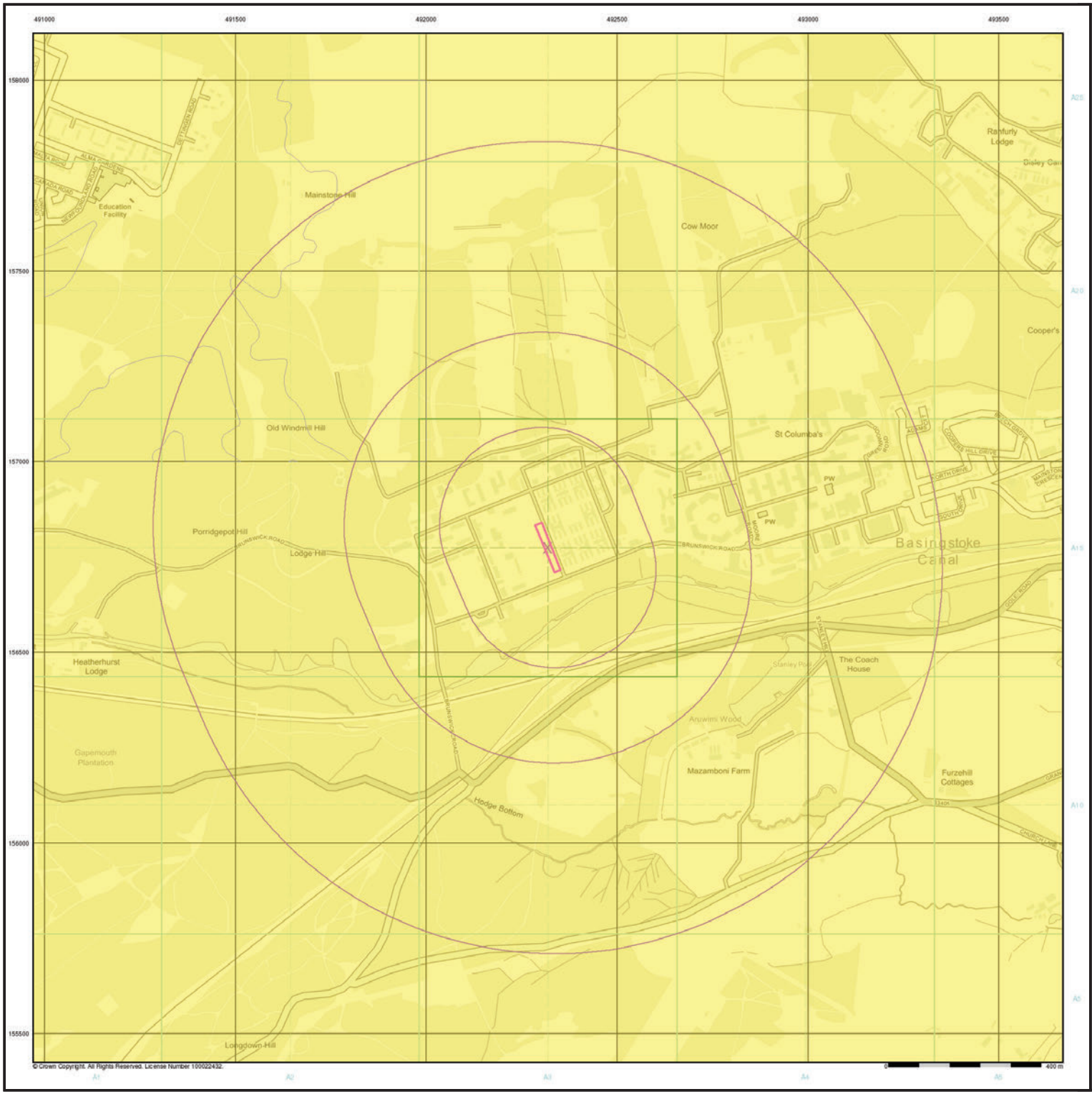


TWEEDIE EVANS CONSULTING

General

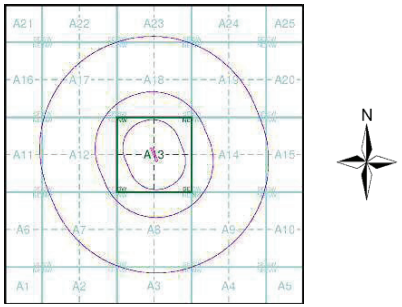
Specified Site | Specified Buffer(s) | Bearing Reference Point

Estimated Soil Chemistry Nickel

Nickel Concentrations mg/kg

- < 15
- 15 - 30
- 30 - 45
- 45 - 60
- 60 - 80
- 80 - 100
- > 100

Estimated Soil Chemistry Nickel - Slice A

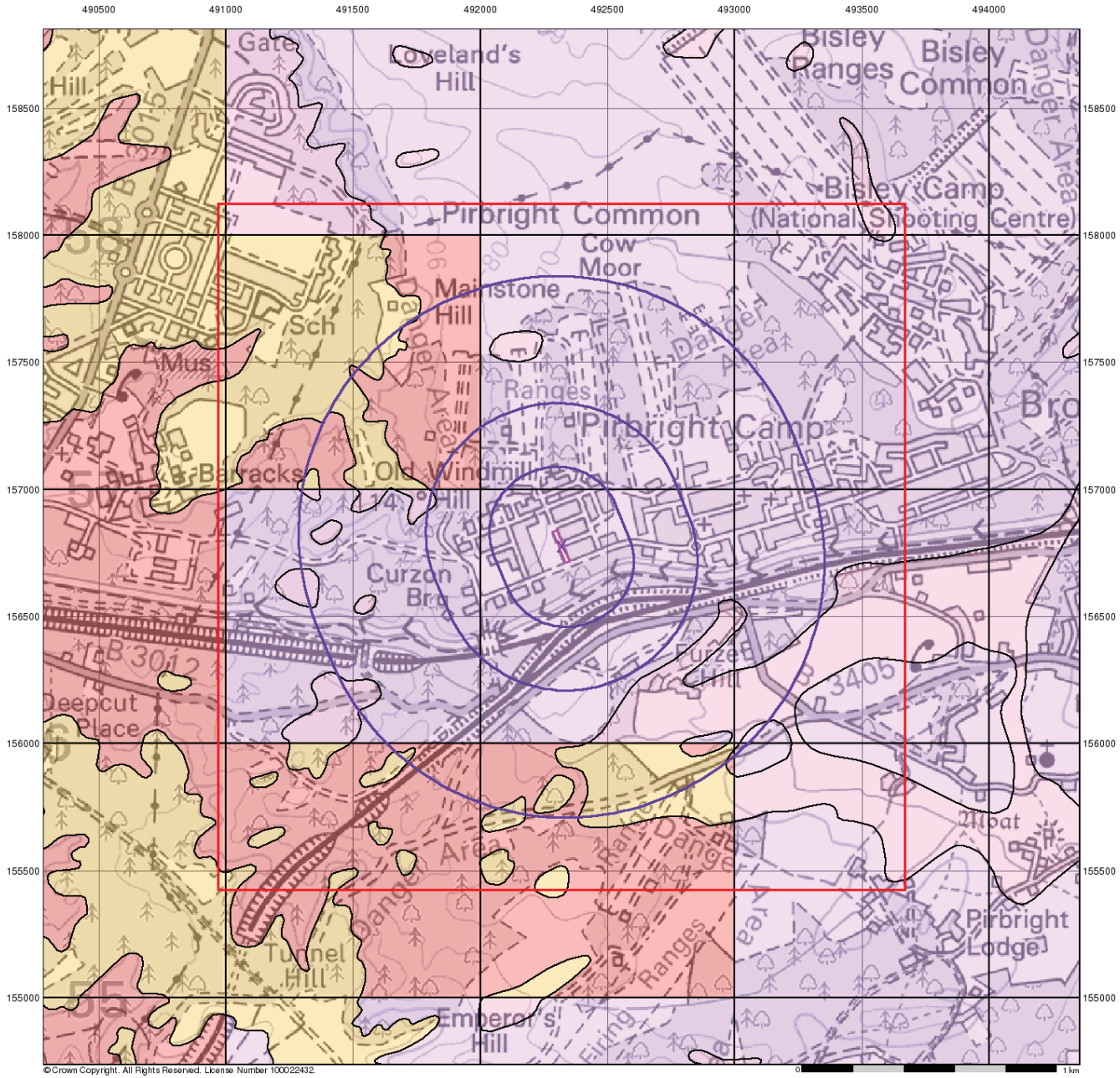


Order Details

Order Details:	221372301_1_1
Customer Ref:	1909006.001
National Grid Reference:	492320, 156770
Slice:	A
Site Area (Ha):	0.24
Search Buffer (m):	1000

Site Details

Brunswick Camp, Pirbright, GU24 0QQ



TWEEDIE EVANS CONSULTING

Groundwater Vulnerability

General

Specified Site | Specified Buffer(s) | Bearing Reference Point | Slice | Map ID

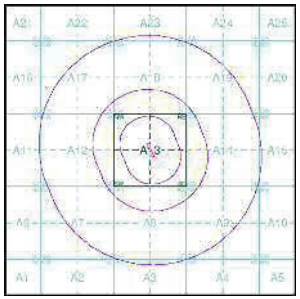
Agency and Hydrological

Bedrock Aquifers	Superficial Aquifers
High Vulnerability, Principal Aquifer	High Vulnerability, Principal Aquifer
High Vulnerability, Secondary Aquifer	High Vulnerability, Secondary Aquifer
Medium Vulnerability, Principal Aquifer	Medium Vulnerability, Principal Aquifer
Medium Vulnerability, Secondary Aquifer	Medium Vulnerability, Secondary Aquifer
Low Vulnerability, Principal Aquifer	Low Vulnerability, Principal Aquifer
Low Vulnerability, Secondary Aquifer	Low Vulnerability, Secondary Aquifer

Unproductive Aquifer

Soluble Rock

Site Sensitivity Context Map - Slice A



Order Details

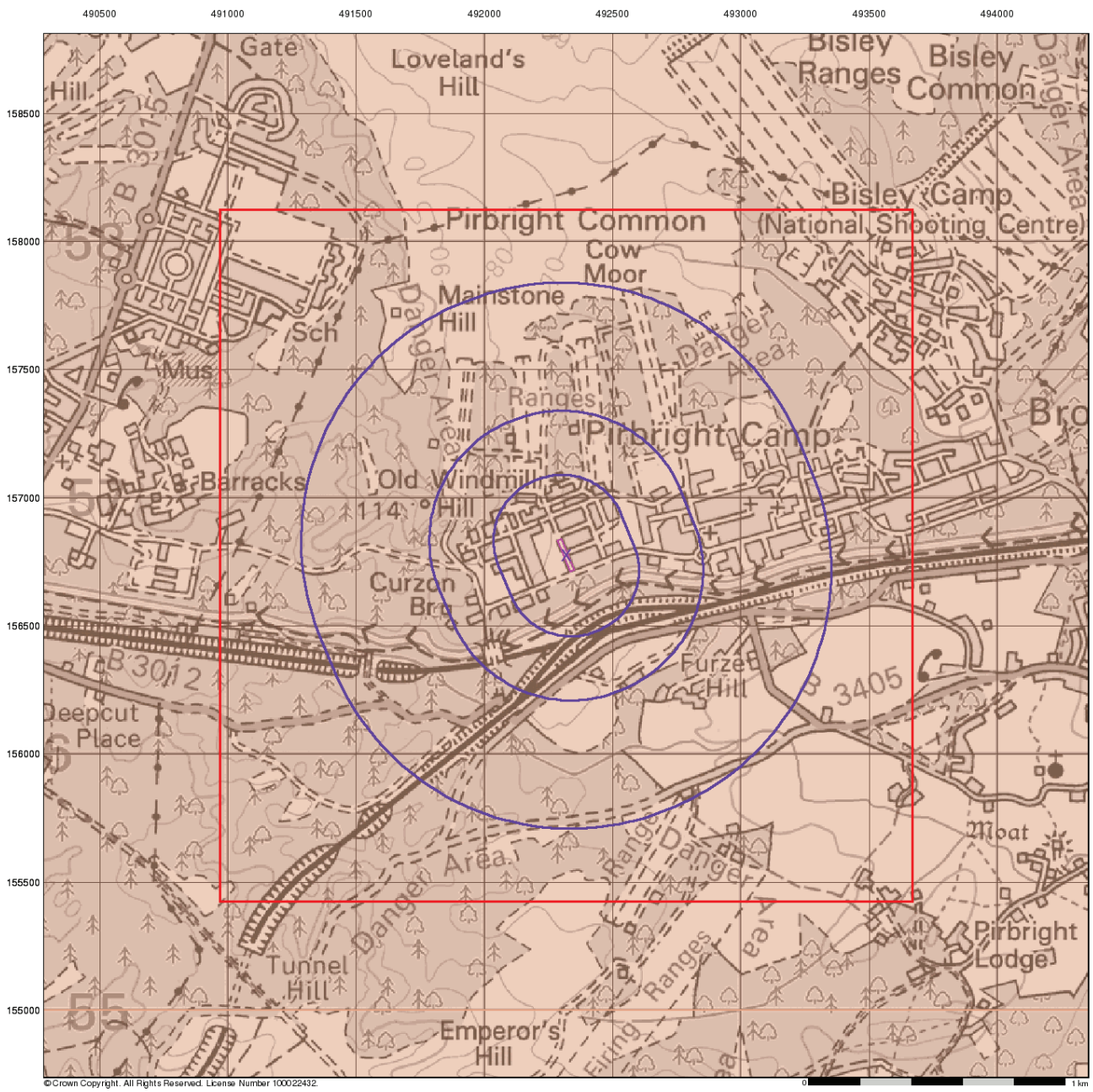
Order Number:	221372301_1_1
Customer Ref:	1909006.001
National Grid Reference:	492320, 156770
Slice:	A
Site Area (Ha):	0.24
Search Buffer (m):	1000

Site Details

Brunswick Camp, Pirbright, GU24 0QQ

Landmark INFORMATION GROUP

Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



TWEEDIE EVANS CONSULTING

Bedrock Aquifer Designation

General

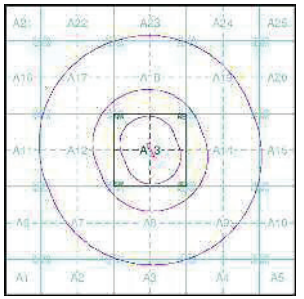
Specified Site | Specified Buffer(s) | Bearing Reference Point | Slice | Map ID

Agency and Hydrological

Geological Classes

- Principal Aquifer
- Secondary A Aquifer
- Secondary B Aquifer
- Secondary Undifferentiated
- Unproductive Strata
- Unknown
- Unknown (Lakes and Landslip)

Site Sensitivity Context Map - Slice A

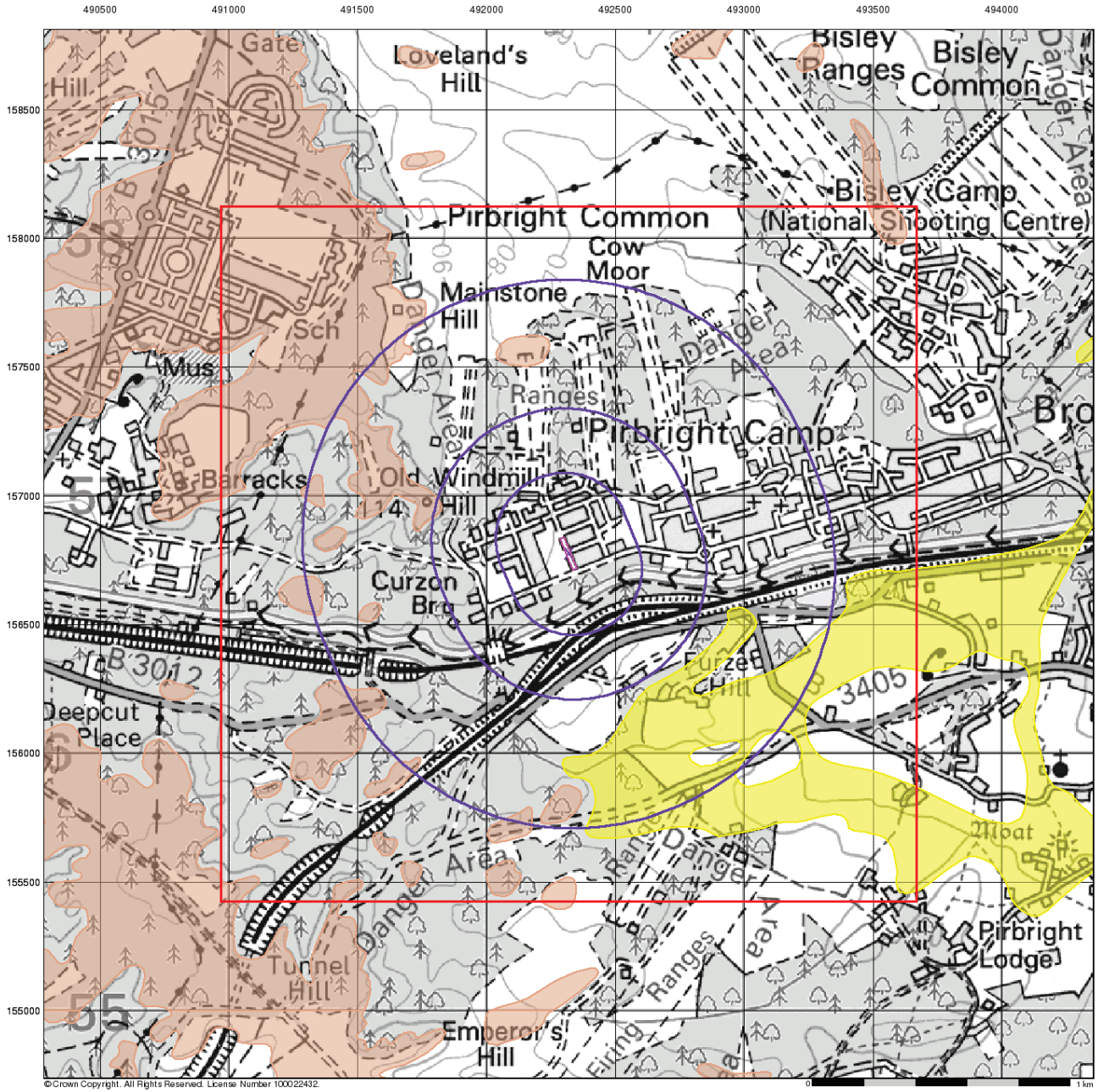


Order Details

Order Number:	221372301_1_1
Customer Ref:	1909006.001
National Grid Reference:	492320, 156770
Slice:	A
Site Area (Ha):	0.24
Search Buffer (m):	1000

Site Details

Brunswick Camp, Pirbright, GU24 0QQ



TWEEDIE EVANS CONSULTING

Superficial Aquifer Designation

General

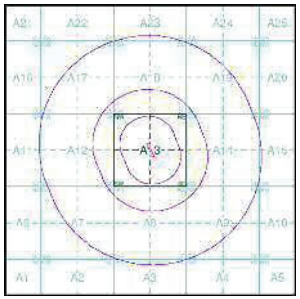
Specified Site | Specified Buffer(s) | Bearing Reference Point | Slice | Map ID

Agency and Hydrological

Geological Classes

- Principal Aquifer
- Secondary A Aquifer
- Secondary B Aquifer
- Secondary Undifferentiated
- Unproductive Strata
- Unknown
- Unknown (Lakes and Landslip)

Site Sensitivity Context Map - Slice A



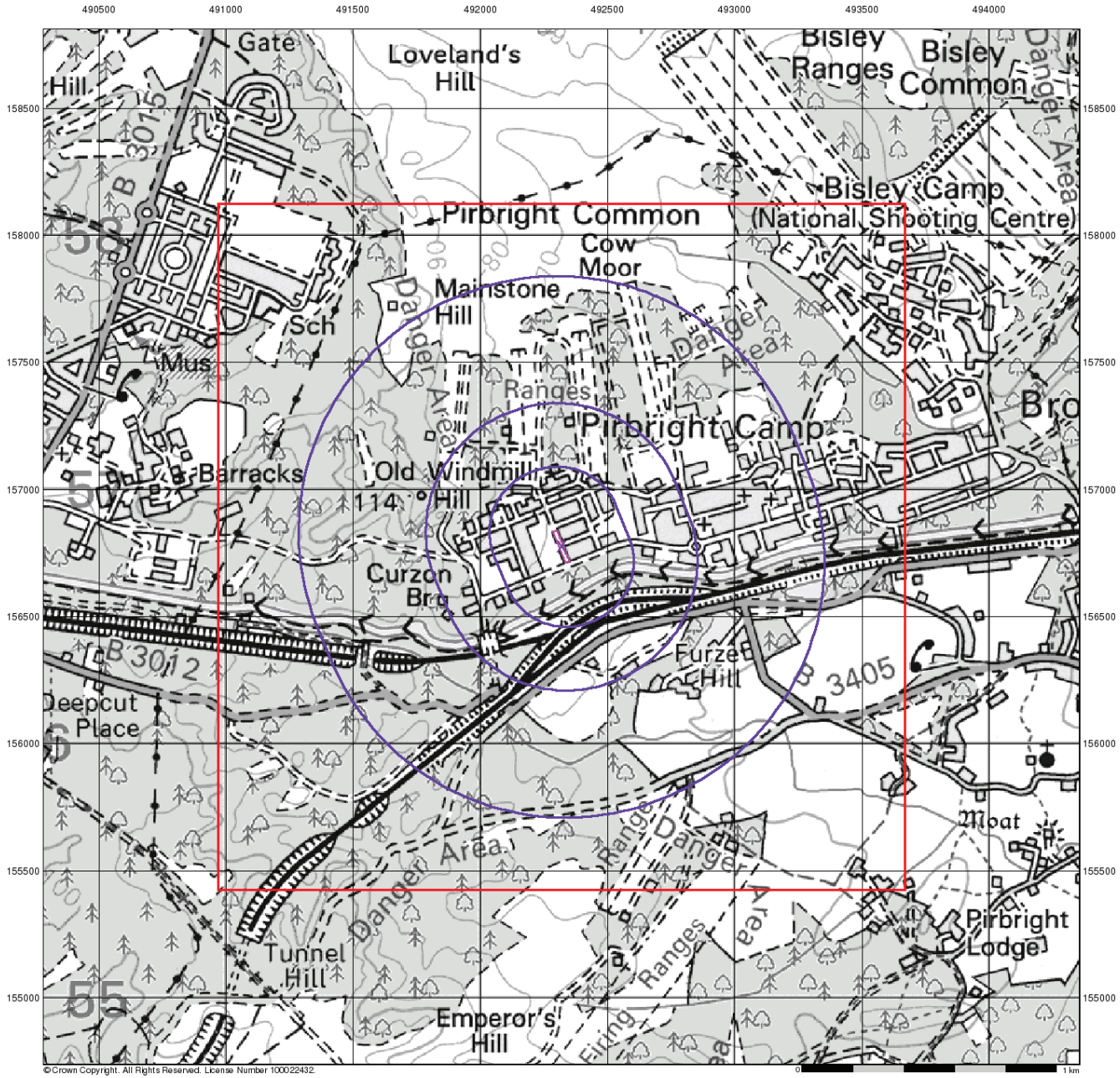
Order Details

Order Number:	221372301_1_1
Customer Ref:	1909006.001
National Grid Reference:	492320, 156770
Slice:	A
Site Area (Ha):	0.24
Search Buffer (m):	1000

Site Details

Brunswick Camp, Pirbright, GU24 0QQ

Landmark INFORMATION GROUP
Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



TWEEDIE EVANS CONSULTING

Source Protection Zones

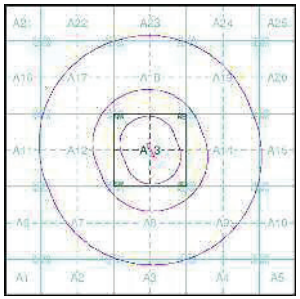
General

Specified Site | Specified Buffer(s) | Bearing Reference Point | Slice | Map ID

Agency and Hydrological

- Inner zone (Zone 1)
- Inner zone - subsurface activity only (Zone 1c)
- Outer zone (Zone 2)
- Outer zone - subsurface activity only (Zone 2c)
- Total catchment (Zone 3)
- Total catchment - subsurface activity only (Zone 3c)
- Special interest (Zone 4)

Site Sensitivity Context Map - Slice A



Order Details

Order Number:	221372301_1_1
Customer Ref:	1909006.001
National Grid Reference:	492320, 156770
Slice:	A
Site Area (Ha):	0.24
Search Buffer (m):	1000

Site Details

Brunswick Camp, Pirbright, GU24 0QQ

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Tel: 0844 844 9952
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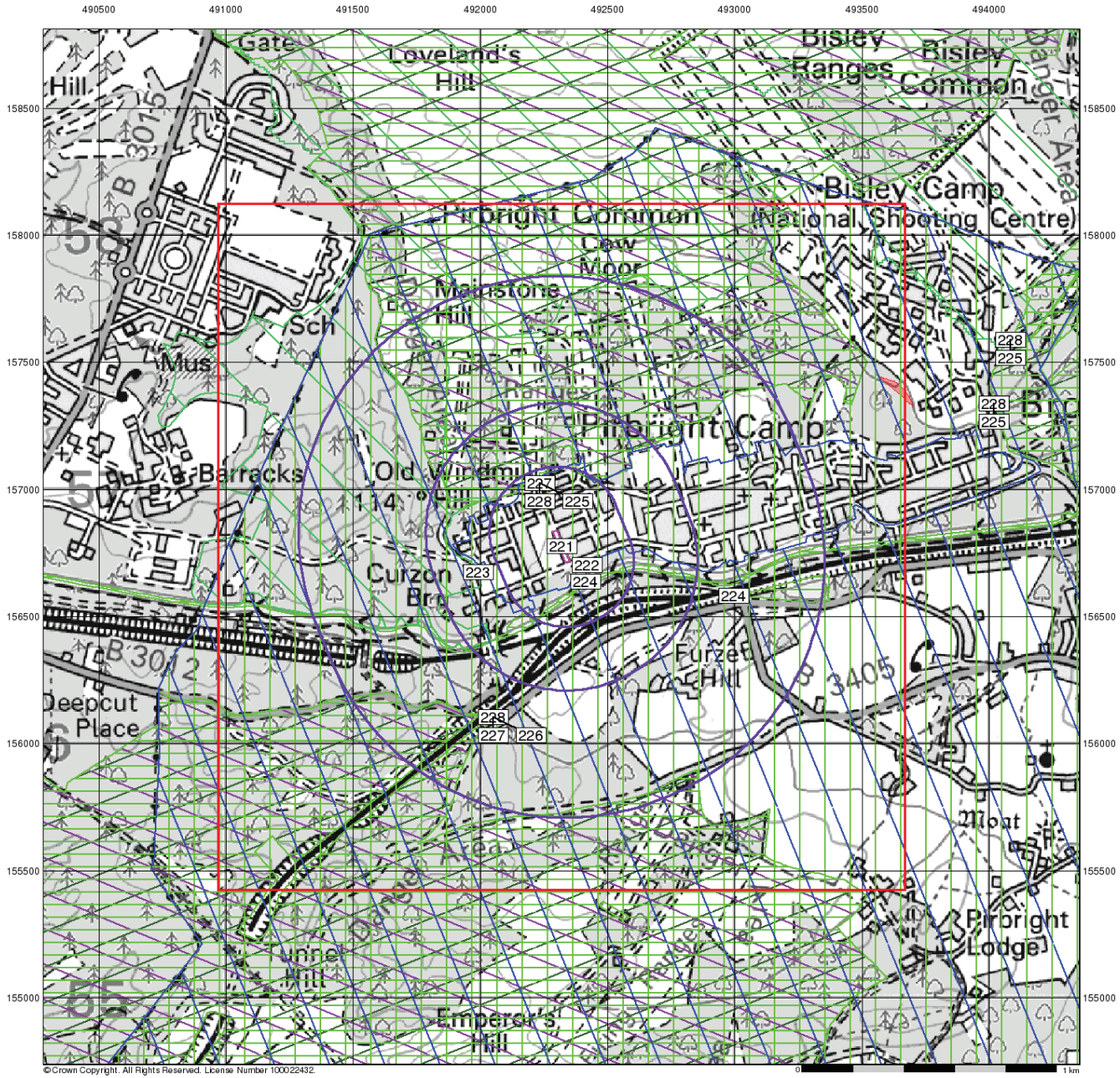


TWEEDIE EVANS CONSULTING

Sensitive Land Uses

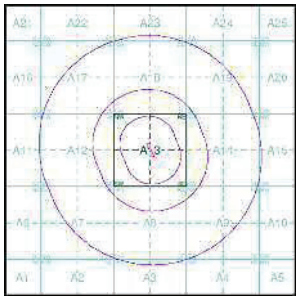
General

Specified Site | Specified Buffer(s) | Bearing Reference Point
Slice | Map ID

Sensitive Land Uses

- Ancient Woodland
- Area of Adopted Green Belt
- Area of Unadopted Green Belt
- Area of Outstanding Natural Beauty
- Environmentally Sensitive Area
- Forest Park
- Local Nature Reserve
- Marine Nature Reserve
- National Nature Reserve
- National Park
- Nitrate Sensitive Area
- Nitrate Vulnerable Zone
- Ramsar Site
- Site of Special Scientific Interest
- Special Area of Conservation
- Special Protection Area
- World Heritage Sites

Site Sensitivity Context Map - Slice A



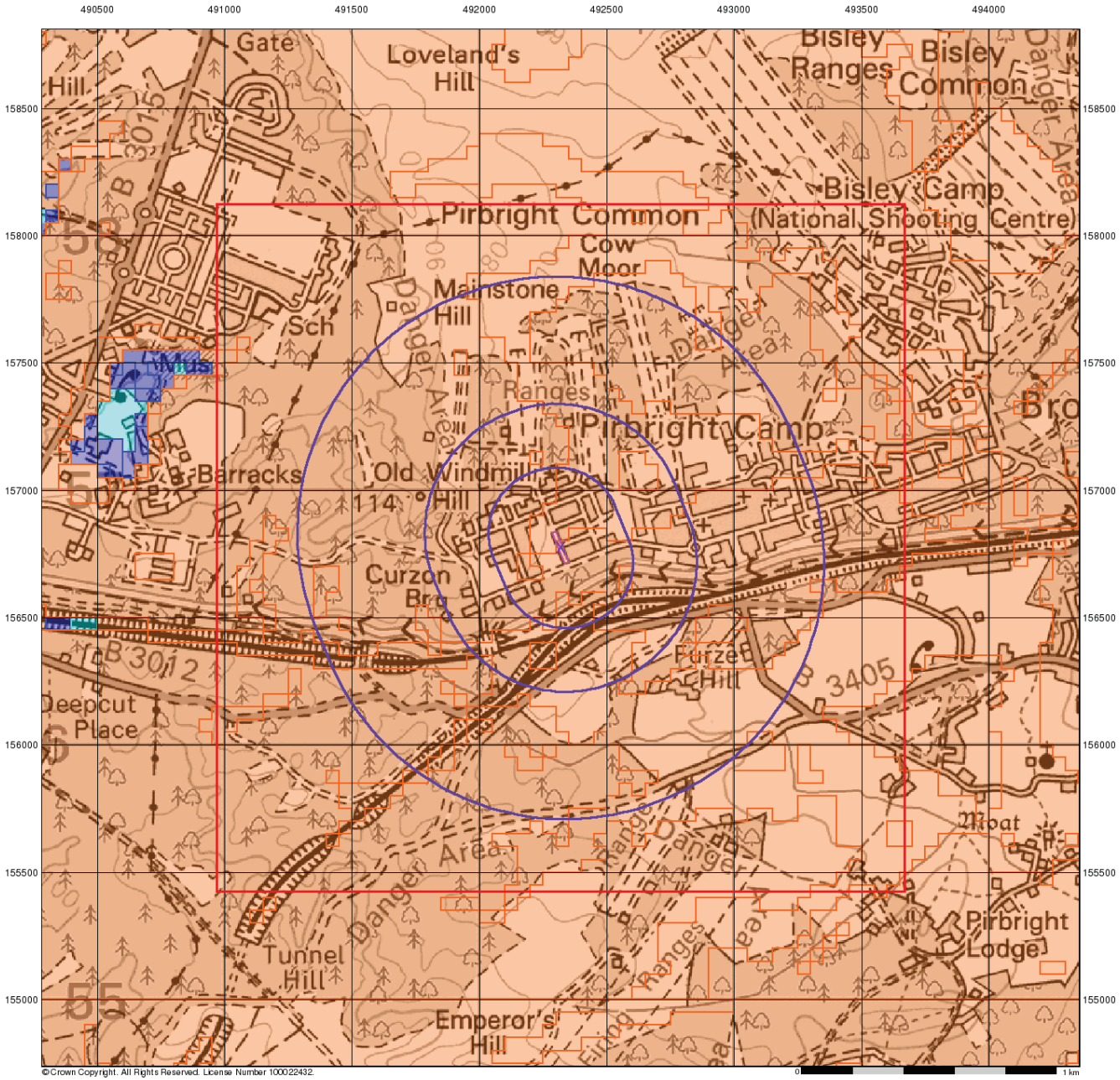
Order Details

Order Number:	221372301_1_1
Customer Ref:	1909006.001
National Grid Reference:	492320, 156770
Slice:	A
Site Area (Ha):	0.24
Search Buffer (m):	1000

Site Details

Brunswick Camp, Pirbright, GU24 0QQ

Landmark INFORMATION GROUP
Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



TWEEDIE EVANS CONSULTING

BGS Flood GFS Data

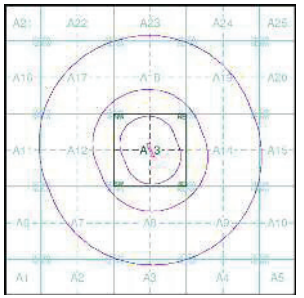
General

Specified Site | Specified Buffer(s) | Bearing Reference Point | Slice

Agency and Hydrological (Flood)

- Limited Potential for Groundwater Flooding to Occur
- Potential for Groundwater Flooding of Property Situated Below Ground Level
- Potential for Groundwater Flooding to Occur at Surface

Site Sensitivity Context Map - Slice A



Order Details

Order Number:	221372301_1_1
Customer Ref:	1909006.001
National Grid Reference:	492320, 156770
Slice:	A
Site Area (Ha):	0.24
Search Buffer (m):	1000

Site Details

Brunswick Camp, Pirbright, GU24 0QQ

Landmark INFORMATION GROUP
Tel: 0844 844 9952
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Appendix D

Regulatory Correspondence

The following questions were issued to Guildford in order for us to complete an environmental review of the Brunswick Camp.

1. Pre-license landfill sites within 500m of the subject site, including:
   - license holder
   - location of landfill/grid reference
   - nature of fill material
   - dates of operation
   - details of any leachate/landfill gas problems

2. Pollution incidents/known areas of contaminated land within 500m of the subject site, including:
   - location/grid reference
   - previous uses
   - nature/source of pollution
   - any further details

3. Part B APC authorisations within 500m of the subject site, including:
   - authorisation holder
   - location/grid reference
   - nature of authorisation

4. Private water supplies within 500m of the subject site, including:
   - location/grid reference
   - details of source and abstraction purpose

5. Storage of Petroleum Hydrocarbons.

6. Records of any previous Site Investigations on or in close proximity to the site

7. Records of any unexploded ordnance in the site area

8. Any known problems with ground gas in the site area

9. Any potential issues regarding naturally elevated contaminant concentrations

10. Any other information held by your authority which may have an impact upon the contaminative status of the site

Request for information - Ref: FOI2019/01167

noreply@guildford.gov.uk on behalf of Lisa Barrett <lisa.barrett@guildford.gov.uk>
Wed 13/11/2019 09:52
To: Harry King <harry.king@tecon.co.uk>

Dear Harry King,

We have considered your request for information, please see our response below:

1. None within 500m.

2. This department do not keep records of pollution incidents and are not aware of any contamination issues at the requested location or areas within 500m.

3. None within 500m

4. None within 500m

5. This department do not hold records on storage of petroleum hydrocarbons. You may wish to contact the Petroleum Officers, Surrey Trading Standards to check if they hold any records.

6. None

7. None

8. None known

9. This department is not aware of any ongoing contamination issues on site.

10. This department has not identified the site for Part IIA investigations. It is likely that if the site is proposed for redevelopment, any potential concerns for contamination will be dealt under the planning regime.

Copyright and re-use of information

Please be aware that copyright may exist on information that we provide in response to requests, including attachments.

Where we are providing information that the Council has authored, you may re-use it free of charge unless we have stated otherwise in our response. However, in some cases we do not own the copyright (for example Ordnance Survey owns the copyright for most map information we use). Therefore, where someone other than Guildford Borough Council owns the copyright for the information, please check with us by writing to foi@guildford.gov.uk if you plan to re-use it or if you are not sure whether copyright will be an issue.

Your right to ask for an internal review

I trust the above addresses your enquiry. However, if you do not agree with the way I have dealt with your request, you may write to ask the Council to review my decision. Another officer will carry out a review and they will then write to you, letting you know whether they agree with my decision or whether they have reached a different conclusion.

You should write to, Customer Services, Guildford Borough Council, Millmead House, Millmead, Guildford GU2 4BB (foi@guildford.gov.uk). It is important that you clearly state that you are asking for an Internal Review and provide a copy of your correspondence with the Council about this

request. We recommend that you include the FOI reference number and "Internal Review" in the email or letter header to help avoid delays.

Your right to appeal to the Information Commissioner

You also have the right to contact the Information Commissioner if you believe we have failed to meet our obligations to deal with your request for information. Please remember that they will usually only consider appeals after the Council has had the opportunity to carry out an internal review. More guidance about your rights is available on the Information Commissioner's website at www.ico.org.uk.

Yours sincerely

Lisa Barrett

Appendix E

Risk Methodologies and Evaluation

Risk Evaluation

The qualitative assessment methodology presented in CIRIA publication C552 (2001) titled *'Contaminated Land Risk Assessment: A Guide to Good Practice'* has been used by TEC for the basis of evaluating potential risk.

The method requires an assessment of the:

- magnitude of the probability or likelihood of the risk occurring (Table 1); and
- magnitude of the potential consequence or severity of the risk occurring (Table 2)

Table 1. Classification of Probability

Classification	Definition
High likelihood	There is a pollution linkage and an event that either appears very likely in the short-term and almost inevitable over the long-term, or there is evidence at the receptor of harm or pollution.
Likely	There is a pollution linkage and all the elements are present and in the right place, which means that it is probable that an event will occur. Circumstances are such that an event is not inevitable, but possible in the short-term and likely over the long-term.
Low likelihood	There is a pollution linkage and circumstances are possible under which an event could occur. However, it is by no means certain that even over a longer period such an event would take place, and is less likely in the short-term.
Unlikely	There is a pollution linkage but circumstances are such that it is improbable that an event would occur even in the very long-term.

Table 2. Classification of Consequence

Classification	Definition	Examples
Severe	Short-term (acute) risk to human health likely to result in "significant harm" as defined by the Environment Protection Act 1990, Part IIA. Short-term risk of pollution of sensitive water resource. (Note: Water Resources Act contains no scope for considering significance of pollution). Catastrophic damage to buildings/property. A short-term risk to a particular ecosystem, or organisation forming part of such ecosystem (note: the definitions of ecological systems within the draft circular on Contaminated Land, DETR, 2000).	High concentrations of cyanide on the surface of an informal recreation area. Major spillage of contaminants from site into controlled water. Explosion, causing building collapse (can also equate to a short-term human health risk if buildings are occupied).
Medium	Chronic damage to human health ("significant harm" as defined in DETR, 2000). Pollution of sensitive water resources. (Note: Water Resources Act contains no scope for considering significance of pollution). A significant change in a particular ecosystem, or organism forming part of such ecosystem, (note: the definitions of ecological systems within draft circular on Contaminated Land, DETR, 2000).	Concentration of a contaminant from site exceeding the generic or site-specific assessment criteria. Leaching of contaminants from a site to a major or minor aquifer. Death of a species within a designated nature reserve.
Mild	Pollution of non-sensitive water resources. Significant damage to crops, buildings, structures and services ("significant harm" as defined in the draft circular on Contaminated Land, DETR, 2000). Damage to sensitive buildings/structures/services or the environment.	Pollution of non-classified groundwater. Damage to building rendering it unsafe to occupy (for example foundation damage resulting in instability).
Minor	Harm, although not necessarily significant harm, which may result in a financial loss, or expenditure to resolve. Non-permanent health effects to human health (easily prevented by means such as personal protective clothing etc), easily repairable effects of damage to buildings, structures and services.	The presence of contaminants at such concentrations that protective equipment is required during site works. The loss of plants in a landscaping scheme. Discolouration of concrete.

The combination of the two factors is determined using Table 3 and the resulting level of risk is described in Table 4. The evaluation can be applied to each of the scenarios identified in the risk model and the overall risk assessed.

Table 3. Combination of Consequence with Probability

		Consequence			
		Severe	Medium	Mild	Minor
Probability	High Likelihood	**Very High Risk**	**High Risk**	**Moderate Risk**	**Moderate/Low Risk**
	Likely	**High Risk**	**Moderate Risk**	**Moderate/Low Risk**	**Low Risk**
	Low Likelihood	**Moderate Risk**	**Moderate/Low Risk**	**Low Risk**	**Very Low Risk**
	Unlikely	**Moderate/Low Risk**	**Low Risk**	**Very Low Risk**	**Very Low Risk**

Table 4. Description of risks and likely action required

Very High Risk	There is a high probability that severe harm could arise to a designated receptor from an identified hazard, or there is evidence that severe harm to a designated receptor is currently happening. This risk, if realised, is likely to result in a substantial liability. Urgent investigation (if not undertaken already) and remediation are likely to be required.
High Risk	Harm is likely to arise to a designated receptor from an identified hazard. Realisation of the risk is likely to present a substantial liability. Urgent investigation (if not undertaken already) is required and remedial works may be necessary in the short-term and are likely over the longer-term.
Moderate Risk	It is possible that harm could arise to a designated receptor from an identified hazard. However, it is either relatively unlikely that any such harm would be severe, or if any harm were to occur it is more likely that the harm would be relatively mild. Investigation (if not already undertaken) is normally required to clarify the risk and to determine the potential liability. Some remedial works may be required in the long-term.
Low Risk	It is possible that harm could arise to a designated receptor from an identified hazard, but it is likely that this harm, if realised, would at worst normally be mild.
Very Low Risk	There is a low possibility that harm could arise to a receptor. In the event of such harm being realised it is not likely to be severe.

Using the risk model the pollutant linkages are identified and a preliminary estimate of risk undertaken. If there is no pollutant linkage identified, then there is no risk. If the estimate of risk for all the linkages and exposure scenarios is very low at this stage then it is likely that no further assessment will be required.

Appendix F

Exploratory Hole Logs

Trial Pit Log

Trialpit No **TP01**

Sheet 1 of 1

Project Name: Brunswick Camp, Pirbright	Project No. 1909007.002	Co-ords: 492346.00 - 156888.00 Level: mbgl	Date 18/11/2020
Location: Pirbright		Dimensions: 2.07m x 0.48m Inclination: ° Orientation: ° Depth: 1.8m	Scale 1:20
Client: Fairhurst			Logged RK

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Information	Depth (m)	Level (m)	Legend	Stratum Description
	0.10	ES						MADE GROUND: Brown slightly gravelly sandy silt. Gravel is flint.
					0.20			*Frequent rootlets to 0.15m*
	0.30 - 0.45	ES						MADE GROUND: Light brown and yellowish brown slightly gravelly silty sand with occasional cobbles of brick. Gravel is flint and brick.
	0.40	D						*Occ. roots to 0.20m*
								Black silty sandy lens with rare green speckles from 0.30m to 0.45m
					0.55			*Occ. rootlets to 0.45m*
	0.60	B						(Loose to medium dense) light brown slightly silty SAND. Sand is fine to medium grained.
								Becoming more yellowish brown from 0.90m
	1.00	D						
					1.50			(Medium dense) light brown and yellowish brown silty gravelly SAND. Sand is fine to medium grained. Gravel is fine to medium subangular to rounded flint.
	1.60	B						*Increasing moisture from 1.60m*
					1.80			End of pit at 1.8 m

1 2 3 4

Remarks: Trial pit remained dry. All comments on densities of granular material are based on field observations. Terminated at depth on Engineer's instruction for soakage test.

Stability: Stable.

Trial Pit Log

Trialpit No **TP02**

Sheet 1 of 1

Project Name: Brunswick Camp, Pirbright	Project No. 1909007.002	Co-ords: 492368.00 - 156956.00 Level: mbgl	Date 18/11/2020
Location: Pirbright		Dimensions: 2.25m x 0.50m Inclination: ° Orientation: ° Depth: 3.0m	Scale 1:20
Client: Fairhurst			Logged RK

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Information	Depth (m)	Level (m)	Legend	Stratum Description
	0.15	ES						NEAR SURFCACE MATERIAL: : Brown very silty sand. *Frequent rootlets to 0.12m*
					0.25			
	0.35 - 0.77	ES			0.35			POTENTIALLY REWORKED NATURAL GROUND: (Loose) dark grey to black very silty sand. *Occ. roots to 0.30m*
	0.60	ES						(Medium dense) Light brown and brown silty SAND. Sand is fine grained.
	0.70	D			0.65 0.72			(Medium dense to dense) dark grey becoming orangish brown very silty SAND. Sand fine grained.
								(Medium dense) light brown becoming greenish grey slightly gravelly slightly clayey silty SAND. Sand is fine grained. Gravel is fine to coarse subangular to rounded flint
	1.40	B						
	2.00	D						
▼								*Slight ingress of groundwater at 2.90m*
					3.00			End of pit at 3.0 m

1 2 3 4

Remarks: Slight ingress of groundwater at 2.90m. All comments on densities of granular material are based on field observations. Terminated at depth on Engineer's instruction.

Stability: Stable.

Trial Pit Log

Trialpit No **TP03**

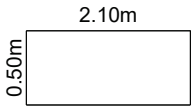
Sheet 1 of 1

Project Name:	Brunswick Camp, Pirbright	Project No. 1909007.002	Co-ords: 492374.00 - 156898.00 Level: mbgl
Location:	Pirbright		Dimensions: Inclination: ° Orientation: ° Depth: 3.1m
Client:	Fairhurst		

Date 18/11/2020

Scale 1:20

Logged RK



Water Strike	Samples and In Situ Testing: Depth	Type	Results	Information	Depth (m)	Level (m)	Legend	Stratum Description
								NEAR SURFCACE MATERIAL: Brown slightly gravelly silty sand. Gravel is flint.
								Frequent rootlets to 0.10m
	0.30	ES						
	0.40 - 0.60	ES			0.35			(Loose to medium dense) light brown and yellowish brown silty SAND. Sand is fine grained.
	0.70	D			0.70			(Loose becoming medium dense) yellowish brown, grey and light brown slightly clayey silty SAND. Sand is fine to medium grained.
▼								*Slight ingress of groundwater at 1.40m*
	2.60	D			2.70			(Medium dense) light brown and yellowish brown gravelly silty SAND. Sand is fine to medium grained. Gravel is fine to medium subangular to rounded flint.
					3.10			End of pit at 3.1 m

1 2 3 4

Remarks: Slight ingress of groundwater at 1.40m. All comments on densities of granular material are based on field observations. Terminated at depth on Engineer's instruction.

Stability: Stable.

Trial Pit Log

Trialpit No **TP04**

Sheet 1 of 1

Project Name: Brunswick Camp, Pirbright	Project No. 1909007.002	Co-ords: 492316.00 - 153880.00 Level: mbgl	Date 18/11/2020
Location: Pirbright		Dimensions: 2.30m × 0.52m Inclination: ° Orientation: ° Depth: 3.3m	Scale 1:20
Client: Fairhurst			Logged RK

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Information	Depth (m)	Level (m)	Legend	Stratum Description
								NEAR SURFCACE MATERIAL: Brown slightly gravelly very silty sand with occasional black staining. Gravel is flint.
								Frequent rootlets to 0.15m
								Frequent roots to 0.25m
	0.35	ES			0.38			
								POTENTIALLY REWORKED NATURAL GROUND: (loose to medium dense) Orangish brown, yellowish brown and light brown becoming dark grey silty SAND with occasional black staining. Sand is fine to medium grained.
					0.70			*Dark grey and black silty sandy lens from 0.38m to 0.40m*
	0.75	D						(Medium dense) grey and dark grey silty SAND. Sand is fine grained.
	0.75	ES						*Dark grey and black very silty sandy lens from 0.70m to 0.75m*
					1.15			(Medium dense) light brown and yellowish brown slightly clayey silty SAND. Sand is fine grained.
								Occ. roots to 1.50m
								Occ. sandy clayey pockets
					2.38			(Medium dense) yellowish brown becoming slightly greenish grey clayey SAND with rare fine gravel. Sand is fine to medium grained. Gravel is fine to medium subangular flint.
	2.60	B						
								Becoming greenish grey and yellowish brown from 2.70m
	2.80	D						
					3.25			End of pit at 3.3 m

1 2 3 4

Remarks: Trial pit remained dry. All comments on densities of granular material are based on field observations. Terminated at depth on Engineer's instruction.

Stability: Stable.

Trial Pit Log

Trialpit No **TP05**

Sheet 1 of 1

Project Name: Brunswick Camp, Pirbright	Project No. 1909007.002	Co-ords: 492299.00 - 156931.00 Level: mbgl	Date 18/11/2020
Location: Pirbright		Dimensions: 2.10m x 0.50m Inclination: ° Orientation: ° Depth: 3.1m	Scale 1:40
Client: Fairhurst			Logged RK

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Information	Depth (m)	Level (m)	Legend	Stratum Description
	0.45 - 0.60	ES			0.25			NEAR SURFCACE MATERIAL: Dark brown and brown slightly gravelly sandy silt. Gravel is fine to medium flint. *Frequent rootlets to 0.20m*
	0.65	B			0.95			POTENTIALLY REWORKED NATURAL GROUND: (Loose to medium dense) Light brown and yellowish brown becoming dark grey slightly clayey gravelly silty SAND with rare black staining. Sand is fine to medium grained. *Dark grey and black silty sandy lens from 0.50m to 0.55m*
	1.20	D						(Loose becoming medium dense) yellowish brown, grey and light brown silty SAND. Sand is fine grained.
					2.50			(Medium dense) yellowish brown becoming slightly greenish grey clayey SAND. Sand is fine to medium grained. *Becoming greenish grey and yellowish brown from 2.90m*
					3.10			End of pit at 3.1 m

Remarks: Trial pit remained dry. All comments on densities of granular material are based on field observations. Terminated at depth on Engineer's instruction.

Stability: Stable.

Appendix G

Geochemical Certificates of Analysis

Reinier van der Kuip
Tweedie Evans Consulting Ltd
The Old Chapel
35a Southover
Wells
Somerset
BA5 1UH

t: 01749 677 760
f: 01749 679 345
e:

i2 Analytical Ltd.
7 Woodshots Meadow,
Croxley Green
Business Park,
Watford,
Herts,
WD18 8YS

t: 01923 225404
f: 01923 237404
e: reception@i2analytical.com

Analytical Report Number : 20-42487

Project / Site name:	Brunswick Camp, Pirbright	**Samples received on:**	18/11/2020
Your job number:	1909007.002	**Samples instructed on/ Analysis started on:**	19/11/2020
Your order number:		**Analysis completed by:**	26/11/2020
Report Issue Number:	1	**Report issued on:**	27/11/2020
Samples Analysed:	2 leachate samples - 6 soil samples		

Signed [redacted]

Karolina Marek
PL Head of Reporting Team
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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

Analytical Report Number: 20-42487
Project / Site name: Brunswick Camp, Pirbright

Lab Sample Number				1690378	1690379	1690380	1690381
Sample Reference				TP01	TP02	TP02	TP03
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.30-0.45	0.15	0.35-0.77	0.40-0.60
Date Sampled				18/11/2020	18/11/2020	18/11/2020	18/11/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	18	8.8	17	13
Total mass of sample received	kg	0.001	NONE	1.7	0.4	1.7	1.7
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected
General Inorganics							
pH - Automated	pH Units	N/A	MCERTS	8.4	5.9	-	-
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1
Total Sulphate as SO4	mg/kg	50	MCERTS	480	420	-	-
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.016	0.041	-	-
Sulphide	mg/kg	1	MCERTS	7.4	2.8	-	-
Ammonia as NH3	mg/kg	0.5	MCERTS	< 0.5	-	< 0.5	< 0.5
Total Organic Carbon (TOC)	%	0.1	MCERTS	0.7	1.5	-	-
Total Phenols							
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Speciated PAHs							
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	0.26	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	0.35	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	0.34	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.25	8.1	< 0.05	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	1.4	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.49	24	< 0.05	< 0.05
Pyrene	mg/kg	0.05	MCERTS	0.43	19	< 0.05	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.25	13	< 0.05	< 0.05
Chrysene	mg/kg	0.05	MCERTS	0.26	8.3	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	12	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	6.9	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	9.8	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	5.3	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	1.6	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	6.1	< 0.05	< 0.05
Total PAH							
Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	1.68	116	< 0.80	< 0.80

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Lab Sample Number				1690378	1690379	1690380	1690381
Sample Reference				TP01	TP02	TP02	TP03
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.30-0.45	0.15	0.35-0.77	0.40-0.60
Date Sampled				18/11/2020	18/11/2020	18/11/2020	18/11/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Heavy Metals / Metalloids							
Antimony (aqua regia extractable)	mg/kg	1	ISO 17025	< 1.0	-	< 1.0	< 1.0
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	6.9	5.1	3.1	2.4
Barium (aqua regia extractable)	mg/kg	1	MCERTS	46	41	7.5	5.6
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.38	0.28	0.15	0.21
Boron (water soluble)	mg/kg	0.2	MCERTS	0.2	0.4	< 0.2	< 0.2
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	-	< 4.0	< 4.0
Chromium (hexavalent) low level	mg/kg	1.2	MCERTS	< 1.2	< 1.2	-	-
Chromium (III)	mg/kg	1	NONE	12	-	6.8	6.3
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	13	10	7	6.6
Copper (aqua regia extractable)	mg/kg	1	MCERTS	370	14	3.5	3.5
Lead (aqua regia extractable)	mg/kg	1	MCERTS	30	51	4.2	2.1
Manganese (aqua regia extractable)	mg/kg	1	MCERTS	130	-	11	11
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	0.5
Molybdenum (aqua regia extractable)	mg/kg	0.25	MCERTS	0.45	-	< 0.25	< 0.25
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	9.4	5.5	1.9	2.2
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	19	18	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	220	59	6.2	8.6
Monoaromatics & Oxygenates							
Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Petroleum Hydrocarbons							
Petroleum Range Organics (C6 - C10)	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	< 0.1
TPH C10 - C40	mg/kg	10	MCERTS	< 10	280	< 10	< 10
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	< 0.001	-	-
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	-	-
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	-	-
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	-	-
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	-	-
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0	-	-
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	< 8.0	-	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	-	-
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	< 0.001	-	-
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	-	-
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	-	-
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	-	-
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	8	-	-
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	80	-	-
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	170	-	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	260	-	-

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Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
VOCs							
Chloromethane	µg/kg	1	ISO 17025	< 1.0	-	< 1.0	< 1.0
Chloroethane	µg/kg	1	NONE	< 1.0	-	< 1.0	< 1.0
Bromomethane	µg/kg	1	ISO 17025	< 1.0	-	< 1.0	< 1.0
Vinyl Chloride	µg/kg	1	NONE	< 1.0	-	< 1.0	< 1.0
Trichlorofluoromethane	µg/kg	1	NONE	< 1.0	-	< 1.0	< 1.0
1,1-Dichloroethene	µg/kg	1	NONE	< 1.0	-	< 1.0	< 1.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	< 1.0	-	< 1.0	< 1.0
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0
1,1-Dichloroethane	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0
2,2-Dichloropropane	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0
Trichloromethane	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0
1,1,1-Trichloroethane	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0
1,2-Dichloroethane	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0
1,1-Dichloropropene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0
Trans-1,2-dichloroethene	µg/kg	1	NONE	< 1.0	-	< 1.0	< 1.0
Benzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0
Tetrachloromethane	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0
1,2-Dichloropropane	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0
Trichloroethene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0
Dibromomethane	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0
Bromodichloromethane	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	< 1.0	-	< 1.0	< 1.0
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	< 1.0	-	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0
1,1,2-Trichloroethane	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0
1,3-Dichloropropane	µg/kg	1	ISO 17025	< 1.0	-	< 1.0	< 1.0
Dibromochloromethane	µg/kg	1	ISO 17025	< 1.0	-	< 1.0	< 1.0
Tetrachloroethene	µg/kg	1	NONE	< 1.0	-	< 1.0	< 1.0
1,2-Dibromoethane	µg/kg	1	ISO 17025	< 1.0	-	< 1.0	< 1.0
Chlorobenzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0
p & m-Xylene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0
Styrene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0
Tribromomethane	µg/kg	1	NONE	< 1.0	-	< 1.0	< 1.0
o-Xylene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0
Isopropylbenzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0
Bromobenzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0
n-Propylbenzene	µg/kg	1	ISO 17025	< 1.0	-	< 1.0	< 1.0
2-Chlorotoluene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0
4-Chlorotoluene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	< 1.0	-	< 1.0	< 1.0
tert-Butylbenzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	< 1.0	-	< 1.0	< 1.0
sec-Butylbenzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	< 1.0	-	< 1.0	< 1.0
p-Isopropyltoluene	µg/kg	1	ISO 17025	< 1.0	-	< 1.0	< 1.0
1,2-Dichlorobenzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0

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Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
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Date Sampled				18/11/2020	18/11/2020	18/11/2020	18/11/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
1,4-Dichlorobenzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0
Butylbenzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	< 1.0	-	< 1.0	< 1.0
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0
Hexachlorobutadiene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	< 1.0	-	< 1.0	< 1.0

SVOCs

Aniline	mg/kg	0.1	NONE	< 0.1	-	< 0.1	< 0.1
Phenol	mg/kg	0.2	ISO 17025	< 0.2	-	< 0.2	< 0.2
2-Chlorophenol	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	< 0.1
2-Methylphenol	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3	< 0.3
Hexachloroethane	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	< 0.05
Nitrobenzene	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	< 0.2	-	< 0.2	< 0.2
Isophorone	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	< 0.2
2-Nitrophenol	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3	< 0.3
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	< 0.05
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	< 0.1	-	< 0.1	< 0.1
Hexachlorobutadiene	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	< 0.1	-	< 0.1	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	< 0.1	-	< 0.1	< 0.1
2-Chloronaphthalene	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	< 0.1
Dimethylphthalate	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	< 0.1
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	< 0.05
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	< 0.2
Dibenzofuran	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	< 0.2
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	< 0.3	-	< 0.3	< 0.3
Diethyl phthalate	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	< 0.2
4-Nitroaniline	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	< 0.2
Fluorene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	< 0.05
Azobenzene	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	< 0.2
Hexachlorobenzene	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3	< 0.3
Phenanthrene	mg/kg	0.05	MCERTS	0.25	-	< 0.05	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	< 0.05
Carbazole	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3	< 0.3
Dibutyl phthalate	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	< 0.2
Anthraquinone	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3	< 0.3

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Analytical Report Number: 20-42487
Project / Site name: Brunswick Camp, Pirbright

Lab Sample Number				1690378	1690379	1690380	1690381
Sample Reference				TP01	TP02	TP02	TP03
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.30-0.45	0.15	0.35-0.77	0.40-0.60
Date Sampled				18/11/2020	18/11/2020	18/11/2020	18/11/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Fluoranthene	mg/kg	0.05	MCERTS	0.49	-	< 0.05	< 0.05
Pyrene	mg/kg	0.05	MCERTS	0.43	-	< 0.05	< 0.05
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	< 0.3	-	< 0.3	< 0.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.25	-	< 0.05	< 0.05
Chrysene	mg/kg	0.05	MCERTS	0.26	-	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	< 0.05
Environmental Forensics							
Hexabromobiphenyl	mg/kg	0.1	NONE	< 0.1	-	< 0.1	< 0.1
Stockholm convention POPs list A							
Mirex	mg/kg	1	NONE	< 1.0	-	< 1.0	< 1.0

U/S = Unsuitable Sample I/S = Insufficient Sample

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Analytical Report Number: 20-42487
Project / Site name: Brunswick Camp, Pirbright

Lab Sample Number				1690382	1690383
Sample Reference				TP04	TP05
Sample Number				None Supplied	None Supplied
Depth (m)				0.35	0.45-0.65
Date Sampled				18/11/2020	18/11/2020
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	9.2	12
Total mass of sample received	kg	0.001	NONE	0.4	1.7
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected
General Inorganics					
pH - Automated	pH Units	N/A	MCERTS	6.2	-
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1
Total Sulphate as SO4	mg/kg	50	MCERTS	290	-
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.01	-
Sulphide	mg/kg	1	MCERTS	< 1.0	-
Ammonia as NH3	mg/kg	0.5	MCERTS	-	< 0.5
Total Organic Carbon (TOC)	%	0.1	MCERTS	0.9	-
Total Phenols					
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0
Speciated PAHs					
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Total PAH					
Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	< 0.80

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Analytical Report Number: 20-42487
Project / Site name: Brunswick Camp, Pirbright

Lab Sample Number				1690382	1690383
Sample Reference				TP04	TP05
Sample Number				None Supplied	None Supplied
Depth (m)				0.35	0.45-0.65
Date Sampled				18/11/2020	18/11/2020
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Heavy Metals / Metalloids					
Antimony (aqua regia extractable)	mg/kg	1	ISO 17025	-	< 1.0
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	3.5	6.8
Barium (aqua regia extractable)	mg/kg	1	MCERTS	13	30
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.17	0.5
Boron (water soluble)	mg/kg	0.2	MCERTS	< 0.2	< 0.2
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	-	< 4.0
Chromium (hexavalent) low level	mg/kg	1.2	MCERTS	< 1.2	-
Chromium (III)	mg/kg	1	NONE	-	16
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	7.1	17
Copper (aqua regia extractable)	mg/kg	1	MCERTS	6.5	5.2
Lead (aqua regia extractable)	mg/kg	1	MCERTS	12	10
Manganese (aqua regia extractable)	mg/kg	1	MCERTS	-	52
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.4	< 0.3
Molybdenum (aqua regia extractable)	mg/kg	0.25	MCERTS	-	0.47
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	2.5	6.6
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	12	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	20	30
Monoaromatics & Oxygenates					
Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0
Petroleum Hydrocarbons					
Petroleum Range Organics (C6 - C10)	mg/kg	0.1	MCERTS	-	< 0.1
TPH C10 - C40	mg/kg	10	MCERTS	< 10	< 10
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	-
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	-
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	-
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	-
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	-
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	-
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	-
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	-
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	-
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	-
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	-
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	-
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	-
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	-

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Analytical Report Number: 20-42487
Project / Site name: Brunswick Camp, Pirbright

Lab Sample Number				1690382	1690383
Sample Reference				TP04	TP05
Sample Number				None Supplied	None Supplied
Depth (m)				0.35	0.45-0.65
Date Sampled				18/11/2020	18/11/2020
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
VOCs					
Chloromethane	µg/kg	1	ISO 17025	-	< 1.0
Chloroethane	µg/kg	1	NONE	-	< 1.0
Bromomethane	µg/kg	1	ISO 17025	-	< 1.0
Vinyl Chloride	µg/kg	1	NONE	-	< 1.0
Trichlorofluoromethane	µg/kg	1	NONE	-	< 1.0
1,1-Dichloroethene	µg/kg	1	NONE	-	< 1.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	< 1.0
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	< 1.0
1,1-Dichloroethane	µg/kg	1	MCERTS	-	< 1.0
2,2-Dichloropropane	µg/kg	1	MCERTS	-	< 1.0
Trichloromethane	µg/kg	1	MCERTS	-	< 1.0
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	< 1.0
1,2-Dichloroethane	µg/kg	1	MCERTS	-	< 1.0
1,1-Dichloropropene	µg/kg	1	MCERTS	-	< 1.0
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	< 1.0
Benzene	µg/kg	1	MCERTS	-	< 1.0
Tetrachloromethane	µg/kg	1	MCERTS	-	< 1.0
1,2-Dichloropropane	µg/kg	1	MCERTS	-	< 1.0
Trichloroethene	µg/kg	1	MCERTS	-	< 1.0
Dibromomethane	µg/kg	1	MCERTS	-	< 1.0
Bromodichloromethane	µg/kg	1	MCERTS	-	< 1.0
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	< 1.0
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	< 1.0
Toluene	µg/kg	1	MCERTS	-	< 1.0
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	< 1.0
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	< 1.0
Dibromochloromethane	µg/kg	1	ISO 17025	-	< 1.0
Tetrachloroethene	µg/kg	1	NONE	-	< 1.0
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	< 1.0
Chlorobenzene	µg/kg	1	MCERTS	-	< 1.0
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	-	< 1.0
p & m-Xylene	µg/kg	1	MCERTS	-	< 1.0
Styrene	µg/kg	1	MCERTS	-	< 1.0
Tribromomethane	µg/kg	1	NONE	-	< 1.0
o-Xylene	µg/kg	1	MCERTS	-	< 1.0
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	< 1.0
Isopropylbenzene	µg/kg	1	MCERTS	-	< 1.0
Bromobenzene	µg/kg	1	MCERTS	-	< 1.0
n-Propylbenzene	µg/kg	1	ISO 17025	-	< 1.0
2-Chlorotoluene	µg/kg	1	MCERTS	-	< 1.0
4-Chlorotoluene	µg/kg	1	MCERTS	-	< 1.0
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	< 1.0
tert-Butylbenzene	µg/kg	1	MCERTS	-	< 1.0
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	< 1.0
sec-Butylbenzene	µg/kg	1	MCERTS	-	< 1.0
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	< 1.0
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	< 1.0
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	< 1.0

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Analytical Report Number: 20-42487
Project / Site name: Brunswick Camp, Pirbright

Lab Sample Number				1690382	1690383
Sample Reference				TP04	TP05
Sample Number				None Supplied	None Supplied
Depth (m)				0.35	0.45-0.65
Date Sampled				18/11/2020	18/11/2020
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	< 1.0
Butylbenzene	µg/kg	1	MCERTS	-	< 1.0
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	< 1.0
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	< 1.0
Hexachlorobutadiene	µg/kg	1	MCERTS	-	< 1.0
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	< 1.0

SVOCs

Aniline	mg/kg	0.1	NONE	-	< 0.1
Phenol	mg/kg	0.2	ISO 17025	-	< 0.2
2-Chlorophenol	mg/kg	0.1	MCERTS	-	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	< 0.1
2-Methylphenol	mg/kg	0.3	MCERTS	-	< 0.3
Hexachloroethane	mg/kg	0.05	MCERTS	-	< 0.05
Nitrobenzene	mg/kg	0.3	MCERTS	-	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	-	< 0.2
Isophorone	mg/kg	0.2	MCERTS	-	< 0.2
2-Nitrophenol	mg/kg	0.3	MCERTS	-	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	< 0.3
Naphthalene	mg/kg	0.05	MCERTS	-	< 0.05
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	-	< 0.1
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	-	< 0.1
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	< 0.1
Dimethylphthalate	mg/kg	0.1	MCERTS	-	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	< 0.1
Acenaphthylene	mg/kg	0.05	MCERTS	-	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	-	< 0.05
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	< 0.2
Dibenzofuran	mg/kg	0.2	MCERTS	-	< 0.2
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	< 0.3
Diethyl phthalate	mg/kg	0.2	MCERTS	-	< 0.2
4-Nitroaniline	mg/kg	0.2	MCERTS	-	< 0.2
Fluorene	mg/kg	0.05	MCERTS	-	< 0.05
Azobenzene	mg/kg	0.3	MCERTS	-	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	< 0.2
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	< 0.3
Phenanthrene	mg/kg	0.05	MCERTS	-	< 0.05
Anthracene	mg/kg	0.05	MCERTS	-	< 0.05
Carbazole	mg/kg	0.3	MCERTS	-	< 0.3
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	< 0.2
Anthraquinone	mg/kg	0.3	MCERTS	-	< 0.3

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Analytical Report Number: 20-42487
Project / Site name: Brunswick Camp, Pirbright

Lab Sample Number				1690382	1690383
Sample Reference				TP04	TP05
Sample Number				None Supplied	None Supplied
Depth (m)				0.35	0.45-0.65
Date Sampled				18/11/2020	18/11/2020
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Fluoranthene	mg/kg	0.05	MCERTS	-	< 0.05
Pyrene	mg/kg	0.05	MCERTS	-	< 0.05
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	< 0.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	< 0.05
Chrysene	mg/kg	0.05	MCERTS	-	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	< 0.05
Environmental Forensics					
Hexabromobiphenyl	mg/kg	0.1	NONE	-	< 0.1
Stockholm convention POPs list A					
Mirex	mg/kg	1	NONE	-	< 1.0

U/S = Unsuitable Sample I/S = Insufficient Sample

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Analytical Report Number: 20-42487
Project / Site name: Brunswick Camp, Pirbright

Lab Sample Number				1690384	1690385
Sample Reference				TP03	TP04
Sample Number				None Supplied	None Supplied
Depth (m)				0.30	0.75
Date Sampled				18/11/2020	18/11/2020
Time Taken				None Supplied	None Supplied
Analytical Parameter (Leachate Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
General Inorganics					
pH	pH Units	N/A	ISO 17025	6.7	6.3
Total Cyanide	µg/l	10	ISO 17025	< 10	< 10
Sulphate as SO4	mg/l	0.1	ISO 17025	0.3	0.4
Sulphide	µg/l	5	NONE	< 5.0	< 5.0
Total Organic Carbon (TOC)	mg/l	0.1	NONE	6.04	8.39
Total Phenols					
Total Phenols (monohydric)	µg/l	10	ISO 17025	< 10	< 10
Speciated PAHs					
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	NONE	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	NONE	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	NONE	< 0.01	< 0.01
Total PAH					
Total EPA-16 PAHs	µg/l	0.2	NONE	< 0.2	< 0.2
Heavy Metals / Metalloids					
Arsenic (dissolved)	µg/l	1	ISO 17025	< 1.0	2.4
Barium (dissolved)	µg/l	0.05	ISO 17025	6.7	4.2
Beryllium (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2
Boron (dissolved)	µg/l	10	ISO 17025	< 10	< 10
Cadmium (dissolved)	µg/l	0.08	ISO 17025	< 0.08	< 0.08
Chromium (dissolved)	µg/l	0.4	ISO 17025	1.1	< 0.4
Copper (dissolved)	µg/l	0.7	ISO 17025	6.2	8
Lead (dissolved)	µg/l	1	ISO 17025	4.7	4.3
Mercury (dissolved)	µg/l	0.5	ISO 17025	< 0.5	< 0.5
Nickel (dissolved)	µg/l	0.3	ISO 17025	0.5	< 0.3
Selenium (dissolved)	µg/l	4	ISO 17025	< 4.0	< 4.0
Vanadium (dissolved)	µg/l	1.7	ISO 17025	< 1.7	< 1.7
Zinc (dissolved)	µg/l	0.4	ISO 17025	13	7.8

U/S = Unsuitable Sample I/S = Insufficient Sample

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number : 20-42487
Project / Site name: Brunswick Camp, Pirbright

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
1690378	TP01	None Supplied	0.30-0.45	Brown sand.
1690379	TP02	None Supplied	0.15	Brown loam and sand with vegetation.
1690380	TP02	None Supplied	0.35-0.77	Brown loam and sand.
1690381	TP03	None Supplied	0.40-0.60	Light brown sand.
1690382	TP04	None Supplied	0.35	Light brown loam and sand with vegetation.
1690383	TP05	None Supplied	0.45-0.65	Light brown loam and sand with gravel.

Analytical Report Number : 20-42487
Project / Site name: Brunswick Camp, Pirbright

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
NRA Leachate Prep	10:1 extract with de-ionised water shaken for 24 hours then filtered.	In-house method based on National Rivers Authority	L020-PL	W	NONE
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with disperion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Metals by ICP-OES in leachate	Determination of metals in leachate by acidification followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Boron in leachate	Determination of boron in leachate. Sample acidified and followed by ICP-OES.	In-house method based on MEWAM	L039-PL	W	ISO 17025
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
Hexavalent chromium in soil (Lower Level)	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in leachate	Determination of phenols in leachate by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in leachate	Determination of PAH compounds in leachate by extraction in dichloromethane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L102B-PL	W	NONE
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
pH at 20oC in leachate	Determination of pH in leachate by electrometric measurement.	In house method.	L005-PL	W	ISO 17025

Analytical Report Number : 20-42487
Project / Site name: Brunswick Camp, Pirbright

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
PRO (Soil)	Determination of hydrocarbons C6-C10 by headspace GC-MS.	In-house method based on USEPA8260	L088-PL	W	MCERTS
Sulphide in leachate	Determination of sulphide in leachate by ion selective electrode.	In-house method	L010-PL	W	NONE
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds in soil by extraction in dichloromethane and hexane followed by GC-MS.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Total cyanide in leachate	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon in leachate	Determination of dissolved organic carbon in leachate by TOC/DOC NDIR analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	NONE
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
Ammonia as NH3 in soil	Determination of Ammonium/Ammonia/ Ammoniacal Nitrogen by the colorimetric salicylate/nitroprusside method, 10:1 water extraction.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082-PL	W	MCERTS
Cr (III) in soil	In-house method by calculation from total Cr and Cr VI.	In-house method by calculation	L080-PL	W	NONE
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	MCERTS
TPH Banding in Soil by FID	Determination of hexane extractable hydrocarbons in soil by GC-FID.	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	W	MCERTS

Analytical Report Number : 20-42487
Project / Site name: Brunswick Camp, Pirbright

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
EF - Hexabromobiphenyl in soil by GC-Q	Hexabromobiphenyl by GC-Q	In-house method	UK	W	NONE
EF - Annex A POPs	Annex A POPs	In house method - Annex A POPs	UK	W	NONE
Sulphate in leachates	Determination of sulphate in leachate by acidification followed by ICP-OES.	In-house method based on MEWAM 1986 Methods for the Determination of Metals in Soil""	L039-PL	W	ISO 17025
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.
For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Reinier van der Kuip
Tweedie Evans Consulting Ltd
The Old Chapel
35a Southover
Wells
Somerset
BA5 1UH

t: 01749 677 760
f: 01749 679 345
e:

i2 Analytical Ltd.
7 Woodshots Meadow,
Croxley Green
Business Park,
Watford,
Herts,
WD18 8YS

t: 01923 225404
f: 01923 237404
e: reception@i2analytical.com

Analytical Report Number : 20-42491

Project / Site name:	Brunswick Camp, Pirbright	**Samples received on:**	18/11/2020
Your job number:	1909007.002	**Samples instructed on/ Analysis started on:**	19/11/2020
Your order number:		**Analysis completed by:**	26/11/2020
Report Issue Number:	1	**Report issued on:**	26/11/2020
Samples Analysed:	4 10:1 WAC samples		

Signed: [redacted]

Rachel Bradley
Deputy Quality Manager
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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i2 Analytical
7 Woodshots Meadow
Croxley Green Business Park
Watford, WD18 8YS

Telephone: 01923 225404
Fax: 01923 237404
email:reception@i2analytical.com

Waste Acceptance Criteria Analytical Results

Report No:	**20-42491**						
					Client:	**TWEEDIE**	
Location	**Brunswick Camp, Pirbright**						
Lab Reference (Sample Number)	1690399 / 1690400				**Landfill Waste Acceptance Criteria Limits**		
Sampling Date	18/11/2020				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID	TP01						
Depth (m)	0.30-0.45						
Solid Waste Analysis							
TOC (%)**	0.7				3%	5%	6%
Loss on Ignition (%) **	1.3				--	--	10%
BTEX (µg/kg) **	< 10				6000	--	--
Sum of PCBs (mg/kg) **	< 0.007				1	--	--
Mineral Oil (mg/kg)	< 10				500	--	--
Total PAH (WAC-17) (mg/kg)	< 0.85				100	--	--
pH (units)**	8.4				--	>6	--
Acid Neutralisation Capacity (mol / kg)	3.6				--	To be evaluated	To be evaluated
Eluate Analysis	10:1			10:1	Limit values for compliance leaching test		
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)	mg/l			mg/kg	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)		
Arsenic *	0.0062			0.0503	0.5	2	25
Barium *	0.0226			0.184	20	100	300
Cadmium *	< 0.0001			< 0.0008	0.04	1	5
Chromium *	0.0030			0.025	0.5	10	70
Copper *	0.025			0.21	2	50	100
Mercury *	< 0.0005			< 0.0050	0.01	0.2	2
Molybdenum *	< 0.0004			< 0.0040	0.5	10	30
Nickel *	0.0024			0.019	0.4	10	40
Lead *	0.0074			0.060	0.5	10	50
Antimony *	< 0.0017			< 0.017	0.06	0.7	5
Selenium *	< 0.0040			< 0.040	0.1	0.5	7
Zinc *	0.033			0.27	4	50	200
Chloride *	2.4			19	800	15000	25000
Fluoride	0.32			2.6	10	150	500
Sulphate *	4.1			33	1000	20000	50000
TDS*	46			380	4000	60000	100000
Phenol Index (Monohydric Phenols) *	< 0.010			< 0.10	1	-	-
DOC	5.29			42.9	500	800	1000
Leach Test Information							
Stone Content (%)	< 0.1						
Sample Mass (kg)	1.7						
Dry Matter (%)	82						
Moisture (%)	18						

Results are expressed on a dry weight basis, after correction for moisture content where applicable.
*= UKAS accredited (liquid eluate analysis only)
Stated limits are for guidance only and i2 cannot be held responsible for any discrepancies with current legislation
** = MCERTS accredited

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes as defined by the Waste (England and Wales) Regulations 2011 (as amended) and EA Guidance WM3.
This analysis is only applicable for landfill acceptance criteria (The Environmental Permitting (England and Wales) Regulations) and does not give any indication as to whether a waste may be hazardous or non-hazardous.

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i2 Analytical
7 Woodshots Meadow
Croxley Green Business Park
Watford, WD18 8YS

Telephone: 01923 225404
Fax: 01923 237404
email:reception@i2analytical.com

Waste Acceptance Criteria Analytical Results

Report No:	**20-42491**						
					Client:	**TWEEDIE**	
Location	**Brunswick Camp, Pirbright**						
Lab Reference (Sample Number)	1690401 / 1690402				**Landfill Waste Acceptance Criteria**		
					Limits		
Sampling Date	18/11/2020				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID	TP02						
Depth (m)	0.35-0.77						
Solid Waste Analysis							
TOC (%)**	1.3				3%	5%	6%
Loss on Ignition (%) **	3.0				--	--	10%
BTEX (µg/kg) **	< 10				6000	--	--
Sum of PCBs (mg/kg) **	< 0.007				1	--	--
Mineral Oil (mg/kg)	< 10				500	--	--
Total PAH (WAC-17) (mg/kg)	< 0.85				100	--	--
pH (units)**	7.1				--	>6	--
Acid Neutralisation Capacity (mol / kg)	0.12				--	To be evaluated	To be evaluated
Eluate Analysis	10:1			10:1	Limit values for compliance leaching test		
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)	mg/l			mg/kg	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)		
Arsenic *	0.0038			0.0317	0.5	2	25
Barium *	0.0080			0.0655	20	100	300
Cadmium *	< 0.0001			< 0.0008	0.04	1	5
Chromium *	0.0015			0.013	0.5	10	70
Copper *	0.0053			0.044	2	50	100
Mercury *	< 0.0005			< 0.0050	0.01	0.2	2
Molybdenum *	< 0.0004			< 0.0040	0.5	10	30
Nickel *	0.0011			0.0093	0.4	10	40
Lead *	0.0055			0.045	0.5	10	50
Antimony *	< 0.0017			< 0.017	0.06	0.7	5
Selenium *	< 0.0040			< 0.040	0.1	0.5	7
Zinc *	0.0065			0.053	4	50	200
Chloride *	2.0			16	800	15000	25000
Fluoride	< 0.050			< 0.50	10	150	500
Sulphate *	2.4			19	1000	20000	50000
TDS*	13			100	4000	60000	100000
Phenol Index (Monohydric Phenols) *	< 0.010			< 0.10	1	-	-
DOC	11.4			93.6	500	800	1000
Leach Test Information							
Stone Content (%)	< 0.1						
Sample Mass (kg)	1.7						
Dry Matter (%)	83						
Moisture (%)	17						

Results are expressed on a dry weight basis, after correction for moisture content where applicable.
*= UKAS accredited (liquid eluate analysis only)
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i2 Analytical
7 Woodshots Meadow
Croxley Green Business Park
Watford, WD18 8YS

Telephone: 01923 225404
Fax: 01923 237404
email:reception@i2analytical.com

Waste Acceptance Criteria Analytical Results

Report No:	**20-42491**						
					Client:	**TWEEDIE**	
Location	**Brunswick Camp, Pirbright**						
Lab Reference (Sample Number)	1690403 / 1690404				**Landfill Waste Acceptance Criteria**		
					Limits		
Sampling Date	18/11/2020				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID	TP03						
Depth (m)	0.40-0.60						
Solid Waste Analysis							
TOC (%)**	0.7				3%	5%	6%
Loss on Ignition (%) **	1.2				--	--	10%
BTEX (µg/kg) **	< 10				6000	--	--
Sum of PCBs (mg/kg) **	< 0.007				1	--	--
Mineral Oil (mg/kg)	< 10				500	--	--
Total PAH (WAC-17) (mg/kg)	1.51				100	--	--
pH (units)**	7.2				--	>6	--
Acid Neutralisation Capacity (mol / kg)	0.56				--	To be evaluated	To be evaluated
Eluate Analysis	10:1			10:1	Limit values for compliance leaching test		
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)	mg/l			mg/kg	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)		
Arsenic *	< 0.0010			< 0.0100	0.5	2	25
Barium *	0.0089			0.0768	20	100	300
Cadmium *	< 0.0001			< 0.0008	0.04	1	5
Chromium *	0.0019			0.016	0.5	10	70
Copper *	0.0027			0.023	2	50	100
Mercury *	< 0.0005			< 0.0050	0.01	0.2	2
Molybdenum *	< 0.0004			< 0.0040	0.5	10	30
Nickel *	0.0009			0.0079	0.4	10	40
Lead *	0.0084			0.072	0.5	10	50
Antimony *	< 0.0017			< 0.017	0.06	0.7	5
Selenium *	< 0.0040			< 0.040	0.1	0.5	7
Zinc *	0.0081			0.070	4	50	200
Chloride *	1.4			12	800	15000	25000
Fluoride	0.099			0.85	10	150	500
Sulphate *	1.7			15	1000	20000	50000
TDS*	13			110	4000	60000	100000
Phenol Index (Monohydric Phenols) *	< 0.010			< 0.10	1	-	-
DOC	7.68			66.2	500	800	1000
Leach Test Information							
Stone Content (%)	< 0.1						
Sample Mass (kg)	1.7						
Dry Matter (%)	87						
Moisture (%)	13						

Results are expressed on a dry weight basis, after correction for moisture content where applicable.
*= UKAS accredited (liquid eluate analysis only)
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** = MCERTS accredited

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i2 Analytical
7 Woodshots Meadow
Croxley Green Business Park
Watford, WD18 8YS

Telephone: 01923 225404
Fax: 01923 237404
email:reception@i2analytical.com

Waste Acceptance Criteria Analytical Results

Report No:	**20-42491**						
					Client:	**TWEEDIE**	
Location	**Brunswick Camp, Pirbright**				**Landfill Waste Acceptance Criteria**		
Lab Reference (Sample Number)	1690405 / 1690406				**Limits**		
Sampling Date	18/11/2020				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID	TP05						
Depth (m)	0.45-0.65						
Solid Waste Analysis							
TOC (%)**	< 0.1				3%	5%	6%
Loss on Ignition (%) **	0.5				--	--	10%
BTEX (µg/kg) **	< 10				6000	--	--
Sum of PCBs (mg/kg) **	< 0.007				1	--	--
Mineral Oil (mg/kg)	< 10				500	--	--
Total PAH (WAC-17) (mg/kg)	< 0.85				100	--	--
pH (units)**	5.8				--	>6	--
Acid Neutralisation Capacity (mol / kg)	-24				--	To be evaluated	To be evaluated
Eluate Analysis	10:1			10:1	Limit values for compliance leaching test		
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)	mg/l			mg/kg	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)		
Arsenic *	0.0048			0.0407	0.5	2	25
Barium *	0.0056			0.0473	20	100	300
Cadmium *	< 0.0001			< 0.0008	0.04	1	5
Chromium *	0.0007			0.0057	0.5	10	70
Copper *	0.0025			0.021	2	50	100
Mercury *	< 0.0005			< 0.0050	0.01	0.2	2
Molybdenum *	< 0.0004			< 0.0040	0.5	10	30
Nickel *	0.0025			0.021	0.4	10	40
Lead *	0.0096			0.082	0.5	10	50
Antimony *	< 0.0017			< 0.017	0.06	0.7	5
Selenium *	< 0.0040			< 0.040	0.1	0.5	7
Zinc *	0.0065			0.055	4	50	200
Chloride *	2.5			21	800	15000	25000
Fluoride	< 0.050			< 0.50	10	150	500
Sulphate *	2.2			19	1000	20000	50000
TDS*	14			120	4000	60000	100000
Phenol Index (Monohydric Phenols) *	< 0.010			< 0.10	1	-	-
DOC	8.38			71.1	500	800	1000
Leach Test Information							
Stone Content (%)	< 0.1						
Sample Mass (kg)	1.7						
Dry Matter (%)	88						
Moisture (%)	12						

Results are expressed on a dry weight basis, after correction for moisture content where applicable.
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** = MCERTS accredited

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Analytical Report Number : 20-42491
Project / Site name: Brunswick Camp, Pirbright

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Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
1690399	TP01	None Supplied	0.30-0.45	Brown sand.
1690401	TP02	None Supplied	0.35-0.77	Brown loam and sand.
1690403	TP03	None Supplied	0.40-0.60	Light brown sand.
1690405	TP05	None Supplied	0.45-0.65	Light brown loam and sand with gravel.

Analytical Report Number : 20-42491
Project / Site name: Brunswick Camp, Pirbright

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
BS EN 12457-2 (10:1) Leachate Prep	10:1 (as recieved, moisture adjusted) end over end extraction with water for 24 hours. Eluate filtered prior to analysis.	In-house method based on BSEN12457-2.	L043-PL	W	NONE
Acid neutralisation capacity of soil	Determination of acid neutralisation capacity by addition of acid or alkali followed by electronic probe.	In-house method based on Guidance an Sampling and Testing of Wastes to Meet Landfill Waste Acceptance""	L046-PL	W	NONE
Loss on ignition of soil @ 450oC	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace.	In house method.	L047-PL	D	MCERTS
Mineral Oil (Soil) C10 - C40	Determination of mineral oil fraction extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L076-PL	D	NONE
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Speciated WAC-17 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270. MCERTS accredited except Coronene.	L064-PL	D	NONE
PCB's By GC-MS in soil	Determination of PCB by extraction with acetone and hexane followed by GC-MS.	In-house method based on USEPA 8082	L027-PL	D	MCERTS
pH at 20oC in soil	Determination of pH in soil by addition of water followed by electrometric measurement.	In house method.	L005-PL	W	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
BTEX in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
Total BTEX in soil (Poland)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073-PL	W	MCERTS
Metals in leachate by ICP-OES	Determination of metals in leachate by acidification followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil""	L039-PL	W	ISO 17025
Chloride 10:1 WAC	Determination of Chloride colorimetrically by discrete analyser.	In house based on MEWAM Method ISBN 0117516260.	L082-PL	W	ISO 17025
Fluoride 10:1 WAC	Determination of fluoride in leachate by 1:1ratio with a buffer solution followed by Ion Selective Electrode.	In-house method based on Use of Total Ionic Strength Adjustment Buffer for Electrode Determination"	L033B-PL	W	ISO 17025
Sulphate 10:1 WAC	Determination of sulphate in leachate by ICP-OES	In-house method based on MEWAM 1986 Methods for the Determination of Metals in Soil""	L039-PL	W	ISO 17025

Analytical Report Number : 20-42491
Project / Site name: Brunswick Camp, Pirbright

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Total dissolved solids 10:1 WAC	Determination of total dissolved solids in water by electrometric measurement.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Monohydric phenols 10:1 WAC	Determination of phenols in leachate by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	ISO 17025
Dissolved organic carbon 10:1 WAC	Determination of dissolved inorganic carbon in leachate by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	NONE

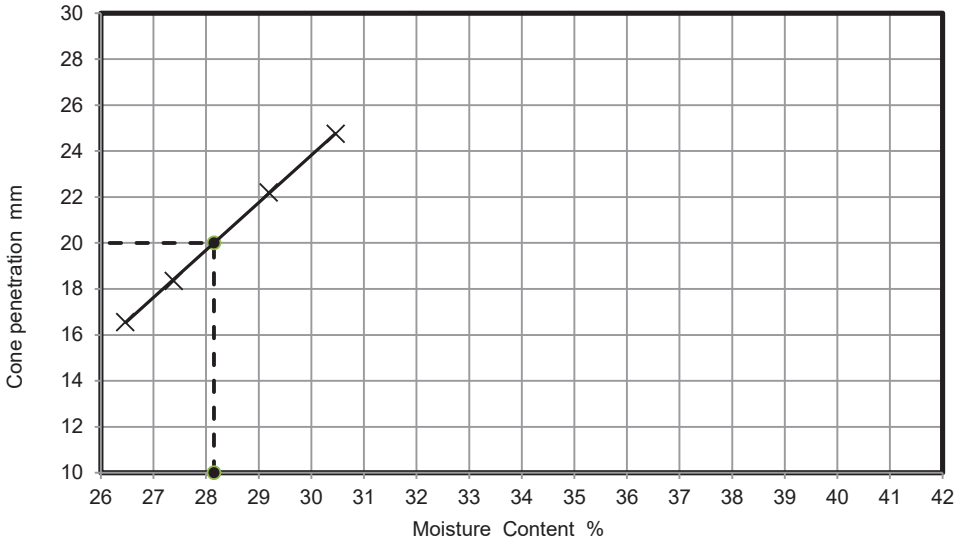
For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.
For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Appendix H

Geotechnical Laboratory Report

LIQUID LIMIT, PLASTIC LIMIT AND PLASTICITY INDEX

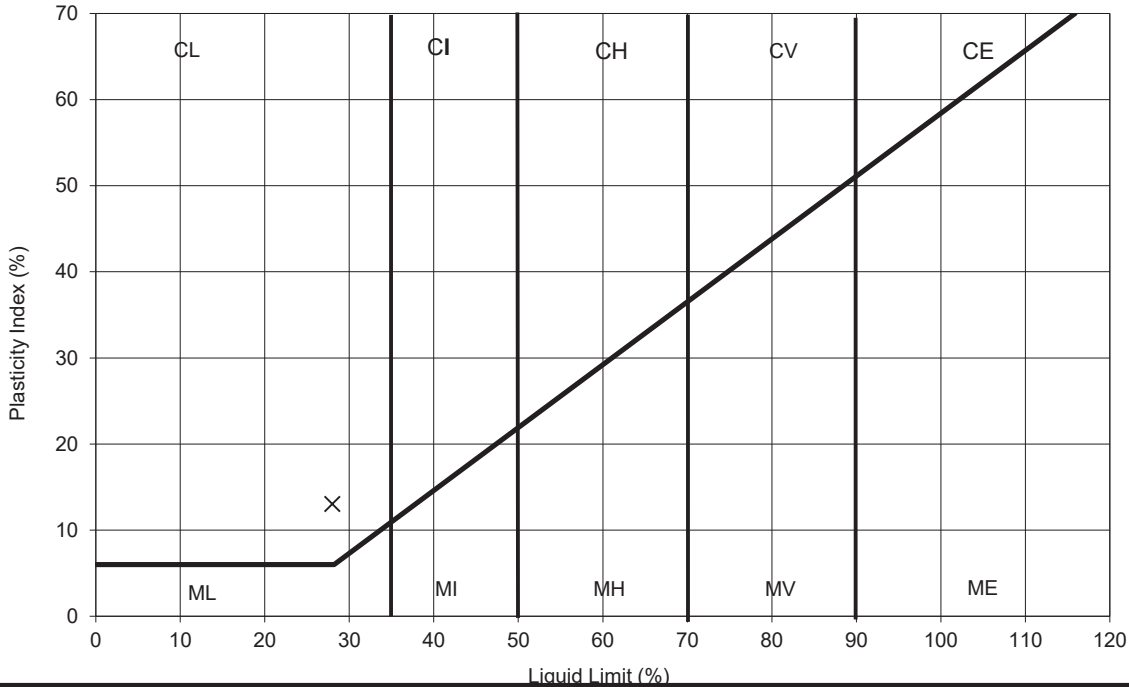
Site Name	Brunswick Camp, Pirbright			Job No.	29111
				Borehole/Pit No.	TP03
Project No.	1909007.002	Client	TEC	Sample No.	-
				Depth Top	2.60 m
Soil Description	Orangish brown slightly mottled grey clayey SAND with rare fine gravel			Depth Base	- m
				Sample Type	D
				Samples received	19/11/2020
				Schedules received	19/11/2020
				Project Started	23/11/2020
				Date Tested	25/11/2020



NATURAL MOISTURE CONTENT	**23**	**%**
% PASSING 425µm SIEVE	**99**	**%**
LIQUID LIMIT	**28**	**%**
PLASTIC LIMIT	**15**	**%**
PLASTICITY INDEX	**13**	**%**

Remarks

PLASTICITY INDEX



TEST METHOD

BS1377: Part 2 :Clause 4.3 : 1990 Determination of the liquid limit by the cone penetrometer method
BS1377: Part 2 :Clause 5.0 : 1990: Determination of the plastic limit and plasticity index
BS1377: Part 2 :Clause 3.2 : 1990:Determination of the moisture content by the oven drying method

Checked and Approved

Initials: J.P
Date: 27/11/2020

Test Report by K4 SOILS LABORATORY Unit 8 Olds Close Olds Approach Watford Herts WD18 9RU
Tel: 01923 711 288 Email: James@k4soils.com

UKAS TESTING 2519

Approved Signatories: K.Phaure (Tech.Mgr) J.Phaure (Lab.Mgr)

Summary of Natural Moisture Content, Liquid Limit and Plastic Limit Results

Job No.	Project Name	Programme	
29111	Brunswick Camp, Pirbright	Samples received	19/11/2020
		Schedule received	19/11/2020
Project No.	Client	Project started	23/11/2020
1909007.002	TEC	Testing Started	25/11/2020

Hole No.	Sample				Soil Description	NMC	Passing 425µm	LL	PL	PI	Remarks
	Ref	Top m	Base m	Type		%	%	%	%	%	
TP03	-	2.60	-	D	Orangish brown slightly mottled grey clayey SAND with rare fine gravel	23	99	28	15	13	

Test Methods: BS1377: Part 2: 1990:
Natural Moisture Content : clause 3.2
Atterberg Limits: clause 4.3, 4.4 and 5.0

Test Report by K4 SOILS LABORATORY
Unit 8 Olds Close Olds Approach
Watford Herts WD18 9RU

Tel: 01923 711 288
Email: James@k4soils.com

Checked and Approved

Initials **J.P**

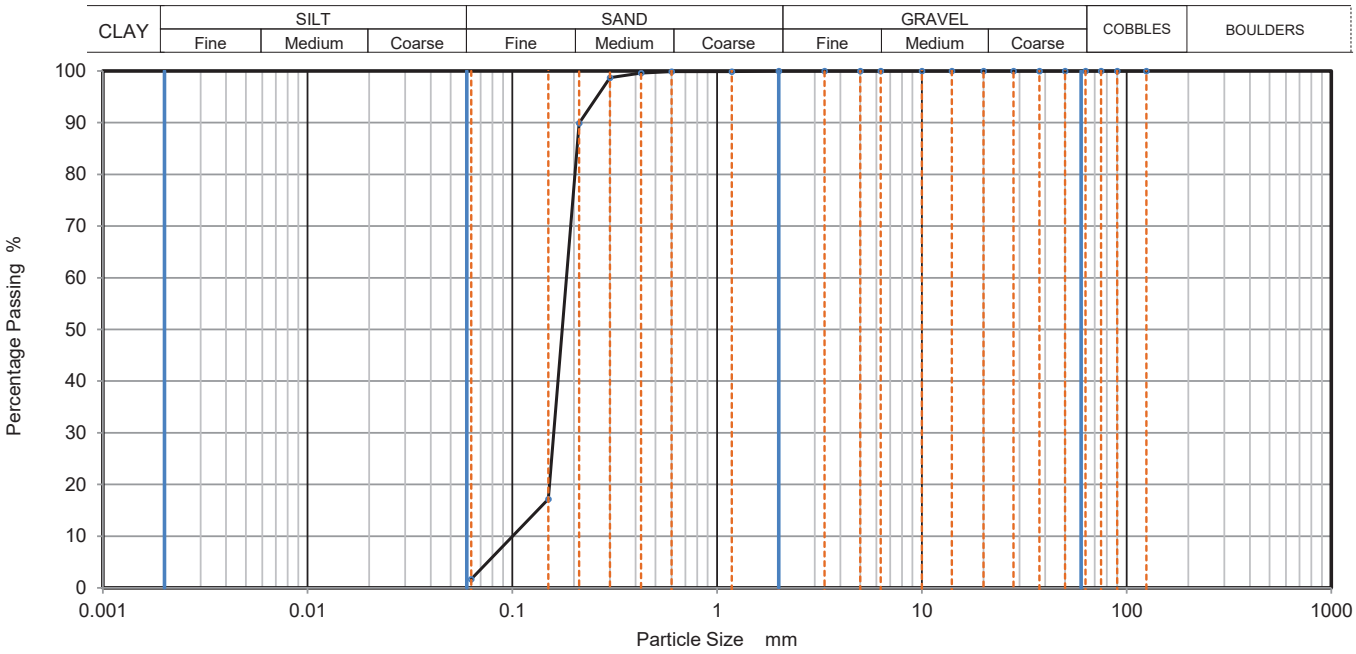
Date: 27/11/2020

2519

Approved Signatories: K.Phaure (Tech.Mgr) J.Phaure (Lab.Mgr)

PARTICLE SIZE DISTRIBUTION

Site Name	Brunswick Camp, Pirbright			Job Ref	29111
				Borehole/Pit No.	TP01
Project No.	1909007.002	Client	TEC	Sample No.	-
				Depth Top	0.60 m
Soil Description	Greyish brown slightly silty SAND			Depth Base	- m
				Sample Type	B
				Samples received	19/11/2020
				Schedules received	19/11/2020
Test Method	BS1377:Part 2: 1990, clause 9.0			Project started	23/11/2020
				Date tested	25/11/2020



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	100		
0.6	100		
0.425	100		
0.3	99		
0.212	90		
0.15	17		
0.063	2		

Sample Proportions	% dry mass
Very coarse	0.0
Gravel	0.0
Sand	98.3
Fines <0.063mm	1.7

Grading Analysis		
D100	mm	
D60	mm	0.184
D30	mm	0.159
D10	mm	0.1
Uniformity Coefficient		1.8
Curvature Coefficient		1.4

Remarks

Preparation and testing in accordance with BS1377 unless noted below

K4 Soils Laboratory

Unit 8, Olds Close, Watford, Herts, WD18 9RU

Email: james@k4soils.com

Tel: 01923 711288

Checked and Approved

Initials:

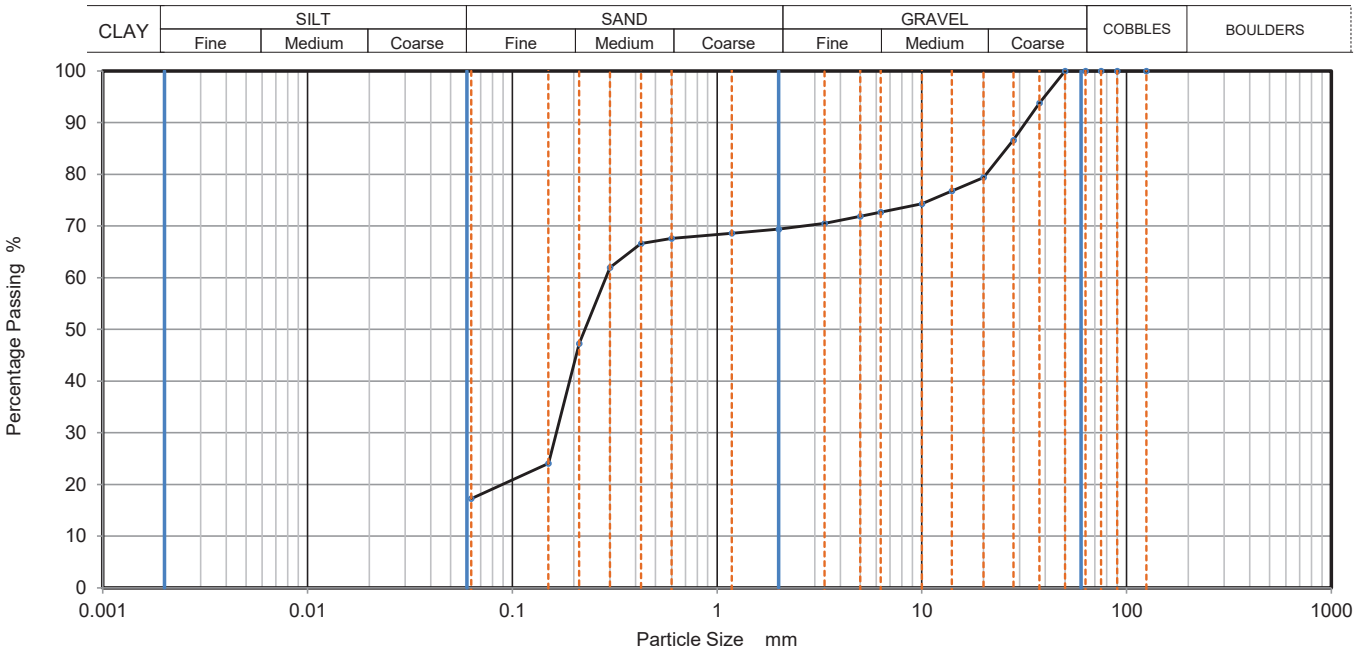
Date: 27/11/2020

UKAS TESTING 2519

Approved Signatories: K.Phaure (Tech.Mgr) J.Phaure (Lab.Mgr)

PARTICLE SIZE DISTRIBUTION

Site Name	Brunswick Camp, Pirbright			Job Ref	29111
				Borehole/Pit No.	TP01
Project No.	1909007.002	Client	TEC	Sample No.	-
				Depth Top	1.60 m
Soil Description	Greyish brown mottled orangish brown silty very gravelly SAND (gravel is fmc and sub-angular to rounded)			Depth Base	- m
				Sample Type	B
				Samples received	19/11/2020
				Schedules received	19/11/2020
Test Method	BS1377:Part 2: 1990, clause 9.0			Project started	23/11/2020
				Date tested	25/11/2020



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	94		
28	87		
20	79		
14	77		
10	74		
6.3	73		
5	72		
3.35	71		
2	69		
1.18	69		
0.6	68		
0.425	67		
0.3	62		
0.212	47		
0.15	24		
0.063	17		

Sample Proportions	% dry mass
Very coarse	0.0
Gravel	30.6
Sand	52.1
Fines <0.063mm	17.3

Grading Analysis		
D100	mm	
D60	mm	0.286
D30	mm	0.164
D10	mm	
Uniformity Coefficient		
Curvature Coefficient		

Remarks

Preparation and testing in accordance with BS1377 unless noted below

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Unit 8, Olds Close, Watford, Herts, WD18 9RU

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Checked and Approved

Initials:

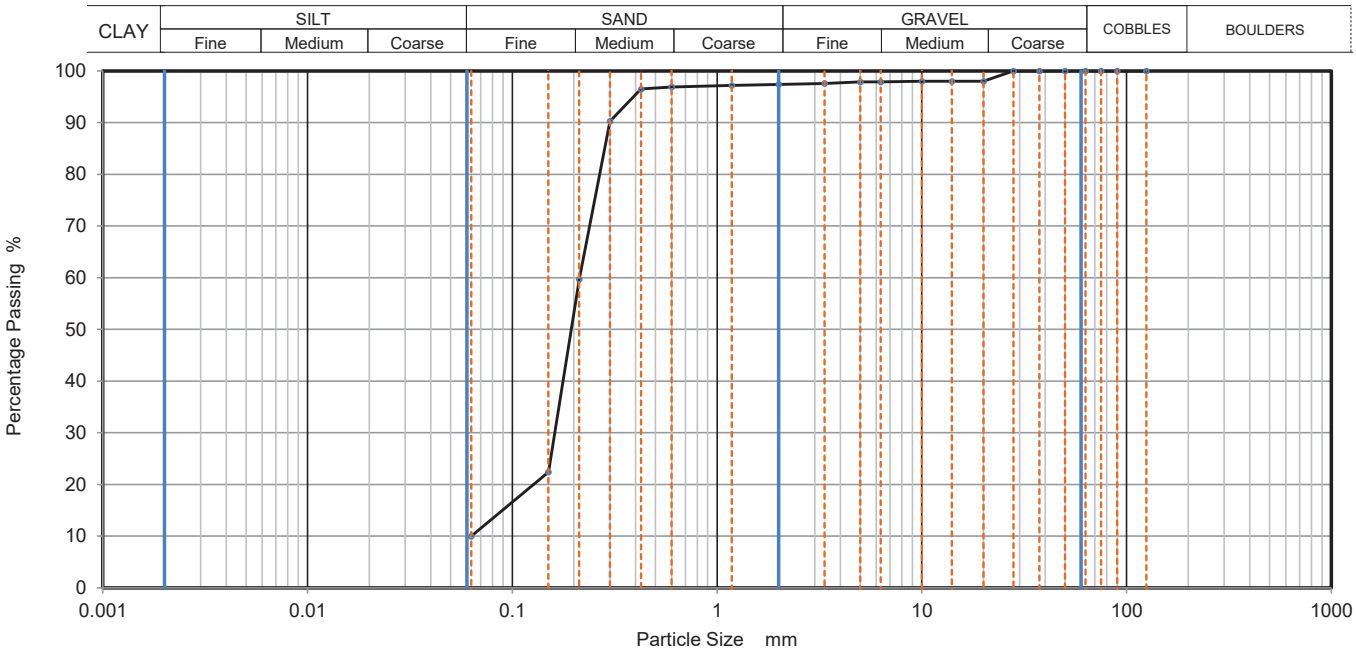
Date: 27/11/2020

UKAS TESTING 2519

Approved Signatories: K.Phaure (Tech.Mgr) J.Phaure (Lab.Mgr)

PARTICLE SIZE DISTRIBUTION

Site Name	Brunswick Camp, Pirbright			Job Ref	29111
				Borehole/Pit No.	TP02
Project No.	1909007.002	Client	TEC	Sample No.	-
				Depth Top	1.40 m
Soil Description	Greenish brown mottled orangish brown slightly gravelly slightly clayey silty SAND (gravel is fmc and sub-angular to rounded)			Depth Base	- m
				Sample Type	B
				Samples received	19/11/2020
				Schedules received	19/11/2020
Test Method	BS1377:Part 2: 1990, clause 9.0			Project started	23/11/2020
				Date tested	25/11/2020



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	98		
14	98		
10	98		
6.3	98		
5	98		
3.35	98		
2	97		
1.18	97		
0.6	97		
0.425	97		
0.3	90		
0.212	60		
0.15	22		
0.063	10		

Sample Proportions	% dry mass
Very coarse	0.0
Gravel	2.6
Sand	87.3
Fines <0.063mm	10.0

Grading Analysis		
D100	mm	
D60	mm	0.213
D30	mm	0.161
D10	mm	
Uniformity Coefficient		
Curvature Coefficient		

Remarks

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Checked and Approved

Initials:

Date: 27/11/2020

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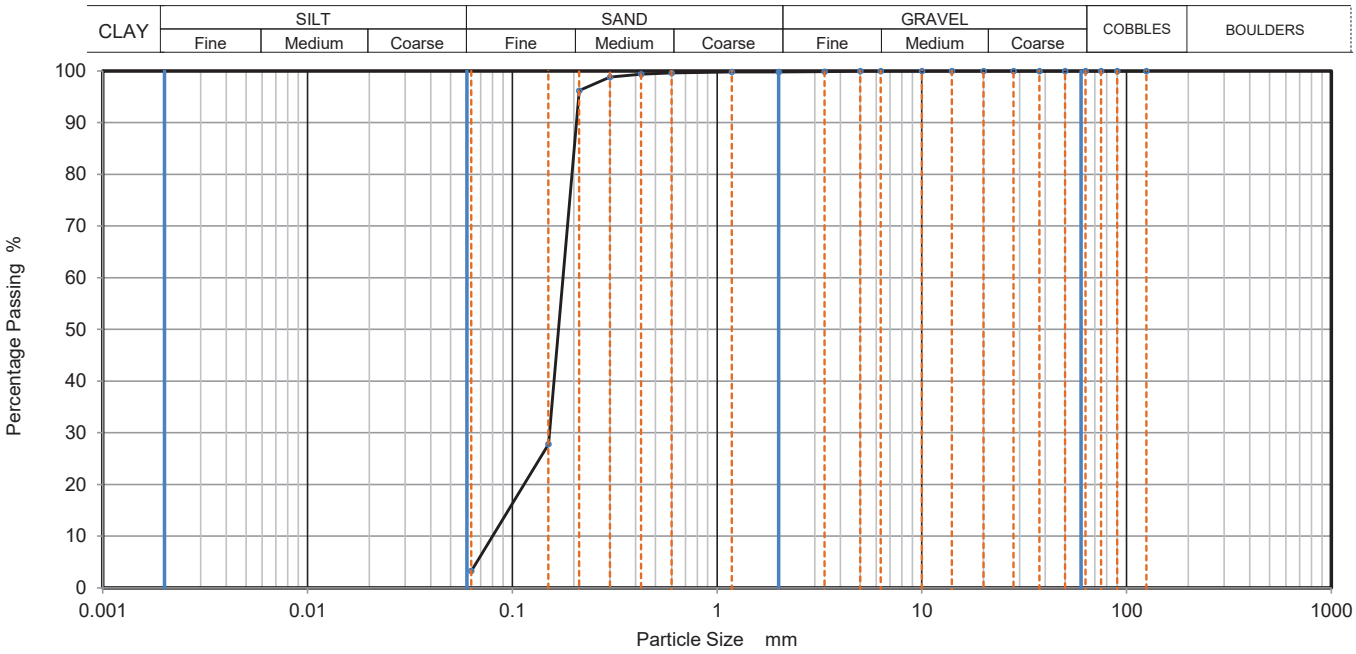
PARTICLE SIZE DISTRIBUTION

Site Name	Brunswick Camp, Pirbright			Job Ref	29111
				Borehole/Pit No.	TP03
Project No.	1909007.002	Client	TEC	Sample No.	-
				Depth Top	0.70 m
Soil Description	Grey slightly silty SAND			Depth Base	- m
				Sample Type	D
				Samples received	19/11/2020
				Schedules received	19/11/2020
Test Method	BS1377:Part 2: 1990, clause 9.0			Project started	23/11/2020
				Date tested	25/11/2020



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	100		
0.6	100		
0.425	99		
0.3	99		
0.212	96		
0.15	28		
0.063	3		

Sample Proportions	% dry mass
Very coarse	0.0
Gravel	0.2
Sand	96.5
Fines <0.063mm	3.3

Grading Analysis		
D100	mm	
D60	mm	0.177
D30	mm	0.152
D10	mm	0.0798
Uniformity Coefficient		2.2
Curvature Coefficient		1.6

Remarks

Preparation and testing in accordance with BS1377 unless noted below

K4 Soils Laboratory

Unit 8, Olds Close, Watford, Herts, WD18 9RU

Email: james@k4soils.com

Tel: 01923 711288

Checked and Approved

Initials:

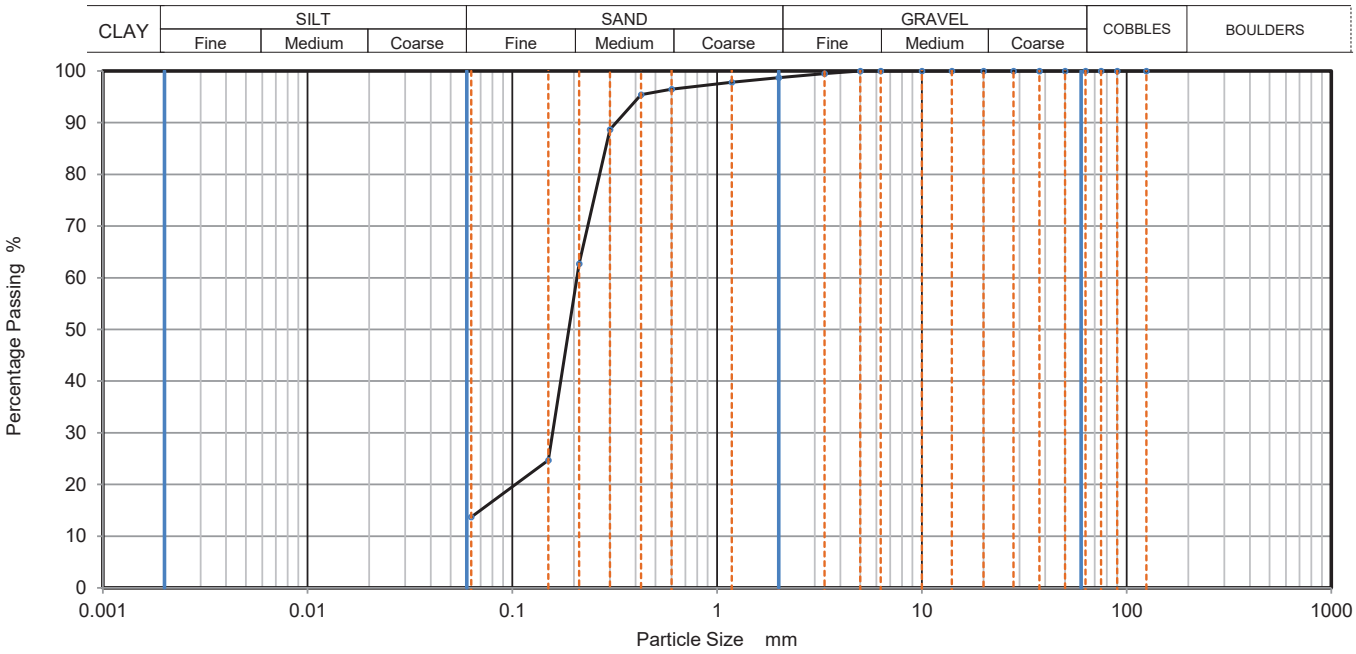
Date: 27/11/2020

UKAS TESTING 2519

Approved Signatories: K.Phaure (Tech.Mgr) J.Phaure (Lab.Mgr)

PARTICLE SIZE DISTRIBUTION

Site Name	Brunswick Camp, Pirbright			Job Ref	29111
				Borehole/Pit No.	TP04
Project No.	1909007.002	Client	TEC	Sample No.	-
				Depth Top	2.60 m
Soil Description	Orangish brown mottled bluish grey clayey SAND with rare fine gravel			Depth Base	- m
				Sample Type	B
				Samples received	19/11/2020
				Schedules received	19/11/2020
Test Method	BS1377:Part 2: 1990, clause 9.0			Project started	23/11/2020
				Date tested	26/11/2020



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	99		
1.18	98		
0.6	97		
0.425	95		
0.3	89		
0.212	63		
0.15	25		
0.063	14		

Sample Proportions	% dry mass
Very coarse	0.0
Gravel	1.3
Sand	85.1
Fines <0.063mm	13.7

Grading Analysis		
D100	mm	
D60	mm	0.207
D30	mm	0.157
D10	mm	
Uniformity Coefficient		
Curvature Coefficient		

Remarks

Preparation and testing in accordance with BS1377 unless noted below

K4 Soils Laboratory

Unit 8, Olds Close, Watford, Herts, WD18 9RU

Email: james@k4soils.com

Tel: 01923 711288

Checked and Approved

Initials:

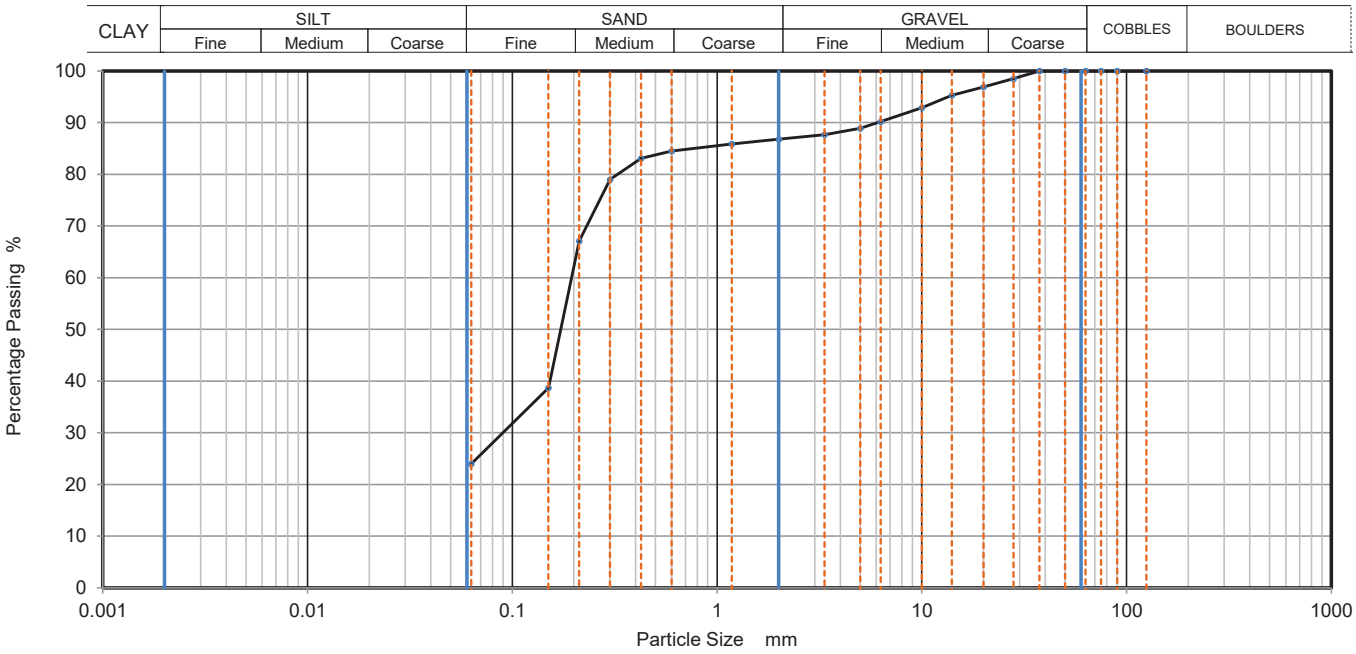
Date: 27/11/2020

UKAS TESTING 2519

Approved Signatories: K.Phaure (Tech.Mgr) J.Phaure (Lab.Mgr)

PARTICLE SIZE DISTRIBUTION

Site Name	Brunswick Camp, Pirbright			Job Ref	29111
				Borehole/Pit No.	TP05
Project No.	1909007.002	Client	TEC	Sample No.	-
				Depth Top	0.65 m
Soil Description	Greyish brown slightly clayey gravelly silty SAND (gravel is fmc and sub-angular to sub-rounded)			Depth Base	- m
				Sample Type	B
				Samples received	19/11/2020
				Schedules received	19/11/2020
Test Method	BS1377:Part 2: 1990, clause 9.0			Project started	23/11/2020
				Date tested	26/11/2020



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	99		
20	97		
14	95		
10	93		
6.3	90		
5	89		
3.35	88		
2	87		
1.18	86		
0.6	85		
0.425	83		
0.3	79		
0.212	67		
0.15	39		
0.063	24		

Sample Proportions	% dry mass
Very coarse	0.0
Gravel	13.2
Sand	62.8
Fines <0.063mm	24.0

Grading Analysis		
D100	mm	
D60	mm	0.194
D30	mm	0.0898
D10	mm	
Uniformity Coefficient		
Curvature Coefficient		

Remarks

Preparation and testing in accordance with BS1377 unless noted below

K4 Soils Laboratory

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Tel: 01923 711288

Checked and Approved

Initials:

Date: 27/11/2020

UKAS TESTING 2519

Approved Signatories: K.Phaure (Tech.Mgr) J.Phaure (Lab.Mgr)

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

cs@elab-uk.co.uk
info@elab-uk.co.uk

THE ENVIRONMENTAL LABORATORY LTD

Analytical Report Number: 20-30997

Issue: 1

Date of Issue: 27/11/2020

Contact: James Phaure

Customer Details: K4 Soils Laboratory Ltd
Unit 8
Watford
HertfordshireWD18 9RU

Quotation No: Q16-00568

Order No: Not Supplied

Customer Reference: 29111

Date Received: 24/11/2020

Date Approved: 27/11/2020

Details: Brunswick Camp, Pirbright

Approved by: [redacted]

Mike Varley, Technical Manager

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

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Sample Summary

Report No.: 20-30997, issue number 1

Elab No.	Client's Ref.	Date Sampled	Date Scheduled	Description	Deviations
220971	TP01 0.40	18/11/2020	24/11/2020	Sand	
220972	TP01 1.00	18/11/2020	24/11/2020	Sand	
220973	TP02 2.00	18/11/2020	24/11/2020	Sand	
220974	TP03 2.60	18/11/2020	24/11/2020	Loamy sand	
220975	TP04 2.80	18/11/2020	24/11/2020	Loamy sand	

Results Summary

Report No.: 20-30997, issue number 1

				ELAB Reference	220971	220972	220973	220974	220975
				Customer Reference					
				Sample ID					
				Sample Type	DISTURBED	DISTURBED	DISTURBED	DISTURBED	DISTURBED
				Sample Location	TP01	TP01	TP02	TP03	TP04
				Sample Depth (m)	0.40	1.00	2.00	2.60	2.80
				Sampling Date	18/11/2020	18/11/2020	18/11/2020	18/11/2020	18/11/2020
Determinand	**Codes**	**Units**	**LOD**						
Soil sample preparation parameters									
Material removed	N	%	0.1		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Description of Inert material removed	N		0		None	None	None	None	None
Anions									
Water Soluble Sulphate	M	g/l	0.02		< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Inorganics									
Total Sulphur	N	%	0.01		0.01	< 0.01	0.01	0.02	< 0.01
Acid Soluble Sulphate (SO4)	U	%	0.02		< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Miscellaneous									
pH	M	pH units	0.1		8.1	7.9	5.7	5.6	5.5

Tests marked N are not UKAS accredited.

Method Summary

Report No.: 20-30997, issue number 1

Parameter	Codes	Analysis Undertaken On	Date Tested	Method Number	Technique
Soil					
pH	M	Air dried sample	27/11/2020	113	Electromeric
Acid Soluble Sulphate	U	Air dried sample	27/11/2020	115	Ion Chromatography
Water soluble anions	M	Air dried sample	26/11/2020	172	Ion Chromatography
Total organic carbon/Total sulphur	N	Air dried sample	26/11/2020	216	IR

Tests marked N are not UKAS accredited

Report Information

Report No.: 20-30997, issue number 1

Key	
U	hold UKAS accreditation
M	hold MCERTS and UKAS accreditation
N	do not currently hold UKAS accreditation
^	MCERTS accreditation not applicable for sample matrix
*	UKAS accreditation not applicable for sample matrix
S	Subcontracted to approved laboratory UKAS Accredited for the test
SM	Subcontracted to approved laboratory MCERTS/UKAS Accredited for the test
NS	Subcontracted to approved laboratory. UKAS accreditation is not applicable.
I/S	Insufficient Sample
U/S	Unsuitable sample
n/t	Not tested
<	means "less than"
>	means "greater than"
LOD	LOD refers to limit of detection, except in the case of pH soils and pH waters where it means limit of discrimination.

Soil sample results are expressed on an air dried basis (dried at < 30°C), and are uncorrected for inert material removed.

ELAB are unable to provide an interpretation or opinion on the content of this report.

The results relate only to the sample received.

PCB congener results may include any coeluting PCBs

Uncertainty of measurement for the determinands tested are available upon request

Unless otherwise stated, sample information has been provided by the client. This may affect the validity of the results.

Deviation Codes

a	No date of sampling supplied
b	No time of sampling supplied (Waters Only)
c	Sample not received in appropriate containers
d	Sample not received in cooled condition
e	The container has been incorrectly filled
f	Sample age exceeds stability time (sampling to receipt)
g	Sample age exceeds stability time (sampling to analysis)

Where a sample has a deviation code, the applicable test result may be invalid.

Sample Retention and Disposal

All soil samples will be retained for a period of one month

All water samples will be retained for 7 days following the date of the test report

Charges may apply to extended sample storage

Appendix I

Generic Quantitative Risk Assessment: Human Health

Project Number: 1909007.002		Lab Sample Number	1690378	1690379	1690380	1690381	1690382	1690383			
Project Name: Brunswick Camp, Pirbright		Sample Reference	TP01	TP02	TP02	TP03	TP04	TP05			
Site End Use:	GAC (mg/kg)	Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Residential with homegrown produce		Depth (m)	0.30-0.45	0.15	0.35-0.77	0.40-0.60	0.35	0.45-0.65			
		Date Sampled	18/11/2020	18/11/2020	18/11/2020	18/11/2020	18/11/2020	18/11/2020			
Determinand			1	2	3	4	5				
Arsenic	37[1]	mg/kg	6.90	5.10	3.10	2.40	3.50	6.80			
Boron	290[3]	mg/kg	0.20	0.40	< 0.2	< 0.2	< 0.2	< 0.2			
Cadmium	22[1]	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2			
Chromium (total)	910[3]	mg/kg	13.00	10.00	7.00	6.60	7.10	17.00			
Chromium (VI)	21[1]	mg/kg	< 4.0	-	< 4.0	< 4.0	-	< 4.0			
Copper	2400[3]	mg/kg	370.00	14.00	3.50	3.50	6.50	5.20			
Lead	200[1]	mg/kg	30.00	51.00	4.20	2.10	12.00	10.00			
Mercury	40[2]	mg/kg	< 0.3	< 0.3	< 0.3	0.50	0.40	< 0.3			
Nickel	130[2]	mg/kg	9.40	5.50	1.90	2.20	2.50	6.60			
Selenium	350[2]	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0			
Zinc	3700[3]	mg/kg	220.00	59.00	6.20	8.60	20.00	30.00			
Beryllium	1.7[3]	mg/kg	0.38	0.28	0.15	0.21	0.17	0.50			
Vanadium	410[3]	mg/kg	19.00	18.00	-	-	12.00	-			
Barium	1300[4]	mg/kg	46.00	41.00	7.50	5.60	13.00	30.00			
Cyanide (Total)	20[5]	mg/kg	< 1	< 1	< 1	< 1	< 1	< 1			
Phenol (Monohydric)	120[3]	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0			
Sulphide	-	mg/kg	7.40	2.80	-	-	< 1.0	-			
Total Organic Carbon (TOC)	-	%	0.70	1.50	-	-	0.90	-			
Naphthalene	2.3[3]	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05			
Acenaphthylene	170[3]	mg/kg	< 0.05	0.26	< 0.05	< 0.05	< 0.05	< 0.05			
Acenaphthene	210[3]	mg/kg	< 0.05	0.35	< 0.05	< 0.05	< 0.05	< 0.05			
Fluorene	170[3]	mg/kg	< 0.05	0.34	< 0.05	< 0.05	< 0.05	< 0.05			
Phenanthrene	95[3]	mg/kg	0.25	8.10	< 0.05	< 0.05	< 0.05	< 0.05			
Anthracene	2400[3]	mg/kg	< 0.05	1.40	< 0.05	< 0.05	< 0.05	< 0.05			
Fluoranthene	280[3]	mg/kg	0.49	24.00	< 0.05	< 0.05	< 0.05	< 0.05			
Pyrene	620[3]	mg/kg	0.43	19.00	< 0.05	< 0.05	< 0.05	< 0.05			
Benzo(a)anthracene	7.2[3]	mg/kg	0.25	13.00	< 0.05	< 0.05	< 0.05	< 0.05			
Chrysene	15[3]	mg/kg	0.26	8.30	< 0.05	< 0.05	< 0.05	< 0.05			
Benzo(b)fluoranthene	2.6[3]	mg/kg	< 0.05	12.00	< 0.05	< 0.05	< 0.05	< 0.05			
Benzo(k)fluoranthene	77[3]	mg/kg	< 0.05	6.90	< 0.05	< 0.05	< 0.05	< 0.05			
Benzo(a)pyrene	2.2[3]	mg/kg	< 0.05	9.80	< 0.05	< 0.05	< 0.05	< 0.05			
Indeno(1,2,3-cd)pyrene	27[3]	mg/kg	< 0.05	5.30	< 0.05	< 0.05	< 0.05	< 0.05			
Dibenz(a,h)anthracene	0.24[3]	mg/kg	< 0.05	1.60	< 0.05	< 0.05	< 0.05	< 0.05			
Benzo(ghi)perylene	320[3]	mg/kg	< 0.05	6.10	< 0.05	< 0.05	< 0.05	< 0.05			
Speciated Total EPA-16 PAHs	-	mg/kg	1.68	116.00	< 0.80	< 0.80	< 0.80	< 0.80			
Benzene	0.087[3]	µg/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0			
Toluene	130[3]	µg/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0			
Ethylbenzene	47[3]	µg/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0			
p & m-xylene	56[3]	µg/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0			
o-xylene	60[3]	µg/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0			
MTBE (Methyl Tertiary Butyl Ether)	49[4]	µg/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0			
TPH Aliphatic C5 - C6	42[3]	mg/kg	< 0.001	< 0.001	-	-	< 0.001	-			
TPH Aliphatic C6 - C8	100[3]	mg/kg	< 0.001	< 0.001	-	-	< 0.001	-			
TPH Aliphatic C8 - C10	27[3]	mg/kg	< 0.001	< 0.001	-	-	< 0.001	-			
TPH Aliphatic C10 - C12	130[3]	mg/kg	< 1.0	< 1.0	-	-	< 1.0	-			
TPH Aliphatic C12 - C16	1100[3]	mg/kg	< 2.0	< 2.0	-	-	< 2.0	-			
TPH Aliphatic C16 - C21	65000[3]	mg/kg	< 8.0	< 8.0	-	-	< 8.0	-			
TPH Aliphatic C21 - C35	65000[3]	mg/kg	< 8.0	< 8.0	-	-	< 8.0	-			
TPH Aromatic C5 - C7	70[3]	mg/kg	< 0.001	< 0.001	-	-	< 0.001	-			

Project Number: 1909007.002		Lab Sample Number	1690378	1690379	1690380	1690381	1690382	1690383			
Project Name: Brunswick Camp, Pirbright		Sample Reference	TP01	TP02	TP02	TP03	TP04	TP05			
Site End Use:	***GAC (mg/kg)***	Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Residential with homegrown produce		Depth (m)	0.30-0.45	0.15	0.35-0.77	0.40-0.60	0.35	0.45-0.65			
		Date Sampled	18/11/2020	18/11/2020	18/11/2020	18/11/2020	18/11/2020	18/11/2020			
TPH Aromatic C7 - C8	130[3]	mg/kg	< 0.001	< 0.001	-	-	< 0.001	-			
TPH Aromatic C8 - C10	34[3]	mg/kg	< 0.001	< 0.001	-	-	< 0.001	-			
TPH Aromatic C10 - C12	74[3]	mg/kg	< 1.0	< 1.0	-	-	< 1.0	-			
TPH Aromatic C12 - C16	140[3]	mg/kg	< 2.0	8.00	-	-	< 2.0	-			
TPH Aromatic C16 - C21	260[3]	mg/kg	< 10	80.00	-	-	< 10	-			
TPH Aromatic C21 - C35	1100[3]	mg/kg	< 10	170.00	-	-	< 10	-			

Notes:

[1] DEFRA C4SLs (2014)

[2] Environment Agency SGVs (2009)

[3] LQM/CIEH S4ULs (2015)

[4] CL:AIRE, AGS & EIS (2009)

[5] Dutch Intervention Value for free cyanide (VROM 2000)

*All GACs based on a sandy soil and Soil Organic Matter (SOM) of 1% where applicable.

Concentration does not exceed GAC

Concentration exceeds GAC

No set GAC

Appendix J

Generic Quantitative Risk Assessment: Controlled Waters

Near Surface Leachability Analysis

Contaminant	TP03 at 0.30mbgl (µg/l)	TP04 at 0.75mbgl (µg/l)	SSV (µg/l)	No. of Exceedances
Arsenic	<1.0[5]	2.4	10[1]	0
Cadmium	<0.08[5]	<0.08[5]	5.0[1]	0
Chromium	1.1	0.4	50[1]	0
Copper	6.2	8	2000[1]	0
Lead	4.7	4.3	10[1]	0
Mercury	<0.5[5]	<0.5[5]	1.0[1]	0
Nickel	0.5	<0.3	20[1]	0
Zinc	13	7.8	3000[2]	0
Beryllium	<0.2[5]	<0.2[5]	-	0
Selenium	<4.0[5]	<4.0[5]	10[1]	0
Vanadium	<1.7[5]	<1.7[5]	60[4]	0
Barium	6.7	4.2	700[2]	0
Cyanide (Total)	<10[5]	<10[5]	50[1]	0
Total Phenol (Monohydric)	<10[5]	<10[5]	0.5[1, 6]	0
Sulphate	300	400	250000[1]	0
Sulphide	<5.0[5]	<0.5[5]	-	0
pH	6.7	6.3	-	0
Naphthalene	<0.01[5]	<0.01[5]	22.4[3]	0
Acenaphthylene	<0.01[5]	<0.01[5]	-	0
Acenaphthene	<0.01[5]	<0.01[5]	-	0
Fluorene	<0.01[5]	<0.01[5]	-	0
Phenanthrene	<0.01[5]	<0.01[5]	-	0
Anthracene	<0.01[5]	<0.01[5]	0.1[3]	0
Fluoranthene	<0.01[5]	<0.01[5]	0.12[4]	0
Pyrene	<0.01[5]	<0.01[5]	-	0
Benzo(a)anthracene	<0.01[5]	<0.01[5]	-	0
Chrysene	<0.01[5]	<0.01[5]	-	0
Benzo(b)fluoranthene	<0.01[5]	<0.01[5]	0.10[1]	0
Benzo(k)fluoranthene	<0.01[5]	<0.01[5]	0.10[1]	0
Benzo(a)pyrene	<0.01[5]	<0.01[5]	0.010[1]	0
Indeno(1,2,3-cd)pyrene	<0.01[5]	<0.01[5]	0.10[1]	0
Benzo(g,h,i)perylene	<0.01[5]	<0.01[5]	0.10[1]	0
Dibenz(a,h)anthracene	<0.01[5]	<0.01[5]	-	0
Total PAH	<0.2[5]	<0.2[5]	-	0

Notes:

1 Water Supply (Water Quality) Regulations 2018 – Drinking Water Standards (DWS)
2 WHO Guidelines for Drinking Water Quality (2016)
3 EQS, Annual Average (AA) – Freshwaters
4 EQS, Maximum Allowable Concentrations (MAC) – Freshwaters
5 Laboratory Limit of Detection
6 Laboratory Limit of Detection greater than SSV

Appendix K

Soakage Test Results

Trial Pit Soakage Test Summary Sheet

BRE Digest 365 (2016) Soakaway Design

Project:	**Brunswick Camp, Pirbright**
Project Number:	**1909007.002**
Test Pit Reference:	TP01/SA01
Client:	Fairhurst
Operator:	RK
Test Date:	18/11/2020

Test 1

Time (m)	Depth (mm bgl)
0.0	870
0.5	880
1.0	889
3.0	889
17.0	900
54.0	840
62.0	840
90.0	750
125.0	610
157.0	480

Test 2

Time (m)	Depth (mm bgl)

Test 3

Time (m)	Depth (mm bgl)

Ground Conditions / Comments
Gradual collapsing sides noted at 17 & 62minutes.
Frequent collapsing sides noted from 65minutes.

Pit reference	TP01/SA01
Pit depth (m)	1.80
Pit width (m)	0.48
Pit length (m)	2.07
Depth to standing water (m)	
Granular Fill used to stabilise the pit?	N

	Test 1	Test 2	Test 3
Max. depth (mm bgl)	1800		
Effective depth (mm bgl)	870		
Effective drop (mm)	930		
25% effective depth (mm bgl)	1103		
50% effective depth (mm bgl)	1335		
75% effective depth (mm bgl)	1568		
t_{25} (min)	-		
t_{75} (min)	-		
V_{p75-25} (m^3)	-		
a_{p50} (m^2)	-		
t_{p75-25} (min)	-		

Note: Where granular fill used to stabilise the test pit, assume there to be 30% free volume.

Soil Infiltration Rate (m/sec)	No Infiltration Rate Calculated
Soil Infiltration Rate (mm/hr)	
Extrapolated Data?	No