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Tittel 2006 Summer geophysical surveys on the Bamble and Ertelien Projects in the Telemark and Buskerud Norway. Med Appendix A, B, og C				
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Kommune Bamble Arendal Froland Ringerike	Fylke Buskerud Telemark Aust-Agder	Bergdistrikt	1: 50 000 kartblad 17152 18153 16122 16123 17124 17132 17133	1: 250 000 kartblad Hamar Skien Arendal
Fagområde Geofysikk Boring	Dokument type		Forekomster (forekomst, gruvefelt, undersøkelsesfelt) Ertelien Langdalen Skaug Tyskland Meikjær Stolz Vissestad Nystein Hånsås Seljåsen	
Råstoffgruppe Malm/metall	Råstofftype Cu Ni			
Sammendrag, innholdsfortegnelse eller innholdsbeskrivelse Appendix A List of Field Personell Appendix B Local Grid Coordinate Conversion Data Appendix C 2006 In-house UTEM Maxwell Modelling - Seljåsen Target				

2006 Summer Geophysical Program

Ertelien and Bamble Projects,
Buskerud and Telemark Fylkes, Norway

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Falconbridge Limited

On behalf of
Sulfidmalm A/S

December 18, 2006

m/appendix A, B og C

SUMMARY AND CONCLUSIONS

This report gives the details and results of the 2006 summer geophysical program on the Bamble and Ertelien projects, which are located approximately 120km southwest and 40 km northwest of Oslo, respectively. These projects are an option and joint venture between Sulfidmalm A/S (Norway), wholly-owned subsidiary of Falconbridge Limited, and Blackstone Ventures Inc. (Canada). Exploration programs are carried out by Falconbridge Limited on behalf of Sulfidmalm.

In order to evaluate the potential for nickel sulphide mineralization in the Bamble and Ertelien Project areas, helicopter-borne magnetic and frequency domain electromagnetic surveys were flown in the fall of 2005 (NGU) and the early spring of 2006 (Fugro DIGHEM). The airborne EM anomalies were prioritized and a plan was made for a follow-up ground geophysical program. A total number of 1450 line km were flown in the Bamble Project area and 1800 line km were flown in the Ertelien Project area during the 2005 survey. A total number of 9329 line km were flown in the Bamble Project area and 2965 line km were flown in the Ertelien Project area during the 2006 survey.

The 2006 summer ground geophysical program was carried out during the period June 13th to July 22nd, 2006 and consisted of 78.9 line km of gridding and UTEM surveying, as well as 2,684m of BHUTEM surveying. Grids with line spacings of 50m, 100m or 200m were established by McKeown Exploration Services (of Oshawa, Ontario, Canada) and Scandicraft AS (of Gjøvik, Norway) using a differential global positioning system (DGPS) with base station and biodegradable flagging tape. The UTEM surveying was carried out by Lamontagne Geophysics Limited of Kingston, Ontario, Canada.

The UTEM survey was successful in detecting and confirming prospective helicopter EM anomalies at the Seljåsen showing (Bamble Project) but was unable to confirm helicopter EM anomalies at the Nystein and Meikjaer properties. Three conductors from the Seljåsen area were modelled in-house by A. Watts. The modelling indicates that conductances range from approximately 30-500 siemens for individual UTEM plates.

Surface UTEM surveying at the Ertelia Mine area was used in tandem with the BHUTEM surveying to further define the conductive horizons for drill targeting

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- Appendix D: Logistics Report – 2006 UTEM Survey, Bamble/Seljåsen Projects, Norway for Sulfidmalm A/S. Rob Langridge, **Lamontagne Geophysics Ltd.**
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1.0 Location, Topography and Access

The Bamble Project area spans a total distance of ~100km northeast-southwest by ~20km northwest-southeast and is located within 2 Flykes (Telemark and Aust-Agder) and 9 Kommunes (Bamble, Kragerø, Tvedestrand*, Froland*, Arendal*, Åmli*, Vegårshei*, Gjerstad*, Risør*). This area contains numerous nickel and copper showings, two of which were targeted during the 2006 summer geophysical program (Bamble and Seljåsen). * Aust-Agder Flyke

The Ertelien project area spans a total distance of ~30km east-west by ~22km north-south. The area of interest for the 2006 summer geophysical program is located 40 km northwest of Oslo, within the Buskerud Flyke (Ringerike kommune). Both project areas are easily accessible by car along highways E18 and #35 (Figure 1).

Figure 1
Bamble and Ertelien Project Locations



Topography in the project areas is quite rugged with local relief of up to 100m. The project areas are covered by mixed coniferous and deciduous forest which has been locally logged. There are numerous cliffs and ridges, which generally trend north-south, with thicker tree cover in the valleys.

Access to the field areas is generally very good via a well-developed system of secondary gravel roads as well as hiking and skiing trails. The majority of the grounds in the Project areas are held by private landowners with isolated blocks held under a "kommunal" designation as well as a state-held designation. Permission to access the field areas is required from both the local kommunes and the landowners.

2.0 Property and Ownership

At the time of the work reported herein, the Bamble "property" consists of 414 pre-claims or "mutings" covering an area of 124.20 sq km (Figures 2 and 3) and the Ertelien "property" consists of 340 pre-claims or "mutings" covering an area of 100.7 sq km (Figure 4). The pre-claims are registered to Sulfidmalm A/S (Norway), a wholly owned subsidiary of Falconbridge Nikkleverk (Norway) which is owned by Falconbridge Limited (Canada). Exploration on the project is carried out under an option and joint venture agreement between Sulfidmalm A/S and Blackstone Ventures Inc. (Canada). Work programs are carried out by Falconbridge Limited on behalf of Sulfidmalm.

3.0 Geological Setting

Ertelien Project

The Ertelien Project is located proximal to historic nickel mining areas which were active during the mid 1800's to early 1900's. Numerous old nickel workings and showings are hosted within differentiated mafic and ultramafic bodies which have intruded 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).

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. 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.

Grab samples have returned nickel values of up to 1.83% and nickel tenors ranging from 1.83% to 3.30%.

Bamble Project

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, 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 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.

4.0 Previous Work

As mentioned above, a number of the mafic bodies contain known accumulations of nickel sulphides. These sulphides were mined mainly in the late 1800's prior to the discovery of the vast nickel laterite deposits of New Caledonia. This discovery subsequently caused a collapse in the price of nickel, rendering the Ertelien and Bamble deposits uneconomic except for a brief period during World War 1. The deposits that are proximal and relevant to the 2006 summer geophysical program are as follows:

Ertelien Deposit

At the Ertelien deposit proper, a small noritic intrusion hosts a deposit that produced 400,000 tonnes grading 1.04% Ni, 0.69% Cu, 0.17% Co from 1849 to 1920. Mineralization

was mainly massive and breccia ore that graded between 2 and 4% Ni. The deposit has only been tested by two holes down to a vertical depth of 60 to 80 m (only weak mineralization at the contact (0.78% Ni, 0.67% Cu, 14.8% S over 1.25 m in DDH1; 0.35% Ni, 1.99% Cu, 7.6% S over 1.60m in DDH 2 –hole may not have hit contact; DDH3 essentially collared in basement)). A detailed ABEM Gun (Slingram) survey conducted over the intrusion detected no anomalies (line spacing 50 m; stations 12.5 m; cable length 50 m). Only one line of the 1963 AEM survey flown by the NGU crossed the deposit but did not detect any anomalies (mean terrain clearance 100 m). A small percussion drilling program (71 samples in 3 profiles) conducted around the old workings in 1971 failed to outline a postulated large low grade resource. The highest values obtained were 0.25% Ni with 3.5% S (2.5% Ni in 100% S). A 60 point gravity survey was completed over a 2 km x 2 km area centered on the host intrusion in 1971 and 1972. Modeling of the results gave a 2.0 mgal anomaly directly over the host intrusion with an extension or possible second 2.0 mgal anomaly approximately 750 m to the north (not exposed on surface). The author also postulates a deeper buried anomaly.

Langdalen, Skaugs and Tyskland Deposits

The Langdalen deposit is the second largest mine in the Ertelien area. Past production was 250, 000 tonnes grading 2.5 – 3.5% Ni. It is a dike-like feature that trends roughly 320° with a near vertical plunge. Little or no intrusion is exposed. Similarly, the Skaugs and Tyskland deposits are also dike-like and are obviously folded with steep vertical plunges. Previous mining has very selectively removed the sulphides and host intrusions.

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 Løkken 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.

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.

5.0 2006 Summer Ground Geophysics Program

During the period June 13th to July 22nd, 2006, a summer program consisting of 78.9 line km of gridding and UTEM surveying, as well as 2,684m of BHUTEM surveying was carried out. A list of field personnel involved in the program can be found in Appendix A.

Grid Preparation

Six grids and ten geophysical loops were established by McKeown Exploration Services and Scandicraft AS during the period May 8th to July 13th. Grids were established using a real-time differential global positioning system (DGPS) as well as a locally established base station due to thick tree covers in many of the areas. DGPS control was used on both the grids and the geophysical loops in order to provide the location and elevation (x, y & z) accuracy required for detailed geophysical modelling.

The grids consisted of lines spaced at 50m, 100 m or 200m apart with stations set at 25m intervals along each line and marked by biodegradable flagging tape. Grid orientations were determined based on the regional geological terrains and vary for individual grids (see Appendix B). Flagging tape was collected upon completion of the surveying in order to return the survey area to its original state.

UTEM Geophysical Surveying

Lamontagne Geophysics Limited carried out 78.9 line km of surface UTEM surveying and 2,684m of borehole UTEM (BHUTEM) between the dates of June 13th to July 22nd, 2006. The UTEM crew consisted of two Lamontagne operators and two Lamontagne helpers.

Surveying was conducted using ten rectangular to square transmitter loops consisting of narrow gauge copper wire (1.70mm diameter) and ranging in size from 475 x 800m to 1300 x 1400m (Figures 5, 6, 7 and 8). Data was collected in an "in-loop" configuration on 100-200m spaced lines at a station interval of 25m. The "in-loop" configuration was adopted for the campaign as the signal to noise ratio is greatly improved compared with the "out-of-loop" configuration in areas with high cultural influences. Line spacing was tightened to 50m as required in areas of anomalous conductivity.

Appendices D and E consist of detailed interpretation reports by Lamontagne Geophysics on the summer 2006 UTEM surveying. The reports contain a description of the survey logistics and methodology, a full listing of the UTEM profiles and the details of the selected UTEM modeling. Appendix D outlines the geophysical program on the Bamble and Seljåsen Projects whereas Appendix E outlines the geophysical program on the Ertelien Projects. The Ertelien report also contains a description of the BHUTEM survey logistics and methodology and a full listing of the BHUTEM profiles.

Good correlation was observed between the results of the Seljåsen UTEM survey and the 2006 DIGHEM survey. However, the UTEM survey provided enhanced depth penetration and conductance discrimination. Three anomalies were deemed to represent potential drill targets based on conductance and were modeled in-house by A. Watts (see Appendix C).

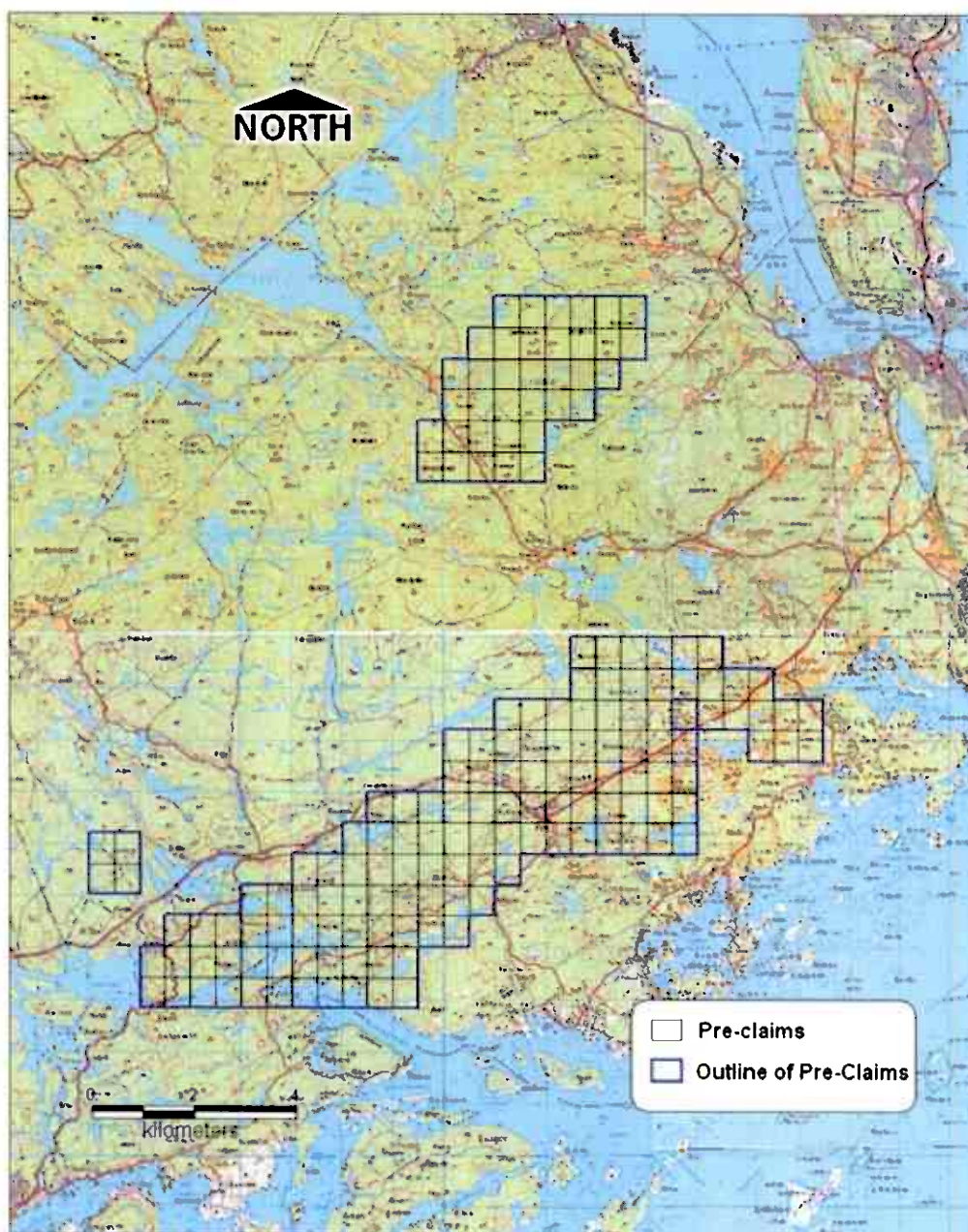
Modeling resulted in the interpretation of conductive plates with the following distribution based on conductance:

- 1 anomaly between 400-1000 siemens
- 1 anomaly between 150-399 siemens
- 1 anomaly <149 siemens

Modeled depth to top and/or the /center of the modeled conductors are typically shallow at < 100m.

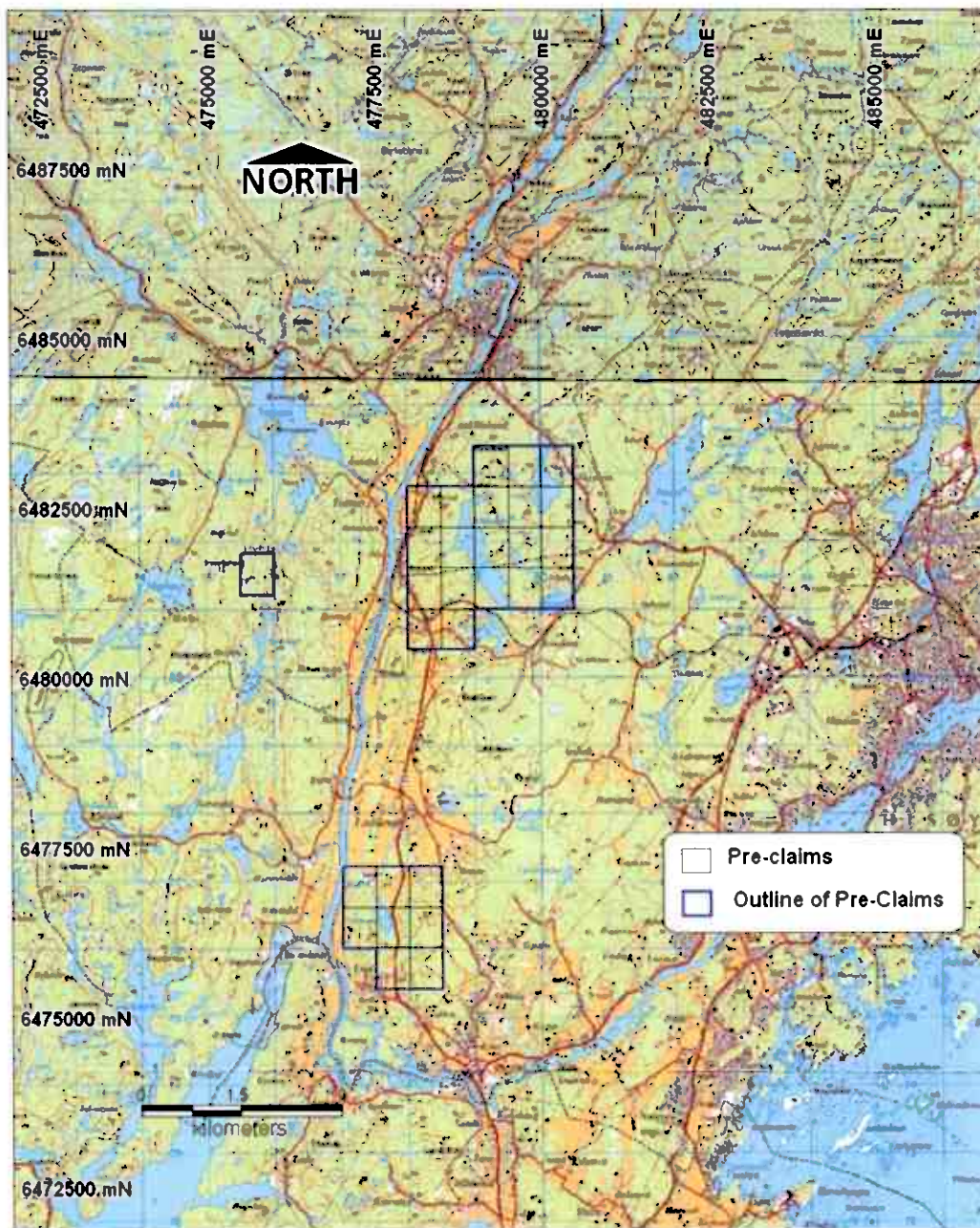
Results of the UTEM modeling will be reviewed and used to help select targets for drill testing.

Figure 2
Bamble Project area – Bamble Kommune Pre-claims



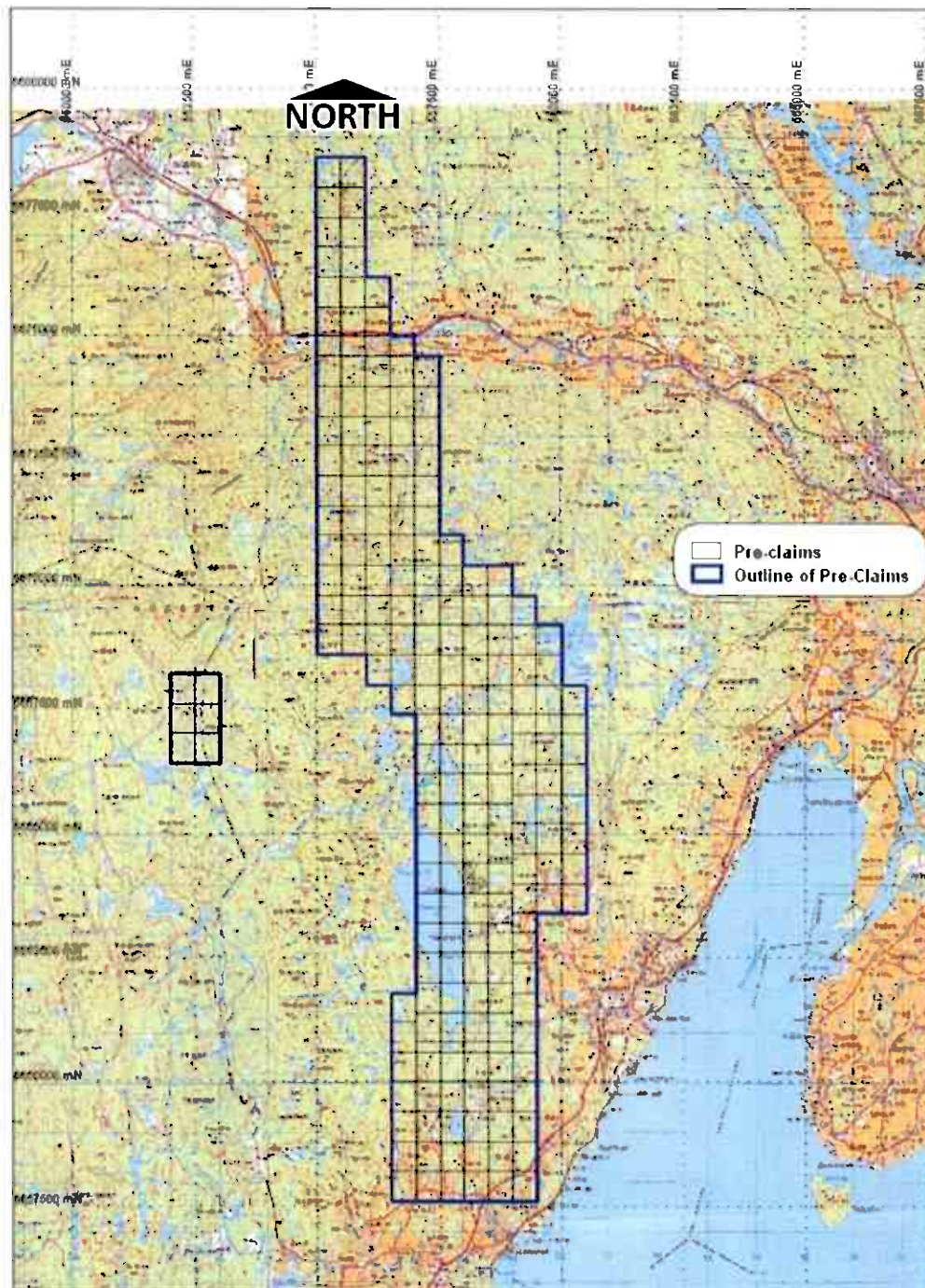
UTM WGS84 Zone 32N

Figure 3
Seljasen Project area – Arendal & Froland Kommune Pre-claims



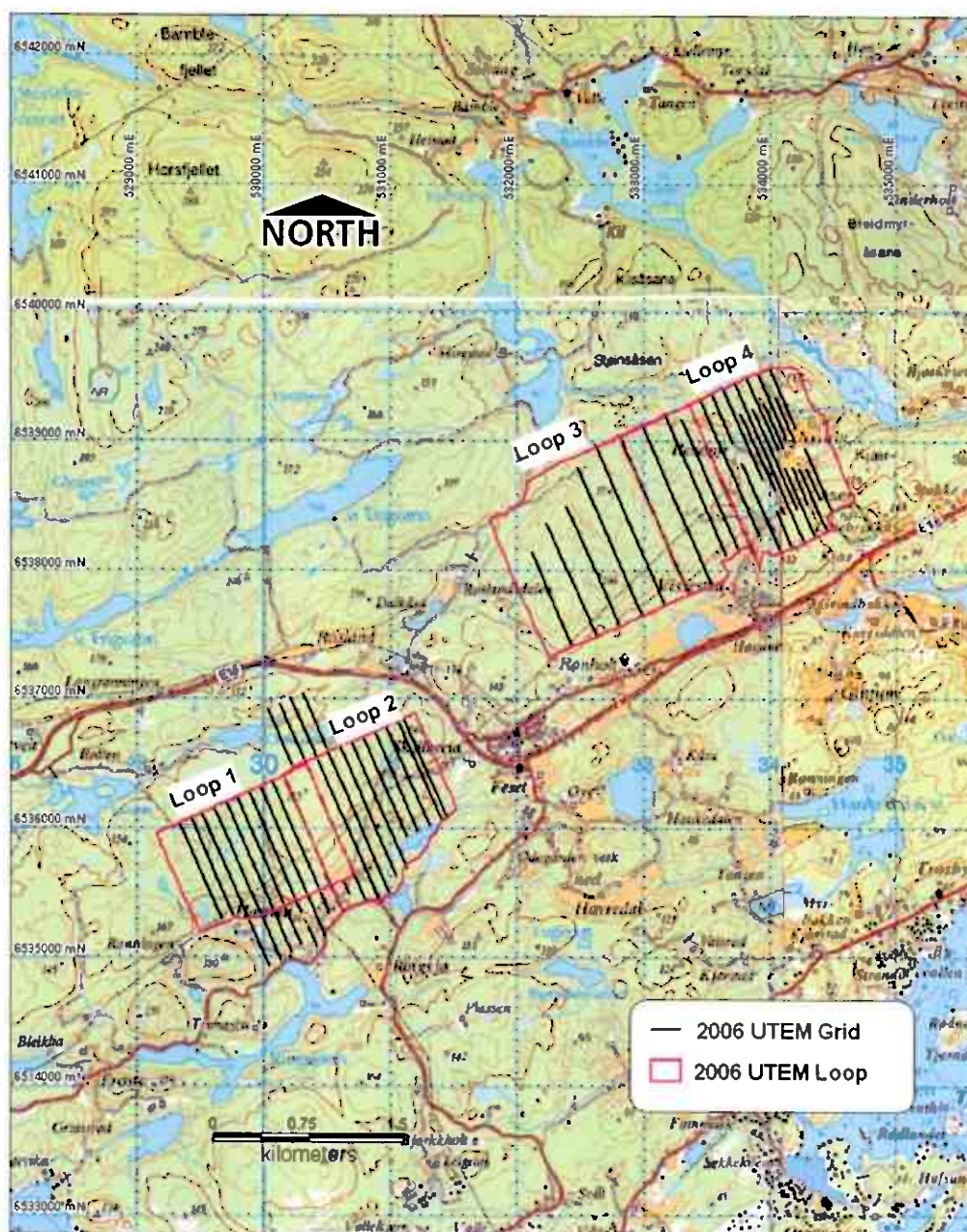
UTM WGS84 Zone 32N

Figure 4
Ertelien Project – Ringerike Kommune Pre-claims



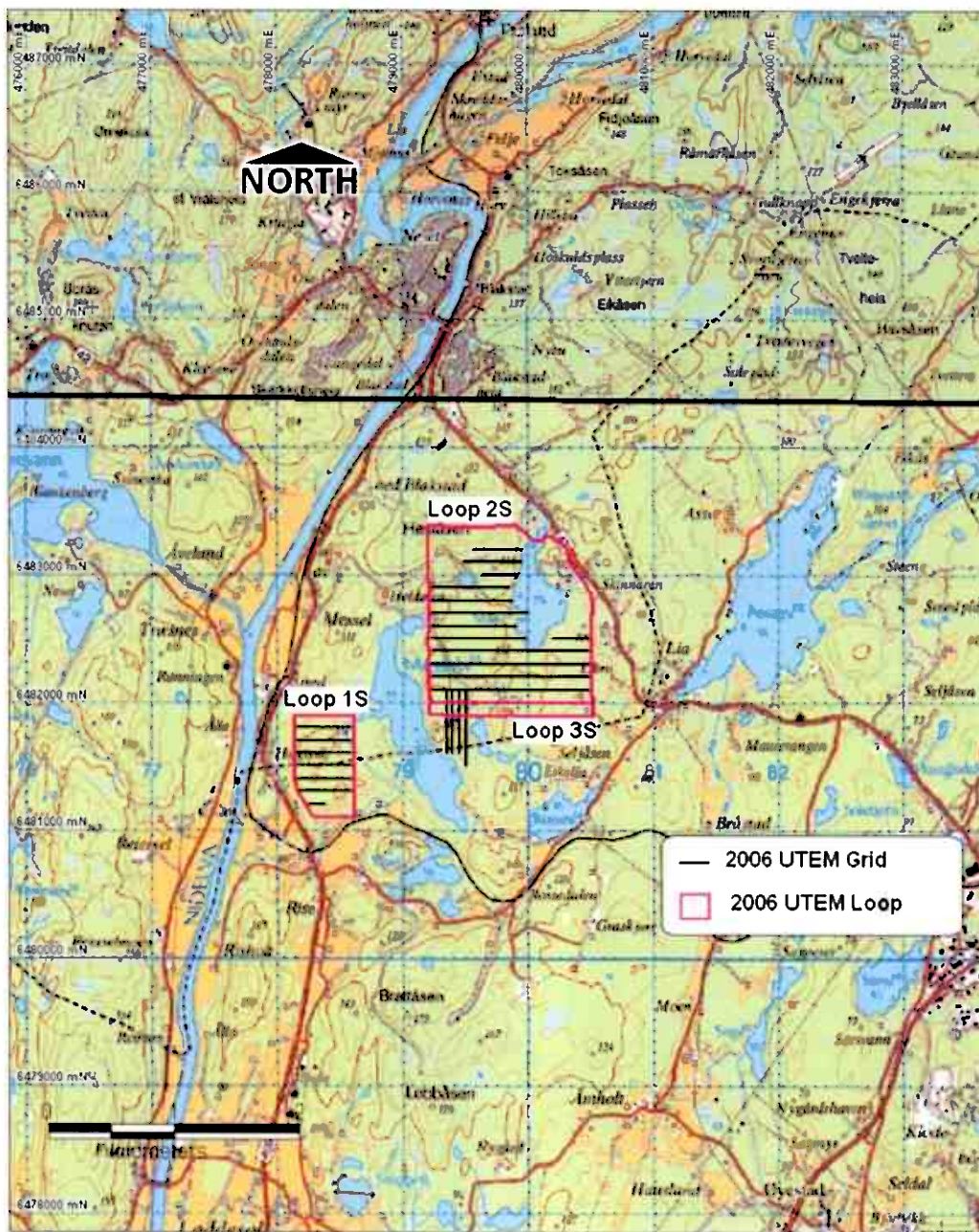
UTM WGS84 Zone 32N

Figure 5
Bamble Project: Nystein-Meikjaer area – 2006 summer UTEM Grids and Loops



UTM WGS84 Zone 32N

Figure 6
Bamble Project: Seljåsen area – 2006 summer UTEM Grids and Loops



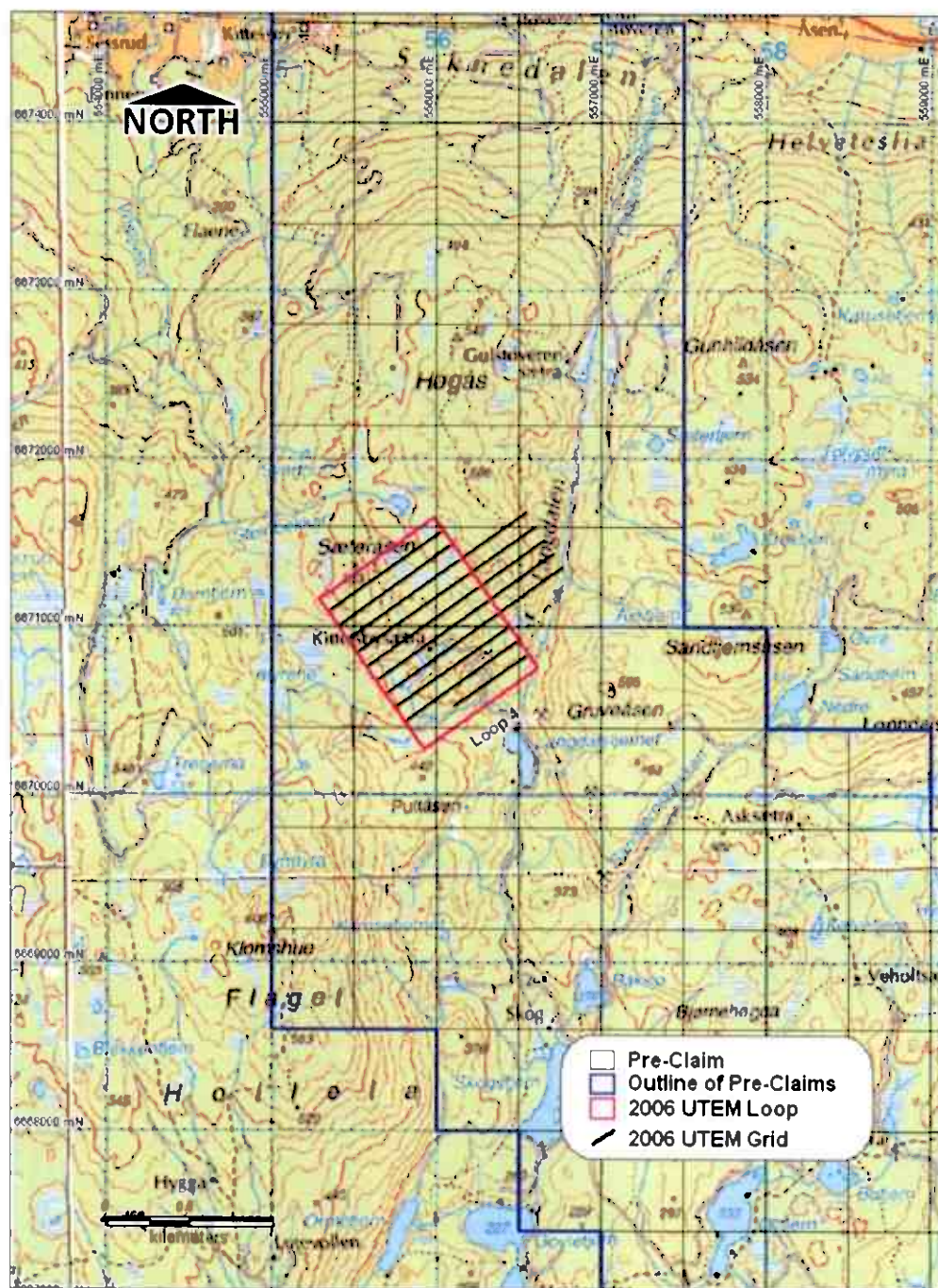
UTM WGS84 Zone 32N

Figure 7
 Ertelien Project: Ertelia area – 2006 summer UTEM / BHUTEM Grid and Loops



UTM WGS84 Zone 32N

Figure 8
Ertelien Project: Langdalen area – 2006 summer UTEM Grid and Loop



UTM WGS84 Zone 32N

6.0 References

Mogaard, J.O., 2006

Data Acquisition and Processing - Helicopter Geophysical Survey, Bamble, Ertelien and Sigdal, 2005, Telemark and Buskerud counties, Norway (for A/S / Sulfidmalm), NGU Report 2006.021, March 10, 2006, 11p.

APPENDIX A LIST OF FIELD PERSONNEL

Falconbridge Limited:	Patti Tirschmann Trevor Blair	Senior Geologist Senior Project Geologist
Sulfidmalm A/S:	Finn Hansen	Project Logistics
Lamontagne Geophysics:	Robert Langridge John Frost Kevin Arsenault Patrick Foley	Senior Geophysicist/UTEM Operator UTEM Operator UTEM Operator Field Assistant
McKeown Exploration Services:	Rob McKeown	DGPS Operator
Scandicraft AS	Stein Ivar Overgaard Kristina Radzeviciute	DGPS Operator DGPS Operator

APPENDIX B LOCAL GRID COORDINATE CONVERSION DATA

Common Coordinates Between the local Ertelien and Bamble grids and UTM WGS84 Zone 32N are as follows:

	<u>Easting</u>	<u>Northing</u>
Local Langdalen Grid (Loop 4)	0	0
Rotation	055°	
UTM WGS84 Zone 32N	558132.44	6665094.20
Local Ertelia Grid (Loops 9, 9B)	0	0
Rotation	053°	
UTM WGS84 Zone 32N	558401.49	6657794.75
Local Bamble Grids (Loops 1, 2, 3 and 4)	0	0
Rotation	156°	
UTM WGS84 Zone 32N	527200	6533200

Note: All the Ertelien and Bamble Project grids are in the same coordinate system.

APPENDIX C

2006 In-house UTEM Maxwell Modelling – Seljåsen Target

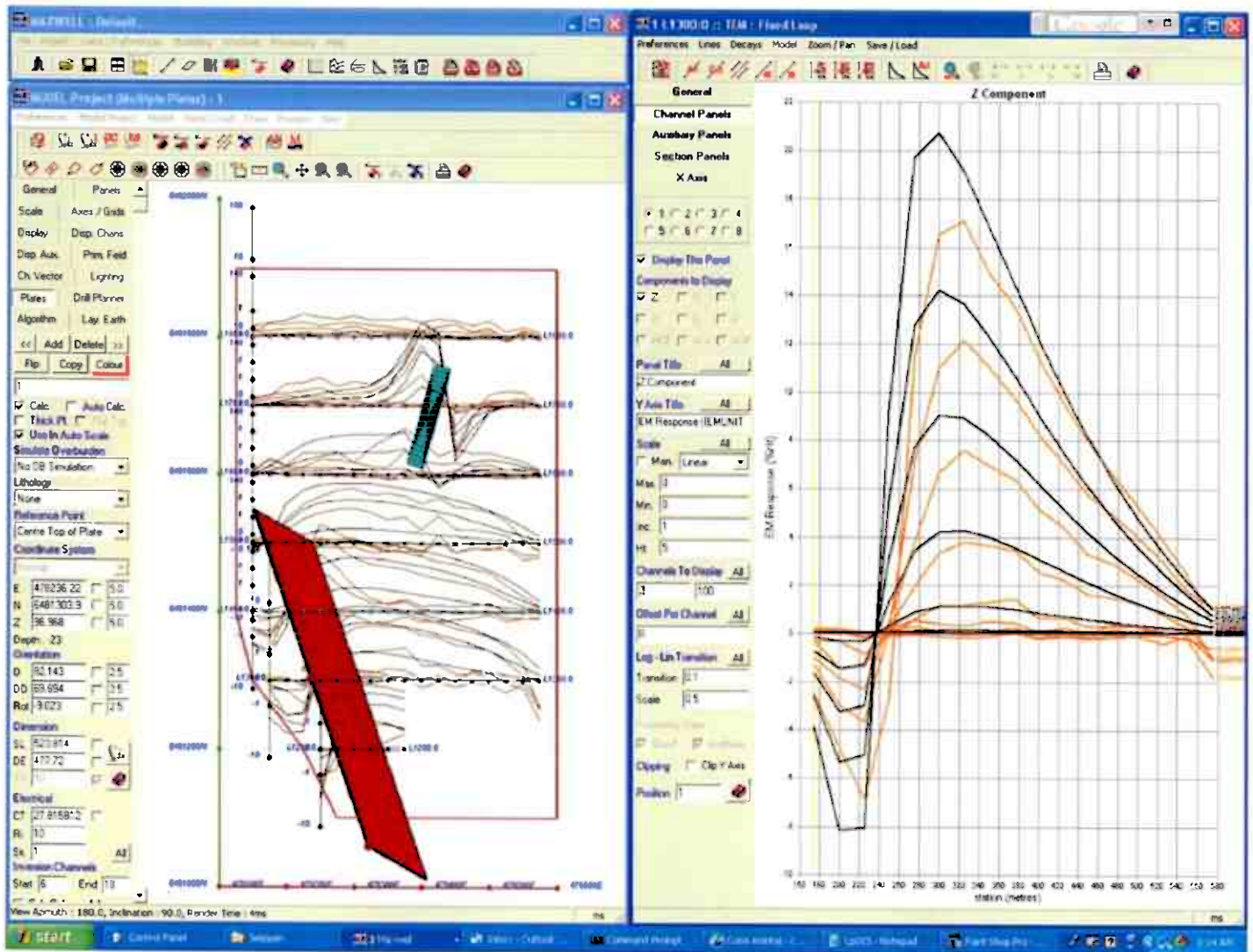
Bamble Project, Aust-Agder Province, Norway

Anthony Watts, Falconbridge Ltd for A/S Sulfidmalm.

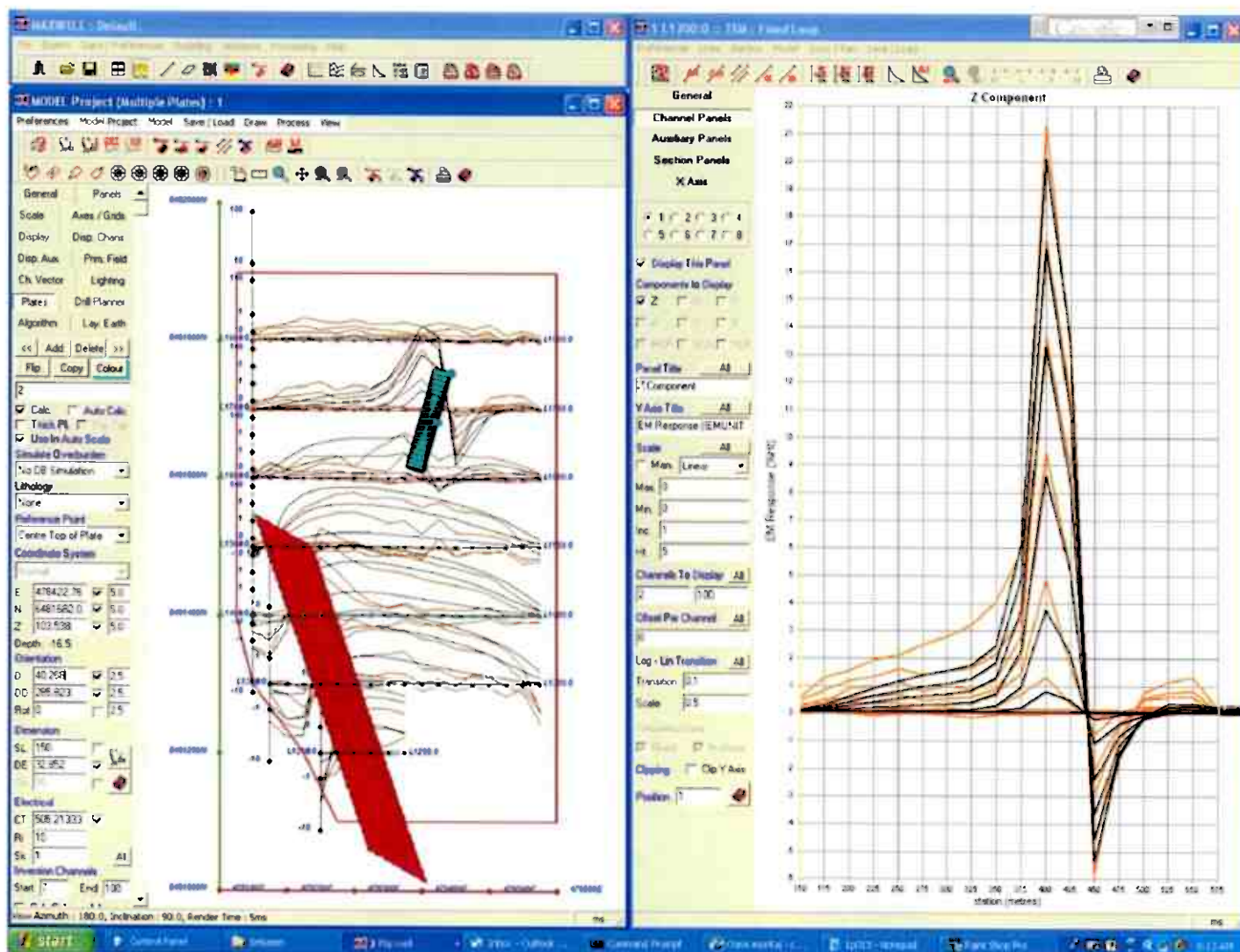
Model 1: Maxwell Model for Loop 1S, Line 1300N (Seljåsen)

Model 2: Maxwell Model for Loop 1S, Line 1700N (Seljåsen)

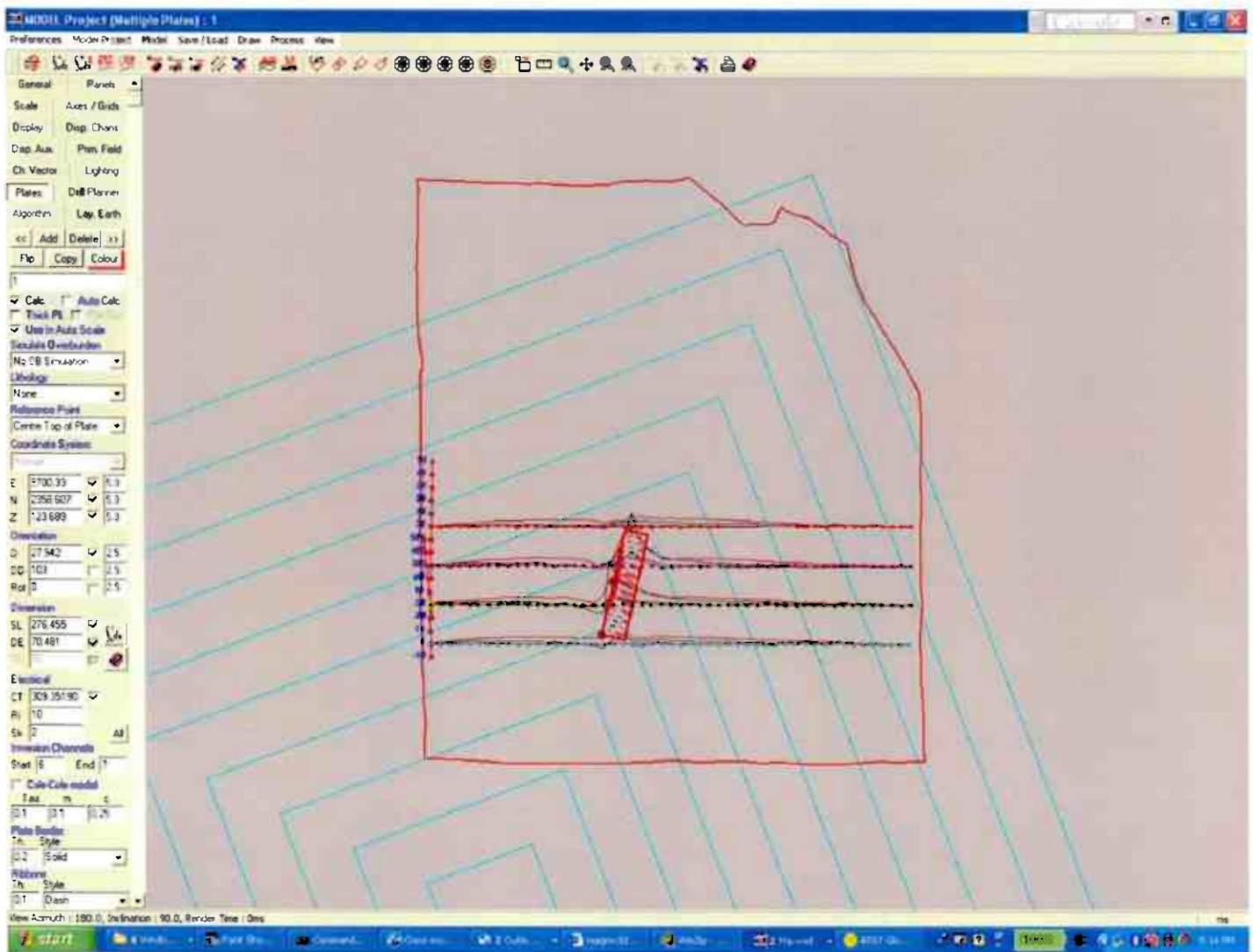
Model 3: Maxwell Model for Loop 2S, Line 2350N (Seljåsen)



Model 1: Maxwell Model for Loop 1S, Line 1300N (Seljasen)



Model 2: Maxwell Model for Loop 1S, Line 1700N (Seljasen)



Model 3: Maxwell Model for Loop 2S, Line 2350N (Seljåsen)