



WD-2002-996

SU57/248



BRITISH GEOLOGICAL SURVEY
LOCAR

BOREHOLE/PIEZOMETER
COMPLETION INFORMATION

LOCAR No.: PL14A Wellmaster No.: SU57/248 SOBI No.: SU57SW113

Location : GRIMSBURY WOOD

NGR : 4514 1719

OD Levels :

at top manhole cover (m OD)
at top casing (m OD)
other (specify) (m OD)

Drilling Company : BRITISH DRILLING AND FREEZE

Driller : SIMON LEVERS

Date Drilling Commenced : 30 OCTOBER 2002

Date Drilling Completed : 3 NOVEMBER 2002

Date Borehole Completed : NO COMPLETION - BACKFILLED

BGS/WMC Supervisor : R. J. MARKS

Borehole Construction Details		Construction Materials	
Bottom of borehole (as drilled)	13.30 m bgl	Casing material:	
Borehole diameter	5 F core (143mm) to 13.20m Reamed open hole at 245 mm to 13.30m (Temp casing inserted)	Screen material:	
Top of backfill (in base of borehole)		Slot size:	mm
Bottom of piezometer*		Screen/casing diameter:	mm
Bottom of screen*		Backfill material:	See notes.
Top of screen*		Filter pack material:	
Top of filter pack†	See notes	Seal material:	
Top of seal†		Grout material:	BENTONITE CEMENT GROUT
Top of grout†	GL m bgl		
* Measurement based on total length of pipe.			
† Measured with a weighted tape measure			

Surface Completion

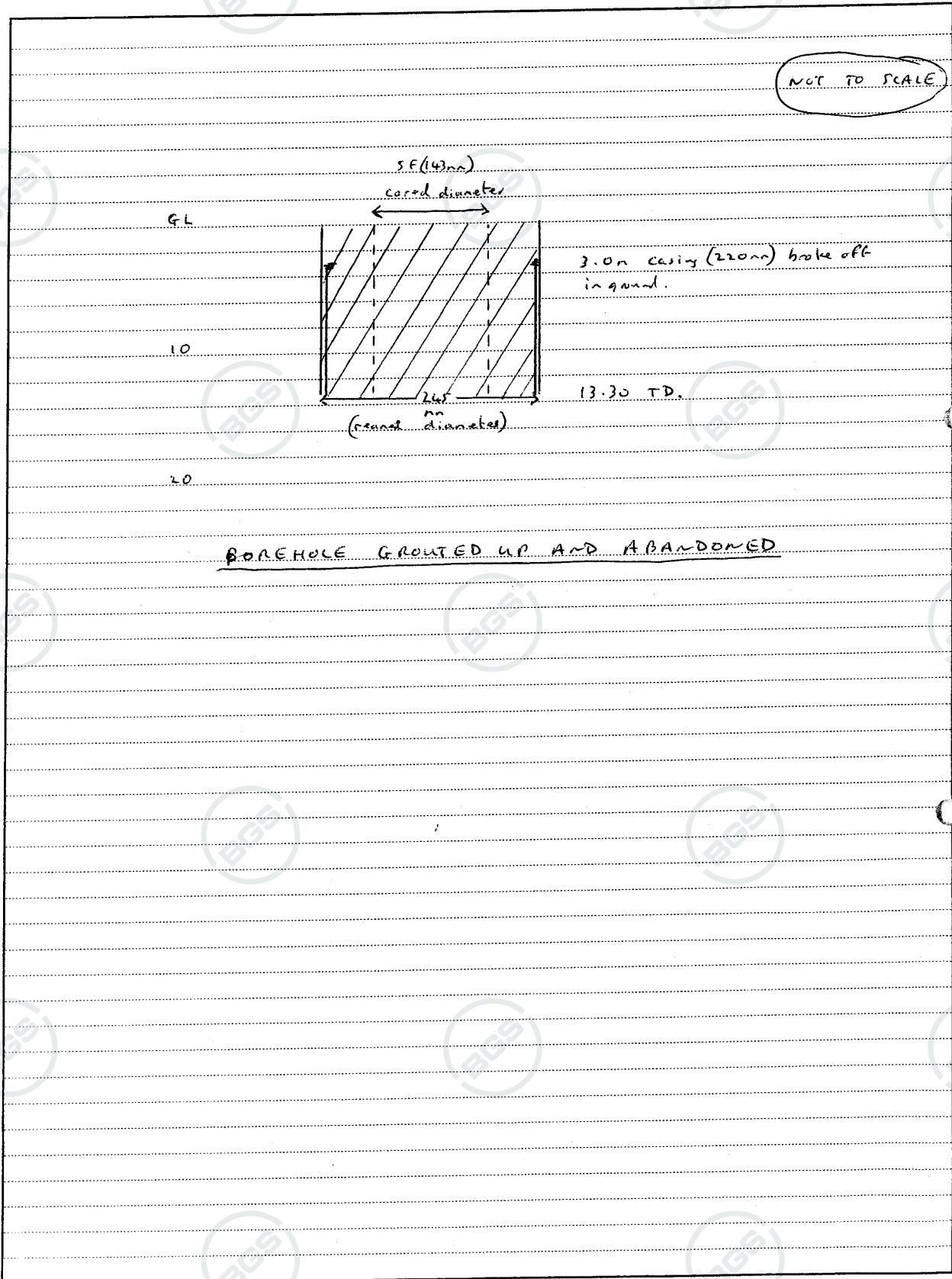
Type (circle one): A (small) B None Height of top of manhole cover above ground level: None m
C D None Top of casing below top of manhole cover: None m

Notes:

This borehole was corral down to 13.2m. Problems with hole stability. Reamed out to 13.30 to insert first string of temporary casing. When cleaning out, rods were getting stuck inside casing. Casing damaged and eventually broke off, 3m bgl. Attempted filling for casing with no success.
BOREHOLE BACKFILLED AND ABANDONED - REPLACED BY BH PL14B.

BOREHOLE CONSTRUCTION DIAGRAM ON REVERSE

BOREHOLE CONSTRUCTION DIAGRAM



British Geological Survey				Project GRIMBURY WOODS		Borehole/Well No. PL 14A						
				Locality Name LOCAR		Sheet 1 of 3						
Start date 4 Nov 02 (logging) End date				Casing diameter		NGR/lat & long						
Drilling method Equipment			Other tests	Borehole diameter		Logged by M.M		Scale: 20mm = 5m				
Sample/core recovery			Fracture spacing (min/mean/max measurement)	SPT blows /N	Orientation VE	Ground level		Depth (thickness) (m)	Level m OD	Legend	Sed. structures/fractures	Grain size
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							
TCR	SCR	RQD										
0.00					No Recovery							
Box 1 TD: 0.00 BD: 3.00 Run 1+2 3.00 1.16												
1.00			0.95	PL14/1	Casing damaged, buckled @ base, v. friable to hard (gradation to 0.95) dark brown to orange brown sandy silt.							
			1.04		top is mottled (dark brown / light brown) + veg. roots							
2.00					No. Intact ^{very} soft brown sandy silt orange and grey mottling							CUT
					No Recovery							
3.00					No Recovery							
Box 2 TD: 3.00 BD: 6.00 Run 3+4 3.00 2.66												
4.00			3.37	PL14/2	Firm brown clay							
			3.45		N.39E change to greenish grey firm clay with thick seam (4.03 → 4.08) orange.							
			4.20	PL14/3	(Casing damaged at bottom) buckled							
			4.27		Bottom greenish grey clay contain black, red and orangeish-yellowish seams							CUT
5.00					No Recovery							
					brown firm sandy silty							
					see next sheet							

Comments: * Drilling apparently done without air @ first so material may have been compacted.



British Geological Survey				Project LOCAR		Borehole/Well No. PL14A					
Start date logging 06/11/02				Locality Name GRAMSBURY WOOD		Sheet 2 of 3					
End date				Casing diameter		NGR/lat & long					
Drilling method without fluid rotary				Other tests		Borehole diameter		Logged by M. M		Scale: 20cm = 5cm	
Equipment				SPT blows N		Orientation VT		Ground level		Depth (thickness) (m)	
Sample/core recovery				Fracture spacing (min/mean/max measurement)		Description of strata to BS5930:1999 with additional information		Level m OD		Legend	
Depth (m) AL/ from to				Core size (mm)				Sed. structures/ fractures		Grain size	
Type No											
TCR SCR RQD											
5.00				5.06		Firm mottled CLAY (yellowish brown and dark brown SILT + red)					
Box 2 (cont'd)				PL14/16		Firm yellowish brown mottled CLAY					
Run 4				5.13		NI, rubble of yellowish greenish brown CLAY. Red and grey mottling					
6.00				6.00		Firm yellowish brown mottled CLAY					
Box 3				PL14/15		soft to stiff multi colored CLAY (dark brown and greyish blue) some v. fine yellowish brown sand beds inter laminated (less or of the order of mm's)				Run 5	
Run 5				6.08		Sequence has been disturbed (chilling) in the core surplus 2 bands of quick sand (yellowish, v. 10cm thick have appeared) casing is damaged (buckled)				Run 6	
1.20/2.95				6.61							
(2.95) - 0.32				6.74							
shoe				PL14/17							
0.19				6.74							
Run 5				6.74							
0.20				6.74							
shoe				6.74							
Box 4				6.74		stiff brown and greyish blue CLAY and some inter laminated yellowish brown fine SAND				Run 7	
Run 7				6.74		stiff greenish brown CLAY and greyish blue CLAY inter laminated. (casing ripped toward the base)				Run 8	
TD = 7.20				6.74							
BD = 7.80				6.74							
0.60 ((0.33 + 0.97) = 2.30)				6.74							
Box 5				6.74		Bluish grey dominant, fine yellowish sand and red CLAY				Run 9	
Run 9				6.74		stiff inter laminated reddish brown and bluish grey CLAY				Run 10	
TD = 7.80				6.74		stiff greenish grey CLAY inter laminated with yellowish brown fine SAND and fine red SAND					
BD = 8.60				6.74		greenish blue dominant to 8.10 then reddish brown (casing deformed)					
0.80 +15				6.74							
0.03				6.74							
0.80 +0.05				6.74							
2.28				6.74							
Box 6				6.74		Firm yellowish brown v. fine SANDY SILT				Run 11	
Run 11				6.74		Stiff inter laminated red SAND, yellowish fine SAND, greenish grey CLAY and brownish red CLAY. Thicker red beds @ bottom				Run 12	
TD = 8.60				6.74							
BD = 9.50				6.74							
0.90 0.98 + 0.36 (shoe)				6.74							
1.17 + 0.04 (shoe)				6.74							
= 2.58				6.74							
Box 7				6.74		Stiff inter laminated multi colored clay and sand (v. thin beds of sand) greenish bluish + red CLAY (can to mmm) + yellowish brown sand				Run 13	
Run 13				6.74		Hard v. fine grained SANDSTONE (3 colored as above)				Run 14	
TD = 9.50				6.74							
BD = 10.60				6.74							
0.00				6.74							

Comments: Generally lamination appears greatly disturbed: drilling induced? Sand | clay

These two boxes combine since Box 3 with anomalous recovery and depth labelling see

additional sheet for (C)

