

DETAILED LOG

Hole Number: ES08-147

Units: METRIC

Project Name: Norway - Espedalen	Primary Coordinates Grid: UTM84-32N	Destination Coordinates Grid: UTM:	Collar Dip: -80.90
Project Number: 201	North:	North: 0.00	Collar Az: 249.00
Location: Surface	East:	East: 4.51	Length: 66.91 (m)
	Elev:	Elev: 0.00	Start Depth: 0.00 (m)
Date Started: Apr 09, 2008	Collar Survey: N	Plugged: N	Contractor: Arctic Drilling A/S
Date Completed: Apr 11, 2008	Multishot Survey: N	Hole Size: BQ	Core Storage: Tyrstrand
Logged By: vbnor	Pulse EM Survey: N	Casing: Left in Hole	Final Depth: 66.91 (m)

Comments: This hole was designed to test the southern extension of UM hosted mineralization at 50m offset from hole 2004-05.

RESULTS:

18-29m: UM hosted 6%po, 0.75%pn, 0.25%cp interstitially.

29-34.5m: UM hosted series of faults, 3% po>>pn>cp. Mineralization difficult to see due to intense talc alteration.

34.5-66.9m: MD/ANOR

40.8-43.5m: ANOR hosted 10% remobilized sulphides, po>>pn>cp

EOH: 66.9m

Sample Averages

Detailed Lithology		Assay Data							
From (m)	To (m)	Lithology	Sample Number	From (m)	To (m)	Length (m)	Ni%	Cu%	Co%
0	13.50	CAS, Casing							
13.50	18.00	GAB, Gabbro Green, medium to coarse grained, non-magnetic, Gabbro. No sulphides, fairly broken. Plagioclase phenocrysts give mottled texture Lower contact sees a fining of grains for 0.50m from contact. Contact is sharp.. Structure 13.50 - 18.00 fairly broken, very little gouge.	BL00301	17.00	18.00	1.00	0.0330	0.0250	0.0050

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Detailed Lithology		Lithology	Assay Data						
From (m)	To (m)		Sample Number	From (m)	To (m)	Length (m)	Ni%	Cu%	Co%
18.00	29.00	UM, Ultramafic Black competent Ultra Mafic rock. 7% sulphides, ~6%po, 0.75%pn, 0.25%cp, in mottled interstitial texture. py coats some fracture surfaces. Moderately magnetic, moderate serpentine alteration. 25m: Rock becomes intensely talc altered, before breaking into a series of faults. Rock is still magnetic, but has very green tinge, and is very soft. 7% sulphides still present. Lower contact into series of small faults was decided on the first set of broken material, soft mineral infill and gouge. Faults are hosted in the intensely talc altered UM. Mineralization 18.00 - 29.00 : CP Chalcopyrite, DIS Disseminated, 0.25% 18.00 - 29.00 : PN Pentlandite, DIS Disseminated, 0.75% 18.00 - 29.00 : PO Pyrrhotite, DIS Disseminated, 6% 25.00 - 29.00 : PY Pyrite, FF Fracture Filling, 0.5% Alteration 25.00 - 29.00 :TL Talc, P Pervasive, S Strong Intense. 18.00 - 29.00 :SERP Serpentine, Dis Disseminated, M Moderate 18.00 - 29.00 :MAG Magnetite, Dis Disseminated, M Moderate 18.00 - 25.00 :TL Talc, F Fracture Controlled, W Weak	BL00302	18.00	19.00	1.00	0.2300	0.0870	0.0200
			BL00303	19.00	20.00	1.00	0.2090	0.0850	0.0190
			BL00304	20.00	21.00	1.00	0.3100	0.0850	0.0270
			BL00305	21.00	22.00	1.00	0.3480	0.1020	0.0290
			BL00306	22.00	23.00	1.00	0.3180	0.0730	0.0280
			BL00307	23.00	24.00	1.00	0.1980	0.0550	0.0180
			BL00308	24.00	25.00	1.00	0.2690	0.0700	0.0240
			BL00309	25.00	26.00	1.00	0.2010	0.0820	0.0170
			BL00310	26.00	27.00	1.00	0.2400	0.2390	0.0200
			BL00311	27.00	28.00	1.00	0.2160	0.0710	0.0180
			BL00312	28.00	29.00	1.00	0.2150	0.0750	0.0180
29.00	34.50	FLT, Fault Series of intensely talc altered UM hosted faults. Faults are 0.05-0.3m in length, and comprise 40% of the unit. Gouge and soft mineral infill present in each fault. 3% sulphides. Lower contact is sharp. Mineralization 29.00 - 34.50 : POPNCP Pyrrhotite/Pentlandite/Chalcopyrite, DIS Disseminated, 3% also smeared on fracture surfaces. Alteration 29.00 - 34.50 :CHL Chlorite, Dis Disseminated, M Moderate ? 29.00 - 34.50 :TL Talc, P Pervasive, S Strong Intense Structure 29.00 - 29.10 29.60 - 29.70 29.60 - 29.70 31.70 - 32.00 31.70 - 32.00 34.00 - 34.30 34.00 - 34.30	BL00313	29.00	30.00	1.00	0.1530	0.0760	0.0140
			BL00314	30.00	31.00	1.00	0.1470	0.1070	0.0140
			BL00315	31.00	32.00	1.00	0.1370	0.1010	0.0120
			BL00316	32.00	33.00	1.00	0.1380	0.0700	0.0130
			BL00317	33.00	34.50	1.50	0.1760	0.1370	0.0160

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Detailed Lithology		Lithology	Assay Data						
From (m)	To (m)		Sample Number	From (m)	To (m)	Length (m)	Ni%	Cu%	Co%
34.50	66.90	MD, Mafic Dike Green, aphanitic to fine grained, non-magnetic, Mafic Dyke. Section of sulphides described below. 0.5% subhedral to euhedral py on fracture surfaces, competent. Fine banding at 80-90 degrees to LCA. Upper and lower contact are sharp. 40.8-43.5m: 10% remobilized interstitial po>>pn>cp. Mineralization 34.50 - 60.00 : PY Pyrite, FF Fracture Filling, 0.5% sub-euhedral py grains on some fractures. 40.80 - 43.50 : POPNCP Pyrrhotite/Pentlandite/Chalcopyrite, INT Interstitial, 10% Structure 59.00 - 63.00 broken core MINOR INTERVALS: Minor Interval: 38.65 - 42.75 ANOR, Anorthosite Fine to medium grained grey-white and minor green Anorthosite. Non magnetic, sericite, epidote, talc and chlorite alteration seen in mottled texture and disseminated. Several green mafic dykes throughout section. Generally competent. Minor Interval: 63 - 66.9 ANOR, Anorthosite as described above. Broken. Structure 63.00 - 66.90 broken, average piece 15cm, no gouge, quite brittle	BL00318	41.75	42.75	1.00	0.0060	0.0090	0.0005
			BL00321	42.75	43.50	0.75	0.4570	0.2270	0.0390
			BL00322	43.50	44.50	1.00	0.0020	0.0110	0.0030
66.90	66.91	EOH, End of Hole							

Samples

Sample Number	From (m)	To (m)	Ni%	Cu%	Co%
Sample Type	ASSAY				
BL00301	17.00	18.00	0.0330	0.0250	0.0050
BL00302	18.00	19.00	0.2300	0.0870	0.0200
BL00303	19.00	20.00	0.2090	0.0850	0.0190
BL00304	20.00	21.00	0.3100	0.0850	0.0270
BL00305	21.00	22.00	0.3480	0.1020	0.0290
BL00306	22.00	23.00	0.3180	0.0730	0.0280
BL00307	23.00	24.00	0.1980	0.0550	0.0180
BL00308	24.00	25.00	0.2690	0.0700	0.0240
BL00309	25.00	26.00	0.2010	0.0820	0.0170

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Samples

Sample Number	From (m)	To (m)	Ni%	Cu%	Co%
Sample Type	ASSAY				
BL00310	26.00	27.00	0.2400	0.2390	0.0200
BL00311	27.00	28.00	0.2160	0.0710	0.0180
BL00312	28.00	29.00	0.2150	0.0750	0.0180
BL00313	29.00	30.00	0.1530	0.0760	0.0140
BL00314	30.00	31.00	0.1470	0.1070	0.0140
BL00315	31.00	32.00	0.1370	0.1010	0.0120
BL00316	32.00	33.00	0.1380	0.0700	0.0130
BL00317	33.00	34.50	0.1760	0.1370	0.0160
BL00318	41.75	42.75	0.0060	0.0090	0.0005
BL00321	42.75	43.50	0.4570	0.2270	0.0390
BL00322	43.50	44.50	0.0020	0.0110	0.0030