



Bergvesenet rapport nr 4814	Intern Journal nr 0908/05	Internt arkiv nr	Rapport lokalisering	Gradering Fortrolig
Kommer fra arkiv	Ekstern rapport nr	Oversendt fra Sulfidmalm a.s.	Fortrolig pga Muting	Fortrolig fra dato:
Tittel 2004 Summer Drilling, Espedalen Project, Drill Logs ES2004-01 through ES2004-17 Volum 2				
Forfatter Tirschmann		Dato År 24.05 2004		Bedrift (Oppdragsgiver og/eller oppdragstaker) Sulfidmalm A/S
Kommune Sor-Fron Gausdal	Fylke Oppland	Bergdistrikt	1: 50 000 kartblad 17171 17172	1: 250 000 kartblad Lillehammer
Fagområde Boring	Dokument type		Forekomster (forekomst, gruvefelt, undersøkelsesfelt) Stormyra Vesle Andreasberg Jørstad Storgruva Evans Statsråd Stang Nicoline Melgårdseter Stylskampen Søndre Gråhø Grimstjønnå Dalen	
Råstoffgruppe Malm/metall	Råstofftype Cu Ni			
Sammendrag, innholdsfortegnelse eller innholdsbeskrivelse Borlogger og analyser samt oversiktskart borhullsplassering og 2003-UTEM nett				

0908/05

Summer
2004 ~~Winter~~ Drilling

Espedalen,
Oppland county, Norway

Falconbridge Limited
On behalf of
Sulfidmalm A/S

May 24, 2004

Detailed Lithology					Assay Data											
From	To	Lithology			Sample #	From	To	Length	Ni %	Cu %	Co %	S %	Pt g/t	Pd g/t	Au g/t	Ag g/t
83.15	110.44	4s Sausseritized/Tectonized Anorthosite			PG03033	83.15	84.00	0.85	0.03	0.03	0.01	0.05	0.01	0.01	0.01	0.25
		Inhomogenous, white, grey and green altered and tectonized anorthosite similar to 31.6-50.8m. Consists of cm to dm scale interval of medium grained, equigranular white and grey anorthosite bounded by much finer grained, foliated, highly sheared anorthosite. Pervasively sausseritized. Rare trace disseminated py (eg. 96m). Appears to be cross-cut by narrow (0.5m) wide serpentized, ultramafic dykes (eg. 89.6-89.9m, 90.1-90.35m, 92.65-93.15m, 94-94.2m, 99-99.35m) between uphole contact and 100m. Ultramafic dykes locally contain trace po.			PG03034	84.00	85.00	1.00	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.25
					PG03035	87.60	88.00	0.40	0.07	0.07	0.01	2.15	0.02	0.01	0.02	0.25
					PG03036	89.00	89.50	0.50	0.03	0.03	0.01	0.93	0.02	0.01	0.01	0.25
		Sheared at downhole contact; contact estimated at 80 degrees to CA.														
		Magnetic Susceptibility: <0.50														
		Conductivity: Non-conductive														
		<u>Structure</u>	85.70	85.71	Sm	General Foliation										
		<u>Structure</u>	98.55	98.56	Sm	General Foliation										
		<u>Structure</u>	106.20	106.21	Sm	General Foliation										
110.44	129.65	10f Mafic dykes														
		Weakly foliated, homogenous , fine grained, dark green mafic dyke. Crosscut by trace to 2% percent 1-5mm wide white carbonate veinlets. Patchy, pale green bleaching of rock locally (eg. 116.5-120m). Rare trace disseminated pyrite.														
		Magnetic Susceptibility: <1, typically 0.5-1.														
		Conductivity: Non-conductive														
		Interpretation: Melano-gabbroic dyke.														
		<u>Structure</u>	114.20	114.21	Sm	General Foliation										
		<u>Structure</u>	124.20	124.21	Sm	General Foliation										
		<u>Structure</u>	128.65	128.66	Sm	General Foliation										

Espedalen - Analysis

Hole Number: ES2004-10

Sample Number	From	To	Sample Length	Ni%	Cu%	Co%	S%	Au g/t	Pt g/t	Pd g/t	Ag g/t	Pb%	Zn%	SiO2 %	Al2O3 %	Fe2O3 %	MgO %	CaO %	Na2O %	K2O %	TiO2 %	P2O5 %	MnO %	Cr2O3 %	V2O5 %	LOI%	SUM %
PG00246	49.00	50.00	1.00	0.03	0.03	0.01	0.04	0.01	0.01	0.01	0.25																
PG00247	50.00	50.80	0.80	0.03	0.03	0.01	0.10	0.01	0.01	0.01	0.25																
PG00248	50.80	52.00	1.20	0.11	0.07	0.01	0.85	0.01	0.01	0.01	0.25																
PG00249	52.00	53.00	1.00	0.12	0.06	0.01	0.69	0.01	0.01	0.01	0.25																
PG03001	53.00	54.00	1.00	0.06	0.03	0.01	0.16	0.02	0.06	0.01	0.25																
PG03002	54.00	55.00	1.00	0.08	0.03	0.02	0.26	0.01	0.01	0.01	0.25																
PG03003	55.00	56.00	1.00	0.09	0.03	0.01	0.44	0.01	0.01	0.01	0.25																
PG03004	56.00	57.00	1.00	0.07	0.05	0.01	0.10	0.01	0.02	0.01	0.25																
PG03005	57.00	58.00	1.00	0.23	0.07	0.01	0.36	0.01	0.02	0.01	0.25																
PG03006	58.00	59.00	1.00	0.14	0.03	0.02	0.27	0.01	0.01	0.01	0.25																
PG03007	59.00	60.00	1.00	0.03	0.03	0.01	0.18	0.01	0.01	0.01	0.25																
PG03008	60.00	61.00	1.00	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.25																
PG03009	61.00	62.00	1.00	0.03	0.05	0.01	0.01	0.01	0.01	0.01	0.25																
PG03010	62.00	62.90	0.90	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.25																
PG03011	62.90	64.35	1.45	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.25																
PG03012	64.35	65.00	0.65	0.08	0.03	0.01	0.19	0.01	0.02	0.01	0.25																
PG03013	65.00	66.00	1.00	0.52	0.12	0.02	4.24	0.01	0.02	0.02	0.50																
PG03014	66.00	67.00	1.00	0.33	0.31	0.03	3.13	0.03	0.01	0.01	1.10																
PG03015	67.00	68.00	1.00	0.26	0.17	0.01	1.82	0.02	0.02	0.01	0.60																
PG03016	68.00	69.00	1.00	0.30	0.28	0.03	2.50	0.13	0.03	0.01	1.20																
PG03017	69.00	70.00	1.00	0.37	0.33	0.01	2.81	0.03	0.02	0.02	1.10																
PG03018	70.00	71.00	1.00	0.42	0.37	0.02	3.14	0.01	0.01	0.01	0.80																
PG03019	71.00	72.00	1.00	0.29	0.10	0.01	1.93	0.01	0.02	0.01	0.25																
PG03020	72.00	73.00	1.00	0.20	0.09	0.01	1.13	0.01	0.01	0.01	0.25																
PG03021	73.00	74.00	1.00	0.16	0.09	0.03	0.95	0.01	0.02	0.01	0.25																
PG03022	74.00	75.00	1.00	0.21	0.09	0.02	1.42	0.02	0.01	0.02	0.25																
PG03023	75.00	76.00	1.00	0.26	0.17	0.01	2.00	0.01	0.01	0.02	0.25																
PG03024	76.00	77.00	1.00	0.47	0.31	0.03	3.88	0.01	0.03	0.03	0.90																

Espedalen - Analysis**Hole Number: ES2004-10**

Sample Number	From	To	Sample Length	Ni%	Cu%	Co%	S%	Au g/t	Pt g/t	Pd g/t	Ag g/t	Pb%	Zn%	SiO2 %	Al2O3 %	Fe2O3 %	MgO %	CaO %	Na2O %	K2O %	TiO2 %	P2O5 %	MnO %	Cr2O3 %	V2O5 %	LOI%	SUM %
PG03026	77.00	78.00	1.00	0.46	0.11	0.01	3.72	0.01	0.01	0.03	0.25																
PG03027	78.00	79.00	1.00	0.28	0.11	0.02	2.32	0.01	0.01	0.02	0.25																
PG03028	79.00	80.00	1.00	0.23	0.19	0.02	1.36	0.06	0.01	0.02	0.60																
PG03029	80.00	81.00	1.00	0.30	0.17	0.02	2.33	0.02	0.03	0.03	0.60																
PG03030	81.00	81.90	0.90	0.09	0.11	0.01	0.11	0.01	0.04	0.04	0.25																
PG03031	81.90	82.75	0.85	0.08	0.08	0.01	0.67	0.01	0.01	0.01	0.25																
PG03032	82.75	83.15	0.40	0.06	0.03	0.04	0.03	0.01	0.02	0.02	0.25																
PG03033	83.15	84.00	0.85	0.03	0.03	0.01	0.05	0.01	0.01	0.01	0.25																
PG03034	84.00	85.00	1.00	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.25																
PG03035	87.60	88.00	0.40	0.07	0.07	0.01	2.15	0.02	0.02	0.01	0.25																
PG03036	89.00	89.50	0.50	0.03	0.03	0.01	0.93	0.01	0.02	0.01	0.25																

Espedalen - Conductivity**Hole Number: ES2004-10**

Depth	Conductivity (Siemens)	COMMENTS
65.40	26.40	
72.50	66.30	
73.50	215.30	
76.90	93.10	
77.10	119.40	
77.20	393.10	
78.55	66.70	
80.70	73.50	

Espedalen - Magnetic Susceptibility**Hole Number: ES2004-10**

DEPTH	MAGNETIC SUSCEPTIBILITY (X 10 ⁻³ SI)	COMMENTS
2.50	0.49	
3.50	0.51	
4.50	0.33	
5.50	0.47	
6.50	0.46	
7.50	0.53	
8.50	0.62	
9.50	0.31	
10.50	0.40	
11.50	0.44	
12.50	0.42	
13.50	0.19	
14.50	0.11	
15.50	0.10	
16.50	0.13	
17.50	0.15	
18.50	0.12	
19.50	0.09	
20.50	0.09	
21.50	0.15	
22.50	0.33	
23.50	0.34	
24.50	0.16	
25.50	0.38	
26.50	0.15	
27.50	0.08	
28.50	0.14	
29.50	0.14	
30.50	0.09	
31.50	0.07	
32.50	0.12	
33.50	0.12	
34.50	0.12	
35.50	0.19	
36.50	0.22	
37.50	0.16	

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Espedalen - Magnetic Susceptibility**Hole Number: ES2004-10**

38.50	0.06	
39.50	0.12	
40.50	0.02	
41.50	0.33	
42.50	1.18	
43.50	0.22	
44.50	0.23	
45.50	0.09	
46.50	0.14	
47.50	0.06	
48.50	0.05	
49.50	0.06	
50.50	0.30	
51.50	2.18	
52.50	2.49	
53.50	0.37	
54.50	0.50	
55.50	0.52	
56.50	0.48	
57.50	0.56	
58.50	1.23	
59.50	0.24	
60.50	0.26	
61.50	0.29	
62.50	0.23	
63.50	0.19	
64.50	0.34	
65.50	6.85	
66.50	10.40	
67.50	2.80	
68.50	8.35	
69.50	4.34	
70.50	7.86	
71.50	7.04	
72.50	18.20	
73.50	6.57	
74.50	22.10	
75.50	14.90	
76.50	22.10	

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Espedalen - Magnetic Susceptibility**Hole Number: ES2004-10**

77.50	48.40	
78.50	12.50	
79.50	21.60	
80.50	62.70	
81.50	27.40	
82.50	1.72	
83.50	0.09	
84.50	0.04	
85.50	0.17	
86.50	0.14	
87.50	0.09	
88.50	0.22	
89.50	0.06	
90.50	0.06	
91.50	0.07	
92.50	0.11	
93.50	0.15	
94.50	0.23	
95.50	0.07	
96.50	0.16	
97.50	0.12	
98.50	0.04	
99.50	0.11	
100.50	0.08	
101.50	0.11	
102.50	0.10	
103.50	0.09	
104.50	0.03	
105.50	0.04	
106.50	0.19	
107.50	0.09	
108.50	0.10	
109.50	0.07	
110.50	0.66	
111.50	0.68	
112.50	0.69	
113.50	0.70	
114.50	0.60	
115.50	0.53	

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Espedalen - Magnetic Susceptibility**Hole Number: ES2004-10**

116.50	0.63	
117.50	0.56	
118.50	0.39	
119.50	0.50	
120.50	0.12	
121.50	0.52	
122.50	0.49	
123.50	0.47	
124.50	0.42	
125.50	0.41	
126.50	0.31	
127.50	0.52	
128.50	0.49	
129.50	0.44	

Espedalen - Rock Quality (RQD)**Hole Number: ES2004-10**

FROM	TO	PERCENT QUALITY	PERCENT CORE	DISKING	COMMENTS
1.79	4.00	79.00	98.00	N	
4.00	7.00	40.00	100.00	N	
7.00	10.00	68.00	100.00	N	
10.00	13.00	27.00	100.00	N	
13.00	16.00	72.00	100.00	N	
16.00	19.00	74.00	100.00	N	
19.00	22.00	54.00	100.00	N	
22.00	25.00	64.00	100.00	N	
25.00	28.00	77.00	100.00	N	
28.00	31.00	52.00	100.00	N	
31.00	34.00	48.00	95.00	N	
34.00	37.00	64.00	100.00	N	
37.00	40.00	63.00	100.00	N	
40.00	43.00	69.00	100.00	N	
43.00	46.00	67.00	100.00	N	
46.00	49.00	79.00	100.00	N	
49.00	52.00	61.00	100.00	N	
52.00	55.00	69.00	100.00	N	
55.00	58.00	89.00	100.00	N	
58.00	61.00	65.00	100.00	N	
61.00	64.00	53.00	100.00	N	
64.00	67.00	36.00	95.00	N	
67.00	70.00	67.00	100.00	N	
70.00	73.00	24.00	98.00	N	
73.00	76.00	45.00	98.00	N	
76.00	79.00	75.00	100.00	N	
79.00	82.00	70.00	100.00	N	
82.00	85.00	74.00	98.00	N	
85.00	88.00	62.00	100.00	N	
88.00	91.00	82.00	100.00	N	
91.00	94.00	84.00	100.00	N	
94.00	97.00	54.00	100.00	N	
97.00	100.00	76.00	100.00	N	
100.00	103.00	63.00	100.00	N	
103.00	106.00	54.00	100.00	N	
106.00	109.00	29.00	100.00	N	
109.00	112.00	79.00	100.00	N	

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ES2004-10

Espedalen - Rock Quality (RQD)**Hole Number: ES2004-10**

112.00	115.00	96.00	100.00	N	
115.00	118.00	98.00	100.00	N	
118.00	121.00	85.00	100.00	N	
121.00	124.00	97.00	100.00	N	
124.00	127.00	91.00	100.00	N	
127.00	129.65	79.00	95.00	N	

*Friday, May 20, 2005**ES2004-10*

Detailed Log

Hole Number: ES2004-11				Units: METRIC			
Project Name: Espedalen		Collar Survey: Y Plugged N		<u>UTM WGS 84 Coord</u> UTM Northing: 6,810,482.77 Local Northing: 4653.45 UTM Easting: 529,575.27 Local Easting: 794.23 Elevation: 1065.14		Core Storage: Strand Fjellstue Collar Dip: -82.00 Contractor: Geo Drilling A/S Collar Azimuth: 50.00 Length: 86.00 Logged by: P. Tirschmann	
Project Number: 300		Multishot Survey: N Hole Size: TT46					
Date Started: 9/6/2004		Pulse EM Survey: N					
Date Completed: 9/8/2004		Casing: Left in Hole, capped					
		Location: Surface					

Comments Purpose: To test UTEM conductor ESP_12_12. Three (3) conductive plates modelled, each with a conductivity of 150 siemens.

Result: Mineralized peridotite was intersected from 48.45m-54.75m, which contains an average of 5-10% pyrrhotite with minor pyrite and chalcopyrite. A nine cm wide semi-massive sulphide vein marks the lower contact of this mineralized unit.

Assays: 0.62% Ni, 0.40% Cu, 0.03% Co / 0.65m (53.10-53.75m) (best)

Lithological interpretation: Mineralized ultramafic (peridotite) grading to gabbro-noritic / pyroxenitic rocks which have intruded banded to laminated quartzofeldspathic country rocks which may be either metasediments or tectonized/silicified anorthositic country rocks (equivalent to M. Heim's "hybrid rocks").

<u>Detailed Lithology</u>			<u>Assay Data</u>											
From	To	Lithology	Sample #	From	To	Length	Ni %	Cu %	Co %	S %	Pt g/t	Pd g/t	Au g/t	Ag g/t
0.00	2.00	C Casing												
2.00	5.95	5 Undivided Metasediments Banded to laminated, grey and green quartzofeldspathic rock consisting of 70% quartz+feldspar, 25-29% biotite+chlorite, 0-1% garnet, 0-1% magnetite and trace pyrite. Intruded downhole by gabbroic unit, contact sharp but irregular at 40-50 degrees to CA. Magnetic susceptibility: Highly variable from <1 to 18. Conductivity: Non-conductive. Interpretation: Equivalent to M. Heims "hybrid rocks"? Tectonized, silicified anorthositic rocks. Does not look as much like siliceous metasediments as units observed in Andreasberg drillholes ES2004-01 and ES2004-02.												
		Structure	3.50	3.51	Sm	General Foliation								

Detailed Lithology				Assay Data											
From	To	Lithology		Sample #	From	To	Length	Ni %	Cu %	Co %	S %	Pt g/t	Pd g/t	Au g/t	Ag g/t
5.95	48.45	6f	Norite	PG03037	37.00	37.50	0.50	0.03	0.03	0.01	0.12	0.01	0.01	0.01	0.25
Well foliated to locally banded, medium grained inhomogeneous dark green to green and white, amphibole-rich unit ranging from amphibolitic gabbro/norite to pyroxenite. Locally contains cm to dm scale grey, feldspar-rich bands (silicified anorthosite?) similar to 2-5.95m (eg. 9.95-10.2m, 16.4-16.6m, 17.45-19.1m, 20.9-21.25m, 25.05-25.95m) and decreasing in abundance downhole. Unit contains trace to 10% po downhole from 37.50m and increasing in abundance downhole. Pyrrhotite occurs as disseminations and blebs locally forming a net texture. One 3 cm wide semi-massive band at 46.92m. Downhole contact interpreted at sharp transition to more homogenous, dark green to black mineralized ultramafic; irregular, estimated at 55-60 degrees to CA. Magnetic susceptibility: Highly variable from < 1 to 42; body as a whole would form a mag high; average estimated as 10-15. Conductivity: Non-conductive to locally conductive where po-bearing (20-120). Interpretation: Gabbro-norite and pyroxenite related to mineralized ultramafic.				PG03038	37.50	37.80	0.30	0.35	0.23	0.02	3.06	0.03	0.07	0.01	0.25
				PG03039	37.80	38.50	0.70	0.05	0.03	0.01	0.67	0.02	0.02	0.05	0.25
				PG03040	40.55	41.55	1.00	0.25	0.16	0.02	2.62	0.02	0.06	0.15	0.25
				PG03041	41.55	42.55	1.00	0.10	0.09	0.01	0.87	0.02	0.03	0.01	0.25
				PG03042	42.55	43.55	1.00	0.07	0.05	0.01	0.64	0.03	0.05	0.01	0.25
				PG03043	43.55	44.55	1.00	0.21	0.21	0.01	1.82	0.09	0.21	0.03	0.50
				PG03044	44.55	45.55	1.00	0.23	0.17	0.01	2.00	0.03	0.04	0.02	0.25
				PG03045	45.55	46.50	0.95	0.23	0.08	0.01	1.51	0.03	0.05	0.01	0.25
				PG03046	46.50	47.50	1.00	0.30	0.24	0.01	2.28	0.02	0.03	0.01	0.60
				PG03047	47.50	48.45	0.95	0.03	0.05	0.01	0.13	0.01	0.01	0.01	0.25
Minor Interval 11.90 12.15 8e Pyroxenite Dark grey/green aphanitic magnetic ultramafic dyke cross-cutting gabbro/norite. Trace pyrite along fractures. Uphole contact sharp at 55 degrees to CA; downhole contact not as sharp and difficult to see as it is in contact with a slightly coarser pyroxenite. Minor Interval 37.50 37.80 6d Pyroxenite Foliated, fine grained, dark green pyroxenite containing 3-4% pyrrhotite blebs. Highly sheared along uphole contact. Moderately conductive.															
Mineralization	37.50	37.80	3.0 %	Po	Pyrrhotite										
				BB	Blebbly										
					3-4% po blebs strung out parallel to foliation										
Mineralization	41.55	46.50	2.0 %	Po	Pyrrhotite										
				D	Disseminated										
					Trace - 5% po										
Mineralization	46.50	47.50	7.0 %	Po	Pyrrhotite										
				STR	Stringers										
					5-10% po as stringers and one 3cm wide semi-massive band at 47.92m; 1% cp with po										
Mineralization	47.50	48.45	0.5 %	Po	Pyrrhotite										
				D	Disseminated										
Structure	8.60	8.61	Sm	General Foliation											

Detailed Lithology					Assay Data												
From	To	Lithology			Sample #	From	To	Length	Ni %	Cu %	Co %	S %	Pt g/t	Pd g/t	Au g/t	Ag g/t	
		<u>Structure</u>	14.25	14.26	Sm	General Foliation											
		<u>Structure</u>	19.75	19.76	Sm	General Foliation											
		<u>Structure</u>	26.65	26.66	Sm	General Foliation											
		<u>Structure</u>	36.50	36.51	Sm	General Foliation											
		<u>Structure</u>	46.40	46.41	Sm	General Foliation											
48.45	54.75	6b Peridotite				PG03048	48.45	49.60	1.15	0.14	0.12	0.02	1.18	0.03	0.03	0.02	0.50
		Medium grained, dark green, weakly foliated peridotite transitional downhole of 53.10m to pyroxenite. Unit is mineralized and contains an average of 5-10% sulphides (po, minor py, minor cp) as disseminations, blebs and narrow semi-massive bands; one 9cm wide SM po band at downhole contact. Downhole contact at 70 degrees to CA. Magnetic susceptibility: Strongly magnetic (10-82) except for pyroxenite along donwhole contact (2.6). Conductivity: 20-40 between 48.45m and 52.8m; 50-290 between 52.8m and 54.75m; 1400 over MS vein at downhole contact. Interpretation: Mineralized ultramafic related to bounding gabbronorites and pyroxenites.				PG03049	49.60	50.10	0.50	0.15	0.34	0.01	1.78	0.06	0.04	0.06	1.40
						PG03051	50.10	51.10	1.00	0.24	0.09	0.02	2.46	0.03	0.04	0.01	0.25
						PG03052	51.10	52.10	1.00	0.21	0.10	0.03	1.85	0.02	0.03	0.01	0.25
						PG03053	52.10	53.10	1.00	0.35	0.16	0.01	3.24	0.04	0.06	0.01	0.25
						PG03054	53.10	53.75	0.65	0.62	0.40	0.03	4.40	0.03	0.07	0.01	1.00
						PG03055	53.75	54.75	1.00	0.47	0.24	0.04	0.38	0.06	0.04	0.01	0.80
		<u>Mineralization</u>	48.45	51.10	2.0 %	Po	Pyrrhotite										
					BB	Blebbly											
		<u>Mineralization</u>	51.10	53.10	4.0 %	Po	Pyrrhotite										
					BB	Blebbly											
					Blebs and stringers												
		<u>Mineralization</u>	53.10	54.75	12.0 %	Po	Pyrrhotite										
					STR	Stringers											
					10-15% sulphide (8-10po, 3-4py, 1cp); stringers, one 9cm wide SMS band at downhole contact												
		<u>Structure</u>	53.30	53.31	Sm	General Foliation											

Detailed Lithology					Assay Data											
From	To	Lithology			Sample #	From	To	Length	Ni %	Cu %	Co %	S %	Pt g/t	Pd g/t	Au g/t	Ag g/t
54.75	86.00	6f Norite			PG03056	54.75	55.55	0.80	0.03	0.08	0.01	0.38	0.02	0.02	0.01	0.25
Weakly to moderately foliated, medium grained, dark green pyroxenite and white and green gabbro-norite as between 5.95m and 48.45m. Contains trace to several percent disseminated sulphides (py, po). Cross-cut, between 54.75m and 66m, by 2-3% mm scale white feldspar-carbonate-quartz veinlets. Pale green, bleached halos adjacent to some veins and around networks of veinlets. Foliation decreases downhole. Magnetic susceptibility: Highly variable from < 1 to 120; body as a whole would form a mag high; 0.5-2 from 54.75-72m, 4-15 from 72m-82.7m, 30-120 from 82.7m-84.2m, 0.5-1.5 from 84.2-86m. Conductivity: Typically non-conductive; locally conductive when tested with ohm-meter where po-bearing (eg. 70.3m & 82.9m) Interpretation: Gabbro-norite and pyroxenite related to mineralized ultramafic.					PG03057	67.80	68.80	1.00	0.03	0.03	0.01	2.15	0.01	0.01	0.01	0.25
					PG03058	68.80	69.60	0.80	0.03	0.03	0.01	1.08	0.01	0.01	0.01	0.25
					PG03059	69.60	70.60	1.00	0.03	0.05	0.01	4.09	0.03	0.02	0.01	0.25
					PG03060	70.60	71.60	1.00	0.03	0.03	0.01	1.54	0.02	0.02	0.01	0.25
					PG03061	81.75	82.75	1.00	0.03	0.03	0.01	1.70	0.01	0.02	0.01	0.25
					PG03062	82.75	83.25	0.50	0.03	0.03	0.01	1.62	0.03	0.02	0.01	0.25
<u>Mineralization</u>					67.80	71.60	1.0 %	Po	Pyrrhotite Disseminated							
								D								
<u>Mineralization</u>					67.80	71.60	1.0 %	Py	Pyrite Disseminated							
								D								
<u>Mineralization</u>					81.75	83.25	2.0 %	Po	Pyrrhotite Disseminated							
								D								
<u>Mineralization</u>					81.75	83.25	1.0 %	Py	Pyrite Disseminated							
								D								
<u>Structure</u>					59.40	59.41	Sm	General Foliation								
<u>Structure</u>					61.40	61.41	Sm	General Foliation								
<u>Structure</u>					67.25	67.26	Sm	General Foliation								
<u>Structure</u>					73.45	73.46	Sm	General Foliation								
<u>Structure</u>					81.50	81.51	Sm	General Foliation								
<u>Structure</u>					85.10	85.11	Sm	General Foliation								

Espedalen - Analysis

Hole Number: ES2004-11

Sample Number	From	To	Sample Length	Ni%	Cu%	Co%	S%	Au g/t	Pt g/t	Pd g/t	Ag g/t	Pb%	Zn%	SiO2 %	Al2O3 %	Fe2O3 %	MgO %	CaO %	Na2O %	K2O %	TiO2 %	P2O5 %	MnO %	Cr2O3 %	V2O5 %	LOI%	SUM %
PG03037	37.00	37.50	0.50	0.03	0.03	0.01	0.12	0.01	0.01	0.01	0.25																
PG03038	37.50	37.80	0.30	0.35	0.23	0.02	3.06	0.01	0.03	0.07	0.25																
PG03039	37.80	38.50	0.70	0.05	0.03	0.01	0.67	0.05	0.02	0.02	0.25																
PG03040	40.55	41.55	1.00	0.25	0.16	0.02	2.62	0.15	0.02	0.06	0.25																
PG03041	41.55	42.55	1.00	0.10	0.09	0.01	0.87	0.01	0.02	0.03	0.25																
PG03042	42.55	43.55	1.00	0.07	0.05	0.01	0.64	0.01	0.03	0.05	0.25																
PG03043	43.55	44.55	1.00	0.21	0.21	0.01	1.82	0.03	0.09	0.21	0.50																
PG03044	44.55	45.55	1.00	0.23	0.17	0.01	2.00	0.02	0.03	0.04	0.25																
PG03045	45.55	46.50	0.95	0.23	0.08	0.01	1.51	0.01	0.03	0.05	0.25																
PG03046	46.50	47.50	1.00	0.30	0.24	0.01	2.28	0.01	0.02	0.03	0.60																
PG03047	47.50	48.45	0.95	0.03	0.05	0.01	0.13	0.01	0.01	0.01	0.25																
PG03048	48.45	49.60	1.15	0.14	0.12	0.02	1.18	0.02	0.03	0.03	0.50																
PG03049	49.60	50.10	0.50	0.15	0.34	0.01	1.78	0.06	0.06	0.04	1.40																
PG03051	50.10	51.10	1.00	0.24	0.09	0.02	2.46	0.01	0.03	0.04	0.25																
PG03052	51.10	52.10	1.00	0.21	0.10	0.03	1.85	0.01	0.02	0.03	0.25																
PG03053	52.10	53.10	1.00	0.35	0.16	0.01	3.24	0.01	0.04	0.06	0.25																
PG03054	53.10	53.75	0.65	0.62	0.40	0.03	4.40	0.01	0.03	0.07	1.00																
PG03055	53.75	54.75	1.00	0.47	0.24	0.04	0.38	0.01	0.06	0.04	0.80																
PG03056	54.75	55.55	0.80	0.03	0.08	0.01	0.38	0.01	0.02	0.02	0.25																
PG03057	67.80	68.80	1.00	0.03	0.03	0.01	2.15	0.01	0.01	0.01	0.25																
PG03058	68.80	69.60	0.80	0.03	0.03	0.01	1.08	0.01	0.01	0.01	0.25																
PG03059	69.60	70.60	1.00	0.03	0.05	0.01	4.09	0.01	0.03	0.02	0.25																
PG03060	70.60	71.60	1.00	0.03	0.03	0.01	1.54	0.01	0.02	0.02	0.25																
PG03061	81.75	82.75	1.00	0.03	0.03	0.01	1.70	0.01	0.01	0.02	0.25																
PG03062	82.75	83.25	0.50	0.03	0.03	0.01	1.62	0.01	0.03	0.02	0.25																

Espedalen - Conductivity**Hole Number: ES2004-11**

Depth	Conductivity (Siemens)	COMMENTS
37.60	15.00	Max reading = 22, but unit is conductive when tested with ohm-meter
38.30	15.00	
40.60	57.00	
41.30	22.00	
44.40	66.00	
44.70	82.00	
46.40	113.00	
46.92	117.00	
47.50	66.00	
48.30	31.00	
49.50	27.00	
50.20	40.00	
51.30	20.00	
52.25	26.00	
52.90	284.00	
53.40	290.00	
53.60	140.00	
54.70	999.00	1400 siemens with conductivity meter over MS band

*Friday, May 20, 2005**ES2004-11*

Espedalen - Magnetic Susceptibility**Hole Number: ES2004-11**

DEPTH	MAGNETIC SUSCEPTIBILITY (X 10 ⁻³ SI)	COMMENTS
2.50	0.50	
3.50	0.15	
4.50	0.18	
5.50	16.30	
6.50	15.70	
7.50	8.40	
8.50	6.70	
9.50	10.60	
10.50	0.50	
11.50	0.56	
12.50	7.70	
13.50	16.80	
14.50	18.40	
15.50	7.10	
16.50	34.80	
17.50	8.10	
18.50	12.40	
19.50	17.70	
20.50	0.37	
21.50	3.40	
22.50	8.40	
23.50	18.90	
24.50	24.00	
25.50	19.70	
26.50	17.90	
27.50	11.20	
28.50	4.20	
29.50	1.90	
30.50	1.60	
31.50	1.90	
32.50	0.90	
33.50	2.00	
34.50	13.70	
35.50	4.70	
36.50	16.70	
37.50	2.10	

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Espedalen - Magnetic Susceptibility**Hole Number: ES2004-11**

38.50	41.60	
39.50	0.65	
40.50	0.50	
41.50	4.60	
42.50	15.10	
43.50	2.10	
44.50	1.20	
45.50	1.10	
46.50	6.40	
47.50	2.60	
48.50	1.27	
49.50	56.00	
50.50	40.00	
51.50	82.10	
52.50	24.10	
53.50	9.70	
54.50	2.60	
55.50	11.20	
56.50	1.10	
57.50	0.50	
58.50	0.70	
59.50	0.55	
60.50	0.38	
61.50	0.51	
62.50	1.42	
63.50	0.73	
64.50	0.79	
65.50	0.62	
66.50	0.70	
67.50	1.70	
68.50	0.85	
69.50	0.48	
70.50	1.40	
71.50	1.00	
72.50	4.50	
73.50	4.30	
74.50	5.90	
75.50	7.70	
76.50	4.60	

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Espedalen - Magnetic Susceptibility**Hole Number: ES2004-11**

77.50	16.20	
78.50	33.30	
79.50	10.40	
80.50	1.63	
81.50	5.90	
82.50	6.10	
83.50	97.50	
84.50	7.30	
85.50	1.33	

Espedalen - Rock Quality (RQD)**Hole Number: ES2004-11**

FROM	TO	PERCENT QUALITY	PERCENT CORE	DISKING	COMMENTS
2.00	5.00	15.00	90.00	N	
5.00	8.00	65.00	95.00	N	
8.00	11.00	61.00	95.00	N	
11.00	14.00	39.00	97.00	N	
14.00	17.00	71.00	100.00	N	
17.00	20.00	54.00	100.00	N	
20.00	23.00	53.00	100.00	N	
23.00	26.00	69.00	100.00	N	
26.00	29.00	67.00	100.00	N	
29.00	32.00	81.00	100.00	N	
32.00	35.00	66.00	100.00	N	
35.00	38.00	62.00	100.00	N	
38.00	41.00	82.00	100.00	N	
41.00	44.00	78.00	100.00	N	
44.00	47.00	92.00	100.00	N	
47.00	50.00	77.00	100.00	N	
50.00	53.00	78.00	100.00	N	
53.00	56.00	42.00	100.00	N	
56.00	59.00	46.00	100.00	N	
59.00	62.00	81.00	100.00	N	
62.00	65.00	80.00	100.00	N	
65.00	68.00	81.00	100.00	N	
68.00	71.00	78.00	100.00	N	
71.00	74.00	76.00	100.00	N	
74.00	77.00	90.00	100.00	N	
77.00	80.00	83.00	100.00	N	
80.00	83.00	85.00	100.00	N	
83.00	86.00	75.00	100.00	N	

*Friday, May 20, 2005**ES2004-11*

Detailed Log

Hole Number: ES2004-12				Units: METRIC			
Project Name: Espedalen		Collar Survey: Y Plugged N		<u>UTM WGS 84 Coord</u>		<u>Local Coord</u>	
Project Number: 300		Multishot Survey: N Hole Size: TT46		UTM Northing: 6,810,011.09		Local Northing: 5117.23	
Date Started: 9/8/2004		Pulse EM Survey: N		UTM Easting: 530,576.48		Local Easting: 1799.12	
Date Completed: 9/11/2004		Casing: Left in Hole, capped		Elevation: 1212.87		Core Storage: Strand Fjellstue	
Location: Surface						Contractor: Geo Drilling A/S	
						Collar Dip: -70.00	
						Collar Azimuth: 225.00	
						Length: 136.00	
						Logged by: P. Tirschmann	

Comments Purpose: To test UTEM conductor ESP_11_10. Two modelled conductive plates tested, one of 150 siemens and the other of 70 siemens conductance.

Result: Intersected mineralized peridotite between 25.40-28.70m containing semi-massive sulphide bands, stringers and disseminations. Dominant sulphide mineral is pyrrhotite and interval between 25.4m and 27.7m is more conductive than predicted by UTEM modelling (C~200-300S). Magnetic peridotite containing zones of weak disseminated sulphides intersected between 47.00-87.05m.

Assays: ☐ 0.48% Ni, 0.43% Cu, 0.04% Co / 1.20m (25.40-26.60m) (best)

Lithological interpretation: Intersected thick sequence of alternating norites and ultramafic rocks. Majority of norites appear to be related to the ultramafic rocks.

Detailed Lithology				Assay Data										
From	To	Lithology	Sample #	From	To	Length	Ni %	Cu %	Co %	S %	Pt g/t	Pd g/t	Au g/t	Ag g/t
0.00	1.50	C Casing												

Detailed Lithology				Assay Data											
From	To	Lithology		Sample #	From	To	Length	Ni %	Cu %	Co %	S %	Pt g/t	Pd g/t	Au g/t	Ag g/t
1.50	25.40	6f	Norite	PG03063	24.50	25.40	0.90	0.03	0.03	0.01	0.35	0.01	0.01	0.01	0.25
Foliated, fine grained grey norite comprised of 60-70% plagioclase and 30-40% mafic minerals (pale green amphibole + minor chlorite). Fine grain size maybe due in part to tectonism. Strongly sheared to mylonitized between 1.5m and 3m; possible pseudotachylite at 8.4m. 1-3% mm scale dark green serpentine veinlets. Locally contains cm to dm scale bands of medium grained, grey, siliceous, garent-bearing rock which could either be silicified norite (Heim's "hybrid rocks"?) or inclusions of metasediment (eg. 5.9m, 6.4m, 6.6m, 7.15m). Magnetic Susceptibility: Typically < 0.5 Conductivity: Non-conductive Interpretation: Norite related to ultramafic rocks but finer grained than in hole ES2004-11.															
<u>Minor Interval</u>															
14.80	15.05	5b	Pelitic Metasediments												
Interval consisting of alternating fine grained, grey siliceous bands and fine to medium grained, pink garnet-rich bands. Banding on mm to cm scale. Uphole contact sharp at 55 degrees to CA; downhole contact gradational over 25cm where siliceous unit is intermixed with norite. Interpretation: Metasedimentary raft or Heim's "hybrid rocks".															
<u>Mineralization</u>	24.50	25.40	0.5 % Po	Pyrrhotite											
			F	Fracture-Controlled											
<u>Structure</u>	2.40	2.41	Sm	General Foliation											
<u>Structure</u>	11.60	11.61	Sm	General Foliation											
<u>Structure</u>	24.55	24.56	Sm	General Foliation											

Detailed Lithology					Assay Data												
From	To	Lithology			Sample #	From	To	Length	Ni %	Cu %	Co %	S %	Pt g/t	Pd g/t	Au g/t	Ag g/t	
25.40	28.70	6b Peridotite			PG03064	25.40	26.60	1.20	0.48	0.43	0.04	7.19	0.05	0.05	0.01	0.90	
		Foliated, medium grained dark grey to green mineralized ultramafic containing SMS bands, stringers and disseminations decreasing in abundance downhole. Uphole contact sharp at 30 degrees to CA; 5cm wide zone of chlorite schist at uphole contact; downhole contact gradational over several cms			PG03065	26.60	27.70	1.10	0.33	0.20	0.03	4.52	0.02	0.10	0.01	0.25	
					PG03066	27.70	28.70	1.00	0.08	0.03	0.01	0.78	0.01	0.03	0.01	0.25	
		Magnetic susceptibility: 0.35-5.2															
		Conductivity: 15-790, averages approx. 200 siemens															
		Mineralization	25.40	26.60	2.0 %	Cpy	Chalcopyrite										
						D	Disseminated										
						Cp	locally intermixed with SM po										
		Mineralization	25.40	26.60	25.0 %	Po	Pyrrhotite										
						SM	Semi-M assive										
						SM po	bands, stringers and net-textures										
		Mineralization	26.60	27.70	8.0 %	Po	Pyrrhotite										
						F	Fracture-Controlled										
						5-10% po	remobilized along fractures										
		Mineralization	26.60	27.70	1.0 %	Cpy	Chalcopyrite										
						BB	Blebbly										
						Intermixed with po											
		Mineralization	27.70	28.70	1.0 %	Po	Pyrrhotite										
						F	Fracture-Controlled										
						Po	along fractures and rare disseminations										
		Structure	26.20	26.21	Sm	General Foliation											
		Structure	27.70	27.71	Sm	General Foliation											

Detailed Lithology				Assay Data											
From	To	Lithology		Sample #	From	To	Length	Ni %	Cu %	Co %	S %	Pt g/t	Pd g/t	Au g/t	Ag g/t
28.70	47.00	6f	Norite	PG03067	28.70	29.70	1.00	0.03	0.03	0.01	0.12	0.01	0.01	0.01	0.25
		Fine to medium grained grey norite as 1.5-25.4m. Ranges from massive to foliated and is locally sheared (36.55m, 37.6m, 39.4m, 42.55m, 44.65-44.80m). Shearing typically consists of 1-3cm wide zones of mylonitization. Pseudotachylite at 41.45m. 10cm wide zone of shearing at 36.55m containing very fine grained laminated semi-massive pyrrhotite. 1-3% serpentine along fractures, trace quartz-carbonate fracture fillings. Magnetic Susceptibility: Typically < 0.5 Conductivity: Non-conductive Interpretation: Norite related to ultramafic rocks.		PG03068	35.80	36.40	0.60	0.03	0.03	0.01	0.41	0.01	0.01	0.01	0.25
				PG03069	36.40	36.70	0.30	0.03	0.07	0.01	2.39	0.01	0.01	0.01	0.25
				PG03070	36.70	37.70	1.00	0.03	0.03	0.01	0.39	0.01	0.01	0.01	0.25
				PG03071	41.80	42.55	0.75	0.08	0.08	0.01	1.30	0.01	0.01	0.01	0.25
				PG03072	46.00	47.00	1.00	0.14	0.07	0.01	1.03	0.02	0.01	0.01	0.25
		<u>Mineralization</u>	36.40 36.70 20.0 %	Po	Pyrrhotite SMSemi-M assive One 5 cm wide band of laminated SMS po										
		<u>Mineralization</u>	41.80 42.55 2.0 %	Po	Pyrrhotite F Fracture-Controlled 2-3% po along fractures and disseminated										
		<u>Structure</u>	36.40 36.41 Sm	General Foliation											

Detailed Lithology				Assay Data											
From	To	Lithology		Sample #	From	To	Length	Ni %	Cu %	Co %	S %	Pt g/t	Pd g/t	Au g/t	Ag g/t
47.00	87.05	6b Peridotite		PG03073	47.00	48.00	1.00	0.18	0.17	0.01	1.46	0.03	0.01	0.01	0.25
Foliated, medium grained mottled, strongly magnetic oikocrystic peridotite. Typically consists of 60-75% dark grey medium grained olivine-rich (?) groundmass, 25-40% 0.5-2.5cm light grey pyroxene (now altered to amphibole) oikocrysts and 3% very fine grained magnetite. Locally mineralized containing trace to 10% disseminated pyrrhotite. Ultramafic is pyroxenitic adjacent to uphole contact and to a depth of 50.25m. Uphole contact is gradational over several cms. Downhole contact is sharp at 80 degrees to CA and UM appears to be cross-cut by a younger leuco-norite. Magnetic susceptibility: 47-50.25m: 1-16, 50.25-87.05m: typically between 20 and 50, locally up to 97. Conductivity: Non-conductive except where po-bearing, weakly to strongly conductive over po mineralization when tested with ohm-meter; 30-40 siemens between 51m and 54m. Interpetation: Large magnetic UM body with zones of weak disseminated mineralization. Minor Interval 79.60 80.10 6f Norite Fine grained, light grey, altered (?) norite containing up to 10% garnet flattened along foliation planes. Block in ultramafic? Mineralization 47.00 51.00 2.0 % Po Pyrrhotite D Disseminated 1-3% disseminated po Mineralization 51.00 54.00 5.0 % Po Pyrrhotite D Disseminated 3-7% disseminated po Mineralization 56.00 56.50 3.0 % Po Pyrrhotite D Disseminated Mineralization 77.70 78.00 5.0 % Po Pyrrhotite D Disseminated Mineralization 86.50 87.05 5.0 % Po Pyrrhotite D Disseminated 5-7% disseminated po Structure 47.50 47.51 Sm General Foliation Structure 48.50 48.51 Sm General Foliation Structure 65.60 65.61 Sm General Foliation Structure 71.60 71.61 Sm General Foliation Structure 76.70 76.71 Sm General Foliation Structure 84.50 84.51 Sm General Foliation				PG03074	48.00	49.00	1.00	0.25	0.12	0.02	2.16	0.03	0.02	0.01	0.25
				PG03076	49.00	50.00	1.00	0.21	0.08	0.03	1.65	0.02	0.02	0.01	0.25
				PG03077	50.00	51.00	1.00	0.20	0.07	0.01	1.81	0.02	0.01	0.01	0.25
				PG03078	51.00	52.00	1.00	0.32	0.13	0.04	2.75	0.03	0.03	0.01	0.25
				PG03079	52.00	53.00	1.00	0.23	0.13	0.02	1.95	0.03	0.02	0.02	0.25
				PG03080	53.00	54.00	1.00	0.23	0.11	0.01	1.93	0.03	0.01	0.01	0.25
				PG03081	54.00	55.00	1.00	0.11	0.03	0.02	0.17	0.01	0.01	0.01	0.25
				PG03082	55.00	56.00	1.00	0.11	0.03	0.01	0.13	0.01	0.01	0.01	0.25
				PG03083	56.00	56.50	0.50	0.16	0.03	0.01	0.96	0.02	0.01	0.01	0.25
				PG03084	56.50	57.00	0.50	0.11	0.03	0.02	0.14	0.01	0.01	0.01	0.25
				PG03085	77.20	77.70	0.50	0.11	0.03	0.01	0.08	0.01	0.01	0.01	0.25
				PG03086	77.70	78.00	0.30	0.29	0.09	0.03	1.16	0.01	0.01	0.01	0.25
				PG03087	78.00	78.50	0.50	0.13	0.03	0.01	0.10	0.02	0.01	0.01	0.25
				PG03088	86.00	86.50	0.50	0.14	0.03	0.02	0.16	0.01	0.01	0.01	0.25
				PG03089	86.50	87.05	0.55	0.29	0.08	0.03	2.14	0.03	0.01	0.01	0.25

Detailed Lithology				Assay Data											
From	To	Lithology		Sample #	From	To	Length	Ni %	Cu %	Co %	S %	Pt g/t	Pd g/t	Au g/t	Ag g/t
87.05	90.25	7a Gabbronorite		PG03090	87.05	87.60	0.55	0.06	0.07	0.01	0.07	0.02	0.01	0.02	0.25
Medium grained, massive to weakly foliated, light grey leuco-gabbro. Consists of 65-70% plagioclase, 30-35% pyroxene and 1-2% chlorite. Very fine grained at uphole contact; downhole contact sharp and possibly sheared at 70 degrees to CA.															
Magnetic susceptibility: 0.1 Conductivity: non-conductive															
Interpretation: Leuconorite younger and cross-cutting ultramafic rocks. Heim's series "3" rocks?															
90.25	136.00	6d Pyroxenite		PG03091	109.30	109.90	0.60	0.07	0.03	0.02	0.10	0.01	0.01	0.01	0.25
Medium grained dark green ultramafic ranging from oikocrystic peridotite to pyroxenite. Similar to 47.00-87.05m but with increasing pyroxene content downhole. Locally contains up to 5% disseminated po.				PG03092	109.90	110.40	0.50	0.30	0.15	0.02	1.42	0.04	0.02	0.03	0.25
				PG03093	110.40	111.00	0.60	0.08	0.03	0.03	0.09	0.03	0.01	0.01	0.25
90.25-93.40m: Fine grained, pale grey, bleached/altered pyroxenite forming contact zone with uphole norite. Mag susceptibility = <1 93.40-99.40m: Oikocrystic peridotite as uphole. Mag susceptibility = 30-80 99.40-136m: Pyroxenite. Magnetic susceptibility highly variable from <1-50; averages 10-15.															
Non- conductive.															
Minor Interval															
	118.90	119.50	6f Norite												
Mineralization	109.90	110.40	5.0 % Po Pyrrhotite COCoated												
Structure	96.70	96.71	Sm General Foliation												
Structure	104.60	104.61	Sm General Foliation												
Structure	115.70	115.71	Sm General Foliation												
Structure	125.60	125.61	Sm General Foliation												
Structure	131.60	131.61	Sm General Foliation												

Espedalen - Analysis

Hole Number: ES2004-12

Sample Number	From	To	Sample Length	Ni%	Cu%	Co%	S%	Au g/t	Pt g/t	Pd g/t	Ag g/t	Pb%	Zn%	SiO2 %	Al2O3 %	Fe2O3 %	MgO %	CaO %	Na2O %	K2O %	TiO2 %	P2O5 %	MnO %	Cr2O3 %	V2O5 %	LOI%	SUM %
PG03063	24.50	25.40	0.90	0.03	0.03	0.01	0.35	0.01	0.01	0.01	0.25																
PG03064	25.40	26.60	1.20	0.48	0.43	0.04	7.19	0.01	0.05	0.05	0.90																
PG03065	26.60	27.70	1.10	0.33	0.20	0.03	4.52	0.01	0.02	0.10	0.25																
PG03066	27.70	28.70	1.00	0.08	0.03	0.01	0.78	0.01	0.01	0.03	0.25																
PG03067	28.70	29.70	1.00	0.03	0.03	0.01	0.12	0.01	0.01	0.01	0.25																
PG03068	35.80	36.40	0.60	0.03	0.03	0.01	0.41	0.01	0.01	0.01	0.25																
PG03069	36.40	36.70	0.30	0.03	0.07	0.01	2.39	0.01	0.01	0.01	0.25																
PG03070	36.70	37.70	1.00	0.03	0.03	0.01	0.39	0.01	0.01	0.01	0.25																
PG03071	41.80	42.55	0.75	0.08	0.08	0.01	1.30	0.01	0.01	0.01	0.25																
PG03072	46.00	47.00	1.00	0.14	0.07	0.01	1.03	0.01	0.02	0.01	0.25																
PG03073	47.00	48.00	1.00	0.18	0.17	0.01	1.46	0.01	0.03	0.01	0.25																
PG03074	48.00	49.00	1.00	0.25	0.12	0.02	2.16	0.01	0.03	0.02	0.25																
PG03076	49.00	50.00	1.00	0.21	0.08	0.03	1.65	0.01	0.02	0.02	0.25																
PG03077	50.00	51.00	1.00	0.20	0.07	0.01	1.81	0.01	0.02	0.01	0.25																
PG03078	51.00	52.00	1.00	0.32	0.13	0.04	2.75	0.01	0.03	0.03	0.25																
PG03079	52.00	53.00	1.00	0.23	0.13	0.02	1.95	0.02	0.03	0.02	0.25																
PG03080	53.00	54.00	1.00	0.23	0.11	0.01	1.93	0.01	0.03	0.01	0.25																
PG03081	54.00	55.00	1.00	0.11	0.03	0.02	0.17	0.01	0.01	0.01	0.25																
PG03082	55.00	56.00	1.00	0.11	0.03	0.01	0.13	0.01	0.01	0.01	0.25																
PG03083	56.00	56.50	0.50	0.16	0.03	0.01	0.96	0.01	0.02	0.01	0.25																
PG03084	56.50	57.00	0.50	0.11	0.03	0.02	0.14	0.01	0.01	0.01	0.25																
PG03085	77.20	77.70	0.50	0.11	0.03	0.01	0.08	0.01	0.01	0.01	0.25																
PG03086	77.70	78.00	0.30	0.29	0.09	0.03	1.16	0.01	0.01	0.01	0.25																
PG03087	78.00	78.50	0.50	0.13	0.03	0.01	0.10	0.01	0.02	0.01	0.25																
PG03088	86.00	86.50	0.50	0.14	0.03	0.02	0.16	0.01	0.01	0.01	0.25																
PG03089	86.50	87.05	0.55	0.29	0.08	0.03	2.14	0.01	0.03	0.01	0.25																
PG03090	87.05	87.60	0.55	0.06	0.07	0.01	0.07	0.02	0.02	0.01	0.25																
PG03091	109.30	109.90	0.60	0.07	0.03	0.02	0.10	0.01	0.01	0.01	0.25																

Espedalen - Analysis**Hole Number: ES2004-12**

Sample Number	From	To	Sample Length	Ni%	Cu%	Co%	S%	Au g/t	Pt g/t	Pd g/t	Ag g/t	Pb%	Zn%	SiO2 %	Al2O3 %	Fe2O3 %	MgO %	CaO %	Na2O %	K2O %	TiO2 %	P2O5 %	MnO %	Cr2O3 %	V2O5 %	LOI%	SUM %
PG03092	109.90	110.40	0.50	0.30	0.15	0.02	1.42	0.03	0.04	0.02	0.25																
PG03093	110.40	111.00	0.60	0.08	0.03	0.03	0.09	0.01	0.03	0.01	0.25																

Espedalen - Conductivity**Hole Number: ES2004-12**

Depth	Conductivity (Siemens)	COMMENTS
25.40	15.00	
25.80	199.00	
25.95	790.00	
26.00	390.00	
26.30	313.00	
26.40	794.00	
26.65	84.00	
27.00	290.00	
27.10	222.00	
27.50	13.00	
27.90	17.00	
36.55	59.00	
51.80	37.00	
52.80	39.00	
53.40	37.00	
86.60	30.00	
97.85	29.00	
110.30	28.00	

*Friday, May 20, 2005**ES2004-12*

Espedalen - Magnetic Susceptibility**Hole Number: ES2004-12**

DEPTH	MAGNETIC SUSCEPTIBILITY (X 10 ⁻³ SI)	COMMENTS
1.50	0.14	
2.50	0.56	
3.50	0.10	
4.50	0.28	
5.50	0.35	
6.50	0.37	
7.50	0.70	
8.50	0.04	
9.50	0.24	
10.50	0.20	
11.50	0.34	
12.50	0.23	
13.50	0.25	
14.50	0.26	
15.50	0.16	
16.50	0.25	
17.50	0.20	
18.50	0.20	
19.50	0.14	
20.50	0.18	
21.50	0.20	
22.50	0.28	
23.50	0.25	
24.50	0.30	
25.50	5.20	
26.50	1.00	
27.50	0.35	
28.50	0.71	
29.50	0.16	
30.50	0.52	
31.50	0.40	
32.50	0.27	
33.50	0.26	
34.50	0.14	
35.50	0.16	
36.50	1.85	

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Espedalen - Magnetic Susceptibility**Hole Number: ES2004-12**

37.50	0.22	
38.50	0.11	
39.50	0.10	
40.50	0.22	
41.50	0.46	
42.50	1.90	
43.50	0.09	
44.50	0.32	
45.50	0.38	
46.50	1.10	
47.50	16.10	
48.50	1.27	
49.50	9.00	
50.50	55.30	
51.50	97.00	
52.50	76.00	
53.50	54.00	
54.50	44.00	
55.50	35.00	
56.50	31.00	
57.50	48.00	
58.50	35.00	
59.50	74.00	
60.50	29.00	
61.50	54.00	
62.50	19.00	
63.50	36.00	
64.50	11.00	
65.50	29.00	
66.50	16.00	
67.50	27.00	
68.50	29.00	
69.50	46.00	
70.50	14.00	
71.50	52.00	
72.50	58.00	
73.50	26.00	
74.50	22.00	
75.50	23.00	

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Espedalen - Magnetic Susceptibility**Hole Number: ES2004-12**

76.50	50.00	
77.50	41.00	
78.50	43.00	
79.50	16.00	
80.50	17.00	
81.50	69.00	
82.50	86.00	
83.50	35.00	
84.50	3.20	
85.50	72.00	
86.50	14.00	
87.50	0.10	
88.50	0.15	
89.50	0.01	
90.50	0.20	
91.50	0.10	
92.50	0.62	
93.50	59.00	
94.50	76.00	
95.50	37.00	
96.50	31.00	
97.50	31.00	
98.50	68.00	
99.50	19.00	
100.50	3.50	
101.50	0.12	
102.50	0.16	
103.50	8.60	
104.50	19.00	
105.50	17.00	
106.50	16.00	
107.50	3.30	
108.50	16.00	
109.50	26.00	
110.50	15.00	
111.50	66.00	
112.50	3.70	
113.50	22.00	
114.50	33.00	

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Espedalen - Magnetic Susceptibility**Hole Number: ES2004-12**

115.50	26.00	
116.50	12.00	
117.50	0.04	
118.50	25.00	
119.50	0.11	
120.50	11.00	
121.50	13.00	
122.50	4.80	
123.50	9.00	
124.50	13.00	
125.50	30.00	
126.50	24.00	
127.50	51.00	
128.50	39.00	
129.50	38.00	
130.50	6.20	
131.50	12.20	
132.50	9.60	
133.50	10.00	
134.50	17.00	
135.50	9.00	

*Friday, May 20, 2005**ES2004-12*

Espedalen - Rock Quality (RQD)**Hole Number: ES2004-12**

FROM	TO	PERCENT QUALITY	PERCENT CORE	DISKING	COMMENTS
1.50	3.00	7.00	100.00	N	
3.00	6.00	42.00	100.00	N	
6.00	9.00	39.00	100.00	N	
9.00	12.00	44.00	100.00	N	
12.00	15.00	17.00	100.00	N	
15.00	18.00	59.00	100.00	N	
18.00	21.00	71.00	100.00	N	
21.00	24.00	44.00	100.00	N	
24.00	27.00	63.00	100.00	N	
27.00	30.00	53.00	100.00	N	
30.00	33.00	60.00	100.00	N	
33.00	36.00	28.00	100.00	N	
36.00	39.00	38.00	100.00	N	
39.00	42.00	51.00	100.00	N	
42.00	45.00	60.00	100.00	N	
45.00	48.00	70.00	100.00	N	
48.00	51.00	82.00	100.00	N	
51.00	54.00	77.00	100.00	N	
54.00	57.00	80.00	100.00	N	
57.00	60.00	79.00	100.00	N	
60.00	63.00	78.00	100.00	N	
63.00	66.00	89.00	100.00	N	
66.00	69.00	93.00	100.00	N	
69.00	72.00	90.00	100.00	N	
72.00	75.00	71.00	100.00	N	
75.00	78.00	86.00	100.00	N	
78.00	81.00	67.00	100.00	N	
81.00	84.00	67.00	100.00	N	
84.00	87.00	84.00	100.00	N	
87.00	90.00	78.00	100.00	N	
90.00	93.00	76.00	100.00	N	
93.00	96.00	86.00	100.00	N	
96.00	99.00	74.00	100.00	N	
99.00	102.00	79.00	100.00	N	
102.00	105.00	77.00	100.00	N	
105.00	108.00	72.00	100.00	N	
108.00	111.00	74.00	100.00	N	

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Espedalen - Rock Quality (RQD)**Hole Number: ES2004-12**

111.00	114.00	72.00	100.00	N	
114.00	117.00	92.00	100.00	N	
117.00	120.00	84.00	100.00	N	
120.00	123.00	53.00	100.00	N	
123.00	126.00	86.00	100.00	N	
126.00	129.00	75.00	100.00	N	
129.00	132.00	97.00	100.00	N	
132.00	135.00	88.00	100.00	N	
135.00	136.00	31.00	100.00	N	

Detailed Log

Hole Number: ES2004-13				Units: METRIC			
Project Name: Espedalen		Collar Survey: Y Plugged N		UTM WGS 84 Coord		Local Coord	
Project Number: 300		Multishot Survey: N Hole Size: TT46		UTM Northing: 6,809,641.55		Local Northing: 5259.52	
Date Started: 9/11/2004		Pulse EM Survey: N		UTM Easting: 531,072.31		Local Easting: 2400.91	
Date Completed: 9/13/2004		Casing: Left in Hole, capped		Elevation: 1214.64		Core Storage: Strand Fjellstue	
		Location: Surface				Contractor: Geo Drilling A/S	
						Collar Dip: -79.00	
						Collar Azimuth: 51.00	
						Length: 97.60	
						Logged by: P.Tirschmann	
Comments Purpose: To test UTEM conductor ESP_11_11. Two conductive plates modelled, one with conductance of 100 siemens and the other of 50 siemens. Result: Peridotite intersected between 2.15m and 31.30m locally contains trace to 3% disseminated pyrrhotite but no obvious conductor was intersected. Assays: All nickel values <0.10%. Lithological interpretation: Pyroxenitic to peridotitic bodies intruding anorthositic country rocks, in turn cross-cut by younger gabbro-norites.							
Detailed Lithology				Assay Data			
From	To	Lithology		Sample #	From	To	Length
				Ni %	Cu %	Co %	S %
				Pt g/t	Pd g/t	Au g/t	Ag g/t
0.00	2.15	C Casing					

Detailed Lithology					Assay Data											
From	To	Lithology			Sample #	From	To	Length	Ni %	Cu %	Co %	S %	Pt g/t	Pd g/t	Au g/t	Ag g/t
2.15	31.30	6b Peridotite			PG03097	14.25	15.25	1.00	0.07	0.03	0.01	0.24	0.01	0.01	0.01	0.25
		Weakly to moderately foliated, medium grained, dark green, strongly magnetic oikocrystic peridotite. Typically consists of 80-85% dark grey medium grained olivine-rich groundmass, 10-20% 0.5-2.5cm light grey pyroxene (now altered to amphibole) oikocrysts and 3% very fine grained magnetite. Weak (trace -3%) disseminated pyrrhotite mineralization locally. Very fine grained pyrrhotite laminae in sheared Um between 31.1-31.2m.			PG03098	21.85	23.00	1.15	0.08	0.03	0.01	0.21	0.01	0.01	0.01	0.25
					PG03099	25.50	26.50	1.00	0.08	0.03	0.02	0.26	0.01	0.01	0.01	0.25
					PG03101	26.50	27.25	0.75	0.08	0.03	0.02	0.22	0.01	0.01	0.01	0.25
					PG03102	30.00	30.80	0.80	0.07	0.03	0.01	0.12	0.01	0.01	0.01	0.25
					PG03103	30.80	31.30	0.50	0.08	0.03	0.01	1.00	0.06	0.03	0.01	0.25
		Sheared over a 40cm interval adjacent to sharp downhole contact with norite; downhole contact at 57 degrees to CA.														
		Magnetic susceptibility: 50-100														
		Conductivity: Non-conductive														
		Interpretation: Oikocrystic ultramafic similar to that seen in ES2004-12 between 47m and 87.05m.														
		<u>Mineralization</u>	30.80	31.30	5.0 %	Po	Pyrrhotite									
							5% vfg po laminations in sheared mylonitized UM									
		<u>Structure</u>	7.30	7.31	Sm	General Foliation										
		<u>Structure</u>	19.20	19.21	Sm	General Foliation										
		<u>Structure</u>	25.60	25.61	Sm	General Foliation										
31.30	43.80	7a Gabbronorite			PG03104	39.90	40.75	0.85	0.03	0.03	0.03	2.18	0.03	0.01	0.01	0.25
		Medium grained, well foliated (sheared?), light grey leuco-gabbro. Consists of 70-75% plagioclase, 25-30% pyroxene and 1-2% chlorite. Several percent serpentinized fractures and slips. Downhole contact unchilled, sharp, but irregular.														
		Magnetic susceptibility: < 1														
		Conductivity: non-conductive														
		Interpretation: Leuconorite as seen in ES2004-12 between 87.05 and 90.25m, but foliated.														
		<u>Mineralization</u>	39.90	40.75	3.0 %	Po	Pyrrhotite									
						D	Disseminated									
							3% disseminated, fracture-controlled and blebby po in sheared norite									
		<u>Structure</u>	34.50	34.51	Sm	General Foliation										
		<u>Structure</u>	39.60	39.61	Sm	General Foliation										
		<u>Structure</u>	42.30	42.31	Sm	General Foliation										

Detailed Lithology			Assay Data											
From	To	Lithology	Sample #	From	To	Length	Ni %	Cu %	Co %	S %	Pt g/t	Pd g/t	Au g/t	Ag g/t
43.80	70.10	6d Pyroxenite Fine grained dark green pyroxenite with inhomogenous appearance due to presence of 5-10% white and green cm to dm scale anorthositic inclusions and schlieren-like bands. Foliation evident in anorthositic intervals. Between 66.5m and 67.8m pyroxenite contains cm scale inclusions of dark grey, aphanitic, mafic rock, some of which contain trace pyrrhotite along fractures. Reaction rims evident on some inclusions. Downhole contact with sheared anorthositic rocks sharp and estimated at 60 degrees to CA. Magnetic susceptibility: Typically between 0.5 and 3.5 Conductivity: Non-conductive Interpretation: Pyroxenite body intruding older anorthositic rocks.												
70.10	87.70	4 Anorthosite / Anorthositic Gabbro Inhomogenous interval of tectonized, mottled white and green, medium to coarse grained anorthositic gabbro. Consists of 65-85% plagioclase and 15-35% pyroxene. Unit is sheared and contains 3-10% serpentine and chlorite fracture fillings and veinlets which locally disrupt and brecciate the host rock. Trace po along fractures in ultramafic dykelet at 71.25m. Rare trace po, disseminated and along fractures in anorthositic gabbro. Magnetic susceptibility: <1 Conductivity: Non-conductive <u>Mineralization</u> 81.00 81.40 4.0 % Po Pyrrhotite STR Stringers One 1-5mm wide stringer of po, minor py sub-parallel to CA <u>Structure</u> 72.65 72.66 Sm General Foliation <u>Structure</u> 78.10 78.11 Sm General Foliation <u>Structure</u> 83.60 83.61 Sm General Foliation <u>Structure</u> 87.55 87.56 Sm General Foliation	PG03105	81.00	81.40	0.40	0.03	0.03	0.01	6.01	0.01	0.01	0.01	0.25

Detailed Lithology			Assay Data																													
From	To	Lithology	Sample #	From	To	Length	Ni %	Cu %	Co %	S %	Pt g/t	Pd g/t	Au g/t	Ag g/t																		
87.70	97.60	6d Pyroxenite Inhomogeneous unit ranging from fine grained dark green pyroxenite to fine grained green and white melanogabbro. Foliation evident in melanogabbro. Broken core at uphole contact with sheared anorthositic rocks but contact is sharp and estimated at 50 degrees to CA. Magnetic susceptibility: 0.3-3 Conductivity: Non-conductive Interpretation: Pyroxenitic to melanogabbroic body intruding older anorthositic rocks. <table><tr><td><u>Structure</u></td><td>88.65</td><td>88.66</td><td>Sm</td><td>General Foliation</td></tr><tr><td><u>Structure</u></td><td>90.60</td><td>90.61</td><td>Sm</td><td>General Foliation</td></tr><tr><td><u>Structure</u></td><td>94.50</td><td>94.51</td><td>Sm</td><td>General Foliation</td></tr><tr><td><u>Structure</u></td><td>97.50</td><td>97.51</td><td>Sm</td><td>General Foliation</td></tr></table>	<u>Structure</u>	88.65	88.66	Sm	General Foliation	<u>Structure</u>	90.60	90.61	Sm	General Foliation	<u>Structure</u>	94.50	94.51	Sm	General Foliation	<u>Structure</u>	97.50	97.51	Sm	General Foliation										
<u>Structure</u>	88.65	88.66	Sm	General Foliation																												
<u>Structure</u>	90.60	90.61	Sm	General Foliation																												
<u>Structure</u>	94.50	94.51	Sm	General Foliation																												
<u>Structure</u>	97.50	97.51	Sm	General Foliation																												

Espedalen - Analysis**Hole Number: ES2004-13**

Sample Number	From	To	Sample Length	Ni%	Cu%	Co%	S%	Au g/t	Pt g/t	Pd g/t	Ag g/t	Pb%	Zn%	SiO2 %	Al2O3 %	Fe2O3 %	MgO %	CaO %	Na2O %	K2O %	TiO2 %	P2O5 %	MnO %	Cr2O3 %	V2O5 %	LOI%	SUM %
PG03097	14.25	15.25	1.00	0.07	0.03	0.01	0.24	0.01	0.01	0.01	0.25																
PG03098	21.85	23.00	1.15	0.08	0.03	0.01	0.21	0.01	0.01	0.01	0.25																
PG03099	25.50	26.50	1.00	0.08	0.03	0.02	0.26	0.01	0.01	0.01	0.25																
PG03101	26.50	27.25	0.75	0.08	0.03	0.02	0.22	0.01	0.01	0.01	0.25																
PG03102	30.00	30.80	0.80	0.07	0.03	0.01	0.12	0.01	0.01	0.01	0.25																
PG03103	30.80	31.30	0.50	0.08	0.03	0.01	1.00	0.01	0.06	0.03	0.25																
PG03104	39.90	40.75	0.85	0.03	0.03	0.03	2.18	0.01	0.03	0.01	0.25																
PG03105	81.00	81.40	0.40	0.03	0.03	0.01	6.01	0.01	0.01	0.01	0.25																

Espedalen - Conductivity**Hole Number: ES2004-13**

Depth	Conductivity (Siemens)	COMMENTS
31.00	24.00	very fine grained po laminae

Espedalen - Magnetic Susceptibility**Hole Number: ES2004-13**

DEPTH	MAGNETIC SUSCEPTIBILITY (X 10 ⁻³ SI)	COMMENTS
2.50	55.30	
3.50	83.20	
4.50	90.40	
5.50	79.20	
6.50	111.00	
7.50	102.00	
8.50	89.70	
9.50	70.80	
10.50	87.30	
11.50	94.50	
12.50	100.00	
13.50	112.00	
14.50	90.00	
15.50	73.20	
16.50	91.10	
17.50	121.00	
18.50	98.20	
19.50	87.30	
20.50	79.40	
21.50	101.00	
22.50	107.00	
23.50	108.00	
24.50	97.70	
25.50	102.00	
26.50	107.00	
27.50	108.00	
28.50	101.00	
29.50	92.30	
30.50	62.70	
31.50	4.51	
32.50	0.48	
33.50	0.39	
34.50	0.33	
35.50	0.27	
36.50	0.34	
37.50	0.33	

*Friday, May 20, 2005**ES2004-13*

Espedalen - Magnetic Susceptibility**Hole Number: ES2004-13**

38.50	0.31	
39.50	0.42	
40.50	0.98	
41.50	0.27	
42.50	0.27	
43.50	0.49	
44.50	0.69	
45.50	1.25	
46.50	0.82	
47.50	0.84	
48.50	3.40	
49.50	0.78	
50.50	2.95	
51.50	1.36	
52.50	0.82	
53.50	0.30	
54.50	3.52	
55.50	0.57	
56.50	0.76	
57.50	0.62	
58.50	1.25	
59.50	0.88	
60.50	0.82	
61.50	3.47	
62.50	1.82	
63.50	2.10	
64.50	2.12	
65.50	1.03	
66.50	7.86	
67.50	1.56	
68.50	6.53	
69.50	11.20	
70.50	0.24	
71.50	0.27	
72.50	0.37	
73.50	0.19	
74.50	0.49	
75.50	1.89	
76.50	0.66	

*Friday, May 20, 2005**ES2004-13*

Espedalen - Magnetic Susceptibility**Hole Number: ES2004-13**

77.50	0.59	
78.50	0.42	
79.50	0.49	
80.50	0.34	
81.50	0.57	
82.50	0.21	
83.50	0.24	
84.50	0.26	
85.50	0.15	
86.50	0.36	
87.50	0.36	
88.50	2.15	
89.50	1.71	
90.50	0.68	
91.50	2.99	
92.50	1.78	
93.50	1.15	
94.50	0.85	
95.50	0.43	
96.50	0.34	
97.50	0.43	

Espedalen - Rock Quality (RQD)**Hole Number: ES2004-13**

FROM	TO	PERCENT QUALITY	PERCENT CORE	DISKING	COMMENTS
2.15	5.00	28.00	100.00	N	
5.00	8.00	41.00	100.00	N	
8.00	11.00	46.00	100.00	N	
11.00	14.00	59.00	100.00	N	
14.00	17.00	71.00	100.00	N	
17.00	20.00	64.00	100.00	N	
20.00	23.00	27.00	100.00	N	
23.00	26.00	59.00	100.00	N	
26.00	29.00	90.00	100.00	N	
29.00	32.00	30.00	100.00	N	
32.00	35.00	62.00	100.00	N	
35.00	38.00	40.00	100.00	N	
38.00	41.00	56.00	100.00	N	
41.00	44.00	57.00	100.00	N	
44.00	47.00	35.00	100.00	N	
47.00	50.00	55.00	100.00	N	
50.00	53.00	49.00	100.00	N	
53.00	56.00	56.00	100.00	N	
56.00	59.00	63.00	100.00	N	
59.00	62.00	74.00	100.00	N	
62.00	65.00	79.00	100.00	N	
65.00	68.00	36.00	100.00	N	
68.00	71.00	48.00	100.00	N	
71.00	74.00	37.00	100.00	N	
74.00	77.00	20.00	100.00	N	
77.00	80.00	40.00	100.00	N	
80.00	83.00	78.00	98.00	N	
83.00	86.00	75.00	100.00	N	
86.00	89.00	65.00	100.00	N	
89.00	92.00	85.00	100.00	N	
92.00	95.00	58.00	100.00	N	
95.00	97.60	48.00	100.00	N	

Friday, May 20, 2005

ES2004-13

Detailed Log

Hole Number: **ES2004-14**

Units: METRIC

Project Name: Espedalen Collar Survey: Y Plugged: N
 Project Number: 300 Multishot Survey: N Hole Size: TT46
 Date Started: 9/15/2004 Pulse EM Survey: N
 Date Completed: 9/19/2004 Casing: Left in Hole, capped
 Location: Surface

UTM WGS 84 Coord Local Coord
 UTM Northing: 6,809,492.84 Local Northing: 6458.42
 UTM Easting: 532,762.13 Local Easting: 3601.03
 Elevation: 1284.42

Core Storage: Strand Fjellstue Collar Dip: -54.00
 Contractor: Geo Drilling A/S Collar Azimuth: 231.00
 Length: 131.45
 Logged by: P. Tirschmann

Comments Purpose: To test UTEM conductor ESP_10_08. Conductivity = 400 siemens.

Result: Mineralized pyroxenite was intersected from 50.85m-81.60m, which contains an average of 2-10% pyrrhotite with trace pyrite and chalcopyrite. Sulphides typically occur as blebs and disseminations. Two narrow intervals containing net-textured to semi-massive sulphides from 79.60-80.60m and 81.15-81.60m.

Assays: ☐ 0.66% Ni, 0.37% Cu, 0.06% Co / 1.00m (79.60-80.60m)
☐ 0.99% Ni, 0.10% Cu, 0.08% Co / 0.45m (81.15-81.60m)

Lithological interpretation: Package of norites and pyroxenites which have intruded what appear to be siliceous metasediments. Mafic/ultramafic rocks locally cross-cut by distinctive magnetic mafic alkaline (?) dykes.

Detailed Lithology

Assay Data

From	To	Lithology
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Sample #	From	To	Length	Ni %	Cu %	Co %	S %	Pt g/t	Pd g/t	Au g/t	Ag g/t
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0.00	2.35	C Casing CASING
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Detailed Lithology			Assay Data											
From	To	Lithology	Sample #	From	To	Length	Ni %	Cu %	Co %	S %	Pt g/t	Pd g/t	Au g/t	Ag g/t
2.35	19.95	6f Norite Medium grained, greyish to brownish green, equigranular norite. Consists of 75-85% pyroxene, 15-25% plagioclase, 3-5% biotite ± chlorite and trace pyrrhotite. Pyroxene is brownish in color and appears altered. Norite is in sharp contact with one interval of pyroxenite (see minor interval) and is also gradational to pyroxenite adjacent to downhole contact with ultramafic dyke (18.6-19.95m). Conductivity: Non-conductive Magnetic susceptibility: 0.3-1.5 <u>Minor Interval</u> 9.45 14.00 6d Pyroxenite Medium grained, dark green pyroxenite locally containing trace to 1% pyrrhotite blebs and disseminations. Uphole contact sharp at 25-30° to CA; downhole contact sharp at 75-85° to CA. Non-conductive. Magnetic susceptibility: 3-12, avg = 5												
19.95	22.30	8f Aphanitic UM Dyke Dark grey to black, magnetic aphanitic ultramafic (?) dyke. No visible leucocratic minerals. Contains 10-20% 1-3mm white diffuse rounded patches for several cms adjacent to both uphole and downhole contacts (alteration mineral or result of chilling?). Up hole contact is sharp and slightly irregular at 65° to CA; downhole contact is sharp and chilled at 65° to CA. Clearly cross-cuts and postdates host norite. Conductivity: Non-conductive Magnetic Susceptibility: 10-32												

Detailed Lithology			Assay Data											
From	To	Lithology	Sample #	From	To	Length	Ni %	Cu %	Co %	S %	Pt g/t	Pd g/t	Au g/t	Ag g/t
22.30	50.85	6f Norite As 2.35-19.95m. Medium grained, greyish to brownish green, equigranular norite. Consists of 75-85% pyroxene, 15-25% plagioclase and 3-5% biotite ± chlorite. Pyroxene is brownish in color and appears altered. Locally norite contains plagioclase rich bands, patches and veinlets which may represent partially digested or remobilized anorthositic material. Norite is in sharp to gradational contact with narrow intervals of pyroxenite (see minor intervals). Downhole contact with larger pyroxenite unit sharp and at 70° to CA. Conductivity: Non-conductive Magnetic susceptibility: 0.2-2, typically < 1. Interpretation: Part of same norite body as uphole, cross-cut by the distinctive aphanitic UM dyke. Likely magmatically related to UM units intersected in hole. <u>Minor Interval</u>												
		32.50 33.70 6d Pyroxenite Fine to medium grained, dark green pyroxenite. Uphole contact appears abrupt but not sharp; downhole contact is sharp and at 75° to CA. Magnetic susceptibility increases downhole from <1 to 25.												

Detailed Lithology				Assay Data											
From	To	Lithology		Sample #	From	To	Length	Ni %	Cu %	Co %	S %	Pt g/t	Pd g/t	Au g/t	Ag g/t
50.85	81.60	6d Pyroxenite		PG03114	60.10	61.00	0.90	0.13	0.07	0.01	0.97	0.02	0.01	0.02	0.25
Medium grained, light to dark green pyroxenite consisting of 80-95% altered (?) pyroxene, 1-15% fine grained chlorite and trace to 10% pyrrhotite. Pyrrhotite occurs as blebs and disseminations and is moderately magnetic. Rare trace chalcopyrite intermixed with pyrrhotite. Ultramafic contains several cm to decimeter scale inclusions of medium to coarse grained anorthosite and anorthositic gabbro (eg. 53.55-53.8m, 54.60m, 78.4-79.6m). Downhole contact interpreted at last occurrence of UM-hosted semi-massive sulphide. Mineralized contact zone contains several 5-8cm wide zones of fine grained, highly siliceous rock as well as one interval of fine grained gabbro-norite between 80.5 and 81m. Conductivity: Conductive where po mineralization is interconnected. Magnetic susceptibility: typical between 1 and 10; locally up to 33. <u>Minor Interval</u> 72.90 73.00 8f Aphanitic UM Dyke Similar to 19.95-22.30m. Uphole contact @ 50° to CA; downhole contact at 55° to CA. <u>Minor Interval</u> 73.05 73.50 8f Aphanitic UM Dyke Strongly magnetic. Aphanitic black UM dyke as previously but containing mm to cm scale clasts of pyroxenite and mineralized pyroxenite. Uphole contact at 30° to CA; downhole contact @ 65-70° to CA. Conductivity: Magnetic Susceptibility: 24-30 Interpretation: Clearly post-dates and brecciates mineralized ultramafic. Magmatic relationship to pyroxenite unclear. <u>Minor Interval</u> 78.40 79.60 4 Anorthosite / Anorthositic Gabbro Very coarse grained, mottled white and green anorthositic block in ultramafic. Unmineralized. <u>Mineralization</u> 60.10 61.00 2.0 % Po Pyrrhotite D Disseminated <u>Mineralization</u> 61.00 61.75 0.5 % Po Pyrrhotite D Disseminated Trace po, poorly mineralized due to presence of anorthositic bands <u>Mineralization</u> 61.75 72.50 3.0 % Po Pyrrhotite BB Blebby 1-5% pyrrhotite blebs and disseminations				PG03115	61.00	61.75	0.75	0.11	0.11	0.01	0.97	0.01	0.01	0.03	0.25
				PG03116	61.75	63.00	1.25	0.20	0.07	0.01	1.63	0.01	0.01	0.01	0.25
				PG03117	63.00	64.00	1.00	0.16	0.11	0.03	1.46	0.03	0.01	0.03	0.60
				PG03118	64.00	65.00	1.00	0.19	0.16	0.02	2.01	0.02	0.01	0.04	0.25
				PG03119	65.00	66.00	1.00	0.14	0.06	0.03	1.10	0.01	0.01	0.03	0.25
				PG03120	66.00	67.00	1.00	0.17	0.06	0.03	1.63	0.01	0.01	0.08	0.70
				PG03121	67.00	68.00	1.00	0.19	0.07	0.02	2.14	0.01	0.01	0.02	0.25
				PG03122	68.00	69.00	1.00	0.16	0.08	0.02	1.68	0.02	0.01	0.04	0.25
				PG03123	69.00	70.00	1.00	0.16	0.07	0.03	1.83	0.01	0.01	0.02	0.25
				PG03124	70.00	71.00	1.00	0.12	0.06	0.01	1.25	0.02	0.01	0.01	0.25
				PG03126	71.00	72.00	1.00	0.13	0.03	0.01	1.21	0.01	0.01	0.01	0.25
				PG03127	72.00	72.50	0.50	0.13	0.03	0.03	1.47	0.02	0.01	0.03	0.25
				PG03128	72.50	73.50	1.00	0.05	0.03	0.01	0.77	0.01	0.01	0.03	0.25
				PG03129	73.50	74.50	1.00	0.14	0.10	0.01	1.92	0.02	0.01	0.09	0.25
				PG03130	74.50	75.50	1.00	0.11	0.03	0.01	1.38	0.01	0.01	0.02	0.25
				PG03131	75.50	76.50	1.00	0.15	0.08	0.02	2.23	0.02	0.01	0.04	0.25
				PG03132	76.50	77.50	1.00	0.13	0.13	0.01	2.01	0.01	0.01	0.43	0.25
				PG03133	77.50	78.40	0.90	0.21	0.22	0.03	3.46	0.01	0.01	0.05	0.80
				PG03134	78.40	79.60	1.20	0.03	0.20	0.01	0.41	0.02	0.01	0.02	0.25
				PG03135	79.60	80.60	1.00	0.66	0.37	0.06	10.40	0.02	0.01	0.03	0.60
				PG03136	80.60	81.15	0.55	0.06	0.19	0.01	0.85	0.01	0.01	0.02	0.25
				PG03137	81.15	81.60	0.45	0.99	0.10	0.08	14.90	0.03	0.05	0.04	0.25

Detailed Lithology					Assay Data											
From	To	Lithology			Sample #	From	To	Length	Ni %	Cu %	Co %	S %	Pt g/t	Pd g/t	Au g/t	Ag g/t
		<u>Mineralization</u>	72.50	73.50	0.5 %	Po	Pyrrhotite									
						D	Disseminated									
							Trace po, most of intervals consists of unmin. UM dykes									
		<u>Mineralization</u>	73.50	78.40	5.0 %	Po	Pyrrhotite									
						BB	Blebbly									
							Po blebs and disseminations throughout									
		<u>Mineralization</u>	78.40	79.60	0.5 %	Cpy	Chalcopyrite									
						F	Fracture-Controlled									
							Trace cp & po filling fracture									
		<u>Mineralization</u>	79.60	80.60	3.0 %	Cpy	Chalcopyrite									
						F	Fracture-Controlled									
							CP concentrated in 7cm wide siliceous zone									
		<u>Mineralization</u>	79.60	80.60	2.0 %	Py	Pyrite									
						D	Disseminated									
							Intermixed with po.									
		<u>Mineralization</u>	79.60	80.60	20.0 %	Po	Pyrrhotite									
						NT	Net-Textured									
							Net-textured to locally semi-massive; one 5cm wide zone of siliceous rock									
		<u>Mineralization</u>	80.60	81.15	1.0 %	Py	Pyrite									
						F	Fracture-Controlled									
							Very fine grained pyrite along fractures in fine grained norite									
		<u>Mineralization</u>	81.15	81.60	30.0 %	Po	Pyrrhotite									
							SMSemi-M assive									
							Breccia textures locally; interval includes 8cm wide siliceous zone									
		<u>Mineralization</u>	81.15	81.60	5.0 %	Py	Pyrite									
						D	Disseminated									
							Intermixed with po									

Detailed Lithology					Assay Data											
From	To	Lithology			Sample #	From	To	Length	Ni %	Cu %	Co %	S %	Pt g/t	Pd g/t	Au g/t	Ag g/t
81.60	87.90	5a Siliceous Metasediments			PG03138	81.60	82.10	0.50	0.15	0.16	0.02	2.46	0.02	0.01	0.02	0.25
		Inhomogenous interval of fine grained, foliated to banded siliceous metasediments consisting of variable amounts of quartz, feldspar, biotite, altered mafic minerals (?) ± garnet. 7cm wide zone of what appears to be well banded to laminated chert at 81.9m. Cm scale anorthositic bands locally. Remobilized po+py locally as disseminations and fracture fillings, including one 4cm wide semi-massive band at 84.2m. Conductivity: typically non-conductive, but strongly conductive over po mineralization. Magnetic Susceptibility: 0.6-3			PG03139	82.10	83.00	0.90	0.03	0.07	0.01	0.87	0.02	0.01	0.05	0.25
					PG03140	83.00	84.10	1.10	0.03	0.03	0.01	0.27	0.01	0.01	0.01	0.25
					PG03141	84.10	85.00	0.90	0.27	0.13	0.03	3.98	0.03	0.01	0.02	0.25
					PG03142	85.00	85.90	0.90	0.18	0.13	0.02	2.85	0.02	0.01	0.07	0.25
					PG03143	85.90	86.40	0.50	0.34	0.17	0.04	5.98	0.03	0.01	0.03	0.25
					PG03144	86.40	87.00	0.60	0.03	0.20	0.01	0.94	0.01	0.01	0.11	0.50
		<u>Mineralization</u>	84.10	85.00	10.0 %	Po	Pyrrhotite SM Semi-M assive 8% po, 2% py mainly in one 4cm wide semi-massive band at 84.2m									
		<u>Mineralization</u>	85.90	86.40	7.0 %	Po	Pyrrhotite F Fracture-Controlled 5% po, 2% py along fractures & disseminated									
		<u>Structure</u>	81.90	81.91	Sm	General Foliation										
		<u>Structure</u>	86.60	86.61	Sm	General Foliation										
87.90	100.20	6d Pyroxenite			PG03145	94.00	95.00	1.00	0.17	0.06	0.01	1.46	0.01	0.01	0.03	0.25
		Medium grained, foliated to massive, dark green pyroxenite consisting of 85-95% altered (?) pyroxene, 1-10% fine grained chlorite and 1% to 5% pyrrhotite. Pyrrhotite occurs as disseminations and blebs and is moderately magnetic. Conductivity: Conductive where po mineralization is interconnected. Magnetic susceptibility: 1-15, avg = 5			PG03146	95.00	96.00	1.00	0.13	0.03	0.02	0.98	0.01	0.01	0.01	0.25
					PG03147	96.00	97.00	1.00	0.13	0.09	0.01	1.04	0.01	0.01	0.01	0.25
					PG03148	97.00	98.00	1.00	0.21	0.10	0.02	1.42	0.02	0.01	0.07	0.25
					PG03149	98.00	99.00	1.00	0.27	0.14	0.02	1.87	0.01	0.01	0.03	0.25
					PG03151	99.00	100.20	1.20	0.16	0.07	0.01	1.38	0.02	0.01	0.02	0.25
					<u>Mineralization</u>	94.00	100.20	2.0 %	Po	Pyrrhotite D Disseminated						
		<u>Structure</u>	88.70	88.71	Sm	General Foliation										
		<u>Structure</u>	98.30	98.31	Sm	General Foliation										

Detailed Lithology				Assay Data											
From	To	Lithology		Sample #	From	To	Length	Ni %	Cu %	Co %	S %	Pt g/t	Pd g/t	Au g/t	Ag g/t
100.20	131.45	5a Siliceous Metasediments Interval dominated by siliceous, garnet-bearing metasediments. 100.2-104.4m: Inhomogenous interval consisting of 60% fine grained, banded, grey siliceous metasediments and 40% medium grained anorthositic gabbro. Both rock types are garnet-bearing with the metasediments containing garnet-rich beds and the anorthositic gabbro containing medium to coarse grained recrystallized garnet. 104.4-113m: Fine grained, dark grey, massive to weakly foliated quartzo-feldspathic unit consisting of variably amounts of feldspar, mafic minerals, quartz, biotite, muscovite ± garnet. (Psammitic metasediments?). 113-131.4m: Fine grained, banded siliceous metasediments consisting of alternating grey siliceous beds and pink, more pelitic garnet-rich beds. Unit also contains cm to dm scale intervals of what appears to be coarser grained, massive garnet-bearing anorthosite (eg. 116.6-117.7m, 118.8-119.2m, 121.55-122.05m, 127.9-128.8m). Metasediments are cross-cut by several aphanitic, magnetic, black ultramafic dykes as follows: 113.3-113.75m: irregular uphole contact, downhole contact at 80° to CA 119.2-120.2m: uphole and downhole contacts at 10° to CA 125.6-127m: uphole contact at 65° to CA; downhole contact at 10° to CA 127.4-127.6m: uphole contact at 60° to CA; downhole contact at 50° to CA Aphanitic dykes typically contains rounded, diffuse white grains 1-3mm in diameter. In one dyke, these grains become much smaller and highly concentrated at the dyke contacts, possible due to effects of rapid cooling. Conductivity: Non-conductive. Magnetic susceptibility: 2-6 between 100.2 and 113m, typically < 2 between 113 and 131.4m (except for magnetic dykes which range from 9-18). <u>Mineralization</u> 123.90 124.20 10.0 % Po Pyrrhotite STR Stringers <u>Structure</u> 100.90 100.91 Sm General Foliation <u>Structure</u> 114.80 114.81 Sm General Foliation <u>Structure</u> 122.60 122.61 Sm General Foliation <u>Structure</u> 129.50 129.51 Sm General Foliation		PG03152	123.90	124.20	0.30	0.08	0.06	0.03	4.74	0.03	0.03	0.04	0.25

Espedalen - Analysis

Hole Number: ES2004-14

Sample Number	From	To	Sample Length	Ni%	Cu%	Co%	S%	Au g/t	Pt g/t	Pd g/t	Ag g/t	Pb%	Zn%	SiO2 %	Al2O3 %	Fe2O3 %	MgO %	CaO %	Na2O %	K2O %	TiO2 %	P2O5 %	MnO %	Cr2O3 %	V2O5 %	LOI%	SUM %
PG03114	60.10	61.00	0.90	0.13	0.07	0.01	0.97	0.02	0.02	0.01	0.25																
PG03115	61.00	61.75	0.75	0.11	0.11	0.01	0.97	0.03	0.01	0.01	0.25																
PG03116	61.75	63.00	1.25	0.20	0.07	0.01	1.63	0.01	0.01	0.01	0.25																
PG03117	63.00	64.00	1.00	0.16	0.11	0.03	1.46	0.03	0.03	0.01	0.60																
PG03118	64.00	65.00	1.00	0.19	0.16	0.02	2.01	0.04	0.02	0.01	0.25																
PG03119	65.00	66.00	1.00	0.14	0.06	0.03	1.10	0.03	0.01	0.01	0.25																
PG03120	66.00	67.00	1.00	0.17	0.06	0.03	1.63	0.08	0.01	0.01	0.70																
PG03121	67.00	68.00	1.00	0.19	0.07	0.02	2.14	0.02	0.01	0.01	0.25																
PG03122	68.00	69.00	1.00	0.16	0.08	0.02	1.68	0.04	0.02	0.01	0.25																
PG03123	69.00	70.00	1.00	0.16	0.07	0.03	1.83	0.02	0.01	0.01	0.25																
PG03124	70.00	71.00	1.00	0.12	0.06	0.01	1.25	0.01	0.02	0.01	0.25																
PG03126	71.00	72.00	1.00	0.13	0.03	0.01	1.21	0.01	0.01	0.01	0.25																
PG03127	72.00	72.50	0.50	0.13	0.03	0.03	1.47	0.03	0.02	0.01	0.25																
PG03128	72.50	73.50	1.00	0.05	0.03	0.01	0.77	0.03	0.01	0.01	0.25																
PG03129	73.50	74.50	1.00	0.14	0.10	0.01	1.92	0.09	0.02	0.01	0.25																
PG03130	74.50	75.50	1.00	0.11	0.03	0.01	1.38	0.02	0.01	0.01	0.25																
PG03131	75.50	76.50	1.00	0.15	0.08	0.02	2.23	0.04	0.02	0.01	0.25																
PG03132	76.50	77.50	1.00	0.13	0.13	0.01	2.01	0.43	0.01	0.01	0.25																
PG03133	77.50	78.40	0.90	0.21	0.22	0.03	3.46	0.05	0.01	0.01	0.80																
PG03134	78.40	79.60	1.20	0.03	0.20	0.01	0.41	0.02	0.02	0.01	0.25																
PG03135	79.60	80.60	1.00	0.66	0.37	0.06	10.40	0.03	0.02	0.01	0.60																
PG03136	80.60	81.15	0.55	0.06	0.19	0.01	0.85	0.02	0.01	0.01	0.25																
PG03137	81.15	81.60	0.45	0.99	0.10	0.08	14.90	0.04	0.03	0.05	0.25																
PG03138	81.60	82.10	0.50	0.15	0.16	0.02	2.46	0.02	0.02	0.01	0.25																
PG03139	82.10	83.00	0.90	0.03	0.07	0.01	0.87	0.05	0.02	0.01	0.25																
PG03140	83.00	84.10	1.10	0.03	0.03	0.01	0.27	0.01	0.01	0.01	0.25																
PG03141	84.10	85.00	0.90	0.27	0.13	0.03	3.98	0.02	0.03	0.01	0.25																
PG03142	85.00	85.90	0.90	0.18	0.13	0.02	2.85	0.07	0.02	0.01	0.25																

Espedalen - Analysis**Hole Number: ES2004-14**

Sample Number	From	To	Sample Length	Ni%	Cu%	Co%	S%	Au g/t	Pt g/t	Pd g/t	Ag g/t	Pb%	Zn%	SiO2 %	Al2O3 %	Fe2O3 %	MgO %	CaO %	Na2O %	K2O %	TiO2 %	P2O5 %	MnO %	Cr2O3 %	V2O5 %	LOI%	SUM %
PG03143	85.90	86.40	0.50	0.34	0.17	0.04	5.98	0.03	0.03	0.01	0.25																
PG03144	86.40	87.00	0.60	0.03	0.20	0.01	0.94	0.11	0.01	0.01	0.50																
PG03145	94.00	95.00	1.00	0.17	0.06	0.01	1.46	0.03	0.01	0.01	0.25																
PG03146	95.00	96.00	1.00	0.13	0.03	0.02	0.98	0.01	0.01	0.01	0.25																
PG03147	96.00	97.00	1.00	0.13	0.09	0.01	1.04	0.01	0.01	0.01	0.25																
PG03148	97.00	98.00	1.00	0.21	0.10	0.02	1.42	0.07	0.02	0.01	0.25																
PG03149	98.00	99.00	1.00	0.27	0.14	0.02	1.87	0.03	0.01	0.01	0.25																
PG03151	99.00	100.20	1.20	0.16	0.07	0.01	1.38	0.02	0.02	0.01	0.25																
PG03152	123.90	124.20	0.30	0.08	0.06	0.03	4.74	0.04	0.03	0.03	0.25																

Espedalen - Conductivity**Hole Number: ES2004-14**

Depth	Conductivity (Siemens)	COMMENTS
69.25	27.00	
69.80	40.00	
75.80	175.00	
76.80	77.00	
77.60	162.00	
78.00	780.00	
78.10	135.00	
79.80	999.00	1300
80.40	999.00	3075
81.20	700.00	
81.40	999.00	2200
84.20	999.00	1087
84.60	53.00	
86.10	560.00	
123.95	230.00	
124.05	200.00	

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Espedalen - Magnetic Susceptibility**Hole Number: ES2004-14**

DEPTH	MAGNETIC SUSCEPTIBILITY (X 10 ⁻³ SI)	COMMENTS
2.50	0.25	
3.50	0.51	
4.50	0.37	
5.50	0.36	
6.50	0.37	
7.50	0.87	
8.50	0.37	
9.50	0.97	
10.50	7.04	
11.50	12.60	
12.50	6.82	
13.50	3.16	
14.50	1.35	
15.50	0.76	
16.50	0.67	
17.50	0.48	
18.50	0.33	
19.50	0.69	
20.50	42.90	
21.50	33.90	
22.50	2.05	
23.50	0.43	
24.50	0.26	
25.50	0.77	
26.50	0.70	
27.50	0.82	
28.50	0.60	
29.50	0.66	
30.50	0.52	
31.50	0.49	
32.50	1.38	
33.50	12.40	
34.50	1.67	
35.50	0.39	
36.50	0.36	
37.50	0.75	

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Espedalen - Magnetic Susceptibility**Hole Number: ES2004-14**

38.50	0.48	
39.50	0.44	
40.50	0.43	
41.50	0.66	
42.50	0.47	
43.50	0.41	
44.50	0.46	
45.50	5.29	
46.50	1.35	
47.50	1.49	
48.50	0.29	
49.50	0.39	
50.50	0.51	
51.50	6.25	
52.50	2.51	
53.50	4.76	
54.50	4.09	
55.50	1.95	
56.50	3.37	
57.50	1.38	
58.50	0.85	
59.50	17.80	
60.50	8.65	
61.50	2.44	
62.50	21.00	
63.50	3.63	
64.50	3.52	
65.50	1.81	
66.50	1.60	
67.50	1.17	
68.50	0.79	
69.50	2.79	
70.50	2.76	
71.50	1.30	
72.50	1.78	
73.50	1.65	
74.50	51.40	
75.50	33.60	
76.50	7.14	

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Espedalen - Magnetic Susceptibility**Hole Number: ES2004-14**

77.50	2.07	
78.50	6.37	
79.50	0.74	
80.50	0.41	
81.50	7.80	
82.50	8.01	
83.50	3.02	
84.50	0.64	
85.50	1.45	
86.50	0.76	
87.50	1.23	
88.50	1.32	
89.50	2.65	
90.50	3.32	
91.50	1.71	
92.50	2.08	
93.50	5.57	
94.50	6.93	
95.50	9.73	
96.50	5.81	
97.50	9.89	
98.50	10.90	
99.50	14.40	
100.50	1.41	
101.50	2.16	
102.50	3.85	
103.50	2.40	
104.50	2.08	
105.50	1.38	
106.50	1.80	
107.50	1.77	
108.50	2.66	
109.50	3.03	
110.50	5.77	
111.50	2.21	
112.50	5.86	
113.50	6.18	
114.50	18.10	
115.50	3.44	

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Espedalen - Magnetic Susceptibility**Hole Number: ES2004-14**

116.50	0.45	
117.50	0.52	
118.50	0.53	
119.50	1.99	
120.50	8.87	
121.50	1.13	
122.50	2.20	
123.50	0.32	
124.50	2.66	
125.50	6.34	
126.50	0.76	
127.50	13.40	
128.50	11.00	
129.50	0.37	
130.50	0.86	
131.50	0.19	

Espedalen - Rock Quality (RQD)**Hole Number: ES2004-14**

FROM	TO	PERCENT QUALITY	PERCENT CORE	DISKING	COMMENTS
2.35	5.00	43.00	100.00	N	
5.00	8.00	62.00	100.00	N	
8.00	11.00	83.00	99.00	N	
11.00	14.00	85.00	100.00	N	
14.00	17.00	58.00	100.00	N	
17.00	20.00	55.00	100.00	N	
20.00	23.00	65.00	100.00	N	
23.00	26.00	77.00	100.00	N	
26.00	29.00	68.00	100.00	N	
29.00	32.00	86.00	100.00	N	
32.00	35.00	64.00	99.00	N	
35.00	38.00	75.00	100.00	N	
38.00	41.00	77.00	100.00	N	
41.00	44.00	70.00	100.00	N	
44.00	47.00	81.00	100.00	N	
47.00	50.00	70.00	100.00	N	
50.00	53.00	65.00	100.00	N	
53.00	55.00	46.00	100.00	N	
55.00	58.00	62.00	100.00	N	
58.00	61.00	73.00	100.00	N	
61.00	64.00	57.00	100.00	N	
64.00	67.00	69.00	100.00	N	
67.00	70.00	77.00	100.00	N	
70.00	73.00	68.00	100.00	N	
73.00	76.00	86.00	100.00	N	
76.00	79.00	77.00	100.00	N	
79.00	82.00	69.00	100.00	N	
82.00	85.00	66.00	100.00	N	
85.00	88.00	57.00	100.00	N	
88.00	91.00	70.00	100.00	N	
91.00	94.00	62.00	100.00	N	
94.00	97.00	63.00	100.00	N	
97.00	100.00	56.00	100.00	N	
100.00	103.00	62.00	100.00	N	
103.00	106.00	65.00	100.00	N	
106.00	109.00	67.00	100.00	N	
109.00	112.00	72.00	100.00	N	

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Espedalen - Rock Quality (RQD)**Hole Number: ES2004-14**

112.00	115.00	64.00	100.00	N	
115.00	118.00	80.00	100.00	N	
118.00	121.00	65.00	100.00	N	
121.00	124.00	69.00	100.00	N	
124.00	127.00	70.00	100.00	N	
127.00	130.00	57.00	100.00	N	
130.00	131.45	83.00	100.00	N	131.45m End of Hole

Detailed Log

Hole Number: **ES2004-15**

Units: METRIC

Project Name: Espedalen Collar Survey: Y Plugged: N
 Project Number: 300 Multishot Survey: N Hole Size: TT46
 Date Started: 9/19/2004 Pulse EM Survey: N
 Date Completed: 9/22/2004 Casing: Left in Hole, capped
 Location: Surface

UTM WGS 84 Coord Local Coord
 UTM Northing: 6,809,422.71 Local Northing: 6452.54
 UTM Easting: 532,813.31 Local Easting: 3687.65
 Elevation: 1282.99

Core Storage: Strand Fjellstue Collar Dip: -50.00
 Contractor: Geo Drilling A/S Collar Azimuth: 230.00
 Length: 123.25
 Logged by: Yannick Beaudoin

Comments Purpose: To further test UTEM conductor ESP_10_08. Two conductive plates modelled, each with a conductance of 375 siemens. This hole is a 85m step-out grid east of hole ES2004-14.

Result: Intersected variably mineralized norite and pyroxenites between 39.00m and 76.30m. Sulphides consist of pyrrhotite ± pyrite± chalcopyrite as disseminations, blebs and local remobilized veinlets/stringers. Intersected 10-15% fracture-controlled pyrrhotite in siliceous metasediments from 79.60-80.50m.

Assays: ☐ 0.44% Ni, 0.22% Cu, 0.04% Co / 4.95m (49.85-54.80m) (avg.)
☐ 0.68% Ni, 0.40% Cu, 0.04% Co / 0.50m (63.00-63.50m)
☐ 0.70% Ni, 0.19% Cu, 0.05% Co / 0.30m (76.00-76.30m)
☐ 0.44% Ni, 0.19% Cu, 0.02% Co / 0.90m (79.60-80.50m)

Lithological interpretation: Similar to hole ES2004-14. Sequence of norites and pyroxenites which have intruded siliceous metasediments and are cross-cut by magnetic, mafic alkaline (?) dykes.

Detailed Lithology

Assay Data

From	To	Lithology	Sample #	From	To	Length	Ni %	Cu %	Co %	S %	Pt g/t	Pd g/t	Au g/t	Ag g/t
0.00	2.00	C Casing												

Detailed Lithology						Assay Data														
From	To	Lithology				Sample #	From	To	Length	Ni %	Cu %	Co %	S %	Pt g/t	Pd g/t	Au g/t	Ag g/t			
2.00	29.35	6f Norite Medium grained, white and grey, equigranular massive to weakly foliated norite. Consists of 50-60% altered mafic minerals (pyroxene ?) and 40-50% plagioclase. Mafic minerals are extensively altered to biotite and chlorite. Similar to norites in hole ES2004-14 but more leucocratic and not as extensively altered. Norite is locally in contact with dm scale intervals of medium grained, green, chloritized pyroxenite (eg. 12.4-12.95m, 17.85-18.8m, 23.15-25.05m). Contacts between the two rock types are abrupt but diffuse. Pyroxenites locally contain trace finely disseminated pyrrhotite and/or pyrite. Conductivity: Non-conductive Magnetic susceptibility: Typically between 0.1 and 1. Pyroxenites more magnetic and variable from 1-20. Interpretation: Gabbroic/noritic unit related to ultramafic rocks based on contact relationships and correlation with hole ES2004-14. <u>Structure</u> 8.85 8.86 Sm General Foliation <u>Structure</u> 17.80 17.81 Sm General Foliation																		
29.35	39.00	8f Aphanitic UM Dyke Very fine grained, dark grey, massive, equigranular magnetic ultramafic dyke similar to those observed in ES2004-14 but slightly coarser grained. Core of dyke is slightly coarser grained and looks like a pyroxenite consisting of 85-90% pyroxene, 5-10% biotite and 1-2% very fine grained magnetite. Rare trace disseminated pyrite. Margins of dyke are finer grained and downhole contact is chilled. 15cm wide zone adjacent to downhole contact containing 10% rounded, diffuse, white grains 2-4mm in diameter. Uphole contact at 40° to CA; broken core at downhole contact but estimated at 60° to CA. Conductivity: Non-conductive Magnetic susceptibility: 9-30 Interpretation: post-dates mineralized UM bodies but genetic relationship unclear.																		
39.00	49.85	6d Pyroxenite Medium grained, green, massive to weakly foliated, chloritized pyroxenite containing trace to 10% disseminated and blebby pyrrhotite (esp. downhole of 41m). Conductivity: Locally conductive where po blebs are interconnected. Magnetic susceptibility: 0.2-2 <u>Mineralization</u> 41.00 49.85 3.0 % Po Pyrrhotite 																		

Detailed Lithology					Assay Data																
From	To	Lithology			Sample #	From	To	Length	Ni %	Cu %	Co %	S %	Pt g/t	Pd g/t	Au g/t	Ag g/t					
49.85	65.10	6f Norite			PG03162	49.85	50.60	0.75	0.48	0.17	0.04	9.35	0.03	0.02	0.01	0.25					
Inhomogenous interval of heavily mineralized, locally silicified (?) norite containing 15% mm to cm scale white feldspathic bands/schlieren which may represent partially digested anorthosite. Mineralization consists of stringers and veins of massive pyrrhotite+pyrite as well as pyrrhotite disseminations and blebs. Trace cp locally. Heaviest mineralization occurs between 49.85 and 55.35m. Contact with uphole pyroxenite marked by first appearance of massive po and transition to more feldspathic composition. Conductivity: Strongly conductive between 49.85 and 55.35m (2200-3400 siemens) and between 63 and 63.5m (approx. 2000 siemens). Magnetic susceptibility: Typically between 0.2 and 2; massive po only weakly magnetic (<1 to 5). Interpretation: Interpreted to be norite but locally looks quite siliceous, possibly due to contamination from adjacent metasediments.					PG03163	50.60	51.60	1.00	0.70	0.29	0.07	13.80	0.03	0.02	0.02	0.25					
					PG03164	51.60	52.80	1.20	0.45	0.17	0.04	9.18	0.06	0.02	0.03	0.25					
					PG03165	52.80	54.00	1.20	0.18	0.25	0.02	4.06	0.02	0.01	0.02	0.60					
					PG03166	54.00	54.80	0.80	0.45	0.19	0.03	8.46	0.03	0.01	0.02	0.25					
					PG03167	54.80	55.35	0.55	0.20	0.16	0.01	4.18	0.01	0.01	0.02	0.25					
					PG03168	55.35	56.50	1.15	0.07	0.09	0.01	1.43	0.02	0.01	0.02	0.25					
					PG03169	56.50	57.50	1.00	0.15	0.13	0.01	2.98	0.01	0.01	0.01	0.25					
					PG03170	57.50	58.50	1.00	0.10	0.03	0.02	2.19	0.01	0.01	0.01	0.25					
					PG03171	58.50	59.50	1.00	0.09	0.07	0.01	1.84	0.01	0.01	0.01	0.25					
					PG03172	59.50	60.50	1.00	0.12	0.08	0.01	2.12	0.04	0.01	0.02	0.25					
<u>Mineralization</u> 49.85 52.80 20.0 % Po Pyrrhotite M Massive Avg. of 20% po occurring as cm scale massive bands and stringers as well as disseminations <u>Mineralization</u> 49.85 52.80 5.0 % Py Pyrite D Disseminated Intermixed with po, trace cp locally <u>Mineralization</u> 52.80 54.00 10.0 % Po Pyrrhotite F Fracture-Controlled 10% po as blebs, disseminations and fracture fillings <u>Mineralization</u> 54.00 54.80 15.0 % Po Pyrrhotite NT Net-Textured 12% po, 3% py heavily disseminated to net textured <u>Mineralization</u> 54.80 55.35 8.0 % Po Pyrrhotite D Disseminated <u>Mineralization</u> 55.35 63.00 2.0 % Po Pyrrhotite D Disseminated 1-3% disseminated po <u>Mineralization</u> 63.00 63.50 30.0 % Po Pyrrhotite SMSemi-M assive 30% po, 1% cp net-textured to semi-massive <u>Structure</u> 58.50 58.51 Sm General Foliation <u>Structure</u> 62.60 62.61 Sm General Foliation					PG03173	60.50	61.50	1.00	0.09	0.06	0.02	1.73	0.04	0.01	0.02	0.25					
					PG03174	61.50	62.50	1.00	0.07	0.03	0.01	1.63	0.01	0.01	0.02	0.25					
					PG03176	62.50	63.00	0.50	0.19	0.20	0.01	3.62	0.03	0.02	0.04	0.25					
					PG03178	63.00	63.50	0.50	0.68	0.40	0.04	12.40	0.02	0.01	0.07	1.00					
					PG03179	63.50	64.00	0.50	0.14	0.33	0.01	2.51	0.01	0.01	0.03	0.60					

Detailed Lithology						Assay Data											
From	To	Lithology				Sample #	From	To	Length	Ni %	Cu %	Co %	S %	Pt g/t	Pd g/t	Au g/t	Ag g/t
65.10	68.20	5a Siliceous Metasediments															
Inhomogeneous interval consisting of 70% fine grained, dark siliceous metasediment (?) and 30% medium grained white to grey cm scale plagioclase-rich bands (norite/anorthosite?). Trace to 2% disseminated po. Uphole contact gradational; downhole contact abrupt, estimated at 70" to CA.																	
Conductivity: Locally conductive where po is interconnected																	
Magnetic susceptibility: <1																	
		Structure	66.50	66.51	Sm General Foliation												
68.20	76.30	6d Pyroxenite				PG03180	68.20	69.00	0.80	0.24	0.09	0.01	2.55	0.01	0.01	0.01	0.25
Medium grained, light to dark green, weakly foliated pyroxenite as uphole. Contains 1-5% disseminated pyrrhotite throughout.						PG03181	69.00	70.00	1.00	0.21	0.07	0.03	1.94	0.01	0.01	0.02	0.25
						PG03182	70.00	71.00	1.00	0.34	0.29	0.03	3.43	0.01	0.01	0.02	0.50
						PG03183	71.00	72.00	1.00	0.25	0.13	0.01	2.02	0.01	0.01	0.01	0.25
Conductivity: Conductive where po is interconnected						PG03184	72.00	73.00	1.00	0.31	0.12	0.02	2.34	0.02	0.01	0.02	0.25
Magnetic Susceptibility: 0.2-7.3, center of unit most magnetic.						PG03185	73.00	74.00	1.00	0.37	0.11	0.02	2.86	0.01	0.01	0.02	0.25
						PG03186	74.00	75.00	1.00	0.31	0.09	0.04	2.46	0.01	0.01	0.01	0.25
Mineralization 68.20 76.00 3.0 % Po Pyrrhotite						PG03187	75.00	76.00	1.00	0.24	0.09	0.02	1.73	0.01	0.01	0.02	0.25

Detailed Lithology					Assay Data											
From	To	Lithology			Sample #	From	To	Length	Ni %	Cu %	Co %	S %	Pt g/t	Pd g/t	Au g/t	Ag g/t
76.30	123.25	5a Siliceous Metasediments			PG03189	76.30	76.80	0.50	0.22	0.12	0.02	1.70	0.01	0.01	0.04	0.25
Interval is dominated by fine grained, foliated and bedded grey and pink siliceous and garnet-bearing metasediments similar to metasediments intersected in ES2004-14 between 100.2 and 131.4m. Rare trace disseminated or fracture-controlled po and/or py. Metasediments are cross-cut by 10% dm scale, fine grained, dark green amphibolitic mafic/ultramafic dykes which are concordant to bedding and foliation in the metasediments (eg. 84.6-84.95m, 93.15-93.75m, 94.1-94.7m, 103.9-105.5m, 107.3-107.6, 119.05-119.9, 122.25-122.65m). 85-98m: Fine to medium grained, dark grey, foliated quartzo-feldspathic unit consisting of variably amounts of feldspar, quartz, biotite, muscovite ± very fine grained magnetite ("dirty" recrystallized psammitic metasediments?). Conductivity: Non-conductive Magnetic susceptibility: Typically < 1; mafic dykes variably magnetic ranging from 1-40; quartzofeldspathic metasediments typically between 1 and 6. Interpretation: Large raft of supracrustal rocks entrained within anorthositic complex?					PG03190	79.60	80.00	0.40	0.44	0.20	0.01	4.51	0.01	0.01	0.03	0.25
					PG03191	80.00	80.50	0.50	0.45	0.18	0.03	4.58	0.01	0.01	0.02	0.25
					PG03192	80.50	81.00	0.50	0.03	0.03	0.01	0.53	0.01	0.01	0.01	0.25
					PG03193	102.20	102.70	0.50	0.03	0.03	0.01	1.60	0.01	0.01	0.02	0.25
Mineralization					80.00	80.50	10.0 %	Po	Pyrrhotite							
								F	Fracture-Controlled							
								pyrrhotite remobilized (?) in sheared metasediments								
Mineralization					102.20	102.70	3.0 %	Py	Pyrite							
								F	Fracture-Controlled							
								2% py, 1% po in fracture-controlled blebs, stringers								
Structure					81.60	81.61	Sm	General Foliation								
Structure					99.90	99.91	Sm	General Foliation								
Structure					109.50	109.51	Sm	General Foliation								
Structure					112.45	112.46	Sm	General Foliation								
Structure					121.70	121.71	Sm	General Foliation								

Espedalen - Analysis

Hole Number: ES2004-15

Sample Number	From	To	Sample Length	Ni%	Cu%	Co%	S%	Au g/t	Pt g/t	Pd g/t	Ag g/t	Pb%	Zn%	SiO2 %	Al2O3 %	Fe2O3 %	MgO %	CaO %	Na2O %	K2O %	TiO2 %	P2O5 %	MnO %	Cr2O3 %	V2O5 %	LOI%	SUM %
PG03153	41.00	42.00	1.00	0.15	0.16	0.01	1.44	0.01	0.02	0.01	0.25																
PG03154	42.00	43.00	1.00	0.16	0.10	0.03	1.96	0.03	0.03	0.01	0.25																
PG03155	43.00	44.00	1.00	0.16	0.15	0.03	1.95	0.02	0.01	0.01	0.25																
PG03156	44.00	45.00	1.00	0.11	0.03	0.01	1.29	0.01	0.02	0.01	0.25																
PG03157	45.00	46.00	1.00	0.17	0.09	0.01	2.22	0.03	0.03	0.01	0.25																
PG03158	46.00	47.00	1.00	0.11	0.06	0.01	1.49	0.01	0.02	0.01	0.25																
PG03159	47.00	48.00	1.00	0.09	0.03	0.01	1.26	0.01	0.01	0.01	0.25																
PG03160	48.00	49.00	1.00	0.06	0.03	0.01	0.71	0.01	0.02	0.01	0.25																
PG03161	49.00	49.85	0.85	0.07	0.07	0.01	0.89	0.01	0.01	0.01	0.25																
PG03162	49.85	50.60	0.75	0.48	0.17	0.04	9.35	0.01	0.03	0.02	0.25																
PG03163	50.60	51.60	1.00	0.70	0.29	0.07	13.80	0.02	0.03	0.02	0.25																
PG03164	51.60	52.80	1.20	0.45	0.17	0.04	9.18	0.03	0.06	0.02	0.25																
PG03165	52.80	54.00	1.20	0.18	0.25	0.02	4.06	0.02	0.02	0.01	0.60																
PG03166	54.00	54.80	0.80	0.45	0.19	0.03	8.46	0.02	0.03	0.01	0.25																
PG03167	54.80	55.35	0.55	0.20	0.16	0.01	4.18	0.02	0.01	0.01	0.25																
PG03168	55.35	56.50	1.15	0.07	0.09	0.01	1.43	0.02	0.02	0.01	0.25																
PG03169	56.50	57.50	1.00	0.15	0.13	0.01	2.98	0.01	0.01	0.01	0.25																
PG03170	57.50	58.50	1.00	0.10	0.03	0.02	2.19	0.01	0.01	0.01	0.25																
PG03171	58.50	59.50	1.00	0.09	0.07	0.01	1.84	0.01	0.01	0.01	0.25																
PG03172	59.50	60.50	1.00	0.12	0.08	0.01	2.12	0.02	0.04	0.01	0.25																
PG03173	60.50	61.50	1.00	0.09	0.06	0.02	1.73	0.02	0.04	0.01	0.25																
PG03174	61.50	62.50	1.00	0.07	0.03	0.01	1.63	0.02	0.01	0.01	0.25																
PG03176	62.50	63.00	0.50	0.19	0.20	0.01	3.62	0.04	0.03	0.02	0.25																
PG03178	63.00	63.50	0.50	0.68	0.40	0.04	12.40	0.07	0.02	0.01	1.00																
PG03179	63.50	64.00	0.50	0.14	0.33	0.01	2.51	0.03	0.01	0.01	0.60																
PG03180	68.20	69.00	0.80	0.24	0.09	0.01	2.55	0.01	0.01	0.01	0.25																
PG03181	69.00	70.00	1.00	0.21	0.07	0.03	1.94	0.02	0.01	0.01	0.25																
PG03182	70.00	71.00	1.00	0.34	0.29	0.03	3.43	0.02	0.01	0.01	0.50																

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ES2004-15

Espedalen - Analysis**Hole Number: ES2004-15**

Sample Number	From	To	Sample Length	Ni%	Cu%	Co%	S%	Au g/t	Pt g/t	Pd g/t	Ag g/t	Pb%	Zn%	SiO2 %	Al2O3 %	Fe2O3 %	MgO %	CaO %	Na2O %	K2O %	TiO2 %	P2O5 %	MnO %	Cr2O3 %	V2O5 %	LOI%	SUM %
PG03183	71.00	72.00	1.00	0.25	0.13	0.01	2.02	0.01	0.01	0.01	0.25																
PG03184	72.00	73.00	1.00	0.31	0.12	0.02	2.34	0.02	0.02	0.01	0.25																
PG03185	73.00	74.00	1.00	0.37	0.11	0.02	2.86	0.02	0.01	0.01	0.25																
PG03186	74.00	75.00	1.00	0.31	0.09	0.04	2.46	0.01	0.01	0.01	0.25																
PG03187	75.00	76.00	1.00	0.24	0.09	0.02	1.73	0.02	0.01	0.01	0.25																
PG03188	76.00	76.30	0.30	0.70	0.19	0.05	5.49	0.03	0.08	0.02	0.25																
PG03189	76.30	76.80	0.50	0.22	0.12	0.02	1.70	0.04	0.01	0.01	0.25																
PG03190	79.60	80.00	0.40	0.44	0.20	0.01	4.51	0.03	0.01	0.01	0.25																
PG03191	80.00	80.50	0.50	0.45	0.18	0.03	4.58	0.02	0.01	0.01	0.25																
PG03192	80.50	81.00	0.50	0.03	0.03	0.01	0.53	0.01	0.01	0.01	0.25																
PG03193	102.20	102.70	0.50	0.03	0.03	0.01	1.60	0.02	0.01	0.01	0.25																

Espedalen - Conductivity**Hole Number: ES2004-15**

Depth	Conductivity (Siemens)	COMMENTS
41.80	30.00	
42.70	135.00	
43.10	42.00	
43.90	85.00	
44.80	55.00	
47.00	20.00	
49.90	999.00	1141 siemens
50.70	999.00	3400 siemens
51.10	218.00	
51.60	999.00	2700 siemens
51.90	445.00	
52.20	999.00	1850 siemens
52.70	999.00	1319 siemens
53.20	999.00	1430 siemens
54.20	549.00	
54.70	325.00	
55.20	216.00	
57.10	68.00	
57.60	136.00	
58.10	40.00	
59.00	175.00	
59.60	46.00	
63.10	999.00	1970 siemens
63.40	999.00	2240 siemens
68.50	110.00	
69.10	40.00	
70.05	330.00	
72.30	37.00	
74.70	40.00	
76.10	96.00	
76.30	925.00	
77.90	24.00	
80.20	260.00	
102.70	220.00	

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Espedalen - Magnetic Susceptibility**Hole Number: ES2004-15**

DEPTH	MAGNETIC SUSCEPTIBILITY (X 10 ⁻³ SI)	COMMENTS
2.50	0.46	
3.50	0.57	
4.50	0.23	
5.50	0.51	
6.50	0.84	
7.50	0.33	
8.50	0.26	
9.50	0.15	
10.50	0.25	
11.50	2.41	
12.50	17.30	
13.50	1.82	
14.50	0.37	
15.50	0.36	
16.50	0.52	
17.50	0.42	
18.50	1.49	
19.50	0.80	
20.50	0.26	
21.50	0.07	
22.50	0.52	
23.50	3.25	
24.50	1.66	
25.50	0.62	
26.50	0.29	
27.50	0.28	
28.50	3.78	
29.50	14.10	
30.50	9.40	
31.50	28.40	
32.50	17.20	
33.50	18.70	
34.50	25.70	
35.50	7.24	
36.50	14.70	
37.50	9.90	

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Espedalen - Magnetic Susceptibility**Hole Number: ES2004-15**

38.50	26.20	
39.50	1.54	
40.50	0.31	
41.50	1.48	
42.50	0.45	
43.50	0.84	
44.50	1.80	
45.50	0.37	
46.50	0.32	
47.50	0.49	
48.50	0.64	
49.50	0.24	
50.50	2.25	
51.50	1.21	
52.50	0.65	
53.50	0.32	
54.50	1.41	
55.50	0.19	
56.50	0.82	
57.50	0.19	
58.50	0.40	
59.50	0.12	
60.50	0.19	
61.50	0.84	
62.50	0.89	
63.50	1.27	
64.50	0.14	
65.50	0.27	
66.50	0.50	
67.50	0.62	
68.50	0.24	
69.50	0.19	
70.50	0.69	
71.50	7.27	
72.50	6.11	
73.50	1.52	
74.50	0.96	
75.50	1.61	
76.50	0.58	

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Espedalen - Magnetic Susceptibility**Hole Number: ES2004-15**

77.50	0.09	
78.50	0.27	
79.50	0.15	
80.50	0.21	
81.50	0.24	
82.50	0.01	
83.50	0.04	
84.50	0.19	
85.50	2.91	
86.50	0.57	
87.50	9.55	
88.50	3.05	
89.50	4.96	
90.50	2.80	
91.50	2.15	
92.50	1.59	
93.50	0.32	
94.50	1.33	
95.50	3.05	
96.50	1.26	
97.50	2.91	
98.50	0.45	
99.50	0.30	
100.50	0.08	
101.50	0.32	
102.50	0.68	
103.50	0.56	
104.50	2.18	
105.50	1.02	
106.50	0.75	
107.50	0.26	
108.50	0.41	
109.50	0.08	
110.50	0.01	
111.50	0.12	
112.50	0.13	
113.50	0.12	
114.50	0.06	
115.50	0.48	

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Espedalen - Magnetic Susceptibility**Hole Number: ES2004-15**

116.50	3.10	
117.50	0.68	
118.50	0.70	
119.50	41.40	
120.50	0.49	
121.50	0.26	
122.50	6.46	123.25m End of Hole

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Espedalen - Rock Quality (RQD)**Hole Number: ES2004-15**

FROM	TO	PERCENT QUALITY	PERCENT CORE	DISKING	COMMENTS
0.00	2.00	0.00	0.00	N	Casing
2.00	5.00	84.00	100.00	N	
5.00	8.00	80.00	100.00	N	
8.00	11.00	57.00	100.00	N	
11.00	14.00	65.00	100.00	N	
14.00	17.00	66.00	100.00	N	
17.00	20.00	79.00	100.00	N	
20.00	23.00	69.00	100.00	N	
23.00	26.00	68.00	100.00	N	
26.00	29.00	54.00	100.00	N	
29.00	32.00	67.00	100.00	N	
32.00	35.00	70.00	100.00	N	
35.00	38.00	71.00	100.00	N	
38.00	41.00	66.00	100.00	N	
41.00	44.00	35.00	100.00	N	
44.00	47.00	72.00	100.00	N	
47.00	50.00	70.00	100.00	N	
50.00	53.00	64.00	100.00	N	
53.00	56.00	62.00	100.00	N	
56.00	59.00	54.00	100.00	N	
59.00	62.00	63.00	100.00	N	
62.00	65.00	50.00	100.00	N	
65.00	68.00	69.00	100.00	N	
68.00	71.00	71.00	100.00	N	
71.00	74.00	74.00	100.00	N	
74.00	77.00	69.00	100.00	N	
77.00	80.00	67.00	100.00	N	
80.00	83.00	73.00	100.00	N	
83.00	86.00	60.00	100.00	N	
86.00	89.00	64.00	100.00	N	
89.00	92.00	77.00	100.00	N	
92.00	95.00	62.00	100.00	N	
95.00	98.00	74.00	100.00	N	
98.00	101.00	70.00	100.00	N	
101.00	104.00	62.00	100.00	N	
104.00	107.00	65.00	100.00	N	
107.00	110.00	72.00	100.00	N	

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Espedalen - Rock Quality (RQD)**Hole Number: ES2004-15**

110.00	113.00	64.00	100.00	N	
113.00	116.00	63.00	100.00	N	
116.00	119.00	62.00	100.00	N	
119.00	122.00	64.00	100.00	N	
122.00	123.25	58.00	100.00	N	

Detailed Log

Hole Number: **ES2004-16**

Units: **METRIC**

Project Name: Espedalen	Collar Survey: Y	Plugged: N	UTM WGS 84 Coord	Local Coord	Core Storage: Strand Fjellstue	Collar Dip: -63.00
Project Number: 300	Multishot Survey: N	Hole Size: TT46	UTM Northing: 6,807,680.39	Local Northing: 5322.14	Contractor: Geo Drilling A/S	Collar Azimuth: 230.00
Date Started: 9/23/2004	Pulse EM Survey: Y		UTM Easting: 532,799.65	Local Easting: 5013.56		Length: 182.10
Date Completed: 9/30/2004	Casing: Left in Hole, capped		Elevation: 1129.08		Logged by: P. Tirschmann	
	Location: Surface					

Comments Purpose: Test UTEM conductor ESP_09_07. Conductivity = 600, 900 Siemens (2 plates)

Result: Hole intersected numerous cm to dm scale mafic/ultramafic zones (dykes?) within anorthositic rocks, a number of which were mineralized containing fracture-controlled, stringer and/or disseminated pyrrhotite±py±cpy. Best mineralization:
 121.90-123.90m - UM schist with 5-15% po stringers
 127.80-128.80m - UM schist with 25% po-py-cpy stringers & one 5cm massive vein

Assays: 0.32% Ni, <0.05% Cu, 0.03% Co / 0.50m (122.90-123.40m)
 0.43% Ni, 0.14% Cu, 0.08% Co / 1.00m (127.80-128.80m)

Borehole UTEM: In-hole response centered on 126m with conductance of < 1000 siemens; off-hole response @ 122m and < 10m up-dip and to north of hole (conductance > 1000 siemens). Target not fully tested.

Lithological interpretation: Anorthositic rocks crosscut by narrow mineralized and non-mineralized ultramafic dykes (?), mafic dykes and mafic, alkaline dykes.

Detailed Lithology

Assay Data

From	To	Lithology	Sample #	From	To	Length	Ni %	Cu %	Co %	S %	Pt g/t	Pd g/t	Au g/t	Ag g/t
0.00	2.00	C Casing												

Detailed Lithology			Assay Data											
From	To	Lithology	Sample #	From	To	Length	Ni %	Cu %	Co %	S %	Pt g/t	Pd g/t	Au g/t	Ag g/t
2.00	138.20	4 Anorthosite / Anorthositic Gabbro Coarse grained to very coarse grained mottled and foliated anorthosite and gabbroic anorthosite. Consists of 70-85% white to light grey plagioclase and 15-30% dark green pyroxene. Pyroxenes range in size from 2-20mm, are variably chloritized and are commonly flattened defining foliation. Anorthositic rocks are locally cross-cut by narrow (cm to dm scale) mafic/ultramafic dykes including a) pyroxenite/UM schist b) fg mafic dykes and c) fine grained norite dykes (eg. 71.75-71.90m., 135.4-135.8m). Between 60m and 138.2m, the unit becomes more inhomogeneous due to the presence of approx. 10% dark green cm to dm scale ultramafic bands (schlieren) and dykes. Ultramafic locally contains fracture-controlled, stringer and/or disseminated po (eg. 63.25-63.35m, 67.2-67.3m, 84.3-84.6m, 92-93m, 117.8-118.8m, 126.4-126.7m). 81-98m: Zone of moderate shearing and deformation. Rocks are strongly foliated and display small-scale folding and crenulation. Conductivity: Non-conductive Magnetic susceptibility: < 0.5. Interpretation: similar setting to P2, P5 & P1 areas with older anorthositic terrain intruded by narrow mineralized ultramafic bodies and younger mafic dykes.	PG03207	39.45	40.00	0.55	0.03	0.03	0.01	0.11	0.01	0.01	0.01	0.25
			PG03209	40.75	41.50	0.75	0.03	0.03	0.01	0.04	0.01	0.01	0.01	0.25
			PG03210	84.30	84.60	0.30	0.03	0.03	0.03	1.45	0.01	0.01	0.01	0.25
			PG03211	92.00	92.40	0.40	0.03	0.03	0.01	1.56	0.01	0.01	0.01	0.25
			PG03212	117.80	118.80	1.00	0.03	0.03	0.01	0.39	0.01	0.01	0.01	0.25
			PG03213	121.30	121.90	0.60	0.03	0.03	0.01	0.03	0.01	0.01	0.01	0.25
			PG03217	123.90	125.00	1.10	0.03	0.03	0.01	0.14	0.01	0.01	0.01	0.25
			PG03218	125.00	126.10	1.10	0.03	0.03	0.03	0.20	0.01	0.01	0.01	0.25
			PG03219	126.10	126.90	0.80	0.06	0.03	0.01	0.91	0.01	0.01	0.01	0.25
			PG03220	126.90	127.80	0.90	0.03	0.03	0.01	0.03	0.01	0.01	0.01	0.25
			PG03222	128.80	129.80	1.00	0.03	0.03	0.01	0.12	0.01	0.01	0.01	0.25
		Minor Interval												
		20.00 20.20 10f Mafic dykes Fine grained dark green mafic dyke with trace po. Contacts at 20° to CA.												
		Minor Interval												
		40.00 40.75 6d Pyroxenite Medium grained, dark green pyroxenite dyke containing 5-10% pyrrhotite as coarse fracture controlled blebs and minor disseminations. Trace cp. Contacts irregular.												
		Minor Interval												
		93.60 96.40 10f Mafic dykes Fine grained, well foliated to sheared mafic dyke containing trace sulphide. Contacts parallel to foliation.												
		Minor Interval												
		121.90 123.90 6e Ultramafic Schist Fine grained, dark green, mineralized, chloritized, serpentinized schist containing 5-15% po stringers. Contacts parallel to foliation.												

Detailed Lithology				Assay Data											
From	To	Lithology		Sample #	From	To	Length	Ni %	Cu %	Co %	S %	Pt g/t	Pd g/t	Au g/t	Ag g/t
Minor Interval															
127.80	128.80	6e Ultramafic Schist													
				Fine grained, dark green, mineralized, chloritized, serpentinized schist containing 25% sulphides including: 20% po, 3% py, 2% pn, tr cp in stringers and one 5cm wide massive vein at uphole contact. Pyrite occurs as coarse grains up to 8mm in diameter. Pentlandite is intermixed with po and occurs as grains up to 1mm in diameter.											
				Contacts parallel to foliation.											
Minor Interval															
131.70	133.40	6e Ultramafic Schist													
				Fine grained, dark green, mineralized, chloritized, serpentinized schist containing 1% po disseminated and along fractures. Sheared at uphole contact, downhole contact irregular.											
Mineralization	40.00	40.75	7.0 %	Po	Pyrrhotite F Fracture-Controlled 7% fracture-controlled po in a pyroxenite dyke										
Mineralization	83.30	84.60	4.0 %	Po	Pyrrhotite STR Stringers 3-5% po stringers in UM dyke										
Mineralization	92.00	92.40	5.0 %	Po	Pyrrhotite STR Stringers 5% po stringers in chloritic UM schist										
Mineralization	117.80	118.80	2.0 %	Po	Pyrrhotite STR Stringers 2% po stringers in UM schist										
Mineralization	123.90	126.10	0.5 %	Po	Pyrrhotite F Fracture-Controlled Trace to 1% po										
Mineralization	126.10	126.90	3.0 %	Po	Pyrrhotite STR Stringers 3% po stringers and disseminations										
Alteration	2.00	138.20	SE	Sericite F Fracture-Controlled M Moderate Patchy to fracture controlled moderate sausseritization/sericitization throughout											
Structure	2.30	2.31	Sm	General Foliation											
Structure	14.30	14.31	Sm	General Foliation											
Structure	38.20	38.21	Sm	General Foliation											

Detailed Lithology					Assay Data											
From	To	Lithology			Sample #	From	To	Length	Ni %	Cu %	Co %	S %	Pt g/t	Pd g/t	Au g/t	Ag g/t
		<u>Structure</u>	51.50	51.51	Sm	General Foliation										
		<u>Structure</u>	65.20	65.21	Sm	General Foliation										
		<u>Structure</u>	90.10	90.11	Sm	General Foliation										
		<u>Structure</u>	100.00	100.01	Sm	General Foliation										
		<u>Structure</u>	110.10	110.11	Sm	General Foliation										
		<u>Structure</u>	119.90	119.91	Sm	General Foliation										
		<u>Structure</u>	137.30	137.31	Sm	General Foliation										
138.20	153.10	10f Mafic dykes Fine grained, massive to very weakly foliated, equigranular mafic dyke consisting of 65% mafic minerals and 35% plagioclase. 1-3% white carbonate veinlets and fracture fillings. Trace po ± py along fractures and disseminated. Uphole contact at 57° to CA; downhole contact at 67° to CA. Conductivity: Non-conductive Magnetic susceptibility: <1 Interpretation: Late mafic dyke.														
153.10	169.70	4 Anorthosite / Anorthositic Gabbro Anorthosite and anorthositic gabbro as 2-138.2m. 153.1-160.0m: Grey anorthosite 160-169.7m: White and green anorthositic gabbro with striped and granulated appearance due to shearing and tectonism. Non-conductive. Magnetic susceptibilities typically < 1. <u>Structure</u> 154.20 154.21 Sm General Foliation <u>Structure</u> 161.80 161.81 Sm General Foliation														
169.70	182.10	8f Aphanitic UM Dyke Very fine grained, dark grey, magnetic ultramafic dyke or body resembling narrower dykes intersected in Jorstad holes ES2004-14 and 15. Pyroxenitic in composition (Whole rock sample taken: 180.1-180.3m, PG03226). Uphole contact sharp and chilled at 50° to CA. Non-conductive. Magnetic susceptibility averages 15-20.														
					PG03226	180.10	180.30	0.20	0.03	0.03	0.01	0.19	0.01	0.01	0.01	0.25

Espedalen - Analysis

Hole Number: ES2004-16

Sample Number	From	To	Sample Length	Ni%	Cu%	Co%	S%	Au g/t	Pt g/t	Pd g/t	Ag g/t	Pb%	Zn%	SiO2 %	Al2O3 %	Fe2O3 %	MgO %	CaO %	Na2O %	K2O %	TiO2 %	P2O5 %	MnO %	Cr2O3 %	V2O5 %	LOI%	SUM %
PG03207	39.45	40.00	0.55	0.03	0.03	0.01	0.11	0.01	0.01	0.01	0.25																
PG03208	40.00	40.75	0.75	0.06	0.08	0.01	2.44	0.01	0.01	0.01	0.25																
PG03209	40.75	41.50	0.75	0.03	0.03	0.01	0.04	0.01	0.01	0.01	0.25																
PG03210	84.30	84.60	0.30	0.03	0.03	0.03	1.45	0.01	0.01	0.01	0.25																
PG03211	92.00	92.40	0.40	0.03	0.03	0.01	1.56	0.01	0.01	0.01	0.25																
PG03212	117.80	118.80	1.00	0.03	0.03	0.01	0.39	0.01	0.01	0.01	0.25																
PG03213	121.30	121.90	0.60	0.03	0.03	0.01	0.03	0.01	0.01	0.01	0.25																
PG03214	121.90	122.90	1.00	0.08	0.03	0.01	1.33	0.01	0.01	0.01	0.25																
PG03215	122.90	123.40	0.50	0.32	0.03	0.03	4.76	0.01	0.05	0.01	0.25																
PG03216	123.40	123.90	0.50	0.03	0.03	0.02	0.46	0.01	0.01	0.01	0.25																
PG03217	123.90	125.00	1.10	0.03	0.03	0.01	0.14	0.01	0.01	0.01	0.25																
PG03218	125.00	126.10	1.10	0.03	0.03	0.03	0.20	0.01	0.01	0.01	0.25																
PG03219	126.10	126.90	0.80	0.06	0.03	0.01	0.91	0.01	0.01	0.01	0.25																
PG03220	126.90	127.80	0.90	0.03	0.03	0.01	0.03	0.01	0.01	0.01	0.25																
PG03221	127.80	128.80	1.00	0.43	0.14	0.08	10.50	0.02	0.06	0.01	0.25																
PG03222	128.80	129.80	1.00	0.03	0.03	0.01	0.12	0.01	0.01	0.01	0.25																
PG03223	131.70	132.60	0.90	0.03	0.03	0.01	0.59	0.01	0.01	0.01	0.25																
PG03224	132.60	133.40	0.80	0.03	0.03	0.01	0.45	0.01	0.01	0.01	0.25																
PG03226	180.10	180.30	0.20	0.03	0.03	0.01	0.19	0.01	0.01	0.01	0.25			50.90	12.70	16.60	4.13	7.77	3.16	1.69	2.67	0.44	0.25	0.01	0.11	0.27	100.10

Espedalen - Conductivity**Hole Number: ES2004-16**

Depth	Conductivity (Siemens)	COMMENTS
84.30	100.00	
84.50	37.00	
92.20	220.00	
92.30	33.00	
118.10	48.00	
118.60	26.00	
122.05	25.00	
122.25	85.00	
122.50	57.00	
123.30	619.00	
126.80	38.00	
127.80	999.00	1700 in 5cm wide massive po vein
128.10	585.00	
128.30	25.00	
128.60	210.00	

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Espedalen - Magnetic Susceptibility**Hole Number: ES2004-16**

DEPTH	MAGNETIC SUSCEPTIBILITY ($\times 10^{-3}$ SI)	COMMENTS
2.50	0.25	
3.50	0.29	
4.50	0.31	
5.50	0.18	
6.50	0.23	
7.50	0.05	
8.50	0.09	
9.50	0.07	
10.50	0.10	
11.50	0.11	
12.50	0.07	
13.50	0.15	
14.50	0.05	
15.50	0.04	
16.50	0.07	
17.50	0.08	
18.50	0.09	
19.50	0.06	
20.50	0.03	
21.50	0.03	
22.50	0.34	
23.50	0.28	
24.50	0.18	
25.50	0.07	
26.50	0.06	
27.50	0.08	
28.50	0.08	
29.50	0.01	
30.50	0.09	
31.50	0.12	
32.50	0.04	
33.50	0.06	
34.50	0.09	
35.50	0.01	
36.50	0.03	
37.50	0.01	

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Espedalen - Magnetic Susceptibility**Hole Number: ES2004-16**

38.50	0.24	
39.50	0.08	
40.50	9.10	
41.50	0.37	
42.50	0.06	
43.50	0.03	
44.50	0.03	
45.50	0.17	
46.50	0.05	
47.50	0.01	
48.50	0.04	
49.50	0.08	
50.50	0.13	
51.50	0.03	
52.50	0.33	
53.50	0.09	
54.50	0.07	
55.50	0.02	
56.50	0.01	
57.50	0.04	
58.50	0.05	
59.50	0.01	
60.50	0.01	
61.50	0.02	
62.50	0.01	
63.50	0.04	
64.50	0.03	
65.50	0.08	
66.50	0.01	
67.50	0.08	
68.50	0.05	
69.50	0.07	
70.50	0.09	
71.50	0.03	
72.50	0.04	
73.50	0.05	
74.50	0.01	
75.50	0.05	
76.50	0.01	

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Espedalen - Magnetic Susceptibility**Hole Number: ES2004-16**

77.50	0.03	
78.50	0.04	
79.50	0.05	
80.50	0.05	
81.50	0.06	
82.50	0.13	
83.50	0.01	
84.50	0.36	
85.50	0.06	
86.50	0.01	
87.50	0.03	
88.50	0.01	
89.50	0.03	
90.50	0.02	
91.50	0.03	
92.50	0.01	
93.50	0.20	
94.50	0.69	
95.50	0.01	
96.50	0.24	
97.50	0.04	
98.50	0.07	
99.50	0.07	
100.50	0.33	
101.50	0.23	
102.50	0.02	
103.50	0.04	
104.50	0.06	
105.50	0.03	
106.50	0.06	
107.50	0.33	
108.50	0.04	
109.50	0.12	
110.50	0.03	
111.50	0.08	
112.50	0.08	
113.50	0.08	
114.50	0.09	
115.50	0.03	

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Espedalen - Magnetic Susceptibility**Hole Number: ES2004-16**

116.50	0.05	
117.50	0.04	
118.50	0.16	
119.50	0.05	
120.50	0.18	
121.50	0.08	
122.50	0.26	
123.50	0.06	
124.50	0.21	
125.50	0.06	
126.50	0.12	
127.50	0.18	
128.50	0.37	
129.50	0.02	
130.50	0.08	
131.50	0.13	
132.50	0.35	
133.50	0.21	
134.50	0.05	
135.50	0.12	
136.50	0.08	
137.50	0.10	
138.50	0.44	
139.50	0.62	
140.50	1.23	
141.50	0.61	
142.50	1.51	
143.50	0.34	
144.50	0.24	
145.50	0.23	
146.50	0.15	
147.50	0.55	
148.50	0.13	
149.50	0.01	
150.50	0.20	
151.50	0.35	
152.50	0.08	
153.50	0.62	
154.50	0.26	

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Espedalen - Magnetic Susceptibility**Hole Number: ES2004-16**

155.50	0.18	
156.50	0.11	
157.50	0.06	
158.50	0.09	
159.50	0.24	
160.50	0.08	
161.50	1.23	
162.50	0.17	
163.50	0.04	
164.50	0.20	
165.50	0.05	
166.50	0.30	
167.50	1.55	
168.50	0.52	
169.50	0.69	
170.50	0.59	
171.50	2.80	
172.50	17.10	
173.50	2.19	
174.50	10.30	
175.50	21.60	
176.50	7.21	
177.50	5.37	
178.50	1.05	
179.50	1.11	
180.50	4.66	
181.50	13.00	

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Espedalen - Rock Quality (RQD)**Hole Number: ES2004-16**

FROM	TO	PERCENT QUALITY	PERCENT CORE	DISKING	COMMENTS
2.00	5.00	44.00	100.00	N	
5.00	8.00	42.00	100.00	N	
8.00	11.00	80.00	100.00	N	
11.00	14.00	64.00	100.00	N	
14.00	17.00	67.00	100.00	N	
17.00	20.00	84.00	100.00	N	
20.00	23.00	59.00	100.00	N	
23.00	26.00	56.00	100.00	N	
26.00	29.00	70.00	100.00	N	
29.00	32.00	52.00	100.00	N	Broken core 29.5 - 29.7m
32.00	35.00	58.00	100.00	N	
35.00	38.00	69.00	100.00	N	
38.00	41.00	75.00	100.00	N	
41.00	44.00	84.00	100.00	N	
44.00	47.00	77.00	100.00	N	
47.00	50.00	83.00	100.00	N	
50.00	53.00	69.00	100.00	N	
53.00	56.00	63.00	100.00	N	
56.00	59.00	72.00	100.00	N	
59.00	62.00	70.00	100.00	N	
62.00	65.00	64.00	100.00	N	
65.00	68.00	87.00	100.00	N	
68.00	71.00	62.00	100.00	N	
71.00	74.00	79.00	100.00	N	
74.00	77.00	76.00	100.00	N	
77.00	80.00	91.00	100.00	N	
80.00	83.00	36.00	100.00	N	Broken core 82.3 - 83m
83.00	86.00	78.00	100.00	N	
86.00	89.00	79.00	100.00	N	
89.00	92.00	75.00	100.00	N	
92.00	95.00	54.00	100.00	N	
95.00	98.00	85.00	100.00	N	Broken core 95.7 - 95.8m
98.00	101.00	91.00	100.00	N	
101.00	104.00	62.00	100.00	N	
104.00	107.00	80.00	100.00	N	
107.00	110.00	73.00	100.00	N	
110.00	113.00	72.00	100.00	N	

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Espedalen - Rock Quality (RQD)**Hole Number: ES2004-16**

113.00	116.00	87.00	100.00	N	
116.00	119.00	60.00	100.00	N	
119.00	122.00	57.00	100.00	N	
122.00	125.00	59.00	100.00	N	
125.00	128.00	34.00	100.00	N	
128.00	131.00	60.00	100.00	N	Broken core 128.8m
131.00	134.00	61.00	100.00	N	Broken core 131.6 - 131.7m
134.00	137.00	57.00	100.00	N	
137.00	140.00	89.00	100.00	N	
140.00	143.00	38.00	100.00	N	
143.00	146.00	41.00	100.00	N	
146.00	149.00	65.00	100.00	N	Broken core 147.9 - 148m
149.00	152.00	69.00	100.00	N	
152.00	155.00	66.00	100.00	N	
155.00	158.00	75.00	100.00	N	
158.00	161.00	74.00	100.00	N	
161.00	164.00	67.00	100.00	N	
164.00	167.00	70.00	100.00	N	
167.00	170.00	69.00	100.00	N	
170.00	173.00	62.00	100.00	N	
173.00	176.00	57.00	100.00	N	
176.00	179.00	50.00	100.00	N	
179.00	182.10	52.00	100.00	N	

Detailed Log

Hole Number: ES2004-17				Units: METRIC			
Project Name: Espedalen		Collar Survey: Y Plugged N		<u>UTM WGS 84 Coord</u>		<u>Local Coord</u>	
Project Number: 300		Multishot Survey: N Hole Size: TT46		UTM Northing: 6,805,293.92		Local Northing: 1830.11	
Date Started: 9/23/2004		Pulse EM Survey: Y		UTM Easting: 530,243.62		Local Easting: 5198.72	
Date Completed: 9/26/2004		Casing: Left in Hole, capped		Elevation: 1118.54		Core Storage: Strand Fjellstue	
		Location: Surface				Collar Dip: -46.00	
						Contractor: Geo Drilling A/S	
						Collar Azimuth: 230.00	
						Length: 94.20	
						Logged by: P. Tirschmann	

Comments Purpose: Test UTEM conductor ESP_04_01. Conductivity = 2000 Siemens

Result: Intersected mm to cm scale veins and stringers of massive po±pn.py.cpy between 57m and 60m. Ultramafic clasts/groundmass is locally associated with the mineralization.

Assays: ☐ 0.38% Ni, 0.35% Cu, 0.03% Co / 0.30m (58.80-59.10m)
☐ 0.68% Ni, 0.30% Cu, 0.08% Co / 0.30m (59.65-59.95m)

Borehole UTEM: Symmetric in-hole response centered at 60m, high conductance (Ch1) anomaly.

Lithological interpretation: Anorthositic terrain intruded by narrow, locally mineralized, ultramafic bodies as well as mafic dykes.

Detailed Lithology				Assay Data											
From	To	Lithology		Sample #	From	To	Length	Ni %	Cu %	Co %	S %	Pt g/t	Pd g/t	Au g/t	Ag g/t
0.00	1.50	C Casing													
1.50	20.20	6b Peridotite		PG03194	9.20	9.33	0.13	0.10	0.03	0.01	0.15	0.01	0.01	0.02	0.25
Medium grained, massive to weakly foliated, dark grey to black peridotite. Consists of 60-80% dark green olivine, 20-40% light grey (altered?) intercumulus and locally oikocrystic pyroxene, 1-3% very fine grained magnetite and trace fine grained sulphide. Unit is transitional to pyroxenite downhole of 17m and is highly chloritized and schistose adjacent to downhole contact (18.7-20.2m). Downhole contact sharp at 75° to CA. Conductivity: Non-conductive Magnetic susceptibility: 15-85, average = 30; becomes less magnetic downhole; approx. =2.5 in schistose UM near downhole contact. <u>Structure</u> 12.85 12.86 Sm General Foliation <u>Structure</u> 18.95 18.96 Sm General Foliation															

Detailed Lithology			Assay Data											
From	To	Lithology	Sample #	From	To	Length	Ni %	Cu %	Co %	S %	Pt g/t	Pd g/t	Au g/t	Ag g/t
20.20	24.05	10f Mafic dykes Fine grained, dark green, equigranular mafic dyke. Consists of 70-80% green mafic minerals and 20-30% interstitial light green micaceous mineral (sericite/sauserite?). Trace sulphides along fractures. Uphole and downhole contacts very fine grained to chilled; small UM clast observed in dyke near uphole contact; downhole contact at 85° to CA. Non-conductive. Magnetic susceptibility: 0.8-1.9												
24.05	27.35	6 Undivided Ultramafic Intrusive Fine grained, dark green, serpentized, chloritized phlogopite-bearing ultramafic. Trace fine grained sulphides. Downhole contact gradational over several cms. Magnetic susceptibility <0.5.												
27.35	30.05	4 Anorthosite / Anorthositic Gabbro Strongly foliated, sheared anorthositic gabbro consisting of 50-55 % white plagioclase, 30-35% green mafic minerals and 5-15% pale green sericite (?). Locally contains mm to cm scale bands of altered UM as immediately uphole. Non-conductive. Magnetic susceptibility: <0.5 Interpretation: Lithology is difficult to identify in drillcore, but transition from more massive to progressively more sheared anorthositic gabbro can be seen in outcrop at surface in immediate area of drillhole. <u>Structure</u> 29.80 29.81 Sm General Foliation												
30.05	41.35	10f Mafic dykes Fine grained, light green, highly foliated (sheared) mafic dyke similar to 20.2-24.05m but more tectonized. Quartz veining at 40.5m. Contacts are concordant to foliation and downhole contact with anorthositic gabbro is very difficult to distinguish due to shearing and similar composition. Non-conductive. Magnetic susceptibility: <0.5 <u>Minor Interval</u> 31.65 32.10 4 Anorthosite / Anorthositic Gabbro Block of anorthositic gabbro in mafic dyke? Mafic unit is fine grained and appears chilled against uphole contact of anorthositic gabbro. <u>Structure</u> 38.20 38.21 Sm General Foliation												

Detailed Lithology				Assay Data											
From	To	Lithology		Sample #	From	To	Length	Ni %	Cu %	Co %	S %	Pt g/t	Pd g/t	Au g/t	Ag g/t
41.35	76.70	4 Anorthosite / Anorthositic Gabbro		PG03195	56.00	57.00	1.00	0.03	0.03	0.01	0.24	0.01	0.01	0.01	0.25
Fine to medium grained, foliated, white and green anorthositic gabbro with "striped" appearance due to shearing. Consists of 50-55% white plagioclase, 30-35% green mafic minerals, 5-15% pale green sericite and 1-3 % dark green chlorite. Locally cross-cut by fine grained, green mafic dykes but contacts are concordant to foliation/shearing (eg. 45.1-45.25m, 46.3-46.85m, 46.95-47.10m). 57-60m: mm to cm scale veins and stringers of massive po ± pn,py and cp cross-cut the anorthositic gabbros and locally contain a small amount of ultramafic as groundmass or clasts (see mineralization). 59.3m: 1cm wide zone of fault gouge NOTE: Degree of shearing decreases downhole. Most intense zone of shearing appears to be between 50m and 51.3m. Non-conductive. Magnetic susceptibility: <0.5. <u>Minor Interval</u> 67.20 67.90 6d Pyroxenite Medium grained green pyroxenite dyke containing trace po. Uphole contact sheared; downhole contact gradational over several cms. <u>Mineralization</u> 57.85 58.30 8.0 % Po Pyrrhotite VN Veined 5-10% po in veinlets up to 6mm in width <u>Mineralization</u> 58.80 59.10 35.0 % Po Pyrrhotite VN Veined Massive po veins/stringers up to 3cm wide; cp locally; tr pn (?) as 0.5 mm rounded eyes in massive po at 58.93m. <u>Mineralization</u> 59.10 59.65 5.0 % Po Pyrrhotite STR Stringers 5% po, tr py in 1-3mm wide foliation parallel stringers <u>Mineralization</u> 59.65 59.95 65.0 % Po Pyrrhotite VN Veined 60-65% po in massive veins/stringers up to 10cm wide; 3-4% pn as 0.5-1mm eyes and as fine grained margins to massive po vein from 59.85m-59.95m; 1-2% py as individual grains up to several mm in diameter.				PG03196	57.00	57.85	0.85	0.03	0.03	0.02	0.37	0.01	0.01	0.01	0.25
				PG03197	57.85	58.30	0.45	0.09	0.03	0.01	2.70	0.01	0.01	0.02	0.25
				PG03198	58.30	58.80	0.50	0.03	0.05	0.01	0.25	0.01	0.01	0.01	0.25
				PG03199	58.80	59.10	0.30	0.38	0.35	0.03	10.80	0.01	0.07	0.01	0.60
				PG03201	59.10	59.65	0.55	0.08	0.08	0.01	2.18	0.01	0.01	0.01	0.25
				PG03202	59.65	59.95	0.30	0.68	0.30	0.08	22.10	0.05	0.04	0.03	1.00
				PG03203	59.95	60.50	0.55	0.03	0.03	0.01	1.01	0.01	0.01	0.01	0.25
				PG03204	60.50	61.50	1.00	0.03	0.03	0.01	0.69	0.01	0.01	0.01	0.25

Detailed Lithology							Assay Data											
From	To	Lithology					Sample #	From	To	Length	Ni %	Cu %	Co %	S %	Pt g/t	Pd g/t	Au g/t	Ag g/t
		<u>Mineralization</u>	59.95	60.50	2.0 %	Po Pyrrhotite STR Stringers 2% po in 1-3mm wide foliation parallel stringers.												
		<u>Structure</u>	49.55	49.56	Sm	General Foliation												
		<u>Structure</u>	54.30	54.31	Sm	General Foliation												
		<u>Structure</u>	63.40	63.41	Sm	General Foliation												
		<u>Structure</u>	74.35	74.36	Sm	General Foliation												
76.70	78.30	6d Pyroxenite					PG03205	77.30	78.30	1.00	0.08	0.03	0.03	0.44	0.01	0.01	0.01	0.25
		Medium grained, green, foliated, chloritized pyroxenite containing 1-2% phlogopite and trace -1% pyrite. Uphole contact at 75° to CA, downhole contact at 80° to CA.																
78.30	88.55	10f Mafic dykes																
		Fine to medium grained, foliated, equigranular, mafic dyke as 20.2-24.05m and 30.05-41.35m. Consists of 60-70% chloritized pyroxene 30-40% interstitial light green micaceous mineral (sericite/saussenite?). Clast of gabbroic anorthosite from 84.8-85m. Interfingered with gabbroic anorthosite at downhole contact which is concordant with foliation.																
		Non-conductive: Magnetic susceptibility: <0.5																
		<u>Structure</u>	79.30	79.31	Sm	General Foliation												
		<u>Structure</u>	87.05	87.06	Sm	General Foliation												
88.55	94.20	4 Anorthosite / Anorthositic Gabbro					PG03206	88.80	88.90	0.10	0.03	0.03	0.01	1.58	0.01	0.01	0.01	0.25
		Medium grained, foliated green and white gabbroic anorthosite. Narrow Um dyke containing 2% po between 88.8 and 88.9m.																
		<u>Mineralization</u>	88.80	88.90	2.0 %	Po Pyrrhotite F Fracture-Controlled 2-3% po in foliation parallel fractures in UM.												
		<u>Structure</u>	93.80	93.81	Sm	General Foliation												

Espedalen - Analysis

Hole Number: ES2004-17

Sample Number	From	To	Sample Length	Ni%	Cu%	Co%	S%	Au g/t	Pt g/t	Pd g/t	Ag g/t	Pb%	Zn%	SiO2 %	Al2O3 %	Fe2O3 %	MgO %	CaO %	Na2O %	K2O %	TiO2 %	P2O5 %	MnO %	Cr2O3 %	V2O5 %	LOI%	SUM %
PG03194	9.20	9.33	0.13	0.10	0.03	0.01	0.15	0.02	0.01	0.01	0.25			39.10	5.70	13.60	28.60	4.15	0.24	0.03	0.26	0.02	0.18	0.45	0.02	8.32	100.60
PG03195	56.00	57.00	1.00	0.03	0.03	0.01	0.24	0.01	0.01	0.01	0.25																
PG03196	57.00	57.85	0.85	0.03	0.03	0.02	0.37	0.01	0.01	0.01	0.25																
PG03197	57.85	58.30	0.45	0.09	0.03	0.01	2.70	0.02	0.01	0.01	0.25																
PG03198	58.30	58.80	0.50	0.03	0.05	0.01	0.25	0.01	0.01	0.01	0.25																
PG03199	58.80	59.10	0.30	0.38	0.35	0.03	10.80	0.01	0.01	0.07	0.60																
PG03201	59.10	59.65	0.55	0.08	0.08	0.01	2.18	0.01	0.01	0.01	0.25																
PG03202	59.65	59.95	0.30	0.68	0.30	0.08	22.10	0.03	0.05	0.04	1.00																
PG03203	59.95	60.50	0.55	0.03	0.03	0.01	1.01	0.01	0.01	0.01	0.25																
PG03204	60.50	61.50	1.00	0.03	0.03	0.01	0.69	0.01	0.01	0.01	0.25																
PG03205	77.30	78.30	1.00	0.08	0.03	0.03	0.44	0.01	0.01	0.01	0.25																
PG03206	88.80	88.90	0.10	0.03	0.03	0.01	1.58	0.01	0.01	0.01	0.25																

Espedalen - Conductivity**Hole Number: ES2004-17**

Depth	Conductivity (Siemens)	COMMENTS
57.90	88.00	
58.05	144.00	
58.20	74.00	
59.00	999.00	1058
59.45	86.00	
59.75	999.00	1330
59.90	999.00	3385

Espedalen - Magnetic Susceptibility**Hole Number: ES2004-17**

DEPTH	MAGNETIC SUSCEPTIBILITY (X 10 ⁻³ SI)	COMMENTS
1.50	37.70	
2.50	61.20	
3.50	62.00	
4.50	56.20	
5.50	38.60	
6.50	71.00	
7.50	21.00	
8.50	49.70	
9.50	17.60	
10.50	23.20	
11.50	77.00	
12.50	83.00	
13.50	32.40	
14.50	17.50	
15.50	31.20	
16.50	36.10	
17.50	26.30	
18.50	2.78	
19.50	2.46	
20.50	1.86	
21.50	1.10	
22.50	0.86	
23.50	0.85	
24.50	0.27	
25.50	0.42	
26.50	0.42	
27.50	0.08	
28.50	0.25	
29.50	0.27	
30.50	0.15	
31.50	0.34	
32.50	0.05	
33.50	0.16	
34.50	0.18	
35.50	0.21	
36.50	0.21	

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Espedalen - Magnetic Susceptibility**Hole Number: ES2004-17**

37.50	0.18	
38.50	0.03	
39.50	0.02	
40.50	0.15	
41.50	0.29	
42.50	0.15	
43.50	0.12	
44.50	0.21	
45.50	0.24	
46.50	0.27	
47.50	0.12	
48.50	0.26	
49.50	0.19	
50.50	0.07	
51.50	0.22	
52.50	0.46	
53.50	0.03	
54.50	0.10	
55.50	0.03	
56.50	0.05	
57.50	0.04	
58.50	0.37	
59.50	0.47	
60.50	0.25	
61.50	0.28	
62.50	0.03	
63.50	0.09	
64.50	0.05	
65.50	0.11	
66.50	0.32	
67.50	0.05	
68.50	0.28	
69.50	0.05	
70.50	0.08	
71.50	0.03	
72.50	0.31	
73.50	0.07	
74.50	0.03	
75.50	0.02	

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Espedalen - Magnetic Susceptibility**Hole Number: ES2004-17**

76.50	0.14	
77.50	0.39	
78.50	0.19	
79.50	0.06	
80.50	0.06	
81.50	0.28	
82.50	0.14	
83.50	0.12	
84.50	0.36	
85.50	0.55	
86.50	0.07	
87.50	0.27	
88.50	0.07	
89.50	0.07	
90.50	0.11	
91.50	0.10	
92.50	0.23	
93.50	0.01	

Espedalen - Rock Quality (RQD)**Hole Number: ES2004-17**

FROM	TO	PERCENT QUALITY	PERCENT CORE	DISKING	COMMENTS
1.50	4.00	41.00	100.00	N	
4.00	7.00	48.00	100.00	N	
7.00	10.00	52.00	100.00	N	
10.00	13.00	37.00	95.00	N	
13.00	16.00	41.00	100.00	N	Badly broken core: 13.5m; broken core: 14.3 - 14.7m
16.00	19.00	57.00	100.00	N	
19.00	22.00	49.00	100.00	N	
22.00	25.00	63.00	100.00	N	
25.00	28.00	39.00	100.00	N	
28.00	31.00	49.00	100.00	N	
31.00	34.00	47.00	100.00	N	
34.00	37.00	76.00	100.00	N	
37.00	40.00	90.00	100.00	N	
40.00	43.00	87.00	100.00	N	
43.00	46.00	77.00	100.00	N	
46.00	49.00	78.00	100.00	N	
49.00	52.00	36.00	100.00	N	
52.00	55.00	32.00	100.00	N	
55.00	58.00	29.00	100.00	N	
58.00	61.00	13.00	100.00	N	
61.00	64.00	3.00	100.00	N	Badly broken core: 63.7 - 64.85m (photos)
64.00	67.00	14.00	100.00	N	Badly broken core: 65.5 - 65.7m
67.00	70.00	36.00	100.00	N	
70.00	73.00	37.00	100.00	N	
73.00	76.00	38.00	100.00	N	
76.00	79.00	71.00	100.00	N	
79.00	82.00	87.00	100.00	N	
82.00	85.00	76.00	100.00	N	
85.00	88.00	95.00	100.00	N	
88.00	91.00	96.00	100.00	N	
91.00	94.20	82.00	100.00	N	

Friday, May 20, 2005

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