

Drilling Method		Cable Percussion and Rotary		Borehole Diameter		Casing Diameter		BOREHOLE No.		BH40050	
Equipment		Dando 2000 Knebel		250mm to 3.50m 150mm to 25.00m		250mm to 3.50m 150mm to 25.00m		Coordinates (National Grid)		E N m OD	
Drill Fluid		Water		Logged by		Compiled by		Approved by			
Crew/Vessel		J Burnlees/P Howard		CC		clm		BC			
Dates Drilled		Start 28/09/2015 End 28/09/2016		06/10/2015		29/09/2015		19/01/2016			

Date & Time	Casing Depth (m)	Water Depth (m) (Flush Return %)	Sample/Core Recovery				SPT Blows /N	Result of U100 Blows/ Rec. mm or Fracture Index	Description of Strata	Depth (Thickness) (m)	Level m OD	Legend
			Depth (m) From To	Type	No.	Recovery %						
28/09	1.20	DRY	0.10	D	1		S50/133		Brown gravelly slightly silty fine to coarse SAND with low cobble content. Gravel is subangular to subrounded fine to coarse of mixed lithologies. Cobbles are subangular to rounded (150mm x 120mm) of mixed lithologies. Possible made ground, see note for 0.5m to 1.2m.	(0.50)	99.80	
			0.10-0.30	B	2							
			0.40	D	3							
			0.50-1.00	B	4							
			1.20	D	5							
			1.20-1.48	D	6							
			1.20-1.70	B	7							
			1.80	B	8							
			2.00	D	9							
			2.00-2.45	D	10							
28/09	1.90	DRY	2.00-2.50	B	11		S35		Dense brown to grey brown sandy slightly silty subangular to rounded fine to coarse GRAVEL of mixed lithologies with medium cobble content. Cobbles are subangular of psammite (140mm x 160mm). Sand is fine to coarse.		98.30	
28/09	1.90	DRY						GLACIOFLUVIAL DEPOSITS	(1.00)			
29/09	3.00	DRY	3.00	D	12		S50/58		Brown silty very sandy angular to subrounded fine to coarse GRAVEL of mixed lithologies with medium cobble content. Cobbles are subangular of psammite (140mm x 120mm). Sand is fine to coarse.		97.30	
			3.00-3.13	D	13							
			3.00-3.50	B	14							
29/09	3.70	DRY	3.70-3.78				C50/38		Medium strong grey PSAMMITE with thin locally extremely closely to closely spaced bands of pelite. Weathering: partial grain disintegration. Fracture set 1: inclined 10 degrees to 30 degrees widely spaced planar smooth.		96.80	
01/10	3.50	(70) DRY	3.50-4.20	100	100	100		1	BEN LUI SCHIST			
			3.92-4.10	C	16							
									Between 4.20m and 4.30m: Assumed zone of core loss.			
			4.20-5.70	96	96	96						

Remarks (See notes & key sheets)	1	Prior to boring a Cable Avoidance Tool (CAT) survey was carried out. An inspection pit (minimum dimension approx 400mm x 400mm) was hand-dug to 1.20m depth and rescanned using the CAT to check for services. Services were not located.
	2	Chiselled using CH from 1.20m to 1.50m (60 mins); chiselled using CH from 1.50m to 1.80m (60 mins); chiselled using CH from 2.80m to 3.10m (60 mins); chiselled using CH from 3.10m to 3.50m (60 mins); chiselled using CH from 3.50m to 3.70m (60 mins); chiselled using CH from 3.70m to 3.70m (60 mins).
	3	See separate sheet for installation.
	4	Groundwater not encountered during boring.

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			Figure No.	FR25 (1 of 6)


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Drilling Method Cable Percussion and Rotary Equipment Dando 2000 Knebel Drill Fluid Water Crew/Vessel J Burnlees/P Howard Dates Drilled Start 28/09/2015 End 28/09/2016		Borehole Diameter 250mm to 3.50m 150mm to 25.00m Casing Diameter 250mm to 3.50m 150mm to 25.00m		BOREHOLE No. BH40050 Coordinates (National Grid) [REDACTED] E Ground Level [REDACTED] N m OD	
Logged by CC 06/10/2015		Compiled by c1m 29/09/2015		Approved by BC 19/01/2016	


Date & Time	Casing Depth (m)	Water Depth (m) (Flush Return %)	Sample/Core Recovery					SPT Blows /N	Result or Fracture Index	Description of Strata	Depth (Thickness) (m)	Level m OD	Legend
			Depth (m)		Type	No.	RQD %						
			From	To									
			5.10-5.45		C	17							
			5.70-6.40		C	18			1				
		(0)	5.70-7.20 6.42-6.70		100 C	100 19	100						
			7.70-8.25		C	20							
		(0)	7.20-8.70		100	100	100			Medium strong dark grey PELITE with thin medium to widely spaced locally extremely closely spaced bands of psammite. Weathering: fresh. Fracture set 1: inclined 10 degrees to 30 degrees medium to widely spaced locally closely spaced planar smooth. BEN LUI SCHIST	7.40	92.90	
			8.50-8.63		C	21							
		(0)	9.27-9.45 8.70-10.20		C	22	100	100	100				


Remarks
(See notes & key sheets)

Scale 1:25



























































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Drilling Method Equipment Drill Fluid Crew/Vessel Dates Drilled		Cable Percussion and Rotary Dando 2000 Knobel Water J Burnlees/P Howard Start 28/09/2015 End 28/09/2016		Borehole Diameter 250mm to 3.50m 150mm to 25.00m		Casing Diameter 250mm to 3.50m 150mm to 25.00m		BOREHOLE No. Coordinates (National Grid) Ground Level		BH40050 E N m OD	
		Logged by CC 06/10/2015		Compiled by clm 29/09/2015		Approved by BC 19/01/2016					
Date & Time	Casing Depth (m)	Water Depth (m) (Flush Return) %	Sample/Core Recovery			SPT Blows /N Core Size (mm)	Result or Fracture Index	Description of Strata	Depth (Thickness) (m)	Level m OD	Legend
			Depth (m) From To	Type TCR %	No. SCR %						
01/10	3.50	3.60									
02/10	3.50	4.10	(0)	10.34-10.60	C	23					
			(0)	10.20-11.10	100	100	98				
			(0)	11.10-11.60	100	100	100				
			(0)	12.00-12.13	C	24					
			(0)	11.60-12.60	100	100	100				
			(0)	12.13-12.60	C	25					
			(0)	13.00-13.50	C	26					
			(0)	12.60-14.10	100	100	100				
			(0)	13.50-13.67	C	27					
			(0)	14.10-14.36	C	28					
			(0)	14.36-15.10	C	29					
			(0)	14.10-15.60	100	100	100				
Remarks (See notes & keysheets)											
Scale 1:25											
			Project A9 PITLOCHRY TO KILLIECRANKIE TRANSPORT SCOTLAND					Contract No. G151043UC Figure No. FR25 (3 of 6)			
28/08/2016											

Drilling Method Cable Percussion and Rotary Equipment Dando 2000 Knebel Drill Fluid Water Crew/Vessel J Burnlees/P Howard Dates Drilled Start 28/09/2015 End 28/09/2016		Borehole Diameter 250mm to 3.50m 150mm to 25.00m Casing Diameter 250mm to 3.50m 150mm to 25.00m		BOREHOLE No. BH40050 Coordinates (National Grid) Ground Level		Logged by CC Compiled by clm Approved by BC 06/10/2015 29/09/2015 19/01/2016					
Date & Time	Casing Depth (m)	Water Depth (m) (Flush Return) %	Sample/Core Recovery			SPT Blows /N Core Size (mm)	Result or Fracture Index	Description of Strata	Depth (Thickness) (m)	Level m OD	Legend
			Depth (m) From To		Type						
		(0)	15.60-17.10	100	100	100					
			17.10-17.50	C	30						
		(0)	17.10-18.60	100	100	100					
			18.43-18.60	C	31						
		(0)	18.60-20.10	100	100	100					
			19.47-19.60	C	32						
Remarks (See notes & keysheets)											
Scale 1:25											
			Project A9 PITLOCHRY TO KILLIECRANKIE TRANSPORT SCOTLAND					Contract No. G151043UC Figure No. FR25 (4 of 6)			
28/06/2018											

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Drilling Method Cable Percussion and Rotary Equipment Dando 2000 Knebel Water Crew/Vessel J Burnlees/P Howard Dates Drilled Start 28/09/2015 End 28/09/2016		Borehole Diameter 250mm to 3.50m 150mm to 25.00m Logged by CC 06/10/2015 Compiled by clm 29/09/2015 Approved by BC 19/01/2016		BOREHOLE No. BH40050 Coordinates (National Grid)  E Ground Level N m OD			
Installation Details			Installation Depth (m)	Level m OD	Water Strikes	Strata Depth (m)	Strata Details
Instrumentation: 50mm slotted section (SL) from 1.00 to 3.50m	Concrete		0.50	99.80		0.50	Silty gravelly SAND
	Bentonite Seal		1.00	99.30		Silty sandy cobbly GRAVEL	
	Gravel Filter						
	SL=1.00-3.50m						
							
	Bentonite Seal		3.50	96.80		3.50	Coarse/Medium grained Metamorphic (SCHIST)
	Cement/Bentonite Grout		4.50	95.80			
							
							
							
							
							
							
							
							
							
							
							
							
							
							
							
							
							
							
							
							
							
							
							
							
							
							
							
							
							
							
							
							
							
							
							
							
							
							
							
							
							
							
							
							
							
							
							
							
							
Remarks (See notes & keysheets) <input checked="" type="checkbox"/> Water Strike <input checked="" type="checkbox"/> Water Rise Flush stopcock box cover. Not to Scale Pipe diameter 50mm to 3.50m, installed on 03/10/2015.							
 28/09/2016		Project A9 PITLOCHRY TO KILLIECRANKIE TRANSPORT SCOTLAND			Contract No. G151043UC Figure No. FR25 (6 of 6)		