

Hole Number: ES07-99

Units: METRIC

Project Name: Norway - Espedalen	Primary Coordinates Grid: UTM84-32N	Destination Coordinates Grid: UTM:	Collar Dip: -50.00
Project Number: 201	North: 6809957.00	North: 61.42	Collar Az: 140.00
Location: Surface	East: 530684.00	East: 9.57	Length: 231.71 (m)
	Elev: 1185.00	Elev: 1185.00	Start Depth: 0.00 (m)
Date Started: Oct 01, 2007	Collar Survey: N	Plugged: N	Contractor: Geo Drilling A/S
Date Completed: Oct 06, 2007	Multishot Survey: N	Hole Size: TT46	Core Storage: Tyrstrand
Logged By: K. Leonard	Pulse EM Survey: N	Casing: Left in Hole	Final Depth: 231.71 (m)

Comments: Testing down dip potential of surface mineralization found at Stang and Nicoline showings. This hole is a 100m step-out from Hole ES07-98.

Results: disseminated, blebby to locally fracture controlled Po, +/- Cpy mineralization intersected in gabbro and UMAF from:

15.90 - 16.25m: semi-massive bands (up to 30%)

24.90 - 25.56m: f.g. disseminated, banded and fractured infillings (5 - 8%)

37.0 - 42.0m: f.g. disseminated to blebby Po, +/- Cpy (1 - 2%, locally up to 5%)

44.2 - 44.0m f.g. disseminations and hairline fracture infillings of Po (5 - 7%)

52.90 - 53.46m: blebby Po, +/- Cpy (5- 7%) near a lithological contact.

163.92 - 164.37m: 5-7% disseminated and stringered Po

194.55 - 195.0m: 10% irregular f.g. Po masses and stringers

195.50 - 195.90m: 3% Po (locally up to 7%) as narrow stringers and fracture infillings

Sample Averages

Detailed Lithology		Assay Data							
From (m)	To (m)	Lithology	Sample Number	From (m)	To (m)	Length (m)	Ni%	Cu%	Co%
0	1.80	CAS, Casing							

Hole Number: ES07-99

Units: METRIC

Detailed Lithology		Lithology	Assay Data						
From (m)	To (m)		Sample Number	From (m)	To (m)	Length (m)	Ni%	Cu%	Co%
1.80	35.60	GAB, Gabbro	PG07993	15.00	15.40	0.40	0.0380	0.0260	0.0090
		grey in colour, fine to medium grained, foliated to locally sheared, locally fractured/blocky core, fine interstitial mm-scale white plagioclase phenocrysts, local Po, +/- Py mineralization, occasional chlorite and carbonate alteration.	PG07994	15.40	15.90	0.50	0.0210	0.0210	0.0060
		Mineralization	PG07995	15.90	16.25	0.35	0.0940	0.0990	0.0170
		15.40 - 16.25 : PO Pyrrhotite, SM Semi-Massive, 20% banded	PG07996	16.25	16.60	0.35	0.0140	0.0090	0.0040
		24.50 - 25.56 : PO Pyrrhotite, DIS Disseminated, 8% narrow banding	PG07997	24.00	24.50	0.50	0.0190	0.0110	0.0050
		31.95 - 32.15 : Cpy Chalcopyrite, VN Veins, 3%	PG07998	24.50	24.90	0.40	0.0640	0.0440	0.0090
		31.95 - 32.15 : PO Pyrrhotite, FG Fine Grained, 15% bands and masses	PG07999	24.90	25.23	0.33	0.1240	0.0940	0.0140
		Structure	PG05251	25.23	25.56	0.33	0.2690	0.0840	0.0220
		1.80 - 4.10 oxidized fracture faces	PG05252	25.56	26.00	0.44	0.0580	0.0420	0.0070
		8.55 - 10.55 oxidized fracture faces	PG05253	31.70	32.00	0.30	0.0600	0.0130	0.0070
		10.70 - 10.90 : SHR Shear, 40 Deg to CA	PG05254	32.00	32.30	0.30	0.3540	0.3840	0.0260
		14.30 - 14.60 chloritized, minor oxide	PG05255	32.30	32.63	0.33	0.0220	0.0450	0.0040
		15.30 - 15.52 : FOL Foliated, 50 Deg to CA	PG05256	32.63	33.00	0.37	0.0230	0.0240	0.0080
		18.15 - 18.44 : SHR Shear, 25 Deg to CA	PG05257	35.00	35.56	0.56	0.0700	0.0370	0.0110
		chloritized, carbonatized	PG05258	35.56	36.00	0.44	0.1050	0.0390	0.0130
		31.90 - 33.30 chloritized							
		31.90 - 33.63 brecciated							
		33.28 - 33.32 chloritized slickensides							
		34.00 - 35.60 chloritized slickensides							
		MINOR INTERVALS:							
		Minor Interval:							
		15.5 - 16.25 SULF, Sulfide banded Po mineralization, strongly conductive,							
		16.30 - 16.11m & 16.16 - 16.25m - semi-massive Po bands - 30% at 58deg and 87deg to the LCA.							

Hole Number: ES07-99

Units: METRIC

Detailed Lithology		Assay Data							
From (m)	To (m)	Lithology	Sample Number	From (m)	To (m)	Length (m)	Ni%	Cu%	Co%
		<p>MINOR INTERVALS:</p> <p>Minor Interval: 24.5 - 25.56 SULF, Sulfide gabbro-hosted pyrrhotite mineralization, dark grey coloured sections appear to contain higher percentage of sulphide content.</p> <p>24.71 - 24.80m: dark grey section containing elongated flecks and blebby Po - 3%</p> <p>24.95 - 25.00m: cm-scale band, brecciated frags and 25% Po</p> <p>25.23 - 25.28m semi-massive Po band at 90deg to the LCA., strongly conductive</p> <p>25.44 - 25.46m: same as above, semi-massive Po band at 55deg to the LCA., strongly conductive</p> <p>25.46 - 25.56m: scattered Po blebs and disseminations</p> <p>Minor Interval: 31.95 - 32.15 SULF, Sulfide fractured, carbonatized alteration, fine grained, banded Po mineralization, stringer, fracture controlled Cpy</p> <p>31.95 - 32.00m: 3% Cpy, 10% Po</p> <p>32.0 - 32.15m 20% banded Po, fine grained masses.</p>							
35.60	53.53	<p>UM, Ultramafic dark grey to black, massive to foliated, locally fractured, in-part serpentized (i.e. talcose feel), noticeably chloritized, composition observed (AN=65, M=35), irregular blebby Po mineralization within this unit and at the contact with GABB below.</p> <p>Structure 37.15 - 37.28 : F Fractured, 15 Deg to CA chloritized slickensides</p> <p>MINOR INTERVALS: Minor Interval: 37 - 42 SULF, Sulfide broad zone of scattered blebby Po +/- Cpy overall at 1-2% (up to 5% locally)</p> <p>Minor Interval: 44.2 - 45 SULF, Sulfide 5 - 7% hairline stringered and fracture infilled Po mineralization., locally conductive.</p> <p>Minor Interval: 52.9 - 53.46 SULF, Sulfide narrow Po mineralized zone at the contact between UMAF and GABB.</p> <p>52.90 - 53.46m: 5-7% Po and Cpy as blebby disseminations and fracture infillings, some conductivity.</p>	PG05259	36.00	36.40	0.40	0.1130	0.0290	0.0150
			PG05261	36.40	37.00	0.60	0.1020	0.0150	0.0130
			PG05262	37.00	37.60	0.60	0.0950	0.0490	0.0140
			PG05263	37.60	38.00	0.40	0.0960	0.0150	0.0140
			PG05264	38.00	38.60	0.60	0.1000	0.0280	0.0130
			PG05265	38.60	39.00	0.40	0.0870	0.0250	0.0100
			PG05266	39.00	40.00	1.00	0.1370	0.0660	0.0140
			PG05267	40.00	40.30	0.30	0.1950	0.1000	0.0180
			PG05268	40.30	41.00	0.70	0.0950	0.0230	0.0110
			PG05269	41.00	41.50	0.50	0.1940	0.0680	0.0180
			PG05270	41.50	42.00	0.50	0.1430	0.0410	0.0150
			PG05271	42.00	43.00	1.00	0.1130	0.0490	0.0130
			PG05272	43.00	44.20	1.20	0.1730	0.0780	0.0160
			PG05273	44.20	45.00	0.80	0.3230	0.0840	0.0270
			PG05274	45.00	45.50	0.50	0.0830	0.0130	0.0120
			PG05275	51.00	51.30	0.30	0.1140	0.0130	0.0150
			PG05276	51.30	52.00	0.70	0.0870	0.0130	0.0110
			PG05277	52.00	52.90	0.90	0.0830	0.0230	0.0090
			PG05278	52.90	53.46	0.56	0.2800	0.1160	0.0200
			PG05279	53.46	54.00	0.54	0.0680	0.0220	0.0070

Hole Number: ES07-99

Units: METRIC

Detailed Lithology		Lithology	Assay Data						
From (m)	To (m)		Sample Number	From (m)	To (m)	Length (m)	Ni%	Cu%	Co%
53.53	70.16	GAB, Gabbro grey in colour, salt 'n' pepper appearance - abundant millimetric-sized plagiophenocrysts throughout, pervasively foliated, competent core, mineralized at the upper contact with UMAF. Mineralization 53.53 - 54.50 : PO Pyrrhotite, DIS Disseminated, 0.5% 53.53 - 55.00 trace mineralization Structure 60.53 - 60.55 : F Fractured, 60 Deg to CA 64.30 - 64.81 67.70 - 67.75 : FOL Foliated, 62 Deg to CA	PG05281	54.00	54.50	0.50	0.1490	0.0410	0.0130
			PG05282	54.50	55.00	0.50	0.0230	0.0150	0.0060
70.16	161.15	UM, Ultramafic similar to unit observed above from 35.60 - 53.53m, dark grey to black (when wetted) in colour, massive to foliated, competent core, strongly magnetic, not as talcose as unit above, chloritized slickensided fracture faces, scattered Po grains observed from 123.23-123.28m, 142.21-142.24m and at 147.07m. at 160.71m: ground-up core denotes fault gouge at the contact. Structure 76.20 - 76.31 : F Fractured, 23 Deg to CA carbonate altered 80.88 - 81.00 : F Fractured, 80 Deg to CA chlorite slickensides 83.88 - 84.45 : F Fractured, 5 Deg to CA carbonate coated fractures 119.20 - 119.50 120.00 - 120.20 : F Fractured, 10 Deg to CA carbonate coated fractures 122.00 - 123.60 123.76 - 123.80 : FOL Foliated, 80 Deg to CA 124.43 - 124.69 125.04 - 125.71 128.10 - 128.23 chloritized, carbonatized 145.23 - 145.80 strongly chloritized, slickensided fractures 160.55 - 160.71 strongly talcose, chloritized fractures 160.69 - 160.71 fault 160.69 - 161.15 : SHR Shear, 42 Deg to CA talcose shear zone							

Hole Number: ES07-99

Units: METRIC

Detailed Lithology		Lithology	Assay Data						
From (m)	To (m)		Sample Number	From (m)	To (m)	Length (m)	Ni%	Cu%	Co%
161.15	231.70	GAB, Gabbro Leucogabbro or Anorthositic Gabbro speckled grey - white in colour, medium to coarse grained plag-rich sections, well foliated, sporadic Po mineralization as f.g. masses, stringers and cm-scale bands, rare spotty Po mineralization. 217 - 220.3m: intense low angle shear zone at 10 - 30deg to the LCA. convoluted fabric and small scale folding, strongly broken core, moderately chloritized. 225.14 - 226.80m: strongly fractured and blocky core. Fractures trend 28deg to the LCA. 228 - 228.50m: fractures at 0deg to the LCA Mineralization 163.92 - 164.37 : PO Pyrrhotite, DIS Disseminated, 5% stringered 194.55 - 195.00 : PO Pyrrhotite, STR Stringers, 10% irregular f.g. masses 194.90 - 195.89 : PO Pyrrhotite, STR Stringers, 3% locally up to 7% Structure 161.15 - 161.30 : BLKY Blocky, 25 Deg to CA 164.37 - 165.80 : F Fractured, 35 Deg to CA minor gouge 166.28 - 166.30 173.84 - 173.86 : FOL Foliated, 30 Deg to CA 181.81 - 181.84 185.42 - 186.00 : BLKY Blocky, 60 Deg to CA 197.25 - 197.26 : Frct Fracture, 45 Deg to CA 201.18 - 201.20 : FOL Foliated, 60 Deg to CA 207.00 - 220.30 : SHR Shear, 15 Deg to CA crenulated, chloritized fractures MINOR INTERVALS: Minor Interval: 163.92 - 164.37 SULF, Sulfide weakly conductive, 5 to 7% stringered Po mineralization Minor Interval: 194.55 - 195 SULF, Sulfide 10% irregular f.g. Po masses and clots Minor Interval: 195.5 - 195.9 SULF, Sulfide 3% Po as fractured infillings and irregular veinlets / stringers	PG05283	163.52	163.92	0.40	0.0260	0.0120	0.0050
			PG05284	163.92	164.37	0.45	0.0350	0.0330	0.0090
			PG05285	164.37	164.80	0.43	0.0050	0.0150	0.0050
			PG05286	194.00	194.55	0.55	0.0170	0.0080	0.0060
			PG05287	194.55	195.00	0.45	0.0090	0.0750	0.0050
			PG05288	195.00	195.50	0.50	0.0090	0.0100	0.0040
			PG05289	195.50	195.90	0.40	0.0120	0.0890	0.0060
			PG05290	195.90	196.30	0.40	0.0090	0.0200	0.0040
231.70	231.71	EOH, End of Hole							

Hole Number: ES07-99

Units: METRIC

Samples

Sample Number	From (m)	To (m)	Ni%	Cu%	Co%
Sample Type	ASSAY				
PG07993	15.00	15.40	0.0380	0.0260	0.0090
PG07994	15.40	15.90	0.0210	0.0210	0.0060
PG07995	15.90	16.25	0.0940	0.0990	0.0170
PG07996	16.25	16.60	0.0140	0.0090	0.0040
PG07997	24.00	24.50	0.0190	0.0110	0.0050
PG07998	24.50	24.90	0.0640	0.0440	0.0090
PG07999	24.90	25.23	0.1240	0.0940	0.0140
PG05251	25.23	25.56	0.2690	0.0840	0.0220
PG05252	25.56	26.00	0.0580	0.0420	0.0070
PG05253	31.70	32.00	0.0600	0.0130	0.0070
PG05254	32.00	32.30	0.3540	0.3840	0.0260
PG05255	32.30	32.63	0.0220	0.0450	0.0040
PG05256	32.63	33.00	0.0230	0.0240	0.0080
PG05257	35.00	35.56	0.0700	0.0370	0.0110
PG05258	35.56	36.00	0.1050	0.0390	0.0130
PG05259	36.00	36.40	0.1130	0.0290	0.0150
PG05261	36.40	37.00	0.1020	0.0150	0.0130
PG05262	37.00	37.60	0.0950	0.0490	0.0140
PG05263	37.60	38.00	0.0960	0.0150	0.0140
PG05264	38.00	38.60	0.1000	0.0280	0.0130
PG05265	38.60	39.00	0.0870	0.0250	0.0100
PG05266	39.00	40.00	0.1370	0.0660	0.0140
PG05267	40.00	40.30	0.1950	0.1000	0.0180
PG05268	40.30	41.00	0.0950	0.0230	0.0110
PG05269	41.00	41.50	0.1940	0.0680	0.0180
PG05270	41.50	42.00	0.1430	0.0410	0.0150
PG05271	42.00	43.00	0.1130	0.0490	0.0130
PG05272	43.00	44.20	0.1730	0.0780	0.0160
PG05273	44.20	45.00	0.3230	0.0840	0.0270
PG05274	45.00	45.50	0.0830	0.0130	0.0120
PG05275	51.00	51.30	0.1140	0.0130	0.0150
PG05276	51.30	52.00	0.0870	0.0130	0.0110
PG05277	52.00	52.90	0.0830	0.0230	0.0090
PG05278	52.90	53.46	0.2800	0.1160	0.0200
PG05279	53.46	54.00	0.0680	0.0220	0.0070
PG05281	54.00	54.50	0.1490	0.0410	0.0130
PG05282	54.50	55.00	0.0230	0.0150	0.0060

Hole Number: ES07-99

Units: METRIC

Samples

Sample Number	From (m)	To (m)	Ni%	Cu%	Co%
Sample Type	ASSAY				
PG05283	163.52	163.92	0.0260	0.0120	0.0050
PG05284	163.92	164.37	0.0350	0.0330	0.0090
PG05285	164.37	164.80	0.0050	0.0150	0.0050
PG05286	194.00	194.55	0.0170	0.0080	0.0060
PG05287	194.55	195.00	0.0090	0.0750	0.0050
PG05288	195.00	195.50	0.0090	0.0100	0.0040
PG05289	195.50	195.90	0.0120	0.0890	0.0060
PG05290	195.90	196.30	0.0090	0.0200	0.0040