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| Bergvesenet rapport nr<br><b>BV 4838</b>                                                                                                                                                                                                                                                                                                                                            | Intern Journal nr<br>06/00131-18 | Internt arkiv nr                 | Rapport lokalisering                                                               | Gradering<br><b>Fortrolig</b>           |
| Kommer fra ..arkiv                                                                                                                                                                                                                                                                                                                                                                  | Ekstern rapport nr               | Oversendt fra<br>Sulfidmalm a.s. | Fortrolig pga<br>Muting                                                            | Fortrolig fra dato:                     |
| Tittel<br>Final Report on Bamble                                                                                                                                                                                                                                                                                                                                                    |                                  |                                  |                                                                                    |                                         |
| Forfatter<br>Fox Doris                                                                                                                                                                                                                                                                                                                                                              |                                  | Dato    År<br>Sept 2006          | Bedrift (Oppdragsgiver og/eller oppdragstaker)<br>Sulfidmalm A/S<br>Xstrata Nickel |                                         |
| Kommune<br>Bamble                                                                                                                                                                                                                                                                                                                                                                   | Fylke<br>Buskerud                | Bergdistrikt                     | 1: 50 000 kartblad<br>17132 17133 17121 17124<br>16121 16122 16123                 | 1: 250 000 kartblad<br>Skien<br>Arendal |
| Fagområde<br>Geolog<br>Geofysikk<br>Geokjemi                                                                                                                                                                                                                                                                                                                                        |                                  | Dokument type                    | Forekomster (forekomst, gruvefelt, undersøkelsesfelt)<br>Bamble Skogen             |                                         |
| Råstoffgruppe<br>Malm/metall                                                                                                                                                                                                                                                                                                                                                        |                                  | Råstofftype<br>Ni Ag             |                                                                                    |                                         |
| Sammendrag, innholdsfortegnelse eller innholdsbeskrivelse<br>Appendix A: Summary of Historical Deposits<br>Appendix B: 2006 Certificate of Analysis<br>Appendix C: 2006 AEM Summary Follow-up Result Table<br>Appendix D: 2005 Summary on the geology of the Skogen Pluton ( hurricane feature)<br>Appendix E: 2005 Bamble Field Exploration<br>Appendix F: Historical Assay Tables |                                  |                                  |                                                                                    |                                         |

## Final Report on BAMBLE - 2006

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Xstrata Nickel  
For  
Sulfidmalm A/S

September 2006

## EXECUTIVE SUMMARY

During the summer of 2006, a five week, four persons, AEM ground follow-up program was conducted over the 100x20km Bamble Belt in Southern Norway with visits to 78 AEM anomalies, 29 additional targets and several historical workings. The main mandate of the program was to follow-up airborne anomalies and areas of interest identified by the 2005 NGU (Hummingbird EM/Mag) survey and the 2006 Fugro Geophysics (DIGHEM/Mag) survey over the Belt. The Belt is known to host such historical workings as Seljeasen Mine and Nystein-Vissestad Mines. The specific goals of the program were to identify any surface expressions of the anomalies identified in the airborne surveys and to identify potentially prospective areas through field visits and surface beep map surveys.

As a result of the 2006 AEM follow-up program, eight prospective areas were identified: Østera Mine area, Seljåsen area, B-65, Btarg-18, B-53, B-54, B-55, and Btarg-21. An additional 226 preclaims were secured over the prospective areas, with the exception of Btarg-18 where preclaims held by Norwegian Resource Ventures took precedence. B-65 and Btarg-18 are previously unknown historic mines that were re-discovered during the program.

Østera mine area consists of two noritic intrusions. The western intrusion is differentiated and hosts the historic workings with post WWI production of 2,000 tonnes @ 1.5% Ni, 0.06% Cu. Grab samples returned values of 1.8% Ni, 0.84% Cu. An AEM anomaly is coincident with the intrusion. UTEM surveys of the workings and both intrusions are recommended to evaluate subsurface nickel potential.

Seljåsen area includes AEM anomalies B-59, B-60, B-61 and B-62. The historic Seljåsen Mine consists of a series of shallow pits and adits hosted in troctolite-norite. The pits follow a moderate NNE trend. A UTEM survey over Seljeasen mine in the summer of 2006, identified UTEM conductors coincident with AEM anomalies B-59 and B-60. Three individual UTEM plates were modelled and represent drill targets. Drill testing of these targets is recommended.

Six km SSW of the mine is anomaly B-65 corresponding to a re-discovered adit. The adit follows steep to moderately plunging mineralization at the contact of gabbro/gabbro-norite and host paragneiss. A UTEM survey of the area is recommended. Following positive results at Seljeasen or B-65, the amphibolite along strike between the two areas should be re-visited to evaluate the potential of a mineralized trend.

Btarg-18 is a newly re-discovered historic copper mine named Boylestad. The Copper Mine appears to be a paragneiss-hosted stratigraphic horizon enriched in copper with assay results of up to 0.05% Ni and 8.61% Cu. The Preclaims currently belong to another company. Monitoring the property status and securing the preclaims when they become available is recommended, followed by a UTEM survey of the mine property and surrounding area.

B-53 refers to an AEM anomaly within a large elongate gabbroic intrusion in the southwest portion of the Bamble Belt. Three anomalies (B-53, B-54 and B-55) lie near the contact of the gabbro with the surrounding paragneissic units. Trace to 5% sulphides were observed at each anomaly with a grab sample from B-55 returning an assay value of 0.05% Ni, and 1.91% Cu. The gabbro displays a variable mag signature but the overall body is a moderate mag high. UTEM surveys of the gabbro particularly near anomalies B-53, B-54 and B-55 are recommended to evaluate the potential of this distinct gabbro body.

Btarg-21 corresponds to a small exposure of sulphides at the contact between paragneiss and orthogneiss. An assay from the anomalous area returned values of 0.05% Ni, 2.08% Cu, 0.02% Co, 5.95% S and very high values of 16.5 g/t Au. The environment is similar to the enriched stratigraphic host environment of Boylestad mine. A UTEM survey of the area is recommended to evaluate the lateral and subsurface extent of the mineralization.

In addition to these eight targets, two geologically prospective areas of interest have been highlighted: the Nystein - Meikjaer area; and the Skogen area. The area encompassing the Nystein to Meikjaer mines is historically known for its past producing mines with grades up to 1.28% Ni, 0.53% Cu (Nystein). Although AEM anomalies in the area were found to be cultural, the area remains geologically prospective with numerous mafic intrusives and patchy staining.

The Skogen area corresponds to a large circular mag high feature at the northern end of the Bamble Belt. At the centre of the mag feature is an elongate gabbro with trace sulphides surrounded by alternating quartz rich paragneiss and magnetite bearing amphibolite. The area requires additional prospecting to identify possible targets within this prospective geological unit.

## TABLE OF CONTENTS

|     |                                             |    |
|-----|---------------------------------------------|----|
| 1.0 | LOCATION, TOPOGRAPHY AND ACCESS .....       | 3  |
| 2.0 | PROPERTY AND OWNERSHIP .....                | 4  |
| 3.0 | REGIONAL GEOLOGICAL SETTING.....            | 5  |
| 4.0 | PREVIOUS WORK.....                          | 6  |
| 5.0 | 2006 AIRBORNE EM FOLLOW-UP PROGRAM .....    | 7  |
| 5.1 | INTRODUCTION .....                          | 7  |
| 5.2 | 2006 AEM FOLLOW-UP PROGRAM METHODOLOGY..... | 9  |
| 5.3 | 2006 AEM FOLLOW-UP PROGRAM RESULTS .....    | 10 |
| 5.4 | 2006 GEOLOGY PROGRAM RESULTS .....          | 21 |
| 6.0 | RECOMMENDATIONS .....                       | 27 |

## LIST OF FIGURES

|            |                                                                                            |
|------------|--------------------------------------------------------------------------------------------|
| Figure 1   | Location map of the Bamble area                                                            |
| Figure 2a  | Location map shows the preclaims held by Falconbridge up to May 2006                       |
| Figure 2b  | Location map shows the preclaims held by Falconbridge as of September 2006.                |
| Figure 3   | Geology Map of the Bamble Belt                                                             |
| Figure 4a  | Geology Map showing the location of all known historical deposits and showings             |
| Figure 4b  | Geology Map showing the location of all previous surface samples                           |
| Figure 5   | Map of Bamble Belt showing distribution of the 78 interpreted AEM anomalies and 29 targets |
| Figure 6   | Map of Bamble Belt showing interpreted Total Mag Field                                     |
| Figure 7   | Geology Map showing location of 2006 assays                                                |
| Figure 8   | Geology map showing the eight targets identified during the 2006 Follow-up program.        |
| Figure 9a  | Geology map of Østera Area                                                                 |
| Figure 9b  | Total Field Mag map of Østera area                                                         |
| Figure 10a | Geology Map of Seljeasen Area                                                              |
| Figure 10b | Map showing Total Field Mag with Seljeasen AEM                                             |
| Figure 11a | Geology Map of B-65 (re-discovered Adit)                                                   |
| Figure 11b | Map showing Total Field Mag with B-65                                                      |
| Figure 12a | Geology map of Btarg-18 (Boylestad Mine) area                                              |
| Figure 12b | Total Field Mag map of Btarg-18 area.                                                      |
| Figure 13a | Geology Map of AEM Targets B-53, B-54 and B-55.                                            |
| Figure 13b | Total Field Mag Map of B-53, B-54 and B-55 area.                                           |
| Figure 14a | Geology Map of Btarg-21 area                                                               |
| Figure 14b | Total Field Mag Map of Btarg-21 area                                                       |
| Figure 15a | Geology map with interpreted domain boundaries                                             |
| Figure 15b | Interpreted Total Magnetic Field map of Bamble Belt with interpreted domain boundaries     |
| Figure 16a | Location map of Area of interest between Nystein and Meikjaer mines                        |
| Figure 16b | Total Mag map of area of interest between Nystein and Meikjaer mines.                      |
| Figure 17a | Geology map of Skogen area of interest                                                     |
| Figure 17b | Total Field Mag map of Skogen area of interest                                             |

## LIST OF TABLES

|            |                              |
|------------|------------------------------|
| TABLE 5.4. | 2006 Follow-up assay results |
|------------|------------------------------|

## LIST OF PHOTOS

|            |                                              |
|------------|----------------------------------------------|
| Photo 1.   | Ostera Mine                                  |
| Photo 2a.  | Seljeasen waste rock                         |
| Photo 2b.  | Mineralized outcrop at Seljeasen mine        |
| Photo 3a.  | B-65 historical adit                         |
| Photo 3b.  | Historical Adit. Looking into adit           |
| Photo 4a.  | Boylestad trench with old workings           |
| Photo 4b.  | Boylestad Trench with copper stained walls   |
| Photo 5a.  | Variable texture of Gabbro near B-53         |
| Photo 5b.  | Gossan at B-54.                              |
| Photo 6.   | Sampling at Btarg-21                         |
| Photo 7a.  | Typical undifferentiated gneiss (paragneiss) |
| Photo 7b.  | Stained sulphide-bearing paragneiss          |
| Photo 8a.  | Typical Orthogneiss with boudins             |
| Photo 8b.  | Typical Fine Banded Orthogneiss              |
| Photo 9a.  | Quartz gneiss with very fine banding         |
| Photo 9b.  | Massive Quartz gneiss                        |
| Photo 10a. | Weakly stained amphibolite banded outcrop    |
| Photo 10b. | Cm banded amphibolite                        |
| Photo 11a. | Highly deformed migmatite                    |
| Photo 11b. | Finely banded migmatite                      |
| Photo 12a. | Weakly banded Gabbro                         |
| Photo 12b. | Massive fine grained crystalline Gabbro      |
| Photo 12c. | Medium grained variable textured Gabbro      |
| Photo 12d. | Medium grained oikocrystic gabbro            |

## LIST OF APPENDICES

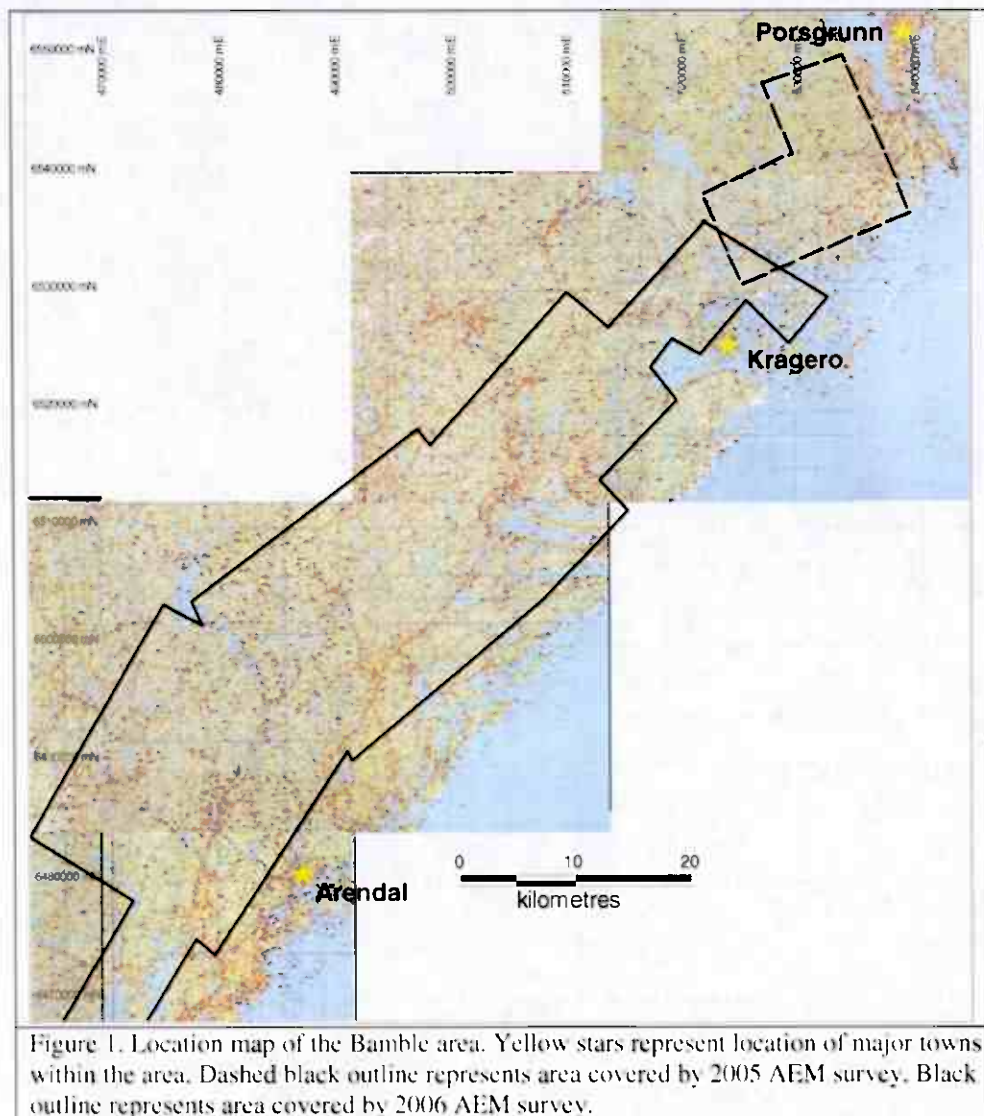
|            |                                                                 |
|------------|-----------------------------------------------------------------|
| APPEDDIX A | Summary of Historical Deposits                                  |
| APPENDIX B | Certificates of Analysis                                        |
| APPENDIX C | 2006_AEM_Summary_Follow-up_results table                        |
| APPENDIX D | Summary of the geology of the Skogen Pluton (hurricane feature) |
| APPENDIX E | 2005 Bamble Field Exploration                                   |
| APPENDIX F | Historical Assays Table                                         |

## 1.0 LOCATION, TOPOGRAPHY AND ACCESS

The Bamble project is situated between Kristiansand in the south and Porsgrunn in the north (approximately 150 km south of Oslo). The Belt is approximately 100 km long x 20 km wide striking NNE.

Small cities such as Arendal are located along the coast and the remainder of the property is dotted with small communities, farms and cottages. The infrastructure of roads is good across the property with access via the national E-18 highway, major roads, secondary roads and private dirt lanes. The infrastructure of powerlines is quite advanced for the area and the main high-tension lines cross the property at multiple locations in addition to mid to low tension lines and domestic lines which are almost ubiquitous.

The topography consists of rolling, tree covered hills and cultivated farms with gentle to moderate slopes and in places small rugged outcropped cliffs. The elevation varies from sea level to 300m ASL. The low-lying areas are generally soggy swampland or shallow swamps during raining periods. Larger lakes are typically grass-sided with scattered small outcrops or boulders. Small creeks and rivers are found throughout the area.

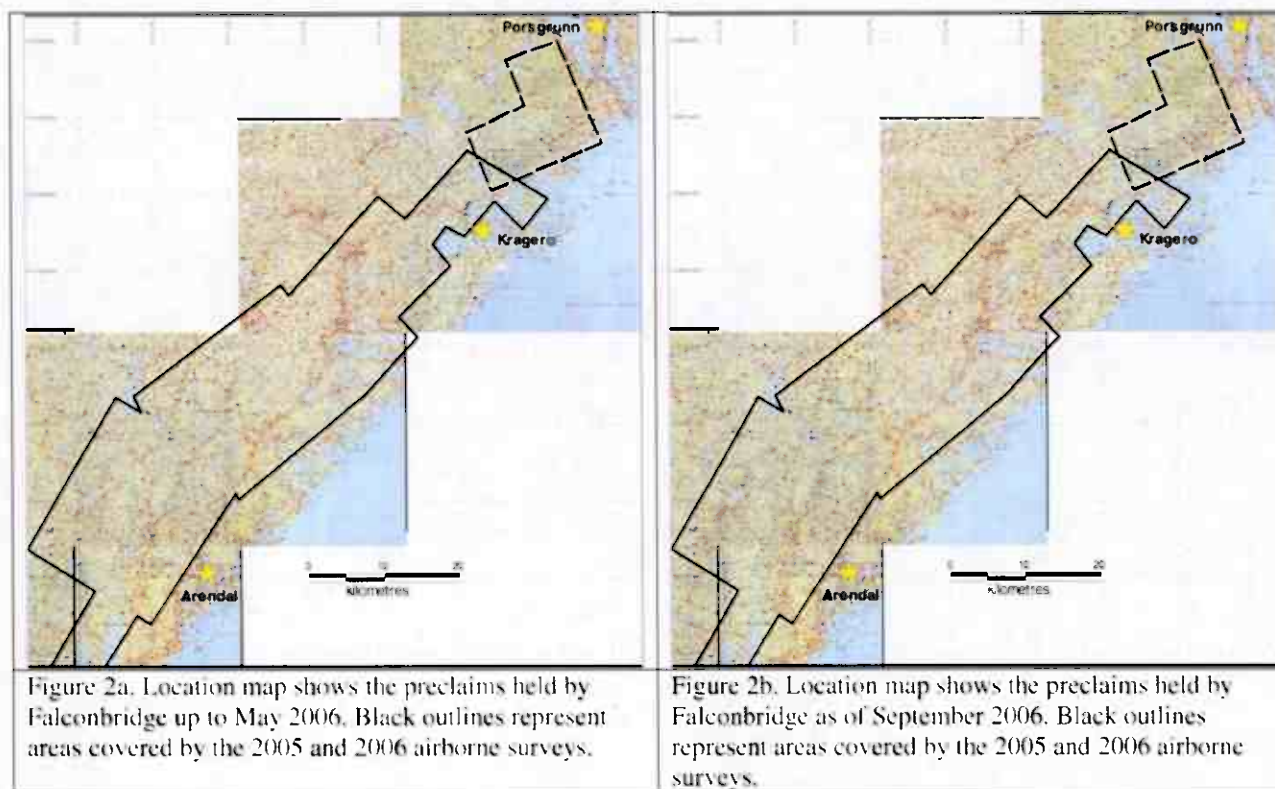


## 2.0 PROPERTY AND OWNERSHIP

Sulfidmalm A/S is a Norwegian Exploration Company that is wholly owned subsidiary of Falconbridge Nikkelverk A/S which in turn is wholly owned by Xstrata Nickel (formerly Falconbridge Limited).

Preclaims over the project area have been intermittently acquired since 2004 and as of May 2006, 188 preclaims over the Bamble Belt were held by Sulfidmalm A/S. An additional 226 preclaims were acquired in 2006 as a result of the AEM follow-up. Preclaims were secured over all areas of interest except one where preclaims are currently held by Norwegian Resource Ventures.

Figures 2a and 2b show the distribution of preclaims held by Falconbridge before and after the 2006 AEM follow-up program.



### 3.0 REGIONAL GEOLOGICAL SETTING

The project area is underlain by a geological domain known as the Bamble Belt, a 100 x 20 km zone of complexly folded sedimentary and granitic gneisses along the eastern coast of Norway. The Belt was deposited between 1700 and 1500 Ma and was subsequently metamorphosed and deformed during the later stages of the Svecofenian Orogeny (1600 – 1450 Ma).

Mafic intrusions, locally called hyperites, were emplaced over a range of ages including, an early phase of hyperites at 1395 – 1450 Ma, a main phase of hyperites between 1180 and 1250 Ma and a late phase at about 1100 Ma. These hyperites are dominantly comprised of coarse-grained, plagioclase-rich mesocumulates and orthocumulates; however the intrusive series in its entirety comprises lithologies ranging from subordinate ultramafites (including pyroxenite, pierite and peridotite) through troctolitic varieties to olivine-free gabbros and norites, and olivine-ferrogabbros. Nickel sulphides are associated with a number of these mafic intrusions. A second phase of metamorphism occurred during the Sveconorwegian Regeneration between 1200 and 1180 Ma. This was essentially a thermal metamorphism with limited structural deformation.

The above ages for the Bamble Belt are very poorly constrained and are almost entirely Rb – Sr ages that should be considered the youngest possible age. Certainly, the similarity in the age between the main hyperites and the Sveconorwegian Regeneration suggests that the radiometric clock has been reset on the hyperites. It is quite conceivable that the hyperites are closer in age to that of the Voisey's Bay intrusion (1330 Ma). The similarity in rock types and the postulated location of southern Norway to the south and east of Nain between 1800 Ma and 1100 Ma gives further credence to this speculation. Brickwood (1986) states: "the intrusive series can be correlated with comparable, broadly contemporaneous magmatism in Eastern North America and Southern Greenland". This widespread magmatic activity is thought to have been initiated by a phase of aborted rifting prior to the ultimately successful breakup of the Proterozoic Supercontinent following the Sveconorwegian (=Grenvillian) Orogeny.

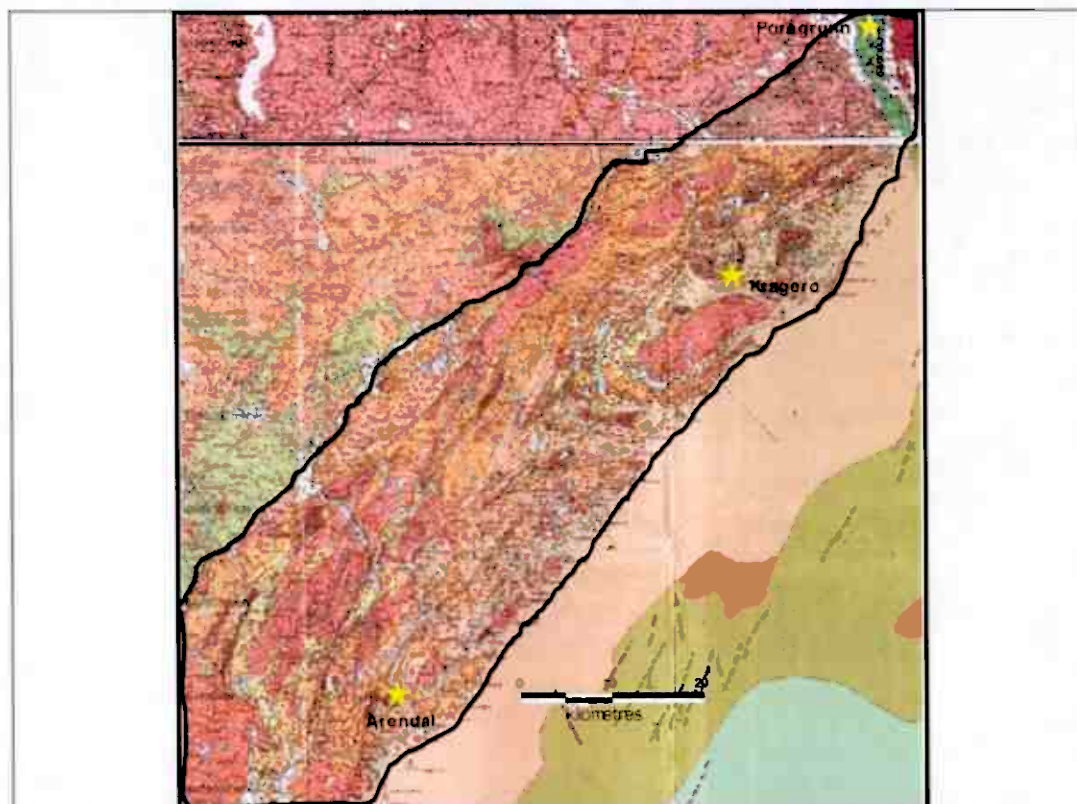


Figure 3. Geology Map of the Bamble Belt (within black outline) with major towns indicated by yellow stars for reference. Browns are mafics, Pinks are orthogneiss and Yellows are paragneiss.

#### 4.0 PREVIOUS WORK

Several small mines were in operation in the Bamble area during the 1800's and prior/during WWI. The mines and deposits are hosted in small late gabbro-norite-troctolite bodies that intrude the regionally metamorphosed gneisses. The mines produced variable tonnes and grades ranging from 2000 tonnes @ 1.5% Ni, 0.06% Cu produced at Østera mine to 6000 tonnes @ 1.28% Ni, 0.53% Cu produced at Vissestad. For a complete list of historical workings see Appendix A.

In 2005, a summer program focussed on the Bamble Belt was aimed at finding new showings and sampling observed mineralization. The details of the 2005 summer program can be found in Beaudoin 2005 (see Appendix E). As a result, 90 samples were collected and one previously unvisited (by Falconbridge) showing of blebby sulphides was identified. These samples returned results up to 2.01% Ni, 0.15% Cu from the Nystein area, indicating the early mines did not deplete the deposits. A complete record of previous samples can be found in Appendix F.

In 2005, the NGU conducted a helicopter-borne Hummingbird EM and magnetic survey over a small portion of the Belt covering the Nystein-Vissestad and Meikjaer deposits. As a result of this survey, Tony Watts identified 6 EM anomalies in the northern Bamble area with 4 of the anomalies having a conductivity of >100S.

More extensive AEM coverage of the Bamble Belt was completed in March and April 2006 by Fugro Geophysics using the DIGHEM system. As a result of this survey, Tony Watts ranked 66 EM anomalies and identified multiple potentially cultural anomalies and at least 10 non-ranked anomalies.

Surface UTEM surveys were conducted in 2006 over the Nystein-Vissestad, Meikjaer and Seljåsen workings. (The reader is referred to the individual Lamontagne UTEM reports for complete details of these surveys).

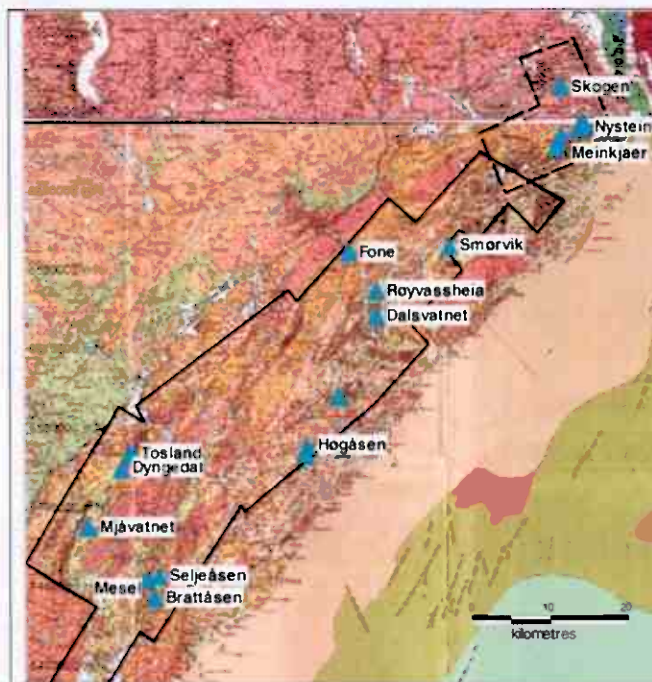


Figure 4.0a Geology Map showing the location of all known historical deposits and showings. AEM surveys shown by black outlines (2005 dashed, 2006 solid).

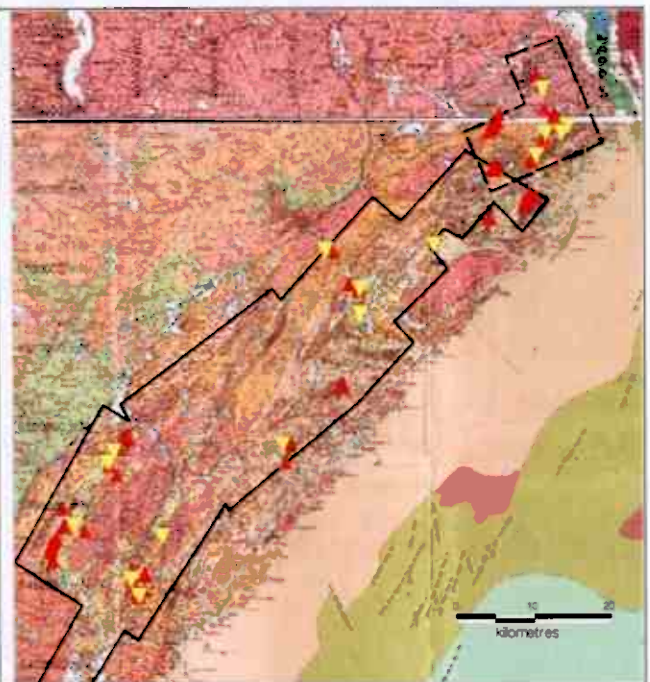


Figure 4.0b Geology Map showing the location of all previous surface samples. Red triangles Falconbridge. Yellow triangles NGU. See Appendix F for assay results

## 5.0 2006 AIRBORNE EM FOLLOW-UP PROGRAM

### 5.1 INTRODUCTION

In May, 2006, a four person crew consisting of two Falconbridge geologists (Doris Fox and Yannick Beaudoin) and two summer students conducted a five week AEM follow-up program of the Bamble Belt. The 78 AEM anomalies and 29 targets were identified from 2005 and 2006 airborne surveys of the Belt. Figure 5.1a shows the location of AEM anomalies and other targets identified from the airborne surveys. Figure 5.1b shows the interpreted total magnetic field for the survey area. See Inserts 1 and 2 for larger scale maps.

The follow-up program had two main objectives: 1) to visit each target to determine the source of the anomaly and evaluate the general prospectivity of area; and 2) to develop a better understanding of the distribution of geology, mineralization and EM conductors throughout the Belt.

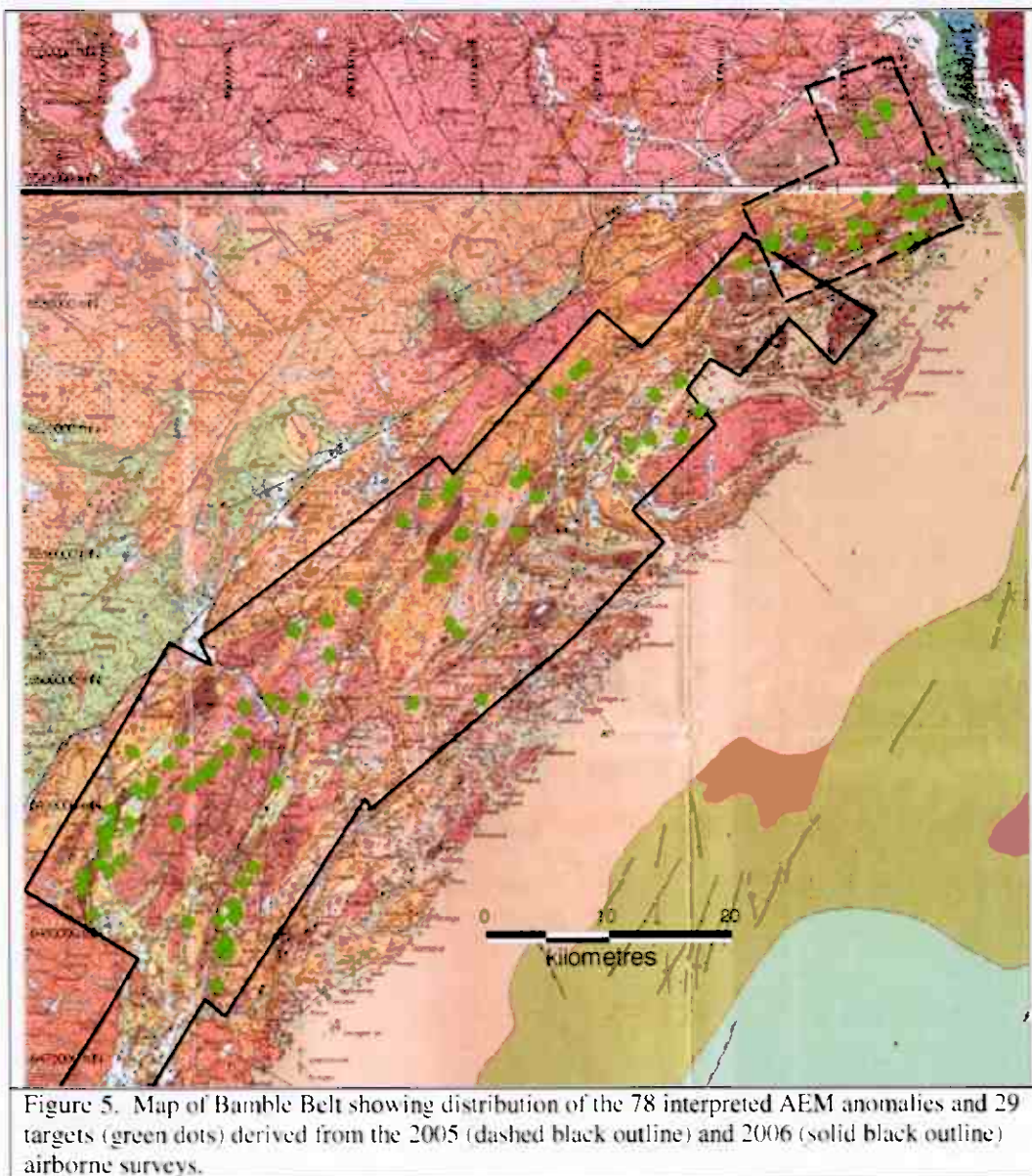
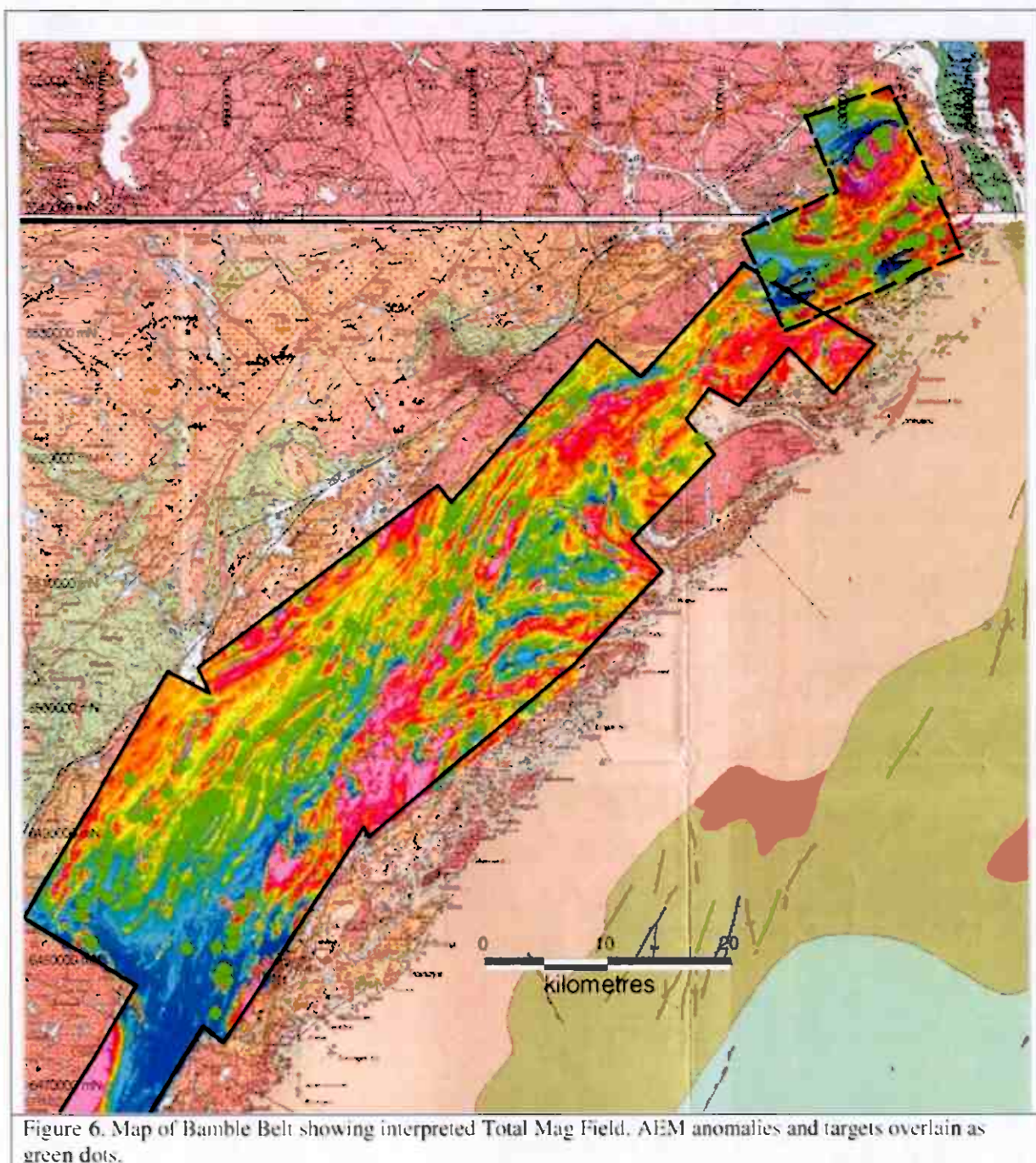


Figure 5. Map of Bamble Belt showing distribution of the 78 interpreted AEM anomalies and 29 targets (green dots) derived from the 2005 (dashed black outline) and 2006 (solid black outline) airborne surveys.



## 5.2 2006 AEM FOLLOW-UP PROGRAM METHODOLOGY

The geophysical surveys were carried out by the NGU (Hummingbird System) in 2005 and Fugro Geophysics (DIGHEM) in 2006, both capable of detecting shallow (maximum ~60m depth) anomalies. The surveys covered most of the Bamble Belt. Anomalies were selected and ranked based on the following criteria:

- 1- quality of EM response (in-phase vs. quadrature response)
- 2- conductor intensity (siemens)
- 3- mag/EM coincidence
- 4- favourable (hyperitic) geology

The anomalies were assigned a priority ranking from 1 to 3 (1 being the highest priority). A field ranking was then assigned to the high priority anomalies, representing the order in which the anomalies would be followed-up on the ground. All other anomalies were followed-up based on their distribution with respect to the field ranked anomalies.

To assign the priority ranking, the mag data was compared with available 1:250,000 scale geological mapping. Of particular interest were the >100S discrete EM anomalies with coincident magnetic highs within mafic intrusives of the Bamble Complex. The mafic bodies, locally referred to as 'hyperites' are the main host units of past producing mines in the area. Also of interest were the discrete mag highs at the contacts of mafic bodies. Orthophotos were used to verify that the anomalies were not the result of obvious cultural products (e.g. power lines, rail tracks).

From the map, it is evident that sediments overlying the Bamble intrusive complex are magnetically active. Numerous magnetic highs with >1 km strike lengths are apparent and may represent formational features including VMS-type sulphide mineralization that is known to occur throughout Norway. These anomalies were not given high priority but were visited in the field to verify that they were sedimentary.

Ground follow-up of the anomalies consisted of locating the conductor axes using a GPS and VLF system. A Beep Mat, capable of sensing up to ~1m depth was used to swath each axis. The beep mat swaths ranged from 5-10m in areas of good exposure and strong VLF response, to >50m in poorly exposed poorly constrained areas. The Beep Mat was used to locate near surface mineralization. Any response from the Beep Mat was followed by sub-surface prospecting up to 1m. Holes were dug down to bedrock and the rock was sampled for sulphides or visually verified to be graphite bearing metasediments with no sulphides. This general prospecting and mapping around anomalies occurred during ground follow-up to explain the source of each anomaly and develop an understanding of the local and regional geology. Any visible sulphides were sampled and sent for assay.

At each anomaly or target the field geologist completed a systematic checklist and made notes about possible sources of the anomaly (e.g. graphite bearing metasediments, powerlines, sulphide bearing mafics etc.). Anomalies that could not be identified were recorded for possible additional follow-up.

### 5.3 2006 AEM FOLLOW-UP PROGRAM RESULTS

#### GENERAL STATEMENT:

During the 2006 AEM follow-up program, 78 EM anomalies (e.g. labelled "B-60") and 29 additional geophysical and/or geological targets (e.g. labelled "Btarg-18") were visited. The details of each target can be found in the summary table titled 302\_2006\_AEM\_follow-up\_results in Appendix C. Four categories of sources can be generalized: sulphides, graphite, culture, and unexplained.

Targets with sulphides listed as their source are divided into formational (metasedimentary) sulphides or magmatic sulphides. The sedimentary sulphides were usually coupled with small amounts of graphite and consisted primarily of pyrite. The pyrite bands were usually located through beep mat survey. Magmatic sulphides varied from trace to massive and consisted of pyrite, pyrrhotite and chalcopyrite with low to very strong beep mat responses.

Targets with graphite listed as their source indicate metasediments (Paragneiss) with >1mm to <1cm bands of formational graphite as very fine grains to large cm scale flakes. Graphite bands were easily identified through beep mat survey and consistently had the strong responses. A streak test was performed to verify graphite as the anomaly. If there was doubt that graphite was present the anomaly was listed as unexplained.

Cultural anomalies were typically powerlines, buried cables, railways and grounded fences. Cultural anomalies were visually verified or confirmed through discussions with local landowners. Most anomalies could not be visually identified due to thick overburden or lack of an identifiable conductor at surface.

Targets were listed as unidentified if the source of magnetic signature could not be explained.

The 2006 program focussed on magmatic sulphides with the location of formational sulphides recorded for possible future follow-up. The table below summarizes the identified anomaly sources.

| SOURCE                  | NUMBER OF TARGETS |
|-------------------------|-------------------|
| Sulphides (formational) | 11                |
| Sulphides (magmatic)    | 18                |
| Graphite                | 27                |
| Culture                 | 12                |
| Unexplained             | 48                |
| <b>TOTAL</b>            | <b>107</b>        |

# HIGHLIGHTS:

During the 2006 AEM follow-up program, a total of 58 samples for assay were collected. As a result of the program eight targets of interest have been identified. Table 5.4 lists the assay results for all samples collected during the 2006 program. Figure 5.4a shows the sample locations. Refer to Appendix containing Excel spreadsheet listing of all samples with UTM locations and details. Make sure to include this Appendix!

TABLE 5.4. 2006 Follow-up assay results. Official Assay Certificates can be found in Appendix B. Assays of interest are highlighted.

| Lab ID      | Name         | Ni wt% | Cu wt% | Co wt% | S wt% | Pt g t | Pd g t | Au g t | Ag g t |
|-------------|--------------|--------|--------|--------|-------|--------|--------|--------|--------|
| PG 08002    | Btarg-10     | < 0.05 | < 0.05 | < 0.02 | 0.03  | < 0.02 | < 0.02 | < 0.02 | < 0.5  |
| PG 08003    | Btarg-10     | < 0.05 | < 0.05 | < 0.02 | 1.21  | < 0.02 | < 0.02 | < 0.02 | < 0.5  |
| PG 08004    | B-54         | < 0.05 | 0.07   | < 0.02 | 5.34  | < 0.02 | < 0.02 | < 0.02 | < 0.5  |
| PG 08005    | B-54         | < 0.05 | < 0.05 | < 0.02 | 0.41  | < 0.02 | < 0.02 | < 0.02 | < 0.5  |
| PG 08006    | B-54         | < 0.05 | < 0.05 | < 0.02 | 2.44  | < 0.02 | < 0.02 | 0.02   | < 0.5  |
| PG 08007    | B-54         | < 0.05 | < 0.05 | < 0.02 | 0.19  | < 0.02 | < 0.02 | < 0.02 | < 0.5  |
| PG 08008    | B-50         | < 0.05 | < 0.05 | < 0.02 | 0.68  | < 0.02 | < 0.02 | < 0.02 | < 0.5  |
| PG 08009    | standard     | 1.85   | 0.38   | 0.06   | 10    | 0.07   | 0.16   | 0.03   | < 0.5  |
| PG 08051    | B-50         | < 0.05 | < 0.05 | < 0.02 | 1.29  | < 0.02 | < 0.02 | 0.03   | < 0.5  |
| PG 08052    | B-50         | < 0.05 | < 0.05 | < 0.02 | 0.66  | < 0.02 | < 0.02 | < 0.02 | < 0.5  |
| PG 08054    | B-55         | < 0.05 | 1.91   | < 0.02 | 4.89  | 0.02   | 0.05   | 0.02   | 2.3    |
| PG 08055    | B-53         | < 0.05 | 0.11   | 0.03   | 10.6  | 0.04   | 0.07   | < 0.02 | < 0.5  |
| PG 08056    | B-61         | < 0.05 | < 0.05 | 0.03   | 1.75  | < 0.02 | < 0.02 | < 0.02 | < 0.5  |
| PG 08057    | B-61         | 0.11   | 0.35   | 0.03   | 2.35  | < 0.02 | < 0.02 | 0.37   | 1.2    |
| PG 08058    | B-65         | 0.31   | 0.35   | 0.26   | 16.2  | < 0.02 | 0.26   | 0.07   | < 0.5  |
| PG 08059    | B-65         | 0.65   | 0.1    | 0.62   | 31.6  | < 0.02 | 0.74   | 0.2    | < 0.5  |
| PG 08060    | B-65         | 0.32   | 0.08   | 0.11   | 18.8  | 0.03   | < 0.02 | 0.03   | < 0.5  |
| PG 08061    | B-65         | 0.11   | 0.05   | 0.04   | 6     | < 0.02 | < 0.02 | < 0.02 | < 0.5  |
| PG 08062    | roadside     | < 0.05 | < 0.05 | < 0.02 | 0.1   | < 0.02 | < 0.02 | < 0.02 | < 0.5  |
| PG 08063    | B-32         | < 0.05 | < 0.05 | < 0.02 | 0.23  | < 0.02 | < 0.02 | < 0.02 | < 0.5  |
| PG 08064    | B-26a        | < 0.05 | < 0.05 | < 0.02 | 4.41  | < 0.02 | < 0.02 | < 0.02 | < 0.5  |
| PG 08065    | B-59         | 0.29   | 0.26   | 0.06   | 9.94  | < 0.02 | < 0.02 | 0.02   | < 0.5  |
| PG 08066    | B-62         | < 0.05 | < 0.05 | < 0.02 | 1.52  | < 0.02 | < 0.02 | < 0.02 | < 0.5  |
| PG 08067    | B-60         | < 0.05 | < 0.05 | < 0.02 | 6.15  | < 0.02 | < 0.02 | 0.03   | < 0.5  |
| PG 08068    | B-65         | < 0.05 | < 0.05 | < 0.02 | 0.62  | < 0.02 | < 0.02 | 0.06   | < 0.5  |
| PG 08069    | B-31         | < 0.05 | < 0.05 | < 0.02 | 1.61  | < 0.02 | < 0.02 | 0.02   | < 0.5  |
| PG 08070    | B-59         | < 0.05 | < 0.05 | < 0.02 | 3.05  | < 0.02 | < 0.02 | < 0.02 | < 0.5  |
| PG 08072    | Btarg-18     | < 0.05 | 8.61   | 0.05   | 31.4  | 0.02   | 0.02   | 1.58   | 65.3   |
| PG 08073    | Btarg-18     | < 0.05 | < 0.05 | < 0.02 | 6.68  | < 0.02 | < 0.02 | 0.18   | 0.7    |
| PG 08078    | Btarg-18     | 0.05   | 0.15   | 0.06   | 29.5  | 0.03   | < 0.02 | < 0.02 | 3      |
| PG 08079    | Ostera Shaft | 0.54   | 0.5    | 0.03   | 6.48  | 0.04   | < 0.02 | 0.02   | 1.7    |
| PG 08080    | Ostera Shaft | 1.8    | 0.84   | 0.09   | 23    | < 0.02 | 0.03   | 0.17   | 1.7    |
| PG 08081    | Ostera Shaft | 0.49   | 0.6    | 0.03   | 5.52  | 0.02   | < 0.02 | 0.04   | 2.2    |
| PG 08082    | Ostera Shaft | 1.46   | 0.74   | 0.08   | 14.5  | 0.02   | 0.02   | 0.05   | 2.5    |
| PG 08083    | Ostera area  | < 0.05 | 0.05   | < 0.02 | 0.84  | < 0.02 | < 0.02 | 0.1    | < 0.5  |
| PG 08084    | Btarg-18     | < 0.05 | 6.39   | 0.06   | 17.9  | 0.02   | 0.14   | 11.8   | 38.6   |
| PG 08085    | Btarg-18     | < 0.05 | 8.31   | < 0.02 | 14.3  | 0.02   | 0.13   | 11.3   | 66     |
| PG 08086    | Btarg-18     | < 0.05 | 0.62   | 0.06   | 28.9  | 0.02   | < 0.02 | 0.17   | 6.6    |
| PG 08087    | Btarg-18     | < 0.05 | 1.17   | 0.05   | 20.1  | < 0.02 | 0.03   | 0.18   | 5.9    |
| PG 08088    | B-18         | 0.25   | 0.45   | 0.14   | 24.1  | < 0.02 | < 0.02 | 0.06   | < 0.5  |
| PG 08089    | Btarg-21     | < 0.05 | 2.08   | < 0.02 | 5.95  | < 0.02 | < 0.02 | 0.13   | 16.5   |
| PG 08089dup | Btarg-21-dup | < 0.05 | 2.06   | < 0.02 | 6.02  | < 0.02 | < 0.02 | 0.12   | 17.1   |

|          |               |        |        |        |      |        |        |        |       |
|----------|---------------|--------|--------|--------|------|--------|--------|--------|-------|
| PG 08090 | B-16          | < 0.05 | < 0.05 | < 0.02 | 3.15 | < 0.02 | < 0.02 | 0.02   | < 0.5 |
| PG 08091 | B-16          | < 0.05 | < 0.05 | < 0.02 | 1.44 | < 0.02 | < 0.02 | < 0.02 | < 0.5 |
| PG 08092 | B-6           | 0.17   | 0.13   | 0.09   | 32.3 | 0.02   | 0.02   | 0.03   | < 0.5 |
| PG 08093 | B-1           | < 0.05 | < 0.05 | < 0.02 | 2.5  | 0.02   | < 0.02 | < 0.02 | < 0.5 |
| PG 08094 | B-17          | < 0.05 | < 0.05 | < 0.02 | 0.12 | < 0.02 | < 0.02 | < 0.02 | < 0.5 |
| PG 08095 | B-8           | < 0.05 | < 0.05 | < 0.02 | 0.13 | < 0.02 | < 0.02 | < 0.02 | < 0.5 |
| PG 08096 | B-5           | < 0.05 | < 0.05 | < 0.02 | 6.82 | < 0.02 | < 0.02 | 0.02   | 0.8   |
| PG 08097 | B-15          | < 0.05 | < 0.05 | < 0.02 | 6.83 | 0.02   | < 0.02 | 0.02   | < 0.5 |
| PG 08098 | Skogen Pluton | < 0.05 | < 0.05 | < 0.02 | 0.26 | < 0.02 | < 0.02 | < 0.02 | < 0.5 |
| PG 08099 | Skogen Pluton | < 0.05 | < 0.05 | < 0.02 | 0.05 | < 0.02 | < 0.02 | < 0.02 | < 0.5 |
| PG 08100 | Skogen Pluton | < 0.05 | < 0.05 | < 0.02 | 0.13 | < 0.02 | < 0.02 | < 0.02 | < 0.5 |
| PG 08101 | Skogen Pluton | < 0.05 | < 0.05 | < 0.02 | 0.13 | < 0.02 | < 0.02 | < 0.02 | < 0.5 |
| PG 08120 | Skogen Pluton | < 0.05 | < 0.05 | < 0.02 | 0.25 | < 0.02 | < 0.02 | < 0.02 | < 0.5 |
| PG 08121 | Skogen Pluton | < 0.05 | < 0.05 | < 0.02 | 1.69 | < 0.02 | < 0.02 | < 0.02 | < 0.5 |
| PG 08122 | Skogen Pluton | < 0.05 | < 0.05 | < 0.02 | 0.32 | < 0.02 | < 0.02 | < 0.02 | < 0.5 |

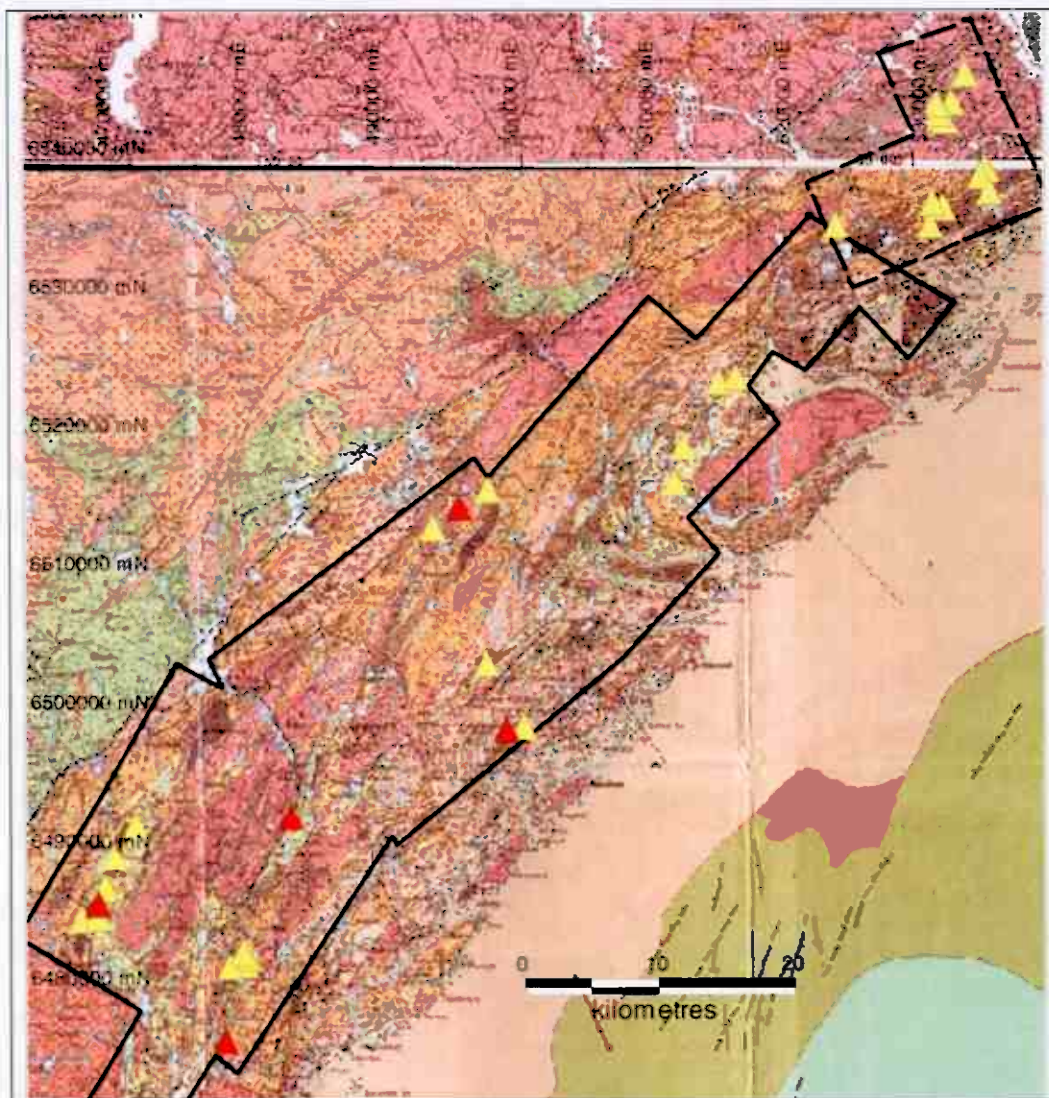


Figure 7. Geology Map showing location of all assays collected during the 2006 follow-up program. Red triangles are assays of interest.

The eight targets of interest were identified based on geology, the AEM survey, and assay results. The eight targets are shown on figure 5.4b and described in more detail as follows:

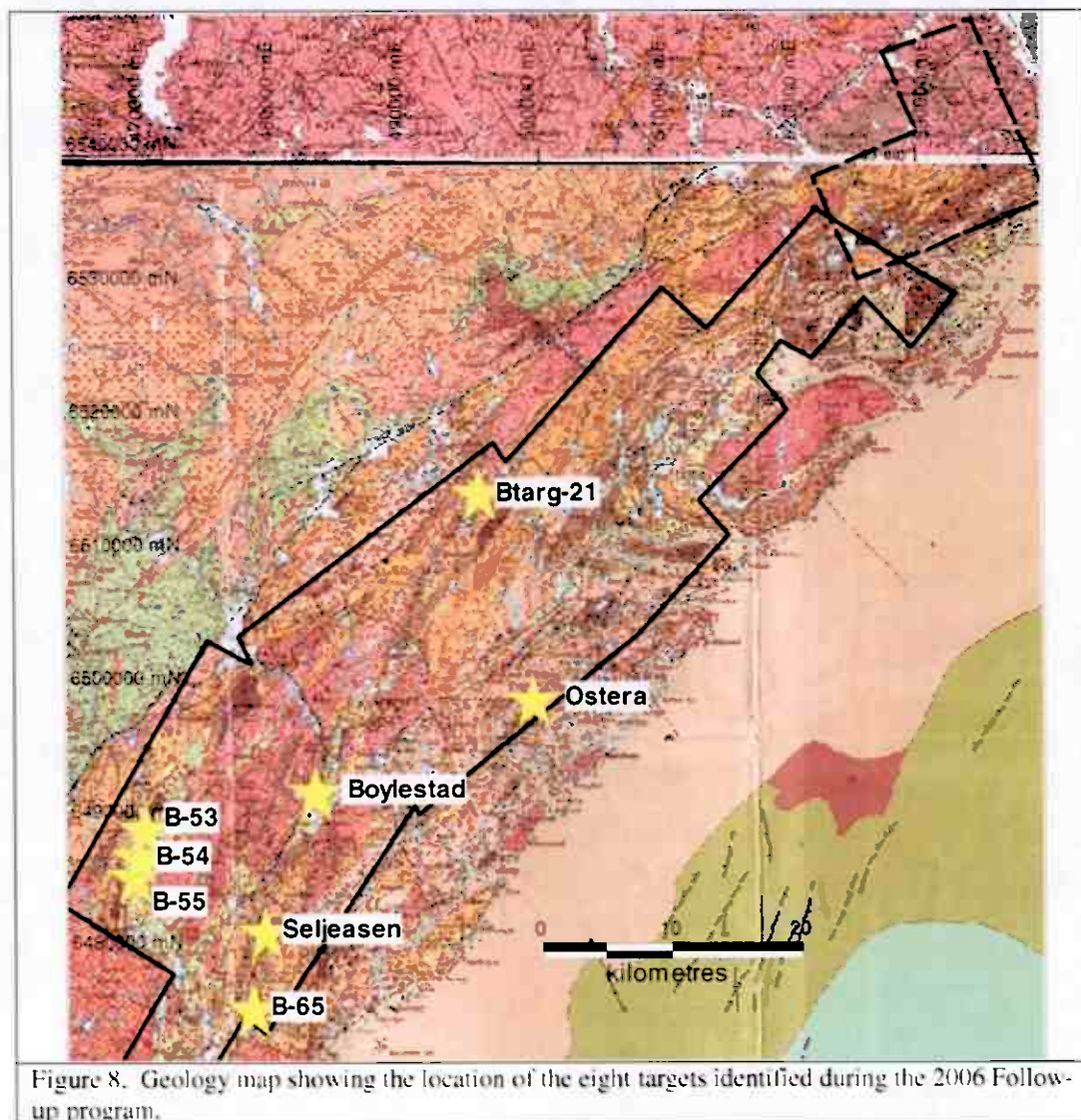


Figure 8. Geology map showing the location of the eight targets identified during the 2006 Follow-up program.

#### Østera

The Østera deposit (also called Høgåsen deposit) is located at the base of a small norite body (500 m x 130 m). A similar-sized but more differentiated norite – troctolite – picrite body (Røyvatn) occurs immediately to the east. The mineralization occurs in a fold structure and had a strike length of 100 m and a maximum thickness of 2 m consisting of both massive and disseminated sulphides. The deposit was mined through several adits at the end of World War I with a reported production of 2,000 tonnes @ 1.5% Ni, 0.06% Cu.

Paragneiss along the eastern and western contacts of the intrusions display strong staining with 3-5% visible pyrite. Grab samples were collected from the eastern intrusion near historic adits and waste piles returning two of the best nickel assays from the program: 1.80% Ni, 0.84% Cu, 0.06% Co and 23.0% S and 1.46% Ni, 0.74% Cu, 0.08% Co and 14.5% S. A mag high feature is roughly coincident with the western intrusion.

*Note: The Østera Mine Landowner does not want a mining operation on his property. He was quite helpful during our visit but stated the area is a known cottage resort area and he would not support the development of a mine on his property.*



Figure 9a. Geology map of Østera Area

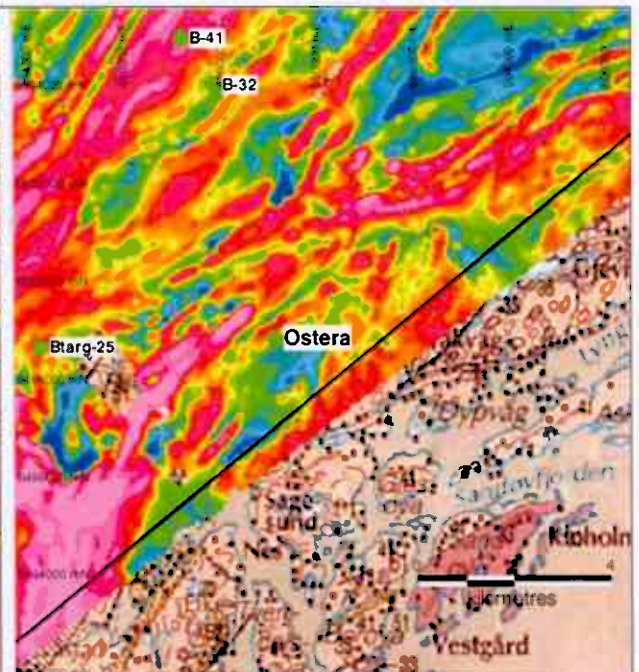


Figure 9b. Total Field Mag map of Østera area



Photo 1. Østera Mine. Partially buried historical adit. Sulphide staining of wallrock.

### Seljasen

The Seljasen area includes AEM anomalies B-59 (Seljasen deposit), B-60, B-61 and B-62 and was one of the first properties acquired by Sulfidmalm A/S in the Bamble Belt.

The Seljasen deposit (grade and production unknown) is hosted in a strongly differentiated body of norite – troctolite – pyroxenite with dimensions of 2 km x 0.5 km. The ore zone occurs in pyroxenite at the base of the intrusion. Mapping of the historic workings indicate primary NNE striking mineralization with a secondary WNW striking trend.

A mag high feature is directly associated with B-59 and a moderate mag high is associated with B-61. Grab samples collected from waste piles at the historic mine returned values up to 0.15% Ni, 3.53% Cu and 4.6% S.

A UTEM survey over Seljeasen mine in the summer of 2006, identified UTEM conductors coincident with AEM anomalies B-59 and B-60. Detailed UTEM modelling identified three UTEM plates which represent potential drill targets. A report with complete details of the UTEM survey will be forthcoming.



Figure 10a. Geology Map of Seljeasen Area with Seljeasen AEM anomalies in red circle.

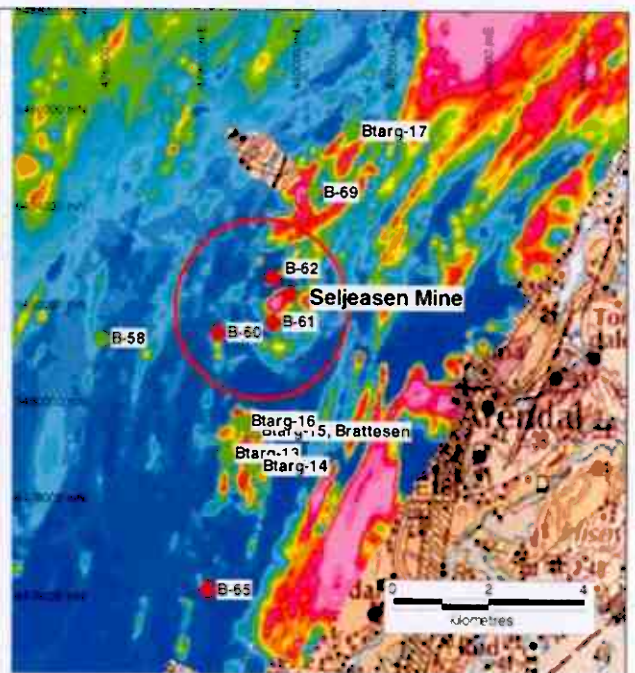


Figure 10b. Map showing Total Field Mag with Seljeasen AEM anomalies in red circle.



Photo 2a. Seljeasen waste rock.

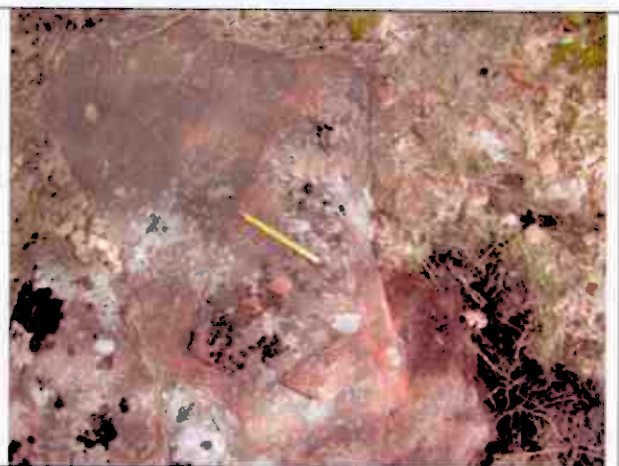


Photo 2b. Mineralized outcrop at Seljeasen mine.

### B-65

Located 5.5km SSW along strike of Seljeasen mine and hosted at the contact of gabbro and paragneiss, target B-65 is a newly re-discovered historical adit associated with an unranked AEM anomaly. The adit plunges steeply NW into the 500m x 500m gabbro body. Massive sulphide was observed on the walls of the adit with exceptionally high beep mat conductivity responses of up 40000. Small outcrops of gabbro were also noted in the area immediately to the SE, which appears as gneiss on the regional geology map.

Grab samples of massive sulphide collected from the waste pile returned anomalous values of 0.65% Ni, 0.1% Cu, 0.62% Co and 31.6% S.



Figure 11a. Geology Map of B-65 (re-discovered Adit) with AEM anomaly.

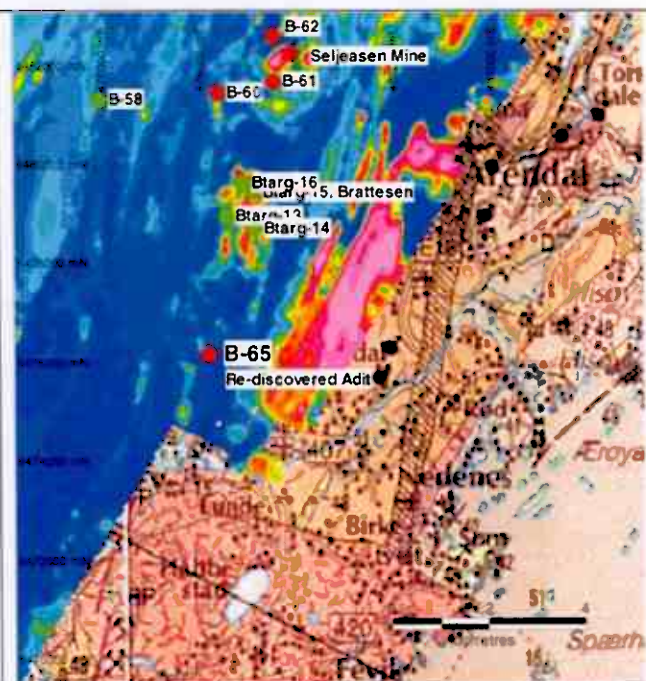


Figure 11b. Map showing Total Field Mag with B-65 AEM anomaly.



Photo 3a. B-65 historical adit at gabbro- paragneiss contact. Staining of wallrock along adit. Looking down to adit.

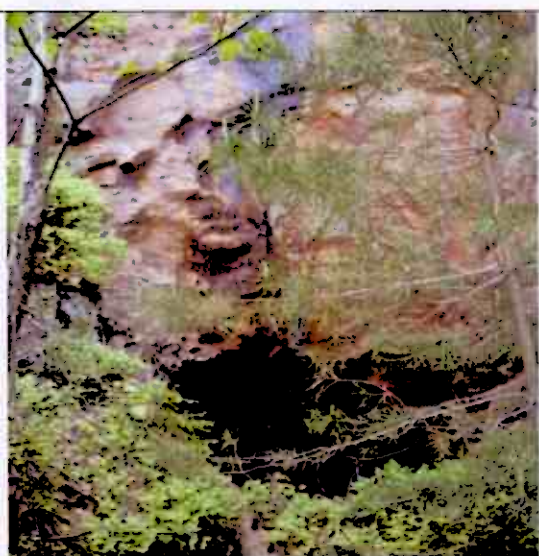


Photo 3b. Historical Adit. Looking into adit

Note: The mag high feature along strike between the Seljeasen Mine and B-65 was investigated and found to be unmineralized amphibolite at surface. Targets Btarg-13, Btarg-14, Btarg-15 and Btarg-16 correspond to the mag feature. Historical records indicate this amphibolite hosts the Bråtesen showing (Btarg-15).

#### Btarg-18

This target is associated with an unranked AEM anomaly and a newly re-discovered historical copper mine. Historical records indicate the copper mine is named Boylestad. The deposit is an enriched stratigraphic horizon striking –N-S with no obvious signs of veining. The surface expression of the mine is a narrow 3m wide trench dipping moderately east with strongly copper stained walls hosted at the contact between orthogneiss and paragneiss. Historical records indicate that 2km to the south, within the same stratigraphic horizon, is a second mine named Skytnyr.

The best copper assay of the program came from Boylestad at 0.05% Ni, 8.31% Cu, 0.02% Co and 14.3% S. Several samples returned nickel and copper values below detection but elevated gold values of up to 11.8gt and sulphur values of up to 32% S, indicating sulphur saturated systems in the area.

Sulfidmalm A/S was unable to obtain preclaims over the Boylestad and Skytnyr mines as they currently belong to Norwegian Resource Ventures.

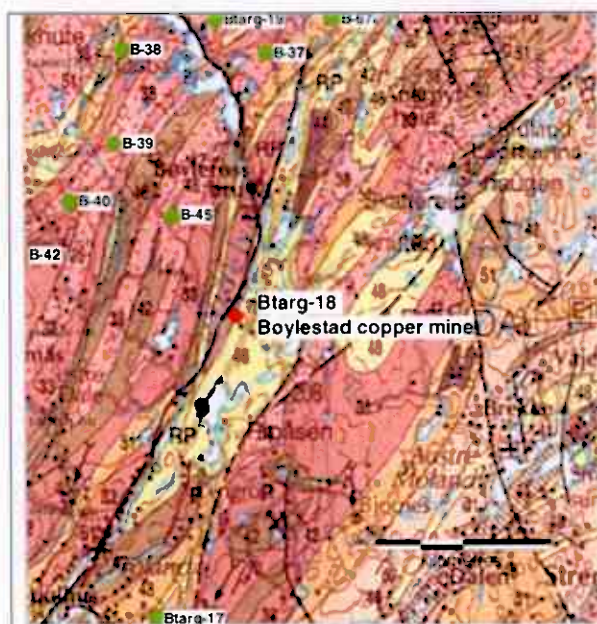


Figure 12a. Geology map of Btarg-18 (Boylestad Mine) area

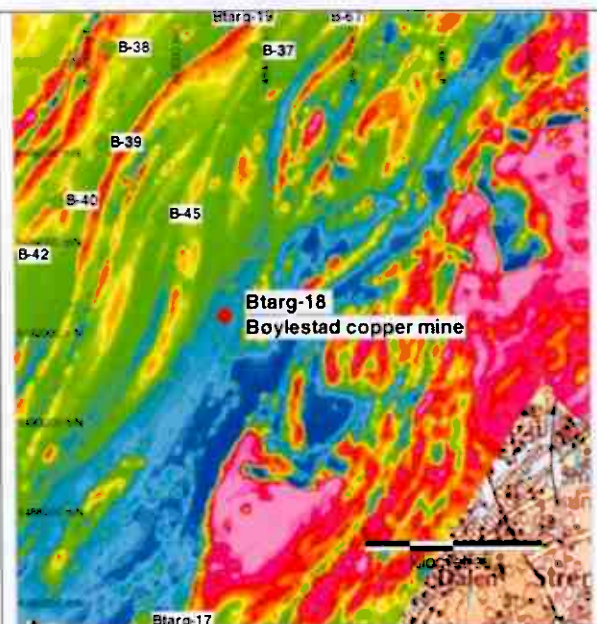


Figure 12b. Total Field Mag map of Btarg-18 area.



Photo 4a. Boylestad trench with old workings



Photo 4b. Boylestad Trench with copper stained walls

### B-53

This >100s AEM anomaly corresponds to the contact of a 10km long x 1.3km wide, variably magnetic, fine grained to ophitic gabbro with very trace sulphides. The magnetic variation corresponds to changes in texture of the gabbro with the most magnetic regions consisting of fine-crystalline gabbro hosting the trace sulphides.

Although assays returned values below detection, the area is considered prospective due to the high conductance AEM anomaly, the location of the anomaly along the contact of the gabbro and the presence of trace sulphides. Two additional anomalies, B-54 and B-55 were detected within this gabbro.



Figure 13a. Geology Map of AEM Targets B-53, B-54 and B-55.

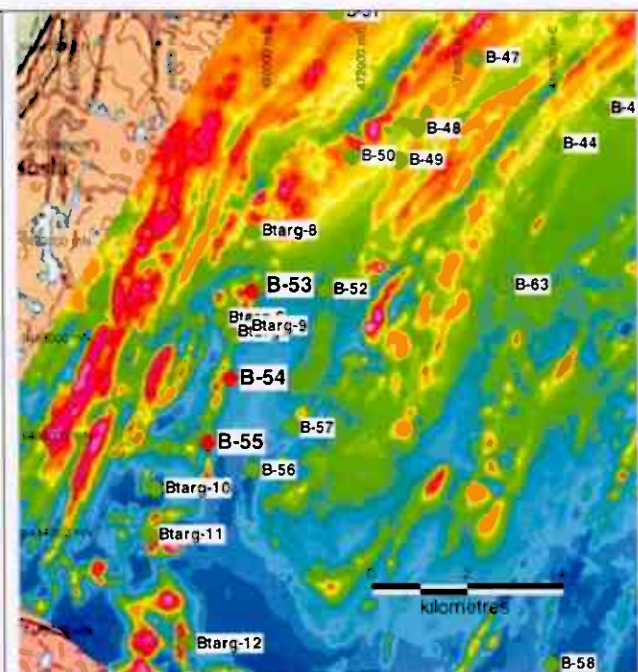


Figure 13b. Total Field Mag Map of B-53, B-54 and B-55 area.

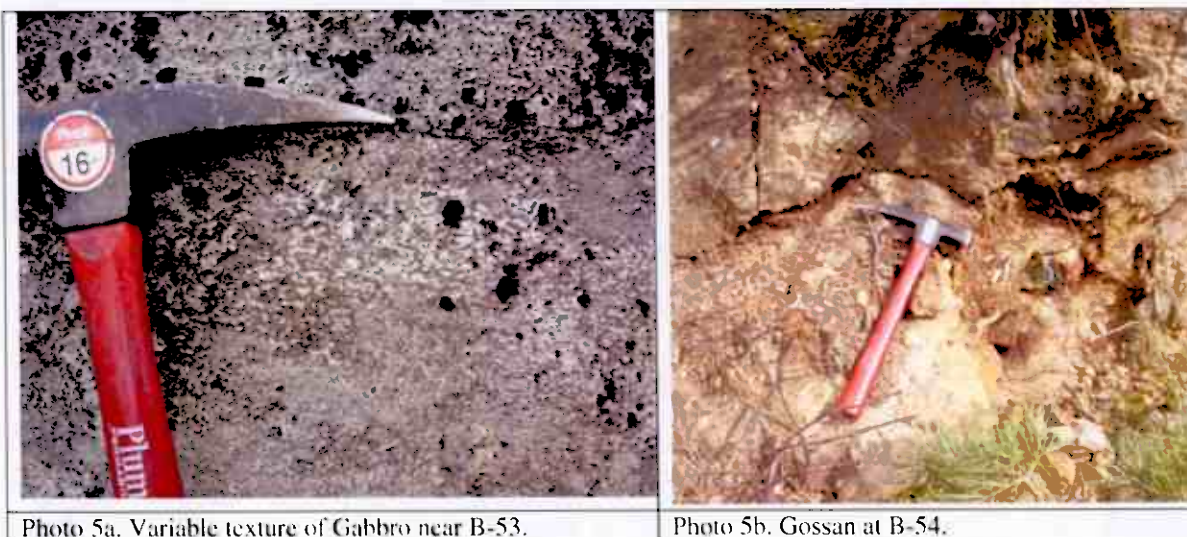


Photo 5a. Variable texture of Gabbro near B-53.

Photo 5b. Gossan at B-54.

#### B-54

This 10<100s AEM conductor lies along the contact of a 10km long x 1.3km wide, variably magnetic, fine grained to ophitic gabbro with very trace sulphides.

Although assays returned values below detection, the area is considered prospective due to the high conductance AEM anomaly, the location of the anomaly along the contact of the gabbro and the presence of trace sulphides. Two additional anomalies, B-53 and B-55 were detected within this gabbro.

#### B-55

This 10<100s AEM conductor lies along the contact of a 10km long x 1.3km wide, variably magnetic, fine grained to ophitic gabbro with very trace sulphides.

Trace sulphides were found below the surface using the Beep Mat. Assays of the trace copper samples returned values of 0.05% Ni, 1.91% Cu, 0.02% Co and 4.89% S.

The area is considered prospective due to the high conductance AEM anomaly, the location of the anomaly along the contact of the gabbro and good assay values from trace sulphides. Two additional anomalies, B-53 and B-54 were detected within this gabbro.

#### Btarg-21

This unranked target lies along the contact between orthogneiss and paragneiss 30km SW of Kragerø. A linear mag high corresponds to amphibolite 300m west of the target.

An assay sample collected from the target area returned values of 0.05% Ni, 2.08% Cu, 0.02% Co, 5.95% S and a very high values of 16.5 g/t Ag.

The anomaly is believed to represent an enriched stratigraphic horizon, an environment similar to the Boylestad and Skytmyr mines near Arendal. The good assay values, proximity to amphibolite and a mag high and the similarity to a known host environment deem this area prospective.



Figure 14a. Geology Map of Btarg-21 area

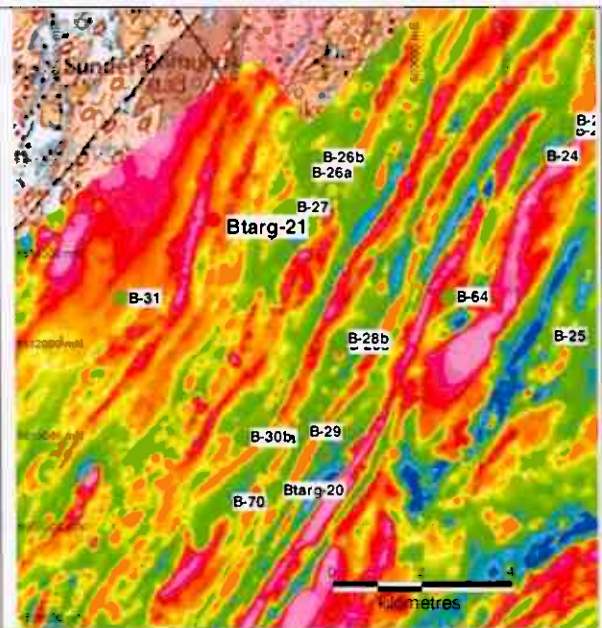


Figure 14b. Total Field Mag Map of Btarg-21 area



Photo 6. Sampling at Btarg-21

## 5.4 2006 GEOLOGY PROGRAM RESULTS

### GENERAL STATEMENTS

The second aim of the 2006 summer program was to gain a better understanding of the geology of the Bamble Belt. The relationship between the magnetic signature and the geology was investigated and two areas of prospective geology were identified. In addition, an effort was made to understand the key lithologies and their relationship with known mineralization. Six dominant lithologies have been identified during the geology program and are described below in the section Lithological Summaries. Several, less prominent lithologies are sporadically present but will not be discussed here. The 1:250,000 geology maps (Arendal and Skien sheets) show good detail considering their large scale and appropriately convey the complexity and degree of deformation of the Belt.

### HIGHLIGHTS

Based on mapping and the interpreted magnetic signature of the Belt, three NNE striking domains (eastern, middle and western) and one massive circular domain (northern) have been interpreted. The easternmost domain along the coast is dominated by paragneiss, amphibolite and quartzite with small late isolated mafic intrusions ranging from gabbro to norite to troctolite. The domain is generally dominated by a moderate-to-high mag signature. The eastern domain hosts the majority of all known workings in the Bamble Belt including the Seljåsen Mine. The middle domain is dominated by quartz rich, graphite bearing, banded gneiss and linear amphibolite bands, with no observed late mafic intrusions. This domain is a broad mag low with minor, linear, formational mag highs coincident with the amphibolite bands. The westernmost domain is dominated by paragneiss and quartzite with minor amphibolite and late, circular mafic intrusions. The domain is spotted with broad mag highs. The circular magnetic domain at the northern end of the Belt is a large gabbroic intrusion with abundant magnetite surrounded by magnetite bearing metasediments and amphibolite. This domain is defined by its very high, circular, mag signature (see Figure 15a and 15b). Not surprisingly, the AEM targets of interest discussed above are found in the eastern domain (4) and the western domain (3). One AEM target of interest (Btarg-21) occurs in the middle domain. This is anomalous since all other anomalies in the middle domain were associated with graphite bands in paragneiss and no mafic intrusion appears directly associated with the anomaly. This re-iterates the idea that Btarg-21 area may represent an enriched stratigraphic layer similar to Boylestad mine.

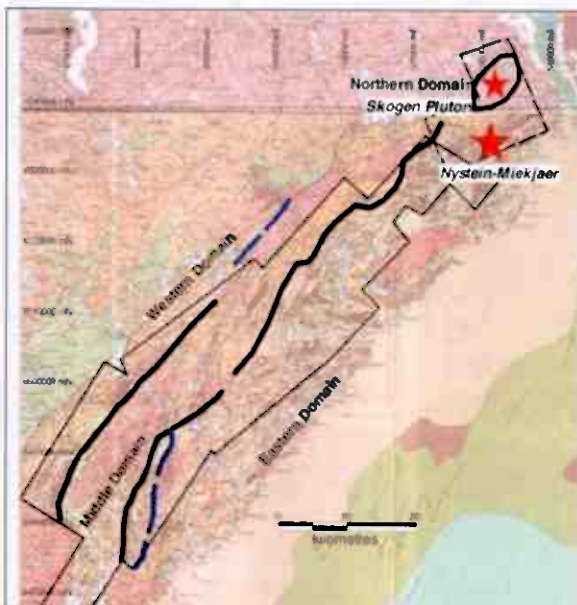


Figure 15a. Geology map with interpreted domain boundaries (thick solid black) and regional scale structural boundaries (dashed blue)

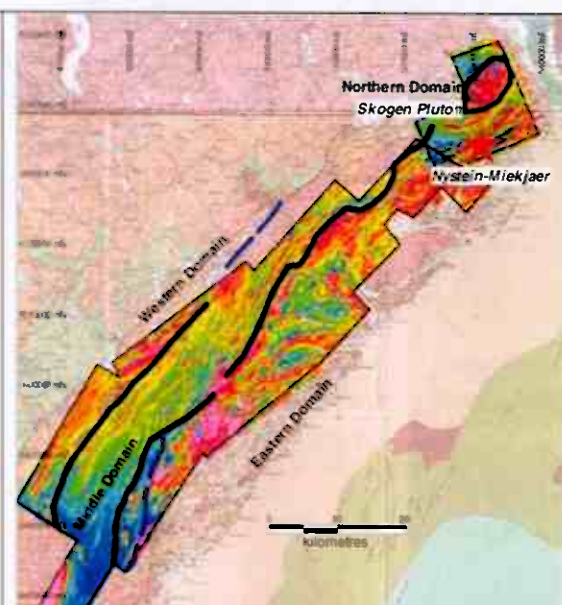


Figure 15b. Interpreted Total Magnetic Field map of Bamble Belt with interpreted domain boundaries.

#### Nystein-Meikjaer area:

This 10km long x 5km wide area encompassing the Nystein-Vissestad-Hansas and Meikjaer deposits, historically contains the highest concentration of deposits in the Bamble Belt. Records indicate the Vissestad mine produced 6,000 tonnes produced @ 1.28% Ni, 0.53% Cu and the Nystein mine produced 31,000 tonnes @ 1.16% Ni, 0.48% Cu. The deposits are ~ 200 m apart occurring along the eastern margin of a 2 km by 1 km norite body that may have a similar plunge to the Meikjaer deposit. The neighbouring Meikjaer and Stoltz deposits had a reported production grade of 1.21% Ni, 0.53% Cu. The workings were fairly extensive considering the small size of their exposed host noritic intrusions (largest 150 m x 50 m). Based on existing maps the norite bodies have a tube-like shape that plunges to the southwest at 45°. The geological setting of hyperite intrusions hosted in paragneiss, an associated linear mag high feature spanning the area between mines and the historical production from local deposits, make this a geologically prospective area.

Although a number of AEM anomalies were identified, follow-up revealed the area is riddled with farms and settlements and the airborne anomalies can easily be attributed to culture at surface. Ground follow-up visits with landowners and the 2006 UTEM survey over the Nystein-Vissestad mines found the associated AEM conductors were buried electrical cables and the anomaly near Meikjaer was found to be the junction of multiple cultural sources. Although geophysics was not successful in identifying surface or near surface mineralization, the area remains geologically prospective.

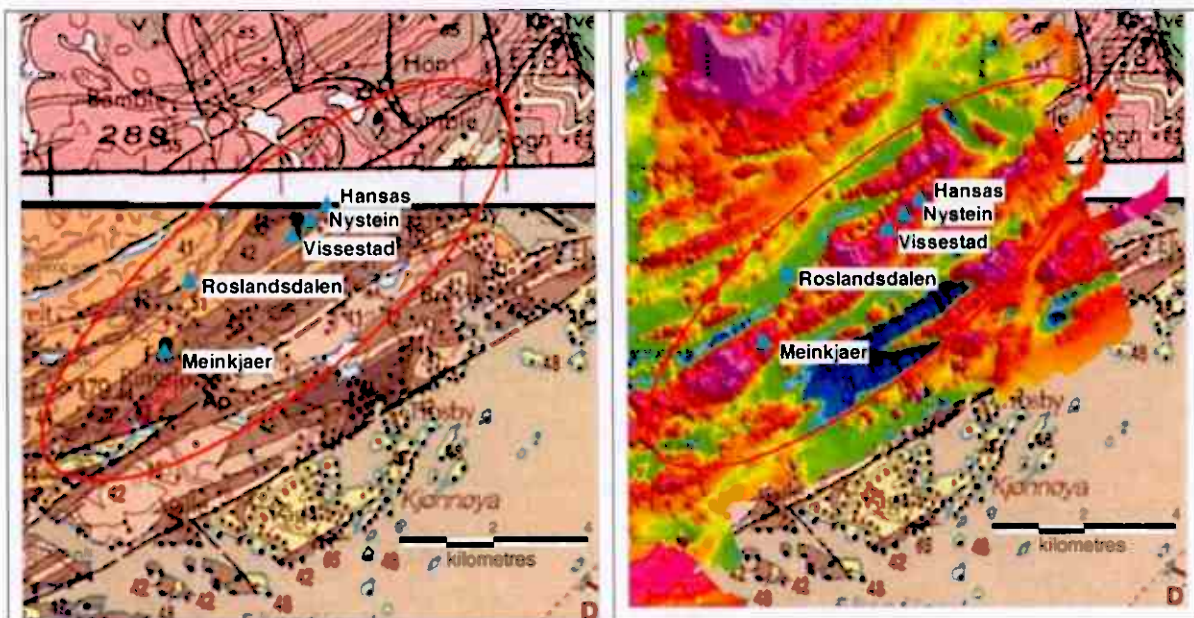


Figure 16a. Location map of Area of interest between Nystein and Meikjaer mines.

Figure 16b. Total Mag map of area of interest between Nystein and Meikjaer mines.

#### Skogen Pluton area:

The Skogen Pluton lies in the centre of the northern mag domain. The ~5km long x 2km wide magnetite rich gabbro, which is mapped as amphibolite, is surrounded by magnetite rich amphibolite bands alternating with quartz rich paragneiss. Historical records indicate the gabbro hosts the Skog showing in the southeast; however multiple attempts to locate the showing have been unsuccessful. Three weak unranked AEM anomalies were identified in the middle of the gabbro, but they may be artifacts of the very high mag signature in the middle of the pluton. Ground follow-up of the anomalies revealed only very trace sulphides within the gabbro. Trace sulphides were sampled from a total of ten locations in and around the gabbro. Assays returned values below detection for all samples.

Although the sampling and ground follow-up did not have positive results, the area remains prospective due to the extremely high mag signature, sporadic trace sulphides, recorded showing, and geological composition. Since the Skogen Pluton mag signature is such a distinguished feature and many

questions regarding the nature of the magnetic units, a full description of the geology and surrounding area can be found in Appendix D.

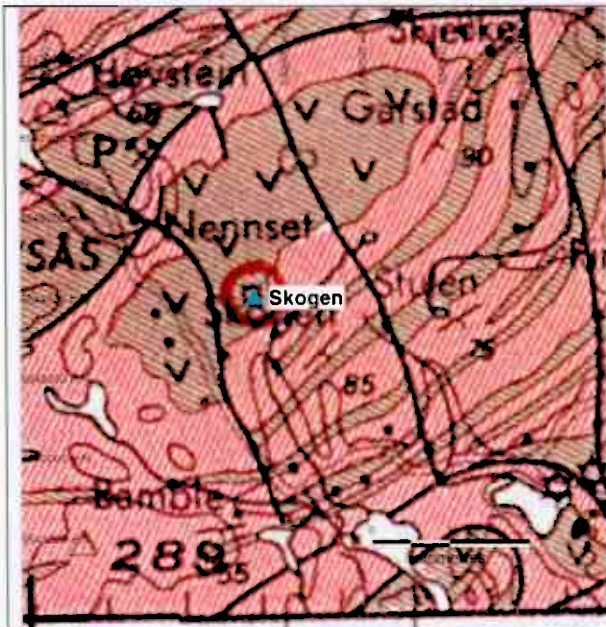


Figure 17a. Geology map of Skogen area of interest

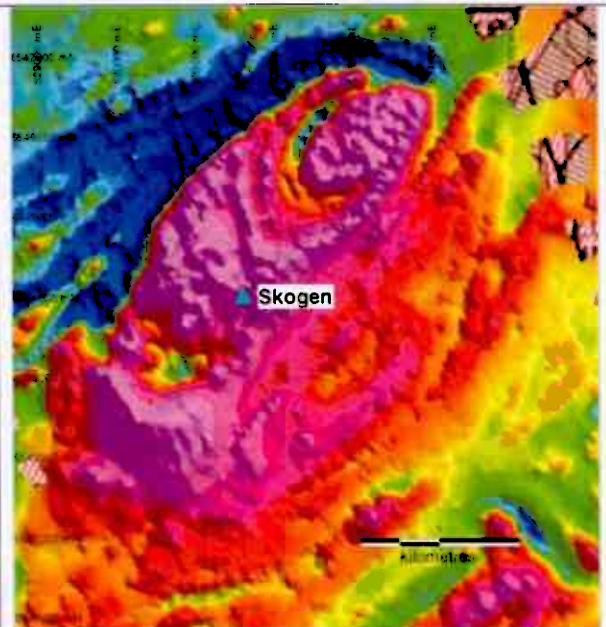


Figure 17b. Total Field Mag map of Skogen area of interest.

#### KEY LITHOLOGICAL SUMMARIES

##### Paragneiss:

Described in the geology legend as undifferentiated banded gneiss (unit 51), this unit is one of the most dominant lithologies of the Belt. It consists of well banded mm-cm scale, felsic rich gneiss with good segregation into leucocratic (feldspar and quartz) and melanocratic (biotite and amphibole) bands. Rounded garnets are found within the gneiss ranging from <1mm to 20cm. The unit ranges from competent crystalline gneiss to well foliated banded paragneiss resembling weathered metasediments. A pervasive regional foliation strikes NNE.

The unit also contains mm-cm scale graphite bands ( $\pm$  pyrite) and local, discontinuous mm-cm magnetite bands. Strong staining is present sporadically and is generally strongest in weathered graphite bearing bands and all sulphide bearing bands.



Photo 7a. Typical undifferentiated gneiss (paragneiss)

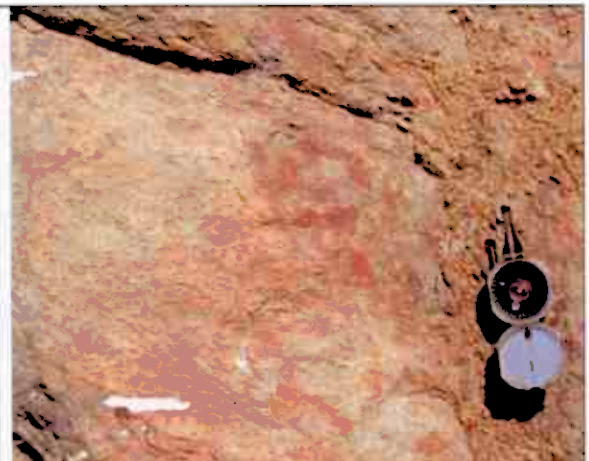


Photo 7b. Stained sulphide-bearing paragneiss

#### Orthogneiss:

Two lithologies, granitic gneiss (unit 33) and quartz dioritic gneiss (unit 38) form the orthogneiss units which are found throughout the belt but dominant in the southern, central portion of the belt. The granitic gneiss is typical granitic-looking gneiss with good banding of feldspars, quartz, biotite and amphiboles. It is obvious that the protolith of this gneiss is a granite.

The quartz dioritic gneiss, consisting of bands of plagioclase + amphibole + biotite + quartz, varies its texture and can resemble both the granitic gneiss and the paragneiss making the distinction between the two units sometimes difficult. It can be massive and well banded with distinct mm-m scale boudins or foliated with a strong schistose fabric parallel to banding. All foliations strike NNE except in local fold noses.

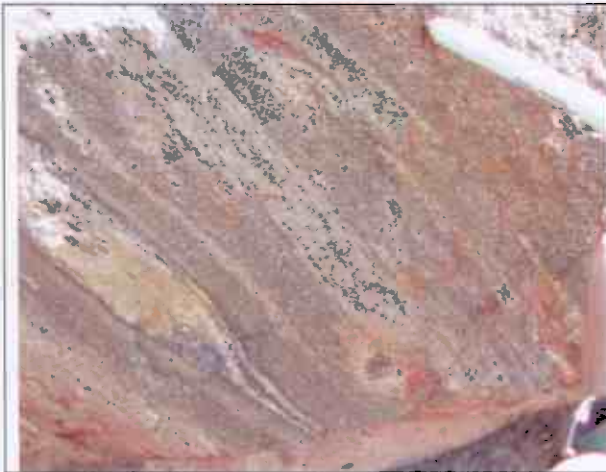


Photo 8a. Typical Orthogneiss with boudins

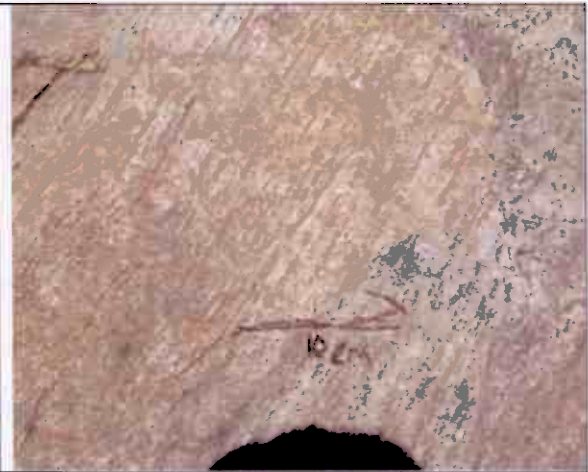


Photo 8b. Typical Fine Banded Orthogneiss

#### Quartz Gneiss:

The unit is recorded on the geology map as quartz gneiss (unit 48). It is best described as massive, crystalline grey to white quartzite with very minor thin bands of biotite ± amphibole. Some of the amphibolite bands are magnetite bearing and cause the quartzite to display localized magnetism. The unit is present to some degree throughout the belt with largest bands observed in the southern portion of the Belt.



Photo 9a. Quartz gneiss with very fine banding

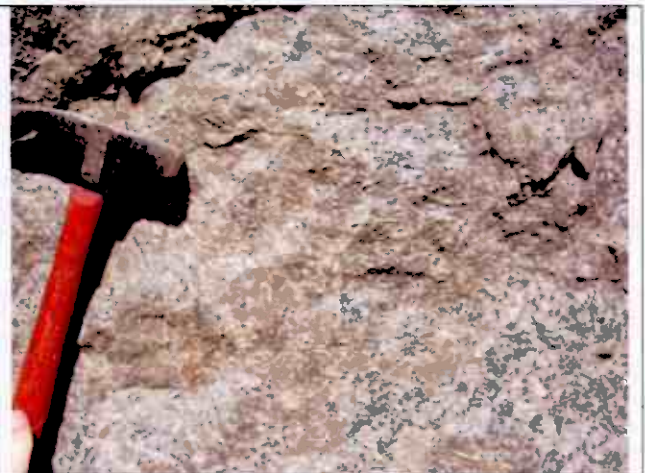


Photo 9b. Massive Quartz gneiss

#### Amphibolite:

Linear km scale bands of amphibolite (unit 42) can be found throughout the Belt and as bands within the other gneisses. The amphibole crystals range from  $< \text{mm}$  to more than  $1 \text{ cm}$  within the bands striking NNE. Some of the wider bands contain abundant magnetite and the AEM survey easily highlights the amphibolite as linear magnetic highs.



Photo 10a. Weakly stained amphibolite banded outcrop



Photo 10b. Cm banded amphibolite

#### Migmatite:

The migmatite (unit 41) is present predominantly on the eastern portion of the belt and is very quartz rich. It strongly resembles the quartz gneiss except that it is more prominently banded and the intense deformation is easily observed due to the contrasting leucocratic and melanocratic bands.

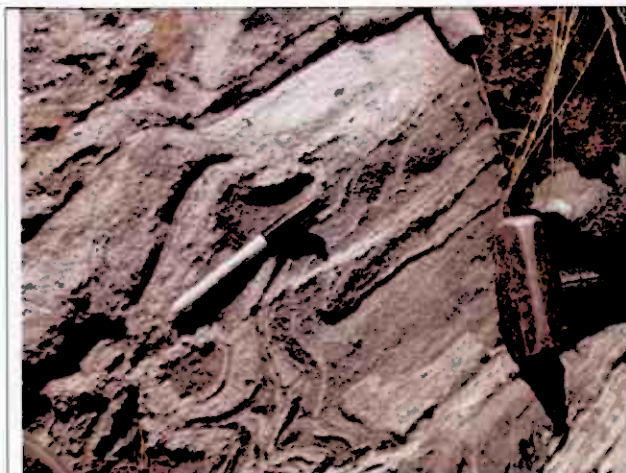


Photo 11a. Highly deformed migmatite



Photo 11b. Finely banded migmatite

#### Mafic Intrusives:

There are at least two easily identifiable generations of mafic intrusives in the Bamble Belt.

One suite is earlier elongate, linear metagabbro with weak to moderate foliation and in places amphibolitized. These intrusives have been deformed during the regional metamorphism and strike NNE accordingly.

Late, syn-to-post-deformation semi-circular mafic intrusives dot the Bamble Belt, ranging in composition from Gabbro to Troctolite to Norite to Hyperstenite. These intrusions are generally referred to as hyperites in historic literature and range in size from several hundred metres to the Skogen Pluton which is 2x4km. Although these intrusives show signs of regional deformation coincident with the belt, they retain their semi-circular shape and have only weak fabrics.



Photo 12a. Weakly banded Gabbro



Photo 12b. Massive fine grained crystalline Gabbro



Photo 12c. Medium grained variable textured Gabbro



Photo 12d. Medium grained oikocrystic gabbro

## 6.0 RECOMMENDATIONS

Based on the results of the 2006 program, the Bamble Belt remains a prospective region for Ni-Cu-sulphide exploration. The number of historic mines and deposits in addition to the newly discovered mineralized targets indicate the Belt is fertile and understanding the distribution of mineralization into the eastern and western domains, will help focus exploration. The exception is Btarg-21 area which is in the middle domain and may represent an environment similar to the Boylestad mine.

Eight targets and two areas of interest have been identified for future follow-up. The recommended follow-up for each target area is outlined as follows:

### Østera:

A UTEM survey of the Østera intrusion particularly covering the historical workings is recommended. The neighbouring Røyvæn intrusion to the east should also be surveyed.

### Seljåsen:

The 2006 UTEM survey identified two subsurface conductors coincident with the AEM anomalies. Drilling is recommended to follow-up this prospective area. Complete details of the survey can be found in forthcoming report by on the 2006 summer UTEM program by Trevor Blair.

### B-65:

A UTEM survey of this anomaly is recommended. The survey should encompass the gabbro contact focussed on the historic adit. Additional prospecting covering the neighbouring gabbros is also recommended.

*Note: Additional prospecting of the amphibolite coincident with the mag high between Seljåsen and B-65 is recommended if the drilling or UTEM results at these targets are positive.*

### Btarg-18:

Negotiations with Norwegian Resource Ventures to obtain the remaining preclaims in this area are recommended. If the preclaims are secured, a UTEM survey covering the mine and extending along the stratigraphic horizon is recommended. Prospecting of the Skytmyr deposit is also recommended.

### B-53:

A UTEM survey covering the anomaly and extending to cover the gabbro contact in this area is recommended.

### B-54:

A UTEM survey covering the anomaly and extending to cover the gabbro contact in this area is recommended. The UTEM survey of this area could easily include B-55.

### B-55:

A UTEM survey covering the anomaly and extending to cover the gabbro contact in this area is recommended. The UTEM survey of this area could easily include B-54.

### Btarg-21:

A UTEM survey covering this anomaly is recommended. The survey should extend to sufficiently cover the stratigraphic horizon hosting the visible sulphides.

### Nystein-Meikjaer area:

Additional prospecting and/or mapping in this area is recommended as it is a known host to mineralization. A better understanding of the mafic intrusions and local mineral trends would help identify potential UTEM or drill targets.

### Skogen area:

Additional prospecting and/or mapping in this area is recommended to better understand the relationship between the gabbro, surrounding paragneiss and trace sulphides observed. An understanding of this relationship may help identify future UTEM targets.

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## APPENDIX A

## **HISTORICAL WORKINGS—Summaries**

### Meikjær and Stoltz Deposits

The Meikjær and nearby Stoltz deposits are fairly extensive workings considering the small size of their exposed host intrusions (largest 150 m x 50 m). Production grade is reported to be 1.21% Ni, 0.53% Cu. Brickwood (1986) postulates "the discordant bosses .... Probably represent either protrusions from a larger single pluton at depth or remnants of a largely eroded intrusion". Based on the existing mapping the host norite bodies have a tube-like shape that plunges to the southwest at 45°. Immediately along strike of the east is the Vissestad, Nystein and Hånsas deposits and the Bjordam ultramafic body lies to the west. The deposit was worked between 1859 and 1884 and again between 1915 and 1917. There are no records of any exploration having been completed on the deposit at the NGU or the Bergvesenet and there is also no core stored at the Lokken facility (virtually all holes drilled in Norway from at least the early 1960's onward are stored there).

### Vissestad, Nystein and Hånsas Deposits

The Vissestad (6,000 tonnes produced @ 1.28% Ni, 0.53% Cu) and Nystein (31,000 tonnes produced @ 1.16% Ni, 0.48% Cu) deposits are only about 200 m apart. They occur along the eastern margin of a 2 km by 1 km norite body and may have a similar plunge to the Meikjær deposit. As with the Meikjær deposit, there are no records of any recent exploration having been conducted over the deposits. Brickwood (1986) states "with the exception of the Nystein deposits, no details have been published of the extent and structure of the Bamble area ore bodies at depth and the present study reveals no further information on this topic, since the mine workings are no longer accessible.

### Bjordam

As mentioned earlier, Bjordam occurs 4 km immediately along strike of Meikjær. Bjordam has been described as "essentially a large composite dyke (3 km x 1 km in size) comprising gabbroic and troctolitic rocks which are locally chilled against a central sheet of peridotite/metaperidotite (Brickwood, 1984). The main lithologies of this dyke-like complex appear to represent fractionates of a deeper level magma which were successively injected to slightly higher crustal levels." This description lends some support for the postulated Voisey's Bay-type conduit system scenario for the Meikjær deposit.

### Skogen

The Skogen pluton is the largest single mafic pluton in the Bamble sector (4 km x 2 km). It is composed of gabbro, norite and troctolite. The pluton hosts the small Skogen nickel deposit (grade unknown). There is no record of any exploration work being conducted over the intrusion. In both 2005 and 2006 unsuccessful attempts were made to locate the Skog deposit / showing.

### Ostera

The Ostera deposit (also called Hogåsen deposit) is located at the base of a small norite body (500 m x 130 m). A similar-sized but more differentiated norite – troctolite – picrite body (Røyvatn) occurs immediately to the east. The two bodies occur in a large fold structure. The deposit was mined at the end of World War I. The mineralization had a strike length of 100 m and a maximum thickness of 2 m. The deposit contained both massive and disseminated sulphides but their relationships are unclear as the deposit has been worked out. Production of 2,000 tonnes grading 1.5% Ni, 0.06% Co is reported. The only previous work on record is a Turam survey from 1947 (50 m spaced lines, 10 m spaced stations) that appears to have picked-up the ore-horizon.

### Seljåsen

The Seljåsen deposit (grade and production unknown, although mining is on the scale of Meikjær) is hosted in a strongly differentiated body (norite – troctolite – pyroxenite) with dimensions of 2 km x 0.5 km. The ore zone occurs in pyroxenite at the base of the intrusion. There are no records of any exploration having been done on the deposit; however, four holes totaling 380 m from Mesel (alternate name for the area) are available at the NGU core library in Løkken.

## APPENDIX B



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**Falconbridge Limited**  
Attn : Patti Tirschmann

Friday, July 28, 2006

Queen's Quay Terminal, 207 Queen's Quay West, Suite 800, Toronto, ON  
M5J 1A7  
Phone: 416 982 7455, Fax: 416 982 7420

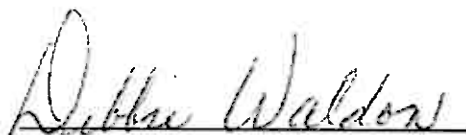
Date Rec. : 19 July 2006  
LR Report : CA03132-JUL06  
Client Ref : PO#302

## CERTIFICATE OF ANALYSIS

### Final Report

| Sample ID    | Ni<br>% | Cu<br>% | Co<br>% | S<br>% | Pt<br>g/t | Pd<br>g/t | Au<br>g/t | Ag<br>g/t |
|--------------|---------|---------|---------|--------|-----------|-----------|-----------|-----------|
| 1: PG 08092  | 0.17    | 0.13    | 0.09    | 32.3   | 0.02      | 0.02      | 0.03      | < 0.5     |
| 2: PG 08093  | < 0.05  | < 0.05  | < 0.02  | 2.50   | 0.02      | < 0.02    | < 0.02    | < 0.5     |
| 3: PG 08094  | < 0.05  | < 0.05  | < 0.02  | 0.12   | < 0.02    | < 0.02    | < 0.02    | < 0.5     |
| 4: PG 08095  | < 0.05  | < 0.05  | < 0.02  | 0.13   | < 0.02    | < 0.02    | < 0.02    | < 0.5     |
| 5: PG 08096  | < 0.05  | < 0.05  | < 0.02  | 6.82   | < 0.02    | < 0.02    | 0.02      | 0.8       |
| 6: PG 08097  | < 0.05  | < 0.05  | < 0.02  | 6.83   | 0.02      | < 0.02    | 0.02      | < 0.5     |
| 7: PG 08098  | < 0.05  | < 0.05  | < 0.02  | 0.26   | < 0.02    | < 0.02    | < 0.02    | < 0.5     |
| 8: PG 08099  | < 0.05  | < 0.05  | < 0.02  | 0.05   | < 0.02    | < 0.02    | < 0.02    | < 0.5     |
| 9: PG 08100  | < 0.05  | < 0.05  | < 0.02  | 0.13   | < 0.02    | < 0.02    | < 0.02    | < 0.5     |
| 10: PG 08101 | < 0.05  | < 0.05  | < 0.02  | 0.13   | < 0.02    | < 0.02    | < 0.02    | < 0.5     |
| 11: PG 08102 | < 0.05  | < 0.05  | < 0.02  | 0.04   | < 0.02    | < 0.02    | < 0.02    | < 0.5     |
| 12: PG 08103 | < 0.05  | < 0.05  | < 0.02  | 0.58   | < 0.02    | < 0.02    | < 0.02    | < 0.5     |
| 13: PG 08104 | < 0.05  | 0.17    | < 0.02  | 0.91   | < 0.02    | < 0.02    | 0.03      | 3.2       |
| 14: PG 08105 | < 0.05  | 0.37    | < 0.02  | 4.95   | < 0.02    | < 0.02    | < 0.02    | 2.0       |
| 15: PG 08106 | < 0.05  | < 0.05  | < 0.02  | 0.08   | < 0.02    | < 0.02    | < 0.02    | < 0.5     |
| 16: PG 08107 | < 0.05  | 1.12    | 0.02    | 33.6   | 0.03      | < 0.02    | 0.02      | 9.0       |
| 17: PG 08108 | < 0.05  | 0.30    | 0.03    | 33.9   | < 0.02    | < 0.02    | < 0.02    | 4.9       |
| 18: PG 08109 | < 0.05  | < 0.05  | < 0.02  | 0.75   | < 0.02    | 0.05      | < 0.02    | < 0.5     |
| 19: PG 08110 | < 0.05  | 0.24    | 0.11    | 46.9   | 0.04      | < 0.02    | < 0.02    | 4.5       |
| 20: PG 08111 | < 0.05  | < 0.05  | < 0.02  | 2.33   | 0.02      | < 0.02    | < 0.02    | < 0.5     |
| 21: PG 08112 | < 0.05  | 0.14    | 0.04    | 5.13   | < 0.02    | < 0.02    | < 0.02    | < 0.5     |
| 22: PG 08113 | < 0.05  | 0.15    | 0.03    | 15.7   | < 0.02    | < 0.02    | 0.02      | 0.5       |
| 23: PG 08114 | < 0.05  | < 0.05  | < 0.02  | 1.45   | 0.02      | 0.02      | < 0.02    | < 0.5     |
| 24: PG 08115 | < 0.05  | < 0.05  | < 0.02  | 0.15   | < 0.02    | < 0.02    | < 0.02    | < 0.5     |
| 25: PG 08116 | < 0.05  | < 0.05  | < 0.02  | 1.11   | < 0.02    | < 0.02    | < 0.02    | < 0.5     |

| Sample ID          | Ni<br>% | Cu<br>% | Co<br>% | S<br>% | Pt<br>g/t | Pd<br>g/t | Au<br>g/t | Ag<br>g/t |
|--------------------|---------|---------|---------|--------|-----------|-----------|-----------|-----------|
| 26: PG 08117       | < 0.05  | < 0.05  | < 0.02  | 0.14   | < 0.02    | < 0.02    | < 0.02    | < 0.5     |
| 27: PG 08118       | 1.76    | 0.37    | 0.06    | 10.5   | 0.08      | 0.15      | < 0.02    | < 0.5     |
| 28-DUP: PG 08111   | < 0.05  | < 0.05  | < 0.02  | 2.30   | 0.02      | < 0.02    | < 0.02    | < 0.5     |
| 29-STD: PTC-1A XRF | 9.93    | 13.4    | 0.30    | ---    | ---       | ---       | ---       | ---       |
| 30-STD: SU1a XRF   | 1.25    | 0.96    | 0.05    | ---    | ---       | ---       | ---       | ---       |
| 33-STD: nbm-1      | ---     | ---     | ---     | 0.29   | ---       | ---       | ---       | ---       |
| 34-STD: RTS-1      | ---     | ---     | ---     | 1.65   | ---       | ---       | ---       | ---       |
| 35-STD: RTS-2      | ---     | ---     | ---     | 18.5   | ---       | ---       | ---       | ---       |
| 36-STD: CZN-3      | ---     | ---     | ---     | 32.4   | ---       | ---       | ---       | 43.0      |
| 37-STD: WMS_1      | ---     | ---     | ---     | ---    | 1.86      | 1.21      | 0.27      | ---       |

  
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## APPENDIX C

## 2006 AEM Follow-up Results

| Anom ID | Map_X  | Map_Y   | Target Type | Target Explained | Summary Observations                                                                                                                                                                              | Field Conclusions                                         | Recommendation | Cultural | Comments                                                                                                                                                            |
|---------|--------|---------|-------------|------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|----------------|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| B-1     | 523148 | 6535122 | AEM         | Y                | Qtz rich metaseds with lots of staining (gossans) with trace visible sulphides (Py+Po+Cpy??) and minor graphite. Amph rich bands. Bmat response 1100hfr 400Lfr rt%16.                             | Anom is poor Sed sulphides and graphite                   | None           | N        | Formational trace sulphides and graphite; possible open fold nose; low prospectivity                                                                                |
| B-2     | 523479 | 6535005 | AEM         | Y                | O/c sparse. Surrounding geology metaseds with mod staining. Bmat response 5000 20cm below surface--- graphite (streak test). No sulphides observed.                                               | Anom is Graphite                                          | None           |          |                                                                                                                                                                     |
| B-3     | 523634 | 6535549 | AEM         | Y                | Metaseds with alternating qtz rich--amph rich bands. Bmat 10000HFR Rt%69 over gossan - sulphide bearing metased (Po, cpy) with graphite. Sample taken for assay.                                  | Anom is Sed sulphides and graphite                        | None           |          |                                                                                                                                                                     |
| B-4     | 525831 | 6536074 | AEM         | N                | Qtz+bt rich metaseds. Some pegmatite. No vis sulphides. No bmat response. No graphite.                                                                                                            | Anom unexplained, non-prospective geology                 | None           |          |                                                                                                                                                                     |
| B-5     | 530206 | 6536774 | AEM         | Y                | Amph+Qtz metaseds (amph rich) with mag 600 and LFR 90. granitic pegmatite in several o/c. Formational Py observed in metaseds as FF. Weak staining. Moderate exposure. Anom parallel to layering. | Anom most likely formational Py. Non-prospective geology. | None           | N        | Metal cable located...not likely conductor; graphite, pyrite bearing metaseds; no prospective geology observed; conductor not directly explained; low prospectivity |

|     |        |         |     |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                         |                                          |       |                                                                                                                                                               |
|-----|--------|---------|-----|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|------------------------------------------|-------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| B-6 | 530206 | 6535199 | AEM | Y | <p>Lots of culture. East end corresponds with transformer station for buried cables. Lots of electric fences. Buried cables to farm (west end of anom) . W end of anom is another transformer station for buried cables. Surface lines overhead W end in multiple directions. Surrounding geology qtz rich metaseds. layering oblique o axis. Second pick from the west corresponds to a small 25m adit through metaseds with peg on parts of wall. sample of interstitial massive Po taken from adit. but possible mica mine-- large 15x10x5cm books of mica. Adit is approx. parallel to axis. Sed Sulph or Peg sulph?? Surrounding geology is metaseds with no staining, no sulph, no bmat response.</p> | <p>Anom is cultural, geology at axis is non-prospective----- But .....close to gabbro, sulphides present in system.</p> | <p>Low-mod priority (poss revisit??)</p> | Y     | <p>Qtz-rich metaseds trend obliquely to anomaly axis; transformer marking trend of buried cables (pic 763, 764)</p>                                           |
| B-7 | 531159 | 6536386 | AEM | Y | <p>Buried cable follows south side of road (landowner statements). Surrounding geology granitic gneisses alternating with Bt+amph+qtz paragneiss. Lots of surficial culture (houses, roads, powerlines) in area. No staining. Bmat sensitive to road made from Meikjaer wasterock. Anom passes through Meikjaer mine (one pick) but unable to determine if sulphides responsible for anom due to heavy culture.</p>                                                                                                                                                                                                                                                                                         | <p>Cultural. Buried cables to house. Related to Meikjaer??</p>                                                          | <p>None-- Meiker UTEM</p>                | Y     | <p>Information from local landowner; abundant culture in area; road built from nickel mine waste; no prospectivity</p>                                        |
| B-8 | 534561 | 6537611 | AEM | N | <p>Anom is in Lake. lakeshore geology is amph rich metaseds with trace py and intermittent FF sulph (py). No bmat response.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | <p>Anom unidentified but most likely Py FF or sed sulph.</p>                                                            | <p>None</p>                              | Maybe | <p>Amph = metagabbro?; conductor not directly explained; potential prospective geology; moderate prospectivities; await assay; actual anomaly under swamp</p> |

|           |        |         |     |   |                                                                                                                                                                                                           |                                                                                     |                       |       |                                                                                                                                                                           |
|-----------|--------|---------|-----|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------|-------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| B-9       | 535300 | 6537552 | AEM | Y | Anom passes through small farming settlement. Buried cable transformer box mid-anom. Lots of culture (fences, building to building wires, buildings etc.). No vis geology.                                | Anom is Cultural. Non prospective area                                              | None                  | Y     | Power transformer marking underground cable axis; axis coincides with multi building farmstead; no prospectivity                                                          |
| B-10      | 535708 | 6537824 | AEM | N | Anom is in lake and has no land exposure. Closest lakeside geology is amphibolitized gabbro. No staining, no vis sulphides. Pegmatite in field ~100m inland.                                              | Anom unexplained. Mod-prospective geology. (anom proximal to gabbro--no sulphides). | None                  | Maybe | In lake; electric cable? unmineralized gabbro in vicinity; outcrop poor shore; abundant culture in area                                                                   |
| B-11      | 534114 | 6539030 | AEM | Y | Abundant culture and tranformer stations for buried cables. SW end of anom passes thorough metaseds. Mid anom is metal fenced tree farm. NE end of anom through of Nystein workings. Mafics in wastepile. | Anom is possibly combination Culture and Old deposit.                               | Wait for UTEM results |       | Abundant culture along axis.. power transformers marking buried cable; UTEM surveyed?                                                                                     |
| B-12      | 534717 | 6539516 | AEM | N | Anom is in middle of lake with no lakeshore expression. Nearest geology to extension of axis is qtz rich metaseds. No staining. No sulphides.                                                             | Anom unidentified. Non-prospective geology                                          | None                  |       |                                                                                                                                                                           |
| B-13      | 537089 | 6538447 | AEM | Y | Anom follows mod-high intensity powerline with several houses nearby. Local geology is amph rich metased, no staining, no bmat response, no vis sulphides.                                                | Anom is cultural. Non prospective geology                                           | None                  | Y     | Powerlines coincident to anomaly axis; no prospectivity; NOTHING                                                                                                          |
| B-14      | 536719 | 6541597 | AEM | Y | Scare o/c. Boulders of metaseds. Good VLF. Bmat response HFR 2300, LFR 600 RT% 39 ~10cm below surface. PY + Graphite found in dirty qtz rich metaseds.                                                    | Anom most likely FF Py and Graphite. Non prospective geology                        | None                  | N     | Poor exposure; graphite, pyrite bearing metaseds; conductor explained; no prospective geology observed; low prospectivity                                                 |
| B-14 ext. | 536719 | 6541597 | AEM | N | Qtz +amph rich metasediments forming narrow (5m) ridge with lowlying ground either side. No staining, no vis sulphides, no bmat response.                                                                 | Anom unexplained. Non-prospective geology                                           | None                  | N     | Nom unexplained. no bmat. no mag. no vlf, no vis sulph. nongraphite. metased ridge corresponds to axis, layering para axis. ~100m SW on roadside.. gossan sampled in 2005 |

|      |        |         |     |   |                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                              |              |   |                                                                                                                                                                                                   |
|------|--------|---------|-----|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|--------------|---|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| B-15 | 515798 | 6524175 | AEM | N | Only one Pick exposed on land---point in lake consisting of massive coarse grained quartz with very trace amounts of amphibole. No bmat response. Axis extend on land to peg quarry (sampled in 2005). No vis sulphides along trace of axis, massive qtzite.                                                                                                                                          | Nnom unidentified. Non prospective geology (poss peg with trace sulph responsible for anom?)                                                 | None         | N | Mineralized samples taken from quarry in 2005-negative assay results; mineralization in pegmatites cuttin quartzite; no prospective geology observed; conductor not identified; low prospectivity |
| B-16 | 513893 | 6523222 | AEM | Y | NE end of anom in sheep farm. Gossan in BT-Qtz-amph-Gt metaseds with trace sulphides (sed sulphides). Anom can be traced through field gossan to gossan but no other o/c contain sulphides. Lots of graphite. Bmat responses 5000hfr over gossan                                                                                                                                                      | Anom is most likely sed sulphides and Graphite. Low-prospective geology.                                                                     | Low priority | N | Farmers field small gossanish o/c                                                                                                                                                                 |
| B-17 | 511929 | 6519255 | AEM | N | Massive qtzite coarse grained with very little amphiblite. Metaseds crosscut by Pegmatite. Trace sulphides found mid anom. No bmat response, very weak mag. No vis sulphides or staining in qtzite.                                                                                                                                                                                                   | Anom unidentified but surface geology non-prospective.                                                                                       | None.        |   |                                                                                                                                                                                                   |
| B-18 | 511171 | 6516805 | AEM | Y | Very steep-sided stream valley with horrible spuce trees and infested with ticks. Most prominent geology qtz-rich, coarse grained metaseds with cm scale bt. Layering parallel to anom. One o/c with cm scale graphite. No bmat response. Good VLF. Pegmatitic looking qtz-rich o/c sporadic throughout area. One o/c with 10-15% sulphides (Po, Cpy, Py) from qtz peg. o/c. Samples taken for assay. | Sulphide bearing qtz peg cutting qtz-rich metaseds. Sedimentary sulphides. Low-prospective geology. Anom possibly sed sulphides or graphite. | Low priority |   |                                                                                                                                                                                                   |
| B-19 | 508702 | 6519780 | AEM | N | Anom in Lake. Investigated geology along lakeshore. Qzt and amph rich metaseds. Amph bands are very magnetite rich with strong bmat mag responses -3500. along access road crossed magnetite mines (staltienn gruve).                                                                                                                                                                                 | Nnom unidentified. Non-prospective geology.                                                                                                  | None         |   |                                                                                                                                                                                                   |

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| B-20  | 508196 | 6525594 | AEM | N | Gossan SW end of axis. Sed sulphides (CPY). Good staining. No bmat response. Axis good VLF conductor. Qtz + gt rich metaseds. No bmat responses. No staining no vis sulph, no graphite.                                                                                  | Anom unexplained overall but most likely sedimentary sulphides. Low-prospectivity. | None (sample assays taken)     | N     | Anom unidentified no sulp. minor graph. nobmat respnse.                                                                                |
| B-21  | 507516 | 6524875 | AEM | N | Coarse grained, Qtz rich, amph banded metaseds. Sparse o/c. No bmat response. No staining, no vis sulphides, trace graphite. Anom ~20m from swamp parallel to axis.                                                                                                      | Anom unidentified. Possibly graphite but non-conclusive. Non-prospective geology   | None                           |       |                                                                                                                                        |
| B-22  | 506193 | 6523436 | AEM | N | Coarse grained, Qtz rich, amph banded metaseds. Sparse o/c. No bmat response. No staining, no vis sulphides, trace graphite. NE end of anom small gossan (hfr 6000). Visible CPY. Hosted in qtz metaseds (sed sulphide). V small sample taken.                           | Anom overall unidentified but most likely sed sulphides. Low-prospective geology   | None (sample taken for assay). | N     | Sedimentary sulphides; no prospective geology; conductor most likely sed sulphide; low prospectivity                                   |
| B-23a | 503257 | 6516804 | AEM | Y | Anom runs along road with streetlights parallel to swamp. Good exposure. Paragneiss banding parallel to anom. Minor garnets. no sulphides or staining. Mafic layers magnetite rich with good bmat mag response (-5000). Northern EM pick intersection of two powerlines. | Anom poss combination culture and magnetite layering. Non prospective geology.     | None                           | Maybe | Good o/c along road with powerlines. powerlines-road-layering all parallel to anom. mafic bands contain magnetite. very rare staining. |
| B-23b | 503301 | 6517007 | AEM | Y | Same as B-23a with mag response -3000.                                                                                                                                                                                                                                   |                                                                                    | None                           |       | Same as B-23a                                                                                                                          |
| B-24  | 502616 | 6516222 | AEM | Y | Anom corresponds directly with trace of ne section of E-18 highway. Road is paralleled by moose fencing, guardrails and streetlights. O/c is paragneiss with good banding. No bmat response. Weak mag response over mafic units.                                         | Culture.                                                                           | None                           | Y     | Anom parallel to layering. layering parallel to E18. Anom is cultural---E18, moose fence, guardrails, pipes, etc.                      |
| B-25  | 502752 | 6512275 | AEM | N | Amon begins in quarry, continues along steep sided gully. No o/c no bmat response in gully. Sides of gully massive qtz and metaseds, amphibole rich (mapped as amphibolite). No magnetite, no graphite, no sulphides observed.                                           | Anom is Structure? Non-prospective geology?                                        | None                           |       |                                                                                                                                        |

|       |        |         |     |   |                                                                                                                                                                                                                                                         |                                                             |                                                    |   |                                                                                                                                                                                     |
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| B-26a | 497386 | 6515883 | AEM | Y | Swamp entire length of axis. Nearest geology along swamp amphibolite (metaseds) with py veinlets parallel to metased layers. No bmat response. Anom unidentified.                                                                                       | Low prospectivity based on surrounding geology. Formational | None                                               | N | Entire length of anomaly coincides with swamp; pyrite in amphibolite to the NW; same trend as graphite conductor to SW; low prospectivity                                           |
| B-26b | 497624 | 6516215 | AEM | Y | Amphibolite at contact with felsic gneiss (leuco metaseds?) with cm scale graphite observed. Bmat response 9000 rt%50. No sulphides, no staining. Non prospective geology at anom. NOTE: contact gabbroic breccia found 500m ESE on map as amphibolite. | ***interesting--prospective?***                             | Poss low priority geophysical follow-up of gabbro. | N | Altered felsic gneiss or metaseds; some amphibolitic gabbro within 100m; minor pyrite in metaseds; conductor explained; low prospectivity                                           |
| B-27  | 497036 | 6515114 | AEM | Y | Amphibolite (sed?) at contact with felsic gneiss. Cm thick graphite bands observed. Bmat response 22000 rt%58. moderate mix oc and overburden. No sulphides, no staining.                                                                               | Anom most likely graphite. Non prospective geology.         | None                                               | N | Amphibolite is gabbroic in composition; axis is not continuous...isolated pods with limited VLF in between; anomalies coincide with logging road; conductor explained; no follow up |
| B-28a | 498202 | 6512080 | AEM | Y | Large o/c containing coarse grained graphite (cm scale layers) in felsic sed (or orthogneiss?) with multiple bmat responses up to 16000 rt%78. Stained o/c along anom, good vlf conductor, no culture.                                                  | Anom most likely graphite. Non-prospective geology          | None                                               | N | Anom parallel to regional layering, o/c mostly Qtzite, metased with bands amph and lenses graphite                                                                                  |
| B-28b | 498161 | 6512219 | AEM | Y | Small o/c coarse graphite in massive felsic rich material. Bmat response 5000 rt% 53. Length of anom consted mostly of massive Qtzite and fine banded felsic metaseds/ (orthogneiss?). Weak VLF conductor.                                              | Anom most likely graphite. Non prospective geology.         | None                                               | N | Coarse graphite, no observed prospective geology; conductor explained                                                                                                               |
| B-29  | 497288 | 6510194 | AEM | Y | Metaseds in o/c and overburden. Bmat response 18000 rt%80. Good Vlf conductor. No culture. Graphite Observed.                                                                                                                                           | Anom most likely graphite. Non prospective geology.         | none                                               | N | No observed prospective geology; crystalline graphite bands in metaseds; conductor explained; pics 2206 and 2208                                                                    |

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| B-30a | 496102 | 6510039 | AEM | Y | Lots of culture. Intersection of multiple powerlines and electric fences in low swamp at northernmost EM pick. Southern picks are swamp with no o/c, few boulders of qtz rich metaseds. Bmat response 1550 r% 15 40cm below surface--weakly stained metased with minor graphite.                                                                                                                                                                                                                                              | Anom most likely culture and graphite. non-prospective geology                                                                                          | None            | Y | Most of anom follows swamp with no o/c, no bmat response, lots of electric fences. N EM pick is intersection of two main powerlines and two electric fences. swamp. one oc with lenses graphite along axis. |
| B-30b | 495982 | 6510069 | AEM | N | Swamp. No o/c, no boulders. Surrounding geology (100m) weakly stained, trace graphite bearing metased. Anom parallel to regional layering.                                                                                                                                                                                                                                                                                                                                                                                    | Anom not conclusively identified but most likely graphite. Non-prospective geology                                                                      | None            |   | Possibly culture but anom unidentified                                                                                                                                                                      |
| B-31  | 493303 | 6513130 | AEM | N | VLF conductor at axis of Anomaly that traces amphibolite ridge. High conductivity EM pick gives bmat high 1256 r%21, LRT263, no mag response. ~20cm below surface siliceous unit containing graphite and trace Py. Staining of o/c, no magnetite observed.                                                                                                                                                                                                                                                                    | Anom unexplained but graphite in area. Mag high unexplained. non-prospective geology.                                                                   |                 | Y | Possible trace sulphides in amphibolite/gabbro?; graphite present; amphibolite-metased contact; if sulphides then follow up                                                                                 |
| B-32  | 497736 | 6504128 | AEM | N | VLF conductor of magnetite bearing paragneiss near gabbro (actual contact not observed). No sulphides, no graphite, moderate staining (iron?). Mag Bmat responses, no HRF. REVISIT: investigate gabbros near anom. Anom is hosted in paragneiss >150m from gabbro. Gabbro has no sulphides. Amphibolitized contact. Good textures in interior. Mag associated with quartz packages not gabbro. Smaller gabbro to the south has very trace sulphides along margin. No staining, no sulphides observed in surrounding metaseds. | Conductor not identified. Conductor most likely magnetite bearing layer. Non-prospective geology overall- gabbro may be prospective but not at surface. | None (gabbro??) | N | Magnetite-bearing pelitic metaseds; cm scale garnets; no observed prospective geology; conductor explained                                                                                                  |

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| B-33 | 489200 | 6507219 | AEM | Y | Small o/c on edge of lake beside new cottage with boats etc. Bmat response 2000 r%68 over oc. Metaseds with strong banding and graphite. Moderate staining. From a distance resembles gossan but closer inspection reveals thin banding with mica and trace Py between lenses magnetite. No Vlf due to lake. O/c to the SE (opposite lakeside) consists predominantly of felsic gneiss with strong banding (orthogneiss?). | Anom source most likely graphite. Low priority geology.     | Very low priority. Poss follow-up of surrounding area. | N | Void of vis sulphides or staining mag response over magnetite rich bands, med-coarse grained pgneiss with coarser bands throughout. banding parallel to anam axis, non-pr specrive geo |
| B-34 | 487197 | 6505197 | AEM | N | Very little o/c NE end, clearcut. O/c SW end large cliff metaseds. No bmat response. No sulphides, staining, magnetite or graphite observed. Small angular boulder on trail contained graphite and trace Py with minor staining.                                                                                                                                                                                           | Anom unidentified but geology is non-prospective.           | None                                                   | N | Minor graphite found on surface outcrop: no prospective geology observed; old clear cut; no culture                                                                                    |
| B-35 | 484553 | 6504517 | AEM | N | O/C at Southern EM picks consists of metaseds. Very weak bmat response. No graphite, no sulphides identified. No staining. Cliffside along axis consists of metaseds. No staining, no vis sulphides, no bmat response (mag or HFR). Northern EM pick is a rounded boulder field (glacial). Anom follows linear swamp and VLF pick-up swamp as main conductor in the area.                                                  | Anom unidentified but geology is non-prospective.           | None                                                   |   |                                                                                                                                                                                        |
| B-36 | 487411 | 6502553 | AEM | Y | Metaseds with graphite found ~40cm below surface by Bmat response 1550 with r% 70. VLF, GPS located axis o/c metaseds. No staining, no sulphides. No mag response.                                                                                                                                                                                                                                                         | Anom most likely graphite lenses. Non-prospective geology.  | None                                                   | N | No observed prospective geology; graphite bearing paragneiss                                                                                                                           |
| B-37 | 483639 | 6498353 | AEM | Y | Swamp bounded by good exposures of metasediments. Good VLF location of axis. Minor graphite observed, no Bmat response, no mag response.                                                                                                                                                                                                                                                                                   | Graphite most likely source of EM. Non-prospective geology. | None                                                   | Y | Anom corresponds well with swamp, no bmat response on o/c, one boulder with graphite. No magnetite or sulphides observed. non prospective geol but anom not id                         |

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| B-38  | 480392 | 6498431 | AEM | Y | Paragneiss with bt-amph bands and thick boudinaged qtz bands. Anom axis parallel to regional layering. Bmat response ~600 graphite observed. No sign of sulphides (no staining, lots of o/c                                                        | Graphite most likely source of anomalie. Non-prospective geology | None |       |                                                                                                                        |
| B-39  | 480198 | 6496331 | AEM | Y | Paragneiss, void of sulphides and no staining, bt-amph bands contain graphite and are responsible for the only response from Bmat. Minor garnets.                                                                                                  | Graphite most likely anom, Non-prospective geol                  | None | Maybe | No prospective geology; graphite conductor; minor culture...old logging camp with cast iron pots; conductor explained; |
| B-40  | 479167 | 6495028 | AEM | Y | Paragneiss with bt-amph bands and occasional very coarse grained felsic bands with garnets. Anom axis parallel to regional layering. Bmat response ~4000 graphite. No sign of sulphides (no staining, lots of o/c)+F50                             | Graphite most likely anom, Non-prospective geol                  | None | N     | Bmat responses very localized correspond to graphite lenses                                                            |
| B-41  | 497075 | 6505081 | AEM | N | No VLF conductor, No bmat response No graphite or sulphides observed, no staining. No surface expression of conductor surrounding o/c is granitic gneiss- locally magnetic. (two pods of magnetite as two separate EM conductors?--no continuity). | Anom unidentified. Non-prospective geology.                      | None | N     | No VLF response; mino mag beep mat response; no observed prospective geology                                           |
| B-42  | 478098 | 6493823 | AEM | Y | Paragneiss with bt-amph bands and occasional very coarse grained felsic bands with garnets. Anom axis parallel to regional layering. Bmat response graphite. No sign of sulphides, no staining, lots of o/c                                        | Graphite most likely anom. Non-prospective geol                  | None | N     | Conductor explained; graphute layers; minor magnetite; no prospective geology                                          |
| B-43a | 477417 | 6493414 | AEM | Y | Paragneiss with bt-amph bands and occasional very coarse grained felsic bands with garnets. Anom axis parallel to regional layering. Bmat response graphite. No sign of sulphides, no staining, lots of o/c                                        | Graphite most likely anom. Non-prospective geol                  | None | N     | Thin and continuous graphite layers in paragneiss; mino diss mag; conductor explained; no prospective geology          |
| B-43b | 476899 | 6492842 | AEM | Y | Paragneiss with bt-amph bands and occasional very coarse grained felsic bands with garnets. Anom axis parallel to regional layering. Bmat response graphite. No sign of sulphides, no staining, lots of o/c                                        | Graphite most likely anom. Non-prospective geol                  | None | N     | No coincident topo features; no prospective geology; unexplained conductor                                             |

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| B-44 | 475901 | 6492131 | AEM | Y | Paragneiss with bt-amph bands and occasional very coarse grained felsic bands with garnets. Anom axis parallel to regional layering. Bmat response graphite. No sign of sulphides. no staining, lots of o/c                                                       | Graphite most likely anom. Non-prospective geol                                       | None                               | N     | VLF axis coincides with creek bed: no prospective geology                                                                                                     |
| B-45 | 481500 | 6494717 | AEM | N | No o/c, boulders of paragneiss, abandoned machinery (cultural influence - bmat 14000), swamp. No bmat response on boulders or in swamp.                                                                                                                           | Anomaly unidentified. Surrounding geology non-prospective                             | none                               |       |                                                                                                                                                               |
| B-46 | 475434 | 6495845 | AEM | Y | Paragneiss, layering parallel to anom axis. Bmat response over isolated layers containing graphite. No mag response, no staining, no sulphides observed. Powerline parallel to axis. abandoned tracks / machinery / pieces of cable along axis.                   | Anom most likely graphite. Non-prospective geol. Minor culture may contribute to anom | none                               | Y     | Anom most likely graphite but poss culture. no sulphides, no staining, vlf picks up powerline, bmat responses all graphite. farm mid anom has lots of culture |
| B-47 | 474268 | 6493881 | AEM | Y | Swamp bounded by graphite rich metasediments. Bmat response of 4000 r%53. Good VLF response to axis, minor culture.                                                                                                                                               | Non prospective geology. Graphite most likely source of EM                            | none                               | N     | Non prospective geol, conductol most likely graphitr. formational anom                                                                                        |
| B-48 | 473043 | 6492442 | AEM | N | Gneiss found at anomalie, no source identified. Gabbro / tonolite observed near anom but not near axis.                                                                                                                                                           | Anom unexplained                                                                      | Low priority                       |       |                                                                                                                                                               |
| B-49 | 472673 | 6491781 | AEM | N | Only o/c was gneiss. lots of culture poor exposure,                                                                                                                                                                                                               | Source of anom unidentified --most likely culture. Non-prospective geology            | Avoid                              | Maybe | Tonalitic outcrop to the SE; unexplained; no prospective units observed                                                                                       |
| B-50 | 471662 | 6491859 | AEM | N | Gneiss at anom location / sed sulphide staining ~200m S... perspective geology, source of anom unidentified.                                                                                                                                                      | Anom unidentified. Prospective geology in area.                                       | Wait for assay results (3 samples) | N     | Possibly graphite layers in pgneiss no sig bmat response no vis sulp                                                                                          |
| B-51 | 471370 | 6494853 | AEM | Y | 2m high fenced "cultivated trees farm" with unknown cable running perimeter of fence. EM picks correspond directly to ends of fence. Surrounding area is swamp with small outcrops of quartzite. High tension powerlines visible within ~200m, VLF n/a, Bmat n/a. | Culture. non-prospective geol.                                                        | None (culture)                     |       |                                                                                                                                                               |

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| B-52 | 471079 | 6489117 | AEM | N | Quarry of 50x50m thick glacial till with metallic machinery                                                                                                                                                                                                                                                                                                                                                   | Anom unidentified. Non-prospective geology. Possibly culture.        | None                        | Maybe | Graphite in till? old machinery present; no prospective geology observed                                                                        |
| B-53 | 469582 | 6489078 | AEM | N | Predominantly gabbro along steep slope, no sulphides visible. Very trace sulphides.                                                                                                                                                                                                                                                                                                                           | Anom unidentified, prospective geology                               | UTEM                        | N     | Prospective geology; no observed surface mineralization                                                                                         |
| B-54 | 469096 | 6487289 | AEM | Y | Weakly mineralized gabbro at contact with highly stained metaseds. qtzite Bmap response (9000), trace diss min, thin sheet graphite.                                                                                                                                                                                                                                                                          | Possibly graphite but most likely sulphides. Prospective geology     | Poss UTEM (gab and contact) | N     | Bmap response over gossan oc of layered felsic gneiss with bands of qtzite cont sheets of graphite and diss py (?). conductor probably graphite |
| B-55 | 468629 | 6485967 | AEM | Y | Contact of gabbro and FGN -- Bmat 8000 response, 40cm below surface; Cpy (veinlets and diss) (high graded sample taken).                                                                                                                                                                                                                                                                                      | Prospective geology-- sulphides most likely source of anomalie       | Prospective geology / UTEM  | N     | Anom source unidentified but o/c non-prospective, no cultural influences, large cliff parallel to anom strike                                   |
| B-56 | 469543 | 6485403 | AEM | N | Fgneiss, no Bmat response, very weak staining (iron?)                                                                                                                                                                                                                                                                                                                                                         | Non perspective geology, anom unidentified                           | Low priority                | N     | No culture; no prospective geology                                                                                                              |
| B-57 | 470359 | 6486278 | AEM | N | Scattered o/c paragneiss in swamp--no sulphides, no staining, no graphite, no magnetite. No bmat response.                                                                                                                                                                                                                                                                                                    | Anom unidentified, non-prospective geology                           | Low priority                | N     |                                                                                                                                                 |
| B-58 | 475823 | 6481417 | AEM | Y | Qtz rich gneiss unit with thin sheeted lenses graphite (id by streak)                                                                                                                                                                                                                                                                                                                                         | Anom most likely graphite. Non-prospective geology                   | None                        | N     |                                                                                                                                                 |
| B-59 | 479770 | 6482370 | AEM | Y | Seljaesen.... Lots of old pits and tailings, good VLF and Beep Map responses, trace to 20% sulphides visible in mafic (gabbroic) outcrop. Two trends ID'd major trends NE parallel to anom, secondary offshoots perpendicular. REVISIT w P&P; troctolyte and Hypersteneite (90% hyperstene-- Umaf) containing interstitial sulphides. Additional samples taken, possible gneissic enclaves.--requires mapping | Prospective Geology. Anom corresponds to major trend marked by pits. | UTEM, secure claims         | N     | No cultural artifacts;                                                                                                                          |

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| B-60 | 478263 | 6481559 | AEM | Y | Paragneiss with peg layers fol parallel to strike of anom. Southern half Anom corresponds to large +5m gully (poss struct related anom??)-- NO Troctolite. North half anom is contact between gabbro and gneiss. Gab contains mod interstitial sulphides. Contact parallel to strike of anom. (gab trends south under gully gneisses???) | Prosepctive Geology                                                 | UTEM                                 | Maybe |                                                                                             |
| B-61 | 479413 | 6481782 | AEM | Y | EM anomalies correspond to moderate gossans gab/metased contacts with good Bmat response (2100 rt% 75). Weak to moderate response along length of axis and Perp to axis- (parallel to Seljeasen trend??). Trace diss Po (Py), minor CPY observed along axis. SE pick-- cliff with overhang containing stained gabbroic? rocks(Gossan)    | Prospective geology, sulphides most likely source of anom.          | UTEM                                 | N     | No culture; weak gossans found at both picks; weak VLF; prospective geology                 |
| B-62 | 479411 | 6482706 | AEM | Y | Fg mafic unit (weathered gabbro) with rusty staining Contact between gneisses and gabbro poss troctolite. Trend of anom follows contact. Trace to diss. Mineralized throughout. Good exposure along road. Poor bmat responses.                                                                                                           | Prospective geology, sulphides most likely responsible for anom.    | UTEM (due to proximity to Saljeasen) |       |                                                                                             |
| B-63 | 474870 | 6489212 | AEM | N | No o/c observed. Anom corresponds to swampy wooded area. Local bmat response (1900 rt%75) 40cm below surface--severly weathered metaseds. Surrounding o/c metaseds and qtzite.                                                                                                                                                           | Anom soource unidentified, non prospective geology                  | None                                 |       |                                                                                             |
| B-64 | 500616 | 6513153 | AEM | N | Metaseds along trend. Bmat mag (-1500) and hfr (75 rt%38) on axis. Graphite ~40cm below surface. Visible magnetite in o/c. weak staining (iron?). No sulphides observed. No cultural influences.                                                                                                                                         | Anom unexplained but most likely graphite. Non-prospective geology. | None                                 | N     | No observed prospective geology; graphite and magnetite bearing gneisses; low prospectivity |

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| B-65 | 478070 | 6476282 | AEM | Y | Re-discovered pit with massive and disseminated Po and associated Cpy. Old Adit. Prospective geology (contact). Gabbro with paragneiss near. Parked cars at quarry near road and observed well developed layering in gneiss (352 / 84) with lineations (160 / 54) on the layering and rodded plagioclase parallel to the lineations. photo----good example of why gabbros appear circular but min trends off into feldspar rocks. | Prospective geology. Anom is sulphides.              | Secure claims, UTEM | N | Good geology / gossan gabbro underlying metaseds, contact mineralized steeply plunging W under topo high                                            |
| B-66 | 504288 | 6515000 | AEM | N | Anom follows a shallow gully approx 10m wide. Sides of gully metaseds with very trace staining. Mostly qtz rich dirty granular qtz layers parallel to gully. No bmat response, no VLF, no o/c in middle of gully.                                                                                                                                                                                                                 | Anom unidentified. Non-prospective geology           | None                | N | Metaseds on west, gneiss east. gully with o/c lining gully. no exposure base of gully (anom). no sulphides. very very trace graphite. no magnetite. |
| B-67 | 485165 | 6499109 | AEM | N | Hillside parallel to road consisting of boulders of metaseds. No o/c. very weak Bmat responses (<100) no source identified.                                                                                                                                                                                                                                                                                                       | Anom source unidentified but non-prospective geology | None                | N | Unable to identify conductor source but located with gps and weak vlf. most likely graphite.                                                        |
| B-68 | 518686 | 6531637 | AEM | Y | High tension powerlines, mid-tension powerlines, low-tension powerlines, transformer station and old railroad parallel to anom axis. Geology is metaseds (qtz rich) with no staining, no sulphides.                                                                                                                                                                                                                               | Anom is cultural, geology non-prospective.           | None                | N | High, medium tension and rail line coincident with anomaly axis; picture 778                                                                        |
| B-69 | 480268 | 6484449 | AEM | N | VLF conductor coincident with axis. Felsic rich gneiss with qtz rich bands. No bmat response. No mag response.                                                                                                                                                                                                                                                                                                                    | Anomaly unexplained. Non prospective geology.        | Low priority        | N | Strong VLF response; no prospective geology or mineralization observed                                                                              |
| B-70 | 495595 | 6508648 | AEM | N | Granitic gneiss and paragneisses. Weak isolated mag response (-400), no HFR, no visible sulphides, no staining.                                                                                                                                                                                                                                                                                                                   | Anomaly unexplained, non-prospective geology.        | None                | N | Anomaly not identified; no prospective geology observed; low prospectivity                                                                          |

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| B-71    | 517621 | 6521983 | AEM | Y | Oikocrystic coarse grained (cm-scale) gabbro. No staining, no vis sulphides, no bmat response. Resembles rest of gabbro in area. Powerline through anom with grounded mid-tension pole at EM pick.                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Cultural—mid-low prospective geology                              | None        | Y | AEM coincides with moderate tension powerline pole; nothing peculiar about it; no mag response; no EM; gabbro everywhere; no sulphides; low prospectivity; gabbro consistent throughout |
| B-72    | 499705 | 6498964 | AEM | Y | Ostera Mine Area: Entire area is prospective with sed sulphides found to the west of the intrusions and semi-massive sulphides found near old workings. Bmat response up to 1500 on gossans near shafts. Workings are steeply W plunging into the eastern edge of the undifferentiated western intrusion. Overlying gneisses (predominantly granitic) are responsible for the topographic high. The workings form a NNE trend. Workings are quite deep (>20m to watertable). Location of EM pick is in metaseds with lots of granitic layers. 200m east of EM pick is gossan of metaseds. *** presence of landowner and very heavy rains inhibited mapping and prospecting. | Anom source most likely sulphides. Prospective geology            | UTEM        |   |                                                                                                                                                                                         |
| Btarg-2 |        |         | AEM | N | weakly stained bt+qtz+amph rich metaseds with bands amphibolite. No vis sulphides.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Non-prospective geology.                                          | none        | N | Poor o.c no staining, no sulph no graphite, metaseds with coarse qtz (peg?)                                                                                                             |
| Btarg-3 | 521098 | 6533701 | Mag | N | Amphibole + qtz rich layered dirty metaseds overlaying amphibolite (metagabbro??). No sulphides observed. No staining. Landowner remembers peg mines in area. Good mag response (~2900) in metaseds. Anom parallel to layering.                                                                                                                                                                                                                                                                                                                                                                                                                                             | Anom unidentified. Low-mod-Prospective geology (poss metagabbro). | Re-visit??  |   |                                                                                                                                                                                         |
| Btarg-4 | 531244 | 6538848 | Mag | N | YB-0603 SST at mag high, boulder of gab breccia identified. Mag source unidentified (underlying sst??) Part of Btarg-9                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                   | Re-visit ?? |   |                                                                                                                                                                                         |
| Btarg-6 | 468883 | 6488536 | Mag | Y | O/c mapped SST at mag high part of Btarg-9                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                   |             |   |                                                                                                                                                                                         |

|          |        |         |         |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                   |                                    |  |  |
|----------|--------|---------|---------|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|------------------------------------|--|--|
| Btarg7   | 469060 | 6488265 | Mag     | Y | Gabbro boulders found, strongly mag metaseds found rd side o/c predom metaseds and Qtzite one small oc gabbro near N mag high. Non-prospective geology. REVISIT: East on side road lots of gabbro. Non magnetic. Magnetic metased ~5m thick. No staining. No sulphides observed.                                                                                                                                                                                                                    |                                                   | None                               |  |  |
| Btarg-8  | 469558 | 6490325 | Mag     | Y | Breccia found, poss remelting of melanosome? Blocks of metased suspended in cliff (showing identified 2005) weak Cpy gossan. Mag source unidentified, geology complicated- non Ni prospective, poss Cpy or Kim prospective. REVISIT: traversed entire mag ring. Gabbro identified over most of the mag highs and mag lows. Highly banded folded metaseds ?- reworked gabbro containing thick bands magnetite found near contact with Qtz metaseds. Prospective geology, anom unidentified, mag high |                                                   | UTEM                               |  |  |
| Btarg-9  | 469344 | 6488381 | Mag     | N | Possibly Umaf(?) vein with Qtz and py (tr Cpy) cutting metaseds/Qtzite. Lots of culture, mag source unidentified. Assay umaf vein wait for results to determine if prospective geology                                                                                                                                                                                                                                                                                                              |                                                   | None / wait for assay              |  |  |
| Btarg-10 | 467515 | 6485035 | Mag     | Y | Highly magnetic gabbroic peg veins. Strong mag response from Bmat. Gab void of sulphides. Gossan found along road at metased/gab contact (sampled 2005). Contact represents prospective geo. For Cpy                                                                                                                                                                                                                                                                                                |                                                   | Verify 2005 assay results          |  |  |
| Btarg-11 | 467383 | 6484079 | Mag     | Y | Magnetic granitoid Peg in contact with paragneiss containing thin lenses magnetite. Void of sulphides. Bmat mag response. Non-perspective geology                                                                                                                                                                                                                                                                                                                                                   |                                                   | None                               |  |  |
| Btarg-12 | 468166 | 6481855 | Geology | Y | Amphibolite and Magnetite rich bands in gneiss. Very magnetic                                                                                                                                                                                                                                                                                                                                                                                                                                       | Amphibolite. Possible metagabbro. non prospective | None-wait for results of B-65 UTEM |  |  |

|                                         |        |         |         |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                   |                                    |   |                                                                                                                                                      |
|-----------------------------------------|--------|---------|---------|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|------------------------------------|---|------------------------------------------------------------------------------------------------------------------------------------------------------|
| Btarg-13                                | 478431 | 6479065 | Geology | Y | Amphibolite and Magnetite rich bands in gneiss. Very magnetic                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Amphibolite. Possible metagabbro, non prospective | None-wait for results of B-65 UTEM |   |                                                                                                                                                      |
| Btarg-14                                | 479019 | 6478820 | Geology | N | Very weakly mineralized (py) and very strongly magnetic Amphibolite and pegmatite in contact with metasediments. Could not locate Brattesen showing. Minor prospective geol. Due to possibility of NE trend between B-65 and Selj. No bmat response. Bmat mag of -2000.                                                                                                                                                                                                                                                                                                                       |                                                   | Low priority, poss UTEM            |   |                                                                                                                                                      |
| Btarg-15, Brattesen                     | 478984 | 6479560 | Geology | Y | Amphibolite bands in intermediate gneiss with thick layers Qtzite. Mafic layers are very magnetic (up to -9900) with magnetite layers up to several mm thick. No staining, no vis sulphides.                                                                                                                                                                                                                                                                                                                                                                                                  |                                                   | Very low priority                  | Y | Similar geology to deland B-65 but not sulphides present. gabb unit is host of messel showing ?                                                      |
| Btarg-16                                | 478761 | 6479740 | MAG     | N | Massive, thick bands (?) Qtzite and Qtz rich metaseds. No bmat response, no staining, no vis sulphides.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Non-prospective geology.                          | None                               |   |                                                                                                                                                      |
| Btarg-17                                | 481043 | 6485714 | AEM     | Y | WARNING OPEN PITS....Old workings, trench and subsurface adits found. Landowner says copper mines in 1800's. Base of workings at least 10m deep with 5m man-made cliff on west side of workings. Steepsided trend follows contact between Pgneiss and Grangneiss. Possibly tracing a vein?. Trend is NNE-SSW steeply west dipping. Lots of visible Po, Cpy, Py, magnetic.--(heavy rain)--<br>REVIST: Surrounding geology and host geology are felsic gneisses (very Qtz rich) with bands of amphibolite. trench traces very coarse Qtz rich band (poss peg). lots of samples, lots of photos. | Prospective Geology                               | Poss UTEM                          |   |                                                                                                                                                      |
| Btarg-18<br>Bøylestad<br>copper<br>mine | 482920 | 6492480 | MAG     | Y | Paragneiss with isolated layers containing trace to 10% sedimentary sulphides (Po, Cpy and Py). Local folding of layers with best sulphides in noses. Layering parallel to NNE regional layering.                                                                                                                                                                                                                                                                                                                                                                                             | Prospective geology??                             | Very low priority                  | N | Trench with multiple shaft like extensions mod to steeply east dipping. trench approx parallel to layering (n-s). multiple samples and photos taken. |

|          |        |         |         |   |                                                                                                                                                                                                                                                                                                |                                                                 |      |   |                                                                                                                                                                                          |
|----------|--------|---------|---------|---|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|------|---|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Btarg-19 | 482504 | 6499085 | Geology | N | Metaseds on two sides of a swamp. Pick corresponds to swamp. No visible sulphides in surrounding paragneiss. No staining, no bmat response.                                                                                                                                                    | Anom unexplained. Non-prospective geology.                      | None |   |                                                                                                                                                                                          |
| Btarg-20 | 496703 | 6508897 | Geology | N | Good VLF conductor. Only o/c were qtz rich metaseds. No bmat response anywhere. Very weak mag on select o/c (magnetite in gneiss).                                                                                                                                                             | Anom unidentified. Non-prospective geology.                     | None | N | Very qtz rich in places peg. layering paral to reg strike (NNE) no vis sulp, no graphite, no bmat response. very very weak staining (poss iron). anom unexplained. non-prospective geol. |
| Btarg-21 | 495406 | 6514862 | Geology | N | Qtz rich metaseds with qtz bands (Peg or veins?) no staining, no vis sulphides, no bmat response.                                                                                                                                                                                              | Anom unidentified. Non-prospective geology.                     | None |   |                                                                                                                                                                                          |
| Btarg-22 | 513387 | 6519623 | Geology | N | Qtz rich metaseds with minor qtz pegmatite (?) / veins(?). Nonbmat response. No staining. No vis sulphides. No graphite                                                                                                                                                                        | Anom unexplained. Non-prospective geology                       | None | N | No beep mat response; no prospective geology observed; conductor unexplained; low prospectivity                                                                                          |
| Btarg-23 | 516043 | 6519758 | Geology | N | Axis follows ridge of felsic orthogneiss(?). No bmat response. No sulphides. Mag ~600. No staining. Transect into gabbro shows lots of amph rich metaseds with undulating sharp contact with gabbro. Gabbroic unit smaller than mapped. No staining, no sulphides. No bmat response. mag 2000. | Anom unidentified. Mod-prospective geology (gabbro in metaseds) | None |   |                                                                                                                                                                                          |
| Btarg-24 | 527672 | 6535177 | Mag     | Y | Tower on top of hill with supporting infrastructure (shed).                                                                                                                                                                                                                                    | Anom is Cultural                                                | None | N | No observed prospective geology within 200m observed; conductor not directly explained; locally magnetic units; low prospectivity                                                        |
| Btarg-25 | 494145 | 6498755 | Geology | N | Granitic gneisses with isolated outcrops of amphibolite. Weak mag response over granite (-500). No HFR response, no VLF. No staining, no vis sulphides.                                                                                                                                        | Anom unexplained. Non-prospective geology.                      | None |   |                                                                                                                                                                                          |

|           |        |         |             |   |                                                                                                                                                                                                                   |                                                                                                            |                                                   |   |                                                                              |
|-----------|--------|---------|-------------|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|---------------------------------------------------|---|------------------------------------------------------------------------------|
| Btarg-26  | 489579 | 6506895 | AEM         | N | Mag low corresponds to amph rich metaseds (bt+qtz+amph) weak banding. No bmat response, low mag. No vis sulphides. No staining.                                                                                   | Anom unexplained. Raft of sediments in gabbro.                                                             | Low priority                                      | N | No prospective geology observed; conductor not identified; low prospectivity |
| Btarg-27  | 532350 | 6546270 | AEM         | N | Gabbro with strong mag response (no different than any gabbro in area), very trace sulphides. No HFR, No LFR. No staining.                                                                                        | Anom unexplained. Poss trace sulphides. Mod-prospective geol.                                              | Poss UTEM--wait for assay results.                |   |                                                                              |
| Btarg-28  | 532720 | 6546190 | AEM         | N | Fine grained, equigranular mafic material with plag and minor qtz. Overprinted siliceous metamorphism--metagabbro?? No staining, no vis sulphides, no HFR, variable mag 0 - 10000.                                | Metagabbro or highly metased. Anom unexplained. Low-prospective geology (potential for magnetite mines??)  | None                                              |   |                                                                              |
| Btarg-29  | 532900 | 6545440 | Mag         | Y | Qtz + Bt+plag +amph with magnetite metaseds with qtz rich-amph rich bands. Good foliation. Good exposure limited to one cliff. Majority of mag high corresponds to farmers field. No staining, no sulphides.      | Mag high is magnetite. Non-prospective geology.                                                            | None                                              |   |                                                                              |
| B-targ-30 | 535359 | 6535858 | Mag         | Y | Well banded (segreggated) metaseds with weak-mod staining. Amphibolite bands with extremely trace sulphides (py) and magnetite.                                                                                   | Metaseds. Sample taken for assay.                                                                          | Wait for assay results                            |   |                                                                              |
| B-targ-31 | 534443 | 6535254 | Mag         | Y | Amphibolite with strong banding and good development of garnets. Coarse grained magnetite. Very trace sulphides.                                                                                                  | Metaseds. Sample taken for assay.                                                                          | Wait for assay results                            |   |                                                                              |
| B-targ-32 | 533961 | 6534841 | NGU showing | N | Attempts were made to locate the NGU showing. No showing could be found in the area. The geology was non-stained gabbro with no vis sulphides. Attempts made to locate the showing in 2005 were also unsuccessful | No showing identified in area elsewhere in unit sulphides and staining observed. Remains prospective area. | Follow-up required UTEM northern portion of body. |   |                                                                              |

|                   |        |         |                |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                  |                                 |  |  |
|-------------------|--------|---------|----------------|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|---------------------------------|--|--|
| SKOGEN<br>Showing | 531518 | 6544098 | NGU<br>showing | N | <p>Attempts were made to locate the old workings of Hansas (east of Nystein). Access is difficult (up and over cliff). Geology map of Viss-Nystein-Hansas has lake mislocated and roads are skewed. Using geology trend to project to Hansas we were unable to find any showings-- however--- the lakeside has many gullies and crevices and the adit and two shafts may be tucked into them-or- were too far to the south and the mine is slightly off trend to the north. Local farmers knew of min and Adit and shaft were previously mapped so it has not been covered/filled in however there is widespread logging near the mine area.</p> | Mine not located | Additional Follow-up req'd UTEM |  |  |
|-------------------|--------|---------|----------------|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|---------------------------------|--|--|

|               |        |         |     |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                            |               |  |  |
|---------------|--------|---------|-----|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|---------------|--|--|
| HANSAS Mine   | 534364 | 6539320 | Mag | Y | <p>The large magnetic feature in Northern Bamble identified in the 2005 AEM survey- referred to as the Hurricane- corresponds to a large mafic unit surrounded by linear alternating Quartz rich and amphibole rich metaseds (paragneiss). The centre of the hurricane which hosts three EM anomalies has been mapped as a large amphibolite but field visits suggest it is a gabbro. The Hurricane feature also corresponds to a relative topographic high. The core varies from coarse grained crystalline leucocratic gabbro with cm scale crystals to fine grained very crystalline weakly silicified massive looking leucocratic gabbro. This part of the feature is highly magnetic with variable beep-mat responses from 10 up to 10000 mag sus. The rim of the hurricane feature is composed of well banded silicified metasediments with good segregation into leucocratic and melanocratic bands. In places, boudins and proto-mylonitic textures are observed. The mafic units consist almost entirely of amphibolite with very fine to very coarse magnetite and are highly magnetic with magnetic susceptibility up to 4000. The quar</p> | Magnetic Gabbro surrounded by Magnetic bearing amphibolite | Possible UTEM |  |  |
| Skogen Pluton | 531000 | 6545000 |     | N |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                            |               |  |  |

## APPENDIX D

## BAMBLE HURRICANE

The large magnetic feature in Northern Bamble identified in the 2005 AEM survey- referred to as the Hurricane- corresponds to a large mafic unit surrounded by linear alternating Quartz rich and amphibole rich metaseds (paragneiss). The centre of the hurricane which hosts three EM anomalies has been mapped as a large amphibolite but field visits suggest it is a gabbro. The Hurricane feature also corresponds to a relative topographic high.

The core varies from coarse grained crystalline leucocratic gabbro with cm scale crystals to fine grained very crystalline weakly silicified massive looking leucocratic gabbro. This part of the feature is highly magnetic with variable beep-mat responses from 10 up to 10000 mag sus.

The rim of the hurricane feature is composed of well banded silicified metasediments with good segregation into leucocratic and melanocratic bands. In places, boudins and proto-mylonitic textures are observed. The mafic units consist almost entirely of amphibolite with very fine to very coarse magnetite and are highly magnetic with magnetic susceptibility up to 4000. The quartz rich units had slightly lower magnetic susceptibilities of ~10-1000. Outward from the rim of the feature the magnetitic susceptibility drops dramatically and becomes localized into small bands similar to other areas of the Bamble Belt.

Trace (very trace) sulphides were observed in the core of the mag feature. No sulphides or staining was observed in any of the paragneisses of the rim. Magnetite was observed in both the core and rim of the feature. The region does not present itself as a Ni prospect.

The mag low in the SW region of the feature corresponds to an outcrop poor, low-lying region bounded by rocky cliffs and topographic highs and may represent artifacts of topography rather than a real mag low in the bedrock. Paragneissic rafts were observed in the core of the feature and correspond to one of the 2005 AEM anomalies.

Both the core and the rim appear to have a pervasive, late silicification that makes the units more crystalline than their counterparts elsewhere in the belt. This supports a hypothesis that the Hurricane area has suffered an intense deformation- possibly a shear whereby the large mafic core acted as the nuclei for rotation (possibly a shear sense indicator). The pervasive yet variable magnetism in this area may also be a result of this regional deformation / metamorphism.

## APPENDIX E

**FOR FALCONBRIDGE LTD**

**PROJECT 202**

**Report of field work in the Bamble area, southeastern Norway: summer 2005.**

**Report prepared by**

**Yannick Beaudoin  
Project Geologist  
Falconbridge Ltd (International Nickel Group)**

## HIGHLIGHTS

- A total of 90 samples were collected from the Bamble North and South areas and sent for analysis (SGS Lakefield Research).
- Previously visited (by Falconbridge, 2004) old workings:
  - Nystein: new samples recovered with up to 2.01wt% Ni for 18wt% S (see samples SA67815-SA67817 in Table 1)
  - Vissestad: new sample recovered with 0.84wt% Ni for 11.7wt% S (see sample SA67814 in Table 1)
  - Meikjaer: 2 new samples with 1.86 and 1.74wt% Ni for 19.2 and 15.1wt%S respectively (see SA67819 and SA67820 in Table 1)
  - Seljasen: 2 new samples with 0.79 and 0.44 wt% Ni for 27 and 16.9wt% S respectively (see SA67825 and SA67826 in Table 1)
- 1 new, previously unvisited (by Falconbridge) Ni showing was located and sampled: Hogasen NGU database showing- 2 samples with 0.54 and 0.49 wt% Ni for 6.6 and 4.22wt% S respectively (see SA68086 and SA68087 in Table 1)

## INTRODUCTION

### Geological Setting

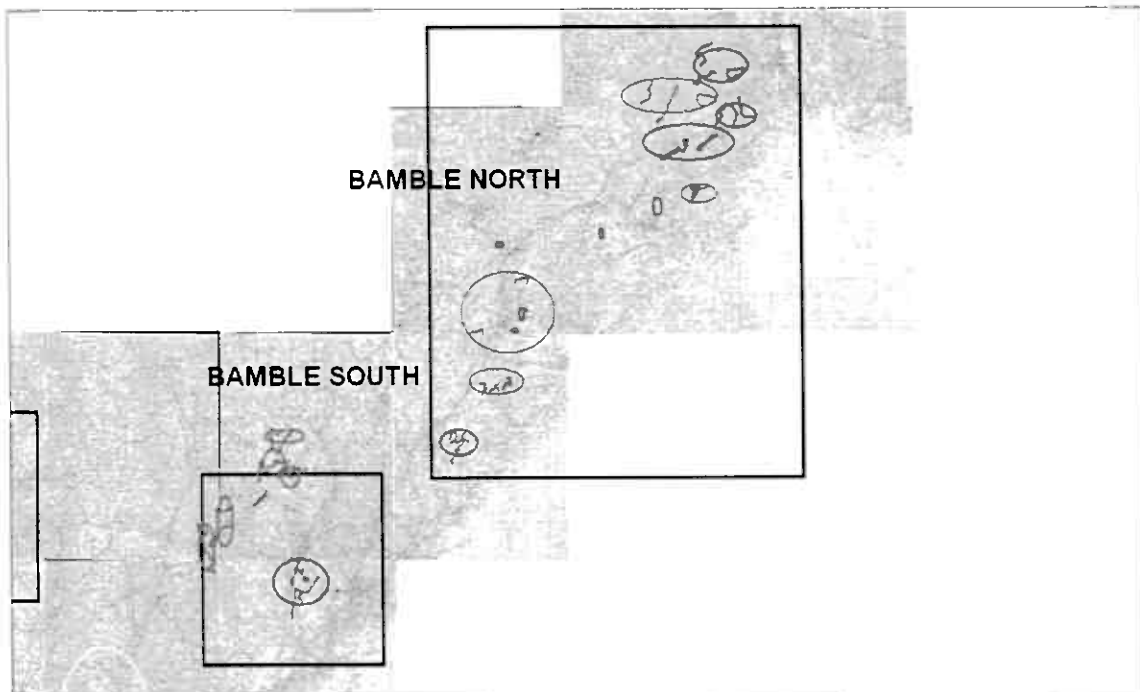
The Bamble project is situated between Kristiansand in the south and Porsgrunn in the north (approximately 150 km south of Oslo). The area is underlain by a geological domain known as the Bamble Belt, a 100 x 20 km zone of complexly folded sedimentary and granitic gneisses that were deposited between 1700 and 1500 Ma and subsequently metamorphosed and deformed during the later stages of the Svecofenian Orogeny (1600 – 1450 Ma). Mafic intrusions, locally called hyperites, were emplaced over a range of ages including, an early phase of hyperites at 1395 – 1450 Ma, a main phase of hyperites between 1180 and 1250 Ma and a late phase at about 1100 Ma. These intrusions are dominantly comprised of coarse-grained, plagioclase-rich mesocumulates and orthocumulates. However, the intrusive series in its entirety comprises lithologies ranging from subordinate ultramafites (including pyroxenite, picrite and peridotite) through troctolitic varieties to olivine-free gabbros and norites, and olivine-ferrogabbros. Nickel sulphides are associated with a number of these mafic intrusions. A second phase of metamorphism occurred during the Sveconorwegian Regeneration between 1200 and 1180 Ma. This was essentially a thermal metamorphism with limited structural deformation.

The above ages are very poorly constrained and are almost entirely Rb – Sr ages that should be considered to be the youngest possible age. Certainly, the similarity in the age between the main hyperites and the Sveconorwegian Regeneration suggests that the radiometric clock has been reset on the hyperites. It is quite conceivable that the hyperites are closer in age to that of the Voisey's Bay intrusion (1330 Ma). The similarity in rock types and the postulated location of southern Norway to the south and east of Nain between 1800 Ma and 1100 Ma gives further credence to this speculation. Brickwood (1986) states: "the intrusive series can be correlated with comparable, broadly contemporaneous magmatism in Eastern North America and Southern Greenland. This widespread magmatic activity is thought to have been initiated by a phase of aborted rifting prior to the ultimately successful breakup of the Proterozoic Supercontinent following the Sveconorwegian (=Grenvillian) Orogeny."

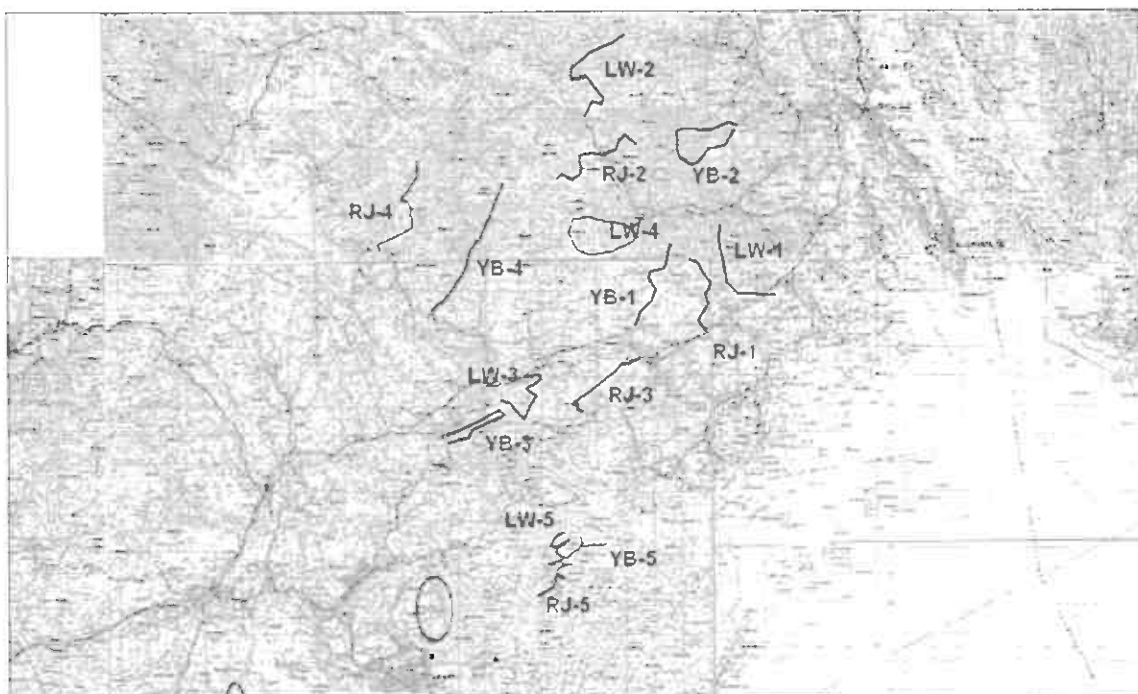
### 2005 FIELD WORK PHASE 1:

From June 27th to July 15th, 2005, a three person crew composed of Yannick Beaudoin (FL International), Rob Jones (FL International) and Lars Weiershäuser (Sulfidmalm A/S) completed geological reconnaissance (pre-airborne geophysics) throughout the Bamble project area. Maps 1, 2 and 3 indicate locations of completed field work. Sites of interest included old mine sites, minor workings and NGU indicated showings. Field work consisted of a series of traverses and road side geology with the goals of: 1-finding previously unknown showings, 2-sampling any observed mineralization, and 3-getting familiar with the local geology and area.

## Location



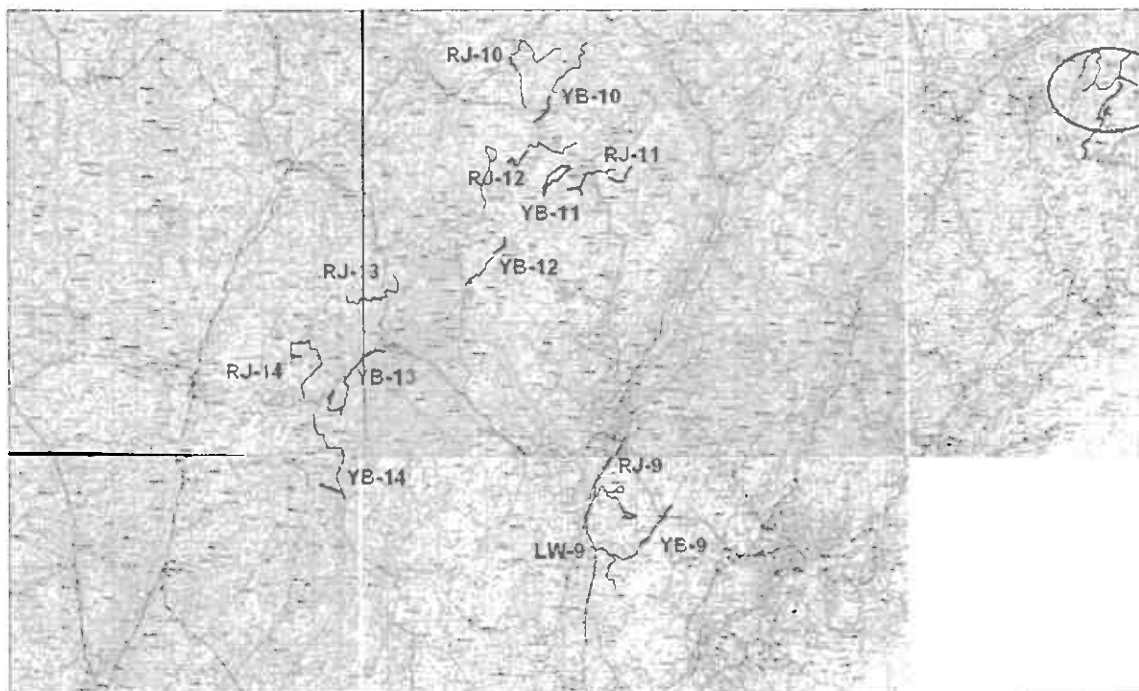
**Map 1: Bamble North and South areas**



**Map 2: Bamble North, area 1 traverses**



**Map 3: Bamble North, area 2 traverses**



## Map 4: Bamble South traverses

### GEOLOGICAL SUMMARY

Based on field observations, the Bamble belt is dominated by a sedimentary gneiss sequence that generally trends NE-SW across the region. Dioritic and quartzofeldspathic gneisses increase in abundance towards the western boundary of the area.

Metamorphic grade appears to decrease from west to east. Gabbroic units investigated nearer the coast exhibited lower amphibolitic characteristics (much less biotite conversion of mafic minerals) while large gabbros more inland are more biotite rich and more indicative of having been subjected to mid-to-upper amphibolitic grade metamorphism.

The small amount of ultramafic material seen (in the vicinity of the known old workings) has been largely affected by regional metamorphism. Identifiable pyroxenite was observed west of the Meinkjaer showing, but for the most part, ultramafics are all amphibolites.

In general, mineralized mafic and ultramafic units tend to be associated with sulfur/sulphide bearing paragneisses sequences. Gabbros observed intruding in more orthogneissic dominated areas were not or weakly mineralized.

The majority of lithological units observed were non to weakly magnetic. No consistent rock unit or type exhibited homogeneous magnetic properties. Discrete bands in quartzofeldspathic and dioritic gneisses were found to be moderately magnetic but this was not consistent on a regional scale. Mineralization encountered (mainly the old workings) was the predominant magnetic component throughout the area.

In conclusion, the Bamble area exhibits geological characteristics similar to those found in the Thompson Nickel Belt, northern Manitoba, Canada:

- Occurrences of mineralized mafic/ultramafic intrusives within an apparent metasedimentary sequence.
- Sulfur/sulphide-bearing metasedimentary units providing a potential assimilation source.
- High metamorphic grade possibly resulting in the remobilization of magmatic sulphides

No conclusions can be made regarding the tectonic history of the Bamble area (i.e. rifting vs convergence) based on the field work completed in the context of this project.

## MINERLIZATION SUMMARY

- Previously visited (by Falconbridge, 2004) old workings:
  - Nystein: new samples recovered with up to 2.01wt% Ni for 18wt% S (see samples SA67815-SA67817 in Table 1)

| Lab ID  | Description      | Ni wt% | Cu wt% | Co wt% | S wt% | Pt g/t | Pd g/t | Au g/t | Ag g/t |
|---------|------------------|--------|--------|--------|-------|--------|--------|--------|--------|
| SA67815 | 35% blebby       | 0.76   | 0.11   | 0.03   | 7.87  | < 0.02 | 0.03   | 0.02   | 0.7    |
| SA67816 | 30% net textured | 2.01   | 0.15   | 0.06   | 18    | 0.02   | 0.05   | 0.03   | 0.8    |
| SA67817 | 20%, veins       | 0.7    | 1.5    | < 0.02 | 6.97  | < 0.02 | 0.03   | 0.03   | 3      |

- Vissestad: new sample recovered with 0.84wt% Ni for 11.7wt% S (see sample SA67814 in Table 1)

| Lab ID  | Description | Ni wt% | Cu wt% | Co wt% | S wt% | Pt g/t | Pd g/t | Au g/t | Ag g/t |
|---------|-------------|--------|--------|--------|-------|--------|--------|--------|--------|
| SA67814 | 20% blebby  | 0.84   | 0.09   | 0.06   | 11.7  | < 0.02 | 0.1    | 0.03   | 0.8    |

- Meikjaer: 2 new samples with 1.86 and 1.74wt% Ni for 19.2 and 15.1wt%S respectively (see SA67819 and SA67820 in Table 1)

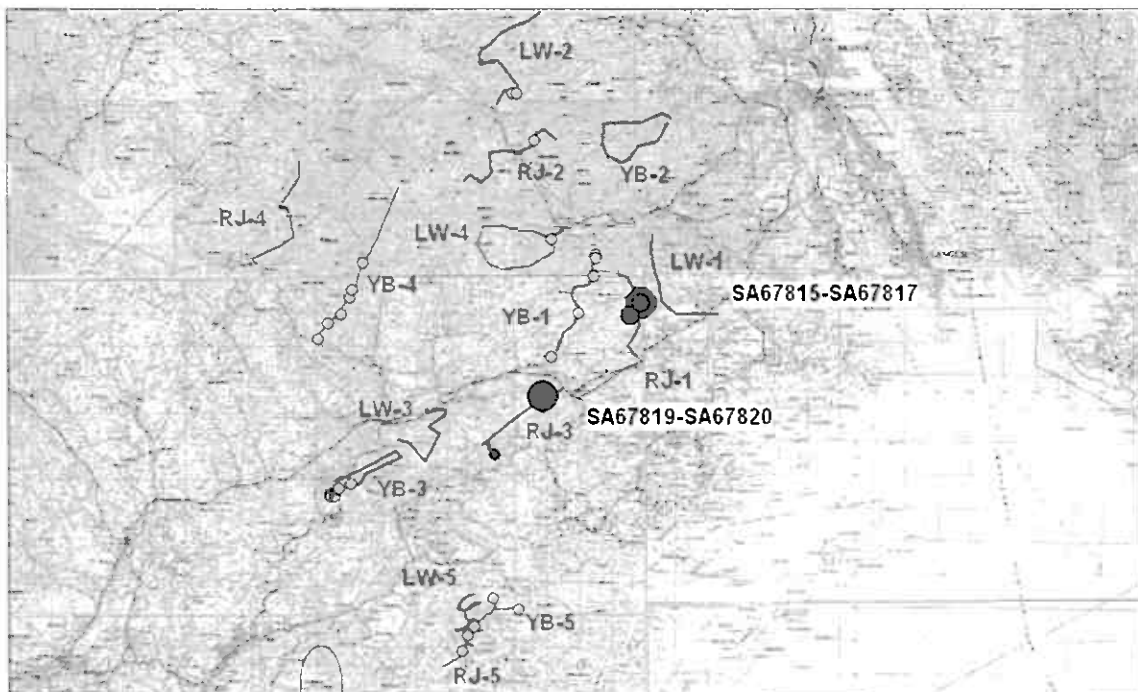
| Lab ID  | Description                                                                                     | Ni wt% | Cu wt% | Co wt% | S wt% | Pt g/t | Pd g/t | Au g/t | Ag g/t |
|---------|-------------------------------------------------------------------------------------------------|--------|--------|--------|-------|--------|--------|--------|--------|
| SA67819 | massive sulfide from waste pile, 75% sulphide, 1%ch, po recrystallized up to 1cm, very magnetic | 1.74   | 0.38   | 0.07   | 15.1  | < 0.02 | 0.14   | 0.04   | 1.2    |
| SA67820 | massive sulfide from waste pile, 75% sulphide, 1%ch, po fine grain remainder very magnetic      | 1.86   | 0.44   | 0.08   | 19.2  | 0.02   | 0.31   | 0.02   | 1.6    |

- Seljasen: 2 new samples with 0.79 and 0.44 wt% Ni for 27 and 16.9wt% S respectively (see SA67825 and SA67826 in Table 1)

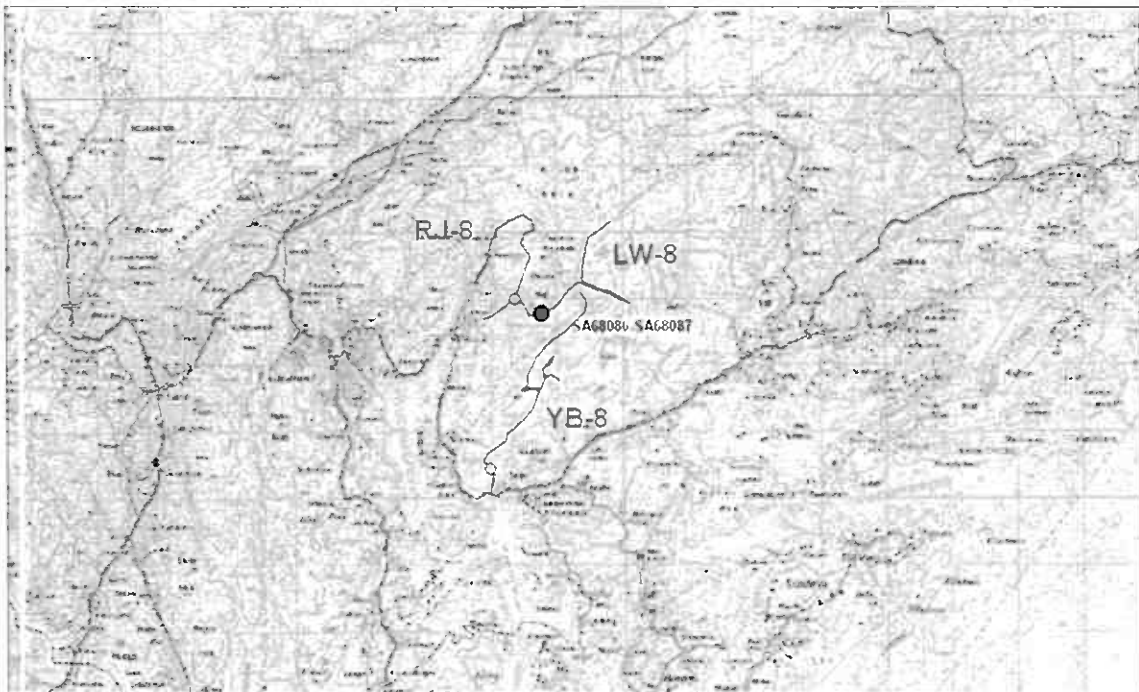
| Lab ID  | Description                                                                                                  | Ni wt% | Cu wt% | Co wt% | S wt% | Pt g/t | Pd g/t | Au g/t | Ag g/t |
|---------|--------------------------------------------------------------------------------------------------------------|--------|--------|--------|-------|--------|--------|--------|--------|
| SA67825 | massive sulfide from waste pile adjacent to small trench, 90% po some crystals up to 10cm, 1% pyrite, +frags | 0.79   | 0.49   | 0.1    | 27    | 0.02   | < 0.02 | 0.04   | 0.02   |
| SA67826 | 50 % sulfide, net textured, minor py, inclusions rich, taken near trench.                                    | 0.44   | 0.56   | 0.08   | 16.9  | < 0.02 | < 0.02 | 0.04   | 0.04   |

- 1 new, previously unvisited (by Falconbridge) Ni showing was located and sampled: Høgasen NGU database showing- 2 samples with 0.54 and 0.49 wt% Ni for 6.6 and 4.22wt% S respectively (see SA68086 and SA68087 in Table 1). Host rock is a banded, biotite gneiss.

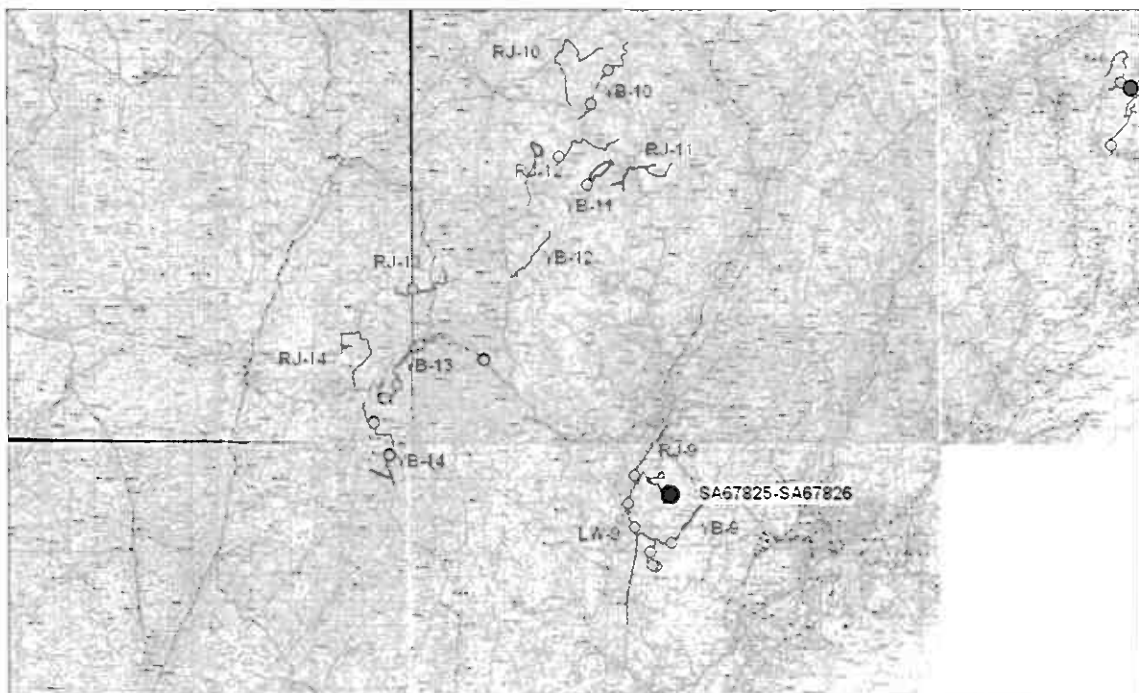
| Lab ID  | Description                                          | Ni wt% | Cu wt% | Co wt% | S wt% | Pt g/t | Pd g/t | Au g/t | Ag g/t |
|---------|------------------------------------------------------|--------|--------|--------|-------|--------|--------|--------|--------|
| SA68086 | blebby sulfides seem to be associated with magnetite | 0.49   | 0.25   | < 0.02 | 4.22  | < 0.02 | < 0.02 | < 0.02 | 0.6    |
| SA68087 | more magnetite, ca. 1% sulfides                      | 0.54   | 0.81   | 0.02   | 6.6   | < 0.02 | < 0.02 | 0.02   | 3      |



**Map 5: assay results for Bamble North, area 1: Ni values indicated as graded red dots. Blue dots are samples that were <0.1wt% Ni.**



**Map 6: assay results for Bamble North, area 2: Ni values indicated as graded red dots. Blue dots are samples that were <0.1wt% Ni.**



**Map 7: assay results for Bamble South: Ni values indicated as graded red dots. Blue dots are samples that were <0.1wt% Ni.**

## **STRUCTURAL GEOLOGY SUMMARY**

Generally NE-SW trends in foliation with the exception of fold hinges.

## **CULTURE SUMMARY**

The entire project area lies within some form or other of developed land. Cottages and towns are common. High (the Tyristrand line) and medium tension lines feeding Oslo cross the project area in many locations and will be an important factor in planning geophysics. Electric train lines also link many of the communities.

## **GROUND GEOPHYSICS**

All areas covered in the Bamble north and south surveys would require a base station DGPS system to enable coverage under topographically variable conditions and taking into account the moderate to heavy tree cover.

## **LOGISTICS**

Contact for accommodations in Kragero:

Tourist Information: telephone: 35 98 23 88

Will provide contact number for cabin and tourist house rentals

Ferieleiligheter Oya Kragero: telephone: 35 98 09 38 mobile: 90 52 44 50

Have a hotel and a guesthouse for rent

Contact for accommodations in the Arendal area:

BraBo A/S: telephone: 37 04 26 00 mobile: 90 61 56 41

Agency specializing in time share/rental of private homes in the Arendal area.

House in Arendal (summer rental only):

Owner: Harald Mortensen

Email: [herald.mortensen@ostereng.no](mailto:herald.mortensen@ostereng.no)

Mobile: 982 83 421

House: 45 25 90 00

**Table 1: sample descriptions and assay results**

| Area  | Field ID | Lab ID  | Sample Type | Sample_comments                                                                                                   | Map_X     | Map_Y      | Ni wt% | Cu wt% | Co wt% | S wt%  | Pt g/t | Pd g/t | Au g/t | Ag g/t |
|-------|----------|---------|-------------|-------------------------------------------------------------------------------------------------------------------|-----------|------------|--------|--------|--------|--------|--------|--------|--------|--------|
| Bamle | Rob      | SA67814 | assay       | 20% blebby                                                                                                        | 533749.76 | 6538816.91 | 0.84   | 0.09   | 0.06   | 11.7   | < 0.02 | 0.1    | 0.03   | 0.8    |
| Bamle | Rob      | SA67815 | assay       | 35% blebby                                                                                                        | 534107.80 | 6539196.57 | 0.76   | 0.11   | 0.03   | 7.87   | < 0.02 | 0.03   | 0.02   | 0.7    |
| Bamle | Rob      | SA67816 | assay       | 30% net textured                                                                                                  | 534106.89 | 6539196.39 | 2.01   | 0.15   | 0.06   | 18     | 0.02   | 0.05   | 0.03   | 0.8    |
| Bamle | Rob      | SA67817 | assay       | 20%, veins                                                                                                        | 534106.71 | 6539197.38 | 0.7    | 1.5    | < 0.02 | 6.97   | < 0.02 | 0.03   | 0.03   | 3      |
| Bamle | Rob      | SA67818 | assay       | 0.5% disseminated sulfide                                                                                         | 530871.75 | 6544107.88 | < 0.05 | < 0.05 | < 0.02 | 0.3    | < 0.02 | < 0.02 | < 0.02 | 0.7    |
| Bamle | Rob      | SA67819 | assay       | massive sulfide from waste pile, 75% sulph, 1%ch, po recrystallized up to 1cm, very magnetic                      | 531041.00 | 6536415.00 | 1.74   | 0.38   | 0.07   | 15.1   | < 0.02 | 0.14   | 0.04   | 1.2    |
|       |          |         |             | massive sulfide from waste pile, 75% sulph, 1%ch, po fine grain remainder very magnetic                           |           |            |        |        |        |        |        |        |        |        |
| Bamle | Rob      | SA67820 | assay       | 3% sulphide from med grain gabbro melanocratic gabbro from road side, magnetic                                    | 531042.00 | 6536416.00 | 1.86   | 0.44   | 0.08   | 19.2   | 0.02   | 0.31   | 0.02   | 1.6    |
| Bamle | Rob      | SA67821 | assay       | no sulfide; may have molybdenite                                                                                  | 529567.00 | 6534648.00 | 0.22   | 0.05   | 0.03   | 2.47   | < 0.02 | < 0.02 | < 0.02 | 0.6    |
| Bamle | Rob      | SA67822 | assay       | no sulfide; may have molybdenite                                                                                  | 528506.56 | 6528728.20 | < 0.05 | < 0.05 | < 0.02 | 0.14   | < 0.02 | < 0.02 | < 0.02 | 0.6    |
| Bamle | Rob      | SA67823 | assay       | no sulfide; may have molybdenite                                                                                  | 528675.60 | 6529197.71 | < 0.05 | < 0.05 | < 0.02 | 0.06   | < 0.02 | < 0.02 | < 0.02 | 0.6    |
| Bamle | Rob      | SA67824 | assay       | Hydrothermal shear with 1% sulf. fine sugary material                                                             | 498372.00 | 6499000.00 | < 0.05 | < 0.05 | < 0.02 | 1.38   | < 0.02 | < 0.02 | 0.02   | 0.7    |
| Bamle | Rob      | SA67825 | assay       | massive sulfide from waste pile adjacent to small trench, 90% po some xls up to 10cm, 1% pyrite, +frags           | 479690.00 | 6482281.00 | 0.79   | 0.49   | 0.1    | 27     | 0.02   | < 0.02 | 0.04   | 1.4    |
|       |          |         |             | 50 % sulfide, net textured, minor py, inclusions rich, taken near trench, notsure what mineral is silver-metallic |           |            |        |        |        |        |        |        |        |        |
| Bamle | Rob      | SA67826 | assay       | 3%                                                                                                                | 475185.95 | 6495993.46 | < 0.05 | < 0.05 | < 0.02 | 0.08   | 0.02   | 0.03   | < 0.02 | < 0.5  |
| Bamle | Rob      | SA67827 | assay       | big.micas                                                                                                         | 469119.46 | 6490639.11 | < 0.05 | < 0.05 | < 0.02 | 3.07   | < 0.02 | < 0.02 | < 0.02 | < 0.5  |
| Bamle | Rob      | SA67828 | assay       | no observed sulphides                                                                                             | 524535.86 | 6533474.43 | < 0.05 | < 0.05 | < 0.02 | < 0.01 | < 0.02 | < 0.02 | < 0.02 | < 0.5  |
| Bamle | Yann     | SA68037 | assay       | peridotite; trace sulphides                                                                                       | 524561.30 | 6533403.24 | < 0.05 | < 0.05 | < 0.02 | 0.04   | < 0.02 | < 0.02 | < 0.02 | < 0.5  |
| Bamle | Yann     | SA68038 | assay       | eclogite? trace fragments of pol ccp                                                                              | 524561.30 | 6533403.24 | < 0.05 | < 0.05 | < 0.02 | 0.12   | < 0.02 | < 0.02 | < 0.02 | < 0.5  |
| Bamle | Yann     | SA68039 | assay       | trace po, ccp                                                                                                     | 524573.28 | 6533421.45 | 0.06   | < 0.05 | < 0.02 | 0.2    | < 0.02 | < 0.02 | < 0.02 | < 0.5  |
| Bamle | Yann     | SA68040 | assay       | trace po                                                                                                          | 524686.28 | 6533400.70 | < 0.05 | < 0.05 | < 0.02 | 0.04   | < 0.02 | < 0.02 | < 0.02 | < 0.5  |
| Bamle | Yann     | SA68041 | assay       | no sulphides seen; magnetite                                                                                      | 525179.00 | 6533783.75 | < 0.05 | < 0.05 | < 0.02 | 0.05   | < 0.02 | < 0.02 | < 0.02 | < 0.5  |
| Bamle | Yann     | SA68042 | assay       | trace sulphides                                                                                                   | 524788.98 | 6533627.20 | < 0.05 | < 0.05 | < 0.02 | 0.04   | < 0.02 | < 0.02 | < 0.02 | < 0.5  |
| Bamle | Yann     | SA68043 | assay       | no sulphides seen                                                                                                 | 524830.45 | 6533656.44 | < 0.05 | < 0.05 | < 0.02 | 0.07   | 0.02   | < 0.02 | < 0.02 | < 0.5  |
| Bamle | Yann     | SA68044 | assay       | minor blebby sulphides                                                                                            | 532710.13 | 6540651.60 | < 0.05 | < 0.05 | < 0.02 | 3.44   | < 0.02 | < 0.02 | < 0.02 | < 0.5  |
| Bamle | Yann     | SA68045 | assay       | 1% sulphide; py                                                                                                   | 532703.08 | 6540550.70 | < 0.05 | < 0.05 | < 0.02 | 0.19   | < 0.02 | < 0.02 | < 0.02 | < 0.5  |
| Bamle | Yann     | SA68046 | assay       | minor blebby py                                                                                                   | 532646.81 | 6540007.27 | < 0.05 | < 0.05 | < 0.02 | 7.04   | < 0.02 | < 0.02 | 0.02   | 0.8    |
| Bamle | Yann     | SA68047 | assay       | 3% sulphide                                                                                                       | 532160.94 | 6538908.49 | < 0.05 | < 0.05 | < 0.02 | 0.13   | < 0.02 | < 0.02 | < 0.02 | < 0.5  |
| Bamle | Yann     | SA68048 | assay       | 3% sulphide                                                                                                       | 532160.94 | 6538908.49 | < 0.05 | < 0.05 | < 0.02 | 6.69   | < 0.02 | < 0.02 | < 0.02 | 0.6    |

|       |             |         |       |                                                                                         |           |            |        |        |        |      |        |        |        |       |
|-------|-------------|---------|-------|-----------------------------------------------------------------------------------------|-----------|------------|--------|--------|--------|------|--------|--------|--------|-------|
| Bamle | Yann        | SA68050 | assay | 1% sulphide                                                                             | 531318.56 | 6537570.29 | < 0.05 | < 0.05 | < 0.02 | 6.68 | < 0.02 | < 0.02 | < 0.02 | < 0.5 |
| Bamle | LW 20       | SA68078 | assay | gneiss, non-mag. homogeneous, garnet-bearing, locally trace sulfide                     | 530207.00 | 6545547.00 | < 0.05 | 0.1    | < 0.02 | 4.85 | < 0.02 | < 0.02 | < 0.02 | < 0.5 |
| Bamle | LW 21       | SA68079 | assay | garnet-bearing gneiss, fine-grained, locally weakly magnetic, slightly gossanous        | 530324.00 | 6545531.00 | < 0.05 | < 0.05 | < 0.02 | 1.3  | < 0.02 | < 0.02 | < 0.02 | < 0.5 |
| Bamle | LW 25       | SA68080 | assay | see ipac file                                                                           | 531353.08 | 6541131.39 | < 0.05 | < 0.05 | < 0.02 | 1.32 | < 0.02 | < 0.02 | < 0.02 | < 0.5 |
| Bamle | 68081       | SA68081 | assay | well-banded, fine to medium-grained, non-magnetic gneiss; locally trace sulfide         | 506249.00 | 6518800.00 | < 0.05 | < 0.05 | < 0.02 | 0.56 | < 0.02 | < 0.02 | < 0.02 | < 0.5 |
| Bamle | 68082       | SA68082 | assay | well-banded gneiss, locally garnet bearing; bands of Fe-ox-rich material; trace sulfide | 506561.00 | 6519069.00 | < 0.05 | < 0.05 | < 0.02 | 0.96 | < 0.02 | < 0.02 | < 0.02 | < 0.5 |
| Bamle | 68083       | SA68083 | assay | massive magnetite                                                                       | 507337.00 | 6518948.00 | < 0.05 | < 0.05 | < 0.02 | 0.04 | < 0.02 | < 0.02 | < 0.02 | < 0.5 |
| Bamle | 68084 CRG-C | SA68084 | assay | gabbroic to schistose rock, medium-grained, non-magnetic; trace sulfide                 | 507478.00 | 6518165.00 | < 0.05 | 0.39   | < 0.02 | 1.52 | < 0.02 | < 0.02 | < 0.02 | < 0.5 |
| Bamle |             | SA68085 | assay | STANDARD                                                                                |           |            | 0.79   | 0.38   | 0.03   | 5.09 | 0.11   | 0.09   | 0.02   | 1.6   |
| Bamle | Lars        | SA68086 | assay | blebby sulfides seem to be associated with magnetite                                    | 498784.55 | 6498771.10 | 0.49   | 0.25   | < 0.02 | 4.22 | < 0.02 | < 0.02 | < 0.02 | 0.6   |
| Bamle | Lars        | SA68087 | assay | more magnetite, ca. 1% sulfides                                                         | 498784.55 | 6498771.10 | 0.54   | 0.81   | 0.02   | 6.6  | < 0.02 | < 0.02 | 0.02   | 3     |
| Bamle | Lars        | SA68088 | assay | 1% disseminated                                                                         | 478201.41 | 6480973.02 | < 0.05 | < 0.05 | < 0.02 | 2.35 | < 0.02 | < 0.02 | < 0.02 | 1     |
| Bamle | Lars        | SA68089 | assay | 1% disseminated                                                                         | 477949.66 | 6481915.34 | < 0.05 | < 0.05 | 0.03   | 1.21 | < 0.02 | < 0.02 | < 0.02 | 0.7   |
| Bamle | Lars        | SA68090 | assay | 1% disseminated                                                                         | 478224.41 | 6483063.29 | < 0.05 | < 0.05 | < 0.02 | 0.51 | < 0.02 | < 0.02 | < 0.02 | 0.8   |
| Bamle | Lars        | SA68091 | assay | 1% blebby, disseminated                                                                 | 472004.76 | 6487808.03 | < 0.05 | < 0.05 | < 0.02 | 1.74 | < 0.02 | 0.02   | < 0.02 | 0.6   |
| Bamle | Yann        | SA68151 | assay | trace sulfides                                                                          | 525635.27 | 6540444.29 | < 0.05 | < 0.05 | < 0.02 | 0.12 | < 0.02 | < 0.02 | < 0.02 | < 0.5 |
| Bamle | Yann        | SA68152 | assay | 0.5% sulfides                                                                           | 525281.84 | 6539647.28 | < 0.05 | < 0.05 | < 0.02 | 3.85 | < 0.02 | < 0.02 | < 0.02 | < 0.5 |
| Bamle | Yann        | SA68153 | assay | minor sulfides                                                                          | 525198.90 | 6539404.02 | < 0.05 | < 0.05 | 0.02   | 2.68 | < 0.02 | < 0.02 | < 0.02 | < 0.5 |
| Bamle | Yann        | SA68154 | assay | trace sulfide                                                                           | 524519.34 | 6538624.40 | < 0.05 | < 0.05 | < 0.02 | 1.49 | < 0.02 | < 0.02 | < 0.02 | < 0.5 |
| Bamle | Yann        | SA68155 | assay | subcrop; minor sulfide                                                                  | 524938.61 | 6538877.57 | < 0.05 | < 0.05 | < 0.02 | 1.37 | < 0.02 | < 0.02 | < 0.02 | < 0.5 |
| Bamle | Yann        | SA68156 | assay | trace sulfides; partly along fracture plane                                             | 524223.86 | 6538152.22 | < 0.05 | < 0.05 | < 0.02 | 0.23 | < 0.02 | < 0.02 | < 0.02 | < 0.5 |
| Bamle | Yann        | SA68157 | assay |                                                                                         |           |            | < 0.05 | < 0.05 | < 0.02 | 2.44 | < 0.02 | < 0.02 | < 0.02 | < 0.5 |
| Bamle | Yann        | SA68158 | assay | trace sulfide; from quarry                                                              | 524237.10 | 6527286.71 | < 0.05 | < 0.05 | < 0.02 | 0.06 | < 0.02 | < 0.02 | < 0.02 | < 0.5 |
| Bamle | Yann        | SA68159 | assay | trace sulfides; from quarry                                                             | 524237.10 | 6527286.71 | < 0.05 | < 0.05 | < 0.02 | 0.8  | < 0.02 | < 0.02 | < 0.02 | < 0.5 |
| Bamle | Yann        | SA68160 | assay | crushed quarry material                                                                 | 524307.29 | 6527266.65 | < 0.05 | < 0.05 | < 0.02 | 0.54 | < 0.02 | < 0.02 | < 0.02 | < 0.5 |
| Bamle | Yann        | SA68161 | assay | trace sulfide; from quarry                                                              | 524307.29 | 6527266.65 | < 0.05 | < 0.05 | < 0.02 | 0.07 | < 0.02 | < 0.02 | < 0.02 | < 0.5 |
| Bamle | Yann        | SA68162 | assay | trace sulfide; magnetite-rich                                                           | 529487.17 | 6530321.07 | < 0.05 | < 0.05 | < 0.02 | 0.05 | < 0.02 | < 0.02 | < 0.02 | < 0.5 |
| Bamle | Yann        | SA68163 | assay | trace ccp; magnetite rich                                                               | 530246.47 | 6529975.91 | < 0.05 | < 0.05 | < 0.02 | 0.02 | < 0.02 | < 0.02 | < 0.02 | 0.5   |
| Bamle | Yann        | SA68164 | assay | trace ccp; maybe po                                                                     | 528851.62 | 6529541.34 | < 0.05 | < 0.05 | < 0.02 | 0.1  | < 0.02 | < 0.02 | < 0.02 | < 0.5 |
| Bamle | Yann        | SA68165 | assay | trace ccp                                                                               | 528886.19 | 6529488.01 | < 0.05 | < 0.05 | < 0.02 | 0.02 | < 0.02 | < 0.02 | < 0.02 | < 0.5 |
| Bamle | Yann        | SA68166 | assay | biotite-pegmatitic vein; 1% sulfides in quartzite? 1% sulfide and magnetite             | 516908.71 | 6524672.05 | < 0.05 | < 0.05 | 0.02   | 0.92 | < 0.02 | < 0.02 | < 0.02 | < 0.5 |
| Bamle | Yann        | SA68167 | assay |                                                                                         | 516908.71 | 6524672.05 | < 0.05 | < 0.05 | < 0.02 | 1    | < 0.02 | < 0.02 | < 0.02 | < 0.5 |
| Bamle | Yann        | SA68168 | assay | trace sulfide in gabbro/amphibolite                                                     | 516908.71 | 6524664.53 | < 0.05 | < 0.05 | < 0.02 | 0.12 | < 0.02 | < 0.02 | < 0.02 | < 0.5 |

|       |       |         |       |                                         |           |            |        |        |        |      |        |        |        |       |
|-------|-------|---------|-------|-----------------------------------------|-----------|------------|--------|--------|--------|------|--------|--------|--------|-------|
| Bamle | Yann  | SA68169 | assay | minor sulfides in coarse gabbro         | 504340.74 | 6523002.19 | < 0.05 | < 0.05 | < 0.02 | 0.26 | < 0.02 | < 0.02 | < 0.02 | < 0.5 |
| Bamle | Yann  | SA68170 | assay | trace sulfides in gabbro                | 505486.15 | 6506065.14 | < 0.05 | < 0.05 | < 0.02 | 0.12 | 0.03   | 0.02   | 0.02   | < 0.5 |
| Bamle | Yann  | SA68171 | assay | trace py in gabbro                      | 505442.35 | 6506227.62 | < 0.05 | < 0.05 | < 0.02 | 0.06 | < 0.02 | < 0.02 | < 0.02 | < 0.5 |
| Bamle | Yann  | SA68172 | assay | trace in gabbro                         | 504985.87 | 6506125.64 | < 0.05 | < 0.05 | < 0.02 | 0.13 | < 0.02 | < 0.02 | < 0.02 | < 0.5 |
| Bamle | Yann  | SA68173 | assay | py in qtz; hydrothermal; 0.5%           | 497977.53 | 6496450.16 | < 0.05 | < 0.05 | < 0.02 | 1.51 | < 0.02 | < 0.02 | < 0.02 | < 0.5 |
| Bamle | Yann  | SA68174 | assay | 0.5% py in metaseds                     | 497977.53 | 6496450.16 | < 0.05 | < 0.05 | < 0.02 | 4.43 | < 0.02 | < 0.02 | < 0.02 | 0.7   |
|       |       |         |       | no sulfided; specularite/magnetite in   |           |            |        |        |        |      |        |        |        |       |
| Bamle | Yann  | SA68175 | assay | gran-gneiss                             | 478848.40 | 6479948.36 | < 0.05 | < 0.05 | < 0.02 | 0.06 | < 0.02 | < 0.02 | < 0.02 | < 0.5 |
| Bamle | Yann  | SA68176 | assay | 0.5% py; in diorite                     | 479105.11 | 6479335.93 | < 0.05 | 0.06   | < 0.02 | 0.71 | < 0.02 | < 0.02 | < 0.02 | < 0.5 |
| Bamle | Yann  | SA68177 | assay | 5% py; diorite; boulder                 | 478969.69 | 6479399.39 | < 0.05 | 0.05   | < 0.02 | 6.02 | 0.02   | < 0.02 | < 0.02 | < 0.5 |
| Bamle | Yann  | SA68178 | assay | trace po? in diorite                    | 479726.17 | 6480321.90 | < 0.05 | < 0.05 | < 0.02 | 0.22 | 0.05   | < 0.02 | < 0.02 | < 0.5 |
| Bamle | CRG-C | SA68179 | assay | STANDARD                                |           |            | 0.76   | 0.39   | 0.03   | 4.92 | 0.14   | 0.09   | 0.03   | 1.7   |
| Bamle | Yann  | SA68180 | assay | trace sulfides in gabbro                | 477232.63 | 6499499.57 | < 0.05 | < 0.05 | < 0.02 | 0.82 | < 0.02 | < 0.02 | < 0.02 | < 0.5 |
| Bamle | Yann  | SA68181 | assay | trace sulfides in gabbro                | 476495.10 | 6498125.52 | < 0.05 | < 0.05 | < 0.02 | 0.07 | < 0.02 | < 0.02 | < 0.02 | < 0.5 |
| Bamle | Yann  | SA68182 | assay | Si-Fe Frm; no observed sulfides         | 476290.95 | 6494836.54 | < 0.05 | < 0.05 | < 0.02 | 0.4  | < 0.02 | < 0.02 | < 0.02 | < 0.5 |
|       |       |         |       | Si-Fe Frm; no observed sulfides;        |           |            |        |        |        |      |        |        |        |       |
| Bamle | Yann  | SA68183 | assay | graphite bearing                        | 476290.95 | 6494836.54 | < 0.05 | < 0.05 | < 0.02 | 1.6  | < 0.02 | < 0.02 | < 0.02 | < 0.5 |
| Bamle | Yann  | SA68184 | assay | minor sulfides in pyroxenite            | 472024.41 | 6487767.10 | < 0.05 | 0.11   | < 0.02 | 2.74 | < 0.02 | 0.06   | < 0.02 | < 0.5 |
| Bamle | Yann  | SA68185 | assay | minor sulfides in pyroxenite            | 472024.41 | 6487767.10 | < 0.05 | 0.08   | 0.03   | 2.64 | < 0.02 | 0.02   | < 0.02 | < 0.5 |
| Bamle | Yann  | SA68186 | assay | minor sulfides in pyroxenite            | 472019.40 | 6487762.09 | < 0.05 | < 0.05 | < 0.02 | 1.43 | < 0.02 | < 0.02 | < 0.02 | < 0.5 |
| Bamle | Yann  | SA68187 | assay | trace sulfide in gabbro                 | 468413.77 | 6486737.56 | < 0.05 | < 0.05 | < 0.02 | 0.09 | < 0.02 | < 0.02 | < 0.02 | < 0.5 |
| Bamle | Yann  | SA68188 | assay | trace sulfide in gabbro                 | 468413.77 | 6486737.56 | < 0.05 | < 0.05 | < 0.02 | 0.19 | < 0.02 | < 0.02 | < 0.02 | < 0.5 |
|       |       |         |       | 3% sulfide in gabbro hosted qtz-bt      |           |            |        |        |        |      |        |        |        |       |
| Bamle | Yann  | SA68189 | assay | vein                                    | 467848.08 | 6486175.08 | < 0.05 | < 0.05 | < 0.02 | 1.12 | < 0.02 | < 0.02 | < 0.02 | < 0.5 |
|       |       |         |       | 0.5% sulfide in gabbro hosted qtz-bt    |           |            |        |        |        |      |        |        |        |       |
| Bamle | Yann  | SA68190 | assay | vein                                    | 467930.64 | 6486181.90 | < 0.05 | < 0.05 | < 0.02 | 1.18 | 0.04   | 0.04   | < 0.02 | < 0.5 |
| Bamle | Yann  | SA68191 | assay | 5% sulfide in breccia                   | 469214.07 | 6488313.19 | < 0.05 | 0.43   | < 0.02 | 5.95 | 0.08   | 0.07   | < 0.02 | 0.9   |
| Bamle | Yann  | SA68192 | assay | 10-15% sulfide; pyroxenitic rock?       | 469214.07 | 6488313.19 | < 0.05 | 0.2    | 0.08   | 36.1 | < 0.02 | 0.03   | < 0.02 | < 0.5 |
| Bamle | Yann  | SA68193 | assay | 5% sulfide in breccia                   | 469206.55 | 6488303.17 | < 0.05 | 0.06   | 0.03   | 9.49 | < 0.02 | < 0.02 | < 0.02 | < 0.5 |
| Bamle | Yann  | SA68194 | assay | 10% po, ccp, py in qtz-epidote vein     | 469374.23 | 6488395.00 | < 0.05 | 0.1    | < 0.02 | 5.63 | < 0.02 | < 0.02 | < 0.02 | < 0.5 |
| Bamle | Yann  | SA68195 | assay | 0.5% sulfide in qtz vein in gabbro      | 467467.25 | 6485218.47 | < 0.05 | < 0.05 | < 0.02 | 0.7  | < 0.02 | < 0.02 | < 0.02 | < 0.5 |
|       |       |         |       | 0.5% po, ccp in vein (coarse zone) in   |           |            |        |        |        |      |        |        |        |       |
| Bamle | Yann  | SA68196 | assay | gabbro                                  | 467475.12 | 6485205.79 | < 0.05 | < 0.05 | < 0.02 | 0.97 | < 0.02 | < 0.02 | < 0.02 | < 0.5 |
|       |       |         |       | 3-5% sulfide (po, ccp) in altered       |           |            |        |        |        |      |        |        |        |       |
| Bamle | Yann  | SA68197 | assay | gabbro                                  | 468091.67 | 6483899.06 | < 0.05 | 0.06   | < 0.02 | 2.08 | < 0.02 | < 0.02 | < 0.02 | < 0.5 |
|       |       |         |       | 5-8% sulfide in quartzite or silicified |           |            |        |        |        |      |        |        |        |       |
| Bamle | Yann  | SA68198 | assay | gabbro                                  | 468091.67 | 6483899.06 | < 0.05 | < 0.05 | 0.02   | 1.84 | < 0.02 | < 0.02 | < 0.02 | < 0.5 |
|       |       |         |       | 8-10% sulfide; po, ccp; in altered      |           |            |        |        |        |      |        |        |        |       |
| Bamle | Yann  | SA68199 | assay | gabbro                                  | 468094.17 | 6483886.52 | < 0.05 | 0.17   | 0.04   | 7.42 | < 0.02 | < 0.02 | 0.02   | < 0.5 |
| Bamle | CRG-C | SA68200 | assay | STANDARD                                |           |            | 0.78   | 0.36   | 0.03   | 4.98 | 0.15   | 0.1    | 0.03   | 1.9   |

NOTE: samples SA67814-SA67826 were submitted to SGS Lakefield as SA67014-SA67026

**APPENDIX:**

**DAILY REPORT SUMMARIES BY: Yannick Beaudoin, Rob Jones and Lars  
Weiershäuser**

## A) Reports by Yannick Beaudoin:

### 1-Vissestad (see YB-1 traverse on 2005 Bamble traverse map)

#### Geology:

Main units encountered included paragneiss, gabbro and granitic gneiss.

The paragneiss is generally composed of a relatively metasedimentary, quartz, biotite and garnet bearing unit (semi-pelitic to pelitic). A very leucocratic garnet-bearing quartzo-feldspathic unit was also observed. Trace to minor sulfides were observed throughout the sequence.

The gabbros occur as foliation parallel bodies (a contact between granitic gneiss and gabbro; the contact was parallel to the foliation) and were observed in the granitic gneiss as well as in the paragneiss sequence. Mineralized gabbros were only observed in the paragneiss sequence most likely related to the metaseds being a sulfur source. The granitic gneisses are virtually devoid of sulphides.

Mineralized gabbros are only locally magnetic where sulphide mineralization occurs. Mineralization consists of up to 3% sulfide with pyrrhotite as the main sulphide. **A previously unmarked gossan was located and sampled. It consisted of ~3% sulphide (po) at the contact between gabbro and paragneiss.**

A young, unfoliated, fine-grained mafic intrusive was observed cutting all other units. It is strongly magnetic and should stand out in a mag survey.

Locally moderate to strong magnetic bands in the paragneissic sequence were also observed and will be a source of anomalies in a mag survey.

#### NGU showing:

Roslandsdalen showing: this showing consisted of a gossany (pyritic) metasedimentary unit. The outcrop was sampled.

#### Structure:

Foliation over the traverse ranges from 050(230) – 070(250); NW-W to E-SE. Tight, moderately plunging folds were observed in the gneisses.

#### Access:

Access is excellent along an open gravel road (gates permanently open).

#### Culture:

Only local, low tension power lines were observed at the north and southern ends of the traverse.

### 2-SW of Herum, northern part of airborne (see YB-2 on 2005 Bamble traverse map)

#### Geology:

Lithologies encountered included granitic gneiss, augen gneiss, paragneiss and foliated gabbro. The distinction between granitic gneisses and paragneisses was made essentially on the basis of the presence of garnet (present in the paragneiss). Some bands in the paragneiss sequence exhibit weak to moderate magnetism.

Another young, unfoliated, fine grained and strongly magnetic mafic dyke was observed.  
Mineralization:

No sulphide mineralization was seen in any of the units.

Structure:

Foliation trended 040-070 throughout the traverse.

Culture:

A high tension powerline crossed the traverse as indicated on the topo map.

Access:

Access is good along two separate gated gravel roads. Local landowners would have to be contacted for access.

2-west of Meinkjaer showing (see YB-3 on 2005 Bamble traverse layer)

Geology:

3 units were encountered:

- a- Locally leuco- to melanocratic, weak to moderately foliated, medium to locally coarse grained gabbro. This unit dominates the area as indicated on the NGU 1:250 000 Arendal geology map. The gabbro is locally magnetic in particular near the contact with the peridotite (next unit). Magnetism also coincides with coarsening and visible magnetite. Very little sulfide was observed in the gabbro
- b- Unfoliated, fine grained, locally magnetic peridotite. Relict olivine and large (>2 cm in diameter) pyroxene phenocrysts can still be observed. Biotite replacement of mafics is not yet pervasive. The unit is locally very iron rich as is evident by a red "soil" resulting from weathering. No sulfide was observed in the unit. Local coarse zones contain magnetite and are moderately magnetic. The unit is being quarried for road building material. There is no clear contact between the gabbro and peridotite. But the lack of other known ultramafic bodies in the region seems to strongly suggest a direct relationship between the units (i.e. the peridotite as a differentiated layer within the gabbro).
- c- **Highly unusual megacrystic garnet-bearing unit (PICT0816.jpg).** This unit was found in a quarry (quarry may be younger than NGU regional mapping) at the contact between the peridotite and the gabbro. It is easily distinguished from either latter unit by up to 20 cm in diameter, rounded, clear (but fractured) garnets. No reaction rim is visible around the garnets. Minor milky quartz crystals are visible within the garnets. The rounded nature of the garnets goes against a xenocrystic origin. The unit matrix is essentially ultramafic: large, relict pyroxene phenocrysts are still visible (now reverted to amphibole). Minor biotite conversion is also visible. There is no deformation of the matrix minerals proximal to the large garnets. The unit extended about 200 m (from the quarry across the roadway along a trend of ~238/68). Beyond that, the gabbro and

peridotite appear to be essentially in contact with each other. Maximum width was 3-5 meters. Unit contains sulfide fragments (po) and ccp blebbs which were all sampled.

Possible origins: 1- unit is basal part of the peridotite (matrices of both units are identical) that underwent garnet growth at depth fed by silicate and alumina assimilated when originally intruded into the country rocks; 2- unit is a wrath of eclogite in the peridotite or the gabbro; 3- unit is an ultrapotassic, kimberlite or lamproite-type hypabassal intrusive

**This unit was sampled for assay and should be submitted for litho geochem if results are positive. (assay results did not return anomalous Ni)**

Access: access was excellent along a paved roadway, followed by a side gravel road.

Structure: although not clearly observed, the peridotite and gabbro units repeat suggesting either more than one sequence of each unit or a single folded sequence.

3-south of Vestre Hermanns-as (topo sheet), west of town of Bamble: traverse YB-4 on 2005 Bamble traverse layer

Geology:

Lithologies encountered included paragneiss, gabbro, diorite, granitic gneiss and mainly migmatite.

Paragneisses are notably sulfide enriched. They are locally gossany and magnetic. Granitic gneisses are relatively devoid of sulfide. They are also locally magnetic.

No significant mineralization was found in any of the gabbros encountered although gabbros found in the paragneiss sequence did have mineralization near the contacts.

One major unit mapped as gabbro on the NGU 1:250 000 Skien geology map is more likely of diorite affinity. The unit is magnetic with trace sulfide.

Structure:

Foliation trends are generally NE-SW throughout the area with the exception of fold hinges.

Access: access is excellent along a private gravel road.

Culture: A major high tension power line crosses the area.

4- Kragero quarry, north of town centre

This is a 90 year old operational quarry producing road building material from a large gabbro intrusion. Quarried area is approximately 500 m in diameter.

Permission was given by operator to walk around non working areas in the quarry. Carbonate, quartz, pegmatitic and other cross cutting vein features are present throughout the gabbro and show how extensive fluid circulation has affected the unit. Minor pyrite (and trace ccp??) were observed and sampled although the operator explained that very little in the way of sulfide had ever been seen in the quarry, and that being at the contact with the country gneisses. A small mineral collection of specimens collected from the quarry consisted mainly of vuggy material, from large quartz crystals to calcite and other carbonates. A sizeable galena vein is also shown as well as numerous large, isocubic pyrite crystals. The only nickel sulfide present was a small millerite sample, apparently the only found at the quarry.

Large, 10 to 15 cm in diameter garnets were seen in the gabbro. It is unclear if the garnets are growing within vein systems or directly in the gabbro matrix.

A second gabbro-hosted quarry was visited near Risør (south of Kragerø). The operator refused us entry citing safety concerns. More large veins (quartz or carbonate) were visible from the entrance, again emphasizing fluid circulation within the gabbro.

#### 5- Langøy Island, Kragerø (see YB-5 on the 2005 Bamble traverse layer

This island is entirely gabbro with a narrow band of albitite cutting through. The island has two previous working symbols indicated on the Kragerø topo sheet. A strong magnetic signature is also associated with the island.

#### Geology:

Only gabbro was encountered on the island. The unit is generally moderately to strongly to very strongly magnetic with only very local zones of weak to no magnetism. The two old workings are relatively extensive with well defined (and mined) zones of >50% magnetite. The gabbro is only weakly foliated and is at a lower metamorphic grade than the in-land ones (pyroxenes are for the most part still intact).

#### Mineralization:

Very little sulfide was found anywhere in the gabbro. Trace ccp in veins and trace blebby ccp were sampled.

Magnetite is of course present throughout with zones of almost massive magnetite.

Molybdenite was also encountered in quartz-feldspar-diopside veins cutting the gabbro. Other molybdenite showings are indicated in the Bamble area.

Access: Access to the island is by ferry from Kragerø (or private boat). Access on the island is good along gravel roads.

Culture: Only low tension local power lines were observed. Very little infrastructure is present (some homes and cottages).

#### Structural summary:

Foliations are generally NE-SW (040-070) except in fold hinges. This trend confirms the chosen flight lines for the Bamble airborne survey.

#### 6-NGU showings: Fone and Smorvik

#### Smorvik showing:

No gossan or other sulfide bearing unit was found in the immediate vicinity of the showing. Approximately 300 m north of indicated showing, across a small waterway, a large quartzite quarry is currently being operated. Some mineralized units were located and samples:

- 1- biotite pegmatitic vein
- 2- sulfide in the quartzite
- 3- trace po in a large garnet-bearing gabbro

The gabbro unit may be the rocktype related to the NGU showing.

Fone showing:

3 old local workings in a granitic pegmatite. Local landowner explained that a Danish operation mined apatite, rutile and uranium. No sulfide was found in the immediate vicinity of the workings.

A sulfide bearing, coarse grained gabbro (amphibolitic) was found and sampled approximately 200 m north of the old workings. This unit may in fact be the NGU Fone showing.

7- Espehaugen (Gjerstad topo sheet reference) area, Bamble; traverse YB-6 on 2005 Bamble traverse layer

Rationale: NGU survey magnetic anomaly along the traverse

Geology:

Coarse to medium grained granitic gneiss of tonalitic to granodioritic affinity; weakly to locally moderately magnetic; strongly magnetic, 1-2cm wide magnetite-rich bands.

Gneissic gabbro: medium grained, amphibolitic; non magnetic and no sulfides.

Structure:

Foliation was 022-030 throughout.

Final note: Magnetic anomaly attributed to magnetic granitic gneiss unit.

8-Troskeberg (Gjerstad topo sheet reference); Bamble; traverse YB-7 on 2005 Bambe traverse layer

Geology:

Medium to medium-coarse grained, foliated, non-magnetic gabbro (gabbro gneiss). Gabbro is banded with leucocratic and melanocratic zones.

A zone of fist sized garnets within a gabbroic to melanogabbroic matrix was observed in proximity to a pegmatitic biotite quartzo-plagioclase intrusive.

Mineralization:

Trace disseminated pyrite was locally found and sampled within the gabbro.

Structure: foliation varied from 090 to 138 in accordance to a regional fold structure.

Access: access is excellent via paved roadway and gravel, public access side roads.

Culture: medium tension power line crosses the immediate area. Homes and farmsteads are located closes to the roadway (411).

9-Maurasen area (Tvedestrand topo sheet reference); Bamble north area: see YB-8 on 2005 Bamble traverse layer

## Geology:

The area is dominated by gneissic, thinly banded metasediments (paragneiss). Hydrothermal alteration is locally intense and includes 1-3% (locally) pyrite/marcasite. The area could be prospective from a SEDEX/VMS perspective. 2 samples were taken to verify gold potential. The entire paragneissic sequence from the south to north ends of the traverse show abundant gossany alteration with accompanying sedimentary sulfides.

No graphitic unit was encountered as was indicated on the NGU 1:250 000 Arendal geology map.

One, small outcrop of strongly magnetic gabbro was observed at the south end of the traverse. It was not encountered again.

Structure: foliation in the paragneiss was consistent ranging from 038-062 (dip direction variable).

Access: access is excellent along gated gravel side roads.

### 10- Brattasen area. Arendal topo sheet reference: see YB-9 traverse on 2005 Bamble traverse layer

NGU showing: the Brattasen NGU showing was located. It consists of a small, gossany outcrop of foliated, medium grained diorite with pyrite mineralization. The diorite weakly magnetic indicating possible pyrrhotite. Medium to coarse grained gabbro boulders were found in the vicinity of the showing. A small, possibly locally derived, highly pyritized boulder was sampled on the road in the vicinity of the showing.

Geology: paragneisses, migmatites and graphitic gneisses dominated the remainder of the area.

Paragneisses are sulfure bearing with rusty patches throughout the unit. Garnet bearing bands were once again evident.

Only one outcrop of graphite bearing gneiss was observed. Graphite occurred as both fine grained layers and as 0.5 cm in diameter "blebs". Graphite is a known conductor that interferes with EM surveys.

Structure: with the exception of fold hinges, foliation in the units typically ranged from 022 to 062 (with dip direction being variable).

Access: access was good along paved road ways and gated gravel roads. The area around the NGU showing is access along a old logging road that would only be quaddable.

### 11-Amdalsmoen area. Nelaug topo sheet reference: see YB-10 on the 2005 Bamble traverse layer

Rationale: the area is dominated by a large gabbro (metagabbro) unit intruding migmatites, granitic gneisses and quartzite.

NGU showing:

The Tosland NGU showing was not located within 200 meters of the indicated location. The area has good outcrop exposure. No rusty or gossany patches were seen. There are also local

references to the name Tosland on the topo map. The NGU showings are usually named in reference to the closest named topo location.

#### Geology:

Gabbro exhibits gneissic banding on a medium scale. Leuco-bands and melano-bands are segregated. Grain size is locally variable but generally ranges from medium to medium-coarse. Other than locally weak magnetism, the gabbro is non-magnetic.

Only trace pyrite mineralization was encountered occurring in up to 5mm wide quartz veinlets cutting the gabbro.

No sulfide mineralization was encountered at or near the contact with the migmatite (felsic orthogneiss).

Structure: foliation ranged from 022 to 048 throughout the gabbro body with the exception of fold hinges.

Access: access is excellent along a gravel side road.

Note: the gabbro intruded units that are devoid of sulfides or other potential sulfur sources.

12-Leikvangen, Nelaug topo map reference: see YB-11 on 2005 Bamble traverse layer

Rationale: 3 quarries were indicated on the Nelaug topo map.

#### Geology:

Paragneiss was the only main lithological unit encountered. Outcrop quality was excellent with bleached outcrops exposed in two of the three quarries.

Paragneiss is well banded with well segregated leucocratic and melanocratic bands. Leucocratic bands tend to range in composition from semi-pelitic to near psammitic while melanocratic bands were gabbroic or dioritic. Some of the melanocratic bands are porphyroblastic (hornfels?). See pictures PICT0844-0859 for detailed views of the sequence.

Rusty patches occur throughout the sequence (especially in the pegmatitic unit) but no sulfide was observed. At the second quarry, a gossany band (sampled) appears to be a silicate-iron formation and is continuous along the outcrop. Some graphite was observed on one of the samples.

Senestral shears were observed trend perpendicular to the banding. Excluding folds, banding at the outcrops in the main quarry (motocross quarry) was very parallel and organized.

Pegmatites occurred as boudined units intruding parallel to banding. None were seen cutting across bands in the gneiss.

Units were all generally non-magnetic with some locally weakly magnetic patches.

Access: access is excellent along an ungated road.

Culture: A medium (or high tension?) power line is within 500 m of the main quarry.

### 13- Asen town (Nelaug topo map reference): see YB-13 on 2005 Bamble traverse layer

Rationale: 3 old workings (unidentified material) were indicated on the Nelaug topo sheet.

#### Geology:

Banded gneisses were the dominant lithology of the area. They are intermediate in composition ranging from dioritic (semi pelitic) to darker gabbroic (pelitic). They are essentially visually identical to the previously defined paragneiss sequence. One particular outcrop distinctly showed pegmatitic "sweats" as for semi-pelitic units of the Thompson Nickel Belt.

No sulfide mineralization was observed in the sequence although locally, rusty patches were prolific.

The old workings were related to the mining or quarrying of quartz veins. Large, barren milky white quartz veins cutting through what appeared to be unfoliated diorite (with large amphiboles in the matrix). No sulfide mineralization was seen anywhere in the vicinity of the workings.

NGU showing- Mjalvatnet: the showing as located approximately 500 m south of where indicated. It consisted of a large gossan that appears to be hosted by a pyroxenitic unit although this is more likely the effect of alteration. The overall lithology (looking at nearby non-gossany outcrops) appears to be dioritic or gabbroic. The gossan occurs in direct contact with a granitic pegmatite (see PICT0860 and 0861). 3 samples with about 0.5% sulfide in each were collected.

### 14-Bjorvatn area (Mykland topo sheet reference): see YB-13 on 2005 Bamble traverse layer

Rational: investigate a large gabbro body that intrudes banded gneisses (paragneiss) and metasandstone.

Geology: the gabbro is foliated, generally medium to medium-coarse grained, non magnetic and is moderately amphibolitic. It intrudes the metasandstone (quartzite NGU unit) with finger-like gabbro formation evident at the contact. The gabbro is intensely foliated at the contact with the metasandstone and becomes progressively less intensely foliated. Grain size is also much finer near the contact than elsewhere in the gabbro.

**Mineralization: 3 previously unmarked showings were located (and sampled) in apparent association with the gabbro.**

- 1- 0.5-1% sulfide mineralization in locally pegmatitic quartz-phlogopite veins cross cutting the gabbro near the contact with the metasandstone. Pegmatitic material may in fact be derived from the gabbro itself. Other pegmatitic veins seen in the metasandstone and the paragneiss sequence were devoid of sulfides. Sulfides were magnetic indicating the likely presence of pyrrhotite. Trace chalcopyrite was also observed along with pyrite.
- 2- Up to 5% sulfide in a breccia unit that included fragments of paragneiss and gabbro in a pyroxene-rich matrix. Overall mineralization appears to be hydrothermal in nature with notable carbonate filling large spaces in between fragments (one carbonate "vein" is about 20 cm wide). Quartz veins are also evident throughout. Pyrite and pyrrhotite are the dominant sulfides with some pyrite crystals being up to 10 cm in diameter and intensely weathered. Chalcopyrite is also visible in notable abundance (~5% of total sulfides).
- 3- Up to 10% sulfide in a quartz-epidote vein occurring in a gossan related to the previous unit (the 2 sites are ~100m apart). Pyrrhotite and chalcopyrite are the dominant sulfides.

**These sites have been highlighted as possible geological stops for future tours.**

Other units: of important is the abundance of rusty patches and sulfur burns in the paragneiss sequence in which the gabbro intrudes. Though only trace amounts of sulfides are locally visible in the sequence, their abundance throughout the sequence make the paragneiss an excellent sulfur source.

The "quartzite" unit in this area is quite different from other units seen further east. This unit better defined as a "dirty", well banded metasandstone. The matrix is composed of medium grained sub-rounded quartz crystals with an overall sugary texture. Other quartzite units mapped were composed of massive quartz perhaps indicating a degree of melting and recrystallization or derivation from an intrusive unit whereas the metasandstone unit encountered in the Bjorvatn area is clearly sedimentary in origin.

Structure: foliation in the gabbro ranges from 018-040 except in fold hinges where measurements of 269 were observed. The metasandstone and paragneiss have consistently NNE-SSW foliation trends.

Access: excellent access throughout area on paved roadways and gravel side roads. No gated roads encountered.

Old workings: some sort of old working (perhaps unrelated to mining) was found. It consisted in an approximately 50 m long by 2-3 m wide by 5 m deep trench cutting into the gabbro. Wood beams were still visible as was a stone foundation. A small overgrown wastepile contained gabbro pieces with trace sulfide (sampled). It is unclear what the site was used for.

15-South of Bjorvatn area (Mykland topo sheet reference): see YB-14 on the 2005 Bamble traverse layer

Rationale: further investigation of large mineralized gabbro unit in the Bjorvatn area.

Additional mineralization was found in the Bjorvatn gabbro including one new showing of importance. Small scale po, ccp mineralization was found in locally coarse (pegmatitic..see PICT0878 and 0879) zones within the gabbro.

A new gossan was located on the roadside in a trench/ditch that runs for about 50-75 m trending 038. It is unclear if the trench is an old working or simply part of the road construction. The gossan is essentially a breccia (hydrothermal?) at the contact of metasandstone and gabbro. Gabbro fragments were observed in the gossan but no intact gabbro outcrop was seen. The entire surface geology of this particular area was dominated by metasandstone with no gabbro seen. The presence of the sandstone would seem to indicate that the gabbro unit is not far below surface. Samples with up to 10% sulfide (po, py, ccp) and magnetite were collected. Some mineralization occurs directly in the metasandstone while other mineralization lies in altered (silicified) gabbro.

It is important to note that NGU mapping indicates two separate mafic units (Bjorvatn gabbro and an amphibolitic unit) in this area. In reference to the NGU mapping, this new gossan would lie in the amphibolitic unit. Thus its relationship to the larger Bjorvatn gabbro is unclear.

**This gossan has been highlighted as a possible geological stops for future tours (pending assay results).**

**NO SAMPLES FROM THE BJORVATN GABBRO RETURNED ANOMALOUS NI VALUES; THIS GOSSAN IS THE RESULT OF HYDROTHERMAL ALTERATION.**

In this particular area, the eastern boundary of the Bjorvatn gabbro is relatively devoid of mineralization features (gossany patches, rusty veinlets...) with respect to the western boundary.

Culture: the regional (Tyrstrand?) high tension powerline crosses the gabbro south of Bjorvatn along a NE-SW trend.

Access: access is excellent along ungated and public gravel roads.

## B) Reports by Rob Jones:

### Traverse RJ-1 on the 2005 Bamble traverse layer

**Location:** Langsdalen area approach from the north.

**Purpose:** investigating the central portion of Paragneiss, locate and sample Stoverntangen showing from NGU database.

**Culture:** Two very large power lines run east west in bottom of the valley close to within 200m of Stoverntangen showing.

**Sulfides found:** Up to 50% sulfide found at Stoverntangen, samples contain po, chal and py. Highly magnetic

**Samples:** Samples RJ008-11 are taken from Stoverntangen showing.

**Rock types:** Paragneiss-med grain, non magnetic, no significant sulfides except at showing, composition banding, banding strikes approximately 340 and dips 70. Garnets found replacing mafic minerals locally. A subgroup is fine grain, pink and strongly foliated but still thought to have originated from a sediment.

**Monzenite-** Quartz and plagioclase with megacrysts of plagioclase up to 12cm in diameter. Not magnetic, mappable and does not contain significant sulfides.

### Traverse RJ-2 on the 2005 Bamble traverse layer

**Location:** Bamble area

**Purpose:** Prospect for new showings in gabbroic region

**Culture:** No major culture

**Sulfides found:** no sulfides found

**Samples:** One sample with strong carbonate alteration minor sulfide.

**Rock Types:** Ortho gneiss- nothing significant found in region. Layers strike to the north east and dip steeply to the south east.

**Gabbro-** Med grain, locally magnetic but does not host any sulfides. There is a showing that was not found.

### Traverse RJ-3 on the 2005 Bamble traverse layer

**Location:** Bamble area, Meinkjaer showing.

**Purpose:** Check workings or mineralization orientation and continue west through gabbro prospecting for new showings.

**Culture:** Power line shown on 5:50k top has been removed.

**Sulfides found:** At workings two types of sulfide were observed 1) recrystallized perotite with crystals up to 1 cm in diameter 2) fine grain perotite. 5% perotite found on new road cut.

**Samples:** RJ 67819 rexls perotite, RJ 67820 fine grain perotite and RJ 67821 from road cut.

**Rock Types:** Felsic Gneiss- med grain generally pink with abundant feldspar and quartz +/- bio and amphibole. The unit generally strikes between 50-70 and dips between 70 and 85.

**Gabbro-** hosts mineralization at the workings. Contact appears to be folded with mineralization in the limbs. The western workings dip to the east south east and the eastern working dipping to the west north west.

### Traverse RJ-4 on the 2005 Bamble traverse layer

**Location:** Bamble area, Meinkjaer showing.

**Purpose:** Check workings or mineralization orientation and continue west through gabbro prospecting for new showings.

**Culture:** Large power line shown on top is present.

**Sulfides found:** No significant sulfides found.

**Samples:** None

**Rock Types:** *Gabbro*: not nearly as abundant as NGU map suggests. Where present the gabbro is non magnetic fine grained. In one location it is magnetic.

*Ortho and Para Gneisses*: make up most of the traversed area. non magnetic striking east dipping near 60 to the south.

**Note:** quartz vein with carbonate alteration found striking north south dipping steeply. No sulfides present, zone up to 2m thick.

#### **Traverse RJ-5 on the 2005 Bamble traverse layer**

**Location:** Bamble area, Langoy island.

**Purpose:** Prospecting gabbro and checking NGU mag anomaly.

**Culture:** Cottages and minor power lines over island.

**Sulfides found:** No sulphides found, potentially molybdenum.

**Samples:** RJ 67822 and RJ 67823 for molybdenum.

**Rock Types:** *Gabbro*- This unit is leucocratic often with small 1cm clots of fine grain biotite that preferentially weather out leaving a pitted surface.

*Albetite*- This unit ranges in grain size from med grain up to coarse pegmatite 15cm crystals. In two different locations 3% moly was observed.

#### **Traverse RJ-6 on the 2005 Bamble traverse layer**

**Location:** Bamble area, Glupe

**Purpose:** Checking NGU sample and regional geology.

**Culture:** Large power line on topo is present.

**Sulfides found:** NGU sample location not found. No sulphides found .

**Samples:** None taken.

**Rock Types:** *Quartzite*- Large unit, in most location has thick beds with minor biotite. Locally has leucosomes of that cut bedding. Foliation strikes to the north west and dips approximately 60 degrees to the north east.

*ParaGneiss*- Fine grain, non-mag, bedding parallel to regional foliation. In some location it is inter-bedded with the quartzite.

#### **Traverse RJ-7 on the 2005 Bamble traverse layer**

**Location:** Bamble North area. East of Songe

**Purpose:** Checking regional geology.

**Culture:** No major culture.

**Sulfides found:** No sulphides found .

**Samples:** None taken.

**Rock Types:** *Quartzite*- Large unit, in most location has thick beds with minor biotite. Foliation strikes to the north east and dips steeply to the south east.

*Para/Ortho Gneiss*- Fine grain, non-mag, bedding parallel to regional foliation. In some location it is inter-bedded with the quartzite. Non magnetic.

#### **Traverse RJ-8 on the 2005 Bamble traverse layer**

**Location:** Bamble North area. near Ostera

**Purpose:** Checking regional geology foliation and contacts.

**Culture:** Mid sized power line on topo is present.

**Sulfides found:** Minor pyrite found in shear.

**Samples:** RJ 67824 1% Pyrite in small shear with sugary fine grain silicification.

**Rock Types:** *Megmatite*- heterogeneous alternating between mafic and felsic layers. In minor locations slightly magnetic. Mafic rich bands are generally finer grain then the felsic bands.

*Granite*- Fine grain, non-mag, overall pink. Locally foliated but often not; thought to be melt produced locally within gneiss.

#### **Traverse RJ-9 on the 2005 Bamble traverse layer**

**Location:** Bamble South area, near Messel

**Purpose:** Checking Seljasen workings and regional geology.

**Culture:** Lots of sheep on road.

**Sulfides found:** Taken near 2 small trenches. Trench right on north side of road before parking. Messel showing of minor importance not found.

**Samples:** RJ 67825 and RJ 67826 massive sulphide with large po crystals up to 10cm, and classic net texture with 50% sulphide.

**Rock Types:** *Gabbro*- intrusion that hosts the mineralization is very different then other observed gabbros. Px/amph have coronas and supported in a feld matrix. Grain size ranges from coarse to medium coarse, that is very interesting.

#### **Traverse RJ-10 on the 2005 Bamble traverse layer**

**Location:** Bamble South area, near Moripen

**Purpose:** Checking mine site of 1:50 topo and regional geology foliation and contacts.

**Culture:** Train tracks to west.

**Sulfides found:** None. Mine site appears to be old gold workings? Or a quarry for silica?

**Samples:** None.

**Rock Types:** Parragneiss is dominate unit. Simular gabbro found at Seljasen was observed on road near end of trav.

#### **Traverse RJ-11 on the 2005 Bamble traverse layer**

**Location:** Bamble South area, near Jomas

**Purpose:** Checking regional geology foliation and contacts.

**Culture:** Large sized power line on topo is present.

**Sulfides found:** No sulphides found.

**Samples:** None.

**Rock Types:** Variable rock types present, in many locations they are hard to distinguish. Range between para/ortho gneisses to gabbros and diorite. The banding in the gneisses strike at 30 degrees and dip near 70 degrees.

#### **Traverse RJ-12 on the 2005 Bamble traverse layer**

**Location:** Bamble South area, near Moripen

**Purpose:** Checking regional geology foliation and contacts, and find NGU showing.

**Culture:** None

**Sulfides found:** None.

**Samples:** None.

**Rock Types:** *Gabbro*: Mid grain, locally magnetic, no sulphides found within the gabbros. NGU showing is a silica mine, no sulphides were observed but there are hornblends up to 10cm in length. One of the old mines on Yanns trav line was visited and it was also a quartz mine, on road on walk out to south at pick up no sulphides were observed.

#### **Traverse RJ-13 on the 2005 Bamble traverse layer**

**Location:** Bamble South area, near Stolemarka.

**Purpose:** Checking regional geology foliation and contacts, northern portion of gabbro where Yann found interesting sulphides.

**Culture:** None.

**Sulfides found:** 1-3% sulphide in large area, weakly mag, disseminated hosted within sediments with muscovite up to 1cm in size.

**Samples:** RJ 67828.

**Rock Types:** *Gabbro:* Mid grain, locally magnetic, no sulphides found within the gabbros. *Para Gneisses:* this was likely a dirty siltstone, contains muscovite and biotite. Area where sample was taken is gossanous over an area 20m by 75m, with no vegetation.

#### **Traverse RJ-14 on the 2005 Bamble traverse layer**

**Location:** Bamble South area, near Lauvrak

**Purpose:** Checking regional geology foliation and contacts

**Culture:** Mid sized power line on topo is present.

**Sulfides found:** No sulphides found.

**Samples:** None.

**Rock Types:** *Pegmatite:* a plethora of small pegmatite mines have operated in this region. It is unclear if it was for the quartz or more likely the mica. None of these numerous working contain any significant sulphide. In locations the k-spar has a graphitic texture with quartz.

*Gabbro:* This gabbro is the same one to that south that was sampled multiple times. Although here there are no sulphides. Gabbro is foliated striking to the north/north east and dipping near 60 to the east. In local areas it is weakly magnetic. *Para Gneisses:* this was likely a dirty siltstone, contains muscovite and biotite. Foliated in same orientation as gabbro but not magnetic. Some horizons look like gabbro which can be misleading if there is only a minor amount of outcrop.

#### **C) Reports by Lars Weiershäuser:**

##### 1-Summary of traverse LW-1 and LW-2 on 2005 Bamble traverse layer

1:50.000 Topo map sheet: Kilbygd

##### Goals

- find any unknown mineral showings, if possible
- determine foliation and other structural attitudes important in the design of the planned airborne survey of the area
- determine the suitability of the area for use of the DGPS without base station.

##### Main Rock Types

The main rock types encountered along traverses LW-1 and LW-2 were various gneisses and gabbro. They are commonly well-foliated and banded. (IMG\_0155)

Gabbros encountered on traverse LW-1 are weakly to non-foliated and commonly contain gneissic bands. Locally, gabbros and gabbroic bands in gneiss are weakly magnetic. Foliation strikes ~220°, dip is vertical to subvertical.

Locally, strongly magnetic, fine-grained, mafic dykes cut the area (IMG\_0152)

Gabbros along traverse LW-2 commonly have a gneissic texture. Gneisses are commonly garnet-bearing. Three different types have been encountered:

1. Fine-grained, banded, fairly dark in color; this type occurs along the southern part of the traverse. Locally, the gneiss looks rusty (IMG\_0164), but contains no or trace amounts of sulfide.

2. Light-colored, well foliated, K-spar-bearing gneiss, fine-grained, locally with large (up to 1.5cm) K-spar augen (IMG\_0171)
3. Weakly foliated with K-spar augen in dark groundmass.

The foliation predominantly strikes ~45° and dips between 60° and 80°.

#### DGPS

The area along the traverse is completely forested with coniferous as well as deciduous trees. The topography is hilly, in places somewhat steep, sometimes extreme (many vertical cliffs). Locally, slopes are covered by blocky talus. The area is densely wooded with young trees, in combination with the steep cliffs, use of a base station seems to be absolutely necessary.

#### Access etc.

Access to the area is very good via well-maintained semi-private and private dirt roads. There is one low tension power line along each of the traverses. No high tension power lines cross the area. A small number of cottages (see map for locations) could potentially require modified ground geophysical traverses. Access to water is moderately good.

### 2-Summary of traverse LW-3 and LW-4 on 2005 Bamble traverse layer

1:50,000 Topo map sheet: Kilbygde

#### Goals

- find any unknown mineral showings, if possible
- determine foliation and other structural attitudes important in the design of the planned airborne survey of the area
- determine the suitability of the area for use of the DGPS without base station.

#### Main Rock Types

The main rock types encountered along traverses LW-3 and LW-4 were various gneisses and gabbro. They are commonly well-foliated and banded. (see IMG\_0237)

Gneisses in the N of traverse are garnet-bearing, micaceous, non-magnetic, and well foliated. They are likely paragneisses. Iron oxides are common on paragneiss outcrops, however, sulfides were not found. Locally, pegmatitic bodies can be found in the paragneiss (IMG\_0239)

The contact with gabbros to the south seems to be gradational; gabbroic bands become more numerous until the gabbro is massive and non- to weakly foliated. The center of the gabbro body is moderately magnetic. South of the gabbro, a K-spar-rich gneiss occurs. It does not contain garnets and little mica, nor is it magnetic. Due to the lack of garnets and mica it could be interpreted as an orthogneiss.

Foliation generally strikes NE to E with a moderate to steep dip S.

Traverse LW-4 did not intercept gabbros. Gneisses that comprise the topographical high of the Horsfjellet are quartz-rich, non-banded, and locally massive. They do not contain abundant garnets. To the east garnet-bearing paragneisses occur. Melanocratic, gabbroic bands are common, but do not seem to constitute a separate unit. Similar to other paragneissic units, iron oxides are fairly common. Foliation is quite variable: 45° – 150° with subvertical dips.

#### DGPS

The area along the traverse is completely forested with coniferous as well as deciduous trees. The topography is hilly, in places somewhat steep, sometimes extreme (many vertical cliffs). Locally, slopes are covered by blocky talus. The area is densely wooded with young trees, in combination with the steep cliffs, use of a base station seems to be absolutely necessary.

#### Access etc.

Access to the area is very good via well-maintained semi-private and private dirt roads. A well-maintained hiking trail crosses the Horsfjellet; however, the trail marked on the corresponding topographical map does not exist in that location..

### 3-Summary of traverse LW-5 on 2005 Bamble traverse layer

Langoy Island - Bamble area

1:50.000 Topo map sheet: Kilbygde

#### Goals

- find any unknown mineral showings, if possible
- determine foliation and other structural attitudes important in the design of the planned airborne survey of the area
- Investigate the reason for mag high
- determine the suitability of the area for use of the DGPS without base station.

#### Main Rock Types

The main rock type encountered along traverse LW-5 was gabbro. It is commonly fine grained; only locally is it medium-grained. Especially the fine-grained portion contains abundant magnetite (IMG\_0245). This type of gabbro is massive and not foliated. The medium-grained gabbro has a foliation striking ~60 with a vertical dip.

No unknown sulfide showings were discovered.

#### DGPS

The area along the traverse is completely forested with coniferous as well as deciduous trees. The topography is hilly, in places somewhat steep, sometimes extreme. Locally, slopes are covered by blocky talus. The area is densely wooded with young trees, in combination with the steep cliffs, use of a base station seems to be absolutely necessary.

### 4-Summary of traverses LW-6, LW-7, LW-8 and LW-9 on 2005 Bamble traverse layer

1:50.000 Topo map sheets: Gjerstad (July 7 – LW 6), Tvedestrand (July 8 & 9 – LW 7 & 8), and Arendal and Nelaug (LW 9)

#### Goals

- find any unknown mineral showings, if possible
- determine foliation and other structural attitudes important in the design of the planned airborne survey of the area
- verify locations of NGU reported showings
- determine the suitability of the area for use of the DGPS without base station.

#### Main Rock Types

The main rock type encountered along traverse LW-6 was gneiss. Locally it contains trace sulfide (e.g. sample 68081, 68082). The gneiss is commonly fine grained; only locally is it medium-grained. It is often garnetiferous and always well-banded (IMG\_0260). Only in the very SE of the traverse did dirty quartzites occur.

Around E507337, N6518948 a thin massive magnetite vein was found. It was mined in the 1700's, the vein has an apparent thickness of ~.5 – 1m. 9 separate pits remain (e.g. IMG\_265)

The main rock type on traverse LW-7 was gabbro. It is commonly well foliated and locally banded with a gneissic texture. Locally, it is garnet bearing. In the very NE of the traverse, the gneiss is very coarse grained (~1cm grain size); it contains coarse magnetite.

No unknown sulfide showings were discovered.

The main rock type along traverse LW-8 was gneiss, locally with migmatitic textures. The rock was always well foliated with consistent foliation striking 40 to 50°. The traverse crossed a high grade metamorphic zone; here, the gneiss was noticeable more abundant in garnet.

Locally, discreet zones of apparent fluid flow can be found parallel to foliation. In these zones the rock is friable and rich in iron oxides. No sulfides were found. No graphite was found in the rock, unlike reported.

The location of the Hogåsen showing was verified. The showing consists of an adit ca. 50m above the road (IMG\_0276). The adit seems to be inclined as it is flooded. Mineralization consists of magnetite with ~1% sulfide (py). The mineralization is hosted in coarse-grained (recrystallized?) gneiss (see samples 68083 and 68084). The samples were taken along the road from waste/tailings rock (IMG\_0277)

On traverse LW 9 a small gabbro body was sampled; it contained trace amounts of sulfides (Sample 68090). The majority of examined outcrops contained well-banded gneiss. Locally, iron oxide staining occurs and trace amounts of sulfide can be found. The foliation strikes between N and NE; it dips steeply.

The existence of the Mjåvatnet could not be confirmed. At the given location no rocks crop out. About 500 m S from the reported location of the showing, a slightly mineralized amphibolitic rock crops out (IMG\_0283). The immediate host rock to the N is a pegmatitic feldspar-rich rock. Sample 68091 contains ~1% combined po and py.

#### DGPS

The areas along the traverses are completely forested with coniferous as well as deciduous trees. The topography is hilly, in places somewhat steep, sometimes extreme. Locally, slopes are covered by blocky talus. The area is densely wooded with young trees, in combination with the steep cliffs, use of a base station seems to be absolutely necessary.

On LW6, a high tension power line was seen crossing the known one (see 1:50.000) topo at ~90 degrees.

### **LITHOLOGICAL SUMMARY**

The Bamble area is dominated by a sedimentary gneiss sequence with variable pelitic and semi pelitic composition. Gneisses have sugary texture, are often garnet bearing and in many areas show abundant rusty/gossany patches indicated sulfur and/or sulfides present/

Another gneissic unit consists of felsic intrusives including granite, granodiorite, monzonite, tonalite and diorite. This suite shows fewer sulfur/sulfide indicators (rusty and gossany patches) than the sedimentary unit.

Both sequences host gabbros (metagabbros) that show various degrees of amphibolitic alteration (low to high grade amphibolite). The gabbros are all foliated with differing intensities.

Gabbros occurring within the sedimentary gneiss sequence are more prone to be mineralized indicating that the latter unit is a better sulfur source than its intrusive composed counterpart.

## APPENDIX F

## FALCONBRIDGE SAMPLES 2004-2006

| Lab_ID  | Map_X  | Map_Y   | Topo sheet  | Name       | Ni_wt% | Cu_wt% | Co_wt% | S_wt% | Pt_g_t | Pd_g_t | Au_g_t | Ag_g_t | Sample comments                                                                                         | Year |
|---------|--------|---------|-------------|------------|--------|--------|--------|-------|--------|--------|--------|--------|---------------------------------------------------------------------------------------------------------|------|
| SA67814 | 533750 | 6538817 | Kragero     | Hettemyr   | 0.84   | 0.09   | 0.06   | 11.7  | <0.02  | 0.1    | 0.03   | 0.8    | 20% blebby                                                                                              | 2005 |
| SA67815 | 534108 | 6539197 | Kragero     | Nystein    | 0.76   | 0.11   | 0.03   | 7.87  | <0.02  | 0.03   | 0.02   | 0.7    | 35% blebby                                                                                              | 2005 |
| SA67816 | 534107 | 6539196 | Kragero     | Nystein    | 2.01   | 0.15   | 0.06   | 18    | 0.02   | 0.05   | 0.03   | 0.8    | 30% net textured                                                                                        | 2005 |
| SA67817 | 534107 | 6539197 | Kragero     | Nystein    | 0.7    | 1.5    | <0.02  | 6.97  | <0.02  | 0.03   | 0.03   | 3      | 20%, veins                                                                                              | 2005 |
| SA67818 | 530872 | 6544108 | Kragero     | Midtre     | <0.05  | <0.05  | <0.02  | 0.3   | <0.02  | <0.02  | <0.02  | 0.7    | 0.5% disseminated sulfide                                                                               | 2005 |
| SA67819 | 531041 | 6536415 | Kragero     | Skjilbreia | 1.74   | 0.38   | 0.07   | 15.1  | <0.02  | 0.14   | 0.04   | 1.2    | massive sulfide from waste pile, 75% sulph, 1%ch, po recrystallized up to 1cm, very magnetic            | 2005 |
| SA67820 | 531042 | 6536416 | Kragero     | Skjilbreia | 1.86   | 0.44   | 0.08   | 19.2  | 0.02   | 0.31   | 0.02   | 1.6    | massive sulfide from waste pile, 75% sulph, 1%ch, po fine grain remainer very magnetic                  | 2005 |
| SA67821 | 529567 | 6534648 | Kragero     | Tomasbu    | 0.22   | 0.05   | 0.03   | 2.47  | <0.02  | <0.02  | <0.02  | 0.6    | 3% sulphide from med grain gabbro melancratic gabbro from road side, magnetic                           | 2005 |
| SA67822 | 528507 | 6528728 | Kragero     | Langoy     | <0.05  | <0.05  | <0.02  | 0.14  | <0.02  | <0.02  | <0.02  | 0.6    | no sulfide; may have molybdenite                                                                        | 2005 |
| SA67823 | 528676 | 6529198 | Kragero     | Langoy     | <0.05  | <0.05  | <0.02  | 0.06  | <0.02  | <0.02  | <0.02  | 0.6    | no sulfide; may have molybdenite                                                                        | 2005 |
| SA67824 | 498372 | 6499000 | Tvedestrand | Hogasen    | <0.05  | <0.05  | <0.02  | 1.38  | <0.02  | <0.02  | 0.02   | 0.7    | Hydrothermal shear with 1% sulf, fine sugary material                                                   | 2005 |
| SA67825 | 479690 | 6482281 | Tvedestrand | Messel     | 0.79   | 0.49   | 0.1    | 27    | 0.02   | <0.02  | 0.04   | 1.4    | massive sulfide from waste pile adjacent to small trench, 90% po some xls up to 10cm, 1% pyrite, +frags | 2005 |
| SA67826 | 479670 | 6482258 | Tvedestrand | Messel     | 0.44   | 0.56   | 0.08   | 16.9  | <0.02  | <0.02  | 0.04   | 0.9    | 50 % sulfide, net textured, minor py, inclusions rich, taken near trench.                               | 2005 |

|         |        |         |             |                    |       |       |       |       |       |       |       |      |                                                                                           |      |
|---------|--------|---------|-------------|--------------------|-------|-------|-------|-------|-------|-------|-------|------|-------------------------------------------------------------------------------------------|------|
| SA67827 | 475186 | 6495993 | Nelaug      | Dyngedal           | <0.05 | <0.05 | <0.02 | 0.08  | 0.02  | 0.03  | <0.02 | <0.5 | notsure what mineral is<br>silver-metallic 3%                                             | 2005 |
| SA67828 | 469119 | 6490639 | Nelaug      | Flottervatn<br>et  | <0.05 | <0.05 | <0.02 | 3.07  | <0.02 | <0.02 | <0.02 | <0.5 | big.micas                                                                                 | 2005 |
| SA68037 | 524536 | 6533474 | Kilebygd    | Bjordam            | <0.05 | <0.05 | <0.02 | <0.01 | <0.02 | <0.02 | <0.02 | <0.5 | no observed sulphides                                                                     | 2005 |
| SA68038 | 524561 | 6533403 | Kilebygd    | Bjordam            | <0.05 | <0.05 | <0.02 | 0.04  | <0.02 | <0.02 | <0.02 | <0.5 | peridotite; trace<br>sulphides                                                            | 2005 |
| SA68039 | 524561 | 6533403 | Kilebygd    | Bjordam            | <0.05 | <0.05 | <0.02 | 0.12  | <0.02 | <0.02 | <0.02 | <0.5 | eclogite? trace<br>fragments of pol ccp                                                   | 2005 |
| SA68040 | 524573 | 6533421 | Kilebygd    | Bjordam            | 0.06  | <0.05 | <0.02 | 0.2   | <0.02 | <0.02 | <0.02 | <0.5 | trace po, ccp                                                                             | 2005 |
| SA68041 | 524686 | 6533401 | Kilebygd    | Bjordam            | <0.05 | <0.05 | <0.02 | 0.04  | <0.02 | <0.02 | <0.02 | <0.5 | trace po                                                                                  | 2005 |
| SA68042 | 525179 | 6533784 | Kilebygd    | Bjordam            | <0.05 | <0.05 | <0.02 | 0.05  | <0.02 | <0.02 | <0.02 | <0.5 | no sulphides seen;<br>magnetite                                                           | 2005 |
| SA68043 | 524789 | 6533627 | Kilebygd    | Bjordam            | <0.05 | <0.05 | <0.02 | 0.04  | <0.02 | <0.02 | <0.02 | <0.5 | trace sulphides                                                                           | 2005 |
| SA68044 | 524830 | 6533656 | Kilebygd    | Bjordam            | <0.05 | <0.05 | <0.02 | 0.07  | 0.02  | <0.02 | <0.02 | <0.5 | no sulphides seen                                                                         | 2005 |
| SA68045 | 532710 | 6540652 | Kilebygd    | Kil                | <0.05 | <0.05 | <0.02 | 3.44  | <0.02 | <0.02 | <0.02 | <0.5 | minor blebby sulphides                                                                    | 2005 |
| SA68046 | 532703 | 6540551 | Kilebygd    | Kil                | <0.05 | <0.05 | <0.02 | 0.19  | <0.02 | <0.02 | <0.02 | <0.5 | 1% sulphide; py                                                                           | 2005 |
| SA68047 | 532647 | 6540007 | Kragero     | Kilsasane          | <0.05 | <0.05 | <0.02 | 7.04  | <0.02 | <0.02 | 0.02  | 0.8  | minor blebby py                                                                           | 2005 |
| SA68048 | 532161 | 6538908 | Kragero     | Skogstadv<br>annet | <0.05 | <0.05 | <0.02 | 0.13  | <0.02 | <0.02 | <0.02 | <0.5 | 3% sulphide                                                                               | 2005 |
| SA68049 | 532161 | 6538908 | Kragero     | Skogstadv<br>annet | <0.05 | <0.05 | <0.02 | 6.69  | <0.02 | <0.02 | <0.02 | 0.6  | 3% sulphide                                                                               | 2005 |
| SA68050 | 531319 | 6537570 | Kragero     | Dalkasa            | <0.05 | <0.05 | <0.02 | 6.68  | <0.02 | <0.02 | <0.02 | <0.5 | 1% sulphided                                                                              | 2005 |
| SA68078 | 530207 | 6545547 | Kragero     | Oygardstje<br>rn   | <0.05 | 0.1   | <0.02 | 4.85  | <0.02 | <0.02 | <0.02 | <0.5 | gneiss, non-mag,<br>homogeneous, garnet-<br>bearing, locally trace<br>sulfide             | 2005 |
| SA68079 | 530324 | 6545531 | Kragero     | Oygardstje<br>rn   | <0.05 | <0.05 | <0.02 | 1.3   | <0.02 | <0.02 | <0.02 | <0.5 | garnet-bearing gneiss,<br>fine-grained, locally<br>weakly magnetic, slightly<br>gossanous | 2005 |
| SA68080 | 531353 | 6541131 | Kragero     | Heidstad           | <0.05 | <0.05 | <0.02 | 1.32  | <0.02 | <0.02 | <0.02 | <0.5 | see ipac file                                                                             | 2005 |
| SA68081 | 506249 | 6518800 | Tvedestrand | Espevika           | <0.05 | <0.05 | <0.02 | 0.56  | <0.02 | <0.02 | <0.02 | <0.5 | well-banded, fine to<br>medium-grained, non-<br>magnetic gneiss; locally<br>trace sulfide | 2005 |

|         |        |         |             |              |       |       |       |      |       |       |       |      |                                                                                         |      |
|---------|--------|---------|-------------|--------------|-------|-------|-------|------|-------|-------|-------|------|-----------------------------------------------------------------------------------------|------|
| SA68082 | 506561 | 6519069 | Tvedestrand | Espevika     | <0.05 | <0.05 | <0.02 | 0.96 | <0.02 | <0.02 | <0.02 | <0.5 | well-banded gneiss, locally garnet bearing; bands of Fe-ox-rich material; trace sulfide | 2005 |
| SA68083 | 507337 | 6518948 | Tvedestrand | Stakjema     | <0.05 | <0.05 | <0.02 | 0.04 | <0.02 | <0.02 | <0.02 | <0.5 | massive magnetite                                                                       | 2005 |
| SA68084 | 507478 | 6518165 | Tvedestrand | Royvassheia  | <0.05 | 0.39  | <0.02 | 1.52 | <0.02 | <0.02 | <0.02 | <0.5 | gabbroic to schistose rock, medium-grained, non-magnetic; trace sulfide                 | 2005 |
| SA68085 | 0      | 0       |             |              | 0.79  | 0.38  | 0.03  | 5.09 | 0.11  | 0.09  | 0.02  | 1.6  | STANDARD                                                                                | 2005 |
| SA68086 | 498785 | 6498771 | Tvedestrand | Hogasen      | 0.49  | 0.25  | <0.02 | 4.22 | <0.02 | <0.02 | <0.02 | 0.6  | blebby sulfides seem to be associated with magnetite                                    | 2005 |
| SA68087 | 498785 | 6498771 | Tvedestrand | Hogasen      | 0.54  | 0.81  | 0.02  | 6.6  | <0.02 | <0.02 | 0.02  | 3    | more magnetite, ca. 1% sulfides                                                         | 2005 |
| SA68088 | 478201 | 6480973 | Arendal     | Rise         | <0.05 | <0.05 | <0.02 | 2.35 | <0.02 | <0.02 | <0.02 | 1    | 1% disseminated                                                                         | 2005 |
| SA68089 | 477950 | 6481915 | Arendal     | Mesel        | <0.05 | <0.05 | 0.03  | 1.21 | <0.02 | <0.02 | <0.02 | 0.7  | 1% disseminated                                                                         | 2005 |
| SA68090 | 478224 | 6483063 | Arendal     | Ov           | <0.05 | <0.05 | <0.02 | 0.51 | <0.02 | <0.02 | <0.02 | 0.8  | 1% disseminated                                                                         | 2005 |
| SA68091 | 472005 | 6487808 | Arendal     | Mjvatnet     | <0.05 | <0.05 | <0.02 | 1.74 | <0.02 | 0.02  | <0.02 | 0.6  | 1% blebby, disseminated                                                                 | 2005 |
| SA68151 | 525635 | 6540444 | Kilebygd    | Lonnrikvanet | <0.05 | <0.05 | <0.02 | 0.12 | <0.02 | <0.02 | <0.02 | <0.5 | trace sulfides                                                                          | 2005 |
| SA68152 | 525282 | 6539647 | Kilebygd    | Saudalsvanna | <0.05 | <0.05 | <0.02 | 3.85 | <0.02 | <0.02 | <0.02 | <0.5 | 0.5% sulfides                                                                           | 2005 |
| SA68153 | 525199 | 6539404 | Kilebygd    | Saudalsvanna | <0.05 | <0.05 | 0.02  | 2.68 | <0.02 | <0.02 | <0.02 | <0.5 | minor sulfides                                                                          | 2005 |
| SA68154 | 524519 | 6538624 | Kilebygd    | Saudalsvanna | <0.05 | <0.05 | <0.02 | 1.49 | <0.02 | <0.02 | <0.02 | <0.5 | trace sulfide                                                                           | 2005 |
| SA68155 | 524939 | 6538878 | Kilebygd    | Saudalsvanna | <0.05 | <0.05 | <0.02 | 1.37 | <0.02 | <0.02 | <0.02 | <0.5 | subcrop; minor sulfide                                                                  | 2005 |
| SA68156 | 524224 | 6538152 | Kilebygd    | Bjon         | <0.05 | <0.05 | <0.02 | 0.23 | <0.02 | <0.02 | <0.02 | <0.5 | trace sulfides; partly along fracture plane                                             | 2005 |
| SA68157 | 0      | 0       |             |              | <0.05 | <0.05 | <0.02 | 2.44 | <0.02 | <0.02 | <0.02 | <0.5 |                                                                                         | 2005 |
| SA68158 | 524237 | 6527287 | Kragero     | Valberg      | <0.05 | <0.05 | <0.02 | 0.06 | <0.02 | <0.02 | <0.02 | <0.5 | trace sulfide; from quarry                                                              | 2005 |
| SA68159 | 524237 | 6527287 | Kragero     | Valberg      | <0.05 | <0.05 | <0.02 | 0.8  | <0.02 | <0.02 | <0.02 | <0.5 | trace sulfides; from quarry                                                             | 2005 |
| SA68160 | 524307 | 6527267 | Kragero     | Valberg      | <0.05 | <0.05 | <0.02 | 0.54 | <0.02 | <0.02 | <0.02 | <0.5 | crushed quarry material                                                                 | 2005 |
| SA68161 | 524307 | 6527267 | Kragero     | Valberg      | <0.05 | <0.05 | <0.02 | 0.07 | <0.02 | <0.02 | <0.02 | <0.5 | trace sulfide; from quarry                                                              | 2005 |

|         |        |         |                 |                |       |       |       |      |       |       |       |      |                                                   |      |
|---------|--------|---------|-----------------|----------------|-------|-------|-------|------|-------|-------|-------|------|---------------------------------------------------|------|
| SA68162 | 529487 | 6530321 | Kragero         | Langoy         | <0.05 | <0.05 | <0.02 | 0.05 | <0.02 | <0.02 | <0.02 | <0.5 | trace sulfide; magnetite-rich                     | 2005 |
| SA68163 | 530246 | 6529976 | Kragero         | Braten         | <0.05 | <0.05 | <0.02 | 0.02 | <0.02 | <0.02 | <0.02 | 0.5  | trace ccp; magnetite rich                         | 2005 |
| SA68164 | 528852 | 6529541 | Kragero         | Langoy         | <0.05 | <0.05 | <0.02 | 0.1  | <0.02 | <0.02 | <0.02 | <0.5 | trace ccp; maybe po                               | 2005 |
| SA68165 | 528886 | 6529488 | Kragero         | Langoy         | <0.05 | <0.05 | <0.02 | 0.02 | <0.02 | <0.02 | <0.02 | <0.5 | trace ccp                                         | 2005 |
| SA68166 | 516909 | 6524672 | Kragero         | Brovikvann     | <0.05 | <0.05 | 0.02  | 0.92 | <0.02 | <0.02 | <0.02 | <0.5 | biotite-pegmatitic vein; 1% sulfides              | 2005 |
| SA68167 | 516909 | 6524672 | Kragero         | Brovikvann     | <0.05 | <0.05 | <0.02 | 1    | <0.02 | <0.02 | <0.02 | <0.5 | in quartzite? 1% sulfide and magnetite            | 2005 |
| SA68168 | 516909 | 6524665 | Kragero         | Brovikvann     | <0.05 | <0.05 | <0.02 | 0.12 | <0.02 | <0.02 | <0.02 | <0.5 | trace sulfide in gabbro/amphibolite               | 2005 |
| SA68169 | 504341 | 6523002 | Gjerstad        | Fone           | <0.05 | <0.05 | <0.02 | 0.26 | <0.02 | <0.02 | <0.02 | <0.5 | minor sulfides in coarse gabbro                   | 2005 |
| SA68170 | 505486 | 6506065 | Gjerstad        | Avreidkilen    | <0.05 | <0.05 | <0.02 | 0.12 | 0.03  | 0.02  | 0.02  | <0.5 | trace sulfides in gabbro                          | 2005 |
| SA68171 | 505442 | 6506228 | Gjerstad        | Avreidkilen    | <0.05 | <0.05 | <0.02 | 0.06 | <0.02 | <0.02 | <0.02 | <0.5 | trace py in gabbro                                | 2005 |
| SA68172 | 504986 | 6506126 | Gjerstad        | Hommeva<br>nn  | <0.05 | <0.05 | <0.02 | 0.13 | <0.02 | <0.02 | <0.02 | <0.5 | trace in gabbro                                   | 2005 |
| SA68173 | 497978 | 6496450 | Tvedestra<br>nd | Sagtjenn       | <0.05 | <0.05 | <0.02 | 1.51 | <0.02 | <0.02 | <0.02 | <0.5 | py in qtz; hydrothermal; 0.5%                     | 2005 |
| SA68174 | 497978 | 6496450 | Tvedestra<br>nd | Sagtjenn       | <0.05 | <0.05 | <0.02 | 4.43 | <0.02 | <0.02 | <0.02 | 0.7  | 0.5% py in metaseds                               | 2005 |
| SA68175 | 478848 | 6479948 | Arendal         | Brattasen      | <0.05 | <0.05 | <0.02 | 0.06 | <0.02 | <0.02 | <0.02 | <0.5 | no sulfided; specularite/magnetite in gran-gneiss | 2005 |
| SA68176 | 479105 | 6479336 | Arendal         | Brattsen       | <0.05 | 0.06  | <0.02 | 0.71 | <0.02 | <0.02 | <0.02 | <0.5 | 0.5% py; in diorite                               | 2005 |
| SA68177 | 478970 | 6479399 | Arendal         | Brattasen      | <0.05 | 0.05  | <0.02 | 6.02 | 0.02  | <0.02 | <0.02 | <0.5 | 5% py; diorite; boulder                           | 2005 |
| SA68178 | 479726 | 6480322 | Arendal         | Rossedale<br>n | <0.05 | <0.05 | <0.02 | 0.22 | 0.05  | <0.02 | <0.02 | <0.5 | trace po? in diorite                              | 2005 |
| SA68179 | 0      | 0       | Arendal         |                | 0.76  | 0.39  | 0.03  | 4.92 | 0.14  | 0.09  | 0.03  | 1.7  | STANDARD                                          | 2005 |
| SA68180 | 477233 | 6499500 | Arendal         | Havet          | <0.05 | <0.05 | <0.02 | 0.82 | <0.02 | <0.02 | <0.02 | <0.5 | trace sulfides in gabbro                          | 2005 |
| SA68181 | 476495 | 6498126 | Arendal         | Amdalsmo<br>en | <0.05 | <0.05 | <0.02 | 0.07 | <0.02 | <0.02 | <0.02 | <0.5 | trace sulfides in gabbro                          | 2005 |
| SA68182 | 476291 | 6494837 | Nelaug          | Stebekken      | <0.05 | <0.05 | <0.02 | 0.4  | <0.02 | <0.02 | <0.02 | <0.5 | Si-Fe Frm; no observed sulfides                   | 2005 |
| SA68183 | 476291 | 6494837 | Nelaug          | Stebekken      | <0.05 | <0.05 | <0.02 | 1.6  | <0.02 | <0.02 | <0.02 | <0.5 | Si-Fe Frm; no observed sulfides; graphite bearing | 2005 |

|         |        |         |           |              |       |       |       |      |       |       |       |      |                                                |      |
|---------|--------|---------|-----------|--------------|-------|-------|-------|------|-------|-------|-------|------|------------------------------------------------|------|
| SA68184 | 472024 | 6487767 | Nelaug    | Mjavatnet    | <0.05 | 0.11  | <0.02 | 2.74 | <0.02 | 0.06  | <0.02 | <0.5 | minor sulfides in pyroxenite                   | 2005 |
| SA68185 | 472024 | 6487767 | Nelaug    | Mjavatnet    | <0.05 | 0.08  | 0.03  | 2.64 | <0.02 | 0.02  | <0.02 | <0.5 | minor sulfides in pyroxenite                   | 2005 |
| SA68186 | 472019 | 6487762 | Nelaug    | Mjavatnet    | <0.05 | <0.05 | <0.02 | 1.43 | <0.02 | <0.02 | <0.02 | <0.5 | minor sulfides in pyroxenite                   | 2005 |
| SA68187 | 468414 | 6486738 | Mykland   | Bjortvatn    | <0.05 | <0.05 | <0.02 | 0.09 | <0.02 | <0.02 | <0.02 | <0.5 | trace sulfide in gabbro                        | 2005 |
| SA68188 | 468414 | 6486738 | Mykland   | Bjortvatn    | <0.05 | <0.05 | <0.02 | 0.19 | <0.02 | <0.02 | <0.02 | <0.5 | trace sulfide in gabbro                        | 2005 |
| SA68189 | 467848 | 6486175 | Mykland   | Bjortvatn    | <0.05 | <0.05 | <0.02 | 1.12 | <0.02 | <0.02 | <0.02 | <0.5 | 3% sulfide in gabbro hosted qtz-bt vein        | 2005 |
| SA68190 | 467931 | 6486182 | Mykland   | Bjortvatn    | <0.05 | <0.05 | <0.02 | 1.18 | 0.04  | 0.04  | <0.02 | <0.5 | 0.5% sulfide in gabbro hosted qtz-bt vein      | 2005 |
| SA68191 | 469214 | 6488313 | Mykland   | Skotet       | <0.05 | 0.43  | <0.02 | 5.95 | 0.08  | 0.07  | <0.02 | 0.9  | 5% sulfide in breccia                          | 2005 |
| SA68192 | 469214 | 6488313 | Mykland   | Skotet       | <0.05 | 0.2   | 0.08  | 36.1 | <0.02 | 0.03  | <0.02 | <0.5 | 10-15% sulfide; pyroxenitic rock?              | 2005 |
| SA68193 | 469207 | 6488303 | Mykland   | Skotet       | <0.05 | 0.06  | 0.03  | 9.49 | <0.02 | <0.02 | <0.02 | <0.5 | 5% sulfide in breccia                          | 2005 |
| SA68194 | 469374 | 6488395 | Nelaug    | Skotet       | <0.05 | 0.1   | <0.02 | 5.63 | <0.02 | <0.02 | <0.02 | <0.5 | 10% po, ccp, py in qtz-epidote vein            | 2005 |
| SA68195 | 467467 | 6485218 | Mykland   | Tiksletjom a | <0.05 | <0.05 | <0.02 | 0.7  | <0.02 | <0.02 | <0.02 | <0.5 | 0.5% sulfide in qtz vein in gabbro             | 2005 |
| SA68196 | 467475 | 6485206 | Mykland   | Tiksletjom a | <0.05 | <0.05 | <0.02 | 0.97 | <0.02 | <0.02 | <0.02 | <0.5 | 0.5% po, ccp in vein (coarse zone) in gabbro   | 2005 |
| SA68197 | 468092 | 6483899 | Lillesand | Bukkefjell   | <0.05 | 0.06  | <0.02 | 2.08 | <0.02 | <0.02 | <0.02 | <0.5 | 3-5% sulfide (po, ccp) in altered gabbro       | 2005 |
| SA68198 | 468092 | 6483899 | Lillesand | Bukkefjell   | <0.05 | <0.05 | 0.02  | 1.84 | <0.02 | <0.02 | <0.02 | <0.5 | 5-8% sulfide in quartzite or silicified gabbro | 2005 |
| SA68199 | 468094 | 6483887 | Lillesand | Bukkefjell   | <0.05 | 0.17  | 0.04  | 7.42 | <0.02 | <0.02 | 0.02  | <0.5 | 8-10% sulfide; po, ccp; in altered gabbro      | 2005 |
| SA68200 | 0      | 0       |           |              | 0.78  | 0.36  | 0.03  | 4.98 | 0.15  | 0.1   | 0.03  | 1.9  | STANDARD                                       | 2005 |
| PG01782 | 533773 | 6538816 | Kragero   | Vissestad    | 2.88  | 0.08  | 0.12  | 29.9 | 0.06  | 0.2   | <0.02 |      | Vissestad - Min. gabbro, net-textured          | 2004 |
| PG01783 | 534145 | 6539158 | Langesund | Nystein      | 1.15  | 0.13  | 0.05  | 0.3  | 0.02  | 0.04  | <0.02 |      | Nystein - Min. gabbro, stringer, diss.         | 2004 |
| PG01784 | 534300 | 6539225 | Langesund | Nystein      | 0.2   | 0.08  | 0.01  | 1.9  | <0.02 | 0.02  | 0.02  |      | Nystein - troctolite                           | 2004 |
| PG01785 | 531019 | 6536430 | Kragero   | Meikjaer     | 0.84  | 0.57  | 0.18  | 34.2 | 0.02  | 0.04  | 0.06  |      | Meikjaer - massive sulphide                    | 2004 |
| PG01787 | 479720 | 6482226 | Arendal   | Seljaesen    | 0.98  | 0.13  | 0.08  | 14.5 | <0.02 | <0.02 | 0.09  |      | Seljaesen - massive sulphide                   | 2004 |

|          |        |         |             |              |        |        |        |      |        |        |        |       |                                     |      |
|----------|--------|---------|-------------|--------------|--------|--------|--------|------|--------|--------|--------|-------|-------------------------------------|------|
| PG01781  | 533735 | 6538813 | Kragero     | Vissestad    | 1.15   | 0.13   | 0.05   | 9.3  | 0.02   | 0.04   | <0.02  |       | Vissestad - massive sulphide        | 2004 |
| PG01786  | 531019 | 6536430 | Kragero     | Meikjaer     | 1.61   | 0.28   | 0.12   | 20.7 | 0.1    | 0.05   | 0.04   |       | Meikjaer - wkly mineralized gabbro  | 2004 |
| PG01788  | 479720 | 6482226 | Arendal     | Seljeasen    | 0.42   | 2.62   | 0.03   | 9.7  | <0.02  | <0.02  | 0.24   |       | Seljasen - troctolite               | 2004 |
| PG01798  | 531014 | 6536426 | Kragero     | Meikjaer     | 0.6    | 0.63   | 0.13   | 24.1 | 0.04   | 0.04   | 0.05   |       | Meikjaer - mineralized gabbro       | 2004 |
| PG01799  | 534125 | 6539185 | Langesund   | Nystein      | 0.41   | 1.91   | 0.1    | 20.3 | <0.02  | 0.02   | 0.11   |       | Nystein - massive sulphide          | 2004 |
| PG01800  | 533776 | 6538803 | Kragero     | Vissestad    | 1.32   | 0.46   | 0.06   | 15.5 | 0.05   | 0.03   | 0.05   |       | Vissestad - mineralized meta-norite | 2004 |
| PG03253  | 479676 | 6482239 | Arendal     | Seljeasen    | 0.49   | 1.17   | 0.28   | 30.1 | 0.31   | 0.08   | 0.16   |       | Seljasen                            | 2004 |
| PG03254  | 479676 | 6482239 | Arendal     | Seljeasen    | 0.15   | 3.53   | <0.02  | 4.6  | 0.03   | <0.02  | 0.11   |       | Seljasen                            | 2004 |
| PG 08002 | 467490 | 6485060 | Mykland     | Btarg-10     | < 0.05 | < 0.05 | < 0.02 | 0.03 | < 0.02 | < 0.02 | < 0.02 | < 0.5 | diss po                             | 2006 |
| PG 08003 | 468630 | 6485210 | Mykland     | Btarg-10     | < 0.05 | < 0.05 | < 0.02 | 1.21 | < 0.02 | < 0.02 | < 0.02 | < 0.5 | fract fill py                       | 2006 |
| PG 08004 | 469180 | 6487500 | Nelaug      | B-54         | < 0.05 | 0.07   | < 0.02 | 5.34 | < 0.02 | < 0.02 | < 0.02 | < 0.5 | gab with staining                   | 2006 |
| PG 08005 | 469110 | 6487460 | Nelaug      | B-54         | < 0.05 | < 0.05 | < 0.02 | 0.41 | < 0.02 | < 0.02 | < 0.02 | < 0.5 | tr sulph                            | 2006 |
| PG 08006 | 469080 | 6487410 | Nelaug      | B-54         | < 0.05 | < 0.05 | < 0.02 | 2.44 | < 0.02 | < 0.02 | 0.02   | < 0.5 | trace sulph in gab                  | 2006 |
| PG 08007 | 469100 | 6487270 | Nelaug      | B-54         | < 0.05 | < 0.05 | < 0.02 | 0.19 | < 0.02 | < 0.02 | < 0.02 | < 0.5 | diss sulph in gab                   | 2006 |
| PG 08008 | 471450 | 6491777 | Nelaug      | B-50         | < 0.05 | < 0.05 | < 0.02 | 0.68 | < 0.02 | < 0.02 | < 0.02 | < 0.5 |                                     | 2006 |
| PG 08009 | x      | x       |             | standard     | 1.85   | 0.38   | 0.06   | 10   | 0.07   | 0.16   | 0.03   | < 0.5 |                                     | 2006 |
| PG 08051 | 471450 | 6491777 | Nelaug      | B-50         | < 0.05 | < 0.05 | < 0.02 | 1.29 | < 0.02 | < 0.02 | 0.03   | < 0.5 | 1-3% po py vis moly?                | 2006 |
| PG 08052 | 471450 | 6491777 | Nelaug      | B-50         | < 0.05 | < 0.05 | < 0.02 | 0.66 | < 0.02 | < 0.02 | < 0.02 | < 0.5 | 1-3% po py                          | 2006 |
| PG 08053 | 471451 | 6491776 | Nelaug      | B-50         | ---    | ---    | ---    | ---  | ---    | ---    | ---    | ---   | 1-3% po py                          | 2006 |
| PG 08054 | 468604 | 6486149 | Mykland     | B-55         | < 0.05 | 1.91   | < 0.02 | 4.89 | 0.02   | 0.05   | 0.02   | 2.3   | 1%cpy py                            | 2006 |
| PG 08055 | 469720 | 6489500 | Nelaug      | B-53         | < 0.05 | 0.11   | 0.03   | 10.6 | 0.04   | 0.07   | < 0.02 | < 0.5 | mionr diss sulph                    | 2006 |
| PG 08056 | 479405 | 6481790 | Arendal     | B-61         | < 0.05 | < 0.05 | 0.03   | 1.75 | < 0.02 | < 0.02 | < 0.02 | < 0.5 | 0.5% po cpy py                      | 2006 |
| PG 08057 | 479465 | 6481796 | Arendal     | B-61         | 0.11   | 0.35   | 0.03   | 2.35 | < 0.02 | < 0.02 | 0.37   | 1.2   | gabbro tr sulph                     | 2006 |
| PG 08058 | 478112 | 6476301 | Arendal     | B-65         | 0.31   | 0.35   | 0.26   | 16.2 | < 0.02 | 0.26   | 0.07   | < 0.5 | massive po                          | 2006 |
| PG 08059 | 478112 | 6476301 | Arendal     | B-65         | 0.65   | 0.1    | 0.62   | 31.6 | < 0.02 | 0.74   | 0.2    | < 0.5 | massive po                          | 2006 |
| PG 08060 | 478113 | 6476299 | Arendal     | B-65         | 0.32   | 0.08   | 0.11   | 18.8 | 0.03   | < 0.02 | 0.03   | < 0.5 | 60% po                              | 2006 |
| PG 08061 | 478089 | 6476307 | Arendal     | B-65         | 0.11   | 0.05   | 0.04   | 6    | < 0.02 | < 0.02 | < 0.02 | < 0.5 | 5% diss and stringers po            | 2006 |
| PG 08062 | 497186 | 6503463 |             | no conductor | < 0.05 | < 0.05 | < 0.02 | 0.1  | < 0.02 | < 0.02 | < 0.02 | < 0.5 | tr py in gab                        | 2006 |
| PG 08063 | 497190 | 6503430 | Tvedestrand | B-32         | < 0.05 | < 0.05 | < 0.02 | 0.23 | < 0.02 | < 0.02 | < 0.02 | < 0.5 | tr py in gab                        | 2006 |

|             |        |         |             |              |        |        |        |      |        |        |        |       |                               |      |
|-------------|--------|---------|-------------|--------------|--------|--------|--------|------|--------|--------|--------|-------|-------------------------------|------|
| PG 08064    | 497369 | 6516024 | Gjerstad    | B-26a        | < 0.05 | < 0.05 | < 0.02 | 4.41 | < 0.02 | < 0.02 | < 0.02 | < 0.5 | 0.5% py in amph               | 2006 |
| PG 08065    | 479710 | 6482226 | Arendal     | B-59         | 0.29   | 0.26   | 0.06   | 9.94 | < 0.02 | < 0.02 | 0.02   | < 0.5 | massive Po in gab             | 2006 |
| PG 08066    | 479277 | 6482542 | Arendal     | B-62         | < 0.05 | < 0.05 | < 0.02 | 1.52 | < 0.02 | < 0.02 | < 0.02 | < 0.5 | 1-3% sulph                    | 2006 |
| PG 08067    | 478377 | 6481717 | Arendal     | B-60         | < 0.05 | < 0.05 | < 0.02 | 6.15 | < 0.02 | < 0.02 | 0.03   | < 0.5 | diss sulph in gab             | 2006 |
| PG 08068    | 478040 | 6476264 | Arendal     | B-65         | < 0.05 | < 0.05 | < 0.02 | 0.62 | < 0.02 | < 0.02 | 0.06   | < 0.5 | minor sulph proximal old adit | 2006 |
| PG 08069    | 493423 | 6513258 | Gjerstad    | B-31         | < 0.05 | < 0.05 | < 0.02 | 1.61 | < 0.02 | < 0.02 | 0.02   | < 0.5 | tr diss sulph                 | 2006 |
| PG 08070    | 479277 | 6482542 | Arendal     | B-59         | < 0.05 | < 0.05 | < 0.02 | 3.05 | < 0.02 | < 0.02 | < 0.02 | < 0.5 | 1-3% sulph in gab             | 2006 |
| PG 08072    | 482898 | 6492444 | Nelaug      | Btarg-18     | < 0.05 | 8.61   | 0.05   | 31.4 | 0.02   | 0.02   | 1.58   | 65.3  | old copper mine trench        | 2006 |
| PG 08073    | 482937 | 6492545 | Nelaug      | Btarg-18     | < 0.05 | < 0.05 | < 0.02 | 6.68 | < 0.02 | < 0.02 | 0.18   | 0.7   | cpy stringers                 | 2006 |
| PG 08078    | 482942 | 6492521 | Nelaug      | Btarg-18     | 0.05   | 0.15   | 0.06   | 29.5 | 0.03   | < 0.02 | < 0.02 | 3     | old copper mine trench        | 2006 |
| PG 08079    | 498710 | 6498760 | Tvedestrand | Ostera Shaft | 0.54   | 0.5    | 0.03   | 6.48 | 0.04   | < 0.02 | 0.02   | 1.7   | 10-15% Po                     | 2006 |
| PG 08080    | 498710 | 6498760 | Tvedestrand | Ostera Shaft | 1.8    | 0.84   | 0.09   | 23   | < 0.02 | 0.03   | 0.17   | 1.7   | 5-10% Po                      | 2006 |
| PG 08081    | 498760 | 6498780 | Tvedestrand | Ostera Shaft | 0.49   | 0.6    | 0.03   | 5.52 | 0.02   | < 0.02 | 0.04   | 2.2   | semi massive Po               | 2006 |
| PG 08082    | 498760 | 6498780 | Tvedestrand | Ostera Shaft | 1.46   | 0.74   | 0.08   | 14.5 | 0.02   | 0.02   | 0.05   | 2.5   | semi massive Po Cpy           | 2006 |
| PG 08083    | 499950 | 6499000 | Tvedestrand | Ostera area  | < 0.05 | 0.05   | < 0.02 | 0.84 | < 0.02 | < 0.02 | 0.1    | < 0.5 | 3-5% sulph in metaseds        | 2006 |
| PG 08084    | 482941 | 6492547 | Nelaug      | Btarg-18     | < 0.05 | 6.39   | 0.06   | 17.9 | 0.02   | 0.14   | 11.8   | 38.6  | cpy semimassive               | 2006 |
| PG 08085    | 482910 | 6492454 | Nelaug      | Btarg-18     | < 0.05 | 8.31   | < 0.02 | 14.3 | 0.02   | 0.13   | 11.3   | 66    | massive cpy                   | 2006 |
| PG 08086    | 482942 | 6492538 | Nelaug      | Btarg-18     | < 0.05 | 0.62   | 0.06   | 28.9 | 0.02   | < 0.02 | 0.17   | 6.6   | massive cpy                   | 2006 |
| PG 08087    | 482910 | 6492471 | Nelaug      | Btarg-18     | < 0.05 | 1.17   | 0.05   | 20.1 | < 0.02 | 0.03   | 0.18   | 5.9   | massive cpy                   | 2006 |
| PG 08088    | 511113 | 6516594 | Gjerstad    | B-18         | 0.25   | 0.45   | 0.14   | 24.1 | < 0.02 | < 0.02 | 0.06   | < 0.5 | semimassive po cpy in peg.    | 2006 |
| PG 08089    | 495370 | 6514770 | Gjerstad    | Btarg-21     | < 0.05 | 2.08   | < 0.02 | 5.95 | < 0.02 | < 0.02 | 0.13   | 16.5  |                               | 2006 |
| PG 08089dup | 495370 | 6514770 | Gjerstad    | Btarg-21-dup | < 0.05 | 2.06   | < 0.02 | 6.02 | < 0.02 | < 0.02 | 0.12   | 17.1  |                               | 2006 |
| PG 08090    | 514403 | 6523872 | Kragero     | B-16         | < 0.05 | < 0.05 | < 0.02 | 3.15 | < 0.02 | < 0.02 | 0.02   | < 0.5 | tr diss sulph                 | 2006 |
| PG 08091    | 514323 | 6523818 | Kragero     | B-16         | < 0.05 | < 0.05 | < 0.02 | 1.44 | < 0.02 | < 0.02 | < 0.02 | < 0.5 | tr sulph with graphite        | 2006 |
| PG 08092    | 530075 | 6535148 | Kragero     | B-6          | 0.17   | 0.13   | 0.09   | 32.3 | 0.02   | 0.02   | 0.03   | < 0.5 | masive po veinlets            | 2006 |
| PG 08093    | 523097 | 6535150 | Kragero     | B-1          | < 0.05 | < 0.05 | < 0.02 | 2.5  | 0.02   | < 0.02 | < 0.02 | < 0.5 | minor diss py                 | 2006 |
| PG 08094    | 511800 | 6519160 | Gjerstad    | B-17         | < 0.05 | < 0.05 | < 0.02 | 0.12 | < 0.02 | < 0.02 | < 0.02 | < 0.5 | tr sulph in metaseds          | 2006 |
| PG 08095    | 534429 | 6537554 | Langesud    | B-8          | < 0.05 | < 0.05 | < 0.02 | 0.13 | < 0.02 | < 0.02 | < 0.02 | < 0.5 | tr sulph                      | 2006 |
| PG 08096    | 530271 | 6536810 | Kragero     | B-5          | < 0.05 | < 0.05 | < 0.02 | 6.82 | < 0.02 | < 0.02 | 0.02   | 0.8   | 1% formational                | 2006 |

|          |        |         |          |           |        |        |        |      |        |        |        |       |                 |      |
|----------|--------|---------|----------|-----------|--------|--------|--------|------|--------|--------|--------|-------|-----------------|------|
| PG 08097 | 515760 | 6524205 | Kragero  | B-15      | < 0.05 | < 0.05 | < 0.02 | 6.83 | 0.02   | < 0.02 | 0.02   | < 0.5 |                 | 2006 |
| PG 08098 | 532698 | 6546172 | Kilebygd | Hurricane | < 0.05 | < 0.05 | < 0.02 | 0.26 | < 0.02 | < 0.02 | < 0.02 | < 0.5 | tr sulph in gab | 2006 |
| PG 08099 | 531158 | 6542704 | Kilebygd | Hurricane | < 0.05 | < 0.05 | < 0.02 | 0.05 | < 0.02 | < 0.02 | < 0.02 | < 0.5 | tr sulph in gab | 2006 |
| PG 08100 | 530891 | 6543004 | Kilebygd | Hurricane | < 0.05 | < 0.05 | < 0.02 | 0.13 | < 0.02 | < 0.02 | < 0.02 | < 0.5 | tr sulph in gab | 2006 |
| PG 08101 | 530775 | 6543194 | Kilebygd | Hurricane | < 0.05 | < 0.05 | < 0.02 | 0.13 | < 0.02 | < 0.02 | < 0.02 | < 0.5 | tr sulph        | 2006 |
| PG 08120 | 531660 | 6544070 | Kilebygd | Hurricane | < 0.05 | < 0.05 | < 0.02 | 0.25 | < 0.02 | < 0.02 | < 0.02 | < 0.5 | DF/YB           | 2006 |
| PG 08121 | 530750 | 6543950 | Kilebygd | Hurricane | < 0.05 | < 0.05 | < 0.02 | 1.69 | < 0.02 | < 0.02 | < 0.02 | < 0.5 | DF/YB           | 2006 |
| PG 08122 | 530620 | 6543940 | Kilebygd | Hurricane | < 0.05 | < 0.05 | < 0.02 | 0.32 | < 0.02 | < 0.02 | < 0.02 | < 0.5 | DF/YB           | 2006 |



