

WD-2007 991

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BRITISH GEOLOGICAL SURVEY
LOCAR

BOREHOLE/PIEZOMETER
COMPLETION INFORMATION

LOCAR No.: PL 25 Wellmaster No.: SUS7/250 SOBI No.: SUS7SW/115.

Location : Pikes Row, Hermitage

NGR : 4528 1731

OD Levels :

at top manhole cover (m OD)

at top casing (m OD)

other (specify) GROUND LEVEL c 98 (m OD)

Drilling Company : D and J Morgan Ltd.

Driller : D. MORRIS

Date Drilling Commenced : 14 October 2002

Date Drilling Completed : 18 October 2002

Date Borehole Completed : 23 OCT 2002

BGS/WMC Supervisor : C. CHENEY, J. COBBING

Borehole Construction Details		Construction Materials	
Bottom of borehole (as drilled)	80.00 m bgl	Casing material:	STEEL
Borehole diameter	0 to 7.00m 315mm 7.00 to 18.00m 280mm 18.00 to 80.00m 203mm	Screen material:	-
Top of backfill (in base of borehole)	m bgl	Slot size:	- mm
Bottom of piezometer*	44.0 and 73.57 m bgl	Screen/casing diameter:	203mm (8" ID)
Bottom of screen*	" " m bgl	Backfill material:	-
Top of screen*	38.0 and 50.0 m bgl	Filter pack material:	-
Top of filter pack [†]	} See overleaf	Seal material:	-
Top of seal [†]		Grout material:	BENTONITE/CEMENT (1 : 10)
Top of grout [†]			
* Measurement based on total length of pipe.			
† Measured with a weighted tape measure			

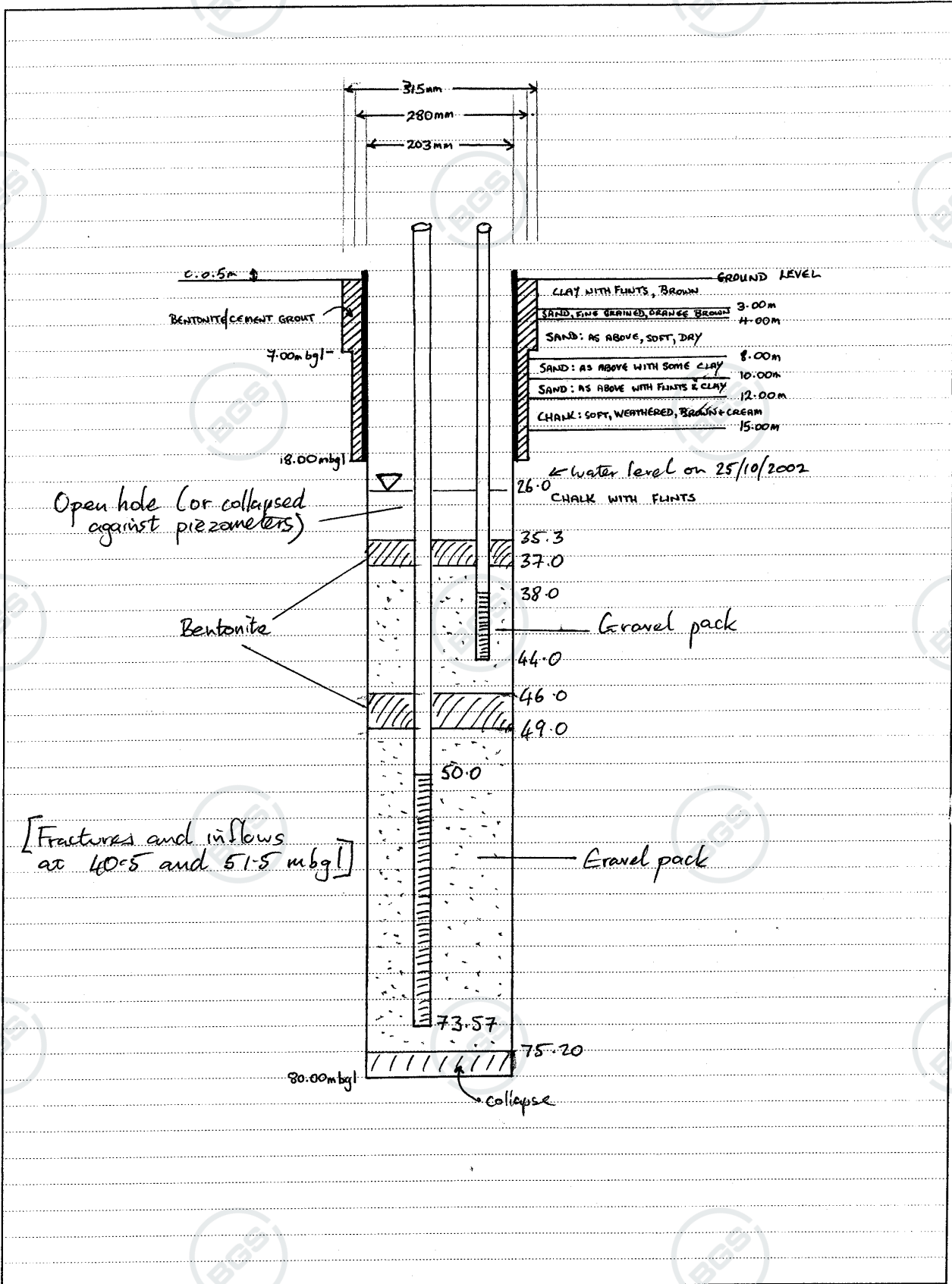
Surface Completion

Type (circle one): A (small) B Height of top of manhole cover above ground level: m
C D Top of casing below top of manhole cover: m

- Notes:
1. TEMPORARY STEEL CASING 303mm ID (12") 340MM OD INSTALLED TO 1.5m bgl AND 254mm ID (10") 274MM OD TO 18.00m bgl - BOTH TEMPORARY STRINGS OF CASING WERE WITHDRAWN PRIOR TO GROUTING 203mm ID (8") CASING INTO THE BOREHOLE TO A DEPTH OF 18.00m.
 2. 203mm ID PERMANENT CASING WAS BUTT JOINTED AND WELDED IN 6 METRE LENGTHS.
 3. AT 26.0m DRILLING RETURNS WERE "LOST" (POSSIBLY INDICATING THE WATER TABLE?) AND DRILLING CONTINUED WITH FOAM/WATER ADDITIVES TO TD @ 80.00m TO ENSURE DRILLING CUTTINGS REMOVED FROM THE BOREHOLE.
 4. DRILLING WAS CARRIED OUT USING A CLAW BIT.
 5. DRILLERS NOTED POSSIBLE WATER STRIKES AT c.41 AND c.57 m bgl.

BOREHOLE CONSTRUCTION DIAGRAM ON REVERSE

BOREHOLE CONSTRUCTION DIAGRAM





SAMPLES

British Geological Survey				Project		Borehole/Well No.		
				LOCALAR		PL25		
				Locality Name		Sheet of		
Start date				Casing diameter		NGR/lat & long		
End date								
Drilling method			Other tests	Borehole diameter		Logged by		
Equipment						E. Cullis 28/12/02		
Sample/core recovery			SPT blows /N	Orientation		Depth (thickness) (m)	Scale:	
Fracture spacing (min/mean/max measurement)				Ground level				Level (m OD)
Depth (m)AL/ from to			Core size (mm)	Description of strata to BS5930:1999 with additional information		Sed. structures/fractures	Grain size	
Type No								Carbonates F L M J C Av gn. size F L F M J C
TCR SCR RQD								
35								
					(37m) loose, cream/pale brown SAND. poorly sorted, fine - coarse grains. few clays.			
40								
					(43m) loose cream/pale brown GRAVEL. poorly sorted coarse sand - medium gravels. Angular grains. few clays.			
45								
					(49m) loose cream/brown GRAVEL. poorly sorted coarse sand - medium gravels. Angular grains.			
50								
					(55m) loose, cream/white GRAVEL. poorly sorted medium sand - medium gravels. Angular grains. Dark flint, grains. 5%.			
55								
					(61m) loose cream/white, sandy GRAVEL. poorly sorted fine sand - medium gravels. Angular grains. Dark flint, grains 5%.			
60								
					(67m) loose cream/white, coarse SAND. Poorly sorted, fine - coarse grains. Angular grains. <5% dark, flint grains.			
65								
					(73m) loose cream/pale brown, SAND. poorly sorted fine - coarse grains. 75% fines. few black grains.			
70								
					(79m) loose, cream/pale brown SAND. reasonably well sorted fine - medium sand. Few black grains.			
75								
					(80m) loose cream/pale brown SAND. poorly sorted fine - coarse sand. 25%.			
80								
					(85m) dark brown/black grains.			
85								
Comments:								



SAMPLES (2)

				Project LOCAR				Borehole/Well No. PL25				
				Locality Name Pikes Row				Sheet 1 of 1				
Start date				Casing diameter				NGR/lat & long				
End date				Borehole diameter				Logged by E. Cullis		Scale:		
Drilling method				Other tests		Orientation		Ground level		Depth (thickness) (m)		
Equipment										Legend		
Sample/core recovery				Fracture spacing (min/mean/max measurement)		SPT blows /N		Description of strata to BS5930:1999 with additional information		Sed. structures/fractures		
Depth (m) AL/ from to		Type	No	Fracture spacing (min/mean/max measurement)	Core size (mm)	Description of strata to BS5930:1999 with additional information		Depth (thickness) (m)	Level m OD	Legend	Sed. structures/fractures	Grain size
		TCR	SCR									
0						(1m)	hard, brown. mixture med sand to gravels. includes flints.					
1						(2m)	moderately hard-hard particles. brown/reddish. soil layers. contains flints.					
2						(3m)	med-coarse sand. brown/dark red.					
3						(4m)	fine-medium sand. brown/red. well sorted and rounded.					
4						(5m)	fine-medium sand. brown/red. well sorted and rounded sand.					
5						(6m)	fine sand, red/brown. well sorted + rounded. SAND.					
6						(8m)	fine-medium sand. brown/red sand. well sorted + rounded.					
7						(10m)	fine-medium SAND. Brown/red. well sorted + rounded.					
8						(12m)	soft, dark brown. chalky SAND. lumps of putty chalk and small flints.					
9						(14m)	soft, cream/orange. fine grained CHALK. putty texture.					
10						(16m)	soft, cream CHALK. putty like texture.					
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
Comments:												
See reverse												