Borehole coordinates:
Eastings - 344943.05
Northings - 375849.585
Top 24" depth ref - 20.211 m AOD
Top 24" to GL - 0.086 m

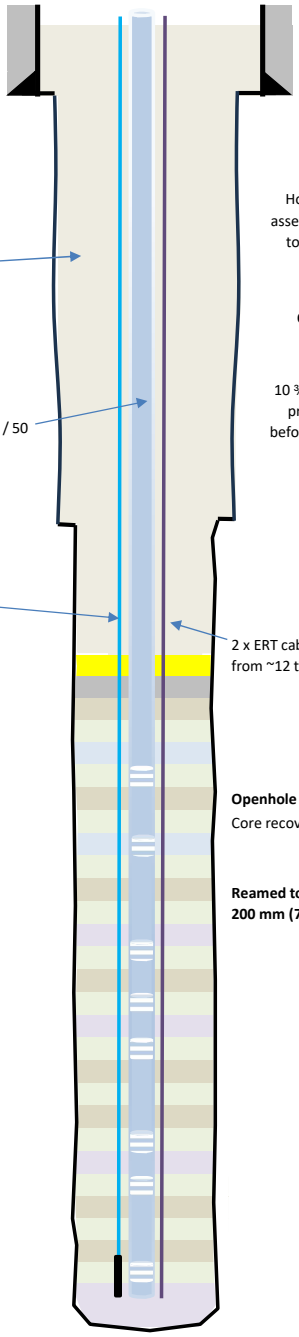
Well Schematic TH0421
MLS Borehole

British Geological Survey

Wireline logging undertaken	Tools run
Section logged inside temp casing to 6 m then 146 mm from 6 to 103.5 m. 16/05/23	GR, CALI, ACBI, LRES, TEMP, COND

Ground Level

NOT DRAWN TO SCALE



24" Cemented to casing top
OPC Grout

Geotherm X Grout
(thermal conductive grout)

Solinst Waterloo MLS tubing 60.3 mm OD / 50 mm ID

Fibre optic cable
(Active constellation)

24" casing shoe
OD 630mm (24.8")
ID 593.2mm (23.35")

Hole section cored with 146 mm assembly to 18.6 m then reamed out to 6 m (change to planned temp casing setting depth)

Openhole section - 311 mm

10 ¾" temporary steel casing run to protect hole and sealed to base before advancing deeper / recovered before completion run

2 x ERT cables with 42 nodes at 1m spacing from ~12 to 96m bgl

Openhole section - cored 146 mm
Core recovered 102 mm to 104.2 m

Reamed to final hole diameter - 200 mm (7 ⅞")

Install base at 99.97 m
Total depth
Well dipped at 102.4 m

TD Coordinates
Eastings - 344943.19
Northings - 375849.50
Step out - 0.16 m (inc 0.09 deg / azi 167 deg)

All Measured Depths (MD) are in metres Below (24") Casing Top (BCT)

Depths m MD-BCT	Comments	Backfill depths
	Bedrock encountered at 1.75 m	
2 m	24" shoe depth	
	273 x 250 mm temp casing	Geotherm X Grout (thermal conductive grout)
6 m	Base of reamed upper section	
	Sharp sand	12.35 to 13.05 m
	Cement Bentonite Pellets	13.05 to 18.55 m
	Bentonite Pellets (Mikolit 300)	18.55 to 27.35 m
	1 - 2 mm MGS filter sand	27.35 to 30.34 m
	6-10 mm Derby Gravel	30.34 to 35.10 m
MLS Port 8 - 28.62 m	1 - 2 mm MGS filter sand	35.10 to 35.65 m
	Bentonite Pellets (Mikolit 300)	35.65 to 38.10 m
	1 - 2 mm MGS filter sand	38.10 to 38.40 m
	6-10 mm Derby Gravel	38.40 to 40.00 m
MLS Port 7 - 41.57 m	1 - 2 mm MGS filter sand	40.00 to 43.01 m
	Bentonite Pellets (Mikolit 300)	43.01 to 46.75 m
	1 - 2 mm MGS filter sand	46.75 to 47.33 m
	4-10 mm MGS Gravel	47.33 to 48.70 m
MLS Port 6 - 50.56 m	1 - 2 mm MGS filter sand	48.70 to 51.90 m
	Bentonite Pellets (Mikolit 300)	51.90 to 56.06 m
MLS Port 5 - 57.42 m	1 - 2 mm MGS filter sand	56.06 to 59.60 m
	4-10 mm MGS Gravel	59.60 to 61.90 m
MLS Port 4 - 68.24 m	1 - 2 mm MGS filter sand	61.90 to 62.55 m
	Bentonite Pellets (Mikolit 300)	62.55 to 66.10 m
	1 - 2 mm MGS filter sand	66.10 to 70.55 m
	Bentonite Pellets (Mikolit 300)	70.55 to 74.95 m
MLS Port 3 - 76.62 m	1 - 2 mm MGS filter sand	74.95 to 77.95 m
	4-10 mm MGS Gravel	77.95 to 79.40 m
MLS Port 2 - 85.31 m	1 - 2 mm MGS filter sand	79.40 to 79.90 m
	Bentonite Pellets (Mikolit 300)	79.90 to 84.10 m
	1 - 2 mm MGS filter sand	84.10 to 87.10 m
	Bentonite Pellets (Mikolit 300)	87.10 to 95.00 m
MLS Port 1 - 96.44 m	1 - 2 mm MGS filter sand	87.10 to 98.00 m
	4-10 mm MGS Gravel	98.00 to 102.00 m
Reamed to 103.7 m	Additional metres drilled for sump - debris in well and for logging tools	
Cored to 104.2 m		