



Brookhurst Wood - Sites G and H Geoenvironmental Report

Biffa Waste Services Ltd

June 2010

CAPITA SYMONDS
STRUCTURES

Quays Office Park, Conference Avenue, Portishead, Bristol BS20 7LZ

Tel 01275 840840 Fax 01275 840830 www.capitasymonds.co.uk

Capita Symonds Ltd

www.capitasymonds.co.uk

Contents

1. Executive Summary	1
2. Introduction	3
3. The Site	4
4. Environmental Setting	5
5. Site History	8
6. Site Conceptual Model	9
7. Ground Investigations	13
8. Ground Conditions	14
9. Contamination Assessment	16
10. Discussion and Recommendations	21
11. References	23

Appendices

Appendix A	Site Location and Exploratory Hole Location Plans
Appendix B	Conceptual Model
Appendix C	2005 Ground Investigation Results
Appendix D	2010 Ground Investigation Results
Appendix E	General Assessment Criteria

1. Executive Summary

- 1.1 Capita Symonds Limited were appointed by Biffa Waste Services Limited to carry out a geoenvironmental ground investigation for a former brickworks site near Warnham in West Sussex, and to produce a remediation strategy. This report is also provided for West Sussex County Council and M+W Group Limited only.
- 1.2 The brickworks site and adjacent clay pits have been divided into different units for development planning. The subject of this report is the area designated as sites G and H, occupying about 8.8ha. This is bounded by the railway line to the west and the access road to the landfill to the east. The southern boundary is the Wienerberger Brick Works, which remains operational. The northern boundary is the slope up to the Biffa yard and offices.
- 1.3 Capita Symonds previously carried out a desk study and ground investigation of the site in 2005 for Gazeley Limited. The purpose of the present ground investigation was to complement the previous work and to obtain samples for additional contamination testing to allow assessment to current procedures. The results from both investigations are assessed in this report.
- 1.4 The site is a former brickworks. Most of the site is level ground on which numerous disused factory buildings remain. The underlying geology is Weald Clay which was quarried from brick pits to the east. The eastern and north eastern parts of the site have been raised with Made Ground, and there are two ponds in the south east part of the site.
- 1.5 The site had previously been used by several generations of brickworks, the main legacy being several old kiln locations mainly in the western part of the site, where the ground has been locally baked.
- 1.6 Seventy-three trial holes including boreholes, trial pits and dynamic sample holes were put down in 2005, and a further 19 window sample holes were carried out in 2010. The 2005 investigation found petroleum hydrocarbons and polyaromatic hydrocarbons (PAH) contaminating several areas, but otherwise the site was found to be uncontaminated. The objective of the 2010 investigation was to carry out additional testing to enable assessment to current standards and procedures (using the CLEA methodology). The investigation generally confirmed the absence of contamination with the exception of hydrocarbons, but also located a hotspot of nickel contamination within the area of Made Ground.
- 1.7 Results showed that the petroleum hydrocarbons have apparently substantially diminished in the intervening period, as this type of contamination tends to decay naturally. They were identified as diesel range, and the assessment showed that they do not require any remediation for commercial or industrial type development.
- 1.8 The risk assessment also showed that the PAH and nickel contamination will not require remediation if they are covered with building slabs or hardstanding, which is most likely to be the case in commercial or industrial development.

- 1.9 Gas monitoring showed that no precautions are necessary with respect to landfill gas over the majority of the site, but that some consideration may be needed for development in the north eastern part, particularly for commercial type development. This could comprise sub-floor ventilation or a high specification gas-proof membrane.
- 1.10 Thus, the site can be regarded as uncontaminated for the purpose of commercial or industrial development, as long as hard cover is provided to the small areas of PAH and nickel contamination, and no remediation is necessary.
- 1.11 This report is for the use of Biffa Waste Services Limited, West Sussex County Council and M+W Group Limited only and should not be relied upon by other parties unless specifically advised by Capita Symonds Ltd in writing.

2. Introduction

- 2.1 Capita Symonds Limited were appointed by Biffa Waste Services Limited to carry out a geoenvironmental ground investigation for a former brickworks site near Warnham in West Sussex, and to produce a remediation strategy. This report is also provided for West Sussex County Council and M+W Group Limited.
- 2.2 The brickworks site and adjacent clay pits have been divided into different units for development planning. The subject of this report is the area designated as Sites G and H. Site H is subdivided into Sites Ha and Hb, Ha being the northern half of Area H and Hb the southern half. The site is bounded by the railway line to the west and the access road to the landfill to the east. The southern boundary is on a line extending from the northern side of the access road to the Wienerberger Brick Works, which remains operational. The northern boundary is a line passing along the toe of the slope up to the Biffa yard and offices. The location of the site is shown on plans in Appendix A.
- 2.3 Capita Symonds previously carried out a desk study and ground investigation of the site in 2005 for Gazeley Limited. The results are contained in our report reference CS007890/CMD/05-1191/R dated August 2005, and the relevant logs and test results are included in Appendix C to this report. Biffa inform us that they are entitled to rely on this report.
- 2.4 The 2005 investigation was carried out to support possible development comprising warehouse units. The work included a desk study, fourteen dynamic sampling holes, ten cable percussion boreholes and 49 trial pits. Twenty monitoring standpipes were installed. Laboratory testing was carried out for both geotechnical and contamination purposes.
- 2.5 The purpose of the present ground investigation was to complement the previous work and to obtain samples for additional contamination testing to allow assessment to current procedures. A total of nineteen window sample holes were put down during March 2010. Samples were also taken of the silt and water within the ponds.
- 2.6 This report provides a summary of the desk study information. This is based on the 2005 investigation, but also refers to more recent environmental searches carried out in 2009 as part of the desk study for the adjacent Site F. This report also gives the results of the present investigation and provides an interpretation and assessment of all the data relating to contamination and the need for remediation.
- 2.7 This report is for the use of Biffa Waste Services Limited, West Sussex County Council and M+W Group Limited only and should not be relied upon by other parties unless specifically advised by Capita Symonds Ltd in writing.

3. The Site

- 3.1 The site is located within a former brickworks near Warnham in West Sussex. It lies approximately 5km to the north of Horsham off Langhurstwood Road. The approximate National Grid Reference of the centre of the site is 51 7050, 134500. A site location plan is given in Appendix A.
- 3.2 The site occupies about 8.8ha, measuring about 490m from north to south and between 150m and 225m from west to east.
- 3.3 The Dorking to Horsham railway line forms the site boundary to the west, and the access road to the landfill is the eastern boundary. The southern boundary is on a line extending from the northern side of the access road to the Wienerberger Brick Works, which remains operational. The northern boundary is a line passing along the toe of the slope up to the Biffa yard and offices.
- 3.4 The topography of the site is mainly flat, but there is raised ground along much of the eastern boundary before a steep bank down to the access road to the landfill.
- 3.5 The site is taken up by old factory buildings and yards over most of its area, except for a strip of raised ground on the eastern boundary in the northern part, and two ponds in the east of the central area with open scrub-covered ground to the north of them.
- 3.6 A workshop at the very northern part of the site and some nearby small buildings were still in use at the time of the investigation, but the rest of the buildings are disused. One of the hardstandings near the centre of the site within Site G was being used for brick storage, and the open area to the south of it was used for parking skips and general materials storage. Some materials storage was also taking place on the hardstanding by the site access in the south east. There is a relatively new compound by the access track in the east-central part of the site, and this houses gas pumping equipment serving the adjacent landfill.
- 3.7 A walkover survey to identify potential sources of contamination identified several tanks on the site, and an old electricity substation in the middle of the site. The disused electricity substation compound possibly incorporated other plant room facilities within small brick buildings. Three tanks were noted around the yard to the south of the workshop by the northern boundary. Three further tanks are located on the northern side of two smaller old factory buildings in the centre of the site, one of which had been removed, and there was a small tank on the eastern boundary near the site access in the south.
- 3.8 To the north of the ponds there is an area within a low bund that was once probably a pond or silt lagoon but is now backfilled supporting rough grass vegetation.
- 3.9 Beyond the boundary and the railway to the west the land is occupied by woods and farming. There is an operational brickworks to the south of the site. To the east, the land is an old clay pit serving the brickworks, and the northern part of this rises up to a recently restored landfill. To the north is a yard containing offices, beyond which is a waste treatment compound and a landfill.

4. Environmental Setting

Geology

- 4.1 The British Geological Survey 1:63,360 geology map Sheet 302 – Horsham Solid and Drift indicates the geology beneath the site to be underlain by Weald Clay of Cretaceous age. The strata are indicated to be dipping gently to the north at 7 degrees. The Weald Clay is generally a stiff to hard dark grey silty clay or weak mudstone, often containing thin limestone or sandstone bands and with clay ironstone beds in its lower formation. The most significant of these beds is the Horsham Stone that is a calcareous sandstone, used for roofing and aggregate. This bed is shown to outcrop about 70m south of the access road to the brickworks. A small limestone band is marked outcropping just to the north of the site, and will not occur beneath the site. No other sandstone or limestone beds are marked that would be encountered on the site.

Hydrogeology

- 4.2 The Environment Agency (EA) operates a classification system to categorise the importance of groundwater resources (aquifers) and their sensitivity to contamination. From 1st April 2010 new aquifer designations have been introduced to replace the old system of classifying aquifers as Major, Minor and Non-Aquifer. This new system is in line with the EA's Groundwater Protection Policy (GP3) and the Water Framework Directive (WFD) and is based on British Geological Survey mapping. Aquifers are now classified as Principal, Secondary A and Secondary B based on the amenity value of the resource. A separate classification has been given for superficial deposits and bedrock.
- 4.3 A Principal Aquifer is defined as layers of rock or drift deposits that have high intergranular and/or fracture permeability - meaning they usually provide a high level of water storage. They may support water supply and/or river base flow on a strategic scale. In most cases, principal aquifers are aquifers previously designated as major aquifer. A Secondary A aquifer comprises permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers. A Secondary B aquifer comprises predominantly lower permeability layers which may store and yield limited amounts of groundwater due to localised features such as fissures, thin permeable horizons and weathering. These are generally the water-bearing parts of the former non-aquifers. Unproductive strata are those which provide no water bearing potential.
- 4.4 The Groundwater Aquifer Map published by the Environment Agency on its website records the site to be on unproductive strata.
- 4.5 To protect drinking water from pollution, the EA has designated groundwater Source Protection Zones (SPZ) around major groundwater abstraction points. The zones restrict the type of activities and development permitted within their boundaries to protect the groundwater reserves. The site is not within a groundwater source protection zone.

- 4.6 There is one abstraction licence in the area, and this relates to surface water abstracted for brick making. It is understood that water is abstracted from the ponds on Site F.

Hydrology

- 4.7 The nearest water course is Boldings Brook which flows from north to south on the western side of the railway. At its nearest point it is about 40m from the site boundary. There is a spring flowing into this brook that arises about 100m south west of the site boundary. This is probably associated with the outcrop of the Horsham Stone.
- 4.8 There are two ponds on the site. Two other ponds are located on Site F to the east.
- 4.9 There are discharge consents for disposal to the stream to the west from both the old brickworks and the existing Wienerberger works. There is also a revoked consent for discharge to the stream from the Cleanaway landfill.

Radon

- 4.10 Map 5 contained in the Radon Atlas of England and Wales shows the site is in an area not affected by radon.

Site Sensitivity

- 4.11 The site sensitivity map contained in the Envirocheck Report for the MRMC site to the east records the site to be in a nitrate sensitive zone.

Waste

- 4.12 The landfill site to the east, Warnham Landfill, has a Waste Management Licence previously held by Cleanaway Limited, who are now part of Veolia Environmental Services (UK) plc, but which was transferred to Biffa Waste Services Limited in 2009. The licence status is reported to be 'active' in the 'boundaries' section of the Envirocheck report, but is listed as 'closed' in the 'locations' section. It is licensed for co-disposal. A superseded licence authorised asbestos, household, commercial and industrial waste and treated leachate.
- 4.13 Brookhurst Wood Landfill site to the north of the Cleanaway site is Permitted to Biffa Waste Services Limited, and was able to accept a wide range of waste. Both Warnham and Brookhurst Wood Landfills are subject to an EP application for extended landfill activity.
- 4.14 The site sensitivity map contained in the Envirocheck Report for the MRMC site to the east records the site to be a Local Authority Recorded Landfill site.
- 4.15 IPPC applications affecting the site relate to the adjacent landfill and to the brickworks manufacture. This included one air pollution enforcement notice in 2004.

Hazardous Substances

- 4.16 The COMAH and NIHHS entries in the Envirocheck Report for the MRMC site relate to the brickworks and do not appear to be current. The Planning Hazardous Substance consent was for the former LPG depot present on the MRMC site (Site F).

Industrial Land Use

- 4.17 The principal Trade Directory entries in the proximity of the site relate to the brickworks and waste operations. Also recorded are vehicle servicing and repairs. The brickworks to the south of the site remains operational.

5. Site History

- 5.1 The site history is summarised based on the information contained in the Capita Symonds 2005 report for Gazeley Ltd and historical maps for the adjacent MRMC site contained in the Capita Symonds 2009 report.
- 5.2 The brickworks development dates from the early 20th century, beginning in the south of the site and spreading north, with the clay pits being developed to the east and north of the brickworks. The brickworks appear to have been extended and redeveloped over several decades. While the development records are incomplete, it is apparent that a succession of buildings have occupied the western half of the site, including several kilns. The kilns identifiable on the old mapping are generally within about 50m of the railway boundary, the 1976 map showing a line of 8 kilns.
- 5.3 The steep bank on the eastern boundary is the edge of the old clay pit. The track entering the site from the east near the middle of the site appears to be over a ramp down into the clay pits.
- 5.4 The pond was established early in the site development. The only buildings identifiable immediately north of the pond are those currently remaining, apart from a chimney marked at the location of what appears now to be an infilled pond or possibly a silt lagoon.

6. Site Conceptual Model

Overview

- 6.1 The general approach taken to dealing with past land contamination is one of risk management comprising identification and assessment of risks followed by mitigation and monitoring if required. The procedures used within this report are consistent with those defined within Part IIA Guidance and the Model Procedures for the Management of Land Contamination, Contaminated Land Report (CLR) 11 produced by the Department of Environment, Food and Rural Affairs (DEFRA) and the Environment Agency.
- 6.2 Within the context of land contamination there are three essential elements to any potential risk :
- A **source** – substance that is in or under the land and has the potential to cause harm or to cause pollution of Controlled Waters
 - A **receptor** – in general terms, something that could be adversely affected by a contaminant, such as people, an ecological system, property, or a water body; and
 - A **pathway** – a route or means by which a receptor can be exposed to, or affected by, a contaminant.
- 6.3 Each of the above can exist independently, but they create a risk only where they are linked together, so that a particular contaminant affects a receptor through a particular pathway. This kind of linked combination is known as the Source (contaminant) - Pathway - Receptor (SPR) risk assessment model. Formulation of an outline conceptual model allows the identification and assessment of potential pollutant linkages.

Potential Sources

- 6.4 Contamination associated with the former brickworks will principally relate to the fuel for the kilns, with possible spillage or leakage of oil from storage tanks or supply lines. Disposal of ash from coal-fired kilns may contain metals, polyaromatic hydrocarbons (PAH) and sulphates.
- 6.5 The electricity substation is a potential source of PAH and PCB contamination.
- 6.6 Contamination could have accumulated in the silt within the ponds.
- 6.7 Any areas of Made Ground on site could contain contaminated soil and may produce gas, but the source of the waste comprising principally reject clay and bricks is not expected to produce significant contamination.
- 6.8 Contaminants that could migrate from the adjacent railway include hydrocarbons and PAH.
- 6.9 The landfills to the north and north east will be a source of landfill gas and potentially contaminated leachate.
- 6.10 Radon gas is not indicated to be a potential source in this area.

Potential Receptors

- 6.11 The potential receptors considered in line with the Environmental Protection Act 1990 Part IIA were :
- Human Health
 - Controlled waters
 - Property in the form of buildings
 - Ecology
- 6.12 Human health includes future users of the site including maintenance staff and construction workers.
- 6.13 The site is not within a groundwater source protection area, and is largely underlain by a non-aquifer. However, the groundwater is considered to be a potential receptor.
- 6.14 There are currently water bodies on site that are receptors.
- 6.15 The proposed buildings and services for the proposed developments are potential receptors.
- 6.16 There are no significant ecological receptors located on or close to the site, and this receptor will not be considered further.

Pathways

- 6.17 Migration pathways are mechanisms by which contaminants can reach a target or receptor, from a potential source. Pathways can be categorised as air, land and water based. The following pathways have been considered:
- migration of contaminants with sub surface infiltration,
 - shallow ground water flow,
 - airborne,
 - direct dermal contact with soil/groundwater contaminants,
 - ingestion and/or inhalation of contaminants, and
 - plant uptake.
- 6.18 The plant uptake pathway will not be present following development, and the current use does not involve cultivation, so this will not be considered further.

Risk Assessment

- 6.19 The preliminary risk assessment is summarised in Table 5.1. This forms the basis of the outline site conceptual model, which is presented in Appendix B.

Table 5.1 – Preliminary Source-Pathway-Receptor Risk Assessment

Potential Source	Potential Pathway	Potential Receptor	Potential for a source-pathway-receptor Linkage
Potential contaminants within Soils – fuel spillages	Migration of contaminants with sub surface infiltration and shallow groundwater flow	Controlled waters	Low – Soils are generally very low permeability with high attenuation
Potential contaminants within Soils – fuel spillages	Ingestion, Direct contact	Human Health	Low – Much of the soil will be covered by the proposed development. Moderate – During construction, but can be mitigated by appropriate ppe.
Potential contaminants within Soils (Made Ground)	Migration of contaminants with sub surface infiltration and shallow groundwater flow	Controlled waters	Low – Significant contamination is unlikely, soils are generally very low permeability with high attenuation
Potential contaminants within Soils – leakages from electricity substation	Migration of contaminants with sub surface infiltration and shallow groundwater flow	Controlled waters	Low – Soils are generally very low permeability with high attenuation
Potential contaminants within Soils – leakages from electricity substation	Ingestion	Human Health	Moderate – PAH may penetrate plastic water supply pipes
Potential contaminants within Soils – leakages from electricity substation	Direct contact	Human Health	Low – Much of the soil will be covered by the proposed development. Moderate – During construction, but can be mitigated by appropriate ppe.
Potential contaminants within Soils (Made Ground)	Ingestion	Human Health	Low – Significant contamination is unlikely. Much of the soil will be covered by the proposed development.
Potential contaminants within Soils (Made Ground)	Direct contact	Human Health	Low – Significant contamination is unlikely. Much of soil will be covered by the proposed development. Possible consideration for construction workers but can be mitigated by appropriate PPE.
Potential contaminants within Soils (Made Ground and natural ground)	Direct contact with foundations, services and migration within groundwater	Buildings, services	Moderate – Sulphates known to occur naturally in Weald Clay, but ground is impermeable.
Potential contaminants within pond silt	Direct contact / ingestion	Human Health	Low – Potential for direct contact is limited. Possible consideration for construction workers if ponds are to be cleared but can be mitigated by appropriate PPE.
Potential contaminants within pond silt	Migration of contaminants with sub surface infiltration	Controlled waters	Low – Limited quantity of silt. Underlying soils are generally very low permeability with high attenuation.

Potential Source	Potential Pathway	Potential Receptor	Potential for a source-pathway-receptor Linkage
Potential contaminants from railway land	Migration of contaminants with sub surface infiltration and shallow groundwater flow	Human Health	Low – Potential for migration is limited because of the impermeability of the ground
Contaminants within landfill	Migration of contaminants with sub surface infiltration and shallow groundwater flow	Controlled waters	Low – Landfill is recent and should have been engineered to control leachate. Ground is generally impermeable and will prevent flow and attenuate contamination.
Gas from landfill	Airborne	Human Health	Moderate – Significant gas will be produced. Soils are generally impermeable so risk will reduce with distance from landfill.

7. Ground Investigations

Introduction

- 7.1 Capita Symonds previously carried out a desk study and ground investigation covering a larger part of the brickworks site in 2005 for Gazeley Limited. The results are contained in our report reference CS007890/CMD/05-1191/R dated August 2005, and the logs and results are included in Appendix C.
- 7.2 The locations of the holes are shown on the site plan in Appendix A.
- 7.3 The investigation comprised ten cable percussion boreholes, fourteen dynamic sample holes and forty-nine trial pits. Standpipes were installed in twenty of the holes to enable gas and groundwater monitoring, and for sampling the groundwater. The dynamic sample holes with installations were located around and adjacent to the tanks. Installations in the cable percussion boreholes provided general site coverage.
- 7.4 Sixty-six soil samples were tested for contamination, together with seven groundwater samples.
- 7.5 The exploratory hole logs, the laboratory test results and the gas and groundwater monitoring records are presented in Appendix C.
- 7.6 A further ground investigation was carried out in March 2010 to supplement the previous investigation. This comprised nineteen window sample holes, principally targeted at areas where contamination had been identified or was suspected and areas where additional coverage was needed. Additionally, samples were taken of the pond water and silt for contamination analysis. Standpipes were installed in three of the holes to supplement those that were able to be utilised from the previous investigation.
- 7.7 Laboratory testing was carried out on samples retrieved, comprising a general suite of potential contaminants together with PAH, hydrocarbons and asbestos testing. This included 16 soil samples, two silt samples and two water samples from the ponds. Monitoring of gas and groundwater level was carried out in the standpipes installed, plus any other installations from the previous investigation that were found to be serviceable.
- 7.8 Logs of the window sample holes, test results and monitoring records for the recent investigation are presented in Appendix D.

8. Ground Conditions

Introduction

- 8.1 This section presents a summary of the ground conditions determined by both the previous ground investigation and the recent supplementary work.

Ground Conditions

- 8.2 The investigations confirmed the recorded geology, finding Weald Clay beneath the whole site. It was described as hard or brittle brown or grey clay, or very weak to weak mudstone, which was generally laminated and fractured. Clay near the surface tended to grade to mudstone.
- 8.3 Over most of the site the natural clay was found to be overlain by Made Ground around 0.3m to 1.5m thick, generally comprising concrete slab and sub-base construction over broken brick with gravel, ash and clay often in a sandy matrix. At the locations of old structures and flues the Made Ground was locally over 3.2m thick. Deeper areas of Made Ground were found in the eastern parts of the site.
- 8.4 Just north of the site entrance from the south, Trial pit 21 and window sample hole 501 found 5.2m depth of Made Ground generally comprising clay with brick, ash, clinker, ceramics, glass and wood. This is thought to be the location of a ramp into the clay pit to the east that used to convey a tramway.
- 8.5 In the east of the site the ponds and silt lagoon are cut into the clay, and the higher ground is made up, the depth of Made Ground increasing northwards to over 5.4m. The Made Ground in this area was found to comprise generally firm to stiff, yellow brown to grey, gravelly clay with ash, brick and mudstone. The infill to the probable old silt lagoon was similar material. In places the natural clay underlying the Made Ground was soft to firm for up to about 1m depth beneath its surface.
- 8.6 In the area of the track entering the site from the east in the middle section of the site the surface of the natural clay falls away into the former clay pit, with Made Ground depths rising to up to 2.8m also comprising clay and brick but also with some wood and metal.
- 8.7 The raised bank along the eastern boundary in the northern section of the site was also found to be Made Ground up to 5.5m thick, comprising brick, ash and clinker fill over clay containing brick and gravel.
- 8.8 The 2005 investigation found that the clay beneath the former brick kilns had been baked, becoming hard and brittle in a zone beneath and around the kilns.

Groundwater

- 8.9 Groundwater was found to enter several of the trial pits, but was thought to be perched water within the Made Ground.

- 8.10 The monitoring results showed groundwater between 1.05m and 5.94m depth. The reduced level was in the range 49.6mOD to 53.0mOD. Typically the reduced level was in the range 50.5mOD to 51.5mOD, and tended to fall slightly during the period of monitoring during the Spring months.

Gas

- 8.11 No methane was recorded in any of the installations with the exception of one reading of 0.1% in BH1.
- 8.12 Carbon dioxide was detected in nearly all of the monitoring installations, but was generally at a very low level with normal oxygen levels. Higher carbon dioxide levels were found in the eastern and northern parts of the site.
- 8.13 Carbon dioxide between 1.5% and 3.5% was found in the Made Ground in the area of the ponds, and in the borehole in the extreme south east of the site. DS13 in the west of the yard at the north of the site recorded up to 6.2%. The maximum readings were taken from BH10 in the Made Ground in the north east of the site where up to 16.5% was recorded.
- 8.14 Gas flow rates were low, the maximum recorded being 0.6l/hr.

9. Contamination Assessment

Introduction

- 9.1 In the 2005 investigation a total of sixty-six soil samples were analysed for a general suite of contaminants considered to be indicative of the state of the soil. The suite included total PAH and total TPH, but these were not speciated. A further sixteen soil samples were analysed during the 2010 investigation, and these included full speciation of both PAH and TPH.
- 9.2 Six soil samples were tested for PCB in 2005. Nine samples from the recent investigation were tested for the presence of asbestos.
- 9.3 Seven samples of groundwater were taken from the standpipe installations in 2005 and analysed for a suite of contaminants including speciated PAH and TPH by GC-FID. In the recent investigation water samples were tested from each of the ponds, plus a sample of silt from each pond.
- 9.4 In line with CLR11 (DEFRA & EA, 2004), a Generic Quantitative Risk Assessment (GQRA) has been undertaken to determine the significance of the measured concentrations of contaminants. The GQRA comprises the comparison of the measured concentrations with Generic Assessment Criteria (GACs).
- 9.5 The GACs used for the assessment of soil concentrations comprise Soil Guideline Values (SGVs) and values that have been derived using the CLEA model (version 1.04) adopting the appropriate assumptions and input parameters provided in the SR series of reports. In deriving the GACs for use on Brownfield sites we have assumed a soil with 1% Soil Organic Matter, consistent with measured values. The derived GACs are given in Appendix E.
- 9.6 The likely development on this site will be commercial or industrial in keeping with the surrounding land uses as landfill, brick manufacture and waste processing. The appropriate category with respect to GACs will be commercial/industrial, and this situation has been used in the assessment.

Soil

- 9.7 The test results for the general suite of contaminants are summarised in the table below. Where appropriate, the GAC has been included for simple comparison.

Determinant	GAC (SGV in bold)	Results (mg/kg unless stated)		
		Min	Max	Average
Arsenic	640	2	132	28
Cadmium	230	<0.5	3.0	0.6

Determinant	GAC (SGV in bold) (LQM)	Results (mg/kg unless stated)		
		Min	Max	Average
Chromium	30400 (LQM)	6.5	395	47
Lead	4400	6	350	51
Mercury	3600	<0.3	1.1	0.4
Nickel	1800	4.4	3554	99
Copper	39000	2	3600	107
Zinc	660000	21	1100	156
Selenium	130000	<0.5	3.8	0.9
Hexavalent Chromium	330	<0.2	<0.2	<0.2
Water soluble Boron	110000	0.8	3.7	2.0
pH (unit)		6.2	10.3	7.7
Water soluble sulphate (mg/l)		10	1800	537
Total Cyanide	16000	<1.0	125	11
Free Cyanide		<1.0	<1.0	<1.0
Sulphide		2	179	22
Elemental Sulphur		10	680	98
Phenols	3200	<1.0	<1.0	<1.0
Soil Organic Matter (%)		<0.1	6.8	1.5

- 9.8 There was only one exceedance of the GAC in all of the above results, this being the figure for nickel of 3554mg/kg. All other results for nickel were less than 85mg/kg which is well below the GAC.
- 9.9 By comparing the maximum figure in the table above with the GAC it is apparent that there are no contaminants of concern within this suite of testing other than nickel. Since in every case the maximum value is well below the GAC no statistical analysis is required for them. For nickel, statistical analysis using the procedure given in the Annex to CLR7 shows that

the US₉₅ value is 172mg/kg, and nickel is not generally of concern, but that the value of 3554mg/kg represents an outlier. The hotspot is located at WS509 at 3.5m depth. It is noted that the result at 0.50m depth in this hole was well within the GAC.

- 9.10 It is unlikely that the hotspot of nickel will be exposed by the works because of the depth at which it was found. Based on the source-pathway-receptor assessment, in this case no remediation will be necessary.
- 9.11 PCB levels were below detection limits in all the samples tested, and this potential contaminant is not of concern.
- 9.12 No asbestos was detected in any of the samples tested.
- 9.13 The 2005 investigation found petroleum hydrocarbons in several of the exploratory holes. Of 66 results, ten gave TPH measurements in excess of 1,000mg/kg. The maximum value was 24,000mg/kg, and the second highest was 8,400mg/kg. The 2010 investigation sampled and tested soil from similar locations to the higher results, principally to be able to speciate the hydrocarbon. Of the twenty samples tested, the highest three results were 996, 249 and 169mg/kg, with all other values being less than 30mg/kg. Speciation of these tests showed the hydrocarbon to be substantially in the range EC₁₆ to EC₃₅.
- 9.14 Although there can be statistical variation in the data, it is evident that there has been a substantial reduction in the levels of hydrocarbons in the ground since the 2005 investigation. This can occur through natural degradation of the hydrocarbon by microbial activity, the source of the contamination having been removed.
- 9.15 Examining the highest level of TPH recorded at 24,000mg/kg, this is probably within the EC₁₆ to EC₃₅ range based on the speciation results. The GAC for the aliphatic fraction in the EC₁₆ to EC₃₅ range is 120,000mg/kg, and for the aromatic fraction the GACs for the EC₁₆ to EC₂₁ and EC₂₁ to EC₃₅ ranges are 27,000 and 28,000mg/kg respectively. Hence, even without the apparent degradation of the hydrocarbon, the recorded levels will be within acceptable limits for commercial or industrial development, based on the CLEA assessment methodology. No remediation of petroleum hydrocarbons will be necessary at this site for commercial or industrial end use.
- 9.16 However, it is possible that other spillages may have occurred that have not been detected by the investigations, and vigilance will be necessary during construction.
- 9.17 Sixty-six results for PAH in the 2005 investigation found detectable amounts in only two locations, a total of 250mg/kg at TP20 beneath the factory slab in the western building, and 5.8mg/kg at TP48 in the Made Ground in the north east of the site. These were not speciated. It was not possible to resample the area beneath the slab because of a dangerous structure, but the 2010 investigation tested 16 other samples for PAH including the position of TP48. Only two samples returned measurable results, at 8.1mg/kg and 1.5mg/kg in WS509 and WS517. Speciation showed these to be principally benzo(b)fluoranthene and benzo(k)fluoranthene, for both of which the GAC is 140mg/kg. These are therefore not of concern, but it is not possible to discount the result at TP20, and this remains a hotspot that will require consideration in development or further investigation.

- 9.18 Because of the very low permeability of the clay strata beneath this site and the limited extent of the contamination, the incidence of PAH contamination is not considered to be significant with respect to controlled waters.
- 9.19 In summary, the soil can be regarded as uncontaminated for the purpose of commercial or industrial development with the exception of an area of possible polyaromatic hydrocarbon (PAH) contamination beneath the factory slab in the area of TP20.
- 9.20 Testing was carried out on two samples of silt from the base of the ponds. All the results for the general suite of testing were well below the GACs, and the PAH was below detection limits. Levels of petroleum hydrocarbons were well below GAC values with TPH results of 58.7mg/kg and 83.6mg/kg. Speciation showed that around 70% of the hydrocarbon was in the EC₁₆ to EC₃₅ range.

Groundwater

- 9.21 Seven samples of groundwater were tested in the 2005 investigation. Results for dissolved cadmium, chromium, lead, mercury, selenium, copper and for PAH were below the detection limit or very close to it. The sample from BH4 was also tested for PCB, which was not detected. Measured quantities of dissolved arsenic, zinc and nickel were all below Environmental Quality Standard limits (EQS), and only Arsenic marginally exceeded the UK Drinking Water Standard (DWS). Petroleum hydrocarbons were below detectable limits for five of the seven samples tested, and the other two gave TPH results of 0.08 and 0.16mg/l, with peaks in the C₁₀ to C₄₀ range. There is no EQS for hydrocarbons, but the UK DWS limit is 0.01 mg/l. The measured values are considered to be insignificant.
- 9.22 Based on the testing carried out, the groundwater can be regarded as uncontaminated.

Pond Water

- 9.23 Samples of water were tested from each pond. Results for arsenic, cadmium, chromium, lead, copper, mercury, and selenium were below the detection limit. Results for nickel, zinc and boron were all below Environmental Quality Standard limits (EQS) and the UK Drinking Water Standard (DWS). Very small amounts of PAH were measured, all well below any relevant EQS or DWS limits. The pond water can be regarded as uncontaminated.

Gas

- 9.24 The gas monitoring results have been assessed using the methodology described in CIRIA Report C665, "Assessing risks posed by hazardous ground gases to buildings". Qualitatively the risk depends on the type of development, but for most industrial uses it is likely to be 'very low'.
- 9.25 Quantitatively, the Gas Screening Value is assessed to be 0.102l/hr at BH10 in the Made Ground in the north east of the site, and up to 0.037l/hr elsewhere. This places the site in Characteristic Situation 1 except for the area of Made Ground in the north east which is gas Characteristic Situation 2. No special measures are needed with respect to ground gas for development of the majority of the site, but gas should be considered for any development in the north east area. Unless the Made Ground is substantially removed and the gas situation verified it will be necessary to adopt Characteristic Situation 2 for this area.

9.26 No radon protection measures are required in this area.

10. Discussion and Recommendations

Introduction

- 10.1 It is assumed that the development of the site will be for commercial or industrial use consistent with the surrounding land use.
- 10.2 The ground investigations confirmed the recorded geology, with Weald Clay being present across the site. It was described as hard or brittle brown or grey clay, or very weak to weak mudstone, which was generally laminated and fractured.
- 10.3 Over most of the site the natural clay was found to be overlain by Made Ground around 0.3m to 1.5m thick, generally comprising concrete slab and sub-base construction over broken brick with gravel, ash and clay often in a sandy matrix. At the locations of old structures and flues the Made Ground was locally over 3.2m thick. Deeper areas of Made Ground were found in the eastern parts of the site.
- 10.4 In the east of the site the ponds and silt lagoon are cut into the clay, and the higher ground is made up, the depth of Made Ground increasing northwards to over 5.4m. The Made Ground in this area was found to comprise generally firm to stiff, yellow brown to grey, gravelly clay with ash, brick and mudstone. The infill to the probable old silt lagoon was similar material.
- 10.5 The raised bank along the eastern boundary in the northern section of the site was also found to be Made Ground up to 5.5m thick, comprising brick, ash and clinker fill over clay containing brick and gravel.
- 10.6 The monitoring results showed groundwater between 1.05m and 5.94m depth. The reduced level was in the range 49.6mOD to 53.0mOD.
- 10.7 The site was previously used as a brickworks, with successive generations of development. This included several kilns, and areas of baked clay have been found in the vicinity of the kiln flues.

Contamination

- 10.8 A detailed contamination assessment was presented in Section 8 of this report. The site can generally be regarded as uncontaminated with respect to development for commercial or industrial use with the exception of hotspots of nickel and PAH.
- 10.9 One hotspot of nickel contamination was found at 3.5m depth in WS509, which is in the area of Made Ground in the east of the site. It is noted that the result at 0.50m depth in this hole was well within the GAC. It is unlikely that the hotspot of nickel will be exposed by development works because of the depth at which it was found. Based on the source-pathway-receptor assessment, in this case no remediation will be necessary. This assessment will need to be reviewed if development proposals require excavation of the Made Ground, particularly with respect to construction workers, but in any case the building slab or hardstanding construction will provide sufficient protection to site users to mitigate the hazard of the contamination.

- 10.10 An area of PAH contamination was identified beneath the slab of the factory building in the west of the site (TP20). Because of the remaining old building it was not possible to determine the extent of this, but it does not appear to extend outside the building area. Based on the source-pathway-receptor assessment, this contamination will not pose a significant risk if it is located beneath a building slab or road hardstanding. If this is the case for the development layout, then no remediation will be necessary. The Contractor should be made aware of the risk to construction workers.
- 10.11 If a slab, hardstanding or other suitable cover cannot be provided in the development layout then the PAH contamination should be treated or removed from site. It is recommended that further investigation is carried out after demolition or during construction to check the extent of this hotspot and to obtain speciated test results to enable an updated risk assessment to be undertaken. It is possible that this contamination may have diminished since the 2005 investigation, as was found with the hydrocarbon contamination. If it requires remediation, then bioremediation or removal may be considered.
- 10.12 The site has been in industrial use for very many years, and it is possible that areas of contamination may occur that have not been detected by the investigations. Any suspect areas discovered during the site development should be tested and assessed, and appropriate measures taken.

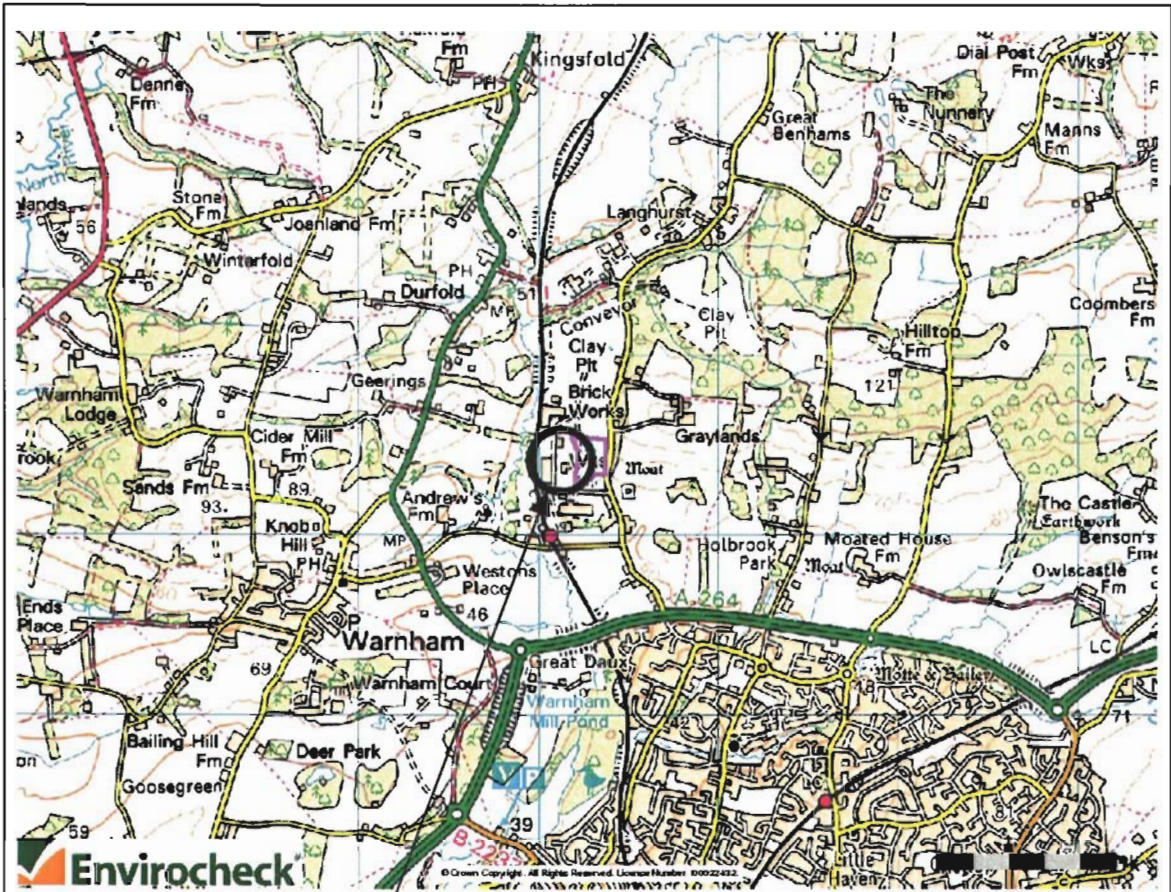
Gas

- 10.13 The site has been assessed to be very low risk with respect to ground gas for the likely form of development, and it is not in an area at risk from radon. No special measures are needed with respect to ground gas for the majority of the site. Any development on or near the Made Ground in the north east area of the site should accommodate the requirements of Gas Characteristic Situation 2.
- 10.14 Tables 2 and 3 of BS 8485 indicate that for an industrial development in the north east area sufficient protection is likely to be provided by a reinforced concrete slab with a taped and sealed gas-proof membrane. Commercial development may require additional precautions such as a ventilated sub-floor void or higher specification of membrane construction.

11. References

- 11.1 Geo-Environmental Investigation for land at The Brickworks, Langhurstwood Road, Warnham, West Sussex. Capita Symonds Ltd Report CS007890/CMD/05-1191/R, August 2005.
- 11.2 Geoenvironmental Report, West Sussex MRM. Capita Symonds Ltd Report CS033750, August 2009.
- 11.3 BMR Green, JCH Miles, EJ Bradley and DM Rees, "The Radon Atlas of England and Wales", National Radiological Protection Board Report W26, August 2002.
- 11.4 Wilson S, Oliver S, Mallett H, Hutchings H, Card G, "Assessing risks posed by hazardous ground gases to buildings", CIRIA Report C665, 2007.
- 11.5 NHBC Standards, Part 4 Foundations, 2008.
- 11.6 BRE Special Digest 1, "Concrete in aggressive ground", 2003.

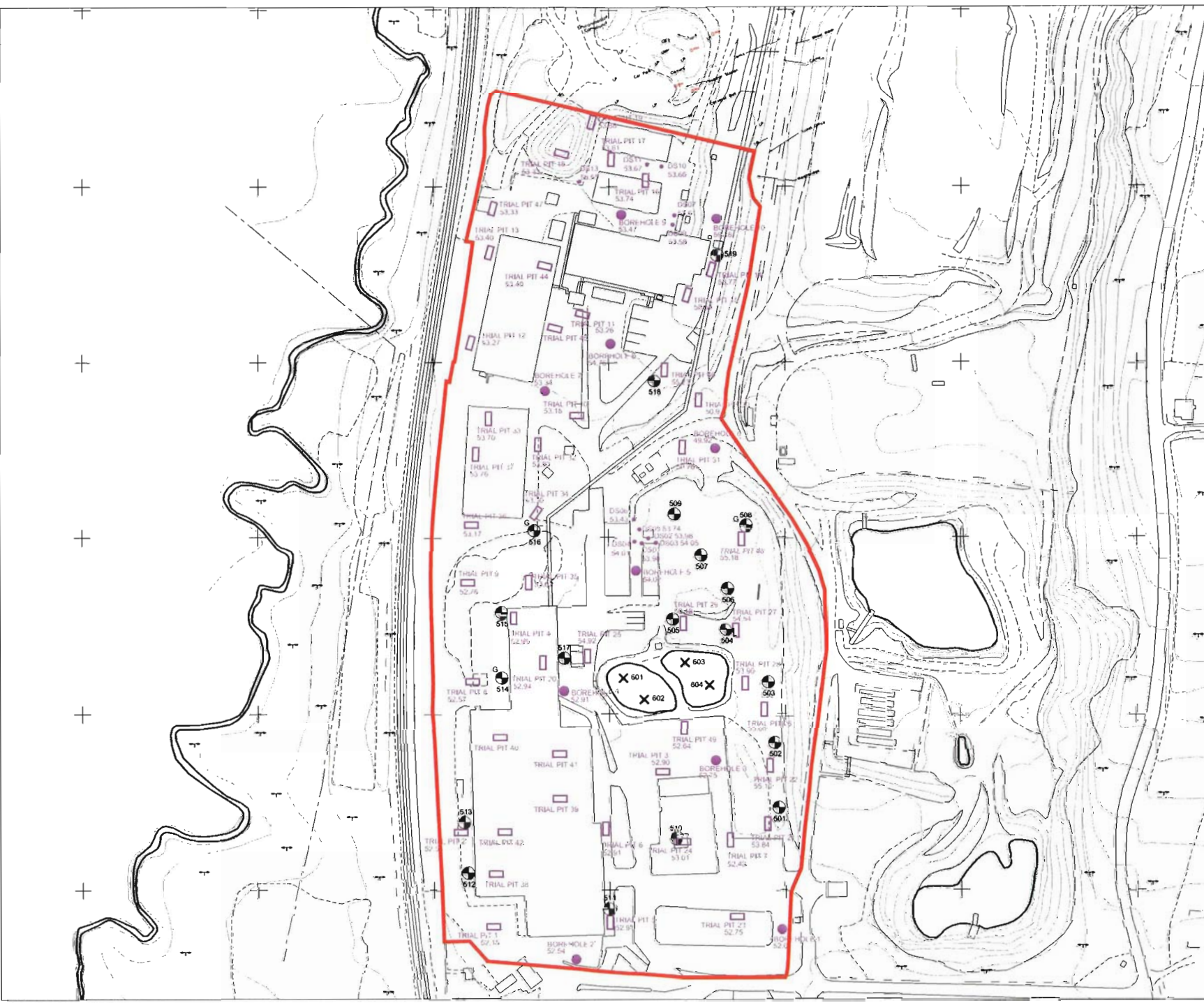
Appendix A Site Location and Exploratory Hole Location Plans



The Site

Brookhurst Wood – Wealdland Brickworks					Biffa Waste Services Ltd	
Site Location					CAPITA SYMONDS Quays Office Park, Conference Avenue Portishead, BRISTOL BS20 7LZ Tel: 01275 840840	
DRAWN BY	CHECKED BY	PASSED BY	DATE	SCALE	DRAWING NUMBER	REV
DBC			May 2010	NTS	CS/42307/GEO/003	

NOTY: THE PROPERTY OF THE DRAWING AND DESIGN IS VESTED IN CAPITA SYMONDS LIMITED AND MUST NOT BE COPIED OR REPRODUCED IN ANY WAY WITHOUT THE WRITTEN CONSENT OF CAPITA SYMONDS LIMITED.



- KEY
- █ SITE No
 - WINDOW SAMPLE HOLE (2010)
 - G GAS INSTALLATION (2010)
 - X GRAB SAMPLE OF POND SLT.1 (2010)
 - EXISTING BOREHOLE (2005)
 - EXISTING TRIAL PIT (2005)
 - EXISTING DYNAMIC SAMPLE HOLE (2005)

REV	DATE	DR	CH	PA	DATE
DRAWN BY	CHECKED BY	PASSED BY	DATE		
AR	DC	DC	06/10		
SCALES @ 1" = 100'			SHEET # 1/14		
1:1000			REPORT		

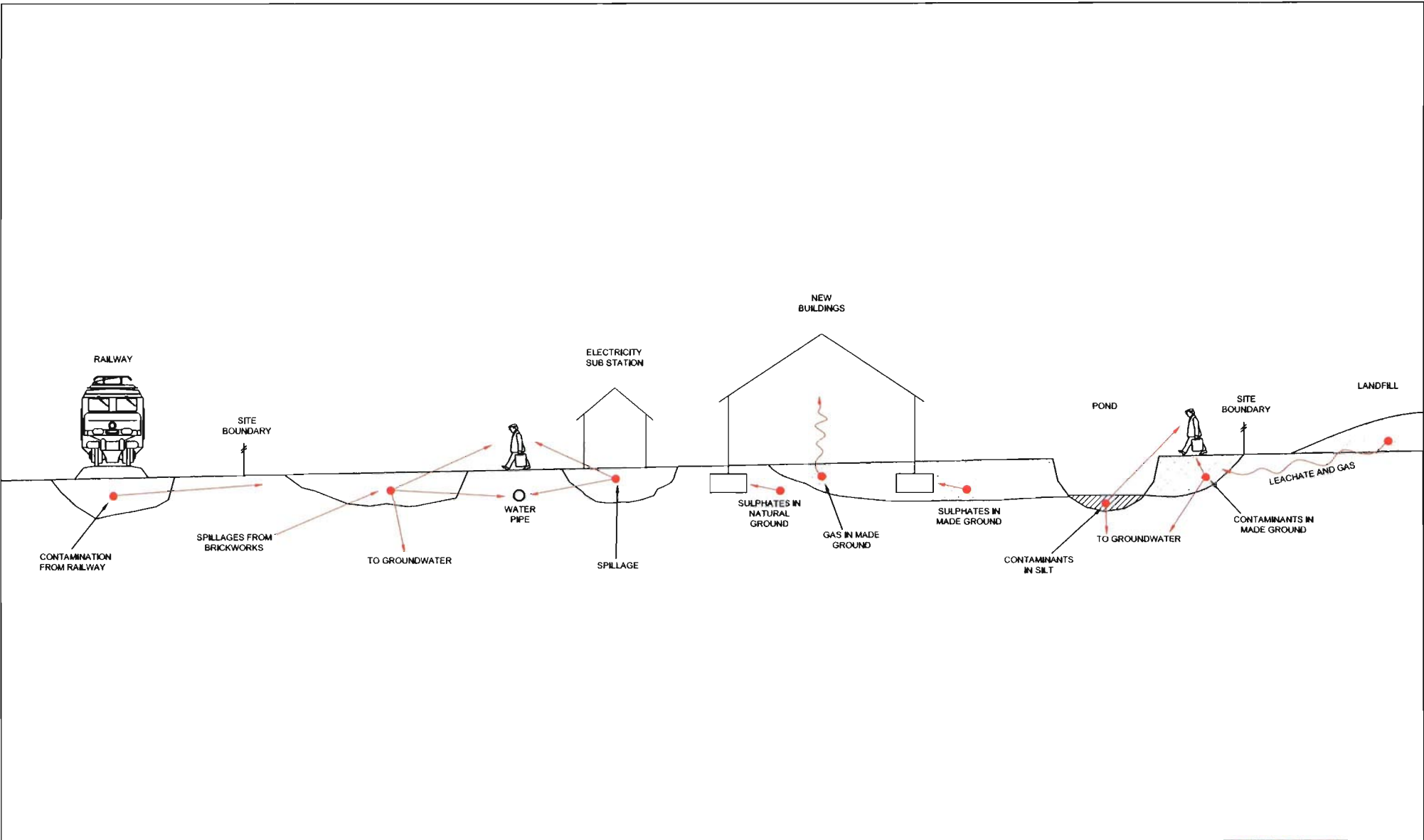
**BROOKHURST WOOD
WEALDLAND BRICKWORKS**

**GROUND INVESTIGATION
LOCATION PLAN**

CAPITA SYMONDS
Quality Control & Compliance Manual
 Registered in England, No. 02068820
 Tel: +44 (0)1225 830900 Fax: +44 (0)1225 846330

Appendix B Conceptual Model

CAD FILE NAME : F:\ZBRSD\Projects\42307 - Brookhurst Wood\WELDLAND BRICKWORKS\Drawings\GEO\GEO-002.dwg
 -1:1000
 0
 10000
 NOT BE COPIED OR REPRODUCED IN ANY WAY WITHOUT THEIR WRITTEN CONSENT



REV	DR	CH	PA	DATE

BIFFA WASTE SERVICES Ltd
BROOKHURST WOOD - WEALDLAND BRICKWORKS

SITE CONCEPTUAL MODEL

DRAWN BY	CHECKED BY	PASSED BY	DATE	SCALES @ A3 SIZE	ISSUE STATUS
AR	DC	DC	05/10	N.T.S.	REPORT



CAPITA SYMONDS

Quays Office Park, Conference Avenue,
 Portishead, BRISTOL BS20 7LZ
 Tel: +44 (0)1275 840840 Fax: +44 (0)1275 840830

DRAWING NUMBER	REV.
CS-42307-GEO-002	-

Appendix C 2005 Ground Investigation Results

CAPITA SYMONDS (Structures) Ltd

Radius House
51 Clarendon Road
Watford Herts WD17 1HU
Tel : 01923 817537
Fax : 01923 228516

Project : The Brickworks, Horsham

Job Number : CS007890A

Client : Gazeleys

Dates : 21/06/2005

N Coord : -

Method : Cable Percussion Rig

G.L. (mLD) -

Exploratory Hole No.

BH1

Sheet 1 of 3

E Coord : -

Driller : JDL

SAMPLING DATA

GROUND STRATA

Depth (m)	Type	Test Result	Level (mLD)	Legend	Depth (m)	Description	Water	Standpipe
					0.20	CONCRETE		
0.50	D				0.40	MADE GROUND. Non cohesive aggregate of crush red bricks, Ash and Clay, dry and coarse.		
						CLAY. Stiff to Very Stiff, weathered brown clay.		
1.00	D							
1.50	D	N = 46			1.50	Stiff to V. Stiff CLAY, weathered brown clay with grey / blue un-weathered patches. Clay becoming harder and more brittle with depth		
2.00	D	N = 44						
2.50	D							
3.00	D	N = 50						
3.50	D							
4.00	D	N = 53			4.00	Blue / Grey, hard and brittle laminated CLAY. Generally becoming harder and more brittle with depth, fractured throughout, friable particularly where weathered along laminae. Texture varies from waxy to cementious, some moisture present commonly along fracture planes.		
4.50	D							
5.00	D	N = 50						
						Continued next sheet		

SAMPLE/TEST KEY

D - Small Disturbed Sample
B - Bulk Sample
U - Undisturbed Sample (& Blows)
W - Water Sample
S - Standard Penetration Test
C - Cone Penetration Test
N - Penetration Test 'N' Value
* - Partial Seating Penetration
Cu - Undrained Shear Strength kPa

Water Strike

Water Level

REMARKS

Hole installed with 50mm HDPE liner, backfilled with pea gravel, sealed with bentonite and completed with lockable metal cover.

Scale =1:32

Boring Progress & Water Observation Depths (m)

Date	Strike	Level	Minutes	Casing	Sealed
Chiselling			Water Added		Logged
From	To	Hours	From	To	By
					JDL

CAPITA SYMONDS (Structures) Ltd

Radius House
51 Clarendon Road
Watford
Herts WD17 1HU
Tel : 01923 817537
Fax : 01923 228516

Project : The Brickworks, Horsham

Job Number : CS007890A

Client : Gazeleys

Dates : 21/06/2005

Method : Cable Percussion Rig

N Coord : -

G.L. (mLD) -

Exploratory Hole No.

BH1

Sheet 2 of 3

E Coord : -

Driller : JDL

SAMPLING DATA

GROUND STRATA

Depth (m)	Type	Test Result	Level (mLD)	Legend	Depth (m)	Description	Water	Standpipe
5.50	D					Blue / Grey, hard and brittle laminated CLAY. Generally becoming harder and more brittle with depth, fractured throughout, friable particularly where weathered along laminae. Texture varies from waxy to cementitious, some moisture present commonly along fracture planes.		
6.00	D	N = 25						
6.50	D							
7.00	D	N = 28						
7.50	D							
8.00	D	N = 27						
8.50	D							
9.00	D	N = 52						
9.50	D							
10.00	D	N = 55						
Continued next sheet								

SAMPLE/TEST KEY

D - Small Disturbed Sample
B - Bulk Sample
U - Undisturbed Sample (& Blows)
W - Water Sample
S - Standard Penetration Test
C - Cone Penetration Test
N - Penetration Test 'N' Value
* - Partial Seating Penetration
Cu - Undrained Shear Strength kPa

Water Strike

Water Level

REMARKS

Hole installed with 50mm HDPE liner, backfilled with pea gravel, sealed with bentonite and completed with lockable metal cover.

Scale = 1:32

Boring Progress & Water Observation Depths (m)

Date	Strike	Level	Minutes	Casing	Sealed
Chiselling			Water Added		Logged
From	To	Hours	From	To	By
					JDL

CAPITA SYMONDS (Structures) Ltd

Radius House
51 Clarendon Road
Watford Herts WD17 1HU
Tel : 01923 817537
Fax : 01923 228516

Project : The Brickworks, Horsham

Job Number : CS007890A

Client : Gazeleys

Dates : 21/06/2005

N Coord : -

Method : Cable Percussion Rig

G.L. (mLD) -

Exploratory Hole No.

BH1

Sheet 3 of 3

E Coord : -

Driller : JDL

SAMPLING DATA

GROUND STRATA

Depth (m)	Type	Test Result	Level (mLD)	Legend	Depth (m)	Description	Water	Standpipe
10.50	D					Blue / Grey, hard and brittle laminated CLAY. Generally becoming harder and more brittle with depth, fractured throughout, friable particularly where weathered along laminae. Texture varies from waxy to cementious, some moisture present commonly along fracture planes.		
11.00	D	N = 30						
11.50	D							
12.00	D	N = 26						
					12.00	End of Exploratory Hole at 12.00 m		

SAMPLE/TEST KEY

D - Small Disturbed Sample
B - Bulk Sample
U - Undisturbed Sample (& Blows)
W - Water Sample
S - Standard Penetration Test
C - Cone Penetration Test
N - Penetration Test 'N' Value
* - Partial Seating Penetration
Cu - Undrained Shear Strength kPa

Water Strike

Water Level

REMARKS

Hole installed with 50mm HDPE liner, backfilled with pea gravel, sealed with bentonite and completed with lockable metal cover.

Scale =1:32

Boring Progress & Water Observation Depths (m)

Date	Strike	Level	Minutes	Casing	Sealed
Chiselling			Water Added		Logged By
From	To	Hours	From	To	
					JDL

CAPITA SYMONDS (Structures) Ltd

Radius House
51 Clarendon Road
Watford
Herts WD17 1HU
Tel : 01923 817537
Fax : 01923 228516

Project : The Brickworks, Horsham		Exploratory Hole No. BH2
Job Number : CS007890A		
Client : Gazeleys		Sheet 1 of 2
Dates : 21/06/2005	N Coord : -	E Coord : -
Method :	G.L. (mLD) -	Driller : JDL

SAMPLING DATA			GROUND STRATA					
Depth (m)	Type	Test Result	Level (mLD)	Legend	Depth (m)	Description	Water	Standpipe
					0.20	CONCRETE		
					0.30	MADE GROUND. non cohesive aggregate of crushed brick, dry clay and ash. Coarse granular, poorly sorted fill.		
1.50-1.95	D	N = 26				Brown weathered CLAY, hard to brittle, laminated and fractured throughout. Friable along laminae and fracture planes. More weathered near top of unit, with some grey unweathered patches.		
2.00-2.45	D	N = 53						
3.00-3.45	D	N = 60						
4.00-4.45	D	N = 31						
5.00-5.45	D	N = 42						
Continued next sheet								

SAMPLE/TEST KEY D - Small Disturbed Sample B - Bulk Sample U - Undisturbed Sample (& Blows) W - Water Sample S - Standard Penetration Test C - Cone Penetration Test N - Penetration Test 'N' Value * - Partial Seating Penetration Cu - Undrained Shear Strength kPa Water Strike Water Level	REMARKS Hole installed with 50mm HDPE liner, backfilled with pea gravel, sealed with bentonite and completed with lockable metal cover. Scale =1:32	Boring Progress & Water Observation Depths (m)					
		Date	Strike	Level	Minutes	Casing	Sealed
Chiselling			Water Added		Logged		
From	To	Hours	From	To	By		
					JDL		

CAPITA SYMONDS (Structures) Ltd

Radius House
51 Clarendon Road
Watford Herts WD17 1HU
Tel : 01923 817537
Fax : 01923 228516

Project : The Brickworks, Horsham

Job Number : CS007890A

Client : Gazeleys

Dates : 21/06/2005

Method :

N Coord : -

G.L. (mLD) -

Exploratory Hole No.

BH2

Sheet 2 of 2

E Coord : -

Driller : JDL

SAMPLING DATA

GROUND STRATA

Depth (m)	Type	Test Result	Level (mLD)	Legend	Depth (m)	Description	Water	Standpipe
6.00-6.45	D	N = 27			5.30	Brown weathered CLAY, hard to brittle, laminated and fractured throughout. Friable along laminae and fracture planes. More weathered near top of unit, with some grey unweathered patches.		
7.00-7.45	D	N = 50				Blue / grey unweathered CLAY. Hard to brittle, laminated and fractured throughout. Friable along laminae and fractures, waxy texture.		
					8.00	End of Exploratory Hole at 8.00 m		

SAMPLE/TEST KEY

D - Small Disturbed Sample
B - Bulk Sample
U - Undisturbed Sample (& Blows)
W - Water Sample
S - Standard Penetration Test
C - Cone Penetration Test
N - Penetration Test 'N' Value
* - Partial Seating Penetration
Cu - Undrained Shear Strength kPa

Water Strike

Water Level

REMARKS

Hole installed with 50mm HDPE liner, backfilled with pea gravel, sealed with bentonite and completed with lockable metal cover.

Scale =1:32

Boring Progress & Water Observation Depths (m)

Date	Strike	Level	Minutes	Casing	Sealed
Chiselling			Water Added		Logged By
From	To	Hours	From	To	
					JDL

**CAPITA
SYMONDS
(Structures) Ltd**

Radius House
51 Clarendon Road
Watford Herts WD17 1HU
Tel : 01923 817537
Fax : 01923 228516

Project : The Brickworks, Horsham

Job Number : CS007890A

Client : Gazeleys

Dates : 22/06/2005

Method :

N Coord : -

G.L. (mLD) -

Exploratory Hole No.

BH3



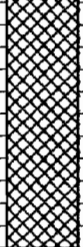
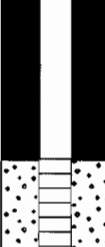

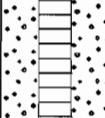

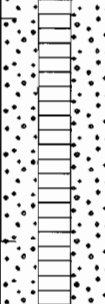
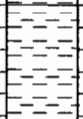
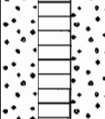

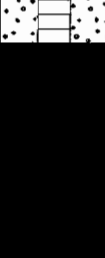
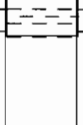

Sheet 1 of 2

E Coord : -

Driller : JDL



SAMPLING DATA

GROUND STRATA

Depth (m)	Type	Test Result	Level (mLD)	Legend	Depth (m)	Description	Water	Standpipe
					0.20	CONCRETE. reinforced		
						MADE GROUND. non cohesive aggregate of crushed brick, ash and dry clay. Coarse granular material, poorly sorted.		
1.50-1.95	D	N=47			1.40	Brown weathered CLAY, hard to brittle laminated and fractured throughout. Friable along the laminae and fractures. Some unweathered grey patches present, and small amount of rootlet material near top of layer.		
2.00-2.45	D	N=28						
3.00-3.45	D	N=33			3.30	Blue / grey unweathered CLAY, hard to brittle laminated and fractured throughout. Friable along laminae and fractures. Unweathered generally less friable along laminae with some moisture and weathering in fracture planes. Waxy texture becoming harder with depth.		
4.00-4.45	D	N=47						
5.00-5.45	D	N=51						

Continued next sheet

SAMPLE/TEST KEY
D - Small Disturbed Sample
B - Bulk Sample
U - Undisturbed Sample (& Blows)
W - Water Sample
S - Standard Penetration Test
C - Cone Penetration Test
N - Penetration Test 'N' Value
* - Partial Seating Penetration
Cu - Undrained Shear Strength kPa

 Water Strike
 Water Level

REMARKS

Hole installed with 50mm HDPE liner, backfilled with pea gravel, sealed with bentonite and completed with lockable metal cover.

Scale =1:32

Boring Progress & Water Observation Depths (m)

Date	Strike	Level	Minutes	Casing	Sealed
Chiselling			Water Added		Logged
From	To	Hours	From	To	By
					JDL

CAPITA SYMONDS (Structures) Ltd

Radius House
51 Clarendon Road
Watford Herts WD17 1HU
Tel : 01923 817537
Fax : 01923 228516

Project : The Brickworks, Horsham

Job Number : CS007890A

Client : Gazeleys

Dates : 22/06/2005

Method :

N Coord : -

G.L. (mLD) -

Exploratory Hole No.

BH3

Sheet 2 of 2

E Coord : -

Driller : JDL

SAMPLING DATA

GROUND STRATA

Depth (m)	Type	Test Result	Level (mLD)	Legend	Depth (m)	Description	Water	Standpipe
6.00-6.45	D	N=28				Blue / grey unweathered CLAY, hard to brittle laminated and fractured throughout. Friable along laminae and fractures. Unweathered generally less friable along laminae with some moisture and weathering in fracture planes. Waxy texture becoming harder with depth.		
7.00-7.45	D	N=53						
8.00-8.45	D	N=46		8.00	End of Exploratory Hole at 8.00 m			

SAMPLE/TEST KEY

D - Small Disturbed Sample
B - Bulk Sample
U - Undisturbed Sample (& Blows)
W - Water Sample
S - Standard Penetration Test
C - Cone Penetration Test
N - Penetration Test 'N' Value
* - Partial Seating Penetration
Cu - Undrained Shear Strength kPa

Water Strike

Water Level

REMARKS

Hole installed with 50mm HDPE liner, backfilled with pea gravel, sealed with bentonite and completed with lockable metal cover.

Scale =1:32

Boring Progress & Water Observation Depths (m)

Date	Strike	Level	Minutes	Casing	Sealed
Chiselling			Water Added		Logged By
From	To	Hours	From	To	
					JDL

CAPITA SYMONDS (Structures) Ltd

Radius House
51 Clarendon Road
Watford
Herts WD17 1HU
Tel : 01923 817537
Fax : 01923 228516

Project : The Brickworks, Horsham

Job Number : CS007890A

Client : Gazeleys

Dates : 23/06/2005

N Coord : -

Method :

G.L. (mLD) -

Exploratory Hole No.

BH4


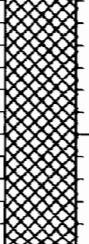
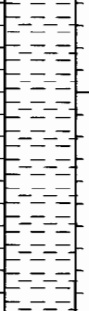
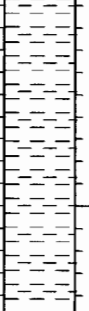



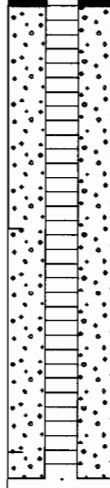
Sheet 1 of 2

E Coord : -

Driller : JDL

SAMPLING DATA

GROUND STRATA

Depth (m)	Type	Test Result	Level (mLD)	Legend	Depth (m)	Description	Water	Standpipe
					0.30	CONCRETE. reinforced		
					1.50	MADE GROUND. non cohesive aggregate of crushed brick, ash and dry clay. Coarse granular, poorly sorted material.		
1.50-1.95	D	N=17				Brown weathered CLAY, hard to brittle laminated and fractured throughout. Friable along the laminae and fractures. Some unweathered grey patches present, and small amount of rootlet material near top of layer.		
2.00-2.45	D	N=31						
3.00-3.45	D	N=36						
4.00-4.45	D	N=51						
5.00-5.45	D	N=29				Continued next sheet		

SAMPLE/TEST KEY

D - Small Disturbed Sample
B - Bulk Sample
U - Undisturbed Sample (& Blows)
W - Water Sample
S - Standard Penetration Test
C - Cone Penetration Test
N - Penetration Test 'N' Value
* - Partial Seating Penetration
Cu - Undrained Shear Strength kPa

 Water Strike

 Water Level

REMARKS

Hole installed with 50mm HDPE liner, backfilled with pea gravel, sealed with bentonite and completed with lockable metal cover.

Scale =1:32

Boring Progress & Water Observation Depths (m)

Date	Strike	Level	Minutes	Casing	Sealed
Chiselling			Water Added		Logged By
From	To	Hours	From	To	
					JDL

CAPITA SYMONDS (Structures) Ltd

Radius House
51 Clarendon Road
Watford Herts WD17 1HU
Tel : 01923 817537
Fax : 01923 228516

Project : The Brickworks, Horsham		Exploratory Hole No. BH4
Job Number : CS007890A		
Client : Gazeleys		Sheet 2 of 2
Dates : 23/06/2005	N Coord : -	E Coord : -
Method :	G.L. (mLD) -	Driller : JDL

SAMPLING DATA

GROUND STRATA

Depth (m)	Type	Test Result	Level (mLD)	Legend	Depth (m)	Description	Water	Standpipe
6.00-6.45	D	N=37			6.00	Brown weathered CLAY, hard to brittle laminated and fractured throughout. Friable along the laminae and fractures. Some unweathered grey patches present, and small amount of rootlet material near top of layer.		
7.00-7.45	D	N=44			7.00	Blue / grey unweathered CLAY, hard to brittle laminated and fractured throughout. Friable along laminae and fractures. Unweathered generally less friable along laminae with some moisture and weathering in fracture planes. Waxy texture becoming harder with depth.		
-----						End of Exploratory Hole at 7.00 m		

SAMPLE/TEST KEY

- D - Small Disturbed Sample
- B - Bulk Sample
- U - Undisturbed Sample (& Blows)
- W - Water Sample
- S - Standard Penetration Test
- C - Cone Penetration Test
- N - Penetration Test 'N' Value
- * - Partial Seating Penetration
- Cu - Undrained Shear Strength kPa

Water Strike

Water Level

REMARKS

Hole installed with 50mm HDPE liner, backfilled with pea gravel, sealed with bentonite and completed with lockable metal cover.

Scale =1:32

Boring Progress & Water Observation Depths (m)

Date	Strike	Level	Minutes	Casing	Sealed
Chiselling			Water Added		Logged By
From	To	Hours	From	To	
					JDL

CAPITA SYMONDS (Structures) Ltd

Radius House
51 Clarendon Road
Watford Herts WD17 1HU
Tel : 01923 817537
Fax : 01923 228516

Project : The Brickworks, Horsham

Job Number : CS007890A

Client : Gazeleys

Dates : 24/06/2005

N Coord : -

Method :

G.L. (mLD) -

Exploratory Hole No.

BH5

Sheet 1 of 2

E Coord : -

Driller : JDL

SAMPLING DATA

GROUND STRATA

Depth (m)	Type	Test Result	Level (mLD)	Legend	Depth (m)	Description	Water	Standpipe
						CONCRETE		
					0.30	MADE GROUND. non cohesive aggregate of crushed brick, ash and dry clay. Coarse granular material, poorly sorted.		
					1.00	Brown weathered CLAY, hard to brittle, laminated and fractured throughout. Friable along laminae and fracture planes. More weathered near top of unit, with some grey unweathered patches.		
1.50-1.95	D	N=36			1.50			
						Blue / grey unweathered CLAY, hard to brittle laminated and fractured throughout. Friable along laminae and fractures. Unweathered generally less friable along laminae with some moisture and weathering in fracture planes. Waxy texture becoming harder with depth.		
2.00-2.45	D	N=50						
						Brown weathered CLAY, hard to brittle, laminated and fractured throughout. Friable along laminae and fracture planes. More weathered near top of unit, with some grey unweathered patches.		
3.00-3.45	D	N=28			3.30			
4.00-4.45	D	N=28						
5.00-5.45	D	N=25						
						Continued next sheet		

SAMPLE/TEST KEY
 D - Small Disturbed Sample
 B - Bulk Sample
 U - Undisturbed Sample (& Blows)
 W - Water Sample
 S - Standard Penetration Test
 C - Cone Penetration Test
 N - Penetration Test 'N' Value
 * - Partial Seating Penetration
 Cu - Undrained Shear Strength kPa

Water Strike
 Water Level

REMARKS
 Hole installed with 50mm HDPE liner, backfilled with pea gravel, sealed with bentonite and completed with lockable metal cover.

Scale =1:32

Boring Progress & Water Observation Depths (m)

Date	Strike	Level	Minutes	Casing	Sealed
Chiselling			Water Added		Logged
From	To	Hours	From	To	By
					JDL

CAPITA SYMONDS (Structures) Ltd

Radius House
51 Clarendon Road
Watford Herts WD17 1HU
Tel : 01923 817537
Fax : 01923 228516

Project : The Brickworks, Horsham

Job Number : CS007890A

Client : Gazeleys

Dates : 24/06/2005

Method :

N Coord : -

G.L. (mLD) -

Exploratory Hole No.

BH5

Sheet 2 of 2

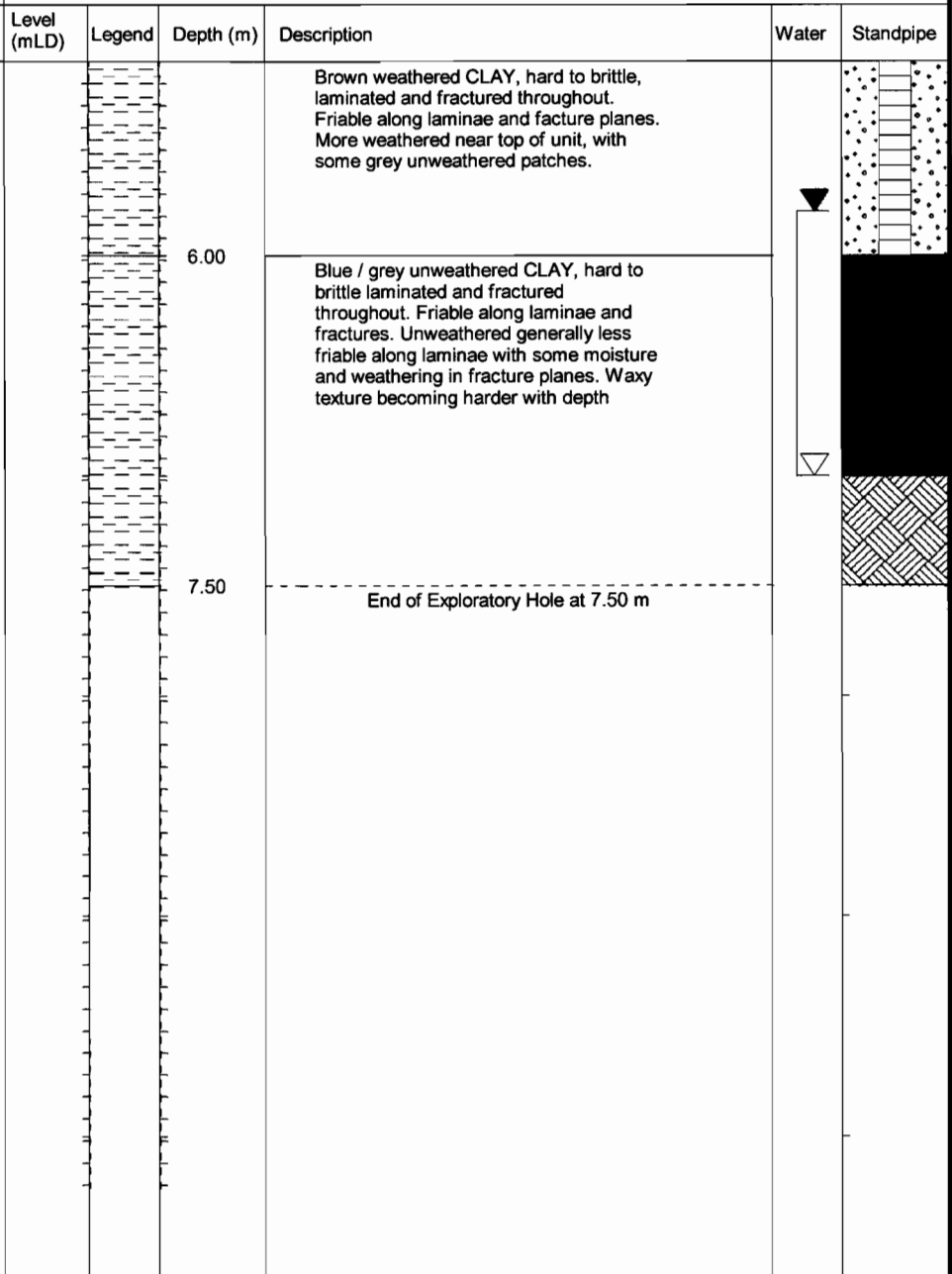
E Coord : -

Driller : JDL

SAMPLING DATA

Depth (m)	Type	Test Result
6.00-6.45	D	N=48
7.00-7.45	D	N=31

GROUND STRATA



SAMPLE/TEST KEY

- D - Small Disturbed Sample
- B - Bulk Sample
- U - Undisturbed Sample (& Blows)
- W - Water Sample
- S - Standard Penetration Test
- C - Cone Penetration Test
- N - Penetration Test 'N' Value
- * - Partial Seating Penetration
- Cu - Undrained Shear Strength kPa

Water Strike

Water Level

REMARKS

Hole installed with 50mm HDPE liner, backfilled with pea gravel, sealed with bentonite and completed with lockable metal cover.

Scale =1:32

Boring Progress & Water Observation Depths (m)

Date	Strike	Level	Minutes	Casing	Sealed
Chiselling			Water Added		Logged By
From	To	Hours	From	To	
					JDL

CAPITA SYMONDS (Structures) Ltd

Radius House
51 Clarendon Road
Watford
Herts WD17 1HU
Tel : 01923 817537
Fax : 01923 228516

Project : The Brickworks, Horsham

Job Number : CS007890A

Client : Gazeleys

Dates : 25/06/2005

Method :

N Coord : -

G.L. (mLD) -

Exploratory Hole No.

BH6




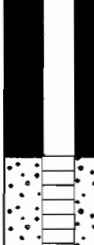
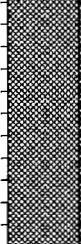
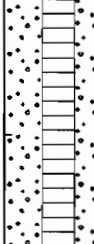
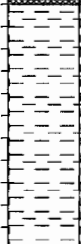
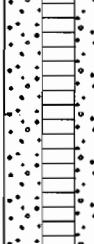


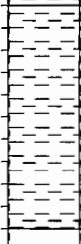

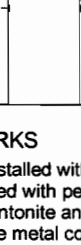
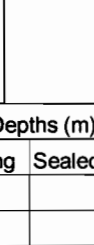






Sheet 1 of 1

E Coord : -

Driller : JDL

SAMPLING DATA

GROUND STRATA

Depth (m)	Type	Test Result	Level (mLD)	Legend	Depth (m)	Description	Water	Standpipe
						CONCRETE		
					0.30	MADE GROUND. non cohesive aggregate of crushed brick, ash and dry clay. Coarse granular material, poorly sorted.		
1.50-1.95	D	N=5						
2.00-2.45	D	N=9						
					2.50			
3.00-3.45	D	N=44				Brown weathered CLAY, hard to brittle, laminated and fractured throughout. Friable along laminae and fracture planes. More weathered near top of unit, with some grey unweathered patches.		
4.00-4.45	D	N=43						
					4.00			
5.00-5.45	D	N=48						
					5.00			
						End of Exploratory Hole at 5.00 m		

SAMPLE/TEST KEY

D - Small Disturbed Sample
B - Bulk Sample
U - Undisturbed Sample (& Blows)
W - Water Sample
S - Standard Penetration Test
C - Cone Penetration Test
N - Penetration Test 'N' Value
* - Partial Seating Penetration
Cu - Undrained Shear Strength kPa

 Water Strike

 Water Level

REMARKS

Hole installed with 50mm HDPE liner, backfilled with pea gravel, sealed with bentonite and completed with lockable metal cover.

Scale = 1:32

Boring Progress & Water Observation Depths (m)

Date	Strike	Level	Minutes	Casing	Sealed
Chiselling			Water Added		Logged
From	To	Hours	From	To	By
					JDL

CAPITA SYMONDS (Structures) Ltd

Radius House
51 Clarendon Road
Watford Herts WD17 1HU
Tel : 01923 817537
Fax : 01923 228516

Project : The Brickworks, Horsham	
Job Number : CS007890A	
Client : Gazeleys	
Dates : 23/06/2005	N Coord : -
Method :	G.L. (mLD) -

Exploratory Hole No.

BH7


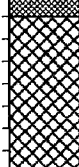
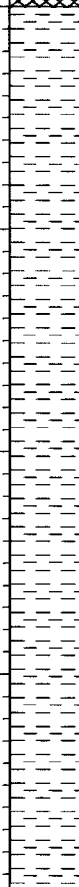
Sheet 1 of 2

E Coord : -



Driller : JDL

SAMPLING DATA

GROUND STRATA

Depth (m)	Type	Test Result	Level (mLD)	Legend	Depth (m)	Description	Water	Standpipe
						MADE GROUND. TARMAC		
					0.30	MADE GROUND. non cohesive aggregate of crushed brick, ash and dry clay. Coarse granular material, poorly sorted.		
					1.00	Brown weathered CLAY, hard to brittle, laminated and fractured throughout. Friable along laminae and fracture planes. More weathered near top of unit, with some grey unweathered patches.		
1.50-1.95	D	N=19						
2.00-2.45	D	N=21						
3.00-3.45	D	N=49						
4.00-4.45	D	N=47						
5.00-5.45	D	N=28			5.00	Continued next sheet		

SAMPLE/TEST KEY
D - Small Disturbed Sample
B - Bulk Sample
U - Undisturbed Sample (& Blows)
W - Water Sample
S - Standard Penetration Test
C - Cone Penetration Test
N - Penetration Test 'N' Value
* - Partial Seating Penetration
Cu - Undrained Shear Strength kPa

 Water Strike
 Water Level

REMARKS

Hole installed with 50mm HDPE liner, backfilled with pea gravel, sealed with bentonite and completed with lockable metal cover.

Scale =1:32

Boring Progress & Water Observation Depths (m)

Date	Strike	Level	Minutes	Casing	Sealed
Chiselling			Water Added		Logged By
From	To	Hours	From	To	
					JDL

CAPITA SYMONDS (Structures) Ltd

Radius House
51 Clarendon Road
Watford Herts WD17 1HU
Tel : 01923 817537
Fax : 01923 228516

Project : The Brickworks, Horsham

Job Number : CS007890A

Client : Gazeleys

Dates : 23/06/2005

Method :

N Coord : -

G.L. (mLD) -

Exploratory Hole No.

BH7

Sheet 2 of 2

E Coord : -

Driller : JDL

SAMPLING DATA

GROUND STRATA

Depth (m)	Type	Test Result	Level (mLD)	Legend	Depth (m)	Description	Water	Standpipe
					5.15	Blue / grey unweathered CLAY, hard to brittle laminated and fractured throughout. Friable along laminae and fractures. Unweathered generally less friable along laminae with some moisture and weathering in fracture planes. Waxy texture becoming harder with depth.		
						End of Exploratory Hole at 6.50 m		

SAMPLE/TEST KEY

- D - Small Disturbed Sample
- B - Bulk Sample
- U - Undisturbed Sample (& Blows)
- W - Water Sample
- S - Standard Penetration Test
- C - Cone Penetration Test
- N - Penetration Test 'N' Value
- * - Partial Seating Penetration
- Cu - Undrained Shear Strength kPa

☒ Water Strike

▼ Water Level

REMARKS

Hole installed with 50mm HDPE liner, backfilled with pea gravel, sealed with bentonite and completed with lockable metal cover.

Scale =1:32

Boring Progress & Water Observation Depths (m)

Date	Strike	Level	Minutes	Casing	Sealed
Chiselling			Water Added		Logged By
From	To	Hours	From	To	
					JDL

CAPITA SYMONDS (Structures) Ltd

Radius House
51 Clarendon Road
Watford Herts WD17 1HU
Tel : 01923 817537
Fax : 01923 228516

Project : The Brickworks, Horsham

Job Number : CS007890A

Client : Gazeleys

Dates : 28/06/2005

N Coord : -

Method :

G.L. (mLD) -

Exploratory Hole No.

BH8

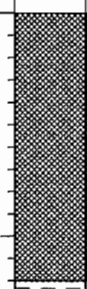

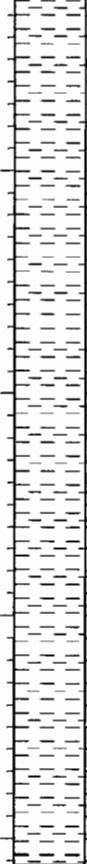
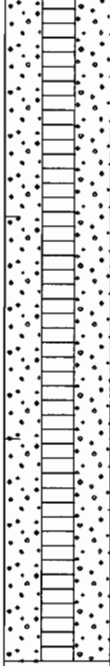
Sheet 1 of 2

E Coord : -

Driller : JDL

SAMPLING DATA

GROUND STRATA

Depth (m)	Type	Test Result	Level (mLD)	Legend	Depth (m)	Description	Water	Standpipe
						MADE GROUND. non cohesive aggregate of crushed brick, ash and dry clay. Coarse granular material, poorly sorted.		
1.50-1.95	D	N=20			1.20	Brown weathered CLAY, hard to brittle, laminated and fractured throughout. Friable along laminae and fracture planes. More weathered near top of unit, with some grey unweathered patches.		
2.00-2.45	D	N=18						
3.00-3.45	D	N=52						
4.00-4.45	D	N=36						
5.00-5.45	D	N=31						

Continued next sheet

SAMPLE/TEST KEY

- D - Small Disturbed Sample
- B - Bulk Sample
- U - Undisturbed Sample (& Blows)
- W - Water Sample
- S - Standard Penetration Test
- C - Cone Penetration Test
- N - Penetration Test 'N' Value
- * - Partial Seating Penetration
- Cu - Undrained Shear Strength kPa

 Water Strike

 Water Level

REMARKS

Hole installed with 50mm HDPE liner, backfilled with pea gravel, sealed with bentonite and completed with lockable metal cover.

Scale =1:32

Boring Progress & Water Observation Depths (m)

Date	Strike	Level	Minutes	Casing	Sealed
Chiselling			Water Added		Logged By
From	To	Hours	From	To	
					JDL

CAPITA SYMONDS (Structures) Ltd

Radius House
51 Clarendon Road
Watford Herts WD17 1HU
Tel : 01923 817537
Fax : 01923 228516

Project : The Brickworks, Horsham

Job Number : CS007890A

Client : Gazeleys

Dates : 28/06/2005

N Coord : -

Method :

G.L. (mLD) -

Exploratory Hole No.

BH8

Sheet 2 of 2

E Coord : -

Driller : JDL

SAMPLING DATA

GROUND STRATA

Depth (m)	Type	Test Result	Level (mLD)	Legend	Depth (m)	Description	Water	Standpipe
					5.17	Brown weathered CLAY, hard to brittle, laminated and fractured throughout. Friable along laminae and fracture planes. More weathered near top of unit, with some grey unweathered patches. End of Exploratory Hole at 5.17 m		

SAMPLE/TEST KEY

D - Small Disturbed Sample
B - Bulk Sample
U - Undisturbed Sample (& Blows)
W - Water Sample
S - Standard Penetration Test
C - Cone Penetration Test
N - Penetration Test 'N' Value
* - Partial Seating Penetration
Cu - Undrained Shear Strength kPa

☒ Water Strike

▼ Water Level

REMARKS

Hole installed with 50mm HDPE liner, backfilled with pea gravel, sealed with bentonite and completed with lockable metal cover.

Scale =1:32

Boring Progress & Water Observation Depths (m)

Date	Strike	Level	Minutes	Casing	Sealed
Chiselling			Water Added		Logged
From	To	Hours	From	To	By
					JDL

CAPITA SYMONDS (Structures) Ltd

Radius House
51 Clarendon Road
Watford
Herts WD17 1HU
Tel : 01923 817537
Fax : 01923 228516

Project : The Brickworks, Horsham

Job Number : CS007890A

Client : Gazeleys

Dates : 25/06/2005

Method :

N Coord : -

G.L. (mLD) -

Exploratory Hole No.

BH9

Sheet 1 of 2

E Coord : -

Driller : JDL

SAMPLING DATA

GROUND STRATA

Depth (m)	Type	Test Result	Level (mLD)	Legend	Depth (m)	Description	Water	Standpipe
						CONCRETE		
					0.30	MADE GROUND. non cohesive aggregate of crushed brick, ash and dry clay. Coarse granular material, poorly sorted.		
1.50-1.95	D	N=3			1.40	Brown weathered CLAY, hard to brittle, laminated and fractured throughout. Friable along laminae and fracture planes. More weathered near top of unit, with some grey unweathered patches.		
2.00-2.45	D	N=12						
3.00-3.45	D	N=20						
4.00-4.45	D	N=54						
5.00-5.45	D	N=28						
						Continued next sheet		

SAMPLE/TEST KEY

D - Small Disturbed Sample
B - Bulk Sample
U - Undisturbed Sample (& Blows)
W - Water Sample
S - Standard Penetration Test
C - Cone Penetration Test
N - Penetration Test 'N' Value
* - Partial Seating Penetration
Cu - Undrained Shear Strength kPa

Water Strike

Water Level

REMARKS

Hole installed with 50mm HDPE liner, backfilled with pea gravel, sealed with bentonite and completed with lockable metal cover.

Scale =1:32

Boring Progress & Water Observation Depths (m)

Date	Strike	Level	Minutes	Casing	Sealed
Chiselling			Water Added		Logged By
From	To	Hours	From	To	
					JDL

CAPITA SYMONDS (Structures) Ltd

Radius House
51 Clarendon Road
Watford Herts WD17 1HU
Tel : 01923 817537
Fax : 01923 228516

Project : The Brickworks, Horsham

Job Number : CS007890A

Client : Gazeleys

Dates : 25/06/2005

Method :

N Coord : -

G.L. (mLD) -

Exploratory Hole No.

BH9

Sheet 2 of 2

E Coord : -

Driller : JDL

SAMPLING DATA

GROUND STRATA

Depth (m)	Type	Test Result	Level (mLD)	Legend	Depth (m)	Description	Water	Standpipe
6.00-6.45	D	N=26			5.50	Brown weathered CLAY, hard to brittle, laminated and fractured throughout. Friable along laminae and fracture planes. More weathered near top of unit, with some grey unweathered patches.		
7.00-7.45	D	N=27				Blue / grey unweathered CLAY, hard to brittle laminated and fractured throughout. Friable along laminae and fractures. Unweathered generally less friable along laminae with some moisture and weathering in fracture planes. Waxy texture becoming harder with depth.		
8.00-8.45	D	N=32			8.15	End of Exploratory Hole at 8.15 m		

SAMPLE/TEST KEY

D - Small Disturbed Sample
B - Bulk Sample
U - Undisturbed Sample (& Blows)
W - Water Sample
S - Standard Penetration Test
C - Cone Penetration Test
N - Penetration Test 'N' Value
* - Partial Seating Penetration
Cu - Undrained Shear Strength kPa

Water Strike

Water Level

REMARKS

Hole installed with 50mm HDPE liner, backfilled with pea gravel, sealed with bentonite and completed with lockable metal cover.

Scale =1:32

Boring Progress & Water Observation Depths (m)

Date	Strike	Level	Minutes	Casing	Sealed
Chiselling			Water Added		Logged
From	To	Hours	From	To	By
					JDL

CAPITA SYMONDS (Structures) Ltd

Radius House
51 Clarendon Road
Watford Herts WD17 1HU
Tel : 01923 817537
Fax : 01923 228516

Project : The Brickworks, Horsham

Job Number : CS007890A

Client : Gazeleys

Dates : 27/06/2005

N Coord : -

Method :

G.L. (mLD) -

Exploratory Hole No.

BH10

Sheet 1 of 2

E Coord : -

Driller : JDL

SAMPLING DATA

GROUND STRATA

Depth (m)	Type	Test Result	Level (mLD)	Legend	Depth (m)	Description	Water	Standpipe
1.50-1.95	D	N=19				MADE GROUND. non cohesive aggregate of crushed brick, ash and dry clay. Coarse granular material, poorly sorted.		
2.00-2.45	D	N=6						
3.00-3.45	D	N=5			3.00	Soft blue / grey CLAY, flexible some brown weathered patches.		
4.00-4.45	D	N=46			4.00	Brown weathered CLAY, hard to brittle, laminated and fractured throughout. Friable along laminae and fracture planes. More weathered near top of unit, with some grey unweathered patches.		
5.00-5.45	D	N=52				Continued next sheet		

SAMPLE/TEST KEY

D - Small Disturbed Sample
B - Bulk Sample
U - Undisturbed Sample (& Blows)
W - Water Sample
S - Standard Penetration Test
C - Cone Penetration Test
N - Penetration Test 'N' Value
* - Partial Seating Penetration
Cu - Undrained Shear Strength kPa

Water Strike

Water Level

REMARKS

Hole installed with 50mm HDPE liner, backfilled with pea gravel, sealed with bentonite and completed with lockable metal cover.

Scale =1:32

Boring Progress & Water Observation Depths (m)

Date	Strike	Level	Minutes	Casing	Sealed
Chiselling			Water Added		Logged By
From	To	Hours	From	To	
					JDL

CAPITA SYMONDS (Structures) Ltd

Radius House
51 Clarendon Road
Watford Tel : 01923 817537
Herts WD17 1HU Fax : 01923 228516

Project : The Brickworks, Horsham

Job Number : CS007890A

Client : Gazeleys

Dates : 27/06/2005

Method :

N Coord : -

G.L. (mLD) -

Exploratory Hole No.

BH10

Sheet 2 of 2

E Coord : -

Driller : JDL

SAMPLING DATA

GROUND STRATA

Depth (m)	Type	Test Result	Level (mLD)	Legend	Depth (m)	Description	Water	Standpipe
6.00-6.45	D	N=35				Brown weathered CLAY, hard to brittle, laminated and fractured throughout. Friable along laminae and fracture planes. More weathered near top of unit, with some grey unweathered patches.		
7.00-7.45	D	N=40						
8.00-8.45	D	N=51			8.00			
9.00-9.45	D	N=27				Blue / grey unweathered CLAY, hard to brittle laminated and fractured throughout. Friable along laminae and fractures. Unweathered generally less friable along laminae with some moisture and weathering in fracture planes. Waxy texture becoming harder with depth.		
10.00-10.45	D	N=31			10.00	End of Exploratory Hole at 10.00 m		

SAMPLE/TEST KEY
 D - Small Disturbed Sample
 B - Bulk Sample
 U - Undisturbed Sample (& Blows)
 W - Water Sample
 S - Standard Penetration Test
 C - Cone Penetration Test
 N - Penetration Test 'N' Value
 * - Partial Seating Penetration
 Cu - Undrained Shear Strength kPa

Water Strike
 Water Level

REMARKS

Hole installed with 50mm HDPE liner, backfilled with pea gravel, sealed with bentonite and completed with lockable metal cover.

Scale =1:32

Boring Progress & Water Observation Depths (m)

Date	Strike	Level	Minutes	Casing	Sealed
Chiselling			Water Added		Logged
From	To	Hours	From	To	By
					JDL

CAPITA SYMONDS (Structures) Ltd

Radius House
51 Clarendon Road
Watford Herts WD17 1HU
Tel : 01923 817537
Fax : 01923 228516

Project : Wealden Brickworks, Horsham

Job Number : CS007890

Client :

Dates : 21/06/2005

N Coord : -

Method :

G.L. (mLD) -

Exploratory Hole No.

DS01

Sheet 1 of 1

E Coord : -

Driller :

SAMPLING DATA

GROUND STRATA

Depth (m)	Type	Test Result	Level (mLD)	Legend	Depth (m)	Description	Water	Standpipe
					0.22	CONCRETE.		
					2.30	MADE GROUND: (loose) reddish brown locally grey variegated ashy brick SAND with some to much fine to medium gravel of brick coal coke clinker. Occasional brick cobbles.		
					2.85	MADE GROUND: firm grey / yellowish brown / brown variegated CLAY with much mudstone gravel.		
					4.00	Very stiff to hard (grades to mudstone) with poorly developed thin to thick laminae grey / yellow variegated CLAY.		
					4.00	End of Exploratory Hole at 4.00 m		

SAMPLE/TEST KEY

D - Small Disturbed Sample
B - Bulk Sample
U - Undisturbed Sample (& Blows)
W - Water Sample
S - Standard Penetration Test
C - Cone Penetration Test
N - Penetration Test 'N' Value
* - Partial Seating Penetration
Cu - Undrained Shear Strength kPa

Water Strike

Water Level

REMARKS

Scale =1:32

Boring Progress & Water Observation Depths (m)

Date	Strike	Level	Minutes	Casing	Sealed
Chiselling			Water Added		Logged By
From	To	Hours	From	To	

CAPITA SYMONDS (Structures) Ltd

Radius House
51 Clarendon Road
Watford Herts WD17 1HU
Tel : 01923 817537
Fax : 01923 228516

Project : Wealden Brickworks, Horsham

Job Number : CS007890

Client :

Dates : 21/06/2005

Method :

N Coord : -

G.L. (mLD) -

Exploratory Hole No.

DS02

Sheet 1 of 1

E Coord : -

Driller :

SAMPLING DATA

GROUND STRATA

Depth (m)	Type	Test Result	Level (mLD)	Legend	Depth (m)	Description	Water	Standpipe
					0.19	CONCRETE.		
					0.25	MADE GROUND: brick COBBLES.		
					1.70	MADE GROUND: (loose) reddish brown locally grey variegated ashy brick SAND with some to much fine to medium gravel of brick coal coke clinker. Occasional brick cobbles.		
					2.55	MADE GROUND: firm to stiff yellowish brown CLAY with gravel of mudstone brick clinker coke.		
					3.70	MADE GROUND: (loose) reddish brown locally grey variegated ashy brick SAND with some to much fine to medium gravel of brick coal coke clinker. Occasional brick cobbles.		
					4.00	Firm rapidly becoming very stiff to hard (grades to mudstone) with poorly developed thin to thick laminae grey / yellow variegated CLAY.		
						End of Exploratory Hole at 4.00 m		

SAMPLE/TEST KEY
 D - Small Disturbed Sample
 B - Bulk Sample
 U - Undisturbed Sample (& Blows)
 W - Water Sample
 S - Standard Penetration Test
 C - Cone Penetration Test
 N - Penetration Test 'N' Value
 * - Partial Seating Penetration
 Cu - Undrained Shear Strength kPa

▽ Water Strike

▼ Water Level

REMARKS

Scale =1:32

Boring Progress & Water Observation Depths (m)

Date	Strike	Level	Minutes	Casing	Sealed
Chiselling			Water Added		Logged
From	To	Hours	From	To	By

CAPITA SYMONDS (Structures) Ltd

Radius House
51 Clarendon Road
Watford Herts WD17 1HU
Tel : 01923 817537
Fax : 01923 228516

Project : Wealden Brickworks, Horsham

Job Number : CS007890

Client :

Dates : 21/06/2005

N Coord : -

Method :

G.L. (mLD) -

Exploratory Hole No.

DS03





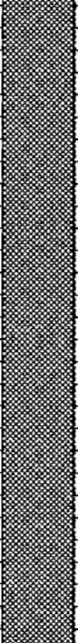
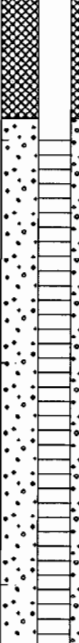
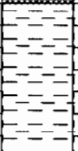



Sheet 1 of 1

E Coord : -

Driller :

SAMPLING DATA

GROUND STRATA

Depth (m)	Type	Test Result	Level (mLD)	Legend	Depth (m)	Description	Water	Standpipe
						CONCRETE.		
			0.22					
			0.30			MADE GROUND: brick COBBLES.		
						MADE GROUND: (loose) reddish brown locally grey variegated ashy brick SAND with some to much fine to medium gravel of brick coal coke clinker. Occasional brick cobbles.		
					3.30	Firm rapidly becoming very stiff to hard (grades to mudstone) with poorly developed thin to thick laminae grey / yellow variegated becoming light grey CLAY.		
			4.00			End of Exploratory Hole at 4.00 m		

SAMPLE/TEST KEY

- D - Small Disturbed Sample
- B - Bulk Sample
- U - Undisturbed Sample (& Blows)
- W - Water Sample
- S - Standard Penetration Test
- C - Cone Penetration Test
- N - Penetration Test 'N' Value
- * - Partial Seating Penetration
- Cu - Undrained Shear Strength kPa

 Water Strike

 Water Level

REMARKS

Scale =1:32

Boring Progress & Water Observation Depths (m)

Date	Strike	Level	Minutes	Casing	Sealed
Chiselling			Water Added		Logged By
From	To	Hours	From	To	

CAPITA SYMONDS (Structures) Ltd

Radius House
51 Clarendon Road
Watford Herts WD17 1HU
Tel : 01923 817537
Fax : 01923 228516

Project : Wealden Brickworks, Horsham

Job Number : CS007890

Client :

Dates : 21/06/2005

N Coord : -

Method :

G.L. (mLD) -

Exploratory Hole No.

DS04

Sheet 1 of 1

E Coord : -

Driller :

SAMPLING DATA

GROUND STRATA

Depth (m)	Type	Test Result	Level (mLD)	Legend	Depth (m)	Description	Water	Standpipe
					0.10	CONCRETE.		
					0.25	MADE GROUND: brick COBBLES.		
					1.45	MADE GROUND: (loose) reddish brown locally grey variegated ashy brick SAND with some to much fine to medium gravel of brick coal coke clinker. Occasional brick cobbles.		
					3.70	MADE GROUND: soft to firm grey / yellowish brown / brown variegated CLAY with much mudstone gravel.		
					4.00	Very stiff to hard (grades to mudstone) with poorly developed thin to thick laminae grey / yellow variegated CLAY.		
						End of Exploratory Hole at 4.00 m		

SAMPLE/TEST KEY
D - Small Disturbed Sample
B - Bulk Sample
U - Undisturbed Sample (& Blows)
W - Water Sample
S - Standard Penetration Test
C - Cone Penetration Test
N - Penetration Test 'N' Value
* - Partial Seating Penetration
Cu - Undrained Shear Strength kPa

Water Strike
 Water Level

REMARKS

Scale =1:32

Boring Progress & Water Observation Depths (m)

Date	Strike	Level	Minutes	Casing	Sealed
Chiselling			Water Added		Logged By
From	To	Hours	From	To	

CAPITA SYMONDS (Structures) Ltd

Radius House
51 Clarendon Road
Watford
Herts WD17 1HU
Tel : 01923 817537
Fax : 01923 228516

Project : Wealden Brickworks, Horsham

Job Number : CS007890

Client :

Dates : 21/06/2005

Method :

N Coord : -

G.L. (mLD) -

Exploratory Hole No.

DS05

Sheet 1 of 1

E Coord : -

Driller :

SAMPLING DATA

GROUND STRATA

Depth (m)	Type	Test Result	Level (mLD)	Legend	Depth (m)	Description	Water	Standpipe
						CONCRETE.		
					0.18	MADE GROUND: stiff grey / yellowish brown / brown variegated CLAY with much mudstone & occasional coal gravel.		
					0.75	MADE GROUND: (loose) yellowish brown becoming reddish brown locally grey variegated ashy SAND with some to much fine to medium gravel of brick coal coke clinker. Occasional brick cobbles.		
					2.10	MADE GROUND: firm yellowish brown / light brown variegated CLAY with much mudstone gravel.		
					3.10	MADE GROUND: firm grey CLAY with much mudstone gravel & occasional wood fragment. Weak hydrocarbon odour.		
					3.80	Firm with poorly developed thin to thick laminae grey / yellow variegated CLAY.		
					4.00	End of Exploratory Hole at 4.00 m		

SAMPLE/TEST KEY

D - Small Disturbed Sample
B - Bulk Sample
U - Undisturbed Sample (& Blows)
W - Water Sample
S - Standard Penetration Test
C - Cone Penetration Test
N - Penetration Test 'N' Value
* - Partial Seating Penetration
Cu - Undrained Shear Strength kPa

Water Strike

Water Level

REMARKS

Scale =1:32

Boring Progress & Water Observation Depths (m)

Date	Strike	Level	Minutes	Casing	Sealed
Chiselling			Water Added		Logged By
From	To	Hours	From	To	

CAPITA SYMONDS (Structures) Ltd

Radius House
51 Clarendon Road
Watford Herts WD17 1HU
Tel: 01923 817537
Fax: 01923 228516

Project : Wealden Brickworks, Horsham

Job Number : CS007890

Client :

Dates : 21/06/2005

Method :

N Coord : -

G.L. (mLD) -

Exploratory Hole No.

DS06


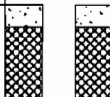
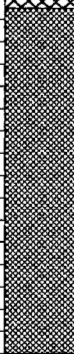
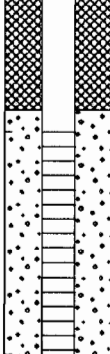
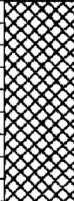
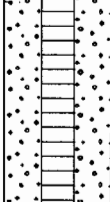
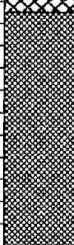
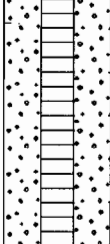
Sheet 1 of 1

E Coord : -



Driller :

SAMPLING DATA

GROUND STRATA

Depth (m)	Type	Test Result	Level (mLD)	Legend	Depth (m)	Description	Water	Standpipe
					0.45	MADE GROUND: stiff grey / yellowish brown / brown variegated CLAY with much mudstone & occasional coal gravel.		
					2.00	MADE GROUND: (loose) yellowish brown becoming reddish brown locally grey variegated ashy locally clayey SAND with some to much fine to medium gravel of brick coal coke clinker. Occasional brick cobbles.		
					2.95	MADE GROUND: firm yellowish brown / light brown variegated CLAY with much mudstone & occasional brick gravel.		
					4.00	MADE GROUND: firm grey / yellowish brown / brown variegated CLAY with much mudstone & occasional ironstone gravel. Locally weak hydrocarbon odour.		
						End of Exploratory Hole at 4.00 m		

SAMPLE/TEST KEY
D - Small Disturbed Sample
B - Bulk Sample
U - Undisturbed Sample (& Blows)
W - Water Sample
S - Standard Penetration Test
C - Cone Penetration Test
N - Penetration Test 'N' Value
* - Partial Seating Penetration
Cu - Undrained Shear Strength kPa

 Water Strike
 Water Level

REMARKS

Scale =1:32

Boring Progress & Water Observation Depths (m)

Date	Strike	Level	Minutes	Casing	Sealed
Chiselling			Water Added		Logged
From	To	Hours	From	To	By

CAPITA SYMONDS (Structures) Ltd

Radius House
51 Clarendon Road
Watford Herts WD17 1HU
Tel : 01923 817537
Fax : 01923 228516

Project : Wealden Brickworks, Horsham

Job Number : CS007890

Client :

Dates : 22/06/2005

N Coord : -

Method :

G.L. (mLD) -

Exploratory Hole No.

DS07

Sheet 1 of 1

E Coord : -

Driller :

SAMPLING DATA

GROUND STRATA

Depth (m)	Type	Test Result	Level (mLD)	Legend	Depth (m)	Description	Water	Standpipe
					0.12	CONCRETE.		
					0.25	MADE GROUND: brick GRAVEL & COBBLES.		
						Stiff to very stiff with poorly developed thin to thick laminae yellowish brown with brown staining to bedding & fissure surfaces CLAY. Locally thin interbeds of mudstone & siltstone.		
					3.40	Very stiff to hard thinly laminated blue grey CLAY.		
					4.00	End of Exploratory Hole at 4.00 m		

SAMPLE/TEST KEY

D - Small Disturbed Sample
B - Bulk Sample
U - Undisturbed Sample (& Blows)
W - Water Sample
S - Standard Penetration Test
C - Cone Penetration Test
N - Penetration Test 'N' Value
* - Partial Seating Penetration
Cu - Undrained Shear Strength kPa

Water Strike

Water Level

REMARKS

Scale =1:32

Boring Progress & Water Observation Depths (m)

Date	Strike	Level	Minutes	Casing	Sealed
Chiselling			Water Added		Logged By
From	To	Hours	From	To	

CAPITA SYMONDS (Structures) Ltd

Radius House
51 Clarendon Road
Watford Herts WD17 1HU
Tel : 01923 817537
Fax : 01923 228516

Project : Wealden Brickworks, Horsham		Exploratory Hole No.
Job Number : CS007890		DS08
Client :		Sheet 1 of 1
Dates : 22/06/2005	N Coord : -	E Coord : -
Method :	G.L. (mLD) -	Driller :

SAMPLING DATA

GROUND STRATA

Depth (m)	Type	Test Result	Level (mLD)	Legend	Depth (m)	Description	Water	Standpipe
					0.17	CONCRETE.		
					0.25	MADE GROUND: brick GRAVEL & COBBLES.		
						Stiff to very stiff with poorly developed thin to thick laminae yellowish brown with brown staining to bedding & fissure surfaces CLAY. Locally thin interbeds of mudstone & siltstone.		
					3.20	Very stiff to hard thinly laminated blue grey CLAY.		
					4.00	End of Exploratory Hole at 4.00 m		

SAMPLE/TEST KEY
D - Small Disturbed Sample
B - Bulk Sample
U - Undisturbed Sample (& Blows)
W - Water Sample
S - Standard Penetration Test
C - Cone Penetration Test
N - Penetration Test 'N' Value
* - Partial Seating Penetration
Cu - Undrained Shear Strength kPa

Water Strike
 Water Level

REMARKS

Scale =1:32

Boring Progress & Water Observation Depths (m)

Date	Strike	Level	Minutes	Casing	Sealed
Chiselling			Water Added		Logged
From	To	Hours	From	To	By

CAPITA SYMONDS (Structures) Ltd

Radius House
51 Clarendon Road
Watford Herts WD17 1HU
Tel : 01923 817537
Fax : 01923 228516

Project : Wealden Brickworks, Horsham

Job Number : CS007890

Client :

Dates : 22/06/2005

N Coord : -

Method :

G.L. (mLD) -

Exploratory Hole No.

DS09

Sheet 1 of 1

E Coord : -

Driller :

SAMPLING DATA

GROUND STRATA

Depth (m)	Type	Test Result	Level (mLD)	Legend	Depth (m)	Description	Water	Standpipe
					0.10	CONCRETE.		
					0.30	MADE GROUND: brick GRAVEL & COBBLES.		
						Stiff to very stiff with poorly developed thin to thick laminae yellowish brown with brown staining to bedding & fissure surfaces CLAY. Locally thin interbeds of mudstone & siltstone.		
					3.30	Very stiff to hard thinly laminated blue grey CLAY.		
					4.00	End of Exploratory Hole at 4.00 m		

SAMPLE/TEST KEY

D - Small Disturbed Sample
B - Bulk Sample
U - Undisturbed Sample (& Blows)
W - Water Sample
S - Standard Penetration Test
C - Cone Penetration Test
N - Penetration Test 'N' Value
* - Partial Seating Penetration
Cu - Undrained Shear Strength kPa

Water Strike

Water Level

REMARKS

Scale =1:32

Boring Progress & Water Observation Depths (m)

Date	Strike	Level	Minutes	Casing	Sealed
Chiselling			Water Added		Logged By
From	To	Hours	From	To	

CAPITA SYMONDS (Structures) Ltd

Radius House
51 Clarendon Road
Watford Herts WD17 1HU
Tel : 01923 817537
Fax : 01923 228516

Project : Wealden Brickworks, Horsham

Job Number : CS007890

Client :

Dates : 22/06/2005

Method :

N Coord : -

G.L. (mLD) -

Exploratory Hole No.

DS10

Sheet 1 of 1

E Coord : -

Driller :

SAMPLING DATA

GROUND STRATA

Depth (m)	Type	Test Result	Level (mLD)	Legend	Depth (m)	Description	Water	Standpipe
					0.12	BRICK PAVING		
					0.25	MADE GROUND: dark grey ashy SAND with much gravel of clinker & brick. Hard brick red thickly laminated CLAY (baked).		
					1.00	Very stiff locally hard (grades to mudstone) light brownish yellow / light brown variegated CLAY with poorly developed thin to thick laminae.		
					2.30	End of Exploratory Hole at 2.30 m		

SAMPLE/TEST KEY

- D - Small Disturbed Sample
- B - Bulk Sample
- U - Undisturbed Sample (& Blows)
- W - Water Sample
- S - Standard Penetration Test
- C - Cone Penetration Test
- N - Penetration Test 'N' Value
- * - Partial Seating Penetration
- Cu - Undrained Shear Strength kPa

Water Strike

Water Level

REMARKS

Scale =1:32

Boring Progress & Water Observation Depths (m)

Date	Strike	Level	Minutes	Casing	Sealed
Chiselling			Water Added		Logged By
From	To	Hours	From	To	

CAPITA SYMONDS (Structures) Ltd

Radius House
51 Clarendon Road
Watford Herts WD17 1HU
Tel : 01923 817537
Fax : 01923 228516

Project : Wealden Brickworks, Horsham

Job Number : CS007890

Client :

Dates : 22/06/2005

N Coord : -

Method :

G.L. (mLD) -

Exploratory Hole No.

DS11

Sheet 1 of 1

E Coord : -

Driller :

SAMPLING DATA

GROUND STRATA

Depth (m)	Type	Test Result	Level (mLD)	Legend	Depth (m)	Description	Water	Standpipe
					0.13	BRICK PAVING		
					0.30	MADE GROUND: dark grey ashy SAND with much gravel of clinker & brick.		
					0.90	Hard brick red thickly laminated CLAY (baked).		
					4.00	Very stiff to hard (grades to mudstone) with poorly developed thin to thick laminae grey / yellow variegated stained brown on discontinuity surfaces CLAY.		
					4.00	End of Exploratory Hole at 4.00 m		

SAMPLE/TEST KEY

D - Small Disturbed Sample
B - Bulk Sample
U - Undisturbed Sample (& Blows)
W - Water Sample
S - Standard Penetration Test
C - Cone Penetration Test
N - Penetration Test 'N' Value
* - Partial Seating Penetration
Cu - Undrained Shear Strength kPa

Water Strike

Water Level

REMARKS

Scale = 1:32

Boring Progress & Water Observation Depths (m)

Date	Strike	Level	Minutes	Casing	Sealed

Chiselling			Water Added		Logged By
From	To	Hours	From	To	

CAPITA SYMONDS (Structures) Ltd

Radius House
51 Clarendon Road
Watford
Herts WD17 1HU
Tel: 01923 817537
Fax: 01923 228516

Project : Wealden Brickworks, Horsham		Exploratory Hole No. DS12
Job Number : CS007890		
Client :		Sheet 1 of 1
Dates : 22/06/2005	N Coord : -	E Coord : -
Method :	G.L. (mLD) -	Driller :

SAMPLING DATA

GROUND STRATA

Depth (m)	Type	Test Result	Level (mLD)	Legend	Depth (m)	Description	Water	Standpipe
					0.12	BRICK PAVING		
					0.25	MADE GROUND: dark grey ashy SAND with much gravel of clinker & brick.		
					0.40	Hard brick red thickly laminated CLAY (baked).		
						Very stiff to hard (grades to mudstone) with poorly developed thin to thick laminae grey / yellow variegated stained brown on discontinuity surfaces CLAY.		
					4.00	End of Exploratory Hole at 4.00 m		

SAMPLE/TEST KEY
 D - Small Disturbed Sample
 B - Bulk Sample
 U - Undisturbed Sample (& Blows)
 W - Water Sample
 S - Standard Penetration Test
 C - Cone Penetration Test
 N - Penetration Test 'N' Value
 * - Partial Seating Penetration
 Cu - Undrained Shear Strength kPa

Water Strike
 Water Level

REMARKS

Scale = 1:32

Boring Progress & Water Observation Depths (m)					
Date	Strike	Level	Minutes	Casing	Sealed
Chiselling			Water Added		Logged By
From	To	Hours	From	To	

CAPITA SYMONDS (Structures) Ltd

Radius House
51 Clarendon Road
Watford
Herts WD17 1HU
Tel : 01923 817537
Fax : 01923 228516

Project : Wealden Brickworks, Horsham

Job Number : CS007890

Client :

Dates : 22/06/2005

N Coord : -

Method :

G.L. (mLD) -

Exploratory Hole No.

DS13

Sheet 1 of 1

E Coord : -

Driller :

SAMPLING DATA

GROUND STRATA

Depth (m)	Type	Test Result	Level (mLD)	Legend	Depth (m)	Description	Water	Standpipe
					0.14	CONCRETE.		
					0.35	MADE GROUND: stiff dark grey / dark brown variegated sandy CLAY with much gravel of clinker brick glass.		
					0.75	MADE GROUND: brown / dark brown variegated SAND & GRAVEL of ash rust iron ceramic glass rubber.		
					1.20	Soft to firm dark grey (organic) / light brown mottled CLAY. Organic odour.		
					2.10	Soft to firm light yellowish brown / light grey mottled CLAY with ordered lithorelics of mudstone.		
					4.00	Stiff to very stiff with poorly developed thin to thick laminae grey / yellow variegated stained brown on discontinuity surfaces CLAY.		
						End of Exploratory Hole at 4.00 m		

SAMPLE/TEST KEY

D - Small Disturbed Sample
B - Bulk Sample
U - Undisturbed Sample (& Blows)
W - Water Sample
S - Standard Penetration Test
C - Cone Penetration Test
N - Penetration Test 'N' Value
* - Partial Seating Penetration
Cu - Undrained Shear Strength kPa

Water Strike

Water Level

REMARKS

Scale =1:32

Boring Progress & Water Observation Depths (m)

Date	Strike	Level	Minutes	Casing	Sealed
Chiselling			Water Added		Logged By
From	To	Hours	From	To	

CAPITA SYMONDS (Structures) Ltd

Radius House
51 Clarendon Road
Watford Herts WD17 1HU
Tel : 01923 817537
Fax : 01923 228516

Project : Wealden Brickworks, Horsham

Job Number : CS007890

Client :

Dates : 22/06/2005

N Coord : -

Method :

G.L. (mLD) -

Exploratory Hole No.

DS14





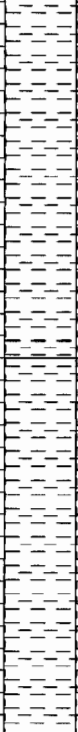
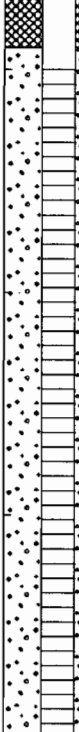


Sheet 1 of 1

E Coord : -



Driller :

SAMPLING DATA

GROUND STRATA

Depth (m)	Type	Test Result	Level (mLD)	Legend	Depth (m)	Description	Water	Standpipe
					0.45	MADE GROUND: brick GRAVEL & COBBLES.		
					0.65	MADE GROUND: brown / dark brown variegated SAND & GRAVEL of ash rust iron ceramic glass rubber.		
					2.30	Soft to firm becoming firm light yellowish brown / light grey mottled CLAY with ordered lithorelics of mudstone.		
					4.00	Stiff to very stiff with poorly developed thin to thick laminae yellowish brown with brown staining to bedding & fissure surfaces CLAY.		
						End of Exploratory Hole at 4.00 m		

SAMPLE/TEST KEY
 D - Small Disturbed Sample
 B - Bulk Sample
 U - Undisturbed Sample (& Blows)
 W - Water Sample
 S - Standard Penetration Test
 C - Cone Penetration Test
 N - Penetration Test 'N' Value
 * - Partial Seating Penetration
 Cu - Undrained Shear Strength kPa

 Water Strike
 Water Level

REMARKS

Scale =1:32

Boring Progress & Water Observation Depths (m)

Date	Strike	Level	Minutes	Casing	Sealed
Chiselling			Water Added		Logged By
From	To	Hours	From	To	

Site:	Wealden Brickworks	Client:	Gazeley
Job No.:	CS007890	Hole No.:	TP1
Level :	52.15mOD	Date:	20/6/2005



Sample	Type	Unit	Depth (m)	Description
		1	0 – 0.45	MADE GROUND. Aggregate of crushed bricks and flints gravels, in a dry granular sandy matrix, unconsolidated.
		2	0.45 – 3.7	CLAY. Pale brown with some grey / blue patches, highly weathered clay, very firm to brittle laminated and interbedded with cemented horizons in places. Clay becoming harder and more brittle with depth highly fractured and friable particularly along laminae. Waxy texture with some moisture along fracture planes, some folded laminae visible
Notes:	Slight trickle of ground water at 3.3 metres			

Site:	Wealden Brickworks	Client:	Gazeley
Job No.:	CS007890	Hole No.:	TP2
Level :	52.54mOD	Date:	20/6/2005



Sample	Type	Unit	Depth (m)	Description
		1	0 – 2.1	<p>MADE GROUND. Unconsolidated aggregate of red bricks crushed bricks, concrete and sand. Some clay patches with plastics and metal rods included. Refusal at 2.1 metres.</p> <p>Eastern side of pit collapsed as a void space, red brick structure clearly visible. Old Kiln flue.</p>
Notes:	Pit stopped at 2.1m due to obstructions. This obstruction later confirmed to be a Kiln Flue.			

Site:	WEALDEN BRICKWORKS	Client:	GAZELEY
Job No.:	CS007890	Hole No.:	TP3
Level :	52.90mOD	Date:	20/6/2005



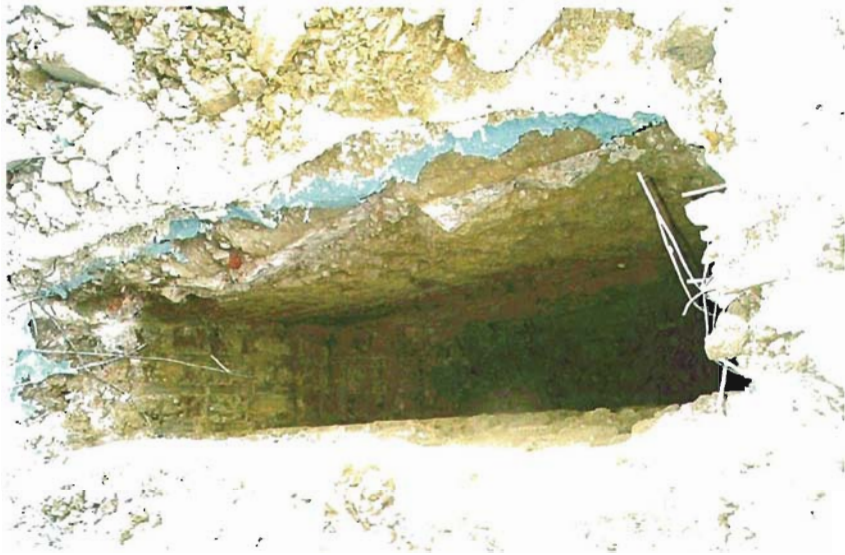
Sample	Type	Unit	Depth (m)	Description
		1	0 – 0.3	CONCRETE
		2	0.3 – 0.5	MADE GROUND. Poorly sorted aggregate of clay and ash, with various pebbles and lumps of carbonaceous material. Some rootlets and a stale odour.
		3	0.9 – 3.3	CLAY. Very firm brown weathered clay with sticky texture. Some grey patches, roots and black patches around roots. Becoming hard brittle and laminated around 2.2m blue / grey clay fractured and friable with some moisture in fractures and some weathering.
Notes:				

Site:	WEALDEN BRICKWORKS	Client:	GAZELEY
Job No.:	CS007890	Hole No.:	TP4
Level :	53.03mOD	Date:	20/6/2005



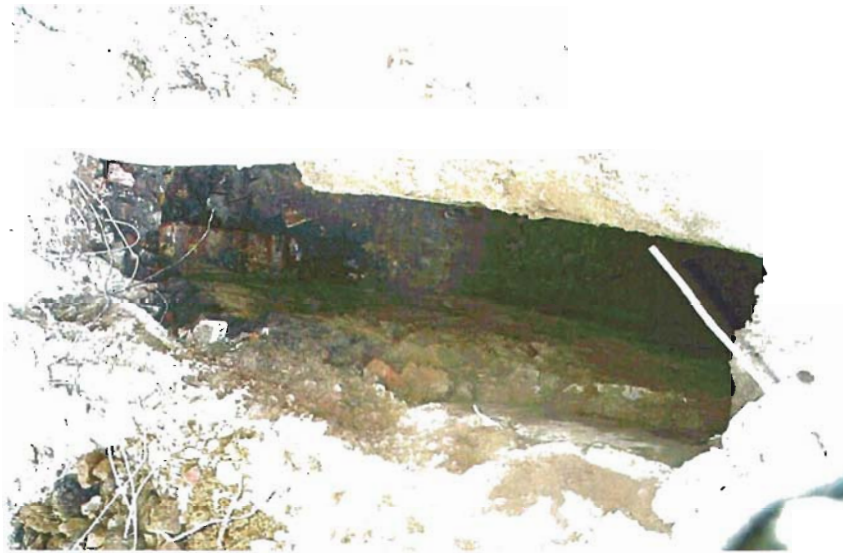
Sample	Type	Unit	Depth (m)	Description
		1	0 – 0.1	CONCRETE
		2	0.1 – 0.3	MADE GROUND. Sand and gravel
		3	0.3 – 1.0	MADE GROUND. Aggregate of stiff clay and brick. Very heavily stained black with strong hydrocarbon smell, some wood and plastic. Concrete slab at base of made ground.
		4	1.0 – 3.4	CLAY. Hard to brittle weathered brown clay, laminated and fractured throughout. Smell of hydrocarbon, old pipe in top of clay possibly old fuel line.
Notes:				

Site:	WEALDEN BRICKWORKS	Client:	GAZELEY
Job No.:	CS007890	Hole No.:	TP5
Level :	52.91mOD	Date:	20/6/2005



Sample	Type	Unit	Depth (m)	Description
		1	0 – 0.6	CONCRETE. Reinforced ring around kilns 200mm over 200mm gravel with 200mm slab below.
		2	0.6 – 2.3	CLAY. Pale brown weathered clay hard and brittle, laminated and fractured throughout
Notes:				

Site:	WEALDEN BRICKWORKS	Client:	GAZELEY
Job No.:	CS007890	Hole No.:	TP6
Level :	52.91mOD	Date:	20/6/2005



Sample	Type	Unit	Depth (m)	Description
		1	0 – 1.2	MADE GROUND / CONCRETE. Reinforced ring around kilns 200mm over 200mm gravel with 200mm slab below. Further layer of sand and gravel with concrete slab at base
		2	1.2 – 3.4	CLAY. Pale brown weathered clay hard and brittle, laminated and fractured throughout. Clay in close proximity to kilns very hard and baked due to heat from kilns.
Notes:	South side of pit red brick structure confirmed to be a section of an old Kiln flue, these are common around this area.			

Site:	WEALDEN BRICKWORKS	Client:	GAZELEY
Job No.:	CS007890	Hole No.:	TP7
Level :	52.42mOD	Date:	20/6/2005



Sample	Type	Unit	Depth (m)	Description
		1	0 – 0.1	CONCRETE
		2	0.1 – 0.9	MADE GROUND. Aggregate of crushed bricks, Sand and gravel
		3	0.9 – 3.0	CLAY. Very firm to hard brown weathered clay, with some grey un-weathered patches and cemented mudstone nodules. Clay becoming less weathered with depth but becoming hard and brittle, laminated and fractured, very friable along laminae some moisture in fractures.
Notes:	Trickle of groundwater at 2.0 metres.			

Site:	WEALDEN BRICKWORKS	Client:	GAZELEY
Job No.:	CS007890	Hole No.:	TP8
Level :	52.57mOD	Date:	20/6/2005



Sample	Type	Unit	Depth (m)	Description
		1	0 – 0.2	CONCRETE
		2	0.2 – 0.3	MADE GROUND. Sand and gravel
		3	0.3 – 3.2	CLAY. Very firm to hard brown weathered clay, with some grey un-weathered patches and cemented mudstone nodules. Clay becoming less weathered with depth but becoming hard and brittle, laminated and fractured, very friable along laminae some moisture in fractures
Notes:				

Site:	WEALDEN BRICKWORKS	Client:	GAZELEY
Job No.:	CS007890	Hole No.:	TP9
Level :	52.76mOD	Date:	20/6/2005



Sample	Type	Unit	Depth (m)	Description
		1	0 – 2.5	MADE GROUND. Unconsolidated ash and dry clay mix (300mm) over red brick structure, identified as kiln flue
		2	2.5 – 3.8	CLAY. Hard cemented clay, laminated and fractured, clay adjacent to the old kiln flue was baked by heat into a red brick like material which is extremely hard.
Notes:				

Site:	WEALDEN BRICKWORKS	Client:	GAZELEY
Job No.:	CS007890	Hole No.:	TP10
Level :	53.18mOD	Date:	20/6/2005



Sample	Type	Unit	Depth (m)	Description
		1	0 – 0.2	CONCRETE
		2	0.2 – 0.5	MADE GROUND. Aggregate of crushed bricks and sandy ash like material with some gravel.
		3	0.5 – 2.7	CLAY. Laminated brown weathered clay, fractured and brittle becoming less weathered with depth to a blue / grey laminated and fractured clay with waxy texture.
Notes:				

Site:	WEALDEN BRICKWORKS	Client:	GAZELEY
Job No.:	CS007890	Hole No.:	TP11
Level :	53.26mOD	Date:	20/6/2005



Sample	Type	Unit	Depth (m)	Description
		1	0 – 0.2	CONCRETE
		2	0.2 – 0.8	MADE GROUND. Unconsolidated aggregate of crushed bricks, clay, ash. Drainage pipe struck at 0.7, no water.
		3	0.8 – 3.3	CLAY. Pale brown weathered clay, fractured and laminated friable along joints. Becoming very hard and cemented with depth, fractured and brittle.

Notes:	
---------------	--

Site:	WEALDEN BRICKWORKS	Client:	GAZELEY
Job No.:	CS007890	Hole No.:	TP12
Level :	53.27mOD	Date:	20/6/2005



Sample	Type	Unit	Depth (m)	Description
		1	0 – 0.2	CONCRETE
		2	0.2 – 0.8	MADE GROUND. Cohesive aggregate of crushed bricks, clay, ash. Sticky and firm texture
		3	0.8 – 3.7	CLAY. Pale brown weathered clay, stiff flexible, Becoming very hard and cemented with depth, laminated, fractured and brittle, friable along laminae and cracks.
Notes:				

Site:	WEALDEN BRICKWORKS	Client:	GAZELEY
Job No.:	CS007890	Hole No.:	TP13
Level :	mOD	Date:	20/6/2005



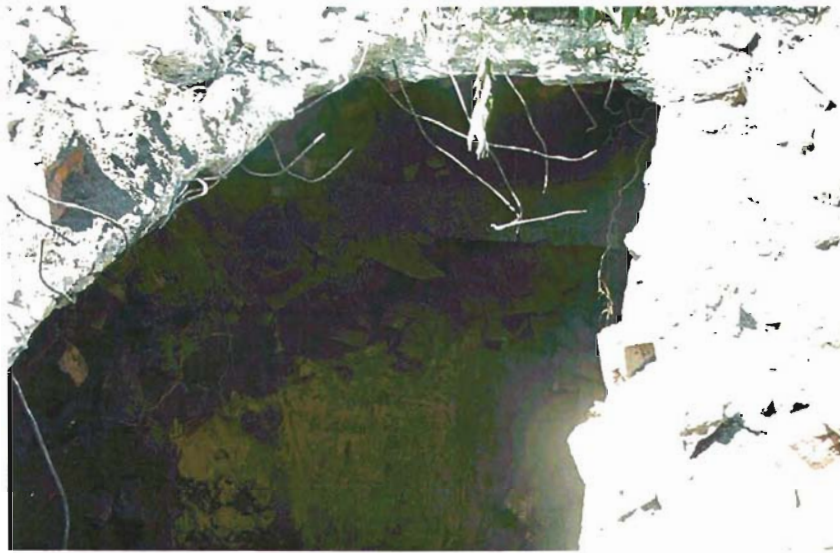
Sample	Type	Unit	Depth (m)	Description
		1	0 – 0.2	CONCRETE
		2	0.2 – 1.3	MADE GROUND. Uncohesive aggregate of crushed bricks, clay, ash. Coarse and dry.
		3	1.3 – 3.9	CLAY. Pale brown weathered clay, stiff flexible, with some un-weathered grey spots. Becoming very hard and cemented with depth, laminated, fractured and brittle, friable along laminae and cracks.
Notes:				

Site:	WEALDEN BRICKWORKS	Client:	GAZELEY
Job No.:	CS007890	Hole No.:	TP14
Level :	58.77mOD	Date:	20/6/2005



Sample	Type	Unit	Depth (m)	Description
		1	0 – 0.2	CONCRETE
		2	0.2 – 4.7	MADE GROUND. Fairly cohesive aggregate of clay, crushed brick, with a lot of whole bricks, ash mixed throughout. Some patches of weald clay through, top metre mostly bricks. Becoming mostly stiff Weald clay, weathered pale brown with some grey / blue un-weathered patches. Roots present with black organic material around roots, some sandier weathered patches. Small brick inclusions proving made ground.
Notes:	No natural ground encountered maximum depth achieved by excavator			

Site:	WEALDEN BRICKWORKS	Client:	GAZELEY
Job No.:	CS007890	Hole No.:	TP15
Level :	58.64mOD	Date:	20/6/2005



Sample	Type	Unit	Depth (m)	Description
		1	0 – 0.2	CONCRETE
		2	0.2 – 3.3	MADE GROUND. Kiln Flue
Notes:	No natural ground encountered maximum depth achieved by excavator			

Site:	WEALDEN BRICKWORKS	Client:	GAZELEY
Job No.:	CS007890	Hole No.:	TP16
Level :	53.74mOD	Date:	20/6/2005



Sample	Type	Unit	Depth (m)	Description
		1	0 – 0.5	MADE GROUND. Compacted clay and brick, top 0.2 very hard becoming less compacted near base.
		2	0.5 – 2.1	CLAY. Extremely hard red cemented clay with no structures. Close proximity to old kilns. Clay has clearly been baked into a hard red brick like material.
		3	2.1 – 4.0	CLAY. Brown weathered clay, laminated and fractured , becoming less weathered with depth to a grey / blue laminated and fractured clay, brittle and friable
Notes:	Baked clay material common across site where clay is in close proximity to old kilns and flues, which have been in operation for over 100 years. Heat from these kilns etc. has baked the clay into a brick like material.			

Site:	WEALDEN BRICKWORKS	Client:	GAZELEY
Job No.:	CS007890	Hole No.:	TP17
Level :	53.61mOD	Date:	20/6/2005



Sample	Type	Unit	Depth (m)	Description
		1	0 – 0.6	MADE GROUND. Compacted clay and brick, top 0.2 very hard becoming less compacted near base. Layer of laid paving bricks in situ at top.
		2	0.6 – 1.2	CLAY. Extremely hard red cemented clay with no structures. Close proximity to old kilns. Clay has clearly been baked into a hard red brick like material.
		3	1.2 – 3.95	CLAY. Brown weathered clay, laminated and fractured , becoming less weathered with depth to a grey / blue laminated and fractured clay, brittle and friable
Notes:	Baked clay material common across site where clay is in close proximity to old kilns and flues, which have been in operation for over 100 years. Heat from these kilns etc. has baked the clay into a brick like material.			

Site:	WEALDEN BRICKWORKS	Client:	GAZELEY
Job No.:	CS007890	Hole No.:	TP18
Level :	53.55mOD	Date:	20/6/2005



Sample	Type	Unit	Depth (m)	Description
		1	0 – 0.7	MADE GROUND. Compacted at surface but becoming unconsolidated with depth. Aggregate of brick and ash, reddish brown in colour, dry with higher percentage of ash near base.
		2	0.7 – 3.7	CLAY. Stiff grey clay with plastic texture with some brown weathered patches, roots present, with some sandier spots. Becoming hard brittle and fractured at 1.7 metres, into the typical laminated, friable clay.
Notes:				

Site:	WEALDEN BRICKWORKS	Client:	GAZELEY
Job No.:	CS007890	Hole No.:	TP19
Level :	53.88mOD	Date:	20/6/2005



Sample	Type	Unit	Depth (m)	Description
		1	0 – 0.5	MADE GROUND. Unconsolidated aggregate of bricks, ash, with glass, ceramics in a coarse granular matrix, with lumps of carbonaceous material.
		2	0.5 – 3.8	CLAY. Stiff brown weathered clay, becoming hard, brittle and laminated with depth. Weathered along laminae and fracture planes, some moisture in cracks, waxy texture. Some folding of layers obvious.
Notes:				

Site:	WEALDEN BRICKWORKS	Client:	GAZELEY
Job No.:	CS007890	Hole No.:	TP20
Level :	52.94mOD	Date:	20/6/2005



Sample	Type	Unit	Depth (m)	Description
		1	0 – 0.2	CONCRETE
		2	0.2 – 1.9	MADE GROUND. Clay and brick aggregate, cohesive and wet, with sand. South side of pit has red brick structure, just below the surface level, old kiln flue. Refusal at 1.9m unknown obstruction possibly base slab of flue. Made ground variable with wood, gravel, metal and plastic in, with hydrocarbon odour at base of pit.
Notes:				

Site:	WEALDEN BRICKWORKS	Client:	GAZELEY
Job No.:	CS007890	Hole No.:	TP21
Level :	53.84mOD	Date:	20/6/2005



Sample	Type	Unit	Depth (m)	Description
		1	0 – 3.8	MADE GROUND. Top 0.6m unconsolidated aggregate of bricks and ash, very dry. Below this various layers of clay and crushed brick, with ash, ceramics, glass and wood. Generally cohesive, with a unidentified chemical odour.
Notes:	Water is base of hole, unknown entry point probably around 3.5 metres.			

Site:	WEALDEN BRICKWORKS	Client:	GAZELEY
Job No.:	CS007890	Hole No.:	TP22
Level :	55.10mOD	Date:	20/6/2005



Sample	Type	Unit	Depth (m)	Description
		1	0 – 0.9	MADE GROUND. Dry semi-cohesive aggregate of clay, brick with plastics, roots and some ash. Dry and desiccated at surface.
		2	0.9 – 3.0	CLAY. Stiff grey clay with weathered brown patches throughout, with some root material. Becoming hard, brittle with depth. Laminated and fractured, friable along laminae, with weathering along fractures planes, some moisture.
Notes:				

Site:	WEALDEN BRICKWORKS	Client:	GAZELEY
Job No.:	CS007890	Hole No.:	TP23
Level :	52.75mOD	Date:	20/6/2005

NO PICTURE

Sample	Type	Unit	Depth (m)	Description
		1	0 – 0.3	CONCRETE
		2	0.3 – 0.5	MADE GROUND. Aggregate of brick and ash, dry and uncohesive.
		3	0.5 – 2.9	CLAY. Stiff grey clay with weathered brown patches throughout, with some root material. Becoming hard, brittle with depth. Laminated and fractured, friable along laminae, with weathering along fractures planes, some moisture.
Notes:				

Site:	WEALDEN BRICKWORKS	Client:	GAZELEY
Job No.:	CS007890	Hole No.:	TP24
Level :	53.01mOD	Date:	20/6/2005

NO PICTURE

Sample	Type	Unit	Depth (m)	Description
		1	0 – 1.3	MADE GROUND. Uncohesive aggregate of clay bricks and ash, dry and crumbly.
		2	1.3 – 2.3	CLAY. Stiff grey clay with weathered brown patches throughout, with some root material. Becoming hard, brittle with depth. Laminated and fractured, friable along laminae, with weathering along fracture planes, some moisture.

Notes:	
---------------	--

Site:	WEALDEN BRICKWORKS	Client:	GAZELEY
Job No.:	CS007890	Hole No.:	TP25
Level :	54.97mOD	Date:	20/6/2005



Sample	Type	Unit	Depth (m)	Description
		1	0 – 0.9	MADE GROUND. Building sand
		2	0.9 – 1.9	MADE GROUND. Semi cohesive aggregate of clay ash and brick. Very high percentage of ash
		3	1.9 – 3.8	CLAY. Blue / grey becoming brown and heavily weathered, hard brittle clay, fractured and laminated.
Notes:				

Site:	WEALDEN BRICKWORKS	Client:	GAZELEY
Job No.:	CS007890	Hole No.:	TP26
Level :	55.60mOD	Date:	20/6/2005



Sample	Type	Unit	Depth (m)	Description
		1	0 – 0.3	MADE GROUND. Uncohesive aggregate of clay bricks and ash, dry and crumbly.
		2	0.3 – 2.5	CLAY. Pale brown weathered clay, stiff flexible, with some un-weathered grey spots. Becoming very hard and cemented with depth, laminated, fractured and brittle, friable along laminae and cracks.
Notes:				

Site:	WEALDEN BRICKWORKS	Client:	GAZELEY
Job No.:	CS007890	Hole No.:	TP27
Level :	54.54mOD	Date:	20/6/2005



Sample	Type	Unit	Depth (m)	Description
		1	0 – 1.6	MADE GROUND. Semi cohesive aggregate of clay bricks and ash.
		2	1.6 – 4.3	CLAY. Blue / grey laminated and fractured clay. Hard and brittle friable along laminae and fracture planes, waxy texture with moisture and weathering in fracture planes.
Notes:				

Site:	WEALDEN BRICKWORKS	Client:	GAZELEY
Job No.:	CS007890	Hole No.:	TP28
Level :	53.90mOD	Date:	20/6/2005



Sample	Type	Unit	Depth (m)	Description
		1	0 – 2.0	MADE GROUND. Semi cohesive aggregate of clay bricks and ash.
		2	2.0 – 4.5	CLAY. Blue / grey laminated and fractured clay. Hard and brittle friable along laminae and fracture planes, waxy texture with moisture and weathering in fracture planes.
Notes:				

Site:	WEALDEN BRICKWORKS	Client:	GAZELEY
Job No.:	CS007890	Hole No.:	TP29
Level :	55.18mOD	Date:	20/6/2005



Sample	Type	Unit	Depth (m)	Description
		1	0 – 4.0	MADE GROUND. Top 2 metres semi cohesive aggregate of clay brick and ash, wet texture flexible. Changing into primarily clay based aggregate, very stiff and cohesive with brick and ash, some roots and hydrocarbon odour. Water in the bottom of the pit most likely from adjacent lagoon or silt pond. Oily substance visible floating on top of water.
Notes:				

Site:	WEALDEN BRICKWORKS	Client:	GAZELEY
Job No.:	CS007890	Hole No.:	TP30
Level :	50.97mOD	Date:	20/6/2005



Sample	Type	Unit	Depth (m)	Description
		1	0 – 2.8	MADE GROUND. Semi cohesive aggregate of clay, brick with a lot of wood and some metal. Becoming less cohesive more granular and dryer with depth
		2	2.8 – 2.9	CLAY. Very hard blue / grey clay, laminated, fractured and brittle along laminae and fractures planes, waxy texture, with some moisture and weathering in fractures.

Notes:	
---------------	--

Site:	WEALDEN BRICKWORKS	Client:	GAZELEY
Job No.:	CS007890	Hole No.:	TP31
Level :	50.78mOD	Date:	20/6/2005



Sample	Type	Unit	Depth (m)	Description
		1	0 – 1.7	MADE GROUND. Unconsolidated aggregate of bricks and gravels in a coarse granular matrix.
		2	1.7 – 3.2	CLAY. Blue / grey, hard laminated clay, fractured and brittle, some moisture in fractures, and small trickle of water into base of pit.
Notes:				

Site:	WEALDEN BRICKWORKS	Client:	GAZELEY
Job No.:	CS007890	Hole No.:	TP32
Level :	53.83mOD	Date:	20/6/2005



Sample	Type	Unit	Depth (m)	Description
		1	0 – 0.6	MADE GROUND. Unconsolidated aggregate of bricks and gravels in a coarse granular matrix.
		2	0.6 – 3.2	MADE GROUND. Kiln flue, possibly backfilled with brick, difficult to tell as it collapsed on itself
Notes:				

Site:	WEALDEN BRICKWORKS	Client:	GAZELEY
Job No.:	CS007890	Hole No.:	TP33
Level :	53.70mOD	Date:	20/6/2005



Sample	Type	Unit	Depth (m)	Description
		1	0 – 1.6	MADE GROUND. Unconsolidated aggregate of bricks and gravels in a coarse granular matrix. Top corner of kiln flue encountered, visible as red brick structure.
		2	1.6 – 3.2	CLAY. Brown weathered clay, hard and brittle, laminated throughout, fractured and friable along laminae and fracture planes
Notes:				

Site:	WEALDEN BRICKWORKS	Client:	GAZELEY
Job No.:	CS007890	Hole No.:	TP34
Level :	53.30mOD	Date:	20/6/2005



Sample	Type	Unit	Depth (m)	Description
		1	0 – 0.9	MADE GROUND. Unconsolidated aggregate of bricks and gravels in a coarse granular matrix, with a lot of ash at the base and a hydrocarbon odour.
		2	0.9 – 3.2	CLAY. Brown weathered clay, hard and brittle, laminated throughout, fractured and friable along laminae and fracture planes
Notes:				

Site:	WEALDEN BRICKWORKS	Client:	GAZELEY
Job No.:	CS007890	Hole No.:	TP35
Level :	53.03mOD	Date:	20/6/2005



Sample	Type	Unit	Depth (m)	Description
		1	0 – 2.0	MADE GROUND. Mostly whole bricks, bits of wall structures, plastics and metal rods. Concrete walls on either side of pit, part of a made structure, possibly old sand pit now backfilled. A lot of water in fill material and pit.
Notes:	Pit terminated as not likely to encounter any natural surfaces.			

Site:	WEALDEN BRICKWORKS	Client:	GAZELEY
Job No.:	CS007890	Hole No.:	TP36
Level :	53.17mOD	Date:	20/6/2005



Sample	Type	Unit	Depth (m)	Description
		1	0 – 0.3	CONCRETE.
		2	0.3 – 4.3	CLAY. Stiff flexible grey / blue clay, slightly weathered brown in parts, becoming hard brittle and laminated at 2.5 metres. Heavily weathered and fractured at depth, with waxy texture and some moisture in fractures.
Notes:				

Site:	WEALDEN BRICKWORKS	Client:	GAZELEY
Job No.:	CS007890	Hole No.:	TP37
Level :	53.76mOD	Date:	20/6/2005



Sample	Type	Unit	Depth (m)	Description
		1	0 – 2.5	MADE GROUND. Unconsolidated aggregate of bricks and gravels in a coarse granular matrix. Top of kiln flue encountered, visible as red brick structure on south side of pit, down to 2.5 m
		2	0.5 – 2.5	CLAY. Very hard cemented red clay, baked by heat from flue, grading into hard weathered, laminated clay, fractured and brittle.
Notes:				

Site:	WEALDEN BRICKWORKS	Client:	GAZELEY
Job No.:	CS007890	Hole No.:	TP38
Level :	mOD	Date:	27/6/2005



Sample	Type	Unit	Depth (m)	Description
		1	0 – 1.3	CONCRETE 200mm, over MADE GROUND. Unconsolidated aggregate of crushed brick and gravel, in coarse granular sand and ash matrix., over CONCRETE 200mm, over MADE GROUND, ash and brick, over CONCRETE 200mm, over made ground.
		2	1.3 – 3.2	CLAY. Brown weathered and fractured clay, laminated, hard and brittle. Waxy texture, friable along laminae, some moisture in fractures at depth.
Notes:				

Site:	WEALDEN BRICKWORKS	Client:	GAZELEY
Job No.:	CS007890	Hole No.:	TP39
Level :		Date:	27/6/2005



Sample	Type	Unit	Depth (m)	Description
		1	0 – 0.2	CONCRETE
		2	0.2 – 0.5	MADE GROUND. Crushed brick and ash aggregate with some gravel, coarse and granular.
		3	0.5 – 0.7	CONCRETE
		4	0.7 – 1.2	MADE GROUND. Aggregate of predominantly ash with crushed brick.
		5	1.2 – 2.6	CLAY. Hard brown and weathered, laminated and fractured, becoming harder and more cemented with depth
Notes:				

Site:	WEALDEN BRICKWORKS	Client:	GAZELEY
Job No.:	CS007890	Hole No.:	TP40
Level :		Date:	27/6/2005



Sample	Type	Unit	Depth (m)	Description
		1	0 – 0.2	CONCRETE
		2	0.2 – 0.6	MADE GROUND. Sand and gravel over unconsolidated aggregate of crushed brick and ash, some dry clay.
		3	0.6 – 3.5	CLAY. Brown weathered, hard and brittle laminated clay weathered and fractured along laminae. Becoming very friable with depth, with some moisture in fracture planes.
Notes:				

Site:	WEALDEN BRICKWORKS	Client:	GAZELEY
Job No.:	CS007890	Hole No.:	TP41
Level :		Date:	27/6/2005



Sample	Type	Unit	Depth (m)	Description
		1	0 – 0.15	CONCRETE
		2	0.15 – 0.4	MADE GROUND. Sand and gravel over unconsolidated aggregate of crushed brick and ash, some dry clay.
		3	0.4 – 3.5	CLAY. Brown weathered, hard and brittle laminated clay weathered and fractured along laminae. Becoming less weathered with depth to a blue / grey clay with waxy texture and some moisture in fractures.
Notes:				

Site:	WEALDEN BRICKWORKS	Client:	GAZELEY
Job No.:	CS007890	Hole No.:	TP42
Level :		Date:	27/6/2005



Sample	Type	Unit	Depth (m)	Description
		1	0 – 0.15	CONCRETE
		2	0.15 – 1.8	MADE GROUND. Large amount of whole red bricks to 1 metre, changing into laid red brick structure down to base, possibly old backfilled flue or brick clamp.
Notes:	Refusal at 1.8 metres			

Site:	WEALDEN BRICKWORKS	Client:	GAZELEY
Job No.:	CS007890	Hole No.:	TP43
Level :		Date:	27/6/2005



Sample	Type	Unit	Depth (m)	Description
		1	0 – 4.2	MADE GROUND. Top 0.4 metres dry unconsolidated clay and gravels, with brick and ash material. Changing into cohesive clay and brick mix with ash layers down to 4.0 metres. Some domestic waste visible in fill including mixed ceramics, bottles, textiles, plastics. Possibly just touching natural clay at 4.0 metres, when a blue clay is encountered with some roots, only small amount retrievable from pit.
Notes:				

Site:	WEALDEN BRICKWORKS	Client:	GAZELEY
Job No.:	CS007890	Hole No.:	TP44
Level :	53.40mOD	Date:	27/6/2005



Sample	Type	Unit	Depth (m)	Description
		1	0 – 0.25	CONCRETE
		2	0.25 – 0.35	MADE GROUND. Sand and Gravel
		3	0.35 – 1.4	CLAY. Baked red clay, hard and cemented, like brick material, close to old kiln. Some moisture detected possibly perched groundwater in pore space.
		4	1.4 – 3.8	CLAY. Brown highly weathered clay, very friable. Laminated and fractured throughout, waxy texture with some moisture in fractures. Becoming harder and more brittle with depth to a cemented mudstone.
Notes:	Small pool of water in base of pit most likely from perched groundwater			

Site:	WEALDEN BRICKWORKS	Client:	GAZELEY
Job No.:	CS007890	Hole No.:	TP45
Level :	mOD	Date:	27/6/2005



Sample	Type	Unit	Depth (m)	Description
		1	0 – 0.1	ASPHALT
		2	0.1 – 0.3	MADE GROUND. Sand and gravel
		3	0.3 – 0.5	MADE GROUND. Bricks and sand aggregate
		4	0.5 – 0.8	MADE GROUND. Worked stiff clay layer, brown weathered flexible clay with high percentage of ash 80 % +
		5	0.8 – 2.7	CLAY. Baked red clay, hard and cemented, some moisture possibly perched groundwater. Grading into the natural brown weathered, laminated and fractured clay, becoming harder and more brittle with depth. Some moisture in fractures
Notes:				

Site:	WEALDEN BRICKWORKS	Client:	GAZELEY
Job No.:	CS007890	Hole No.:	TP46
Level :	55.23mOD	Date:	27/6/2005



Sample	Type	Unit	Depth (m)	Description
		1	0 – 4.8	MADE GROUND. Brown aggregate of clay and ash. Some cohesive clay layers, not very thick. Primarily an aggregate of ash, bricks, roots, gravels, with some ceramics and glass. Abundant rootlets in top 1 metre, overall semi cohesive unit.
Notes:				

Site:	WEALDEN BRICKWORKS	Client:	GAZELEY
Job No.:	CS007890	Hole No.:	TP47
Level :	53.33mOD	Date:	27/6/2005



Sample	Type	Unit	Depth (m)	Description
		1	0 – 0.1	CONCRETE
		2	0.1 – 1.4	MADE GROUND. Crushed brick and ash layer at top over a stiff clay layer 350 mm, on brown and weathered with some un weathered patches. Generally sticky and cohesive with some red brick fragments 750mm, on 300mm of crushed brick and ash.
		3	1.4 – 4.1	CLAY. Brown weathered stiff clay, cohesive and flexible, becoming hard and brittle with depth, changing to laminated fractured clay, weathered and friable along laminae and fractures.
Notes:				

Site:	WEALDEN BRICKWORKS	Client:	GAZELEY
Job No.:	CS007890	Hole No.:	TP48
Level :	55.18mOD	Date:	27/6/2005



Sample	Type	Unit	Depth (m)	Description
		1	0 – 5.4	MADE GROUND. Top 0.5 metres non cohesive aggregate of brick, clay and ash. Becoming stiff and cohesive with depth, primarily clay based aggregate, grey weathered brown clay with some brick fragments and root material. No natural ground encountered only worked clay to base.
Notes:				

Site:	WEALDEN BRICKWORKS	Client:	GAZELEY
Job No.:	CS007890	Hole No.:	TP49
Level :	52.69mOD	Date:	27/6/2005



Sample	Type	Unit	Depth (m)	Description
		1	0 – 0.2	CONCRETE
		2	0.2 – 0.4	MADE GROUND. Uncohesive aggregate of brick and ash, coarse and granular.
		3	0.4 – 2.6	CLAY. Brown weathered stiff clay, semi cohesive at top rapidly becoming hard and brittle with depth, changing to laminated fractured clay, weathered and friable along laminae and fractures.
Notes:				

Cathaoir McDermott
Capita Symonds Ltd
Radius House,
51 Clarendon Road
Watford
WD17 1HU

Page 1 of 9 pages

19th July 2005

TEST REPORT

Our Report No: B05005069

Your Order No: Instns of 09.07.2005

67 no. soil samples submitted for analysis on 09.07.2005

Project Name: The Brinkworks

Project Code: CS007890

Results enclosed: Pages 2-9

Laboratory analysis started on 09.07.2005

All laboratory analysis completed by 19th July 2005

Rexona Rahman
Project Co-ordinator

ALCONTROL TECHNICHEM

Leigh Barker
Project Co-ordinator

ALCONTROL TECHNICHEM

Test Methods are Documented In House Procedures or where appropriate Standard Methods.

Non accredited tests (if applicable) are identified on each page. Procedures for sampling are outside the scope of the laboratory UKAS accreditation. Opinions and interpretations expressed herein are outside the scope of our UKAS accreditation.

All samples connected with this report, including any 'on hold', will be stored and disposed of according to Company policy. A copy of this policy is available on request.

TEST REPORT

SOIL ANALYTICAL RESULTS

Our Report No: B05005069

Page 2 of 9 pages

Your Order No: Instns of 09.07.2005

CLIENT: Capita Symonds Ltd

67 no. soil samples submitted for analysis on 09.07.2005

DATE OF ISSUE: 19th July 2005

Project Name: The Brinkworks

Project Code: CS007890

Lab Ref No:	S05034233	S05034235	S05034236	S05034237	S05034238	S05034239	S05034240	S05034241	S05034242	S05034243
Sampling Date:	20/06/2005	20/06/2005	20/06/2005	20/06/2005	20/06/2005	20/06/2005	20/06/2005	20/06/2005	-	-
Sample Ref :	TP 2	TP 4	TP 4	TP 5	TP 5	TP 11	TP 11	TP 12	TP 12	TP 12
Depth(m):	0.50	0.70	3.40	0.30	1.00	0.50	1.50	0.40	1.20	3.00
Sample Type:	S	S	S	S	S	S	S	S	S	S
025a Total (acid soluble) Sulphate as SO ₄	2900	560	<200	1500	310	500	620	870	670	260
011 2:1 Water Soluble Sulphate as SO ₄ (g/l)	0.84	0.05	0.03	0.16	0.05	0.08	0.16	0.26	0.15	0.05
032 Elemental Sulphur	<100	680	<100	<100	<100	<100	<100	<100	<100	<100
026 Organic Carbon (%)	1.0	3.5	0.5	0.60	2.2	0.4	0.4	0.7	0.6	2.0
*Rapid PAH by GC-FID	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
065 Rapid TPH by GC-FID	94	24000	7300	100	<50	<50	<50	<50	<50	<50
016 Arsenic	18	14	3	12	13	27	15	22	15	2
016 Cadmium	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
016 Chromium	44	39	46	30	43	37	56	45	33	33
016 Lead	46	28	28	41	21	28	27	31	30	17
016 Mercury	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
016 Selenium	0.9	<0.5	<0.5	<0.5	<0.5	0.7	<0.5	<0.5	<0.5	<0.5
016 Copper	50	55	41	23	30	30	41	33	16	26
016 Nickel	36	47	50	24	53	43	52	30	22	36
016 Zinc	160	110	96	86	110	110	120	71	59	79

All results expressed in mg/kg dry weight basis, unless stated

*denotes analysis outside the scope of our UKAS accreditation

ALcontrol Technichem

TEST REPORT

SOIL ANALYTICAL RESULTS

Our Report No: B05005069

Page 3 of 9 pages

Your Order No: Instns of 09.07.2005

CLIENT: Capita Symonds Ltd

67 no. soil samples submitted for analysis on 09.07.2005

DATE OF ISSUE: 19th July 2005

Project Name: The Brinkworks

Project Code: CS007890

Lab Ref No:	S05034244	S05034245	S05034246	S05034247	S05034248	S05034249	S05034250	S05034251	S05034252	S05034253
Sampling Date:	-	-	-	-	-	-	-	-	-	-
Sample Ref :	TP 14	TP 14	TP 14	TP 14	TP 20	TP 20	TP 21	TP 21	TP 21	TP 22
Depth(m):	0.50	2.00	3.00	4.50	1.00	1.80	0.50	1.50	3.50	0.40
Sample Type:	S	S	S	S	S	S	S	S	S	S
025a Total (acid soluble) Sulphate as SO ₄	15000	8200	1000	430	2000	2500	5100	82000	3100	630
011 2:1 Water Soluble Sulphate as SO ₄ (g/l)	1.5	1.7	0.30	0.08	0.36	0.80	1.6	1.5	1.4	0.09
032 Elemental Sulphur	<100	<100	<100	<100	330	<100	<100	<100	220	<100
026 Organic Carbon (%)	0.5	1.9	3.5	2.60	2.7	0.8	1.5	0.4	0.9	1.9
*Rapid PAH by GC-FID	<2	<2	<2	<2	250	<2	<2	<2	<2	<2
065 Rapid TPH by GC-FID	<50	540	<50	<50	3000	270	120	1100	120	8400
016 Arsenic	76	47	14	14	16	16	56	120	23	20
016 Cadmium	<0.5	0.9	<0.5	<0.5	<0.5	<0.5	<0.5	3.0	<0.5	<0.5
016 Chromium	41	39	37	44	44	43	39	49	43	46
016 Lead	73	270	47	28	29	28	33	50	27	47
016 Mercury	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
016 Selenium	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	2.9	<0.5	1.2
016 Copper	96	160	30	40	210	54	70	160	47	48
016 Nickel	79	59	28	49	44	51	63	110	48	49
016 Zinc	120	510	92	110	88	93	100	440	95	150

All results expressed in mg/kg dry weight basis, unless stated

*denotes analysis outside the scope of our UKAS accreditation

ALcontrol Technichem

TEST REPORT

SOIL ANALYTICAL RESULTS

Our Report No: B05005069

Page 4 of 9 pages

Your Order No: Instns of 09.07.2005

CLIENT: Capita Symonds Ltd

67 no. soil samples submitted for analysis on 09.07.2005

DATE OF ISSUE: 19th July 2005

Project Name: The Brinkworks

Project Code: CS007890

Lab Ref No:	S05034254	S05034255	S05034256	S05034257	S05034258	S05034259	S05034260	S05034261	S05034262	S05034263
Sampling Date:	-	-	-	-	-	-	-	-	-	-
Sample Ref :	TP 22	TP 24	TP 24	TP 25	TP 25	TP 25	TP 26	TP 26	TP 27	TP 27
Depth(m):	2.00	0.30	1.50	0.50	1.50	2.50	0.20	2.00	0.50	2.00
Sample Type:	S	S	S	S	S	S	S	S	S	S
025a Total (acid soluble) Sulphate as SO ₄	570	2200	3100	250	660	5600	920	1500	430	1500
011 2:1 Water Soluble Sulphate as SO ₄ (g/l)	0.12	0.22	1.2	0.06	0.06	1.6	0.25	0.45	0.10	0.38
032 Elemental Sulphur	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
026 Organic Carbon (%)	3.1	2.3	2.00	0.20	4.2	0.5	1.00	0.7	0.3	0.9
*Rapid PAH by GC-FID	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
065 Rapid TPH by GC-FID	<50	3800	80	150	75	<50	4200	74	62	<50
016 Arsenic	9	69	25	6	18	24	19	15	10	18
016 Cadmium	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
016 Chromium	46	120	35	11	32	42	43	47	32	48
016 Lead	20	170	17	6	44	22	36	23	21	20
016 Mercury	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
016 Selenium	<0.5	2.0	1.0	2.0	0.6	0.5	1.2	0.6	<0.5	1.2
016 Copper	36	3600	32	5	77	69	64	38	29	34
016 Nickel	49	240	41	7	57	53	46	45	37	51
016 Zinc	86	1100	81	21	210	110	130	84	76	96

All results expressed in mg/kg dry weight basis, unless stated

*denotes analysis outside the scope of our UKAS accreditation

ALcontrol Technichem

TEST REPORT

SOIL ANALYTICAL RESULTS

Our Report No: B05005069

Page 5 of 9 pages

Your Order No: Instns of 09.07.2005

CLIENT: Capita Symonds Ltd

67 no. soil samples submitted for analysis on 09.07.2005

DATE OF ISSUE: 19th July 2005

Project Name: The Brinkworks

Project Code: CS007890

Lab Ref No:	S05034264	S05034265	S05034266	S05034267	S05034268	S05034269	S05034270	S05034271	S05034272	S05034273
Sampling Date:	-	-	-	-	-	-	-	-	-	-
Sample Ref :	TP 28	TP 28	TP 29	TP 29	TP 34	TP 34	TP 38	TP 38	TP 38	TP 39
Depth(m):	0.30	2.50	1.00	3.50	0.50	1.10	0.40	1.00	1.50	0.40
Sample Type:	S	S	S	S	S	S	S	S	S	S
025a Total (acid soluble) Sulphate as SO ₄	610	1300	3200	6500	3400	2400	3600	4800	270	2600
011 2:1 Water Soluble Sulphate as SO ₄ (g/l)	0.09	0.38	0.49	1.8	1.1	0.71	0.44	0.31	0.06	0.24
032 Elemental Sulphur	<100	<100	<100	360	<100	<100	<100	<100	<100	<100
026 Organic Carbon (%)	1.3	3.2	0.7	6.80	1.7	1.4	0.4	0.3	0.4	1.6
*Rapid PAH by GC-FID	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
065 Rapid TPH by GC-FID	1400	75	110	7000	200.0	<50	110	<50	<50	130
016 Arsenic	18	17	20	22	31	15	31	19	14	27
016 Cadmium	<0.5	<0.5	<0.5	0.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
016 Chromium	45	41	43	31	37	40	59	47	43	52
016 Lead	41	18	40	49	32	21	44	69	26	130
016 Mercury	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
016 Selenium	0.6	1.0	1.2	3.8	0.9	0.6	<0.5	<0.5	<0.5	<0.5
016 Copper	70	31	33	58	47	31	58	38	36	72
016 Nickel	45	43	31	39	48	45	36	23	49	34
016 Zinc	140	160	150	610	110	130	92	71	95	200

All results expressed in mg/kg dry weight basis, unless stated

*denotes analysis outside the scope of our UKAS accreditation

ALcontrol Technichem

TEST REPORT

SOIL ANALYTICAL RESULTS

Our Report No: B05005069

Page 6 of 9 pages

Your Order No: Instns of 09.07.2005

CLIENT: Capita Symonds Ltd

67 no. soil samples submitted for analysis on 09.07.2005

DATE OF ISSUE: 19th July 2005

Project Name: The Brinkworks

Project Code: CS007890

Lab Ref No:	S05034274	S05034275	S05034276	S05034277	S05034278	S05034279	S05034280	S05034281	S05034282	S05034283
Sampling Date:	-	-	-	-	-	-	-	-	-	-
Sample Ref :	TP 39	TP 39	TP 43	TP 43	TP 43	TP 46	TP 46	TP 46	TP 48	TP 48
Depth(m):	1.00	2.00	0.50	1.00	3.00	0.50	2.00	3.00	0.40	1.50
Sample Type:	S	S	S	S	S	S	S	S	S	S
025a Total (acid soluble) Sulphate as SO ₄	6200	610	62000	440	12000	2800	4300	3300	520	1100
011 2:1 Water Soluble Sulphate as SO ₄ (g/l)	1.6	0.16	1.6	0.09	1.8	0.84	1.5	1.4	0.03	0.31
032 Elemental Sulphur	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
026 Organic Carbon (%)	0.8	2.7	2.8	0.3	1.3	1.4	2.3	0.7	1.6	2.2
*Rapid PAH by GC-FID	<2	<2	<2	<2	<2	<2	<2	<2	5.8	<2
065 Rapid TPH by GC-FID	<50	<50	<50	<50	93	110	<50	<50	130	57
016 Arsenic	33	11	33	24	56	39	33	24	25	17
016 Cadmium	<0.5	<0.5	<0.5	<0.5	<0.5	0.7	<0.5	<0.5	<0.5	<0.5
016 Chromium	37	31	26	49	140	52	34	33	32	35
016 Lead	42	22	33	18	350	260	49	26	63	19
016 Mercury	<0.3	<0.3	<0.3	<0.3	0.4	0.6	<0.3	<0.3	<0.3	<0.3
016 Selenium	1.1	<0.5	2.0	<0.5	<0.5	1.4	<0.5	0.8	<0.5	<0.5
016 Copper	82	32	72	31	130	120	67	52	130	30
016 Nickel	51	42	76	47	57	55	58	49	51	42
016 Zinc	170	75	220	98	490	400	110	77	120	98

All results expressed in mg/kg dry weight basis, unless stated

*denotes analysis outside the scope of our UKAS accreditation

ALcontrol Technichem

TEST REPORT

SOIL ANALYTICAL RESULTS

Our Report No: B05005069

Page 7 of 9 pages

Your Order No: Instns of 09.07.2005

CLIENT: Capita Symonds Ltd

67 no. soil samples submitted for analysis on 09.07.2005

DATE OF ISSUE: 19th July 2005

Project Name: The Brinkworks

Project Code: CS007890

Lab Ref No:	S05034284	S05034285	S05034286	S05034287	S05034288	S05034289	S05034290	S05034291	S05034292	S05034293
Sampling Date:	-	-	-	-	-	-	-	-	-	-
Sample Ref :	TP 48	DS01	DS01	DS01	DS05	DS05	DS05	DS07	DS07	DS07
Depth(m):	3.50	0.90	1.90	2.50	0.60	1.90	3.50	0.25	1.90	3.90
Sample Type:	S	S	S	S	S	S	S	S	S	S
025a Total (acid soluble) Sulphate as SO ₄	860	37000	34000	1300						
011 2:1 Water Soluble Sulphate as SO ₄ (g/l)	0.21	1.5	1.4	0.40						
032 Elemental Sulphur	<100	<100	<100	<100						
026 Organic Carbon (%)	2.2	1.6	1.6	0.90						
*Rapid PAH by GC-FID	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
065 Rapid TPH by GC-FID	76	57	<50	<50	100	<50	3500	<50	<50	69
016 Arsenic	15	35	53	22						
016 Cadmium	<0.5	<0.5	<0.5	<0.5						
016 Chromium	31	28	29	40						
016 Lead	28	36	33	15						
016 Mercury	<0.3	<0.3	<0.3	<0.3						
016 Selenium	<0.5	1.0	1.4	0.6						
016 Copper	30	75	86	29						
016 Nickel	35	58	62	43						
016 Zinc	70	100	79	73						

All results expressed in mg/kg dry weight basis, unless stated

*denotes analysis outside the scope of our UKAS accreditation

ALcontrol Technichem

TEST REPORT

SOIL ANALYTICAL RESULTS

Our Report No: B05005069

Page 8 of 9 pages

Your Order No: Instns of 09.07.2005

CLIENT: Capita Symonds Ltd

67 no. soil samples submitted for analysis on 09.07.2005

DATE OF ISSUE: 19th July 2005

Project Name: The Brinkworks

Project Code: CS007890

Lab Ref No:	S05034294	S05034295	S05034296	S05034297	S05034298	S05034299				
Sampling Date:	-	-	-	-	-	-				
Sample Ref :	DS10	DS10	DS10	DS14	DS14	DS14				
Depth(m):	0.20	1.00	2.00	0.40	1.50	3.50				
Sample Type:	S	S	S	S	S	S				
025a Total (acid soluble) Sulphate as SO ₄	1100	<200	<200	7000	890	530				
011 2:1 Water Soluble Sulphate as SO ₄ (g/l)	0.28	0.04	0.03	1.6	0.25	0.16				
032 Elemental Sulphur	<100	<100	<100	<100	<100	<100				
026 Organic Carbon (%)	4.3	<0.1	2.5	3.20	4.2	2.9				
*Rapid PAH by GC-FID	<2	<2	<2	<2	<2	<2				
065 Rapid TPH by GC-FID	660	69	<50	<50	<50	<50				
016 Arsenic	17	9	17	40	6	26				
016 Cadmium	<0.5	<0.5	<0.5	5.0	<0.5	<0.5				
016 Chromium	32	30	34	39	37	43				
016 Lead	97	18	22	450	20	17				
016 Mercury	<0.3	<0.3	<0.3	0.8	<0.3	<0.3				
016 Selenium	0.6	<0.5	<0.5	1.1	<0.5	<0.5				
016 Copper	45	22	34	630	31	36				
016 Nickel	24	31	34	64	37	46				
016 Zinc	43	67	85	570	63	130				

All results expressed in mg/kg dry weight basis, unless stated

*denotes analysis outside the scope of our UKAS accreditation

ALcontrol Technichem

TEST REPORT

SOIL ANALYTICAL RESULTS - 039 POLYCHLORINATED BIPHENYLS

Our Report No: B05005069

Page 9 of 9 pages

Your Order No: Instns of 09.07.2005

CLIENT: Capita Symonds Ltd

67 no. soil samples submitted for analysis on 09.07.2005

DATE OF ISSUE: 19th July 2005

Project Name: The Brinkworks

Project Code: CS007890

Lab Ref No:	S05034235	S05034236†	S05034248†	S05034249	S05034257	S05034258	S05034259			
Sampling Date:	20/06/2005	20/06/2005	-	-	-	-	-			
Sample Ref :	TP 4	TP 4	TP 20	TP 20	TP 25	TP 25	TP 25			
Depth(m):	0.70	3.40	1.00	1.80	0.50	1.50	2.50			
Sample Type:	S	S	S	S	S	S	S			
039 Polychlorinated Biphenyls (PCB's)										
PCB Congener 28	‡	<0.05	<0.05	<0.005	<0.005	<0.005	<0.005			
PCB Congener 52	‡	<0.05	<0.05	<0.005	<0.005	<0.005	<0.005			
PCB Congener 101	‡	<0.05	<0.05	<0.005	<0.005	<0.005	<0.005			
PCB Congener 118	‡	<0.05	<0.05	<0.005	<0.005	<0.005	<0.005			
PCB Congener 138	‡	<0.05	<0.05	<0.005	<0.005	<0.005	<0.005			
PCB Congener 153	‡	<0.05	<0.05	<0.005	<0.005	<0.005	<0.005			
PCB Congener 180	‡	<0.05	<0.05	<0.005	<0.005	<0.005	<0.005			
Total PCBs	‡	ND	ND	ND	ND	ND	ND			

All results expressed in mg/kg dry weight basis

Total PCB = Sum of 7 identified components

ND denotes Not Detected

†denotes raised detection limit(s) due to matrix interference.

‡ denotes unsuitable for analysis due to matrix interference.

ALcontrol Technichem

Cathaoir McDermott
Capita Symonds Ltd
Radius House,
51 Clarendon Road
Watford
WD17 1HU

Page 1 of 8 pages

25th July 2005

TEST REPORT

Our Report No: B05005414 (Previous Report B05005069)

Your Order No: Instns of 20.07.2005

66 no. soil samples submitted for additional analysis on 20.07.2005

Project Name: The Brinkworks

Project Code: CS007890

Results enclosed: Pages 2-8

*Laboratory analysis started on 20.07.2005
All laboratory analysis completed by 25th July 2005*

Leigh Barker
Project Co-ordinator
ALCONTROL TECHNICHEM

Andy Dengel
Operations Manager
ALCONTROL TECHNICHEM

Test Methods are Documented In House Procedures or where appropriate Standard Methods.

Non accredited tests (if applicable) are identified on each page. Procedures for sampling are outside the scope of the laboratory UKAS accreditation. Opinions and interpretations expressed herein are outside the scope of our UKAS accreditation.

All samples connected with this report, including any 'on hold', will be stored and disposed of according to Company policy. A copy of this policy is available on request.

TEST REPORT

SOIL ANALYTICAL RESULTS

Our Report No: B05005414 (Previous Report B05005069)

Page 2 of 8 pages

Your Order No: Instns of 20.07.2005

CLIENT: Capita Symonds Ltd

66 no. soil samples submitted for additional analysis on 20.07.2005

DATE OF ISSUE: 25th July 2005

Project Name: The Brinkworks

Project Code: CS007890

Lab Ref No:	S05036680	S05036681	S05036682	S05036683	S05036684	S05036685	S05036686	S05036687	S05036688	S05036689
Previous Lab Ref No:	S05034233	S05034235	S05034236	S05034237	S05034238	S05034239	S05034240	S05034241	S05034242	S05034243
Sampling Date:	20/06/2005	20/06/2005	20/06/2005	20/06/2005	20/06/2005	20/06/2005	20/06/2005	20/06/2005	-	-
Sample Ref :	TP 2	TP 4	TP 4	TP 5	TP 5	TP 11	TP 11	TP 12	TP 12	TP 12
Depth(m):	0.50	0.70	3.40	0.30	1.00	0.50	1.50	0.40	1.20	3.00
Sample Type:	S	S	S	S	S	S	S	S	S	S
009 pH	7.2	7.3	6.9	10.0	7.5	8.2	7.3	7.0	6.8	6.6

ALcontrol Technichem

TEST REPORT

SOIL ANALYTICAL RESULTS

Our Report No: B05005414 (Previous Report B05005069)

Page 3 of 8 pages

Your Order No: Instns of 20.07.2005

CLIENT: Capita Symonds Ltd

66 no. soil samples submitted for additional analysis on 20.07.2005

DATE OF ISSUE: 25th July 2005

Project Name: The Brinkworks

Project Code: CS007890

Lab Ref No:	S05036690	S05036691	S05036692	S05036693	S05036694	S05036695	S05036696	S05036697	S05036698	S05036699
Previous Lab Ref No:	S05034244	S05034245	S05034246	S05034247	S05034248	S05034249	S05034250	S05034251	S05034252	S05034253
Sampling Date:	-	-	-	-	-	-	-	-	-	-
Sample Ref :	TP 14	TP 14	TP 14	TP 14	TP 20	TP 20	TP 21	TP 21	TP 21	TP 22
Depth(m):	0.50	2.00	3.00	4.50	1.00	1.80	0.50	1.50	3.50	0.40
Sample Type:	S	S	S	S	S	S	S	S	S	S
009 pH	7.4	7.1	6.7	6.2	7.5	7.1	7.2	7.5	7.7	8.1

ALcontrol Technichem

TEST REPORT

SOIL ANALYTICAL RESULTS

Our Report No: B05005414 (Previous Report B05005069)

Page 4 of 8 pages

Your Order No: Instns of 20.07.2005

CLIENT: Capita Symonds Ltd

66 no. soil samples submitted for additional analysis on 20.07.2005

DATE OF ISSUE: 25th July 2005

Project Name: The Brinkworks

Project Code: CS007890

Lab Ref No:	S05036700	S05036701	S05036702	S05036703	S05036704	S05036705	S05036706	S05036707	S05036708	S05036709
Previous Lab Ref No:	S05034254	S05034255	S05034256	S05034257	S05034258	S05034259	S05034260	S05034261	S05034262	S05034263
Sampling Date:	-	-	-	-	-	-	-	-	-	-
Sample Ref :	TP 22	TP 24	TP 24	TP 25	TP 25	TP 25	TP 26	TP 26	TP 27	TP 27
Depth(m):	2.00	0.30	1.50	0.50	1.50	2.50	0.20	2.00	0.50	2.00
Sample Type:	S	S	S	S	S	S	S	S	S	S
009 pH	7.3	7.2	6.9	8.4	7.4	7.0	7.3	7.2	7.0	7.5

ALcontrol Technichem

TEST REPORT

SOIL ANALYTICAL RESULTS

Our Report No: B05005414 (Previous Report B05005069)

Page 5 of 8 pages

Your Order No: Instns of 20.07.2005

CLIENT: Capita Symonds Ltd

66 no. soil samples submitted for additional analysis on 20.07.2005

DATE OF ISSUE: 25th July 2005

Project Name: The Brinkworks

Project Code: CS007890

Lab Ref No:	S05036710	S05036711	S05036712	S05036713	S05036714	S05036715	S05036716	S05036717	S05036718	S05036719
Previous Lab Ref No:	S05034264	S05034265	S05034266	S05034267	S05034268	S05034269	S05034270	S05034271	S05034272	S05034273
Sampling Date:	-	-	-	-	-	-	-	-	-	-
Sample Ref :	TP 28	TP 28	TP 29	TP 29	TP 34	TP 34	TP 38	TP 38	TP 38	TP 39
Depth(m):	0.30	2.50	1.00	3.50	0.50	1.10	0.40	1.00	1.50	0.40
Sample Type:	S	S	S	S	S	S	S	S	S	S
009 pH	7.1	7.2	8.0	7.3	7.7	7.2	8.7	10.3	7.6	9.7

ALcontrol Technichem

TEST REPORT

SOIL ANALYTICAL RESULTS

Our Report No: B05005414 (Previous Report B05005069)

Page 6 of 8 pages

Your Order No: Instns of 20.07.2005

CLIENT: Capita Symonds Ltd

66 no. soil samples submitted for additional analysis on 20.07.2005

DATE OF ISSUE: 25th July 2005

Project Name: The Brinkworks

Project Code: CS007890

Lab Ref No:	S05036720	S05036721	S05036722	S05036723	S05036724	S05036725	S05036726	S05036727	S05036728	S05036729
Previous Lab Ref No:	S05034274	S05034275	S05034276	S05034277	S05034278	S05034279	S05034280	S05034281	S05034282	S05034283
Sampling Date:	-	-	-	-	-	-	-	-	-	-
Sample Ref :	TP 39	TP 39	TP 43	TP 43	TP 43	TP 46	TP 46	TP 46	TP 48	TP 48
Depth(m):	1.00	2.00	0.50	1.00	3.00	0.50	2.00	3.00	0.40	1.50
Sample Type:	S	S	S	S	S	S	S	S	S	S
009 pH	7.5	7.0	6.3	7.2	7.4	7.3	7.4	7.1	7.6	6.9

ALcontrol Technichem

TEST REPORT

SOIL ANALYTICAL RESULTS

Our Report No: B05005414 (Previous Report B05005069)

Page 7 of 8 pages

Your Order No: Instns of 20.07.2005

CLIENT: Capita Symonds Ltd

66 no. soil samples submitted for additional analysis on 20.07.2005

DATE OF ISSUE: 25th July 2005

Project Name: The Brinkworks

Project Code: CS007890

Lab Ref No:	S05036730	S05036731	S05036732	S05036733	S05036734	S05036735	S05036736	S05036737	S05036738	S05036739
Previous Lab Ref No:	S05034284	S05034285	S05034286	S05034287	S05034288	S05034289	S05034290	S05034291	S05034292	S05034293
Sampling Date:	-	-	-	-	-	-	-	-	-	-
Sample Ref :	TP 48	DS01	DS01	DS01	DS05	DS05	DS05	DS07	DS07	DS07
Depth(m):	3.50	0.90	1.90	2.50	0.60	1.90	3.50	0.25	1.90	3.90
Sample Type:	S	S	S	S	S	S	S	S	S	S
009 pH	7.4	7.0	7.3	7.5	6.2	7.0	7.3	7.4	7.3	7.2

ALcontrol Technichem

TEST REPORT

SOIL ANALYTICAL RESULTS

Our Report No: B05005414 (Previous Report B05005069)

Page 8 of 8 pages

Your Order No: Instns of 20.07.2005

CLIENT: Capita Symonds Ltd

66 no. soil samples submitted for additional analysis on 20.07.2005

DATE OF ISSUE: 25th July 2005

Project Name: The Brinkworks

Project Code: CS007890

Lab Ref No:	S05036740	S05036741	S05036742	S05036743	S05036744	S05036745				
Previous Lab Ref No:	S05034294	S05034295	S05034296	S05034297	S05034298	S05034299				
Sampling Date:	-	-	-	-	-	-				
Sample Ref :	DS10	DS10	DS10	DS14	DS14	DS14				
Depth(m):	0.20	1.00	2.00	0.40	1.50	3.50				
Sample Type:	S	S	S	S	S	S				
009 pH	7.6	7.6	6.9	7.1	6.2	6.8				

ALcontrol Technichem

Cathoir McDermott
Capita Symonds Ltd
Radius House,
51 Clarendon Road
Watford
WD17 1HU

Page 1 of 6 pages

16th August 2005

TEST REPORT

Our Report No: B05005943

Your Order No: CS007890

7 no.water samples submitted for analysis on 06.08.2005

Project Name: The brickworks

Project Code: CS007890

Results enclosed: Pages 2-6

*Laboratory analysis started on 06.08.2005
All laboratory analysis completed by 16th August 2005*

Leigh Barker
Project Co-ordinator
ALCONTROL TECHNICHEM

Peter Morley
Site Manager
ALCONTROL TECHNICHEM

Test Methods are Documented In House Procedures or where appropriate Standard Methods.

Non accredited tests (if applicable) are identified on each page. Procedures for sampling are outside the scope of the laboratory UKAS accreditation. Opinions and interpretations expressed herein are outside the scope of our UKAS accreditation.

All samples connected with this report, including any 'on hold', will be stored and disposed of according to Company policy. A copy of this policy is available on request.

TEST REPORT

WATER ANALYTICAL RESULTS

Our Report No: B05005943

Page 2 of 6 pages

Your Order No: CS007890

CLIENT: Capita Symonds Ltd

7 no. water samples submitted for analysis on 06.08.2005

DATE OF ISSUE: 16th August 2005

Project Name: The brickworks

Project Code: CS007890

Lab Ref No:	S05040300	S05040301	S05040302	S05040303	S05040304	S05040305	S05040306			
Sampling Date:	02/08/2005	02/08/2005	02/08/2005	02/08/2005	02/08/2005	02/08/2005	02/08/2005			
Sample No:	DS07	DS10	BH2	BH3	BH4	BH6	BH7			
Sample Type:	W	W	W	W	W	W	W			
009 pH	7.3	7.3	6.9	6.8	7.2	7.1	6.9			
016 Sulphate as SO ₄	100	230	150	240	160	420	1200			
016 Dissolved Arsenic	0.013	0.015	0.008	0.012	0.010	0.020	0.022			
016 Dissolved Cadmium	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001			
016 Dissolved Chromium	0.011	<0.01	<0.01	<0.01	0.011	<0.01	<0.01			
016 Dissolved Lead	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01			
028 Dissolved Mercury	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005			
016 Dissolved Selenium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01			
016 Dissolved Copper	0.008	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005			
016 Dissolved Nickel	<0.005	<0.005	0.016	0.007	<0.005	0.007	0.009			
016 Dissolved Zinc	0.055	<0.005	0.019	<0.005	<0.005	<0.005	0.014			

All results expressed in mg/l except for pH unless stated

ALcontrol Technichem

TEST REPORT

WATER ANALYTICAL RESULTS - 022 PAH SPECIATED

Our Report No: B05005943

Page 3 of 6 pages

Your Order No: CS007890

CLIENT: Capita Symonds Ltd

7 no. water samples submitted for analysis on 06.08.2005

DATE OF ISSUE: 16th August 2005

Project Name: The brickworks

Project Code: CS007890

Lab Ref No:	S05040300	S05040301	S05040302	S05040303	S05040304	S05040305	S05040306			
Sampling Date:	02/08/2005	02/08/2005	02/08/2005	02/08/2005	02/08/2005	02/08/2005	02/08/2005			
Sample No:	DS07	DS10	BH2	BH3	BH4	BH6	BH7			
Sample Type:	W	W	W	W	W	W	W			
Naphthalene	<0.0001	0.00012	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001			
Acenaphthylene	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001			
Acenaphthene	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001			
Fluorene	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001			
Phenanthrene	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001			
Anthracene	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001			
Fluoranthene	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001			
Pyrene	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001			
Benzo (a) anthracene	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001			
Chrysene	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001			
Benzo (b) fluoranthene	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001			
Benzo (k) fluoranthene	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001			
Benzo (a) pyrene	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001			
Indeno (1,2,3-cd) pyrene	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001			
Dibenzo (a,h) anthracene	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001			
Benzo (g,h,i) perylene	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001			
Total PAH	ND	0.00012	ND	ND	ND	ND	ND			

All results expressed in mg/l

ND denotes Not Detected

Total PAH = Sum of 16 identified components

ALcontrol Technichem

TEST REPORT

WATER ANALYTICAL RESULTS - 039 POLYCHLORINATED BIPHENYLS

Our Report No: B05005943

Page 4 of 6 pages

Your Order No: CS007890

CLIENT: Capita Symonds Ltd

7 no. water samples submitted for analysis on 06.08.2005

DATE OF ISSUE: 16th August 2005

Project Name: The brickworks

Project Code: CS007890

Lab Ref No:	S05040304									
Sampling Date:	02/08/2005									
Sample No:	BH4									
Sample Type:	W									
039 Polychlorinated Biphenyls (PCB's)										
PCB Congener 28	<0.005									
PCB Congener 52	<0.006									
PCB Congener 101	<0.006									
PCB Congener 118	<0.007									
PCB Congener 138	<0.006									
PCB Congener 153	<0.007									
PCB Congener 180	<0.006									
Total PCBs	ND									

All results expressed in mg/l

ND denotes Not Detected

Total PCB = Sum of 7 identified components

ALcontrol Technichem

TEST REPORT

Our Report No: B05005943

Page 5 of 6 pages

Your Order No: CS007890

CLIENT: Capita Symonds Ltd

7 no. water samples submitted for analysis on 06.08.2005

DATE OF ISSUE: 16th August 2005

Project Name: The brickworks

Project Code: CS007890

WATER - RESULTS

Lab Ref No:	Sampling Date:	Sample No:	Sample Type:	072 TPH by GC-FID (C ₁₀ -C ₄₀)	Description
S05040300	02/08/2005	DS07	W	0.16	The sample chromatogram contains a hump of unresolved complex material overlain by a series of peaks ranging between C ₁₀ and C ₃₀ .
S05040301	02/08/2005	DS10	W	<0.01	The sample chromatogram contains too little GC-FID amenable material for qualitative description.
S05040302	02/08/2005	BH2	W	<0.01	The sample chromatogram contains too little GC-FID amenable material for qualitative description.
S05040303	02/08/2005	BH3	W	<0.01	The sample chromatogram contains too little GC-FID amenable material for qualitative description.

NOTE:

- (i) The method provides information only on Gas Chromatograph (GC) amenable material with elutions ranging between 40°C and 325°C.
- (ii) The results are expressed as mg/l.

*Denotes analysis outside the scope of our UKAS accreditation.

TEST REPORT

Our Report No: B05005943

Page 6 of 6 pages

Your Order No: CS007890

CLIENT: Capita Symonds Ltd

7 no. water samples submitted for analysis on 06.08.2005

DATE OF ISSUE: 16th August 2005

Project Name: The brickworks

Project Code: CS007890

WATER - RESULTS

Lab Ref No:	Sampling Date:	Sample No:	Sample Type:	072 TPH by GC-FID (C ₁₀ -C ₄₀)	Description
S05040304	02/08/2005	BH4	W	<0.01	The sample chromatogram contains too little GC-FID amenable material for qualitative description.
S05040305	02/08/2005	BH6	W	0.08	The sample chromatogram contains a hump of unresolved complex material overlain by a series of peaks ranging between C ₁₀ and C ₄₀ .
S05040306	02/08/2005	BH7	W	<0.01	The sample chromatogram contains too little GC-FID amenable material for qualitative description.

NOTE:

- (i) The method provides information only on Gas Chromatograph (GC) amenable material with elutions ranging between 40°C and 325°C.
- (ii) The results are expressed as mg/l.

*Denotes analysis outside the scope of our UKAS accreditation.

Project Name:		THE BRICKWORKS, WARNHAM					Date:	2/8/2005			
Project No.:		CS007890					Weather:	Sunny			
Client:		GAZELEY LTD					Page:	1 of 4			
IN-SITU GAS MONITORING											
Location	Date	Depth	Atmos.	Gas	Gas	Time	Methane	Methane	Carbon	Oxygen	
Ref.		to water	Pressure	Pressure	Flow				Dioxide		
		m bgl	mb	Pa	L/Hr	sec	% LEL	% v/v	% v/v	% v/v	
BH1	2/8/2005	DRY	1014	NR	0	15	1	0.1	2	NR	
					0	30	1	0.1	1.4	NR	
					0	60	1	0.1	1.4	NR	
					0	120	1	0.1	1.4	NR	
					0	180	1	0.1	1.4	NR	
BH2	2/8/2005	2.2	1014	NR	0	15	0	0	0.4	NR	
					0	30	0	0	0.5	NR	
					0	60	0	0	0.5	NR	
					0	120	0	0	0.5	NR	
					0	180	0	0	0.5	NR	
BH3	2/8/2005	2.58	1014	NR	0	15	0	0	1.8	NR	
					0	30	0	0	1.3	NR	
					0	60	0	0	1.3	NR	
					0	120	0	0	1.3	NR	
					0	180	0	0	1.3	NR	
Comments: n/d denotes not detected. NR denotes not read.						Instrument:	Geotechnical Instruments				
						GA2000					
Oxygen not calibrated no reading available						Recorded by:	CMD				

Project Name:		THE BRICKWORKS, WARNHAM					Date:	2/8/2005			
Project No.:		CS007890					Weather:	Sunny			
Client:		GAZELEY LTD					Page:	2 of 4			
IN-SITU GAS MONITORING											
Location	Date	Depth	Atmos.	Gas	Gas	Time	Methane	Methane	Carbon	Oxygen	
Ref:		to water	Pressure	Pressure	Flow				Dioxide		
		m bgl	mb	Pa	L/Hr	sec	% LEL	% v/v	% v/v	% v/v	
BH4	2/8/2005	3.02	1014		0	15	0	0	0.1	NR	
					0	30	0	0	0.1	NR	
					0	60	0	0	0.1	NR	
					0	120	0	0	0.1	NR	
					0	180	0	0	0.1	NR	
BH5	2/8/2005	3.5	1014		0	15	0	0	1.4		
					0	30	0	0	1.4		
					0	60	0	0	1.4		
					0	120	0	0	1.4		
					0	180	0	0	1.4		
BH6	2/8/2005	3.13	1014		0	15	0	0	0.4		
					0	30	0	0	0.4		
					0	60	0	0	0.4		
					0	120	0	0	0.4		
					0	180	0	0	0.4		
Comments: n/d denotes not detected. NR denotes not read.						Instrument:	Geotechnical Instruments				
						GA2000					
						Recorded by:	CMD				

Project Name:	THE BRICKWORKS, WARNHAM					Date:	2/8/2005				
Project No.:	CS007890					Weather:	Sunny				
Client:	GAZELEY LTD					Page:	1 of 4				
IN-SITU GAS MONITORING											
Location	Date	Depth	Atmos.	Gas	Gas	Time	Methane	Methane	Carbon	Oxygen	
Ref:		to water	Pressure	Pressure	Flow				Dioxide		
		m bgl	mb	Pa	L/Hr	sec	% LEL	% v/v	% v/v	% v/v	
BH7	2/8/2005	2.87	1014	NR	0	15	0	0	0.5	NR	
					0	30	0	0	0.3	NR	
					0	60	0	0	0.3	NR	
					0	120	0	0	0.3	NR	
					0	180	0	0	0.3	NR	
BH8	2/8/2005	DRY	1014	NR	0	15	0	0	0.4	NR	
					0	30	0	0	0.5	NR	
					0	60	0	0	0.5	NR	
					0	120	0	0	0.5	NR	
					0	180	0	0	0.5	NR	
BH9	2/8/2005	2.58	1014	NR	0	15	0	0	2.5	NR	
					0	30	0	0	3.2	NR	
					0	60	0	0	3.2	NR	
					0	120	0	0	3.2	NR	
					0	180	0	0	3.2	NR	
Comments: n/d denotes not detected. NR denotes not read.						Instrument:	Geotechnical Instruments				
						GA2000					
Oxygen not calibrated no reading available						Recorded by:	CMD				

Project Name:		THE BRICKWORKS, WARNHAM				Date:	2/8/2005			
Project No.:		CS007890				Weather:	Sunny			
Client:		GAZELEY LTD				Page:	2 of 4			
IN-SITU GAS MONITORING										
Location	Date	Depth	Atmos.	Gas	Gas	Time	Methane	Methane	Carbon	Oxygen
Ref:		to water	Pressure	Pressure	Flow				Dioxide	
		m bgl	mb	Pa	L/Hr	sec	% LEL	% v/v	% v/v	% v/v
BH10	2/8/2005	DRY	1014		0	15	4	0.4	4.6	NR
					0	30	4	0.4	4.6	NR
					0	60	4	0.4	4.6	NR
					0	120	4	0.4	4.6	NR
					0	180	4	0.4	4.6	NR
DS01	2/8/2005	DRY	1014		0	15	0	0	1.4	NR
					0	30	0	0	1.4	NR
					0	60	0	0	1.4	NR
					0	120	0	0	1.4	NR
					0	180	0	0	1.4	NR
DS07	2/8/2005	1.92	1014		0	15	0	0	1	
					0	30	0	0	1	
					0	60	0	0	1	
					0	120	0	0	1	
					0	180	0	0	1	
Comments: n/d denotes not detected. NR denotes not read.						Instrument:	Geotechnical Instruments			
						GA2000				
						Recorded by:	CMD			

Project Name:		THE BRICKWORKS, WARNHAM					Date:	2/8/2005			
Project No.:		CS007890					Weather:	Sunny			
Client:		GAZELEY LTD					Page:	1 of 4			
IN-SITU GAS MONITORING											
Location	Date	Depth	Atmos.	Gas	Gas	Time	Methane	Methane	Carbon	Oxygen	
Ref:		to water	Pressure	Pressure	Flow				Dioxide		
		m bgl	mb	Pa	L/Hr	sec	% LEL	% v/v	% v/v	% v/v	
DS10	2/8/2005	1.15	1014	NR	0	15	0	0	0.4	NR	
					0	30	0	0	0.4	NR	
					0	60	0	0	0.4	NR	
					0	120	0	0	0.4	NR	
					0	180	0	0	0.4	NR	
DS13	2/8/2005	3.13	1014	NR	0	15	0	0	0.1	NR	
					0	30	0	0	0.1	NR	
					0	60	0	0	0.1	NR	
					0	120	0	0	0.1	NR	
					0	180	0	0	0.1	NR	
Comments: n/d denotes not detected. NR denotes not read.						Instrument:	Geotechnical Instruments				
						GA2000					
Oxygen not calibrated no reading available						Recorded by:	CMD				

Appendix D 2010 Ground Investigation Results

ADVANCED INVESTIGATION SYSTEMS LLP

Tel / Fax: ++44 (0) 1305 774157

Mobile: 07970 460 427

Web: www.windowssampling.com

BOREHOLE RECORD

(Window Sampling)

Borehole Number

WS501

Site:
Brookhurst Wood, Wealdland Brickworks, Horsham

Engineer:
T & P Regeneration Ltd

Drilling Equipment:
Competitor 130

Client:
Capita Symonds

Elevation AOD: Easting: Northing:
- - -

Start: Finish:
12/03/2010 12/03/2010

Scale:
1:50

GROUND WATER			SAMPLES & IN SITU TESTING					STRATA RECORD		Sheet 1 of 1
Strike	Well	Depth (m)	Depth/Type (m)	P/P (kg/cm2)	Standard Penetration Testing	Sampler / Recovery	Depth (m)	Key	Description	
					N=2 (0,0/1,1,0,0)	101mm WLS 90%	1	0-00	MADE GROUND: stiff yellow brown locally grey variegated slightly sandy gravelly CLAY. Gravel is mudstone & brick.	
					N=1 (0,0/0,0,1,0)	101mm WLS 90%	2	1-20	MADE GROUND: (loose) dark grey silty fine SAND.	
					N=1 (0,0/1,0,0,0)	92mm WLS 70%	3	1-30	MADE GROUND: (loose) yellow brown fine medium & coarse SAND.	
					N=2 (0,0/1,1,0,0)	92mm WLS 90%	4		MADE GROUND: soft to firm locally soft light blue grey locally yellow brown variegated gravelly CLAY. Gravel is angular fine medium & coarse weak mudstone occasional brick & disseminated clinker.	
					N=16 (0,0/0,5,5,6)	92mm WLS 60%	5			
					45/150mm - Abandoned	92mm WLS 90%	6	5-20	Very weak to weak blue grey thinly laminated MUDSTONE.	
							6	6-00	End of Borehole at 6.15 m	
							7			
							8			
							9			
							10			

Remarks / Well Installation / Casing Details

6.15m BGL: refusal. Backfilled with arisings.



Depth to water strike
Standing water depth

WLS - Windowless Sampler
WS - Window sampler

ADVANCED INVESTIGATION SYSTEMS LLP

Tel / Fax: ++44 (0) 1305 774157

Mobile: 07970 460 427

Web: www.windowssampling.com

**BOREHOLE RECORD
(Window Sampling)**

Borehole
Number

WS502

Site:
Brookhurst Wood, Wealdland Brickworks, Horsham

Engineer:
T & P Regeneration Ltd

Drilling Equipment:
Competitor Dart

Client:
Capita Symonds

Elevation AOD: Easting: Northing:
- - -

Start: Finish:
12/03/2010 12/03/2010

Scale:
1:50

GROUND WATER SAMPLES & IN SITU TESTING STRATA RECORD Sheet 1 of 1






Strike	Well	Depth (m)	Depth/Type (m)	P/P (kg/cm2)	Standard Penetration Testing	Sampler / Recovery	Depth (m)	Key	Description
									MADE GROUND: stiff grey brown slightly sandy gravelly CLAY. Gravel is mudstone with disseminated brick & clinker.
					N=25 (4,5/6,6,7,6)	101mm WLS 90%	1		Stiff to very stiff light yellow brown yellow locally orange brown variegated CLAY with lithorelics grading to poorly developed thinly laminated fabric.
					N=44 (6,7/10,10,11,13)	101mm WLS 90%	2		Very weak to weak yellow brown locally brown thinly laminated extremely closely fissured MUDSTONE. Stained orange brown on discontinuity surfaces.
					N=62 (9,10/12,14,15,21)	70mm WLS 70%	3		End of Borehole at 3.45 m
							4		
							5		
							6		
							7		
							8		
							9		
							10		

Remarks / Well Installation / Casing Details

3.45m BGL: refusal. Backfilled with arisings.



WLS - Windowless Sampler
WS - Window sampler

ADVANCED INVESTIGATION SYSTEMS LLP				BOREHOLE RECORD (Window Sampling)				Borehole Number WS503	
Tel / Fax: ++44 (0) 1305 774157 Mobile: 07970 460 427 Web: www.windowssampling.com				Engineer: T & P Regeneration Ltd				Drilling Equipment: Competitor 130	
Site: Brookhurst Wood, Wealdland Brickworks, Horsham				Client: Capita Symonds				Elevation AOD: - Easting: - Northing: -	
Start: 12/03/2010				Finish: 12/03/2010				Scale: 1:50	
GROUND WATER		SAMPLES & IN SITU TESTING				STRATA RECORD			
Strike	Well	Depth (m)	Depth/Type (m)	P/P (kg/cm2)	Standard Penetration Testing	Sampler / Recovery	Depth (m)	Key	Description
					N=29 (5,6/8,8,7,6)	101mm WLS 90%	1		MADE GROUND: soft to firm locally firm yellow brown locally grey variegated gravely cobbly CLAY. Gravel & cobbles are angular fine medium & coarse weak mudstone occasional brick.
					N=40 (5,7/7,10,10,13)	101mm WLS 100%	2		Very weak to weak blue grey thinly laminated MUDSTONE. Stained orange brown on discontinuity surfaces towards top.
					43/150mm - Abandoned	92mm WLS 70%	3		Very weak to weak light yellow brown thinly laminated extremely closely fissured MUDSTONE. Stained orange brown on discontinuity surfaces.
							3.15		End of Borehole at 3.15 m
							4		
							5		
							6		
							7		
							8		
							9		
							10		
Remarks / Well Installation / Casing Details									
3.15m BGL: refusal. Backfilled with arisings.									
							WLS - Windowless Sampler WS - Window sampler		

ADVANCED INVESTIGATION SYSTEMS LLP

Tel / Fax: ++44 (0) 1305 774157

Mobile: 07970 460 427

Web: www.windowssampling.com

BOREHOLE RECORD

(Window Sampling)

Borehole Number

WS504

Site:
Brookhurst Wood, Wealdland Brickworks, Horsham

Engineer:
T & P Regeneration Ltd

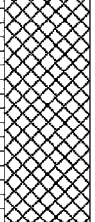


Drilling Equipment:
Competitor 130

Client:
Capita Symonds

Elevation AOD: Easting: Northing:
- - -



Start: Finish:
11/03/2010 11/03/2010

Scale:
1:50


GROUND WATER			SAMPLES & IN SITU TESTING					STRATA RECORD		Sheet 1 of 1
Strike	Well	Depth (m)	Depth/Type (m)	P/P (kg/cm2)	Standard Penetration Testing	Sampler / Recovery	Depth (m)	Key	Description	
					N=9 (1,1/2,3,2,2)	101mm WLS 90%	1		MADE GROUND: firm to stiff grey brown brown / grey variegated gravelly CLAY. Gravel is angular fine medium & coarse weak mudstone ash brick and clinker.	
					N=34 (3,5/8,9,8,9)	101mm WLS 90%	2		Very stiff grey thinly laminated extremely closely fissured CLAY. Stained brown on discontinuity surfaces at top. Grades to mudstone at base.	
		2.85 3.00			N=61 (7,9/12,17,15,17)	92mm WLS 100%	3		End of Borehole at 3.45 m	
							4			
							5			
							6			
							7			
							8			
							9			
							10			

Remarks / Well Installation / Casing Details
3.45m BGL: refusal. Backfilled with arisings.



 Depth to water strike
 Standing water depth

WLS - Windowless Sampler
WS - Window sampler

ADVANCED INVESTIGATION SYSTEMS LLP Tel / Fax: ++44 (0) 1305 774157 Mobile: 07970 460 427 Web: www.windowssampling.com				BOREHOLE RECORD (Window Sampling)				Borehole Number WS505		
Site: Brookhurst Wood, Wealdland Brickworks, Horsham			Engineer: T & P Regeneration Ltd			Drilling Equipment: Competitor 130				
Client: Capita Symonds			Elevation AOD: -		Easting: -	Northing: -	Start: 12/03/2010	Finish: 12/03/2010	Scale: 1:50	
GROUND WATER			SAMPLES & IN SITU TESTING				STRATA RECORD			Sheet 1 of 1
Strike	Well	Depth (m)	Depth/Type (m)	P/P (kg/cm2)	Standard Penetration Testing	Sampler / Recovery	Depth (m)	Key	Description	
									MADE GROUND: firm to stiff locally firm yellow brown locally dark grey slightly sandy gravely cobbly CLAY. Clasts include mudstone with brick & clinker abundant at top.	
					N=5 (1, 1/1, 2, 1, 1)	19mm WLS 90%	1		MADE GROUND: (loose) dark red brown / dark grey brown silty sandy ashy GRAVEL of clinker coke brick.	
					N=12 (1, 3/3, 4, 3, 2)	92mm WLS 90%	2		MADE GROUND: (loose) dark yellow brown / grey brown silty gravely SAND. Gravel includes clinker coke mudstone brick.	
					N=7 (2, 3/3, 1, 1, 2)	92mm WLS 90%	3		MADE GROUND: firm locally firm to stiff yellow brown / grey variegated gravely cobbly CLAY. Gravel & cobbles are angular fine medium & coarse weak mudstone brick & clinker.	
					N=10 (0, 0/0, 0, 5, 5)	92mm WLS 90%	4		MADE GROUND: (loose) dark red brown / dark grey brown silty sandy ashy GRAVEL of clinker coke brick.	
					74 (6, 16/-74 for 225mm)	70mm WLS 70%	5		Soft to firm becoming firm to stiff yellow brown light grey mottled becoming blue grey & dark grey CLAY.	
									Weak to moderately weak brown grey variegated thinly laminated fissured MUDSTONE. Stained orange brown & dark brown on discontinuity surfaces.	
									<i>End of Borehole at 5.38 m</i>	
							6			
							7			
							8			
							9			
							10			
Remarks / Well Installation / Casing Details 5.375m BGL: refusal. Backfilled with arisings.										
										
WLS - Windowless Sampler WS - Window sampler										

ADVANCED INVESTIGATION SYSTEMS LLP

Tel / Fax: ++44 (0) 1305 774157

Mobile: 07970 460 427

Web: www.windowssampling.com

BOREHOLE RECORD

(Window Sampling)

Borehole Number

WS506

Site:
Brookhurst Wood, Wealdland Brickworks, Horsham

Engineer:
T & P Regeneration Ltd

Drilling Equipment:
Competitor Dart

Client:
Capita Symonds

Elevation AOD: - **Easting:** - **Northing:** -

Start: 12/03/2010 **Finish:** 12/03/2010

Scale:
1:50

GROUND WATER **SAMPLES & IN SITU TESTING** **STRATA RECORD** Sheet 1 of 1

Strike	Well	Depth (m)	Depth/Type (m)	P/P (kg/cm2)	Standard Penetration Testing	Sampler / Recovery	Depth (m)	Key	Description
					N=20 (5,5/3,4,6,7)	101mm WLS 90%	1		MADE GROUND: firm becoming firm to stiff grey yellow brown silty CLAY.
					N=20 (4,4/4,5,5,6)	101mm WLS 70%	2		MADE GROUND: firm locally firm to stiff yellow brown / grey variegated gravely cobbly CLAY. Gravel & cobbles are angular fine medium & coarse weak mudstone & brick.
					N=6 (2,2/2,1,1,2)	92mm WLS 20%	3		
					N=8 (2,1/2,1,2,3)	79mm WLS 30%	4		MADE GROUND: firm locally firm to stiff yellow brown / grey variegated gravely cobbly CLAY. Gravel & cobbles are angular fine medium & coarse weak mudstone. Locally discrete black organic partings & occasional wood fragments that retain strength.
					N=10 (2,1/2,1,2,5)	79mm WLS 80%	5		
					35/150mm - Abandoned	70mm WLS 100%	6		Soft to firm becoming firm to stiff yellow brown light grey mottled CLAY.
									Very weak to weak light yellow brown thinly laminated extremely closely fissured MUDSTONE. Stained orange brown on discontinuity surfaces.
									<i>End of Borehole at 5.95 m</i>
							7		
							8		
							9		
							10		

Remarks / Well Installation / Casing Details




5.95m BGL: refusal. Backfilled with arisings.



WLS - Windowless Sampler
WS - Window sampler

ADVANCED INVESTIGATION SYSTEMS LLP Tel / Fax: ++44 (0) 1305 774157 Mobile: 07970 460 427 Web: www.windowssampling.com		BOREHOLE RECORD (Window Sampling)		Borehole Number WS507
Site: Brookhurst Wood, Wealdland Brickworks, Horsham		Engineer: T & P Regeneration Ltd		Drilling Equipment: Competitor Dart
Client: Capita Symonds		Elevation AOD: -	Easting: -	Northing: -
		Start: 12/03/2010	Finish: 12/03/2010	Scale: 1:50

GROUND WATER			SAMPLES & IN SITU TESTING					STRATA RECORD		Sheet 1 of 1
Strike	Well	Depth (m)	Depth/Type (m)	P/P (kg/cm2)	Standard Penetration Testing	Sampler / Recovery	Depth (m)	Key	Description	
									MADE GROUND: firm becoming firm to stiff grey yellow brown silty CLAY with patches & partings of yellow brown fine to medium sand.	
					N=13 (2,6/4,3,3,3)	101mm WLS 90%	1	0-70	MADE GROUND: firm to stiff locally firm yellow brown locally grey slightly sandy very gravely cobbly CLAY. Clasts include mudstone with occasional brick & clinker becoming increasingly abundant with depth.	
					N=8 (2,2/2,2,1,3)	101mm WLS 70%	2			
					N=7 (1,2,1,2,2,2)	92mm WLS 90%	3	3-30	MADE GROUND: (loose) dark brown / dark grey brown very clayey silty sandy ashy GRAVEL of clinker coke & brick.	
					N=8 (2,1/2,2,2,2)	92mm WLS 100%	4	3-90	Firm becoming soft to firm yellow brown light grey locally orange brown mottled CLAY.	
		4.55 5.00			N=76 (2,3/2,15,26,33)	79mm WLS 70%	5	5-30	Weak to moderately weak grey locally light yellow brown variegated thinly laminated fissured MUDSTONE.	
						70mm WLS 90%	6	5.45	<i>End of Borehole at 5.45 m</i>	
							7			
							8			
							9			
							10			

Remarks / Well Installation / Casing Details 5.45m BGL: refusal. Backfilled with arisings.		 Depth to water strike  Standing water depth	WLS - Windowless Sampler WS - Window sampler
--	---	---	---

ADVANCED INVESTIGATION SYSTEMS LLP

Tel / Fax: ++44 (0) 1305 774157

Mobile: 07970 460 427

Web: www.windowssampling.com

BOREHOLE RECORD

(Window Sampling)

Borehole Number

WS508

Site:
Brookhurst Wood, Wealdland Brickworks, Horsham

Engineer:
T & P Regeneration Ltd

Drilling Equipment:
Competitor Dart

Client:
Capita Symonds

Elevation AOD: - **Easting:** - **Northing:** -

Start: 11/03/2010 **Finish:** 11/03/2010

Scale: 1:50

GROUND WATER			SAMPLES & IN SITU TESTING				STRATA RECORD			Sheet 1 of 1
Strike	Well	Depth (m)	Depth/Type (m)	P/P (kg/cm2)	Standard Penetration Testing	Sampler / Recovery	Depth (m)	Key	Description	
					N=7 (1,2/2,1,2,2)	101mm WLS 90%	1			
					N=6 (1,1/2,1,1,2)	101mm WLS 70%	2			
					N=7 (1,1/1,2,2,2)	92mm WLS 90%	3			
					N=8 (1,1,2,1,2,3)	92mm WLS 100%	4			
					N=60 (1,3/10,14,15,21)	79mm WLS 90%	5			
						79mm WLS 90%	6			
		6.00				79mm WLS 90%	6			
							7			
							8			
							9			
							10			

Remarks / Well Installation / Casing Details
6.00m BGL: refusal. 50mm ID, uPVC, slotted well screen installed to 6.0m BGL.



WLS - Windowless Sampler
WS - Window sampler

ADVANCED INVESTIGATION SYSTEMS LLP

Tel / Fax: ++44 (0) 1305 774157
 Mobile: 07970 460 427
 Web: www.windowssampling.com

**BOREHOLE RECORD
 (Window Sampling)**

Borehole
 Number

WS509

Site:
 Brookhurst Wood, Wealdland Brickworks, Horsham

Engineer:
 T & P Regeneration Ltd

Drilling Equipment:
 Competitor Dart

Client:
 Capita Symonds

Elevation AOD: Easting: Northing:
 - - -

Start: Finish:
 12/03/2010 12/03/2010

Scale:
 1:50

GROUND WATER			SAMPLES & IN SITU TESTING					STRATA RECORD		Sheet 1 of 1
Strike	Well	Depth (m)	Depth/Type (m)	P/P (kg/cm ²)	Standard Penetration Testing	Sampler / Recovery	Depth (m)	Key	Description	
					N=6 (1,1/1,1,2,2)	101mm WLS 100%	1		MADE GROUND: firm to stiff yellow brown locally grey slightly sandy very gravely cobbly CLAY. Clasts include mudstone with occasional brick & clinker becoming increasingly abundant with depth.	
					N=7 (1,2/2,2,1,2)	101mm WLS 70%	2			
					N=7 (2,1,0,1,3,3)	92mm WLS 100%	3		MADE GROUND: (loose) dark brown / dark grey brown silty sandy ashy GRAVEL of clinker coke & brick.	
					N=5 (1,1/1,1,1,2)	92mm WLS 60%	4			
		3.65 4.00				73mm WLS 60%	5		Firm becoming stiff yellow brown light grey mottled CLAY.	
					33/150mm - Abandoned	70mm WLS 100%	6		Weak to moderately weak light yellow brown / grey variegated thinly laminated fissured MUDSTONE. Stained orange brown & dark brown on discontinuity surfaces.	
							6		End of Borehole at 5.65 m	
							7			
							8			
							9			
							10			

Remarks / Well Installation / Casing Details
 5.65m BGL: refusal. Backfilled with arisings.



Depth to water strike
 Standing water depth

WLS - Windowless Sampler
 WS - Window sampler

ADVANCED INVESTIGATION SYSTEMS LLP

Tel / Fax: ++44 (0) 1305 774157

Mobile: 07970 460 427

Web: www.windowssampling.com

**BOREHOLE RECORD
(Window Sampling)**

Borehole
Number

WS510

Site:
Brookhurst Wood, Wealdland Brickworks, Horsham

Engineer:
T & P Regeneration Ltd

Drilling Equipment:
Competitor 130

Client:
Capita Symonds

Elevation AOD: Easting: Northing:
- - -

Start: Finish:
10/03/2010 10/03/2010

Scale:
1:50

Sheet 1 of 1

GROUND WATER			SAMPLES & IN SITU TESTING				STRATA RECORD		
Strike	Well	Depth (m)	Depth/Type (m)	P/P (kg/cm ²)	Standard Penetration Testing	Sampler / Recovery	Depth (m)	Key	Description
					N=32 (6,6/7,8,9,8)	101mm WLS 90%	1	0.45 0.70	MADE GROUND: (loose) dark brown / dark grey / yellow brown variegated silty gravely cobbly bouldery SAND. Clasts include brick occasional clinker & coke.
					N=51 (3,7/11,11,13,16)	101mm WLS 90%	2	2.10	MADE GROUND: (loose) dark brown / dark grey brown silty sandy ashy GRAVEL of clinker coke. Very stiff to hard grey with brown variegation & stained orange brown on discontinuity surfaces becoming homogenous grey poorly development thinly laminated fabric CLAY.
					N=38 (3,5/8,9,10,11)	92mm WLS 100%	3	3.20	Stiff light brown yellow (buff) friable poorly developed thinly laminated fabric SILT / CLAY.
					49/150mm - Abandoned	70mm WLS 100%	4	4.00	Very weak to weak blue grey thinly laminated MUDSTONE. Stained orange brown on discontinuity surfaces towards top.
							4		End of Borehole at 4.15 m
							5		
							6		
							7		
							8		
							9		
							10		

Remarks / Well Installation / Casing Details

4.15m BGL: refusal. Backfilled with arisings.



WLS - Windowless Sampler
WS - Window sampler

ADVANCED INVESTIGATION SYSTEMS LLP

Tel / Fax: ++44 (0) 1305 774157

Mobile: 07970 460 427

Web: www.windowssampling.com

**BOREHOLE RECORD
(Window Sampling)**

Borehole
Number

WS511

Site:
Brookhurst Wood, Wealdland Brickworks, Horsham

Engineer:
T & P Regeneration Ltd

Drilling Equipment:
Competitor Dart

Client:
Capita Symonds

Elevation AOD: - **Easting:** - **Northing:** -

Start: 10/03/2010 **Finish:** 10/03/2010

Scale:
1:50

GROUND WATER **SAMPLES & IN SITU TESTING** **STRATA RECORD** Sheet 1 of 1

Strike	Well	Depth (m)	Depth/Type (m)	P/P (kg/cm2)	Standard Penetration Testing	Sampler / Recovery	Depth (m)	Key	Description
						150mm core			CONCRETE
								0.19	
								0.35	MADE GROUND / FILL: (dense) light grey silty sandy angular GRAVEL of limestone.
								0.50	
					N=74 (10,15/16,17,18,23)	101mm WLS 100%	1	0.90	MADE GROUND: firm to stiff yellow brown / grey variegated slightly sandy gravelly CLAY. Gravel is mudstone & brick.
									Very stiff to hard light brown yellow (buff) locally orange brown & grey variegated thinly laminated & fissured CLAY.
		2.00			N=101 (15,19/16,21,30,34)	101mm WLS 100%	2	2.00	Very weak to weak light yellow brown thinly laminated extremely closely fissured MUDSTONE. Stained orange brown on discontinuity surfaces.
									End of Borehole at 2.45 m
							3		
							4		
							5		
							6		
							7		
							8		
							9		
							10		

Remarks / Well Installation / Casing Details

2.45m BGL: refusal. 50mm ID, uPVC, slotted well screen installed to 2.0m BGL.



WLS - Windowless Sampler
WS - Window sampler

ADVANCED INVESTIGATION SYSTEMS LLP

Tel / Fax: ++44 (0) 1305 774157

Mobile: 07970 460 427

Web: www.windowssampling.com

**BOREHOLE RECORD
(Window Sampling)**

Borehole
Number

WS512E

Site:
Brookhurst Wood, Wealdland Brickworks, Horsham

Engineer:
T & P Regeneration Ltd

Drilling Equipment:
Competitor Dart

Client:
Capita Symonds

Elevation AOD: - **Easting:** - **Northing:** -

Start: 11/03/2010 **Finish:** 11/03/2010

Scale:
1:50

GROUND WATER		SAMPLES & IN SITU TESTING					STRATA RECORD		Sheet 1 of 1
Strike	Well	Depth (m)	Depth/Type (m)	P/P (kg/cm2)	Standard Penetration Testing	Sampler / Recovery	Depth (m)	Key	Description
					N=2 (1,0/1,0,1,0)	101mm WLS 90%	1	0.10 0.30	MADE GROUND: stiff yellow brown / grey variegated slightly sandy gravely CLAY. Gravel is mudstone & brick. MADE GROUND: (loose) orange brown fine to medium SAND.
					N=3 (2,0/1,0,1,1)	101mm WLS 80%	2		MADE GROUND: stiff yellow brown occasionally grey variegated slightly sandy locally sandy gravely CLAY. Gravel is mudstone & brick. Wood fragments at base.
					N=45 (4,7,7,8,11,19)	92mm WLS 90%	3	2.60 3.40	Very weak to weak light yellow brown thinly laminated fissured MUDSTONE. Stained orange brown on discontinuity surfaces.
									<i>End of Borehole at 3.45 m</i>
							4		
							5		
							6		
							7		
							8		
							9		
							10		

Remarks / Well Installation / Casing Details
3.45m BGL: refusal. Backfilled with arisings.



WLS - Windowless Sampler
WS - Window sampler

ADVANCED INVESTIGATION SYSTEMS LLP

Tel / Fax: ++44 (0) 1305 774157

Mobile: 07970 460 427

Web: www.windowssampling.com

BOREHOLE RECORD

(Window Sampling)

Borehole Number

WS512A

Site:
Brookhurst Wood, Wealdland Brickworks, Horsham

Engineer:
T & P Regeneration Ltd

Drilling Equipment:
Competitor Dart

Client:
Capita Symonds

Elevation AOD: -
Easting: -
Northing: -

Start: 12/03/2010
Finish: 12/03/2010

Scale:
1:50

Sheet 1 of 1

GROUND WATER		SAMPLES & IN SITU TESTING						STRATA RECORD	
Strike	Well	Depth (m)	Depth/Type (m)	P/P (kg/cm2)	Standard Penetration Testing	Sampler / Recovery	Depth (m)	Key	Description
							101mm WLS 100%		<p>MADE GROUND: stiff yellow brown / grey variegated slightly sandy gravelly CLAY. Gravel is mudstone & brick.</p> <p>MADE GROUND: (loose) orange brown fine to medium SAND.</p> <p>MADE GROUND: stiff yellow brown / grey variegated slightly sandy gravelly CLAY. Gravel is mudstone & brick.</p> <p>MADE GROUND: brick FILL</p> <p><i>End of Borehole at 0.80 m</i></p>
							0.20		
							0.35		
							0.65		
							0.80		
							1		
							2		
							3		
							4		
							5		
							6		
							7		
							8		
							9		
							10		

Remarks / Well Installation / Casing Details

0.80m BGL: refusal. Backfilled with arisings.



WLS - Windowless Sampler
WS - Window sampler

ADVANCED INVESTIGATION SYSTEMS LLP

Tel / Fax: ++44 (0) 1305 774157

Mobile: 07970 460 427

Web: www.windowssampling.com

**BOREHOLE RECORD
(Window Sampling)**

Borehole
Number

WS513

Site:
Brookhurst Wood, Wealdland Brickworks, Horsham

Engineer:
T & P Regeneration Ltd

Drilling Equipment:
Competitor Dart

Client:
Capita Symonds

Elevation AOD: - **Easting:** - **Northing:** -

Start: 11/03/2010 **Finish:** 11/03/2010

Scale:
1:50

GROUND WATER			SAMPLES & IN SITU TESTING					STRATA RECORD		Sheet 1 of 1
Strike	Well	Depth (m)	Depth/Type (m)	P/P (kg/cm2)	Standard Penetration Testing	Sampler / Recovery	Depth (m)	Key	Description	
									MADE GROUND: firm to stiff grey brown brown / grey variegated very gravelly CLAY. Gravel is angular fine medium & coarse brick and clinker.	
					N=15 (1,1/2,4,4,5)	101mm WLS 90%	1		Very stiff light brown yellow (buff) friable poorly developed thinly laminated fabric fissured SILT / CLAY.	
					N=29 (2,3/5,5,9,10)	101mm WLS 80%	2		Very weak to weak light yellow brown locally brown thinly laminated extremely closely fissured MUDSTONE. Stained orange brown on discontinuity surfaces.	
					N=41 (6,9/10,10,10,11)	92mm WLS 100%	3			
					N=39 (5,6/9,8,11,11)	79mm WLS 70%	4			
					N=42 (4,6/8,10,10,14)	70mm WLS 70%	5		End of Borehole at 5.45 m	
							6			
							7			
							8			
							9			
							10			

Remarks / Well Installation / Casing Details

5.45m BGL: refusal. Backfilled with arisings.



WLS - Windowless Sampler
WS - Window sampler

GROUND WATER				SAMPLES & IN SITU TESTING				STRATA RECORD			Sheet 1 of 1
Strike	Well	Depth (m)	Depth/Type (m)	P/P (kg/cm2)	Standard Penetration Testing	Sampler / Recovery	Depth (m)	Key	Description		
						150mm core	0.20	CONCRETE			
						101mm WLS 100%	0.35	MADE GROUND / FILL: (dense) light grey / light red brown silty sandy angular GRAVEL of limestone.			
					N=35 (6,7/8,8,9,10)	101mm WLS 100%	1	Very weak to weak light yellow brown locally brown thinly laminated extremely closely fissured MUDSTONE. Stained orange brown on discontinuity surfaces.			
					N=39 (6,8/8,10,9,12)	101mm WLS 100%	2				
		3.00			38 (10,11/-,-38 for 150mm)	50mm WLS 90%	3	End of Borehole at 3.30 m			
							4				
							5				
							6				
							7				
							8				
							9				
							10				

Remarks / Well Installation / Casing Details
 3.30m BGL: refusal. 50mm ID, uPVC, slotted well screen installed to 3.0m BGL.



WLS - Windowless Sampler
 WS - Window sampler

ADVANCED INVESTIGATION SYSTEMS LLP
 Tel / Fax: ++44 (0) 1305 774157
 Mobile: 07970 460 427
 Web: www.windowssampling.com

BOREHOLE RECORD
(Window Sampling)

Borehole Number
WS514

Site: Brookhurst Wood, Wealdland Brickworks, Horsham
 Engineer: T & P Regeneration Ltd
 Drilling Equipment: Competitor Dart

Client: Capita Symonds
 Elevation AOD: - Easting: - Northing: -
 Start: 11/03/2010 Finish: 11/03/2010
 Scale: 1:50

Scale: 1:50

ADVANCED INVESTIGATION SYSTEMS LLP

Tel / Fax: ++44 (0) 1305 774157

Mobile: 07970 460 427

Web: www.windowssampling.com

**BOREHOLE RECORD
(Window Sampling)**

Borehole
Number

WS515

Site:
Brookhurst Wood, Wealdland Brickworks, Horsham

Engineer:
T & P Regeneration Ltd






Drilling Equipment:
Competitor Dart

Client:
Capita Symonds

Elevation AOD: Easting: Northing:
- - -

Start: Finish:
11/03/2010 11/03/2010

Scale:
1:50

GROUND WATER			SAMPLES & IN SITU TESTING				STRATA RECORD			Sheet 1 of 1
Strike	Well	Depth (m)	Depth/Type (m)	P/P (kg/cm2)	Standard Penetration Testing	Sampler / Recovery	Depth (m)	Key	Description	
						150mm core	0.42		CONCRETE	
					N=24 (5,5/6,5,6,7)	101mm WLS 100%	0.30		MADE GROUND / FILL: (dense) light grey / light red brown silty sandy angular GRAVEL of limestone.	
					N=46 (7,9/9,10,11,16)	92mm WLS 100%			Very weak to weak light yellow brown thinly laminated extremely closely fissured MUDSTONE. Stained orange brown on discontinuity surfaces.	
					N=53 (6,8/10,12,13,18)	79mm WLS 90%			End of Borehole at 3.45 m	
							4			
							5			
							6			
							7			
							8			
							9			
							10			

Remarks / Well Installation / Casing Details
3.45m BGL: refusal. Backfilled with arisings.



WLS - Windowless Sampler
WS - Window sampler

Site:
 Brookhurst Wood, Wealdland Brickworks, Horsham

Engineer:
 T & P Regeneration Ltd

Drilling Equipment:
 Competitor 130

Client:
 Capita Symonds

Elevation AOD: Easting: Northing:
 - - -

Start: Finish:
 10/03/2010 10/03/2010

Scale:
 1:50

GROUND WATER			SAMPLES & IN SITU TESTING					STRATA RECORD		Sheet 1 of 1
Strike	Well	Depth (m)	Depth/Type (m)	P/P (kg/cm2)	Standard Penetration Testing	Sampler / Recovery	Depth (m)	Key	Description	
									CONCRETE	
									MADE GROUND: brick FILL	
					N=26 (0,3/4,5,8,9)	101mm WLS 90%	1		Stiff to very stiff light brown yellow (buff) locally orange brown & grey variegated poorly developed thinly laminated fabric CLAY.	
					N=52 (6,8/11,13,13,15)	101mm WLS 100%	2		Very stiff light brown yellow (buff) friable poorly developed thinly laminated fabric SILT / CLAY.	
					N=93 (18,23/22,20,22,29)	92mm WLS 100%	3		Very stiff to hard light brown yellow (buff) locally orange brown & grey variegated thinly laminated & fissured CLAY.	
		3.00							Very weak to weak light yellow brown thinly laminated extremely closely fissured MUDSTONE. Stained orange brown on discontinuity surfaces.	
									End of Borehole at 3.45 m	
							4			
							5			
							6			
							7			
							8			
							9			
							10			

Remarks / Well Installation / Casing Details
 3.45m BGL: refusal. 50mm ID, uPVC, slotted well screen installed to 3.0m BGL.



WLS - Windowless Sampler
 WS - Window sampler

ADVANCED INVESTIGATION SYSTEMS LLP

Tel / Fax: ++44 (0) 1305 774157

Mobile: 07970 460 427

Web: www.windowssampling.com

**BOREHOLE RECORD
(Window Sampling)**

Borehole
Number

WS517

Site:
Brookhurst Wood, Wealdland Brickworks, Horsham

Engineer:
T & P Regeneration Ltd

Drilling Equipment:
Competitor Dart

Client:
Capita Symonds

Elevation AOD: Easting: Northing:
- - -

Start: Finish:
10/03/2010 10/03/2010

Scale:
1:50

GROUND WATER			SAMPLES & IN SITU TESTING					STRATA RECORD		Sheet 1 of 1
Strike	Well	Depth (m)	Depth/Type (m)	P/P (kg/cm2)	Standard Penetration Testing	Sampler / Recovery	Depth (m)	Key	Description	
					N=5 (3,2/2,1,1,1)	101mm WLS 70%	1	0-0.30	MADE GROUND / FILL: (dense) light grey / light red brown silty sandy angular GRAVEL of limestone.	
					N=8 (0,0/2,0,2,4)	92mm WLS 60%	2	1-1.30	MADE GROUND: firm yellow brown / grey variegated slightly sandy gravelly CLAY. Gravel is mudstone & occasional brick.	
					N=22 (4,4/5,4,6,7)	92mm WLS 80%	3	2-2.55	MADE GROUND: (loose) dark brown / dark grey brown silty sandy ashy GRAVEL of clinker coke. Occasional brick gravel & cobbles.	
					N=61 (7,9/11,12,16,22)	73mm WLS 90%	4	3-3.50	Stiff light brown yellow (buff) friable poorly developed thinly laminated fabric SILT / CLAY.	
								3.50-4.45	Very weak to weak light yellow brown thinly laminated extremely closely fissured MUDSTONE. Stained orange brown on discontinuity surfaces.	
								4.45	End of Borehole at 4.45 m	
								5		
								6		
								7		
								8		
								9		
								10		

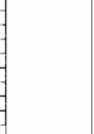
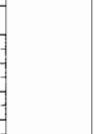
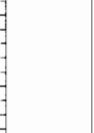
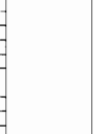

Remarks / Well Installation / Casing Details

4.45m BGL: refusal. 50mm ID, uPVC, slotted well screen installed to 2.5m BGL.



▽ Depth to water strike

WLS - Windowless Sampler
WS - Window sampler

GROUND WATER				SAMPLES & IN SITU TESTING				STRATA RECORD			Sheet 1 of 1
Strike	Well	Depth (m)	Depth/Type (m)	P/P (kg/cm2)	Standard Penetration Testing	Sampler / Recovery	Depth (m)	Key	Description		
					N=9 (2,3/2,2,2,3)	101mm WLS 100%	1		MADE GROUND: firm to stiff grey brown brown / grey variegated gravelly CLAY. Gravel is angular fine medium & coarse weak mudstone ash brick and clinker. Plastic at base.		
					N=4 (1,1/1,1,1,1)	101mm WLS 100%	2		MADE GROUND: firm to stiff yellow brown / grey variegated slightly sandy gravelly CLAY. Gravel is mudstone & brick.		
					N=51 (5,8/10,12,13,16)	92mm WLS 70%	3		Very stiff grey thinly laminated extremely closely fissured CLAY. Stained brown on discontinuity surfaces at top. Grades to mudstone at base.		
					33/75mm - Abandoned	70mm WLS 30%	4		Weak to moderately weak light grey locally brown stained thinly laminated fissured MUDSTONE.		
							4		End of Borehole at 4.23 m		
							5				
							6				
							7				
							8				
							9				
							10				

Remarks / Well Installation / Casing Details

4.225m BGL: refusal. Backfilled with arisings.



WLS - Windowless Sampler
WS - Window sampler

ADVANCED INVESTIGATION SYSTEMS LLP

Tel / Fax: ++44 (0) 1305 774157

Mobile: 07970 460 427

Web: www.windowssampling.com

**BOREHOLE RECORD
(Window Sampling)**

Borehole
Number

WS519

Site:
Brookhurst Wood, Wealdland Brickworks, Horsham

Engineer:
T & P Regeneration Ltd

Drilling Equipment:
Competitor 130

Client:
Capita Symonds

Elevation AOD: - **Easting:** - **Northing:** -

Start: 10/03/2010 **Finish:** 10/03/2010

Scale:
1:50

Sheet 1 of 1

GROUND WATER			SAMPLES & IN SITU TESTING				STRATA RECORD		
Strike	Well	Depth (m)	Depth/Type (m)	P/P (kg/cm2)	Standard Penetration Testing	Sampler / Recovery	Depth (m)	Key	Description
						150mm core			CONCRETE
					N=6 (2, 1/1, 2, 1, 2)	101mm WLS 90%	1		MADE GROUND: coarse brick & clinker FILL
					N=4 (0, 1/1, 1, 1, 1)	101mm WLS 70%	2		MADE GROUND: (loose) dark brown / dark grey brown clayey silty sandy ashy GRAVEL of clinker coke & brick.
					N=5 (0, 1/1, 1, 1, 2)	92mm WLS 90%	3		MADE GROUND: firm locally firm to stiff yellow brown / light grey variegated gravelly CLAY. Gravel is angular fine medium & coarse weak mudstone. Rare disseminated brick and clinker.
					N=5 (1, 1/2, 1, 1, 1)	79mm WLS 90%	4		
					N=11 (2, 2/2, 3, 3, 3)	70mm WLS 70%	5		
						70mm WLS 90%	6		Firm to stiff light grey & brown mottled silty CLAY. Locally thinly laminated and slightly gravelly at base with weak mudstone.
									<i>End of Borehole at 6.00 m</i>
							7		
							8		
							9		
							10		

Remarks / Well Installation / Casing Details

6.00m BGL: refusal. Backfilled with arisings.



WLS - Windowless Sampler
WS - Window sampler

ELAB



Unit A2
Windmill Road
Ponswood Industrial Estate
St Leonards on Sea
East Sussex
TN38 9BY
Telephone (01424) 718618
Facsimile (01424) 729911

THE ENVIRONMENTAL LABORATORY LTD

F.A.O. Mike Nicholas
T & P Regeneration Limited
Number One, Dean Street
Bedminster, Bristol
BS3 1BG

Reporting Date: 09/04/2010

ANALYTICAL REPORT No. AR25914

Samples Received By:-	Courier
Samples Received:-	19/03/10
Your Job No:	HOR462
Site Location:	Horsham (Brickworks)
No Samples Received:-	30
Date of Sampling	12/03/10

Report Checked By:-

A handwritten signature in black ink, appearing to be 'S. Knight'.

Steve Knight
Director

Authorised By:-

A handwritten signature in black ink, appearing to be 'Cliff P.V. Knight'.

Cliff P.V. Knight BSc, EurChem, CChem FRSC
Managing Director

Any comments, opinions, or interpretations expressed herein are outside the scope of UKAS accreditation (Accreditation Number 2683)



THE ENVIRONMENTAL LABORATORY LTD

Unit A2, Windmill Road, Perwood Industrial Estate, St Leonards On Sea, East Sussex, TN38 9BY

Tel: 01424 718618 Fax: 01424 728811

ANALYTICAL REPORT No. AR25914

Location: Horsham (Brickworks)



Your Job No: HOR462

Reporting Date: 09/04/10

F.A.O. Mike Nicholas
T & P Regeneration Limited
Number One, Dean Street
Bodminster, Bristol
BS3 1BG

Characteristic	Loamy Sand	Sandy Silt Loam	Clay	Clay	Clay	Silt Clay Loam	Clay	Clay Loam	Loamy Sand	Clay Loam
Date Sampled	12/03/10	12/03/10	12/03/10	12/03/10	12/03/10	12/03/10	12/03/10	12/03/10	12/03/10	11/03/10
TP/BH	WS501	WS505	WS506	WS506	WS507	WS507	WS508	WS509	WS509	WS512
Depth (m)	0.80	0.90	1.00 - 2.00	4.50	0.30	3.30	0.60	0.50	3.50	0.80
Our ref	52730	52736	52738	52739	52740	52741	52742	52744	52745	52749
Arsenic** (mg/kg)	67.1	19.8	24.9	36.9	18.8	30.7	16.4	21.4	35.4	16.7
Cadmium** (mg/kg)	<0.5	<0.5	<0.5	0.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium** (mg/kg)	31	22	71	20	68	31	51	51	395	39
Lead** (mg/kg)	33	47	44	34	37	35	17	38	28	33
Mercury** (mg/kg)	1.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Nickel** (mg/kg)	71	28	53	24	44	38	50	47	3554	66
Copper** (mg/kg)	71	32	48	17	37	65	37	48	116	32
Zinc** (mg/kg)	73	160	246	42	123	70	232	114	98	82
Selenium** (mg/kg)	3.4	<0.5	0.9	0.7	<0.5	0.6	<0.5	<0.5	1.0	0.8
Hexavalent Chromium (mg/kg)	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Water Soluble Boron (mg/kg)	2.0	2.0	2.0	0.9	1.3	2.3	0.8	1.5	2.5	1.1
pH Value** (Units)	7.3	7.1	7.4	7.2	7.8	7.5	7.8	7.4	7.7	7.9
Water Soluble Sulphate (mg/l as SO ₄)	85	930	218	77	60	187	21	507	751	368
Total Cyanide** (mg/kg)	<1	<1	<1	<1	<1	6.3	1.1	125.4	21.8	1.2
Free Cyanide (mg/kg)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulphide (mg/kg)	<2	15.4	8.8	54.4	7.2	10.0	3.8	<2	<2	7.0
Elemental Sulphur** (mg/kg)	<10	<10	<10	37	11	<10	<10	20	25	<10
Total Monohydric Phenols** (mg/kg)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Soil Organic Matter* (%)	4.6	0.9	0.7	0.6	0.5	2.5	0.4	0.4	2.7	0.3

All results expressed on dry weight basis

** - MCERTS accredited test

* - UKAS accredited test

260



THE ENVIRONMENTAL LABORATORY LTD

Unit A2, Windmill Road, Penwood Industrial Estate, St Leonards On Sea, East Sussex, TN38 9BY
 Tel: 01424 718618 Fax: 01424 728011

ANALYTICAL REPORT No. AR25914

Location: Horsham (Brickworks)



Your Job No: HOR462

Reporting Date: 09/04/10

F.A.O. Mike Nichols
T & P Regeneration Limited
Number One, Bean Street
Bedminster, Bristol
BS3 1BQ

Characteristic	Sand	Clay	Silt Clay Loam	Sandy Silt Loam	Sandy Clay	Clay Loam
Soils						
Date Sampled	11/03/10	11/03/10	10/03/10	10/03/10	11/03/10	11/03/10
TP/BH	WS514	WS515	WS517	WS517	WS518	WS519
Depth (m)	0.30	0.20	0.90	1.50	0.50	1.90
Our ref	52752	52753	52755	52756	52757	52759
Arsenic** (mg/kg)	<5	8.8	132.4	63.7	24.0	23.2
Cadmium** (mg/kg)	<0.5	0.6	<0.5	<0.5	<0.5	0.6
Chromium** (mg/kg)	6	22	65	33	32	34
Lead** (mg/kg)	9	13	53	46	147	164
Mercury** (mg/kg)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Nickel** (mg/kg)	4	13	84	67	38	40
Copper** (mg/kg)	2	9	43	83	67	73
Zinc** (mg/kg)	25	179	214	148	178	197
Selenium** (mg/kg)	<0.5	<0.5	3.6	1.7	0.7	0.6
Hexavalent Chromium (mg/kg)	<2	<2	<2	<2	<2	<2
Water Soluble Boron (mg/kg)	0.8	0.9	3.3	3.6	3.7	2.8
pH Value** (Units)	9.4	8.3	7.7	8.0	7.5	8.0
Water Soluble Sulphate (mg/l as SO ₄)	323	77	64	116	<10	484
Total Cyanide** (mg/kg)	<1	<1	<1	<1	5.8	<1
Free Cyanide (mg/kg)	<1	<1	<1	<1	<1	<1
Sulphide (mg/kg)	<2	3.3	34.5	178.9	19.5	<2
Elemental Sulphur** (mg/kg)	<10	<10	<10	29	<10	<10
Total Monohydric Phenols** (mg/kg)	<1	<1	<1	<1	<1	<1
Soil Organic Matter* (%)	0.2	0.3	1.3	2.4	2.1	0.6

All results expressed on dry weight basis

** - MCERTS accredited test

* - UKAS accredited test

NI



THE ENVIRONMENTAL LABORATORY LTD

Unit A2, Windmill Road, Pennwood Industrial Estate, St Leonards On Sea, East Sussex, TN38 8BW

Tel: 01424 718818 Fax: 01424 728811

ANALYTICAL REPORT No. AR25014

Location: Horsham (Brickworks)



Your Job No: HOR462

Reporting Date: 09/04/10

F.A.O. Mike Nicholas
 Y & P Regeneration Limited
 Number One, Dean Street
 Redminster, Bristol
 BS3 1BG

Soils	Characteristic	Loamy Sand Sandy Silt Loam		Clay		Silt Clay Loam		Clay Loam		Loamy Sand Clay Loam	
		12/03/10	12/03/10	12/03/10	12/03/10	12/03/10	12/03/10	12/03/10	12/03/10	12/03/10	11/03/10
	Date Sampled	12/03/10	12/03/10	12/03/10	12/03/10	12/03/10	12/03/10	12/03/10	12/03/10	12/03/10	11/03/10
	TP/BH	WS501	WS505	WS506	WS506	WS507	WS507	WS508	WS509	WS509	WS512
	Depth (m)	0.80	0.90	1.00 - 2.00	4.50	0.30	3.30	0.60	0.50	3.50	0.80
	Our ref	52730	52736	52738	52739	52740	52741	52742	52744	52745	52749
Naphthalene**	(mg/kg)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene**	(mg/kg)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene**	(mg/kg)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene**	(mg/kg)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene**	(mg/kg)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene**	(mg/kg)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene**	(mg/kg)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	<0.5	<0.5
Pyrene**	(mg/kg)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	<0.5	<0.5
Benz(a)anthracene**	(mg/kg)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.9	<0.5	<0.5
Chrysene**	(mg/kg)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.7	<0.5	<0.5
Benzo(b)fluoranthene**	(mg/kg)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.4	<0.5	<0.5
Benzo(k)fluoranthene**	(mg/kg)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.7	<0.5	<0.5
Benzo(a)pyrene**	(mg/kg)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.5
Indeno(123-cd)pyrene**	(mg/kg)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.9	<0.5	<0.5
Dibenz(ah)anthracene**	(mg/kg)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(ghi)perylene**	(mg/kg)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.9	<0.5	<0.5
Total PAH**	(mg/kg)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	8.1	<0.5	<0.5

All results expressed on dry weight basis

** - MCERTS accredited test

AV



F.A.O. Mike Nicholas
 T & P Regeneration Limited
 Number One, Dean Street
 Bedminster, Bristol
 BS3 1BG

THE ENVIRONMENTAL LABORATORY LTD

Unit A2, Windmill Road, Penwood Industrial Estate, St Leonards On Sea, East Sussex, TN38 9BY

Tel: 01424 718618 Fax: 01424 728011

ANALYTICAL REPORT No. AR25914

Location: Horsham (Brickworks)



Your Job No: HOR462

Reporting Date: 09/04/10

Soils	Characteristic	Sand		Clay		Silt Clay Loam		Sandy Silt Loam		Sandy Clay		Clay Loam	
		Date Sampled	11/03/10	11/03/10	10/03/10	10/03/10	10/03/10	10/03/10	11/03/10	11/03/10	11/03/10	11/03/10	11/03/10
	TP/BH	WS514	WS514	WS515	WS517	WS517	WS517	WS518	WS518	WS518	WS518	WS519	WS519
	Depth (m)	0.30	0.20	0.20	0.90	1.50	1.50	0.50	0.50	0.50	0.50	1.90	1.90
	Our ref	52752	52753	52753	52755	52756	52756	52757	52757	52757	52757	52759	52759
Naphthalene**	(mg/kg)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene**	(mg/kg)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene**	(mg/kg)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene**	(mg/kg)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene**	(mg/kg)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene**	(mg/kg)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene**	(mg/kg)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene**	(mg/kg)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)anthracene**	(mg/kg)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene**	(mg/kg)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b)fluoranthene**	(mg/kg)	<0.5	<0.5	<0.5	0.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene**	(mg/kg)	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene**	(mg/kg)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1,2,3-cd)pyrene**	(mg/kg)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(ah)anthracene**	(mg/kg)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(ghi)perylene**	(mg/kg)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Total PAH**	(mg/kg)	<0.5	<0.5	<0.5	1.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

All results expressed on dry weight basis

** - MCERTS accredited test

m

THE ENVIRONMENTAL LABORATORY LTD

Unit A2, Windmill Road, Pennwood Industrial Estate, St Leonards On Sea, East Sussex, TN38 9BF

Tel: 01424 718618 Fax: 01424 728911

ANALYTICAL REPORT No. AR25914

Location: Horsham (Brickworks)



Your Job No: HOR462

Reporting Date: 09/04/10

**F.A.O. Mike Nicholas
T & P Regeneration Limited
Number One, Dean Street
Bodminster, Bristol
BS3 1BG**

TPH CMG - Soil

Characteristic	Loamy Sand	Loamy Sand	Sandy Clay	Clay	Clay	Clay	Sandy Silt Loam	Sandy Clay Loam	Clay	Clay
Date Sampled	12/03/10	12/03/2010	12/03/2010	12/03/2010	12/03/2010	12/03/2010	12/03/10	12/03/10	12/03/10	12/03/10
TP/BH	WS501	WS501	WS501	WS502	WS503	WS504	WS505	WS505	WS506	WS506
Depth (m)	0.80	1.50	3.50	0.70	0.10	0.50	0.90	3.40	1.00 - 2.00	4.50
Our ref	52730	52731	52732	52733	52734	52735	52736	52737	52738	52739
<u>Amphibic</u>										
>EC ₅ -EC ₇ (mg/kg)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
>EC ₇ -EC ₈ (mg/kg)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
>EC ₈ -EC ₁₀ (mg/kg)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
>EC ₁₀ -EC ₁₂ (mg/kg)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
>EC ₁₂ -EC ₁₆ (mg/kg)	<0.1	<0.1	1.8	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
>EC ₁₆ -EC ₂₁ (mg/kg)	<0.1	0.9	13.8	<0.1	<0.1	<0.1	0.2	<0.1	<0.1	<0.1
>EC ₂₁ -EC ₃₅ (mg/kg)	2.3	2.5	35.4	1.0	0.1	0.3	0.7	<0.1	1.8	<0.1
<u>Aliphatic</u>										
>EC ₅ -EC ₈ (mg/kg)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
>EC ₈ -EC ₁₀ (mg/kg)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
>EC ₁₀ -EC ₁₂ (mg/kg)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
>EC ₁₂ -EC ₁₆ (mg/kg)	<0.1	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
>EC ₁₆ -EC ₂₁ (mg/kg)	<0.1	<0.1	16.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
>EC ₂₁ -EC ₃₅ (mg/kg)	<0.1	4.8	66.1	1.8	<0.1	0.1	<0.1	<0.1	2.0	<0.1
TPH (C ₆ - C ₄₀) (mg/kg)	2.7	14.5	168.5	2.8	0.1	0.4	1.3	<0.1	3.8	<0.1

All results expressed on dry weight basis

mu

THE ENVIRONMENTAL LABORATORY LTD

Unit A2, Windmill Road, Penwood Industrial Estate, St Leonards On Sea, East Sussex, TN38 9BY

Tel: 01424 719618 Fax: 01424 729011

ANALYTICAL REPORT No. AR25914

Location: Horsham (Brickworks)



Your Job No: HOR462

Reporting Date: 09/04/10

F.A.S. Mike Nicholas
T & P Regeneration Limited
Number One, Bean Street
Bedminster, Bristol
BS3 1DG

TPH CMG - Soil

Characteristic	Clay	Silt Clay Loam	Clay	Clay Loam	Clay Loam	Loamy Sand	Sandy Silt Loam	Silt Clay Loam	Sandy Clay	Clay Loam
Date Sampled	12/03/10	12/03/10	12/03/10	12/03/10	12/03/10	12/03/10	10/03/10	10/03/10	10/03/10	11/03/10
TP/BH	WS507	WS507	WS508	WS508	WS509	WS509	WS510	WS510	WS511	WS512
Depth (m)	0.30	3.30	0.60	1.60	0.50	3.50	0.10	0.70	0.30	0.80
Our ref	52740	52741	52742	52743	52744	52745	52746	52747	52748	52749
Aromatic										
>EC ₅ -EC ₇	(mg/kg)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
>EC ₇ -EC ₈	(mg/kg)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
>EC ₈ -EC ₁₀	(mg/kg)	<0.1	<0.1	<0.1	<0.1	0.8	<0.1	<0.1	4.6	<0.1
>EC ₁₀ -EC ₁₂	(mg/kg)	<0.1	<0.1	<0.1	<0.1	0.2	<0.1	<0.1	3.3	<0.1
>EC ₁₂ -EC ₁₆	(mg/kg)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	5.6	<0.1
>EC ₁₆ -EC ₂₁	(mg/kg)	<0.1	5.4	<0.1	<0.1	1.5	<0.1	0.4	14.7	<0.1
>EC ₂₁ -EC ₃₅	(mg/kg)	1.7	89.7	1.8	0.5	12.3	0.4	3.2	230.8	1.8
Aliphatic										
>EC ₅ -EC ₆	(mg/kg)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
>EC ₆ -EC ₈	(mg/kg)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
>EC ₈ -EC ₁₀	(mg/kg)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	3.2	<0.1
>EC ₁₀ -EC ₁₂	(mg/kg)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.2	<0.1
>EC ₁₂ -EC ₁₆	(mg/kg)	<0.1	0.7	<0.1	<0.1	0.5	<0.1	0.2	0.2	<0.1
>EC ₁₆ -EC ₂₁	(mg/kg)	<0.1	20.7	<0.1	<0.1	2.3	<0.1	2.7	47.1	<0.1
>EC ₂₁ -EC ₃₅	(mg/kg)	5.1	132.3	1.9	<0.1	10.9	<0.1	6.5	686.1	5.8
TPH (C ₆ - C ₄₀)	(mg/kg)	6.8	248.9	3.7	0.5	28.5	0.4	12.9	995.8	7.6

All results expressed on dry weight basis

mu)



2000

THE ENVIRONMENTAL LABORATORY LTD

Unit A2, Windmill Road, Pinewood Industrial Estate, St Leonards-on-Sea, East Sussex, TN39 5DF

Tel: 01424 718618 Fax: 01424 728911

ANALYTICAL REPORT No. AR25914

Location: Horsham (Brickworks)

ELAB

F.A.O. Mike Nicholes
T & P Regeneration Limited
Number One, Dean Street
Bodminster, Bristol
BS3 1BG

Your Job No: HOR462
Reporting Date: 09/04/10

Asbestos Identification

Sample ref:	WSS01
Depth (m)	0.90
Our ref:	52730
#Description of Sample Matrix:	Loamy Sand
Result:	No asbestos identified

Sample ref:	WSS05
Depth (m)	0.90
Our ref:	52730
#Description of Sample Matrix:	Sandy Silt Loam
Result:	No asbestos identified

Sample ref:	WSS06
Depth (m)	1.00 - 2.00
Our ref:	52738
#Description of Sample Matrix:	Clay
Result:	No asbestos identified

Sample ref:	WSS07
Depth (m)	0.30
Our ref:	52740
#Description of Sample Matrix:	Clay
Result:	No asbestos identified

Sample ref:	WSS08
Depth (m)	0.50
Our ref:	52744
#Description of Sample Matrix:	Clay Loam
Result:	No asbestos identified

*= UKAS accredited

Analytical result only applies to the sample as submitted by the client

Any comments, opinions or interpretations (marked #) in this report are outside UKAS accreditation (Accreditation No2683). They are subjective comments only which must be verified by the client

701



THE ENVIRONMENTAL LABORATORY LTD

Unit A8, Windmill Road, Pennwood Industrial Estate, St Leonards On Sea, East Sussex, TN38 9DF

Tel: 01424 718818 Fax: 01424 728811

ANALYTICAL REPORT No. AR25014

Location: Horsham (Brickworks)



**F.A.O. Mike Nicholas
T & P Regeneration Limited
Number One, Dean Street
Badminster, Bristol
BS3 1BG**

Your Job No: HOR462

Reporting Date: 09/04/10

Asbestos Identification

Sample ref:	W8512
Depth (m)	0.80
Our ref:	52749
#Description of Sample Matrix:	Clay Loam
Result:	No asbestos identified

Sample ref:	W8517
Depth (m)	0.90
Our ref:	52758
#Description of Sample Matrix:	Silt Clay Loam
Result:	No asbestos identified

Sample ref:	W8518
Depth (m)	0.50
Our ref:	52757
#Description of Sample Matrix:	Sandy Clay
Result:	No asbestos identified

Sample ref:	W8519
Depth (m)	1.00
Our ref:	52758
#Description of Sample Matrix:	Clay Loam
Result:	No asbestos identified

*= UKAS accredited

Analytical result only applies to the sample as submitted by the client

Any comments, opinions or interpretations (marked #) in this report are outside UKAS accreditation (Accreditation No2683). They are subjective comments only which must be verified by the client

NU



Unit A2
 Windmill Road
 Ponswood Industrial Estate
 St Leonards on Sea
 East Sussex
 TN38 9BY
 Telephone (01424) 718618
 Facsimile (01424) 729911

THE ENVIRONMENTAL LABORATORY LTD

SAMPLE RECEIPT AND TEST DATES

Our Analytical Report Number AR25914
 Your Job No: HOR462
 Sample Receipt Date: 19/03/10
 Reporting Date: 09/04/10

 Registered: 19/03/10
 Prepared: 20/03/10
 Analysis complete: 09/04/10

TEST METHOD SUMMARY

PARAMETER	Analysis Undertaken on	Date Tested	Method Number	Technique
Arsenic**	Air dried sample	31/03/10	118	ICPMS
Cadmium**	Air dried sample	31/03/10	118	ICPMS
Chromium**	Air dried sample	31/03/10	118	ICPMS
Lead**	Air dried sample	31/03/10	118	ICPMS
Mercury**	Air dried sample	31/03/10	118	ICPMS
Nickel**	Air dried sample	31/03/10	118	ICPMS
Copper**	Air dried sample	31/03/10	118	ICPMS
Zinc**	Air dried sample	31/03/10	118	ICPMS
Selenium**	Air dried sample	31/03/10	118	ICPMS
Hexavalent Chromium	As submitted sample	29/03/10	110	Colorimetry
Water Soluble Boron	Air dried sample	31/03/10	202	Colorimetry
pH Value**	Air dried sample	31/03/10	113	Probe
Water Soluble Sulphate	Air dried sample	30/03/10	209	Colorimetry
Total Cyanide**	As submitted sample	31/03/10	204	Colorimetry
Free Cyanide	As submitted sample	31/03/10	107	Colorimetry
Sulphide	As submitted sample	01/04/10	109	Colorimetry
Elemental Sulphur**	Air dried sample	30/03/10	122	HPLC
Total Monohydric Phenols**	As submitted sample	30/03/10	121	HPLC
Soil Organic Matter*	Air dried sample	31/03/10	111	Titration
Speciated PAH**	As submitted sample	31/03/10	133	Gas Chromatography
Carbon Banding (TPH)	As submitted sample	26/03/10	117	Gas chromatography
Asbestos*	As submitted sample	05/04/10	179	see note

Asbestos analysis qualitative only

Note:- Documented In-house procedure based on HSG 248 2005

* = UKAS Accredited test

** - MCERTS Accredited test

Determinands not marked with * or ** are non accredited

MCERTS accreditation covers samples which are predominantly sand, clay, loam or combinations of these three soil types

Any comments, opinions, or interpretations expressed herein are outside the scope of UKAS accreditation (Accreditation Number 2683)

ELAB



Unit A2
Windmill Road
Ponswood Industrial Estate
St Leonards on Sea
East Sussex
TN38 9BY
Telephone (01424) 718618
Facsimile (01424) 729911

THE ENVIRONMENTAL LABORATORY LTD

F.A.O. Mike Nicholas
T & P Regeneration Limited
Number One, Dean Street
Bedminster, Bristol
BS3 1BG

Reporting Date: 09/04/2010

ANALYTICAL REPORT No. AR25994

Samples Received By:-	Courier
Samples Received:-	24/03/10
Your Job No:	HOR462
Site Location:	Horsham (Brickworks)
No Samples Received:-	4
Date of Sampling	22/03/10

Report Checked By:-

A handwritten signature in black ink, appearing to read 'S. Knight'.

Steve Knight
Director

Authorised By:-

A handwritten signature in black ink, appearing to read 'Cliff P.V. Knight'.

Cliff P.V. Knight BSc, EurChem, CChem FRSC
Managing Director

Any comments, opinions, or interpretations expressed herein are outside the scope of UKAS accreditation (Accreditation Number 2683)



F.A.O. Mike Nicholas
 T & P Regeneration Limited
 Number One, Dean Street
 Badminton, Bristol
 BS3 1BQ

THE ENVIRONMENTAL LABORATORY LTD

Unit A2, Windmill Road, Foxwood Industrial Estate, St Leonards On Sea, East Sussex, TN38 9JF

Tel: 01424 718616 Fax: 01424 728811

ANALYTICAL REPORT No. AR25894

Location: Horsham (Brickworks)



Your Job No: HOR462

Reporting Date: 09/04/10

Soils	Characteristic	Silt Loam	Silt Loam
	Date Sampled	22/03/10	22/03/10
	Sample Reference	601 Silt	604 Silt
	Our ref	53223	53224
Arsenic**	(mg/kg)	18.1	14.8
Cadmium**	(mg/kg)	<0.5	<0.5
Chromium**	(mg/kg)	72	64
Lead**	(mg/kg)	32	32
Mercury**	(mg/kg)	<0.5	<0.5
Nickel**	(mg/kg)	50	44
Copper**	(mg/kg)	33	34
Zinc**	(mg/kg)	103	103
Selenium	(mg/kg)	<0.5	<0.5
Hexavalent Chromium	(mg/kg)	<2	<2
Water Soluble Boron	(mg/kg)	1.1	1.3
pH Value**	(Units)	8.3	8.2
Water Soluble Sulphate	(mg/l as SO ₄)	<10	<10
Total Cyanide**	(mg/kg)	<1	<1
Free Cyanide	(mg/kg)	<1	<1
Sulphide	(mg/kg)	<2	<2
Elemental Sulphur**	(mg/kg)	109	336
Total Monohydric Phenols**	(mg/kg)	<1	<1
Soil Organic Matter*	(%)	0.8	0.6

All results expressed on dry weight basis

** - MCERTS accredited test

* = UKAS accredited test

7/01



F.A.O. Mike Nicholas
 T & P Regeneration Limited
 Number One, Dean Street
 Bedminster, Bristol
 BS3 1BG

THE ENVIRONMENTAL LABORATORY LTD

Unit A2, Windmill Road, Penwood Industrial Estate, St Leonards On Sea, East Sussex, TN38 9BY

Tel: 01424 718618 Fax: 01424 729911

ANALYTICAL REPORT No. AR25994

Location: Horsham (Brickworks)



Your Job No: HOR462

Reporting Date: 09/04/10

Soils

	Characteristic	Silt Loam	Silt Loam
	Date Sampled	22/03/10	22/03/10
	Sample Reference	601 Silt	604 Silt
	Our ref	53223	53224
Naphthalene**	(mg/kg)	<0.5	<0.5
Acenaphthylene**	(mg/kg)	<0.5	<0.5
Acenaphthene**	(mg/kg)	<0.5	<0.5
Fluorene**	(mg/kg)	<0.5	<0.5
Phenanthrene**	(mg/kg)	<0.5	<0.5
Anthracene**	(mg/kg)	<0.5	<0.5
Fluoranthene**	(mg/kg)	<0.5	<0.5
Pyrene**	(mg/kg)	<0.5	<0.5
Benz(a)anthracene**	(mg/kg)	<0.5	<0.5
Chrysene**	(mg/kg)	<0.5	<0.5
Benzo(b)fluoranthene**	(mg/kg)	<0.5	<0.5
Benzo(k)fluoranthene**	(mg/kg)	<0.5	<0.5
Benzo(a)pyrene**	(mg/kg)	<0.5	<0.5
Indeno(1,2,3-cd)pyrene**	(mg/kg)	<0.5	<0.5
Dibenz(ah)anthracene**	(mg/kg)	<0.5	<0.5
Benzo(ghi)perylene**	(mg/kg)	<0.5	<0.5
Total PAH**	(mg/kg)	<0.5	<0.5

All results expressed on dry weight basis

** - MCERTS accredited test

261

THE ENVIRONMENTAL LABORATORY LTD

Unit A2, Windmill Road, Portsmouth Industrial Estate, St Leonards-On-Sea, East Sussex, TN38 9BY

Tel: 01424 718818 Fax: 01424 738911

ANALYTICAL REPORT No. AR25994

Location: Horsham (Brickworks)



Your Job No: HOR462

Reporting Date: 09/04/10

F.A.S. Mike Nichols
T & P Regeneration Limited
Number One, Dean Street
Bodminster, Bristol
BS3 1BG

TPH CMO - Soil

Characteristic	Silt Loam	Silt Loam
Date Sampled	22/03/10	22/03/10
Sample Reference	601 Silt	604 Silt
Our ref	53223	53224
Aromatic		
>EC ₅ -EC ₇ (mg/kg)	<0.01	<0.01
>EC ₇ -EC ₉ (mg/kg)	<0.01	0.02
>EC ₉ -EC ₁₀ (mg/kg)	3.2	3.3
>EC ₁₀ -EC ₁₂ (mg/kg)	3.2	3.4
>EC ₁₂ -EC ₁₆ (mg/kg)	6.7	6.9
>EC ₁₆ -EC ₂₁ (mg/kg)	8.3	8.7
>EC ₂₁ -EC ₃₅ (mg/kg)	15.2	18.8
Aliphatic		
>EC ₅ -EC ₆ (mg/kg)	<0.01	<0.01
>EC ₆ -EC ₈ (mg/kg)	<0.01	<0.01
>EC ₈ -EC ₁₀ (mg/kg)	2.2	2.2
>EC ₁₀ -EC ₁₂ (mg/kg)	1.2	1.2
>EC ₁₂ -EC ₁₆ (mg/kg)	1.4	1.4
>EC ₁₆ -EC ₂₁ (mg/kg)	1.2	1.5
>EC ₂₁ -EC ₃₅ (mg/kg)	16.1	36.1
TPH (C ₆ - C ₄₀) (mg/kg)	58.7	83.6

All results expressed on dry weight basis

JW



2003

F.A.O. Mike Nicholas
T & P Regeneration Limited
Number One, Dean Street
Bedminster, Bristol
BS3 1BQ

THE ENVIRONMENTAL LABORATORY LTD

Unit A2, Windmill Road, Ponewood Industrial Estate, St Leonards On Sea, East Sussex, TN38 9BY

Tel: 01424 718618 Fax: 01424 729011

ANALYTICAL REPORT No. AR25994

Location: Horsham (Brickworks)

ELAB

Your Job No: HOR462

Reporting Date: 09/04/2010

Waters

		Date Sampled	22/03/10	22/03/10
		Sample Reference	601 Water	604 Water
		Our ref	53225	53226
Arsenic*	(µg/l)		<5	<5
Cadmium*	(µg/l)		<1	<1
Chromium*	(µg/l)		<5	<5
Lead*	(µg/l)		<1	<1
Nickel*	(µg/l)		3	3
Copper*	(µg/l)		<5	<5
Zinc*	(µg/l)		22	17
Mercury*	(µg/l)		<0.1	<0.1
Selenium*	(µg/l)		<5	<5
Boron	(µg/l)		6	130
pH Value*	(Units)		7.6	7.8
Sulphate*	(mg/l)		112	153
Total Cyanide*	(µg/l)		<5	<5
Free Cyanide	(µg/l)		<5	<5
Sulphide	(mg/l)		<0.1	<0.1
Total Phenols	(µg/l)		<0.5	<0.5
Elemental Sulphur	(mg/l)		<0.1	<0.1

* = UKAS Accredited test

2010

THE ENVIRONMENTAL LABORATORY LTD

Unit A2, Windmill Road, Parkwood Industrial Estate, St Leonards On Sea, East Sussex, TN38 9BY

Tel: 01424 718818 Fax: 01424 728811

ANALYTICAL REPORT No. AR25994

Location: Horsham (Brickworks)

ELAB

Your Job No: HOR462

Reporting Date: 09/04/2010

F.A.O. Mike Nicholas
T & P Regeneration Limited
Number One, Dean Street
Bedminster, Bristol
BS3 1BG

Water

		Date Sampled	22/03/10	22/03/10
		Sample Reference	601 Water	604 Water
		Our ref	53225	53226
Naphthalene	(µg/l)		<0.01	0.04
Acenaphthylene	(µg/l)		0.01	0.01
Acenaphthene	(µg/l)		0.01	<0.01
Fluorene	(µg/l)		<0.01	<0.01
Phenanthrene	(µg/l)		0.01	0.01
Anthracene	(µg/l)		<0.01	<0.01
Fluoranthene	(µg/l)		0.01	0.01
Pyrene	(µg/l)		0.01	0.01
Benzo(a)anthracene	(µg/l)		<0.01	<0.01
Chrysene	(µg/l)		<0.01	<0.01
Benzo(b)fluoranthene	(µg/l)		<0.01	<0.01
Benzo(k)fluoranthene	(µg/l)		<0.01	<0.01
Benzo(a)pyrene	(µg/l)		<0.01	<0.01
Indeno(123-cd)pyrene	(µg/l)		<0.01	<0.01
Dibenz(ah)anthracene	(µg/l)		<0.01	<0.01
Benzo(ghi)perylene	(µg/l)		<0.01	<0.01
Total PAH	(µg/l)		0.05	0.08

MI



Unit A2
Windmill Road
Ponswood Industrial Estate
St Leonards on Sea
East Sussex
TN38 9BY
Telephone (01424) 718618
Facsimile (01424) 729911

THE ENVIRONMENTAL LABORATORY LTD

SAMPLE RECEIPT AND TEST DATES

Our Analytical Report Number AR25994
Your Job No: HOR462
Sample Receipt Date: 24/03/10
Reporting Date: 09/04/10

Registered: 24/03/10
Prepared: 25/03/10
Analysis complete: 09/04/10

TEST METHOD SUMMARY

PARAMETER	Analysis Undertaken on	Date Tested	Method Number	Technique
Arsenic**	Air dried sample	03/04/10	118	ICPMS
Cadmium**	Air dried sample	03/04/10	118	ICPMS
Chromium**	Air dried sample	03/04/10	118	ICPMS
Lead**	Air dried sample	03/04/10	118	ICPMS
Mercury**	Air dried sample	03/04/10	118	ICPMS
Nickel**	Air dried sample	03/04/10	118	ICPMS
Copper**	Air dried sample	03/04/10	118	ICPMS
Zinc**	Air dried sample	03/04/10	118	ICPMS
Selenium	Air dried sample	03/04/10	118	ICPMS
Hexavalent Chromium	As submitted sample	30/03/10	110	Colorimetry
Water Soluble Boron	Air dried sample	06/04/10	202	Colorimetry
pH Value**	Air dried sample	06/04/10	113	Probe
Water Soluble Sulphate	Air dried sample	07/04/10	209	Colorimetry
Total Cyanide**	As submitted sample	01/04/10	204	Colorimetry
Free Cyanide	As submitted sample	01/04/10	107	Colorimetry
Sulphide	As submitted sample	02/04/10	109	Colorimetry
Elemental Sulphur**	Air dried sample	06/04/10	122	HPLC
Total Monohydric Phenols**	As submitted sample	31/03/10	121	HPLC
Soil Organic Matter*	Air dried sample	06/04/10	111	Titration
Speciated PAH**	As submitted sample	31/03/10	133	Gas Chromatography
Carbon Banding (TPH)	As submitted sample	29/03/10	117	Gas chromatography

* = UKAS Accredited test

** - MCERTS Accredited test

Determinands not marked with * or ** are non accredited

MCERTS accreditation covers samples which are predominantly sand, clay, loam or combinations of these three soil types

Any comments, opinions, or interpretations expressed herein are outside the scope of UKAS accreditation (Accreditation Number 2683)

ELAB



2683

Unit A2
Windmill Road
Ponswood Industrial Estate
St Leonards on Sea
East Sussex
TN38 9BY
Telephone (01424) 718618
Facsimile (01424) 729911

THE ENVIRONMENTAL LABORATORY LTD

WATER SAMPLE RECEIPT AND TEST DATES

Our Analytical Report Number AR25994
Your Ref No: HOR462
Sample Receipt Date: 24/03/10
Reporting Date: 09/04/10

Registered: 24/03/10
Prepared: 25/03/10
Analysis complete: 09/04/10

WATER TEST METHOD SUMMARY


PARAMETER	Method Number	Technique
Arsenic*	101	ICPMS
Cadmium*	101	ICPMS
Chromium*	101	ICPMS
Lead*	101	ICPMS
Nickel*	101	ICPMS
Copper*	101	ICPMS
Zinc*	101	ICPMS
Mercury*	101	ICPMS
Selenium*	101	ICPMS
Boron	203	Colorimetry
pH Value*	113	Electrometric
Sulphate*	131	Ion Chromatography
Total Cyanide*	130	Colorimetry
Free Cyanide	132	Colorimetry
Sulphide	134	Colorimetry
Total Phenols	121	HPLC
Elemental Sulphur	122	HPLC
Speciated PAH	135	GCMS

* = UKAS Accredited test

Determinands not marked with * are non accredited

Any comments, opinions, or interpretations expressed herein are outside the scope of UKAS accreditation (Accreditation Number 2683)


Gas Monitoring Records

Client: Capita Symonds													
Project: Horsham (Brick works) Phase 2													
Project No: HOR462													
Date and time: 22.03.10 11.45am						Surface ground conditions:							
Logged by: Duncan Guthrie			Approved By:			Weather conditions: Cloudy and Windy							
Barometric pressure trend (24 hr) ^{*1} : Day before:						At start of visit: 1013			At end of visit: 1012				
Monitoring equipment: Gas Analyser: GAS DATA LMS xi						Date of last calibration: 01/08/2009							
Monitoring Point			Gas Concentrations								Groundwater		Comments
Borehole No.	Flow Rate	Barometric Pressure	Methane (% v/v)		Methane (% LEL)		Carbon Dioxide (% v/v)		Oxygen (% v/v)		Groundwater Level ^{*2}	Depth to Base Of Borehole ^{*2}	
			CH ₄	CH ₄	CH ₄	CH ₄	CO ₂	CO ₂	O ₂	O ₂			
LeD	0.1	-	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-	-	
	l/hr	Pascals	Peak	Steady	Peak	Steady	Peak	Steady	Peak	Steady	(m)	(m)	
WS508	0.30	1012	0.00	0.00	0.00	0.00	1.40	1.30	18.60	18.80	5.04	5.94	Site Ha
WS511	0.00	1013	0.00	0.00	0.00	0.00	0.10	0.10	20.60	20.60	2.02	2.14	
WS514	0.10	1013	0.00	0.00	0.00	0.00	0.00	0.00	20.40	20.40	2.41	2.80	Site Ha
WS516	-0.10	1013	0.00	0.00	0.00	0.00	0.00	0.00	20.30	20.30	2.71	3.07	Site Ha
WS517	0.40	1012	0.00	0.00	0.00	0.00	0.90	0.80	19.20	19.20	Dry	2.52	Site Ha
BH3	0.00	1013	0.00	0.00	0.00	0.00	0.20	0.00	20.60	20.60	1.28	1.79	Site Ha - SE corner of pond
DS01	0.50	1013	0.00	0.00	0.00	0.00	0.00	0.00	20.40	20.40	2.76	3.64	Site Ha
-	-	-	-	-	-	-	-	-	-	-	-	-	
BH8	0.60	1012	0.00	0.00	0.00	0.00	0.00	0.00	20.40	20.40	1.80	4.18	
BH10	0.60	1011	0.00	0.00	0.00	0.00	15.00	13.00	13.50	14.80	Dry	5.91	
DS09	0.20	1013	0.00	0.00	0.00	0.00	0.10	0.00	20.10	20.10	1.63	3.83	
BH9	0.20	1013	0.00	0.00	0.00	0.00	1.10	0.20	17.50	19.50	2.50	4.20	
DS13	-2.40	1013	0.00	0.00	0.00	0.00	0.30	0.30	19.90	19.00	2.30	4.60	
DS11	0.10	1013	0.00	0.00	0.00	0.00	0.20	0.00	20.30	20.30	1.05	3.76	
Notes:													

^{*1} Barometric pressure trend recorded from BBC weather website at nearest reported weather station on the day of visit.

^{*2} Measured from ground level unless stated otherwise.


Gas Monitoring Records

Client: Capita Symonds			Project: Horsham (Brick works) Phase 2								Project No: HOR462		
Date and time: 08.04.10 10.00am			Surface ground conditions: Dry								Weather conditions: Blue skies with occasional cloud.		
Logged by: Duncan Guthrie			Approved By:				At start of visit: 1030				At end of visit: 1024		
Barometric pressure trend (24 hr) ¹ :			Day before:										
Monitoring equipment: Gas Analyser: GAS DATA LMS xi						Date of last calibration: 01/08/2009							
Monitoring Point			Gas Concentrations								Groundwater		Comments
Borehole No.	Flow Rate	Barometric Pressure	Methane (% v/v)		Methane (% LEL)		Carbon Dioxide (% v/v)		Oxygen (% v/v)		Groundwater Level ²	Depth To Base Of Borehole ²	
			CH ₄	CH ₄	CH ₄	CH ₄	CO ₂	CO ₂	O ₂	O ₂			
LoD	0.1	-	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-	-	
	l/hr	Pascals	Peak	Steady	Peak	Steady	Peak	Steady	Peak	Steady	(m)	(m)	
WS508	-0.10	1028	0.00	0.00	0.00	0.00	1.50	1.50	19.40	19.40	5.06	5.90	Site Ha
WS511	0.00	103	0.00	0.00	0.00	0.00	0.10	0.00	21.00	21.00	2.10	2.15	
WS514	0.00	1027	0.00	0.00	0.00	0.00	0.00	0.00	20.40	20.40	2.50	2.95	Site Ha
WS516	0.00	1027	0.00	0.00	0.00	0.00	0.00	0.00	20.30	20.30	2.75	3.02	Site Ha
WS517	0.00	1028	0.00	0.00	0.00	0.00	0.20	0.20	20.50	20.50	Dry	2.50	Site Ha
BH3	0.00	1030	0.00	0.00	0.00	0.00	0.20	0.00	20.80	20.80	1.36	1.80	Site Ha - SE corner of pond
DS01	0.10	1028	0.00	0.00	0.00	0.00	2.90	2.80	16.50	16.50	2.79	3.65	Site Ha
-	-	-	-	-	-	-	-	-	-	-	-	-	
BH6	0.20	1026	0.00	0.00	0.00	0.00	1.30	1.00	8.40	11.90	1.91	4.20	
BH10	0.00	1024	0.00	0.00	0.00	0.00	0.10	0.10	29.00	29.00	Dry	5.80	
DS09	0.00	1025	0.00	0.00	0.00	0.00	0.30	0.10	20.30	20.30	1.70	3.85	
BH9	0.00	1026	0.00	0.00	0.00	0.00	1.70	0.10	15.40	19.80	2.56	4.20	
DS13	0.40	1026	0.00	0.00	0.00	0.00	5.30	5.30	16.30	16.30	2.41	4.61	
DS11	0.00	1024	0.00	0.00	0.00	0.00	0.00	0.00	20.30	20.30	1.09	3.75	
Notes:													

¹ Barometric pressure trend recorded from BBC weather website at nearest reported weather station on the day of visit.

² Measured from ground level unless stated otherwise.

Gas Monitoring Records

Client: Capita Symonds													
Project: Horsham (Brick works) Phase 2													
Project No: HOR462													
Date and time: 26.04.10 1.45pm						Surface ground conditions: Dry							
Logged by: Duncan Guthrie			Approved By:			Weather conditions: Cloudy							
Barometric pressure trend (24 hr) ^{*1} : Day before:						At start of visit: 1019			At end of visit: 1016				
Monitoring equipment: Gas Analyser: GAS DATA LMS xi						Date of last calibration: 01/08/2009							
Monitoring Point			Gas Concentrations								Groundwater		Comments
Borehole No.	Flow Rate	Barometric Pressure	Methane (% v/v)		Methane (% LEL)		Carbon Dioxide (% v/v)		Oxygen (% v/v)		Groundwater Level ^{*2}	Depth To Base Of Borehole ^{*2}	
			CH ₄	CH ₄	CH ₄	CH ₄	CO ₂	CO ₂	O ₂	O ₂			
LoD	0.1	-	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-	-	
	l/hr	Pascals	Peak	Steady	Peak	Steady	Peak	Steady	Peak	Steady	(m)	(m)	
WS508	0.00	1018	0.00	0.00	0.00	0.00	2.10	2.00	16.20	16.20	5.50	5.82	Site Ha
WS511	0.00	1018	0.00	0.00	0.00	0.00	0.10	0.00	20.70	20.70	Dry	2.12	
WS514	-0.20	1017	0.00	0.00	0.00	0.00	0.00	0.00	20.30	20.30	2.10	2.90	Site Ha
WS516	0.30	1017	0.00	0.00	0.00	0.00	0.00	0.00	20.40	20.40	2.58	3.08	Site Ha
WS517	0.00	1017	0.00	0.00	0.00	0.00	0.60	0.60	19.30	19.30	Dry	2.51	Site Ha Gas fill - SE corner of pond
BH3	0.00	1018	0.00	0.00	0.00	0.00	1.80	1.80	16.70	16.70	1.63	1.87	
DS01	0.10	1017	0.00	0.00	0.00	0.00	2.20	2.20	17.80	17.80	2.95	3.65	Site Ha
-	-	-	-	-	-	-	-	-	-	-	-	-	
BH6	0.00	1017	0.00	0.00	0.00	0.00	0.00	0.00	20.20	20.20	3.00	4.16	
BH10	0.40	1017	0.00	0.00	0.00	0.00	16.50	14.00	13.20	14.50	Dry	5.97	
DS09	0.00	1017	0.00	0.00	0.00	0.00	0.50	0.20	20.00	20.00	2.54	3.87	
BH9	0.10	1017	0.00	0.00	0.00	0.00	0.70	0.10	20.10	20.10	2.60	4.03	
DS13	0.20	1017	0.00	0.00	0.00	0.00	1.00	1.00	18.60	18.60	2.41	4.02	
DS11	0.10	1017	0.00	0.00	0.00	0.00	0.00	0.00	20.10	20.10	2.21	3.79	
Notes: WS514 - Water present around bung and had to be drained prior to testing.													

^{*1} Barometric pressure trend recorded from BBC weather website at nearest reported weather station on the day of visit.

^{*2} Measured from ground level unless stated otherwise.

Gas Monitoring Records

Client: Capita Symonds													
Project: Horsham (Brick works) Phase 2													
Project No:													
Date and time: 11.05.10			Surface ground conditions:										
Logged by: John Flannery			Approved By: DC				Weather conditions: Sunny						
Barometric pressure trend (24 hr) ^{*1} :			Day before:				At start of visit: 1006		At end of visit: 1005				
Monitoring equipment: Gas Analyser: GAS DATA LMS xi						Date of last calibration:							
Monitoring Point			Gas Concentrations								Groundwater		Comments
Borehole No.	Flow Rate	Barometric Pressure	Methane (% v/v)		Methane (% LEL)		Carbon Dioxide (% v/v)		Oxygen (% v/v)		Groundwater Level ^{*2}	Depth To Base Of Borehole ^{*2}	
			CH ₄	CH ₄	CH ₄	CH ₄	CO ₂	CO ₂	O ₂	O ₂			
LoD	0.1	-	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-	-	
	l/hr	Pascals	Peak	Steady	Peak	Steady	Peak	Steady	Peak	Steady	(m)	(m)	
WS508	0.10	1005	0.00	0.00	0.00	0.00	2.50	2.50	15.40	15.40	5.60	5.20	
WS511	0.10	1006	0.00	0.00	0.00	0.00	0.00	0.00	21.40	21.40	Dry	2.13	
WS514	0.10	1006	0.00	0.00	0.00	0.00	0.20	0.20	19.60	19.60	2.60	2.69	
WS516	0.10	1006	0.00	0.00	0.00	0.00	0.00	0.00	20.00	20.00	2.69	3.60	
WS517	0.10	1005	0.00	0.00	0.00	0.00	1.60	1.20	19.10	19.10	Dry	2.51	
BH3	0.10	1005	0.00	0.00	0.00	0.00	2.60	2.50	15.40	15.40	1.65	1.81	
DS01	0.51	1005	0.00	0.00	0.00	0.00	3.80	3.50	15.30	15.30	3.40	3.64	
-	-	-	-	-	-	-	-	-	-	-	-	-	
BH8	0.10	1006	0.00	0.00	0.00	0.00	0.00	0.00	20.80	20.80	3.19	4.13	
BH10	0.10	1006	0.00	0.00	0.00	0.00	17.00	14.00	14.80	14.80	Dry	5.90	
DS09	0.01	1005	0.00	0.00	0.00	0.00	1.00	1.00	15.60	15.50	2.91	3.81	
BH9	0.10	1005	0.00	0.00	0.00	0.00	0.50	0.50	20.30	20.20	3.20	4.20	
DS13	0.10	1005	0.00	0.00	0.00	0.00	6.20	6.20	11.80	11.80	3.19	4.00	
DS11	0.41	1005	0.00	0.00	0.00	0.00	0.10	0.10	20.60	20.60	2.35	3.76	
Notes:													

^{*1}Barometric pressure trend recorded from BBC weather website at nearest reported weather station on the day of visit.

^{*2} Measured from ground level unless stated otherwise.

Appendix E General Assessment Criteria

GACs in mg/kg for
Soil Type = Sandy Soil
Soil Organic Matter = 1.0%

Contaminant of Concern	Residential	Residential no plant	Commercial Industrial	Allotments	Public Open Space
Arsenic	32	35	640	43	130
Boron	94	6700	110000	14	25000
Barium (CLAIRE)			22000		
Beryllium (LQM)			420		
Cadmium	10	84	230	1.8	280
Chromium VI	34	37	330	52	590
Copper	630	3900	39000	110	33000
Lead	180	210	4400	170	870
Mercury SGV	170	230	3600	80	960
Nickel	130	130	1800	230	2900
Selenium SGV	350	600	13000	120	2200
Vanadium	200	220	5600	230	850
Zinc	2200	40000	660000	340	150000
Inorganic Cyanide	780	790	16000	2300	3000
TPH Aliphatic >C5 - C6	17	17	2600	560	60000
TPH Aliphatic >C6 - C8	33	33	5000	1600	81000
TPH Aliphatic >C8 - C10	7.8	7.9	1200	220	6300
TPH Aliphatic >C10 - C12	44	44	6300	1500	9900
TPH Aliphatic >C12 - C16	210	210	25000	8400	13000
TPH Aliphatic >C16 - C35	17000	17000	1200000	230000	270000
TPH Aromatic >C8 - C10	11	15	2200	6.8	3300
TPH Aromatic >C10 - C12	35	83	9700	9.2	4600
TPH Aromatic >C12 - C16	91	410	25000	18	5700
TPH Aromatic >C16 - C21	200	1000	27000	38	4700
TPH Aromatic >C21 - C35	790	1300	28000	280	5000
Benzene SGV	0.054	0.11	16	0.016	54
Chloroethene	0.0002	0.0003	0.04	0.001	3.0
1,2-Dichloroethane	0.002	0.002	0.36	0.004	12
Ethylbenzene SGV	42	70	510	16	510
Tetrachloroethanes	0.41	0.44	63	0.39	890
Tetrachloroethene	0.53	0.56	91	1.6	415
Tetrachloromethane	0.0077	0.0078	1.7	0.16	93
Toluene SGV	92	260	835	22	835
1,1,1-Trichloroethane	2.6	2.7	390	47	1400
Trichloroethene	0.045	0.046	6.6	0.41	390
Xylenes SGV	20	22	470	28	470
Benz[a]anthracene	7.1	9.7	140	3.7	35
Benzo[a]pyrene	1.0	1.0	14	0.61	4.2
Benzo[b]fluoranthene	8.2	10	140	5.0	41
Benzo[ghi]perylene	9.8	10	150	16	48
Benzo[k]fluoranthene	8.8	10	140	7.0	43
Chrysene	66	100	1400	26	360
Dibenz[ah]anthracene	1.0	1.0	14	0.87	4.4
Fluoranthene	620	2400	54000	130	9100
Indeno[123-cd]pyrene	7.8	10	140	4.2	40
Naphthalene	5.5	7	75	4.0	75
Phenol	180	310	685	62	685
Pyrene	770	3500	76000	150	13000
Acenaphthene LQM values	210		85000		
Acenaphthylene LQM values	170		84000		
Fluorene LQM values	160		64000		
Phenanthrene LQM values	92		22000		
Anthracene LQM values	2300		530000		
MTBE (CLAIRE)			7900		

