

Land at Barns Green, Horsham, West Sussex

Preliminary Mineral Resource Assessment

March 2026

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PRELIMINARY MINERAL RESOURCE ASSESSMENT OF
LAND AT BARN'S GREEN, HORSHAM, WEST SUSSEX

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Principal

16 March 2026

1. Introduction

- 1.1. This report comprises a Preliminary Mineral Resource Assessment and opinion on the mineral potential and commercial attractiveness of the land at Chapel Road, Barns Green, Horsham, West Sussex. Wardrop Minerals Management Ltd have been provided with a feasibility study plan showing conceptual housing on the land. This assessment and opinion is based on the following professional background.
- 1.2. Our Principal, Mr Duncan Wardrop, draws on considerable experience in expressing the professional opinions presented in this report. For 34 years he headed the geology and mineral exploration functions originally in Redland Aggregates and subsequently in Lafarge Aggregates, with a brief covering all of the UK and a number of locations overseas. Responsibilities included landsearch for greenfield mineral prospects and strategic extensions to the portfolio of operating quarries; the geological assessment of those prospects; the management of the company reserves schedules; advising the Board on prospects to pursue; and subsequent quarry design, contribution to planning applications and site development.
- 1.3. The author is a Competent Person under the terms of the Pan European Reserves and Resources Reporting Committee (PERC) and holds the Qualified for Minerals Reporting (QMR) designation from the Institute of Materials, Metallurgy and Mining. In private practice since 2013 he has been involved in the mineral resource assessments on a number of housing, factory and solar farm developments in addition to quarry extension projects.
- 1.4. In the UK generally the minerals typically included in mineral safeguarding considerations are sand and gravel, coal, industrial minerals, brick clays, china clays, brickearths, silica sands, building stone and hard rock resources. In this case the relevant mineral is brickmaking clay, specifically that derived from the Weald Clay.
- 1.5. The policy background is summarised in Policy M9 of the West Sussex Joint Minerals Plan, adopted in 2018 and partly reviewed in 2021.

Policy M9: Safeguarding Minerals

(a) Existing minerals extraction sites will be safeguarded against non-mineral development that prejudices their ability to supply minerals in the manner associated with the permitted activities.

(b) Soft sand (including potential silica sand), sharp sand and gravel, brick-making clay, building stone resources and chalk reserves are safeguarded against sterilisation. Proposals for non-mineral development within the Minerals Safeguarded Areas (as shown on maps in Appendix E) will not be permitted unless:

(i) Mineral sterilisation will not occur; or

(ii) it is appropriate and practicable to extract the mineral prior to the development taking place, having regards to the other policies in this Plan; or

(ii) *the overriding need for the development outweighs the safeguarding of the mineral and it has been demonstrated that prior extraction is not practicable or environmentally feasible.*

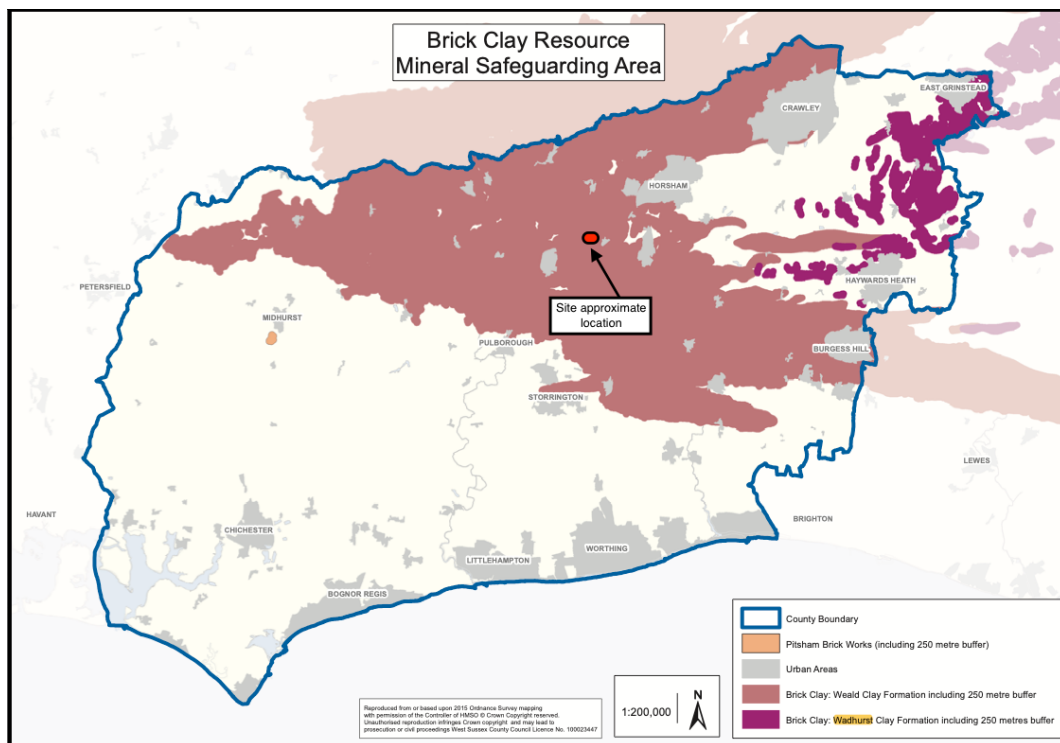
- 1.6. The subject site is located on Chapel Road on the edge of the village of Barns Green. Figure 1 below is a GoogleEarth image of the land with an approximate site boundary, the precise boundaries being obscured by trees.



Source: GoogleEarth

Figure 1. Location of land of interest.

- 1.7. A number of minerals are worked in West Sussex and the County have defined specific Mineral Safeguarding Areas for each group of minerals.
- 1.8. The relationship of the Brick Clay Mineral Safeguarding Area and the site is shown on Figure 2 below published in the West Sussex Joint Minerals Local Plan. Mineral Safeguarding Areas tend to largely reflect the geologically mapped occurrence or outcrop of the material concerned and do not in themselves confer any indication of thickness, quality or commercial viability of any minerals within those areas.



Source: West Sussex Joint Minerals Local Plan

Figure 2. Source information for Mineral Safeguarding Areas.

- 1.9. The site is roughly rectangular in shape with a smaller rectangle appended to the southeastern corner. A short southeastern boundary is formed by a B road public highway Chapel Road whilst the longer northeastern side is bounded by Muntham Drive leading to Muntham House School. A Public Bridleway named Smugglers Lane forms the Southwestern boundary. The longest axis of the land measures approximately 230 metres, with the major part measuring 164 metres in length and from 93 metres to 113 metres in width. Total area is approximately 19.4 hectares.
- 1.10. Barns Green village hall is on the far side of Muntham Drive whilst to the East are some residences and a substantial house labelled as Bennetts on the feasibility study plan.
- 1.11. The landholding is located on the southeastern flank of the nose of a topographic ridge oriented southwest to northeast such that the surface slopes gently down towards the southeast dropping around 12 metres.
- 1.12. There are some lakes and water areas to the south and west but no watercourses or water bodies on site.

2. Executive Summary

- 2.1. A Preliminary Mineral Resource Assessment has been carried out on land at Chapel Road by a suitably qualified and experienced practitioner.
- 2.2. The site does lie within the mapped outcrop of Weald Clay. As such it clearly falls within the Mineral Safeguarding Area defined by West Sussex County Council.

- 2.3. Reference has been made to the British Geological Survey (BGS) online database of boreholes and the online geological map. There are no archive boreholes on the subject site but boreholes to the south and west provide logged descriptions of the Weald Clay locally.
- 2.4. A site investigation was carried out in March 2025 by Aviron as part of a Generic Quantitative Risk Assessment for contaminated land. The ground investigation comprised Dynamic Cone Penetration tests along with Window Sampling boreholes giving a total of 18 data points distributed across the land.
- 2.5. All of the boreholes identified the upper part of the Weald Clay although the limited depths of the boreholes precluded the proving of substantial thicknesses of clay. The greater relevance of the boreholes, however, is the identification of the weathered brick clay that has been considered in this report as unsuitable and treated as overburden in any notional excavation.
- 2.6. Prior extraction is not considered to be practicable, realistic nor sustainable. Despite this a notional resource calculation has been carried out using minimal margins to a hypothetical excavation, giving a resource figure of 178,000 Tonnes equating to 1.3% of the County landbank for brick clay.
- 2.7. The four operating brickworks in the County control a total clay landbank of over 46 years.
- 2.8. In the opinion of the author this land offers no mineral potential at all and has no potential to contribute to the County brick clay supply.
- 2.9. The site does not meet safeguarding criteria under clause (i) of policy M9 in that there is no resource of economic importance, and therefore no mineral would be sterilised by permanent surface development, nor under clause (ii) in that prior extraction is not appropriate or practicable.

3. Sources of Information

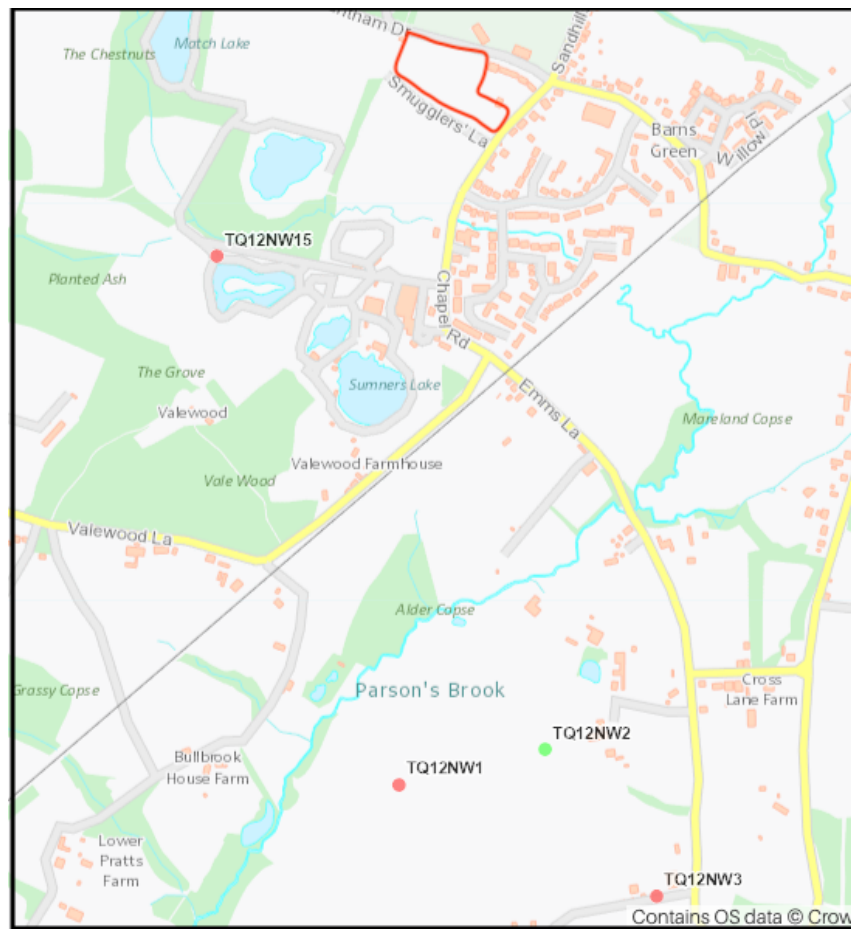
- 3.1. A number of open source records together with reports commissioned by the client have been used to inform this mineral assessment.
- BGS online geological maps
 - BGS online borehole archive
 - Aviron Site Investigation and Generic Quantitative Risk Assessment dated June 2025.
 - Feasibility study site layout plan from client
 - West Sussex Joint Minerals Local Plan of July 2018 (Partial Review March 2021)
 - Monitoring Report 2021/22 for the above Local Plan
 - Mineral Sites Selection Report of January 2017
 - British Geological Survey (BGS) report Mineral Resource Information for Development Plans – West Sussex: Resources and Constraints.

4. Geological setting

- 4.1. The Lower Cretaceous Weald Clay outcrops beneath a large part of the north of the County. Barn's Green is located close to the centreline of the Weald anticline structure that extends in a large partial oval shape from Folkstone westwards to Farnham through Petersfield and

back to the coast through Lewes and Eastbourne. The older Hastings Beds underlie the area.

- 4.2. The County also benefits from a 1998 BGS report entitled “Mineral Resource Information for Development Plans – West Sussex: Resources and Constraints”. Weald Clay is stated to be up to 450 metres thick.
- 4.3. Bedrock on the site is the Weald Clay as mapped, with no superficial geological deposits.
- 4.4. The BGS maintain an open access database of boreholes throughout the country. Detailed logs of boreholes are sometimes held “Commercial in Confidence” but many others are available to be interpreted. There is no obligation on companies undertaking shallow mineral exploration to submit details to the BGS, but many companies do, and it is possible to gain an impression of exploration areas that are or have been of commercial interest.

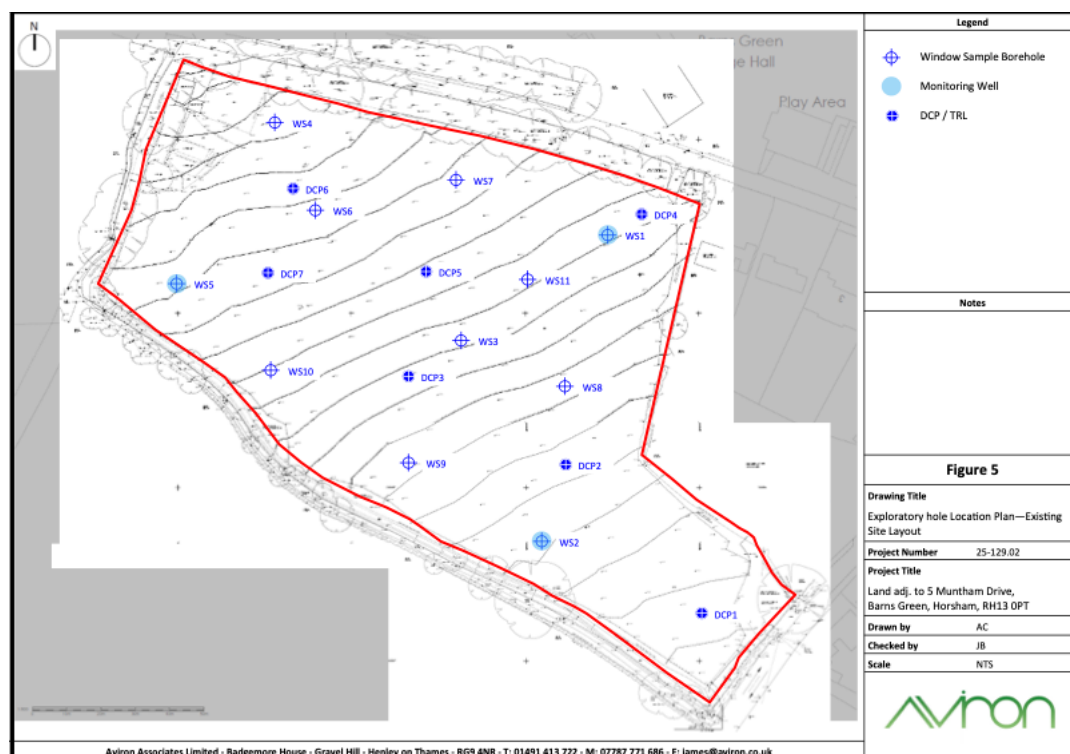


Source: BGS borehole database

Figure 3. Boreholes recorded in the vicinity of the subject site.

- 4.5. Figure 3 shows the BGS borehole locations in the vicinity of the subject site. There are no recorded boreholes on the subject site itself although there are a number to the west and south. All the boreholes confirm the presence of Weald Clay and prove it to depths as much as 53 metres.

4.6. A site investigation was carried out in March 2025 by Aviron as part of a Generic Quantitative Risk Assessment for contaminated land. The ground investigation comprised 7 Dynamic Cone Penetration tests to 0.9 metres depth along with 11 Window Sampling boreholes as deep as 4.7 metres giving a total of 18 data points distributed across the land as shown on Figure 4 below. Three of the window sampling locations were adopted as groundwater monitoring points as highlighted in blue.



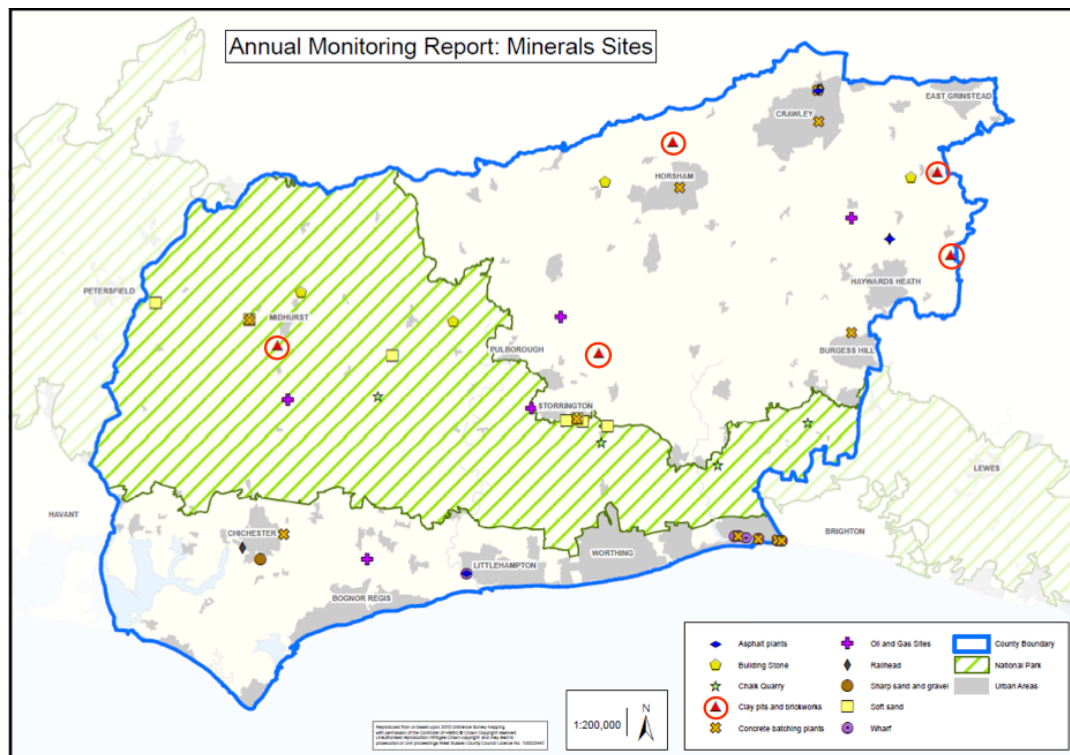
Source: Aviron Site Investigation and Generic Quantitative Risk Assessment 2025

Figure 4. Boreholes drilled by Aviron 2025.

- 4.7. All boreholes identified Weald Clay. The interest from a potential mineral resource point of view is the thickness of weathered clay in the shallow subsurface that would be considered as overburden in any mineral working.
- 4.8. On site this the weathered clay thickness ranges from 1.7 to 3.2 metres.
- 4.9. Water was struck during drilling only in WS2 and WS9 boreholes in the south of the site, at 2.4 and 3.8 metres below ground respectively. Subsequent water level monitoring in WS1, WS2 and WS5 recorded water at 1.36, 1.98 and 1.55 metres respectively. This is not interpreted as groundwater in the strict sense but local seepage in the shallow subsurface.
- 4.10. Nevertheless any excavation in clay will accumulate water by runoff from surrounding land or directly from rainfall.
- 4.11. For all practical purposes the mineral presence is negligible as will be discussed in Section 6 of this report.

5. Brick clay production in West Sussex

5.1. The West Sussex Monitoring report 2021/2022 confirms that there are 4 operating and 1 non-operating brickworks in the County, shown on Figure 5 below as red triangles in red circles. All are safeguarded in policy.



Source: West Sussex Joint Minerals Local Plan July 2018

Figure 5. Clay pits and brickworks

5.2. Permitted mineral reserves at specific sites are confidential but the report states that the total reserves of clay in 2021 were 13.04 million Tonnes with an output of 0.28 million Tonnes per year. On this basis a landbank of over 46 years is more than adequate for the plan period and no site specific clay pit extensions are identified for the operating sites.

5.3. Only one site specific extension is identified in the Minerals Local Plan at West Hoathley, near East Grinstead, but that site closed in 2020 and is under restoration.

5.4. A cursory examination on GoogleEarth shows that all the operating clay pits are adjacent to open country and it is a reasonable assumption that further resources will be made available in due course.

6. Discussion and site constraints

6.1 The subject site is modest in size, bounded by mature trees and with some housing adjacent. The shape of the site is such that excavation could only be considered on the roughly rectangular part of the land with dimensions of approximately 164 by 103 metres.

- 6.2 It is conventional for aggregates quarries to apply a 100 metre standoff from residential properties. Applying this to the site would constrain almost the whole landholding and the notional clay resources would be zero.
- 6.3 For the purposes of this assessment only basic edge margins are considered giving a gross area measured on GoogleEarth as 12,800 square metres. Other clay excavations have effective batters of 27 metres horizontal distance for the top 2 or 3 benches of clay working. Applying a similar batter gives a base of excavation area of 3,800 m².
- 6.4 A simple calculation has assumed a vertical sided block of mineral bounded at the mid point of the notional batters, with an area of 7,990 m². Taking a working thickness of 15 metres, less an average overburden of 2.6 metres, gives a mineral thickness of 12.4 metres and a hypothetical resource of approximately 99,000 cubic metres or 178,000 Tonnes.
- 6.5 Such a mineral resource represents only 7.6 months of County supply, and only 1.3 % of permitted reserves and is judged to be *de minimus*.
- 6.6 In a County with abundant clay resources and with good potential for future additional resources an excavation at this site would be of no interest to a commercial operator.
- 6.7 Clay arisings would require to be road hauled to one or more active brickworks which would not be economically feasible or sustainable. All the active works are supplied with clay from immediately adjacent workings.
- 6.8 Excavation of the land would leave a partially water filled void such that the site would require to be filled with high quality inert material in order to provide a theoretically developable surface. Filling the void would not be economically feasible to permit or to operate, would take a very long time, and would result in a land surface that would be unattractive to developers.
- 6.9 In the author's opinion the subject site does not meet safeguarding criteria under clause (i) of policy M9 in that there is no resource of economic importance, and therefore no mineral would be sterilised by permanent surface development; and under clause (ii) in that prior extraction is not appropriate or practicable.

7. Conclusions

- 7.1. The subject site at Barn's Green is located within an extensive mapped outcrop of Weald Clay. An intrusive ground investigation by drilling proved this geology and the absence of superficial deposits above the clay. A notional overburden is formed by a thickness of weathered clay in the upper parts.
- 7.2. Applying 100 metre standoffs to housing that are conventional for aggregate quarries would constrain almost the entire site and result in notional mineral resources of zero. Even if more modest edge margins are assumed then the maximum notional mineral resource would be approximately 178,00 Tonnes of clay.
- 7.3. West Sussex enjoys a large landbank of brick clay to support the 4 operating brickworks and the relevant clay pits appear to have good potential for extension.
- 7.4. Prior extraction at the site would be uneconomic and of no commercial interest to a mineral operator.

7.5. It is concluded that there is a *de minimus* mineral resource on site. On this analysis the site fails to meet safeguarding criteria under clause (i) of policy M9 in that there is no resource of economic importance, and therefore no mineral would be sterilised by permanent surface development; and under clause (ii) in that prior extraction is not appropriate or practicable.

D R Wardrop. B.Sc (Hons), C. Geol., C. Eng., C. Sci., MIMMM QMR., FGS.
Principal

16 March 2026

BOREHOLE LOGS



WINDOW SAMPLE LOG

Site: Land adj. to 5 Muntham Drive, Barns Green, Horsham, RH13 0PT				Project No. 25-129.02		Borehole: WS1			
Client: Shanly Homes				Start: 05/06/2025		End: 05/06/2025		Sheet: 1 of 1	
Method/Plant Used: Premier Rig (3D)			Co-ordinates: NT			Ground Level: NT			

Description of Strata	Legend	Depth (m bgl) (thickness)	Well Cnstr.	Samples/Tests			SPT Results							Notes
				Depth	No	Type	75mm	75mm	75mm	75mm	75mm	75mm	N' Value	
Light brown slightly clayey very sandy slightly gravelly SILT. Gravel is fine to coarse sub-rounded to rounded of flint. Rootlets. (TOPSOIL)		(0.5)		0.1 - 0.3	1	WAC								
Firm light brown orange frequently mottled light grey silty slightly sandy CLAY. Rootlets to 1.3m. (WEALD CLAY FORMATION)		0.5 (1.1)		0.7	2	ES								
				1.0		SPT	1	1	2	2	2	2	8	HP
				1.25										HP 9.6
				1.5										HP 10.8
Firm poorly laminated light brown mottled light grey silty slightly sandy CLAY. (WEALD CLAY FORMATION)		(0.6)		1.75										HP 6.8
				2.0		SPT	1	1	1	1	3	3	8	HP 10.2
				2.25										HP 8.9
Firm to stiff laminated brown occasionally black slightly clayey slightly sandy SILT. (WEALD CLAY FORMATION)		(0.3)		2.5										HP 8.3
Stiff poorly laminated light brown mottled light grey silty slightly sandy CLAY. (WEALD CLAY FORMATION)		(0.4)		2.75										HP 6.6
Stiff becoming very stiff laminated light grey with occasional light brown partings slightly silty gravelly CLAY. Gravel is fine to medium sub-angular of mudstone. Occasional fine shell fragments. Occasional fine partings of selenite. (WEALD CLAY FORMATION)		2.9 (1.5)		3.0		SPT	3	3	3	5	5	5	18	HP 6.4
				3.25										HP 11+
				3.5										HP 11+
				3.75										HP 11+
				4.0		SPT	3	4	4	7	9	13	33	HP 11+
				4.25										HP 11+
		4.4		4.4		SPT	16	9	24	20	6		50	HP 11+ For 170mm

Casing record			Chiselling records			Water level observations (depths in metres below gl)					
Date	Diameter (mm)	Depth (m)	Time	From (m)	To (m)	Date	Water strike	Water level (after 20mins)	Flow	Standing level	Remarks
05/06/2025	101	1.00				05/06/2025	-	-	-	Dry	
Remarks									By		
No groundwater encountered. No visual or olfactory evidence of contamination. Rootlets noted to 1.3m bgl. Gas and groundwater monitoring well installed to 4.4m bgl.							Logged	AC			
SPT: Standard Penetration Test, HP: Hand Penetrometer, B: Bulk Sample, D: Disturbed Sample							Checked	OB			Scale 01:25



Description of Strata	Legend	Depth (m bgl) (thickness)	Well Cnstr.	Samples/Tests			SPT Results						N' Value	Notes
				Depth	No	Type	75mm	75mm	75mm	75mm	75mm	75mm		
Light brown slightly clayey very sandy slightly gravelly SILT. Gravel is fine to coarse sub-rounded to rounded of flint. Rare sub-angular fine to coarse gravel size fragments of brick. Rootlets. (Reworked TOPSOIL)		(0.4) 0.4		0.3	1	ES								
Firm light brown orange frequently mottled light grey silty slightly sandy CLAY. Rootlets to 1.1m. (WEALD CLAY FORMATION)		(0.8) 1.2		1.0	2	LC/SPT	1	2	2	2	3	4	11	
Firm laminated brown occasionally black slightly clayey slightly sandy SILT. (WEALD CLAY FORMATION)		(0.4) 1.6												
Stiff becoming very stiff light grey pale orange occasionally mottled pale grey silty slightly sandy slightly gravelly CLAY. Gravel is fine to coarse angular to sub-angular of mudstone. (WEALD CLAY FORMATION)		(1.1) 2.7		2.0		SPT	5	4	4	4	4	5	17	
				2.7		SPT	18	7	32	15			47	For 95mm

Casing record			Chiselling records			Water level observations (depths in metres below gl)					
Date	Diameter (mm)	Depth (m)	Time	From (m)	To (m)	Date	Water strike	Water level (after 20mins)	Flow	Standing level	Remarks
05/06/2025	101	1.00				05/06/2025	2.50	2.40	Very slow	2.40	
Remarks									By		
Groundwater encountered from 2.4m bgl. No visual or olfactory evidence of contamination. Rootlets noted to 1.1m bgl. Gas and groundwater monitoring well installed to 2.7m bgl. SPT: Standard Penetration Test. HP: Hand Penetrometer. B: Bulk Sample. D: Disturbed Sample									Logged	AC	
									Checked	OB	



WINDOW SAMPLE LOG

Site: Land adj. to 5 Muntham Drive, Barns Green, Horsham, RH13 OPT				Project No. 25-129.02		Borehole: WS3					
Client: Shanly Homes				Start: 05/06/2025		End: 05/06/2025		Sheet: 1 of 1			
Method/Plant Used: Premier Rig (3D)				Co-ordinates: NT				Ground Level: NT			

Description of Strata	Legend	Depth (m bgl) (thickness)	Well Cnstr.	Samples/Tests			SPT Results							Notes
				Depth	No	Type	75mm	75mm	75mm	75mm	75mm	75mm	N' Value	
Light brown slightly clayey very sandy rarely gravelly SILT. Gravel is fine to coarse sub-rounded to rounded of flint. (TOPSOIL)		(0.6)		0.1	1	ES								
Soft becoming firm light brown orange frequently mottled light grey silty slightly sandy CLAY. (WEALD CLAY FORMATION)		0.6												
		(1.7)		1.0		SPT	1	1	1	1	1	2	5	
				1.25										HP 7.8
				1.5										HP 6.6
				1.75										HP 11+
				2.0	2	LC/SPT	1	1	2	4	5	7	18	HP 10.4
Stiff poorly laminated light brown rarely mottled light grey slightly silty slightly sandy occasionally gravelly CLAY. Gravel is medium angular to sub-angular of mudstone. (WEALD CLAY FORMATION)		(0.6)												
		2.3												
Very stiff poorly laminated dark brown dark grey slightly very silty occasionally gravelly CLAY. Gravel is medium to coarse angular to sub-angular of mudstone. (WEALD CLAY FORMATION)		(0.5)		3.0		SPT	3	3	4	7	9	15	35	
		3.4												
Very weak, poorly laminated light brown mottled orange MUDSTONE. (WEALD CLAY FORMATION)		(0.2)		3.5		SPT	21	4	50				50	For 75mm
		3.6												

Casing record			Chiselling records			Water level observations (depths in metres below gl)					
Date	Diameter (mm)	Depth (m)	Time	From (m)	To (m)	Date	Water strike	Water level (after 20mins)	Flow	Standing level	Remarks
05/06/2025	101	1.00				05/06/2025	-	-	-	Dry	
Remarks									By		
No groundwater encountered. No visual or olfactory evidence of contamination. No roots present in borehole. Borehole backfilled with arisings.							Logged	AC			
SPT: Standard Penetration Test, HP: Hand Penetrometer, B: Bulk Sample, D: Disturbed Sample							Checked	OB			Scale 01:25



WINDOW SAMPLE LOG

Site: Land adj. to 5 Muntham Drive, Barns Green, Horsham, RH13 0PT					Project No. 25-129.02		Borehole: WS4			
Client: Shanly Homes					Start: 05/06/2025		End: 05/06/2025		Sheet: 1 of 1	
Method/Plant Used: Premier Rig (3D)				Co-ordinates: NT			Ground Level: NT			

Description of Strata	Legend	Depth (m bgl) (thickness)	Well Cnstr.	Samples/Tests			SPT Results						Notes
				Depth	No	Type	75mm	75mm	75mm	75mm	75mm	N' Value	
Light brown slightly clayey very sandy rarely gravelly SILT. Gravel is fine to coarse sub-rounded to rounded of flint. Rootlets. (TOPSOIL)		(0.4)		0.1	1	ES							
Soft to firm light brown orange frequently mottled light grey silty slightly sandy CLAY. (WEALD CLAY FORMATION)		0.4		0.6	2	ES							
		(0.9)		1.0		SPT	1	2	1	2	2	2	
Firm becoming stiff and very stiff poorly laminated brown grey occasionally mottled orange silty occasionally gravelly CLAY. Gravel is medium to coarse angular to sub-angular of mudstone. (WEALD CLAY FORMATION)		1.3											
		(1.7)		2.0	3	LC/SPT	1	2	3	4	5	4	16
		3.0		3.0		SPT	7	10	13	14	14	9	50 For 295mm

Casing record			Chiselling records			Water level observations (depths in metres below gl)					
Date	Diameter (mm)	Depth (m)	Time	From (m)	To (m)	Date	Water strike	Water level (after 20mins)	Flow	Standing level	Remarks
05/06/2025	101	1.00				05/06/2025	-	-	-	Dry	
Remarks									By		
No groundwater encountered. No visual or olfactory evidence of contamination. No roots present in borehole. Borehole backfilled with arisings.							Logged	AC			
SPT: Standard Penetration Test, HP: Hand Penetrometer, B: Bulk Sample, D: Disturbed Sample							Checked	OB			Scale 01:25



WINDOW SAMPLE LOG

Site:				Project No.		Borehole:	
Land adj. to 5 Muntham Drive, Barns Green, Horsham, RH13 0PT				25-129.02		WS5	
Client:				Start:		End:	
Shanly Homes				05/06/2025		05/06/2025	
Method/Plant Used:				Co-ordinates:		Ground Level:	
Premier Rig (3D)				NT		NT	

Description of Strata	Legend	Depth (m bgl) (thickness)	Well Cnstr.	Samples/Tests			SPT Results							Notes
				Depth	No	Type	75mm	75mm	75mm	75mm	75mm	75mm	N' Value	
Light brown slightly clayey very sandy rarely gravelly SILT. Gravel is fine to coarse sub-rounded to rounded of flint. Rootlets. (TOPSOIL)		(0.4)		0.1 - 0.3	1	WAC								
Firm light brown orange frequently mottled light grey silty slightly sandy CLAY. Rootlets to 1.1m. (WEALD CLAY FORMATION)		0.4 (1.1)		1.0		SPT	1	1	2	3	4	4	13	
		1.5		1.25										HP 11+
		1.5		1.5										HP 11+
Firm to stiff poorly laminated light brown mottled light grey silty slightly sandy CLAY. (WEALD CLAY FORMATION)		(1.1)		1.75										HP 11+
		2.6		2.0		SPT	2	3	3	4	4	5	16	HP 11+
Stiff becoming very stiff laminated brown grey occasionally mottled orange silty gravelly CLAY. Gravel is fine to coarse angular to sub-angular of mudstone. (WEALD CLAY FORMATION)		(1.6)		3.0		SPT	3	3	4	6	8	8	26	
		4.2		4.0		SPT	5	5	8	8	9	10	35	
Very weak, poorly laminated brown grey frequently mottled bright orange red MUDSTONE. (WEALD CLAY FORMATION)		(0.3)		4.5		SPT	13	12	24	24	2		50	For 150mm
		4.5												

Casing record			Chiselling records			Water level observations (depths in metres below gl)					
Date	Diameter (mm)	Depth (m)	Time	From (m)	To (m)	Date	Water strike	Water level (after 20mins)	Flow	Standing level	Remarks
05/06/2025	101	1.00				05/06/2025	-	-	-	Dry	
Remarks									By		
No groundwater encountered. No visual or olfactory evidence of contamination. Roots noted to 1.1m bgl. Gas and groundwater monitoring well installed to 4.5m bgl.							Logged	AC			
SPT: Standard Penetration Test, HP: Hand Penetrometer, B: Bulk Sample, D: Disturbed Sample							Checked	OB			Scale 01:25



WINDOW SAMPLE LOG

Site: Land adj. to 5 Muntham Drive, Barns Green, Horsham, RH13 0PT				Project No. 25-129.02	Borehole: WS6
Client: Shanly Homes			Start: 05/06/2025	End: 05/06/2025	Sheet: 1 of 1
Method/Plant Used: Premier Rig (3D)	Co-ordinates: NT			Ground Level: NT	

Description of Strata	Legend	Depth (m bgl) (thickness)	Well Cnstr.	Samples/Tests			SPT Results						Notes
				Depth	No	Type	75mm	75mm	75mm	75mm	75mm	N' Value	
Light brown slightly clayey very sandy rarely gravelly SILT. Gravel is fine to coarse sub-rounded to rounded of flint. (TOPSOIL)		(0.3)		0.1 - 0.3	1	WAC							
Firm light brown orange frequently mottled light grey silty slightly sandy CLAY. (WEALD CLAY FORMATION)		0.3 (1.4)		1.0		SPT	2	3	3	4	3	3	HP 11+
				1.25									HP 11+
				1.5									
Firm to stiff becoming stiff to very stiff poorly laminated brown grey occasionally mottled orange silty occasionally gravelly CLAY. Gravel is medium to coarse angular to sub-angular of mudstone. (WEALD CLAY FORMATION)		1.7 (1.5)		1.75									HP 11+
				2.0		SPT	2	2	3	4	4	4	
		3.2		3.0	2	LC/SPT	2	5	6	7	8	8	29
Very weak, poorly laminated brown grey frequently mottled bright orange red MUDSTONE. Rare partings of fine shell fragments. (WEALD CLAY FORMATION)		(0.4)		3.6		SPT	10	13	13	16	16	5	50 For 235mm
		3.6											

Casing record			Chiselling records			Water level observations (depths in metres below gl)					
Date	Diameter (mm)	Depth (m)	Time	From (m)	To (m)	Date	Water strike	Water level (after 20mins)	Flow	Standing level	Remarks
05/06/2025	101	1.00				05/06/2025	-	-	-	Dry	
Remarks									By		
No groundwater encountered. No visual or olfactory evidence of contamination. No roots present in borehole. Borehole backfilled with arisings.							Logged	AC			
SPT: Standard Penetration Test, HP: Hand Penetrometer, B: Bulk Sample, D: Disturbed Sample							Checked	OB			Scale 01:25



WINDOW SAMPLE LOG

Site: Land adj. to 5 Muntham Drive, Barns Green, Horsham, RH13 0PT					Project No. 25-129.02	Borehole: WS7
Client: Shanly Homes			Start: 05/06/2025	End: 05/06/2025	Sheet: 1 of 1	
Method/Plant Used: Premier Rig (3D)		Co-ordinates: NT			Ground Level: NT	

Description of Strata	Legend	Depth (m bgl) (thickness)	Well Cnstr.	Samples/Tests			SPT Results							Notes
				Depth	No	Type	75mm	75mm	75mm	75mm	75mm	75mm	N' Value	
Light brown slightly clayey very sandy rarely gravelly SILT. Gravel is fine to coarse sub-rounded to rounded of flint. (TOPSOIL)		(0.4)												
		0.4												
Firm and stiff light brown orange frequently mottled light grey silty slightly sandy CLAY. (WEALD CLAY FORMATION)		(1.0)		1.0	1	D/SPT	2	2	3	3	4	4	14	HP 11+
				1.25										HP 11+
		1.4		1.5	2	D								HP 11+
				1.75										HP 11+
Stiff becoming very stiff poorly laminated light brown pale orange occasionally mottled light grey very silty slightly sandy slightly gravelly CLAY. Gravel is fine to coarse angular to sub-angular of mudstone. (WEALD CLAY FORMATION)		(1.8)		2.0	3	D/SPT	1	2	3	4	5	6	18	HP 11+
				2.25										HP 11+
				2.5	4	D								HP 11+
				2.75										HP 11+
				3.0	5	D/SPT	7	7	7	8	10	11	36	HP 11+
		3.2		3.25										HP 11+
Very stiff poorly laminated dark grey dark brown frequently mottled dark orange red very silty sandy occasionally gravelly CLAY. Gravel is fine to medium sub-angular of mudstone. (WEALD CLAY FORMATION)		(1.5)		3.5	6	D								HP 11+
				3.75										HP 11+
				4.0	7	D/SPT	5	4	6	7	13	14	40	HP 11+
				4.25										HP 11+
				4.5										HP 11+
		4.7		4.7	8	D/SPT	11	13	14	14	18	4	50	For 235mm

Casing record			Chiselling records			Water level observations (depths in metres below gl)					
Date	Diameter (mm)	Depth (m)	Time	From (m)	To (m)	Date	Water strike	Water level (after 20mins)	Flow	Standing level	Remarks
05/06/2025	101	1.00				05/06/2025	-	-	-	Dry	
Remarks									By		
No groundwater encountered. No visual or olfactory evidence of contamination. No roots present in borehole. Borehole backfilled with arisings.							Logged	AC			
SPT: Standard Penetration Test, HP: Hand Penetrometer, B: Bulk Sample, D: Disturbed Sample							Checked	OB			Scale 01:25



WINDOW SAMPLE LOG

Site:	Land adj. to 5 Muntham Drive, Barns Green, Horsham, RH13 0PT	Project No.	25-129.02	Borehole:	WS8
Client:	Shanly Homes	Start:	05/06/2025	End:	05/06/2025
Method/Plant Used:	Premier Rig (3D)	Co-ordinates:	NT	Ground Level:	NT

Description of Strata	Legend	Depth (m bgl) (thickness)	Well Cnstr.	Samples/Tests			SPT Results							Notes
				Depth	No	Type	75mm	75mm	75mm	75mm	75mm	75mm	N' Value	
Light brown slightly clayey very sandy rarely gravelly SILT. Gravel is fine to coarse sub-rounded to rounded of flint. (TOPSOIL)		(0.4)												
		0.4												
Soft to firm light brown orange frequently mottled light grey silty slightly sandy CLAY. (WEALD CLAY FORMATION)		(1.0)												
				1.0	1	D/SPT	1	1	1	2	2	2	7	
				1.25										HP 8.1
		1.4												
				1.5										HP 8.4
				1.75										HP 9.7
Firm poorly laminated light brown pale orange occasionally mottled light grey very silty slightly sandy slightly gravelly CLAY. Gravel is medium to coarse angular to sub-angular of mudstone. (WEALD CLAY FORMATION)		(1.1)												
				2.0	2	D/SPT	1	2	2	2	3	3	10	HP 8.7
				2.25										HP 8.4
		2.5												
Very weak, poorly laminated brown grey frequently mottled bright orange red MUDSTONE. Rare partings of fine shell fragments. (WEALD CLAY FORMATION)		(0.5)												
		3.0		3.0	3	D/SPT	10	15	25	25			50	For 150mm

Casing record			Chiselling records			Water level observations (depths in metres below gl)					
Date	Diameter (mm)	Depth (m)	Time	From (m)	To (m)	Date	Water strike	Water level (after 20mins)	Flow	Standing level	Remarks
05/06/2025	101	1.00				05/06/2025	-	-	-	Dry	
Remarks									By		
No groundwater encountered. No visual or olfactory evidence of contamination. No roots present in borehole. Borehole backfilled with arisings.							Logged	AC			
SPT: Standard Penetration Test, HP: Hand Penetrometer, B: Bulk Sample, D: Disturbed Sample							Checked	OB			Scale 01:25



WINDOW SAMPLE LOG

Site: Land adj. to 5 Muntham Drive, Barns Green, Horsham, RH13 0PT				Project No. 25-129.02		Borehole: WS9	
Client: Shanly Homes				Start: 05/06/2025		End: 05/06/2025	
Method/Plant Used: Premier Rig (3D)				Co-ordinates: NT		Ground Level: NT	
						Sheet: 1 of 1	

Description of Strata	Legend	Depth (m bgl) (thickness)	Well Cnstr.	Samples/Tests			SPT Results							Notes
				Depth	No	Type	75mm	75mm	75mm	75mm	75mm	75mm	N' Value	
Light brown slightly clayey very sandy slightly gravelly SILT. Gravel is fine to coarse sub-rounded to rounded of flint. Rootlets. (TOPSOIL)		(0.5)												
		0.5												
Firm light brown orange frequently mottled light grey silty slightly sandy CLAY. (WEALD CLAY FORMATION)		(1.0)		1.0	1	D/SPT	1	1	2	2	3	3	10	
		1.5		1.25										HP 11+
		1.5		1.5	2	D								HP 9.6
Firm poorly laminated brown pale orange mottled light grey very silty slightly sandy slightly gravelly CLAY. Gravel is medium to coarse angular to sub-angular of mudstone. (WEALD CLAY FORMATION)		(0.9)		1.75										HP 10.2
		2.4		2.0	3	D/SPT	1	1	1	2	2	3	8	HP 7.9
		2.6		2.25										HP 7.3
Firm poorly laminated brown occasionally black slightly clayey slightly sandy SILT. (WEALD CLAY FORMATION)		(0.2)		2.5	4	D								HP 7.7
Firm to stiff poorly laminated brown pale grey silty slightly sandy slightly gravelly CLAY. Gravel is fine to medium sub-rounded of mudstone. (WEALD CLAY FORMATION)		(0.9)		2.75										HP 7.7
		3.5		3.0	5	D/SPT	1	3	6	3	3	3	15	HP 9.8
		3.5		3.25										HP 11+
Very weak, poorly laminated light grey rarely mottled brown MUDSTONE. (WEALD CLAY FORMATION)		(0.5)		3.5	6	D								HP 10.6
		4.0		4.0	7	D/SPT	1	5	7	12	20	11	50	For 265mm

Casing record			Chiselling records			Water level observations (depths in metres below gl)					
Date	Diameter (mm)	Depth (m)	Time	From (m)	To (m)	Date	Water strike	Water level (after 20mins)	Flow	Standing level	Remarks
05/06/2025	101	1.00				05/06/2025	3.90	3.85	Slow	3.80	
Remarks									By		
Groundwater encountered from 3.8m bgl. No visual or olfactory evidence of contamination. No roots present in borehole. Borehole backfilled with arisings.									Logged	AC	
									Checked	OB	
SPT: Standard Penetration Test, HP: Hand Penetrometer, B: Bulk Sample, D: Disturbed Sample											



WINDOW SAMPLE LOG

Site: Land adj. to 5 Muntham Drive, Barns Green, Horsham, RH13 0PT				Project No. 25-129.02	Borehole: WS10
Client: Shanly Homes			Start: 05/06/2025	End: 05/06/2025	Sheet: 1 of 1
Method/Plant Used: Premier Rig (3D)		Co-ordinates: NT		Ground Level: NT	

Description of Strata	Legend	Depth (m bgl) (thickness)	Well Cnstr.	Samples/Tests			SPT Results						Notes
				Depth	No	Type	75mm	75mm	75mm	75mm	75mm	N' Value	
Light brown slightly clayey very sandy slightly gravelly SILT. Gravel is fine to coarse sub-rounded to rounded of flint. Rootlets. (TOPSOIL)		(0.5)											
		0.5											
Firm light brown orange frequently mottled light grey silty slightly sandy CLAY. (WEALD CLAY FORMATION)		(0.6)											
		1.1		1.0		SPT	1	1	2	2	3	3	10
		1.5		1.25									HP 9.8
				1.5									HP 11+
				1.75									HP 11+
				2.0		SPT	3	3	5	5	7	6	23
				2.25									HP 11+
				2.5									HP 11+
		2.6		2.75									HP 9.4
Very stiff poorly laminated dark grey brown very silty slightly sandy slightly gravelly CLAY. Gravel is medium to coarse angular to sub-angular of mudstone. (WEALD CLAY FORMATION)		(0.4)		3.0		SPT	2	4	6	12	22	10	50
		3.0											For 245mm

Casing record			Chiselling records			Water level observations (depths in metres below gl)					
Date	Diameter (mm)	Depth (m)	Time	From (m)	To (m)	Date	Water strike	Water level (after 20mins)	Flow	Standing level	Remarks
05/06/2025	101	1.00				05/06/2025	-	-	-	Dry	
Remarks									By		
No groundwater encountered. No visual or olfactory evidence of contamination. No roots present in borehole. Borehole backfilled with arisings.									Logged	AC	
									Checked	OB	
SPT: Standard Penetration Test. HP: Hand Penetrometer. B: Bulk Sample. D: Disturbed Sample											



WINDOW SAMPLE LOG

Site: Land adj. to 5 Muntham Drive, Barns Green, Horsham, RH13 0PT				Project No. 25-129.02	Borehole: WS11
Client: Shanly Homes			Start: 05/06/2025	End: 05/06/2025	Sheet: 1 of 1
Method/Plant Used: Premier Rig (3D)		Co-ordinates: NT		Ground Level: NT	

Description of Strata	Legend	Depth (m bgl) (thickness)	Well Cnstr.	Samples/Tests			SPT Results						Notes
				Depth	No	Type	75mm	75mm	75mm	75mm	75mm	N' Value	
Light brown slightly clayey very sandy rarely gravelly SILT. Gravel is fine to coarse sub-rounded to rounded of flint. (TOPSOIL)		(0.3)		0.2	1	ES							
Firm light brown orange frequently mottled light grey silty slightly sandy CLAY. (WEALD CLAY FORMATION)		0.3 (1.3)											
				1.0	2	D/SPT	2	2	2	2	3	3	10 HP 9.5
				1.25									HP 8.3
				1.5	3	D							HP 11+
Firm poorly laminated brown occasionally black slightly clayey slightly sandy SILT. (WEALD CLAY FORMATION)		(0.2) 1.8		1.75									HP 11+
Stiff to very stiff poorly laminated brown pale orange mottled light grey very silty slightly sandy slightly gravelly CLAY. Gravel is fine to coarse angular to sub-angular of mudstone. (WEALD CLAY FORMATION)		(0.6)		2.0	4	D/SPT	5	5	7	7	9	8	31 HP 11+
				2.25									HP 11+
				2.5	5	D							HP 11+
Very stiff to hard poorly laminated brown orange occasionally mottled light grey mottled dark red very silty slightly sandy slightly gravelly CLAY. Gravel is medium to coarse angular to sub-angular of mudstone. (WEALD CLAY FORMATION)		(0.6) 3.0		2.8		SPT	15	10	20	22	8		For 170mm
				3.0	6	D							HP 11+

Casing record			Chiselling records			Water level observations (depths in metres below gl)					
Date	Diameter (mm)	Depth (m)	Time	From (m)	To (m)	Date	Water strike	Water level (after 20mins)	Flow	Standing level	Remarks
05/06/2025	101	1.00				05/06/2025	-	-	-	Dry	
Remarks									By		
No groundwater encountered. No visual or olfactory evidence of contamination. No roots present in borehole. Borehole backfilled with arisings.							Logged	AC			
SPT: Standard Penetration Test, HP: Hand Penetrometer, B: Bulk Sample, D: Disturbed Sample							Checked	OB		Scale 01:25	



WS1 arisings



WS2 arisings



WS3 arisings



WS4 arisings



WS5 arisings



WS6 arisings



WS7 arisings



WS8 arisings



WS9 arisings



WS10 arisings



WS11 arisings