

GFZ-OSG - Logging Report
OUTO Project
20-August - 06-September 2011

Statistics	
Travel to:	20-22-AUG-2011, 3 d
Rig-up:	22-AUG, 15:00-17:00
Logging:	23-AUG - 01-SEP, no night shifts
Logging time:	89 h
Rig-down:	01-SEP, 16:45-17:30
Travel back:	02-06-SEP, 5 d (incl. 1 day stand-by on 03-SEP)
Total time:	18 d
GFZ participants:	Christian Carnein, Jochem Kück, Matxalen Rey Abasolo, Martin Töpfer, Stefan Weisheit, Thomas Wiersberg
Project representative:	Ilmo Kukkonen, GTK, Espoo, & Riika K
Cable type /Owner:	7-H422D 7-conductor cable Rochester/GFZ
Winch type /Owner:	Logging Truck, International Harvester/GFZ

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Site Parameters	
Well:	OUTO
Location:	Outokumpu, Sysmejärvi, Finland
Geographic Coordinates:	Lat: N62° 43.0684, Long: E29° 03.7196
Depth reference:	top of casing
Elevation depth reference above ground:	1.1 m
Elevation of ground above sea level:	99.04 m

Well Parameters			
Max. depth driller: 2516 m			
<i>Casing/Liner/ OH</i>	<i>ID</i>	<i>Top [m]</i>	<i>Bottom [m]</i>
Casing	324 mm	0	44
OH	220 mm	44	2516
Drilling method in open hole:		rotary coring	
Type of fluid in hole:		saline rock fluids	
Remarks:	pumping tests with a downhole membbarne pump were performed earlier this year		

Logging Program OUTO 2011

Sonde	Parameters	Log Range [m]	Date in 2011	Remarks
TS1-MP-TEMP	T, p, MRES, GR	0 - 2500	23-AUG	sonde stood up 7 times, could be overcome by 4 people pulling laterally on the rope ('monkey business')
TS1-MS	MSUS, GR	44 - 2500	26-AUG	
TS1-DIP	Mx,My,Mz, GR, DEVI, DAZI	1260 - 2500	28-AUG	run as magnetometer w/ arms not opened
FAC40	borhehole images	160 - 235 950 - 980 1275 - 1742 1740 - 1900	29-31 AUG	
TS1-FS	GR, fluid samples	500, 970, 1470, 1820, 2480, 500, 2350, 1470	24-29 AUG	8 Samples, sonde was left downhole overnight for sampling several times
MP standard	T, MRES, GR	0 - 1500	01-SEP	8 m/min in 4 sections for comparison w/ slimhole sonde, inbetween run fast