Our Ref: 23206/LO.001/AIB

Mr S. Stuart
Vistry South East Midlands
Penman House
1 Penman Way
Grove Park
Enderby
LEICESTER
LE19 1SY

2 April 2025

Dear Shaun

Site Address: Former RAF Upwood, Ramsey, Cambridgeshire
Developer: Vistry South East Midlands
Construction Phase Remediation: Clean Cover Validation – Plots 7 to 22

Background

Georisk Management Limited (Georisk) has been commissioned by Vistry South East Midlands (Vistry) to provide independent validation and verification of the construction phase remediation works for the above project.

The requirements of the construction phase remediation works are detailed in "*Remediation Method Statement and Validation Plan*" (RMS) prepared by Georisk, reference 23206/2 Revision 1 dated November 2023. This report should be referred to for specific details. As part of this, clean cover was to be placed in garden areas of all plots.

This present correspondence presents clean cover validation records for **Plots 7 to 22.**

Validation of Clean Cover Quality

Source of Capping Soils

Plots 7 to 22, fall within Phase 1a of the development that lies outside the area of former RAF infrastructure. The former use of this part of the site comprised a residential property "Upwoodhill House" with associated gardens. Ground investigation completed in this locality generally confirmed the presence of topsoil onto in situ natural material, with only nominal and localised Made Ground comprising reworked natural soil. Chemical analysis of the near surface soils revealed no elevated contaminants of concern in the context of the proposed end use of the site. An Exploratory Hole Location Plan, relevant exploratory hole records and chemical test results are presented in Appendix A; GTP31 to GTP36 inclusive are relevant.

Existing Topsoil from this area was stripped off and stockpiled for potential reuse in garden areas. Two soils samples were taken from this stockpile and were sent to a UKAS accredited laboratory for testing for a range of potential contaminants of concern, as identified in the RMS. The results are included in Appendix B; reference i2 Analytical Limited (i2) Report No. 24-044204 dated 3 October 2024.

In all cases the test results are below the Validation Criteria set out in the RMS document and; therefore, the verification testing confirms that the site-won topsoil stockpile was suitable for use in clean cover construction.

Given the above, supported by previous investigation data, it was considered appropriate to provide 600 mm clean cover in gardens by relaying site won topsoil over the underlying natural retained subsoil that remains in situ and will form part of the clean capping layer.

Verification Testing of Clean Cover Materials

Georisk attended site on 12 March 2025 and obtained representative samples of emplaced topsoil and underlying retained subsoil from a selection of locations across completed gardens areas. Visually, the placed topsoil and retained subsoil was clean and free from deleterious material.

The samples were sent to a UKAS accredited laboratory for testing for a range of potential contaminants of concern, as identified in the RMS. The results are included in Appendix C; reference i2 Report No. 25-012735 dated 24 March 2025.

In all cases the test results are below the Validation Criteria set out in the RMS document and; therefore, the verification testing confirms that the capping soils are suitable for use in clean cover construction.

Validation of Clean Cover Thickness

Georisk attended site on 12 March 2025 in order to validate the thickness of clean cover placed in the gardens of Plots 7 to 22. Validation was achieved by inspecting spot check excavations dug through the emplaced soil. Photographs taken at the time of inspection are provided in Appendix D.

The inspections confirmed that a clean cover layer to the required minimum depth of at least 600 mm (including 150 mm topsoil) was present in accordance with the requirements of the RMS.

Conclusion

On the basis of the above comments and enclosures, an appropriate clean cover layer has been provided for Plots 7 to 22.

We would therefore recommend that any relevant Local Authority/NHBC Land Quality Conditions be discharged for Plots 7 to 22.

Yours sincerely



APPENDIX A
RELEVANT GROUND INVESTIGATION INFORMATION



Notes

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This drawing is to be read in conjunction with all development drawings, and designers risk assessments.

This drawing must not be scaled. Work to figured dimensions only.

KEY

GTP27 — Trial Pit Location (Georisk 2023)

S1 — Stockpile of Crushed Material

Rev	Date	Description	Initials

Client

VISTRY PARTNERSHIPS LIMITED

georisk MANAGEMENT

Varney House, 91 Spon Lane, West Bromwich, B70 6AB
t. 0121 553 4044, f. 0121 553 1112
www.georisk-uk.com, email. enquiries@georisk-uk.com

Contract

FORMER RAF UPWOOD

Drawing Title

EXPLORATORY HOLE LOCATION PLAN

Drawing Status	FINAL		
Drawn By	AIB	Date	28/09/23
Checked/Approved	AIB	Date	28/09/23
Scale	NTS	Drawing Number	23206/1

[redacted]
Georisk Management Limited
Varney House
91 Spon Lane
West Bromwich
B70 6AB

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

e: [redacted]

Combined Report - Former RAF Upwood

Project / Site name:	Former RAF Upwood	Samples received on:	29/09/2023
Your job number:	23206	Samples instructed on/ Analysis started on:	29/09/2023
Your order number:	23206	Analysis completed by:	11/10/2023
Report Issue Number:	1	Report issued on:	15/10/2023
Samples Analysed:	44 soil samples		

[redacted]
Reporting Specialist
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 relate only to the sample(s) submitted for testing.

Combined Report - Former RAF Upwood
Project / Site name: Former RAF Upwood
Your Order No: 23206

Lab Sample Number				2830083	2830084	2830085	2830086	2830087
Sample Reference				GTP01	GTP02	GTP03	GTP04	GTP05
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.20	0.40	0.10	0.40	0.20
Date Sampled				25/09/2023	25/09/2023	25/09/2023	25/09/2023	25/09/2023
Time Taken				0900	0900	0900	0900	0900
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	15	18	12	12	14
Total mass of sample received	kg	0.001	NONE	1.5	0.9	0.9	0.9	0.9
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	MLO	MLO	MLO	MLO	MLO
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	8.2	8.1	8.2	8.3	8.4
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0052	0.0881	0.0345	0.0084	0.0061
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.06	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.51	< 0.05	0.09
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.25	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.05	< 0.05	1.7	< 0.05	0.16
Pyrene	mg/kg	0.05	MCERTS	0.05	0.05	1.5	< 0.05	0.14
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.72	< 0.05	0.07
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.7	< 0.05	0.05
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	1.1	< 0.05	0.07
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	0.4	< 0.05	0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.93	< 0.05	0.08
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.45	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.56	< 0.05	< 0.05
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	< 0.80	< 0.80	8.84	< 0.80	< 0.80
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	13	16	13	14	16
Boron (water soluble)	mg/kg	0.2	MCERTS	0.8	1.6	0.4	0.5	1.5
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	30	32	27	27	34
Copper (aqua regia extractable)	mg/kg	1	MCERTS	20	23	19	22	20
Lead (aqua regia extractable)	mg/kg	1	MCERTS	23	14	18	18	15
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	25	32	26	26	28
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	71	68	61	60	78

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Combined Report - Former RAF Upwood
Project / Site name: Former RAF Upwood
Your Order No: 23206

Lab Sample Number				2830083	2830084	2830085	2830086	2830087
Sample Reference				GTP01	GTP02	GTP03	GTP04	GTP05
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.20	0.40	0.10	0.40	0.20
Date Sampled				25/09/2023	25/09/2023	25/09/2023	25/09/2023	25/09/2023
Time Taken				0900	0900	0900	0900	0900
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Monoaromatics & Oxygenates								
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
p & m-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
o-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Petroleum Hydrocarbons								
TPH-CWG - Aliphatic >EC5 - EC6 $_{HS_1D_AL}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC6 - EC8 $_{HS_1D_AL}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC8 - EC10 $_{HS_1D_AL}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC10 - EC12 $_{EH_CU_1D_AL}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16 $_{EH_CU_1D_AL}$	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21 $_{EH_CU_1D_AL}$	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35 $_{EH_CU_1D_AL}$	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35) $_{EH_CU+HS_1D_AL}$	mg/kg	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >EC5 - EC7 $_{HS_1D_AR}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aromatic >EC7 - EC8 $_{HS_1D_AR}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aromatic >EC8 - EC10 $_{HS_1D_AR}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aromatic >EC10 - EC12 $_{EH_CU_1D_AR}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16 $_{EH_CU_1D_AR}$	mg/kg	2	MCERTS	< 2.0	< 2.0	3.6	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21 $_{EH_CU_1D_AR}$	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >EC21 - EC35 $_{EH_CU_1D_AR}$	mg/kg	10	MCERTS	< 10	< 10	23	< 10	< 10
TPH-CWG - Aromatic (EC5 - EC35) $_{EH_CU+HS_1D_AR}$	mg/kg	10	NONE	< 10	< 10	34	< 10	< 10

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Combined Report - Former RAF Upwood
Project / Site name: Former RAF Upwood
Your Order No: 23206

Lab Sample Number				2830088	2830089	2830090	2830091	2830092
Sample Reference				GTP06	GTP07	GTP08	GTP09	GTP10
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.60	0.20	0.60	0.60	0.20
Date Sampled				25/09/2023	25/09/2023	25/09/2023	25/09/2023	25/09/2023
Time Taken				0900	0900	0900	1600	1600
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	14	14	9.3	13	9.7
Total mass of sample received	kg	0.001	NONE	0.9	0.9	0.9	0.9	0.9
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	MLO	MLO	MLO	MLO	MLO
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	8.2	8.3	8.5	8.3	6.6
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.007	0.0058	0.0096	0.0057	0.0029
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.09	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.27	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.22	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.07	0.16	4.8	< 0.05	0.07
Anthracene	mg/kg	0.05	MCERTS	< 0.05	0.18	1.2	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.19	0.36	8.4	< 0.05	0.23
Pyrene	mg/kg	0.05	MCERTS	0.16	0.33	7.2	< 0.05	0.17
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.1	0.18	3.6	< 0.05	0.09
Chrysene	mg/kg	0.05	MCERTS	0.09	0.17	3.3	< 0.05	0.14
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.11	0.2	4.2	< 0.05	0.17
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.05	0.11	2	< 0.05	0.07
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.1	0.18	3.8	< 0.05	0.13
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	0.1	1.9	< 0.05	0.09
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.39	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	0.11	2	< 0.05	0.09
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	0.87	2.08	43.4	< 0.80	1.25
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	16	15	12	12	15
Boron (water soluble)	mg/kg	0.2	MCERTS	2.3	1.8	0.6	3.3	1
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	35	32	13	28	24
Copper (aqua regia extractable)	mg/kg	1	MCERTS	70	20	8	18	20
Lead (aqua regia extractable)	mg/kg	1	MCERTS	34	22	11	20	27
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	28	26	9.2	22	21
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	670	72	35	230	74

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Combined Report - Former RAF Upwood
Project / Site name: Former RAF Upwood
Your Order No: 23206

Lab Sample Number				2830088	2830089	2830090	2830091	2830092
Sample Reference				GTP06	GTP07	GTP08	GTP09	GTP10
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.60	0.20	0.60	0.60	0.20
Date Sampled				25/09/2023	25/09/2023	25/09/2023	25/09/2023	25/09/2023
Time Taken				0900	0900	0900	1600	1600
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Monoaromatics & Oxygenates								
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
p & m-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
o-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Petroleum Hydrocarbons								
TPH-CWG - Aliphatic >EC5 - EC6 $_{HS_1D_AL}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC6 - EC8 $_{HS_1D_AL}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC8 - EC10 $_{HS_1D_AL}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC10 - EC12 $_{EH_CU_1D_AL}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16 $_{EH_CU_1D_AL}$	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21 $_{EH_CU_1D_AL}$	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35 $_{EH_CU_1D_AL}$	mg/kg	8	MCERTS	< 8.0	< 8.0	35	< 8.0	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35) $_{EH_CU+HS_1D_AL}$	mg/kg	10	NONE	< 10	< 10	39	< 10	< 10
TPH-CWG - Aromatic >EC5 - EC7 $_{HS_1D_AR}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aromatic >EC7 - EC8 $_{HS_1D_AR}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aromatic >EC8 - EC10 $_{HS_1D_AR}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aromatic >EC10 - EC12 $_{EH_CU_1D_AR}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16 $_{EH_CU_1D_AR}$	mg/kg	2	MCERTS	< 2.0	< 2.0	3.2	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21 $_{EH_CU_1D_AR}$	mg/kg	10	MCERTS	< 10	< 10	26	< 10	< 10
TPH-CWG - Aromatic >EC21 - EC35 $_{EH_CU_1D_AR}$	mg/kg	10	MCERTS	< 10	< 10	64	< 10	< 10
TPH-CWG - Aromatic (EC5 - EC35) $_{EH_CU+HS_1D_AR}$	mg/kg	10	NONE	< 10	< 10	94	< 10	< 10

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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

Combined Report - Former RAF Upwood
Project / Site name: Former RAF Upwood
Your Order No: 23206

Lab Sample Number				2830093	2830094	2830095	2830096	2830097
Sample Reference				GTP11	GTP12	GTP13	GTP14	GTP15
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.50	0.10	0.40	0.20
Date Sampled				25/09/2023	25/09/2023	25/09/2023	26/09/2023	26/09/2023
Time Taken				1600	1600	1600	0900	0900
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	20	15	15	11	15
Total mass of sample received	kg	0.001	NONE	0.9	0.9	0.9	0.9	0.9
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	MJN	MJN	MJN	MJN	MJN
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	7.4	7.4	7.7	8	8.3
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0205	0.0255	0.0101	0.0087	0.0243
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.07	< 0.05	0.42	< 0.05	0.36
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.07	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.17	< 0.05	0.84	< 0.05	0.55
Pyrene	mg/kg	0.05	MCERTS	0.13	< 0.05	0.74	< 0.05	0.44
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.07	< 0.05	0.38	< 0.05	0.22
Chrysene	mg/kg	0.05	MCERTS	0.08	< 0.05	0.4	< 0.05	0.25
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.08	< 0.05	0.5	< 0.05	0.27
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	0.2	< 0.05	0.1
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.07	< 0.05	0.38	< 0.05	0.23
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.17	< 0.05	0.11
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.21	< 0.05	0.12
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	< 0.80	< 0.80	4.31	< 0.80	2.7
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	13	16	18	14	14
Boron (water soluble)	mg/kg	0.2	MCERTS	4.3	1.4	1.4	0.8	2.5
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	32	30	35	25	30
Copper (aqua regia extractable)	mg/kg	1	MCERTS	18	14	19	17	19
Lead (aqua regia extractable)	mg/kg	1	MCERTS	20	18	28	15	27
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	23	23	25	23	23
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	74	71	97	57	78

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Combined Report - Former RAF Upwood
Project / Site name: Former RAF Upwood
Your Order No: 23206

Lab Sample Number				2830093	2830094	2830095	2830096	2830097
Sample Reference				GTP11	GTP12	GTP13	GTP14	GTP15
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.50	0.10	0.40	0.20
Date Sampled				25/09/2023	25/09/2023	25/09/2023	26/09/2023	26/09/2023
Time Taken				1600	1600	1600	0900	0900
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Monoaromatics & Oxygenates								
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
p & m-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
o-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Petroleum Hydrocarbons								
TPH-CWG - Aliphatic >EC5 - EC6 $_{HS_1D_AL}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC6 - EC8 $_{HS_1D_AL}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC8 - EC10 $_{HS_1D_AL}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC10 - EC12 $_{EH_CU_1D_AL}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16 $_{EH_CU_1D_AL}$	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21 $_{EH_CU_1D_AL}$	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35 $_{EH_CU_1D_AL}$	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35) $_{EH_CU+HS_1D_AL}$	mg/kg	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >EC5 - EC7 $_{HS_1D_AR}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aromatic >EC7 - EC8 $_{HS_1D_AR}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aromatic >EC8 - EC10 $_{HS_1D_AR}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aromatic >EC10 - EC12 $_{EH_CU_1D_AR}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16 $_{EH_CU_1D_AR}$	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21 $_{EH_CU_1D_AR}$	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >EC21 - EC35 $_{EH_CU_1D_AR}$	mg/kg	10	MCERTS	< 10	< 10	12	< 10	< 10
TPH-CWG - Aromatic (EC5 - EC35) $_{EH_CU+HS_1D_AR}$	mg/kg	10	NONE	< 10	< 10	17	< 10	12

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Combined Report - Former RAF Upwood
Project / Site name: Former RAF Upwood
Your Order No: 23206

Lab Sample Number				2830098	2830099	2830100	2830101	2830102
Sample Reference				GTP17	GTP18	GTP19	GTP20	GTP21
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.10	0.10	0.20	0.30
Date Sampled				26/09/2023	26/09/2023	26/09/2023	26/09/2023	26/09/2023
Time Taken				0900	0900	0900	0900	0900
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	15	15	15	15	16
Total mass of sample received	kg	0.001	NONE	0.9	0.9	0.9	0.8	0.9
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	KWB	KWB	KWB	KWB	KWB
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	8.1	8.8	8.2	9.1	8.2
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0259	0.791	0.174	0.222	0.136
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	0.11	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	0.05	0.14	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	0.07	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.51	2.5	< 0.05	0.09	< 0.05
Anthracene	mg/kg	0.05	MCERTS	0.09	0.64	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	1.5	9.9	< 0.05	0.15	< 0.05
Pyrene	mg/kg	0.05	MCERTS	1.4	10	< 0.05	0.14	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.66	5.4	< 0.05	0.1	< 0.05
Chrysene	mg/kg	0.05	MCERTS	0.76	5.2	< 0.05	0.09	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.95	9	< 0.05	0.14	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.41	3.7	< 0.05	0.06	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.71	8	< 0.05	0.11	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.46	4.3	< 0.05	0.06	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.12	0.86	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.48	4.8	< 0.05	0.08	< 0.05
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	8.15	64.4	< 0.80	1.02	< 0.80
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	18	17	24	17	16
Boron (water soluble)	mg/kg	0.2	MCERTS	0.6	1.8	0.9	0.8	1.6
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	30	28	24	23	25
Copper (aqua regia extractable)	mg/kg	1	MCERTS	18	17	16	18	20
Lead (aqua regia extractable)	mg/kg	1	MCERTS	16	36	14	20	14
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	33	21	24	27	27
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	69	110	54	71	61

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Combined Report - Former RAF Upwood
Project / Site name: Former RAF Upwood
Your Order No: 23206

Lab Sample Number				2830098	2830099	2830100	2830101	2830102
Sample Reference				GTP17	GTP18	GTP19	GTP20	GTP21
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.10	0.10	0.20	0.30
Date Sampled				26/09/2023	26/09/2023	26/09/2023	26/09/2023	26/09/2023
Time Taken				0900	0900	0900	0900	0900
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Monoaromatics & Oxygenates								
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
p & m-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
o-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Petroleum Hydrocarbons								
TPH-CWG - Aliphatic >EC5 - EC6 $_{HS_1D_AL}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC6 - EC8 $_{HS_1D_AL}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC8 - EC10 $_{HS_1D_AL}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC10 - EC12 $_{EH_CU_1D_AL}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16 $_{EH_CU_1D_AL}$	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21 $_{EH_CU_1D_AL}$	mg/kg	8	MCERTS	< 8.0	9.8	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35 $_{EH_CU_1D_AL}$	mg/kg	8	MCERTS	< 8.0	21	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35) $_{EH_CU+HS_1D_AL}$	mg/kg	10	NONE	< 10	32	< 10	< 10	< 10
TPH-CWG - Aromatic >EC5 - EC7 $_{HS_1D_AR}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aromatic >EC7 - EC8 $_{HS_1D_AR}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aromatic >EC8 - EC10 $_{HS_1D_AR}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aromatic >EC10 - EC12 $_{EH_CU_1D_AR}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16 $_{EH_CU_1D_AR}$	mg/kg	2	MCERTS	< 2.0	2.5	< 2.0	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21 $_{EH_CU_1D_AR}$	mg/kg	10	MCERTS	< 10	26	< 10	< 10	< 10
TPH-CWG - Aromatic >EC21 - EC35 $_{EH_CU_1D_AR}$	mg/kg	10	MCERTS	18	70	< 10	< 10	< 10
TPH-CWG - Aromatic (EC5 - EC35) $_{EH_CU+HS_1D_AR}$	mg/kg	10	NONE	25	99	< 10	< 10	< 10

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Combined Report - Former RAF Upwood
Project / Site name: Former RAF Upwood
Your Order No: 23206

Lab Sample Number				2830103	2830104	2830105	2830106	2830107
Sample Reference				GTP22	GTP23	GTP24	GTP25	GTP26
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.10	0.20	0.10	0.30
Date Sampled				26/09/2023	26/09/2023	26/09/2023	26/09/2023	26/09/2023
Time Taken				0900	0900	1600	1600	1600
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	15	13	14	13	15
Total mass of sample received	kg	0.001	NONE	0.8	0.8	0.8	0.8	0.9
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	MWI	MWI	MWI	MWI	MWI
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	8.1	9.2	8.1	8.2	8.2
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.289	1.41	0.0053	0.0085	0.195
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	0.11	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	0.35	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	0.29	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	5.3	< 0.05	0.34	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	1.1	< 0.05	0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	13	< 0.05	0.79	< 0.05
Pyrene	mg/kg	0.05	MCERTS	0.05	11	< 0.05	0.66	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	5.9	< 0.05	0.37	< 0.05
Chrysene	mg/kg	0.05	MCERTS	< 0.05	5.8	< 0.05	0.42	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	7.7	< 0.05	0.55	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	2.7	< 0.05	0.13	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	6.1	< 0.05	0.41	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	2.9	< 0.05	0.16	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	0.67	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	3.2	< 0.05	0.22	< 0.05
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	< 0.80	65.9	< 0.80	4.1	< 0.80
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	13	18	12	14	13
Boron (water soluble)	mg/kg	0.2	MCERTS	0.9	2.4	1.1	1.2	0.7
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	27	28	28	32	29
Copper (aqua regia extractable)	mg/kg	1	MCERTS	18	35	14	20	19
Lead (aqua regia extractable)	mg/kg	1	MCERTS	24	62	14	28	13
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	24	24	19	21	27
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	62	170	63	82	57

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Combined Report - Former RAF Upwood
Project / Site name: Former RAF Upwood
Your Order No: 23206

Lab Sample Number				2830103	2830104	2830105	2830106	2830107
Sample Reference				GTP22	GTP23	GTP24	GTP25	GTP26
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.10	0.20	0.10	0.30
Date Sampled				26/09/2023	26/09/2023	26/09/2023	26/09/2023	26/09/2023
Time Taken				0900	0900	1600	1600	1600
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Monoaromatics & Oxygenates								
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
p & m-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
o-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Petroleum Hydrocarbons								
TPH-CWG - Aliphatic >EC5 - EC6 $_{HS_1D_AL}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC6 - EC8 $_{HS_1D_AL}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC8 - EC10 $_{HS_1D_AL}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC10 - EC12 $_{EH_CU_1D_AL}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16 $_{EH_CU_1D_AL}$	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21 $_{EH_CU_1D_AL}$	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35 $_{EH_CU_1D_AL}$	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35) $_{EH_CU+HS_1D_AL}$	mg/kg	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >EC5 - EC7 $_{HS_1D_AR}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aromatic >EC7 - EC8 $_{HS_1D_AR}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aromatic >EC8 - EC10 $_{HS_1D_AR}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aromatic >EC10 - EC12 $_{EH_CU_1D_AR}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16 $_{EH_CU_1D_AR}$	mg/kg	2	MCERTS	< 2.0	2.4	< 2.0	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21 $_{EH_CU_1D_AR}$	mg/kg	10	MCERTS	< 10	26	< 10	< 10	< 10
TPH-CWG - Aromatic >EC21 - EC35 $_{EH_CU_1D_AR}$	mg/kg	10	MCERTS	< 10	57	< 10	< 10	< 10
TPH-CWG - Aromatic (EC5 - EC35) $_{EH_CU+HS_1D_AR}$	mg/kg	10	NONE	< 10	85	< 10	< 10	< 10

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Combined Report - Former RAF Upwood
Project / Site name: Former RAF Upwood
Your Order No: 23206

Lab Sample Number				2830108	2830109	2830110	2830111	2830112
Sample Reference				GTP27	GTP28	GTP29	GTP31	GTP32
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.50	0.40	0.60	0.20	0.40
Date Sampled				26/09/2023	27/09/2023	27/09/2023	27/09/2023	27/09/2023
Time Taken				1600	0900	0900	0900	1600
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	12	13	11	15	11
Total mass of sample received	kg	0.001	NONE	1.5	0.9	0.8	0.8	0.9
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	MWI	MWI	MWI	MWI	MWI
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	8.4	8.3	8.4	8.2	8.4
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0419	0.0087	0.012	0.0121	0.0162
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	0.16	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	0.11	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	1.7	0.13	0.1	0.06
Anthracene	mg/kg	0.05	MCERTS	< 0.05	0.44	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	4.4	0.31	0.25	0.11
Pyrene	mg/kg	0.05	MCERTS	< 0.05	3.7	0.3	0.23	0.09
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	2.2	0.16	0.11	< 0.05
Chrysene	mg/kg	0.05	MCERTS	< 0.05	2.1	0.19	0.14	0.05
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	2.8	0.21	0.17	0.05
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	0.92	0.11	0.07	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	2.2	0.18	0.15	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	1	0.08	0.07	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	0.23	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	1.1	0.11	0.1	< 0.05
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	< 0.80	23.1	1.78	1.39	< 0.80
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	16	15	14	16	15
Boron (water soluble)	mg/kg	0.2	MCERTS	0.6	1	0.6	1.7	1
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	27	27	24	22	24
Copper (aqua regia extractable)	mg/kg	1	MCERTS	17	27	21	22	15
Lead (aqua regia extractable)	mg/kg	1	MCERTS	12	28	26	33	13
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	27	24	22	23	27
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	51	93	69	80	51

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Combined Report - Former RAF Upwood
Project / Site name: Former RAF Upwood
Your Order No: 23206

Lab Sample Number				2830108	2830109	2830110	2830111	2830112
Sample Reference				GTP27	GTP28	GTP29	GTP31	GTP32
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.50	0.40	0.60	0.20	0.40
Date Sampled				26/09/2023	27/09/2023	27/09/2023	27/09/2023	27/09/2023
Time Taken				1600	0900	0900	0900	1600
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Monoaromatics & Oxygenates								
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
p & m-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
o-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Petroleum Hydrocarbons								
TPH-CWG - Aliphatic >EC5 - EC6 $_{HS_1D_AL}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC6 - EC8 $_{HS_1D_AL}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC8 - EC10 $_{HS_1D_AL}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC10 - EC12 $_{EH_CU_1D_AL}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16 $_{EH_CU_1D_AL}$	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21 $_{EH_CU_1D_AL}$	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35 $_{EH_CU_1D_AL}$	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35) $_{EH_CU+HS_1D_AL}$	mg/kg	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >EC5 - EC7 $_{HS_1D_AR}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aromatic >EC7 - EC8 $_{HS_1D_AR}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aromatic >EC8 - EC10 $_{HS_1D_AR}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aromatic >EC10 - EC12 $_{EH_CU_1D_AR}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16 $_{EH_CU_1D_AR}$	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21 $_{EH_CU_1D_AR}$	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >EC21 - EC35 $_{EH_CU_1D_AR}$	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (EC5 - EC35) $_{EH_CU+HS_1D_AR}$	mg/kg	10	NONE	< 10	16	< 10	< 10	< 10

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Combined Report - Former RAF Upwood
Project / Site name: Former RAF Upwood
Your Order No: 23206

Lab Sample Number				2830113	2830114	2830115	2830116	2830117
Sample Reference				GTP33	GTP34	GTP35	GTP36	S1A
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.20	0.30	0.10	0.50	None Supplied
Date Sampled				27/09/2023	27/09/2023	27/09/2023	27/09/2023	27/09/2023
Time Taken				1600	1600	1600	1600	0900
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	14	10	11	9.3	9.1
Total mass of sample received	kg	0.001	NONE	0.8	0.8	0.8	0.8	0.8
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	SSZ	SSZ	SSZ	SSZ	SSZ
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	8.4	8.3	8.4	8.1	11.5
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.014	0.0182	0.0252	0.063	0.468
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.11	< 0.05	0.14	< 0.05	0.29
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	0.06
Fluoranthene	mg/kg	0.05	MCERTS	0.27	< 0.05	0.39	< 0.05	0.68
Pyrene	mg/kg	0.05	MCERTS	0.24	< 0.05	0.36	< 0.05	0.62
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.14	< 0.05	0.18	< 0.05	0.38
Chrysene	mg/kg	0.05	MCERTS	0.15	< 0.05	0.24	< 0.05	0.41
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.18	< 0.05	0.31	< 0.05	0.53
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.08	< 0.05	0.11	< 0.05	0.22
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.16	< 0.05	0.23	< 0.05	0.41
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.09	< 0.05	0.13	< 0.05	0.23
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.09	< 0.05	0.15	< 0.05	0.25
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	1.51	< 0.80	2.24	< 0.80	4.08
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	17	22	19	18	15
Boron (water soluble)	mg/kg	0.2	MCERTS	1	0.6	1.5	0.8	2.1
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	23	22	19	19	20
Copper (aqua regia extractable)	mg/kg	1	MCERTS	20	21	24	15	23
Lead (aqua regia extractable)	mg/kg	1	MCERTS	36	45	43	20	19
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	23	24	23	21	17
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	74	92	88	57	100

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Combined Report - Former RAF Upwood
Project / Site name: Former RAF Upwood
Your Order No: 23206

Lab Sample Number				2830113	2830114	2830115	2830116	2830117
Sample Reference				GTP33	GTP34	GTP35	GTP36	S1A
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.20	0.30	0.10	0.50	None Supplied
Date Sampled				27/09/2023	27/09/2023	27/09/2023	27/09/2023	27/09/2023
Time Taken				1600	1600	1600	1600	0900
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Monoaromatics & Oxygenates								
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
p & m-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
o-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Petroleum Hydrocarbons								
TPH-CWG - Aliphatic >EC5 - EC6 $_{HS_1D_AL}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC6 - EC8 $_{HS_1D_AL}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC8 - EC10 $_{HS_1D_AL}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC10 - EC12 $_{EH_CU_1D_AL}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16 $_{EH_CU_1D_AL}$	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21 $_{EH_CU_1D_AL}$	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35 $_{EH_CU_1D_AL}$	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	51
TPH-CWG - Aliphatic (EC5 - EC35) $_{EH_CU+HS_1D_AL}$	mg/kg	10	NONE	< 10	< 10	< 10	< 10	53
TPH-CWG - Aromatic >EC5 - EC7 $_{HS_1D_AR}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aromatic >EC7 - EC8 $_{HS_1D_AR}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aromatic >EC8 - EC10 $_{HS_1D_AR}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aromatic >EC10 - EC12 $_{EH_CU_1D_AR}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16 $_{EH_CU_1D_AR}$	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21 $_{EH_CU_1D_AR}$	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >EC21 - EC35 $_{EH_CU_1D_AR}$	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	43
TPH-CWG - Aromatic (EC5 - EC35) $_{EH_CU+HS_1D_AR}$	mg/kg	10	NONE	< 10	< 10	< 10	< 10	46

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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

Combined Report - Former RAF Upwood
Project / Site name: Former RAF Upwood
Your Order No: 23206

Lab Sample Number				2830118	2830119	2830120	2830121	2830122
Sample Reference				S1B	S1C	S2A	S2B	S2C
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				27/09/2023	27/09/2023	27/09/2023	27/09/2023	27/09/2023
Time Taken				0900	0900	0900	0900	0900
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	12	9.3	13	11	13
Total mass of sample received	kg	0.001	NONE	0.8	0.8	0.8	0.9	0.9
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	Chrysotile	Chrysotile	Chrysotile
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Detected	Detected	Detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	< 0.001	< 0.001	< 0.001
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	< 0.001	< 0.001	< 0.001
Asbestos Analyst ID	N/A	N/A	N/A	PDO	PDO	PDO	PDO	PDO
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	11.2	11.7	10.5	11	10.7
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.884	0.174	1.4	1.37	1.43
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	0.2
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	0.06	0.07	0.07	0.73
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	0.43
Phenanthrene	mg/kg	0.05	MCERTS	0.51	0.83	0.54	0.63	9.5
Anthracene	mg/kg	0.05	MCERTS	0.1	0.15	0.11	0.14	2.2
Fluoranthene	mg/kg	0.05	MCERTS	1.2	1.7	1.4	1.4	10
Pyrene	mg/kg	0.05	MCERTS	1	1.3	1.3	1.2	8.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.68	0.67	0.81	0.76	4.2
Chrysene	mg/kg	0.05	MCERTS	0.64	0.74	0.9	0.81	3.5
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.8	0.88	1.3	1.1	4
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.38	0.37	0.55	0.43	1.9
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.67	0.67	1	0.86	3.2
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.37	0.37	0.61	0.47	1.7
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	0.1	0.14	0.14	0.48
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.39	0.41	0.63	0.55	1.7
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	6.69	8.22	9.29	8.55	52.1
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	16	14	15	16	14
Boron (water soluble)	mg/kg	0.2	MCERTS	1.5	0.6	2.3	1.2	2.2
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	20	19	22	26	24
Copper (aqua regia extractable)	mg/kg	1	MCERTS	29	23	12	24	11
Lead (aqua regia extractable)	mg/kg	1	MCERTS	21	21	30	24	37
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	17	15	19	19	17
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	110	95	110	87	95

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Combined Report - Former RAF Upwood
Project / Site name: Former RAF Upwood
Your Order No: 23206

Lab Sample Number				2830118	2830119	2830120	2830121	2830122
Sample Reference				S1B	S1C	S2A	S2B	S2C
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				27/09/2023	27/09/2023	27/09/2023	27/09/2023	27/09/2023
Time Taken				0900	0900	0900	0900	0900
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Monoaromatics & Oxygenates								
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
p & m-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
o-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Petroleum Hydrocarbons								
TPH-CWG - Aliphatic >EC5 - EC6 $_{HS_1D_AL}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC6 - EC8 $_{HS_1D_AL}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC8 - EC10 $_{HS_1D_AL}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC10 - EC12 $_{EH_CU_1D_AL}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16 $_{EH_CU_1D_AL}$	mg/kg	2	MCERTS	3.8	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21 $_{EH_CU_1D_AL}$	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35 $_{EH_CU_1D_AL}$	mg/kg	8	MCERTS	56	39	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35) $_{EH_CU+HS_1D_AL}$	mg/kg	10	NONE	67	43	< 10	< 10	< 10
TPH-CWG - Aromatic >EC5 - EC7 $_{HS_1D_AR}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aromatic >EC7 - EC8 $_{HS_1D_AR}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aromatic >EC8 - EC10 $_{HS_1D_AR}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aromatic >EC10 - EC12 $_{EH_CU_1D_AR}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16 $_{EH_CU_1D_AR}$	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	2.1
TPH-CWG - Aromatic >EC16 - EC21 $_{EH_CU_1D_AR}$	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	11
TPH-CWG - Aromatic >EC21 - EC35 $_{EH_CU_1D_AR}$	mg/kg	10	MCERTS	33	24	< 10	< 10	20
TPH-CWG - Aromatic (EC5 - EC35) $_{EH_CU+HS_1D_AR}$	mg/kg	10	NONE	34	26	< 10	< 10	33

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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

Combined Report - Former RAF Upwood
Project / Site name: Former RAF Upwood
Your Order No: 23206

Lab Sample Number				2830123	2830124	2830125	2831562
Sample Reference				S3A	S3B	S3C	GTP16
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	0.30
Date Sampled				27/09/2023	27/09/2023	27/09/2023	26/09/2023
Time Taken				0900	0900	0900	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	15	9	11	16
Total mass of sample received	kg	0.001	NONE	0.9	0.9	0.9	1.1

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	WEM	WEM	WEM	MJN

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	10.4	11.3	11.1	8.7
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	1.36	0.77	0.74	1.8

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	0.11	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.05
Acenaphthene	mg/kg	0.05	MCERTS	0.07	0.27	0.07	0.72
Fluorene	mg/kg	0.05	MCERTS	< 0.05	0.16	< 0.05	0.51
Phenanthrene	mg/kg	0.05	MCERTS	0.68	1.7	0.92	7
Anthracene	mg/kg	0.05	MCERTS	0.14	0.27	0.17	1.6
Fluoranthene	mg/kg	0.05	MCERTS	1.7	3	2.5	14
Pyrene	mg/kg	0.05	MCERTS	1.6	2.9	2.6	11
Benzo(a)anthracene	mg/kg	0.05	MCERTS	1.1	1.7	1.7	6.2
Chrysene	mg/kg	0.05	MCERTS	1	1.6	1.7	5.5
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	1.8	2	2	7
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.55	0.84	0.8	2.9
Benzo(a)pyrene	mg/kg	0.05	MCERTS	1.3	1.5	1.4	5
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.78	0.84	0.81	2.5
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.22	0.22	0.26	0.8
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.81	0.84	0.83	2.5

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	11.7	18	15.7	67.2

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	15	13	14	14
Boron (water soluble)	mg/kg	0.2	MCERTS	2.4	1.9	1.8	2.4
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	24	20	23	22
Copper (aqua regia extractable)	mg/kg	1	MCERTS	11	20	20	14
Lead (aqua regia extractable)	mg/kg	1	MCERTS	38	24	25	45
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	19	16	18	19
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	110	81	83	83

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Combined Report - Former RAF Upwood
Project / Site name: Former RAF Upwood
Your Order No: 23206

Lab Sample Number				2830123	2830124	2830125	2831562
Sample Reference				S3A	S3B	S3C	GTP16
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	0.30
Date Sampled				27/09/2023	27/09/2023	27/09/2023	26/09/2023
Time Taken				0900	0900	0900	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status				
Monoaromatics & Oxygenates							
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
p & m-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
o-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6 $_{HS_1D_AL}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC6 - EC8 $_{HS_1D_AL}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC8 - EC10 $_{HS_1D_AL}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC10 - EC12 $_{EH_CU_1D_AL}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16 $_{EH_CU_1D_AL}$	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21 $_{EH_CU_1D_AL}$	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35 $_{EH_CU_1D_AL}$	mg/kg	8	MCERTS	< 8.0	< 8.0	12	17
TPH-CWG - Aliphatic (EC5 - EC35) $_{EH_CU+HS_1D_AL}$	mg/kg	10	NONE	< 10	< 10	14	19

TPH-CWG - Aromatic >EC5 - EC7 $_{HS_1D_AR}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aromatic >EC7 - EC8 $_{HS_1D_AR}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aromatic >EC8 - EC10 $_{HS_1D_AR}$	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10
TPH-CWG - Aromatic >EC10 - EC12 $_{EH_CU_1D_AR}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16 $_{EH_CU_1D_AR}$	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21 $_{EH_CU_1D_AR}$	mg/kg	10	MCERTS	< 10	< 10	< 10	16
TPH-CWG - Aromatic >EC21 - EC35 $_{EH_CU_1D_AR}$	mg/kg	10	MCERTS	< 10	19	< 10	40
TPH-CWG - Aromatic (EC5 - EC35) $_{EH_CU+HS_1D_AR}$	mg/kg	10	NONE	< 10	25	< 10	57

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Combined Report - Former R/ 23-59670
Project / Site name: Former RAF Upwood
Your Order No: 23206

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2830120	S2A		148	Loose Fibres	Chrysotile	< 0.001	< 0.001
2830121	S2B		122	Loose Fibres	Chrysotile	< 0.001	< 0.001
2830122	S2C		133	Loose Fibres	Chrysotile	< 0.001	< 0.001

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

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Combined Report - Former RAF Upwood
Project / Site name: Former RAF Upwood

* 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 *
2830083	GTP01	None Supplied	0.2	Brown loam and sand with gravel and vegetation.
2830084	GTP02	None Supplied	0.4	Brown clay and loam with gravel.
2830085	GTP03	None Supplied	0.1	Brown clay and loam with gravel.
2830086	GTP04	None Supplied	0.4	Brown clay and sand with gravel.
2830087	GTP05	None Supplied	0.2	Brown clay and sand with gravel.
2830088	GTP06	None Supplied	0.6	Brown clay and sand with gravel.
2830089	GTP07	None Supplied	0.2	Brown clay and sand with gravel.
2830090	GTP08	None Supplied	0.6	Brown clay and sand with gravel.
2830091	GTP09	None Supplied	0.6	Brown clay and sand with gravel.
2830092	GTP10	None Supplied	0.2	Brown loam with gravel and vegetation.
2830093	GTP11	None Supplied	0.1	Brown clay and sand with gravel and vegetation.
2830094	GTP12	None Supplied	0.5	Brown loam and clay with gravel.
2830095	GTP13	None Supplied	0.1	Brown clay and sand with gravel and vegetation.
2830096	GTP14	None Supplied	0.4	Brown clay and sand with gravel.
2830097	GTP15	None Supplied	0.2	Brown clay and sand with gravel.
2830098	GTP17	None Supplied	0.1	Brown clay and sand with gravel.
2830099	GTP18	None Supplied	0.1	Brown clay and sand with gravel.
2830100	GTP19	None Supplied	0.1	Brown clay and sand with gravel.
2830101	GTP20	None Supplied	0.2	Brown clay and sand with gravel.
2830102	GTP21	None Supplied	0.3	Brown clay and sand with gravel.
2830103	GTP22	None Supplied	0.1	Brown clay and sand with gravel.
2830104	GTP23	None Supplied	0.1	Brown clay and sand with gravel.
2830105	GTP24	None Supplied	0.2	Brown clay and sand with gravel.
2830106	GTP25	None Supplied	0.1	Brown clay and sand with gravel and vegetation.
2830107	GTP26	None Supplied	0.3	Brown clay with gravel.
2830108	GTP27	None Supplied	0.5	Brown clay with gravel.
2830109	GTP28	None Supplied	0.4	Brown loam with gravel.
2830110	GTP29	None Supplied	0.6	Brown loam and sand with gravel and vegetation.
2830111	GTP31	None Supplied	0.2	Brown loam and sand with gravel and vegetation.
2830112	GTP32	None Supplied	0.4	Brown clay with gravel.
2830113	GTP33	None Supplied	0.2	Brown loam and sand with gravel and vegetation.
2830114	GTP34	None Supplied	0.3	Brown loam and sand with gravel and vegetation.
2830115	GTP35	None Supplied	0.1	Brown loam and sand with gravel and vegetation.
2830116	GTP36	None Supplied	0.5	Brown loam and sand with gravel and vegetation.
2830117	S1A	None Supplied	None Supplied	Brown loam and sand with gravel.
2830118	S1B	None Supplied	None Supplied	Brown loam and sand with gravel.
2830119	S1C	None Supplied	None Supplied	Brown loam and sand with gravel.
2830120	S2A	None Supplied	None Supplied	Brown loam and clay with gravel.
2830121	S2B	None Supplied	None Supplied	Brown loam and clay with gravel.
2830122	S2C	None Supplied	None Supplied	Brown loam and clay with gravel.
2830123	S3A	None Supplied	None Supplied	Brown loam and clay with gravel.
2830124	S3B	None Supplied	None Supplied	Brown loam and sand with gravel.
2830125	S3C	None Supplied	None Supplied	Brown loam and sand with gravel and brick.
2831562	GTP16	None Supplied	0.3	Brown sand with gravel and vegetation.

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Combined Report - Former RAF Upwood
Project / Site name: Former RAF Upwood

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
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
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
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	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
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
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 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. Refer to CoA for analyte specific accreditation.	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
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 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
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS. Individual components MCERTS accredited	In-house method based on USEPA8260. Refer to CoA for analyte specific accreditation	L073B-PL	W	MCERTS
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID. Refer to CoA for band specific accreditation.	In-house method with silica gel split/clean up.	L088/76-PL	D	MCERTS
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	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 or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' 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.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Combined Report - Former RAF Upwood
Project / Site name: Former RAF Upwood

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Trial Pit No. GTP31
Sheet 1 of 1

Project Name	**Project No.**	**Co-ords:** 527315.00 E 283307.00 N	**Date**
RAF Upwood	23206	**Level:** 21.79 m AOD	25/09/2023
Equipment: JCB 3CX		**Dimensions:** - Depth: 1.00 m	**Scale** 1:25
Client: Vistry Partnership Limited			**Logged By** AC

Water Strikes	Samples & In Situ Testing			Depth (m)	Level (m AOD)	Legend	Stratum Description
	Depth (m)	Type	Results				
	0.20	ES1					Greyish brown slightly gravelly slightly clayey sandy TOPSOIL. Gravel is subrounded and rounded fine and medium chert.
				0.30	21.49		Firm greyish brown slightly gravelly slightly sandy CLAY. Gravel is subangular to rounded fine to coarse quartzite, chert and shell fragments. (GLACIAL TILL)
				1.00	20.79		End of Trial Pit at 1.00 m
		Type	Results				

Remarks: Groundwater not encountered during excavation.
Backfilled with arisings upon completion.

Stability: Pit sides stable.

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Trial Pit No. GTP32 Sheet 1 of 1

Project Name	**Project No.**	**Co-ords:**	527341.00 E 283270.00 N	**Date**
RAF Upwood	23206	**Level:**	21.40 m AOD	25/09/2023
Equipment: JCB 3CX		**Dimensions:** - Depth: 1.00 m		**Scale** 1:25
Client: Vistry Partnership Limited				**Logged By** AC

Water Strikes	Samples & In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m AOD)	Legend	Stratum Description
				0.25	21.15		Greyish brown slightly gravelly slightly clayey sandy TOPSOIL. Gravel is subrounded and rounded fine and medium chert.
	0.40	ES1					Firm greyish brown slightly gravelly slightly sandy CLAY. Gravel is subangular to rounded fine to coarse quartzite, chert and shell fragments. (GLACIAL TILL)
				1.00	20.40		End of Trial Pit at 1.00 m
		Type	Results				

Remarks: Groundwater not encountered during excavation.
Backfilled with arisings upon completion.

Stability: Pit sides stable.

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Trial Pit No. GTP33 Sheet 1 of 1

Project Name	**Project No.**	**Co-ords:** 527288.00 E 283268.00 N	**Date**
RAF Upwood	23206	**Level:** 21.00 m AOD	25/09/2023
Equipment: JCB 3CX		**Dimensions:** - Depth: 1.00 m	**Scale** 1:25
Client: Vistry Partnership Limited			**Logged By** AC

Water Strikes	Samples & In Situ Testing			Depth (m)	Level (m AOD)	Legend	Stratum Description
	Depth (m)	Type	Results				
	0.20	ES1					Greyish brown slightly gravelly slightly clayey sandy TOPSOIL. Gravel is subrounded and rounded fine and medium chert.
				0.30	20.70		Firm greyish brown slightly gravelly slightly sandy CLAY. Gravel is subangular to rounded fine to coarse quartzite, chert and shell fragments. Sandy to 0.6 m begl. (GLACIAL TILL)
				1.00	20.00		End of Trial Pit at 1.00 m
		Type	Results				

Remarks: Groundwater not encountered during excavation.
Backfilled with arisings upon completion.

Stability: Pit sides stable.

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Trial Pit No. GTP34
Sheet 1 of 1

Project Name RAF Upwood	**Project No.** 23206	**Co-ords:** 527256.00 E 283317.00 N **Level:** 21.50 m AOD	**Date** 25/09/2023
Equipment: JCB 3CX		**Dimensions:** - Depth: 1.00 m	**Scale** 1:25
Client: Vistry Partnership Limited			**Logged By** AC

Water Strikes	Samples & In Situ Testing			Depth (m)	Level (m AOD)	Legend	Stratum Description
	Depth (m)	Type	Results				
							MADE GROUND: Concrete in grey clayey sand.
				0.15	21.35		MADE GROUND: Scrub over light orangish brown slightly gravelly sandy clay. Gravel is angular and subangular fine to coarse chert and occasional ash.
	0.30	ES1					
				0.40	21.10		Firm orange sandy CLAY. Gravel is subangular to rounded fine to coarse quartzite, chert and shell fragments.
				0.50	21.00		(GLACIAL TILL)
							Firm greyish brown slightly gravelly slightly sandy CLAY. Gravel is subangular to rounded fine to coarse quartzite, chert and shell fragments.
							(GLACIAL TILL)
				1.00	20.50		End of Trial Pit at 1.00 m
		Type	Results				

Remarks: Groundwater not encountered during excavation.
Backfilled with arisings upon completion.

Stability: Pit sides stable.

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Trial Pit No. GTP35 Sheet 1 of 1

Project Name RAF Upwood	**Project No.** 23206	**Co-ords:** 527248.00 E 283288.00 N **Level:** 20.61 m AOD	**Date** 25/09/2023
Equipment: JCB 3CX		**Dimensions:** - Depth: 1.30 m	**Scale** 1:25
Client: Vistry Partnership Limited			**Logged By** AC

Water Strikes	Samples & In Situ Testing Depth (m)	Type	Results	Depth (m)	Level (m AOD)	Legend	Stratum Description
	0.10	ES1					MADE GROUND: Scrub over light orangish brown slightly gravelly sandy clay. Gravel is angular and subangular fine to coarse chert and occasional ash.
				0.35	20.26		Orangish brown SAND. Gravel is subangular to rounded fine to coarse quartzite and chert.
				0.60	20.01		(GLACIAL TILL)
							Firm greyish brown slightly gravelly slightly sandy CLAY. Gravel is subangular to rounded fine to coarse quartzite, chert and shell fragments. (GLACIAL TILL)
				1.30	19.31		End of Trial Pit at 1.30 m
		Type	Results				

Remarks: Groundwater not encountered during excavation.
Backfilled with arisings upon completion.

Stability: Pit sides stable.

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Trial Pit No. GTP36
Sheet 1 of 1

Project Name	**Project No.**	**Co-ords:**	527247.00 E 283244.00 N	**Date**
RAF Upwood	23206	**Level:**	19.84 m AOD	25/09/2023
Equipment: JCB 3CX		**Dimensions:** - Depth: 1.00 m		**Scale** 1:25
Client: Vistry Partnership Limited				**Logged By** AC

Water Strikes	Samples & In Situ Testing Depth (m)	Type	Results	Depth (m)	Level (m AOD)	Legend	Stratum Description
				0.30	19.54		Greyish brown slightly gravelly slightly clayey sandy TOPSOIL. Gravel is subrounded and rounded fine and medium chert.
	0.50	ES1		0.60	19.24		Orangish brown gravelly clayey SAND. Gravel is subangular to rounded fine to coarse quartzite and chert. Orange gravelly sand to 0.6 m begl. (GLACIAL TILL)
				1.00	18.84		Firm greyish brown slightly gravelly slightly sandy CLAY. Gravel is subangular to rounded fine to coarse quartzite, chert and shell fragments. (GLACIAL TILL) End of Trial Pit at 1.00 m
		Type	Results				

Remarks: Groundwater not encountered during excavation.
Backfilled with arisings upon completion.

Stability: Pit sides stable.

APPENDIX B
SITE-WON TOPSOIL VERIFICATION TEST RESULTS

i2 Analytical Limited Report No. 24-044204

Igne
Whistleberry Road
Hamilton
ML3 0HP

e: [redacted]

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

[redacted]

e: [redacted]

Analytical Report Number : 24-044204

Project / Site name:	100993 - Former RAF Base Ramsey Road Upwood	Samples received on:	25/09/2024
Your job number:	P2400321 - DAV24-00477	Samples instructed on / Analysis started on:	25/09/2024
Your order number:	P2400321	Analysis completed by:	03/10/2024
Report Issue Number:	1	Report issued on:	03/10/2024
Samples Analysed:	2 soil samples		

[redacted]

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

Analytical Report Number: 24-044204
Project / Site name: 100993 - Former RAF Base Ramsey Road Upwood
Your Order No: P2400321

Lab Sample Number				328474	328475
Sample Reference				DAV24-00477-S001-Sample 1	DAV24-00477-S002-Sample 2
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				20/09/2024	20/09/2024
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status		
Stone Content	%	0.1	NONE	8.3	14
Moisture Content	%	0.01	NONE	13	11
Total mass of sample received	kg	0.1	NONE	2	2
Asbestos					
Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	MUA	MUA
General Inorganics					
pH (L099)	pH Units	N/A	MCERTS	7.4	8
Water Soluble Sulphate as SO_4 16hr extraction (2:1)	mg/kg	2.5	MCERTS	21	39
Water Soluble SO_4 16hr extraction (2:1)	mg/l	1.25	MCERTS	10.7	19.7
Total Sulphur	mg/kg	50	MCERTS	340	360
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	2.2	2.5
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	0.08	0.13
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.25	0.38
Pyrene	mg/kg	0.05	MCERTS	0.23	0.36
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.12	0.19
Chrysene	mg/kg	0.05	MCERTS	0.18	0.25
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.12	0.2
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.09	0.15
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.17	0.23
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.06	0.1
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.1	0.13
Total PAH					
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	1.39	2.13

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

Analytical Report Number: 24-044204
Project / Site name: 100993 - Former RAF Base Ramsey Road Upwood
Your Order No: P2400321

Lab Sample Number				328474	328475
Sample Reference				DAV24-00477-S001 Sample 1	DAV24-00477-S002 Sample 2
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				20/09/2024	20/09/2024
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status		
Heavy Metals / Metalloids					
Antimony (aqua regia extractable)	mg/kg	1	ISO 17025	2.3	3.3
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	17	24
Barium (aqua regia extractable)	mg/kg	1	MCERTS	62	70
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.4	0.5
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	21	27
Copper (aqua regia extractable)	mg/kg	1	MCERTS	19	22
Lead (aqua regia extractable)	mg/kg	1	MCERTS	43	50
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Molybdenum (aqua regia extractable)	mg/kg	0.25	MCERTS	0.91	1.9
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	22	28
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	1.1	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	76	91
Petroleum Hydrocarbons					
TPHCWG - Aliphatic >EC5 - EC6 $_{HS_1D_AL}$	mg/kg	0.01	MCERTS	< 0.010	< 0.010
TPHCWG - Aliphatic >EC6 - EC8 $_{HS_1D_AL}$	mg/kg	0.01	MCERTS	< 0.010	< 0.010
TPHCWG - Aliphatic >EC8 - EC10 $_{HS_1D_AL}$	mg/kg	0.01	MCERTS	< 0.010	< 0.010
TPHCWG - Aliphatic >EC10 - EC12 $_{EH_CU_1D_AL}$	mg/kg	1	MCERTS	< 1.0	< 1.0
TPHCWG - Aliphatic >EC12 - EC16 $_{EH_CU_1D_AL}$	mg/kg	2	MCERTS	2.7	< 2.0
TPHCWG - Aliphatic >EC16 - EC21 $_{EH_CU_1D_AL}$	mg/kg	8	MCERTS	< 8.0	< 8.0
TPHCWG - Aliphatic >EC21 - EC35 $_{EH_CU_1D_AL}$	mg/kg	8	MCERTS	< 8.0	< 8.0
TPHCWG - Aliphatic >EC5 - EC35 $_{EH_CU+HS_1D_AL}$	mg/kg	10	NONE	< 10	< 10
TPHCWG - Aromatic >EC5 - EC7 $_{HS_1D_AR}$	mg/kg	0.01	MCERTS	< 0.010	< 0.010
TPHCWG - Aromatic >EC7 - EC8 $_{HS_1D_AR}$	mg/kg	0.01	MCERTS	< 0.010	< 0.010
TPHCWG - Aromatic >EC8 - EC10 $_{HS_1D_AR}$	mg/kg	0.02	MCERTS	< 0.020	< 0.020
TPHCWG - Aromatic >EC10 - EC12 $_{EH_CU_1D_AR}$	mg/kg	1	MCERTS	< 1.0	< 1.0
TPHCWG - Aromatic >EC12 - EC16 $_{EH_CU_1D_AR}$	mg/kg	2	MCERTS	< 2.0	< 2.0
TPHCWG - Aromatic >EC16 - EC21 $_{EH_CU_1D_AR}$	mg/kg	10	MCERTS	< 10	< 10
TPHCWG - Aromatic >EC21 - EC35 $_{EH_CU_1D_AR}$	mg/kg	10	MCERTS	< 10	< 10
TPHCWG - Aromatic >EC5 - EC35 $_{EH_CU+HS_1D_AR}$	mg/kg	10	NONE	< 10	< 10
VOCs					
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0
p & m-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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

Analytical Report Number : 24-044204

Project / Site name: 100993 - Former RAF Base Ramsey Road Upwood

* 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 *
328474	-00477-S001-Sa	None Supplied	None Supplied	Brown sand with stones and vegetation
328475	-00477-S002-Sa	None Supplied	None Supplied	Brown sand with stones and vegetation

Analytical Report Number : 24-044204
Project / Site name: 100993 - Former RAF Base Ramsey Road Upwood

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Asbestos identification in Soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques	In-house method based on HSG 248, 2021	A001B	D	ISO 17025
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate (Walkley Black Method)	In-house method	L009B	D	MCERTS
Moisture Content	Moisture content, determined gravimetrically (up to 30°C)	In-house method	L019B	W	NONE
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.	L019B	D	NONE
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	L038B	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Sulphate, water soluble, in soil (16hr extraction)	In-house method	L038B	D	MCERTS
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES	In-house method	L038B	D	MCERTS
Speciated PAHs and/or Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds (including PAH) in soil by extraction in dichloromethane and hexane followed by GC-MS	In-house method based on USEPA 8270	L064B	D	MCERTS
BTEX and/or Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS	In-house method based on USEPA 8260	L073B	W	MCERTS
Total petroleum hydrocarbons with carbon banding by GC-FID/GC-MS HS in soil	Determination of total petroleum hydrocarbons in soil by GC-FID/GC-MS HS with carbon banding aliphatic and aromatic	In-house method	L076B/L088-PL	D/W	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry	In-house method	L080-PL	W	MCERTS
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	L080-PL	W	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

For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL' or 'B' 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.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Analytical Report Number : 24-044204
Project / Site name: 100993 - Former RAF Base Ramsey Road Upwood

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - underscore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

Quality control parameter failure associated with individual result applies to calculated sum of individuals.
The result for sum should be interpreted with caution

Sample Deviation Report

Analytical Report Number : 24-044204

Project / Site name: 100993 - Former RAF Base Ramsey Road Upwood

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis.Please note that the associated result(s) may be unreliable a interpreted with care.

Key: a - No sampling date b - Incorrect container c - Holding time d - Headspace e - Temperature

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref
DAV24-00477-S001-Sample 1	N/A	S	328474	b	BTEX and/or Volatile organic compounds in soil	L073B
DAV24-00477-S001-Sample 1	N/A	S	328474	b	Total petroleum hydrocarbons with carbon banding by GC-FID/GC-MS HS in soil	L076B/L088-PL
DAV24-00477-S002-Sample 2	N/A	S	328475	b	BTEX and/or Volatile organic compounds in soil	L073B
DAV24-00477-S002-Sample 2	N/A	S	328475	b	Total petroleum hydrocarbons with carbon banding by GC-FID/GC-MS HS in soil	L076B/L088-PL

ınd should be

Test Deviation
b
b
b
b

APPENDIX C
CAPPING VERIFICATION TEST RESULTS

i2 Analytical Limited Report No. 25-012735

Georisk Management Limited
Varney House
91 Spon Lane
West Bromwich
B70 6AB

e: [redacted]

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

[redacted]
e: [redacted]

Analytical Report Number : 25-012735

Project / Site name:	RAF Upwood	Samples received on:	13/03/2025
Your job number:	23206	Samples instructed on/ Analysis started on:	13/03/2025
Your order number:	23206	Analysis completed by:	24/03/2025
Report Issue Number:	1	Report issued on:	24/03/2025
Samples Analysed:	6 soil samples		

[redacted]
Customer Service Advisor
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
air	- once the analysis is complete

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

Retention period for records and reports is minimum 6 years from the date of issue of the final report.
Some records may be kept for longer according to other legal/best practice requirements.

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: 25-012735
Project / Site name: RAF Upwood
Your Order No: 23206

Lab Sample Number				481382	481383	481384	481385	481386
Sample Reference				Plot 007	Plot 007	Plot 013	Plot 013	Plot 020
Sample Number				TPS	SBS	TPS	SBS	TPS
Water Matrix				N/A	N/A	N/A	N/A	N/A
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				12/03/2025	12/03/2025	12/03/2025	12/03/2025	12/03/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	21.5
Moisture Content	%	0.01	NONE	22	17	21	18	14
Total mass of sample received	kg	0.1	NONE	0.6	0.6	0.6	0.6	0.6
Asbestos								
Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	MJN	MJN	MJN	MJN	MJN
Analysis completed	N/A	N/A	N/A	21/03/2025	21/03/2025	21/03/2025	21/03/2025	21/03/2025
General Inorganics								
pH (L099)	pH Units	N/A	MCERTS	7.6	10.5	7.4	7.3	7.8
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble Sulphate as SO_4 16hr extraction (2:1)	mg/kg	2.5	MCERTS	280	610	110	3900	560
Water Soluble SO_4 16hr extraction (2:1)	mg/l	1.25	MCERTS	138	303	55.5	1940	279
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	0.18	0.15	0.17	0.14	0.2
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	0.21
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	0.21
Phenanthrene	mg/kg	0.05	MCERTS	0.22	0.14	0.29	0.07	1.5
Anthracene	mg/kg	0.05	MCERTS	0.05	< 0.05	0.06	< 0.05	0.37
Fluoranthene	mg/kg	0.05	MCERTS	0.57	0.23	0.67	0.09	1.6
Pyrene	mg/kg	0.05	MCERTS	0.5	0.18	0.57	0.06	1.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.28	0.1	0.31	< 0.05	0.58
Chrysene	mg/kg	0.05	MCERTS	0.34	0.13	0.36	0.06	0.72
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.39	0.13	0.42	< 0.05	0.69
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.19	0.05	0.21	< 0.05	0.33
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.35	0.1	0.36	< 0.05	0.58
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.19	< 0.05	0.19	< 0.05	0.33
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.05	< 0.05	0.05	< 0.05	0.09
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.21	< 0.05	0.16	< 0.05	0.31
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	3.53	1.21	3.82	< 0.80	8.95

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

Analytical Report Number: 25-012735
Project / Site name: RAF Upwood
Your Order No: 23206

Lab Sample Number				481382	481383	481384	481385	481386
Sample Reference				Plot 007	Plot 007	Plot 013	Plot 013	Plot 020
Sample Number				TPS	SBS	TPS	SBS	TPS
Water Matrix				N/A	N/A	N/A	N/A	N/A
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				12/03/2025	12/03/2025	12/03/2025	12/03/2025	12/03/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	16	15	18	14	17
Boron (water soluble)	mg/kg	0.2	MCERTS	1.7	0.9	1	1.2	1.5
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	0.4	0.5	0.4	0.5
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	23	27	26	28	28
Copper (aqua regia extractable)	mg/kg	1	MCERTS	26	53	22	16	24
Lead (aqua regia extractable)	mg/kg	1	MCERTS	42	16	49	16	42
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	24	28	25	27	29
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	86	63	130	61	77
Petroleum Hydrocarbons								
TPHCWG - Aliphatic >EC5 - EC6 $_{HS_1D_AL}$	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aliphatic >EC6 - EC8 $_{HS_1D_AL}$	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aliphatic >EC8 - EC10 $_{HS_1D_AL}$	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aliphatic >EC10 - EC12 $_{EH_CU_1D_AL}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPHCWG - Aliphatic >EC12 - EC16 $_{EH_CU_1D_AL}$	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPHCWG - Aliphatic >EC16 - EC21 $_{EH_CU_1D_AL}$	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPHCWG - Aliphatic >EC21 - EC35 $_{EH_CU_1D_AL}$	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPHCWG - Aliphatic >EC5 - EC35 $_{EH_CU+HS_1D_AL}$	mg/kg	10	NONE	< 10	< 10	< 10	< 10	< 10
TPHCWG - Aromatic >EC5 - EC7 $_{HS_1D_AR}$	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC7 - EC8 $_{HS_1D_AR}$	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC8 - EC10 $_{HS_1D_AR}$	mg/kg	0.02	MCERTS	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aromatic >EC10 - EC12 $_{EH_CU_1D_AR}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPHCWG - Aromatic >EC12 - EC16 $_{EH_CU_1D_AR}$	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	2.6
TPHCWG - Aromatic >EC16 - EC21 $_{EH_CU_1D_AR}$	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPHCWG - Aromatic >EC21 - EC35 $_{EH_CU_1D_AR}$	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPHCWG - Aromatic >EC5 - EC35 $_{EH_CU+HS_1D_AR}$	mg/kg	10	NONE	< 10	< 10	< 10	< 10	< 10
VOCs								
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
p & m-Xylene	µg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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

Analytical Report Number: 25-012735
Project / Site name: RAF Upwood
Your Order No: 23206

Lab Sample Number				481387
Sample Reference				Plot 020
Sample Number				SBS
Water Matrix				N/A
Depth (m)				None Supplied
Date Sampled				12/03/2025
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status	
Stone Content	%	0.1	NONE	32.5
Moisture Content	%	0.01	NONE	11
Total mass of sample received	kg	0.1	NONE	0.6

Asbestos

Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	MJN
Analysis completed	N/A	N/A	N/A	21/03/2025

General Inorganics

pH (L099)	pH Units	N/A	MCERTS	8.1
Total Cyanide	mg/kg	1	MCERTS	< 1.0
Water Soluble Sulphate as SO_4 16hr extraction (2:1)	mg/kg	2.5	MCERTS	80
Water Soluble SO_4 16hr extraction (2:1)	mg/l	1.25	MCERTS	40

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	0.11
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.08
Pyrene	mg/kg	0.05	MCERTS	0.07
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	ISO 17025	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	< 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

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	< 0.80

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Analytical Report Number: 25-012735
Project / Site name: RAF Upwood
Your Order No: 23206

Lab Sample Number				481387
Sample Reference				Plot 020
Sample Number				SBS
Water Matrix				N/A
Depth (m)				None Supplied
Date Sampled				12/03/2025
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status	
Heavy Metals / Metalloids				
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	17
Boron (water soluble)	mg/kg	0.2	MCERTS	1.3
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	26
Copper (aqua regia extractable)	mg/kg	1	MCERTS	24
Lead (aqua regia extractable)	mg/kg	1	MCERTS	42
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	27
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	66
Petroleum Hydrocarbons				
TPHCWG - Aliphatic >EC5 - EC6 $_{HS_1D_AL}$	mg/kg	0.01	MCERTS	< 0.010
TPHCWG - Aliphatic >EC6 - EC8 $_{HS_1D_AL}$	mg/kg	0.01	MCERTS	< 0.010
TPHCWG - Aliphatic >EC8 - EC10 $_{HS_1D_AL}$	mg/kg	0.01	MCERTS	< 0.010
TPHCWG - Aliphatic >EC10 - EC12 $_{EH_CU_1D_AL}$	mg/kg	1	MCERTS	< 1.0
TPHCWG - Aliphatic >EC12 - EC16 $_{EH_CU_1D_AL}$	mg/kg	2	MCERTS	< 2.0
TPHCWG - Aliphatic >EC16 - EC21 $_{EH_CU_1D_AL}$	mg/kg	8	MCERTS	< 8.0
TPHCWG - Aliphatic >EC21 - EC35 $_{EH_CU_1D_AL}$	mg/kg	8	MCERTS	< 8.0
TPHCWG - Aliphatic >EC5 - EC35 $_{EH_CU+HS_1D_AL}$	mg/kg	10	NONE	< 10
TPHCWG - Aromatic >EC5 - EC7 $_{HS_1D_AR}$	mg/kg	0.01	MCERTS	< 0.010
TPHCWG - Aromatic >EC7 - EC8 $_{HS_1D_AR}$	mg/kg	0.01	MCERTS	< 0.010
TPHCWG - Aromatic >EC8 - EC10 $_{HS_1D_AR}$	mg/kg	0.02	MCERTS	< 0.020
TPHCWG - Aromatic >EC10 - EC12 $_{EH_CU_1D_AR}$	mg/kg	1	MCERTS	< 1.0
TPHCWG - Aromatic >EC12 - EC16 $_{EH_CU_1D_AR}$	mg/kg	2	MCERTS	< 2.0
TPHCWG - Aromatic >EC16 - EC21 $_{EH_CU_1D_AR}$	mg/kg	10	MCERTS	< 10
TPHCWG - Aromatic >EC21 - EC35 $_{EH_CU_1D_AR}$	mg/kg	10	MCERTS	< 10
TPHCWG - Aromatic >EC5 - EC35 $_{EH_CU+HS_1D_AR}$	mg/kg	10	NONE	< 10
VOCs				
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	MCERTS	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0
p & m-Xylene	µg/kg	8	MCERTS	< 8.0
o-Xylene	µg/kg	5	MCERTS	< 5.0

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 25-012735
Project / Site name: RAF Upwood

* 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 *
481382	Plot 007	TPS	None Supplied	Brown clay and sand with gravel and vegetation
481383	Plot 007	SBS	None Supplied	Brown clay with gravel
481384	Plot 013	TPS	None Supplied	Brown loam and clay with gravel and vegetation
481385	Plot 013	SBS	None Supplied	Brown clay and sand with gravel
481386	Plot 020	TPS	None Supplied	Brown clay and loam with gravel and vegetation
481387	Plot 020	SBS	None Supplied	Brown clay and loam with vegetation and stones

Analytical Report Number : 25-012735
Project / Site name: RAF Upwood

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)
Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Asbestos identification in Soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques	In-house method based on HSG 248, 2021	A001B	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically (up to 30°C)	In-house method	L019B	W	NONE
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.	L019B	D	NONE
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	L038B	D	MCERTS
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	L038B	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Sulphate, water soluble, in soil (16hr extraction)	In-house method	L038B	D	MCERTS
Speciated PAHs and/or Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds (including PAH) in soil by extraction in dichloromethane and hexane followed by GC-MS	In-house method based on USEPA 8270	L064B	D	MCERTS
BTEX and/or Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS	In-house method based on USEPA 8260	L073B	W	MCERTS
Total petroleum hydrocarbons with carbon banding by GC-FID/GC-MS HS in soil	Determination of total petroleum hydrocarbons in soil by GC-FID/GC-MS HS with carbon banding aliphatic and aromatic	In-house method	L076B/L088-PL	D/W	MCERTS
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	L080-PL	W	MCERTS
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	L080-PL	W	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

For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL' or 'B' 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.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Quality control parameter failure associated with individual result applies to calculated sum of individuals.
The result for sum should be interpreted with caution

APPENDIX D
CAPPING THICKNESS VALIDATION PHOTOGRAPHS

PHOTOGRAPHIC RECORD

Date: 12 March 2025	**Site: Former RAF Upwood, Ramsey, Cambridgeshire**
Validation Record: Plots 7 to 22	**Capping Thickness: minimum 600 mm**

View of completed capping in the rear garden of Plot 7 confirming 600 mm of capping soil.





PHOTOGRAPHIC RECORD

Date: 12 March 2025	**Site: Former RAF Upwood, Ramsey, Cambridgeshire**
Validation Record: Plots 7 to 22	**Capping Thickness: minimum 600 mm**

View of completed capping in the rear garden of Plot 8 confirming 600 mm of capping soil.





PHOTOGRAPHIC RECORD

Date: 12 March 2025	**Site: Former RAF Upwood, Ramsey, Cambridgeshire**
Validation Record: Plots 7 to 22	**Capping Thickness: minimum 600 mm**

View of completed capping in the rear garden of Plot 9 confirming 600 mm of capping soil.





PHOTOGRAPHIC RECORD

Date: 12 March 2025	**Site: Former RAF Upwood, Ramsey, Cambridgeshire**
Validation Record: Plots 7 to 22	**Capping Thickness: minimum 600 mm**

View of completed capping in the rear garden of Plot 10 confirming 600 mm of capping soil.





PHOTOGRAPHIC RECORD

Date: 12 March 2025	**Site: Former RAF Upwood, Ramsey, Cambridgeshire**
Validation Record: Plots 7 to 22	**Capping Thickness: minimum 600 mm**

View of completed capping in the rear garden of Plot 11 confirming 600 mm of capping soil.





PHOTOGRAPHIC RECORD

Date: 12 March 2025	**Site: Former RAF Upwood, Ramsey, Cambridgeshire**
Validation Record: Plots 7 to 22	**Capping Thickness: minimum 600 mm**

View of completed capping in the rear garden of Plot 12 confirming 600 mm of capping soil.





PHOTOGRAPHIC RECORD

Date: 12 March 2025	**Site: Former RAF Upwood, Ramsey, Cambridgeshire**
Validation Record: Plots 7 to 22	**Capping Thickness: minimum 600 mm**

View of completed capping in the rear garden of Plot 13 confirming 600 mm of capping soil.





PHOTOGRAPHIC RECORD

Date: 12 March 2025	**Site: Former RAF Upwood, Ramsey, Cambridgeshire**
Validation Record: Plots 7 to 22	**Capping Thickness: minimum 600 mm**

View of completed capping in the rear garden of Plot 14 confirming 600 mm of capping soil.





PHOTOGRAPHIC RECORD

Date: 12 March 2025	**Site: Former RAF Upwood, Ramsey, Cambridgeshire**
Validation Record: Plots 7 to 22	**Capping Thickness: minimum 600 mm**

View of completed capping in the rear garden of Plot 15 confirming 600 mm of capping soil.





PHOTOGRAPHIC RECORD

Date: 12 March 2025	**Site: Former RAF Upwood, Ramsey, Cambridgeshire**
Validation Record: Plots 7 to 22	**Capping Thickness: minimum 600 mm**

View of completed capping in the rear garden of Plot 16 confirming 600 mm of capping soil.





PHOTOGRAPHIC RECORD

Date: 12 March 2025	**Site: Former RAF Upwood, Ramsey, Cambridgeshire**
Validation Record: Plots 7 to 22	**Capping Thickness: minimum 600 mm**

View of completed capping in the rear garden of Plot 17 confirming 600 mm of capping soil.





PHOTOGRAPHIC RECORD

Date: 12 March 2025	**Site: Former RAF Upwood, Ramsey, Cambridgeshire**
Validation Record: Plots 7 to 22	**Capping Thickness: minimum 600 mm**

View of completed capping in the rear garden of Plot 18 confirming 600 mm of capping soil.





PHOTOGRAPHIC RECORD

Date: 12 March 2025	**Site: Former RAF Upwood, Ramsey, Cambridgeshire**
Validation Record: Plots 7 to 22	**Capping Thickness: minimum 600 mm**

View of completed capping in the rear garden of Plot 19 confirming 600 mm of capping soil.





PHOTOGRAPHIC RECORD

Date: 12 March 2025	**Site: Former RAF Upwood, Ramsey, Cambridgeshire**
Validation Record: Plots 7 to 22	**Capping Thickness: minimum 600 mm**

View of completed capping in the rear garden of Plot 20 confirming 600 mm of capping soil.



