DETAILED LOG

Hole Number: ES2005-23 Units: METRIC

Project Name:	Norway - Espedalen	Primary Coordinates	Grid: UTM84-32N		Destination Coordinates	Grid: UTM:	
Project Number:	201	North:	6801339.30		North:	61.34	Collar Dip: -44.83
Location:	Surface	East:	535023.10		East:	9.65	Collar Az: 232.77
		Elev:	990.06		Elev:	990.06	Length: 61.30 (m)
Date Started:	Mar 30, 2005	Collar Survey:	Y	Plugged: N	Contractor:	Arctic Drilling A/S	Start Depth: 0.00 (m)
Date Completed:	Mar 31, 2005	Multishot Survey:	Y	Hole Size: TT46	Core Storage:	Strand Fjellstue	Final Depth: 61.30 (m)
Logged By:	Trevor Blair, Lars Weiershaeuser	Pulse EM Survey:	Y	Casing: Left in Hole, capped			

Comments: Purpose: Test centre of UTEM conductor on L11300E, 100m grid west of holes ES2004-08 (2.07% Ni, 1.20%Cu, 0.07%Co / 2.70m (56.30-59.00m)) and ES2005-22 (3.29%Ni, 1.52%Cu, 0.10%Co / 5.67m (29.35-35.02m)).

Result: Intersected cm scale sulphide veinlets (po-pn-cpy) within a mafic dyke, from 26.77m-27.27m (0.55m).

Assays: 2.28%Ni, 0.86%Cu, 0.06%Co / 0.50m (26.77-27.27m)

Borehole UTEM: in-hole response @ 27m. Correlates with intersected mineralization.

Sample Averages

Survey Data

Depth (m)	Azimuth Decimal	Dip Decimal	Test Type	Flag	Comments	Depth (m)	Azimuth Decimal	Dip Decimal	Test Type	Flag	Comments
0.00	232.77	-44.83	MShot	OK		5.00	232.77	-44.97	MShot	OK	
10.00	232.74	-45.03	MShot	OK		15.00	232.45	-45.18	MShot	OK	
20.00	232.34	-45.28	MShot	OK		25.00	232.45	-45.42	MShot	OK	
30.00	232.30	-45.65	MShot	OK		35.00	232.47	-45.85	MShot	OK	
40.00	232.33	-46.07	MShot	OK		45.00	232.58	-46.42	MShot	OK	
50.00	232.55	-46.83	MShot	OK		55.00	232.51	-47.20	MShot	OK	
59.00	232.70	-47.23	MShot	OK							

Detailed Lithology

From (m)	To (m)	Lithology	Assay Data: Sample Number	From (m)	To (m)	Length (m)	Ni%	Cu%	Co%
0	2.20	C, Casing							

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Detailed Lithology

From (m)	To (m)	Lithology
2.20	61.30	4s, Sausseritized/Tectonized Anorthosite

Fine-grained white to gray , non-magnetic, heterogeneous, foliated anorthosite. The rock is composed of plagioclase and alteration minerals (chlorite, hematite, minor fuchsite, ?sericite). The rock is intruded by fine-grained, dark gray to black, non-magnetic, moderately foliated, homogeneous mafic dykes (for intervals and contact relationships see minor units).
The lower contact is unknown, as the hole was shutdown.

The anorthosite is unmineralized

Alteration

21.00 - 25.00 :HM Hematite, ST Staining, W Weak

Structure

2.80 - 2.81 : S1 First Foliation, 60 Deg to CA
31.30 - 31.31 : S1 First Foliation, 50 Deg to CA
38.40 - 38.41 : S1 First Foliation, 70 Deg to CA
47.40 - 47.41 : S1 First Foliation, 60 Deg to CA

RQD

2.20 - 6.00 : 48.00 % RQD 100.00 % Core
6.00 - 9.00 : 84.00 % RQD 100.00 % Core
9.00 - 12.00 : 94.00 % RQD 100.00 % Core
12.00 - 15.00 : 86.00 % RQD 100.00 % Core
15.00 - 18.00 : 99.00 % RQD 100.00 % Core
18.00 - 21.00 : 99.00 % RQD 100.00 % Core
21.00 - 24.00 : 95.00 % RQD 100.00 % Core
24.00 - 27.00 : 91.00 % RQD 100.00 % Core
27.00 - 30.00 : 85.00 % RQD 100.00 % Core
30.00 - 33.00 : 94.00 % RQD 100.00 % Core
33.00 - 36.00 : 91.00 % RQD 100.00 % Core
36.00 - 39.00 : 90.00 % RQD 100.00 % Core
39.00 - 42.00 : 90.00 % RQD 100.00 % Core
42.00 - 45.00 : 89.00 % RQD 100.00 % Core
45.00 - 48.00 : 98.00 % RQD 100.00 % Core
48.00 - 51.00 : 87.00 % RQD 100.00 % Core
51.00 - 54.00 : 90.00 % RQD 100.00 % Core
54.00 - 57.00 : 98.00 % RQD 100.00 % Core
57.00 - 61.30 : 99.00 % RQD 100.00 % Core

Assay Data

Sample Number	From (m)	To (m)	Length (m)	Ni%	Cu%	Co%
PG03808	25.52	26.77	1.25	0.1700	0.0800	0.0100
PG03809	26.77	27.27	0.50	2.2800	0.8600	0.0600
PG03810	27.27	28.52	1.25	0.0250	0.0250	0.0100
PG03811	28.52	29.52	1.00	0.0700	0.0250	0.0100

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Detailed Lithology

From (m)	To (m)	Lithology
		MINOR INTERVALS: Minor Interval: 3.6 - 8.87 MD, Mafic Dike Fine-grained homogeneous dark gray to black mafic dyke. The upper contact is sharp at ~60 degrees tca, the lower contact is sharp at ~65 degrees tca. This dyke is unmineralized. Minor Interval: 25.45 - 27.27 MD, Mafic Dike This dyke/sill is composed of dark gray to black homogeneous fine grained non-magnetic rock. The upper contact is sharp at ~50 degrees tca. This unit is characterized by minor amounts of sulfide mineralization, consisting of ~8% po, ~1%cpy, and ~1%pn. The sulfides appear remobilized and occur in cm-scale veinlets over a ~50cm interval. The lower contact of this unit is sharp at 90 degrees tca. Mineralization 26.77 - 27.27 : Cpy Chalcopyrite, STR Stringers, 1% 26.77 - 27.27 : Pn Pentlandite, TR Trace, 1% 26.77 - 27.27 : Po Pyrrhotite, STR Stringers, 8% mm to cm scale remobilized veinlets Minor Interval: 41.3 - 41.9 MD, Mafic Dike Fine-grained homogeneous dark gray to black mafic dyke. The upper and lower contact is sharp but irregular. This dyke is unmineralized. Minor Interval: 51.85 - 60.04 MD, Mafic Dike Fine-grained homogeneous dark gray to black mafic dyke. The upper contact is sharp at ~60 degrees tca, the lower contact is sharp at ~65 degrees tca. This dyke is unmineralized.

Assay Data

Sample Number	From (m)	To (m)	Length (m)	Ni%	Cu%	Co%

Samples

Sample Number	From (m)	To (m)	Ni%	Cu%	Co%
Sample Type ASSAY					
PG03808	25.52	26.77	0.1700	0.0800	0.0100
PG03809	26.77	27.27	2.2800	0.8600	0.0600
PG03810	27.27	28.52	0.0250	0.0250	0.0100
PG03811	28.52	29.52	0.0700	0.0250	0.0100