Meggitt Aerospace, Coventry

Geo-Environmental Site Investigation Factual and Interpretative Report

A107448

Meggitt Aerospace Limited
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WYG Environment

Geneva Building, Lakeview Drive, Sherwood Business Park, Annesley, Nottingham, NG15 0ED
Tel: +44 (0)1623 684 550 Fax: +44 (0)1623 684 551
Email: info@wyg.com Website: www.**wyg**.com

WYG Environment Planning Transport Limited. Registered in England & Wales Number: 03050297
Registered Office: Arndale Court, Otley Road, Headingley, Leeds, LS6 2UJ

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1.0 Executive Summary

Proposed Development	Mixed residential and industrial development is proposed (including the retention of the Meggitt Carbon Factory).
Site Conditions	The site is located approximately 4km north of Coventry City Centre. The central and western section of the site is occupied by office buildings, large industrial units and carparking areas, currently in use by Meggitt Aircraft Braking Systems. Areas of hardstanding and several recently demolished former building footprints occupy the east of the site. Swallow Road runs along the southern boundary of the site, providing access to the whole site.
Ground Investigation	The ground investigation was undertaken from 5 to 16 February 2018. The investigation comprised 29 No. window sample boreholes, 12 No. installed with gas and groundwater monitoring standpipes and 10 No. rotary open holed boreholes all installed with standpipes. Due to the presence of industrial buildings, the extent of investigations was severely restricted, particularly within proposed Residential Zone D.
Ground Conditions	The ground conditions generally comprise concrete / asphalt hardstanding overlying granular made ground which is underlain by natural clayey sand / sandy clay. Coarse grained siltstone / fine grained sandstone was encountered locally in some window sample boreholes and in all rotary boreholes.
Geotechnical Assessment	Corrected SPT N_{60} values obtained indicated a strong correlation between an increase in strength with depth. Moisture content tests returned an average value of 18.3% for the site. The results of the Atterberg tests indicates that the cohesive materials on site generally have a low to medium plasticity and a low to intermediate volume change potential. Results for water soluble sulphate indicate no requirement for protection of concrete from sulphate attack. The Design Sulphate class was assessed as DS-2, ACEC Class AC-2.
Contamination Assessment	Sporadic presence of asbestos was identified in made ground, predominantly at trace concentration. Sporadic presence of potentially plant-toxic metals was also identified. The volatile organic compound trichloroethene was identified both within residential and industrial areas. Human health risk applicable to the

	industrial areas was rare, though more widespread within residential development areas. Groundwater was also locally impacted. Petroleum hydrocarbons, predominantly lubricating oil range, were also sporadic at low to moderate concentration. A zone of impact by petrol-range hydrocarbons was identified, predominantly affecting groundwater, in Industrial Zone 2. Assessment of ground gas indicates a potential requirement for localised gas protection to CS2. Localised protection from organic vapour may also be required.
Conclusions and Recommendations	Further investigation will be required on completion of demolition, particularly within the residential development zones where a high proportion of the development area was inaccessible. Identified contamination by asbestos, petroleum hydrocarbons and chlorinated hydrocarbons (particularly TCE) will require remedial action. A Remediation Strategy should be prepared to identify requirements specific to development proposals. Detailed Quantitative Risk assessment is likely to be required to inform the Strategy, particularly relating to controlled waters. Strip or trench fill footings extending through the made ground to the stiff / medium dense superficial deposits between 2.0 and 3.0mbgl are proposed. Where applicable a proprietary compressible material should be incorporated into the foundation design to protect against heave and shrinkage of cohesive soils. Due to the presence of groundwater during the ground investigation and monitoring visits, de-watering may need to be considered during groundworks.
This sheet is intended as a summary of the assessment of the site in relation to ground contamination and geotechnical conditions. It does not provide a definitive engineering analysis.	

2.0 Introduction

2.1 Instruction

WYG Environment (WYG) were commissioned by Meggitt Aerospace to conduct a geo-environmental investigation at the manufacturing site off Holbrook Lane, Coventry. The ground investigation has been carried out in line with BS10175 [1] and BS5930: 2015 (incorporating amendment 2) [2].

2.2 Scope of Services

The investigation was undertaken to assess the sub-surface chemical and geotechnical ground conditions at the site using in-situ and laboratory testing. The scope of investigation was based on site investigation design prepared by G&J Geo-environmental Consultants Limited. Parts of the site currently occupied by buildings were excluded.

The scope of the fieldwork programme included:

- 29 No. window sample boreholes to a maximum depth of 5.0m bgl or refusal with in-situ standard penetration tests (SPTs);
- Installation of 12 No. window sample boreholes with gas and groundwater monitoring standpipes;
- 10 No. rotary open boreholes to a maximum depth of 15.0m bgl with in-situ SPTs;
- Installation of all rotary boreholes with gas and groundwater monitoring standpipes;
- 6 No. return visits over a three-month period for gas and groundwater depth monitoring;
- 2 No. return visits for groundwater quality monitoring;
- Geotechnical and contamination testing of selected made ground/ soil samples from the borehole arisings;
- Contamination testing on groundwater samples;
- Provision of a factual and interpretative report.

2.3 Terms and Conditions

Attention is drawn to the report conditions, included in Appendix A, and to the terms and conditions of the engagement.

3.0 Site Details

3.1 General

Site location and layout plans are included as Figure 1.

3.2 Site Location

The site is located off Holbrook Lane, Coventry, approximately 4.0km north of Coventry City Centre. Salient site details are summarised in Table 1.

Table 1: Site Location

Site Address	Meggitt Aircraft Braking Systems, Holbrook Lane, Coventry, CV6 4AA
NGR (Centre of Site)	433178mE, 282309mN

3.3 Site Description

A site walkover was conducted by WYG on 2nd February 2018. The site is rectangular in shape and occupies an area of approximately 12.3 hectares. It can be accessed via the main entrance off Holbrook Lane to the east and a secondary entrance off Beake Avenue to the west. Swallow Road runs along the southern boundary of the site from east to west, providing access to the whole site.

The ground is generally flat and is predominantly tarmac, with a rectangular section of concrete present to the east in 'New Industrial Zone 2' on the new development masterplan. The central and western section of the site is occupied by office buildings, large industrial units and carparking areas, currently in use by Meggitt Aircraft Braking Systems. Areas of hardstanding and several recently demolished former building footprints occupy the east of the site. Swallow Road runs along the southern boundary of the site from east to west, providing access to the whole site.

The site can be sub-divided into three main sections; The eastern section, which encompasses 'Industrial Zone 1 and 2' on the masterplan, comprises open derelict land which is the site of former industrial buildings, including a water reservoir and a garage, the footprints of which are still present. The western section of the site encompasses 'Residential Zone D' on the

masterplan and comprises an operational industrial test house for aircraft braking systems with a decommissioned water tank and pump house along the northern boundary. The central section comprises of an operational carbon processing factory with two in-use gas storage tanks as part of the 'Existing Industrial Zone' on the masterplan, together with operational commercial offices and a tarmac car park which dominate the area within 'Residential Zone E' on the masterplan.

Buildings present within the site (based on data included in a Geo-Environmental Assessment report prepared by Meerbrook Consulting [3]) include (from west to east):

Building A2 – Meggitt Aircraft Braking Systems, main production building. An above-ground, bunded, tank is located to the west of the building.

Buildings C2, G2, F2 and E2 – Disused ancillary buildings including a pump house.

Building H2 – Stores and waste handling.

Building Y3 – Disused foundry

Buildings A3, B3, C3, X3, D3, P3 – Meggitt Aircraft Control Systems production and office buildings. Car parking to north of D3, to the south of A3 and immediately east of P3.

Buildings T3, R3, B4, C4, D4 - Largely disused ancillary buildings including a fire station, boiler house and nurse's station. In this area are also located a cooling water plant and substation.

Building Q3, F4, K4, H4 - Disused single storey buildings. F4 used as storage for road salt and machinery. To the south of these buildings are disused parking areas and a fire fighting water reservoir.

Building N5 currently in use by others.

Building identifications are shown in Figure 6 - Meerbrook Site Investigation Locations.

No evidence of visible contamination was identified by WYG walkover or during ground investigation works.

3.4 Surrounding Land Uses

Table 2: Surrounding Land Uses

Boundary	Description
North	Holbrook Park with residential beyond.
East	Industrial and commercial units.
South	Open recently demolished land with Industrial units beyond.
West	New build residential areas.

The land immediately south of Swallow Road was previously occupied by parts of the Meggitt works (and its predecessors). The industrial premises in this area have recently been demolished, and remedial works undertaken. Ongoing hydrocarbons / chlorinated solvent remediation, by monitored natural attenuation, is described in the Remediation Strategy for this area prepared by Ramboll Environ [13]. Localised mitigation of soil contamination hotspots was also undertaken.

Other industrial premises are located to the south of the wider Meggitt landholding. No further information is available regarding contamination potential associated with these works.

3.5 Proposed development

A masterplan has been prepared by PCPT Architects Limited, reproduced in Appendix F. Residential development is proposed in the west (former Building A2 area) and central areas. Two industrial zones are proposed to the east, with associated car parking and service yard areas. The existing Carbon Factory (Buildings A3, B3, C3 and X3; refer to Figure 2) is to be retained in its current use.

3.6 Previous Reports

Limited previous investigation was undertaken by Meerbrook Consulting [3], for Clowes Developments and Meggitt Aircraft Braking Systems, in 2012, including land to the south of Swallow Road.

The report included an assessment of site history that identified industrial development of the site since the 1920s. The site was formerly a part of the Dunlop works (wheel and rim manufacture); motor works (Standard Swallow, subsequently Jaguar), later utilised for an aircraft wheel manufacture. Parts of the site were used for munitions manufacturing during

WW1. Land to the south of Swallow Road was also a part of the works development.

Contamination investigations were undertaken predominantly outside the building footprints and comprised window sample and cable percussion boreholes and trial pits. Selected samples were selected for contamination analysis, with some variation in test suite between samples.

Within the current study area, evidence of contamination was restricted to:

Asbestos: restricted to made ground in the central section of the site (proposed residential area), exploratory locations MWS122, MWS126, MWS127 (chrysotile and amosite, bundles of unbound asbestos fibres). No evidence of asbestos-containing materials was identified in exploratory logs.

Metals: Very localised instances of elevated cadmium (27mg/kg maximum) and copper (at plant toxicity levels only, maximum 1,700mg/kg).

Petroleum hydrocarbons: Slightly elevated at MTP102 (2,300mg/kg C10-C40, predominantly C21-C40 lubricating oil range).

4.0 Published Geology

4.1 Geology

Details of the geology underlying the site have been obtained from the following sources:

- Envirocheck 1:50,000 Geological Plan Extracts – derived from BGS Sheet 169 Coventry, 1994;
- BGS GeoIndex Website.

4.1.1 Superficial Geology

The site is underlain by superficial deposits comprising the Thrussington Member. The BGS Lexicon of Named Rock Units gives the following generic description of the Thrussington Member:

'Diamicton. Superficial Deposits formed up to 2 million years ago in the Quaternary Period. Local environment previously dominated by ice age conditions'

4.1.2 Solid Geology

The BGS GeoIndex website and the 1:50,000 scale geological plan indicates the bedrock underlying the site is the Keresley Member. The BGS Lexicon of Named Rock Units gives the following generic description of the Keresley Member:

'Redbed sequence; mudstone dominated in lower part but becoming increasingly arenaceous towards top. Thin Spirorbis limestone beds at some levels. Impersistent conglomerates in upper part.'

4.1.3 Structural Geology

The 1:50,000 scale geological map does not show any faults within the site boundary or immediate surrounding area.

4.1.4 Historic BGS Borehole Information

Three historic BGS recorded boreholes are located within the site boundary. Available logs indicate made ground to depths of between 0.8 to 3.8m bgl underlain by hard sandy CLAY. Fine red SAND becoming weakly cemented sandstone was encountered at depths between 7.4 and 9.3m bgl in one borehole.

Copies of the BGS borehole records are included in Appendix H.

5.0 Fieldwork

The locations of exploratory holes are shown on the Exploratory Hole Location Plan, included as Figure 2. The exploratory holes were supervised, logged and sampled by a WYG Engineer. Fieldworks were undertaken in accordance with BS5930:2015 [2]. Locations were based on a tentative location plan prepared by G & J GeoEnvironmental, predominantly targeting areas which were not investigated in the earlier Meerbrook investigation. A small number of locations were targeted to further investigate previously identified sources (WS1, WS3 - minor solvent contamination in groundwater; R1 – elevated carbon monoxide; R9 – significant TCE in groundwater to the south of Swallow Road; WS46, 47, 54 – hydrocarbons, and WS33, 34, 35 - asbestos). Due to services and vehicle access constraints, it was not possible to locate all exploratory locations exactly where proposed by G & J GeoEnvironmental.

Field work was undertaken between the 5th February and the 16th February 2018. All exploratory locations were marked out and service cleared before breaking any ground.

5.1 Window Sample Boreholes

29 No. window sample boreholes were advanced through the sub-surface strata using window sample techniques to a maximum depth of 5.0mbgl. Sampling of the recovered materials was undertaken at discrete intervals and at changes in material.

Standard penetration tests (SPTs) were carried out at selected intervals throughout the window sample boreholes.

Standpipes were installed in 12 No. window sample boreholes. Details of the installations are provided in the borehole records attached as Appendix B. Representative samples of soils were scheduled for geotechnical and chemical laboratory analysis.

5.2 Rotary Boreholes

Ten rotary open holed boreholes using air mist techniques were advanced to 15.0mbgl.

In-situ SPTs were carried out at 1.5m intervals throughout the rotary boreholes.

Standpipes were installed in all rotary boreholes, details of which are provided in the borehole records, Appendix B.

5.3 Concrete Coring

28 No. locations required coring through concrete / asphalt hardstanding for window sample and rotary boreholes to follow on.

5.4 Groundwater sampling

Groundwater sampling was undertaken from installed boreholes where groundwater was present. Initial sampling was undertaken using disposable PVC bailing tubes, following well development and purging. The use of bailers allows targeted sampling of any floating free product layer on the groundwater surface (LNAPL – Light Non-Aqueous Phase Liquid); avoids the potential for cross-contamination associated with techniques such as submersible pumps, and is relatively rapid. Lowering of the bailer through the borehole water column also tends to result in a sample representative of the full borehole response zone, suitable for initial assessment. Consideration of the use of techniques such as low flow sampling may be preferred for more targeted sampling to inform any future detailed quantitative risk assessment studies. Groundwater samples for metals analysis were filtered prior to despatch to the laboratory, in order to minimise dissolution of contaminants associated with sediments, and allow acidification of samples to prevent precipitation of metals less soluble when oxidised (eg. iron) and co-precipitation of other metals. Samples were placed in appropriate containers as specified by the testing laboratory, as appropriate to the determinands. Sample temperature was retained below 9°C in transit, in accordance with the laboratory preservation protocol.

5.5 Geotechnical Laboratory Testing

Following the completion of fieldwork, selected samples recovered during the investigation were submitted to a UKAS accredited geotechnical laboratory for testing.

The testing suite undertaken comprised:

- 29 No. Water Content;
- 14 No. Atterberg Limits;
- 6 No. BRE SD1 Concrete Aggressivity Suite.

The results of the geotechnical testing are discussed in Section 7.3 and attached in Appendix C.

5.6 Contamination Laboratory Testing

Selected soil samples from the ground investigations works were scheduled for contamination testing. 34No. Screening contamination suites were undertaken, comprising:

- Metals (As, Cd, Cr, Cu, Hg, Ni, Pb, Se, Zn);
- Boron (hot water soluble);
- pH value;
- Cyanide (free);
- Water Soluble Sulphate as SO_4;
- Speciated PAHs (US EPA 16 priority pollutants);
- Extractable petroleum hydrocarbons;
- Volatile Organic Compounds;
- Chromium (hexavalent).

Samples containing demolition materials (concrete, brick) were also screened for asbestos. Samples that tested positive for asbestos were then scheduled for quantitative asbestos analysis (detection limit, 0.001%)

The results of the chemical analytical testing are discussed in Section 9.0 and attached in Appendix D.

Selected water samples from the ground investigation works were also scheduled for contamination testing.

6.0 Encountered Subsurface Conditions

The ground conditions across the site generally comprise concrete / asphalt hardstanding overlying granular MADE GROUND which is underlain by natural clayey SAND / sandy CLAY. Coarse grained SILTSTONE / fine grained SANDSTONE was encountered locally in some boreholes.

6.1 Hardstanding

Hardstanding was encountered within 37 No. locations from ground level to a maximum depth of 0.2m bgl. Typically comprising dark grey to black hard asphalt underlain by grey to light grey concrete with 10-20mm reinforcing bar.

6.2 Made Ground

Made ground was encountered in all exploratory locations (except WS49 and WS53, where concrete hardstanding overlay natural ground) from a minimum of ground level to a maximum depth of 2.0mbgl although having a typical depth range from 0.1 – 1.2m bgl. Made ground was of variable composition, predominantly clay, sand or gravel, with common brick, concrete, ash and clinker, asphalt, slate and quartzite. Rare metal, wood, coal and plastic were present.

Observations indicative of contamination are summarised in Table 3.

Table 3 Evidence of Contamination

Location	Strata	Depth, mbgl	Description
WS28	Made ground	0.8 – 1.1	MG with potential asbestos-containing material
WS49	NG Clay	1.3 - >3.0	Strong hydrocarbon odour
WS51	NG Clay	1.1 - 32	Hydrocarbon odour
	NG Sand	3.2 – 4.8	Hydrocarbon odour

6.3 Superficial Geology

6.3.1 Cohesive superficial geology

Cohesive superficial geology was encountered in the majority of exploratory locations, but occasionally absent. Typically comprising stiff red to orange slightly sandy slightly gravelly CLAY. Gravel is sub-rounded to rounded fine to coarse flint and quartzite.

Cohesive superficial strata were present at between 0.4 and 6.0mbgl, sporadically identified above or below granular superficial material.

6.3.2 Granular superficial geology

Granular superficial geology typically comprised red slightly gravelly slightly clayey fine to medium SAND. Gravel is sub-rounded to rounded quartzite and flint.

Granular superficial strata were most commonly reported in the central (boreholes WS29-36) and eastern (boreholes WS50-52) areas. Depths varied between 0.5 and 4.8mbgl.

6.4 Solid Geology

Weak red MUDSTONE and SANDSTONE was encountered underlying the superficial geology in all rotary boreholes and locally at the base of some of the window sample boreholes. Deeper rotary boreholes identified an alternating sequence of mudstone and sandstone bands, thickness 1.0 – 9.0m (mudstone), 2.3 - >6.8m (sandstone). Mudstone was encountered at a minimum depth of 2.1mbgl; sandstone at 1.95mbgl.

6.5 Ground Conditions, Summary

Table 4 summarises the observed depth and thickness of strata encountered.

Table 4 Encountered Ground Conditions, Summary

Strata	Depth, minimum m bgl	Depth, maximum m bgl
Hardstanding	0.0	0.2
Made ground	0.0	2.0
Superficial, cohesive	0.4	6.0
Superficial, granular	0.5	4.8
Solid, mudstone	2.1	15.0
Solid, sandstone	1.95	15.0

6.6 Groundwater

Groundwater was encountered during the ground investigation in all rotary boreholes at depths between 1.5 and 6.0mbgl. Groundwater levels encountered during monitoring rounds are presented below in Table 5.

Table 5: Groundwater levels during monitoring rounds.

Borehole ID	Groundwater Depth (mbgl)					
	Round 1	Round 2	Round 3	Round 4	Round 5	Round 6
WS01	1.07	1.0	1.25	1.30	1.58	1.30
WS02	3.02	2.80	2.95	2.97	2.98	3.12
WS20	1.82	1.12	1.35	1.60	1.55	0.72
WS21	1.05	1.09	1.10	1.02	1.10	1.12
WS22	1.5	1.42	1.55	1.40	1.56	1.56
WS29	Dry	Dry	Dry	Dry	Dry	Dry
WS32	Dry	Dry	Dry	Dry	Dry	Dry
WS35	Dry	Dry	Dry	Dry	Dry	Dry
WS36	Dry	Dry	Dry	Dry	Dry	Dry
WS45	Dry	Dry	Dry	Dry	Dry	Dry
WS46	Dry	Dry	Dry	Dry	Dry	Dry
WS48	0.5	0.45	0.65	0.67	1.85	0.87
WS49	1.06	1.73	1.30	1.35	0.73	1.95
WS51	1.06	1.48	2.35	2.50	0.42	1.38
R1	-	-	-	-	-	-
R2	2.96	2.62	2.97	3.03	2.98	3.24
R5	DRY	1.42	Dry	Dry	Dry	Dry
R6	14.37	14.37	Dry	Dry	Dry	14.28
R7	6.80	6.53	6.50	6.90	6.95	7.15
R8	8.99	11.55	5.38	11.60	11.50	11.95
R9	12.53	12.35	8.71	11.96	11.80	12.65
R10	10.26	10.29	-	-	-	12.65
R11	11.98	11.14	11.30	11.30	11.30	11.58
R12	8.63	7.67	8.10	8.00	8.20	6.74

7.0 Geotechnical Assessment

7.1 Window Sample Standard Penetration Tests

86 Standard Penetration Tests (SPTs) were carried out at 1.0m intervals throughout the window sample boreholes. The energy ratio of the SPT hammers used were 86% and 72% in comparison to the British Standard of 60%. The corrected SPT N_{60} results are summarised within Table 6.

Table 6: Summary of Window Sample SPT N60 results

	Cohesive Made Ground	Clay	Sand	Granular Made Ground	Silt	Mudstone	Sandstone
Number of tests	1	48	18	5	2	9	3
Minimum Corrected N Value	25.2	4.3	7.5	4.5	26.9	18	45
Maximum Corrected N Value	25.2	50	50	50	50	50	50
Average Corrected N Value	25.2	24.1	28.3	17.1	38.4	36.2	48.3

A plot of corrected SPT N_{60} values versus depth is included as Figure 3 and uncorrected N values are included on logs attached in Appendix B.

7.2 Rotary Standard Penetration Tests

75 Standard Penetration Tests (SPTs) were carried out at 1.5m intervals throughout the Rotary open boreholes. The energy ratio of the SPT hammer used was 79% in comparison to the British Standard of 60%. The corrected SPT N_{60} results are summarised within Table 7.

Table 7: Summary of Rotary SPT N60 results

	Clay	Sand	Mudstone	Sandstone
Number of tests	10	10	24	31

Minimum Corrected N Value	3	10.9	50	50
Maximum Corrected N Value	50	49.4	50	50
Average Corrected N Value	19	23.2	50	50

A plot of corrected SPT N_{60} values versus depth is included as Figure 4 and uncorrected N values are included on logs attached in Appendix B.

7.3 Geotechnical Laboratory Analysis Results

7.3.1 Moisture Content

29 No. moisture content determinations were carried out on samples recovered from the site. A plot of moisture content versus depth is included as Figure 5. The results are summarised in Table 8.

Table 8: Summary of Moisture Content Results

Stratum	No. of Tests	Moisture Content		
		Minimum	Maximum	Average
Clay	16	9.7	25	18.7
Granular Made Ground	8	6.7	38	21
Silt	5	9.2	19	15

Results for the moisture content tests returned a site average of 18.3%.

7.3.2 Atterberg Limits Tests

13 No. Atterberg Limits tests were carried out on deposits from across the site. The results are summarised in Table 9.

Table 9: Summary of Atterberg Limits Test Results

Location Reference	Depth (m)	Stratum	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Modified Plasticity Index	Plasticity	Volume Change Potential
WS01	2.0-3.0	Clay	40	20	20	20	Medium	Intermediate
WS46	1.2-2.0	Clay	40	22	18	17.82	Low	Intermediate
WS46	2.0-3.0	Clay	48	24	24	24	Medium	Intermediate
WS51	2.0-3.0	Clay	44	21	23	22.31	Medium	Intermediate
WS02	1.5	Clay	34	18	16	16	Low	Low
WS03	0.6	Clay	32	18	14	13.3	Low	Low
WS03	1.6	Clay	27	17	10	10	Low	Low
WS22	1.5	Clay	41	20	21	21	Medium	Intermediate
WS35	2.4	Clay	35	17	16	16	Low	Low
WS46	3.5	Clay	35	19	16	16	Low	Low
WS49	1.4	Clay	29	17	12	12	Low	Low
WS51	1.2	Clay	41	20	21	21	Medium	Intermediate
WS28	2.0	Clay	30	19	11	11	Low	Low

The results of the Atterberg Limits test indicate that the clays on site have a low to medium plasticity and have a low to intermediate volume change potential in accordance with NHBC Chapter 4.2 [4]

7.3.3 Sulphates

Results for water soluble sulphate indicate protection of concrete from sulphate attack may be required. The Design Sulphate class was assessed as DS-2, ACEC Class AC-2 in accordance with the guidance given in BRE Special Digest 1 [5].

8.0 Contamination Assessment Criteria

8.1 Soils

A Generic Quantitative Risk Assessment (GQRA) has been undertaken by comparing recorded concentrations of chemical constituents in soil with Generic Assessment Criteria (GAC) to identify whether, at the concentrations recorded, the presence of the constituent has the potential to adversely affect the health of site users.

If the recorded concentrations of a particular constituent are below the GAC then the risk is considered to be acceptable. Where a substance is recorded at concentrations higher than GAC this does not necessarily indicate that a particular risk is present, but signifies the requirement to undertake further review / assessment in line with the UK tiered risk assessment framework.

The Soil Screening Values (SSVs) used to screen analytical results derive from various sources. Preferentially WYG have used Category 4 Screening Levels (C4SL) derived by DEFRA with CL:AIRE (Contaminated Land: Applications in Real Environments) [6]. C4SLs are currently available for arsenic, benzene, benzo(a)pyrene, cadmium, chromium VI and lead.

Where C4SLs are unavailable, 'Suitable for Use Levels' (S4ULs) developed by LQM/CIEH [7] have been applied. The LQM/CIEH S4ULs are based on minimal or tolerable risk intended to be protective of human health.

An SSV for 'Easily Liberatable Cyanide' has also been generated by WYG, based on potential short-term exposure.

SSVs are available for a number of land uses. Based on current proposals, criteria for 'Residential with Plant Uptake' use have been applied where residential development is proposed, 'Commercial / Industrial' in proposed industrial areas, including the retained Meggitt land. SSVs are provided in Appendix E.

9.0 Contamination Assessment

9.1 General

Contamination testing was undertaken on 29 samples of made ground at depths between 0.1 to 1.1mgbl. 5No. samples of natural ground exhibiting odour evidence of hydrocarbons contamination were also tested.

19No. samples were screened for asbestos. The positive asbestos samples were subsequently analysed for quantitative asbestos.

Discussion of results has been sub-divided to reflect the proposed development type, as indicated in the masterplan (Appendix F), comprising residential (Residential zones D and E); industrial (Zone 1) and the retained Meggitt land (Carbon Factory).

No investigation was possible within the current buildings and consequently assessment has been restricted to peripheral areas.

9.2 Residential Development Areas

No significant metals contamination, relating to human health or plant toxicity, was identified within residential development areas. A single result indicating elevated lead (1,640mg/kg; criterion 200mg/kg) was identified at WS33, on the boundary between the retained Meggitt area and Residential Zone E.

Made ground at WS21, Zone D, contained trace levels of asbestos (<0.001%) as asbestos-containing material (ACM) debris containing chrysotile.

No positive asbestos results were obtained within Zone E by WYG. However, a number of samples from this area were found to contain asbestos in the earlier Meerbrook investigation [3].

The chlorinated hydrocarbon trichloroethene (TCE) was commonly encountered at concentrations in excess of the residential criterion (0.034mg/kg).

Detectable concentrations of other chlorinated hydrocarbons including 1,1,1-trichloroethane and cis-1,2-dichloroethene (DCE) were also recorded at WS36. 1,1,1-trichloroethane was present at concentrations below human health screening value; no generic screening value is available for DCE. The presence of DCE is indicative of natural degradation of TCE. Further degradation to vinyl chloride was not evident, though the analytical detection limit exceeded

the screening criterion.

The distribution of moderately elevated TCE indicates multiple historical sources, likely to relate to the use of TCE as a degreasing solvent. The notably elevated concentrations in two samples from WS36, located within Residential Zone E adjacent to Swallow Road, suggests a significant source in this area.

Slightly elevated concentrations of petroleum hydrocarbons were identified at two locations in the eastern Residential Zone E (WS34, 1,770mg/kg >C8-C40 and WS43, 3,960mg/kg). In both cases, the >C21-C40 range was predominant, typical of lubricating / heavy fuel oil.

Exceedances of human health screening criteria applicable to the current Masterplan are summarised in Table 10. In the absence of a quantitative criterion for asbestos, all positive screening results are included.

Table 10: Residential Development Zone: Concentrations Exceeding Human Health Criteria

Contaminant	Location	Criterion, mg/kg	Concentration, mg/kg
Lead	WS33, 0.4m [1]	200	1,690
Asbestos	WS21, 0.5m	-	<0.001%
TCE	WS2, 0.2m	0.034	0.623
	WS2, 1.1m		0.400
	WS3, 0.2m		0.430
	WS36, 0.2m		48.000
	WS36, 0.5m		4.060

[1] Location adjacent to Residential Zone E boundary

9.3 Industrial Development Area

Localised contamination by potentially plant-toxic metals was identified in made ground at WS47 (copper 1,580mg/kg; zinc 1,910mg/kg). Made ground at this location was described as black ashy gravel / clinker. Plant toxicity is unlikely to be of concern within the industrial zone.

Made ground at WS52 and WS54 contained trace levels of asbestos (<0.001%) as loose fibres of amosite and chrysotile.

Trichloroethene was detected at WS52, exceeding the residential screening value but below the commercial criterion applicable in this area.

Hydrocarbon odours were noted in natural ground at WS49 and WS51. Samples from WS49 did not identify any significant total petroleum hydrocarbons concentration, though volatile hydrocarbons in the >C8-C10 range exceeded the residential, but not commercial, screening value. At WS51, the total hydrocarbons concentration was moderately elevated (1.8m sample, 3,020mg/kg, predominantly >C12-C16 diesel range). Slightly elevated concentrations were also identified at WS45-48, 50 and WS52, not exceeding 4,280mg/kg >C8-C40. With the exception of WS51, most hydrocarbons band data indicate the contaminant to relate to lubricating / heavy fuel oils. At WS52, more significant concentrations of more volatile petroleum hydrocarbons, >C8-C10, were also present, suggesting either a mixed source or degradation products from heavier hydrocarbons. Volatile aromatic hydrocarbons (including toluene, trimethylbenzene and butylbenzene) were detected at WS49, 51 and 52 at low concentrations, below human health risk thresholds.

Exceedances of human health screening criteria applicable to the current Masterplan are summarised in Table 11.

Table 11: Industrial Development Zone: Concentrations Exceeding Human Health Criteria

Contaminant	Location	Criterion[1], mg/kg	Concentration, mg/kg
Asbestos	WS52, 0.3m	-	<0.001%
	WS54, 0.2m	-	<0.001%

9.4 Retained Meggitt Carbon Plant Area

No redevelopment is proposed in this area.

Made ground was characterised by sporadic slightly elevated metals concentrations (copper, zinc and lead) and sporadic positive asbestos results (laboratory-identified ACM debris and loose fibres in soil), at WS19, 21 and 22. Made ground at WS21 and WS22 contained trace levels of asbestos (<0.001%); made ground at WS19 contained low levels of asbestos (0.0388%). Suspected asbestos-containing materials were only identified during fieldwork at WS28, 0.8 – 1.0m, confirmed as asbestos cement containing chrysotile.

Metal and asbestos contamination are not likely to constrain development of the adjoining residential areas, as no plausible pathways exist for migration.

Localised contamination by petroleum hydrocarbons (maximum 5,060mg/kg >C8-C40 at WS22, 0.2m) and TCE (maximum 4.11mg/kg at WS20, 0.2m) was identified. Only the TCE maximum result exceeded the Industrial human health criterion. Whilst unlikely to represent

any human health risk to site occupiers in the continued industrial use scenario, the possibility of migration from sources within this area to adjoining residential development areas may require consideration.

Sample WS22, 0.2m exceeded the Industrial criterion for a number of PAH compounds, likely to be associated with the reported presence of asphalt in the made ground matrix at this location. The benzo(a)pyrene content of this sample, 124mg/kg, indicates that the material would be classified as hazardous waste for disposal, anticipating that the PAH content relates to coal tar based asphalt in the made ground. Similar, though less elevated, PAH results related to sample WS32, 0.4m, which also contained asphalt.

Exceedances of human health screening criteria applicable to the current Masterplan are summarised in Table 12.

Table 12: Retained Carbon Plant: Concentrations Exceeding Human Health Criteria

Contaminant	Location	Criterion[1], mg/kg	Concentration, mg/kg
Asbestos	WS19, 0.2m	-	0.0388%
	WS21, 0.5m		<0.001%
	WS22, 0.2m		<0.001%
	WS28, 0.9m		Present (ACM bulk sample)
TCE	WS20, 0.2m	2.6	4.11
Benzo(b)fluoranthene	WS22, 0.2m	44	158
Benzo(a)pyrene	WS22, 0.2m	77	124
Dibenzo(a,h)anthracene	WS22,0.2m	3.6	15.0
	WS32, 0.4m	3.6	4.53

9.5 Asphalt Waste Assessment

Three samples of asphalt hard surfacing were tested to assess waste classification. Asphalt waste containing coal tar is assessed as Hazardous Waste due to carcinogenic content.

Environment Agency publication WM3 [8] indicates that asphalt should be assessed as containing coal tar if the benzo(a)pyrene content exceeds 50mg/kg.

Sample WS44, obtained from the industrial development area east of building P3, contained benzo(a)pyrene at 89.0mg/kg and is assessed as Hazardous Waste for disposal. Samples from WS3 and WS33, from the western and eastern residential areas respectively, were below the 50mg/kg threshold and are assessed as non-hazardous.

9.6 Leachability Analysis

21 samples were scheduled for leachability testing (10:1 CEN leach test). Results have been assessed based on Waste Acceptance Criteria for inert wastes (as mg/kg) to identify any materials which may have potential for pollution of groundwater. The leachability suite comprised:

- Ammoniacal nitrogen;
- pH;
- Sulphate;
- Metals (As, B, Cd, Cr, Cu, Hg, Pb, Ni, Se, Zn);
- Cyanide, total.

In almost all cases, leachable concentrations of the analysed determinands were below the 'inert waste' threshold and no pollution risk is identified. Sample WS36, 0.2m, exceeded the criteria for sulphate, nickel and cadmium, and was acidic (at pH5.94). Total nickel concentration in made ground from WS36, 0.2m was not elevated, and therefore, it is considered likely that the elevated leachable nickel concentration was associated with the leachate acidity. Sample WS50, 0.5m, also slightly exceeded the sulphate 'inert' criterion.

9.7 Controlled Waters

The superficial deposits of the Thrussington Member are classified as a Secondary (undifferentiated) Aquifer. Bedrock deposits of the Keresley Member are classified as a Principal Aquifer. The northwest and west of the site is within a groundwater Source Protection Zone III (Total Catchment); the balance of the site is not within a Source Protection Zone.

Open waterbodies are not located within the site or within the surrounding area. The nearest open waterbody is the Coventry Canal located 1.17km southeast.

Groundwater samples were collected from selected boreholes on 29 March 2018, 5 March 2018 and 6 June 2018. Laboratory transcripts are included in Appendix D.

Groundwater quality was compared against the Drinking Water Standards, DWS [9], considered most applicable in the absence of surface water in the near vicinity (250m) of the site. Groundwater exceedances are as follows:

- The sulphate screening criterion (250mg/L) was marginally exceeded in four instances (WS21 – Round 1, 282mg/L; R09, WS20 & WS49 – Round 2, 442, 473 & 390mg/L);
- The selenium screening criterion (10µg/L) was marginally exceeded in two instances (WS21 – Round 1, 14.8µg/L; WS49 – Round 2, 12.2µg/L);
- The benzo(a)pyrene DWS screening criterion (0.01µg/L) was exceeded in all but two instances. The highest benzo(a)pyrene concentration was encountered at WS51 (19.30µg/L) from Round 2;
- The PAH (sum of benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(g,h,i)perylene and indeno(1,2,3-cd)pyrene) DWS screening criterion (0.1µg/L) was exceeded in all but four instances. The highest PAH concentration was encountered at WS51 (68.0µg/L) from Round 2;
- The trichloroethene DWS screening criterion (10µg/L) was typically exceeded in groundwater sampled from two boreholes (WS21 – Round 1, 146 µg/L; WS22 – Round 2, 175µg/L; WS21 and WS22 – Round 3, 33.6 and 219µg/L). WS21 and WS22 are adjacent, at the southeastern edge of Residential Zone D;
- The vinyl chloride DWS screening criterion (0.5µg/L) was exceeded in one borehole (WS49 – Round 2, 29.6µg/L). However, it should be noted that the laboratory detection limit (1µg/L) was higher than the screening criterion, so a greater number of exceedances is plausible. Vinyl chloride is a degradation product of TCE, recorded at 8.6µg/l at this location, potentially indicating a historical contamination event, now largely degraded;
- The ethylbenzene and xylene DWS screening criteria (300 and 500µg/L) were exceeded in one instance (R12 – Round 2, 598µg/L and 4806µg/L, respectively). The benzene DWS screening criterion (1.0µg/L) was exceeded in one instance (WS49 – Round 2, 42.4µg/L);
- The 1,2-Dichloroethene (calculated as the sum of cis-1,2-Dichloroethene and trans-1,2-Dichloroethene) DWS screening criterion (50µg/L) was exceeded by approximately two-fold in one instance (WS49 – Round 2, 124.86µg/L)

In the absence of an EQS criterion for petroleum hydrocarbons, results have been assessed based on the Surface Waters (abstraction for drinking water) Regulations 'DW2' criterion, 'water suitable for abstraction with normal chemical and physical treatment', 200µg/L. Evidence of petroleum hydrocarbon contamination of groundwater was identified in 14No. samples tested, with total concentrations (>C10-C40) between 202µg/L – 283,000µg/L. The hydrocarbon composition showed >C21-C28 (indicative of lubricating / heavy fuel oils) to be predominant in all instances, except at R12 and WS49 where >C10-C12 (indicative of petrol or other light hydrocarbon) predominated (217,000µg/l at R12). >C10-C12 also contributed substantially to the total hydrocarbon concentration at WS51. The presence of >C10-C12 and other light hydrocarbons in the vicinity of WS48-51 and R12 indicates a significant impact in this area, the southeast of Industrial Zone 2.

The localised impacts by TCE (WS21, WS22) and petroleum hydrocarbons (particularly the group of impacted locations at WS48-52 and R12) will require further detailed assessment of risk to controlled waters. The impacted groundwater should also be assessed as a potential source of vapour, with regard to the human health inhalation pathway. Groundwater (which may be perched water within the made ground) was recorded at between 1.0 and 2.0m at these locations. Further investigations are likely to be required to provide data for this assessment, which may not be practicable pending further demolition.

9.8 Preliminary Conceptual Model

The investigation has provided data to inform development of a conceptual model as follows:

Contamination Sources

The site has the potential for contamination of soils and groundwater associated with an extended period of industrial use since the 1920s. Potential contaminants are typical of those associated with engineering / manufacturing, including metals; petroleum hydrocarbons (fuel, lubricants); chlorinated hydrocarbons (degreasing solvents, paints and coatings) and asbestos (building materials, friction materials, insulation).

The contamination testing suite utilised reflects a broad range of the expected contaminants, in both soils and groundwater.

Receptors

Assessment has taken into account the anticipated future redevelopment of parts of the site, based on the current Masterplan, including residential and new industrial / commercial activity.

Receptors considered include future residential occupiers; occupants of industrial premises; controlled waters (principally, underlying groundwater); building materials and plant toxicity (applicable to residential gardens and landscaped areas).

Pathways

Human health risks due to contamination may arise from soil ingestion; ingestion of crop plants grown in residential gardens; inhalation of airborne particulates and gases / vapours and dermal contact.

The contamination risk assessment has assessed the materials tested, allowing for the material to be present at or close to the surface and available for direct contact (via soil ingestion, creation of airborne dust, dermal contact, etc.). However, most materials tested represent made ground, physically unsuitable for retention at the surface in gardens and landscaping areas. Consequently, the assessment represents a conservative approach, identifying materials with the potential for health hazards in the unlikely event that they were retained at surface without cover. Similarly, although plant toxicity has been assessed, direct planting of the tested materials is unlikely.

Controlled waters risks have been assessed primarily based on testing of groundwater encountered within boreholes, and comparison of water quality with generic standards for drinking water. Whilst this preliminary assessment indicates the potential for impacts on groundwater outside the site boundary, current assessment does not provide quantitative assessment of risk, required to inform the derivation of a remediation strategy.

By considering the sources, pathways and receptors, an assessment of the environmental risks can be made with reference to the significance and degree of the risk. The assessment is based on the consideration of whether the source of contamination can reach a receptor and hence whether it is of major or minor significance. The qualitative risk assessment is undertaken in accordance with BS10175:2011 and CIRIA Document C552, Contaminated land risk assessment: A Guide to Good Practice. The source – pathway – receptor linkages are developed around the information presented above.

Table 13 Categorisation of Risk

Category	Definition
Severe	Acute risks to human health, catastrophic damage to buildings/property, major pollution of controlled waters
Medium	Chronic risk to human health, pollution of sensitive controlled waters, significant effects on sensitive ecosystems or species, significant damage to buildings or structures
Mild	Pollution of non-sensitive waters, minor damage to buildings or structures
Minor	Requirement for protective equipment during site works to mitigate health effects, damage to non-sensitive ecosystems or species

The likelihood of an event (probability) takes into account both the presence of the hazard and target and the integrity of the pathway and has been assessed based on the categories given below.

Table 14 Categorisation of Probability

Category	Definition
High Likelihood	Pollutant linkage may be present, and risk is almost certain to occur in long term, or there is evidence of harm to the receptor
Likely	Pollutant linkage may be present, and it is probable that the risk will occur over the long term
Low Likelihood	Pollutant linkage may be present, and there is a possibility of the risk occurring, although there is no certainty that it will do so
Unlikely	Pollutant linkage may be present, but the circumstances under which harm would occur are improbable

The potential severity of the risk and the probability of the risk occurring have been combined in accordance with the following matrix in order to give a level of risk for each potential hazard.

Table 15 Risk Matrix Categories

		Potential Severity			
		Severe	**Medium**	**Mild**	**Minor**
Probability of Risk	High Likelihood	Very High	High	Moderate	Moderate/ Low
	Likely	High	Moderate	Moderate/ Low	Low
	Low Likelihood	Moderate	Moderate/ Low	Low	Negligible
	Unlikely	Moderate/ Low	Low	Negligible	Negligible

Potential risks / constraints identified are summarised in Table 16.

Table 16 – Summary Conceptual Model

Potential Source	Potential Pollutant	Potential Receptor	Potential Pathway to Receptor	Associated Hazard (Severity)	Likelihood of Occurrence	Risk
Contaminants in made ground	Contaminants may be present in made ground due to historical sources, or import / use of contaminated materials as required for fill / engineering purposes. No specific current sources are evident.					
	Asbestos	Future residential occupiers	Inhalation	Severe	Low	Moderate
		Future industrial / commercial occupiers	Inhalation	Severe	Low	Moderate
	TCE	Future residential occupiers	Inhalation, ingestion, skin contact	Medium	Likely (though localised)	Moderate
	Lead	Future residential occupiers	Inhalation, ingestion, skin contact	Medium	Low	Moderate/ Low
	Petroleum hydrocarbons Chlorinated hydrocarbons	Groundwater	Leaching / migration through soils	Medium	Likely (some impact on groundwater within site demonstrated)	Moderate
	Copper, zinc	Garden / landscape planting	Root contact	Minor	Low (impact predominantly within industrial zones)	Negligible

9.9 Summary

Made ground throughout the investigation area is characterised by sporadic elevated metals concentrations, most commonly copper and zinc, consistent with historical engineering activities or imported fill. As testing relates to made ground which would not be physically suitable for retention close to the surface in gardens or areas of landscape planting, the metals contamination does not represent any significant risk to human health or plant growth.

Materials visually identified as suspect ACM were rare, encountered only at a single location within the retained Meggitt area, WS28, 0.9m. However, laboratory analysis identified the presence of detectable asbestos, as loose fibres or unspecified ACM debris, in 5 of 19 samples tested. Trace levels of asbestos (<0.001%) were identified in made ground from WS21, WS22, WS52 and WS54. Low levels of asbestos (0.0388%) in made ground were found at WS19. Based on the CL:AIRE Work Category Decision Support Tool [10], the CAR Regulations [11] would not apply when disturbing ground at WS21, WS22, WS52 and WS54 due to the low concentration present. As no ground disturbance works are currently proposed at WS19, the CAR Regulations do not apply. Therefore, no controls for management of asbestos are required during the proposed redevelopment works.

Petroleum hydrocarbons were commonly identified at low to moderate concentration, predominantly characterised as lubricating / heavy fuel oil range. Significant contamination by lighter hydrocarbons (petrol range) was identified in groundwater in the east of the site in the vicinity of WS48, 49, 51 and R12. Measured concentrations are not considered to represent any significant human health risk because the contamination was associated with made ground which would not remain at surface. Groundwater has shown evidence of petroleum hydrocarbons and PAH impact, consistent with evidence of contamination in soils.

Chlorinated hydrocarbons, most significantly trichloroethene (TCE), were widespread in soil at concentrations exceeding residential human health criteria. Notably elevated concentrations were identified at WS36, within the eastern residential Zone E. Made ground exceeding the relevant human health screening criteria may represent a human health risk by indoor inhalation, due to potential for migration through overlying cover materials / building floor structures. Chlorinated hydrocarbons, most commonly TCE, were detected in several groundwater samples. The TCE concentration exceeded the DWS criterion in two instances, both by a substantial margin, and vinyl chloride concentration exceeded the DWS criterion in one instance.

Remedial action will be required to mitigate contamination of soils and groundwater to

enable the proposed partial redevelopment of the site. Preparation of a Remediation Strategy is recommended to identify remedial requirements, taking into account both WYG and historical data.

10.0 Gas Assessment

Ground gas monitoring has been undertaken on six occasions over an eight week period. Results are included in Appendix G.

The maximum methane concentration (1.0%) was recorded from WS49 during Round 1; the maximum carbon dioxide concentration (12.0%) was recorded from WS36 during Round 1. Flow rates recorded from WS36 and WS49 during Round 1 were 2.5L/hr and 0.0L/hr, respectively. Hazardous gas flow rate did not exceed 0.07 L/h on any occasion, at any location. Based on guidance in CIRIA C665 [12], the site falls within Characteristic Gas Situation (CS) 1, assessed on hazardous gas flow alone.

At WS36, the concentration of carbon dioxide was frequently in excess of 5%, maximum 12.0%. CIRIA guidance suggests that consideration should be given to a precautionary increase to CS2 where carbon dioxide typically exceeds 5%. Although the measured concentration was not significantly greater than may be found in typical organic soils, localised gas protection is recommended in the vicinity of WS36.

Slightly elevated carbon monoxide concentrations were noted sporadically during the gas monitoring. Elevated results were most commonly associated with WS36, maximum concentration 34ppm (Round 4) marginally exceeding the occupational exposure limit (30ppm). Borehole WS36, and others at which carbon monoxide was detected at more elevated concentrations, coincided with locations at which chlorinated hydrocarbons (TCE) and/or hydrocarbon vapours may be anticipated due to elevated concentrations in soils or groundwater. Correspondence with the manufacturer did not indicate any known cross-sensitivity of the instrument carbon monoxide sensor to TCE. However, comparison of analysis of a laboratory gas sample with the field instrument suggests that the indicated carbon monoxide was not replicated by laboratory analysis methods (Table 17). The carbon monoxide sensor is known to be cross-sensitive to hydrogen, but this was not identified by laboratory analysis.

Table 17 - Borehole WS36 – Comparison of Laboratory and Field Instrument Gas Data

	Methane, %	Carbon Dioxide, %	Oxygen, %	Carbon Monoxide, ppm	Hydrogen, ppm
Field Instrument	0.0	11.8	8.2	33	-
Laboratory	<0.05	9.23	8.86	<1	<0.5

During most monitoring rounds at R12, the field instrument indicated concentrations of methane above the limit of the analyser. Groundwater samples from this location had recorded substantial concentrations of volatile petroleum hydrocarbons, with strong odour. The gas analyser methane sensor is known to be cross-sensitive to petroleum hydrocarbons vapour. Vapour monitoring, using a photo-ionisation detector (PID), recorded elevated vapour concentrations from R12, indicating that the methane result was likely to be erroneous.

Depleted oxygen concentrations (<10%) were observed on several occasions during the monitoring programme . Controls for working in confined spaces will need to be implemented during any excavation works.

Summary gas monitoring data is included in Table 18.

Table 18 – Summary of Gas Monitoring Data

Installation	Maximum Concentration			Peak flow[2], l/h	
	Methane, %	Carbon Dioxide, %	Carbon Monoxide, ppm	Methane	Carbon Dioxide
R1	0.1	1.1	1.0	0.000	0.000
R2	0.2	7.1	5.0	0.000	0.003
R5	0.1	8.6	5.0	-0.004	0.002
R6	0.1	2.9	3.0	0.001	0.015
R7	0.1	3.0	5.0	0.000	0.000
R8	0.1	1.8	3.0	-0.002	0.003
R9	0.1	1.6	2.0	0.000	0.011
R10	0.4	4.6	1.0	0.002	0.023
R11	0.4	3.5	3.0	-0.002	0.004
R12	(>>>)[1]	3.7	3.0	-	0.064
WS01	0.1	0.8	4.0	0.000	0.001
WS02	0.2	8.4	0.0	0.000	0.010
WS20	0.2	4.0	3.0	0.000	0.003
WS21	0.1	2.5	2.0	0.000	0.001
WS22	0.1	2.9	1.0	0.000	0.003
WS29	0.1	0.5	2.0	0.000	0.001
WS32	0.1	11.6	10.0	0.000	0.000
WS35	0.2	0.4	3.0	0.000	0.000
WS36	0.1	12.0	34.0	0.000	0.009
WS45	0.4	3.7	2.0	0.000	0.002
WS46	0.2	6.2	3.6	0.000	0.003
WS48	0.6	1.4	2.0	0.000	0.000
WS49	1.0	3.2	20.0	0.015	0.023
WS51	1.3	7.6	7.0	0.002	0.009

[1] Over-range indicated due to hydrocarbon vapour [2] Maximum positive flow

11.0 Preliminary Engineering Assessment

The following section provides details and comments relating to the construction as currently proposed. Residential development is proposed in the west and central areas. Two industrial zones are proposed to the east, with associated car parking and service yard areas. The existing Carbon Factory is to be retained in its current use.

11.1 Foundation Design

The ground conditions generally comprise concrete / asphalt hardstanding overlying granular made ground which is underlain by natural clayey sand / sandy clay. Coarse grained siltstone / fine grained sandstone was encountered locally in some window sample boreholes and all rotary boreholes. Corrected SPT N_{60} values obtained indicates a strong correlation between an increase in strength with depth with values ranging from 4 to 28 at 1.2mbgl with an average of 13, 5 to 50 at 2.0mbgl with an average of 28 and 19 to 50 at 3.0mbgl with an average of 36. It is understood that a residential development and two industrial zones are proposed, however foundation design will be dependent on measurements of post remediation ground levels and most likely comprise a mixture of strip and trench fill foundations. It is likely that suspended floor slabs will be required in all residential properties.

11.2 Protection of buried concrete

The sulphate data assessed with section 7.3.3 indicates a design sulphate class of DS-2, ACEC Class AC-2, and protection of buried concrete may be required for the site.

11.3 Geotechnical Constraints

The results for the Atterberg Limits tests indicate that the cohesive material on site hold a low to medium plasticity and a low to intermediate volume change potential in accordance with NHBC guidelines. Where applicable a propriety compressible material should be incorporated into the foundation design to protect against heave and shrinkage of cohesive soils.

Groundwater was encountered in all rotary boreholes during the ground investigation at depths at 1.5 and 6.0mbgl, and in 17 of the installed boreholes during monitoring at depths between 0.45 and 14.37mbgl. Groundwater should be incorporated into the foundation design, particularly if foundation design is likely to extend past 3.0mbgl. De-watering may therefore be required during excavations.

12.0 Summary and Conclusions

- WYG Environment (WYG) were commissioned by Meggitt Aerospace to conduct a ground investigation at the manufacturing site off Holbrook Lane, Coventry.
- The ground investigation was undertaken from the 5th to the 16th February 2018.
- The ground investigation was undertaken from the 5th to the 16th February 2018.
- The investigation comprised 29 No. window sample boreholes, 12 No. installed with gas and groundwater monitoring standpipes and 10 No. rotary open holed boreholes all installed with standpipes.
- The ground conditions generally comprised hardstanding overlying granular made ground overlying natural clayey sand / sandy clay, which is underlain by coarse grained siltstone / fine grained sandstone.
- Groundwater was encountered in all rotary boreholes during the ground investigation at depths between 1.5 and 6.0mbgl. Further groundwater monitoring recorded standing depths between 0.42 and 14.37mbgl.
- Corrected SPT N_{60} values obtained indicated a strong correlation between an increase in strength with depth.
- Moisture content tests returned an average value of 18.3% for the site.
- The results of the Atterberg tests indicate the cohesive materials on site generally have a low to medium plasticity and a low to intermediate volume change potential.
- Results for water soluble sulphate indicate protection of concrete from sulphate attack may be required. The Design Sulphate class was assessed as DS-2, ACEC Class AC-2.
- Sporadic presence of asbestos was identified in made ground, predominantly at trace levels. No requirements for asbestos controls during excavations within the proposed development areas were indicated.
- Sporadic presence of potentially plant-toxic metals was identified, unlikely to represent a constraint assuming that clean soil cover will be prpvided in gardens.
- The volatile organic compound trichloroethene was identified both within residential and industrial areas. Concentrations in soils at three locations (WS2, WS3, WS36), within residential development Zones D and E, may require remedial action. TCE impacted groundwater should also be assessed as a human health risk contamination source.
- Petroleum hydrocarbons, predominantly lubricating oil range, were also sporadic at low

to moderate concentration. A significant part of Industrial Zone 2 in the east was impacted by light hydrocarbons (petrol range), requiring further assessment.

- Detailed quantitative risk assessment will be required to assess controlled waters remedial requirements.
- Remedial action will be required to mitigate contamination of soils and groundwater, to enable the partial redevelopment of the site.
- Preparation of a Remediation Strategy is recommended to identify remedial requirements based on both WYG and historical data.
- Assessment of ground gas indicates a requirement gas protection (CS2). This location is also impacted by TCE, for which remedial works may also mitigate the ground gas hazard.
- Strip or trench fill footings extending through the made ground to the stiff / medium dense superficial deposits between 2.0 and 3.0mbgl are proposed.
- Where applicable a proprietary compressible material should be incorporated into the foundation design to protect against heave and shrinkage of cohesive soils.
- Due to the presence of groundwater during the ground investigation and monitoring visits, de-watering may need to be considered during excavations.

13.0 References

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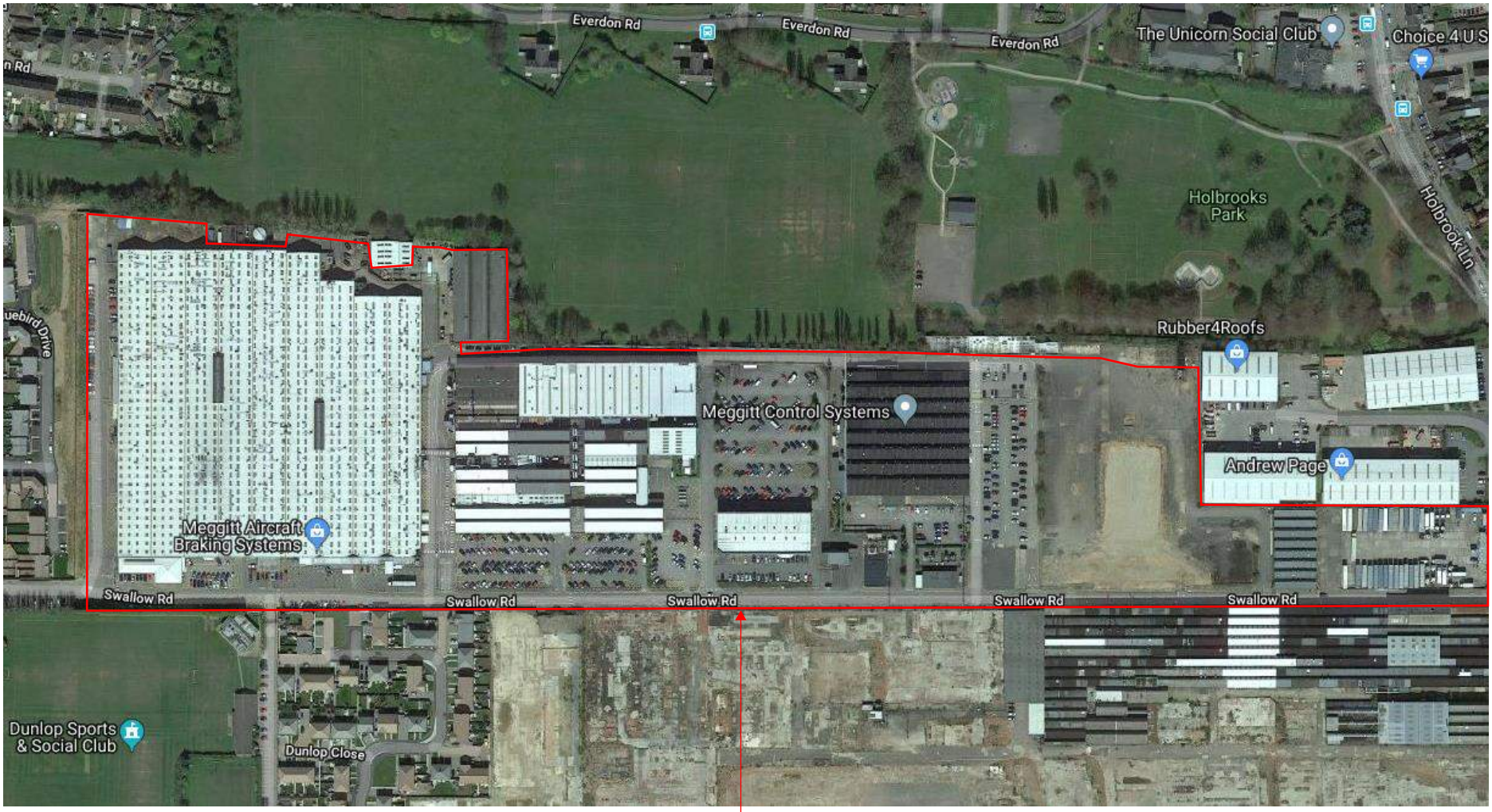
14.0 Figures and Appendices

Figure 1 – Local Location Plan



Site Location Outline

Figure 2 – Exploratory Borehole Location Plan

Figure 2: Exploratory Hole Location Plan

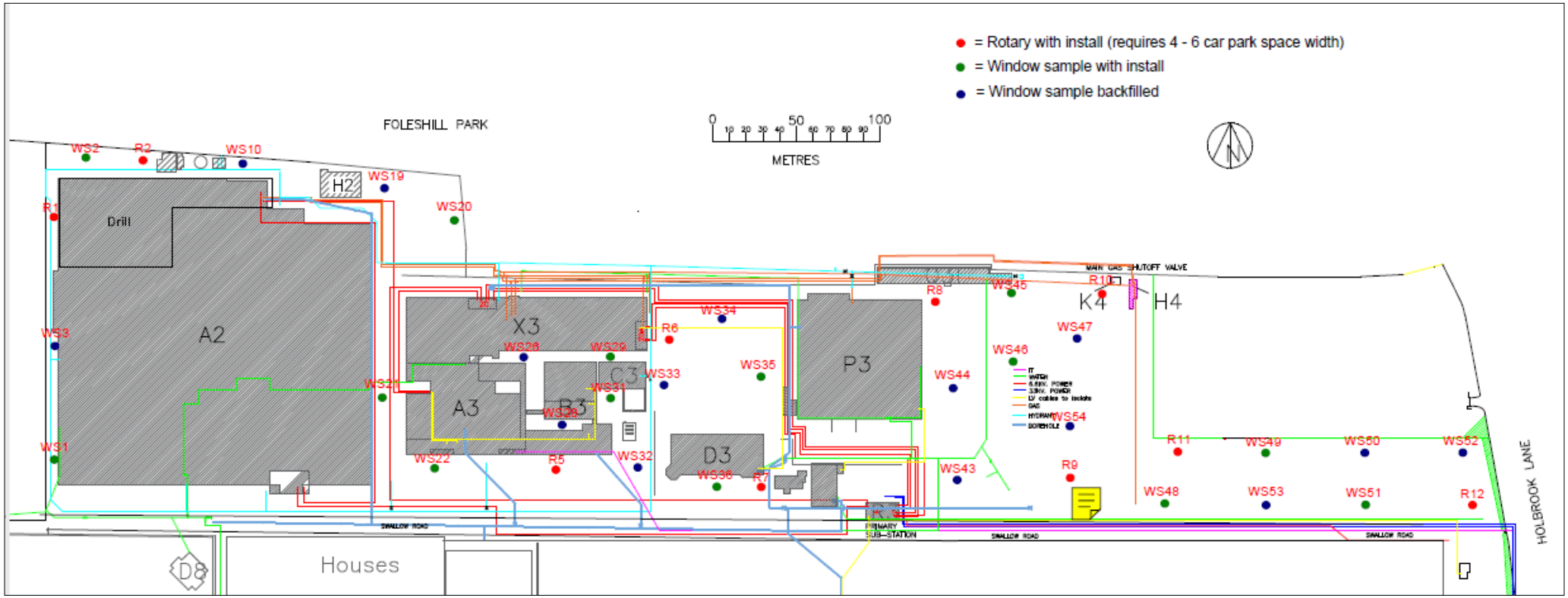


Figure 3 – SPT 'N' Value v Depth (Window Samples)

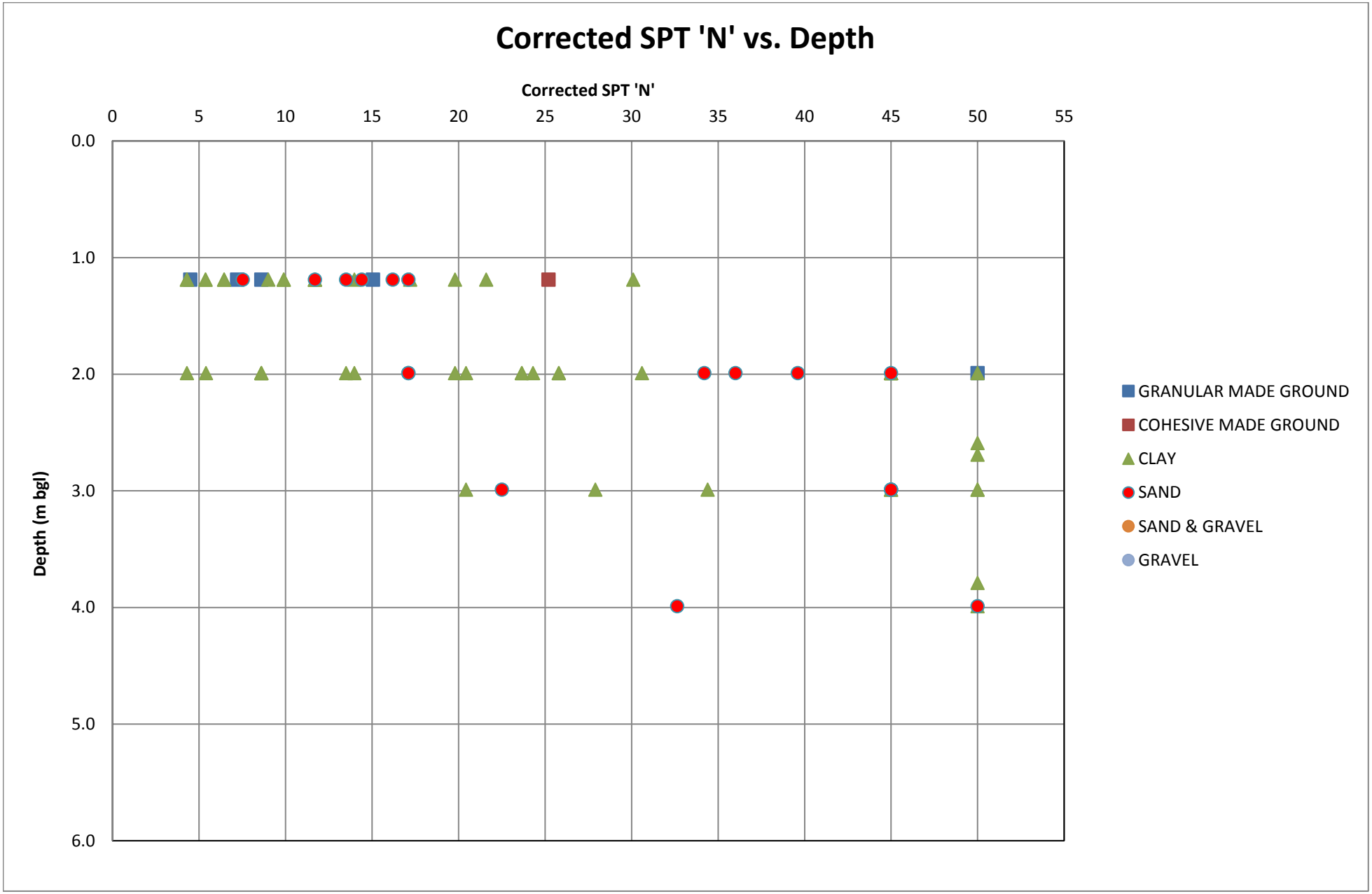

Corrected SPT 'N' vs. Depth
Corrected SPT 'N'
0
5
10
15
20
25
30
35
40
45
50
55
0.0
1.0
2.0
3.0
4.0
5.0
6.0
Depth (m bgl)
GRANULAR MADE GROUND
COHESIVE MADE GROUND
CLAY
SAND
SAND & GRAVEL
GRAVEL

Figure 4 – SPT 'N' Value v Depth (Rotary)

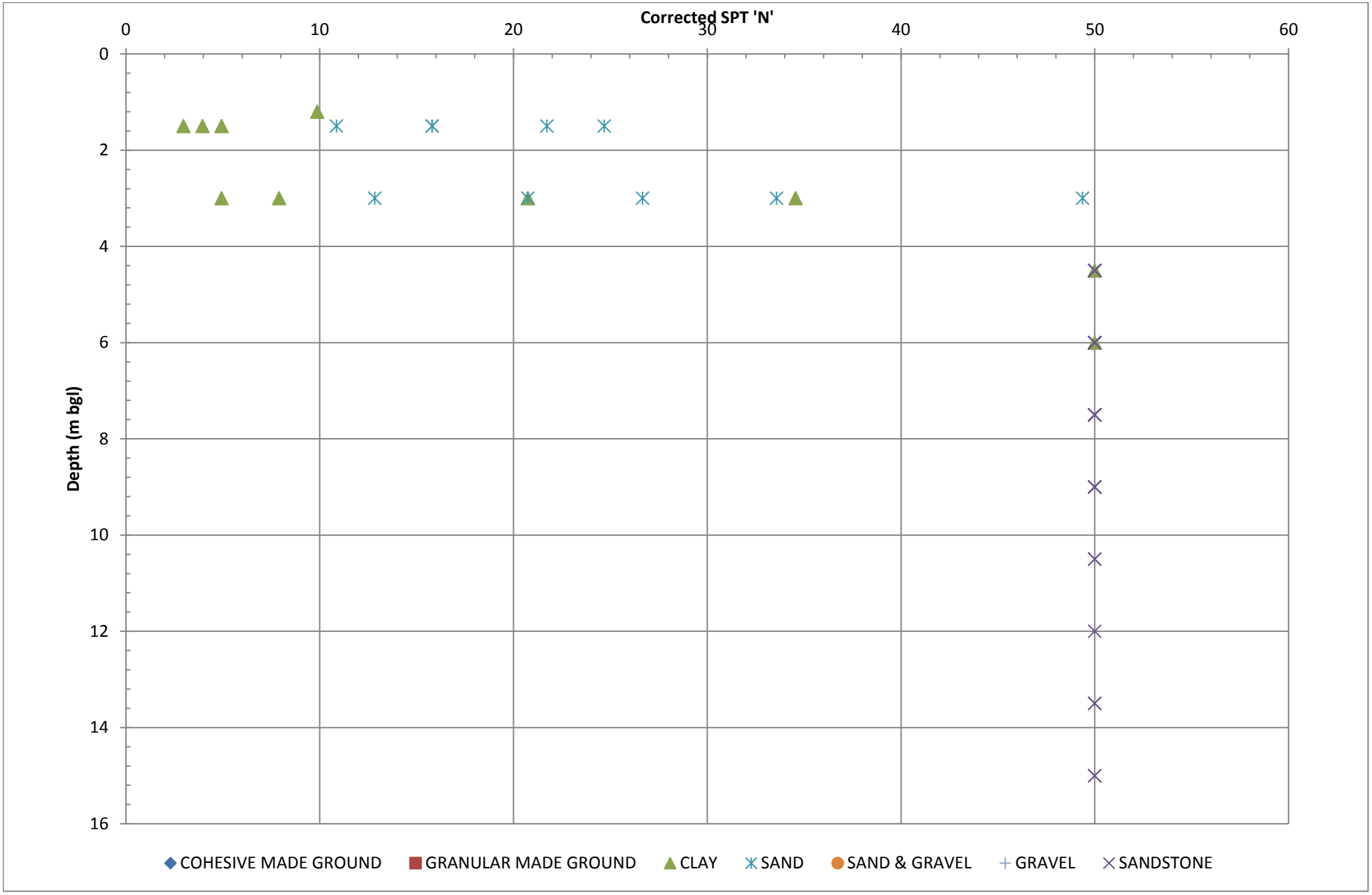

Corrected SPT 'N'
0
10
20
30
40
50
60
Depth (m bgl)
0
2
4
6
8
10
12
14
16
COHESIVE MADE GROUND
GRANULAR MADE GROUND
CLAY
SAND
SAND & GRAVEL
GRAVEL
SANDSTONE

Figure 5 – Moisture Content versus Depth

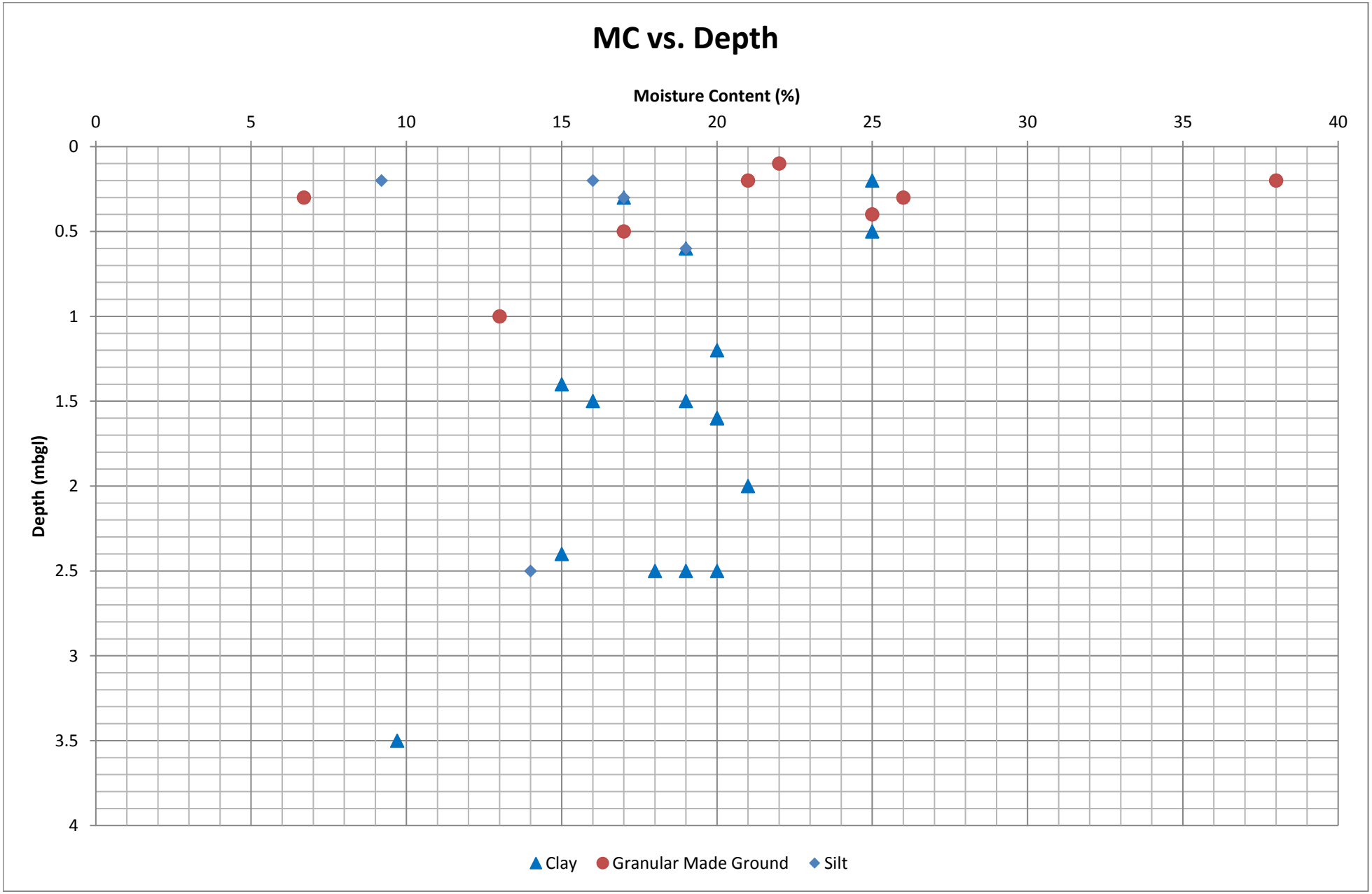
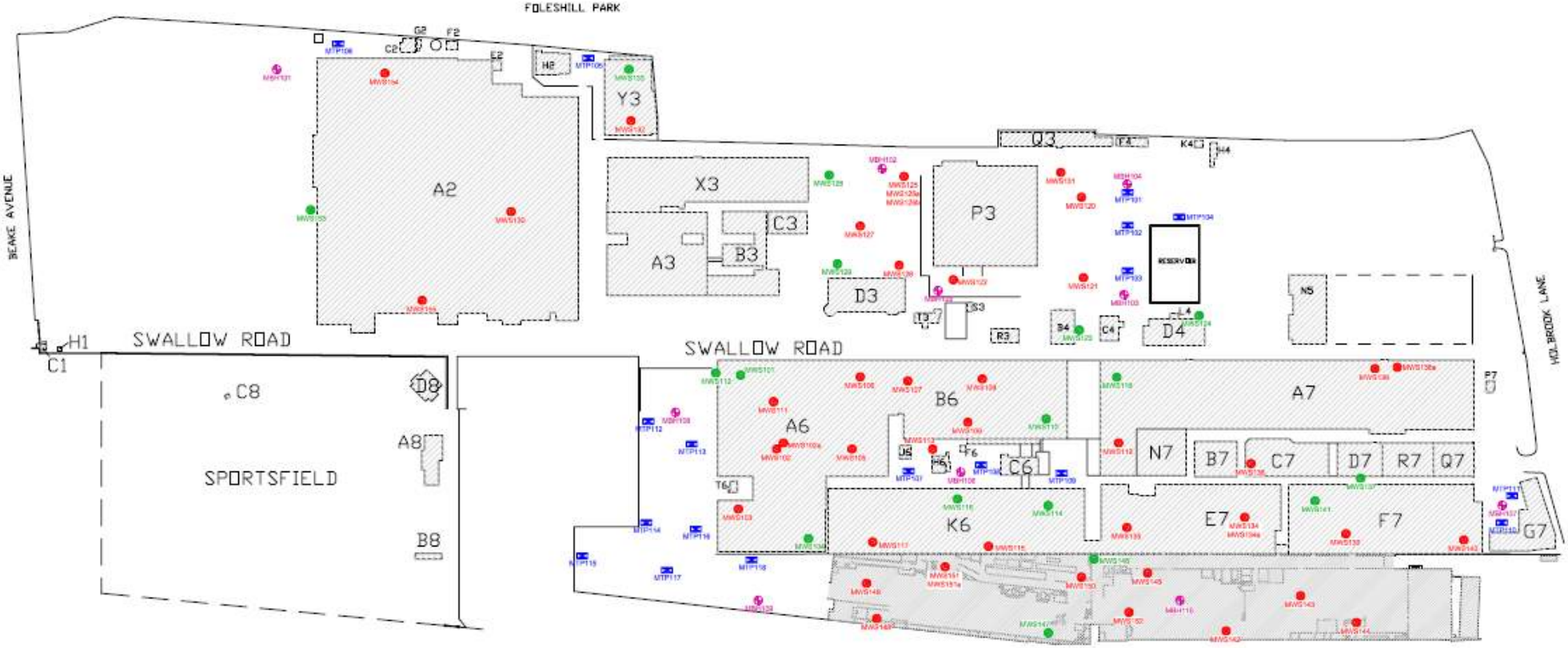

MC vs. Depth
Moisture Content (%)
0
5
10
15
20
25
30
35
40
Depth (mbgl)
0
0.5
1
1.5
2
2.5
3
3.5
4
Clay
Granular Made Ground
Silt

Figure 6 - Meerbrook Site Investigation Locations



Legend

- MWSref — Approximate Merebrook window sample location with reference
- MWSref — Approximate Merebrook window sample (with installed standpipe) location with reference
- MTPref — Approximate Merebrook trial pit location with reference
- MBHref — Approximate Merebrook borehole location with reference

merebrook consulting

Client: Clowes Developments/Meggitt Aerospace Ltd

Project: Meggitt/Stadco Coventry

Drg Title: Site Investigation Locations

Job No. 17054a	Drg No. 17054a-004-001	Revision -	
Scale N.T.S.	Date Feb 2012	Paper Dimensions (A1) 791 x 594	
Drawn D.M.S.	Checked R.M.	Approved L.S.	

Appendix A – Report Conditions

Report Conditions

GROUND INVESTIGATION

This report is produced solely for the benefit of Meggitt Aerospace and no liability is accepted for any reliance placed on it by any other party unless specifically agreed in writing otherwise.

This report refers, within the limitations stated, to the condition of the site at the time of the inspections. No warranty is given as to the possibility of future changes in the condition of the site.

This report is based on a visual site inspection, reference to accessible referenced historical records, information supplied by those parties referenced in the text and preliminary discussions with local and Statutory Authorities. Some of the opinions are based on unconfirmed data and information and are presented as the best that can be obtained without further extensive research. Where ground contamination is suspected but no physical site test results are available to confirm this, the report must be regarded as initial advice only, and further assessment should be undertaken prior to activities related to the site. Where test results undertaken by others have been made available these can only be regarded as a limited sample. The possibility of the presence of contaminants, perhaps in higher concentrations, elsewhere on the site cannot be discounted.

Whilst confident in the findings detailed within this report because there are no exact UK definitions of these matters, being subject to risk analysis, we are unable to give categoric assurances that they will be accepted by Authorities or Funds etc. without question as such bodies often have unpublished, more stringent objectives. This report is prepared for the proposed uses stated in the report and should not be used in a different context without reference to WYGE. In time improved practices or amended legislation may necessitate a re-assessment.

The assessment of ground conditions within this report is based upon the findings of the study undertaken. We have interpreted the ground conditions in between locations on the assumption that conditions do not vary significantly. However, no investigation can inspect each and every part of the site and therefore changes or variances in the physical and chemical site conditions as described in this report cannot be discounted.

The report is limited to those aspects of land contamination specifically reported on and is necessarily restricted and no liability is accepted for any other aspect especially concerning gradual or sudden pollution incidents. The opinions expressed cannot be absolute due to the limitations of time and resources imposed by the agreed brief and the possibility of unrecorded previous use and abuse of the site and adjacent sites. The report concentrates on the site as defined in the report and provides an opinion on surrounding sites. If migrating pollution or contamination (past or present) exits further extensive research will be required before the effects can be better determined.

Appendix B – Exploratory Hole Logs

Project:	**Meggitt**
Location:	**Coventry**
Client:	**Homes England**

Location Details

Easting:	432754.00	Northing:	282397.00
Level:	116.00mAOD	Depth:	9.00m
Logger:	JP	Type:	RO
		Inclination:	90°

Status: DRAFT

Borehole Number: **R1**

Sheet 1 of 1

Scale:	1:50
Checked By:	SM
Approved By:	SDC
Start Date:	16/02/2018
Finish Date:	16/02/2018

Method, Plant and Crew

From (m)	To (m)	Type	Plant Used	Crew
0.00	1.20	Inspection Pit	Hand dug pit	DSUK
1.20	9.00	Rotary Open Hole	Comachio MC 450	DSUK

Diameter

Depth (m)	Diam (mm)
9.00	100

Casing

Depth(m)	Diam (mm)
3.00	100

Drilling Progress by Time

Date	Time	Depth (m)	Casing (m)	Water (m)

Strata Description

Strata Description	Depth (m)	Reduced Level (mAOD)
Brick and concrete fill. Rockoller through concrete between 0.7 and 0.9mbgl (drillers description)		
Soft brown sandy CLAY (drillers description)	0.90	115.10
Loose red fine gravelly SAND (drillers description)	1.40	114.60
Weak red SANDSTONE (drillers description)	3.30	112.70
EOH at 9.00m -	9.00	107.00

Legend

Water Level (m)

Inst / Backfill

Samples, Tests and Rotary Coring

Depth (m)	Ref	Tests / Results
1.50		SPT(C) 1.50m, N=16 (1,3/3,4,4,5)
3.00		SPT(C) 3.00m, N=21 (11,9/8,5,4,4)
4.50		SPT(C) 4.50m, 50 (8,8/50 for 210mm)
6.00		SPT(C) 6.00m, 50 (25 for 115mm/50 for 30mm)
7.50		SPT(C) 7.50m, 50 (25 for 55mm/50 for 20mm)
9.00		SPT(C) 9.00m, 50 (25 for 45mm/50 for 25mm)

Depth scale: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10

Observations / Remarks

Groundwater encountered at 3.0mbgl

Flushing

From (m)	To (m)	Return Min %	Colour	Type

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks
3.00	-	-	0	0.00	

Hammer Information

Serial No.	Energy Ratio %
SC.01	79

Project Number: **A107448**

Project:	**Meggitt**
Location:	**Coventry**
Client:	**Homes England**

Location Details

Easting:	433373.22	Northing:	282351.94
Level:	105.95mAOD	Depth:	15.00m
Logger:	JP	Type:	RO
		Inclination:	90°

Status: DRAFT

Borehole Number: **R10**

Sheet 1 of 2

Method, Plant and Crew

From (m)	To (m)	Type	Plant Used	Crew
0.00	1.20	Inspection Pit	Hand Dug Pit	DSUK
1.20	15.00	Rotary Open Hole	Comachio MC 450	DSUK

Diameter

Depth (m)	Diam (mm)
15.00	100

Casing

Depth(m)	Diam (mm)
3.00	100

Drilling Progress by Time

Date	Time	Depth (m)	Casing (m)	Water (m)

Scale:	1:50
Checked By:	SM
Approved By:	SDC
Start Date:	12/02/2018
Finish Date:	13/02/2018

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill	Samples, Tests and Rotary Coring: Depth (m)	Ref	Tests / Results
Hand dug trial pit (drillers description)								
Soft reddish brown silty CLAY (drillers description)		1.20	104.75					SPT(C) 1.50m, N=5 (1,1/1,1,2,1)
								SPT(C) 3.00m, N=21 (2,2/3,3,7,8)
Red weak SANDSTONE (drillers description)		3.30	102.65					
								SPT(C) 4.50m, 50 (25 for 50mm/50 for 55mm)
								SPT(C) 6.00m, 50 (25 for 45mm/50 for 30mm)
								SPT(C) 7.50m, 50 (25 for 25mm/50 for 30mm)
								SPT(C) 9.00m, 50 (25 for 35mm/50 for 35mm)
Red weak MUDSTONE with occasional sandstone bands (drillers description)		9.80	96.15					

Continued on Next Page

Observations / Remarks

Groundwater encountered at 4.5mbgl.

Flushing

From (m)	To (m)	Return Min %	Colour	Type

Hammer Information

Serial No.	Energy Ratio %
SC.01	79

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks
4.50	-	-	0	0.00	

Project Number: **A107448**

Project:	**Meggitt**
Location:	**Coventry**
Client:	**Homes England**

Location Details

Easting:	433373.22	Northing:	282351.94
Level:	105.95mAOD	Depth:	15.00m
Logger:	JP	Type:	RO
		Inclination:	90°

Status: DRAFT

Borehole Number: **R10**

Sheet 2 of 2

Scale:	1:50
Checked By:	SM
Approved By:	SDC
Start Date:	12/02/2018
Finish Date:	13/02/2018

Method, Plant and Crew

From (m)	To (m)	Type	Plant Used	Crew
0.00	1.20	Inspection Pit	Hand Dug Pit	DSUK
1.20	15.00	Rotary Open Hole	Comachio MC 450	DSUK

Diameter

Depth (m)	Diam (mm)
15.00	100

Casing

Depth(m)	Diam (mm)
3.00	100

Drilling Progress by Time

Date	Time	Depth (m)	Casing (m)	Water (m)

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill	Samples, Tests and Rotary Coring: Depth (m)	Ref	Tests / Results
								SPT(C) 10.50m, 50 (25 for 30mm/50 for 30mm)
								SPT(C) 12.00m, 50 (25 for 30mm/50 for 25mm)
								SPT(C) 13.50m, 50 (25 for 35mm/50 for 25mm)
EOH at 15.00m - Full Depth		15.00	90.95					SPT(C) 15.00m, 50 (25 for 30mm/50 for 35mm)

11 12 13 14 15 16 17 18 19 20

Observations / Remarks

Groundwater encountered at 4.5mbgl.

Flushing

From (m)	To (m)	Return Min %	Colour	Type

Hammer Information

Serial No.	Energy Ratio %
SC.01	79

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

Project Number: **A107448**

Project:	**Meggitt**
Location:	**Coventry**
Client:	**Homes England**

Location Details

Easting:	433409.56	Northing:	282274.22
Level:	105.55mAOD	Depth:	15.00m
Logger:	JP	Type:	RO
		Inclination:	90°

Status: DRAFT

Borehole Number: **R11**

Sheet 1 of 2

Method, Plant and Crew					Diameter		Casing		Drilling Progress by Time				
From (m)	To (m)	Type	Plant Used	Crew	Depth (m)	Diam (mm)	Depth(m)	Diam (mm)	Date	Time	Depth (m)	Casing (m)	Water (m)
0.00	1.20	Inspection Pit	Hand dig pit	DSUK	15.00	100	3.00	100					
1.20	15.00	Rotary Open Hole	Comachio MC 450	DSUK									

Scale:	1:50
Checked By:	SM
Approved By:	SDC
Start Date:	13/02/2018
Finish Date:	13/02/2018

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill	Samples, Tests and Rotary Coring: Depth (m)	Ref	Tests / Results
Had dug trial pit - Rockroller between 0.3-0.7mbgl through concrete (drillers description)								
Red brown soft clayey loose SAND (drillers description)		1.20	104.35					SPT(C) 1.50m, N=25 (1,5/5,6,7,7)
Weak red SANDSTONE (drillers description)		3.10	102.45					SPT(C) 3.00m, 50 (25 for 85mm/50 for 35mm)
Weak red MUDSTONE (drillers description)		6.00	99.55					SPT(C) 4.50m, 50 (25 for 40mm/50 for 30mm)
Weak red SANDSTONE (drillers description)		8.20	97.35					SPT(C) 6.00m, 50 (7,7/50 for 95mm)
								SPT(C) 7.50m, 50 (25 for 70mm/50 for 80mm)
								SPT(C) 9.00m, 50 (12,13/50 for 55mm)

Continued on Next Page

Observations / Remarks

Groundwater encountered at 6.0mbgl

Flushing

From (m)	To (m)	Return Min %	Colour	Type

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

Hammer Information

Serial No.	Energy Ratio %
SC.01	79

Project Number: **A107448**

Project:	**Meggitt**
Location:	**Coventry**
Client:	**Homes England**

Location Details			
Easting:	433409.56	Northing:	282274.22
Level:	105.55mAOD	Depth:	15.00m
Logger:	JP	Type:	RO
		Inclination:	90°

Status: DRAFT

Borehole Number: **R11**

Method, Plant and Crew					Diameter		Casing		Drilling Progress by Time				
From (m)	To (m)	Type	Plant Used	Crew	Depth (m)	Diam (mm)	Depth(m)	Diam (mm)	Date	Time	Depth (m)	Casing (m)	Water (m)
0.00	1.20	Inspection Pit	Hand dig pit	DSUK	15.00	100	3.00	100					
1.20	15.00	Rotary Open Hole	Comachio MC 450	DSUK									

Scale:	1:50
Checked By:	SM
Approved By:	SDC
Start Date:	13/02/2018
Finish Date:	13/02/2018

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill	Samples, Tests and Rotary Coring: Depth (m)	Ref	Tests / Results
								SPT(C) 10.50m, 50 (25 for 60mm/50 for 45mm)
								SPT(C) 12.00m, 50 (25 for 40mm/50 for 30mm)
								SPT(C) 13.50m, 50 (25 for 30mm/50 for 35mm)
EOH at 15.00m - Full Depth		15.00	90.55					SPT(C) 15.00m, 50 (25 for 25mm/50 for 30mm)

Depth scale: 11, 12, 13, 14, 15, 16, 17, 18, 19, 20

Observations / Remarks
Groundwater encountered at 6.0mbgl

Flushing				
From (m)	To (m)	Return Min %	Colour	Type

Hammer Information	
Serial No.	Energy Ratio %
SC.01	79

Groundwater					
Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

Project Number: **A107448**

Project:	**Meggitt**
Location:	**Coventry**
Client:	**Homes England**

Location Details

Easting:	433564.09	Northing:	282237.45
Level:	103.71mAOD	Depth:	15.00m
Logger:	JP	Type:	RO
		Inclination:	90°

Status: DRAFT

Borehole Number: **R12**

Sheet 1 of 2

Method, Plant and Crew					Diameter		Casing		Drilling Progress by Time				
From (m)	To (m)	Type	Plant Used	Crew	Depth (m)	Diam (mm)	Depth(m)	Diam (mm)	Date	Time	Depth (m)	Casing (m)	Water (m)
0.00	1.20	Inspection Pit	Hand dug pit	DSUK	15.00	100	3.00	100					
1.20	15.00	Rotary Open Hole	Comachio MC 450	DSUK									

Scale:	1:50
Checked By:	SM
Approved By:	SDC
Start Date:	14/02/2018
Finish Date:	14/02/2018

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill	Samples, Tests and Rotary Coring: Depth (m)	Ref	Tests / Results
MADE GROUND comprising concrete and brick fill (drillers description)								
Brown soft silty CLAY (drillers description)		0.80	102.91					
Reddish brown clayey loose SAND (drillers description)		1.20	102.51					SPT(C) 1.50m, N=16 (2,3/3,4,4,5)
								SPT(C) 3.00m, N=34 (6,7/8,8,8,10)
Weak red SANDSTONE (drillers description)		3.20	100.51					SPT(C) 4.50m, 50 (25 for 60mm/50 for 50mm)
								SPT(C) 6.00m, 50 (25 for 20mm/50 for 20mm)
								SPT(C) 7.50m, 50 (25 for 30mm/50 for 25mm)
Weak red MUDSTONE (drillers description)		8.20	95.51					
								SPT(C) 9.00m, 50 (7,9/50 for 85mm)
Weak red SANDSTONE (drillers description)		9.20	94.51					

Continued on Next Page

Observations / Remarks

Groundwater encountered at 5.5mbgl

Flushing

From (m)	To (m)	Return Min %	Colour	Type

Hammer Information

Serial No.	Energy Ratio %
SC.01	79

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks
5.50	-	-	0	0.00	

Project Number: **A107448**

Project:	**Meggitt**
Location:	**Coventry**
Client:	**Homes England**

Location Details

Easting:	433564.09	Northing:	282237.45
Level:	103.71mAOD	Depth:	15.00m
Logger:	JP	Type:	RO
		Inclination:	90°

Status: DRAFT

Borehole Number: **R12**

Sheet 2 of 2

Method, Plant and Crew					Diameter		Casing		Drilling Progress by Time				
From (m)	To (m)	Type	Plant Used	Crew	Depth (m)	Diam (mm)	Depth(m)	Diam (mm)	Date	Time	Depth (m)	Casing (m)	Water (m)
0.00	1.20	Inspection Pit	Hand dug pit	DSUK	15.00	100	3.00	100					
1.20	15.00	Rotary Open Hole	Comachio MC 450	DSUK									

Scale:	1:50
Checked By:	SM
Approved By:	SDC
Start Date:	14/02/2018
Finish Date:	14/02/2018

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill	Samples, Tests and Rotary Coring: Depth (m)	Ref	Tests / Results
								SPT(C) 10.50m, 50 (25 for 55mm/50 for 60mm)
Weak red MUDSTONE (drillers description)		11.80	91.91					SPT(C) 12.00m, 50 (25 for 70mm/50 for 80mm)
								SPT(C) 13.50m, 50 (25 for 50mm/50 for 60mm)
EOH at 15.00m - Full Depth		15.00	88.71					SPT(C) 15.00m, 50 (25 for 90mm/50 for 80mm)

11 12 13 14 15 16 17 18 19 20

Observations / Remarks

Groundwater encountered at 5.5mbgl

Flushing

From (m)	To (m)	Return Min %	Colour	Type

Hammer Information

Serial No.	Energy Ratio %
SC.01	79

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

Project Number: **A107448**

Project:	**Meggitt**
Location:	**Coventry**
Client:	**Homes England**

Location Details

Easting:	432787.52	Northing:	282439.64
Level:	114.00mAOD	Depth:	15.00m
Logger:	JP	Type:	RO
		Inclination:	90°

Status: DRAFT

Borehole Number: **R2**

Sheet 1 of 2

Scale:	1:50
Checked By:	SM
Approved By:	SDC
Start Date:	14/02/2018
Finish Date:	14/02/2018

Method, Plant and Crew

From (m)	To (m)	Type	Plant Used	Crew
0.00	1.20	Inspection Pit	Hand dug pit	DSUK
1.20	15.00	Rotary Open Hole	Comachio MC 450	DSUK

Diameter

Depth (m)	Diam (mm)
15.00	100

Casing

Depth(m)	Diam (mm)
3.00	100

Drilling Progress by Time

Date	Time	Depth (m)	Casing (m)	Water (m)

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill	Samples, Tests and Rotary Coring: Depth (m)	Ref	Tests / Results
Hand dug trial pit (drillers description)								
Soft red silty CLAY (drillers description)		1.20	112.80					SPT(C) 1.50m, N=4 (1,0/1,1,1,1)
								SPT(C) 3.00m, N=5 (1,0/1,1,2,1)
Weak red MUDSTONE (drillers description)		3.70	110.30					SPT(C) 4.50m, 50 (25 for 125mm/50 for 105mm)
								SPT(C) 6.00m, 50 (3,4/50 for 250mm)
								SPT(C) 7.50m, 50 (25 for 85mm/50 for 70mm)
								SPT(C) 9.00m, 50 (25 for 40mm/50 for 20mm)

Continued on Next Page

Observations / Remarks

Groundwater encountered at 3.0mbgl

Flushing

From (m)	To (m)	Return Min %	Colour	Type

Hammer Information

Serial No.	Energy Ratio %
SC.01	79

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks
3.00	-	-	0	0.00	

Project Number: **A107448**

Project:	**Meggitt**
Location:	**Coventry**
Client:	**Homes England**

Location Details

Easting:	432787.52	Northing:	282439.64
Level:	114.00mAOD	Depth:	15.00m
Logger:	JP	Type:	RO
		Inclination:	90°

Status: DRAFT

Borehole Number: **R2**

Sheet 2 of 2

Scale:	1:50
Checked By:	SM
Approved By:	SDC
Start Date:	14/02/2018
Finish Date:	14/02/2018

Method, Plant and Crew

From (m)	To (m)	Type	Plant Used	Crew
0.00	1.20	Inspection Pit	Hand dug pit	DSUK
1.20	15.00	Rotary Open Hole	Comachio MC 450	DSUK

Diameter

Depth (m)	Diam (mm)
15.00	100

Casing

Depth(m)	Diam (mm)
3.00	100

Drilling Progress by Time

Date	Time	Depth (m)	Casing (m)	Water (m)

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill	Samples, Tests and Rotary Coring: Depth (m)	Ref	Tests / Results
								SPT(C) 10.50m, 50 (25 for 30mm/50 for 30mm)
								SPT(C) 12.00m, 50 (25 for 95mm/50 for 60mm)
Weak red SANDSTONE (drillers description)		12.70	101.30					
								SPT(C) 13.50m, 50 (25 for 60mm/50 for 35mm)
EOH at 15.00m - Full Depth		15.00	99.00					SPT(C) 15.00m, 50 (35 for 30mm/50 for 25mm)

Depth scale: 11, 12, 13, 14, 15, 16, 17, 18, 19, 20

Observations / Remarks

Groundwater encountered at 3.0mbgl

Flushing

From (m)	To (m)	Return Min %	Colour	Type

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

Hammer Information

Serial No.	Energy Ratio %
SC.01	79

Project Number: **A107448**

Project:	**Meggitt**
Location:	**Coventry**
Client:	**Homes England**

Location Details

Easting:	432944.42	Northing:	282365.11
Level:	111.07mAOD	Depth:	6.00m
Logger:	JP	Type:	RO
		Inclination:	90°

Status: DRAFT

Borehole Number: **R5**

Sheet 1 of 1

Scale:	1:50
Checked By:	SM
Approved By:	SDC
Start Date:	15/02/2018
Finish Date:	15/02/2018

Method, Plant and Crew

From (m)	To (m)	Type	Plant Used	Crew
0.00	1.20	Inspection Pit	Hand dug pit	DSUK
1.20	6.00	Rotary Open Hole	Comachio MC 450	DSUK

Diameter

Depth (m)	Diam (mm)
6.00	100

Casing

Depth(m)	Diam (mm)
3.00	100

Drilling Progress by Time

Date	Time	Depth (m)	Casing (m)	Water (m)

Strata Description

Strata Description	Depth (m)	Reduced Level (mAOD)
Hand dug trial pit (drillers description)		
Brown soft silty CLAY (drillers description)	1.20	109.87
Red soft sandy CLAY (drillers description)	1.70	109.37
EOH at 6.00m - Borehole collapse	6.00	105.07

Samples, Tests and Rotary Coring

Depth (m)	Ref	Tests / Results
		SPT(C) 1.50m, N=3 (1,0/1,0,1,1)
		SPT(C) 3.00m, N=8 (1,1/2,2,2,2)
		SPT(C) 4.50m, 50 (25 for 85mm/50 for 65mm)
		SPT(C) 6.00m, 50 (25 for 35mm/50 for 20mm)

Observations / Remarks

Groundwater encountered at 5.0mbgl. Borehole terminated at 6.0mbgl due to collapse.

Flushing

From (m)	To (m)	Return Min %	Colour	Type

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks
5.00	-	-	0	0.00	

Hammer Information

Serial No.	Energy Ratio %
SC.01	79

Project Number: **A107448**

Project:	**Meggitt**
Location:	**Coventry**
Client:	**Homes England**

Location Details

Easting:	433113.00	Northing:	282338.00
Level:	111.00mAOD	Depth:	15.00m
Logger:	JP	Type:	RO
		Inclination:	90°

Status: DRAFT

Borehole Number: **R6**

Sheet 1 of 2

Scale:	1:50
Checked By:	SM
Approved By:	SDC
Start Date:	15/02/2018
Finish Date:	15/02/2018

Method, Plant and Crew

From (m)	To (m)	Type	Plant Used	Crew
0.00	1.20	Inspection Pit	Hand dug pit	DSUK
1.20	15.00	Rotary Open Hole	Comachio MC 450	DSUK

Diameter

Depth (m)	Diam (mm)
15.00	100

Casing

Depth(m)	Diam (mm)
3.00	100

Drilling Progress by Time

Date	Time	Depth (m)	Casing (m)	Water (m)

Strata Description

Strata Description	Depth (m)	Reduced Level (mAOD)
Brick and concrete fill (drillers description)		
Brown gravelly SAND (drillers description)	0.70	110.30
Weak red MUDSTONE	2.60	108.40

Legend | Water Level (m) | Inst / Backfill

Samples, Tests and Rotary Coring

Depth (m)	Ref	Tests / Results
		SPT(C) 1.50m, N=5 (1,2/1,1,2,1)
		SPT(C) 3.00m, N=25 (4,5/6,6,6,7)
		SPT(C) 4.50m, 50 (6,12/50 for 95mm)
		SPT(C) 6.00m, N=43 (4,8/10,11,11,11)
		SPT(C) 7.50m, 50 (25 for 95mm/50 for 115mm)
		SPT(C) 9.00m, 50 (12,12/50 for 85mm)

1 2 3 4 5 6 7 8 9 10

Continued on Next Page

Observations / Remarks

Groundwater encountered at 5.0mbgl.

Flushing

From (m)	To (m)	Return Min %	Colour	Type

Hammer Information

Serial No.	Energy Ratio %
SC.01	79

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks
5.00	-	-	0	0.00	

Project Number: **A107448**

Project:	**Meggitt**
Location:	**Coventry**
Client:	**Homes England**

Location Details

Easting:	433113.00	Northing:	282338.00
Level:	111.00mAOD	Depth:	15.00m
Logger:	JP	Type:	RO
		Inclination:	90°

Status: DRAFT

Borehole Number: **R6**

Method, Plant and Crew

From (m)	To (m)	Type	Plant Used	Crew
0.00	1.20	Inspection Pit	Hand dug pit	DSUK
1.20	15.00	Rotary Open Hole	Comachio MC 450	DSUK

Diameter

Depth (m)	Diam (mm)
15.00	100

Casing

Depth(m)	Diam (mm)
3.00	100

Drilling Progress by Time

Date	Time	Depth (m)	Casing (m)	Water (m)

Scale:	1:50
Checked By:	SM
Approved By:	SDC
Start Date:	15/02/2018
Finish Date:	15/02/2018

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill	Samples, Tests and Rotary Coring: Depth (m)	Ref	Tests / Results
								SPT(C) 10.50m, 50 (25 for 85mm/50 for 70mm)
Weak red SANDSTONE		11.20	99.80					SPT(C) 12.00m, 50 (25 for 95mm/50 for 85mm)
								SPT(C) 13.50m, 50 (25 for 65mm/50 for 80mm)
EOH at 15.00m - Full Depth		15.00	96.00					SPT(C) 15.00m, 50 (25 for 50mm/50 for 60mm)

11 12 13 14 15 16 17 18 19 20

Observations / Remarks

Groundwater encountered at 5.0mbgl.

Flushing

From (m)	To (m)	Return Min %	Colour	Type

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

Hammer Information

Serial No.	Energy Ratio %
SC.01	79

Project Number: **A107448**

Project:	**Meggitt**
Location:	**Coventry**
Client:	**Homes England**

Location Details

Easting:	433181.49	Northing:	282235.25
Level:	108.71mAOD	Depth:	8.00m
Logger:	JP	Type:	RO
		Inclination:	90°

Status: DRAFT

Borehole Number: **R7**

Sheet 1 of 1

Scale:	1:50
Checked By:	SM
Approved By:	SDC
Start Date:	15/02/2018
Finish Date:	16/02/2018

Method, Plant and Crew

From (m)	To (m)	Type	Plant Used	Crew
0.00	1.20	Inspection Pit	Hand dug pit	DSUK
1.20	8.00	Rotary Open Hole	Comachio MC 450	DSUK

Diameter

Depth (m)	Diam (mm)
8.00	100

Casing

Depth(m)	Diam (mm)
8.00	100

Drilling Progress by Time

Date	Time	Depth (m)	Casing (m)	Water (m)

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill	Samples, Tests and Rotary Coring: Depth (m)	Ref	Tests / Results
Hand dug trial pit (drillers description)								
Red loose gravelly SAND (drillers description)		1.20	107.51					SPT(C) 1.50m, N=11 (1,2/2,3,3,3)
								SPT(C) 3.00m, N=27 (2,4/6,6,8,7)
Weak red SANDSTONE (drillers description)		3.20	105.51					SPT(C) 4.50m, 50 (25 for 50mm/50 for 35mm)
								SPT(C) 6.00m, 50 (25 for 40mm/50 for 60mm)
								SPT(C) 7.50m, 50 (25 for 60mm/50 for 45mm)
EOH at 8.00m -		8.00	100.71					

Depth scale: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10

Observations / Remarks

Groundwater encountered at 5.5mbgl

Flushing

From (m)	To (m)	Return Min %	Colour	Type

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

Hammer Information

Serial No.	Energy Ratio %
SC.01	79

Project Number: **A107448**

Project:	**Meggitt**
Location:	**Coventry**
Client:	**Homes England**

Location Details

Easting:	433270.92	Northing:	282357.38
Level:	106.71mAOD	Depth:	15.00m
Logger:	JP	Type:	RO
		Inclination:	90°

Status: DRAFT

Borehole Number: **R8**

Sheet 1 of 2

Scale:	1:50
Checked By:	SM
Approved By:	SDC
Start Date:	12/02/2018
Finish Date:	12/02/2018

Method, Plant and Crew

From (m)	To (m)	Type	Plant Used	Crew
0.00	1.50	Inspection Pit	Hand Dug Pit	DSUK
1.50	15.00	Rotary Open Hole	Comachio MC 450	DSUK

Diameter

Depth (m)	Diam (mm)
15.00	150

Casing

Depth(m)	Diam (mm)
15.00	150

Drilling Progress by Time

Date	Time	Depth (m)	Casing (m)	Water (m)

Strata Description	Depth (m)	Reduced Level (mAOD)
CONCRETE		
Soft dark brown silty gravelly CLAY (drillers description)	0.40	106.31
Dark reddish brown clayey SAND (drillers description)	1.50	105.21
Red weak SANDSTONE with occasional clay bands (drillers description)	3.70	103.01
Continued on Next Page	10.00	96.71

Legend | Water Level (m) | Inst / Backfill

Samples, Tests and Rotary Coring

Depth (m)	Ref	Tests / Results
1.50		SPT(C) 1.50m, N=22 (3,4/4,5,6,7)
3.00		SPT(C) 3.00m, N=13 (3,3/3,3,3,4)
4.50		SPT(C) 4.50m, 50 (25 for 30mm/50 for 30mm)
6.00		SPT(C) 6.00m, 50 (25 for 35mm/50 for 30mm)
7.50		SPT(C) 7.50m, 50 (25 for 35mm/50 for 30mm)
9.00		SPT(C) 9.00m, 50 (25 for 40mm/50 for 35mm)

Observations / Remarks

Groundwater encountered at 1.5mbgl.

Flushing

From (m)	To (m)	Return Min %	Colour	Type

Hammer Information

Serial No.	Energy Ratio %
SC.01	79

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks
1.50	-	-	0	0.00	

Project Number: **A107448**

Project:	**Meggitt**
Location:	**Coventry**
Client:	**Homes England**

Location Details

Easting:	433270.92	Northing:	282357.38
Level:	106.71mAOD	Depth:	15.00m
Logger:	JP	Type:	RO
		Inclination:	90°

Status: DRAFT

Borehole Number: **R8**

Sheet 2 of 2

Method, Plant and Crew					Diameter		Casing		Drilling Progress by Time				
From (m)	To (m)	Type	Plant Used	Crew	Depth (m)	Diam (mm)	Depth(m)	Diam (mm)	Date	Time	Depth (m)	Casing (m)	Water (m)
0.00	1.50	Inspection Pit	Hand Dug Pit	DSUK	15.00	150	15.00	150					
1.50	15.00	Rotary Open Hole	Comachio MC 450	DSUK									

Scale:	1:50
Checked By:	SM
Approved By:	SDC
Start Date:	12/02/2018
Finish Date:	12/02/2018

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill	Samples, Tests and Rotary Coring: Depth (m)	Ref	Tests / Results
Dark red weak MUDSTONE with sandstone bands (drillers description)								SPT(C) 10.50m, 50 (25 for 40mm/50 for 45mm)
								SPT(C) 12.00m, 50 (25 for 35mm/50 for 40mm)
								SPT(C) 13.50m, 50 (25 for 40mm/50 for 45mm)
EOH at 15.00m - Full Depth		15.00	91.71					SPT(C) 15.00m, 50 (25 for 30mm/50 for 25mm)

11 12 13 14 15 16 17 18 19 20

Observations / Remarks

Groundwater encountered at 1.5mbgl.

Flushing

From (m)	To (m)	Return Min %	Colour	Type

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

Hammer Information

Serial No.	Energy Ratio %
SC.01	79

Project Number: **A107448**

Project:	**Meggitt**
Location:	**Coventry**
Client:	**Homes England**

Location Details

Easting:	433362.79	Northing:	282259.68
Level:	105.76mAOD	Depth:	15.00m
Logger:	JP	Type:	RO
		Inclination:	90°

Status: DRAFT

Borehole Number: **R9**

Sheet 1 of 2

Method, Plant and Crew

From (m)	To (m)	Type	Plant Used	Crew
0.00	1.20	Inspection Pit	Hand Dug Pit	DSUK
1.20	15.00	Rotary Open Hole	Comachio MC 450	DSUK

Diameter

Depth (m)	Diam (mm)
15.00	100

Casing

Depth(m)	Diam (mm)
3.00	100

Drilling Progress by Time

Date	Time	Depth (m)	Casing (m)	Water (m)

Scale:	1:50
Checked By:	SM
Approved By:	SDC
Start Date:	13/02/2018
Finish Date:	13/02/2018

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill	Samples, Tests and Rotary Coring: Depth (m)	Ref	Tests / Results
Hand dug pit (drillers description)								
Red brown soft silty CLAY (drillers description)		1.20	104.56					SPT(C) 1.50m, N=10 (1,1/2,3,2,3)
								SPT(C) 3.00m, N=35 (2,4/7,8,8,12)
Red weak SANDSTONE (drillers description)		3.70	102.06					
								SPT(C) 4.50m, 50 (25 for 60mm/50 for 55mm)
								SPT(C) 6.00m, 50 (25 for 30mm/50 for 25mm)
								SPT(C) 7.50m, 50 (25 for 40mm/50 for 30mm)
								SPT(C) 9.00m, 50 (25 for 70mm/50 for 25mm)

Continued on Next Page

Observations / Remarks

Groundwater encountered at 4.5mbgl

Flushing

From (m)	To (m)	Return Min %	Colour	Type

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks
4.50	-	-	0	0.00	

Hammer Information

Serial No.	Energy Ratio %
SC.01	79

Project Number: **A107448**

Project:	**Meggitt**
Location:	**Coventry**
Client:	**Homes England**

Location Details

Easting:	433362.79	Northing:	282259.68
Level:	105.76mAOD	Depth:	15.00m
Logger:	JP	Type:	RO
		Inclination:	90°

Status: DRAFT

Borehole Number: **R9**

Sheet 2 of 2

Method, Plant and Crew					Diameter		Casing		Drilling Progress by Time				
From (m)	To (m)	Type	Plant Used	Crew	Depth (m)	Diam (mm)	Depth(m)	Diam (mm)	Date	Time	Depth (m)	Casing (m)	Water (m)
0.00	1.20	Inspection Pit	Hand Dug Pit	DSUK	15.00	100	3.00	100					
1.20	15.00	Rotary Open Hole	Comachio MC 450	DSUK									

Scale:	1:50
Checked By:	SM
Approved By:	SDC
Start Date:	13/02/2018
Finish Date:	13/02/2018

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill	Samples, Tests and Rotary Coring: Depth (m)	Ref	Tests / Results
Red weak MUDSTONE with sandstone bands (drillers description)		10.50	95.26					SPT(C) 10.50m, 50 (25 for 55mm/50 for 30mm)
								SPT(C) 12.00m, 50 (25 for 60mm/50 for 30mm)
								SPT(C) 13.50m, 50 (25 for 50mm/50 for 30mm)
EOH at 15.00m - Full Depth		15.00	90.76					SPT(C) 15.00m, 50 (25 for 45mm/50 for 25mm)

11 12 13 14 15 16 17 18 19 20

Observations / Remarks

Groundwater encountered at 4.5mbgl

Flushing

From (m)	To (m)	Return Min %	Colour	Type

Hammer Information

Serial No.	Energy Ratio %
SC.01	79

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

Project Number: **A107448**

Project:	**Meggitt**
Location:	**Coventry**
Client:	**Homes England**

Location Details

Easting:	432751.00	Northing:	282255.00
Level:	117.00mAOD	Depth:	3.00m
Logger:	SC	Type:	WS
		Inclination:	90°

Status: DRAFT

Borehole Number: **WS01**

Sheet 1 of 1

Scale:	1:50
Checked By:	SM
Approved By:	SDC
Start Date:	09/02/2018
Finish Date:	09/02/2018

Method, Plant and Crew

From (m)	To (m)	Type	Plant Used	Crew
0.00	1.20	Inspection Pit	Hand Pitting Tools	DSUK
1.20	3.00	Window Sampler	Premier Tracker 110	DSUK

Diameter

Depth (m)	Diam (mm)
1.20	250
2.00	87
3.00	77

Casing

Depth(m)	Diam (mm)
1.20	100

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Rose To (m)	Time (mins)	Remarks

Strata Description

Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill
Asphalt				
MADE GROUND comprising purple brown to black slightly silty sandy GRAVEL. Gravel is fine to coarse sub-angular to sub-rounded asphalt, concrete, brick, slate and quartzite with rare metal.	0.12	116.88		
Red slightly gravelly slightly clayey SAND. Sand is fine to medium. Gravel is sub-rounded to rounded quartzite.	0.50	116.50		
Soft brown slightly gravelly slightly sandy CLAY. Gravel is sub-angular to rounded quartz. *Red in colour and no gravel from 1.7mbgl* *Becoming stiff and very friable from 2.4mbgl.*	1.40	115.60		
EOH at 3.00m - Refusal	3.00	114.00		

Samples and Testing

Depth (m)	Ref	Tests / Results
0.30	D1	
0.30	ES1	
0.60	D2	
		SPT(C) 1.20m, N=7 (3,3/2,2,1,2)
1.50	D3	
2.00	D4	SPT(C) 2.00m, N=24 (3,3/4,5,6,9)
2.00 - 3.00	B1	
3.00	D5	SPT(C) 3.00m, 50 (10,13/50 for 265mm)

1 2 3 4 5 6 7 8 9 10

Observations / Remarks

Groundwater not encountered. Hole terminated at 3.0mbgl due to refusal .

Sampling Runs

From (m)	To (m)	Diam (mm)	Recovery %	Remarks
0.00	1.20	250	100	
1.20	2.00	87	100	
2.00	3.00	77	100	

Hammer Information

Serial No.	Energy Ratio %

Project Number: **A107448**

Project:	**Meggitt**
Location:	**Coventry**
Client:	**Homes England**

Location Details

Easting:	432766.54	Northing:	282442.74
Level:	114.42mAOD	Depth:	3.60m
Logger:	JP	Type:	WS
		Inclination:	90°

Status: DRAFT

Borehole Number: **WS02**

Sheet 1 of 1

Scale:	1:50
Checked By:	SM
Approved By:	SDC
Start Date:	09/02/2018
Finish Date:	09/02/2018

Method, Plant and Crew

From (m)	To (m)	Type	Plant Used	Crew
0.00	1.20	Inspection Pit	Hand Dug Pit	DSUK
1.20	3.60	Window Sampler	Premier Tracker 110	DSUK

Diameter

Depth (m)	Diam (mm)
1.20	250
2.00	87
3.00	77
3.60	77

Casing

Depth(m)	Diam (mm)
1.20	100

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Rose To (m)	Time (mins)	Remarks

Strata Description

Strata Description	Depth (m)	Reduced Level (mAOD)
CONCRETE	0.15	114.27
MADE GROUND comprising soft dark brown slightly sandy slightly gravelly CLAY with low cobble content. Sand is fine to coarse. Gravel is sub-angular fine to coarse brick, concrete, mudstone and flint. Cobbles are sub-angular mudstone and brick.	0.50	113.92
MADE GROUND comprising firm orangeish brown slightly gravelly silty CLAY. Gravel is sub-rounded fine to medium flint and mudstone.	1.00	113.42
MADE GROUND comprising black ashy GRAVEL of sub-angular fine to coarse clinker, brick and flint.	1.40	113.02
Very stiff oragneish brown slightly gravelly silty CLAY. Gravel is sub-angular fine to medium flint.	2.90	111.52
Weak weathered orangeish brown MUDSTONE	3.40	111.02
Weak weathered orangeish brown SANDSTONE	3.60	110.82
EOH at 3.60m - Refusal		

Legend | Water Level (m) | Inst / Backfill

Samples and Testing

Depth (m)	Ref	Tests / Results
0.20	D2	
0.20	ES1	
0.60	D3	
1.10	D4	
1.10	ES5	SPT(C) 1.20m, N=8 (2,2/2,2,2,2)
1.50	D6	
		SPT(C) 2.00m, N=22 (2,3/4,6,6,6)
3.00	D7	SPT(C) 3.00m, N=23 (3,4/4,5,6,8)
3.50	D8	
		SPT(C) 3.60m, 50 (25 for 105mm/50 for 135mm)

1 2 3 4 5 6 7 8 9 10

Observations / Remarks

Groundwater not encountered. Borehole terminated at 3.6mbgl due to refusal.

Sampling Runs

From (m)	To (m)	Diam (mm)	Recovery %	Remarks
1.20	0.00	250	100	
2.00	1.20	87	100	
3.00	2.00	77	100	
3.60	3.00	77	100	

Hammer Information

Serial No.	Energy Ratio %
110.50	86

Project Number: **A107448**

Project:	**Meggitt**
Location:	**Coventry**
Client:	**Homes England**

Location Details

Easting:	432749.12	Northing:	282320.81
Level:	114.77mAOD	Depth:	3.00m
Logger:	JP	Type:	WS
		Inclination:	90°

Status: DRAFT

Borehole Number: **WS03**

Sheet 1 of 1

Method, Plant and Crew					Diameter		Casing		Groundwater					
From (m)	To (m)	Type	Plant Used	Crew	Depth (m)	Diam (mm)	Depth(m)	Diam (mm)	Strike (m)	Casing (m)	Sealed (m)	Rose To (m)	Time (mins)	Remarks
0.00	1.20	Inspection Pit	Hand Dug Pit	DSUK	1.20	250	1.20	100						
1.20	3.00	Window Sampler	Premier Tracker 110	DSUK	2.00	77								
					3.00	67								

Scale:	1:50
Checked By:	SM
Approved By:	SDC
Start Date:	09/02/2018
Finish Date:	09/02/2018

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill	Samples and Testing: Depth (m)	Ref	Tests / Results
CONCRETE								
MADE GROUND comprising orangeish brown to black ashy GRAVEL of sub-angular fine to coarse brick, concrete and clinker.		0.18	114.59			0.20 0.30	D1 ES2	
Firm greyish orange slightly gravelly silty CLAY. Gravel is sub-rounded fine to medium flint.		0.50	114.27			0.60	D3	
								SPT(C) 1.20m, N=4 (1,0/1,1,1,1)
Becoming orangeish brown in colour from 1.6mbgl						1.60	D4	
								SPT(C) 2.00m, N=13 (2,2/2,2,4,5)
Weak weathered orangeish brown MUDSTONE.		2.10	112.67			2.20	D5	
EOH at 3.00m - Refusal		3.00	111.77			3.00	D6	SPT(C) 3.00m, 50 (25 for 105mm/50 for 180mm)

Observations / Remarks

Groundwater not encountered. Borehole terminated at 3.0mbgl due to refusal.

Sampling Runs

From (m)	To (m)	Diam (mm)	Recovery %	Remarks
1.20	0.00	250	100	
2.00	1.20	77	100	
3.00	2.00	67	100	

Hammer Information

Serial No.	Energy Ratio %
110.50	86

Project Number: **A107448**

Project:	**Meggitt**
Location:	**Coventry**
Client:	**Homes England**

Location Details

Easting:	432862.92	Northing:	282435.10
Level:	112.55mAOD	Depth:	3.50m
Logger:	JP	Type:	WS
		Inclination:	90°

Status: DRAFT

Borehole Number: **WS10**

Sheet 1 of 1

Scale:	1:50
Checked By:	SM
Approved By:	SDC
Start Date:	09/02/2018
Finish Date:	09/02/2018

Method, Plant and Crew

From (m)	To (m)	Type	Plant Used	Crew
0.00	1.20	Inspection Pit	Hand Dug Pit	DSUK
1.20	3.50	Window Sampler	Premier Tracker 110	DSUK

Diameter

Depth (m)	Diam (mm)
1.20	250
3.00	77
3.50	67

Casing

Depth(m)	Diam (mm)
1.20	100

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Rose To (m)	Time (mins)	Remarks

Strata Description

Strata Description	Depth (m)	Reduced Level (mAOD)
CONCRETE		
MADE GROUND comprising black ashy GRAVEL. Gravel is sub-angular to sub-rounded fine to coarse clinker, concrete and mudstone.	0.16	112.39
Firm orangeish brown slightly gravelly silty CLAY. Gravel is sub-angular fine to medium flint.	0.60	111.95
Soft from 1.3mbgl		
Stiff from 1.9mbgl		
Weak weathered reddish orange MUDSTONE	2.80	109.75
EOH at 3.50m - Refusal	3.50	109.05

Legend | Water Level (m) | Inst / Backfill

Samples and Testing

Depth (m)	Ref	Tests / Results
0.20	D2	
0.20	ES1	
0.70	D3	
		SPT(C) 1.20m, N=5 (1,1/1,1,1,2)
1.40	D4	
2.00	D5	SPT(C) 2.00m, N=19 (2,2/3,4,5,7)
3.00	D6	SPT(C) 3.00m, N=25 (3,3/4,5,7,9)
		SPT(C) 3.50m, 50 (12,12/50 for 210mm)

1 2 3 4 5 6 7 8 9 10

Observations / Remarks

Groundwater not encountered. Borehole terminated at 3.5mbgl due to refusal.

Sampling Runs

From (m)	To (m)	Diam (mm)	Recovery %	Remarks
1.20	0.00	250	100	
2.00	1.20	77	100	
3.00	2.00	77	100	
3.50	3.00	67	100	

Hammer Information

Serial No.	Energy Ratio %
110.50	86

Project Number: **A107448**

Project:	**Meggitt**
Location:	**Coventry**
Client:	**Homes England**

Location Details

Easting:	432940.27	Northing:	282423.69
Level:	111.08mAOD	Depth:	3.00m
Logger:	JP	Type:	WS
		Inclination:	90°

Status: DRAFT

Borehole Number: **WS19**

Sheet 1 of 1

Method, Plant and Crew					Diameter		Casing		Groundwater					
From (m)	To (m)	Type	Plant Used	Crew	Depth (m)	Diam (mm)	Depth(m)	Diam (mm)	Strike (m)	Casing (m)	Sealed (m)	Rose To (m)	Time (mins)	Remarks
0.00	1.20	Inspection Pit	Hand Dug Pit	DSUK	1.20	250	1.20	100						
1.20	3.00	Window Sampler	Premier Tracker 110	DSUK	3.00	77								

Scale:	1:50
Checked By:	SM
Approved By:	SDC
Start Date:	07/02/2018
Finish Date:	07/02/2018

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill	Samples and Testing: Depth (m)	Ref	Tests / Results
CONCRETE		0.19	110.89			0.20 0.20	D2 ES1	
MADE GROUND comprising black gravelly SILT with medium cobble content. Gravel is sub-angular fine to coarse brick, clinker, concrete and flint. Cobbles are angular to sub-angular brick.		0.40	110.68			0.50 0.50	D4 ES3	
MADE GROUND comprising firm dark orangeish brown silty gravelly CLAY. Gravel is sub-angular to sub-rounded fine to coarse brick, concrete, clinker and flint.		1.00	110.08			1.10 1.30 - 2.00	D5 B6	SPT(C) 1.20m, N=5 (0,0/1,1,1,2)
Firm orangeish brown slightly gravelly silty CLAY. Gravel is sub-rounded fine to medium flint. *Silt lense between 1.1 and 1.2mbgl* *Stiff from 1.3mbgl*						2.00 - 3.00	B7	SPT(C) 2.00m, N=8 (1,1/1,2,2,3)
EOH at 3.00m - Refusal		3.00	108.08					SPT(C) 3.00m, 50 (7,9/50 for 275mm)

Observations / Remarks

Groundwater not encountered. Borehole terminated at 3.0mbgl due to refusal.

Sampling Runs

From (m)	To (m)	Diam (mm)	Recovery %	Remarks
1.20	0.00	250	100	
2.00	1.20	77	100	
3.00	2.00	77	90	

Hammer Information

Serial No.	Energy Ratio %
110.50	86

Project Number: **A107448**

Project:	**Meggitt**
Location:	**Coventry**
Client:	**Homes England**

Location Details

Easting:	432982.51	Northing:	282402.10
Level:	110.82mAOD	Depth:	4.00m
Logger:	JP	Type:	WS
		Inclination:	90°

Status: DRAFT

Borehole Number: **WS20**

Sheet 1 of 1

Scale:	1:50
Checked By:	SM
Approved By:	SDC
Start Date:	07/02/2018
Finish Date:	07/02/2018

Method, Plant and Crew

From (m)	To (m)	Type	Plant Used	Crew
0.00	1.20	Inspection Pit	Hand Dug Pit	DSUK
1.20	4.00	Window Sampler	Premier Tracker 110	DSUK

Diameter

Depth (m)	Diam (mm)
1.20	250
2.00	87
4.00	77

Casing

Depth(m)	Diam (mm)
1.20	100

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Rose To (m)	Time (mins)	Remarks

Strata Description

Strata Description	Depth (m)	Reduced Level (mAOD)
CONCRETE		
MADE GROUND black slightly gravelly SILT. Gravel is sub-angular fine to medium flint, brick and clinker.	0.18	110.64
Firm dark orangeish brown slightly silty slightly gravelly CLAY. Gravel is sub-rounded fine to medium flint and wood. *No wood from 1.4mbgl* *Silt lense at 1.5mbgl* *Stiff from 2.75mbgl* *No gravel from 2.8mbgl* *Hard from 3.0mbgl*	1.00	109.82
EOH at 4.00m - Refusal	4.00	106.82

Legend

Inst / Backfill

Samples and Testing

Depth (m)	Ref	Tests / Results
0.20	D2	
0.20	ES1	
0.80	ES3	
1.10	D4	SPT(C) 1.20m, N=6 (1,1/1,2,1,2)
1.50 - 2.50	B5	
		SPT(C) 2.00m, N=8 (1,1/2,2,2,2)
2.80	D6	
3.00 - 4.00	B7	SPT(C) 3.00m, N=32 (3,5/6,8,9,9)
		SPT(C) 4.00m, 50 (8,9/50 for 245mm)

Water Level (m)

1 2 3 4 5 6 7 8 9 10

Observations / Remarks

Groundwater not encountered. Borehole terminated at 4.0mbgl due to refusal.

Sampling Runs

From (m)	To (m)	Diam (mm)	Recovery %	Remarks
1.20	0.00	250	100	
2.00	1.20	87	100	
3.00	2.00	77	100	
4.00	3.00	77	100	

Hammer Information

Serial No.	Energy Ratio %
110.50	86

Project Number

A107448

Project:	**Meggitt**
Location:	**Coventry**
Client:	**Homes England**

Location Details

Easting:	432944.45	Northing:	282294.26
Level:	111.54mAOD	Depth:	4.00m
Logger:	SC +SC	Type:	WS
		Inclination:	°

Status: DRAFT

Borehole Number: **WS21**

Sheet 1 of 1

Method, Plant and Crew					Diameter		Casing		Groundwater					
From (m)	To (m)	Type	Plant Used	Crew	Depth (m)	Diam (mm)	Depth(m)	Diam (mm)	Strike (m)	Casing (m)	Sealed (m)	Rose To (m)	Time (mins)	Remarks
0.00	1.20	Inspection Pit	Hand Pitting Tools	DSUK	1.20	250	1.20	250						
1.20	4.00	Window Sampler	Premier Tracker 110	DSUK	2.00	77								
					4.00	67								

Scale:	1:50
Checked By:	SM
Approved By:	SDC
Start Date:	08/02/2018
Finish Date:	08/02/2018

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill	Samples and Testing: Depth (m)	Ref	Tests / Results
Asphalt		0.13	111.41					
Concrete with 10mm reinforcement bar.		0.29	111.25					
MADE GROUND comprising dark brown to black slightly clayey slightly sandy GRAVEL with medium cobble content. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to coarse concrete, brick, coal, ash, clinker and quartzite with rare metal. Cobbles are angular to sub-angular brick and concrete.		0.70	110.84			0.50 0.50	D2 ES1	
Yellowish brown to light brown gravelly SAND. Gravel is sub-angular to rounded fine to coarse quartzite.		1.10	110.44			0.90	D3	
Soft to firm red slightly silty CLAY with fine to medium sand lenses throughout. *Slightly gravelly between 1.7 and 1.9mbgl. Gravel is sub-rounded quartzite.*		2.60	108.94			1.20 2.00	D4 D5	SPT(C) 1.20m, N=13 (1,1/2,4,3,4) SPT(C) 2.00m, N=22 (2,2/3,7,6,6)
Red weak MUDSTONE		4.00	107.54			2.80 4.00	D6 D7	SPT(C) 3.00m, N=44 (6,8/10,9,11,14) SPT(C) 4.00m, N=50 (7,9/10,12,13,15)
EOH at 4.00m - Refusal								

1 2 3 4 5 6 7 8 9 10

Observations / Remarks

Groundwater not encountered. Hole terminated at 4.0mbgl.

Sampling Runs

From (m)	To (m)	Diam (mm)	Recovery %	Remarks
1.20	0.00	250	100	
2.00	1.20	77	100	
3.00	2.00	67	90	
4.00	3.00	67	85	

Hammer Information

Serial No.	Energy Ratio %
110.71	72

Project Number: **A107448**

Project:	**Meggitt**
Location:	**Coventry**
Client:	**Homes England**

Location Details

Easting:	432971.21	Northing:	282252.86
Level:	111.60mAOD	Depth:	2.90m
Logger:	JP	Type:	WS
		Inclination:	90°

Status: DRAFT

Borehole Number: **WS22**

Sheet 1 of 1

Scale:	1:50
Checked By:	SM
Approved By:	SDC
Start Date:	09/02/2018
Finish Date:	09/02/2018

Method, Plant and Crew

From (m)	To (m)	Type	Plant Used	Crew
0.00	1.20	Inspection Pit	Hand Dug Pit	DSUK
1.20	2.90	Window Sampler	Premier Tracker 110	DSUK

Diameter

Depth (m)	Diam (mm)
1.20	250
2.00	87
2.90	77

Casing

Depth(m)	Diam (mm)
1.20	100

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Rose To (m)	Time (mins)	Remarks

Strata Description

Strata Description	Depth (m)	Reduced Level (mAOD)
Asphalt		
MADE GROUND comprising dark brown to black ashy GRAVEL with abundant rootlets. Gravel is sub-angular fine to coarse clinker and asphalt.	0.15	111.44
Firm to stiff orangeish brown slightly gravelly silty CLAY. Gravel is sub-rounded fine tom coarse flint. *Black discolouration (no odour) at 0.8mbgl* *Stiff from 1.5mbgl*	0.50	111.10
Weak weathered orangeish brown MUDSTONE	2.50	109.10
EOH at 2.90m - Refusal	2.90	108.70

Legend

Water Level (m)

Inst / Backfill

Samples and Testing

Depth (m)	Ref	Tests / Results
0.20	D2	
0.20	ES1	
0.60	D4	
0.60	ES3	
		SPT(C) 1.20m, N=6 (0,0/1,2,1,2)
1.50	D5	
		SPT(C) 2.00m, N=8 (1,1/2,1,2,3)
2.60	D6	
		SPT(C) 2.90m, 50 (25 for 145mm/50 for 160mm)

1 2 3 4 5 6 7 8 9 10

Observations / Remarks

Groundwater not encountered. Borehole terminated at 2.9mbgl due to refusal.

Sampling Runs

From (m)	To (m)	Diam (mm)	Recovery %	Remarks
1.20	0.00	250	100	
2.00	1.20	87	100	
2.90	2.00	77	100	

Hammer Information

Serial No.	Energy Ratio %
110.50	86

Project Number

A107448

Project:	**Meggitt**
Location:	**Coventry**
Client:	**Homes England**

Location Details

Easting:	433021.00	Northing:	282327.00
Level:	112.00mAOD	Depth:	3.00m
Logger:	SC	Type:	WS
		Inclination:	°

Status: DRAFT

Borehole Number: **WS26**

Sheet 1 of 1

Scale:	1:50
Checked By:	SM
Approved By:	SDC
Start Date:	07/02/2018
Finish Date:	07/02/2018

Method, Plant and Crew

From (m)	To (m)	Type	Plant Used	Crew
0.00	1.20	Inspection Pit	Hand Dug Pit	DSUK
1.20	3.00	Window Sampler	Premier Tracker 110	DSUK

Diameter

Depth (m)	Diam (mm)
1.20	250
3.00	67

Casing

Depth(m)	Diam (mm)
1.20	100

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Rose To (m)	Time (mins)	Remarks

Strata Description

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill
Asphalt		0.06	111.94		
Concrete with 20mm reinforcing bar.		0.22	111.78		
MADE GROUND comprising brown slightly silty slightly clayey gravelly SAND with medium cobble content. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to coarse concrete, brick and quartzite with rare metal. Cobbles are angular to sub-rounded brick and concrete.					
Stiff red slightly gravelly CLAY. Gravel is sub-rounded to rounded quartzite.		0.90	111.10		
No gravel and slightly silty from 1.2mbgl.					
Soft between 2.0 and 2.3mbgl.					
Weak red MUDSTONE		2.30	109.70		
EOH at 3.00m - Refusal		3.00	109.00		

Samples and Testing

Depth (m)	Ref	Tests / Results
0.30	D2	
0.30	ES1	
1.00	D3	SPT(C) 1.20m, N=10 (1,1/2,2,3,3)
2.00	D4	SPT(C) 2.00m, N=27 (4,4/4,5,7,11)
3.00	D5	SPT(C) 3.00m, 50 (7,7/50 for 290mm)

1 2 3 4 5 6 7 8 9 10

Observations / Remarks

Groundwater not encountered. Borehole terminated at 3.0mbgl due to refusal.

Sampling Runs

From (m)	To (m)	Diam (mm)	Recovery %	Remarks
1.20	0.00	250	100	
2.00	1.20	67	100	
3.00	2.00	67	100	

Hammer Information

Serial No.	Energy Ratio %
110.71	72

Project Number

A107448

Project:	**Meggitt**
Location:	**Coventry**
Client:	**Homes England**

Location Details

Easting:	433051.28	Northing:	282281.15
Level:	109.85mAOD	Depth:	2.00m
Logger:	SC	Type:	WS
		Inclination:	°

Status: DRAFT

Borehole Number: **WS28**

Sheet 1 of 1

Scale:	1:50
Checked By:	SM
Approved By:	SDC
Start Date:	08/02/2018
Finish Date:	08/02/2018

Method, Plant and Crew

From (m)	To (m)	Type	Plant Used	Crew
0.00	1.20	Inspection Pit	Hand Dug Pit	DSUK
1.20	2.00	Window Sampler	Premier Tracker 110	DSUK

Diameter

Depth (m)	Diam (mm)
1.20	250
2.00	77

Casing

Depth(m)	Diam (mm)
1.20	100

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Rose To (m)	Time (mins)	Remarks

Strata Description

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill
Concrete paving slab		0.04	109.81		
MADE GROUND comprising brown to dark brown slightly silty very gravelly SAND with medium cobble content. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to coarse concrete, brick, quartzite, and sandstone with rare metal. Cobbles are angular to sub-angular brick, concrete and clinker.					
MADE GROUND comprising firm brown to reddish brown slightly gravelly CLAY. Gravel is sub-angular to sub-rounded fine to coarse slate and brick with potential asbestos containing material.		0.80	109.05		
Stiff red slightly silty CLAY		1.10	108.75		
EOH at 2.00m - Refusal		2.00	107.85		

Samples and Testing

Depth (m)	Ref	Tests / Results
0.30	D2	
0.30	ES1	
0.90	ACM	
0.90	D4	
0.90	ES3	
1.20	D6	SPT(C) 1.20m, N=11 (1,1/2,3,3,3)
2.00	D7	SPT(C) 2.00m, 50 (4,5/50 for 240mm)

Observations / Remarks

Groundwater not encountered. Borehole terminated at 2.0mbgl due to refusal.

Sampling Runs

From (m)	To (m)	Diam (mm)	Recovery %	Remarks
1.20	0.00	250	100	
2.00	1.20	77	100	

Hammer Information

Serial No.	Energy Ratio %
110.71	72

Project Number: **A107448**

Project:	**Meggitt**
Location:	**Coventry**
Client:	**Homes England**

Location Details

Easting:	433093.00	Northing:	282328.00
Level:	112.00mAOD	Depth:	3.00m
Logger:	SC	Type:	WS
		Inclination:	°

Status: DRAFT

Borehole Number: **WS29**

Sheet 1 of 1

Scale:	1:50
Checked By:	SM
Approved By:	SDC
Start Date:	07/02/2018
Finish Date:	07/02/2018

Method, Plant and Crew

From (m)	To (m)	Type	Plant Used	Crew
0.00	1.20	Inspection Pit	Hand Dug Pit	DSUK
1.20	3.00	Window Sampler	Premier Tracker 110	DSUK

Diameter

Depth (m)	Diam (mm)
1.20	250
3.00	77

Casing

Depth(m)	Diam (mm)
1.20	100

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Rose To (m)	Time (mins)	Remarks

Strata Description

Strata Description	Depth (m)	Reduced Level (mAOD)
Asphalt		
MADE GROUND comprising light grey to dark brown slightly silty very gravelly SAND with medium cobble content. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to coarse concrete, brick, quartzite and sandstone with rare metal.	0.20	111.80
Red fine to medium SAND *Very compact from 2.5mbgl*	1.30	110.70
EOH at 3.00m - Refusal	3.00	109.00

Legend

Water Level (m)

Inst / Backfill

Samples and Testing

Depth (m)	Ref	Tests / Results
0.50	D2	
0.50	ES1	
1.00	D4	
1.00	ES3	SPT(C) 1.20m, N=5 (1,1/1,1,1,2)
1.50	D5	
2.00	D6	SPT(C) 2.00m, N=38 (6,8/10,10,9,9)
3.00	D7	SPT(C) 3.00m, 50 (8,13/50 for 190mm)

Observations / Remarks

Groundwater not encountered. Borehole terminated at 3.0mbgl due to refusal.

Sampling Runs

From (m)	To (m)	Diam (mm)	Recovery %	Remarks
1.20	0.00	250	100	
2.00	1.20	77	100	
3.00	2.00	77	100	

Hammer Information

Serial No.	Energy Ratio %
110.71	72

Project Number: **A107448**

Project:	**Meggitt**
Location:	**Coventry**
Client:	**Homes England**

Location Details

Easting:	433081.39	Northing:	282296.11
Level:	109.60mAOD	Depth:	3.00m
Logger:	SC	Type:	WS
		Inclination:	°

Status: DRAFT

Borehole Number: **WS31**

Sheet 1 of 1

Scale:	1:50
Checked By:	SM
Approved By:	SDC
Start Date:	08/02/2018
Finish Date:	08/02/2018

Method, Plant and Crew

From (m)	To (m)	Type	Plant Used	Crew
0.00	1.20	Inspection Pit	Hand Dug Pit	DSUK
1.20	3.00	Window Sampler	Premier Tracker 110	DSUK

Diameter

Depth (m)	Diam (mm)
1.20	250
2.00	77
3.00	67

Casing

Depth(m)	Diam (mm)
1.20	100

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Rose To (m)	Time (mins)	Remarks

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill	Samples and Testing: Depth (m)	Ref	Tests / Results
Asphalt		0.10	109.50					
MADE GROUND comprising black slightly sandy GRAVEL. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to coarse quartzite, tarmacadam, concrete and rare brick.		0.30	109.30					
MADE GROUND comprising firm brown to reddish brown slightly gravelly slightly silty CLAY with medium cobble content. Gravel is sub-angular to sub-rounded fine to coarse concrete, brick and quartzite. Cobbles are angular to sub-angular brick and concrete.						0.50 0.50	D2 ES1	
Red slightly clayey slightly silty SAND *No clay from 1.5mbgl.*		1.20	108.40			1.30	D3	SPT(C) 1.20m, N=19 (2,2/3,3,6,7)
						2.00	D4	SPT(C) 2.00m, N=40 (3,4/6,10,14,10)
EOH at 3.00m - Refusal		3.00	106.60			3.00	D5	SPT(C) 3.00m, 50 (9,12/50 for 220mm)

Observations / Remarks

Groundwater not encountered. Borehole terminated at 3.0mbgl due to refusal.

Sampling Runs

From (m)	To (m)	Diam (mm)	Recovery %	Remarks
1.20	0.00	250	100	
2.00	1.20	77	100	
3.00	2.00	67	100	

Hammer Information

Serial No.	Energy Ratio %
110.71	72

Project Number: **A107448**

Project:	**Meggitt**
Location:	**Coventry**
Client:	**Homes England**

Location Details

Easting:	433092.81	Northing:	282248.46
Level:	109.67mAOD	Depth:	2.00m
Logger:	SC	Type:	WS
		Inclination:	°

Status: DRAFT

Borehole Number: **WS32**

Sheet 1 of 1

Method, Plant and Crew					Diameter		Casing		Groundwater					
From (m)	To (m)	Type	Plant Used	Crew	Depth (m)	Diam (mm)	Depth(m)	Diam (mm)	Strike (m)	Casing (m)	Sealed (m)	Rose To (m)	Time (mins)	Remarks
0.00	1.20	Inspection Pit	Hand Dug Pit	DSUK	1.20	250	1.20	100						
1.20	2.00	Window Sampler	Premier Tracker 110	DSUK	2.00	77								

Scale:	1:50
Checked By:	SM
Approved By:	SDC
Start Date:	08/02/2018
Finish Date:	08/02/2018

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill	Samples and Testing: Depth (m)	Ref	Tests / Results
Asphalt		0.09	109.58					
MADE GROUND comprising black slightly sandy GRAVEL. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to coarse quartzite, asphalt, concrete and rare brick.						0.40 0.40	D2 ES1	
MADE GROUND comprising stiff brown slightly gravelly slightly silty CLAY with medium cobble content. Gravel is sub-angular to sub-rounded fine to coarse concrete, brick, quartzite and sandstone with rare metal and slate. Cobbles are angular to sub-angular brick and concrete. *Concrete broken out at 0.8mbgl*		0.50	109.17			0.70 0.70	D4 ES3	
								SPT(C) 1.20m, N=28 (25 for 75mm/10,5,6,7)
Firm red slightly silty CLAY with lenses of red to yellow brown fine to medium sand throughout.		1.30	108.37			1.40	D5	
EOH at 2.00m - Refusal		2.00	107.67			2.00	D6	SPT(C) 2.00m, 50 (5,4/50 for 210mm)

Observations / Remarks

Groundwater not encountered. Borehole terminated at 2.0mbgl due to refusal.

Sampling Runs

From (m)	To (m)	Diam (mm)	Recovery %	Remarks
1.20	0.00	250	100	
2.00	1.00	77	100	

Hammer Information

Serial No.	Energy Ratio %
110.71	72

Project Number: **A107448**

Project:	**Meggitt**
Location:	**Coventry**
Client:	**Homes England**

Location Details

Easting:	433113.87	Northing:	282334.59
Level:	109.07mAOD	Depth:	2.00m
Logger:	SC	Type:	WS
		Inclination:	°

Status: DRAFT

Borehole Number: **WS33**

Sheet 1 of 1

Scale:	1:50
Checked By:	SM
Approved By:	SDC
Start Date:	06/02/2018
Finish Date:	06/02/2018

Method, Plant and Crew

From (m)	To (m)	Type	Plant Used	Crew
0.00	1.20	Inspection Pit	Hand Dug Pit	DSUK
1.20	2.00	Window Sampler	Premier Tracker 110	DSUK

Diameter

Depth (m)	Diam (mm)
1.20	250
2.00	87

Casing

Depth(m)	Diam (mm)
1.20	100

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Rose To (m)	Time (mins)	Remarks

Strata Description

Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill
Asphalt	0.05	109.02		
Concrete with 10mm reinforcing bar	0.25	108.82		
MADE GROUND comprising dark brown to black slightly silty gravelly SAND. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to coarse concrete, brick, clinker, slate, quartzite and metal.	0.70	108.37		
Brown to light brown clayey slightly gravelly SAND. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to medium quartzite and sandstone.	1.95	107.12		
Red weak SANDSTONE	2.00	107.07		
EOH at 2.00m - Refusal				

Samples and Testing

Depth (m)	Ref	Tests / Results
0.40	D2	
0.40	ES1	
0.80	D4	
0.80	ES3	
		SPT(C) 1.20m, N=16 (1,2/3,4,4,5)
1.80	D5	
2.00	D6	SPT(C) 2.00m, 50 (8,9/50 for 220mm)

1 2 3 4 5 6 7 8 9 10

Observations / Remarks

Groundwater not encountered. Borehole terminated at 2.0mbgl due to refusal.

Sampling Runs

From (m)	To (m)	Diam (mm)	Recovery %	Remarks
1.20	0.00	250	100	
2.00	1.00	87	100	

Hammer Information

Serial No.	Energy Ratio %
110.71	72

Project Number

A107448

Project:	**Meggitt**
Location:	**Coventry**
Client:	**Homes England**

Location Details

Easting:	433149.84	Northing:	282350.25
Level:	108.20mAOD	Depth:	3.00m
Logger:	SC	Type:	WS
		Inclination:	90°

Status: DRAFT

Borehole Number: **WS34**

Sheet 1 of 1

Scale:	1:50
Checked By:	SM
Approved By:	SDC
Start Date:	07/02/2018
Finish Date:	07/02/2018

Method, Plant and Crew

From (m)	To (m)	Type	Plant Used	Crew
0.00	1.20	Inspection Pit	Hand Dug Pit	DSUK

Diameter

Depth (m)	Diam (mm)
1.20	250
2.00	77
3.00	67

Casing

Depth(m)	Diam (mm)
1.20	100

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Rose To (m)	Time (mins)	Remarks

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill	Samples and Testing: Depth (m)	Ref	Tests / Results
Asphalt		0.12	108.08					
MADE GROUND comprising dark brown to grey slightly silty very gravelly SAND with low cobble content. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to coarse brick, concrete, asphalt, plastic and metal. Cobbles are angular to sub-angular brick.						0.30 0.30	D2 ES1	
Red slightly clayey fine to medium SAND *Slightly gravelly between 1.0 to 1.3mbgl. Gravel is sub-angular to sub-rounded fine to coarse sandstone and quartzite.*		0.90	107.30			1.00	D3	SPT(C) 1.20m, N=13 (2,3/3,3,3,4)
						2.00 2.00 - 3.00	D4 B5	SPT(C) 2.00m, N=19 (3,3/4,4,4,7)
EOH at 3.00m - Refusal		3.00	105.20					SPT(C) 3.00m, 50 (25 for 115mm/50 for 110mm)

Observations / Remarks

Groundwater not encountered. Borehole terminated at 3.0mbgl due to refusal.

Sampling Runs

From (m)	To (m)	Diam (mm)	Recovery %	Remarks
1.20	0.00	250	100	
2.00	1.20	77	100	
3.00	2.00	67	100	

Hammer Information

Serial No.	Energy Ratio %
110.71	72

Project Number: **A107448**

Project:	**Meggitt**
Location:	**Coventry**
Client:	**Homes England**

Location Details

Easting:	433169.13	Northing:	282298.27
Level:	108.91mAOD	Depth:	3.00m
Logger:	SC	Type:	WS
		Inclination:	90°

Status: DRAFT

Borehole Number: **WS35**

Sheet 1 of 1

Method, Plant and Crew

From (m)	To (m)	Type	Plant Used	Crew
0.00	1.20	Inspection Pit	Hand Dug Pit	DSUK
1.20	3.00	Window Sampler	Premier Tracker 110	DSUK

Diameter

Depth (m)	Diam (mm)
1.20	250
3.00	77

Casing

Depth(m)	Diam (mm)
1.20	100

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Rose To (m)	Time (mins)	Remarks

Scale:	1:50
Checked By:	SM
Approved By:	SDC
Start Date:	07/02/2018
Finish Date:	07/02/2018

Strata Description

Strata Description	Depth (m)	Reduced Level (mAOD)
Asphalt	0.14	108.77
MADE GROUND comprising dark grey to brown slightly silty very gravelly SAND with medium cobble content. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to coarse concrete, brick, quartzite and metal. Cobbles are sub-angular brick and concrete.	1.40	107.51
Red slightly silty fine to coarse SAND *Slightly clayey and no silt from 1.8mbgl*	2.30	106.61
Stiff red slightly silty CLAY with occasional sand lenses.	3.00	105.91
EOH at 3.00m - Refusal		

Legend / Inst / Backfill

Samples and Testing

Depth (m)	Ref	Tests / Results
0.30	D2	
0.30	ES1	
1.20	D4	SPT(C) 1.20m, N=8 (3,2/1,1,1,5)
1.20	ES3	
1.50	D5	
2.00	D6	SPT(C) 2.00m, N=19 (5,5/4,5,4,6)
2.40	D7	
3.00	D8	SPT(C) 3.00m, 50 (4,4/50 for 240mm)

Water Level (m)

1 2 3 4 5 6 7 8 9 10

Observations / Remarks

Groundwater not encountered. Borehole terminated at 3.0mbgl due to refusal.

Sampling Runs

From (m)	To (m)	Diam (mm)	Recovery %	Remarks
1.20	0.00	250	100	
2.00	1.20	77	80	
3.00	2.00	77	100	

Hammer Information

Serial No.	Energy Ratio %
110.71	72

Project Number: **A107448**

Project:	**Meggitt**
Location:	**Coventry**
Client:	**Homes England**

Location Details

Easting:	433130.88	Northing:	282243.11
Level:	109.22mAOD	Depth:	3.00m
Logger:	SC	Type:	WS
		Inclination:	°

Status: DRAFT

Borehole Number: **WS36**

Sheet 1 of 1

Scale:	1:50
Checked By:	SM
Approved By:	SDC
Start Date:	08/02/2018
Finish Date:	08/02/2018

Method, Plant and Crew

From (m)	To (m)	Type	Plant Used	Crew
0.00	1.20	Inspection Pit	Hand Dug Pit	DSUK
1.20	3.00	Window Sampler	Premier Tracker 110	DSUK

Diameter

Depth (m)	Diam (mm)
1.20	250
2.00	77
3.00	67

Casing

Depth(m)	Diam (mm)
1.20	100

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Rose To (m)	Time (mins)	Remarks

Strata Description

Strata Description	Depth (m)	Reduced Level (mAOD)
Asphalt	0.09	109.14
MADE GROUND comprising dark grey to black clayey GRAVEL. Gravel is sub-angular to sub-rounded fine to coarse concrete brick and slate.	0.30	108.92
MADE GROUND comprising firm reddish brown slightly silty gravelly CLAY. Gravel is sub-angular to sub-rounded fine to coarse concrete, brick, slate and metal.	1.00	108.22
Red to reddish brown slightly gravelly slightly silty slightly clayey SAND. Gravel is sub-angular to sub-rounded fine to coarse quartzite and siltstone. *No gravel from 1.3mbgl* *No sand or silt from 2.7mbgl*	2.85	106.38
Red weak MUDSTONE	3.00	106.22
EOH at 3.00m - Refusal		

Legend

Water Level (m)

Inst / Backfill

Samples and Testing

Depth (m)	Ref	Tests / Results
0.20	D2	
0.20	ES1	
0.50	D4	
0.50	ES3	
1.10	D5	SPT(C) 1.20m, N=15 (1,2/3,4,4,4)
2.00	D6	SPT(C) 2.00m, N=44 (5,5/6,11,13,14)
2.90	D7	
		SPT(C) 3.00m, 50 (25 for 85mm/50 for 40mm)

1 2 3 4 5 6 7 8 9 10

Observations / Remarks

Groundwater not encountered. Borehole terminated at 3.0mbgl due to refusal.

Sampling Runs

From (m)	To (m)	Diam (mm)	Recovery %	Remarks
1.20	0.00	250	100	
2.00	1.00	77	100	
3.00	2.00	67	100	

Hammer Information

Serial No.	Energy Ratio %
110.71	72

Project Number: **A107448**

Project:	**Meggitt**
Location:	**Coventry**
Client:	**Homes England**

Location Details

Easting:	433287.48	Northing:	282246.19
Level:	106.85mAOD	Depth:	2.70m
Logger:	JP	Type:	WS
		Inclination:	90°

Status: DRAFT

Borehole Number: **WS43**

Sheet 1 of 1

Scale:	1:50
Checked By:	SM
Approved By:	SDC
Start Date:	06/02/2018
Finish Date:	06/02/2018

Method, Plant and Crew

From (m)	To (m)	Type	Plant Used	Crew
0.00	1.20	Inspection Pit	Hand Dug Pit	DSUK
1.20	2.70	Window Sampler	Premier Tracker 110	DSUK

Diameter

Depth (m)	Diam (mm)
1.20	250
2.70	77

Casing

Depth(m)	Diam (mm)
1.20	100

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Rose To (m)	Time (mins)	Remarks

Strata Description

Strata Description	Depth (m)	Reduced Level (mAOD)
MADE GROUND comprising dark greyish brown gravelly SAND with medium cobble content. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to coarse brick, concrete and clinker. Cobbles are sub-angular brick.	0.80	106.05
MADE GROUND comprising soft to firm orangeish brown slightly gravelly slightly sandy CLAY. Sand is fine to coarse. Gravel is sub-angular fine to medium brick and concrete.	1.20	105.65
Firm orangeish brown slightly silty CLAY *Stiff from 2.2mbgl* *Very stiff, slightly sandy and no silt from 2.5mbgl*	2.70	104.15
EOH at 2.70m - Refusal		

Legend / Inst / Backfill

Samples and Testing

Depth (m)	Ref	Tests / Results
0.10	D1	
0.30	ES2	
0.90	D4	
0.90	ES3	
1.20 - 2.00	B5	SPT(C) 1.20m, N=16 (2,3/3,4,4,5)
2.00 - 2.70	B6	SPT(C) 2.00m, N=24 (4,5/6,6,6,6)
		SPT(C) 2.70m, 50 (25 for 125mm/50 for 135mm)

Water Level (m)

1 2 3 4 5 6 7 8 9 10

Observations / Remarks

Groundwater not encountered. Borehole terminated at 2.7mbgl due to refusal.

Sampling Runs

From (m)	To (m)	Diam (mm)	Recovery %	Remarks
1.20	0.00	250	100	
2.00	1.20	77	100	
3.00	2.00	77	100	

Hammer Information

Serial No.	Energy Ratio %
110.50	86

Project Number: **A107448**

Project:	**Meggitt**
Location:	**Coventry**
Client:	**Homes England**

Location Details

Easting:	433292.96	Northing:	282299.64
Level:	106.45mAOD	Depth:	2.60m
Logger:	JP	Type:	WS
		Inclination:	90°

Status: DRAFT

Borehole Number: **WS44**

Sheet 1 of 1

Method, Plant and Crew					Diameter		Casing		Groundwater					
From (m)	To (m)	Type	Plant Used	Crew	Depth (m)	Diam (mm)	Depth(m)	Diam (mm)	Strike (m)	Casing (m)	Sealed (m)	Rose To (m)	Time (mins)	Remarks
0.00	1.20	Inspection Pit	Hand Dug Pit	DSUK	1.20	250	1.20	100						
1.20	2.60	Window Sampler	Premier Tracker 110	DSUK	2.60	77								

Scale:	1:50
Checked By:	SM
Approved By:	SDC
Start Date:	06/02/2018
Finish Date:	06/02/2018

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill	Samples and Testing: Depth (m)	Ref	Tests / Results
Asphalt		0.12	106.33					
MADE GROUND comprising light greyish brown very sandy GRAVEL with low cobble content. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to coarse flint, mudstone, brick and concrete. Cobbles are sub-angular concrete.						0.20 0.20	D2 ES1	
Stiff orangeish brown slightly silty CLAY		0.75	105.70			0.80	D3	
						1.20 - 2.00	B4	SPT(C) 1.20m, N=28 (3,4/6,7,7,8)
Becoming very stiff from 2.0mbgl								SPT(C) 2.00m, N=22 (3,4/3,4,7,8)
Becoming hard from 2.4mbgl								
Light greyish brown weak MUDSTONE		2.50	103.95					
EOH at 2.60m - Refusal		2.60	103.85			2.60	D5	SPT(C) 2.60m, 50 (11,13/50 for 115mm)

1 2 3 4 5 6 7 8 9 10

Observations / Remarks

Groundwater not encountered. Borehole terminated at 2.6mbgl due to refusal.

Sampling Runs

From (m)	To (m)	Diam (mm)	Recovery %	Remarks
1.20	0.00	250	100	
2.00	1.20	77	100	
2.60	2.00	77	100	

Hammer Information

Serial No.	Energy Ratio %
110.50	86

Project Number

A107448

Project:	**Meggitt**
Location:	**Coventry**
Client:	**Homes England**

Location Details

Easting:	433318.02	Northing:	282355.59
Level:	106.54mAOD	Depth:	2.00m
Logger:	JP	Type:	WS
		Inclination:	90°

Status: DRAFT

Borehole Number: **WS45**

Sheet 1 of 1

Scale:	1:50
Checked By:	SM
Approved By:	SDC
Start Date:	06/02/2018
Finish Date:	06/02/2018

Method, Plant and Crew

From (m)	To (m)	Type	Plant Used	Crew
0.00	1.20	Inspection Pit	Hand Dug Pit	DSUK
1.20	2.00	Window Sampler	Premier Tracker 110	DSUK

Diameter

Depth (m)	Diam (mm)
1.20	250
2.00	87

Casing

Depth(m)	Diam (mm)
1.20	100

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Rose To (m)	Time (mins)	Remarks

Strata Description

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill
Asphalt		0.10	106.44		
MADE GROUND comprising light yellowish brown clayey GRAVEL with low cobble content. Gravel is sub-angular fine to coarse concrete and brick. Cobbles are sub-angular concrete.		0.20	106.34		
MADE GROUND comprising black ashy GRAVEL. Gravel is sub-angular to sub-rounded clinker and asphalt.		0.50	106.04		
Firm orangeish brown slightly silty CLAY *Very stiff from 1.2mbgl*					
Light orangeish brown slightly clayey SILT		1.65	104.89		
EOH at 2.00m - Refusal		2.00	104.54		

Samples and Testing

Depth (m)	Ref	Tests / Results
0.10	D1	
0.15	ES2	
0.20	D3	
0.30	ES4	
0.50	D5	
1.20	D6	SPT(C) 1.20m, N=13 (1,1/2,3,4,4)
1.70	D7	
		SPT(C) 2.00m, 50 (25 for 135mm/50 for 200mm)

Observations / Remarks

Groundwater not encountered. Borehole terminated at 2.0mbgl due to refusal.

Sampling Runs

From (m)	To (m)	Diam (mm)	Recovery %	Remarks
1.20	0.00	250	100	
2.00	1.20	87	100	

Hammer Information

Serial No.	Energy Ratio %
110.50	86

Project Number: **A107448**

Project:	**Meggitt**
Location:	**Coventry**
Client:	**Homes England**

Location Details

Easting:	433317.53	Northing:	282314.88
Level:	106.67mAOD	Depth:	3.80m
Logger:	JP	Type:	WS
		Inclination:	90°

Status: DRAFT

Borehole Number: **WS46**

Sheet 1 of 1

Method, Plant and Crew					Diameter		Casing		Groundwater					
From (m)	To (m)	Type	Plant Used	Crew	Depth (m)	Diam (mm)	Depth(m)	Diam (mm)	Strike (m)	Casing (m)	Sealed (m)	Rose To (m)	Time (mins)	Remarks
0.00	1.20	Inspection Pit	Hand Dug Pit	DSUK	1.20	250	1.20	100						
1.20	3.80	Window Sampler	Premier Tracker 110	DSUK	2.00	87								
					3.80	77								

Scale:	1:50
Checked By:	SM
Approved By:	SDC
Start Date:	06/02/2018
Finish Date:	06/02/2018

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill	Samples and Testing: Depth (m)	Ref	Tests / Results
Asphalt		0.10	106.57					
MADE GROUND light yellowish brown clayey GRAVEL with low cobble content. Gravel is sub-angular to sub-rounded fine to coarse concrete and brick. Cobbles are sub-angular concrete.		0.40	106.27			0.20 0.30 0.40 0.50	D1 ES2 D3 ES4	
MADE GROUND comprising black ashy GRAVEL. Gravel is sub-angular to sub-rounded fine to coarse clinker and asphalt		0.70	105.97			0.70	D5	
Firm orangeish brown slightly silty slightly gravelly CLAY. Gravel is sub-rounded coarse flint.						1.20 - 2.00	B6	SPT(C) 1.20m, N=4 (1,1/1,1,1,1)
						2.00 - 3.00	B7	SPT(C) 2.00m, N=4 (1,0/1,1,1,1)
								SPT(C) 3.00m, N=19 (1,2/2,4,6,7)
Very stiff from 3.2mbgl								
Hard from 3.4mbgl						3.50	D8	
EOH at 3.80m - Refusal		3.80	102.87					SPT(C) 3.80m, 50 (25 for 60mm/50 for 95mm)

1 2 3 4 5 6 7 8 9 10

Observations / Remarks

Groundwater not encountered. Borehole terminated at 3.8mbgl due to refusal.

Sampling Runs

From (m)	To (m)	Diam (mm)	Recovery %	Remarks
1.20	0.00	250	100	
2.00	1.20	87	100	
3.00	2.00	77	100	
3.80	3.00	77	100	

Hammer Information

Serial No.	Energy Ratio %
110.50	86

Project Number: **A107448**

Project:	**Meggitt**
Location:	**Coventry**
Client:	**Homes England**

Location Details

Easting:	433354.01	Northing:	282340.16
Level:	106.33mAOD	Depth:	2.00m
Logger:	JP	Type:	WS
		Inclination:	90°

Status: DRAFT

Borehole Number: **WS47**

Sheet 1 of 1

Scale:	1:50
Checked By:	SM
Approved By:	SDC
Start Date:	07/02/2018
Finish Date:	07/02/2018

Method, Plant and Crew

From (m)	To (m)	Type	Plant Used	Crew
0.00	1.20	Inspection Pit	Hand Dug Pit	DSUK
1.20	2.00	Window Sampler	Premier Tracker 110	DSUK

Diameter

Depth (m)	Diam (mm)
1.20	250
2.00	87

Casing

Depth(m)	Diam (mm)
1.20	100

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Rose To (m)	Time (mins)	Remarks

Strata Description

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill
Asphalt		0.07	106.26		
MADE GROUND comprising black ashy GRAVEL. Gravel is angular to sub-angular fine to coarse clinker, concrete and asphalt.		0.40	105.93		
Orangeish brown slightly gravelly SILT. Gravel is sub-rounded fine to coarse flint and mudstone.		1.35	104.98		
Firm dark orangeish brown slightly gravelly very silty CLAY. Gravel is sub-rounded fine to medium flint.		2.00	104.33		
EOH at 2.00m - Refusal					

Samples and Testing

Depth (m)	Ref	Tests / Results
0.10	D2	
0.10	ES1	
0.50	D3	
		SPT(C) 1.20m, N=25 (3,4/5,6,7,7)
1.50	D4	
		SPT(C) 2.00m, 50 (7,10/50 for 265mm)

1 2 3 4 5 6 7 8 9 10

Observations / Remarks

Groundwater not encountered. Borehole terminated at 2.0mbgl due to refusal.

Sampling Runs

From (m)	To (m)	Diam (mm)	Recovery %	Remarks
1.20	0.00	250	100	
2.00	1.20	87	100	

Hammer Information

Serial No.	Energy Ratio %
110.50	86

Project Number

A107448

Project:	**Meggitt**
Location:	**Coventry**
Client:	**Homes England**

Location Details

Easting:	433403.29	Northing:	282243.83
Level:	105.40mAOD	Depth:	2.00m
Logger:	SC	Type:	WS
		Inclination:	90°

Status: DRAFT

Borehole Number: **WS48**

Sheet 1 of 1

Scale:	1:50
Checked By:	SM
Approved By:	SDC
Start Date:	09/02/2018
Finish Date:	09/02/2018

Method, Plant and Crew

From (m)	To (m)	Type	Plant Used	Crew
0.00	1.20	Window Sampler	Hand Pittitng Tools	DSUK
1.20	2.00	Window Sampler	Premier Tracker 110	DSUK

Diameter

Depth (m)	Diam (mm)
1.20	250
2.00	77

Casing

Depth(m)	Diam (mm)
1.20	100

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Rose To (m)	Time (mins)	Remarks

Strata Description

Strata Description	Depth (m)	Reduced Level (mAOD)
MADE GROUND comprising dark grey to black slightly sandy slightly silty GRAVEL. Gravel is fine to coarse sub-angular to sub-rounded asphalt, concrete, brick, metal and quartzite.	0.70	104.70
Stiff red slightly silty slightly sandy CLAY. Sand is fine.	2.00	103.40
EOH at 2.00m - Refusal		

Samples and Testing

Depth (m)	Ref	Tests / Results
0.20	D1	
0.20	ES1	
0.80	D2	
1.20 - 2.00	D3	SPT(C) 1.20m, N=24 (3,5/4,6,6,8)
		SPT(C) 2.00m, 50 (6,14/50 for 235mm)

Legend | Water Level (m) | Inst / Backfill

1 2 3 4 5 6 7 8 9 10

Observations / Remarks

Groundwater not encountered. Hole terminated at 2.0mbgl.

Sampling Runs

From (m)	To (m)	Diam (mm)	Recovery %	Remarks
0.00	1.20	250	100	
1.20	2.00	77	100	

Hammer Information

Serial No.	Energy Ratio %

Project Number

A107448

Project:	**Meggitt**
Location:	**Coventry**
Client:	**Homes England**

Location Details

Easting:	433461.43	Northing:	282269.86
Level:	103.69mAOD	Depth:	3.00m
Logger:	SC	Type:	WS
		Inclination:	90°

Status: DRAFT

Borehole Number: **WS49**

Sheet 1 of 1

Scale:	1:50
Checked By:	SM
Approved By:	SDC
Start Date:	06/02/2018
Finish Date:	06/02/2018

Method, Plant and Crew

From (m)	To (m)	Type	Plant Used	Crew
0.00	1.20	Inspection Pit	Hand Dug Pit	DSUK
1.20	3.00	Window Sampler	Premier Tracker 110	DSUK

Diameter

Depth (m)	Diam (mm)
1.20	250
3.00	87

Casing

Depth(m)	Diam (mm)
1.20	100

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Rose To (m)	Time (mins)	Remarks

Strata Description

Strata Description	Depth (m)	Reduced Level (mAOD)
Concrete with 10mm reinforcing bar		
Soft red to reddish brown slightly silty slightly silty gravelly CLAY. Gravel is sub-angular to sub-rounded fine to medium quartzite and sandstone.	0.27	103.42
Stiff red slightly silty sandy friable CLAY with strong hydrocarbon odour throughout. *Silty and slightly sandy from 1.6mbgl*	1.30	102.39
EOH at 3.00m - Refusal	3.00	100.69

Legend | Water Level (m) | Inst / Backfill

Samples and Testing

Depth (m)	Ref	Tests / Results
0.30	ES1	
0.40 - 1.00	B2	
		SPT(C) 1.20m, N=13 (1,1/2,3,3,5)
1.40	D3	
1.50	ES4	
2.00	D5	SPT(C) 2.00m, N=34 (8,10/7,8,10,9)
2.50	ES6	
3.00	D7	SPT(C) 3.00m, 50 (7,10/50 for 220mm)

1 2 3 4 5 6 7 8 9 10

Observations / Remarks

Groundwater not encountered. Borehole terminated at 3.0mbgl due to refusal.

Sampling Runs

From (m)	To (m)	Diam (mm)	Recovery %	Remarks
1.20	0.00	250	100	
2.00	1.20	87	100	
3.00	2.00	87	100	

Hammer Information

Serial No.	Energy Ratio %
110.71	72

Project Number: **A107448**

Project:	**Meggitt**
Location:	**Coventry**
Client:	**Homes England**

Location Details

Easting:	433519.00	Northing:	282272.24
Level:	103.73mAOD	Depth:	4.00m
Logger:	SC	Type:	WS
		Inclination:	90°

Status: DRAFT

Borehole Number: **WS50**

Sheet 1 of 1

Scale:	1:50
Checked By:	SM
Approved By:	SDC
Start Date:	06/02/2018
Finish Date:	06/02/2018

Method, Plant and Crew

From (m)	To (m)	Type	Plant Used	Crew
0.00	1.20	Inspection Pit	Hand Dug Pit	DSUK
1.20	4.00	Window Sampler	Premier Tracker 110	DSUK

Diameter

Depth (m)	Diam (mm)
1.20	250
2.00	87
3.00	77
4.00	67

Casing

Depth(m)	Diam (mm)
1.20	100

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Rose To (m)	Time (mins)	Remarks

Strata Description

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill
CONCRETE with 10mm reinforcing bar					
MADE GROUND comprising dark brown slightly silty gravelly SAND. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to coarse concrete, brick, quartzite, metal and wood.		0.20	103.53		
Stiff red brown to grey slightly gravelly slightly silty CLAY. Gravel is sub-angular to sub-rounded fine to coarse quartzite and sandstone. *Red in colour from 1.2mbgl* *Slightly sandy from 2.2mbgl* *Sandy and no silt from 2.5mbgl*		0.90	102.83		
Red slightly clayey fine to medium SAND		3.00	100.73		
EOH at 4.00m - Refusal		4.00	99.73		

Samples and Testing

Depth (m)	Ref	Tests / Results
0.50	D2	
0.50	ES1	
1.00	D4	
1.00	ES3	
1.00 - 2.00	B5	SPT(C) 1.20m, N=22 (1,2/4,5,6,7)
		SPT(C) 2.00m, N=6 (1,1/2,2,1,1)
2.50	D6	
3.00	D7	SPT(C) 3.00m, N=25 (2,2/4,6,7,8)
4.00	D8	SPT(C) 4.00m, 50 (5,6/50 for 259mm)

Observations / Remarks

Groundwater not encountered. Borehole terminated at 4.0mbgl due to refusal.

Sampling Runs

From (m)	To (m)	Diam (mm)	Recovery %	Remarks
1.20	0.00	250	100	
2.00	1.20	87	100	
3.00	2.00	77	100	
4.00	3.00	67	100	

Hammer Information

Serial No.	Energy Ratio %
110.71	72

Project Number: **A107448**

Project:	**Meggitt**
Location:	**Coventry**
Client:	**Homes England**

Location Details

Easting:	433521.34	Northing:	282236.72
Level:	103.62mAOD	Depth:	5.00m
Logger:	SC	Type:	WS
		Inclination:	90°

Status: DRAFT

Borehole Number: **WS51**

Sheet 1 of 1

Scale:	1:50
Checked By:	SM
Approved By:	SDC
Start Date:	05/02/2018
Finish Date:	05/02/2018

Method, Plant and Crew

From (m)	To (m)	Type	Plant Used	Crew
0.00	1.20	Inspection Pit	Hand Dug Pit	DSUK
1.20	5.00	Window Sampler	Premier Tracker 110	DSUK

Diameter

Depth (m)	Diam (mm)
1.20	250
3.00	87
5.00	77

Casing

Depth(m)	Diam (mm)
1.20	100

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Rose To (m)	Time (mins)	Remarks

Strata Description

Strata Description	Depth (m)	Reduced Level (mAOD)
CONCRETE with 10mm reinforcing bar		
MADE GROUND comprising dark brown slightly silty gravelly SAND. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to coarse concrete, bricks, quartzite, metal and wood.	0.22	103.40
MADE GROUND comprising soft brown to light grey mottled black slightly sandy slightly gravelly CLAY. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to coarse quartzite and brick with rare wood and coal.	0.80	102.82
Firm slightly sandy slightly gravelly CLAY. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to medium sandstone and quartzite with hydrocarbon odour throughout.	1.10	102.52
Red to reddish brown clayey fine to medium SAND with hydrocarbon odour.	3.20	100.42
Hard red to fine to medium grained SANDSTONE	4.80	98.82
EOH at 5.00m - Refusal	5.00	98.62

Legend

Water Level (m)

Inst / Backfill

Samples and Testing

Depth (m)	Ref	Tests / Results
0.30	D2	
0.30	ES1	
0.90	D4	
0.90	ES3	
1.20	D5	SPT(C) 1.20m, N=13 (1,2/3,2,4,4)
1.80	ES6	
2.00 - 3.00	B7	SPT(C) 2.00m, N=15 (2,2/3,3,4,5)
		SPT(C) 3.00m, N=31 (5,5/7,6,9,9)
3.50	ES8	
4.00	D9	SPT(C) 4.00m, N=32 (5,4/5,7,9,11)
5.00	D10	SPT(C) 5.00m, 50 (25 for 30mm/50 for 15mm)

1 2 3 4 5 6 7 8 9 10

Observations / Remarks

Groundwater not encountered. Borehole terminated at 5.0mbgl due to refusal.

Sampling Runs

From (m)	To (m)	Diam (mm)	Recovery %	Remarks
1.20	0.00	250	100	
2.00	1.20	87	100	
3.00	2.00	87	100	
4.00	3.00	77	100	
5.00	4.00	77	100	

Hammer Information

Serial No.	Energy Ratio %
110.71	72

Project Number

A107448

Project:	**Meggitt**
Location:	**Coventry**
Client:	**Homes England**

Location Details

Easting:	433562.60	Northing:	282271.32
Level:	103.69mAOD	Depth:	2.00m
Logger:	SC	Type:	WS
		Inclination:	90°

Status: DRAFT

Borehole Number: **WS52**

Sheet 1 of 1

Method, Plant and Crew					Diameter		Casing		Groundwater					
From (m)	To (m)	Type	Plant Used	Crew	Depth (m)	Diam (mm)	Depth(m)	Diam (mm)	Strike (m)	Casing (m)	Sealed (m)	Rose To (m)	Time (mins)	Remarks
0.00	1.20	Inspection Pit	Hand Dug Pit	DSUK	1.20	250	1.20	100						
1.20	2.00	Window Sampler	Premier Tracker 110	DSUK	2.00	87								

Scale:	1:50
Checked By:	SM
Approved By:	SDC
Start Date:	05/02/2018
Finish Date:	05/02/2018

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill	Samples and Testing: Depth (m)	Ref	Tests / Results
CONCRETE with 10mm reinforcing bar								
MADE GROUND comprising dark brown slightly silty gravelly fine to coarse SAND. Gravel is sub-angular to sub-rounded fine to coarse concrete, brick, metal, wood and quartzite.		0.20	103.49			0.30 0.30	D2 ES1	
Brown to reddish brown slightly gravelly slightly clay fine to medium SAND. Gravel is sub-angular to sub-rounded fine to medium quartzite.		1.00	102.69			1.00	D3	SPT(C) 1.20m, N=18 (3,4/3,5,5,5)
Red to reddish brown fine to coarse SAND		1.35	102.34			1.50	D4	
EOH at 2.00m - Refusal		2.00	101.69			2.00	D5	SPT(C) 2.00m, 50 (5,8/50 for 270mm)

1 2 3 4 5 6 7 8 9 10

Observations / Remarks

Groundwater not encountered. Borehole terminated at 2.0mbgl due to refusal.

Sampling Runs

From (m)	To (m)	Diam (mm)	Recovery %	Remarks
1.20	0.00	250	100	
2.00	1.20	87	100	

Hammer Information

Serial No.	Energy Ratio %
110.71	72

Project Number: **A107448**

Project:	**Meggitt**
Location:	**Coventry**
Client:	**Homes England**

Location Details

Easting:	433465.04	Northing:	282242.69
Level:	103.65mAOD	Depth:	2.00m
Logger:	SC	Type:	WS
		Inclination:	90°

Status: DRAFT

Borehole Number: **WS53**

Sheet 1 of 1

Scale:	1:50
Checked By:	SM
Approved By:	SDC
Start Date:	06/02/2018
Finish Date:	06/02/2018

Method, Plant and Crew

From (m)	To (m)	Type	Plant Used	Crew
0.00	1.20	Inspection Pit	Hand Dug Pit	DSUK
1.20	2.00	Window Sampler	Premier Tracker 110	DSUK

Diameter

Depth (m)	Diam (mm)
1.20	250
2.00	87

Casing

Depth(m)	Diam (mm)
1.20	100

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Rose To (m)	Time (mins)	Remarks

Strata Description

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill
Concrete with 10mm reinforcing bar					
Stiff red to reddish brown slightly gravelly silty CLAY. Gravel is sub-angular to sub-rounded fine to medium quartzite and sandstone		0.40	103.25		
Stiff red slightly silty sandy CLAY. Sand if fine to medium		1.30	102.35		
EOH at 2.00m - Refusal		2.00	101.65		

Samples and Testing

Depth (m)	Ref	Tests / Results
0.60	D2	
0.60	ES1	
1.00	D3	
1.30	D4	SPT(C) 1.20m, N=11 (1,2/2,3,3,3)
2.00	D5	SPT(C) 2.00m, 50 (11,12/50 for 232mm)

1 2 3 4 5 6 7 8 9 10

Observations / Remarks

Groundwater not encountered. Borehole terminated at 2.0mbgl due to refusal.

Sampling Runs

From (m)	To (m)	Diam (mm)	Recovery %	Remarks
1.20	0.00	250	100	
2.00	1.20	87	100	

Hammer Information

Serial No.	Energy Ratio %
110.71	72

Project Number: **A107448**

Project:	**Meggitt**
Location:	**Coventry**
Client:	**Homes England**

Location Details

Easting:	433365.23	Northing:	282287.86
Level:	105.27mAOD	Depth:	2.00m
Logger:	JP	Type:	WS
		Inclination:	90°

Status: DRAFT

Borehole Number: **WS54**

Sheet 1 of 1

Scale:	1:50
Checked By:	SM
Approved By:	SDC
Start Date:	07/02/2018
Finish Date:	07/02/2018

Method, Plant and Crew / Diameter / Casing / Groundwater

From (m)	To (m)	Type	Plant Used	Crew	Diameter Depth (m)	Diameter Diam (mm)	Casing Depth(m)	Casing Diam (mm)	Strike (m)	Casing (m)	Sealed (m)	Rose To (m)	Time (mins)	Remarks
0.00	1.20	Inspection Pit	Hand Dug Pit	DSUK	1.20	250	1.20	100						
1.20	2.00	Window Sampler	Premier Tracker 110	DSUK	2.00	100								

Strata Description

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill
MADE GROUND comprising light reddish brown sandy GRAVEL with medium cobble content. Sand is fine to coarse. Gravel is sub-angular fine to coarse brick, concrete, wood, metal and flint. Cobbles are angular to sub-angular brick.					
EOH at 2.00m - Refusal		2.00	103.27		

Samples and Testing

Depth (m)	Ref	Tests / Results
0.10	D1	
0.20	ES2	
0.50 - 1.50	B3	
1.00	ES4	
		SPT(C) 1.20m, N=14 (4,4/4,3,4,3)
		SPT(C) 2.00m, 50 (11,12/50 for 235mm)

1 2 3 4 5 6 7 8 9 10

Observations / Remarks

Groundwater not encountered. Borehole terminated at 2.0mbgl due to refusal.

Sampling Runs

From (m)	To (m)	Diam (mm)	Recovery %	Remarks
1.20	0.00	250	100	
2.00	1.20	87	100	

Hammer Information

Serial No.	Energy Ratio %
110.50	86

Project Number: **A107448**

Appendix C – Geotechnical Laboratory Results

Nicholls Colton Group
7 - 11 Harding Street
Leicester
LE1 4DH

WYG Environment Planning Transport Ltd.
Purchase Ledger Department
PO Box 364
Leeds
LS6 2WQ

Analytical Test Report: L18/0391/WYG/001

Your Project Reference:	**Meggitt, Coventry**	Samples Received on:	16/02/2018
Your Order Number:	NOT/1316	Testing Instruction Received:	06/03/2018
Report Issue Number:	1	Sample Tested:	06/03 to 15/03/2018
Samples Analysed:	6 Soils	Report issued:	15/03/2018

Signed

James Gane
Commercial Manager
Nicholls Colton Group

Notes:

General

Please refer to Methodologies tab for details pertaining to the analytical methods undertaken.

Samples will be retained for 14 days after issue of this report unless otherwise requested.

Moisture Content was determined in accordance with NC method statement MS - CL - Sample Prep, oven dried at <30˚C.

Moisture Content is reported as a percentage of the dry mass of soil, this calculation is in accordance with BS1377, Part 2, 1990, Clause 3.2

Stone Content was determined in accordance with NC method statement MS - CL - Sample Prep and refers to the percentage of stones retained on a 10mm BS test sieve.

With the exception of Sulphate and Sulphur which are crushed over the 2mm test sieve, concentrations are reported as a percentage mass of the dry soil passing the 10mm BS test sieve. As received samples have been corrected for moisture content but not stone content.

Samples were supplied by customer, results are representative of the material provided

Deviating Samples

Samples were received in suitable containers	**Yes**
A date and time of sampling was provided	**Yes**
Sample holding times were exceeded prior to analysis of determinants	**Yes**

Where samples do not meet one or more of the above criteria they will be classed as deviating, this means data may not be representative of the sample at the time of sampling and it is possible that results provided may be compromised.

Accreditation Key

UKAS = UKAS Accreditation, MCERTS = MCERTS Accreditation, u = Unaccredited

Date of Issue 24.01.2017
Owned by Emily Blissett - Customer Services Supervisor
Authorised by James Gane - Commercial Manager
J:\Public\Projects\2018\L18\WYG - WYG Nottingham\L18-0391-WYG\[L18-0391-WYG-002.xlsx]Results

Nicholls Colton Group
7 - 11 Harding Street
Leicester
LE1 4DH

L18/0391/WYG/001

Project Reference - Meggitt, Coventry

Analytical Test Results - BRE Suite

NC Reference			18-7081	18-7082	18-7083	18-7084	18-7085	18-7086
Client Sample Reference			WS01	WS10	WS21	WS26	WS36	WS52
Client Sample Location			D1	D2	D2	D2	D4	D2
Depth - Top (m)			0.30	0.20	0.50	0.30	0.50	0.30
Depth - Bottom (m)			0.30	0.20	0.50	0.30	0.50	0.30
Date of Sampling			16/02/2018	16/02/2018	16/02/2018	16/02/2018	16/02/2018	16/02/2018
Time of Sampling			Not provided	Not provided	Not provided	Not provided	Not provided	Not provided
Sample Matrix			Sand	Sand	Clay	Clay	Sand	Loam
Determinant	**Units**	**Accreditation**						
Water soluble sulphate	(mg/l)	u	89	96	220	170	590	930
Acid Soluble Sulphate	(%)	u	0.07	0.08	0.15	0.29	0.17	0.45
Total Sulphur	(%)	u	0.10	0.07	0.08	0.11	0.06	0.17
pH Value	pH Units	MCERTS	9.1	9.0	8.6	9.5	7.9	11.2

Nicholls Colton Group
7 - 11 Harding Street
Leicester
LE1 4DH

L18/0391/WYG/001

Project Reference - Meggitt, Coventry

Sample Descriptions

NC Reference	Client Sample Reference	Sample Location	Description	Passing 2mm test sieve (%)
18-7081	WS01	D1	Black/dark brown silty crushed rock.	33
18-7082	WS10	D2	Dark brown slightly silty clayey crushed rock.	48
18-7083	WS21	D2	Brown gravelly clay with crushed rock and brick.	39
18-7084	WS26	D2	Brown slightly silty slightly gravelly clay with crushed rock and occasional brick.	28
18-7085	WS36	D4	Brown clayey slightly gravelly sand.	95
18-7086	WS52	D2	Brown slightly gravelly clayey silt with crushed rock and occasional brick and wood.	46

Nicholls Colton Group
7 - 11 Harding Street
Leicester
LE1 4DH

L18/0391/WYG/001

Project Reference - Meggitt, Coventry

Analysis Methodologies

Matrix	Determinant	Sample condition for analysis	Test Method used
Soil	pH	As Received	In house method statement - MS - CL - pH in soils (using a 1:3 soil to water extraction)
Soil	Sulphate (w/s)	Oven Dried	In house method statement - MS - CL - Anions by Aquakem
Soil	Acid Sulphate	Oven Dried	In house method statement - MS - CL - BRE Analysis
Soil	Total Sulphur	Oven Dried	In house method statement - MS - CL - BRE Analysis

Nicholls Colton Group
7 - 11 Harding Street
Leicester
LE1 4DH

Nicholls Colton Group

Cover Sheet

WYG Environment Planning Transport Ltd.
Purchase Ledger Department
PO Box 364
Leeds
LS6 2WQ

Analytical Test Report: L18/0391/WYG/002

Your Project Reference:	**Meggitt, Coventry**	Samples Received on:	16/02/2018
Your Order Number:	NOT/1316	Testing Instruction Received:	06/03/2018
Report Issue Number:	1	Sample Tested:	07 to 14/03/2018
Samples Analysed:	29 Soils	Report issued:	15/03/2018

Signed

Lee Harbottle
GCM Operations Manager
Nicholls Colton Group

Notes:

Samples will be retained for 14 days after issue of this report unless otherwise requested.

Sample preparation was in accordance with BS1377:Part 1:2016.

The results included within the report are representative of the samples submitted for analysis.

A certificate of sampling was not supplied.

Samples were provided by client

1377 Plasticity Index

Testing was in accordance with BS1377:Part 2:1990 Clauses 3, 4.4 (one-point) & 5.

The material was prepared from its natural state.

1377 Moisture Content

Moisture content testing was in accordance with BS1377 : Part 2 :1990 Clause 3.2.3.2 (medium).

1377 Particle Density

Sample preparation was in accordance with BS 1377 : Part 1 : 2016.

Testing was in accordance with BS 1377 : Part 2 : 1990 Clause 8.2 gas jar method.

Date of Issue 10.03.2017

Owned by Emily Blissett - Customer Services Supervisor

Authorised by James Gane - Commercial Manager

J:\Public\Projects\2018\L18\WYG - WYG Nottingham\L18-0391-WYG\[L18-0391-WYG-001.xlsx]Cover Sheet

Nicholls Colton Group
7 - 11 Harding Street
Leicester
LE1 4DH

L18/0391/WYG/002

Meggitt, Coventry

Material Analysis Results

NC Reference	18-5084	18-5093	18-5094	18-5098
Client Sample Reference	WS01	WS46	WS46	WS51
Client Sample Location	B6	B1	B2	B1
Sample Depth (m)	2.0-3.0	1.2-2.0	2.0-3.0	2.0-3.0
Date of Sampling	Not provided	Not provided	Not provided	Not provided
Sample type	Disturbed	Disturbed	Disturbed	Disturbed
Visual Description	Red/brown slightly silty clay.	Brown/red slightly silty clay.	Brown/red slightly silty clay.	Red/brown slightly silty slightly gravelly clay.

BS Test Sieve (mm)	Specification	Units				
0.425		% Passing	100	99	100	97
Moisture Content		(%)	18	20	20	19
Liquid Limit		(%)	40	40	48	44
Plastic Limit		(%)	20	22	24	21
Plasticity Index		(%)	20	18	24	23
Particle Density		(Mg/m^3)	-	-	-	-

Nicholls Colton Group
7 - 11 Harding Street
Leicester
LE1 4DH

L18/0391/WYG/002

Meggitt, Coventry

Material Analysis Results

NC Reference			18-5108	18-5112	18-5113	18-5134
Client Sample Reference			WS02	WS03	WS03	WS22
Client Sample Location			D6	D3	D4	D5
Sample Depth (m)			1.50	0.60	1.60	1.50
Date of Sampling			Not provided	Not provided	Not provided	Not provided
Sample type			Disturbed	Disturbed	Disturbed	Disturbed
Visual Description			Brown/red slightly silty clay.	Brown slightly silty slightly gravelly clay.	Red/brown silty clay.	Red/brown clay.
BS Test Sieve (mm)	**Specification**	**Units**				
0.425		**% Passing**	100	95	100	100
Moisture Content		**(%)**	16	19	20	19
Liquid Limit		**(%)**	34	32	27	41
Plastic Limit		**(%)**	18	18	17	20
Plasticity Index		**(%)**	16	14	10	21
Particle Density		**(Mg/m^3)**	-	-	-	-

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Meggitt, Coventry

Material Analysis Results

NC Reference			18-5167	18-5186	18-5187	18-5192
Client Sample Reference			WS35	WS46	WS47	WS49
Client Sample Location			D7	D8	D2	D3
Sample Depth (m)			2.40	3.50	0.10	1.40
Date of Sampling			Not provided	Not provided	Not provided	Not provided
Sample type			Disturbed	Disturbed	Disturbed	Disturbed
Visual Description			Red/brown slightly silty clay.	Red/brown clay with mudstone.	Dark brown shale.	Brown/red slightly silty clay.
BS Test Sieve (mm)	**Specification**	**Units**				
0.425		**% Passing**	100	100	36	100
Moisture Content		**(%)**	15	9.7	22	15
Liquid Limit		**(%)**	35	35	33	29
Plastic Limit		**(%)**	17	19	Non-Plastic	17
Plasticity Index		**(%)**	16	16		12
Particle Density		**(Mg/m^3)**	-	-	-	-

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Meggitt, Coventry

Material Analysis Results

NC Reference			18-5202	18-6949	18-5089	18-5100
Client Sample Reference			WS51	WS28	WS34	WS01
Client Sample Location			D5	D7	B5	D1
Sample Depth (m)			1.20	2.00	2.50	0.30
Date of Sampling			Not provided	Not provided	Not provided	Not provided
Sample type			Disturbed	Disturbed	Disturbed	Disturbed
Visual Description			Red/brown slightly silty clay.	Red/brpown silty clay.	Brown slightly gravelly clayey sandy silt.	Black/dark brown silty crushed rock.
BS Test Sieve (mm)	**Specification**	**Units**				
0.425		**% Passing**	100	100	-	-
Moisture Content		**(%)**	20	21	14	26
Liquid Limit		**(%)**	41	30	-	-
Plastic Limit		**(%)**	20	19	-	-
Plasticity Index		**(%)**	21	11	-	-
Particle Density		**(Mg/m^3)**	-	-	2.68	-

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L18/0391/WYG/002

Meggitt, Coventry

Material Analysis Results

NC Reference	18-5106	18-5106	18-5111	18-5116
Client Sample Reference	WS02	WS02	WS03	WS10
Client Sample Location	D2	D3	D1	D2
Sample Depth (m)	0.20	0.60	0.20	0.20
Date of Sampling	Not provided	Not provided	Not provided	Not provided
Sample type	Disturbed	Disturbed	Disturbed	Disturbed
Visual Description	Brown slightly silty clay with crushed rock.	Brown slightly gravelly clayey silt.	Dark brown shale.	Dark brown slightly silty clayey crushed rock.

BS Test Sieve (mm)	Specification	Units				
0.425		% Passing	-	-	-	-
Moisture Content		(%)	25	19	21	38
Liquid Limit		(%)	-	-	-	-
Plastic Limit		(%)	-	-	-	-
Plasticity Index		(%)	-	-	-	-
Particle Density		(Mg/m^3)	-	-	-	-

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L18/0391/WYG/002

Meggitt, Coventry

Material Analysis Results

NC Reference			18-5124	18-5127	18-5136	18-5152
Client Sample Reference			WS20	WS21	WS26	WS32
Client Sample Location			D2	D2	D2	D2
Sample Depth (m)			0.20	0.50	0.30	0.40
Date of Sampling			Not provided	Not provided	Not provided	Not provided
Sample type			Disturbed	Disturbed	Disturbed	Disturbed
Visual Description			Brown sandy silt with occasional slag.	Brown gravelly clay with crushed rock and brick.	Brown slightly silty slightly gravelly clay with crushed rock and occasional brick.	Black silty crushed rock and brick.
BS Test Sieve (mm)	**Specification**	**Units**				
0.425		**% Passing**	-	-	-	-
Moisture Content		**(%)**	9.2	25	17	25
Liquid Limit		**(%)**	-	-	-	-
Plastic Limit		**(%)**	-	-	-	-
Plasticity Index		**(%)**	-	-	-	-
Particle Density		**(Mg/m^3)**	-	-	-	-

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Meggitt, Coventry

Material Analysis Results

NC Reference	18-5160	18-5161	18-5170	18-5176
Client Sample Reference	WS34	WS34	WS36	WS44
Client Sample Location	D2	D3	D4	D2
Sample Depth (m)	0.30	1.00	0.50	0.20
Date of Sampling	Not provided	Not provided	Not provided	Not provided
Sample type	Disturbed	Disturbed	Disturbed	Disturbed
Visual Description	Grey crushed rock.	Brown silty sand with crushed rock.	Brown clayey slightly gravelly sand.	Brown gravelly silt with crushed rock and brick.

BS Test Sieve (mm)	Specification	Units				
0.425		% Passing	-	-	-	-
Moisture Content		(%)	6.7	13	17	16
Liquid Limit		(%)	-	-	-	-
Plastic Limit		(%)	-	-	-	-
Plasticity Index		(%)	-	-	-	-
Particle Density		(Mg/m^3)	-	-	-	-

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Meggitt, Coventry

Material Analysis Results

NC Reference	**18-5206**
Client Sample Reference	WS52
Client Sample Location	D2
Sample Depth (m)	0.30
Date of Sampling	Not provided
Sample type	Disturbed
Visual Description	Brown slightly gravelly clayey silt with crushed rock and occasional brick and wood.

BS Test Sieve (mm)	**Specification**	**Units**	
0.425		**% Passing**	-
Moisture Content		**(%)**	17
Liquid Limit		**(%)**	-
Plastic Limit		**(%)**	-
Plasticity Index		**(%)**	-
Particle Density		**(Mg/m^3)**	-

Appendix D – Contamination Laboratory Results

Unit 7-8 Hawarden Business Park
Manor Road (off Manor Lane)
Hawarden
Deeside
CH5 3US
Tel: (01244) 528700
Fax: (01244) 528701
email: hawardencustomerservices@alsglobal.com
Website: www.alsenvironmental.co.uk

WYG Geo-Environment
Newstead Court
Little Oak Drive
Nottingham
Nottinghamshire
NG15 0DR

Attention: David Howes

CERTIFICATE OF ANALYSIS

Date:	21 February 2018
Customer:	H_WYG_ANN
Sample Delivery Group (SDG):	180213-19
Your Reference:	A107448
Location:	Meggitt, Coventry
Report No:	445329

We received 51 samples on Tuesday February 13, 2018 and 35 of these samples were scheduled for analysis which was completed on Wednesday February 21, 2018. Accredited laboratory tests are defined within the report, but opinions, interpretations and on-site data expressed herein are outside the scope of ISO 17025 accreditation.

Should this report require incorporation into client reports, it must be used in its entirety and not simply with the data sections alone.

Chemical testing (unless subcontracted) performed at ALS Environmental Hawarden (Method codes TM) or ALS Environmental Aberdeen (Method codes S).

Approved By:

Sonia McWhan

Operations Manager

ALS Life Sciences Limited. Registered Office: Units 7 & 8 Hawarden Business Park, Manor Road, Hawarden, Deeside, CH5 3US. Registered in England and Wales No. 4057291.

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
17036566	NO ID			
17036516	WS1		0.30	09/02/2018
17036517	WS2		0.20	09/02/2018
17036518	WS2		1.10	09/02/2018
17036519	WS3		0.20	09/02/2018
17036520	WS10		0.20	09/02/2018
17036521	WS19		0.20	07/02/2018
17036522	WS19		0.50	07/02/2018
17036523	WS20		0.20	07/02/2018
17036524	WS20		0.80	07/02/2018
17036525	WS21		0.50	08/02/2018
17036526	WS22		0.20	09/02/2018
17036527	WS22		0.60	09/02/2018
17036528	WS26		0.30	07/02/2018
17036529	WS28		0.30	08/02/2018
17036530	WS28		0.90	08/02/2018
17036531	WS29		0.50	07/02/2018
17036532	WS29		1.00	07/02/2018
17036533	WS31		0.50	08/02/2018
17036534	WS32		0.40	08/02/2018
17036535	WS32		0.70	08/02/2018
17036536	WS33		0.40	06/02/2018
17036537	WS33		0.80	06/02/2018
17036538	WS34		0.30	07/02/2018
17036539	WS35		0.30	07/02/2018
17036540	WS35		1.20	07/02/2018
17036541	WS36		0.20	08/02/2018
17036565	WS36		0.50	08/02/2018
17036542	WS43		0.10	06/02/2018
17036544	WS43		0.90	06/02/2018
17036545	WS44		0.20	06/02/2018
17036546	WS45		0.15	06/02/2018
17036547	WS45		0.30	06/02/2018
17036548	WS46		0.10	06/02/2018
17036549	WS46		0.50	06/02/2018
17036550	WS47		0.10	07/02/2018
17036551	WS48		0.20	06/02/2018
17036552	WS49		0.30	06/02/2018
17036553	WS49		1.50	06/02/2018
17036554	WS49		2.50	06/02/2018
17036555	WS50		0.50	06/02/2018
17036556	WS50		1.00	06/02/2018
17036557	WS51		0.30	05/02/2018
17036558	WS51		0.90	05/02/2018
17036559	WS51		1.80	05/02/2018
17036560	WS51		3.50	05/02/2018
17036561	WS52		0.30	05/02/2018
17036562	WS53		0.60	06/02/2018
17036563	WS54		0.20	07/02/2018
17036564	WS54		1.00	07/02/2018
17040174	WS28_ASB		0.90	08/02/2018

Maximum Sample/Coolbox Temperature (°C) : **4.8**

ISO5667-3 Water quality - Sampling - Part3 -
During Transportation samples shall be stored in a cooling device capable of maintaining a temperature of (5±3)°C.

ALS have data which show that a cool box with 4 frozen icepacks is capable of maintaining pre-chilled samples at a temperature of (5±3)°C for a period of up to 24hrs.

Only received samples which have had analysis scheduled will be shown on the following pages.

Validated

CERTIFICATE OF ANALYSIS

SDG:	180213-19	**Client Reference:**	A107448	**Report Number:**	445329
Location:	Meggitt, Coventry	**Order Number:**	NOT/1305	**Superseded Report:**	

Results Legend

X Test

N No Determination Possible

Sample Types -

S - Soil/Solid
UNS - Unspecified Solid
GW - Ground Water
SW - Surface Water
LE - Land Leachate
PL - Prepared Leachate
PR - Process Water
SA - Saline Water
TE - Trade Effluent
TS - Treated Sewage
US - Untreated Sewage
RE - Recreational Water
DW - Drinking Water Non-regulatory
UNL - Unspecified Liquid
SL - Sludge
G - Gas
OTH - Other

Lab Sample No(s)			17036517			17036518			17036519			17036520			17036521			17036523			17036525
Customer Sample Reference			WS2			WS2			WS3			WS10			WS19			WS20			WS21
AGS Reference																					
Depth (m)			0.20			1.10			0.20			0.20			0.20			0.20			0.50
Container			1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB
Sample Type			S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
Ammoniacal Nitrogen	All	NDPs: 0 Tests: 21	X						X			X			X			X			X
Anions by Kone (soil)	All	NDPs: 0 Tests: 34		X			X			X			X			X			X		
Anions by Kone (w)	All	NDPs: 0 Tests: 21	X						X			X			X			X			X
Asbestos ID in Solid Samples	All	NDPs: 0 Tests: 19	X			X			X			X			X			X			X
Boron Water Soluble	All	NDPs: 0 Tests: 34		X			X			X			X			X			X		
CEN Readings	All	NDPs: 0 Tests: 21	X						X			X			X			X			X
Cyanide Comp/Free/Total/Thiocyanate	All	NDPs: 0 Tests: 54	X	X			X		X	X		X	X		X	X		X	X		X
Dissolved Metals by ICP-MS	All	NDPs: 0 Tests: 21	X						X			X			X			X			X
Hexavalent Chromium (s)	All	NDPs: 0 Tests: 34		X			X			X			X			X			X		
Mercury Dissolved	All	NDPs: 0 Tests: 21	X						X			X			X			X			X
Metals in solid samples by OES	All	NDPs: 0 Tests: 34		X			X			X			X			X			X		
PAH by GCMS	All	NDPs: 0 Tests: 34		X			X			X			X			X			X		
pH	All	NDPs: 0 Tests: 34		X			X			X			X			X			X		
pH Value of Filtered Water	All	NDPs: 0 Tests: 21	X						X			X			X			X			X
Phenols by HPLC (S)	All	NDPs: 0 Tests: 34		X			X			X			X			X			X		

17036534	WS32		0.40	60g VOC (ALE215)	S															
				250g Amber Jar (ALE210)	S		X			X		X		X		X	X	X		X
17036533	WS31		0.50	60g VOC (ALE215)	S															
				250g Amber Jar (ALE210)	S		X			X		X		X		X	X	X		X
				1kg TUB	S	X		X			X	X	X		X				X	
17036531	WS29		0.50	60g VOC (ALE215)	S															
				250g Amber Jar (ALE210)	S		X			X		X		X		X	X	X		X
				1kg TUB	S	X		X			X	X	X		X				X	
17036530	WS28		0.90	60g VOC (ALE215)	S															
				250g Amber Jar (ALE210)	S		X			X		X		X		X	X	X		X
17036529	WS28		0.30	60g VOC (ALE215)	S															
				250g Amber Jar (ALE210)	S		X			X		X		X		X	X	X		X
				1kg TUB	S	X		X			X	X	X		X				X	
17036528	WS26		0.30	60g VOC (ALE215)	S															
				250g Amber Jar (ALE210)	S		X			X		X		X		X	X	X		X
				1kg TUB	S	X		X			X	X	X		X				X	
17036526	WS22		0.20	60g VOC (ALE215)	S															
				250g Amber Jar (ALE210)	S		X			X		X		X		X	X	X		X
				1kg TUB	S	X		X	X		X	X	X		X				X	
17036525	WS21		0.50	60g VOC (ALE215)	S															
				250g Amber Jar (ALE210)	S		X			X		X		X		X	X	X		X

Validated

CERTIFICATE OF ANALYSIS

SDG:	180213-19	**Client Reference:**	A107448	**Report Number:**	445329
Location:	Meggitt, Coventry	**Order Number:**	NOT/1305	**Superseded Report:**	

Results Legend

X Test

N No Determination Possible

Sample Types -

S - Soil/Solid
UNS - Unspecified Solid
GW - Ground Water
SW - Surface Water
LE - Land Leachate
PL - Prepared Leachate
PR - Process Water
SA - Saline Water
TE - Trade Effluent
TS - Treated Sewage
US - Untreated Sewage
RE - Recreational Water
DW - Drinking Water Non-regulatory
UNL - Unspecified Liquid
SL - Sludge
G - Gas
OTH - Other

Lab Sample No(s)	17036517			17036518			17036519			17036520			17036521			17036523			17036525
Customer Sample Reference	WS2			WS2			WS3			WS10			WS19			WS20			WS21
AGS Reference																			
Depth (m)	0.20			1.10			0.20			0.20			0.20			0.20			0.50
Container	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB
Sample Type	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
Sample description / All / NDPs: 0 Tests: 34		X			X			X			X			X			X		
TPH c6-40 Value of soil / All / NDPs: 0 Tests: 34		X			X			X			X			X			X		
VOC MS (S) / All / NDPs: 0 Tests: 34			X			X			X			X			X			X	

17036534	WS32		0.40	60g VOC (ALE215)	S				X
				250g Amber Jar (ALE210)	S		X	X	
17036533	WS31		0.50	60g VOC (ALE215)	S				X
				250g Amber Jar (ALE210)	S		X	X	
				1kg TUB	S				
17036531	WS29		0.50	60g VOC (ALE215)	S				X
				250g Amber Jar (ALE210)	S		X	X	
				1kg TUB	S				
17036530	WS28		0.90	60g VOC (ALE215)	S				X
				250g Amber Jar (ALE210)	S		X	X	
17036529	WS28		0.30	60g VOC (ALE215)	S				X
				250g Amber Jar (ALE210)	S		X	X	
				1kg TUB	S				
17036528	WS26		0.30	60g VOC (ALE215)	S				X
				250g Amber Jar (ALE210)	S		X	X	
				1kg TUB	S				
17036526	WS22		0.20	60g VOC (ALE215)	S				X
				250g Amber Jar (ALE210)	S		X	X	
				1kg TUB	S				
17036525	WS21		0.50	60g VOC (ALE215)	S				X
				250g Amber Jar (ALE210)	S		X	X	

Validated

CERTIFICATE OF ANALYSIS

SDG:	180213-19	**Client Reference:**	A107448	**Report Number:**	445329
Location:	Meggitt, Coventry	**Order Number:**	NOT/1305	**Superseded Report:**	

Results Legend

X Test

N No Determination Possible

Sample Types -

S - Soil/Solid
UNS - Unspecified Solid
GW - Ground Water
SW - Surface Water
LE - Land Leachate
PL - Prepared Leachate
PR - Process Water
SA - Saline Water
TE - Trade Effluent
TS - Treated Sewage
US - Untreated Sewage
RE - Recreational Water
DW - Drinking Water Non-regulatory
UNL - Unspecified Liquid
SL - Sludge
G - Gas
OTH - Other

Lab Sample No(s)					17036536				17036538				17036539				17036541				17036565
Customer Sample Reference					WS33				WS34				WS35				WS36				WS36
AGS Reference																					
Depth (m)					0.40				0.30				0.30				0.20				0.50
Container					1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)
Sample Type					S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
Ammoniacal Nitrogen	All	NDPs: 0 Tests: 21			X						X			X							
Anions by Kone (soil)	All	NDPs: 0 Tests: 34				X			X			X			X		X			X	
Anions by Kone (w)	All	NDPs: 0 Tests: 21			X						X			X							
Asbestos ID in Solid Samples	All	NDPs: 0 Tests: 19			X			X						X					X		
Boron Water Soluble	All	NDPs: 0 Tests: 34				X			X			X			X		X			X	
CEN Readings	All	NDPs: 0 Tests: 21			X						X			X							
Cyanide Comp/Free/Total/Thiocyanate	All	NDPs: 0 Tests: 54			X	X			X		X	X		X	X		X			X	
Dissolved Metals by ICP-MS	All	NDPs: 0 Tests: 21			X						X			X							
Hexavalent Chromium (s)	All	NDPs: 0 Tests: 34				X			X			X			X		X			X	
Mercury Dissolved	All	NDPs: 0 Tests: 21			X						X			X							
Metals in solid samples by OES	All	NDPs: 0 Tests: 34				X			X			X			X		X			X	
PAH by GCMS	All	NDPs: 0 Tests: 34				X			X			X			X		X			X	
pH	All	NDPs: 0 Tests: 34				X			X			X			X		X			X	
pH Value of Filtered Water	All	NDPs: 0 Tests: 21			X						X			X							
Phenols by HPLC (S)	All	NDPs: 0 Tests: 34				X			X			X			X		X			X	

Lab Sample No(s)					17036542				17036545												
Customer Sample Reference					WS43				WS44												
AGS Reference																					
Depth (m)					0.10				0.20												
Container					1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)												
Sample Type					S	S	S	S	S												
Ammoniacal Nitrogen	All	NDPs: 0 Tests: 21						X													
Anions by Kone (soil)	All	NDPs: 0 Tests: 34				X			X												
Anions by Kone (w)	All	NDPs: 0 Tests: 21						X													
Asbestos ID in Solid Samples	All	NDPs: 0 Tests: 19			X			X													
Boron Water Soluble	All	NDPs: 0 Tests: 34				X			X												
CEN Readings	All	NDPs: 0 Tests: 21						X													
Cyanide Comp/Free/Total/Thiocyanate	All	NDPs: 0 Tests: 54				X		X	X												
Dissolved Metals by ICP-MS	All	NDPs: 0 Tests: 21						X													
Hexavalent Chromium (s)	All	NDPs: 0 Tests: 34				X			X												
Mercury Dissolved	All	NDPs: 0 Tests: 21						X													
Metals in solid samples by OES	All	NDPs: 0 Tests: 34				X			X												
PAH by GCMS	All	NDPs: 0 Tests: 34				X			X												
pH	All	NDPs: 0 Tests: 34				X			X												
pH Value of Filtered Water	All	NDPs: 0 Tests: 21						X													
Phenols by HPLC (S)	All	NDPs: 0 Tests: 34				X			X												

17036557	WS51		0.30	60g VOC (ALE215)	S															
				250g Amber Jar (ALE210)	S		X			X		X		X		X	X	X		X
				1kg TUB	S				X											
17036555	WS50		0.50	60g VOC (ALE215)	S															
				250g Amber Jar (ALE210)	S		X			X		X		X		X	X	X		X
				1kg TUB	S	X		X			X	X	X		X				X	
17036554	WS49		2.50	60g VOC (ALE215)	S															
				250g Amber Jar (ALE210)	S		X			X		X		X		X	X	X		X
17036553	WS49		1.50	60g VOC (ALE215)	S															
				250g Amber Jar (ALE210)	S		X			X		X		X		X	X	X		X
17036551	WS48		0.20	60g VOC (ALE215)	S															
				250g Amber Jar (ALE210)	S		X			X		X		X		X	X	X		X
				1kg TUB	S				X											
17036550	WS47		0.10	60g VOC (ALE215)	S															
				250g Amber Jar (ALE210)	S		X			X		X		X		X	X	X		X
				1kg TUB	S	X		X	X		X	X	X		X				X	
17036549	WS46		0.50	60g VOC (ALE215)	S															
				250g Amber Jar (ALE210)	S		X			X		X		X		X	X	X		X
17036546	WS45		0.15	60g VOC (ALE215)	S															
				250g Amber Jar (ALE210)	S		X			X		X		X		X	X	X		X
				1kg TUB	S	X		X	X		X	X	X		X				X	

Validated

CERTIFICATE OF ANALYSIS

SDG:	180213-19	**Client Reference:**	A107448	**Report Number:**	445329
Location:	Meggitt, Coventry	**Order Number:**	NOT/1305	**Superseded Report:**	

Results Legend

X Test

N No Determination Possible

Sample Types -

S - Soil/Solid
UNS - Unspecified Solid
GW - Ground Water
SW - Surface Water
LE - Land Leachate
PL - Prepared Leachate
PR - Process Water
SA - Saline Water
TE - Trade Effluent
TS - Treated Sewage
US - Untreated Sewage
RE - Recreational Water
DW - Drinking Water Non-regulatory
UNL - Unspecified Liquid
SL - Sludge
G - Gas
OTH - Other

Lab Sample No(s)	17036536			17036538			17036539			17036541			17036565			17036542			17036545	
Customer Sample Reference	WS33			WS34			WS35			WS36			WS36			WS43			WS44	
AGS Reference																				
Depth (m)	0.40			0.30			0.30			0.20			0.50			0.10			0.20	
Container	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)
Sample Type	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
Sample description — All — NDPs: 0 Tests: 34		X			X			X			X		X			X			X	
TPH c6-40 Value of soil — All — NDPs: 0 Tests: 34		X			X			X			X		X			X			X	
VOC MS (S) — All — NDPs: 0 Tests: 34			X			X			X			X		X			X	X		

17036557	WS51		0.30	60g VOC (ALE215)	S				X
				250g Amber Jar (ALE210)	S		X	X	
				1kg TUB	S				
17036555	WS50		0.50	60g VOC (ALE215)	S				X
				250g Amber Jar (ALE210)	S		X	X	
				1kg TUB	S				
17036554	WS49		2.50	60g VOC (ALE215)	S				X
				250g Amber Jar (ALE210)	S		X	X	
17036553	WS49		1.50	60g VOC (ALE215)	S				X
				250g Amber Jar (ALE210)	S		X	X	
17036551	WS48		0.20	60g VOC (ALE215)	S				X
				250g Amber Jar (ALE210)	S		X	X	
				1kg TUB	S				
17036550	WS47		0.10	60g VOC (ALE215)	S				X
				250g Amber Jar (ALE210)	S		X	X	
				1kg TUB	S				
17036549	WS46		0.50	60g VOC (ALE215)	S				X
				250g Amber Jar (ALE210)	S		X	X	
17036546	WS45		0.15	60g VOC (ALE215)	S				X
				250g Amber Jar (ALE210)	S		X	X	
				1kg TUB	S				

Validated

CERTIFICATE OF ANALYSIS

SDG:	180213-19	**Client Reference:**	A107448	**Report Number:**	445329
Location:	Meggitt, Coventry	**Order Number:**	NOT/1305	**Superseded Report:**	

Results Legend

X Test

N No Determination Possible

Sample Types -

S - Soil/Solid
UNS - Unspecified Solid
GW - Ground Water
SW - Surface Water
LE - Land Leachate
PL - Prepared Leachate
PR - Process Water
SA - Saline Water
TE - Trade Effluent
TS - Treated Sewage
US - Untreated Sewage
RE - Recreational Water
DW - Drinking Water Non-regulatory
UNL - Unspecified Liquid
SL - Sludge
G - Gas
OTH - Other

Lab Sample No(s)			17036559		17036560			17036561		17036562		17036563		17040174
Customer Sample Reference			WS51		WS51			WS52		WS53		WS54		WS28_ASB
AGS Reference														
Depth (m)			1.80		3.50			0.30		0.60		0.20		0.90
Container			250g Amber Jar (ALE210)	60g VOC (ALE215)	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	250g TUB
Sample Type			S	S	S	S	S	S	S	S	S	S	S	S
Ammoniacal Nitrogen	All	NDPs: 0 Tests: 21					X			X	X			
Anions by Kone (soil)	All	NDPs: 0 Tests: 34	X		X			X		X		X		
Anions by Kone (w)	All	NDPs: 0 Tests: 21					X			X	X			
Asbestos ID in Solid Samples	All	NDPs: 0 Tests: 19					X				X			
Asbestos Identification	All	NDPs: 0 Tests: 1												X
Boron Water Soluble	All	NDPs: 0 Tests: 34	X		X			X		X		X		
CEN Readings	All	NDPs: 0 Tests: 21					X			X	X			
Cyanide Comp/Free/Total/Thiocyanate	All	NDPs: 0 Tests: 54	X		X		X	X		X	X	X		
Dissolved Metals by ICP-MS	All	NDPs: 0 Tests: 21					X			X	X			
Hexavalent Chromium (s)	All	NDPs: 0 Tests: 34	X		X			X		X		X		
Mercury Dissolved	All	NDPs: 0 Tests: 21					X			X	X			
Metals in solid samples by OES	All	NDPs: 0 Tests: 34	X		X			X		X		X		
PAH by GCMS	All	NDPs: 0 Tests: 34	X		X			X		X		X		
pH	All	NDPs: 0 Tests: 34	X		X			X		X		X		
pH Value of Filtered Water	All	NDPs: 0 Tests: 21					X			X	X			

Validated

CERTIFICATE OF ANALYSIS

SDG:	180213-19	**Client Reference:**	A107448	**Report Number:**	445329
Location:	Meggitt, Coventry	**Order Number:**	NOT/1305	**Superseded Report:**	

Results Legend

X Test

N No Determination Possible

Sample Types -

S - Soil/Solid
UNS - Unspecified Solid
GW - Ground Water
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PL - Prepared Leachate
PR - Process Water
SA - Saline Water
TE - Trade Effluent
TS - Treated Sewage
US - Untreated Sewage
RE - Recreational Water
DW - Drinking Water Non-regulatory
UNL - Unspecified Liquid
SL - Sludge
G - Gas
OTH - Other

Lab Sample No(s)			17036559		17036560			17036561		17036562		17036563		17040174
Customer Sample Reference			WS51		WS51			WS52		WS53		WS54		WS28_ASB
AGS Reference														
Depth (m)			1.80		3.50			0.30		0.60		0.20		0.90
Container			250g Amber Jar (ALE210)	60g VOC (ALE215)	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	250g TUB
Sample Type			S	S	S	S	S	S	S	S	S	S	S	S
Phenols by HPLC (S)	All	NDPs: 0 Tests: 34	X		X			X		X		X		
Sample description	All	NDPs: 0 Tests: 34	X		X			X		X		X		
TPH c6-40 Value of soil	All	NDPs: 0 Tests: 34	X		X			X		X		X		
VOC MS (S)	All	NDPs: 0 Tests: 34		X		X			X	X			X	

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Sample Descriptions

Grain Sizes

very fine	<0.063mm	fine	0.063mm - 0.1mm	medium	0.1mm - 2mm	coarse	2mm - 10mm	very coarse	>10mm

Lab Sample No(s)	Customer Sample Ref.	Depth (m)	Colour	Description	Inclusions	Inclusions 2
17036517	WS2	0.20	Dark Brown	Sandy Loam	Stones	Brick
17036518	WS2	1.10	Black	Sand	Stones	Brick
17036519	WS3	0.20	Black	Sand	Stones	Brick
17036520	WS10	0.20	Black	Sand	Stones	Brick
17036521	WS19	0.20	Black	Sand	Stones	Brick
17036523	WS20	0.20	Black	Sand	Stones	None
17036525	WS21	0.50	Black	Sand	Stones	Brick
17036526	WS22	0.20	Black	Sand	Stones	Vegetation
17036528	WS26	0.30	Dark Brown	Sandy Clay Loam	Stones	Brick
17036529	WS28	0.30	Dark Brown	Loamy Sand	Stones	Brick
17036530	WS28	0.90	Dark Brown	Sandy Clay Loam	Stones	Brick
17036531	WS29	0.50	Dark Brown	Sandy Loam	Stones	None
17036533	WS31	0.50	Dark Brown	Sandy Loam	Stones	Brick
17036534	WS32	0.40	Black	Stone/Soil	Stones	Crushed Brick
17036536	WS33	0.40	Dark Brown	Sandy Loam	Stones	None
17036538	WS34	0.30	Light Brown	Sand	Stones	Crushed Brick
17036539	WS35	0.30	Light Brown	Stone/Soil	Stones	None
17036541	WS36	0.20	Dark Brown	Sandy Loam	Stones	None
17036565	WS36	0.50	Dark Brown	Sandy Loam	Brick	Stones
17036542	WS43	0.10	Dark Brown	Sand	Stones	Brick
17036545	WS44	0.20	Dark Brown	Loamy Sand	Stones	Brick
17036546	WS45	0.15	Dark Brown	Loamy Sand	Stones	None
17036549	WS46	0.50	Black	Sand	Stones	Vegetation
17036550	WS47	0.10	Black	Sand	Stones	Crushed Brick
17036551	WS48	0.20	Black	Sand	Stones	Crushed Brick
17036553	WS49	1.50	Red	Silty Clay Loam	None	None
17036554	WS49	2.50	Red	Silty Clay Loam	Stones	None
17036555	WS50	0.50	Dark Brown	Sand	Stones	Crushed Brick
17036557	WS51	0.30	Dark Brown	Loamy Sand	Stones	Vegetation
17036559	WS51	1.80	Red	Silty Clay Loam	None	None
17036560	WS51	3.50	Red	Silty Clay Loam	None	None
17036561	WS52	0.30	Dark Brown	Sand	Stones	Crushed Brick
17036562	WS53	0.60	Red	Silt Loam	Stones	None
17036563	WS54	0.20	Dark Brown	Sand	Stones	Crushed Brick

These descriptions are only intended to act as a cross check if sample identities are questioned, and to provide a log of sample matrices with respect to MCERTS validation. They are not intended as full geological descriptions.

We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials - whether these are derived from naturally ocurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample.

Other coarse granular materials such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.

Validated

CERTIFICATE OF ANALYSIS

SDG:	180213-19	**Client Reference:**	A107448	**Report Number:**	445329
Location:	Meggitt, Coventry	**Order Number:**	NOT/1305	**Superseded Report:**	

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-5&+§@	Sample deviation (see appendix)

Customer Sample Ref.			WS2	WS2	WS3	WS10	WS19	WS20
Depth (m)			0.20	1.10	0.20	0.20	0.20	0.20
Sample Type			Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
Date Sampled			09/02/2018	09/02/2018	09/02/2018	09/02/2018	07/02/2018	07/02/2018
Sample Time			.	.	.	.	.	.
Date Received			13/02/2018	13/02/2018	13/02/2018	13/02/2018	13/02/2018	13/02/2018
SDG Ref			180213-19	180213-19	180213-19	180213-19	180213-19	180213-19
Lab Sample No.(s)			17036517	17036518	17036519	17036520	17036521	17036523
AGS Reference								
Component	**LOD/Units**	**Method**						
Moisture Content Ratio (% of as received sample)	%	PM024	21	21	14	22	15	7.6
Phenol	<0.01 mg/kg	TM062 (S)	<0.01 M	<0.01 M	<0.01 M	<0.01 M	<0.01 M	<0.1 M
Cresols	<0.01 mg/kg	TM062 (S)	<0.01 M	<0.01 M	<0.01 M	<0.01 M	<0.01 M	<0.1 M
Xylenols	<0.015 mg/kg	TM062 (S)	<0.015 M	<0.015 M	<0.015 M	<0.015 M	<0.015 M	<0.15 M
Phenols, Total Detected monohydric	<0.035 mg/kg	TM062 (S)	<0.035 M	<0.035 M	<0.035 M	<0.035 M	<0.035 M	<0.035 M
pH	1 pH Units	TM133	7.57 M	7.89 M	8.2 M	9.35 M	8.17 M	10.2 M
Chromium, Hexavalent	<0.6 mg/kg	TM151	<0.6 #	<0.6 #	<0.6 #	<0.6 #	<0.6 #	<0.6 #
Cyanide, Free	<1 mg/kg	TM153	<1 M	<1 M	<1 M	<1 M	<1 M	<1 M
TPH >C6-C8	<10 mg/kg	TM154	<10	<10	<10	<10	<10	<10
TPH >C8-C10	<10 mg/kg	TM154	<10	<10	<10	<10	<10	<10
TPH >C10-C12	<10 mg/kg	TM154	<10	<10	<10	<10	<10	<10
TPH >C12-C16	<10 mg/kg	TM154	15.4	<10	<10	<10	<10	28.1
TPH >C16-C21	<10 mg/kg	TM154	69.5	<10	<10	<10	<10	50.7
TPH >C21-C40	<10 mg/kg	TM154	243	<10	30	134	86.8	73.4
TPH >C6-C40	<10 mg/kg	TM154	328	<10	38.8	140	101	165
TPH >C8-40	<10 mg/kg	TM154	315 #	<10 #	38.1 #	134 #	98.5 #	164 #
Arsenic	<0.6 mg/kg	TM181	35.9 M	14.2 M	5.14 M	16.1 M	28.1 M	3.29 M
Cadmium	<0.02 mg/kg	TM181	0.493 M	1.77 M	0.233 M	0.772 M	0.195 M	0.356 M
Chromium	<0.9 mg/kg	TM181	10.6 M	7.71 M	7.52 M	4.86 M	38 M	3.64 M
Copper	<1.4 mg/kg	TM181	43.4 M	115 M	37.3 M	79.9 M	586 M	10.8 M
Lead	<0.7 mg/kg	TM181	46.1 M	26.9 M	13.5 M	78.3 M	78.8 M	5.52 M
Mercury	<0.14 mg/kg	TM181	<0.14 M	<0.14 M	<0.14 M	<0.14 M	<0.14 M	<0.14 M
Nickel	<0.2 mg/kg	TM181	22.2 M	52.2 M	17.2 M	41.6 M	96.8 M	8 M
Selenium	<1 mg/kg	TM181	2.14 #	<1 #	<1 #	<1 #	<1 #	<1 #
Zinc	<1.9 mg/kg	TM181	95.8 M	163 M	36 M	240 M	451 M	15.3 M
Boron, water soluble	<1 mg/kg	TM222	1.65 M	1.39 M	<1 M	2.62 M	<1 M	<1 M
Water Soluble Sulphate as SO4 2:1 Extract	<0.004 g/l	TM243	0.149 M	0.0403 M	0.0094 M	0.004 M	0.0791 M	0.0652 M

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Validated

CERTIFICATE OF ANALYSIS

SDG:	180213-19	**Client Reference:**	A107448	**Report Number:**	445329
Location:	Meggitt, Coventry	**Order Number:**	NOT/1305	**Superseded Report:**	

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-5&+§@	Sample deviation (see appendix)

Customer Sample Ref.			WS21	WS22	WS26	WS28	WS28	WS29
Depth (m)			0.50	0.20	0.30	0.30	0.90	0.50
Sample Type			Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
Date Sampled			08/02/2018	09/02/2018	07/02/2018	08/02/2018	08/02/2018	07/02/2018
Sample Time			.	.	.	.	.	.
Date Received			13/02/2018	13/02/2018	13/02/2018	13/02/2018	13/02/2018	13/02/2018
SDG Ref			180213-19	180213-19	180213-19	180213-19	180213-19	180213-19
Lab Sample No.(s)			17036525	17036526	17036528	17036529	17036530	17036531
AGS Reference								
Component	**LOD/Units**	**Method**						
Moisture Content Ratio (% of as received sample)	%	PM024	21	16	14	13	13	7
Phenol	<0.01 mg/kg	TM062 (S)	<0.01 M	<0.01 M	<0.01 M	<0.01 M	<0.01 M	<0.01 M
Cresols	<0.01 mg/kg	TM062 (S)	<0.01 M	0.0595 M	<0.01 M	<0.01 M	<0.01 M	<0.01 M
Xylenols	<0.015 mg/kg	TM062 (S)	<0.015 M	<0.015 M	<0.015 M	<0.015 M	<0.015 M	<0.015 M
Phenols, Total Detected monohydric	<0.035 mg/kg	TM062 (S)	<0.035 M	0.0595 M	<0.035 M	<0.035 M	<0.035 M	<0.035 M
pH	1 pH Units	TM133	9.09 M	8.15 M	9.44 M	8.9 M	8.62 M	10.1 M
Chromium, Hexavalent	<0.6 mg/kg	TM151	<0.6 #	<0.6 #	<0.6 #	<0.6 #	<0.6 #	<0.6 #
Cyanide, Free	<1 mg/kg	TM153	<1 M	<1 M	<1 M	<1 M	<1 M	<1 M
TPH >C6-C8	<10 mg/kg	TM154	<10	<10	<10	<10	<10	<10
TPH >C8-C10	<10 mg/kg	TM154	<10	<10	<10	<10	<10	<10
TPH >C10-C12	<10 mg/kg	TM154	<10	<10	<10	<10	<10	23.3
TPH >C12-C16	<10 mg/kg	TM154	<10	174	<10	<10	<10	<10
TPH >C16-C21	<10 mg/kg	TM154	50.8	1410	15.2	51.7	12.5	<10
TPH >C21-C40	<10 mg/kg	TM154	356	3470	462	834	151	98.6
TPH >C6-C40	<10 mg/kg	TM154	408	5060	477	888	164	133
TPH >C8-40	<10 mg/kg	TM154	388 #	4930 #	465 #	873 #	160 #	132 #
Arsenic	<0.6 mg/kg	TM181	10.3 M	12.1 M	60.4 M	24.2 M	12.4 M	10.5 M
Cadmium	<0.02 mg/kg	TM181	0.339 M	0.674 M	1.12 M	0.474 M	1.48 M	0.608 M
Chromium	<0.9 mg/kg	TM181	13.7 M	11 M	20.4 M	7.31 M	22.3 M	13.6 M
Copper	<1.4 mg/kg	TM181	47.6 M	82.1 M	221 M	134 M	457 M	240 M
Lead	<0.7 mg/kg	TM181	63.2 M	48.8 M	60.6 M	30.5 M	93.2 M	165 M
Mercury	<0.14 mg/kg	TM181	<0.14 M	<0.14 M	0.241 M	0.143 M	0.244 M	<0.14 M
Nickel	<0.2 mg/kg	TM181	26.8 M	63 M	41.1 M	19.2 M	46 M	26.3 M
Selenium	<1 mg/kg	TM181	<1 #	3.96 #	2.43 #	<1 #	<1 #	<1 #
Zinc	<1.9 mg/kg	TM181	83.4 M	154 M	296 M	101 M	450 M	168 M
Boron, water soluble	<1 mg/kg	TM222	1.53 M	2.79 M	<1 M	<1 M	<1 M	1.19 M
Water Soluble Sulphate as SO4 2:1 Extract	<0.004 g/l	TM243	0.0384 M	0.0838 M	0.121 M	0.0204 M	0.125 M	0.249 M

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Validated

CERTIFICATE OF ANALYSIS

SDG:	180213-19	**Client Reference:**	A107448	**Report Number:**	445329
Location:	Meggitt, Coventry	**Order Number:**	NOT/1305	**Superseded Report:**	

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-5&+§@	Sample deviation (see appendix)

Customer Sample Ref.			WS31	WS32	WS33	WS34	WS35	WS36
Depth (m)			0.50	0.40	0.40	0.30	0.30	0.20
Sample Type			Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
Date Sampled			08/02/2018	08/02/2018	06/02/2018	07/02/2018	07/02/2018	08/02/2018
Sample Time			.	.	.	.	.	.
Date Received			13/02/2018	13/02/2018	13/02/2018	13/02/2018	13/02/2018	13/02/2018
SDG Ref			180213-19	180213-19	180213-19	180213-19	180213-19	180213-19
Lab Sample No.(s)			17036533	17036534	17036536	17036538	17036539	17036541
AGS Reference								
Component	**LOD/Units**	**Method**						
Moisture Content Ratio (% of as received sample)	%	PM024	15	23	15	5.8	6	9.1
Phenol	<0.01 mg/kg	TM062 (S)	<0.01 M	<0.01 M	<0.01 M	<0.01 M	<0.01 #	<0.01 M
Cresols	<0.01 mg/kg	TM062 (S)	<0.01 M	<0.01 M	0.0472 M	0.0106 M	<0.01 #	<0.01 M
Xylenols	<0.015 mg/kg	TM062 (S)	<0.015 M	<0.015 M	0.0236 M	<0.015 M	<0.015 #	<0.015 M
Phenols, Total Detected monohydric	<0.035 mg/kg	TM062 (S)	<0.035 M	<0.035 M	0.0708 M	<0.035 M	<0.035 #	<0.035 M
pH	1 pH Units	TM133	8.4 M	8.38 M	6.38 M	9.43 M	9.87 #	4.71 M
Chromium, Hexavalent	<0.6 mg/kg	TM151	<0.6 #	<0.6 #	<0.6 #	<0.6 #	<0.6 #	<0.6 #
Cyanide, Free	<1 mg/kg	TM153	<1 M	<1 M	<1 M	<1 M	<1 #	<1 M
TPH >C6-C8	<10 mg/kg	TM154	<10	<10	<10	<10	<10	<10
TPH >C8-C10	<10 mg/kg	TM154	<10	<10	<10	<10	<10	<10
TPH >C10-C12	<10 mg/kg	TM154	<10	<10	<10	26.4	<10	<10
TPH >C12-C16	<10 mg/kg	TM154	11.9	20.9	<10	16.1	<10	<10
TPH >C16-C21	<10 mg/kg	TM154	86.7	395	25.8	212	<10	<10
TPH >C21-C40	<10 mg/kg	TM154	434	2030	291	1520	27.4	14.6
TPH >C6-C40	<10 mg/kg	TM154	533	2450	323	1780	28.7	19
TPH >C8-40	<10 mg/kg	TM154	519 #	2310 #	315 #	1770 #	28.7 #	18.8 #
Arsenic	<0.6 mg/kg	TM181	21.7 M	20.7 M	37.2 M	2.59 M	1.89 #	25.6 M
Cadmium	<0.02 mg/kg	TM181	1.15 M	1.31 M	0.631 M	0.216 M	0.231 #	0.43 M
Chromium	<0.9 mg/kg	TM181	17 M	13.2 M	19.6 M	3.48 M	5.16 #	19.9 M
Copper	<1.4 mg/kg	TM181	70.6 M	97.2 M	147 M	34.5 M	33 #	88.5 M
Lead	<0.7 mg/kg	TM181	191 M	190 M	1640 M	21.5 M	13.9 #	49.8 M
Mercury	<0.14 mg/kg	TM181	<0.14 M	0.168 M	<0.14 M	<0.14 M	<0.14 #	<0.14 M
Nickel	<0.2 mg/kg	TM181	34 M	71.2 M	40.3 M	11.2 M	14.5 #	42.4 M
Selenium	<1 mg/kg	TM181	<1 #	2.04 #	2.58 #	<1 #	<1 #	2.48 #
Zinc	<1.9 mg/kg	TM181	256 M	154 M	535 M	65.7 M	66 #	97.3 M
Boron, water soluble	<1 mg/kg	TM222	1.27 M	<1 M	4 M	<1 M	<1 #	<1 M
Water Soluble Sulphate as SO4 2:1 Extract	<0.004 g/l	TM243	0.0728 M	0.0722 M	0.0064 M	0.0285 M	0.0121 #	1.95 M

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CERTIFICATE OF ANALYSIS

SDG:	180213-19	**Client Reference:**	A107448	**Report Number:**	445329
Location:	Meggitt, Coventry	**Order Number:**	NOT/1305	**Superseded Report:**	

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-5&+§@	Sample deviation (see appendix)

Customer Sample Ref.			WS36	WS43	WS44	WS45	WS46	WS47
Depth (m)			0.50	0.10	0.20	0.15	0.50	0.10
Sample Type			Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
Date Sampled			08/02/2018	06/02/2018	06/02/2018	06/02/2018	06/02/2018	07/02/2018
Sample Time			.	.	.	.	.	.
Date Received			13/02/2018	13/02/2018	13/02/2018	13/02/2018	13/02/2018	13/02/2018
SDG Ref			180213-19	180213-19	180213-19	180213-19	180213-19	180213-19
Lab Sample No.(s)			17036565	17036542	17036545	17036546	17036549	17036550
AGS Reference								
Component	**LOD/Units**	**Method**						
Moisture Content Ratio (% of as received sample)	%	PM024	11	10	13	5.7	22	14
Phenol	<0.01 mg/kg	TM062 (S)	<0.01 M	<0.01 M	0.057 M	<0.01 M	<0.01 M	<0.01 M
Cresols	<0.01 mg/kg	TM062 (S)	<0.01 M	<0.01 M	0.0228 M	0.0212 M	<0.01 M	<0.01 M
Xylenols	<0.015 mg/kg	TM062 (S)	<0.015 M	<0.015 M	0.0456 M	0.0954 M	<0.015 M	<0.015 M
Phenols, Total Detected monohydric	<0.035 mg/kg	TM062 (S)	<0.035 M	<0.035 M	0.125 M	0.117 M	<0.035 M	<0.035 M
pH	1 pH Units	TM133	7.75 M	8.58 M	11.8 M	8.23 M	8.52 M	7.59 M
Chromium, Hexavalent	<0.6 mg/kg	TM151	<0.6 #	<0.6 #	<0.6 #	<0.6 #	<0.6 #	<0.6 #
Cyanide, Free	<1 mg/kg	TM153	<1 M	<1 M	<1 M	<1 M	<1 M	<1 M
TPH >C6-C8	<10 mg/kg	TM154	<10	<10	<10	<10	<10	<10
TPH >C8-C10	<10 mg/kg	TM154	<10	<10	<10	<10	<10	<10
TPH >C10-C12	<10 mg/kg	TM154	12.9	<10	<10	<10	<10	<10
TPH >C12-C16	<10 mg/kg	TM154	104	<10	15.3	14.9	50.8	12.9
TPH >C16-C21	<10 mg/kg	TM154	162	107	94.1	238	88.8	117
TPH >C21-C40	<10 mg/kg	TM154	189	3890	657	1100	398	749
TPH >C6-C40	<10 mg/kg	TM154	469	4000	769	1360	549	880
TPH >C8-40	<10 mg/kg	TM154	465 #	3960 #	762 #	1350 #	523 #	865 #
Arsenic	<0.6 mg/kg	TM181	14.4 M	11.9 M	9.33 M	4.03 M	13.2 M	20.2 M
Cadmium	<0.02 mg/kg	TM181	0.729 M	0.47 M	0.266 M	0.887 M	1.63 M	3.46 M
Chromium	<0.9 mg/kg	TM181	2.31 M	25.6 M	9.48 M	51.2 M	13 M	54.9 M
Copper	<1.4 mg/kg	TM181	37 M	29.5 M	54.5 M	69.3 M	106 M	1580 M
Lead	<0.7 mg/kg	TM181	37.1 M	22 M	26.2 M	12.7 M	49 M	264 M
Mercury	<0.14 mg/kg	TM181	<0.14 M	<0.14 M	<0.14 M	<0.14 M	<0.14 M	<0.14 M
Nickel	<0.2 mg/kg	TM181	21.7 M	22.2 M	11.8 M	65.9 M	51.5 M	74.3 M
Selenium	<1 mg/kg	TM181	2.26 #	<1 #	<1 #	<1 #	1.92 #	<1 #
Zinc	<1.9 mg/kg	TM181	75.7 M	208 M	74.1 M	118 M	124 M	1910 M
Boron, water soluble	<1 mg/kg	TM222	1.26 M	<1 M	1.15 M	<1 M	5.7 M	<1 M
Water Soluble Sulphate as SO4 2:1 Extract	<0.004 g/l	TM243	1.95 M	1.5 M	0.459 M	0.0093 M	0.0497 M	0.0169 M

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CERTIFICATE OF ANALYSIS

SDG:	180213-19	**Client Reference:**	A107448	**Report Number:**	445329
Location:	Meggitt, Coventry	**Order Number:**	NOT/1305	**Superseded Report:**	

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-5&+§@	Sample deviation (see appendix)

Customer Sample Ref.			WS48	WS49	WS49	WS50	WS51	WS51
Depth (m)			0.20	1.50	2.50	0.50	0.30	1.80
Sample Type			Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
Date Sampled			06/02/2018	06/02/2018	06/02/2018	06/02/2018	05/02/2018	05/02/2018
Sample Time			.	.	.	.	.	.
Date Received			13/02/2018	13/02/2018	13/02/2018	13/02/2018	13/02/2018	13/02/2018
SDG Ref			180213-19	180213-19	180213-19	180213-19	180213-19	180213-19
Lab Sample No.(s)			17036551	17036553	17036554	17036555	17036557	17036559
AGS Reference								
Component	**LOD/Units**	**Method**						
Moisture Content Ratio (% of as received sample)	%	PM024	11	12	7.6	8.6	12	14
Phenol	<0.01 mg/kg	TM062 (S)	<0.01 M	<0.01 M	<0.01 M	<0.01 M	<0.01 M	<0.01 M
Cresols	<0.01 mg/kg	TM062 (S)	<0.01 M	<0.01 M	<0.01 M	<0.01 M	<0.01 M	<0.01 M
Xylenols	<0.015 mg/kg	TM062 (S)	<0.015 M	<0.015 M	<0.015 M	<0.015 M	<0.015 M	<0.015 M
Phenols, Total Detected monohydric	<0.035 mg/kg	TM062 (S)	<0.035 M	<0.035 M	<0.035 M	<0.035 M	<0.035 M	<0.035 M
pH	1 pH Units	TM133	10.9 M	8.69 M	9.01 M	10.6 M	11.5 M	8.03 M
Chromium, Hexavalent	<0.6 mg/kg	TM151	<0.6 #	<0.6 #	<0.6 #	<0.6 #	<0.6 #	<0.6 #
Cyanide, Free	<1 mg/kg	TM153	<1 M	<1 M	<1 M	<1 M	<1 M	<1 M
TPH >C6-C8	<10 mg/kg	TM154	<10	<10	<10	<10	<10	<10
TPH >C8-C10	<10 mg/kg	TM154	<10	<10	134	<10	<10	51
TPH >C10-C12	<10 mg/kg	TM154	<10	<10	84	<10	<10	426
TPH >C12-C16	<10 mg/kg	TM154	40.1	<10	<10	12.7	44.4	1820
TPH >C16-C21	<10 mg/kg	TM154	130	<10	<10	111	162	373
TPH >C21-C40	<10 mg/kg	TM154	1310	17.9	45.5	951	1020	400
TPH >C6-C40	<10 mg/kg	TM154	1490	17.9	268	1070	1230	3070
TPH >C8-40	<10 mg/kg	TM154	1470 #	17.6 #	267 #	1070 #	1220 #	3020 #
Arsenic	<0.6 mg/kg	TM181	8.61 M	4.88 M	3.94 M	7.29 M	6.59 M	5.59 M
Cadmium	<0.02 mg/kg	TM181	1.18 M	0.214 M	0.223 M	0.329 M	0.326 M	0.141 M
Chromium	<0.9 mg/kg	TM181	404 M	16.1 M	11.2 M	14.3 M	19.1 M	23.1 M
Copper	<1.4 mg/kg	TM181	38.8 M	14.1 M	15.6 M	43 M	36.6 M	17.8 M
Lead	<0.7 mg/kg	TM181	27.4 M	16 M	7.58 M	112 M	83.3 M	10.5 M
Mercury	<0.14 mg/kg	TM181	<0.14 M	<0.14 M	<0.14 M	<0.14 M	0.142 M	<0.14 M
Nickel	<0.2 mg/kg	TM181	18.3 M	25.8 M	19.8 M	19.4 M	17.9 M	32.9 M
Selenium	<1 mg/kg	TM181	3.1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Zinc	<1.9 mg/kg	TM181	70.3 M	37 M	43.1 M	206 M	162 M	47.8 M
Boron, water soluble	<1 mg/kg	TM222	1.56 M	<1 M	<1 M	2.97 M	4.53 M	<1 M
Water Soluble Sulphate as SO4 2:1 Extract	<0.004 g/l	TM243	0.123 M	0.0507 M	0.0517 M	0.321 M	0.102 M	0.0256 M

Validated

CERTIFICATE OF ANALYSIS

SDG:	180213-19	**Client Reference:**	A107448	**Report Number:**	445329
Location:	Meggitt, Coventry	**Order Number:**	NOT/1305	**Superseded Report:**	

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-5&+§@	Sample deviation (see appendix)

Customer Sample Ref.			WS51	WS52	WS53	WS54		
Depth (m)			3.50	0.30	0.60	0.20		
Sample Type			Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)		
Date Sampled			05/02/2018	05/02/2018	06/02/2018	07/02/2018		
Sample Time			.	.	.	.		
Date Received			13/02/2018	13/02/2018	13/02/2018	13/02/2018		
SDG Ref			180213-19	180213-19	180213-19	180213-19		
Lab Sample No.(s)			17036560	17036561	17036562	17036563		
AGS Reference								
Component	**LOD/Units**	**Method**						
Moisture Content Ratio (% of as received sample)	%	PM024	14	13	14	7.9		
Phenol	<0.01 mg/kg	TM062 (S)	<0.01 M	<0.01 M	<0.01 M	<0.01 M		
Cresols	<0.01 mg/kg	TM062 (S)	<0.01 M	<0.01 M	<0.01 M	<0.01 M		
Xylenols	<0.015 mg/kg	TM062 (S)	<0.015 M	<0.015 M	<0.015 M	<0.015 M		
Phenols, Total Detected monohydric	<0.035 mg/kg	TM062 (S)	<0.035 M	<0.035 M	<0.035 M	<0.035 M		
pH	1 pH Units	TM133	8.65 M	10.9 M	8.6 M	11.8 M		
Chromium, Hexavalent	<0.6 mg/kg	TM151	<0.6 #	<0.6 #	<0.6 #	<0.6 #		
Cyanide, Free	<1 mg/kg	TM153	<1 M	<1 M	<1 M	<1 M		
TPH >C6-C8	<10 mg/kg	TM154	<10	<10	<10	<10		
TPH >C8-C10	<10 mg/kg	TM154	<10	70.7	<10	<10		
TPH >C10-C12	<10 mg/kg	TM154	<10	36.6	<10	<10		
TPH >C12-C16	<10 mg/kg	TM154	32.7	73.9	<10	<10		
TPH >C16-C21	<10 mg/kg	TM154	<10	524	<10	22.8		
TPH >C21-C40	<10 mg/kg	TM154	39.4	3650	<10	235		
TPH >C6-C40	<10 mg/kg	TM154	95.4	4360	<10	260		
TPH >C8-40	<10 mg/kg	TM154	93.7 #	4280 #	<10 #	258 #		
Arsenic	<0.6 mg/kg	TM181	7.77 M	7.81 M	9.45 M	9.53 M		
Cadmium	<0.02 mg/kg	TM181	0.196 M	0.384 M	0.231 M	0.373 M		
Chromium	<0.9 mg/kg	TM181	23 M	31.8 M	20.9 M	14.4 M		
Copper	<1.4 mg/kg	TM181	35 M	47.8 M	26.9 M	11.9 M		
Lead	<0.7 mg/kg	TM181	15.8 M	128 M	12.1 M	19.1 M		
Mercury	<0.14 mg/kg	TM181	<0.14 M	<0.14 M	<0.14 M	<0.14 M		
Nickel	<0.2 mg/kg	TM181	43.8 M	19.7 M	36.4 M	14.6 M		
Selenium	<1 mg/kg	TM181	<1 #	<1 #	<1 #	<1 #		
Zinc	<1.9 mg/kg	TM181	66.7 M	224 M	50.3 M	84.2 M		
Boron, water soluble	<1 mg/kg	TM222	<1 M	2.9 M	1.08 M	<1 M		
Water Soluble Sulphate as SO4 2:1 Extract	<0.004 g/l	TM243	0.0283 M	0.122 M	0.0308 M	0.131 M		

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CERTIFICATE OF ANALYSIS

SDG:	180213-19	**Client Reference:**	A107448	**Report Number:**	445329
Location:	Meggitt, Coventry	**Order Number:**	NOT/1305	**Superseded Report:**	

PAH by GCMS

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-5&+§@	Sample deviation (see appendix)

Customer Sample Ref.			WS2	WS2	WS3	WS10	WS19	WS20
Depth (m)			0.20	1.10	0.20	0.20	0.20	0.20
Sample Type			Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
Date Sampled			09/02/2018	09/02/2018	09/02/2018	09/02/2018	07/02/2018	07/02/2018
Sample Time			.	.	.	.	.	.
Date Received			13/02/2018	13/02/2018	13/02/2018	13/02/2018	13/02/2018	13/02/2018
SDG Ref			180213-19	180213-19	180213-19	180213-19	180213-19	180213-19
Lab Sample No.(s)			17036517	17036518	17036519	17036520	17036521	17036523
AGS Reference								
Component	**LOD/Units**	**Method**						
Naphthalene-d8 % recovery**	%	TM218	93.2	99.5	95.2	106	91.7	94.6
Acenaphthene-d10 % recovery**	%	TM218	91.5	97.2	92.8	104	90.7	92.3
Phenanthrene-d10 % recovery**	%	TM218	89.4	95.3	89.9	98.5	87.8	91.2
Chrysene-d12 % recovery**	%	TM218	84	90.7	81.8	94.2	83.3	89.1
Perylene-d12 % recovery**	%	TM218	90.7	95.2	83	96.2	85.3	90.8
Naphthalene	<9 µg/kg	TM218	44.7 M	12 M	79.1 M	40.8 M	83.8 M	1980 M
Acenaphthylene	<12 µg/kg	TM218	<12 M	<12 M	<12 M	29.6 M	<12 M	37 M
Acenaphthene	<8 µg/kg	TM218	<8 M	<8 M	<8 M	<8 M	12.2 M	<8 M
Fluorene	<10 µg/kg	TM218	<10 M	<10 M	<10 M	<10 M	<10 M	28.9 M
Phenanthrene	<15 µg/kg	TM218	122 M	31.8 M	270 M	193 M	153 M	1020 M
Anthracene	<16 µg/kg	TM218	24.1 M	<16 M	22.6 M	40.5 M	<16 M	179 M
Fluoranthene	<17 µg/kg	TM218	139 M	28.3 M	117 M	319 M	142 M	423 M
Pyrene	<15 µg/kg	TM218	155 M	24.1 M	98.6 M	250 M	90.3 M	399 M
Benz(a)anthracene	<14 µg/kg	TM218	112 M	<14 M	72.4 M	117 M	81 M	229 M
Chrysene	<10 µg/kg	TM218	99.9 M	<10 M	49 M	178 M	105 M	233 M
Benzo(b)fluoranthene	<15 µg/kg	TM218	189 M	27.5 M	104 M	441 M	120 M	191 M
Benzo(k)fluoranthene	<14 µg/kg	TM218	60.6 M	<14 M	25.3 M	106 M	35.1 M	43.8 M
Benzo(a)pyrene	<15 µg/kg	TM218	141 M	<15 M	41.8 M	151 M	61.9 M	102 M
Indeno(1,2,3-cd)pyrene	<18 µg/kg	TM218	92.5 M	<18 M	43.2 M	160 M	44.9 M	37.5 M
Dibenzo(a,h)anthracene	<23 µg/kg	TM218	31.8 M	<23 M	<23 M	33.2 M	<23 M	<23 M
Benzo(g,h,i)perylene	<24 µg/kg	TM218	159 M	<24 M	89.8 M	216 M	80.8 M	101 M
PAH, Total Detected USEPA 16	<118 µg/kg	TM218	1370	124	1010	2270	1010	5000

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CERTIFICATE OF ANALYSIS

SDG:	180213-19	**Client Reference:**	A107448	**Report Number:**	445329
Location:	Meggitt, Coventry	**Order Number:**	NOT/1305	**Superseded Report:**	

PAH by GCMS

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-5&+§@	Sample deviation (see appendix)

Customer Sample Ref.			WS21	WS22	WS26	WS28	WS28	WS29
Depth (m)			0.50	0.20	0.30	0.30	0.90	0.50
Sample Type			Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
Date Sampled			08/02/2018	09/02/2018	07/02/2018	08/02/2018	08/02/2018	07/02/2018
Sample Time			.	.	.	.	.	.
Date Received			13/02/2018	13/02/2018	13/02/2018	13/02/2018	13/02/2018	13/02/2018
SDG Ref			180213-19	180213-19	180213-19	180213-19	180213-19	180213-19
Lab Sample No.(s)			17036525	17036526	17036528	17036529	17036530	17036531
AGS Reference								
Component	**LOD/Units**	**Method**						
Naphthalene-d8 % recovery**	%	TM218	94.8	96.8	92.4	96	92.2	92
Acenaphthene-d10 % recovery**	%	TM218	94	89.6	89.8	87.8	84.5	89.8
Phenanthrene-d10 % recovery**	%	TM218	91.1	89.8	87.8	81.3	80.9	89.4
Chrysene-d12 % recovery**	%	TM218	84.3	103	89.6	77.7	77.3	92.4
Perylene-d12 % recovery**	%	TM218	87.6	89.2	98.2	82.5	80.8	99.4
Naphthalene	<9 µg/kg	TM218	100 M	1080 M	<9 M	109 M	15.4 M	13.4 M
Acenaphthylene	<12 µg/kg	TM218	<12 M	1530 M	<12 M	166 M	14.3 M	13.6 M
Acenaphthene	<8 µg/kg	TM218	<8 M	18800 M	<8 M	144 M	10.9 M	25.6 M
Fluorene	<10 µg/kg	TM218	<10 M	20800 M	<10 M	142 M	<10 M	26 M
Phenanthrene	<15 µg/kg	TM218	289 M	275000 M	42 M	349 M	110 M	506 M
Anthracene	<16 µg/kg	TM218	22.5 M	85300 M	<16 M	230 M	31.7 M	119 M
Fluoranthene	<17 µg/kg	TM218	110 M	399000 M	94.8 M	717 M	316 M	1040 M
Pyrene	<15 µg/kg	TM218	95.7 M	316000 M	102 M	703 M	263 M	859 M
Benz(a)anthracene	<14 µg/kg	TM218	74.4 M	153000 M	73.6 M	513 M	198 M	528 M
Chrysene	<10 µg/kg	TM218	44.4 M	123000 M	60.7 M	433 M	159 M	480 M
Benzo(b)fluoranthene	<15 µg/kg	TM218	124 M	158000 M	93.4 M	865 M	302 M	591 M
Benzo(k)fluoranthene	<14 µg/kg	TM218	24.1 M	60600 M	29 M	410 M	87.2 M	238 M
Benzo(a)pyrene	<15 µg/kg	TM218	50.5 M	124000 M	70.4 M	810 M	216 M	528 M
Indeno(1,2,3-cd)pyrene	<18 µg/kg	TM218	57.4 M	55100 M	46.6 M	598 M	157 M	382 M
Dibenzo(a,h)anthracene	<23 µg/kg	TM218	<23 M	15000 M	<23 M	<230 M	39.8 M	89.5 M
Benzo(g,h,i)perylene	<24 µg/kg	TM218	113 M	66200 M	84.5 M	851 M	232 M	546 M
PAH, Total Detected USEPA 16	<118 µg/kg	TM218	1110	1870000	697	7040	2150	5980

Validated

CERTIFICATE OF ANALYSIS

SDG:	180213-19	**Client Reference:**	A107448	**Report Number:**	445329
Location:	Meggitt, Coventry	**Order Number:**	NOT/1305	**Superseded Report:**	

PAH by GCMS

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-5&+§@	Sample deviation (see appendix)

Customer Sample Ref.			WS31	WS32	WS33	WS34	WS35	WS36
Depth (m)			0.50	0.40	0.40	0.30	0.30	0.20
Sample Type			Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
Date Sampled			08/02/2018	08/02/2018	06/02/2018	07/02/2018	07/02/2018	08/02/2018
Sample Time			.	.	.	.	.	.
Date Received			13/02/2018	13/02/2018	13/02/2018	13/02/2018	13/02/2018	13/02/2018
SDG Ref			180213-19	180213-19	180213-19	180213-19	180213-19	180213-19
Lab Sample No.(s)			17036533	17036534	17036536	17036538	17036539	17036541
AGS Reference								
Component	**LOD/Units**	**Method**						
Naphthalene-d8 % recovery**	%	TM218	91.1	98.8	92.8	94.6	93.4	99.9
Acenaphthene-d10 % recovery**	%	TM218	88.1	92.2	87.7	89.3	90.3	98.4
Phenanthrene-d10 % recovery**	%	TM218	86.9	87.3	86.9	89.4	89.5	98.4
Chrysene-d12 % recovery**	%	TM218	82.1	91.2	82.4	87.2	85.7	80.9
Perylene-d12 % recovery**	%	TM218	86.1	88.6	83.8	93.3	90.2	73.7
Naphthalene	<9 µg/kg	TM218	36 M	388 M	71.7 M	<9 M	<9 #	13.8 M
Acenaphthylene	<12 µg/kg	TM218	26.5 M	451 M	18.4 M	<12 M	<12 #	<12 M
Acenaphthene	<8 µg/kg	TM218	25.8 M	459 M	14.6 M	<8 M	42.5 #	<8 M
Fluorene	<10 µg/kg	TM218	27.4 M	491 M	20.7 M	<10 M	50.6 #	<10 M
Phenanthrene	<15 µg/kg	TM218	373 M	6600 M	187 M	21.1 M	484 #	<15 M
Anthracene	<16 µg/kg	TM218	86.8 M	2690 M	45.8 M	<16 M	150 #	<16 M
Fluoranthene	<17 µg/kg	TM218	916 M	41900 M	297 M	31.2 M	471 #	<17 M
Pyrene	<15 µg/kg	TM218	778 M	43000 M	257 M	30.1 M	354 #	<15 M
Benz(a)anthracene	<14 µg/kg	TM218	525 M	27400 M	198 M	16 M	223 #	<14 M
Chrysene	<10 µg/kg	TM218	497 M	21900 M	184 M	17.2 M	169 #	<10 M
Benzo(b)fluoranthene	<15 µg/kg	TM218	763 M	33600 M	289 M	30.6 M	212 #	<15 M
Benzo(k)fluoranthene	<14 µg/kg	TM218	269 M	14600 M	92.5 M	<14 M	99.2 #	<14 M
Benzo(a)pyrene	<15 µg/kg	TM218	547 M	32500 M	183 M	27.6 M	180 #	<15 M
Indeno(1,2,3-cd)pyrene	<18 µg/kg	TM218	317 M	17400 M	109 M	<18 M	89.6 #	<18 M
Dibenzo(a,h)anthracene	<23 µg/kg	TM218	118 M	4530 M	33.4 M	<23 M	25 #	<23 M
Benzo(g,h,i)perylene	<24 µg/kg	TM218	489 M	21400 M	178 M	35.9 M	132 #	<24 M
PAH, Total Detected USEPA 16	<118 µg/kg	TM218	5790	269000	2180	210	2680	<118

Validated

CERTIFICATE OF ANALYSIS

SDG:	180213-19	**Client Reference:**	A107448	**Report Number:**	445329
Location:	Meggitt, Coventry	**Order Number:**	NOT/1305	**Superseded Report:**	

PAH by GCMS

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-5&+§@	Sample deviation (see appendix)

Customer Sample Ref.			WS36	WS43	WS44	WS45	WS46	WS47
Depth (m)			0.50	0.10	0.20	0.15	0.50	0.10
Sample Type			Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
Date Sampled			08/02/2018	06/02/2018	06/02/2018	06/02/2018	06/02/2018	07/02/2018
Sample Time			.	.	.	.	.	.
Date Received			13/02/2018	13/02/2018	13/02/2018	13/02/2018	13/02/2018	13/02/2018
SDG Ref			180213-19	180213-19	180213-19	180213-19	180213-19	180213-19
Lab Sample No.(s)			17036565	17036542	17036545	17036546	17036549	17036550
AGS Reference								
Component	**LOD/Units**	**Method**						
Naphthalene-d8 % recovery**	%	TM218	113	85.8	94.1	93.8	88.4	110
Acenaphthene-d10 % recovery**	%	TM218	112	83.1	90.5	88.4	94.3	106
Phenanthrene-d10 % recovery**	%	TM218	111	81.2	89.3	90.7	82.5	104
Chrysene-d12 % recovery**	%	TM218	102	77.7	93.5	99.9	64	102
Perylene-d12 % recovery**	%	TM218	102	87.4	101	108	63.1	98.1
Naphthalene	<9 µg/kg	TM218	11.1 M	<45 M	410 M	70.7 M	729 M	96.2 M
Acenaphthylene	<12 µg/kg	TM218	22.8 M	<60 M	24.7 M	834 M	<12 M	724 M
Acenaphthene	<8 µg/kg	TM218	<8 M	73.3 M	557 M	2540 M	79.4 M	64.7 M
Fluorene	<10 µg/kg	TM218	<10 M	<50 M	283 M	1310 M	71.9 M	66.7 M
Phenanthrene	<15 µg/kg	TM218	57.3 M	543 M	2810 M	9920 M	1240 M	1310 M
Anthracene	<16 µg/kg	TM218	45.8 M	201 M	689 M	6630 M	217 M	1350 M
Fluoranthene	<17 µg/kg	TM218	141 M	1480 M	3080 M	58500 M	717 M	14900 M
Pyrene	<15 µg/kg	TM218	186 M	1480 M	2760 M	54400 M	646 M	17400 M
Benz(a)anthracene	<14 µg/kg	TM218	111 M	692 M	1390 M	24100 M	311 M	7170 M
Chrysene	<10 µg/kg	TM218	68.6 M	538 M	1090 M	18300 M	218 M	5280 M
Benzo(b)fluoranthene	<15 µg/kg	TM218	214 M	1340 M	1250 M	27900 M	517 M	10800 M
Benzo(k)fluoranthene	<14 µg/kg	TM218	74.4 M	436 M	512 M	11700 M	104 M	4580 M
Benzo(a)pyrene	<15 µg/kg	TM218	118 M	970 M	1140 M	26100 M	226 M	9590 M
Indeno(1,2,3-cd)pyrene	<18 µg/kg	TM218	189 M	549 M	573 M	13000 M	155 M	4930 M
Dibenzo(a,h)anthracene	<23 µg/kg	TM218	35.8 M	165 M	145 M	3340 M	35.8 M	1300 M
Benzo(g,h,i)perylene	<24 µg/kg	TM218	328 M	792 M	772 M	17400 M	365 M	6160 M
PAH, Total Detected USEPA 16	<118 µg/kg	TM218	1600	9260	17500	276000	5630	85700

Validated

CERTIFICATE OF ANALYSIS

SDG:	180213-19	**Client Reference:**	A107448	**Report Number:**	445329
Location:	Meggitt, Coventry	**Order Number:**	NOT/1305	**Superseded Report:**	

PAH by GCMS

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-5&+§@	Sample deviation (see appendix)

Customer Sample Ref.			WS48	WS49	WS49	WS50	WS51	WS51
Depth (m)			0.20	1.50	2.50	0.50	0.30	1.80
Sample Type			Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
Date Sampled			06/02/2018	06/02/2018	06/02/2018	06/02/2018	05/02/2018	05/02/2018
Sample Time			.	.	.	.	.	.
Date Received			13/02/2018	13/02/2018	13/02/2018	13/02/2018	13/02/2018	13/02/2018
SDG Ref			180213-19	180213-19	180213-19	180213-19	180213-19	180213-19
Lab Sample No.(s)			17036551	17036553	17036554	17036555	17036557	17036559
AGS Reference								
Component	**LOD/Units**	**Method**						
Naphthalene-d8 % recovery**	%	TM218	92.5	96.5	92.5	91	92.7	96.9
Acenaphthene-d10 % recovery**	%	TM218	90.9	91.1	88.2	88.7	88.3	94.4
Phenanthrene-d10 % recovery**	%	TM218	87.1	90.9	87.6	87.3	86.9	90.7
Chrysene-d12 % recovery**	%	TM218	86.9	87.7	85.4	90.9	89.8	95.5
Perylene-d12 % recovery**	%	TM218	91.2	89.7	92.1	86.6	99.6	96.3
Naphthalene	<9 µg/kg	TM218	452 M	<9 M	<9 M	27.2 M	221 M	136 M
Acenaphthylene	<12 µg/kg	TM218	17.9 M	<12 M	<12 M	35.6 M	28.2 M	52.2 M
Acenaphthene	<8 µg/kg	TM218	52.1 M	<8 M	<8 M	13.4 M	142 M	147 M
Fluorene	<10 µg/kg	TM218	54.9 M	<10 M	<10 M	14.8 M	107 M	101 M
Phenanthrene	<15 µg/kg	TM218	1110 M	<15 M	<15 M	192 M	1240 M	56.7 M
Anthracene	<16 µg/kg	TM218	211 M	<16 M	<16 M	79.3 M	182 M	<16 M
Fluoranthene	<17 µg/kg	TM218	1170 M	<17 M	<17 M	758 M	1100 M	<17 M
Pyrene	<15 µg/kg	TM218	1130 M	<15 M	<15 M	942 M	916 M	<15 M
Benz(a)anthracene	<14 µg/kg	TM218	675 M	<14 M	<14 M	588 M	545 M	20.5 M
Chrysene	<10 µg/kg	TM218	561 M	<10 M	<10 M	551 M	463 M	<10 M
Benzo(b)fluoranthene	<15 µg/kg	TM218	824 M	<15 M	<15 M	799 M	728 M	<15 M
Benzo(k)fluoranthene	<14 µg/kg	TM218	276 M	<14 M	<14 M	248 M	252 M	<14 M
Benzo(a)pyrene	<15 µg/kg	TM218	567 M	<15 M	<15 M	498 M	486 M	<15 M
Indeno(1,2,3-cd)pyrene	<18 µg/kg	TM218	297 M	<18 M	<18 M	299 M	269 M	<18 M
Dibenzo(a,h)anthracene	<23 µg/kg	TM218	79.2 M	<23 M	<23 M	92.8 M	82.2 M	<23 M
Benzo(g,h,i)perylene	<24 µg/kg	TM218	585 M	<24 M	<24 M	418 M	361 M	<24 M
PAH, Total Detected USEPA 16	<118 µg/kg	TM218	8060	<118	<118	5560	7120	513

Validated

CERTIFICATE OF ANALYSIS

SDG:	180213-19	**Client Reference:**	A107448	**Report Number:**	445329
Location:	Meggitt, Coventry	**Order Number:**	NOT/1305	**Superseded Report:**	

PAH by GCMS

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-5&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	WS51	WS52	WS53	WS54		
Customer Sample Ref.			WS51	WS52	WS53	WS54		
Depth (m)			3.50	0.30	0.60	0.20		
Sample Type			Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)		
Date Sampled			05/02/2018	05/02/2018	06/02/2018	07/02/2018		
Sample Time			.	.	.	.		
Date Received			13/02/2018	13/02/2018	13/02/2018	13/02/2018		
SDG Ref			180213-19	180213-19	180213-19	180213-19		
Lab Sample No.(s)			17036560	17036561	17036562	17036563		
AGS Reference								
Naphthalene-d8 % recovery**	%	TM218	103	102	95.7	105		
Acenaphthene-d10 % recovery**	%	TM218	101	101	93.4	100		
Phenanthrene-d10 % recovery**	%	TM218	97.9	98.8	90.8	99.4		
Chrysene-d12 % recovery**	%	TM218	95.9	99.6	83.9	102		
Perylene-d12 % recovery**	%	TM218	101	109	87.1	106		
Naphthalene	<9 µg/kg	TM218	<9 M	98 M	<9 M	26 M		
Acenaphthylene	<12 µg/kg	TM218	<12 M	32.6 M	<12 M	19.5 M		
Acenaphthene	<8 µg/kg	TM218	<8 M	93.6 M	<8 M	101 M		
Fluorene	<10 µg/kg	TM218	<10 M	54.1 M	<10 M	35.3 M		
Phenanthrene	<15 µg/kg	TM218	<15 M	517 M	<15 M	985 M		
Anthracene	<16 µg/kg	TM218	<16 M	135 M	<16 M	196 M		
Fluoranthene	<17 µg/kg	TM218	<17 M	965 M	<17 M	1640 M		
Pyrene	<15 µg/kg	TM218	<15 M	888 M	<15 M	1290 M		
Benz(a)anthracene	<14 µg/kg	TM218	<14 M	546 M	<14 M	883 M		
Chrysene	<10 µg/kg	TM218	<10 M	504 M	<10 M	686 M		
Benzo(b)fluoranthene	<15 µg/kg	TM218	<15 M	630 M	<15 M	1110 M		
Benzo(k)fluoranthene	<14 µg/kg	TM218	<14 M	259 M	<14 M	442 M		
Benzo(a)pyrene	<15 µg/kg	TM218	<15 M	494 M	<15 M	885 M		
Indeno(1,2,3-cd)pyrene	<18 µg/kg	TM218	<18 M	318 M	<18 M	515 M		
Dibenzo(a,h)anthracene	<23 µg/kg	TM218	<23 M	101 M	<23 M	141 M		
Benzo(g,h,i)perylene	<24 µg/kg	TM218	<24 M	488 M	<24 M	682 M		
PAH, Total Detected USEPA 16	<118 µg/kg	TM218	<118	6120	<118	9650		

Validated

CERTIFICATE OF ANALYSIS

SDG:	180213-19	**Client Reference:**	A107448	**Report Number:**	445329
Location:	Meggitt, Coventry	**Order Number:**	NOT/1305	**Superseded Report:**	

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-5&+§@	Sample deviation (see appendix)

Customer Sample Ref.			WS2	WS2	WS3	WS10	WS19	WS20
Depth (m)			0.20	1.10	0.20	0.20	0.20	0.20
Sample Type			Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
Date Sampled			09/02/2018	09/02/2018	09/02/2018	09/02/2018	07/02/2018	07/02/2018
Sample Time			.	.	.	.	.	.
Date Received			13/02/2018	13/02/2018	13/02/2018	13/02/2018	13/02/2018	13/02/2018
SDG Ref			180213-19	180213-19	180213-19	180213-19	180213-19	180213-19
Lab Sample No.(s)			17036517	17036518	17036519	17036520	17036521	17036523
AGS Reference								
Component	**LOD/Units**	**Method**						
Dibromofluoromethane**	%	TM116	114	113	140	127	121	123
Toluene-d8**	%	TM116	96.4	96.4	91.3	93.4	93.1	86.6
4-Bromofluorobenzene**	%	TM116	90.5	95.7	78.2	79.4	76	65.6
Dichlorodifluoromethane	<6 µg/kg	TM116	<60 M	<60 M	<60 M	<60 M	<120 M	<120 M
Chloromethane	<7 µg/kg	TM116	<70 #	<70 #	<70 #	<70 #	<140 #	<140 #
Vinyl Chloride	<6 µg/kg	TM116	<60 M	<60 M	<60 M	<60 M	<120 M	<120 M
Bromomethane	<10 µg/kg	TM116	<100 M	<100 M	<100 M	<100 M	<200 M	<200 M
Chloroethane	<10 µg/kg	TM116	<100 M	<100 M	<100 M	<100 M	<200 M	<200 M
Trichlorofluoromethane	<6 µg/kg	TM116	<60 M	<60 M	<60 M	<60 M	<120 M	<120 M
1,1-Dichloroethene	<10 µg/kg	TM116	<100 #	<100 #	<100 #	<100 #	<200 #	<200 #
Carbon Disulphide	<7 µg/kg	TM116	<70 M	<70 M	<70 M	<70 M	<140 M	<140 M
Dichloromethane	<10 µg/kg	TM116	<100 #	<100 #	<100 #	<100 #	<200 #	<200 #
Methyl Tertiary Butyl Ether	<10 µg/kg	TM116	<100 M	<100 M	<100 M	<100 M	<200 M	<200 M
trans-1,2-Dichloroethene	<10 µg/kg	TM116	<100 M	<100 M	<100 M	<100 M	<200 M	<200 M
1,1-Dichloroethane	<8 µg/kg	TM116	<80 M	<80 M	<80 M	<80 M	<160 M	<160 M
cis-1,2-Dichloroethene	<6 µg/kg	TM116	<60 M	<60 M	<60 M	<60 M	<120 M	<120 M
2,2-Dichloropropane	<10 µg/kg	TM116	<100	<100	<100	<100	<200	<200
Bromochloromethane	<10 µg/kg	TM116	<100 M	<100 M	<100 M	<100 M	<200 M	<200 M
Chloroform	<8 µg/kg	TM116	<80 M	<80 M	<80 M	<80 M	<160 M	<160 M
1,1,1-Trichloroethane	<7 µg/kg	TM116	<70 M	<70 M	<70 M	<70 M	586 M	<140 M
1,1-Dichloropropene	<10 µg/kg	TM116	<100 M	<100 M	<100 M	<100 M	<200 M	<200 M
Carbontetrachloride	<10 µg/kg	TM116	<100 M	<100 M	<100 M	<100 M	<200 M	<200 M
1,2-Dichloroethane	<5 µg/kg	TM116	<50 M	<50 M	<50 M	<50 M	<100 M	<100 M
Benzene	<9 µg/kg	TM116	<90 M	<90 M	<90 M	<90 M	<180 M	<180 M
Trichloroethene	<9 µg/kg	TM116	623 #	400 #	430 #	<90 #	294 #	4110 #
1,2-Dichloropropane	<10 µg/kg	TM116	<100 M	<100 M	<100 M	<100 M	<200 M	<200 M
Dibromomethane	<9 µg/kg	TM116	<90 M	<90 M	<90 M	<90 M	<180 M	<180 M
Bromodichloromethane	<7 µg/kg	TM116	<70 M	<70 M	<70 M	<70 M	<140 M	<140 M
cis-1,3-Dichloropropene	<10 µg/kg	TM116	<100 M	<100 M	<100 M	<100 M	<200 M	<200 M
Toluene	<7 µg/kg	TM116	<70 M	<70 M	<70 M	<70 M	<140 M	<140 M
trans-1,3-Dichloropropene	<10 µg/kg	TM116	<100	<100	<100	<100	<200	<200
1,1,2-Trichloroethane	<10 µg/kg	TM116	<100 M	<100 M	<100 M	<100 M	<200 M	<200 M
1,3-Dichloropropane	<7 µg/kg	TM116	<70 M	<70 M	<70 M	<70 M	<140 M	<140 M

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Validated

CERTIFICATE OF ANALYSIS

SDG:	180213-19	**Client Reference:**	A107448	**Report Number:**	445329
Location:	Meggitt, Coventry	**Order Number:**	NOT/1305	**Superseded Report:**	

VOC MS (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-5&+§@	Sample deviation (see appendix)

Customer Sample Ref.			WS2	WS2	WS3	WS10	WS19	WS20
Depth (m)			0.20	1.10	0.20	0.20	0.20	0.20
Sample Type			Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
Date Sampled			09/02/2018	09/02/2018	09/02/2018	09/02/2018	07/02/2018	07/02/2018
Sample Time			-	-	-	-	-	-
Date Received			13/02/2018	13/02/2018	13/02/2018	13/02/2018	13/02/2018	13/02/2018
SDG Ref			180213-19	180213-19	180213-19	180213-19	180213-19	180213-19
Lab Sample No.(s)			17036517	17036518	17036519	17036520	17036521	17036523
AGS Reference								
Component	**LOD/Units**	**Method**						
Tetrachloroethene	<5 µg/kg	TM116	<50 M	<50 M	<50 M	<50 M	<100 M	<100 M
Dibromochloromethane	<10 µg/kg	TM116	<100 M	<100 M	<100 M	<100 M	<200 M	<200 M
1,2-Dibromoethane	<10 µg/kg	TM116	<100 M	<100 M	<100 M	<100 M	<200 M	<200 M
Chlorobenzene	<5 µg/kg	TM116	<50 M	<50 M	<50 M	<50 M	<100 M	<100 M
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116	<100 M	<100 M	<100 M	<100 M	<200 M	<200 M
Ethylbenzene	<4 µg/kg	TM116	<40 M	<40 M	<40 M	<40 M	<80 M	<80 M
p/m-Xylene	<10 µg/kg	TM116	<100 #	<100 #	<100 #	<100 #	<200 #	<200 #
o-Xylene	<10 µg/kg	TM116	<100 M	<100 M	<100 M	<100 M	<200 M	<200 M
Styrene	<10 µg/kg	TM116	<100 #	<100 #	<100 #	<100 #	<200 #	<200 #
Bromoform	<10 µg/kg	TM116	<100 M	<100 M	<100 M	<100 M	<200 M	<200 M
Isopropylbenzene	<5 µg/kg	TM116	<50 #	<50 #	<50 #	<50 #	<100 #	<100 #
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116	<100 #	<100 #	<100 #	<100 #	<200 #	<200 #
1,2,3-Trichloropropane	<16 µg/kg	TM116	<160 M	<160 M	<160 M	<160 M	<320 M	<320 M
Bromobenzene	<10 µg/kg	TM116	<100 M	<100 M	<100 M	<100 M	<200 M	<200 M
Propylbenzene	<10 µg/kg	TM116	<100 M	<100 M	<100 M	<100 M	<200 M	<200 M
2-Chlorotoluene	<9 µg/kg	TM116	<90 M	<90 M	<90 M	<90 M	<180 M	<180 M
1,3,5-Trimethylbenzene	<8 µg/kg	TM116	<80 M	<80 M	<80 M	<80 M	<160 M	<160 M
4-Chlorotoluene	<10 µg/kg	TM116	<100 M	<100 M	<100 M	<100 M	<200 M	<200 M
tert-Butylbenzene	<14 µg/kg	TM116	<140 M	<140 M	<140 M	<140 M	<280 M	<280 M
1,2,4-Trimethylbenzene	<9 µg/kg	TM116	<90 #	<90 #	<90 #	<90 #	<180 #	<180 #
sec-Butylbenzene	<10 µg/kg	TM116	<100	<100	<100	<100	<200	<200
4-Isopropyltoluene	<10 µg/kg	TM116	<100 M	<100 M	<100 M	<100 M	<200 M	<200 M
1,3-Dichlorobenzene	<8 µg/kg	TM116	<80 M	<80 M	<80 M	<80 M	<160 M	<160 M
1,4-Dichlorobenzene	<5 µg/kg	TM116	<50 M	<50 M	<50 M	<50 M	<100 M	<100 M
n-Butylbenzene	<11 µg/kg	TM116	<110	<110	<110	<110	<220	<220
1,2-Dichlorobenzene	<10 µg/kg	TM116	<100 M	<100 M	<100 M	<100 M	<200 M	<200 M
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116	<140 M	<140 M	<140 M	<140 M	<280 M	<280 M
Tert-amyl methyl ether	<10 µg/kg	TM116	<100 #	<100 #	<100 #	<100 #	<200 #	<200 #
1,2,4-Trichlorobenzene	<20 µg/kg	TM116	<200	<200	<200	<200	<400	<400
Hexachlorobutadiene	<20 µg/kg	TM116	<200	<200	<200	<200	<400	<400
Naphthalene	<13 µg/kg	TM116	<130 M	<130 M	<130 M	<130 M	<260 M	<260 M
1,2,3-Trichlorobenzene	<20 µg/kg	TM116	<200 #	<200 #	<200 #	<200 #	<400 #	<400 #

Validated

CERTIFICATE OF ANALYSIS

SDG:	180213-19	**Client Reference:**	A107448	**Report Number:**	445329
Location:	Meggitt, Coventry	**Order Number:**	NOT/1305	**Superseded Report:**	

VOC MS (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-5&+§@	Sample deviation (see appendix)

Customer Sample Ref.			WS21	WS22	WS26	WS28	WS28	WS29
Depth (m)			0.50	0.20	0.30	0.30	0.90	0.50
Sample Type			Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
Date Sampled			08/02/2018	09/02/2018	07/02/2018	08/02/2018	08/02/2018	07/02/2018
Sample Time			.	.	.	.	.	.
Date Received			13/02/2018	13/02/2018	13/02/2018	13/02/2018	13/02/2018	13/02/2018
SDG Ref			180213-19	180213-19	180213-19	180213-19	180213-19	180213-19
Lab Sample No.(s)			17036525	17036526	17036528	17036529	17036530	17036531
AGS Reference								
Component	**LOD/Units**	**Method**						
Dibromofluoromethane**	%	TM116	109	127	108	110	108	119
Toluene-d8**	%	TM116	98.6	92.7	101	98.9	99.8	97
4-Bromofluorobenzene**	%	TM116	87	77.2	97.4	90.5	92.8	81.3
Dichlorodifluoromethane	<6 µg/kg	TM116	<60 M	<60 M	<60 M	<60 M	<60 M	<6 M
Chloromethane	<7 µg/kg	TM116	<70 #	<70 #	<70 #	<70 #	<70 #	<7 #
Vinyl Chloride	<6 µg/kg	TM116	<60 M	<60 M	<60 M	<60 M	<60 M	<6 M
Bromomethane	<10 µg/kg	TM116	<100 M	<100 M	<100 M	<100 M	<100 M	<10 M
Chloroethane	<10 µg/kg	TM116	<100 M	<100 M	<100 M	<100 M	<100 M	<10 M
Trichlorofluoromethane	<6 µg/kg	TM116	<60 M	<60 M	<60 M	<60 M	<60 M	<6 M
1,1-Dichloroethene	<10 µg/kg	TM116	<100 #	<100 #	<100 #	<100 #	<100 #	<10 #
Carbon Disulphide	<7 µg/kg	TM116	<70 M	<70 M	<70 M	<70 M	<70 M	<7 M
Dichloromethane	<10 µg/kg	TM116	<100 #	<100 #	<100 #	<100 #	<100 #	<10 #
Methyl Tertiary Butyl Ether	<10 µg/kg	TM116	<100 M	<100 M	<100 M	<100 M	<100 M	<10 M
trans-1,2-Dichloroethene	<10 µg/kg	TM116	<100 M	<100 M	<100 M	<100 M	<100 M	<10 M
1,1-Dichloroethane	<8 µg/kg	TM116	<80 M	<80 M	<80 M	<80 M	<80 M	<8 M
cis-1,2-Dichloroethene	<6 µg/kg	TM116	<60 M	<60 M	<60 M	<60 M	<60 M	<6 M
2,2-Dichloropropane	<10 µg/kg	TM116	<100	<100	<100	<100	<100	<10
Bromochloromethane	<10 µg/kg	TM116	<100 M	<100 M	<100 M	<100 M	<100 M	<10 M
Chloroform	<8 µg/kg	TM116	<80 M	<80 M	<80 M	<80 M	<80 M	<8 M
1,1,1-Trichloroethane	<7 µg/kg	TM116	<70 M	<70 M	<70 M	<70 M	<70 M	<7 M
1,1-Dichloropropene	<10 µg/kg	TM116	<100 M	<100 M	<100 M	<100 M	<100 M	<10 M
Carbontetrachloride	<10 µg/kg	TM116	<100 M	<100 M	<100 M	<100 M	<100 M	<10 M
1,2-Dichloroethane	<5 µg/kg	TM116	<50 M	<50 M	<50 M	<50 M	<50 M	<5 M
Benzene	<9 µg/kg	TM116	<90 M	<90 M	<90 M	<90 M	<90 M	<9 M
Trichloroethene	<9 µg/kg	TM116	<90 #	<90 #	<90 #	<90 #	<90 #	182 #
1,2-Dichloropropane	<10 µg/kg	TM116	<100 M	<100 M	<100 M	<100 M	<100 M	<10 M
Dibromomethane	<9 µg/kg	TM116	<90 M	<90 M	<90 M	<90 M	<90 M	<9 M
Bromodichloromethane	<7 µg/kg	TM116	<70 M	<70 M	<70 M	<70 M	<70 M	<7 M
cis-1,3-Dichloropropene	<10 µg/kg	TM116	<100 M	<100 M	<100 M	<100 M	<100 M	<10 M
Toluene	<7 µg/kg	TM116	<70 M	<70 M	<70 M	<70 M	<70 M	<7 M
trans-1,3-Dichloropropene	<10 µg/kg	TM116	<100	<100	<100	<100	<100	<10
1,1,2-Trichloroethane	<10 µg/kg	TM116	<100 M	<100 M	<100 M	<100 M	<100 M	<10 M
1,3-Dichloropropane	<7 µg/kg	TM116	<70 M	<70 M	<70 M	<70 M	<70 M	<7 M

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Validated

CERTIFICATE OF ANALYSIS

SDG:	180213-19	**Client Reference:**	A107448	**Report Number:**	445329
Location:	Meggitt, Coventry	**Order Number:**	NOT/1305	**Superseded Report:**	

VOC MS (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-5&+§@	Sample deviation (see appendix)

Customer Sample Ref.			WS21	WS22	WS26	WS28	WS28	WS29
Depth (m)			0.50	0.20	0.30	0.30	0.90	0.50
Sample Type			Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
Date Sampled			08/02/2018	09/02/2018	07/02/2018	08/02/2018	08/02/2018	07/02/2018
Sample Time			-	-	-	-	-	-
Date Received			13/02/2018	13/02/2018	13/02/2018	13/02/2018	13/02/2018	13/02/2018
SDG Ref			180213-19	180213-19	180213-19	180213-19	180213-19	180213-19
Lab Sample No.(s)			17036525	17036526	17036528	17036529	17036530	17036531
AGS Reference								
Component	**LOD/Units**	**Method**						
Tetrachloroethene	<5 µg/kg	TM116	<50 M	<50 M	<50 M	<50 M	<50 M	<5 M
Dibromochloromethane	<10 µg/kg	TM116	<100 M	<100 M	<100 M	<100 M	<100 M	<10 M
1,2-Dibromoethane	<10 µg/kg	TM116	<100 M	<100 M	<100 M	<100 M	<100 M	<10 M
Chlorobenzene	<5 µg/kg	TM116	<50 M	<50 M	<50 M	<50 M	<50 M	<5 M
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116	<100 M	<100 M	<100 M	<100 M	<100 M	<10 M
Ethylbenzene	<4 µg/kg	TM116	<40 M	<40 M	<40 M	<40 M	<40 M	<4 M
p/m-Xylene	<10 µg/kg	TM116	<100 #	<100 #	<100 #	<100 #	<100 #	<10 #
o-Xylene	<10 µg/kg	TM116	<100 M	<100 M	<100 M	<100 M	<100 M	<10 M
Styrene	<10 µg/kg	TM116	<100 #	<100 #	<100 #	<100 #	<100 #	<10 #
Bromoform	<10 µg/kg	TM116	<100 M	<100 M	<100 M	<100 M	<100 M	<10 M
Isopropylbenzene	<5 µg/kg	TM116	<50 #	<50 #	<50 #	<50 #	<50 #	<5 #
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116	<100 #	<100 #	<100 #	<100 #	<100 #	<10 #
1,2,3-Trichloropropane	<16 µg/kg	TM116	<160 M	<160 M	<160 M	<160 M	<160 M	<16 M
Bromobenzene	<10 µg/kg	TM116	<100 M	<100 M	<100 M	<100 M	<100 M	<10 M
Propylbenzene	<10 µg/kg	TM116	<100 M	<100 M	<100 M	<100 M	<100 M	<10 M
2-Chlorotoluene	<9 µg/kg	TM116	<90 M	<90 M	<90 M	<90 M	<90 M	<9 M
1,3,5-Trimethylbenzene	<8 µg/kg	TM116	<80 M	<80 M	<80 M	<80 M	<80 M	<8 M
4-Chlorotoluene	<10 µg/kg	TM116	<100 M	<100 M	<100 M	<100 M	<100 M	<10 M
tert-Butylbenzene	<14 µg/kg	TM116	<140 M	<140 M	<140 M	<140 M	<140 M	<14 M
1,2,4-Trimethylbenzene	<9 µg/kg	TM116	<90 #	<90 #	<90 #	<90 #	<90 #	<9 #
sec-Butylbenzene	<10 µg/kg	TM116	<100	<100	<100	<100	<100	<10
4-Isopropyltoluene	<10 µg/kg	TM116	<100 M	<100 M	<100 M	<100 M	<100 M	<10 M
1,3-Dichlorobenzene	<8 µg/kg	TM116	<80 M	<80 M	<80 M	<80 M	<80 M	<8 M
1,4-Dichlorobenzene	<5 µg/kg	TM116	<50 M	<50 M	<50 M	<50 M	<50 M	<5 M
n-Butylbenzene	<11 µg/kg	TM116	<110	<110	<110	<110	<110	<11
1,2-Dichlorobenzene	<10 µg/kg	TM116	<100 M	<100 M	<100 M	<100 M	<100 M	<10 M
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116	<140 M	<140 M	<140 M	<140 M	<140 M	<14 M
Tert-amyl methyl ether	<10 µg/kg	TM116	<100 #	<100 #	<100 #	<100 #	<100 #	<10 #
1,2,4-Trichlorobenzene	<20 µg/kg	TM116	<200	<200	<200	<200	<200	<20
Hexachlorobutadiene	<20 µg/kg	TM116	<200	<200	<200	<200	<200	<20
Naphthalene	<13 µg/kg	TM116	<130 M	<130 M	<130 M	<130 M	<130 M	<13 M
1,2,3-Trichlorobenzene	<20 µg/kg	TM116	<200 #	<200 #	<200 #	<200 #	<200 #	<20 #

Validated

CERTIFICATE OF ANALYSIS

SDG:	180213-19	**Client Reference:**	A107448	**Report Number:**	445329
Location:	Meggitt, Coventry	**Order Number:**	NOT/1305	**Superseded Report:**	

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-5&+§@	Sample deviation (see appendix)

Customer Sample Ref.			WS31	WS32	WS33	WS34	WS35	WS36
Depth (m)			0.50	0.40	0.40	0.30	0.30	0.20
Sample Type			Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
Date Sampled			08/02/2018	08/02/2018	06/02/2018	07/02/2018	07/02/2018	08/02/2018
Sample Time			.	.	.	.	.	.
Date Received			13/02/2018	13/02/2018	13/02/2018	13/02/2018	13/02/2018	13/02/2018
SDG Ref			180213-19	180213-19	180213-19	180213-19	180213-19	180213-19
Lab Sample No.(s)			17036533	17036534	17036536	17036538	17036539	17036541
AGS Reference								
Component	**LOD/Units**	**Method**						
Dibromofluoromethane**	%	TM116	96.7	101	116	124	105	105
Toluene-d8**	%	TM116	95.6	98.9	92.8	89.5	97.5	99.3
4-Bromofluorobenzene**	%	TM116	73.1	80.3	84.2	87.3	86.6	91
Dichlorodifluoromethane	<6 µg/kg	TM116	<60 M	<60 #	<60 M	<6 M	<6 #	<120 M
Chloromethane	<7 µg/kg	TM116	<70 #	<70 #	<70 #	<7 #	<7 #	<140 #
Vinyl Chloride	<6 µg/kg	TM116	<60 M	<60 #	<60 M	<6 M	<6 #	<120 M
Bromomethane	<10 µg/kg	TM116	<100 M	<100 #	<100 M	<10 M	<10 #	<200 M
Chloroethane	<10 µg/kg	TM116	<100 M	<100 #	<100 M	<10 M	<10 #	<200 M
Trichlorofluoromethane	<6 µg/kg	TM116	<60 M	<60 #	<60 M	<6 M	<6 #	<120 M
1,1-Dichloroethene	<10 µg/kg	TM116	<100 #	<100 #	<100 #	<10 #	<10 #	<200 #
Carbon Disulphide	<7 µg/kg	TM116	<70 M	<70 #	<70 M	<7 M	<7 #	<140 M
Dichloromethane	<10 µg/kg	TM116	<100 #	<100 #	<100 #	<10 #	<10 #	<200 #
Methyl Tertiary Butyl Ether	<10 µg/kg	TM116	<100 M	<100 #	<100 M	<10 M	<10 #	<200 M
trans-1,2-Dichloroethene	<10 µg/kg	TM116	<100 M	<100 #	<100 M	<10 M	<10 #	<200 M
1,1-Dichloroethane	<8 µg/kg	TM116	<80 M	<80 #	<80 M	<8 M	<8 #	<160 M
cis-1,2-Dichloroethene	<6 µg/kg	TM116	<60 M	<60 #	<60 M	<6 M	<6 #	11000 M
2,2-Dichloropropane	<10 µg/kg	TM116	<100	<100	<100	<10	<10	<200
Bromochloromethane	<10 µg/kg	TM116	<100 M	<100 #	<100 M	<10 M	<10 #	<200 M
Chloroform	<8 µg/kg	TM116	<80 M	<80 #	<80 M	<8 M	<8 #	<160 M
1,1,1-Trichloroethane	<7 µg/kg	TM116	<70 M	<70 #	<70 M	- M	<7 #	672 M
1,1-Dichloropropene	<10 µg/kg	TM116	<100 M	<100 #	<100 M	<10 M	<10 #	<200 M
Carbontetrachloride	<10 µg/kg	TM116	<100 M	<100 #	<100 M	- M	<10 #	<200 M
1,2-Dichloroethane	<5 µg/kg	TM116	<50 M	<50 #	<50 M	<5 M	<5 #	<100 M
Benzene	<9 µg/kg	TM116	<90 M	<90 #	<90 M	<9 M	<9 #	<180 M
Trichloroethene	<9 µg/kg	TM116	833 #	<90 #	<90 #	<9 #	<9 #	48000 #
1,2-Dichloropropane	<10 µg/kg	TM116	<100 M	<100 #	<100 M	<10 M	<10 #	<200 M
Dibromomethane	<9 µg/kg	TM116	<90 M	<90 #	<90 M	<9 M	<9 #	<180 M
Bromodichloromethane	<7 µg/kg	TM116	<70 M	<70 #	<70 M	<7 M	<7 #	<140 M
cis-1,3-Dichloropropene	<10 µg/kg	TM116	<100 M	<100 #	<100 M	<10 M	<10 #	<200 M
Toluene	<7 µg/kg	TM116	<70 M	<70 #	<70 M	<7 M	<7 #	<140 M
trans-1,3-Dichloropropene	<10 µg/kg	TM116	<100	<100	<100	<10	<10	<200
1,1,2-Trichloroethane	<10 µg/kg	TM116	<100 M	<100 #	<100 M	<10 M	<10 #	<200 M
1,3-Dichloropropane	<7 µg/kg	TM116	<70 M	<70 #	<70 M	<7 M	<7 #	<140 M

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CERTIFICATE OF ANALYSIS

SDG:	180213-19	**Client Reference:**	A107448	**Report Number:**	445329
Location:	Meggitt, Coventry	**Order Number:**	NOT/1305	**Superseded Report:**	

VOC MS (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-5&+§@	Sample deviation (see appendix)

Customer Sample Ref.			WS31	WS32	WS33	WS34	WS35	WS36
Depth (m)			0.50	0.40	0.40	0.30	0.30	0.20
Sample Type			Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
Date Sampled			08/02/2018	08/02/2018	06/02/2018	07/02/2018	07/02/2018	08/02/2018
Sample Time			-	-	-	-	-	-
Date Received			13/02/2018	13/02/2018	13/02/2018	13/02/2018	13/02/2018	13/02/2018
SDG Ref			180213-19	180213-19	180213-19	180213-19	180213-19	180213-19
Lab Sample No.(s)			17036533	17036534	17036536	17036538	17036539	17036541
AGS Reference								
Component	**LOD/Units**	**Method**						
Tetrachloroethene	<5 µg/kg	TM116	<50 M	<50 #	<50 M	<5 M	<5 #	<100 M
Dibromochloromethane	<10 µg/kg	TM116	<100 M	<100 #	<100 M	<10 M	<10 #	<200 M
1,2-Dibromoethane	<10 µg/kg	TM116	<100 M	<100 #	<100 M	<10 M	<10 #	<200 M
Chlorobenzene	<5 µg/kg	TM116	<50 M	<50 #	<50 M	<5 M	<5 #	<100 M
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116	<100 M	<100 #	<100 M	<10 M	<10 #	<200 M
Ethylbenzene	<4 µg/kg	TM116	<40 M	<40 #	<40 M	<4 M	<4 #	<80 M
p/m-Xylene	<10 µg/kg	TM116	<100 #	<100 #	<100 #	<10 #	<10 #	<200 #
o-Xylene	<10 µg/kg	TM116	<100 M	<100 #	<100 M	<10 M	<10 #	<200 M
Styrene	<10 µg/kg	TM116	<100 #	<100 #	<100 #	<10 #	<10 #	<200 #
Bromoform	<10 µg/kg	TM116	<100 M	<100 #	<100 M	<10 M	<10 #	<200 M
Isopropylbenzene	<5 µg/kg	TM116	<50 #	<50 #	<50 #	<5 #	<5 #	<100 #
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116	<100 #	<100 #	<100 #	<10 #	<10 #	<200 #
1,2,3-Trichloropropane	<16 µg/kg	TM116	<160 M	<160 #	<160 M	<16 M	<16 #	<320 M
Bromobenzene	<10 µg/kg	TM116	<100 M	<100 #	<100 M	<10 M	<10 #	<200 M
Propylbenzene	<10 µg/kg	TM116	<100 M	<100 #	<100 M	<10 M	<10 #	<200 M
2-Chlorotoluene	<9 µg/kg	TM116	<90 M	<90 #	<90 M	<9 M	<9 #	<180 M
1,3,5-Trimethylbenzene	<8 µg/kg	TM116	<80 M	<80 #	<80 M	<8 M	<8 #	<160 M
4-Chlorotoluene	<10 µg/kg	TM116	<100 M	<100 #	<100 M	<10 M	<10 #	<200 M
tert-Butylbenzene	<14 µg/kg	TM116	<140 M	<140 #	<140 M	<14 M	<14 #	<280 M
1,2,4-Trimethylbenzene	<9 µg/kg	TM116	<90 #	<90 #	<90 #	<9 #	<9 #	<180 #
sec-Butylbenzene	<10 µg/kg	TM116	<100	<100	<100	<10	<10	<200
4-Isopropyltoluene	<10 µg/kg	TM116	<100 M	<100 #	<100 M	<10 M	<10 #	<200 M
1,3-Dichlorobenzene	<8 µg/kg	TM116	<80 M	<80 #	<80 M	<8 M	<8 #	<160 M
1,4-Dichlorobenzene	<5 µg/kg	TM116	<50 M	<50 #	<50 M	<5 M	<5 #	<100 M
n-Butylbenzene	<11 µg/kg	TM116	<110	<110	<110	<11	<11	<220
1,2-Dichlorobenzene	<10 µg/kg	TM116	<100 M	<100 #	<100 M	<10 M	<10 #	<200 M
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116	<140 M	<140 #	<140 M	<14 M	<14 #	<280 M
Tert-amyl methyl ether	<10 µg/kg	TM116	<100 #	<100 #	<100 #	<10 #	<10 #	<200 #
1,2,4-Trichlorobenzene	<20 µg/kg	TM116	<200	<200	<200	<20	<20	<400
Hexachlorobutadiene	<20 µg/kg	TM116	<200	<200	<200	<20	<20	<400
Naphthalene	<13 µg/kg	TM116	<130 M	<130 #	<130 M	<13 M	<13 #	<260 M
1,2,3-Trichlorobenzene	<20 µg/kg	TM116	<200 #	<200 #	<200 #	<20 #	<20 #	<400 #

Validated

CERTIFICATE OF ANALYSIS

SDG:	180213-19	**Client Reference:**	A107448	**Report Number:**	445329
Location:	Meggitt, Coventry	**Order Number:**	NOT/1305	**Superseded Report:**	

VOC MS (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-5&+§@	Sample deviation (see appendix)

Customer Sample Ref.			WS36	WS43	WS44	WS45	WS46	WS47
Depth (m)			0.50	0.10	0.20	0.15	0.50	0.10
Sample Type			Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
Date Sampled			08/02/2018	06/02/2018	06/02/2018	06/02/2018	06/02/2018	07/02/2018
Sample Time			.	.	.	.	.	.
Date Received			13/02/2018	13/02/2018	13/02/2018	13/02/2018	13/02/2018	13/02/2018
SDG Ref			180213-19	180213-19	180213-19	180213-19	180213-19	180213-19
Lab Sample No.(s)			17036565	17036542	17036545	17036546	17036549	17036550
AGS Reference								
Component	**LOD/Units**	**Method**						
Dibromofluoromethane**	%	TM116	118	164	7.53 2	106	113	122
Toluene-d8**	%	TM116	95.7	75.3	79.2 2	98.7	94.8	94.6
4-Bromofluorobenzene**	%	TM116	84.1	69.6	72.1 2	93.6	89.1	78.6
Dichlorodifluoromethane	<6 µg/kg	TM116	<6 M	<6 M	<6 2 M	<120 M	<120 M	<120 M
Chloromethane	<7 µg/kg	TM116	<7 #	<7 #	<7 2 #	<140 #	<140 #	<140 #
Vinyl Chloride	<6 µg/kg	TM116	<6 M	<6 M	<6 2 M	<120 M	<120 M	<120 M
Bromomethane	<10 µg/kg	TM116	<10 M	<10 M	<10 2 M	<200 M	<200 M	<200 M
Chloroethane	<10 µg/kg	TM116	<10 M	<10 M	<10 2 M	<200 M	<200 M	<200 M
Trichlorofluoromethane	<6 µg/kg	TM116	<6 M	<6 M	<6 2 M	<120 M	<120 M	<120 M
1,1-Dichloroethene	<10 µg/kg	TM116	<10 #	<10 #	<10 2 #	<200 #	<200 #	<200 #
Carbon Disulphide	<7 µg/kg	TM116	<7 M	<7 M	<7 2 M	<140 M	<140 M	<140 M
Dichloromethane	<10 µg/kg	TM116	<10 #	<10 #	<10 2 #	<200 #	<200 #	<200 #
Methyl Tertiary Butyl Ether	<10 µg/kg	TM116	<10 M	<10 M	<10 2 M	<200 M	<200 M	<200 M
trans-1,2-Dichloroethene	<10 µg/kg	TM116	<10 M	<10 M	<10 2 M	<200 M	<200 M	<200 M
1,1-Dichloroethane	<8 µg/kg	TM116	<8 M	<8 M	<8 2 M	<160 M	<160 M	<160 M
cis-1,2-Dichloroethene	<6 µg/kg	TM116	1060 M	<6 M	<6 2 M	<120 M	<120 M	<120 M
2,2-Dichloropropane	<10 µg/kg	TM116	<10	<10	<10 2	<200	<200	<200
Bromochloromethane	<10 µg/kg	TM116	<10 M	<10 M	<10 2 M	<200 M	<200 M	<200 M
Chloroform	<8 µg/kg	TM116	<8 M	<8 M	<8 2 M	<160 M	<160 M	<160 M
1,1,1-Trichloroethane	<7 µg/kg	TM116	104 M	<7 M	<7 2 M	<140 M	<140 M	<140 M
1,1-Dichloropropene	<10 µg/kg	TM116	<10 M	<10 M	<10 2 M	<200 M	<200 M	<200 M
Carbontetrachloride	<10 µg/kg	TM116	<10 M	<10 M	<10 2 M	<200 M	<200 M	<200 M
1,2-Dichloroethane	<5 µg/kg	TM116	<5 M	<5 M	<5 2 M	<100 M	<100 M	<100 M
Benzene	<9 µg/kg	TM116	<9 M	<9 M	<9 2 M	<180 M	<180 M	<180 M
Trichloroethene	<9 µg/kg	TM116	4060 #	<9 #	<9 2 #	<180 #	<180 #	<180 #
1,2-Dichloropropane	<10 µg/kg	TM116	<10 M	<10 M	<10 2 M	<200 M	<200 M	<200 M
Dibromomethane	<9 µg/kg	TM116	<9 M	<9 M	<9 2 M	<180 M	<180 M	<180 M
Bromodichloromethane	<7 µg/kg	TM116	<7 M	<7 M	<7 2 M	<140 M	<140 M	<140 M
cis-1,3-Dichloropropene	<10 µg/kg	TM116	<10 M	<10 M	<10 2 M	<200 M	<200 M	<200 M
Toluene	<7 µg/kg	TM116	<7 M	<7 M	<7 2 M	<140 M	<140 M	<140 M
trans-1,3-Dichloropropene	<10 µg/kg	TM116	<10	<10	<10 2	<200	<200	<200
1,1,2-Trichloroethane	<10 µg/kg	TM116	<10 M	<10 M	<10 2 M	<200 M	<200 M	<200 M
1,3-Dichloropropane	<7 µg/kg	TM116	<7 M	<7 M	<7 2 M	<140 M	<140 M	<140 M

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Validated

CERTIFICATE OF ANALYSIS

SDG:	180213-19	**Client Reference:**	A107448	**Report Number:**	445329
Location:	Meggitt, Coventry	**Order Number:**	NOT/1305	**Superseded Report:**	

VOC MS (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-5&+§@	Sample deviation (see appendix)

Customer Sample Ref.			WS36	WS43	WS44	WS45	WS46	WS47
Depth (m)			0.50	0.10	0.20	0.15	0.50	0.10
Sample Type			Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
Date Sampled			08/02/2018	06/02/2018	06/02/2018	06/02/2018	06/02/2018	07/02/2018
Sample Time			-	-	-	-	-	-
Date Received			13/02/2018	13/02/2018	13/02/2018	13/02/2018	13/02/2018	13/02/2018
SDG Ref			180213-19	180213-19	180213-19	180213-19	180213-19	180213-19
Lab Sample No.(s)			17036565	17036542	17036545	17036546	17036549	17036550
AGS Reference								
Component	**LOD/Units**	**Method**						
Tetrachloroethene	<5 µg/kg	TM116	39.4 M	<5 M	<5 2 M	<100 M	<100 M	<100 M
Dibromochloromethane	<10 µg/kg	TM116	<10 M	<10 M	<10 2 M	<200 M	<200 M	<200 M
1,2-Dibromoethane	<10 µg/kg	TM116	<10 M	<10 M	<10 2 M	<200 M	<200 M	<200 M
Chlorobenzene	<5 µg/kg	TM116	<5 M	<5 M	<5 2 M	<100 M	<100 M	<100 M
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116	<10 M	<10 M	<10 2 M	<200 M	<200 M	<200 M
Ethylbenzene	<4 µg/kg	TM116	<4 M	<4 M	11.5 2 M	<80 M	<80 M	<80 M
p/m-Xylene	<10 µg/kg	TM116	<10 #	<10 #	33.4 2 #	<200 #	<200 #	<200 #
o-Xylene	<10 µg/kg	TM116	<10 M	<10 M	26.2 2 M	<200 M	<200 M	<200 M
Styrene	<10 µg/kg	TM116	<10 #	<10 #	<10 2 #	<200 #	<200 #	<200 #
Bromoform	<10 µg/kg	TM116	<10 M	<10 M	<10 2 M	<200 M	<200 M	<200 M
Isopropylbenzene	<5 µg/kg	TM116	<5 #	<5 #	<5 2 #	<100 #	<100 #	<100 #
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116	<10 #	<10 #	<10 2 #	<200 #	<200 #	<200 #
1,2,3-Trichloropropane	<16 µg/kg	TM116	<16 M	<16 M	<16 2 M	<320 M	<320 M	<320 M
Bromobenzene	<10 µg/kg	TM116	<10 M	<10 M	<10 2 M	<200 M	<200 M	<200 M
Propylbenzene	<10 µg/kg	TM116	<10 M	<10 M	<10 2 M	<200 M	<200 M	<200 M
2-Chlorotoluene	<9 µg/kg	TM116	<9 M	<9 M	<9 2 M	<180 M	<180 M	<180 M
1,3,5-Trimethylbenzene	<8 µg/kg	TM116	<8 M	<8 M	<8 2 M	<160 M	<160 M	<160 M
4-Chlorotoluene	<10 µg/kg	TM116	<10 M	<10 M	<10 2 M	<200 M	<200 M	<200 M
tert-Butylbenzene	<14 µg/kg	TM116	<14 M	<14 M	<14 2 M	<280 M	<280 M	<280 M
1,2,4-Trimethylbenzene	<9 µg/kg	TM116	<9 #	<9 #	<9 2 #	<180 #	<180 #	<180 #
sec-Butylbenzene	<10 µg/kg	TM116	<10	<10	<10 2	<200	<200	<200
4-Isopropyltoluene	<10 µg/kg	TM116	<10 M	<10 M	<10 2 M	<200 M	<200 M	<200 M
1,3-Dichlorobenzene	<8 µg/kg	TM116	<8 M	<8 M	<8 2 M	<160 M	<160 M	<160 M
1,4-Dichlorobenzene	<5 µg/kg	TM116	<5 M	<5 M	<5 2 M	<100 M	<100 M	<100 M
n-Butylbenzene	<11 µg/kg	TM116	<11	<11	<11 2	<220	<220	<220
1,2-Dichlorobenzene	<10 µg/kg	TM116	<10 M	<10 M	<10 2 M	<200 M	<200 M	<200 M
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116	<14 M	<14 M	<14 2 M	<280 M	<280 M	<280 M
Tert-amyl methyl ether	<10 µg/kg	TM116	<10 #	<10 #	<10 2 #	<200 #	<200 #	<200 #
1,2,4-Trichlorobenzene	<20 µg/kg	TM116	<20	<20	<20 2	<400	<400	<400
Hexachlorobutadiene	<20 µg/kg	TM116	<20	<20	<20 2	<400	<400	<400
Naphthalene	<13 µg/kg	TM116	<13 M	<13 M	201 2 M	<260 M	<260 M	<260 M
1,2,3-Trichlorobenzene	<20 µg/kg	TM116	<20 #	<20 #	<20 2 #	<400 #	<400 #	<400 #

Validated

CERTIFICATE OF ANALYSIS

SDG:	180213-19	**Client Reference:**	A107448	**Report Number:**	445329
Location:	Meggitt, Coventry	**Order Number:**	NOT/1305	**Superseded Report:**	

VOC MS (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-5&+§@	Sample deviation (see appendix)

Customer Sample Ref.			WS48	WS49	WS49	WS50	WS51	WS51
Depth (m)			0.20	1.50	2.50	0.50	0.30	1.80
Sample Type			Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
Date Sampled			06/02/2018	06/02/2018	06/02/2018	06/02/2018	05/02/2018	05/02/2018
Sample Time			.	.	.	.	.	.
Date Received			13/02/2018	13/02/2018	13/02/2018	13/02/2018	13/02/2018	13/02/2018
SDG Ref			180213-19	180213-19	180213-19	180213-19	180213-19	180213-19
Lab Sample No.(s)			17036551	17036553	17036554	17036555	17036557	17036559
AGS Reference								
Component	**LOD/Units**	**Method**						
Dibromofluoromethane**	%	TM116	119	117	105	109	93.9	107
Toluene-d8**	%	TM116	93.6	100	101	87.9	88.5	86.9
4-Bromofluorobenzene**	%	TM116	84.6	99.9	104	71.7	82.7	77.1
Dichlorodifluoromethane	<6 µg/kg	TM116	<120 M	<6 M	<60 M	<6 M	<6 M	<6 M
Chloromethane	<7 µg/kg	TM116	<140 #	<7 #	<70 #	<7 #	<7 #	<7 #
Vinyl Chloride	<6 µg/kg	TM116	<120 M	<6 M	<60 M	<6 M	<6 M	<6 M
Bromomethane	<10 µg/kg	TM116	<200 M	<10 M	<100 M	<10 M	<10 M	<10 M
Chloroethane	<10 µg/kg	TM116	<200 M	<10 M	<100 M	<10 M	<10 M	<10 M
Trichlorofluoromethane	<6 µg/kg	TM116	<120 M	<6 M	<60 M	<6 M	<6 M	<6 M
1,1-Dichloroethene	<10 µg/kg	TM116	<200 #	<10 #	<100 #	<10 #	<10 #	<10 #
Carbon Disulphide	<7 µg/kg	TM116	<140 M	<7 M	<70 M	<7 M	<7 M	<7 M
Dichloromethane	<10 µg/kg	TM116	<200 #	<10 #	<100 #	<10 #	<10 #	<10 #
Methyl Tertiary Butyl Ether	<10 µg/kg	TM116	<200 M	<10 M	<100 M	<10 M	<10 M	<10 M
trans-1,2-Dichloroethene	<10 µg/kg	TM116	<200 M	<10 M	<100 M	<10 M	<10 M	<10 M
1,1-Dichloroethane	<8 µg/kg	TM116	<160 M	<8 M	<80 M	<8 M	<8 M	<8 M
cis-1,2-Dichloroethene	<6 µg/kg	TM116	<120 M	<6 M	<60 M	<6 M	<6 M	<6 M
2,2-Dichloropropane	<10 µg/kg	TM116	<200	<10	<100	<10	<10	<10
Bromochloromethane	<10 µg/kg	TM116	<200 M	<10 M	<100 M	<10 M	<10 M	<10 M
Chloroform	<8 µg/kg	TM116	<160 M	<8 M	<80 M	<8 M	<8 M	<8 M
1,1,1-Trichloroethane	<7 µg/kg	TM116	<140 M	<7 M	<70 M	<7 M	- M	<7 M
1,1-Dichloropropene	<10 µg/kg	TM116	<200 M	<10 M	<100 M	<10 M	<10 M	<10 M
Carbontetrachloride	<10 µg/kg	TM116	<200 M	<10 M	<100 M	<10 M	- M	<10 M
1,2-Dichloroethane	<5 µg/kg	TM116	<100 M	<5 M	<50 M	<5 M	<5 M	<5 M
Benzene	<9 µg/kg	TM116	<180 M	<9 M	<90 M	<9 M	<9 M	<9 M
Trichloroethene	<9 µg/kg	TM116	<180 #	<9 #	<90 #	<9 #	<9 #	<9 #
1,2-Dichloropropane	<10 µg/kg	TM116	<200 M	<10 M	<100 M	<10 M	<10 M	<10 M
Dibromomethane	<9 µg/kg	TM116	<180 M	<9 M	<90 M	<9 M	<9 M	<9 M
Bromodichloromethane	<7 µg/kg	TM116	<140 M	<7 M	<70 M	<7 M	<7 M	<7 M
cis-1,3-Dichloropropene	<10 µg/kg	TM116	<200 M	<10 M	<100 M	<10 M	<10 M	<10 M
Toluene	<7 µg/kg	TM116	<140 M	<7 M	<70 M	<7 M	<7 M	<7 M
trans-1,3-Dichloropropene	<10 µg/kg	TM116	<200	<10	<100	<10	<10	<10
1,1,2-Trichloroethane	<10 µg/kg	TM116	<200 M	<10 M	<100 M	<10 M	<10 M	<10 M
1,3-Dichloropropane	<7 µg/kg	TM116	<140 M	<7 M	<70 M	<7 M	<7 M	<7 M

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Validated

CERTIFICATE OF ANALYSIS

SDG:	180213-19	**Client Reference:**	A107448	**Report Number:**	445329
Location:	Meggitt, Coventry	**Order Number:**	NOT/1305	**Superseded Report:**	

VOC MS (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-5&+§@	Sample deviation (see appendix)

Customer Sample Ref.			WS48	WS49	WS49	WS50	WS51	WS51
Depth (m)			0.20	1.50	2.50	0.50	0.30	1.80
Sample Type			Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
Date Sampled			06/02/2018	06/02/2018	06/02/2018	06/02/2018	05/02/2018	05/02/2018
Sample Time			-	-	-	-	-	-
Date Received			13/02/2018	13/02/2018	13/02/2018	13/02/2018	13/02/2018	13/02/2018
SDG Ref			180213-19	180213-19	180213-19	180213-19	180213-19	180213-19
Lab Sample No.(s)			17036551	17036553	17036554	17036555	17036557	17036559
AGS Reference								
Component	**LOD/Units**	**Method**						
Tetrachloroethene	<5 µg/kg	TM116	<100 M	<5 M	<50 M	<5 M	<5 M	<5 M
Dibromochloromethane	<10 µg/kg	TM116	<200 M	<10 M	<100 M	<10 M	<10 M	<10 M
1,2-Dibromoethane	<10 µg/kg	TM116	<200 M	<10 M	<100 M	<10 M	<10 M	<10 M
Chlorobenzene	<5 µg/kg	TM116	<100 M	<5 M	<50 M	<5 M	<5 M	<5 M
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116	<200 M	<10 M	<100 M	<10 M	<10 M	<10 M
Ethylbenzene	<4 µg/kg	TM116	<80 M	<4 M	<40 M	<4 M	<4 M	<4 M
p/m-Xylene	<10 µg/kg	TM116	<200 #	<10 #	<100 #	<10 #	<10 #	<10 #
o-Xylene	<10 µg/kg	TM116	<200 M	<10 M	<100 M	<10 M	<10 M	<10 M
Styrene	<10 µg/kg	TM116	<200 #	<10 #	<100 #	<10 #	<10 #	<10 #
Bromoform	<10 µg/kg	TM116	<200 M	<10 M	<100 M	<10 M	<10 M	<10 M
Isopropylbenzene	<5 µg/kg	TM116	<100 #	<5 #	<50 #	<5 #	<5 #	<5 #
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116	<200 #	<10 #	<100 #	<10 #	<10 #	<10 #
1,2,3-Trichloropropane	<16 µg/kg	TM116	<320 M	<16 M	<160 M	<16 M	<16 M	<16 M
Bromobenzene	<10 µg/kg	TM116	<200 M	<10 M	<100 M	<10 M	<10 M	<10 M
Propylbenzene	<10 µg/kg	TM116	<200 M	<10 M	<100 M	<10 M	<10 M	<10 M
2-Chlorotoluene	<9 µg/kg	TM116	<180 M	<9 M	<90 M	<9 M	<9 M	<9 M
1,3,5-Trimethylbenzene	<8 µg/kg	TM116	<160 M	<8 M	<80 M	<8 M	<8 M	46.7 M
4-Chlorotoluene	<10 µg/kg	TM116	<200 M	<10 M	<100 M	<10 M	<10 M	<10 M
tert-Butylbenzene	<14 µg/kg	TM116	<280 M	<14 M	<140 M	<14 M	<14 M	<14 M
1,2,4-Trimethylbenzene	<9 µg/kg	TM116	<180 #	<9 #	542 #	<9 #	<9 #	<9 #
sec-Butylbenzene	<10 µg/kg	TM116	<200	<10	<100	<10	<10	81.1
4-Isopropyltoluene	<10 µg/kg	TM116	<200 M	<10 M	<100 M	<10 M	<10 M	<10 M
1,3-Dichlorobenzene	<8 µg/kg	TM116	<160 M	<8 M	<80 M	<8 M	<8 M	<8 M
1,4-Dichlorobenzene	<5 µg/kg	TM116	<100 M	<5 M	<50 M	<5 M	<5 M	<5 M
n-Butylbenzene	<11 µg/kg	TM116	<220	<11	195	<11	<11	<11
1,2-Dichlorobenzene	<10 µg/kg	TM116	<200 M	<10 M	<100 M	<10 M	<10 M	<10 M
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116	<280 M	<14 M	<140 M	<14 M	<14 M	<14 M
Tert-amyl methyl ether	<10 µg/kg	TM116	<200 #	<10 #	<100 #	<10 #	<10 #	<10 #
1,2,4-Trichlorobenzene	<20 µg/kg	TM116	<400	<20	<200	<20	<20	<20
Hexachlorobutadiene	<20 µg/kg	TM116	<400	<20	<200	<20	<20	<20
Naphthalene	<13 µg/kg	TM116	<260 M	<13 M	<130 M	<13 M	124 M	<13 M
1,2,3-Trichlorobenzene	<20 µg/kg	TM116	<400 #	<20 #	<200 #	<20 #	<20 #	<20 #

Validated

CERTIFICATE OF ANALYSIS

SDG:	180213-19	**Client Reference:**	A107448	**Report Number:**	445329
Location:	Meggitt, Coventry	**Order Number:**	NOT/1305	**Superseded Report:**	

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-5&+§@	Sample deviation (see appendix)

Customer Sample Ref.			WS51	WS52	WS53	WS54		
Depth (m)			3.50	0.30	0.60	0.20		
Sample Type			Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)		
Date Sampled			05/02/2018	05/02/2018	06/02/2018	07/02/2018		
Sample Time			.	.	.	.		
Date Received			13/02/2018	13/02/2018	13/02/2018	13/02/2018		
SDG Ref			180213-19	180213-19	180213-19	180213-19		
Lab Sample No.(s)			17036560	17036561	17036562	17036563		
AGS Reference								
Component	**LOD/Units**	**Method**						
Dibromofluoromethane**	%	TM116	105	123	105 2	18		
Toluene-d8**	%	TM116	100	90.4	101 2	78.7		
4-Bromofluorobenzene**	%	TM116	96.2	68.9	99.2 2	76.4		
Dichlorodifluoromethane	<6 µg/kg	TM116	<6 M	<6 M	<6 2 M	<6 M		
Chloromethane	<7 µg/kg	TM116	<7 #	<7 #	<7 2 #	<7 #		
Vinyl Chloride	<6 µg/kg	TM116	<6 M	<6 M	<6 2 M	<6 M		
Bromomethane	<10 µg/kg	TM116	<10 M	<10 M	<10 2 M	<10 M		
Chloroethane	<10 µg/kg	TM116	<10 M	<10 M	<10 2 M	<10 M		
Trichlorofluoromethane	<6 µg/kg	TM116	<6 M	<6 M	<6 2 M	<6 M		
1,1-Dichloroethene	<10 µg/kg	TM116	<10 #	<10 #	<10 2 #	<10 #		
Carbon Disulphide	<7 µg/kg	TM116	<7 M	<7 M	<7 2 M	<7 M		
Dichloromethane	<10 µg/kg	TM116	<10 #	<10 #	<10 2 #	<10 #		
Methyl Tertiary Butyl Ether	<10 µg/kg	TM116	<10 M	<10 M	<10 2 M	<10 M		
trans-1,2-Dichloroethene	<10 µg/kg	TM116	<10 M	<10 M	<10 2 M	<10 M		
1,1-Dichloroethane	<8 µg/kg	TM116	<8 M	<8 M	<8 2 M	<8 M		
cis-1,2-Dichloroethene	<6 µg/kg	TM116	<6 M	15.6 M	<6 2 M	<6 M		
2,2-Dichloropropane	<10 µg/kg	TM116	<10	<10	<10 2	<10		
Bromochloromethane	<10 µg/kg	TM116	<10 M	<10 M	<10 2 M	<10 M		
Chloroform	<8 µg/kg	TM116	<8 M	<8 M	<8 2 M	<8 M		
1,1,1-Trichloroethane	<7 µg/kg	TM116	<7 M	<7 M	<7 3 M	<7 M		
1,1-Dichloropropene	<10 µg/kg	TM116	<10 M	<10 M	<10 2 M	<10 M		
Carbontetrachloride	<10 µg/kg	TM116	<10 M	<10 M	<10 3 M	<10 M		
1,2-Dichloroethane	<5 µg/kg	TM116	<5 M	<5 M	<5 3 M	<5 M		
Benzene	<9 µg/kg	TM116	<9 M	<9 M	<9 2 M	<9 M		
Trichloroethene	<9 µg/kg	TM116	<9 #	171 #	<9 2 #	<9 #		
1,2-Dichloropropane	<10 µg/kg	TM116	<10 M	<10 M	<10 2 M	<10 M		
Dibromomethane	<9 µg/kg	TM116	<9 M	<9 M	<9 2 M	<9 M		
Bromodichloromethane	<7 µg/kg	TM116	<7 M	<7 M	<7 2 M	<7 M		
cis-1,3-Dichloropropene	<10 µg/kg	TM116	<10 M	<10 M	<10 2 M	<10 M		
Toluene	<7 µg/kg	TM116	<7 M	8.13 M	<7 2 M	<7 M		
trans-1,3-Dichloropropene	<10 µg/kg	TM116	<10	<10	<10 2	<10		
1,1,2-Trichloroethane	<10 µg/kg	TM116	<10 M	<10 M	<10 2 M	<10 M		
1,3-Dichloropropane	<7 µg/kg	TM116	<7 M	<7 M	<7 2 M	<7 M		

09:15:38 21/02/2018

Validated

CERTIFICATE OF ANALYSIS

SDG:	180213-19	**Client Reference:**	A107448	**Report Number:**	445329
Location:	Meggitt, Coventry	**Order Number:**	NOT/1305	**Superseded Report:**	

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-5&+§@	Sample deviation (see appendix)

Customer Sample Ref.			WS51	WS52	WS53	WS54		
Depth (m)			3.50	0.30	0.60	0.20		
Sample Type			Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)		
Date Sampled			05/02/2018	05/02/2018	06/02/2018	07/02/2018		
Sample Time			-	-	-	-		
Date Received			13/02/2018	13/02/2018	13/02/2018	13/02/2018		
SDG Ref			180213-19	180213-19	180213-19	180213-19		
Lab Sample No.(s)			17036560	17036561	17036562	17036563		
AGS Reference								
Component	**LOD/Units**	**Method**						
Tetrachloroethene	<5 µg/kg	TM116	<5 M	<5 M	<5 2 M	<5 M		
Dibromochloromethane	<10 µg/kg	TM116	<10 M	<10 M	<10 2 M	<10 M		
1,2-Dibromoethane	<10 µg/kg	TM116	<10 M	<10 M	<10 2 M	<10 M		
Chlorobenzene	<5 µg/kg	TM116	<5 M	<5 M	<5 2 M	<5 M		
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116	<10 M	<10 M	<10 2 M	<10 M		
Ethylbenzene	<4 µg/kg	TM116	<4 M	<4 M	<4 2 M	<4 M		
p/m-Xylene	<10 µg/kg	TM116	<10 #	<10 #	<10 2 #	<10 #		
o-Xylene	<10 µg/kg	TM116	<10 M	<10 M	<10 2 M	<10 M		
Styrene	<10 µg/kg	TM116	<10 #	<10 #	<10 2 #	<10 #		
Bromoform	<10 µg/kg	TM116	<10 M	<10 M	<10 2 M	<10 M		
Isopropylbenzene	<5 µg/kg	TM116	<5 #	<5 #	<5 2 #	<5 #		
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116	<10 #	<10 #	<10 2 #	<10 #		
1,2,3-Trichloropropane	<16 µg/kg	TM116	<16 M	<16 M	<16 2 M	<16 M		
Bromobenzene	<10 µg/kg	TM116	<10 M	<10 M	<10 2 M	<10 M		
Propylbenzene	<10 µg/kg	TM116	<10 M	<10 M	<10 2 M	<10 M		
2-Chlorotoluene	<9 µg/kg	TM116	<9 M	<9 M	<9 2 M	<9 M		
1,3,5-Trimethylbenzene	<8 µg/kg	TM116	<8 M	<8 M	<8 2 M	<8 M		
4-Chlorotoluene	<10 µg/kg	TM116	<10 M	<10 M	<10 2 M	<10 M		
tert-Butylbenzene	<14 µg/kg	TM116	<14 M	<14 M	<14 2 M	<14 M		
1,2,4-Trimethylbenzene	<9 µg/kg	TM116	<9 #	<9 #	<9 2 #	<9 #		
sec-Butylbenzene	<10 µg/kg	TM116	<10	<10	<10 2	<10		
4-Isopropyltoluene	<10 µg/kg	TM116	<10 M	<10 M	<10 2 M	<10 M		
1,3-Dichlorobenzene	<8 µg/kg	TM116	<8 M	<8 M	<8 2 M	<8 M		
1,4-Dichlorobenzene	<5 µg/kg	TM116	<5 M	<5 M	<5 2 M	<5 M		
n-Butylbenzene	<11 µg/kg	TM116	<11	<11	<11 2	<11		
1,2-Dichlorobenzene	<10 µg/kg	TM116	<10 M	<10 M	<10 2 M	<10 M		
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116	<14 M	<14 M	<14 2 M	<14 M		
Tert-amyl methyl ether	<10 µg/kg	TM116	<10 #	<10 #	<10 2 #	<10 #		
1,2,4-Trichlorobenzene	<20 µg/kg	TM116	<20	<20	<20 2	<20		
Hexachlorobutadiene	<20 µg/kg	TM116	<20	<20	<20 2	<20		
Naphthalene	<13 µg/kg	TM116	<13 M	<13 M	<13 2 M	<13 M		
1,2,3-Trichlorobenzene	<20 µg/kg	TM116	<20 #	<20 #	<20 2 #	<20 #		

Validated

CERTIFICATE OF ANALYSIS

SDG:	180213-19	**Client Reference:**	A107448	**Report Number:**	445329
Location:	Meggitt, Coventry	**Order Number:**	NOT/1305	**Superseded Report:**	

Asbestos Identification - Bulk

		Date of Analysis	Analysed by	Comments	Actinolite, Fibrous	Anthophyllite, Fibrous	Asbestos, Amosite (brown)	Asbestos, Chrysotile (white)	Asbestos, Crocidolite (blue)	Non-asbestos fibre	Tremolite, Fibrous
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS28_ASB 0.90 SOLID 08/02/2018 00:00:00 13/02/2018 11:52:47 180213-19 17040174 TM048	22/02/18	Christian Hallam	Material typical of Asbestos Cement	Not Detected (#)	Not Detected (#)	Not Detected (#)	Detected (#)	Not Detected (#)	Not Detected	Not Detected (#)

Asbestos Identification - Solid Samples

		Date of Analysis	Analysed By	Comments	Amosite (Brown) Asbestos	Chrysotile (White) Asbestos	Crocidolite (Blue) Asbestos	Fibrous Actinolite	Fibrous Anthophyllite	Fibrous Tremolite	Non-Asbestos Fibre
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS2 0.20 SOLID 09/02/2018 00:00:00 14/02/2018 11:23:52 180213-19 17036517 TM048	20/02/2018	Marcin Magdziarek	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS2 1.10 SOLID 09/02/2018 00:00:00 14/02/2018 11:22:08 180213-19 17036518 TM048	20/02/2018	Marcin Magdziarek	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS3 0.20 SOLID 09/02/2018 00:00:00 14/02/2018 11:18:41 180213-19 17036519 TM048	20/02/2018	Marcin Magdziarek	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS10 0.20 SOLID 09/02/2018 00:00:00 14/02/2018 11:20:30 180213-19 17036520 TM048	20/02/2018	Marcin Magdziarek	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS19 0.20 SOLID 07/02/2018 00:00:00 14/02/2018 10:05:44 180213-19 17036521 TM048	20/02/2018	Marcin Magdziarek	Soil containing ACM debris	Not Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS20 0.20 SOLID 07/02/2018 00:00:00 14/02/2018 10:02:13 180213-19 17036523 TM048	20/02/2018	James Richards	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

Validated

CERTIFICATE OF ANALYSIS

SDG: 180213-19 **Client Reference:** A107448 **Report Number:** 445329
Location: Meggitt, Coventry **Order Number:** NOT/1305 **Superseded Report:**

		Date of Analysis	Analysed By	Comments	Amosite (Brown) Asbestos	Chrysotile (White) Asbestos	Crocidolite (Blue) Asbestos	Fibrous Actinolite	Fibrous Anthophyllite	Fibrous Tremolite	Non-Asbestos Fibre
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS21 0.50 SOLID 08/02/2018 00:00:00 14/02/2018 10:04:09 180213-19 17036525 TM048	20/02/2018	Marcin Magdziarek	Soil containing ACM debris	Not Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS22 0.20 SOLID 09/02/2018 00:00:00 14/02/2018 11:34:02 180213-19 17036526 TM048	20/02/2018	Marcin Magdziarek	Loose fibre in soil	Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS33 0.40 SOLID 06/02/2018 00:00:00 14/02/2018 11:49:00 180213-19 17036536 TM048	20/02/2018	James Richards	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS34 0.30 SOLID 07/02/2018 00:00:00 14/02/2018 11:28:22 180213-19 17036538 TM048	20/02/2018	Marcin Magdziarek	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS36 0.20 SOLID 08/02/2018 00:00:00 14/02/2018 11:26:38 180213-19 17036541 TM048	19/02/2018	Marcin Magdziarek	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS43 0.10 SOLID 06/02/2018 00:00:00 14/02/2018 11:43:34 180213-19 17036542 TM048	20/02/2018	Marcin Magdziarek	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Detected

Validated

CERTIFICATE OF ANALYSIS

SDG: 180213-19 **Client Reference:** A107448 **Report Number:** 445329
Location: Meggitt, Coventry **Order Number:** NOT/1305 **Superseded Report:**

		Date of Analysis	Analysed By	Comments	Amosite (Brown) Asbestos	Chrysotile (White) Asbestos	Crocidolite (Blue) Asbestos	Fibrous Actinolite	Fibrous Anthophyllite	Fibrous Tremolite	Non-Asbestos Fibre
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS44 0.20 SOLID 06/02/2018 00:00:00 14/02/2018 11:41:50 180213-19 17036545 TM048	20/02/2018	James Richards	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS45 0.15 SOLID 06/02/2018 00:00:00 14/02/2018 11:45:33 180213-19 17036546 TM048	20/02/2018	Marcin Magdziarek	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS47 0.10 SOLID 07/02/2018 00:00:00 14/02/2018 11:51:46 180213-19 17036550 TM048	19/02/2018	Marcin Magdziarek	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS48 0.20 SOLID 06/02/2018 00:00:00 14/02/2018 11:53:18 180213-19 17036551 TM048	20/02/2018	James Richards	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS51 0.30 SOLID 05/02/2018 00:00:00 14/02/2018 11:58:35 180213-19 17036557 TM048	19/02/2018	Marcin Magdziarek	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS52 0.30 SOLID 05/02/2018 00:00:00 14/02/2018 13:33:24 180213-19 17036561 TM048	19/02/2018	Marcin Magdziarek	loose fibres in soil	Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

Validated

CERTIFICATE OF ANALYSIS

SDG:	180213-19	**Client Reference:**	A107448	**Report Number:**	445329
Location:	Meggitt, Coventry	**Order Number:**	NOT/1305	**Superseded Report:**	

		Date of Analysis	Analysed By	Comments	Amosite (Brown) Asbestos	Chrysotile (White) Asbestos	Crocidolite (Blue) Asbestos	Fibrous Actinolite	Fibrous Anthophyllite	Fibrous Tremolite	Non-Asbestos Fibre
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS54 0.20 SOLID 07/02/2018 00:00:00 14/02/2018 12:01:05 180213-19 17036563 TM048	19/02/2018	Marcin Magdziarek	Loose fibres in soil	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

Validated

CERTIFICATE OF ANALYSIS

SDG:	180213-19	**Client Reference:**	A107448	**Report Number:**	445329
Location:	Meggitt, Coventry	**Order Number:**	NOT/1305	**Superseded Report:**	

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	Meggitt, Coventry
Mass Sample taken (kg)	0.114	**Natural Moisture Content (%)**	26.6
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	79
Particle Size <4mm	>95%		

Case				
SDG	180213-19			
Lab Sample Number(s)	17036517			
Sampled Date	09-Feb-2018			
Customer Sample Ref.	WS2			
Depth (m)	0.20			

Eluate Analysis	**C2** Concⁿ in 10:1 eluate (mg/l)		**A2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
Ammoniacal Nitrogen as N	<0.2	<0.2	<2	<2	-	-	-
pH Value of Filtered Water	8	<0.001	80	<0.01	-	-	-
Sulphate (soluble)	51.3	<2	513	<20	-	-	-
Mercury Dissolved (CVAF)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
Total Cyanide (W)	<0.05	<0.05	<0.5	<0.5	-	-	-
Arsenic	0.000856	<0.0005	0.00856	<0.005	-	-	-
Boron	0.0848	<0.005	0.848	<0.05	-	-	-
Cadmium	<0.00008	<0.00008	<0.0008	<0.0008	-	-	-
Chromium	<0.001	<0.001	<0.01	<0.01	-	-	-
Copper	0.00163	<0.0003	0.0163	<0.003	-	-	-
Lead	<0.0002	<0.0002	<0.002	<0.002	-	-	-
Nickel	0.000475	<0.0004	0.00475	<0.004	-	-	-
Selenium	0.000645	<0.0005	0.00645	<0.005	-	-	-
Zinc	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	15-Feb-2018
pH (pH Units)	8.22
Conductivity (µS/cm)	204.00
Temperature (ºC)	21.10
Volume Leachant (Litres)	0.876

Mcerts Certification does not apply to leachates
21/02/2018 09:16:27

09:15:38 21/02/2018

Validated

CERTIFICATE OF ANALYSIS

SDG:	180213-19	**Client Reference:**	A107448	**Report Number:**	445329
Location:	Meggitt, Coventry	**Order Number:**	NOT/1305	**Superseded Report:**	

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	Meggitt, Coventry
Mass Sample taken (kg)	0.105	**Natural Moisture Content (%)**	16.3
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	86
Particle Size <4mm	>95%		

Case				
SDG	180213-19			
Lab Sample Number(s)	17036519			
Sampled Date	09-Feb-2018			
Customer Sample Ref.	WS3			
Depth (m)	0.20			

Eluate Analysis	**C2** Concⁿ in 10:1 eluate (mg/l)		**A2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
Ammoniacal Nitrogen as N	<0.2	<0.2	<2	<2	-	-	-
pH Value of Filtered Water	8.4	<0.001	84	<0.01	-	-	-
Sulphate (soluble)	5.8	<2	58	<20	-	-	-
Mercury Dissolved (CVAF)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
Total Cyanide (W)	<0.05	<0.05	<0.5	<0.5	-	-	-
Arsenic	0.00747	<0.0005	0.0747	<0.005	-	-	-
Boron	0.0244	<0.005	0.244	<0.05	-	-	-
Cadmium	<0.00008	<0.00008	<0.0008	<0.0008	-	-	-
Chromium	<0.001	<0.001	<0.01	<0.01	-	-	-
Copper	0.00243	<0.0003	0.0243	<0.003	-	-	-
Lead	0.000462	<0.0002	0.00462	<0.002	-	-	-
Nickel	0.000511	<0.0004	0.00511	<0.004	-	-	-
Selenium	0.00117	<0.0005	0.0117	<0.005	-	-	-
Zinc	0.00153	<0.001	0.0153	<0.01	-	-	-

Leach Test Information

Date Prepared	15-Feb-2018
pH (pH Units)	8.34
Conductivity (µS/cm)	334.00
Temperature (ºC)	21.00
Volume Leachant (Litres)	0.885

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CERTIFICATE OF ANALYSIS

SDG:	180213-19	**Client Reference:**	A107448	**Report Number:**	445329
Location:	Meggitt, Coventry	**Order Number:**	NOT/1305	**Superseded Report:**	

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	Meggitt, Coventry
Mass Sample taken (kg)	0.116	**Natural Moisture Content (%)**	28.2
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	78
Particle Size <4mm	>95%		

Case				
SDG	180213-19			
Lab Sample Number(s)	17036520			
Sampled Date	09-Feb-2018			
Customer Sample Ref.	WS10			
Depth (m)	0.20			

Eluate Analysis	**C2** Conc^n in 10:1 eluate (mg/l)		**A2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
Ammoniacal Nitrogen as N	<0.2	<0.2	<2	<2	-	-	-
pH Value of Filtered Water	9	<0.001	90	<0.01	-	-	-
Sulphate (soluble)	3.7	<2	37	<20	-	-	-
Mercury Dissolved (CVAF)	0.0000299	<0.00001	0.000299	<0.0001	-	-	-
Total Cyanide (W)	<0.05	<0.05	<0.5	<0.5	-	-	-
Arsenic	0.0066	<0.0005	0.066	<0.005	-	-	-
Boron	0.107	<0.005	1.07	<0.05	-	-	-
Cadmium	<0.00008	<0.00008	<0.0008	<0.0008	-	-	-
Chromium	<0.001	<0.001	<0.01	<0.01	-	-	-
Copper	0.00397	<0.0003	0.0397	<0.003	-	-	-
Lead	0.00176	<0.0002	0.0176	<0.002	-	-	-
Nickel	0.00116	<0.0004	0.0116	<0.004	-	-	-
Selenium	0.00111	<0.0005	0.0111	<0.005	-	-	-
Zinc	0.00468	<0.001	0.0468	<0.01	-	-	-

Leach Test Information

Date Prepared	15-Feb-2018
pH (pH Units)	8.90
Conductivity (µS/cm)	166.00
Temperature (ºC)	20.90
Volume Leachant (Litres)	0.875

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CERTIFICATE OF ANALYSIS

SDG:	180213-19	**Client Reference:**	A107448	**Report Number:**	445329
Location:	Meggitt, Coventry	**Order Number:**	NOT/1305	**Superseded Report:**	

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	Meggitt, Coventry
Mass Sample taken (kg)	0.106	**Natural Moisture Content (%)**	17.6
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	85
Particle Size <4mm	>95%		

Case				
SDG	180213-19			
Lab Sample Number(s)	17036521			
Sampled Date	07-Feb-2018			
Customer Sample Ref.	WS19			
Depth (m)	0.20			

Eluate Analysis	**C2** Concⁿ in 10:1 eluate (mg/l)		**A2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
Ammoniacal Nitrogen as N	<0.2	<0.2	<2	<2	-	-	-
pH Value of Filtered Water	7.9	<0.001	79	<0.01	-	-	-
Sulphate (soluble)	23.8	<2	238	<20	-	-	-
Mercury Dissolved (CVAF)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
Total Cyanide (W)	<0.05	<0.05	<0.5	<0.5	-	-	-
Arsenic	0.00129	<0.0005	0.0129	<0.005	-	-	-
Boron	0.0333	<0.005	0.333	<0.05	-	-	-
Cadmium	<0.00008	<0.00008	<0.0008	<0.0008	-	-	-
Chromium	<0.001	<0.001	<0.01	<0.01	-	-	-
Copper	0.00278	<0.0003	0.0278	<0.003	-	-	-
Lead	<0.0002	<0.0002	<0.002	<0.002	-	-	-
Nickel	0.000812	<0.0004	0.00812	<0.004	-	-	-
Selenium	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Zinc	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	15-Feb-2018
pH (pH Units)	7.73
Conductivity (µS/cm)	166.00
Temperature (ºC)	19.50
Volume Leachant (Litres)	0.884

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CERTIFICATE OF ANALYSIS

SDG:	180213-19	**Client Reference:**	A107448	**Report Number:**	445329
Location:	Meggitt, Coventry	**Order Number:**	NOT/1305	**Superseded Report:**	

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	Meggitt, Coventry
Mass Sample taken (kg)	0.097	**Natural Moisture Content (%)**	8.23
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	92.4
Particle Size <4mm	>95%		

Case	
SDG	180213-19
Lab Sample Number(s)	17036523
Sampled Date	07-Feb-2018
Customer Sample Ref.	WS20
Depth (m)	0.20

Eluate Analysis	**C2** Concⁿ in 10:1 eluate (mg/l)		**A2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
Ammoniacal Nitrogen as N	<0.2	<0.2	<2	<2	-	-	-
pH Value of Filtered Water	9.9	<0.001	99	<0.01	-	-	-
Sulphate (soluble)	<10	<10	<100	<100	-	-	-
Mercury Dissolved (CVAF)	0.0000767	<0.00001	0.000767	<0.0001	-	-	-
Total Cyanide (W)	<0.05	<0.05	<0.5	<0.5	-	-	-
Arsenic	0.0059	<0.0005	0.059	<0.005	-	-	-
Boron	0.038	<0.005	0.38	<0.05	-	-	-
Cadmium	0.000578	<0.00008	0.00578	<0.0008	-	-	-
Chromium	0.00161	<0.001	0.0161	<0.01	-	-	-
Copper	0.0288	<0.0003	0.288	<0.003	-	-	-
Lead	0.00162	<0.0002	0.0162	<0.002	-	-	-
Nickel	0.00771	<0.0004	0.0771	<0.004	-	-	-
Selenium	0.000574	<0.0005	0.00574	<0.005	-	-	-
Zinc	0.00584	<0.001	0.0584	<0.01	-	-	-

Leach Test Information

Date Prepared	15-Feb-2018
pH (pH Units)	9.79
Conductivity (µS/cm)	266.00
Temperature (ºC)	21.00
Volume Leachant (Litres)	0.893

Mcerts Certification does not apply to leachates
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CERTIFICATE OF ANALYSIS

SDG:	180213-19	**Client Reference:**	A107448	**Report Number:**	445329
Location:	Meggitt, Coventry	**Order Number:**	NOT/1305	**Superseded Report:**	

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	Meggitt, Coventry
Mass Sample taken (kg)	0.113	**Natural Moisture Content (%)**	26.6
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	79
Particle Size <4mm	>95%		

Case				
SDG	180213-19			
Lab Sample Number(s)	17036525			
Sampled Date	08-Feb-2018			
Customer Sample Ref.	WS21			
Depth (m)	0.50			

Eluate Analysis	**C2** Conc^n in 10:1 eluate (mg/l)		**A2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
Ammoniacal Nitrogen as N	<0.2	<0.2	<2	<2	-	-	-
pH Value of Filtered Water	8.5	<0.001	85	<0.01	-	-	-
Sulphate (soluble)	17.4	<2	174	<20	-	-	-
Mercury Dissolved (CVAF)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
Total Cyanide (W)	<0.05	<0.05	<0.5	<0.5	-	-	-
Arsenic	0.00456	<0.0005	0.0456	<0.005	-	-	-
Boron	0.0506	<0.005	0.506	<0.05	-	-	-
Cadmium	<0.00008	<0.00008	<0.0008	<0.0008	-	-	-
Chromium	<0.001	<0.001	<0.01	<0.01	-	-	-
Copper	0.00303	<0.0003	0.0303	<0.003	-	-	-
Lead	0.00181	<0.0002	0.0181	<0.002	-	-	-
Nickel	0.000814	<0.0004	0.00814	<0.004	-	-	-
Selenium	0.00219	<0.0005	0.0219	<0.005	-	-	-
Zinc	0.00175	<0.001	0.0175	<0.01	-	-	-

Leach Test Information

Date Prepared	15-Feb-2018
pH (pH Units)	7.81
Conductivity (µS/cm)	209.00
Temperature (ºC)	20.90
Volume Leachant (Litres)	0.876

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CERTIFICATE OF ANALYSIS

SDG:	180213-19	**Client Reference:**	A107448	**Report Number:**	445329
Location:	Meggitt, Coventry	**Order Number:**	NOT/1305	**Superseded Report:**	

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	Meggitt, Coventry
Mass Sample taken (kg)	0.107	**Natural Moisture Content (%)**	19
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	84
Particle Size <4mm	>95%		

Case				
SDG	180213-19			
Lab Sample Number(s)	17036526			
Sampled Date	09-Feb-2018			
Customer Sample Ref.	WS22			
Depth (m)	0.20			

Eluate Analysis	**C2** Concⁿ in 10:1 eluate (mg/l)		**A2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
Ammoniacal Nitrogen as N	<0.2	<0.2	<2	<2	-	-	-
pH Value of Filtered Water	8	<0.001	80	<0.01	-	-	-
Sulphate (soluble)	10.4	<2	104	<20	-	-	-
Mercury Dissolved (CVAF)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
Total Cyanide (W)	<0.05	<0.05	<0.5	<0.5	-	-	-
Arsenic	0.00743	<0.0005	0.0743	<0.005	-	-	-
Boron	0.0233	<0.005	0.233	<0.05	-	-	-
Cadmium	<0.00008	<0.00008	<0.0008	<0.0008	-	-	-
Chromium	<0.001	<0.001	<0.01	<0.01	-	-	-
Copper	0.00108	<0.0003	0.0108	<0.003	-	-	-
Lead	0.000428	<0.0002	0.00428	<0.002	-	-	-
Nickel	0.00165	<0.0004	0.0165	<0.004	-	-	-
Selenium	0.000727	<0.0005	0.00727	<0.005	-	-	-
Zinc	0.00139	<0.001	0.0139	<0.01	-	-	-

Leach Test Information

Date Prepared	15-Feb-2018
pH (pH Units)	8.84
Conductivity (µS/cm)	212.00
Temperature (ºC)	21.00
Volume Leachant (Litres)	0.883

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CERTIFICATE OF ANALYSIS

SDG:	180213-19	**Client Reference:**	A107448	**Report Number:**	445329
Location:	Meggitt, Coventry	**Order Number:**	NOT/1305	**Superseded Report:**	

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	Meggitt, Coventry
Mass Sample taken (kg)	0.104	**Natural Moisture Content (%)**	16.3
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	86
Particle Size <4mm	>95%		

Case				
SDG	180213-19			
Lab Sample Number(s)	17036528			
Sampled Date	07-Feb-2018			
Customer Sample Ref.	WS26			
Depth (m)	0.30			

Eluate Analysis	**C2** Concⁿ in 10:1 eluate (mg/l)		**A2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
Ammoniacal Nitrogen as N	<0.2	<0.2	<2	<2	-	-	-
pH Value of Filtered Water	8.8	<0.001	88	<0.01	-	-	-
Sulphate (soluble)	13.3	<2	133	<20	-	-	-
Mercury Dissolved (CVAF)	0.000019	<0.00001	0.00019	<0.0001	-	-	-
Total Cyanide (W)	<0.05	<0.05	<0.5	<0.5	-	-	-
Arsenic	0.0153	<0.0005	0.153	<0.005	-	-	-
Boron	0.0492	<0.005	0.492	<0.05	-	-	-
Cadmium	<0.00008	<0.00008	<0.0008	<0.0008	-	-	-
Chromium	0.00583	<0.001	0.0583	<0.01	-	-	-
Copper	0.00525	<0.0003	0.0525	<0.003	-	-	-
Lead	0.00093	<0.0002	0.0093	<0.002	-	-	-
Nickel	0.000667	<0.0004	0.00667	<0.004	-	-	-
Selenium	0.00247	<0.0005	0.0247	<0.005	-	-	-
Zinc	0.00241	<0.001	0.0241	<0.01	-	-	-

Leach Test Information

Date Prepared	15-Feb-2018
pH (pH Units)	8.93
Conductivity (µS/cm)	104.00
Temperature (ºC)	19.80
Volume Leachant (Litres)	0.885

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CERTIFICATE OF ANALYSIS

SDG:	180213-19	**Client Reference:**	A107448	**Report Number:**	445329
Location:	Meggitt, Coventry	**Order Number:**	NOT/1305	**Superseded Report:**	

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	Meggitt, Coventry
Mass Sample taken (kg)	0.103	**Natural Moisture Content (%)**	14.9
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	87
Particle Size <4mm	>95%		

Case				
SDG	180213-19			
Lab Sample Number(s)	17036529			
Sampled Date	08-Feb-2018			
Customer Sample Ref.	WS28			
Depth (m)	0.30			

Eluate Analysis	**C2** Concⁿ in 10:1 eluate (mg/l)		**A2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
Ammoniacal Nitrogen as N	<0.2	<0.2	<2	<2	-	-	-
pH Value of Filtered Water	8.5	<0.001	85	<0.01	-	-	-
Sulphate (soluble)	6.2	<2	62	<20	-	-	-
Mercury Dissolved (CVAF)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
Total Cyanide (W)	<0.05	<0.05	<0.5	<0.5	-	-	-
Arsenic	0.0176	<0.0005	0.176	<0.005	-	-	-
Boron	0.0141	<0.005	0.141	<0.05	-	-	-
Cadmium	<0.00008	<0.00008	<0.0008	<0.0008	-	-	-
Chromium	0.00214	<0.001	0.0214	<0.01	-	-	-
Copper	0.00259	<0.0003	0.0259	<0.003	-	-	-
Lead	0.000699	<0.0002	0.00699	<0.002	-	-	-
Nickel	<0.0004	<0.0004	<0.004	<0.004	-	-	-
Selenium	0.000831	<0.0005	0.00831	<0.005	-	-	-
Zinc	0.00114	<0.001	0.0114	<0.01	-	-	-

Leach Test Information

Date Prepared	15-Feb-2018
pH (pH Units)	8.51
Conductivity (µS/cm)	73.60
Temperature (ºC)	20.40
Volume Leachant (Litres)	0.887

Mcerts Certification does not apply to leachates
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CERTIFICATE OF ANALYSIS

SDG:	180213-19	**Client Reference:**	A107448	**Report Number:**	445329
Location:	Meggitt, Coventry	**Order Number:**	NOT/1305	**Superseded Report:**	

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	Meggitt, Coventry
Mass Sample taken (kg)	0.097	**Natural Moisture Content (%)**	7.53
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	93
Particle Size <4mm	>95%		

Case				
SDG	180213-19			
Lab Sample Number(s)	17036531			
Sampled Date	07-Feb-2018			
Customer Sample Ref.	WS29			
Depth (m)	0.50			

Eluate Analysis	**C2** Concⁿ in 10:1 eluate (mg/l)		**A2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
Ammoniacal Nitrogen as N	<0.2	<0.2	<2	<2	-	-	-
pH Value of Filtered Water	9.8	<0.001	98	<0.01	-	-	-
Sulphate (soluble)	41.2	<2	412	<20	-	-	-
Mercury Dissolved (CVAF)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
Total Cyanide (W)	<0.05	<0.05	<0.5	<0.5	-	-	-
Arsenic	0.0134	<0.0005	0.134	<0.005	-	-	-
Boron	0.0535	<0.005	0.535	<0.05	-	-	-
Cadmium	<0.00008	<0.00008	<0.0008	<0.0008	-	-	-
Chromium	0.00223	<0.001	0.0223	<0.01	-	-	-
Copper	0.0231	<0.0003	0.231	<0.003	-	-	-
Lead	0.000706	<0.0002	0.00706	<0.002	-	-	-
Nickel	0.00107	<0.0004	0.0107	<0.004	-	-	-
Selenium	0.0017	<0.0005	0.017	<0.005	-	-	-
Zinc	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	15-Feb-2018
pH (pH Units)	10.22
Conductivity (µS/cm)	199.00
Temperature (ºC)	20.20
Volume Leachant (Litres)	0.893

Mcerts Certification does not apply to leachates
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CERTIFICATE OF ANALYSIS

SDG:	180213-19	**Client Reference:**	A107448	**Report Number:**	445329
Location:	Meggitt, Coventry	**Order Number:**	NOT/1305	**Superseded Report:**	

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	Meggitt, Coventry
Mass Sample taken (kg)	0.106	**Natural Moisture Content (%)**	17.6
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	85
Particle Size <4mm	>95%		

Case				
SDG	180213-19			
Lab Sample Number(s)	17036533			
Sampled Date	08-Feb-2018			
Customer Sample Ref.	WS31			
Depth (m)	0.50			

Eluate Analysis	**C2** Concⁿ in 10:1 eluate (mg/l)		**A2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
Ammoniacal Nitrogen as N	<0.2	<0.2	<2	<2	-	-	-
pH Value of Filtered Water	8.1	<0.001	81	<0.01	-	-	-
Sulphate (soluble)	34.7	<2	347	<20	-	-	-
Mercury Dissolved (CVAF)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
Total Cyanide (W)	<0.05	<0.05	<0.5	<0.5	-	-	-
Arsenic	0.00146	<0.0005	0.0146	<0.005	-	-	-
Boron	0.0903	<0.005	0.903	<0.05	-	-	-
Cadmium	<0.00008	<0.00008	<0.0008	<0.0008	-	-	-
Chromium	<0.001	<0.001	<0.01	<0.01	-	-	-
Copper	0.00231	<0.0003	0.0231	<0.003	-	-	-
Lead	0.000453	<0.0002	0.00453	<0.002	-	-	-
Nickel	0.000959	<0.0004	0.00959	<0.004	-	-	-
Selenium	0.00159	<0.0005	0.0159	<0.005	-	-	-
Zinc	0.00218	<0.001	0.0218	<0.01	-	-	-

Leach Test Information

Date Prepared	15-Feb-2018
pH (pH Units)	7.36
Conductivity (µS/cm)	227.00
Temperature (ºC)	19.50
Volume Leachant (Litres)	0.884

Mcerts Certification does not apply to leachates
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09:15:38 21/02/2018

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CERTIFICATE OF ANALYSIS

SDG:	180213-19	**Client Reference:**	A107448	**Report Number:**	445329
Location:	Meggitt, Coventry	**Order Number:**	NOT/1305	**Superseded Report:**	

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	Meggitt, Coventry
Mass Sample taken (kg)	0.106	**Natural Moisture Content (%)**	17.6
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	85
Particle Size <4mm	>95%		

Case	
SDG	180213-19
Lab Sample Number(s)	17036536
Sampled Date	06-Feb-2018
Customer Sample Ref.	WS33
Depth (m)	0.40

Eluate Analysis	**C2** Concⁿ in 10:1 eluate (mg/l)		**A2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
Ammoniacal Nitrogen as N	0.413	<0.2	4.13	<2	-	-	-
pH Value of Filtered Water	7.2	<0.001	72	<0.01	-	-	-
Sulphate (soluble)	9	<2	90	<20	-	-	-
Mercury Dissolved (CVAF)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
Total Cyanide (W)	<0.05	<0.05	<0.5	<0.5	-	-	-
Arsenic	0.00129	<0.0005	0.0129	<0.005	-	-	-
Boron	0.268	<0.005	2.68	<0.05	-	-	-
Cadmium	<0.00008	<0.00008	<0.0008	<0.0008	-	-	-
Chromium	<0.001	<0.001	<0.01	<0.01	-	-	-
Copper	0.000441	<0.0003	0.00441	<0.003	-	-	-
Lead	0.00319	<0.0002	0.0319	<0.002	-	-	-
Nickel	0.0154	<0.0004	0.154	<0.004	-	-	-
Selenium	0.0033	<0.0005	0.033	<0.005	-	-	-
Zinc	0.0456	<0.001	0.456	<0.01	-	-	-

Leach Test Information

Date Prepared	15-Feb-2018
pH (pH Units)	6.41
Conductivity (µS/cm)	357.00
Temperature (ºC)	19.70
Volume Leachant (Litres)	0.884

Mcerts Certification does not apply to leachates
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CERTIFICATE OF ANALYSIS

SDG:	180213-19	**Client Reference:**	A107448	**Report Number:**	445329
Location:	Meggitt, Coventry	**Order Number:**	NOT/1305	**Superseded Report:**	

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	Meggitt, Coventry
Mass Sample taken (kg)	0.096	**Natural Moisture Content (%)**	6.38
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	94
Particle Size <4mm	>95%		

Case	
SDG	180213-19
Lab Sample Number(s)	17036539
Sampled Date	07-Feb-2018
Customer Sample Ref.	WS35
Depth (m)	0.30

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
Ammoniacal Nitrogen as N	<0.2	<0.2	<2	<2	-	-	-
pH Value of Filtered Water	10	<0.001	100	<0.01	-	-	-
Sulphate (soluble)	4	<2	40	<20	-	-	-
Mercury Dissolved (CVAF)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
Total Cyanide (W)	<0.05	<0.05	<0.5	<0.5	-	-	-
Arsenic	0.00225	<0.0005	0.0225	<0.005	-	-	-
Boron	0.0112	<0.005	0.112	<0.05	-	-	-
Cadmium	<0.00008	<0.00008	<0.0008	<0.0008	-	-	-
Chromium	<0.001	<0.001	<0.01	<0.01	-	-	-
Copper	0.0021	<0.0003	0.021	<0.003	-	-	-
Lead	<0.0002	<0.0002	<0.002	<0.002	-	-	-
Nickel	<0.0004	<0.0004	<0.004	<0.004	-	-	-
Selenium	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Zinc	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	15-Feb-2018
pH (pH Units)	10.33
Conductivity (µS/cm)	113.00
Temperature (ºC)	19.60
Volume Leachant (Litres)	0.894

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CERTIFICATE OF ANALYSIS

SDG:	180213-19	**Client Reference:**	A107448	**Report Number:**	445329
Location:	Meggitt, Coventry	**Order Number:**	NOT/1305	**Superseded Report:**	

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	Meggitt, Coventry
Mass Sample taken (kg)	0.099	**Natural Moisture Content (%)**	10
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	90.9
Particle Size <4mm	>95%		

Case	
SDG	180213-19
Lab Sample Number(s)	17036541
Sampled Date	08-Feb-2018
Customer Sample Ref.	WS36
Depth (m)	0.20

Eluate Analysis	**C2** Concⁿ in 10:1 eluate (mg/l)		**A2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
Ammoniacal Nitrogen as N	0.608	<0.2	6.08	<2	-	-	-
pH Value of Filtered Water	5.2	<0.001	52	<0.01	-	-	-
Sulphate (soluble)	1610	<10	16100	<100	-	-	-
Mercury Dissolved (CVAF)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
Total Cyanide (W)	<0.05	<0.05	<0.5	<0.5	-	-	-
Arsenic	0.00163	<0.0005	0.0163	<0.005	-	-	-
Boron	0.0211	<0.005	0.211	<0.05	-	-	-
Cadmium	0.00526	<0.00008	0.0526	<0.0008	-	-	-
Chromium	<0.001	<0.001	<0.01	<0.01	-	-	-
Copper	0.0448	<0.0003	0.448	<0.003	-	-	-
Lead	0.00186	<0.0002	0.0186	<0.002	-	-	-
Nickel	0.215	<0.0004	2.15	<0.004	-	-	-
Selenium	0.00121	<0.0005	0.0121	<0.005	-	-	-
Zinc	0.249	<0.001	2.49	<0.01	-	-	-

Leach Test Information

Date Prepared	15-Feb-2018
pH (pH Units)	5.94
Conductivity (µS/cm)	2,240.00
Temperature (ºC)	19.70
Volume Leachant (Litres)	0.891

Mcerts Certification does not apply to leachates
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CERTIFICATE OF ANALYSIS

SDG:	180213-19	**Client Reference:**	A107448	**Report Number:**	445329
Location:	Meggitt, Coventry	**Order Number:**	NOT/1305	**Superseded Report:**	

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	Meggitt, Coventry
Mass Sample taken (kg)	0.104	**Natural Moisture Content (%)**	14.9
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	87
Particle Size <4mm	>95%		

Case				
SDG	180213-19			
Lab Sample Number(s)	17036545			
Sampled Date	06-Feb-2018			
Customer Sample Ref.	WS44			
Depth (m)	0.20			

Eluate Analysis	**C2** Concⁿ in 10:1 eluate (mg/l)		**A2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
Ammoniacal Nitrogen as N	<0.2	<0.2	<2	<2	-	-	-
pH Value of Filtered Water	12	<0.001	120	<0.01	-	-	-
Sulphate (soluble)	73.5	<2	735	<20	-	-	-
Mercury Dissolved (CVAF)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
Total Cyanide (W)	<0.05	<0.05	<0.5	<0.5	-	-	-
Arsenic	0.000983	<0.0005	0.00983	<0.005	-	-	-
Boron	0.00573	<0.005	0.0573	<0.05	-	-	-
Cadmium	<0.00008	<0.00008	<0.0008	<0.0008	-	-	-
Chromium	0.00531	<0.001	0.0531	<0.01	-	-	-
Copper	0.00895	<0.0003	0.0895	<0.003	-	-	-
Lead	0.000298	<0.0002	0.00298	<0.002	-	-	-
Nickel	0.00455	<0.0004	0.0455	<0.004	-	-	-
Selenium	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Zinc	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	15-Feb-2018
pH (pH Units)	11.69
Conductivity (µS/cm)	1,120.00
Temperature (ºC)	19.60
Volume Leachant (Litres)	0.887

Mcerts Certification does not apply to leachates
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CERTIFICATE OF ANALYSIS

SDG:	180213-19	**Client Reference:**	A107448	**Report Number:**	445329
Location:	Meggitt, Coventry	**Order Number:**	NOT/1305	**Superseded Report:**	

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	Meggitt, Coventry
Mass Sample taken (kg)	0.095	**Natural Moisture Content (%)**	6.04
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	94.3
Particle Size <4mm	>95%		

Case	
SDG	180213-19
Lab Sample Number(s)	17036546
Sampled Date	06-Feb-2018
Customer Sample Ref.	WS45
Depth (m)	0.15

Eluate Analysis	**C2** Concⁿ in 10:1 eluate (mg/l)		**A2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
Ammoniacal Nitrogen as N	<0.2	<0.2	<2	<2	-	-	-
pH Value of Filtered Water	8.1	<0.001	81	<0.01	-	-	-
Sulphate (soluble)	9.5	<2	95	<20	-	-	-
Mercury Dissolved (CVAF)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
Total Cyanide (W)	<0.05	<0.05	<0.5	<0.5	-	-	-
Arsenic	0.00109	<0.0005	0.0109	<0.005	-	-	-
Boron	0.0251	<0.005	0.251	<0.05	-	-	-
Cadmium	<0.00008	<0.00008	<0.0008	<0.0008	-	-	-
Chromium	<0.001	<0.001	<0.01	<0.01	-	-	-
Copper	0.000772	<0.0003	0.00772	<0.003	-	-	-
Lead	<0.0002	<0.0002	<0.002	<0.002	-	-	-
Nickel	<0.0004	<0.0004	<0.004	<0.004	-	-	-
Selenium	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Zinc	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	16-Feb-2018
pH (pH Units)	7.51
Conductivity (µS/cm)	90.20
Temperature (ºC)	19.10
Volume Leachant (Litres)	0.895

Mcerts Certification does not apply to leachates
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CERTIFICATE OF ANALYSIS

SDG:	180213-19	**Client Reference:**	A107448	**Report Number:**	445329
Location:	Meggitt, Coventry	**Order Number:**	NOT/1305	**Superseded Report:**	

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	Meggitt, Coventry
Mass Sample taken (kg)	0.105	**Natural Moisture Content (%)**	16.3
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	86
Particle Size <4mm	>95%		

Case				
SDG	180213-19			
Lab Sample Number(s)	17036550			
Sampled Date	07-Feb-2018			
Customer Sample Ref.	WS47			
Depth (m)	0.10			

Eluate Analysis	**C2** Concⁿ in 10:1 eluate (mg/l)		**A2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
Ammoniacal Nitrogen as N	<0.2	<0.2	<2	<2	-	-	-
pH Value of Filtered Water	7.4	<0.001	74	<0.01	-	-	-
Sulphate (soluble)	6.1	<2	61	<20	-	-	-
Mercury Dissolved (CVAF)	0.0000185	<0.00001	0.000185	<0.0001	-	-	-
Total Cyanide (W)	<0.05	<0.05	<0.5	<0.5	-	-	-
Arsenic	0.00708	<0.0005	0.0708	<0.005	-	-	-
Boron	0.0674	<0.005	0.674	<0.05	-	-	-
Cadmium	0.000532	<0.00008	0.00532	<0.0008	-	-	-
Chromium	<0.001	<0.001	<0.01	<0.01	-	-	-
Copper	0.0464	<0.0003	0.464	<0.003	-	-	-
Lead	0.00472	<0.0002	0.0472	<0.002	-	-	-
Nickel	0.00258	<0.0004	0.0258	<0.004	-	-	-
Selenium	0.000833	<0.0005	0.00833	<0.005	-	-	-
Zinc	0.393	<0.001	3.93	<0.01	-	-	-

Leach Test Information

Date Prepared	16-Feb-2018
pH (pH Units)	6.77
Conductivity (µS/cm)	58.10
Temperature (ºC)	20.20
Volume Leachant (Litres)	0.885

Mcerts Certification does not apply to leachates
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CERTIFICATE OF ANALYSIS

SDG:	180213-19	**Client Reference:**	A107448	**Report Number:**	445329
Location:	Meggitt, Coventry	**Order Number:**	NOT/1305	**Superseded Report:**	

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	Meggitt, Coventry
Mass Sample taken (kg)	0.099	**Natural Moisture Content (%)**	9.41
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	91.4
Particle Size <4mm	>95%		

Case	
SDG	180213-19
Lab Sample Number(s)	17036555
Sampled Date	06-Feb-2018
Customer Sample Ref.	WS50
Depth (m)	0.50

Eluate Analysis	**C2** Concⁿ in 10:1 eluate (mg/l)		**A2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
Ammoniacal Nitrogen as N	<0.2	<0.2	<2	<2	-	-	-
pH Value of Filtered Water	11	<0.001	110	<0.01	-	-	-
Sulphate (soluble)	108	<2	1080	<20	-	-	-
Mercury Dissolved (CVAF)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
Total Cyanide (W)	<0.05	<0.05	<0.5	<0.5	-	-	-
Arsenic	0.00186	<0.0005	0.0186	<0.005	-	-	-
Boron	0.156	<0.005	1.56	<0.05	-	-	-
Cadmium	<0.00008	<0.00008	<0.0008	<0.0008	-	-	-
Chromium	0.0088	<0.001	0.088	<0.01	-	-	-
Copper	0.00559	<0.0003	0.0559	<0.003	-	-	-
Lead	0.00271	<0.0002	0.0271	<0.002	-	-	-
Nickel	<0.0004	<0.0004	<0.004	<0.004	-	-	-
Selenium	0.00124	<0.0005	0.0124	<0.005	-	-	-
Zinc	0.00146	<0.001	0.0146	<0.01	-	-	-

Leach Test Information

Date Prepared	16-Feb-2018
pH (pH Units)	10.92
Conductivity (µS/cm)	460.00
Temperature (ºC)	19.80
Volume Leachant (Litres)	0.892

Mcerts Certification does not apply to leachates
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CERTIFICATE OF ANALYSIS

SDG:	180213-19	**Client Reference:**	A107448	**Report Number:**	445329
Location:	Meggitt, Coventry	**Order Number:**	NOT/1305	**Superseded Report:**	

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	Meggitt, Coventry
Mass Sample taken (kg)	0.103	**Natural Moisture Content (%)**	14.9
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	87
Particle Size <4mm	>95%		

Case				
SDG	180213-19			
Lab Sample Number(s)	17036561			
Sampled Date	05-Feb-2018			
Customer Sample Ref.	WS52			
Depth (m)	0.30			

Eluate Analysis	**C2** Concⁿ in 10:1 eluate (mg/l)		**A2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
Ammoniacal Nitrogen as N	<0.2	<0.2	<2	<2	-	-	-
pH Value of Filtered Water	11	<0.001	110	<0.01	-	-	-
Sulphate (soluble)	38.4	<2	384	<20	-	-	-
Mercury Dissolved (CVAF)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
Total Cyanide (W)	<0.05	<0.05	<0.5	<0.5	-	-	-
Arsenic	0.00426	<0.0005	0.0426	<0.005	-	-	-
Boron	0.0914	<0.005	0.914	<0.05	-	-	-
Cadmium	<0.00008	<0.00008	<0.0008	<0.0008	-	-	-
Chromium	0.00288	<0.001	0.0288	<0.01	-	-	-
Copper	0.016	<0.0003	0.16	<0.003	-	-	-
Lead	0.000751	<0.0002	0.00751	<0.002	-	-	-
Nickel	0.00104	<0.0004	0.0104	<0.004	-	-	-
Selenium	0.00256	<0.0005	0.0256	<0.005	-	-	-
Zinc	0.0019	<0.001	0.019	<0.01	-	-	-

Leach Test Information

Date Prepared	16-Feb-2018
pH (pH Units)	10.70
Conductivity (µS/cm)	298.00
Temperature (ºC)	21.00
Volume Leachant (Litres)	0.887

Mcerts Certification does not apply to leachates
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CERTIFICATE OF ANALYSIS

SDG:	180213-19	**Client Reference:**	A107448	**Report Number:**	445329
Location:	Meggitt, Coventry	**Order Number:**	NOT/1305	**Superseded Report:**	

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	Meggitt, Coventry
Mass Sample taken (kg)	0.090	**Natural Moisture Content (%)**	0
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	100
Particle Size <4mm	>95%		

Case				
SDG	180213-19			
Lab Sample Number(s)	17036562			
Sampled Date	06-Feb-2018			
Customer Sample Ref.	WS53			
Depth (m)	0.60			

Eluate Analysis	**C2** Concⁿ in 10:1 eluate (mg/l)		**A2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
Ammoniacal Nitrogen as N	<0.2	<0.2	<2	<2	-	-	-
pH Value of Filtered Water	7.6	<0.001	76	<0.01	-	-	-
Sulphate (soluble)	6	<2	60	<20	-	-	-
Mercury Dissolved (CVAF)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
Total Cyanide (W)	<0.05	<0.05	<0.5	<0.5	-	-	-
Arsenic	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Boron	0.0471	<0.005	0.471	<0.05	-	-	-
Cadmium	<0.00008	<0.00008	<0.0008	<0.0008	-	-	-
Chromium	<0.001	<0.001	<0.01	<0.01	-	-	-
Copper	0.000575	<0.0003	0.00575	<0.003	-	-	-
Lead	0.000343	<0.0002	0.00343	<0.002	-	-	-
Nickel	0.000465	<0.0004	0.00465	<0.004	-	-	-
Selenium	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Zinc	0.0109	<0.001	0.109	<0.01	-	-	-

Leach Test Information

Date Prepared	16-Feb-2018
pH (pH Units)	7.38
Conductivity (µS/cm)	32.80
Temperature (ºC)	19.70
Volume Leachant (Litres)	0.900

Mcerts Certification does not apply to leachates
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CERTIFICATE OF ANALYSIS

SDG:	180213-19	**Client Reference:**	A107448	**Report Number:**	445329
Location:	Meggitt, Coventry	**Order Number:**	NOT/1305	**Superseded Report:**	

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	Meggitt, Coventry
Mass Sample taken (kg)	0.098	**Natural Moisture Content (%)**	8.58
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	92.1
Particle Size <4mm	>95%		

Case				
SDG	180213-19			
Lab Sample Number(s)	17036563			
Sampled Date	07-Feb-2018			
Customer Sample Ref.	WS54			
Depth (m)	0.20			

Eluate Analysis	**C2** Conc^n in 10:1 eluate (mg/l)		**A2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
Ammoniacal Nitrogen as N	<0.2	<0.2	<2	<2	-	-	-
pH Value of Filtered Water	11	<0.001	110	<0.01	-	-	-
Sulphate (soluble)	80.1	<2	801	<20	-	-	-
Mercury Dissolved (CVAF)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
Total Cyanide (W)	<0.05	<0.05	<0.5	<0.5	-	-	-
Arsenic	0.00131	<0.0005	0.0131	<0.005	-	-	-
Boron	0.00903	<0.005	0.0903	<0.05	-	-	-
Cadmium	<0.00008	<0.00008	<0.0008	<0.0008	-	-	-
Chromium	0.0279	<0.001	0.279	<0.01	-	-	-
Copper	0.0589	<0.0003	0.589	<0.003	-	-	-
Lead	<0.0002	<0.0002	<0.002	<0.002	-	-	-
Nickel	0.00487	<0.0004	0.0487	<0.004	-	-	-
Selenium	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Zinc	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	16-Feb-2018
pH (pH Units)	11.49
Conductivity (µS/cm)	807.00
Temperature (ºC)	19.60
Volume Leachant (Litres)	0.892

Mcerts Certification does not apply to leachates
21/02/2018 09:16:27

09:15:38 21/02/2018

Table of Results - Appendix

Method No	Reference	Description
ASB_PREP		
PM001		Preparation of Samples for Metals Analysis
PM024	Modified BS 1377	Soil preparation including homogenisation, moisture screens of soils for Asbestos Containing Material
PM115		Leaching Procedure for CEN One Stage Leach Test 2:1 & 10:1 1 Step
TM048	HSG 248, Asbestos: The analysts' guide for sampling, analysis and clearance procedures	Identification of Asbestos in Bulk Material
TM062 (S)	National Grid Property Holdings Methods for the Collection & Analysis of Samples from National Grid Sites version 1 Sec 3.9	Determination of Phenols in Soils by HPLC
TM099	BS 2690: Part 7:1968 / BS 6068: Part2.11:1984	Determination of Ammonium in Water Samples using the Kone Analyser
TM116	Modified: US EPA Method 8260, 8120, 8020, 624, 610 & 602	Determination of Volatile Organic Compounds by Headspace / GC-MS
TM133	BS 1377: Part 3 1990;BS 6068-2.5	Determination of pH in Soil and Water using the GLpH pH Meter
TM151	Method 3500D, AWWA/APHA, 20th Ed., 1999	Determination of Hexavalent Chromium using Kone analyser
TM152	Method 3125B, AWWA/APHA, 20th Ed., 1999	Analysis of Aqueous Samples by ICP-MS
TM153	Method 4500A,B,C, I, M AWWA/APHA, 20th Ed., 1999	Determination of Total Cyanide, Free (Easily Liberatable) Cyanide and Thiocyanate using the Skalar SANS+ System Segmented Flow Analyser
TM154	In - house Method	Determination of Petroleum Hydrocarbons by EZ Flash GC-FID in the Carbon range C6-C40
TM181	US EPA Method 6010B	Determination of Routine Metals in Soil by iCap 6500 Duo ICP-OES
TM183	BS EN 23506:2002, (BS 6068-2.74:2002) ISBN 0 580 38924 3	Determination of Trace Level Mercury in Waters and Leachates by PSA Cold Vapour Atomic Fluorescence Spectrometry
TM184	EPA Methods 325.1 & 325.2,	The Determination of Anions in Aqueous Matrices using the Kone Spectrophotometric Analysers
TM218	Determination of PAH by GCMS Microwave extraction	The determination of PAH in soil samples by microwave extraction and GC-MS
TM222	In-House Method	Determination of Hot Water Soluble Boron in Soils (10:1 Water:soil) by IRIS Emission Spectrometer
TM227	Standard methods for the examination of waters and wastewaters 20th Edition, AWWA/APHA Method 4500.	Determination of Total Cyanide, Free (Easily Liberatable) Cyanide and Thiocyanate
TM243		Mixed Anions In Soils By Kone
TM256	The measurement of Electrical Conductivity and the Laboratory determination of pH Value of Natural, Treated and Wastewaters. HMSO, 1978. ISBN 011 751428 4.	Determination of pH in Water and Leachate using the GLpH pH Meter

NA = not applicable.

Chemical testing (unless subcontracted) performed at ALS Environmental Hawarden (Method codes TM) or ALS Environmental Aberdeen (Method codes S).

Validated

CERTIFICATE OF ANALYSIS

SDG:	180213-19	**Client Reference:**	A107448	**Report Number:**	445329
Location:	Meggitt, Coventry	**Order Number:**	NOT/1305	**Superseded Report:**	

Test Completion Dates

Lab Sample No(s)	17036517	17036518	17036519	17036520	17036521	17036523	17036525	17036526	17036528	17036529
Customer Sample Ref.	WS2	WS2	WS3	WS10	WS19	WS20	WS21	WS22	WS26	WS28
AGS Ref.										
Depth	0.20	1.10	0.20	0.20	0.20	0.20	0.50	0.20	0.30	0.30
Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
Ammoniacal Nitrogen	19-Feb-2018		19-Feb-2018	19-Feb-2018	19-Feb-2018	20-Feb-2018	19-Feb-2018	19-Feb-2018	19-Feb-2018	19-Feb-2018
Anions by Kone (soil)	19-Feb-2018	19-Feb-2018	20-Feb-2018	19-Feb-2018	20-Feb-2018	19-Feb-2018	20-Feb-2018	20-Feb-2018	19-Feb-2018	19-Feb-2018
Anions by Kone (w)	20-Feb-2018		20-Feb-2018	20-Feb-2018	20-Feb-2018	20-Feb-2018	20-Feb-2018	20-Feb-2018	20-Feb-2018	20-Feb-2018
Asbestos ID in Solid Samples	20-Feb-2018	20-Feb-2018	20-Feb-2018	20-Feb-2018	20-Feb-2018	20-Feb-2018	20-Feb-2018	20-Feb-2018		
Boron Water Soluble	20-Feb-2018	20-Feb-2018	20-Feb-2018	20-Feb-2018	20-Feb-2018	20-Feb-2018	20-Feb-2018	20-Feb-2018	20-Feb-2018	20-Feb-2018
CEN 10:1 Leachate (1 Stage)	16-Feb-2018		16-Feb-2018	16-Feb-2018	15-Feb-2018	15-Feb-2018	16-Feb-2018	16-Feb-2018	15-Feb-2018	15-Feb-2018
CEN Readings	19-Feb-2018		19-Feb-2018	19-Feb-2018	17-Feb-2018	19-Feb-2018	19-Feb-2018	19-Feb-2018	17-Feb-2018	17-Feb-2018
Cyanide Comp/Free/Total/Thiocyanate	20-Feb-2018	16-Feb-2018	21-Feb-2018	21-Feb-2018	21-Feb-2018	20-Feb-2018	20-Feb-2018	20-Feb-2018	20-Feb-2018	20-Feb-2018
Dissolved Metals by ICP-MS	20-Feb-2018		20-Feb-2018	20-Feb-2018	20-Feb-2018	20-Feb-2018	20-Feb-2018	20-Feb-2018	20-Feb-2018	20-Feb-2018
Hexavalent Chromium (s)	19-Feb-2018	19-Feb-2018	19-Feb-2018	20-Feb-2018	19-Feb-2018	19-Feb-2018	19-Feb-2018	19-Feb-2018	20-Feb-2018	19-Feb-2018
Mercury Dissolved	20-Feb-2018		19-Feb-2018	20-Feb-2018	19-Feb-2018	20-Feb-2018	19-Feb-2018	20-Feb-2018	20-Feb-2018	20-Feb-2018
Metals in solid samples by OES	19-Feb-2018	19-Feb-2018	19-Feb-2018	19-Feb-2018	20-Feb-2018	20-Feb-2018	19-Feb-2018	19-Feb-2018	20-Feb-2018	20-Feb-2018
PAH by GCMS	16-Feb-2018	16-Feb-2018	16-Feb-2018	16-Feb-2018	16-Feb-2018	16-Feb-2018	16-Feb-2018	16-Feb-2018	15-Feb-2018	15-Feb-2018
pH	15-Feb-2018	15-Feb-2018	15-Feb-2018	15-Feb-2018	15-Feb-2018	15-Feb-2018	15-Feb-2018	15-Feb-2018	15-Feb-2018	15-Feb-2018
pH Value of Filtered Water	19-Feb-2018		19-Feb-2018	19-Feb-2018	20-Feb-2018	20-Feb-2018	19-Feb-2018	19-Feb-2018	20-Feb-2018	20-Feb-2018
Phenols by HPLC (S)	16-Feb-2018	16-Feb-2018	16-Feb-2018	16-Feb-2018	16-Feb-2018	16-Feb-2018	16-Feb-2018	16-Feb-2018	16-Feb-2018	16-Feb-2018
Sample description	14-Feb-2018	14-Feb-2018	14-Feb-2018	14-Feb-2018	14-Feb-2018	14-Feb-2018	14-Feb-2018	14-Feb-2018	14-Feb-2018	14-Feb-2018
TPH c6-40 Value of soil	16-Feb-2018	16-Feb-2018	19-Feb-2018	19-Feb-2018	19-Feb-2018	19-Feb-2018	16-Feb-2018	19-Feb-2018	16-Feb-2018	16-Feb-2018
VOC MS (S)	17-Feb-2018	17-Feb-2018	17-Feb-2018	17-Feb-2018	17-Feb-2018	17-Feb-2018	17-Feb-2018	17-Feb-2018	19-Feb-2018	19-Feb-2018

Lab Sample No(s)	17036530	17036531	17036533	17036534	17036536	17036538	17036539	17036541	17036565	17036542
Customer Sample Ref.	WS28	WS29	WS31	WS32	WS33	WS34	WS35	WS36	WS36	WS43
AGS Ref.										
Depth	0.90	0.50	0.50	0.40	0.40	0.30	0.30	0.20	0.50	0.10
Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
Ammoniacal Nitrogen		19-Feb-2018	19-Feb-2018		19-Feb-2018		19-Feb-2018	19-Feb-2018		
Anions by Kone (soil)	19-Feb-2018	20-Feb-2018	19-Feb-2018	19-Feb-2018	20-Feb-2018	19-Feb-2018	20-Feb-2018	19-Feb-2018	19-Feb-2018	19-Feb-2018
Anions by Kone (w)		20-Feb-2018	20-Feb-2018		20-Feb-2018		20-Feb-2018	20-Feb-2018		
Asbestos ID in Solid Samples					20-Feb-2018	20-Feb-2018		19-Feb-2018		20-Feb-2018
Boron Water Soluble	20-Feb-2018	20-Feb-2018	20-Feb-2018	20-Feb-2018	20-Feb-2018	20-Feb-2018	20-Feb-2018	20-Feb-2018	20-Feb-2018	20-Feb-2018
CEN 10:1 Leachate (1 Stage)		15-Feb-2018	15-Feb-2018		15-Feb-2018		15-Feb-2018	15-Feb-2018		
CEN Readings		17-Feb-2018	17-Feb-2018		17-Feb-2018		17-Feb-2018	17-Feb-2018		
Cyanide Comp/Free/Total/Thiocyanate	16-Feb-2018	20-Feb-2018	20-Feb-2018	16-Feb-2018	20-Feb-2018	16-Feb-2018	20-Feb-2018	20-Feb-2018	16-Feb-2018	16-Feb-2018
Dissolved Metals by ICP-MS		20-Feb-2018	20-Feb-2018		20-Feb-2018		20-Feb-2018	20-Feb-2018		
Hexavalent Chromium (s)	19-Feb-2018	19-Feb-2018	19-Feb-2018	19-Feb-2018	19-Feb-2018	20-Feb-2018	19-Feb-2018	19-Feb-2018	19-Feb-2018	19-Feb-2018
Mercury Dissolved		20-Feb-2018	20-Feb-2018		20-Feb-2018		20-Feb-2018	20-Feb-2018		
Metals in solid samples by OES	20-Feb-2018	19-Feb-2018	20-Feb-2018	20-Feb-2018	20-Feb-2018	20-Feb-2018	19-Feb-2018	20-Feb-2018	19-Feb-2018	19-Feb-2018
PAH by GCMS	15-Feb-2018	15-Feb-2018	15-Feb-2018	15-Feb-2018	15-Feb-2018	15-Feb-2018	15-Feb-2018	19-Feb-2018	16-Feb-2018	16-Feb-2018
pH	15-Feb-2018	15-Feb-2018	15-Feb-2018	15-Feb-2018	15-Feb-2018	15-Feb-2018	15-Feb-2018	15-Feb-2018	15-Feb-2018	15-Feb-2018
pH Value of Filtered Water		20-Feb-2018	20-Feb-2018		20-Feb-2018		20-Feb-2018	20-Feb-2018		
Phenols by HPLC (S)	16-Feb-2018	16-Feb-2018	16-Feb-2018	16-Feb-2018	16-Feb-2018	16-Feb-2018	16-Feb-2018	16-Feb-2018	16-Feb-2018	16-Feb-2018
Sample description	14-Feb-2018	14-Feb-2018	14-Feb-2018	14-Feb-2018	14-Feb-2018	14-Feb-2018	14-Feb-2018	14-Feb-2018	14-Feb-2018	14-Feb-2018
TPH c6-40 Value of soil	19-Feb-2018	19-Feb-2018	19-Feb-2018	16-Feb-2018	16-Feb-2018	19-Feb-2018	19-Feb-2018	19-Feb-2018	19-Feb-2018	19-Feb-2018
VOC MS (S)	19-Feb-2018	16-Feb-2018	19-Feb-2018	19-Feb-2018	17-Feb-2018	16-Feb-2018	19-Feb-2018	19-Feb-2018	19-Feb-2018	17-Feb-2018

Validated

CERTIFICATE OF ANALYSIS

SDG:	180213-19	**Client Reference:**	A107448	**Report Number:**	445329
Location:	Meggitt, Coventry	**Order Number:**	NOT/1305	**Superseded Report:**	

Lab Sample No(s)	17036545	17036546	17036549	17036550	17036551	17036553	17036554	17036555	17036557	17036559
Customer Sample Ref.	WS44	WS45	WS46	WS47	WS48	WS49	WS49	WS50	WS51	WS51
AGS Ref.										
Depth	0.20	0.15	0.50	0.10	0.20	1.50	2.50	0.50	0.30	1.80
Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
Ammoniacal Nitrogen	19-Feb-2018	19-Feb-2018		19-Feb-2018				19-Feb-2018		
Anions by Kone (soil)	19-Feb-2018	19-Feb-2018	20-Feb-2018	19-Feb-2018	20-Feb-2018	20-Feb-2018	20-Feb-2018	19-Feb-2018	20-Feb-2018	20-Feb-2018
Anions by Kone (w)	20-Feb-2018	20-Feb-2018		20-Feb-2018				20-Feb-2018		
Asbestos ID in Solid Samples	20-Feb-2018	20-Feb-2018		19-Feb-2018	20-Feb-2018				19-Feb-2018	
Boron Water Soluble	20-Feb-2018	20-Feb-2018	20-Feb-2018	20-Feb-2018	20-Feb-2018	20-Feb-2018	20-Feb-2018	19-Feb-2018	20-Feb-2018	20-Feb-2018
CEN 10:1 Leachate (1 Stage)	15-Feb-2018	16-Feb-2018		16-Feb-2018				16-Feb-2018		
CEN Readings	17-Feb-2018	17-Feb-2018		17-Feb-2018				17-Feb-2018		
Cyanide Comp/Free/Total/Thiocyanate	20-Feb-2018	21-Feb-2018	16-Feb-2018	21-Feb-2018	16-Feb-2018	16-Feb-2018	16-Feb-2018	20-Feb-2018	16-Feb-2018	19-Feb-2018
Dissolved Metals by ICP-MS	20-Feb-2018	20-Feb-2018		20-Feb-2018				20-Feb-2018		
Hexavalent Chromium (s)	20-Feb-2018	19-Feb-2018	19-Feb-2018	20-Feb-2018	19-Feb-2018	19-Feb-2018	19-Feb-2018	19-Feb-2018	19-Feb-2018	19-Feb-2018
Mercury Dissolved	20-Feb-2018	20-Feb-2018		20-Feb-2018				20-Feb-2018		
Metals in solid samples by OES	20-Feb-2018	19-Feb-2018	20-Feb-2018	19-Feb-2018	19-Feb-2018	20-Feb-2018	20-Feb-2018	19-Feb-2018	20-Feb-2018	19-Feb-2018
PAH by GCMS	15-Feb-2018	16-Feb-2018	19-Feb-2018	16-Feb-2018	16-Feb-2018	16-Feb-2018	16-Feb-2018	16-Feb-2018	15-Feb-2018	19-Feb-2018
pH	15-Feb-2018	15-Feb-2018	15-Feb-2018	15-Feb-2018	15-Feb-2018	15-Feb-2018	15-Feb-2018	15-Feb-2018	15-Feb-2018	15-Feb-2018
pH Value of Filtered Water	20-Feb-2018	19-Feb-2018		19-Feb-2018				20-Feb-2018		
Phenols by HPLC (S)	16-Feb-2018	16-Feb-2018	16-Feb-2018	16-Feb-2018	16-Feb-2018	16-Feb-2018	16-Feb-2018	16-Feb-2018	16-Feb-2018	17-Feb-2018
Sample description	14-Feb-2018	14-Feb-2018	14-Feb-2018	14-Feb-2018	14-Feb-2018	14-Feb-2018	14-Feb-2018	14-Feb-2018	14-Feb-2018	14-Feb-2018
TPH c6-40 Value of soil	16-Feb-2018	16-Feb-2018	19-Feb-2018	16-Feb-2018	16-Feb-2018	19-Feb-2018	16-Feb-2018	16-Feb-2018	19-Feb-2018	19-Feb-2018
VOC MS (S)	18-Feb-2018	19-Feb-2018	17-Feb-2018	17-Feb-2018	17-Feb-2018	19-Feb-2018	19-Feb-2018	16-Feb-2018	16-Feb-2018	19-Feb-2018

Lab Sample No(s)	17036560	17036561	17036562	17036563	17040174
Customer Sample Ref.	WS51	WS52	WS53	WS54	WS28_ASB
AGS Ref.					
Depth	3.50	0.30	0.60	0.20	0.90
Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
Ammoniacal Nitrogen		19-Feb-2018	19-Feb-2018	19-Feb-2018	
Anions by Kone (soil)	20-Feb-2018	20-Feb-2018	20-Feb-2018	20-Feb-2018	
Anions by Kone (w)		20-Feb-2018	20-Feb-2018	20-Feb-2018	
Asbestos ID in Solid Samples		19-Feb-2018		19-Feb-2018	
Asbestos Identification					20-Feb-2018
Boron Water Soluble	20-Feb-2018	20-Feb-2018	20-Feb-2018	20-Feb-2018	
CEN 10:1 Leachate (1 Stage)		16-Feb-2018	16-Feb-2018	16-Feb-2018	
CEN Readings		19-Feb-2018	17-Feb-2018	17-Feb-2018	
Cyanide Comp/Free/Total/Thiocyanate	16-Feb-2018	20-Feb-2018	20-Feb-2018	20-Feb-2018	
Dissolved Metals by ICP-MS		20-Feb-2018	20-Feb-2018	20-Feb-2018	
Hexavalent Chromium (s)	19-Feb-2018	20-Feb-2018	19-Feb-2018	20-Feb-2018	
Mercury Dissolved		19-Feb-2018	19-Feb-2018	20-Feb-2018	
Metals in solid samples by OES	20-Feb-2018	19-Feb-2018	19-Feb-2018	19-Feb-2018	
PAH by GCMS	16-Feb-2018	16-Feb-2018	19-Feb-2018	16-Feb-2018	
pH	15-Feb-2018	15-Feb-2018	15-Feb-2018	15-Feb-2018	
pH Value of Filtered Water		19-Feb-2018	19-Feb-2018	20-Feb-2018	
Phenols by HPLC (S)	16-Feb-2018	16-Feb-2018	17-Feb-2018	16-Feb-2018	
Sample description	14-Feb-2018	14-Feb-2018	14-Feb-2018	14-Feb-2018	
TPH c6-40 Value of soil	16-Feb-2018	19-Feb-2018	19-Feb-2018	16-Feb-2018	
VOC MS (S)	19-Feb-2018	17-Feb-2018	17-Feb-2018	17-Feb-2018	

ASSOCIATED AQC DATA

Ammoniacal Nitrogen

Component	Method Code	QC 1707	QC 1718	QC 1712
Ammoniacal Nitrogen as N	TM099	**99.6** 93.47 : 108.25	**100.8** 93.47 : 108.25	**101.2** 93.47 : 108.25

Anions by Kone (soil)

Component	Method Code	QC 1746	QC 1732	QC 1799	QC 1797
Chloride (soluble)	TM243	89.30 : 110.70	89.30 : 110.70	89.30 : 110.70	89.30 : 110.70
Water Soluble Sulphate as SO4 2:1 Extract	TM243	88.38 : 118.74	88.38 : 118.74	88.38 : 118.74	88.38 : 118.74

Anions by Kone (w)

Component	Method Code	QC 1716	QC 1797
Chloride	TM184	92.93 : 115.43	**101.0** 92.93 : 115.43
Phosphate (Ortho as PO4)	TM184	96.40 : 108.40	96.40 : 108.40
Sulphate (soluble)	TM184	**100.8** 90.53 : 113.03	**100.8** 90.53 : 113.03
TON as NO3	TM184	96.26 : 111.21	96.26 : 111.21

Boron Water Soluble

Component	Method Code	QC 1748	QC 1780	QC 1764
Water Soluble Boron	TM222	**99.5** 84.27 : 109.96	**97.0** 84.27 : 109.96	**97.5** 84.27 : 109.96

Cyanide Comp/Free/Total/Thiocyanate

Component	Method Code	QC 1790	QC 1798	QC 1734	QC 1787	QC 1764	QC 1720
Free Cyanide	TM153	**96.5** 84.60 : 110.40	**95.2** 84.60 : 110.40	**94.1** 84.60 : 110.40			
Free Cyanide (W)	TM227				**101.5** 93.25 : 112.75	**100.0** 93.25 : 112.75	**98.5** 93.25 : 112.75
Thiocyanate	TM153	**91.02** 83.02 : 103.47	**89.22** 83.02 : 103.47	**88.62** 83.02 : 103.47			
Thiocyanate (W)	TM227				**103.75** 97.75 : 109.75	**103.5** 97.75 : 109.75	**102.5** 97.75 : 109.75
Total Cyanide	TM153	**102.14** 87.53 : 111.13	**100.71** 87.53 : 111.13	**102.86** 87.53 : 111.13			
Total Cyanide (W)	TM227				**103.75** 95.25 : 111.75	**102.5** 95.25 : 111.75	**101.5** 95.25 : 111.75

Validated

CERTIFICATE OF ANALYSIS

SDG:	180213-19	**Client Reference:**	A107448	**Report Number:**	445329
Location:	Meggitt, Coventry	**Order Number:**	NOT/1305	**Superseded Report:**	

Cyanide Comp/Free/Total/Thiocyanate

Component	Method Code	QC 1748
Free Cyanide (W)	TM227	**100.75** 93.25 : 112.75
Thiocyanate (W)	TM227	**102.75** 97.75 : 109.75
Total Cyanide (W)	TM227	**102.75** 95.25 : 111.75

Dissolved Metals by ICP-MS

Component	Method Code	QC 1723	QC 1728
Aluminium	TM152	**100.33** 89.90 : 110.02	**99.0** 89.90 : 110.02
Antimony	TM152	**100.5** 79.80 : 122.00	**102.17** 79.80 : 122.00
Arsenic	TM152	**100.17** 90.42 : 111.32	**102.67** 90.42 : 111.32
Barium	TM152	**101.0** 92.02 : 112.48	**101.33** 92.02 : 112.48
Beryllium	TM152	**96.83** 86.15 : 118.35	**100.5** 86.15 : 118.35
Bismuth	TM152	**97.67** 88.90 : 106.90	**99.5** 88.90 : 106.90
Borate	TM152	**97.53** 88.00 : 112.00	**100.0** 88.00 : 112.00
Boron	TM152	**97.67** 86.68 : 117.67	**99.67** 86.68 : 117.67
Cadmium	TM152	**97.83** 92.07 : 109.87	**100.33** 92.07 : 109.87
Chromium	TM152	**99.5** 90.87 : 108.50	**100.0** 90.87 : 108.50
Cobalt	TM152	**97.67** 84.39 : 114.26	**98.5** 84.39 : 114.26
Copper	TM152	**98.17** 91.20 : 110.79	**98.83** 91.20 : 110.79
Lead	TM152	**99.33** 85.65 : 113.58	**99.67** 85.65 : 113.58
Lithium	TM152	**98.5** 89.26 : 119.04	**100.83** 89.26 : 119.04
Manganese	TM152	**98.67** 90.63 : 109.13	**99.5** 90.63 : 109.13
Molybdenum	TM152	**99.33** 87.00 : 108.89	**101.33** 87.00 : 108.89
Nickel	TM152	**99.33** 92.11 : 110.56	**99.67** 92.11 : 110.56
Phosphorus	TM152	**103.33** 90.52 : 115.47	**102.5** 90.52 : 115.47
Selenium	TM152	**99.5** 88.44 : 113.86	**100.17** 88.44 : 113.86
Silver	TM152	**91.67** 76.93 : 112.73	**93.0** 76.93 : 112.73
Strontium	TM152	**102.0** 90.72 : 114.82	**101.67** 90.72 : 114.82
Tellurium	TM152	**97.5** 86.97 : 108.87	**99.17** 86.97 : 108.87

Dissolved Metals by ICP-MS

		QC 1723	QC 1728
Thallium	TM152	**97.33** 80.92 : 114.72	**98.17** 80.92 : 114.72
Titanium	TM152	**99.0** 90.08 : 111.18	**99.17** 90.08 : 111.18
Tungsten	TM152	**101.5** 91.72 : 109.22	**102.83** 91.72 : 109.22
Uranium	TM152	**94.67** 90.58 : 113.28	**96.5** 90.58 : 113.28
Vanadium	TM152	**102.5** 88.43 : 114.30	**100.33** 88.43 : 114.30
Zinc	TM152	**99.33** 86.52 : 115.27	**100.33** 86.52 : 115.27

Hexavalent Chromium (s)

Component	Method Code	QC 1714	QC 1721	QC 1776
Hexavalent Chromium	TM151	**96.0** 90.20 : 107.00	**96.0** 90.20 : 107.00	**102.0** 90.20 : 107.00

Mercury Dissolved

Component	Method Code	QC 1742	QC 1718	QC 1781
Mercury Dissolved (CVAF)	TM183	**100.0** 73.51 : 120.83	**97.6** 73.51 : 120.83	**93.7** 73.51 : 120.83

Metals in solid samples by OES

Component	Method Code	QC 1773	QC 1730	QC 1738	QC 1769
Aluminium	TM181	**94.07** 75.13 : 109.48	**90.37** 79.04 : 112.63	**90.37** 79.04 : 112.63	**94.07** 75.13 : 109.48
Antimony	TM181	**101.93** 84.48 : 110.90	**100.0** 86.83 : 114.87	**99.23** 86.83 : 114.87	**101.54** 84.48 : 110.90
Arsenic	TM181	**97.43** 83.14 : 108.73	**96.92** 82.60 : 102.80	**97.69** 82.60 : 102.80	**96.92** 83.14 : 108.73
Barium	TM181	**96.88** 77.47 : 102.53	**93.75** 81.38 : 110.22	**93.75** 81.38 : 110.22	**98.44** 77.47 : 102.53
Beryllium	TM181	**98.29** 84.19 : 106.77	**98.97** 84.81 : 107.80	**99.32** 84.81 : 107.80	**95.89** 84.19 : 106.77
Boron	TM181	**92.37** 76.55 : 106.69	**90.68** 85.36 : 111.96	**92.94** 85.36 : 111.96	**93.5** 76.55 : 106.69
Cadmium	TM181	**104.79** 86.37 : 111.59	**96.28** 87.76 : 109.47	**96.28** 87.76 : 109.47	**100.0** 86.37 : 111.59
Chromium	TM181	**102.95** 81.29 : 118.71	**95.99** 81.29 : 118.71	**96.62** 81.29 : 118.71	**100.42** 81.29 : 118.71
Cobalt	TM181	**100.0** 85.45 : 109.14	**96.87** 88.00 : 108.30	**97.18** 88.00 : 108.30	**99.06** 85.45 : 109.14
Copper	TM181	**96.22** 81.33 : 103.33	**93.01** 84.91 : 106.21	**93.74** 84.91 : 106.21	**94.03** 81.33 : 103.33

Metals in solid samples by OES

		QC 1773	QC 1730	QC 1738	QC 1769
Iron	TM181	**102.08** 82.44 : 111.71	**97.92** 82.96 : 114.27	**97.22** 82.96 : 114.27	**100.0** 82.44 : 111.71
Lead	TM181	**94.68** 83.33 : 106.95	**97.02** 85.19 : 108.04	**95.53** 85.19 : 108.04	**94.26** 83.33 : 106.95
Manganese	TM181	**91.92** 80.56 : 102.33	**94.55** 82.29 : 105.35	**94.75** 82.29 : 105.35	**92.73** 80.56 : 102.33
Mercury	TM181	**100.39** 84.13 : 111.85	**99.61** 87.62 : 110.64	**99.61** 87.62 : 110.64	**100.0** 84.13 : 111.85
Molybdenum	TM181	**101.16** 84.19 : 110.39	**95.37** 86.47 : 109.19	**96.14** 86.47 : 109.19	**98.84** 84.19 : 110.39
Nickel	TM181	**100.7** 84.19 : 109.77	**97.67** 87.56 : 108.11	**97.9** 87.56 : 108.11	**98.6** 84.19 : 109.77
Phosphorus	TM181	**92.51** 73.47 : 116.86	**91.92** 77.53 : 107.97	**91.47** 77.53 : 107.97	**90.42** 73.47 : 116.86
Selenium	TM181	**97.03** 81.32 : 108.59	**96.14** 85.50 : 107.61	**97.63** 85.50 : 107.61	**94.96** 81.32 : 108.59
Strontium	TM181	**98.1** 84.70 : 105.87	**95.77** 82.37 : 105.96	**95.77** 82.37 : 105.96	**96.19** 84.70 : 105.87
Thallium	TM181	**99.22** 81.19 : 105.37	**96.87** 85.06 : 112.06	**96.87** 85.06 : 112.06	**98.05** 81.19 : 105.37
Tin	TM181	**102.84** 85.92 : 110.00	**95.39** 85.70 : 112.34	**96.1** 85.70 : 112.34	**99.29** 85.92 : 110.00
Titanium	TM181	**91.54** 73.44 : 113.17	**92.31** 80.40 : 114.25	**94.62** 80.40 : 114.25	**98.46** 73.44 : 113.17
Vanadium	TM181	**96.32** 78.62 : 101.47	**89.57** 79.08 : 102.49	**90.18** 79.08 : 102.49	**95.09** 78.62 : 101.47
Zinc	TM181	**100.52** 85.64 : 110.14	**98.6** 86.18 : 108.79	**99.13** 86.18 : 108.79	**98.08** 85.64 : 110.14

PAH by GCMS

Component	Method Code	QC 1717	QC 1760	QC 1774	QC 1738	QC 1752
Acenaphthene	TM218	**93.0** 82.60 : 105.38	**98.5** 78.95 : 114.22	**90.5** 82.97 : 108.44	**92.5** 82.97 : 108.44	**99.0** 78.95 : 114.22
Acenaphthylene	TM218	**91.5** 73.64 : 111.66	**84.0** 72.87 : 102.50	**84.5** 77.27 : 104.05	**85.0** 77.27 : 104.05	**87.5** 72.87 : 102.50
Anthracene	TM218	**92.0** 73.49 : 107.13	**94.0** 77.17 : 105.56	**88.0** 78.18 : 102.20	**90.0** 78.18 : 102.20	**94.0** 77.17 : 105.56
Benz(a)anthracene	TM218	**103.5** 87.82 : 118.79	**101.0** 80.47 : 122.11	**107.0** 80.40 : 121.27	**111.0** 80.40 : 121.27	**102.5** 80.47 : 122.11
Benzo(a)pyrene	TM218	**110.0** 83.39 : 123.49	**101.0** 86.85 : 124.60	**102.5** 86.92 : 120.63	**101.0** 86.92 : 120.63	**100.0** 86.85 : 124.60
Benzo(b)fluoranthene	TM218	**105.0** 80.60 : 126.56	**103.0** 81.46 : 113.62	**104.0** 82.24 : 121.86	**100.0** 82.24 : 121.86	**104.5** 81.46 : 113.62
Benzo(ghi)perylene	TM218	**100.0** 80.86 : 109.92	**100.5** 79.07 : 113.26	**104.5** 76.26 : 118.18	**92.0** 76.26 : 118.18	**100.5** 79.07 : 113.26
Benzo(k)fluoranthene	TM218	**102.0** 87.91 : 119.03	**100.0** 86.00 : 117.59	**94.0** 86.60 : 115.15	**99.5** 86.60 : 115.15	**99.0** 86.00 : 117.59
Chrysene	TM218	**92.5** 85.34 : 115.46	**98.0** 88.35 : 118.80	**102.0** 86.11 : 112.00	**107.0** 86.11 : 112.00	**94.0** 88.35 : 118.80
Dibenzo(ah)anthracene	TM218	**102.5** 82.98 : 121.47	**99.0** 85.70 : 123.10	**102.0** 83.84 : 116.37	**93.0** 83.84 : 116.37	**98.0** 85.70 : 123.10
Fluoranthene	TM218	**95.5** 82.03 : 107.26	**101.0** 80.37 : 111.80	**97.0** 81.23 : 104.94	**95.5** 81.23 : 104.94	**101.0** 80.37 : 111.80

PAH by GCMS

		QC 1717	QC 1760	QC 1774	QC 1738	QC 1752
Fluorene	TM218	**95.5** 81.48 : 108.26	**98.5** 79.98 : 109.78	**92.5** 83.68 : 108.62	**94.5** 83.68 : 108.62	**97.5** 79.98 : 109.78
Indeno(123cd)pyrene	TM218	**102.5** 84.02 : 120.55	**98.5** 85.41 : 122.03	**102.5** 83.72 : 116.90	**92.5** 83.72 : 116.90	**98.0** 85.41 : 122.03
Naphthalene	TM218	**93.5** 84.06 : 108.38	**93.0** 82.33 : 112.21	**87.0** 81.32 : 109.34	**87.5** 81.32 : 109.34	**96.5** 82.33 : 112.21
Phenanthrene	TM218	**91.5** 78.68 : 107.87	**99.0** 80.52 : 110.11	**90.0** 82.06 : 103.85	**92.5** 82.06 : 103.85	**98.5** 80.52 : 110.11
Pyrene	TM218	**94.5** 81.96 : 108.90	**100.5** 79.57 : 110.12	**96.0** 81.04 : 103.65	**96.0** 81.04 : 103.65	**101.0** 79.57 : 110.12

pH

Component	Method Code	QC 1763	QC 1765	QC 1735	QC 1745
pH	TM133	**101.04** 99.25 : 102.83	**100.78** 99.63 : 103.42	**100.65** 99.63 : 103.42	**101.95** 99.63 : 103.42

pH Value of Filtered Water

Component	Method Code	QC 1796	QC 1773
pH Value of Filtered Water	TM256	**101.08** 99.73 : 102.16	**101.08** 99.73 : 102.16

Phenols by HPLC (S)

Component	Method Code	QC 1700	QC 1711	QC 1715
2.3.5 Trimethyl-Phenol by HPLC (S)	TM062 (S)	**101.95** 70.10 : 89.90	**102.6** 70.10 : 89.90	**94.81** 70.10 : 89.90
2-Isopropyl Phenol by HPLC (S)	TM062 (S)	**87.13** 72.23 : 101.87	**88.89** 72.23 : 101.87	**92.98** 84.69 : 104.79
Catechol by HPLC (S)	TM062 (S)	**115.24** 47.70 : 158.70	**112.38** 47.70 : 158.70	**101.9** 24.84 : 108.44
Cresols by HPLC (S)	TM062 (S)	**95.62** 83.70 : 114.90	**96.66** 83.70 : 114.90	**91.65** 72.20 : 110.60
Napthol by HPLC (S)	TM062 (S)	**116.43** 71.00 : 98.00	**117.86** 71.00 : 98.00	**111.43** 91.99 : 139.23
Phenol by HPLC (S)	TM062 (S)	**105.96** 68.00 : 98.00	**111.26** 68.00 : 98.00	**107.28** 82.00 : 107.15
Resorcinol HPLC (S)	TM062 (S)	**131.45** 61.95 : 145.05	**137.74** 61.95 : 145.05	**120.75** 96.51 : 136.70
Xylenols by HPLC (S)	TM062 (S)	**100.62** 83.04 : 110.82	**102.6** 83.04 : 110.82	**97.6** 82.47 : 110.25

TPH c6-40 Value of soil

TPH c6-40 Value of soil

Component	Method Code	QC 1783	QC 1702	QC 1746	QC 1719	QC 1758
Diesel QC	TM154	**99.36** 87.23 : 107.46	**101.69** 89.39 : 107.96	**102.06** 87.23 : 107.46	**103.86** 87.23 : 107.46	**103.05** 87.23 : 107.46
Lube Oil QC	TM154	**97.97** 88.86 : 105.23	**101.42** 89.27 : 107.48	**96.09** 88.86 : 105.23	**102.01** 88.86 : 105.23	**100.96** 88.86 : 105.23
TPH C6-40 Corrected	TM154	**98.75** 89.38 : 104.63	**101.5** 90.11 : 106.95	**99.0** 89.38 : 104.63	**103.0** 89.38 : 104.63	**102.0** 89.38 : 104.63

VOC MS (S)

Component	Method Code	QC 1763	QC 1719	QC 1789	QC 1703	QC 1713	QC 1704
1,1,1,2-tetrachloroethane	TM116	**103.0** 77.56 : 115.55	**99.4** 77.56 : 115.55	**103.4** 77.56 : 115.55	**107.2** 77.56 : 115.55	**97.0** 77.56 : 115.55	**105.4** 77.56 : 115.55
1,1,1-Trichloroethane	TM116	**107.2** 74.97 : 113.76	**99.4** 74.97 : 113.76	**109.4** 74.97 : 113.76	**110.8** 74.97 : 113.76	**105.2** 74.97 : 113.76	**102.8** 74.97 : 113.76
1,1,2-Trichloroethane	TM116	**100.6** 77.12 : 116.04	**101.4** 77.12 : 116.04	**103.8** 77.12 : 116.04	**112.8** 77.12 : 116.04	**100.0** 77.12 : 116.04	**101.8** 77.12 : 116.04
1,1-Dichloroethane	TM116	**110.4** 74.46 : 129.15	**107.6** 74.46 : 129.15	**113.6** 74.46 : 129.15	**117.2** 74.46 : 129.15	**110.8** 74.46 : 129.15	**108.8** 74.46 : 129.15
1,2-Dichloroethane	TM116	**115.8** 92.57 : 128.78	**111.4** 92.57 : 128.78	**124.2** 92.57 : 128.78	**130.8** 92.57 : 128.78	**115.8** 92.57 : 128.78	**119.4** 92.57 : 128.78
1,4-Dichlorobenzene	TM116	**103.2** 72.76 : 126.34	**94.8** 72.76 : 126.34	**98.8** 72.76 : 126.34	**104.2** 72.76 : 126.34	**94.6** 72.76 : 126.34	**101.2** 72.76 : 126.34
2-Chlorotoluene	TM116	**95.0** 69.73 : 114.13	**92.0** 69.73 : 114.13	**95.8** 69.73 : 114.13	**96.8** 69.73 : 114.13	**85.6** 69.73 : 114.13	**94.6** 69.73 : 114.13
4-Chlorotoluene	TM116	**85.6** 66.90 : 112.46	**87.2** 66.90 : 112.46	**95.8** 66.90 : 112.46	**95.0** 66.90 : 112.46	**83.6** 66.90 : 112.46	**91.8** 66.90 : 112.46
Benzene	TM116	**106.0** 81.05 : 117.28	**105.0** 81.05 : 117.28	**109.2** 81.05 : 117.28	**106.6** 81.05 : 117.28	**105.6** 81.05 : 117.28	**104.2** 81.05 : 117.28
Carbon Disulphide	TM116	**97.6** 74.91 : 122.14	**93.6** 74.91 : 122.14	**98.4** 74.91 : 122.14	**97.6** 74.91 : 122.14	**92.8** 74.91 : 122.14	**90.2** 74.91 : 122.14
Carbontetrachloride	TM116	**113.4** 77.80 : 119.23	**106.6** 77.80 : 119.23	**115.0** 77.80 : 119.23	**113.6** 77.80 : 119.23	**105.2** 77.80 : 119.23	**111.8** 77.80 : 119.23
Chlorobenzene	TM116	**101.8** 75.00 : 115.53	**94.6** 75.00 : 115.53	**100.4** 75.00 : 115.53	**102.4** 75.00 : 115.53	**95.2** 75.00 : 115.53	**101.0** 75.00 : 115.53
Chloroform	TM116	**109.2** 77.34 : 121.84	**107.6** 77.34 : 121.84	**113.8** 77.34 : 121.84	**116.2** 77.34 : 121.84	**107.4** 77.34 : 121.84	**111.8** 77.34 : 121.84
Chloromethane	TM116	**117.0** 52.63 : 138.74	**109.8** 52.63 : 138.74	**123.6** 52.63 : 138.74	**118.6** 52.63 : 138.74	**122.4** 52.63 : 138.74	**114.2** 52.63 : 138.74
Cis-1,2-Dichloroethene	TM116	**114.4** 80.67 : 126.72	**107.6** 80.67 : 126.72	**109.6** 80.67 : 126.72	**117.6** 80.67 : 126.72	**110.4** 80.67 : 126.72	**107.6** 80.67 : 126.72
Dibromomethane	TM116	**100.4** 67.80 : 121.75	**98.8** 67.80 : 121.75	**109.0** 67.80 : 121.75	**118.2** 67.80 : 121.75	**99.4** 67.80 : 121.75	**103.4** 67.80 : 121.75
Dichloromethane	TM116	**112.4** 81.11 : 133.25	**110.8** 81.11 : 133.25	**113.8** 81.11 : 133.25	**124.6** 81.11 : 133.25	**110.6** 81.11 : 133.25	**117.2** 81.11 : 133.25
Ethylbenzene	TM116	**95.2** 72.53 : 109.84	**92.6** 72.53 : 109.84	**99.2** 72.53 : 109.84	**97.4** 72.53 : 109.84	**89.8** 72.53 : 109.84	**98.2** 72.53 : 109.84
Hexachlorobutadiene	TM116	**88.8** 12.82 : 152.73	**67.6** 12.82 : 152.73	**104.8** 12.82 : 152.73	**87.4** 12.82 : 152.73	**60.4** 12.82 : 152.73	**88.0** 12.82 : 152.73
Isopropylbenzene	TM116	**80.6** 54.46 : 125.44	**80.8** 54.46 : 125.44	**89.0** 54.46 : 125.44	**82.6** 54.46 : 125.44	**78.6** 54.46 : 125.44	**78.8** 54.46 : 125.44
Naphthalene	TM116	**104.8** 80.86 : 128.81	**107.2** 80.86 : 128.81	**101.4** 80.86 : 128.81	**102.8** 80.86 : 128.81	**110.8** 80.86 : 128.81	**117.6** 80.86 : 128.81
o-Xylene	TM116	**88.2** 67.46 : 102.22	**84.8** 67.46 : 102.22	**88.0** 67.46 : 102.22	**87.4** 67.46 : 102.22	**80.0** 67.46 : 102.22	**84.6** 67.46 : 102.22

VOC MS (S)

		QC 1763	QC 1719	QC 1789	QC 1703	QC 1713	QC 1704
p/m-Xylene	TM116	**91.6** 68.32 : 108.91	**85.8** 68.32 : 108.91	**93.5** 68.32 : 108.91	**90.2** 68.32 : 108.91	**83.4** 68.32 : 108.91	**85.8** 68.32 : 108.91
Sec-Butylbenzene	TM116	**76.6** 46.09 : 121.51	**76.2** 46.09 : 121.51	**90.6** 46.09 : 121.51	**77.8** 46.09 : 121.51	**70.4** 46.09 : 121.51	**71.2** 46.09 : 121.51
Tetrachloroethene	TM116	**101.2** 76.95 : 121.02	**96.4** 76.95 : 121.02	**104.0** 76.95 : 121.02	**101.8** 76.95 : 121.02	**96.4** 76.95 : 121.02	**98.4** 76.95 : 121.02
Toluene	TM116	**98.6** 74.24 : 107.42	**94.2** 74.24 : 107.42	**101.0** 74.24 : 107.42	**100.8** 74.24 : 107.42	**91.6** 74.24 : 107.42	**94.8** 74.24 : 107.42
Trichloroethene	TM116	**101.8** 77.61 : 111.54	**98.4** 77.61 : 111.54	**103.0** 77.61 : 111.54	**100.4** 77.61 : 111.54	**97.4** 77.61 : 111.54	**97.6** 77.61 : 111.54
Trichlorofluoromethane	TM116	**105.4** 71.31 : 128.41	**98.2** 71.31 : 128.41	**106.2** 71.31 : 128.41	**106.0** 71.31 : 128.41	**100.8** 71.31 : 128.41	**103.8** 71.31 : 128.41
Vinyl Chloride	TM116	**114.0** 68.26 : 133.45	**108.2** 68.26 : 133.45	**117.6** 68.26 : 133.45	**109.0** 68.26 : 133.45	**116.0** 68.26 : 133.45	**109.8** 68.26 : 133.45

Component	Method Code	QC 1745
1,1,1,2-tetrachloroethane	TM116	**96.6** 77.56 : 115.55
1,1,1-Trichloroethane	TM116	**98.6** 74.97 : 113.76
1,1,2-Trichloroethane	TM116	**93.6** 77.12 : 116.04
1,1-Dichloroethane	TM116	**102.2** 74.46 : 129.15
1,2-Dichloroethane	TM116	**111.2** 92.57 : 128.78
1,4-Dichlorobenzene	TM116	**99.4** 72.76 : 126.34
2-Chlorotoluene	TM116	**96.0** 69.73 : 114.13
4-Chlorotoluene	TM116	**85.2** 66.90 : 112.46
Benzene	TM116	**103.0** 81.05 : 117.28
Carbon Disulphide	TM116	**95.8** 74.91 : 122.14
Carbontetrachloride	TM116	**106.6** 77.80 : 119.23
Chlorobenzene	TM116	**96.0** 75.00 : 115.53
Chloroform	TM116	**102.2** 77.34 : 121.84
Chloromethane	TM116	**108.8** 52.63 : 138.74
Cis-1,2-Dichloroethene	TM116	**105.2** 80.67 : 126.72
Dibromomethane	TM116	**90.4** 67.80 : 121.75
Dichloromethane	TM116	**105.6** 81.11 : 133.25
Ethylbenzene	TM116	**93.6** 72.53 : 109.84
Hexachlorobutadiene	TM116	**62.6** 12.82 : 152.73

VOC MS (S)

		QC 1745
Isopropylbenzene	TM116	**83.2** 54.46 : 125.44
Naphthalene	TM116	**106.8** 80.86 : 128.81
o-Xylene	TM116	**82.6** 67.46 : 102.22
p/m-Xylene	TM116	**86.2** 68.32 : 108.91
Sec-Butylbenzene	TM116	**75.0** 46.09 : 121.51
Tetrachloroethene	TM116	**100.6** 76.95 : 121.02
Toluene	TM116	**95.4** 74.24 : 107.42
Trichloroethene	TM116	**95.8** 77.61 : 111.54
Trichlorofluoromethane	TM116	**98.8** 71.31 : 128.41
Vinyl Chloride	TM116	**105.8** 68.26 : 133.45

The above information details the reference name of the analytical quality control sample (AQC) that has been run with the samples contained in this report for the different methods of analysis.
The figure detailed is the percentage recovery result for the AQC.
The subscript numbers below are the percentage recovery lower control limit (LCL) and the upper control limit (UCL). The percentage recovery result for the AQC should be between these limits to be statistically in control.

Appendix

General

1. Results are expressed on a dry weight basis (dried at 35ºC) for all soil analyses except for the following: NRA and CEN Leach tests, flash point LOI, pH, ammonium as NH4 by the BRE method, VOC TICs and SVOC TICs.

2. Samples will be run in duplicate upon request, but an additional charge may be incurred.

3. If sufficient sample is received a sub sample will be retained free of charge for 30 days after analysis is completed (e-mailed) for all sample types unless the sample is destroyed on testing. The prepared soil sub sample that is analysed for asbestos will be retained for a period of 6 months after the analysis date. All bulk samples will be retained for a period of 6 months after the analysis date. All samples received and not scheduled will be disposed of one month after the date of receipt unless we are instructed to the contrary. Once the initial period has expired, a storage charge will be applied for each month or part thereof until the client cancels the request for sample storage. ALS reserve the right to charge for samples received and stored but not analysed.

4. With respect to turnaround, we will always endeavour to meet client requirements wherever possible, but turnaround times cannot be absolutely guaranteed due to so many variables beyond our control.

5. We take responsibility for any test performed by sub-contractors (marked with an asterisk). We endeavour to use UKAS/MCERTS Accredited Laboratories, who either complete a quality questionnaire or are audited by ourselves. For some determinands there are no UKAS/MCERTS Accredited Laboratories, in this instance a laboratory with a known track record will be utilised.

6. When requested, the individual sub sample scheduled will be analysed in house for the presence of asbestos fibres and asbestos containing material by our documented in house method TM048 based on HSG 248 (2005), which is accredited to ISO17025. If a specific asbestos fibre type is not found this will be reported as “Not detected”. If no asbestos fibre types are found all will be reported as “Not detected” and the sub sample analysed deemed to be clear of asbestos. If an asbestos fibre type is found it will be reported as detected (for each fibre type found). Testing can be carried out on asbestos positive samples, but, due to Health and Safety considerations, may be replaced by alternative tests or reported as No Determination Possible (NDP). The quantity of asbestos present is not determined unless specifically requested.

7. If no separate volatile sample is supplied by the client, or if a headspace or sediment is present in the volatile sample, the integrity of the data may be compromised. This will be flagged up as an invalid VOC on the test schedule and the result marked as deviating on the test certificate.

8. If appropriate preserved bottles are not received preservation will take place on receipt. However, the integrity of the data may be compromised.

9. NDP - No determination possible due to insufficient/unsuitable sample.

10. Metals in water are performed on a filtered sample, and therefore represent dissolved metals - total metals must be requested separately.

11. Results relate only to the items tested.

12. LoDs (Limit of Detection) for wet tests reported on a dry weight basis are not corrected for moisture content.

13. **Surrogate recoveries** - Surrogates are added to your sample to monitor recovery of the test requested. A % recovery is reported, results are not corrected for the recovery measured. Typical recoveries for organics tests are 70-130%, they are generally wider for volatiles analysis, 50-150%. Recoveries in soils are affected by organic rich or clay rich matrices. Waters can be affected by remediation fluids or high amounts of sediment. Test results are only ever reported if all of the associated quality checks pass; it is assumed that all recoveries outside of the values above are due to matrix affect.

14. **Product analyses** - Organic analyses on products can only be semi-quantitative due to the matrix effects and high dilution factors employed.

15. Phenols monohydric by HPLC include phenol, cresols (2-Methylphenol, 3-Methylphenol and 4-Methylphenol) and Xylenols (2,3 Dimethylphenol, 2,4 Dimethylphenol, 2,5 Dimethylphenol, 2,6 Dimethylphenol, 3,4 Dimethyphenol, 3,5 Dimethylphenol).

16. Total of 5 speciated phenols by HPLC includes Phenol, 2,3,5-Trimethyl Phenol, 2-Isopropylphenol, Cresols and Xylenols (as detailed in 15).

17. Stones/debris are not routinely removed. We always endeavour to take a representative sub sample from the received sample.

18. In certain circumstances the method detection limit may be elevated due to the sample being outside the calibration range. Other factors that may contribute to this include possible interferences. In both cases the sample would be diluted which would cause the method detection limit to be raised.

19. Mercury results quoted on soils will not include volatile mercury as the analysis is performed on a dried and crushed sample.

20. For leachate preparations other than Zero Headspace Extraction (ZHE) volatile loss may occur.

21. For the BSEN 12457-3 two batch process to allow the cumulative release to be calculated, the volume of the leachate produced is measured and filtered for all tests. We therefore cannot carry out any unfiltered analysis. The tests affected include volatiles GCFID/GCMS and all subcontracted analysis.

22. We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials - whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample. Other coarse granular material such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.

23. Analysis and identification of specific compounds using GCFID is by retention time only, and we routinely calibrate and quantify for benzene, toluene, ethylbenzenes and xylenes (BTEX). For total volatiles in the C5-C12 range, the total area of the chromatogram is integrated and expressed as ug/kg or ug/l. Although this analysis is commonly used for the quantification of gasoline range organics (GRO), the system will also detect other compounds such as chlorinated solvents, and this may lead to a falsely high result with respect to hydrocarbons only. It is not possible to specifically identify these non-hydrocarbons, as standards are not routinely run for any other compounds, and for more definitive identification, volatiles by GCMS should be utilised.

24. **Tentatively Identified Compounds (TICs)** are non-target peaks in VOC and SVOC analysis. All non-target peaks detected with a concentration above the LoD are subjected to a mass spectral library search. Non-target peaks with a library search confidence of >75% are reported based on the best mass spectral library match. When a non-target peak with a library search confidence of <75% is detected it is reported as “mixed hydrocarbons”. Non-target compounds identified from the scan data are semi-quantified relative to one of the deuterated internal standards, under the same chromatographic conditions as the target compounds. This result is reported as a semi-quantitative value and reported as Tentatively Identified Compounds (TICs). TICs are outside the scope of UKAS accreditation and are not moisture corrected.

Sample Deviations

If a sample is classed as deviated then the associated results may be compromised.

1	**Container with Headspace provided for volatiles analysis**
2	**Incorrect container received**
3	**Deviation from method**
4	**Holding time exceeded before sample received**
5	**Samples exceeded holding time before presevation was performed**
§	**Sampled on date not provided**
♦	**Sample holding time exceeded in laboratory**
@	**Sample holding time exceeded due to sampled on date**
&	**Sample Holding Time exceeded - Late arrival of instructions.**

Asbestos

Identification of Asbestos in Bulk Materials & Soils

The results for identification of asbestos in bulk materials are obtained from supplied bulk materials which have been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining, based on HSG 248 (2005).

The results for identification of asbestos in soils are obtained from a homogenised sub sample which has been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining, based on HSG 248 (2005).

Asbestos Type	Common Name
Chrysotile	White Asbestos
Amosite	Brown Asbestos
Crocidolite	Blue Asbestos
Fibrous Actinolite	-
Fibrous Anthophyllite	-
Fibrous Tremolite	-

Visual Estimation Of Fibre Content

Estimation of fibre content is not permitted as part of our UKAS accredited test other than: - Trace - Where only one or two asbestos fibres were identified.

Further guidance on typical asbestos fibre content of manufactured products can be found in HSG 264.

The identification of asbestos containing materials and soils falls within our schedule of tests for which we hold UKAS accreditation, however opinions, interpretations and all other information contained in the report are outside the scope of UKAS accreditation.

Appendix E – Contamination Assessment Criteria

Appendix E1 – Contamination Assessment Criteria

WYG Tier One Human Health Screening Values, Issue 15.
Residential With Plant Uptake

Determinand	Units	SOIL ORGANIC MATTER			SOURCE
		1%	2.5%	6%	
pH		<5, >9			
Asbestos	%	Presence			
HEAVY METALS/METALLOIDS					
Arsenic	mg/kg	37			C4SL
Cadmium	mg/kg	22			C4SL
Chromium (III)	mg/kg	910			CIEH/LQM S4ULs
Chromium (VI)	mg/kg	21			C4SL
Lead	mg/kg	200			C4SL
Mercury (Elemental)	mg/kg		1.2		CIEH/LQM S4ULs
Mercury (Inorganic)	mg/kg	40			CIEH/LQM S4ULs
Mercury (Methyl)	mg/kg		11		CIEH/LQM S4ULs
Nickel	mg/kg	180			CIEH/LQM S4ULs
Selenium	mg/kg	250			CIEH/LQM S4ULs
Beryllium	mg/kg	1.7			CIEH/LQM S4ULs
Boron	mg/kg	290			CIEH/LQM S4ULs
Vanadium	mg/kg	410			CIEH/LQM S4ULs
Copper	mg/kg	2,400			CIEH/LQM S4ULs
Zinc	mg/kg	3,700			CIEH/LQM S4ULs
GENERAL INORGANICS					
Easily Liberatable Cyanide (free)	mg/kg	24			Acute effects infant 1 dose 3g soil
US EPA PRIORITY PAHs					
Acenaphthene	mg/kg	210	510	1100	CIEH/LQM S4ULs
Acenaphthylene	mg/kg	170	420	920	CIEH/LQM S4ULs
Anthracene	mg/kg	2,400	5,400	11,000	CIEH/LQM S4ULs
Benzo(a)anthracene	mg/kg	7.2	11	13	CIEH/LQM S4ULs
Benzo(b)fluoranthene	mg/kg	2.6	3.3	3.7	CIEH/LQM S4ULs
Benzo(k)fluoranthene	mg/kg	77	93	100	CIEH/LQM S4ULs
Benzo(g,h,i)perylene	mg/kg	320	340	350	CIEH/LQM S4ULs
Benzo(a)pyrene	mg/kg	5	5	5	C4SL, CLEA v1.071
Chrysene	mg/kg	15	22	27	CIEH/LQM S4ULs
Di-benzo(a,h)anthracene	mg/kg	0.24	0.28	0.30	CIEH/LQM S4ULs

Determinand	Units	SOIL ORGANIC MATTER			SOURCE
		1%	2.5%	6%	
Fluoranthene	mg/kg	280	560	890	CIEH/LQM S4ULs
Fluorene	mg/kg	170	400	860	CIEH/LQM S4ULs
Indeno(1,2,3-cd)pyrene	mg/kg	27	36	41	CIEH/LQM S4ULs
Naphthalene	mg/kg	2.3	5.6	13	CIEH/LQM S4ULs
Phenanthrene	mg/kg	95	220	440	CIEH/LQM S4ULs
Pyrene	mg/kg	620	1200	2000	CIEH/LQM S4ULs
Phenolics					
Phenol	mg/kg	120	200	380	CIEH/LQM S4ULs
TPH					
TPH Aliphatic >C5-6	mg/kg	42	78	160	CIEH/LQM S4ULs
TPH Aliphatic >C6-8	mg/kg	100	230	530	CIEH/LQM S4ULs
TPH Aliphatic >C8-10	mg/kg	27	65	150	CIEH/LQM S4ULs
TPH Aliphatic >C10-12	mg/kg	130	330	770	CIEH/LQM S4ULs
TPH Aliphatic >C12-16	mg/kg	1,100	2,400	4,400	CIEH/LQM S4ULs
TPH Aliphatic >C16-35	mg/kg	65,000	92,000	110,000	CIEH/LQM S4ULs
TPH Aliphatic >C35-44	mg/kg	65,000	92,000	110,000	CIEH/LQM S4ULs
TPH Aromatic >EC5-7 (Benzene)	mg/kg	0.2	0.41	0.87	C4SL, CLEA v1.071
TPH Aromatic >EC7-8	mg/kg	130	290	660	CIEH/LQM S4ULs
TPH Aromatic >EC8-10	mg/kg	34	83	190	CIEH/LQM S4ULs
TPH Aromatic >EC10-12	mg/kg	74	180	380	CIEH/LQM S4ULs
TPH Aromatic >EC12-16	mg/kg	140	330	660	CIEH/LQM S4ULs
TPH Aromatic >EC16-21	mg/kg	260	540	930	CIEH/LQM S4ULs
TPH Aromatic >EC21-35	mg/kg	1,100	1,500	1,700	CIEH/LQM S4ULs
TPH Aromatic >EC35-44	mg/kg	1,100	1,500	1,700	CIEH/LQM S4ULs
TPH Aliphatic & Aromatic >EC44-70	mg/kg	1,600	1,800	1,900	CIEH/LQM S4ULs

Appendix E2 – Contamination Assessment Criteria

WYG Tier One Human Health Screening Values, Issue 15.
Commercial / Industrial

Determinand	Units	SOIL ORGANIC MATTER			SOURCE
		1%	2.5%	6%	
pH		<5, >9			
Asbestos	%	Presence			
HEAVY METALS/METALLOIDS					
Arsenic	mg/kg	640			C4SL
Cadmium	mg/kg	410			C4SL
Chromium (III)	mg/kg	8,600			CIEH/LQM S4ULs
Chromium (VI)	mg/kg	49			C4SL
Lead	mg/kg	2,300			C4SL
Mercury (Elemental)	mg/kg	58			CIEH/LQM S4ULs
Mercury (Inorganic)	mg/kg	1,100			CIEH/LQM S4ULs
Mercury (Methyl)	mg/kg	320			CIEH/LQM S4ULs
Nickel	mg/kg	980			CIEH/LQM S4ULs
Selenium	mg/kg	12,000			CIEH/LQM S4ULs
Berylium	mg/kg	12			CIEH/LQM S4ULs
Boron	mg/kg	240,000			CIEH/LQM S4ULs
Vanadium	mg/kg	9,000			CIEH/LQM S4ULs
Copper	mg/kg	68,000			CIEH/LQM S4ULs
Zinc	mg/kg	730,000			CIEH/LQM S4ULs
GENERAL INORGANICS					
Easily Liberatable Cyanide (free)	mg/kg	40			WYG derived considering acute effects
US EPA PRIORITY PAHs					
Acenaphthene	mg/kg	84,000	97,000	100,000	CIEH/LQM S4ULs
Acenaphthylene	mg/kg	83,000	97,000	100,000	CIEH/LQM S4ULs
Anthracene	mg/kg	520,000	540,000	540,000	CIEH/LQM S4ULs
Benzo(a)anthracene	mg/kg	170	170	180	CIEH/LQM S4ULs
Benzo(b)fluoranthene	mg/kg	44	44	45	CIEH/LQM S4ULs
Benzo(k)fluoranthene	mg/kg	1,200	1,200	1,200	CIEH/LQM S4ULs
Benzo(g,h,i)perylene	mg/kg	3,900	4,000	4,000	CIEH/LQM S4ULs
Benzo(a)pyrene	mg/kg	77	77	77	C4SL, CLEA v1.071
Chrysene	mg/kg	350	350	350	CIEH/LQM S4ULs
Di-benzo(a,h)anthracene	mg/kg	3.5	3.6	3.6	CIEH/LQM S4ULs

Determinand	Units	SOIL ORGANIC MATTER			SOURCE
		1%	2.5%	6%	
Fluoranthene	mg/kg	23,000	23,000	23,000	CIEH/LQM S4ULs
Fluorene	mg/kg	63,000	68,000	71,000	CIEH/LQM S4ULs
Indeno(1,2,3-cd)pyrene	mg/kg	500	510	510	CIEH/LQM S4ULs
Naphthalene	mg/kg	190	460	1,100	CIEH/LQM S4ULs
Phenanthrene	mg/kg	22,000	22,000	23,000	CIEH/LQM S4ULs
Pyrene	mg/kg	54,000	54,000	54,000	CIEH/LQM S4ULs
Phenolics					
Phenol	mg/kg	440	690	1,300	CIEH/LQM S4ULs
TPH					
TPH Aliphatic >C5-6	mg/kg	3,200	5,900	12,000	CIEH/LQM S4ULs
TPH Aliphatic >C6-8	mg/kg	7,800	17,000	40,000	CIEH/LQM S4ULs
TPH Aliphatic >C8-10	mg/kg	2,000	4,800	11,000	CIEH/LQM S4ULs
TPH Aliphatic >C10-12	mg/kg	9,700	23,000	47,000	CIEH/LQM S4ULs
TPH Aliphatic >C12-16	mg/kg	59,000	82,000	90,000	CIEH/LQM S4ULs
TPH Aliphatic >C16-35	mg/kg	1,000,000	1,000,000	1,000,000	CIEH/LQM S4ULs
TPH Aliphatic >C35-44	mg/kg	1,000,000	1,000,000	1,000,000	CIEH/LQM S4ULs
TPH Aromatic >EC5-7 (Benzene)	mg/kg	27	50	98	C4SL, CLEA v1.071
TPH Aromatic >EC7-8	mg/kg	56,000	110,000	180,000	CIEH/LQM S4ULs
TPH Aromatic >EC8-10	mg/kg	3,500	8,100	17,000	CIEH/LQM S4ULs
TPH Aromatic >EC10-12	mg/kg	16,000	28,000	34,000	CIEH/LQM S4ULs
TPH Aromatic >EC12-16	mg/kg	36,000	37,000	38,000	CIEH/LQM S4ULs
TPH Aromatic >EC16-21	mg/kg	28,000	28,000	28,000	CIEH/LQM S4ULs
TPH Aromatic >EC21-35	mg/kg	28,000	28,000	28,000	CIEH/LQM S4ULs
TPH Aromatic >EC35-44	mg/kg	28,000	28,000	28,000	CIEH/LQM S4ULs
TPH Aliphatic & Aromatic >EC44-70	mg/kg	28,000	28,000	28,000	CIEH/LQM S4ULs

Appendix F – Development Masterplan

PCPT Architects Ltd. Drawing 3844 AD(0) 003 A

Area Schedule

Zone	Hectares	Acres
Residential A	2.7	6.7
Residential B	o m i t t e d	
Residential C	4.9	12.1
Residential D	4.1	10.1
Residential E	1.7	4.2
sub total	13.4	33.0
Industrial 1	2.1	5.1
Industrial 2	0.8	2.0
sub total	2.9	7.1
Public Open Space	4.4	10.9
Carbon Factory	3.0	7.4
Other (inc main access road)	2.5	6.1
Total	26.2	64.7

Typical Industrial/Unit

Industrial Site Area:
2.9 hectares (7.1 acres)

8 units, giving total of
9,800sqm (105,490sqft)
gross external

A- E=98 no.
F-G=26 no.
total =124 (19%)

A- E=236 no.
F-G=74 no.
total =310 (49%)

A- E=89 no.
F-G=32 no.
total =121 (19%)

A- E=42 no.
F-G=42 no.
total =84 (13%)

Total Residential Site area:
A-E=14.1 Hectares (34.8 Acres)+
F-G=3.9 Hectares (9.6 Acres)
total= 18 Hectares (44.4 Acres)

Density =36 units per hectare

A-E=465 units
F-G=174 units

total =639 units

Public open space

Revision A - Amendment to Zone F and G - Faded out as a later planned phase

Client

HCA & Thomas Lister

Project Name

Holbrook Lane Redevelopment

Coventry

Master Plan Layout Option 1

Feasibility Study

PCPT Architects Limited
14 Hylton Street
Jewellery Quarter
Birmingham
B18 6HN

T: 0121 523 9335

design@pcptarchitects.co.uk

Scale	Date
1:1000 @ A0	Mar 17
Drawn by	Checked by
DJW/ BT	
Plot Date	

Drawing No.	Revision
3844 AD(0) 003	A

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Report any discrepancies immediately.

AutoCAD reference:
H:\Drawings\3844 Project Titles\3844 AD(0)001

Appendix G – Monitoring

WYG ENVIRONMENT

Geneva Building, Lakeview Drive, Sherwood Business Park, Annesley, Nottinghamshire, NG15 0ED
Tel: 01623 684550 Fax: 01623 684551

GROUNDWATER / GAS MONITORING RECORD SHEET

Client:	HE	**Job No:**	A107448	**Instruments Used:**	Dip Meter & Infra Red Gas Analyser
Project:	Meggitt, Coventry	**Date:**	20-Mar-18	**Monitored By:**	**JP**
Weather:	Drizzle				

Installation No.	Elevation of cover (m agl)	Peak [1] (% vol)		Steady [2] (% vol)			(ppm)		Flow rate (l/hr)			Atmospheric Pressure (mbar)	Water Depth to Cover (m bgl)	Base Depth (m bgl)	Water Level (m bgl)	Remarks
		CH_4	CO_2	CH_4	CO_2	O_2	CO	H_2S	Total gas	Peak CH_4	Peak CO_2					
R12	0.00	0.1	2.8	0.1	2.8	1.1	0.0	0.0	0.0	0.000	0.000	1017	8.63	15.00	8.63	
WS51	0.00	0.8	0.1	0.7	0.0	17.8	7.0	0.0	2.2		0.002	1020	1.06	4.70	1.06	
WS49	0.00	1.0	0.9	1.0	0.9	18.3	20.0	0.0	2.5	0.000	0.023	1020	1.06	3.00	1.06	
R11	0.00	0.4	2.1	0.1	2.1	19.6	0.0	0.0	-0.6	0.000	-0.013	1020	11.98	15.01	11.98	
WS45	0.00	0.4	3.7	0.1	3.3	15.7	0.0	0.0	0.0	0.000	0.000	1020	DRY	2.07	DRY	
WS46	0.00	0.2	6.2	0.2	6.2	15.0	0.0	0.0	0.0	0.000	0.000	1020	DRY	3.78	DRY	
R9	0.00	0.1	0.7	0.1	0.7	21.0	0.0	0.0	-1.2	0.000	-0.008	1020	12.53	15.07	12.53	
R7	0.00	0.1	1.9	0.1	1.9	20.1	0.0	0.0	0.0	0.000	0.000	1020	6.80	8.10	6.80	
WS36	0.00	0.1	12.0	0.1	12.0	7.4	20.0	0.0	0.0	0.000	0.000	1020	DRY	2.88	DRY	
WS32	0.00	0.1	0.2	0.1	0.0	5.9	4.0	0.0	0.0		0.000	1020	DRY	1.89	DRY	
WS22	0.00	0.1	0.6	0.1	0.6	21.1	0.0	0.0	0.1	0.000	0.001	1021	1.50	2.94	1.50	
R5	0.00	0.1	2.4	0.1	2.4	13.9	0.0	0.0	0.0	0.000	0.000	1020	DRY	5.12	DRY	
WS01	0.00	0.1	0.3	0.0	0.0	22.1	1.0	0.0	0.2		0.001	1020	1.07	3.04	1.07	
R1	0.00	0.1	0.6	0.0	0.6	21.4	0.0	0.0	0.0	0.000	0.000	1020	_	_	_	Unable to remove gas bung
WS48	0.00	0.1	0.0	0.1	0.0	21.7	1.0	0.0	0.0		0.000	1020	0.50	2.00	0.50	
WS20	0.00	0.2	2.8	0.1	2.8	14.4	0.0	0.0	0.0	0.000	0.000	1019	1.82	4.02	1.82	

Background Gas Levels:

	CH_4 (%)	CO_2 (%)	O_2 (%)	Atmos. (mbar)
Before Monitoring	0.1	0.1	21.6	1017
After Monitoring	0.1	0.1	21.4	1020

Characteristic Gas Situation	
1	
2	
3	
4	

[1] The peak reading is the maximum recorded level during a monitoring event.

[2] The steady reading is the level which remained constant after approximately 1 minute.

WYG ENVIRONMENT

Geneva Building, Lakeview Drive, Sherwood Business Park, Annesley, Nottinghamshire, NG15 0ED
Tel: 01623 684550 Fax: 01623 684551

GROUNDWATER / GAS MONITORING RECORD SHEET

Client:	HE	**Job No.:**	A107448	**Instruments Used:**	Dip Meter & Infra Red Gas Analyser
Project:	Meggit, Coventry	**Date:**	29-Mar-18	**Monitored By:**	**SC + SK**
Weather:	Sunny, clear				

Installation No.	Elevation of cover (m agl)	Peak [1] CH_4 (% vol)	Peak [1] CO_2 (% vol)	Steady [2] CH_4 (% vol)	Steady [2] CO_2 (% vol)	Steady [2] O_2 (% vol)	Steady [2] CO (ppm)	Steady [2] H_2S (ppm)	Total gas flow rate (l/hr)	Peak CH_4 flow rate (l/hr)	Peak CO_2 flow rate (l/hr)	Atmospheric Pressure (mbar)	Water Depth to Cover (m bgl)	Base Depth (m bgl)	Water Level (m bgl)	Remarks
WS02	0.00	0.2	5.6	0.2	5.6	15.2	0.0	0.0	0.0	0.000	0.000	988	3.02	3.60	3.02	
R2	0.00	0.2	2.5	0.2	2.5	11.2	3.0	0.0	0.0	0.000	0.000	990	2.96	14.78	2.96	
WS21	0.00	0.1	2.5	0.1	2.5	16.7	0.0	0.0	-0.1	0.000	-0.003	989	1.05	3.97	1.05	
WS35	0.00	0.2	0.4	0.2	0.4	20.6	0.0	0.0	0.0	0.000	0.000	989	DRY	2.91	DRY	
R6	0.00	0.1	2.9	0.1	2.9	14.8	0.0	0.0	0.5	0.001	0.015	989	14.37	14.47	14.37	
WS29	0.00	0.1	0.4	0.1	0.4	20.2	0.0	0.0	-0.1	0.000	0.000	989	DRY	2.99	DRY	
R8	0.00	0.1	1.8	0.1	1.8	14.9	0.0	0.0	0.1	0.000	0.002	989	8.99	14.55	8.99	
R10	0.00	0.4	4.6	0.4	4.6	6.9	1.0	0.0	0.5	0.002	0.023	989	10.26	14.94	10.26	

Background Gas Levels:

	CH_4 (%)	CO_2 (%)	O_2 (%)	Atmos. (mbar)
Before Monitoring	0.0	0.1	21.1	988
After Monitoring	0.0	0.1	21.1	989

Characteristic Gas Situation	
1	
2	
3	
4	

[1] The peak reading is the maximum recorded level during a monitoring event.

[2] The steady reading is the level which remained constant after approximately 1 minute.

WYG ENVIRONMENT

Geneva Building, Lakeview Drive, Sherwood Business Park, Annesley, Nottinghamshire, NG15 0ED
Tel: 01623 684550 Fax: 01623 684551

GROUNDWATER / GAS MONITORING RECORD SHEET

Client:	Meggitt Aerospace	**Job No.:**	A107448	**Instruments Used:**	Dip Meter & Infra Red Gas Analyser
Project:	Meggitt	**Date:**	05-Apr-18	**Monitored By:**	**JP**
Weather:	Sunny				

Installation No.	Elevation of cover (m agl)	Peak [1]		Steady [2]					Total gas flow rate (l/hr)	Peak CH_4 flow rate (l/hr)	Peak CO_2 flow rate (l/hr)	Atmospheric Pressure (mbar)	Water Depth to Cover (m bgl)	Base Depth (m bgl)	Water Level (m bgl)	Remarks
		CH_4 (% vol)	CO_2 (% vol)	CH_4 (% vol)	CO_2 (% vol)	O_2 (% vol)	CO (ppm)	H_2S (ppm)								
WS21	0.00	0.0	0.8	0.0	0.8	19.3	0.0	0.0	0.1	0.000	0.001	1006	1.09	4.01	1.09	
WS20	0.00	0.1	3.3	0.0	3.3	15.3	0.0	0.0	0.1	0.000	0.003	1005	1.12	4.10	1.12	
R6	0.00	0.0	0.1	0.0	0.1	21.1	0.0	0.0	-3.3	0.000	-0.003	1006	14.37	14.47	14.37	
WS29	0.00	0.0	0.0	0.0	0.0	21.2	2.0	0.0	0.1	0.000	0.000	1006	DRY	2.95	DRY	
WS35	0.00	0.0	0.1	0.0	0.1	20.1	0.0	0.0	0.0	0.000	0.000	1006	DRY	2.91	DRY	
R12	0.00		1.2		1.2	13.0	1.0	0.0	5.3	0.000	0.064	1006	7.67	14.92	7.67	CH4 above detectable limit

Background Gas Levels:

	CH_4 (%)	CO_2 (%)	O_2 (%)	Atmos. (mbar)
Before Monitoring	0.2	0.1	20.6	1003
After Monitoring	0.1	0.1	20.1	1006

Characteristic Gas Situation	
1	
2	
3	
4	

[1] The peak reading is the maximum recorded level during a monitoring event.

[2] The steady reading is the level which remained constant after approximately 1 minute.

WYG ENVIRONMENT

Geneva Building, Lakeview Drive, Sherwood Business Park, Annesley, Nottinghamshire, NG15 0ED
Tel: 01623 684550 Fax: 01623 684551

GROUNDWATER / GAS MONITORING RECORD SHEET

Client:	Meggitt Aerospace	**Job No.:**	A107448	**Instruments Used:**	Dip Meter & Infra Red Gas Analyser
Project:	Meggitt	**Date:**	05-Apr-18	**Monitored By:**	**JP**
Weather:	Sunny				

Installation No.	Elevation of cover (m agl)	Peak [1] CH_4 (% vol)	Peak [1] CO_2 (% vol)	Steady [2] CH_4 (% vol)	Steady [2] CO_2 (% vol)	Steady [2] O_2 (% vol)	Steady [2] CO (ppm)	Steady [2] H_2S (ppm)	Total gas flow rate (l/hr)	Peak CH_4 flow rate (l/hr)	Peak CO_2 flow rate (l/hr)	Atmospheric Pressure (mbar)	Water Depth to Cover (m bgl)	Base Depth (m bgl)	Water Level (m bgl)	Remarks
WS51	0.00	0.6	0.1	0.6	0.0	12.5	0.0	0.0	0.4	0.002	0.000	1003	1.48	4.66	1.48	
WS49	0.00	0.6	0.4	0.6	0.4	18.0	11.0	0.0	2.5	0.015	0.010	1005	1.73	2.97	1.73	
R11	0.00	0.1	0.1	0.1	0.1	19.9	0.0	0.0	-2.2	-0.002	-0.002	1005	11.14	15.03	11.14	
WS48	0.00												0.45	2.01	0.45	
R9	0.00												12.35	15.03	12.35	
WS46	0.00	0.1	2.7	0.1	2.4	19.1	0.0	0.0	0.1	0.000	0.003	1006	DRY	3.85	DRY	
WS45	0.00	0.1	0.5	0.1	0.5	19.3	0.0	0.0	0.0	0.000	0.000	1006	DRY	2.23	DRY	
R10	0.00											1006	10.29	14.83	10.29	
R8	0.00	0.1	0.1	0.1	0.1	20.3	0.0	0.0	-1.5	-0.002	-0.002	1005	11.55	14.82	11.55	
R7	0.00	0.1	0.1	0.1	0.1	19.3	1.0	0.0	0.0	0.000	0.000	1005	6.53	7.97	6.53	
WS36	0.00	0.1	6.3	0.1	6.3	15.9	9.0	0.0	0.1	0.000	0.006	1005	DRY	2.83	DRY	
WS32	0.00	0.1	0.1	0.1	0.1	6.7	4.0	0.0	0.0	0.000	0.000	1005	DRY	1.86	DRY	
R5	0.00	0.1	2.6	0.1	2.6	10.4	1.0	0.0	-4.0	-0.004	-0.104	1005	4.56	5.02	4.56	
WS22	0.00	0.1	0.2	0.1	0.2	20.3	1.0	0.0	-0.1	0.000	0.000	1005	1.42	3.91	1.42	
R1	0.00	0.1	0.6	0.1	0.6	20.0	1.0	0.0	0.0	0.000	0.000	1005	-	-	-	Bung stuck, unable to dip and sample
R2	0.00	0.1	3.5	0.1	3.5	16.3	1.0	0.0	0.0	0.000	0.000	1005	2.62	14.89	2.62	
WS02	0.00	0.0	5.2	0.0	5.2	15.6	0.0	0.0	0.2	0.000	0.010	1005	2.80	3.65	2.80	
WS01	0.00	0.0	0.1	0.0	0.1	20.6	4.0	0.0	0.0	0.000	0.000	1005	1.00	3.08	1.00	

Background Gas Levels:

	CH_4 (%)	CO_2 (%)	O_2 (%)	Atmos. (mbar)
Before Monitoring	0.2	0.1	20.6	1003
After Monitoring	0.1	0.1	20.1	1006

Characteristic Gas Situation	
1	
2	
3	
4	

[1] The peak reading is the maximum recorded level during a monitoring event.

[2] The steady reading is the level which remained constant after approximately 1 minute.

WYG ENVIRONMENT

Geneva Building, Lakeview Drive, Sherwood Business Park, Annesley, Nottinghamshire, NG15 0ED
Tel: 01623 684550 Fax: 01623 684551

GROUNDWATER / GAS MONITORING RECORD SHEET

Client:	Meggitt Aerospace	**Job No.:**	A107448	**Instruments Used:**	Dip Meter & Infra Red Gas Analyser
Project:	Meggitt, Coventry	**Date:**	18-Apr-18	**Monitored By:**	**JP**
Weather:	Sunny				

Installation No.	Elevation of cover (m agl)	Peak [1] CH_4 (% vol)	Peak [1] CO_2 (% vol)	Steady [2] CH_4 (% vol)	Steady [2] CO_2 (% vol)	Steady [2] O_2 (% vol)	Steady [2] CO (ppm)	Steady [2] H_2S (ppm)	Total gas flow rate (l/hr)	Peak CH_4 flow rate (l/hr)	Peak CO_2 flow rate (l/hr)	Atmospheric Pressure (mbar)	Water Depth to Cover (m bgl)	Base Depth (m bgl)	Water Level (m bgl)	Remarks
R12	0.00	>>>	2.8	>>>	2.8	2.9	2.0	1.0	-1.3	#VALUE!	-0.036	1017	8.10	15.00	8.10	
WS51	0.00	0.0	0.1	0.0	0.1	11.9	2.0	1.0	9.1	0.000	0.009	1017	2.35	4.75	2.35	
WS49	0.00	0.1	0.1	0.1	0.1	20.2	3.0	0.0	0.3	0.000	0.000	1016	1.30	3.04	1.30	
WS48	0.00	0.0	0.2	0.0	0.2	21.3	1.0	0.0	-0.1	0.000	0.000	1016	0.65	2.00	0.65	
R11	0.00	0.0	0.8	0.0	0.8	20.2	1.0	0.0	0.0	0.000	0.000	1015	11.30	13.00	11.30	
WS45	0.00	0.0	0.7	0.0	0.7	20.2	1.0	0.0	0.1	0.000	0.001	1015	2.50	DRY	2.50	
WS46	0.00	0.0	4.3	0.0	3.4	18.7	1.0	0.0	0.0	0.000	0.000	1015	DRY	3.94	DRY	
R9	0.00	0.0	0.3	0.0	0.3	20.7	1.0	0.0	-0.3	0.000	-0.001	1016	8.71	15.16	8.71	
R7	0.00	0.0	2.2	0.0	2.2	18.3	1.0	0.0	0.0			1016	6.50	7.10	6.50	
WS36	0.00	0.0	7.0	0.0	7.0	15.0	24.0	0.0	0.1	0.000	0.007	1016	DRY	2.90	DRY	
WS32	0.00	0.0	0.1	0.0	0.0	4.9	3.0	0.0	0.0			1016	DRY	1.92	DRY	
WS22	0.00	0.0	1.4	0.0	1.6	19.2	1.0	0.0	0.2	0.000	0.003	1016	1.55	2.95	1.55	
R5	0.00	0.0	0.4	0.0	0.4	20.4	1.0	0.0	0.0	0.000	0.000	1016	DRY	5.07	DRY	
WS01	0.00	0.0	0.4	0.0	0.4	18.8	1.0	0.0	0.0			1016	1.25	3.28	1.25	
R1	0.00	0.0	0.7	0.0	0.7	19.8	0.0	0.0	0.0	0.000	0.000	1016	-	-	-	Bung stuck in standpipe undable to dip
WS48	0.00	0.0	0.2	0.0	0.2	21.3	1.0	0.0	-0.1			1016	0.65	2.00	0.65	
WS20	0.00	0.0	2.7	0.0	2.7	13.7	1.0	0.0	0.0			1016	1.35	4.13	1.35	

Background Gas Levels:

	CH_4 (%)	CO_2 (%)	O_2 (%)	Atmos. (mbar)
Before Monitoring	0.1	0.1	20.9	1015
After Monitoring	0.1	0.1	21.0	1015

Characteristic Gas Situation	
1	
2	
3	
4	

[1] The peak reading is the maximum recorded level during a monitoring event.

[2] The steady reading is the level which remained constant after approximately 1 minute.

WYG ENVIRONMENT

Geneva Building, Lakeview Drive, Sherwood Business Park, Annesley, Nottinghamshire, NG15 0ED
Tel: 01623 684550 Fax: 01623 684551

GROUNDWATER / GAS MONITORING RECORD SHEET

Client:	Meggitt Aerospace	**Job No.:**	A107448	**Instruments Used:**	Dip Meter & Infra Red Gas Analyser
Project:	Meggitt, Coventry	**Date:**	18-Apr-18	**Monitored By:**	**JP**
Weather:	Sunny				

Installation No.	Elevation of cover (m agl)	Peak [1] CH_4 (% vol)	Peak [1] CO_2 (% vol)	Steady [2] CH_4 (% vol)	Steady [2] CO_2 (% vol)	Steady [2] O_2 (% vol)	Steady [2] CO (ppm)	Steady [2] H_2S (ppm)	Total gas flow rate (l/hr)	Peak CH_4 flow rate (l/hr)	Peak CO_2 flow rate (l/hr)	Atmospheric Pressure (mbar)	Water Depth to Cover (m bgl)	Base Depth (m bgl)	Water Level (m bgl)	Remarks
WS02	0.00	0.1	4.6	0.1	4.6	16.9	0.0	0.0	0.1	0.000	0.005	1015	2.95	3.60	2.95	
R2	0.00	0.1	3.2	0.1	3.2	16.3	1.0	0.0	0.1	0.000	0.003	1015	2.97	15.00	2.97	
WS21	0.00	0.0	0.4	0.0	0.4	19.9	1.0	0.0	0.0	0.000	0.000	1016	1.10	4.01	1.10	
WS35	0.00	0.0	0.2	0.0	0.2	21.3	1.0	0.0	0.0	0.000	0.000	1016	DRY	2.95	DRY	
R6	0.00	0.0	1.5	0.0	1.5	17.6	2.0	0.0	-0.4	0.000	-0.006	1016	DRY	14.36	DRY	
WS29	0.00	0.0	0.2	0.0	0.2	21.0	2.0	0.0	0.0	0.000	0.000	1016	DRY	3.00	DRY	
R8	0.00	0.0	0.3	0.0	0.3	16.0	2.0	0.0	0.0	0.000	0.000	1016	5.38	14.75	5.38	
R10	0.00															

Background Gas Levels:

	CH_4 (%)	CO_2 (%)	O_2 (%)	Atmos. (mbar)
Before Monitoring	0.1	0.1	20.9	1015
After Monitoring	0.1	0.1	21.0	1015

Characteristic Gas Situation	
1	
2	
3	
4	

[1] The peak reading is the maximum recorded level during a monitoring event.

[2] The steady reading is the level which remained constant after approximately 1 minute.

WYG ENVIRONMENT

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GROUNDWATER / GAS MONITORING RECORD SHEET

Client:	Meggitt Aerospace	**Job No.:**	A107448	**Instruments Used:**	Dip Meter & Infra Red Gas Analyser
Project:	Meggitt	**Date:**	08-May-18	**Monitored By:**	**JP**
Weather:	Sunny				

Installation No.	Elevation of cover (m agl)	Peak [1] CH_4 (% vol)	Peak [1] CO_2 (% vol)	Steady [2] CH_4 (% vol)	Steady [2] CO_2 (% vol)	Steady [2] O_2 (% vol)	Steady [2] CO (ppm)	Steady [2] H_2S (ppm)	Total gas flow rate (l/hr)	Peak CH_4 flow rate (l/hr)	Peak CO_2 flow rate (l/hr)	Atmospheric Pressure (mbar)	Water Depth to Cover (m bgl)	Base Depth (m bgl)	Water Level (m bgl)	Remarks
R12	0.00	>>>	2.5	>>>	2.5	5.4	2.0	0.0	-0.4	#VALUE!	-0.010	998	8.00	15.00	8.00	
WS51	0.00	0.0	0.1	0.0	0.1	12.1	1.0	1.0	9.3	0.000	0.009	998	2.50	4.80	2.50	
WS49	0.00	0.0	0.0	0.0	0.0	21.2	2.0	0.0	0.0	0.000	0.000	998	1.35	4.70	1.35	
WS48	0.00	0.0	0.1	0.0	0.0	21.6	1.0	0.0	0.0	0.000	0.000	998	0.67	2.00	0.67	
R11	0.00	0.0	3.5	0.0	3.5	17.1	2.0	0.0	0.1	0.000	0.004	998	11.30	13.00	11.30	
WS45	0.00	0.0	1.0	0.0	1.0	19.6	2.0	0.0	0.1	0.000	0.001	998	DRY	2.00	DRY	
WS46	0.00	0.0	0.0	3.6	0.0	19.4	3.6	2.0	0.0	0.000	0.000	998	DRY	4.90	DRY	
R9	0.00	0.0	1.6	0.0	1.6	7.4	2.0	0.0	0.7	0.000	0.011	997	11.96	15.20	11.96	
R7	0.00	0.0	3.0	0.0	3.0	16.6	4.0	0.0	0.0			998	6.90	7.15	6.90	
WS36	0.00	0.0	9.0	0.0	9.0	10.7	34.0	0.0	0.1	0.000	0.009	998	DRY	2.90	DRY	
WS32	0.00	0.0	0.3	0.0	0.0	1.0	2.0	0.0	0.0			998	DRY	1.90	DRY	
WS22	0.00	0.0	2.0	0.0	1.0	19.6	1.0	0.0	0.1	0.000	0.002	998	1.40	2.60	1.40	
R5	0.00	0.0	1.7	0.0	1.7	18.3	1.0	0.0	0.1	0.000	0.002	998	DRY	5.15	DRY	
WS01	0.00	0.0	0.8	0.0	0.3	18.9	2.0	0.0	0.0			996	1.30	3.10	1.30	
R1	0.00	0.0	0.7	0.0	0.7	19.6	1.0	0.0	0.0	0.000	0.000	996	-	-	-	Bung stuck unable to dip
WS48	0.00	0.0	0.1	0.0	0.0	21.6	1.0	0.0	0.0			998	0.67	2.00	0.67	
WS20	0.00	0.0	3.4	0.0	3.4	14.2	2.0	0.0	0.0			2	1.60	4.20	1.60	

Background Gas Levels:

	CH_4 (%)	CO_2 (%)	O_2 (%)	Atmos. (mbar)
Before Monitoring	0.1	0.1	21.1	996
After Monitoring	0.1	0.0	21.0	998

Characteristic Gas Situation	
1	
2	
3	
4	

[1] The peak reading is the maximum recorded level during a monitoring event.

[2] The steady reading is the level which remained constant after approximately 1 minute.

WYG ENVIRONMENT

Geneva Building, Lakeview Drive, Sherwood Business Park, Annesley, Nottinghamshire, NG15 0ED
Tel: 01623 684550 Fax: 01623 684551

GROUNDWATER / GAS MONITORING RECORD SHEET

Client:	Meggitt Aerospace	**Job No.:**	A107448	**Instruments Used:**	Dip Meter & Infra Red Gas Analyser
Project:	Meggitt	**Date:**	08-May-18	**Monitored By:**	**JP**
Weather:	Sunny				

Installation No.	Elevation of cover (m agl)	Peak [1] CH_4 (% vol)	Peak [1] CO_2 (% vol)	Steady [2] CH_4 (% vol)	Steady [2] CO_2 (% vol)	Steady [2] O_2 (% vol)	Steady [2] CO (ppm)	Steady [2] H_2S (ppm)	Total gas flow rate (l/hr)	Peak CH_4 flow rate (l/hr)	Peak CO_2 flow rate (l/hr)	Atmospheric Pressure (mbar)	Water Depth to Cover (m bgl)	Base Depth (m bgl)	Water Level (m bgl)	Remarks
WS02	0.00	0.1	6.7	0.1	6.7	12.7	0.0	0.0	0.0	0.000	0.000	996	2.97	3.60	2.97	
R2	0.00	0.1	1.4	0.1	1.4	18.4	0.0	0.0	-1.9	-0.002	-0.027	996	3.03	15.00	3.03	
WS21	0.00	0.0	0.7	0.0	0.7	19.5	2.0	0.0	0.1	0.000	0.001	998	1.02	4.00	1.02	
WS35	0.00	0.0	0.1	0.0	0.1	21.0	3.0	0.0	0.1	0.000	0.000	997	DRY	2.95	DRY	
R6	0.00	0.0	1.8	0.0	1.8	15.9	3.0	0.0	0.7	0.000	0.013	998	DRY	14.50	DRY	
WS29	0.00	0.0	0.3	0.0	0.3	19.9	2.0	0.0	0.0	0.000	0.000	998	DRY	3.00	DRY	
R8	0.00	0.0	0.5	0.0	0.5	14.5	3.0	0.0	0.5	0.000	0.003	998	11.60	14.75	11.60	
																Bung stuck unable to dip

Background Gas Levels:

	CH_4 (%)	CO_2 (%)	O_2 (%)	Atmos. (mbar)
Before Monitoring	0.1	0.1	21.1	996
After Monitoring	0.1	0.0	21.0	998

Characteristic Gas Situation	
1	
2	
3	
4	

[1] The peak reading is the maximum recorded level during a monitoring event.

[2] The steady reading is the level which remained constant after approximately 1 minute.

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Tel: 01623 684550 Fax: 01623 684551

GROUNDWATER / GAS MONITORING RECORD SHEET

Client:	Meggitt Aerospace	**Job No.:**	A107448	**Instruments Used:**	Dip Meter & Infra Red Gas Analyser
Project:	Meggitt, Coventry	**Date:**	16-May-18	**Monitored By:**	**JP**
Weather:	Sunny				

Installation No.	Elevation of cover (m agl)	Peak [1] CH_4 (% vol)	Peak [1] CO_2 (% vol)	Steady [2] CH_4 (% vol)	Steady [2] CO_2 (% vol)	Steady [2] O_2 (% vol)	Steady [2] CO (ppm)	Steady [2] H_2S (ppm)	Total gas flow rate (l/hr)	Peak CH_4 flow rate (l/hr)	Peak CO_2 flow rate (l/hr)	Atmospheric Pressure (mbar)	Water Depth to Cover (m bgl)	Base Depth (m bgl)	Water Level (m bgl)	Remarks
R12	0.00	>>>	2.7	>>>	2.7	6.6	3.0	0.0	-0.6	#VALUE!	-0.016	1018	8.20	15.00	8.20	
WS51	0.00	0.0	0.0	0.0	0.0	21.0	1.0	0.0	0.1	0.000	0.000	1018	0.42	4.73	0.42	
WS49	0.00	0.0	0.0	0.0	0.0	21.2	2.0	0.0	0.0	0.000	0.000	1018	0.73	3.00	0.73	
WS48	0.00	0.0	0.0	0.0	0.0	0.0	19.9	2.0	0.0			1018	1.85	2.00	1.85	
R11	0.00	0.0	1.2	0.0	1.2	19.9	3.0	0.0	0.1	0.000	0.001	1018	11.20	13.00	11.30	
WS45	0.00	0.0	1.7	0.0	1.7	18.6	1.0	0.0	0.1	0.000	0.002	1018	DRY	4.80	DRY	
WS46	0.00	0.0	2.8	0.0	2.8	19.8	1.0	0.0	0.1	0.000	0.003	1018	DRY	3.90	DRY	
R9	0.00	0.0	0.4	0.0	0.4	20.5	2.0	0.0	-0.5	0.000	-0.002	1018	11.80	15.00	11.80	
R7	0.00	0.0	2.4	0.0	2.4	18.1	5.0	0.0	0.0			1017	6.95	8.13	6.95	
WS36	0.00	0.0	9.9	0.0	9.9	11.0	28.0	0.0	0.0	0.000	0.000	1016	DRY	2.86	DRY	
WS32	0.00	0.0	0.7	0.0	0.0	6.9	2.0	0.0	0.0			1016	DRY	1.90	DRY	
WS22	0.00	0.0	2.3	0.0	2.3	17.4	0.0	0.0	0.1	0.000	0.002	1016	1.56	2.93	1.56	
R5	0.00	0.0	0.5	0.0	0.5	20.2	1.0	0.0	0.0	0.000	0.000	1016	DRY	5.06	DRY	
WS01	0.00	0.0	0.5	0.0	0.5	18.2	0.0	0.0	0.1			1015	1.58	3.14	1.58	
R1	0.00	0.0	0.8	0.0	0.8	19.7	0.0	0.0	0.0	0.000	0.000	1015	-	-	-	Bung stuck unable to dip
WS48	0.00	0.0	0.0	0.0	0.0	19.9	2.0	0.0	0.0			1018	1.85	2.00	1.85	
WS20	0.00	0.0	4.0	0.0	4.0	13.7	1.0	0.0	0.1			1016	1.55	4.11	1.55	

Background Gas Levels:

	CH_4 (%)	CO_2 (%)	O_2 (%)	Atmos. (mbar)
Before Monitoring	0.1	0.1	21.1	1015
After Monitoring	0.1	0.1	21.0	1018

Characteristic Gas Situation	
1	
2	
3	
4	

[1] The peak reading is the maximum recorded level during a monitoring event.

[2] The steady reading is the level which remained constant after approximately 1 minute.

WYG ENVIRONMENT

Geneva Building, Lakeview Drive, Sherwood Business Park, Annesley, Nottinghamshire, NG15 0ED
Tel: 01623 684550 Fax: 01623 684551

GROUNDWATER / GAS MONITORING RECORD SHEET

Client:	Meggitt Aerospace	**Job No.:**	A107448	**Instruments Used:**	Dip Meter & Infra Red Gas Analyser
Project:	Meggitt, Coventry	**Date:**	16-May-18	**Monitored By:**	**JP**
Weather:	Sunny				

Installation No.	Elevation of cover (m agl)	Peak [1] CH_4 (% vol)	Peak [1] CO_2 (% vol)	Steady [2] CH_4 (% vol)	Steady [2] CO_2 (% vol)	Steady [2] O_2 (% vol)	Steady [2] CO (ppm)	Steady [2] H_2S (ppm)	Total gas flow rate (l/hr)	Peak CH_4 flow rate (l/hr)	Peak CO_2 flow rate (l/hr)	Atmospheric Pressure (mbar)	Water Depth to Cover (m bgl)	Base Depth (m bgl)	Water Level (m bgl)	Remarks
WS02	0.00	0.1	8.4	0.1	8.4	10.3	0.0	0.0	0.0	0.000	0.000	1015	2.98	3.62	2.98	
R2	0.00	0.1	4.9	0.1	4.9	12.8	3.0	0.0	-1.2	-0.001	-0.059	1015	2.98	3.62	2.98	
WS21	0.00	0.0	0.8	0.0	0.8	18.5	0.0	0.0	0.0	0.000	0.000	1016	1.10	4.01	1.10	
WS35	0.00	0.0	0.2	0.0	0.2	20.9	2.0	0.0	0.0	0.000	0.000	1018	DRY	2.95	DRY	
R6	0.00	0.0	0.1	0.0	0.1	20.9	2.0	0.0	-0.5	0.000	-0.001	1018	DRY	14.50	DRY	
WS29	0.00	0.0	0.5	0.0	0.5	20.1	2.0	0.0	0.0	0.000	0.000	1017	DRY	3.00	DRY	
R8	0.00	0.0	0.5	0.0	0.5	15.4	2.0	0.0	0.0	0.000	0.000	1018	11.50	14.50	11.50	

Background Gas Levels:

	CH_4 (%)	CO_2 (%)	O_2 (%)	Atmos. (mbar)
Before Monitoring	0.1	0.1	21.1	1015
After Monitoring	0.1	0.1	21.0	1018

Characteristic Gas Situation	
1	
2	
3	
4	

[1] The peak reading is the maximum recorded level during a monitoring event.

[2] The steady reading is the level which remained constant after approximately 1 minute.

WYG ENVIRONMENT

Geneva Building, Lakeview Drive, Sherwood Business Park, Annesley, Nottinghamshire, NG15 0ED
Tel: 01623 684550 Fax: 01623 684551

GROUNDWATER / GAS MONITORING RECORD SHEET

Client:	Meggitt Aerospace	**Job No.:**	A107448	**Instruments Used:**	Dip Meter & Infra Red Gas Analyser
Project:	Meggitt, Coventry	**Date:**	06-Jun-18	**Monitored By:**	**SK**
Weather:	Sunny				

Installation No.	Elevation of cover (m agl)	Peak [1] CH_4 (% vol)	Peak [1] CO_2 (% vol)	Steady [2] CH_4 (% vol)	Steady [2] CO_2 (% vol)	Steady [2] O_2 (% vol)	Steady [2] CO (ppm)	Steady [2] H_2S (ppm)	Total gas flow rate (l/hr)	Peak CH_4 flow rate (l/hr)	Peak CO_2 flow rate (l/hr)	Atmospheric Pressure (mbar)	Water Depth to Cover (m bgl)	Base Depth (m bgl)	Water Level (m bgl)	Remarks
WS32	0.00	0.1	11.6	0.1	11.6	5.9	1.0	0.0	-0.2	0.000	-0.023	1002	3.12	3.59	3.12	
R2	0.00	0.1	7.1	0.1	7.1	6.9	5.0	0.0	-2.9	-0.003	-0.206	1002	3.24	14.66	3.24	
R1	0.00	0.1	1.1	0.1	1.1	18.9	1.0	0.0	0.0	0.000	0.000	1005			0.00	
WS01	0.00	0.0	0.5	0.0	0.5	18.5	0.0	0.0	-0.1	0.000	-0.001	1006	1.30	3.10	1.30	
WS36	0.00	0.0	11.8	0.0	11.8	8.2	33.0	0.0	-0.1	0.000	-0.012	1005	DRY	2.85	DRY	
WS32	0.00	0.0	0.1	0.0	0.1	4.1	10.0	0.0	-0.2	0.000	0.000	1005	DRY	1.69	DRY	
R5	0.00	0.0	8.6	0.0	8.6	19.2	5.0	0.0	0.0	0.000	0.000	1006	DRY	5.03	DRY	
R6	0.00	0.0	2.8	0.0	2.8	13.3	3.0	0.0	0.1	0.000	0.003	1005	14.28	14.48	14.28	
WS35	0.00	0.0	0.2	0.0	0.2	20.2	2.0	0.0	0.0			1006	DRY	2.95	DRY	
WS29	0.00	0.0	0.3	0.0	0.3	19.9	2.0	0.0	0.2	0.000	0.001	1006	DRY		DRY	
WS21	0.00	0.0	1.3	0.0	1.3	19.4	1.0	0.0	0.0			1005	1.12	3.98	1.12	No free product
WS22	0.00	0.0	2.9	0.0	2.9	18.1	0.0	0.0	0.1	0.000	0.003	1006	1.56	2.91	1.56	
WS20	0.00	0.0	3.6	0.0	3.4	15.1	3.0	0.0	0.0	0.000	0.000	1006	0.72	4.09	0.72	
R7	0.00	0.0	2.5	0.0	2.5	18.1	5.0	0.0	0.0			1006	7.15	8.09	7.15	
R8	0.00	0.0	0.7	0.0	0.7	19.1	0.0	0.0	0.1	0.000	0.001	1006	11.95	14.49	11.95	
WS46	0.00	0.0	1.8	0.0	1.8	17.9	1.0	0.0	0.0			1006	DRY	2.00	DRY	
WS45	0.00	0.1	1.5	0.1	1.5	18.8	0.0	0.0	0.1			1006	DRY	4.80	DRY	
R10	0.00	0.0											12.65	14.99	12.65	

Background Gas Levels:

	CH_4 (%)	CO_2 (%)	O_2 (%)	Atmos. (mbar)
Before Monitoring	0.1	0.1	21.1	1002
After Monitoring	0.1	0.1	21.0	1006

Characteristic Gas Situation	
1	
2	
3	
4	

[1] The peak reading is the maximum recorded level during a monitoring event.

[2] The steady reading is the level which remained constant after approximately 1 minute.

WYG ENVIRONMENT

Geneva Building, Lakeview Drive, Sherwood Business Park, Annesley, Nottinghamshire, NG15 0ED
Tel: 01623 684550 Fax: 01623 684551

GROUNDWATER / GAS MONITORING RECORD SHEET

Client:	Meggitt Aerospace	**Job No.:**	A107448	**Instruments Used:**	Dip Meter & Infra Red Gas Analyser
Project:	Meggitt, Coventry	**Date:**	06-Jun-18	**Monitored By:**	**SK**
Weather:	Sunny				

Installation No.	Elevation of cover (m agl)	Peak [1] CH_4 (% vol)	Peak [1] CO_2 (% vol)	Steady [2] CH_4 (% vol)	Steady [2] CO_2 (% vol)	Steady [2] O_2 (% vol)	Steady [2] CO (ppm)	Steady [2] H_2S (ppm)	Total gas flow rate (l/hr)	Peak CH_4 flow rate (l/hr)	Peak CO_2 flow rate (l/hr)	Atmospheric Pressure (mbar)	Water Depth to Cover (m bgl)	Base Depth (m bgl)	Water Level (m bgl)	Remarks
R9	0.00	0.0	0.4	0.0	0.4	20.1	0.0	0.0	0.0	0.000	0.000	1006	12.65	14.99	12.65	
R11	0.00	0.1	0.1	0.1	0.4	19.9	0.0	0.0	0.0	0.000	0.000	1006	11.58	15.01	11.58	
R12	0.00	>>	3.7	>>	3.7	0.4	2.0	0.0	0.0	#VALUE!	0.000	1005	6.74	14.83	6.74	No free product
WS48	0.00	0.6	1.4	0.0	1.4	12.3	1.0	0.0	0.0	0.000	0.000	1006	0.87	1.98	0.87	
WS49	0.00	0.7	3.2	0.7	3.2	16.7	3.0	0.0	0.0	0.000	0.000	1006	1.95	2.96	1.95	
WS51	0.00	1.3	7.6	0.4	7.6	7.2	2.0	0.0	-0.2	-0.003	-0.015	1006	1.38	4.69	1.38	No free product

Background Gas Levels:

	CH_4 (%)	CO_2 (%)	O_2 (%)	Atmos. (mbar)
Before Monitoring	0.1	0.1	21.1	1002
After Monitoring	0.1	0.1	21.0	1006

Characteristic Gas Situation	
1	
2	
3	
4	

[1] The peak reading is the maximum recorded level during a monitoring event.

[2] The steady reading is the level which remained constant after approximately 1 minute.

Appendix H – BGS Borehole Records

FOUNDATION ENGINEERING Ltd.

BOREHOLE LOG

SOIL MECHANICS DEPT.

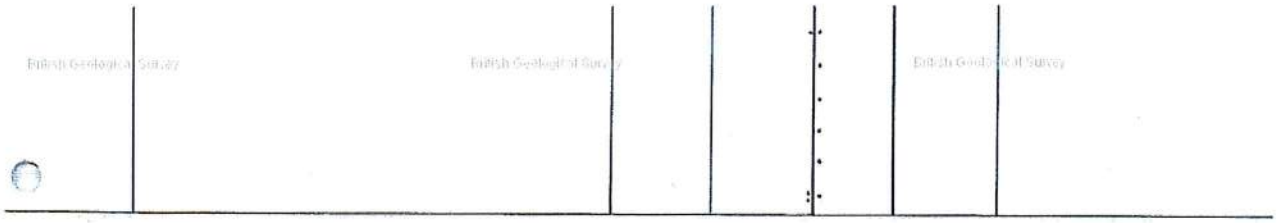
FIGURE 2.

LOCATION : COVENTRY – DUNLOP FACTORY BOREHOLE No. : 2

BOREHOLE DIA. : 6 IN. GROUND LEVEL :

DATE (Start) : 17TH AUGUST 1961. WATER LEVEL . :

Dates	Description	Thickness	Depth	Sample	Remarks
	MADE GROUND – ASH, RUBBLE	3'-6"	0'-0"		
			3'-6"	1	
				2 +	N = 45
	HARD RED MARL, SANDY, FRIABLE AND MOTTLED GREY IN PLACES			3 +	N = 46
		21'-0"		4 +	N = 100/10 IN.
				5 +	N = 100/10 IN
			24'-6"	6 +	N = 100/6 IN.
	VERY COMPACT FINE RED SAND BECOMING A NEARLY CEMENTED SANDSTONE	6'-0" PENETRATED			
			30'-6"	+	N = 100/6 IN.
			END OF BOREHOLE		



BOREHOLE SCALE : 1″=5′ • : DISTURBED SAMPLE ▮ : UNDISTURBED SAMPLE + STANDARD PENETRATION TEST

FOUNDATION ENGINEERING Ltd.

BOREHOLE LOG

SOIL MECHANICS DEPT.

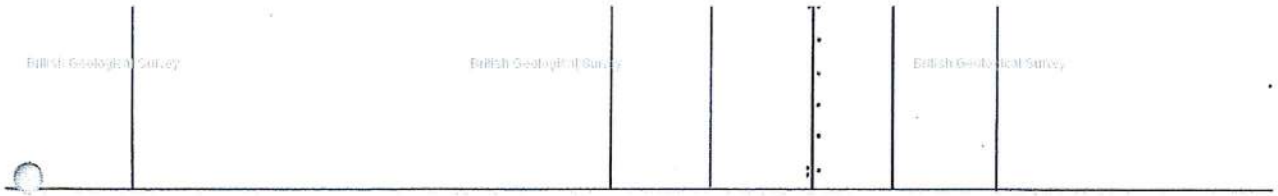
FIGURE 3.

LOCATION : COVENTRY - DUNLOP FACTORY BOREHOLE No. : 3

BOREHOLE DIA. : 6 in GROUND LEVEL :

DATE (Start) : 14TH AUGUST 1961 WATER LEVEL :

Dates	Description	Thickness	Depth	Sample	Remarks
	MADE GROUND - ASH AND RUBBLE	2'-8"	0'-0"		
			2'-8"	1, 2, 3 +	A B — SAMPLES A AND B TAKEN FROM ADJACENT PIT. N = 47
				4	
	HARD RED MARL MOTTLED GREY IN PLACES AND VERY SANDY BETWEEN 4'-8" AND 10'-0"	27'-4" PENETRATED		5 +	N = 62
				6 +	N = 100/6 in.
				7 +	N = 100/6 in.
				8	
			30'-0"	+	N = 100/6 in.
			END OF BOREHOLE		



BOREHOLE SCALE : 1″=5′ • : DISTURBED SAMPLE ▮ : UNDISTURBED SAMPLE + STANDARD PENETRATION TEST

British Geological Survey

FOUNDATION ENGINEERING Ltd.

BOREHOLE LOG

SOIL MECHANICS DEPT.

FIGURE 1.

LOCATION : COVENTRY – DUNLOP FACTORY

BOREHOLE No. : 1

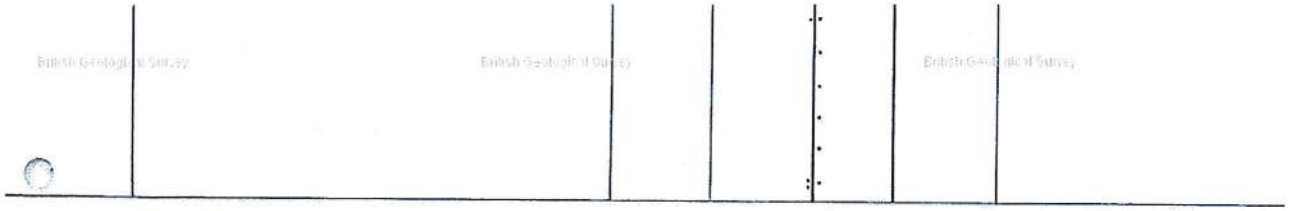
BOREHOLE DIA. : 6 in.

GROUND LEVEL :

DATE (Start) : 21st AUGUST 1961

WATER LEVEL :

Dates	Description	Thickness	Depth	Sample	Remarks
	MADE GROUND – ASH AND SAND	6'-0"	0'-0"		
	MADE GROUND – VERY SOFT BLACK SANDY SILT, FRAGMENTS OF TIMBER.	7'-6"	5'-0"	1 +	N = 4
				2 +	N = 3
	HARD RED AND GREY MARL	18'-0" PENETRATED	12'-6"	3 +	N = 100/6 in.
				4 +	N = 100/9 in.
				5 +	N = 100/5 in.
			30'-6"	6 +	N = 100/5 in.
			END OF BOREHOLE		



BOREHOLE SCALE : 1″=5′ • : DISTURBED SAMPLE ▮ : UNDISTURBED SAMPLE + STANDARD PENETRATION TEST