

## DETAILED LOG

Hole Number: ES08-146

Units: METRIC

Project Name: Norway - Espedalen	Primary Coordinates Grid: UTM84-32N	Destination Coordinates Grid: UTM:	Collar Dip: -80.00
Project Number: 201	North:	North: 0.00	Collar Az: 235.00
Location: Surface	East:	East: 4.51	Length: 92.51 (m)
	Elev:	Elev: 0.00	Start Depth: 0.00 (m)
Date Started: Apr 08, 2008	Collar Survey: N	Plugged: N	Contractor: Arctic Drilling A/S
Date Completed: Apr 09, 2008	Multishot Survey: N	Hole Size: BQ	Core Storage: Tyrstrand
Logged By: vbnor	Pulse EM Survey: N	Casing: Pulled	Final Depth: 92.51 (m)

Comments: This hole was designed to test the southern extension of ultra mafic hosted sulphides, at a 50m offset from hole ES08-144.

## RESULTS:

13.4-62.0m: Ultra mafic: Average 6% sulphides, range: 2-10%. Sulphides: po>>pn>cp.

62-92.5m: MD/ANOR , no sulphides.

92.5m: EOH

## Sample Averages

Detailed Lithology		Assay Data							
From (m)	To (m)	Lithology	Sample Number	From (m)	To (m)	Length (m)	Ni%	Cu%	Co%
0	13.40	CAS, Casing							

Hole Number: ES08-146

Units: METRIC

Detailed Lithology		Lithology	Assay Data						
From (m)	To (m)		Sample Number	From (m)	To (m)	Length (m)	Ni%	Cu%	Co%
13.40	62.00	UM, Ultramafic	BL00263	13.40	15.00	1.60	0.0530	0.0260	0.0070
		Black, fairly competent Ultra Mafic rock. Disseminated and coarse grained sulphides vary from 2-5% within unit. Moderate to intense talc dissemination and veining. Weak to moderate magnetism and serpentine alteration, highly variable over unit. Intermittent weak coarse grained biotite alteration. Several green mafic dykes within unit, as well as regions where UM is so talc altered, it is difficult to recognise..	BL00265	15.00	16.50	1.50	0.1590	0.0700	0.0130
		Mineralization	BL00266	16.50	18.00	1.50	0.3650	0.2450	0.0270
		58.85 - 62.00 : CP Chalcopyrite, DIS Disseminated, 0.3% on edges on grains and in stringers.	BL00267	18.00	19.50	1.50	0.0810	0.0210	0.0130
		58.85 - 62.00 : PN Pentlandite, DIS Disseminated, 0.7% within po	BL00268	19.50	21.00	1.50	0.1140	0.0460	0.0150
		58.85 - 62.00 : PO Pyrrhotite, F Fracture Controlled, 5% and disseminated, and remobilized in stringers	BL00269	21.00	22.50	1.50	0.0650	0.0330	0.0120
		51.30 - 56.70 : CP Chalcopyrite, DIS Disseminated, 0.2% difficult to see, very altered	BL00271	22.50	24.00	1.50	0.0430	0.0080	0.0080
		51.30 - 56.70 : PN Pentlandite, DIS Disseminated, 0.3% difficult to see, very altered	BL00272	24.00	25.50	1.50	0.1860	0.0560	0.0170
		51.30 - 56.70 : PO Pyrrhotite, STR Stringers, 7.5% and disseminated	BL00273	25.50	27.00	1.50	0.2070	0.0370	0.0190
		46.35 - 48.60 : CP Chalcopyrite, DIS Disseminated, 0.3% on edges of po grains	BL00274	27.00	28.50	1.50	0.2570	0.0710	0.0220
		46.35 - 48.60 : PN Pentlandite, DIS Disseminated, 0.7% within po grains	BL00275	28.50	30.00	1.50	0.3200	0.1680	0.0260
		46.35 - 48.60 : PO Pyrrhotite, DIS Disseminated, 9% and in stringers, grains <2mm	BL00276	30.00	31.50	1.50	0.2380	0.1140	0.0180
		37.00 - 43.10 : CP Chalcopyrite, DIS Disseminated, 0.3% on edges of po grains	BL00277	31.50	33.00	1.50	0.2710	0.2150	0.0190
		37.00 - 43.10 : PN Pentlandite, DIS Disseminated, 0.7% within po grains	BL00278	33.00	34.00	1.00	0.2650	0.2070	0.0210
		37.00 - 43.10 : PO Pyrrhotite, DIS Disseminated, 6% and in stringers, grains <2mm	BL00279	34.00	35.00	1.00	0.2270	0.0900	0.0180
		35.00 - 37.00 : POPNCP Pyrrhotite/Pentlandite/Chalcopyrite, DIS Disseminated, 0.05% trace, intense talc alteration	BL00281	35.00	37.00	2.00	0.0190	0.0140	0.0040
		24.50 - 35.00 : CP Chalcopyrite, STR Stringers, 0.3% on edges of po grains	BL00282	37.00	38.50	1.50	0.1220	0.0560	0.0130
		24.50 - 35.00 : PN Pentlandite, DIS Disseminated, 0.7% within po grains	BL00283	38.50	40.00	1.50	0.1540	0.0720	0.0150
		24.50 - 35.00 : PO Pyrrhotite, DIS Disseminated, 6% and in stringers, grains <2mm	BL00284	40.00	41.50	1.50	0.1980	0.1360	0.0180
		17.00 - 24.50 : POPNCP Pyrrhotite/Pentlandite/Chalcopyrite, DIS Disseminated, 3%	BL00285	41.50	43.00	1.50	0.1380	0.0880	0.0130
		16.00 - 17.00 : PN Pentlandite, DIS Disseminated, 0.8% within po stringers	BL00286	43.00	44.50	1.50	0.0160	0.0220	0.0030
		16.00 - 17.00 : CP Chalcopyrite, DIS Disseminated, 0.2%	BL00287	44.50	46.35	1.85	0.0350	0.0370	0.0050
			BL00288	46.35	47.50	1.15	0.3000	0.0810	0.0270
			BL00289	47.50	48.60	1.10	0.2350	0.0740	0.0210
			BL00290	48.60	50.00	1.40	0.0020	0.0110	0.0030
			BL00291	50.00	51.30	1.30	0.0190	0.0300	0.0040
			BL00292	51.30	53.00	1.70	0.3510	0.1140	0.0300
			BL00293	53.00	54.50	1.50	0.3220	0.1240	0.0280
			BL00294	54.50	56.00	1.50	0.2870	0.0810	0.0260
			BL00295	56.00	57.50	1.50	0.1260	0.0440	0.0120
			BL00296	57.50	59.00	1.50	0.0510	0.0330	0.0050
			BL00297	59.00	60.50	1.50	0.1560	0.0570	0.0180
			BL00298	60.50	62.00	1.50	0.2090	0.0620	0.0240



Hole Number: ES08-146

Units: METRIC

Detailed Lithology		Lithology	Assay Data						
From (m)	To (m)		Sample Number	From (m)	To (m)	Length (m)	Ni%	Cu%	Co%
62.00	92.50	MD, Mafic Dike Green, aphanitic to fine grained, non-magnetic, Mafic Dyke. Trace sulphides, competent. Fine banding at 80-90 degrees to LCA. Upper contact is sharp, with small <0.5cm veins of mafic minerals within 15 cm of contact..  71-75m: 0.5% py infilling fractures. Alteration 84.50 - 92.50 :BIO Biotite, Dis Disseminated, M Moderate coarse grained. MINOR INTERVALS: Minor Interval: 66.2 - 70.7 ANOR, Anorthosite Fine to medium grained, well foliated at 80-90 degrees to LCA, grey-white and minor green Anorthosite. Non magnetic, sericite, epidote, talc and chlorite alteration seen in banding and disseminated. Several green mafic dykes throughout section. No sulphides. Generally competent. Minor Interval: 76.45 - 84.4 ANOR, Anorthosite As described above.	BL00299	62.00	63.50	1.50	0.0510	0.0230	0.0080
92.50	92.51	EOH, End of Hole							

## Samples

Sample Number	From (m)	To (m)	Ni%	Cu%	Co%
Sample Type	ASSAY				
BL00263	13.40	15.00	0.0530	0.0260	0.0070
BL00265	15.00	16.50	0.1590	0.0700	0.0130
BL00266	16.50	18.00	0.3650	0.2450	0.0270
BL00267	18.00	19.50	0.0810	0.0210	0.0130
BL00268	19.50	21.00	0.1140	0.0460	0.0150
BL00269	21.00	22.50	0.0650	0.0330	0.0120
BL00271	22.50	24.00	0.0430	0.0080	0.0080
BL00272	24.00	25.50	0.1860	0.0560	0.0170
BL00273	25.50	27.00	0.2070	0.0370	0.0190
BL00274	27.00	28.50	0.2570	0.0710	0.0220
BL00275	28.50	30.00	0.3200	0.1680	0.0260
BL00276	30.00	31.50	0.2380	0.1140	0.0180
BL00277	31.50	33.00	0.2710	0.2150	0.0190
BL00278	33.00	34.00	0.2650	0.2070	0.0210
BL00279	34.00	35.00	0.2270	0.0900	0.0180
BL00281	35.00	37.00	0.0190	0.0140	0.0040
BL00282	37.00	38.50	0.1220	0.0560	0.0130

Hole Number: ES08-146

Units: METRIC

## Samples

Sample Number	From (m)	To (m)	Ni%	Cu%	Co%
Sample Type	ASSAY				
BL00283	38.50	40.00	0.1540	0.0720	0.0150
BL00284	40.00	41.50	0.1980	0.1360	0.0180
BL00285	41.50	43.00	0.1380	0.0880	0.0130
BL00286	43.00	44.50	0.0160	0.0220	0.0030
BL00287	44.50	46.35	0.0350	0.0370	0.0050
BL00288	46.35	47.50	0.3000	0.0810	0.0270
BL00289	47.50	48.60	0.2350	0.0740	0.0210
BL00290	48.60	50.00	0.0020	0.0110	0.0030
BL00291	50.00	51.30	0.0190	0.0300	0.0040
BL00292	51.30	53.00	0.3510	0.1140	0.0300
BL00293	53.00	54.50	0.3220	0.1240	0.0280
BL00294	54.50	56.00	0.2870	0.0810	0.0260
BL00295	56.00	57.50	0.1260	0.0440	0.0120
BL00296	57.50	59.00	0.0510	0.0330	0.0050
BL00297	59.00	60.50	0.1560	0.0570	0.0180
BL00298	60.50	62.00	0.2090	0.0620	0.0240
BL00299	62.00	63.50	0.0510	0.0230	0.0080