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Tittel

Report on field work in the Skjaekerdalen area, central Norway: summer 2006

Forfatter	Dato År	Bedrift (Oppdragsgiver og/eller oppdragstaker)
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Fagområde	Dokument type	Forekomster (forekomst, gruvefelt, undersøkelsesfelt)
Geofysikk		Skjækerdalen nikkelforekomst, Dyrhaugen
Råstoffgruppe: Malm/metall	Råstofftype: Ni	

Sammendrag, innholdsfortegnelse eller innholdsbeskrivelse

5 anomalier ble bestemt å være prospektive for nikkel
11 anomalier ble bestemt til å være prospektive for VMS mineralisering
38 anomalier ble fastlagt til å skyldes grafitt eller intraformasjonale sulfidlag
15 anomalier kunne ikke florklares på grunn av overdekke eller ekstrem topografi.

FOR A/S SULFIDMALM
PROJECT 306
Report of field work in the Skjackerdalen area, central Norway: summer 2006.

Report prepared by

Yannick Beaudoin
Project Geologist
Xstrata Nickel (International Nickel Group)

September 26, 2006

SUMMARY, CONCLUSIONS, RECOMMENDATIONS

Summary

The Skjaekerdalen project area (figure 1) is known to host historical nickel workings that began in 1876.Between 1876 and 1891 approximately 18,750 tonnes of ore grading 1.26% Ni and 0.63% Cu were mined. Other sources report production as being 16,396 tonnes grading 2.2% Ni and 1.3% Cu.

Geophysical work carried out in 2006 has employed directed airborne mag/EM (NGU's Hummingbird system) to identify any shallow (within ~60m) anomalies. 800 line kms were flown directly over the Skjaekerdalen Property and immediately to the south along strike from the historical workings

From August 1st to August 19th, 2006, a 4 person crew composed of Yannick Beaudoin, Doris Fox, Nadia Asgersdottir (field assistant) and Marie Loe Halvorsen (field assistant) completed ground truthing of 70 airborne EM and magnetic anomalies identified in the 2006 Skjaekerdalen AEM survey (see tables 1, 2, 3 and 4). No EM anomaly was detected immediately over the historical workings. Anomalies were selected for ground follow up based on the following criteria:

1- quality of EM response (in-phase vs out-of-phase response)
2- mag/EM coincidence
3- host geology

Ground truthing involved a combination of GPS and VLF to locate each anomaly and the beep mat (ground EM) to try and find a surface expression. Figure 1 indicates the locations of all anomalies.

Following ground follow up work, the 2006 AEM anomalies are ranked according to their nickel prospectivity (table 1) and VMS prospectivity (table 2). Anomalies with good prospectivity are those with anomalous mineralization (S-22), or unexplained discordant mag features coincident with the interpreted extent of the Skjaekerdalen complex (Y-1 and Y2). Anomalies with moderate prospectivity are those with notable geophysical (2006 AEM survey) properties (mag or EM) coincident with potential nickel or volcanogenic massive sulphide (VMS) hosting geology that could not be directly explained during ground truthing. Table 3 lists anomalies that have been explained as cultural, formational sulphide or graphite. Anomalies that could not be explained due to lack of any surface geology, or due to extreme topography, are listed in table 4.

Conclusions

- 5 anomalies were determined to be prospective for nickel (table 1)
- 11 anomalies were determined to be prospective for VMS mineralization (table 2)
- 38 anomalies were determined to be cultural, caused by graphite or caused by formational sulphides (table 3)
- 15 anomalies could not be explained due to lack of surface geology and/or extreme topography (table 4)

Recommendations

UTEM work is recommended for S-17, S-22, Y-1, Y-2 and Y-3. Figure 3 presents proposed UTEM grids to cover anomalies S-17, Y-1 and Y-2. Figure 4 presents a proposed UTEM grid to cover anomaly Y-3. Figure 5 presents a proposed UTEM grid to cover anomaly S-22.

UTEM work is also proposed to cover the historical workings (figure 6).

For anomalies S-17, Y-1 and Y-2 (figure 3): a total of 18.8 line kilometres are proposed (based on 100 m line spacing). At US$4000 / km, the total cost = US$75, 200.

For anomaly Y-3 figure 4): a total of 20 line kilometres are proposed (based on 100 m line spacing) to cover the anomaly and other discordant mag features in the vicinity. At US$4000 / km, the total cost = US$80,000.

For anomaly S-22 (figure 5): a total of 5.6 line kilometres is proposed (based on 50 m line spacing). At US$4000 / km, the total cost = US$22,400.

For the historical nickel workings (figure 6): a total of 26 line kilometres is proposed (based on 100 m line spacing). At $US4000 / km, the total cost = US$104,000.

The total cost of proposed UTEM for the Skjaekerdalen area is US$281,600 for a total of 44.4 line kilometres.

A winter program would be the most appropriate option with respect to topography, tree cover and equipment mobilization. Estimated time for survey completion would be 15 days with 2 survey teams (based on 3 km / day production). Gridding would require the use of a base station and would need to be completed prior to the UTEM surveys.

Table 1: Anomalies with nickel potential: Ranking is based on field and geophysical assessment. Assay results are included for anomalies where samples were taken.

ID	Conduc-tivity	Coincid-ent Mag	Strike length (m)	Target Explaine d	Host Geology	Field Observations	Field Conclusions	Recommenda-tions	Sample ID	Ni wt%	Cu wt%	Co wt%	S wt%	Pt ppm	Pd ppm	Au ppm	Ag ppm
Y-1	no EM	strong mag	300	N	Gula Group (banded mica schists); within NGU interpreted extension of Skjaekerdal en complex	no surface expression of magnetic unit; mag high is coincident with a topographic high surrounded by low boggy ground similar the area of the historical Skjaekerdalen nickel workings; surface geology consists of Gula group qtz, bt metaseds that are non magnetic; magnetic unit may be an underlying intrusive unit; the feature is along strike of the Skjaekerdalen complex.	mag feature not directly observed; see pic 2670 showing the topo high that coincides with the mag high.	good prospectivity; on strike with Skjaekerdalen complex; discordant mag feature									
Y-2	weak EM	strong mag	300	N	Gula Group (banded mica schists); within NGU interpreted extension of Skjaekerdal en complex	no surface expression of magnetic unit; no outcrop in the vicinity of the feature. Mag feature coincides with a topo low (bowl) surrounded by Gula group qtz, bt metaseds	no magnetic unit was observed either in outcrop (no outcrop) or in boulders in the riverbed that transects the feature; an EM anomaly (S-17) is 200m SW of the feature; no surface expression of conductor identified.	good prospectivity: on strike with Skjaekerdalen complex; discordant mag feature with nearby EM anomaly.									

S-17	10<100	weak to moderate	450	N	Coincident with interpreted extension of Skjaekerdalen gabbro-diorite complex	Surface geology is not consistent with extension of Skjaekerdalen complex. Heavy overburden and some outcrops of Gula group qtz, bt metaseds. No observed sulphide. Minor patchy staining. Low beep mat response (~200 HFR) and weak VLF response along part of axis.	conductor not directly observed; no prospective geology observed; low beep mat response; within 200m of a discordant and isolated mag feature (Y-2)	moderate prospectivity in conjunction with Y-2 mag feature	PG08140	<0.05	<0.05	<0.02	0.87	<0.02	0.02	<0.02	<0.5
Y-3	no EM	strong mag	300	N	Gula Group (banded mica schists); within NGU interpreted extension of Skjaekerdalen complex	mafic volcanic or volcaniclastic schist; very local patchy staining; cm scale magnetite bands; no sulphide or graphite observed; majority of mag feature coincides with lake in topo low (bowl)	Mag beep mat response of 1200--cm scale magnetite band; no prospective geology observed	moderate prospectivity; mag feature has no surface expression; proximity to historical nickel warrants ground geophysical work (UTEM)									
S-1	>100	strong	250	N	Støren Group (metavolcanics)	no outcrop observed; nearby (~150 m) outcrop consists of schistose metavolcanics or metavolcaniclastics; well foliated and crenulated	no beep mat response; conductor not directly explained; no prospective geology observed	moderate prospectivity-coincident mag-EM									

Table 2: Anomalies with VMS potential: Ranking is based on field and geophysical assessment. Assay results are included for anomalies where samples were taken.

ID	Conductivity	Coinci-dent Mag	Strike length (m)	Target Explained	Host Geology	Field Observatons	Field Conclusions	Recommendation	Sample Id	Ni wt%	Cu wt%	Co wt%	S wt%	Pt ppm	Pd ppm	Au ppm	Ag ppm
S-22	10<100	weak	200	Y	Støren Group (metavolcanics)	Conductor axis transected by trench; up to massive sulphide (py, po, minor ccp) mineralization; conductor is within 100m of Akervold mine workings	Up to 42000 HFR beep mat response over the exposed gossan surface; VLF response over axis;	good VMS prospectivity; strike length limited	PG08143 PG08144 PG08145	<0.05 <0.05 <0.05	0.42 2.26 6.45	<0.02 0.06 0.09	21.7 22.7 21.9	0.03 0.02 0.02	0.02 <0.02 <0.02	0.05 0.06 0.09	8.7 11.7 30.3
S-6b	10<100	strong	370	N	Gula Group (banded mica schists)	metaseds-qtz, bt, amph?; well developed schistosity; intensely folded; local patchy iron staining	conductor not directly observed; prospective VMS geology observed; no beep mat response; no magnetic unit observed.	moderate prospectivity as EM anomaly and associated mag do not have a surface expression and may represent a buried prospective unit	PG08010	<0.05	<0.05	<0.02	0.27	0.02	<0.02	0.03	<0.5
S-31	<10	moder ate to strong	400	N	Boundary of Gula and Støren Groups	Thick overburden; only observed outcrop found in stream bed; schistose, crenulated chloritized metaseds; no staining	no beep mat or VLF response; conductor not directly observed; prospective VMS geology observed	moderate VMS prospectivity; good strike length, host geology									
S-39	>100	moder ate	500	N	Boundary of Gula and Støren Groups	fine grained, chloritic metaseds; Storen Group	VLF response along axis; no magnetic unit observed; prospective VMS geology observed;	moderate prospectivity; good strike length; good conductor; host geology									

S-49	EM	edge	300	N	Støren Group	no outcrop on or near the anomaly	conductor not directly explained; the anomaly is in the same general area as 2 old VMS-Cu mines	moderate prospectivity; good strike length; host geology; proximity to old VMS workings											
S-19	10<100	weak to strong	1000	N	Gula Group (banded mica schists)	Very sparse outcrop; mostly boggy ground or heavy overburden; chloritic, qtz, bt metaseds observed; no staining	conductor not directly explained; no beep mat response; intermittent VLF response along axis; prospective VMS geology observed	moderate prospectivity; long strike length; host geology											
S-4	10<100	weak	250	N	Gula Group (banded mica schists)	mafic volcanic or volcaniclastic schist; well foliated; very local staining	no beep mat response; conductor not directly explained; prospective VMS geology observed	moderate prospectivity; moderate strike length; prospective host geology; weak to moderate conductor											
S-34	10<100		420	N	Gula Group (banded mica schists)	limited outcropping; heavy overburden; observed outcrop consists of qtz, minor bt, chlorite bearing metaseds; no magnetic response	no VLF response along axis; no beep mat response	moderate prospectivity; host geology; good strike length; weak to moderate conductor	PG08141	<0.05	<0.05	<0.02	0.24	<0.02	<0.02	<0.02	1.1
S-14	10<100	moder ate	150	N	Gula Group (banded mica schists)	qtz, bt bearing metaseds; no staining	no beep mat response; conductor not directly explained; prospective VMS geology observed	moderate prospectivity-limited strike length; host geology											
S-46	EM	moder ate	100	N	Støren Group (metavolcanic s)	metavolcanic or metavolcaniclastic schist; crenulated; well foliated; no staining;	conductor not directly explained; prospective VMS geology observed	moderate prospectivity; host geology; limited strike length											

S-27	10<100	n	100	N	Støren Group (metavolcanics)	no outcrop immediately over picks; outcrop in vicinity consists of fine grained, qtz dominated metaseds;	highest beep mat response 20 HFR; no sulphides observed; no staining; prospective VMS geology observed	moderate prospectivity, host geology; limited strike length										
S-47	EM	strong	0	N	Støren Group (metavolcanics)	inaccessible due to extreme (cliff) topography; nearby outcrops consist of schistose metavolcanics or metavolcaniclastics; no staining	actual pick not directly tested by beep mat; prospective VMS geology observed	anomaly not directly tested; extreme topography; no strike length										
S-15	<10	moderate	350	N	Gula Group (banded mica schists)	boggy ground; nearby outcrops consists of qtz, bt metaseds; well foliated; no staining	no beep mat response; conductor not directly explained; prospective VMS geology observed	anomaly unexplained										
S-2	10<100	y	3000	N	Gula Group (metaseds)	schistose metavolcanics or metavolcaniclastics; well foliated; crenulated; no staining	no beep mat response; conductor not directly explained; prospective VMS geology observed	anomaly unexplained; no mafic/ultramafic unit observed										
S-12	10<100	moderate	0	N	Gula Group (banded mica schists)	no outcrop; low boggy ground	no beep mat or VLF response; conductor not directly explained; Gula group metaseds are the nearest (~500m) outcrop; no magnetic unit observed.	anomaly unexplained; no mafic/ultramafic unit observed										

S-21	<10	moderate	100	N	Gula Group (metaseds)	Schistose, crenulated metaseds within boudined quartz bands; sparse outcrop; mostly boggy ground	no beep mat or VLF response; conductor not directly observed; prospective VMS geology observed	anomaly unexplained; no mafic/ultramafic unit observed										
S-36	10<100	moderate	560	N	Gula Group (banded mica schists)	no outcrop; low boggy ground	no beep mat or VLF response; conductor not directly explained; no prospective geology observed	anomaly unexplained; no mafic/ultramafic unit observed										
S-6a	10<100	y	0	N	Gula Group (banded mica schists)	no outcrop directly over the pick; nearby outcrops consist of qtz, bt bearing metaseds; well foliated;	conductor not directly explained; no beep mat response; prospective VMS geology observed	anomaly unexplained; no mafic/ultramafic unit observed										
S-26	10<100	weak	100	N	Støren Group (metavolcanics)	no outcrop over or near conductor	conductor not directly explained; no prospective geology observed	anomaly unexplained; geology unknown										
S-40	10<100	weak	100	N	Boundary of Gula and Støren Groups	fine grained, chloritic metaseds; Storen Group	no magnetic unit observed; no intrusive unit; prospective VMS geology observed;	anomaly unexplained; no mafic/ultramafic unit observed										

S-8	>100	n	0		Gula Group (banded mica schists)	metaseds-qtz, bt, amph?; well developed schistosity; intensely folded; local patchy iron staining	only red dot was investigated due to extreme topography; no beep mat response; no observed graphite or sulphide; conductor not directly explained; no prospective geology observed; no magnetic unit observed	anomaly unexplained; no mafic/ultramafic unit observed									
S-24b				N	Gula Group (banded mica schists)	no outcrop; low boggy ground	conductor not directly explained; no prospective geology observed	anomaly unexplained; geology unknown									
S-29b					Støren Group (metavolcanics)	No exposed outcrop observed; swamp and boggy low ground	conductor not directly explained; no prospective geology observed	anomaly unexplained; geology unknown									
S-38b				N	Gula Group (banded mica schists)	metaseds (qtz, bt, chlorite); well foliated	no observed sulphides; no beep mat response; no VLF response along axis; no prospective geology observed; conductor not directly explained	anomaly unexplained; no mafic/ultramafic unit observed									
S-41	10<100	n	0	N	Støren Group (metavolcanics)	inaccessible due to extreme (cliff) topography; no nearby outcrop; thick glacial till	conductor not directly explained; no prospective geology observed	anomaly unexplained; no mafic/ultramafic unit observed									

S-50				N	Støren Group (metavolcanics)	inaccessible due to extreme (cliff) topography; nearby outcrops consist of schistose metavolcanics or metavolcaniclastics; no staining	actual pick not directly tested by beep mat; no prospective geology observed	anomaly unexplained; not visited										

Table 3: Anomalies identified as being cultural in origin, explained by graphite or explained by the presence of sedimentary sulphide. Assay results are included for anomalies where samples were taken.

ID	Conductivity	Coincident Mag	Strike length (m)	Target Explained	Host Geology	Field Observatons	Field Conclusions	Recommendation	Sample Id	Ni wt%	Cu wt%	Co wt%	S wt%	Pt ppm	Pd ppm	Au ppm	Ag ppm
S-3	10<100	y	760	Y	Gula Group (metaseds)	schistose metavolcanics or metavolcaniclastics ; well foliated; crenulated; graphite bearing	~8200 HFR beep mat response (maximum); graphite; no prospective geology observed	graphite									
S-5	10<100	weak	130	Y	Gula Group (banded mica schists)	mafic volcanic or volcaniclastic schist; well foliated; very local staining; locally graphite bearing;	1300 HFR beep mat response--graphite; no prospective geology observed	graphite									

S-7	10<100	strong	100	Y	Gula Group (banded mica schists)	metaseds-qtz, bt, amph? And graphite; well developed schistosity; intensely folded; local patchy iron staining	beep mat response (~5000 HFR) over graphite bearing band; very good exposure; pervasive weak iron staining; no sulphide observed; no magnetic unit observed	graphite										
S-9	>100	strong	350	Y	Gula Group (banded mica schists)	metased-qtz, bt, amph? And locally graphite bearing; pervasive, patchy iron staining; well developed schistosity;	low beep map response (~600 HFR) over graphite bearing bands; consistent VLF response over axis; no sulphide observed; no prospective geology observed; no magnetic unit observed	low prospectivity for nickel or VMS; no further follow up										

S-10	>100	strong	1000	Y	Gula Group (banded mica schists)	metased-qtz, bt, amph? And locally graphite bearing; pervasive, patchy iron staining; well developed schistosity;	low beep map response (~600 HFR) over graphite bearing bands; consistent VLF response over axis; no sulphide observed; no prospective geology observed; no magnetic unit observed	graphite									
S-11	10<100	moderate	170	Y	Gula Group (banded mica schists)	metased-qtz, bt, amph? And locally graphite bearing; pervasive, patchy iron staining; well developed schistosity;	low beep map response (~600 HFR) over graphite bearing bands; consistent VLF response over axis; no sulphide observed; no prospective geology observed.	graphite									
S-16	<10	weak	500	Y	Gula Group (banded mica schists)	qtz, bt bearing metaseds; locally graphite bearing no staining	3300 HFR beep mat response--graphite in metaseds	graphite									

S-18	10<100	moderate	110	Y	Gula Group (banded mica schists)	Very sparse outcrop; heavy overburden; observed outcrop in vicinity consists of qtz, bt metaseds; site of beep mat response is graphite bearing metaseds	450 HFR beep mat response consists of graphite bearing Gula metaseds; no sulphides observed; no VLF response along axis; no prospective geology observed	graphite									
S-20	>100	strong	1550	N	Gula Group (banded mica schists)	Schistose, crenulated metaseds within boudined quartz bands; sparse outcrop; mostly boggy ground	about 6000 HFR maximum response over graphite layers; conductor observed; no prospective geology observed	graphite									

S-25	10<100	weak	400	Y	Støren Group (metavolcanics)	very sparse outcrop; southern end dominated by swamp and boggy ground; ridge area consists of qtz rich, fine grained metasediments; no staining observed; no sulphide observed; graphite present throughout with multiple beep mat responses.	highest beep mat response 6900 HFR on graphite bearing unit; no prospective geology observed	graphite										
S-28	10<100	strong	400	Y	Støren Group (metavolcanics)	no outcrop immediately over picks; outcrop in vicinity consists of fine grained, qtz dominated metaseds; area dominated by swamps and boggy	highest beep mat response 100 HFR; graphite observed; no sulphides observed; no staining; no prospective geology observed	graphite										

S-29a	>100	strong	600	Y	Støren Group (metavolcanics)	In vicinity of red pick, 5000 HFR response -- graphite bearing metaseds; well banded, foliated, schistose--parallel to conductor axis	5000 HFR beep mat response; consistent VLF response along axis; no prospective geology observed	graphite									
S-33a	>100	strong	950	Y	Gula Group (banded mica schists)	graphite in Gula group metaseds; quartz bands (veins?) parallel to foliation;	~10 000 HFR beep mat response on graphite bearing section; no prospective geology observed	graphite	PG08146	<0.05	<0.05	<0.02	26.6	0.06	0.05	0.06	0.9
S-33b				Y	Gula Group (banded mica schists)	sedimentary sulphides (py and po) in Gula group qtz, bt bearing metaseds; locally graphite bearing; well stained outcrops	~17 000 HFR beep mat response on sedimentary sulphide bearing portions; no prospective geology observed	sedimentary sulphide	PG08148	<0.05	<0.05	<0.02	17.3	<0.02	<0.02	0.09	1.4

S-33c				Y	Gula Group (banded mica schists)	Qtz, bt bearing schistose metaseds; locally graphite bearing; patchy staining; no sulphide observed	low beep response (~400 HFR); no prospective geology observed	graphite								
S-35	>100	moderate	180	Y	Gula Group (banded mica schists)	mafic volcanic (or volcaniclastic) schist; very fine grained, non magnetic; cm scale chert bands and quartz veins parallel to foliation; trace sedimentary (pyrite) sulphides; graphite bearing	beep mat response (~9000 HFR) over graphite bearing portions of the unit; no VLF response along axis	graphite	PG08142	<0.05	<0.05	<0.02	0.45	<0.02	<0.02	<0.02	<0.5
S-38a	>100	moderate to strong	1400	Y	Boundary of Gula and Støren Groups	crenulated, well foliated (shale) metaseds; sedimentary sulphide (pyrrohite);	~8000 HFR beep mat response; no VLF response along axis	sedimentary sulphide								
S-42	10<100	moderate to locally none	1300	N	Støren Group (metavolcanics)	graphite in Gula group metaseds; VLF response along axis; very little outcrop	no prospective geology observed	graphite								

S-45	10<100	weak	450	Y	Gula Group (banded mica schists)	Gula group qtz, bt bearing metaseds; locally graphite bearing;	~1200 HFR maximum beep mat response over graphite bearing portions; no prospective geology observed	graphite									
S-48	EM	weak	200	Y	Støren Group	schistose metavolcanics or metavolcaniclastics ; graphite bearing	~3000 HFR beep mat response; no prospective geology observed nearby	graphite									
S-13	10<100	n	0	Y	Gula Group (banded mica schists)	anomaly coincides with large barn. Powerlines feed into barn. Large industrial refrigerator present inside		cultural									
S-23a	>100	moderate to weak	900	Y	Gula Group (banded mica schists)	lighted ski trail and shooting range		cultural									
S-23b				Y		lighted ski trail and shooting range		cultural									
S-24a	>100	weak	500	Y	Gula Group (grey phyllite)	lighted ski trail and shooting range; numerous power lines throughout area		cultural									

S-24c				Y		lighted ski trail; electric fence		cultural									
S-30	<10	weak to moderate	800	Y	Boundary of Gula and Støren Groups	powerline		cultural									
S-32a	10<100	y; moderate	210	Y	Gula Group (metaseds)	farmer's field; no outcrop.		cultural									
S-32b				Y	Gula Group (metaseds)	barn and gear (tractors, farm equipment)		cultural									
S-37	10<100	strong	700	Y	Boundary of Gula and Støren Groups	farmer's barley field; 3m of top soil. No known cables buried in area	inaccessible by beep mat	cultural									
S-43a	10<100	coincident to mag low	1500	Y	Støren Group (metavolcanic)	power line and buried electric cables		cultural									

S-43b				Y	Støren Group (metavolcanic)	temporary horse fence in a farmer's field. Fence consisted of metal posts and metal fencing; the fence was present during the survey an is no longer present (info from farmer); also from farmer...water well drilling resulted in 90m of overburden prior to hitting bedrock		cultural										
S-43c				N	Støren Group (metavolcanic)	barley field with no apparent culture or outcrop	conductor not directly identified	likely cultural											
S-43d				N	Støren Group (metavolcanic)	barley field with no apparent culture or outcrop	conductor not directly identified	likely cultural											
S-43e				N	Støren Group (metavolcanic)	barley field with no apparent culture or outcrop	conductor not directly identified	likely cultural											
S-43f				N	Støren Group (metavolcanic)	sheep pasture; no outcrop; no culture	conductor not directly identified	likely cultural											

S-44	10<100	coincident to mag low	600	N	Støren Group	swamp, and thick till; no outcrop in the vicinity of anomaly; no apparent culture; good VLF response along axis; proximal to cultivated fields	conductor not directly identified	likely cultural										
S-51				Y	Gula Group (metaseds)	anomaly coincides with power transformer next to farmhouse	cultural	cultural										
S-52				Y	Gula Group (metaseds)	pig farm coincident with EM pick		cultural										

Table 4: Anomalies that could not be explained due to lack of surface geology or due to extreme topography.

ID	Conductivity	Coincident Mag	Strike length (m)	Target Explained	Host Geology	Field Observations	Field Conclusions	Recommendation
S-47	EM	strong	0	N	Støren Group (metavolcanics)	inaccessible due to extreme (cliff) topography; nearby outcrops consist of schistose metavolcanics or metavolcaniclastics; no staining	actual pick not directly tested by beep mat; prospective VMS geology observed	anomaly not directly tested: extreme topography; no strike length
S-15	<10	moderate	350	N	Gula Group (banded mica schists)	boggy ground; nearby outcrops consists of qtz, bt metaseds; well foliated; no staining	no beep mat response; conductor not directly explained; prospective VMS geology observed	anomaly unexplained
S-2	10<100	y	3000	N	Gula Group (metaseds)	schistose metavolcanics or metavolcaniclastics; well foliated; crenulated; no staining	no beep mat response; conductor not directly explained; prospective VMS geology observed	anomaly unexplained; no mafic/ultramafic unit observed
S-12	10<100	moderate	0	N	Gula Group (banded mica schists)	no outcrop; low boggy ground	no beep mat or VLF response; conductor not directly explained; Gula group metaseds are the nearest (~500m) outcrop; no magnetic unit observed.	anomaly unexplained; no mafic/ultramafic unit observed

S-21	<10	moderate	100	N	Gula Group (metaseds)	Schistose, crenulated metaseds within boudined quartz bands; sparse outcrop, mostly boggy ground	no beep mat or VLF response; conductor not directly observed; prospective VMS geology observed	anomaly unexplained; no mafic/ultramafic unit observed
S-36	10<100	moderate	560	N	Gula Group (banded mica schists)	no outcrop; low boggy ground	no beep mat or VLF response; conductor not directly explained; no prospective geology observed	anomaly unexplained; no mafic/ultramafic unit observed
S-6a	10<100	y	0	N	Gula Group (banded mica schists)	no outcrop directly over the pick; nearby outcrops consist of qtz, bt bearing metaseds; well foliated;	conductor not directly explained; no beep mat response; prospective VMS geology observed	anomaly unexplained; no mafic/ultramafic unit observed
S-26	10<100	weak	100	N	Støren Group (metavolcanics)	no outcrop over or near conductor	conductor not directly explained; no prospective geology observed	anomaly unexplained; geology unknown
S-40	10<100	weak	100	N	Boundary of Gula and Støren Groups	fine grained, chloritic metaseds; Storen Group	no magnetic unit observed; no intrusive unit; prospective VMS geology observed;	anomaly unexplained; no mafic/ultramafic unit observed

S-8	>100	n	0		Gula Group (banded mica schists)	metaseds-qtz, bt, amph?; well developed schistosity; intensely folded; local patchy iron staining	only red dot was investigated due to extreme topography; no beep mat response; no observed graphite or sulphide; conductor not directly explained; no prospective geology observed; no magnetic unit observed	anomaly unexplained; no mafic/ultramafic unit observed
S-24b				N	Gula Group (banded mica schists)	no outcrop; low boggy ground	conductor not directly explained; no prospective geology observed	anomaly unexplained; geology unknown
S-29b					Støren Group (metavolcanics)	No exposed outcrop observed; swamp and boggy low ground	conductor not directly explained; no prospective geology observed	anomaly unexplained; geology unknown
S-38b				N	Gula Group (banded mica schists)	metaseds (qtz, bt, chlorite); well foliated	no observed sulphides; no beep mat response; no VLF response along axis; no prospective geology observed; conductor not directly explained	anomaly unexplained; no mafic/ultramafic unit observed
S-41	10<100	n	0	N	Støren Group (metavolcanics)	inaccessible due to extreme (cliff) topography; no nearby outcrop; thick glacial till	conductor not directly explained; no prospective geology observed	anomaly unexplained; no mafic/ultramafic unit observed

S-50				N	Støren Group (metavolcanics)	inaccessible due to extreme (cliff) topography; nearby outcrops consist of schistose metavolcanics or metavolcaniclastics; no staining	actual pick not directly tested by beep mat, no prospective geology observed	anomaly unexplained; not visited

REGIONAL GEOLOGY

The Skjaekerdalen area (figure 1) is located approximately 90 km northeast of Trondheim. The regional geology is dominated by the Gula, Fundjø and Støren Groups and the Hovin/Sulåmo Groups (figure 6). The Gula Group forms the oldest part of the Trondheim Nappe and is thought to be Proterozoic in age. The unit consists of a series of psammitic, calcareous, graphitic and pelitic schists with subordinate amphibolites and small bodies of ultramafic and gabbroic rock (none besides the Skjaekerdalen complex located in the immediate project area). The unit is largely overburden covered. The Gula Group hosts a number of nickel deposits and showings including the Vakkerlien deposit (400,000 tonnes grading 1.0% Ni, 0.4% Cu), the Kalberget and Olkar showings, and the Skjaekerdalen historical workings.

The Gula Group is bounded to the east and west respectively, by the Fundjø and Hovin/Sulåmo Groups (figure 2) which are dominated by metavolcanic sequences (greenstones). Primary pillow basalts have been observed indicating a submarine formational environment. The Fundjø and Støren Groups have been described as lithologically distinct from the Gula Group leading to the interpretation that they originated in separate environments. Airborne anomalies in the southwest corner of the 2006 survey appear to be hosted in the Støren Group and may be related to VMS-type mineralization like that characteristic of the Malsåa mine which was a copper and zinc producer from ~1879-1923. No information was found on total production numbers or grades. The Hovin/Sulåmo Groups are described as a series of clastic and volcaniclastic units related to the Støren Group that include phylites, conglomerates and rhyollite tuffs.

LOCAL GEOLOGY: Skjaekerdalen historical workings

The Skjækerdalen deposits are associated with a composite gabbro - diorite body that has intruded weakly layered mica- and quartz-feldspar schists that are locally graphitic. The gabbro intrusion is 4.0 x 1.5 km in size and is lenticular in shape. It is surrounded by a 10 – 15 m wide zone of diorite. The gabbro has been dated at 436 Ma (U-Pb zircon). This age is similar to the Fongen –Hyllingen layered intrusion and the Råna layered intrusion. It is not a uniform rock, but has the form of an intrusive breccia containing co-magmatic fragments of diorite, leucogabbro, melagabbro and ultramafics. Fragments of local wall rock schists are also common. The fragments range in size from less than 10 cm to 20 m. Most of the fragments are angular, but several show narrow reaction rims. This is especially common around ultramafic fragments. Layering can be seen in some of the gabbro fragments. The matrix of the breccia varies from melagabbroic to leucodioritic. The magmatic fragments are always more mafic than the local matrix in which they are situated.

There are six main nickel mines in the gabbro, all located in brecciated areas. Throughout the breccia the mineralization is connected to melagabbroic and ultramafic fragments mainly as a sulphide dissemination. Rich disseminations and locally massive ore have also been observed in more leucocratic gabbros. Nickel mineralization occurs over a 1,700 x 300 m zone following the inner portions of the gabbro breccia.

2006 Geological observations

Field observations of the Gula Group define the unit as: crenulated and highly schistose metasediments, mica-, quartz- and plagioclase-bearing, locally light to moderately chloritized, fine to locally medium grained. Open and tight folding is pervasive. The overall strike ranges from 035 to 055 with steep, variable dip.

Field observations of the Støren Group define the unit as: schistose to locally less deformed metasediments, metavolcaniclastics and metavolcanics. In and around the old VMS mine workings, deformed and altered (mainly chloritized) metavolcanics dominate. These units are fine grained, mafic with minor plagioclase (sausseritized). Thinly banded pyrite and minor pyrrhotite and chalcopyrite are the dominant sulphides. Crenulated and schistose, quartz-, mica-, plagioclase-bearing metaseds (generally identical to the Gula Group units) are also observed.

LOCATION AND GEOLOGY

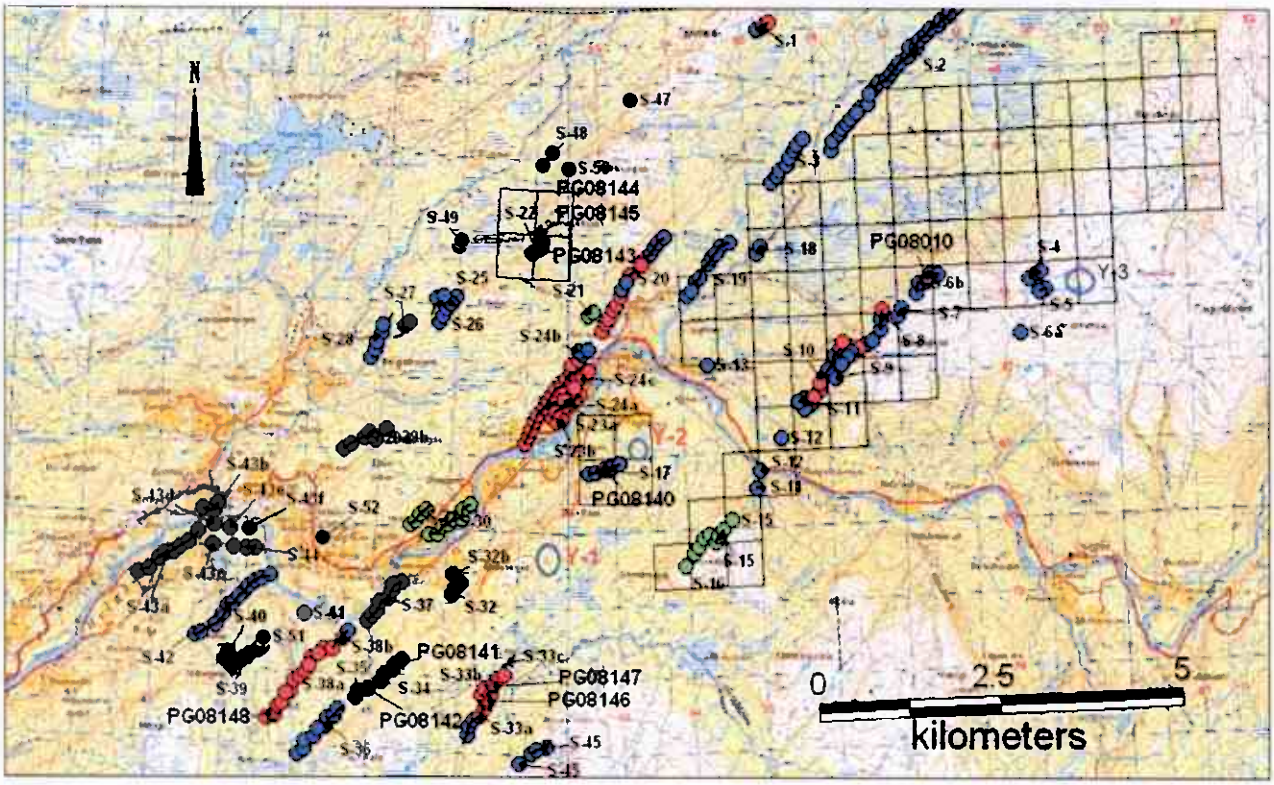
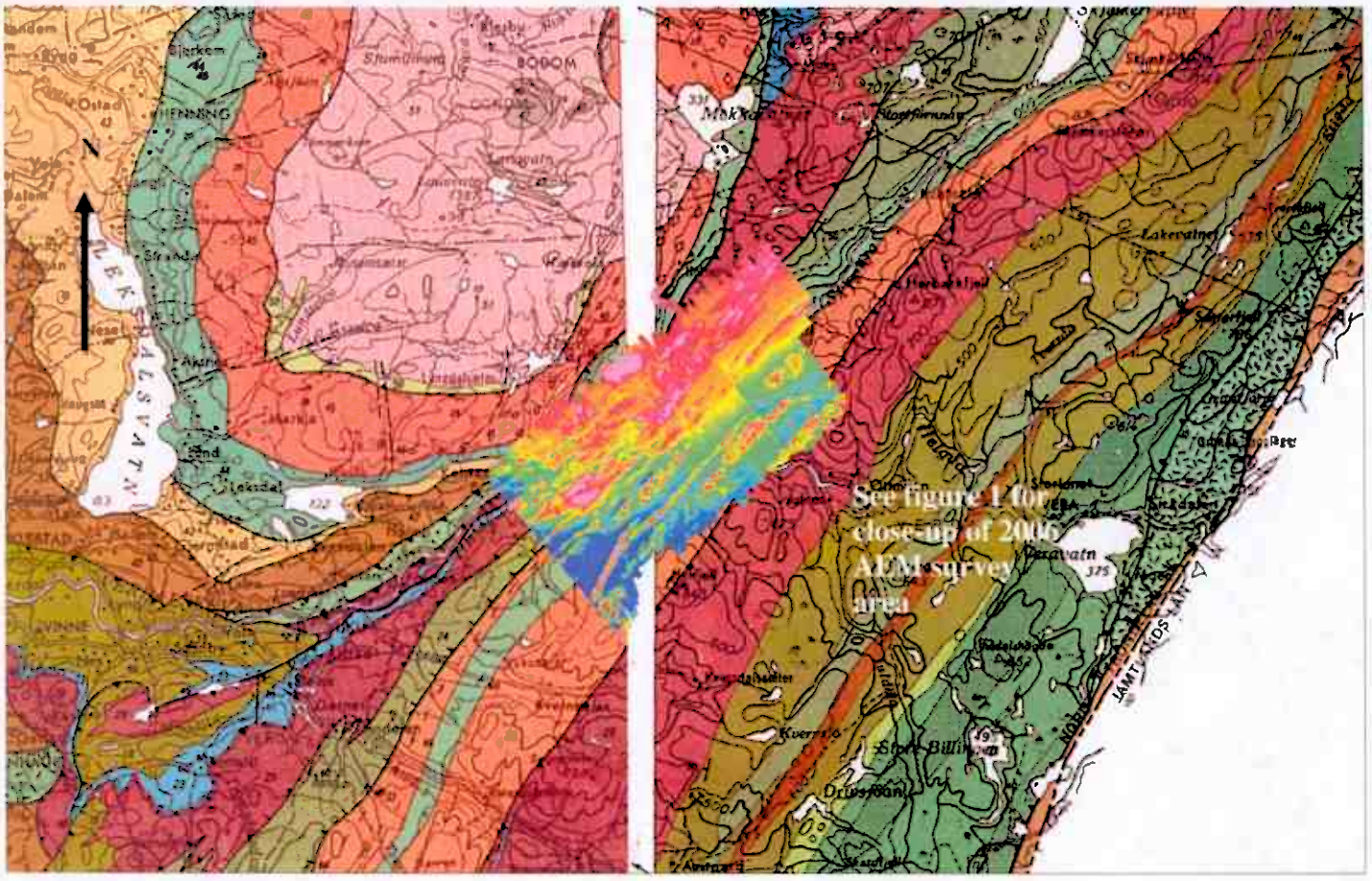


Figure 1: Skjaekerdalen project area map showing current preclaims, 2006 AEM anomalies and 2006 samples. Y1, Y2 and S-22 are highlighted.

METHODOLOGY

Field work consisted of targeted traverses with the goals of: 1-surveying of the immediate area of each anomaly for any surface expression using VLF and beep mat, 2-examining the local geology to identify any new prospective (for nickel and VMS) geology, 3-sampling of any sulphide bearing unit.

Anomalies were located by GPS or in the case of EM conductors with a strike length, a combination of GPS and VLF. The axis of EM conductors was surveyed by beep mat (ground EM) using approximately 100 m., perpendicular to axis traverses on each side of the conductor. Spacing between traverses was generally between 25 and 50 m. Detected beep mat anomaly locations were recorded. Since the beep mat can only detect conductors down to approximately 1m from surface, any beep mat response was uncovered and examined. Samples were taken if sulphides were present. While traversing with the beep mat, the local surface geology was examined and noted.



Sulåmogruppen (underordovisisk – mellomordovisisk alder)

Grønnstein

Grå serisittfyllitt og gråvakke

Grå kalkspatholdig sandstein

Kalkstein

Grå og svart fyllitt

Grønnstein- og jaspiskonglomerat

Andre alloktone bergarter (antatt senprekambrisk – silurisk

Garbenskifer (ofte med biotitt-, granat- og/eller disthenporfyroblaster)

Serpentinitt

Amfibolitter med lag av glimmerskifer, kvartsitt, meta-arkose (ofte med granat-, hornblende- og/eller K-feltspatporfyroblaster)

Blastomylonitt

Øyegneis

Støren-[1] og Fundsjøgruppen[2] (tremadoc – underordovisisk a

Kvartskeratofyr

Grønnstein, grønnskifer; noe kvartskeratofyr o.l.

Gulagruppen (antatt senprekambrisk – kambrisk alder)

Kvartsittkonglomerat og kvartsitt

Grå og svarte fyllitter, tildels med biotitt eller hornblende

Båndet biotittgneis

Biotittskifer med kvartsmobilisater

Migmatittgneis med muskovitt, biotitt og stedvis sillimanitt, staurolitt og disthen

Grunnfjell (prekambrisk alder)

Metagabbro

Granittporfyr eller leptitt

Kvartsporfyr

Granitt

Figure 2: Regional 1:250K geology and 2006 Skjaekerdalen airborne survey area.

CRITERIA FOR AEM ANOMALY RANKING

A complete listing of investigated anomalies, including field notes can be found in tables 1, 2, 3 and 4. In these tables, for the field conclusions column, "prospective geology" is defined as any lithological unit with potential to host nickel sulphides (e.g. mafic-ultramafic intrusives; Skjaekerdalen complex type gabbro-diorite intrusives), or VMS-type mineralization (e.g. volcanogenic hydrothermal massive sulphides).

In the recommendation column, "prospectivity" represents the nickel or VMS potential of the area surrounding the anomaly based on interpretation of field observations, assay results and the airborne geophysics data. In tables 1 and 2, anomalies with good prospectivity are those with anomalous mineralization (S-22), or unexplained discordant mag features coincident with the interpreted extent of the Skjaekerdalen complex (Y-1 and Y2). Anomalies with moderate prospectivity are those with notable geophysical (2006 AEM survey) properties (mag or EM) coincident with potential nickel or VMS hosting geology that could not be directly explained during ground truthing. Lower ranking anomalies, listed in table 2, have poor geophysical properties. Anomalies listed in table 3 are all those explained by culture, by graphite or by formational sulphide. The remaining anomalies are listed in table 4 and are unexplained due to the absence of surface geology for evaluation or are inaccessible due to extreme topography.

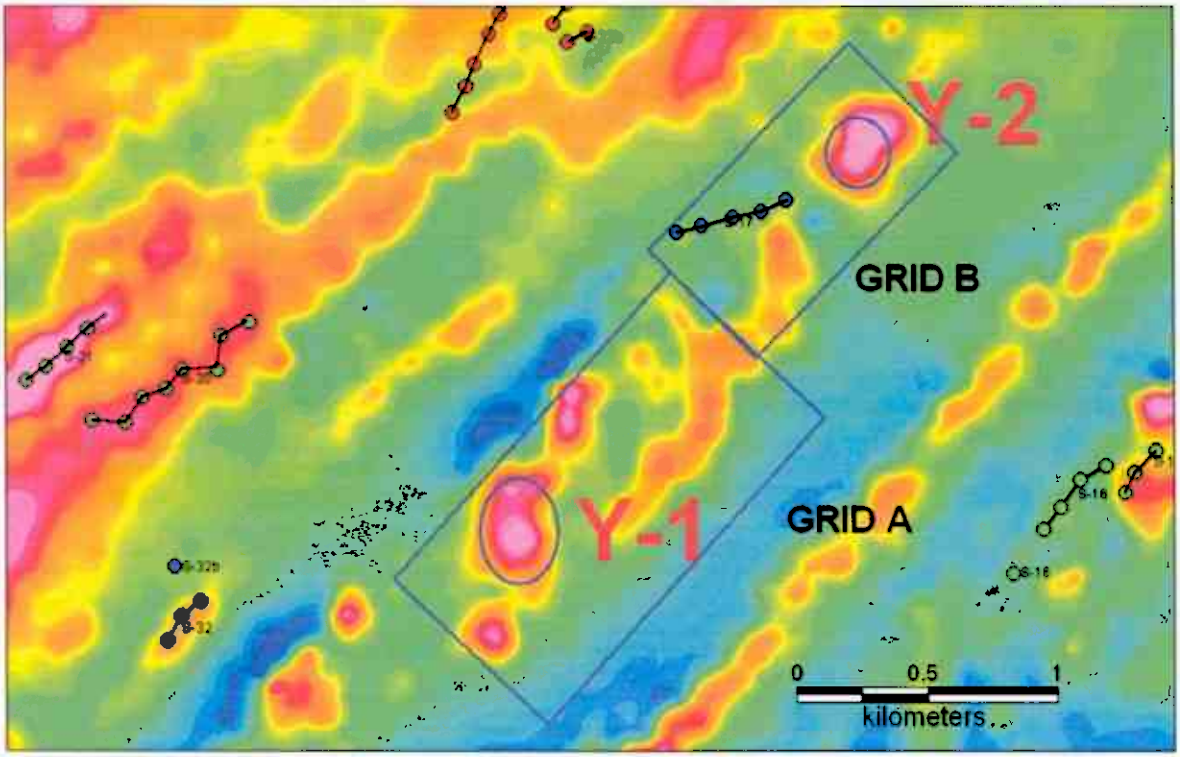


Figure 3: proposed UTEM grids over Y-1, Y-2 and S-17.

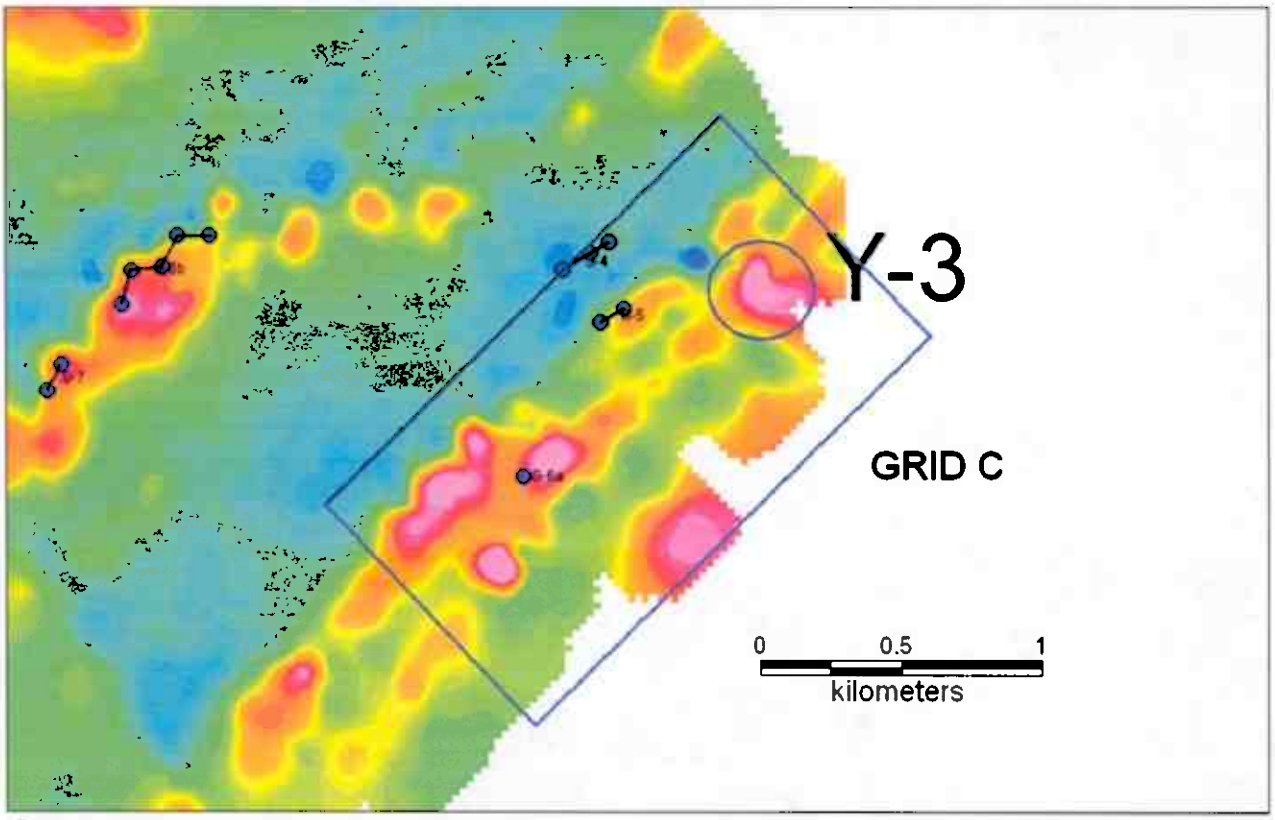


Figure 4: proposed UTEM grid over Y-3.

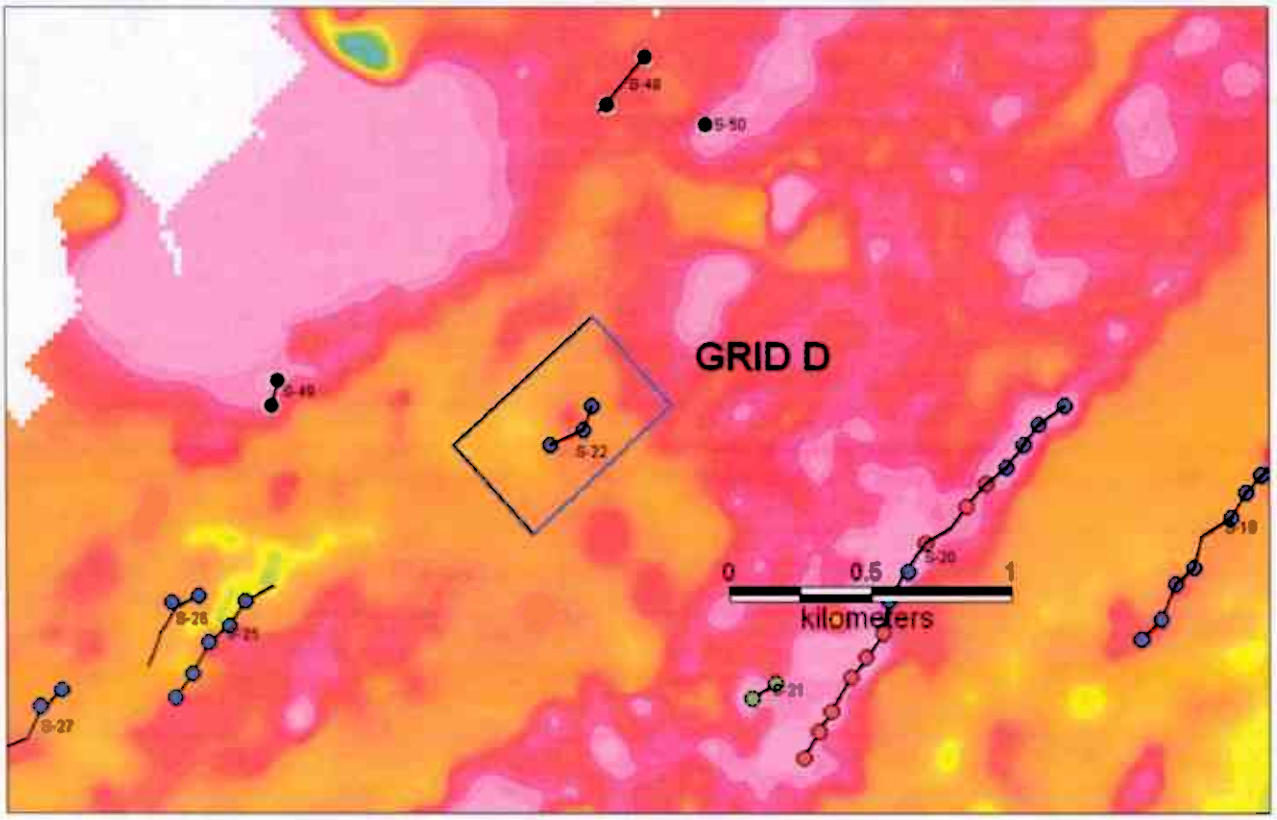


Figure 5: proposed UTEM grid over S-22.

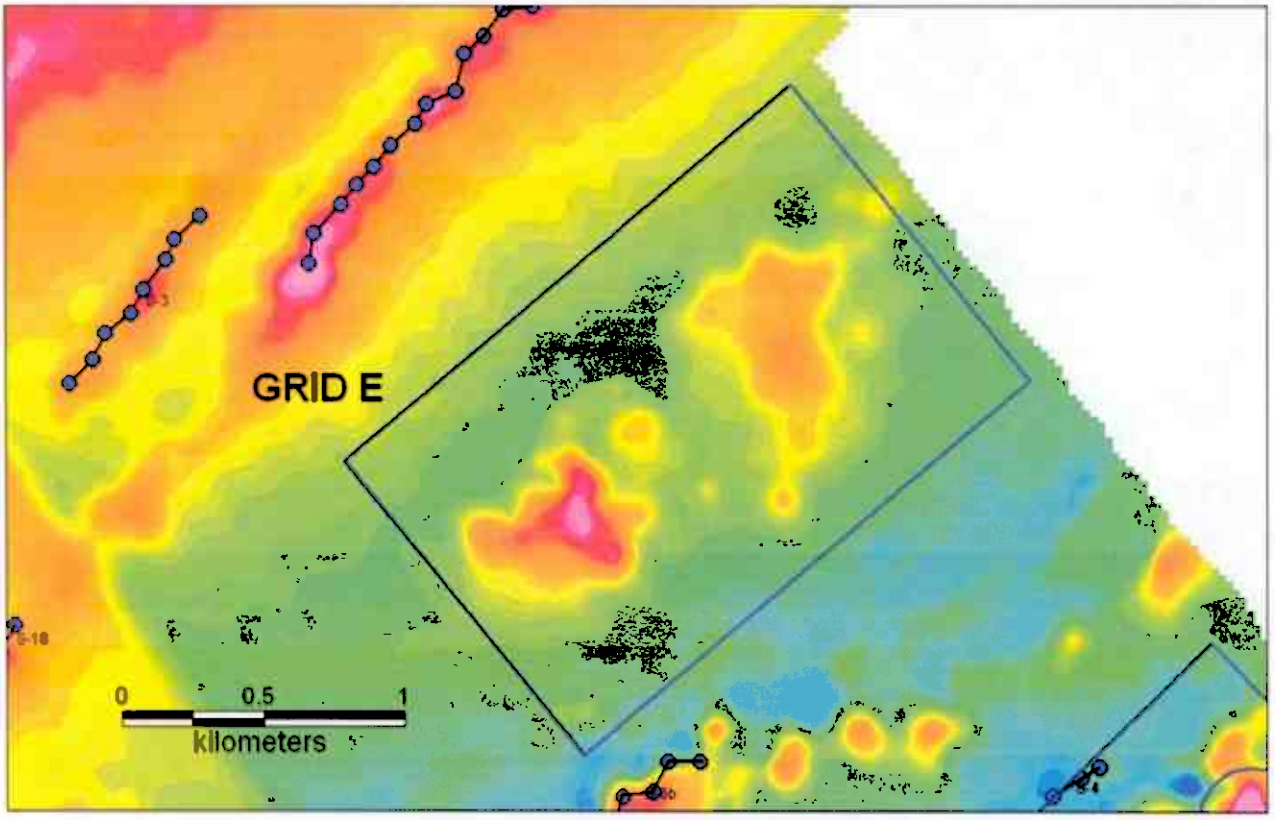


Figure 6: proposed UTEM grid over historical nickel workings.

Appendix 1: Field photos

Photo 2827: Old VMS working 150m from anomaly S-22

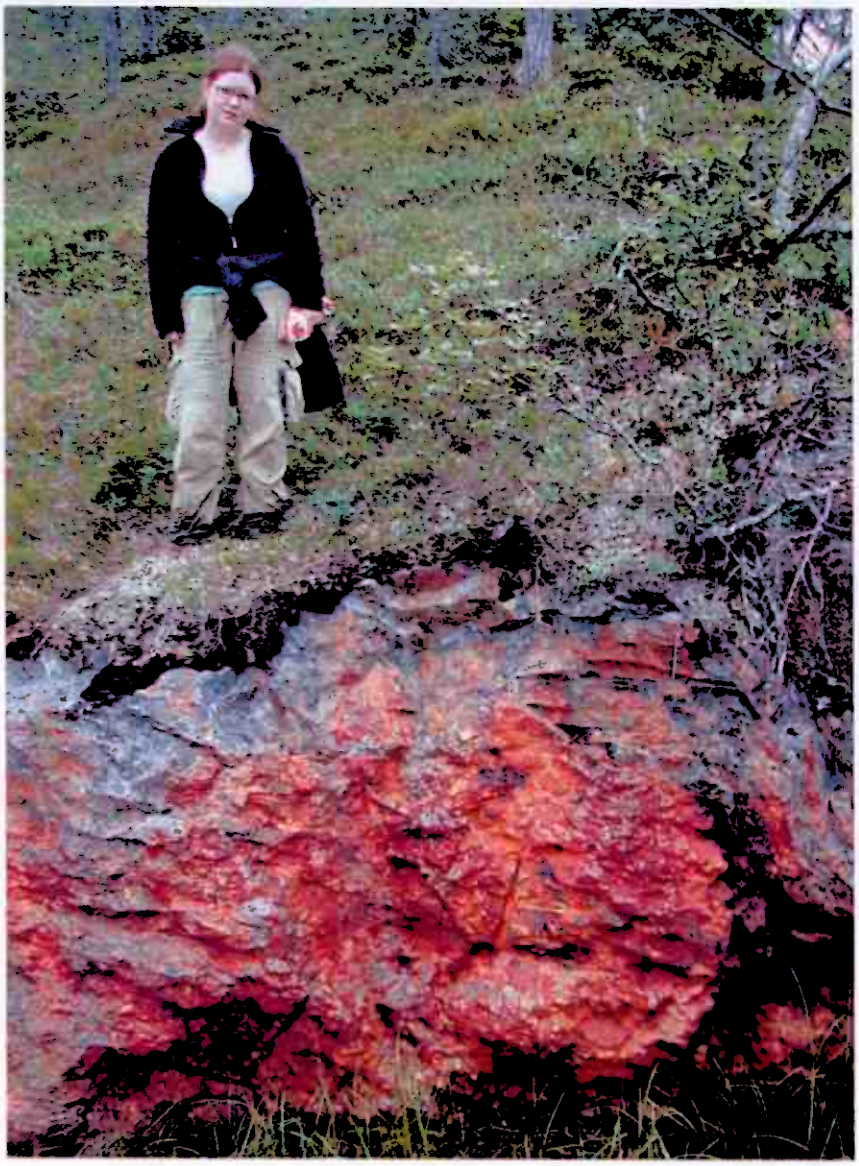


Photo 2828: axis of anomaly S-22 transected by trench.

Photo 2669: Topo high coincides directly with mag feature Y-1.

APPENDIX A

FOR FALCONBRIDGE LTD

PROJECT 206

Report of field work in the Skjaekerdalen area, central Norway: summer 2005.

Report prepared by

Yannick Beaudoin
Project Geologist
Falconbridge Ltd (International Nickel Group)
September 10, 2005

HIGHLIGHTS

- A total of 21 samples were collected in the previously unvisited (Falconbridge) Skjaekerdalen project area.
- 18 of the samples returned anomalous Ni values ranging from 0.38wt% Ni (for 3.22wt% S) to 2.65wt% Ni (for 25.1wt% S).
- Nickel tenors are notable at Skjaekerdalen with the best sample group having tenors ranging from 1.39 to 4.03.
- A possible second area of the Skjaekerdalen intrusion was located to the southwest of the main area.
- A number of old copper workings are located throughout the Skjaekerdalen area. 2 samples were collected from one of the biggest (Malsa Gruver) with the best sample returning 1.83wt% Cu. These are VMS/SEDEX-type deposits.

INTRODUCTION

Geological Setting

The Skjækerdalen area is located approximately 90 km northeast of Trondheim. The area is underlain by the Gula Group. The Gula Group forms the oldest part of the Trondheim Nappe and is thought to be Proterozoic in age. The unit consists of a series of psammitic, calcareous, graphitic and pelitic schists with subordinate amphibolites and small bodies of ultramafic and gabbroic rock. The unit is largely overburden covered. The Gula Group hosts a number of nickel deposits and showings including the Vakkerlien deposit (400,000 tonnes grading 1.0% Ni, 0.4% Cu), the Kalberget and Olkar showings, and the Skjækerdalen deposits.

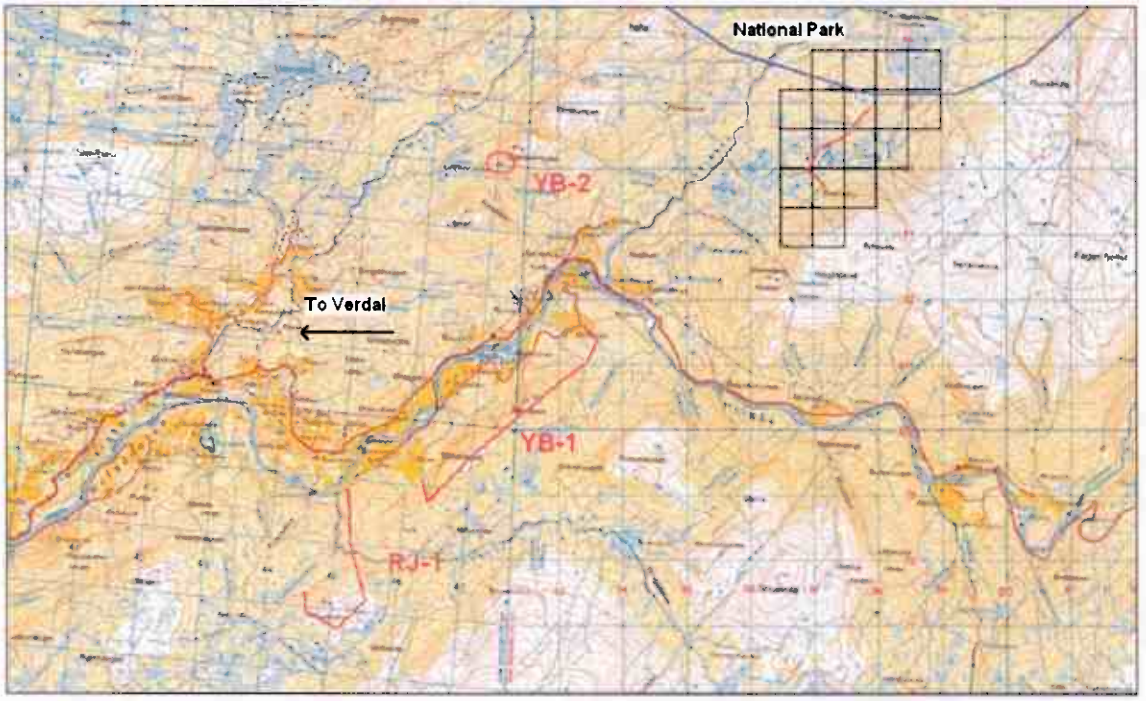
The Skjækerdalen deposits are associated with a composite gabbro - diorite body that has intruded weakly layered mica- and quartz-feldspar schists that are locally graphitic. The gabbro intrusion is 4.0 x 1.5 km in size and is lenticular in shape. It is surrounded by a 10 – 15 m wide zone of diorite. The gabbro has been dated at 436 Ma (U-Pb zircon). This age is similar to the Fongen –Hyllingen layered intrusion and the Råna layered intrusion. It is not a uniform rock, but has the form of an intrusive breccia containing comagmatic fragments of diorite, leucogabbro, melagabbro and ultramafics. Fragments of local wall rock schists are also common. The fragments range in size from less than 10 cm to 20 m. Most of the fragments are angular, but several show narrow reaction rims. This is especially common around ultramafic fragments. Layering can be seen in some of the gabbro fragments. The matrix of the breccia varies from melagabbroic to leucodioritic. The magmatic fragments are always more mafic than the local matrix in which they are situated.

There are six main nickel mines in the gabbro, all located in brecciated areas. Throughout the breccia the mineralization is connected to melagabbroic and ultramafic fragments mainly as a sulphide dissemination. Rich disseminations and locally massive ore have also been observed in more leucocratic gabbros. Nickel mineralization occurs over a 1,700 x 300 m zone following the inner portions of the gabbro breccia.

2005 FIELD WORK PHASE 1:

From July 23rd to July 27th, 2005, a 2 person crew composed of Yannick Beaudoin (FL International) and Rob Jones (FL International) completed geological reconnaissance (pre-airborne geophysics) throughout the previously unvisited (by Falconbridge) Skjaekerdalen project area. Map 1 indicates locations of completed field work. Sites of interest included old mine sites, minor workings and a southeastern extent to the rock unit of interest (previously mapped by Sulfidmalm). Field work consisted of traverses with the goals of: 1-finding previously known workings (18), 2-sampling any observed mineralization, and 3-getting familiar with the local geology and area.

Location



Map 1: Skjaekerdalen area: Red lines/circles indicate traverses. Blue line marks the approximate boundary of a national park.

LITHOLOGICAL SUMMARY

The composition of the Skjaerkerdalen intrusive complex varies from gabbroic (melano to normal gabbro) to dioritic. The country rock is strongly foliated schist consistent with Gula Schist metasediments.

In general, field observations only identified various gabbroic units with no direct observation of true diorite. Previous work done (Bjarne Lieungh report) included thin section work which more than likely identified diorite. The main breccia horizon was encountered as indicated towards the center of the complex. Various fragments (gabbro, melanogabbro, Gula metaseds and a fine grained diorite) were observed as fragments in a leucogabbro matrix. No true ultramafic was observed although melanograbbo was observed at almost every mineralized site.
Topographically, the intrusive complex coincides with the low ground while Gula Group metaseds are higher standing. The complex lies in a valley bordered by high standing Gule Group. The mineralization sites are isolated from each other by bog and swamp with very little outcropping of the gabbroic rocks in between. Field observations put most of the observed gossans along the same horizon form southwest to northeast. It is thus very conceivable that the areas in between showings host other, buried gossans.

To the southwest, two areas were previously mapped (Bjarne Lieugh, NGU) as being outliers of the Skjaekerdalen complex. A diorite/gabbro sequence was located further to the south (see RJ-1 traverse on map 1) but no unit seen on the YB-1 traverse (see map 1)

resembles rock types from that area. It is unclear what the previous mapping was based on. .

MINERLIZATION SUMMARY

Maps 2 and 3 below summarize the location and highest Ni values for the Skjaekerdalen project area. All sites within the Skjakerdalen project area have not previously been visited by Falconbridge geologists.

- Anomalous Ni values at the old Skjaekerdalen workings ranges from 0.38wt% to 2.65wt%.
- Ni tenure is an important consideration at Skjaekerdalen. Tenor range from 0.79 to 4.03. All low (<1) tenor values are from samples collected at one site (see samples SA68136-SA68139 on map 2 and map 3) within the composite gabbro-diorite host body. This location is the closest sample location to the Gula schist contact.

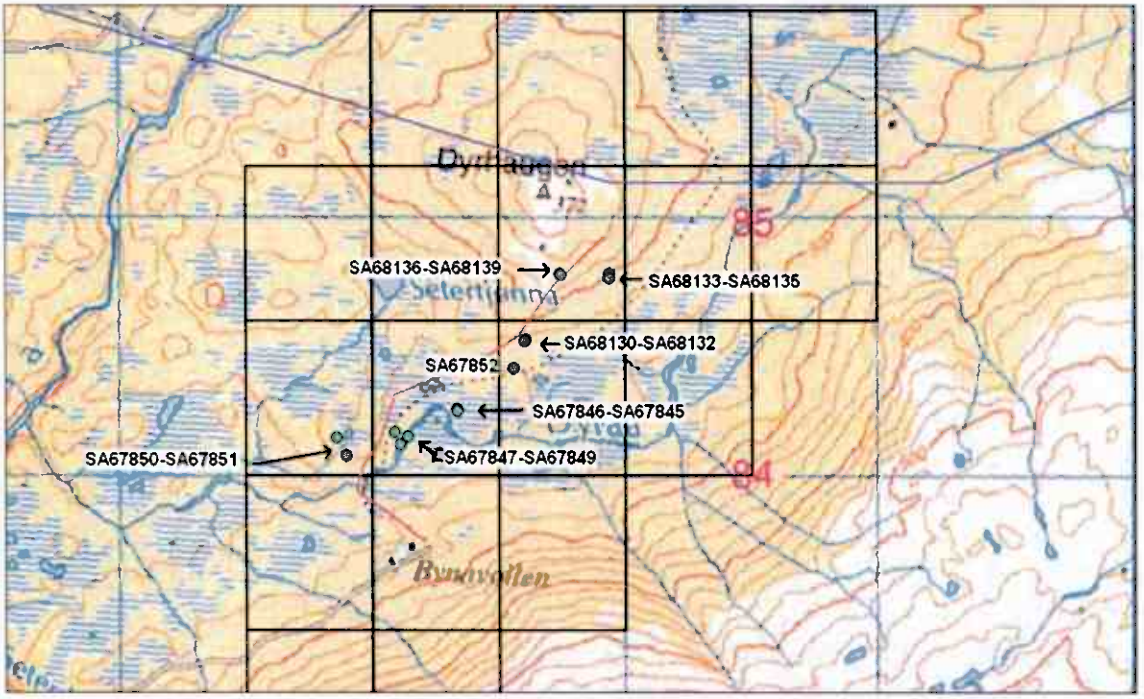
Lab ID	Sample_comments	tenor	Ni wt%	Cu wt%	Co wt%	S wt%	Pt ppm	Pd ppm	Au ppm	Ag ppm
SA67845	80% massive sulfide in gabbro	3.48	2.65	0.12	0.12	25.1	< 0.02	< 0.02	0.06	< 0.5
SA67846	semi massive sulfide in gabbro; ccp 3% s stringers. po is fine grain	3.86	1.38	0.19	0.07	11.8	< 0.02	< 0.02	0.02	0.8
SA67847	5% disseminated sulfide in gabbro	3.35	1.34	0.7	0.08	13.2	< 0.02	0.04	< 0.02	1
SA67848	25% sulfide in gabbro	3.26	0.67	0.11	0.06	6.78	< 0.02	< 0.02	0.02	< 0.5
SA67849	45% disseminated sulfide in gabbro	3.60	0.38	0.21	0.03	3.48	< 0.02	< 0.02	< 0.02	< 0.5
SA67850	1% disseminated in gabbro	3.89	0.38	0.14	0.04	3.22	< 0.02	< 0.02	< 0.02	< 0.5
SA67851	10-15% sulfide in gabbro	4.03	0.73	0.86	0.04	5.98	< 0.02	< 0.02	< 0.02	2.2
SA67852	1% disseminated in gabbro	1.39	0.09	0.08	< 0.02	2.14	< 0.02	< 0.02	< 0.02	< 0.5
SA68130	10% sulphide, almost net texture; in gabbro	3.62	0.43	0.7	0.02	3.92	< 0.02	< 0.02	0.02	1.9
SA68131	10% sulfide; almost net texture; in gabbro	3.98	1.28	0.29	0.04	10.6	< 0.02	< 0.02	0.02	1
SA68132	10% sulfide; almost net textured; in gabbro	3.78	1.26	0.44	0.06	11	< 0.02	< 0.02	0.02	1.2
SA68133	10-15% pseudo-net texture sulfide in melanogabbro	2.18	0.62	0.33	0.06	9.38	< 0.02	0.02	0.02	0.7
SA68134	8-10% sulfide in melanogabbro	1.61	0.48	0.69	0.06	9.84	< 0.02	< 0.02	< 0.02	1
SA68135	semi massive sulfide with melanogabbro fragments	2.04	0.86	0.14	0.09	13.9	< 0.02	< 0.02	0.06	< 0.5
SA68136	massive po in gabbro	0.84	0.77	0.18	0.15	30.4	< 0.02	0.02	< 0.02	1.3
SA68137	massive sulfide in gabbro	0.79	0.51	0.84	0.09	21.3	0.1	< 0.02	0.02	0.6

SA68138	massive sulfide in gabbro	0.87	0.83	0.24	0.13	31.5	< 0.02	0.02	0.02	0.6
SA68139	massive sulfide in gabbro	0.86	0.81	0.29	0.14	31.2	< 0.02	< 0.02	0.02	0.5
SA68140	minor sulfide in sheared diorite		< 0.05	< 0.05	< 0.02	1.12	< 0.02	< 0.02	< 0.02	< 0.5

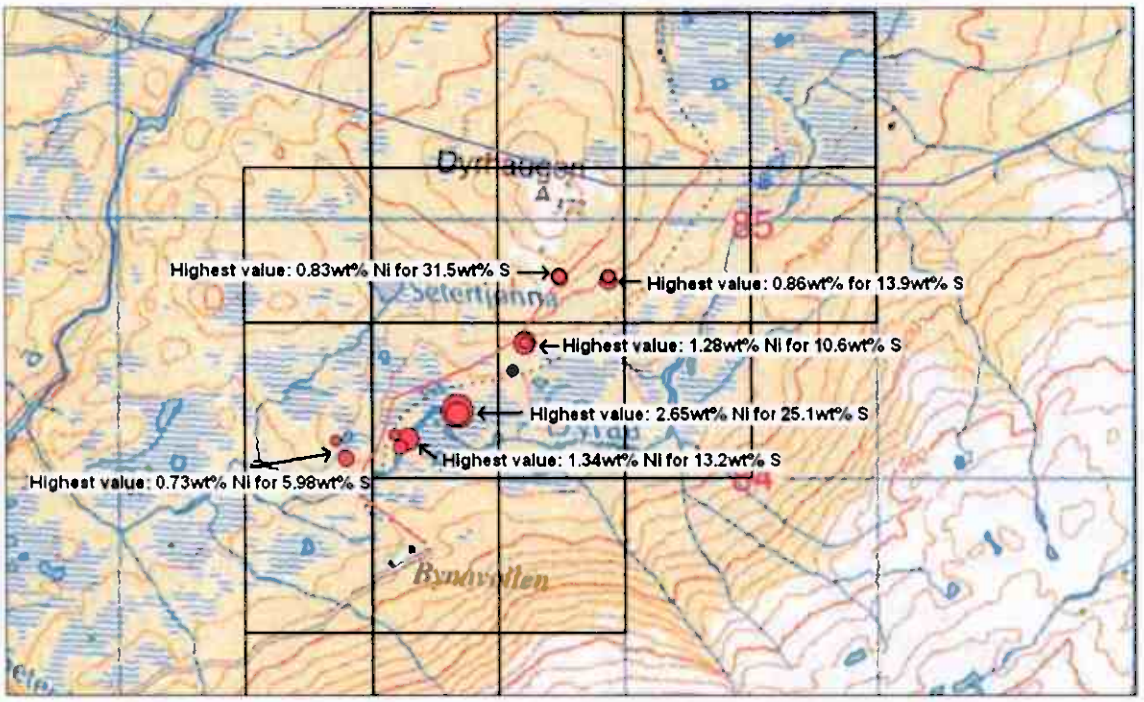
A number of old copper workings are also found in the Skjaekerdalen area. One of the bigger workings is the Malsa Gruver which had on/off operations from the 1870s to 1923. No information was available on total tonnage mined or grade. A smelter had been located within 1 km of the mines as slag was used for road building.

The site lies within strongly schistose Gula Group metasediments. Mineralization is VMS or SEDEX type with chalcopyrite stringers and disseminated to semi massive pyrite (marcasite). Silicification was observed in many samples looked at from the waste pile. 2 mineralized samples were taken (see table below).

Lab ID	Sample_comments	tenor	Ni wt%	Cu wt%	Co wt%	S wt%	Pt ppm	Pd ppm	Au ppm	Ag ppm
SA68142	80% ccp and py		< 0.05	1.83	0.03	20.7	< 0.02	< 0.02	0.08	6.7
SA68143	50% py and minor ccp		< 0.05	0.34	0.07	36	< 0.02	< 0.02	0.04	2.8



Map 2: Sample locations (light blue dots) within the area of old workings at Skjaekerdalen. Falconbridge preclaim outlines are also shown.



Map 3: assay results for Skjaekerdalen project area: Ni values indicated as graded red dots. Blue dots are samples that were <0.1wt% Ni. Highest Ni values are indicated for clusters of samples. Falconbridge preclaim outlines are also shown.

STRUCTURAL GEOLOGY SUMMARY

CULTURE SUMMARY

Only local, low tension lines were seen anywhere near the Skjakerdalen workings. A medium tension line was observed in the Vuku area.

GROUND GEOPHYSICS

In the winter season, ground geophysics should be manageable without the need for a base station. Tree coverage over the area of the old Skjakerdalen workings is sparse. Ground is boggy and tundra-like.

LOGISTICS

Ostenes Camping and Hytter:

Table 1: sample descriptions and assay results

Area	Topo sheet	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
Skjaekerdalen	Vuku	RJ	SA67845	assay	80% massive sulfide in gabbro	357336	7084260	2.65	0.12	0.12	25.1	< 0.02	< 0.02	0.06	< 0.5
Skjaekerdalen	Vuku	RJ	SA67846	assay	semi massive sulfide in gabbro; ccp 3% s stringers. po is fine grain	357336	7084254	1.38	0.19	0.07	11.8	< 0.02	< 0.02	0.02	0.8
Skjaekerdalen	Vuku	RJ	SA67847	assay	5% disseminated sulfide in gabbro	357140	7084150	1.34	0.7	0.08	13.2	< 0.02	0.04	< 0.02	1
Skjaekerdalen	Vuku	RJ	SA67848	assay	25% sulfide in gabbro	357108	7084123	0.67	0.11	0.06	6.78	< 0.02	< 0.02	0.02	< 0.5
Skjaekerdalen	Vuku	RJ	SA67849	assay	45% disseminated sulfide in gabbro	357089	7084171	0.38	0.21	0.03	3.48	< 0.02	< 0.02	< 0.02	< 0.5
Skjaekerdalen	Vuku	RJ	SA67850	assay	1% disseminated in gabbro	356856	7084149	0.38	0.14	0.04	3.22	< 0.02	< 0.02	< 0.02	< 0.5
Skjaekerdalen	Vuku	RJ	SA67851	assay	10-15% sulfide in gabbro	356896	7084079	0.73	0.86	0.04	5.98	< 0.02	< 0.02	< 0.02	2.2
Skjaekerdalen	Vuku	RJ	SA67852	assay	1% disseminated in gabbro	357558	7084417	0.09	0.08	< 0.02	2.14	< 0.02	< 0.02	< 0.02	< 0.5
Skjaekerdalen	Vuku	YB	SA68130	assay	10% sulphide, almost net texture; in gabbro	357605	7084526	0.43	0.7	0.02	3.92	< 0.02	< 0.02	0.02	1.9
Skjaekerdalen	Vuku	YB	SA68131	assay	10% sulfide; almost net texture; in gabbro	357605	7084526	1.28	0.29	0.04	10.6	< 0.02	< 0.02	0.02	1
Skjaekerdalen	Vuku	YB	SA68132	assay	10% sulfide; almost net textured; in gabbro	357601	7084523	1.26	0.44	0.06	11	< 0.02	< 0.02	0.02	1.2
Skjaekerdalen	Vuku	YB	SA68133	assay	10-15% pseudo-net texture sulfide in melanogabbro	357937	7084782	0.62	0.33	0.06	9.38	< 0.02	0.02	0.02	0.7
Skjaekerdalen	Vuku	YB	SA68134	assay	8-10% sulfide in melanogabbro	357937	7084782	0.48	0.69	0.06	9.84	< 0.02	< 0.02	< 0.02	1
Skjaekerdalen	Vuku	YB	SA68135	assay	semi massive sulfide with melanogabbro fragments	357937	7084767	0.86	0.14	0.09	13.9	< 0.02	< 0.02	0.06	< 0.5
Skjaekerdalen	Vuku	YB	SA68136	assay	massive po in gabbro	357741	7084785	0.77	0.18	0.15	30.4	< 0.02	0.02	< 0.02	1.3
Skjaekerdalen	Vuku	YB	SA68137	assay	massive sulfide in gabbro	357741	7084785	0.51	0.84	0.09	21.3	0.1	< 0.02	0.02	0.6
Skjaekerdalen	Vuku	YB	SA68138	assay	massive sulfide in gabbro	357743	7084779	0.83	0.24	0.13	31.5	< 0.02	0.02	0.02	0.6
Skjaekerdalen	Vuku	YB	SA68139	assay	massive sulfide in gabbro	357743	7084779	0.81	0.29	0.14	31.2	< 0.02	< 0.02	0.02	0.5
Skjaekerdalen	Vuku	YB	SA68140	assay	minor sulfide in sheared diorite	352463	7080373	< 0.05	< 0.05	< 0.02	1.12	< 0.02	< 0.02	< 0.02	< 0.5
Skjaekerdalen	Vuku	YB	SA68141	assay	STANDARD CRG-B			1.75	0.35	0.05	11	0.02	0.15	< 0.02	< 0.5
Skjaekerdalen	Vuku	YB	SA68142	assay	80% ccp and py	356238	7089568	< 0.05	1.83	0.03	20.7	< 0.02	< 0.02	0.08	6.7
Skjaekerdalen	Vuku	YB	SA68143	assay	50% py and minor ccp	356238	7089568	< 0.05	0.34	0.07	36	< 0.02	< 0.02	0.04	2.8

UTM ZONE 33N

APPENDIX:

DAILY REPORT SUMMARIES BY: Yannick Beaudoin and Rob Jones

A) Reports by Yannick Beaudoin:

1-Skjaekerdalen workings

10 main sites of old workings were sampled, photographed and GPS located. The most extensive working (Jensen mine?) consists of a number of vertical shafts (water and debris filled) along the Skjakerdalen river. Based on the general descriptions, Slipern's mine, Barbara Bachkes mine, Anton Bachkes mine, Archbold mine and Homans mine were located and sampled. Other pits and trenches throughout the area were also found and sampled. The associated MapInfo stations table for the Skjakerdalen area makes reference to numerous pictures taken at the various sites.

Geology: In general, field observations only identified various gabbroic units with no direct observation of true diorite. Previous work done (Bjarne Lieungh report) included thin section work which more than likely identified diorite. The main breccia horizon was encountered as indicated towards the center of the complex. PICT0947-0949 show this unit and the various fragments (gabbro, melanogabbro, Gula metaseds and a fine grained diorite) that are found in a leucogabbro matrix. No true ultramafic was observed although melanograbbo was observed at almost every mineralized site.

Setting: Topographically, the intrusive complex coincides with the low ground while Gula Group metaseds are higher standing. The complex lies in a valley bordered by high standing Gule Group. The mineralization sites are isolated from each other by bog and swamp with very little outcropping of the gabbroic rocks in between. Field observations put most of the observed gossans along the same horizon form southwest to northeast. It is thus very conceivable that the areas in between showings host other, buried gossans.

Mineralization: sampled mineralization ranges from 3-5% disseminated po and ccp to massive, coarse pyrrhotite with minor chalcopyrite, depending on the site. Pseudo-net texture sulfide is also very common. Massive sulfide is generally uncommon more than likely to the efficiency of hand picking related to the past mining. **Mineralized horizons all trend approximately 040 with variable dip direction.**

Recommendations: Geophysics is clearly the only approach that can provide an accurate evaluation of the area's potential. Since no known work has focused on the areas between mineralized sites, a UTEM survey (without necessarily having airborne geophysics done prior) would likely yield immediate targets for drilling. Tree cover in the immediate area of the old workings is sparse and consist of mainly pine with some deciduous varieties. **A winter UTEM program should not require a base station.**

2-Skjaekerdalen diorite/gabbro complex, southwest extent; Radtuva and Melaberget topo references; see YB-1 on 2005 Skjaekerdalen traverse layer

Rationale: investigate the previously mapped diorite unit inferred to be related to the Skjaekerdalen workings.

Geology: the entire area lies within a metasedimentary sequence (Gula Group?). Only one true dioritic outcrop was located, in a swamp in between the two peaks. It is unclear what relationship of this dioritic unit is with the metaseds as the outcrop was isolated. Based on field observations, it is not similar to the units seen in and around the Skjaekerdalen showings. The unit is strongly foliated.
The metased sequence is schistose with a general trend of 040. They are gossany throughout with small, local accumulations of pyrite. One site, in a shear, was sampled as it contained minor pyrrhotite and trace chalcopyrite. PICT0988-0989 represent the main metasedimentary unit.

A diorite/gabbro sequence was located by Rob Jones further to the south (see description below) but no unit seen on the YB-1 traverse resembles rock types from that area. It is unclear what the previous mapping was based on. .

3- Malsa mine area; Vuku topo sheet reference; see YB-2 on 2005 Skjaekerdalen traverse layer

A number of old copper workings are also found in the Skjaekerdalen area. One of the bigger workings is the Malsa Gruver which had on/off operations from the 1870s to 1923. No information was available on total tonnage mined or grade. A smelter had been located within 1 km of the mines as slag was used for road building.

The site lies within strongly schistose Gula Group metasediments. Mineralization is VMS or SEDEX type with chalcopyrite stringers and disseminated to semi massive pyrite (marcasite). Silicification was observed in many samples looked at from the waste pile. 2 mineralized samples were taken. PICT1023-1025 represent one of many individual trenches, pits and shafts in the area.

B) Reports by Rob Jones:

RJ-1 on the 2005 Skjaekerdalen traverse layer
Area: Skjaekerdalen
Location: Raudkolla.
Purpose: Find diorite from old working and prospect.
Culture: None.
Access: Suspension bridge and logging road up eastern side of creek.
Sulfides found: None
Samples: None
Rock types: *Diorite:* This unit does not look similar to rocks found at the Skjaekerdalen mine area. Whole rock geochem may be useful to determine if there is a relationship other then spatial with these two units. Throughout the diorite its colour does change from more leucocratic to normal and the weathered surface is pitted to the north. The northern contact was not reach. Fragments of the sediments are found as rafts within the diorite ranging in size from cm to 10m scale. This unit is not foliated overall, but locally the foliation is present and is in many different orientations. At no location was this unit magnetic.
Sediments: Are fine grain and striking to the north east and dipping to the south east near 50 degrees. There are minor gossans with trace sulphide. The rocks are not magnetic. Fragments of these sediments are found in the diorite. Small diorite dykes cut sediments close to the contact.

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APPENDIX B

SGS Lakefield Research Limited
P.O. Box 4300 - 185 Concession St.
Lakefield - Ontario - K0L 2H0
Phone: 705-652-2038 FAX: 705-652-6441

Falconbridge Limited
Attn : Patti Tirschmann

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

Tuesday, September 26, 2006

Date Rec. : 01 September 2006
LR Report : **CA03072-SEP06**
Client Ref : PO# 306

CERTIFICATE OF ANALYSIS

Final Report

Sample ID	Ni %	Cu %	Co %	S %	Pt g/t	Pd g/t	Au g/t	Ag g/t
1: PG08010	< 0.05	< 0.05	< 0.02	0.27	0.02	< 0.02	0.03	< 0.5
2: PG08140	< 0.05	< 0.05	< 0.02	0.87	< 0.02	0.02	< 0.02	< 0.5
3: PG08141	< 0.05	< 0.05	< 0.02	0.24	< 0.02	< 0.02	< 0.02	1.1
4: PG08142	< 0.05	< 0.05	< 0.02	0.45	< 0.02	< 0.02	< 0.02	< 0.5
5: PG08143	< 0.05	0.42	< 0.02	21.7	0.03	0.02	0.05	8.7
6: PG08144	< 0.05	2.26	0.08	22.7	0.02	< 0.02	0.06	11.7
7: PG08145	< 0.05	6.45	0.09	21.9	0.02	< 0.02	0.09	30.3
8: PG08146	< 0.05	0.15	< 0.02	2.06	< 0.02	0.02	< 0.02	0.8
9: PG08147	< 0.05	< 0.05	< 0.02	26.6	0.06	0.05	0.06	0.9
10: PG08148	< 0.05	< 0.05	< 0.02	17.3	< 0.02	< 0.02	0.09	1.4
11: PG08149	1.72	0.38	0.05	10.2	0.07	0.16	< 0.02	< 0.5
12-STD: PTC-1A XRF	10.1	13.5	0.29	---	---	---	---	---
16-STD: nbm-1	---	---	---	0.29	---	---	---	---
17-STD: RTS-1	---	---	---	1.65	---	---	---	---
18-STD: RTS-2	---	---	---	18.5	---	---	---	---
19-STD: CZN-3	---	---	---	31.0	---	---	---	45.0
20-STD: WMS_1	---	---	---	---	1.87	1.18	0.29	---

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Minerals Services, Analytical

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