

Hole Number: ES08-164

Units: METRIC

Project Name: Norway - Espedalen	Primary Coordinates Grid: UTM84-32N	Destination Coordinates Grid: UTM:	Collar Dip: -77.10
Project Number: 201	North: 6805274.00	North: 61.38	Collar Az: 234.50
Location: Surface	East: 533940.00	East: 9.64	Length: 148.54 (m)
	Elev: 759.00	Elev: 759.00	Start Depth: 0.00 (m)
Date Started: Jun 10, 2008	Collar Survey: N	Plugged: N	Contractor: Arctic Drilling A/S
Date Completed: Jun 13, 2008	Multishot Survey: N	Hole Size: BQ	Core Storage: Tyrstrand
Logged By: cmnor	Pulse EM Survey: N	Casing: Left in Hole	Final Depth: 148.54 (m)

Comments: 100m down-dip of ESP_DAL_P2"A" ES08-162

Mineralization

73.23 - 78.70 trace Po, Cpy
78.70 - 97.65 2-3 % Po, trace Cpy, Py
97.65 - 98.65 4% Po, Cpy
98.65 - 101.65 10-12% Po, Cpy
101.65 - 103.65 10-15% Po, Cpy
103.65 - 106.65 ~5% Po, trace Cpy
122.46 - 128.03 trace - 1% Po
128.03 - 129.03 3-5% Po, Cpy
131.03 - 132.03 2-3% Po
133.03 - 139.53 ~1% Po
140.03 - 140.50 3-5% Po, Cpy
121.46 - 126.45 trace to 1% diss Po, trace Cpy
126.46 - 128.03 1-3% Po
128.03 - 131.03 3-5% Po
131.03 - 132.03 2-3% Po
132.03 - 139.53 1-2% Po

Sample Averages

Detailed Lithology		Assay Data							
From (m)	To (m)	Lithology	Sample Number	From (m)	To (m)	Length (m)	Ni%	Cu%	Co%
0	7.42	O/B, Overburden							

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Detailed Lithology		Assay Data							
From (m)	To (m)	Lithology	Sample Number	From (m)	To (m)	Length (m)	Ni%	Cu%	Co%
7.42	70.48	ANOR, Anorthosite ANORTHOSITE -white to purple-grey in color, and fine to medium grained -altered from 7.42 to 44.80 (hematized and purple in color) -unaltered anorthosite from 44.80 - 70.48 -minor intersections of a more mafic component blended in various sections -mafic dyke @ 38.75 - 39.15 (broken core) - 5-20cm qtz-carb stringers -minor sericite stringers unit not mineralized Alteration 7.42 - 44.80 :ALT Alteration, P Pervasive, M Moderate altered anorthosite Structure 15.00 - 15.00 : FLT Fault, 60 Deg to CA 17.15 - 17.15 : FLT Fault, 15 Deg to CA 22.20 - 22.20 : FLT Fault, 20 Deg to CA 28.25 - 28.25 : FLT Fault, 10 Deg to CA 68.15 - 68.15 : G Gouge, 40 Deg to CA 69.63 - 69.63 : FLT Fault, 50 Deg to CA 69.85 - 69.85 : Frct Fracture, 0.05 Deg to CA 70.48 - 70.48 : LC Lower Contact, 40 Deg to CA							
70.48	78.25	MD, Mafic Dike MAFIC DYKE -green to grey-green and very fine grained - UC @ 40 degrees to CA (local fault and broken core) -fractures and faults throughout -non magnetic -LC fault gouge @ -65 degrees to CA unit not mineralized 70.48 - 71.0 broken core 71.20 - 71.70 broken core 73.30 - 74.0 broken core Structure 70.48 - 70.48 : UC Upper Contact, 40 Deg to CA 71.15 - 71.15 : FLT Fault, 45 Deg to CA 74.80 - 74.80 : FLT Fault, 40 Deg to CA 77.25 - 77.25 : FLT Fault, 75 Deg to CA	BL00578	73.23	73.65	0.42	0.0030	0.0060	0.0030
			BL00579	73.65	74.65	1.00	0.0050	0.0070	0.0030
			BL00581	74.65	75.65	1.00	0.0060	0.0110	0.0020
			BL00582	75.65	76.65	1.00	0.0090	0.0270	0.0040
			BL00583	76.65	77.65	1.00	0.0030	0.0100	0.0030
			BL00584	77.65	78.25	0.60	0.0460	0.0310	0.0050

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From (m)	To (m)	Lithology	Sample Number	From (m)	To (m)	Length (m)	Ni%	Cu%	Co%
78.25	107.65	PYXT, Pyroxenite	BL00585	78.25	78.70	0.45	0.1620	0.0820	0.0140
		PYROXENITE	BL00586	78.70	79.65	0.95	0.1970	0.0610	0.0180
		-dark grey to black in color, vf to fine grained and massive	BL00587	79.65	80.65	1.00	0.1690	0.0800	0.0160
		-UC fault @ 65 degrees to CA	BL00588	80.65	81.65	1.00	0.1910	0.0600	0.0170
		- 1-2cm fine grained opx	BL00589	81.65	82.65	1.00	0.1950	0.0660	0.0180
		-1-5mm qtz-carb veins throughout unit	BL00590	82.65	83.65	1.00	0.1930	0.0980	0.0180
		-strongly magnetic	BL00591	83.65	84.65	1.00	0.1920	0.0790	0.0180
		-fracutes and faults throughout unit	BL00592	84.65	85.65	1.00	0.1790	0.0550	0.0170
		Mineralization	BL00593	85.65	86.65	1.00	0.2060	0.1010	0.0210
		73.23 - 78.70 trace Po, Cpy	BL00594	86.65	87.65	1.00	0.1390	0.0700	0.0150
		78.70 - 86.65 2-3 % Po, trace Cpy, Py	BL00595	87.65	88.65	1.00	0.2290	0.0970	0.0230
		86.65 - 87.65 ~2% Po, trace Cpy	BL00596	88.65	89.65	1.00	0.2270	0.1070	0.0240
		88.65 - 97.65 2-3% Po, trace Cpy	BL00597	89.65	90.65	1.00	0.2070	0.0830	0.0220
		97.65 - 98.65 4% Po, Cpy	BL00598	90.65	91.65	1.00	0.1870	0.0480	0.0200
		98.65 - 101.65 10-12% Po, Cpy	BL00599	91.65	92.65	1.00	0.1680	0.0460	0.0190
		101.65 - 103.65 10-15% Po, Cpy	BL00601	92.65	93.65	1.00	0.1260	0.0430	0.0160
		103.65 - 106.65 ~5% Po, trace Cpy	BL00602	93.65	94.65	1.00	0.2100	0.0660	0.0230
		122.46 - 128.03 trace - 1% Po	BL00603	94.65	95.65	1.00	0.2380	0.1010	0.0250
		128.03 - 129.03 3-5% Po, Cpy	BL00604	95.65	96.65	1.00	0.4080	0.2040	0.0370
		131.03 - 132.03 2-3% Po	BL00605	96.65	97.65	1.00	0.3190	0.1010	0.0300
		133.03 - 139.53 ~1% Po	BL00606	97.65	98.65	1.00	0.3490	0.1090	0.0330
		140.03 - 140.50 3-5% Po, Cpy	BL00607	98.65	99.65	1.00	0.5170	0.1970	0.0460
		Mineralization	BL00608	99.65	100.65	1.00	0.5490	0.2210	0.0490
		106.65 - 107.65 : PO Pyrrhotite, Net Net Textured, 2% 1-2% Po	BL00609	100.65	101.65	1.00	0.5640	0.2220	0.0530
		105.65 - 106.65 : PO Pyrrhotite, Net Net Textured, 4%	BL00610	101.65	102.65	1.00	0.4100	0.1490	0.0380
		104.65 - 105.65 : PO Pyrrhotite, Net Net Textured, 5% 4-5% Po, Cpy	BL00611	102.65	103.65	1.00	0.3270	0.0860	0.0300
		103.65 - 104.65 : PO Pyrrhotite, Net Net Textured, 7% 5-7% Po, Cpy	BL00612	103.65	104.65	1.00	0.2870	0.1070	0.0260
		101.65 - 103.65 : PO Pyrrhotite, Net Net Textured, 15%	BL00613	104.65	105.65	1.00	0.2700	0.0970	0.0250
		98.65 - 101.65 : PO Pyrrhotite, Net Net Textured, 12%	BL00614	105.65	106.65	1.00	0.2800	0.1260	0.0270
		97.65 - 98.65 : PO Pyrrhotite, Net Net Textured, 5% 4-7% Po, Cpy	BL00615	106.65	107.65	1.00	0.2060	0.0850	0.0190
		94.65 - 97.65 : PO Pyrrhotite, Net Net Textured, 3%							
		91.65 - 94.65 : PO Pyrrhotite, Net Net Textured, 3%							
		89.65 - 90.65 : PO Pyrrhotite, Net Net Textured, 2%							
		88.65 - 89.65 : PO Pyrrhotite, Net Net Textured, 3%							
		86.65 - 88.65 : PO Pyrrhotite, Net Net Textured, 2% 1-2% Po, Cpy							
		78.70 - 86.65 : PO Pyrrhotite, Net Net Textured, 3% 2-3% Po, Cpy							

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From (m)	To (m)	Lithology	Sample Number	From (m)	To (m)	Length (m)	Ni%	Cu%	Co%
107.65	126.45	MD, Mafic Dike	BL00616	107.65	108.28	0.63	0.0080	0.0160	0.0040
		MAFIC DYKE? LEUCOGABBRO? (dyke intersects massive pyroxenite unit)	BL00617	108.28	109.28	1.00	0.0060	0.0080	0.0040
		-green to grey-green and vf to fine grained	BL00618	120.41	121.46	1.05	0.0050	0.0090	0.0040
		- UC faulted @ 75 degrees to CA	BL00619	121.46	122.46	1.00	0.0050	0.0070	0.0030
		-fractures and faults throughout	BL00621	122.46	123.46	1.00	0.0060	0.0110	0.0040
		-minor 1mm sericite stringers	BL00622	123.46	124.46	1.00	0.0050	0.0070	0.0040
		-minor 1-5mm qtz-carb stringers	BL00623	124.46	125.46	1.00	0.0050	0.0070	0.0030
		-LC fault gouge @ -65 degrees to CA	BL00624	125.46	126.46	1.00	0.0050	0.0070	0.0040
		Mineralization							
		121.46 - 126.45 trace to 1% diss Po, trace Cpy							
		Mineralization							
		121.46 - 126.45 : PO Pyrrhotite, DIS Disseminated, 1% trace to 1% Po, Cpy							
126.45	140.54	PYXT, Pyroxenite	BL00625	126.46	127.03	0.57	0.0930	0.0480	0.0090
		PYROXENITE (same as above units)	BL00626	127.03	128.03	1.00	0.2130	0.0790	0.0210
		-UC @ 85 degrees to CA	BL00627	128.03	129.03	1.00	0.1950	0.0710	0.0210
		-LC @ 60 degrees to CA	BL00628	129.03	130.03	1.00	0.1220	0.0420	0.0140
		-minor 1mm qtz-carb stringers	BL00629	130.03	131.03	1.00	0.1830	0.0680	0.0200
		Mineralization	BL00630	131.03	132.03	1.00	0.0330	0.0070	0.0070
		126.46 - 128.03 1-3% Po	BL00631	132.03	133.03	1.00	0.0420	0.0080	0.0080
		128.03 - 131.03 3-5% Po	BL00632	133.03	134.03	1.00	0.0310	0.0060	0.0070
		131.03 - 132.03 2-3% Po	BL00633	134.03	135.03	1.00	0.1440	0.0560	0.0150
		132.03 - 134.03 1-2% Po	BL00634	135.03	136.03	1.00	0.0930	0.0340	0.0110
		134.03 - 139.53 1% Po	BL00635	136.03	137.03	1.00	0.0300	0.0080	0.0060
		Mineralization	BL00636	137.03	138.03	1.00	0.0390	0.0300	0.0080
		131.03 - 139.53 : PO Pyrrhotite, DIS Disseminated, 1%	BL00637	138.03	139.03	1.00	0.3410	0.1110	0.0300
		131.03 - 132.03 : PO Pyrrhotite, Net Net Textured, 3% 2-3% Po	BL00638	139.03	139.53	0.50	0.0570	0.0490	0.0050
		128.03 - 131.03 : PO Pyrrhotite, Net Net Textured, 5% 3-5% Po, trace Cpy	BL00639	139.53	140.03	0.50	0.1100	0.0320	0.0090
		126.45 - 128.03 : PO Pyrrhotite, DIS Disseminated, 2% 1-2% Po	BL00641	140.03	140.50	0.47	0.3270	0.0940	0.0290
		Structure	BL00642	140.50	140.99	0.49	0.0030	0.0025	0.0005
		129.70 - 129.70 : Frct Fracture, 70 Deg to CA							
		132.39 - 132.39 : Frct Fracture, 30 Deg to CA							
		134.40 - 134.40 : FLT Fault, 45 Deg to CA							
		134.75 - 134.75 : FLT Fault, 55 Deg to CA							

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From (m)	To (m)		Sample Number	From (m)	To (m)	Length (m)	Ni%	Cu%	Co%
140.54	148.54	ANOR, Anorthosite ANORTHOSITE (same as unaltered unit above) UC @ 60 degrees to CA Mineralization trace Po near local 1mm fractures Structure 143.90 - 143.90 : FLT Fault, 65 Deg to CA 148.00 - 148.00 : Frct Fracture, 85 Deg to CA MINOR INTERVALS: Minor Interval: 146.8 - 148.35 MD, Mafic Dike MAFIC DYKE -green to green-grey, very fine grained -UC fault gouge @ 85 degrees to CA (local broken core) -LC faulted @ 85 degrees to CA Unit not mineralization	BL00643	140.99	141.99	1.00	0.0070	0.0025	0.0005

Samples

Sample Number	From (m)	To (m)	Ni%	Cu%	Co%
Sample Type	ASSAY				
BL00578	73.23	73.65	0.0030	0.0060	0.0030
BL00579	73.65	74.65	0.0050	0.0070	0.0030
BL00581	74.65	75.65	0.0060	0.0110	0.0020
BL00582	75.65	76.65	0.0090	0.0270	0.0040
BL00583	76.65	77.65	0.0030	0.0100	0.0030
BL00584	77.65	78.25	0.0460	0.0310	0.0050
BL00585	78.25	78.70	0.1620	0.0820	0.0140
BL00586	78.70	79.65	0.1970	0.0610	0.0180
BL00587	79.65	80.65	0.1690	0.0800	0.0160
BL00588	80.65	81.65	0.1910	0.0600	0.0170
BL00589	81.65	82.65	0.1950	0.0660	0.0180
BL00590	82.65	83.65	0.1930	0.0980	0.0180
BL00591	83.65	84.65	0.1920	0.0790	0.0180
BL00592	84.65	85.65	0.1790	0.0550	0.0170
BL00593	85.65	86.65	0.2060	0.1010	0.0210
BL00594	86.65	87.65	0.1390	0.0700	0.0150
BL00595	87.65	88.65	0.2290	0.0970	0.0230
BL00596	88.65	89.65	0.2270	0.1070	0.0240

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Samples

Sample Number	From (m)	To (m)	Ni%	Cu%	Co%
Sample Type	ASSAY				
BL00597	89.65	90.65	0.2070	0.0830	0.0220
BL00598	90.65	91.65	0.1870	0.0480	0.0200
BL00599	91.65	92.65	0.1680	0.0460	0.0190
BL00601	92.65	93.65	0.1260	0.0430	0.0160
BL00602	93.65	94.65	0.2100	0.0660	0.0230
BL00603	94.65	95.65	0.2380	0.1010	0.0250
BL00604	95.65	96.65	0.4080	0.2040	0.0370
BL00605	96.65	97.65	0.3190	0.1010	0.0300
BL00606	97.65	98.65	0.3490	0.1090	0.0330
BL00607	98.65	99.65	0.5170	0.1970	0.0460
BL00608	99.65	100.65	0.5490	0.2210	0.0490
BL00609	100.65	101.65	0.5640	0.2220	0.0530
BL00610	101.65	102.65	0.4100	0.1490	0.0380
BL00611	102.65	103.65	0.3270	0.0860	0.0300
BL00612	103.65	104.65	0.2870	0.1070	0.0260
BL00613	104.65	105.65	0.2700	0.0970	0.0250
BL00614	105.65	106.65	0.2800	0.1260	0.0270
BL00615	106.65	107.65	0.2060	0.0850	0.0190
BL00616	107.65	108.28	0.0080	0.0160	0.0040
BL00617	108.28	109.28	0.0060	0.0080	0.0040
BL00618	120.41	121.46	0.0050	0.0090	0.0040
BL00619	121.46	122.46	0.0050	0.0070	0.0030
BL00621	122.46	123.46	0.0060	0.0110	0.0040
BL00622	123.46	124.46	0.0050	0.0070	0.0040
BL00623	124.46	125.46	0.0050	0.0070	0.0030
BL00624	125.46	126.46	0.0050	0.0070	0.0040
BL00625	126.46	127.03	0.0930	0.0480	0.0090
BL00626	127.03	128.03	0.2130	0.0790	0.0210
BL00627	128.03	129.03	0.1950	0.0710	0.0210
BL00628	129.03	130.03	0.1220	0.0420	0.0140
BL00629	130.03	131.03	0.1830	0.0680	0.0200
BL00630	131.03	132.03	0.0330	0.0070	0.0070
BL00631	132.03	133.03	0.0420	0.0080	0.0080
BL00632	133.03	134.03	0.0310	0.0060	0.0070
BL00633	134.03	135.03	0.1440	0.0560	0.0150
BL00634	135.03	136.03	0.0930	0.0340	0.0110
BL00635	136.03	137.03	0.0300	0.0080	0.0060

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Samples

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Sample Type	ASSAY				
BL00636	137.03	138.03	0.0390	0.0300	0.0080
BL00637	138.03	139.03	0.3410	0.1110	0.0300
BL00638	139.03	139.53	0.0570	0.0490	0.0050
BL00639	139.53	140.03	0.1100	0.0320	0.0090
BL00641	140.03	140.50	0.3270	0.0940	0.0290
BL00642	140.50	140.99	0.0030	0.0025	0.0005
BL00643	140.99	141.99	0.0070	0.0025	0.0005