How we use gINT at GEO



How we use gINT at GEO

Agenda

- Who we are Jens and Stine
- How/why GEO use gINT

2

GEO logs



Who we are...

- Jens Galsgaard Geologist Experienced in gINT output
 - Have designed the logs we use
- Stine Fogh Project Engineer
 Experienced in importing data into gINT and exporting to AGS files
 - Have generated appropriate correspondance files

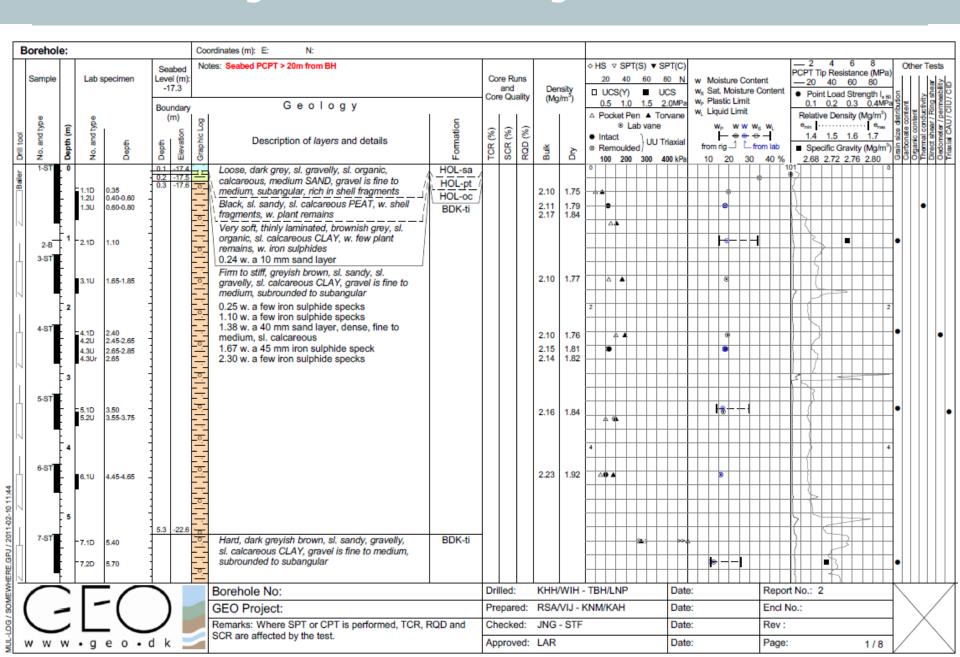


How/why GEO use gINT

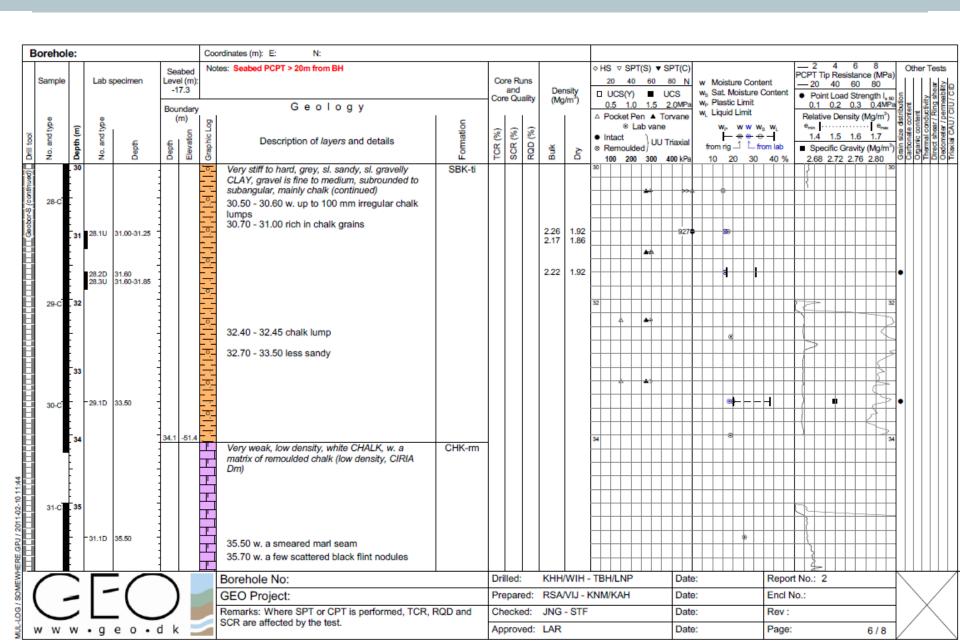
- Produce borehole logs
- Produce AGS files and Excel files
- Primarily on offshore jobs
- Able to produce preliminary logs on-site
- The logs are dynamic can be designed to the client's needs
- gINT is easy to use for non-programmers
- The database has a logic structure
- All parameters are assigned to a depth



Offshore log - a site investigation in the UK



Offshore log – a site investigation in the UK

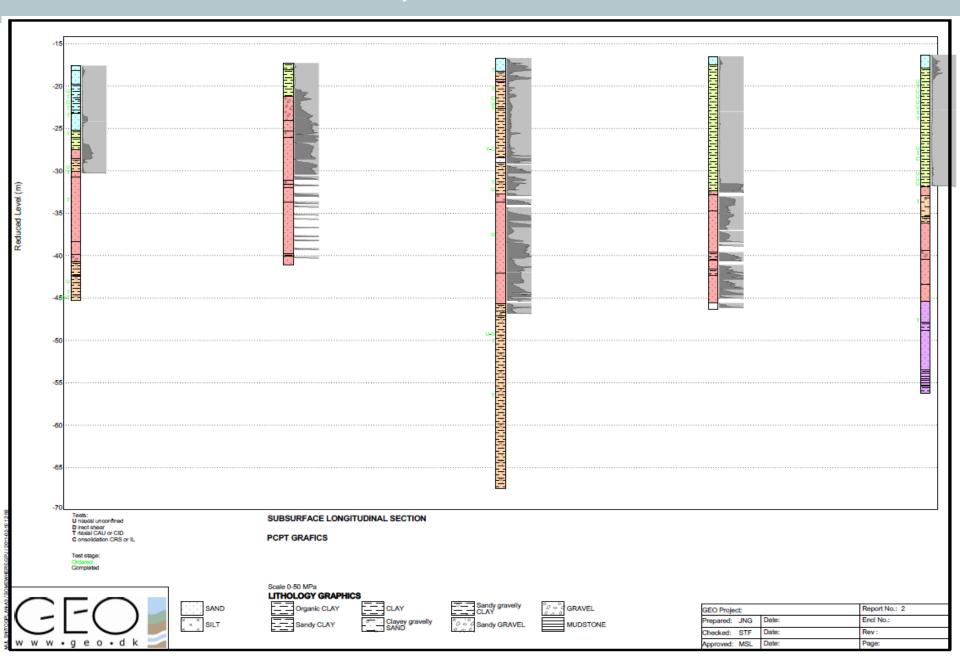


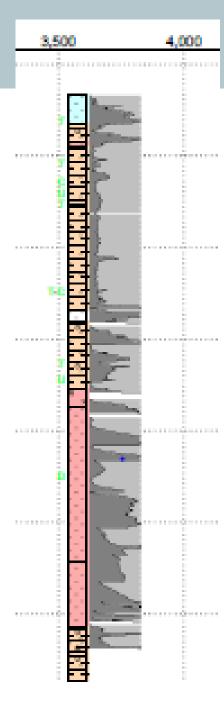
A3-portrait

March Marc		Bk	reho	le:					_	rchates (m): E: N:										* * * *			=	_
Company Comp			lample		Labra	pecimen			Not	NK.						20 40 60 1	80 N	4 8 12	16	-2 4 6	8	Office 	r Teets	
Control of Agency and decided Control of Agency and Age							Dour	ndary	_	Geology		Com	Quality	(Mg	im)	△ Pocket Pen ▲ Tor	rvane	w. Set Moisture		D, (Jamiolkova 30 60 90	64 1988) 120 %	La Co	1	į
2 2 2 3 5 2 2 3 5 10 10 10 10 10 10 10		IJ	Š.		agrip	ı					*	2	2 2			N,=15 Bet, from C	Heidel IPT	w, Liquid Limit	_	Relative Density (Mpm)	deco.		
Company of the growth flow of the control of the co	1	o e	ě	- Beb	No. on	8	e de la constantina	Bone	Graph	Description of layers and details	9 8 9	8	90 90	ž	à	-N ₂ -20 000 100 4		F-+	-T	Specific Gravity	march 5	888		
### And Committing from the efficiency of committee of the committee of th		$\overline{}$	1-8	•				Ī	Č	Loose, grey, sl. sitty, sl. gravelly, fine,		П		Ī	Ē						0	Ħ	Ш	ĺ
1		4	2+0	ŧ		:				subangular to subrounded, w. charcoal pieces,		Н					#			4114		Ш		
100		U		Ē,	2.10	0.80						Н					#					Ш		ı
### Company of the co		П		Ē	2.20	1.20						Н					$^{+}$			11111		11		
### 1		Н	3-51	Ē		100700	1.0	-17.8		Very soft to soft, grey, sandy, calcareous	Ma Lg	1		1.90	1.54		#			<u> 51 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1</u>		Ш		
### Commoning from to self, we all furnitures #### Commoning from to self, we all furnitures #### Commoning from to self, we all furnitures #### Commoning from to self, we all furnitures ##### Commoning from to self, we all furnitures ##### Commoning from to self, we all furnitures ###################################		Ш		2					녈	iron sulphides stains		Н				2	Н			4.11+	2	Ш		
1.00 1.00		N		Ē					Ξ	2.00 - 2.15 loose, grey, medium sand		Н					₩		\square	// // // /		Ш		
3.60 becoming self 3.60 b		Ш	461	Ė	4.10	2.90-3.10			뎚	2.60 becoming firm, w. several silt laminae		Н		1.03	1.40		L L			/		Ш		
3.60 becoming self 1.00 (-60 becoming self)		Ш		*								Н		1.05	1.44	-	\blacksquare	L.	2	1 %		•		ı
100 140 150 150 150 150 150 150 150 150 150 15		Ы	5-91	ŧ	•	130130				3.60 heromina stiff		Н					\Box					Ш		ĺ
100 100 100 100 100 100 100 100 100 100		ě		Ė,	5.1D 5.2U	3.80 3.90-4.10				and becoming and		Н					100	e-	111		 	Ш		
10		S S		Ē	5.3U	4.204.40						Н		1.07	1.49		-		Ш			Ш		
100 100 100 100 100 100 100 100 100 100		Ü	0.51	Ē	6.1U	4.70-4.90						Н		1.04	1.47		LIK.					Ш		
100 100 100 100 100 100 100 100 100 100		W.										Н					Ш			4]		
1.00		II.		ŧΙ								П					\coprod					11		
150 150		И	7-61	E								П		1.06	1.38				+					l
### 100 10				•										1.04	1.40	*	H				8			
1.00 1.00		И ъ	8.57	ŧ		-								1.00	1.37		#							
2.50 Page 1.50 P		ā		Ė,								П					#		111		Ш			
### 128		Ш		E	8:3U	7.25-7.50			莒			Н		1.70	1.28		#					Ш		ı
### AND 15-26 AN		N	9.61	Ē		1			Ξ	7.60 becoming firm to stiff, w. silt laminae		Н							Ш			Ш		
### Mail Mail		Ш		٠					Ξ			Н				2 -	Ш		-		8	Ш		
11/30 1/30 1/30 1/30 1/30 1/30 1/30 1/30		Ш		Ė	83U	8.30-8.50			녎			Н		1.75	1.24				*			Ш		
10.00 becoming film 10.00 becoming film 10.00 becoming film 10.00 becoming film 10.00 becoming soft 10.00 becoming soft to film 10.00 becoming soft to film		И	10-91	ŧ	10.1U	8.80-9.00			킄	8.60 - 9.55 soft to firm		Н					+		+++		\mathbf{H}	Ш		
9.60 becoming firm 10.61 1.65 1.65 1.65 1.65 1.65 1.65 1.65 1		Ш		٠					녈			Н			ı		\blacksquare		0					
10.00 becoming soft 10.00 becoming soft to film 10.0		lήl	11-97	ŧ						9.60 hecoming firm		Н		1.03	1.31		\Box		111			11		
10.60 becoming soft 10.60 becoming soft brim 10.60 becoming s		N		Ė.,,	11.20	9.80-10.00				and becoming min		Н		1.04	1.32	-	#		111		-	Ш		
13-81 13-20		Ш		Ē	11.30	10.30						Н					#					Ш		
13-00 13-00		Ш	12-61	Ē	******	10.80.11.00				10.60 becoming soft		Н		1.75	1.19						Ш	Ш		
13-80 To 13-		Ш		"	12.20	11.00-11.20			Ξ			Н					Ш							•
13.80 13.80 13.80 13.80 13.80 13.80 13.80 becoming firm to selff 13.80 13.80 13.80 13.80 13.80 13.80 13.80 13.80 13.80 becoming firm to selff 13.80 13.80 13.80 13.80 13.80 13.80 13.80 13.80 becoming firm to selff 13.80 13.80 13.80 13.80 13.80 13.80 13.80 13.80 becoming firm to selff 13.80 13.80 13.80 13.80 13.80 13.80 13.80 13.80 becoming firm to selff 13.80 13.80 13.80 13.80 13.80 13.80 13.80 13.80 13.80 becoming firm to selff 13.80 13.80 13.80 13.80 13.80 13.80 13.80 13.80 13.80 13.80 13.80 13.80 becoming firm to selff 13.80		ľ.]		Ė	12.30	11.25						Н					+				++	1		
12.50 several 2-5 mm fine sand sheaks 12.50 becoming soft to film 13.60 ta.00		Ц	19-61	Ė					Ξ			Н					+				\mathbb{H}	Ш	•	
12.50 becoming soft to firm 12.60 becoming firm to stiff 13.60 becoming stiff 13.60 becoming firm to stiff 13.60 becoming firm to stiff 13.60 becoming stiff		Ш		**					Ξ	40.00		Н		1.00	1.27	G .	\blacksquare		H		0	Ш		
13.60 becoming firm to stiff 13.60 becoming firm to stiff 13.61 1.52 1.55 1.55 1.55 1.55 1.55 1.55 1.5		N	16-91	ŧ		-			Ξ			Н		2.00	1.45		\blacksquare					Ш		
13.50 13.00		Ш		Ē.,		-			Ξ			Н		-			#					Ш		
13.50 13.00				E								П					#		\boxplus					
19-80 13-20		И	15-61	Ē	15.1D 15.2U	13.70			녈	13.60 becoming firm to stiff		Н		1.91	1.52		1	1111	1111			۱۱		
13.0 13.0 13.0 13.0 13.0 13.0 13.0 13.0		Ш		14		14.00-14.20						Н				11/24					14	Ш		
13-0		Û	18.180	ŧ					莒			Н					#					Ш		
13.0 13.0 13.0 13.0 13.0 13.0 13.0 13.0		a g	10.440	Ē.		3			莒			Н					#		Ш			Ш		
Very derival, Clayery, of greenly, calcamacus SAND. Greenly is subanquier to subrounded 18.10 becoming ality 18.10 becoming ality 18.10 - 18.25 way ality 18.10 - 18.35 st. sility Very derival, Clayery, of greenly, calcamacus CII Oc 20-10 20-1		8		₽"	16.1D				Ξ			Н					Ш		Ш			Ш		
Very derivacion, clayery, at gravely, celebrancus SAND. Gravel is subsequent to subsequence 18.10 becoming siby 18.10 becomi			17-8	ŧI	17.1D	15.80	15.8	-31.9	=	Very dense, grey, calcernous, fine SAND	Mw Gc	11					Н					Ш		
Very derivacion, clayery, at gravely, celebrancus SAND. Gravel is subsequent to subsequence 18.10 becoming siby 18.10 becomi		И		*		-						Н				18	Н		Ш		2	Ш		
Very derivacion, clayery, at gravely, calcumous SAND. Crewel is subsequent to subseque		N		Εl			18.8	-02.9				Н					\blacksquare		\blacksquare					ı
16.10 becoming ally 16.25 two ally		ě		E 1		16.80		17011	- 5	Very dense, clayey, sl. gravelly, calcareous SAND. Gravel is subangular to subrounded	GI Gc	1					#	10 pq				11		
18.10 becoming ally 18.10 tecoming allowed allowed allowed allowed allowed allowed a		9	19.8	"	19.1D	17.10			-	•		Н					\Box	0			100	Ш		
18.10 becoming sity 18.10 -18.25 very sity 18.20 -18.25 very sity 18		ř		ŧΙ		-						Н					#					Ш		
18. 10 becoming allry 18.25 visually	-	Ш		E.		3						Н					#					Ш		
18.25 - 18.35 sl. slifty Wery selft, grey, very sendy, gravelly, calcimensus CAY. Crewel is subsengular to sub	9	Ш	2146	Ē"	21.1D	18.35			-	18.10 - 18.25 yery ality		Н					Ш					Ш		
22-in 19 22-in 1	0114	Ш		ξĺ						18.25 - 18.35 sl. silty		П					\coprod							
Borehole Log: Drilled: KHH-WIHJ.NJ-TOA Date: Report No.: 2 Feet seque. GEO Project: Persent from the seabed campaign is included. Checked: JNG-STF Date: Rev: 1 Accrossed: MSL Date: Page: 1/2 Optigated.	T T	Ш	22,467	•			19.1	35.4	- 1	Very stiff own wert specific assumits	OI Or	1					\coprod							l
Borehole Log: Drilled: KHH-WIHJWJ-TOA Date: Report No.: 2 Feet range: GEO Project: Pepsyared: KRA-STKUSP Date: End No.: Cert data from the seabed campaign is included. Checked: JNG-STF Date: Rev: 1 Accrossed: MSL Date: Page: 1/2 Optigeted:	7	Ш	-	ŧΙ	22.1D	19.20				celcareous CLAY, Grevel is subangular to	Gr GC	П					H		\coprod			11		
Borehole Log: Drillie: RH-WINUW-TOA Diale: Report No.: 2 Test stage: GEO Project: Pepgared: RRA-STKUSP Diale: End No.: Remarks: CPT data from the seabed campaign is included. Checked: JNG-STF Diale: Rev: 1 Approximately MSL Diale: Page: 1/2 Cyfigeled:	- Contract	Ш		Εl			19.8	-38.2	ō,	SALETON TORKS		1					\Box		\Box					
GEO Project: Pepered: KRA-STKUSP Date: End No.: W w w + g = 0 + d k GEO Project: Pepered: KRA-STKUSP Date: End No.: Pere Date: Pere: 1 Accessive: MSL Date: Page: +/2 Cyfrjeled:	9	7		_			_									SHIPTON	Linear	n.	respon	No.: 2		Tent s	box.	,
W W W + Q E O + d K	ANN.A	(_	1	()				nobale 4					JSP						_	×	
	NO.	, w	\ *	<u>_</u>			1 k			rvemeno: UPT data from the seated campaign is i	100000				olf				Page:	1	1/2	Cophe	ested	,



Fence – A3 landscape

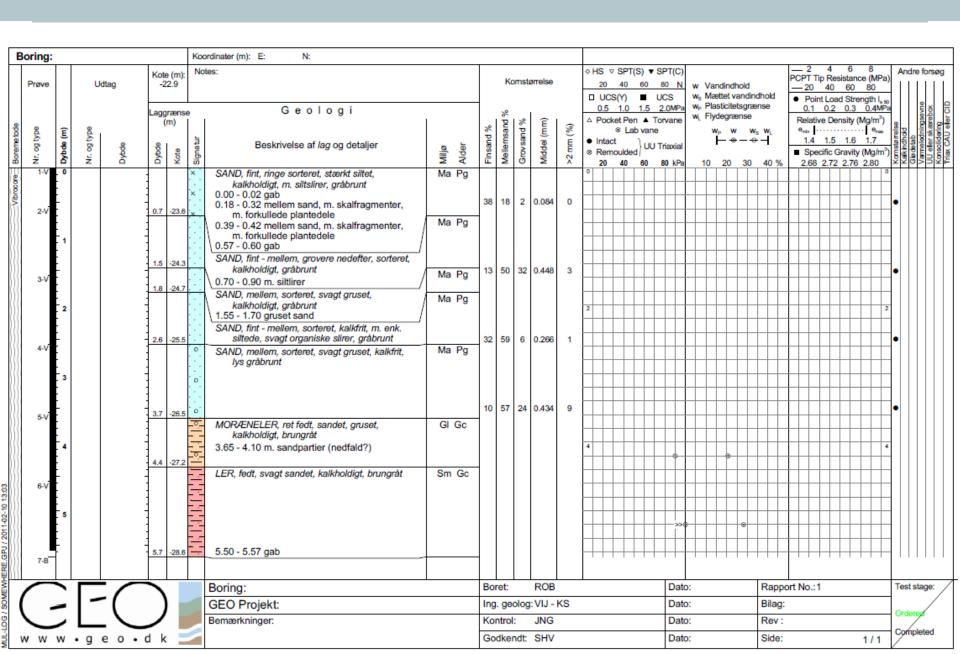




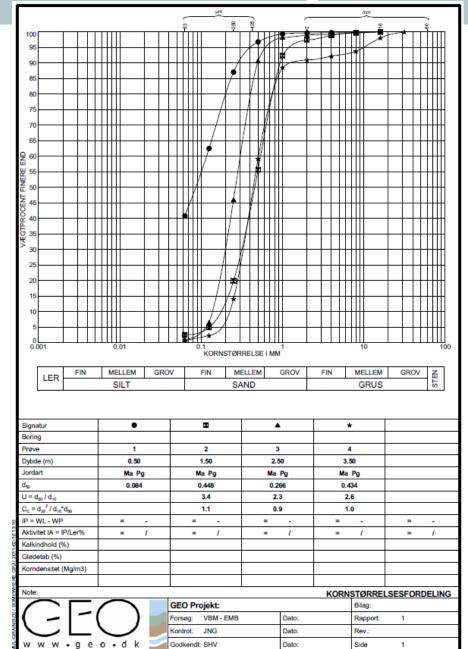


11-02-2011

Danish standards log - Vibrocore & sieve data



Danish standards - grainsize



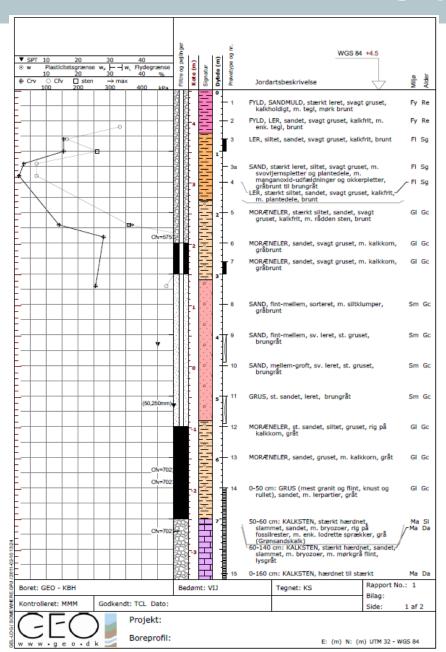


Signatur	•	•			4	\	7	*	
Boring									
Prøve	1		2	2	3	3		4	
Dybde (m)	0.5	50	1.	50	2.	50	3.50		
Jordart	Ма	Pg	Ма	Pg	Ма	Pg	Ма	Pg	
d ₅₀	0.0	84	0.4	148	0.2	266	0.434		
$U = d_{60} / d_{10}$			3	.4	2.	.3	2	.6	
$C_C = d_{30}^2 / d_{10}^* d_{60}$			1.	.1	0.	.9	1	.0	
IP = WL - WP	=	-	=	-	=	-	=	-	
Aktivitet IA = IP/Ler%	=	1	=	1	=	1	=	1	
Kalkindhold (%)									
Glødetab (%)									
Korndensitet (Mg/m3)									



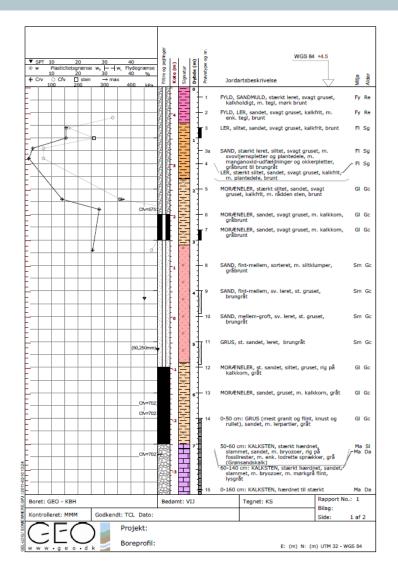
11-02-2011 12

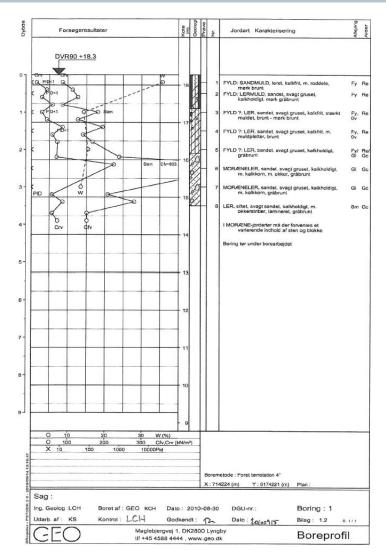
GEO – Geotechnical on-shore log (in Danish)





Logs - gINT Vs. GEOGIS







How we use gINT at GEO

Thank you for your attention

Jens Galsgaard

jng@geo.dk

Stine Fogh

stf@geo.dk



11-02-2011 15