

DETAILED LOG

Hole Number: ER2006-12

Units: METRIC

Project Name: Norway - South Norway	Primary Coordinates Grid: UTM84-32N	Destination Coordinates Grid: UTM:	Collar Dip: -56.10
Project Number: 203	North: 6659839.70	North: 60.07	Collar Az: 56.50
Location: Ertelia	East: 557875.70	East: 10.04	Length: 244.50 (m)
	Elev: 199.00	Elev: 199.00	Start Depth: 0.00 (m)
Date Started: Sep 12, 2006	Collar Survey: N	Plugged: N	Contractor: Arctic Drilling A/S
Date Completed: Sep 22, 2006	Multishot Survey: N	Hole Size: TT46	Final Depth: 244.50 (m)
Logged By: larsw, blairt	Pulse EM Survey: N	Casing: Left in Hole, capped	Core Storage:

Comments:

Sample Averages

Survey Data

Depth (m)	Azimuth Decimal	Dip Decimal	Test Type	Flag	Comments	Depth (m)	Azimuth Decimal	Dip Decimal	Test Type	Flag	Comments
10.00	56.50	-56.10	EZ	OK		25.00	56.80	-55.70	EZ	OK	
50.00	57.30	-55.60	EZ	OK		100.00	58.60	-55.30	EZ	OK	

Detailed Lithology		Assay Data							
From (m)	To (m)	Lithology	Sample Number	From (m)	To (m)	Length (m)	Ni%	Cu%	Co%
0	1.20	C, Casing							
1.20	17.13	7, Undivided Mafic Intrusive This unit consists of a fine- to medium-grained dark gray to greenish-gray, non-magnetic, non-foliated, on a meter-scale homogenous, pyroxene and plagioclase-bearing rock. Except for trace amounts of disseminated sulfides, this unit is not mineralized. Structure 17.13 - 17.13 : LC Lower Contact, 50 Deg to CA sharp RQD 1.20 - 3.00 : 52.00 % RQD 100.00 % Core 3.00 - 6.00 : 82.00 % RQD 100.00 % Core 6.00 - 9.00 : 97.00 % RQD 100.00 % Core 9.00 - 12.00 : 73.00 % RQD 100.00 % Core 12.00 - 15.00 : 76.00 % RQD 100.00 % Core 15.00 - 18.00 : 87.00 % RQD 100.00 % Core							

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From (m)	To (m)	Lithology	Sample Number	From (m)	To (m)	Length (m)	Ni%	Cu%	Co%
17.13	38.31	4, Anorthosite / Anorthosite Gabbro Very coarse-grained, plagioclase, quartz, and biotite-bearing pegmatitic unit. The rock is not foliated, mineralized, or magnetic. Structure 22.25 - 22.42 : F Fractured, 50 Deg to CA broken core 38.31 - 38.31 : LC Lower Contact, 50 Deg to CA sharp RQD 18.00 - 21.00 : 54.00 % RQD 100.00 % Core 21.00 - 24.00 : 55.00 % RQD 100.00 % Core 24.00 - 27.00 : 94.00 % RQD 100.00 % Core 27.00 - 30.00 : 87.00 % RQD 100.00 % Core 30.00 - 33.00 : 78.00 % RQD 100.00 % Core 33.00 - 36.00 : 51.00 % RQD 100.00 % Core 36.00 - 39.00 : 72.00 % RQD 100.00 % Core							

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From (m)	To (m)	Lithology	Sample Number	From (m)	To (m)	Length (m)	Ni%	Cu%	Co%
38.31	83.34	7, Undivided Mafic Intrusive This unit consists of a fine- to medium-grained dark gray to greenish-gray, non-magnetic, non-foliated, on a meter-scale homogenous, pyroxene and plagioclase-bearing rock. This unit is medium- to coarse-grained within the first ~3m of the hanging wall. 43.47 - 44.16m: anorthositic pegmatite Except for trace amounts of disseminated sulfides, this unit is not mineralized. Structure 42.60 - 42.90 : S Schistose, 50 Deg to CA some broken core 59.50 - 59.80 : S Schistose, 30 Deg to CA serpentized, minor chlorite 62.10 - 62.28 : S Schistose, 50 Deg to CA chlorite along sides, serpentine in center 64.61 - 64.77 : S Schistose, 25 Deg to CA chlorite, serpentized 79.32 - 79.41 : S Schistose, 30 Deg to CA chlorite, serpentized 83.34 - 83.34 : LC Lower Contact, 20 Deg to CA sharp RQD 39.00 - 42.00 : 70.00 % RQD 100.00 % Core 42.00 - 45.00 : 43.00 % RQD 100.00 % Core 45.00 - 48.00 : 95.00 % RQD 100.00 % Core 48.00 - 51.00 : 90.00 % RQD 100.00 % Core 51.00 - 54.00 : 85.00 % RQD 100.00 % Core 54.00 - 57.00 : 83.00 % RQD 100.00 % Core 57.00 - 60.00 : 91.00 % RQD 100.00 % Core 60.00 - 63.00 : 76.00 % RQD 100.00 % Core 63.00 - 66.00 : 91.00 % RQD 100.00 % Core 66.00 - 69.00 : 88.00 % RQD 100.00 % Core 69.00 - 72.00 : 76.00 % RQD 100.00 % Core 72.00 - 75.00 : 91.00 % RQD 100.00 % Core 75.00 - 78.00 : 91.00 % RQD 100.00 % Core 78.00 - 81.00 : 73.00 % RQD 100.00 % Core 81.00 - 84.00 : 80.00 % RQD 100.00 % Core							

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From (m)	To (m)	Lithology	Sample Number	From (m)	To (m)	Length (m)	Ni%	Cu%	Co%
83.34	89.30	4, Anorthosite / Anorthosite Gabbro Very coarse-grained, plagioclase, quartz, and biotite-bearing pegmatitic unit. The rock is not foliated, mineralized, or magnetic. RQD 84.00 - 87.00 : 77.00 % RQD 100.00 % Core 87.00 - 90.00 : 77.00 % RQD 100.00 % Core							

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Detailed Lithology		Lithology	Assay Data						
From (m)	To (m)		Sample Number	From (m)	To (m)	Length (m)	Ni%	Cu%	Co%
89.30	213.70	7, Undivided Mafic Intrusive	PG04712	175.60	177.10	1.50	0.0800	0.1300	0.0100
		This unit consists of a fine- to medium-grained dark gray to greenish-gray, non-magnetic, non-foliated, on a meter-scale homogenous, pyroxene and plagioclase-bearing rock.	PG04713	177.10	177.40	0.30	0.6500	0.8500	0.0500
		This unit is cut by numerous serpentinized faults and shears, commonly at 10 - 20 degrees tca.	PG04714	177.40	178.60	1.20	0.0500	0.0700	0.0100
		93.0 - 94.65m and 98.0 - 98.6m broken core.							
		Starting at 154.8m: increasing amount of dark red garnet clusters, up to ~10% and slightly increased grain size of rock.							
		~193m - 213.70m (lower contact): Intermixed gabbro-norite (~80%) with assimilated? mafic gneiss (~20%). The unit appears fine to medium grained, weakly magnetic, dark grey, heterogenous unit composed of dm scale horizons appearing siliceous and garnet-bearing (weakly foliated). Contact relationships are difficult to ascertain as the unit is highly broken as well as the assimilated nature.							
		The lower contact of this unit was determined as there are no discernible gabbro-norite downhole of this depth.							
		Mineralization							
		177.10 - 177.40 : Cpy Chalcopyrite, TR Trace, 0.5%							
		177.10 - 177.40 : Po Pyrrhotite, STR Stringers, 5%							
		177.10 - 177.40 : Py Pyrite, STR Stringers, 5%							
		Structure							
		92.35 - 92.45 : S Schistose, 15 Deg to CA serp.							
		94.00 - 94.65 : S Schistose, 15 Deg to CA serp.							
		98.00 - 98.60 : S Schistose, 10 Deg to CA serp.							
		99.00 - 99.40 : S Schistose, 15 Deg to CA serp.							
		100.70 - 100.80 : S Schistose, 15 Deg to CA serp.							
		102.60 - 102.77 : S Schistose, 15 Deg to CA serp.							
		103.82 - 104.50 : S Schistose, 10 Deg to CA serp.							
		106.00 - 106.30 : S Schistose, 10 Deg to CA serp.							
		106.70 - 106.90 : S Schistose, 15 Deg to CA serp.							
		111.00 - 111.20 : S Schistose, 20 Deg to CA broken core							

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Detailed Lithology		Assay Data							
From (m)	To (m)	Lithology	Sample Number	From (m)	To (m)	Length (m)	Ni%	Cu%	Co%
		Structure							
		113.00 - 114.47 : S Schistose, 20 Deg to CA broken core							
		116.14 - 116.50 : S Schistose, 10 Deg to CA serp.							
		118.10 - 118.70 : S Schistose, 0 Deg to CA broken core, serp., parallel to core, terminated in 50 degrees tca shears at either end							
		146.26 - 146.40 : S Schistose, 30 Deg to CA serp.							
		148.55 - 148.70 : S Schistose, 20 Deg to CA serp.							
		151.05 - 151.31 : S Schistose, 45 Deg to CA serp.							
		158.40 - 161.00 : F Fractured, 45 Deg to CA broken core							
		162.50 - 164.40 : F Fractured, 25 Deg to CA Broken core, ending on fault gouge at 25 tca.							
		176.80 - 177.10 : S Schistose, 15 Deg to CA Low angle serpentine veinlets (10-15 ca) resulting in broken core							
		RQD							
		90.00 - 93.00 : 20.00 % RQD 100.00 % Core							
		93.00 - 96.00 : 47.00 % RQD 100.00 % Core							
		96.00 - 99.00 : 51.00 % RQD 100.00 % Core							
		99.00 - 102.00 : 40.00 % RQD 100.00 % Core							
		102.00 - 105.00 : 55.00 % RQD 100.00 % Core							
		105.00 - 108.00 : 76.00 % RQD 100.00 % Core							
		108.00 - 111.00 : 88.00 % RQD 100.00 % Core							
		111.00 - 114.00 : 38.00 % RQD 100.00 % Core							
		114.00 - 117.00 : 40.00 % RQD 100.00 % Core							
		117.00 - 120.00 : 37.00 % RQD 100.00 % Core							
		120.00 - 123.00 : 33.00 % RQD 100.00 % Core							
		123.00 - 126.00 : 49.00 % RQD 100.00 % Core							
		126.00 - 129.00 : 74.00 % RQD 100.00 % Core							
		129.00 - 132.00 : 49.00 % RQD 100.00 % Core							
		132.00 - 135.00 : 68.00 % RQD 100.00 % Core							
		135.00 - 138.00 : 73.00 % RQD 100.00 % Core							
		138.00 - 141.00 : 40.00 % RQD 100.00 % Core							
		141.00 - 144.00 : 52.00 % RQD 100.00 % Core							
		144.00 - 147.00 : 51.00 % RQD 100.00 % Core							
		147.00 - 150.00 : 88.00 % RQD 100.00 % Core							
		150.00 - 153.00 : 57.00 % RQD 100.00 % Core							

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Detailed Lithology		Assay Data							
From (m)	To (m)	Lithology	Sample Number	From (m)	To (m)	Length (m)	Ni%	Cu%	Co%
		RQD							
		153.00 - 156.00 : 66.00 % RQD 100.00 % Core							
		156.00 - 159.00 : 44.00 % RQD 100.00 % Core							
		159.00 - 162.00 : 13.00 % RQD 100.00 % Core							
		162.00 - 165.00 : 32.00 % RQD 100.00 % Core							
		165.00 - 168.00 : 75.00 % RQD 100.00 % Core							
		168.00 - 171.00 : 92.00 % RQD 100.00 % Core							
		171.00 - 174.00 : 78.00 % RQD 100.00 % Core							
		174.00 - 177.00 : 83.00 % RQD 100.00 % Core							
		177.00 - 180.00 : 83.00 % RQD 100.00 % Core							
		180.00 - 183.00 : 86.00 % RQD 100.00 % Core							
		183.00 - 186.00 : 73.00 % RQD 100.00 % Core							
		186.00 - 189.00 : 84.00 % RQD 100.00 % Core							
		189.00 - 192.00 : 80.00 % RQD 100.00 % Core							
		192.00 - 195.00 : 37.00 % RQD 100.00 % Core							
		195.00 - 198.00 : 69.00 % RQD 100.00 % Core							
		198.00 - 201.00 : 56.00 % RQD 100.00 % Core							
		201.00 - 204.00 : 53.00 % RQD 100.00 % Core							
		204.00 - 207.00 : 60.00 % RQD 100.00 % Core							
		207.00 - 210.00 : 60.00 % RQD 100.00 % Core							
		210.00 - 213.00 : 67.00 % RQD 100.00 % Core							
		213.00 - 216.00 : 77.00 % RQD 100.00 % Core							
		MINOR INTERVALS:							
		Minor Interval:							
		178.6 - 181.6 4, Anorthosite / Anorthosite Gabbro							
		Coarse grained, homogenous, massive, non-magnetic, pegmatitic anorthositic unit composed of 80-85% plagioclase and 15-20% biotite (locally 'books').							
		The upper and lower contacts of this unit are sharp at 35 and 60 degrees tca, respectively.							

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From (m)	To (m)		Sample Number	From (m)	To (m)	Length (m)	Ni%	Cu%	Co%
213.70	244.50	<p>5, Undivided Metasediments MAFIC GNEISS</p> <p>Fine grained, well foliated, dark grey to grey, homogenous, moderately magnetic gneiss composed of 10-35% mm scale garnets and 40-50% biotite/chlorite/pyroxenes within a quartzofeldspathic groundmass.</p> <p>Unit contains local trace disseminated sulphides (generally downhole of 232) - pyrite and chalcopyrite.</p> <p>The lower contact of this unit is unknown as the hole was shutdown.</p> <p>Structure 215.25 - 215.26 : S1 First Foliation, 55 Deg to CA 220.60 - 220.65 : F Fractured, 50 Deg to CA Faulted lower contact (5cm gouge) of minor interval 232.05 - 232.06 : S1 First Foliation, 45 Deg to CA 240.95 - 240.96 : S1 First Foliation, 35 Deg to CA</p> <p>RQD 216.00 - 219.00 : 94.00 % RQD 100.00 % Core 219.00 - 222.00 : 80.00 % RQD 100.00 % Core 222.00 - 225.00 : 72.00 % RQD 100.00 % Core 225.00 - 228.00 : 59.00 % RQD 100.00 % Core 228.00 - 231.00 : 72.00 % RQD 100.00 % Core 231.00 - 234.00 : 93.00 % RQD 100.00 % Core 234.00 - 237.00 : 60.00 % RQD 100.00 % Core 237.00 - 240.00 : 72.00 % RQD 100.00 % Core 240.00 - 243.00 : 69.00 % RQD 100.00 % Core 243.00 - 244.50 : 85.00 % RQD 100.00 % Core</p> <p>MINOR INTERVALS: Minor Interval: 215.72 - 220.6 4, Anorthosite / Anorthosite Gabbro Pegmatitic anorthosite as described from 178.60m to 181.60m.</p> <p>The upper and lower contacts of this unit are both sharp at 60 and 50 degrees tca.</p> <p>Alteration haloes occur proximal to both contacts, as the rock unit is talc altered (light green) 10cm from the upper contact and 75cm from the lower contact.</p>							

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Samples

Sample Number	From (m)	To (m)	Ni%	Cu%	Co%
Sample Type ASSAY					
PG04712	175.60	177.10	0.0800	0.1300	0.0100
PG04713	177.10	177.40	0.6500	0.8500	0.0500
PG04714	177.40	178.60	0.0500	0.0700	0.0100