CWTC Multi Family ICAV acting solely in respect of its sub fund DTBR SCR1 Fund

Bailey Gibson 2
Proposed Strategic Housing Development

VOLUME III
APPENDICES TO
ENVIRONMENTAL IMPACT ASSESSMENT REPORT

JUNE 2022

Document Control Sheet

Client	CWTC Multi Family ICAV acting solely in respect of its sub fund DBTR-SCR1 Fund			
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Document Title	EIAR Volume III Appendices			
Document No.	4390			
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	1	1	-	20
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A	ISSUED	10.06.2022

Volume III - Table of Contents

Chapter	Title	Contents
1.	Introduction	• No Appendices
2.	Development Description	• No Appendices
3.	Alternatives	• No Appendices
4.	Population & Human Health	• No Appendices
5.	Landscape & Visual	• No Appendices
6.	Material Assets: Traffic & Transport	• No Appendices
7.	Material Assets: Built Services	• Appendix 7.1 - Irish Water Confirmation of Feasibility, - Irish Water Diversions Confirmation of Feasibility, - Irish Water Statement of Design Acceptance
8.	Land & Soils	• Appendix 8.1 – Environmental Risk Assessment & Waste Characterisation
9.	Water & Hydrology	
10.	Biodiversity (Flora & Fauna)	• Appendix 10.1 – Bat Survey
11.	Noise & Vibration	• Appendix 11.1 – Bailey Gibson Preliminary Construction Noise and Vibration Management Plan
12.	Air Quality & Climate	• Appendix 12.1 – Ambient Air Quality Standards • Appendix 12.2 – Dust Management Plan
13.	Archaeological & Cultural Heritage	• Appendix 13.1 – RMP Sites within the Surrounding Area • Appendix 13.2 – Stray Finds within the Surrounding Area • Appendix 13.3 – Legislation Protecting the Archaeological Resource • Appendix 13.4 – Impact Assessment and the Cultural Heritage Resource • Appendix 13.5 – Mitigation Measures and the Cultural Heritage Resource
14.	Built Heritage	• Appendix 14.1 – Historic Map Extracts • Appendix 14.2 – Key Plan • Appendix 14.3 – Photographic Record – External • Appendix 14.4 – Photographic Record – Internal • Appendix 14.5 – Outline Conservation Method Statement • Appendix 14.6 – Relevant Extracts from Architectural Heritage Protection Guidelines & DCC Development Plan • Appendix 14.7 – *Industrial Heritage Assessment of the Bailey Gibson Site,* (prepared by IAC Archaeology, 2019) • Appendix 14.8 - *Architectural Heritage Assessment of the Former Player Wills Factory,* (by David Slattery Conservation Architects, 2020) • Appendix 14.9 – *Conservation Record Study of St. Teresa's Gardens,* (by Kelly and Coogan Architects, 2013)
15.	Interactions of the Foregoing	• No Appendices
16.	Summary of Mitigation Measures	• No Appendices

APPENDIX 7.1

IRISH WATER CONFIRMATION OF FEASIBILITY, IRISH WATER DIVERSIONS CONFIRMATION OF FEASIBILITY, IRISH WATER STATEMENT OF DESIGN ACCEPTANCE

VOLUME III

APPENDICES TO
ENVIRONMENTAL IMPACT ASSESSMENT REPORT

JUNE 2022

Ciaran O'Rafferty

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Irish Water
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11 May 2022

Re: CDS22003138 pre-connection enquiry - Subject to contract | Contract denied

Connection for Multi/Mixed Use Development of 347 units at 326-328, South Circular Road, Dublin

Dear Sir/Madam,

Irish Water has reviewed your pre-connection enquiry in relation to a Water & Wastewater connection at 326-328, South Circular Road, Dublin (the **Premises**). Based upon the details you have provided with your pre-connection enquiry and on our desk top analysis of the capacity currently available in the Irish Water network(s) as assessed by Irish Water, we wish to advise you that your proposed connection to the Irish Water network(s) can be facilitated at this moment in time.

SERVICE	**OUTCOME OF PRE-CONNECTION ENQUIRY** **THIS IS NOT A CONNECTION OFFER. YOU MUST APPLY FOR A CONNECTION(S) TO THE IRISH WATER NETWORK(S) IF YOU WISH TO PROCEED.**
Water Connection	Feasible without infrastructure upgrade by Irish Water
Wastewater Connection	Feasible without infrastructure upgrade by Irish Water
SITE SPECIFIC COMMENTS	
Water Connection	The proposed Development indicates that Irish Water assets are present on the site. The Developer has to demonstrate that proposed structures and works will not inhibit access for maintenance or endanger structural or functional integrity of the assets during and after the works. Drawings (showing clearance distances, changing to ground levels) and Method

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Oifig Chláraithe / Registered Office: Teach Colvill, 24-26 Sráid Thalbóid, Baile Átha Cliath 1, D01 NP86 / Colvill House, 24-26 Talbot Street, Dublin 1 D01 NP86
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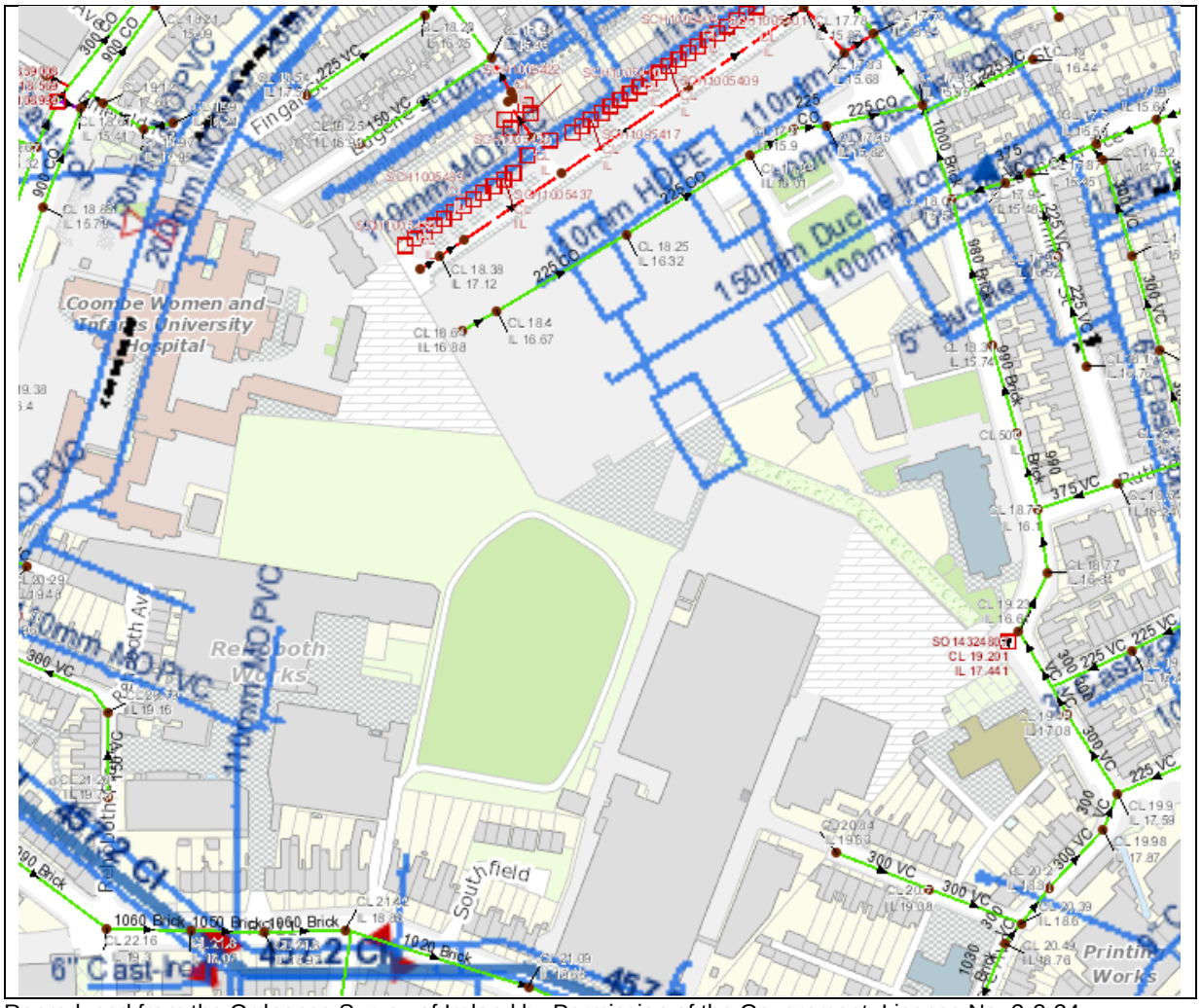
	Statements should be included in the Detailed Design of the Development. A wayleave in favour of Irish Water will be required over the assets that are not located within the Public Space. For design submissions and queries related to diversion/build near or over, please contact IW Diversion Team via email address diversions@water.ie
Wastewater Connection	Removal of storm water in the existing combined network to facilitate the provision of capacity will be required. Minimum reduction should be at a ratio of 3 SW:1 WW-peak for design flow 1 in 1-year event. Further information, verified by surveys, should be provided at a connection application stage and before any existing infrastructure is demolished, regarding the current storm connection. Separate storm and foul water connection services should be provided for the Development. Storm water from the site must be discharged only into the existing storm water network or associated alternative to a combined drainage discharge. The connection arrangement should be agreed with Dublin City County Council Drainage Division. Proposed basement car park should be designed such that surface water from the site and/or surrounding areas cannot flow down to the car park. Wastewater from the car park (contaminated water generated from run off from cars/tyres) must be pumped to ground level to discharge by gravity to the Irish Water Network via a petrol interceptor. The proposed Development indicates that Irish Water assets are present on the site. The Developer has to demonstrate that proposed structures and works will not inhibit access for maintenance or endanger structural or functional integrity of the assets during and after the works. Drawings (showing clearance distances, changing to ground levels) and Method Statements should be included in the Detailed Design of the Development. A wayleave in favour of Irish Water will be required over the assets that are not located within the Public Space. For design submissions and queries related to diversion/build near or over, please contact IW Diversion Team via email address diversions@water.ie
The design and construction of the Water & Wastewater pipes and related infrastructure to be installed in this development shall comply with the Irish Water Connections and Developer Services Standard Details and Codes of Practice that are available on the Irish Water website. Irish Water reserves the right to supplement these requirements with Codes of Practice and these will be issued with the connection agreement.	

The map included below outlines the current Irish Water infrastructure adjacent to your site:



Reproduced from the Ordnance Survey of Ireland by Permission of the Government. License No. 3-3-34

Whilst every care has been taken in its compilation Irish Water gives this information as to the position of its underground network as a general guide only on the strict understanding that it is based on the best available information provided by each Local Authority in Ireland to Irish Water. Irish Water can assume no responsibility for and give no guarantees, undertakings or warranties concerning the accuracy, completeness or up to date nature of the information provided and does not accept any liability whatsoever arising from any errors or omissions. This information should not be relied upon in the event of excavations or any other works being carried out in the vicinity of the Irish Water underground network. The onus is on the parties carrying out excavations or any other works to ensure the exact location of the Irish Water underground network is identified prior to excavations or any other works being carried out. Service connection pipes are not generally shown but their presence should be anticipated.

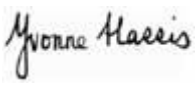
General Notes:

1) The initial assessment referred to above is carried out taking into account water demand and wastewater discharge volumes and infrastructure details on the date of the assessment. **The availability of capacity may change at any date after this assessment.**

2) This feedback does not constitute a contract in whole or in part to provide a connection to any Irish Water infrastructure. All feasibility assessments are subject to the constraints of the Irish Water Capital Investment Plan.
3) The feedback provided is subject to a Connection Agreement/contract being signed at a later date.
4) A Connection Agreement will be required to commencing the connection works associated with the enquiry this can be applied for at https://www.water.ie/connections/get-connected/
5) A Connection Agreement cannot be issued until all statutory approvals are successfully in place.
6) Irish Water Connection Policy/ Charges can be found at https://www.water.ie/connections/information/connection-charges/
7) Please note the Confirmation of Feasibility does not extend to your fire flow requirements.
8) Irish Water is not responsible for the management or disposal of storm water or ground waters. You are advised to contact the relevant Local Authority to discuss the management or disposal of proposed storm water or ground water discharges
9) To access Irish Water Maps email datarequests@water.ie
10) All works to the Irish Water infrastructure, including works in the Public Space, shall have to be carried out by Irish Water.

If you have any further questions, please contact Marina Byrne from the design team via email mzbyrne@water.ie For further information, visit **www.water.ie/connections.**

Yours sincerely,



Yvonne Harris

Head of Customer Operations

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Claire Pomroy
C/O DBTR-SCR1 Fund, a Sub-Fund of the CWTC Multi Family ICAV
70 Sir John Rogerson's Quay
Dublin 2
D02 R296

11 March 2022

Dear Claire

Re: DIV21315 – 326-328 South Circular Road, Dublin 8, Dublin– Diversion enquiry.

Irish Water has reviewed your enquiry in relation to the diversion of existing 225mm concrete foul main and 150mm DI water main to facilitate the new housing development at 326-328 South Circular Road, Dublin 8, Dublin as indicated on drawings 1023 rev. PL4, 1032 rev. PL5 & 1120 rev. PL3.

Based upon the details you have provided with your enquiry and as assessed by Irish Water, we wish to advise you that, in this instance, Irish Water will accept the proposed diversion of existing 225mm concrete foul main with new 300mm uPVC foul main and existing 150mm DI water main with new 150mm HDPE water main to accommodate the new housing development. Subject to the conditions set out below being in place.

1. The construction shall be constructed in strict accordance to drawings 1023 rev. PL4, 1032 rev. PL5 & 1120 rev. PL3.
2. Applicant has to upgrade the existing 300mm to 375mm foul crossing road main section on Donore Ave.
3. Applicant has to register new wayleaves over the new diverted mains.
4. Coombe Women and Infants University Hospital is being fed from the proposal 150mm DI water main. Hospital will need to be notified in advance for the proposal diversion works.

You are advised that this correspondence does not constitute an agreement in whole or in part to provide a diversion of Irish Water infrastructure and is provided subject to diversion agreement being executed at a later date.

If you have any further questions, please contact Juan Antonio Gragera Rubio from the diversions team on email diversions@water.ie. For further information, visit **www.water.ie/connections**

Yours sincerely,

Yvonne Harris

Yvonne Harris
Head of Customer Operations

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Malcolm McCabe
70 Sir John Rogersons Quay
Dublin
Co. Dublin

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Cathair Chorcaí

Irish Water
PO Box 448,
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Delivery Office,
Cork City.

www.water.ie

2 June 2022

Re: Design Submission for 326-328 South Circular Road, Dublin, Co. Dublin (the "Development")
(the "Design Submission") / Connection Reference No: CDS22003138

Dear Malcolm McCabe,

Many thanks for your recent Design Submission.

We have reviewed your proposal for the connection(s) at the Development. Based on the information provided, which included the documents outlined in Appendix A to this letter, Irish Water has no objection to your proposals.

This letter does not constitute an offer, in whole or in part, to provide a connection to any Irish Water infrastructure. Before you can connect to our network you must sign a connection agreement with Irish Water. This can be applied for by completing the connection application form at www.water.ie/connections. Irish Water's current charges for water and wastewater connections are set out in the Water Charges Plan as approved by the Commission for Regulation of Utilities (CRU)(https://www.cru.ie/document_group/irish-waters-water-charges-plan-2018/).

You the Customer (including any designers/contractors or other related parties appointed by you) is entirely responsible for the design and construction of all water and/or wastewater infrastructure within the Development which is necessary to facilitate connection(s) from the boundary of the Development to Irish Water's network(s) (the "**Self-Lay Works**"), as reflected in your Design Submission. Acceptance of the Design Submission by Irish Water does not, in any way, render Irish Water liable for any elements of the design and/or construction of the Self-Lay Works.

If you have any further questions, please contact your Irish Water representative:
Name: Dario Alvarez
Email: dalvarez@water.ie

Yours sincerely,

Yvonne Harris

Yvonne Harris
Head of Customer Operations

Appendix A

Document Title & Revision

- [**BGL-BMD-ZZ-00-DR-C-1030 Rev. PL6**]
- [**BGL-BMD-ZZ-00-DR-C-1031 Rev. PL6**]
- [**BGL-BMD-ZZ-00-DR-C-1032 Rev. PL6]**
- [**BGL-BMD-ZZ-00-DR-C-1020 Rev. PL6]**
- [**BGL-BMD-ZZ-00-DR-C-1021 Rev. PL6]**
- [**BGL-BMD-ZZ-00-DR-C-1022 Rev. PL6]**
- [**BGL-BMD-ZZ-00-DR-C-1120 Rev. PL4]**
- [**BGL-BMD-ZZ-00-DR-C-1121 Rev. PL4]**

Standard Details/Code of Practice Exemption: N/A

For further information, visit ***www.water.ie/connections***

Notwithstanding any matters listed above, the Customer (including any appointed designers/contractors, etc.) is entirely responsible for the design and construction of the Self-Lay Works. Acceptance of the Design Submission by Irish Water will not, in any way, render Irish Water liable for any elements of the design and/or construction of the Self-Lay Works.

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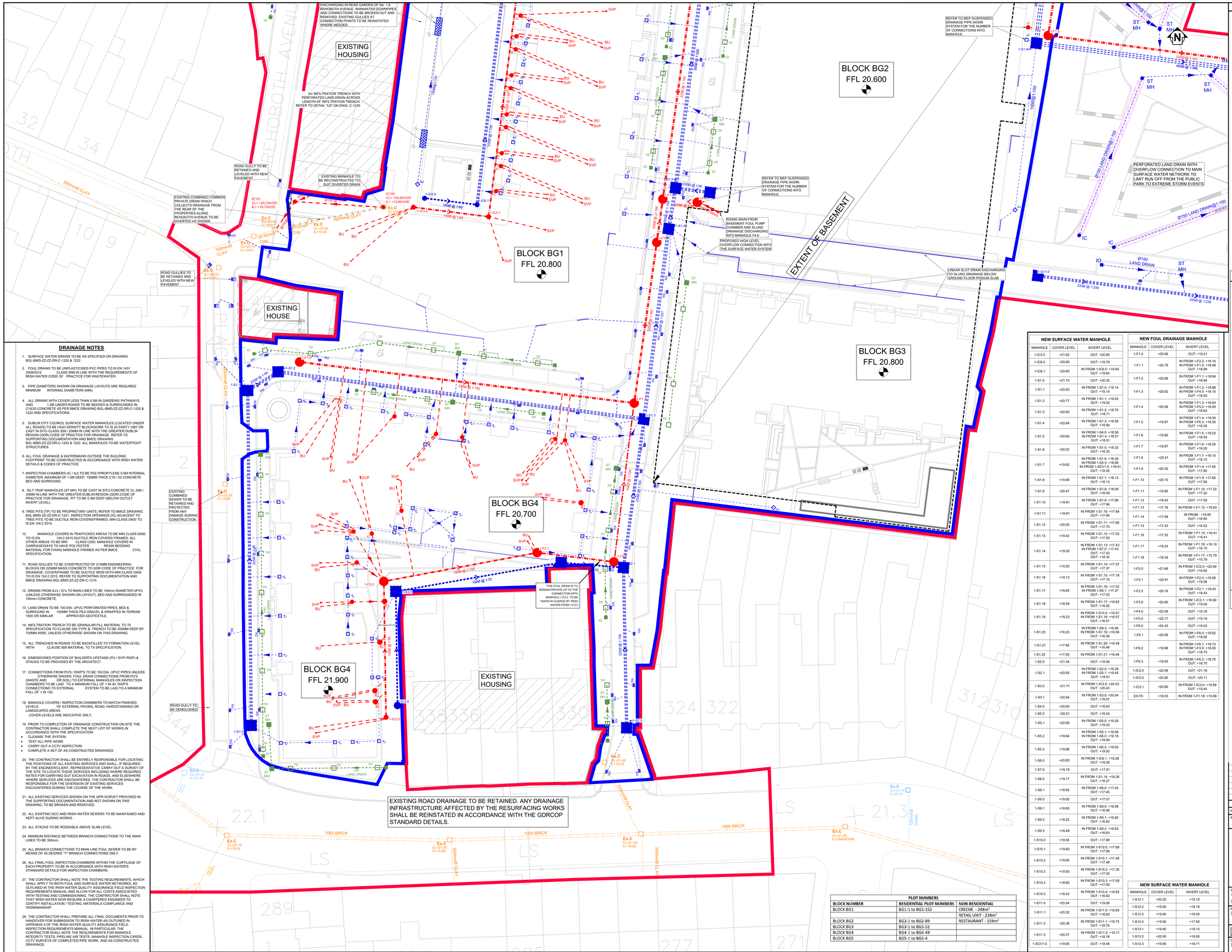

DRAINAGE NOTES

1. SURFACE WATER DRAINS TO BE AS SPECIFIED ON DRAWING BGL-BMD-ZZ-ZZ-DR-C-1220 & 1222.
2. FOUL DRAINS TO BE UNPLASTICISED PVC PIPES TO IS EN 1401 2009/2012 CLASS SN8 IN LINE WITH THE REQUIREMENTS OF IRISH WATER CODE OF PRACTICE FOR WASTEWATER.
3. PIPE DIAMETERS SHOWN ON DRAINAGE LAYOUTS ARE REQUIRED MINIMUM INTERNAL DIAMETERS (MM).
4. ALL DRAINS WITH COVER LESS THAN 0.5M IN GARDENS/ PATHWAYS AND 1.2M UNDER ROADS TO BE BEDDED & SURROUNDED IN C16/20 CONCRETE AS PER BMCE DRAWING BGL-BMD-ZZ-ZZ-DR-C-1220 & 1222 AND SPECIFICATIONS.
5. DUBLIN CITY COUNCIL SURFACE WATER MANHOLES (LOCATED UNDER ALL ROADS) TO BE HIGH DENSITY BLOCKWORK TO IS 20 PART1:1987 OR CAST IN SITU CLASS 30N / 250MM IN LINE WITH THE GREATER DUBLIN REGION (GDR) CODE OF PRACTICE FOR DRAINAGE. REFER TO SUPPORTING DOCUMENTATION AND BMCE DRAWING BGL-BMD-ZZ-ZZ-DR-C-1220 & 1222. ALL MANHOLES TO BE WATERTIGHT STRUCTURES.
6. ALL FOUL DRAINAGE & WATERMAINS OUTSIDE THE BUILDING FOOTPRINT TO BE CONSTRUCTED IN ACCORDANCE WITH IRISH WATER DETAILS & CODES OF PRACTICE.
7. INSPECTION CHAMBERS (IC / AJ) TO BE POLYPROPYLENE 0.5M INTERNAL DIAMETER, MAXIMUM OF 1.0M DEEP. 150MM THICK C16 / 20 CONCRETE BED AND SURROUND.
8. SILT TRAP MANHOLES (ST MH) TO BE CAST IN SITU CONCRETE CL 30N / 20MM IN LINE WITH THE GREATER DUBLIN REGION (GDR) CODE OF PRACTICE FOR DRAINAGE. PIT TO BE 0.5M DEEP (BELOW OUTLET INVERT LEVEL).
9. TREE PITS (TP) TO BE PROPRIETARY UNITS, REFER TO BMCE DRAWING BGL-BMD-ZZ-ZZ-DR-C-1221. INSPECTION OPENINGS (IO) ADJACENT TO TREE PITS TO BE DUCTILE IRON COVERS/FRAMES, MIN CLASS D400 TO IS EN 124:2 2015.
10. MANHOLE COVERS IN TRAFFICKED AREAS TO BE MIN CLASS D400 TO IS EN 124:2 2015 DUCTILE IRON COVERS/ FRAMES, ALL OTHER AREAS TO BE MIN CLASS C250. MANHOLE COVERS IN CARRIAGEWAYS TO HAVE POLYESTER RESIN BEDDING MATERIAL FOR FIXING MANHOLE FRAMES AS PER BMCE CIVIL SPECIFICATION.
11. ROAD GULLIES TO BE CONSTRUCTED OF 215MM ENGINEERING BLOCKS OR 225MM MASS CONCRETE TO GDR CODE OF PRACTICE FOR DRAINAGE, COVER/FRAME TO BE DUCTILE IRON WITH MIN CLASS D400 TO IS EN 124:2 2015. REFER TO SUPPORTING DOCUMENTATION AND BMCE DRAWING BGL-BMD-ZZ-ZZ-DR-C-1210.
12. DRAINS FROM A,/s / IC's TO MAIN LINES TO BE 100mm DIAMETER UPVC (UNLESS OTHERWISE SHOWN ON LAY-OUT), BED AND SURROUNDED IN 150mm CONCRETE.
13. LAND DRAIN TO BE 100 DIA. UPVC PERFORATED PIPES, BED & SURROUND IN 150MM THICK PEA GRAVEL & WRAPPED IN TERRAM 1000 OR SIMILAR APPROVED GEOTEXTILE.
14. INFILTRATION TRENCH TO BE GRANULAR FILL MATERIAL TO TII SPECIFICATION TO CLAUSE 505 TYPE B. TRENCH TO BE 400MM DEEP BY 700MM WIDE, UNLESS OTHERWISE SHOWN ON THIS DRAWING.
15. ALL TRENCHES IN ROADS TO BE BACKFILLED TO FORMATION LEVEL WITH CLAUSE 808 MATERIAL TO TII SPECIFICATION.
16. DIMENSIONED POSITION OF BUILDER'S UPSTAND (PU / SVP/ RWP) & STACKS TO BE PROVIDED BY THE ARCHITECT.
17. CONNECTIONS FROM PU'S / RWP'S TO BE 100 DIA. UPVC PIPES UNLESS OTHERWISE SHOWN. FOUL DRAIN CONNECTIONS FROM PU'S (WASTE AND OR SOIL) TO EXTERNAL MANHOLES OR INSPECTION CHAMBERS TO BE LAID TO A MINIMUM FALL OF 1 IN 40. RWP'S CONNECTIONS TO EXTERNAL SYSTEM TO BE LAID TO A MINIMUM FALL OF 1 IN 100.
18. MANHOLE COVERS / INSPECTION CHAMBERS TO MATCH FINISHED LEVELS OF EXTERNAL PAVING, ROAD, HARDSTANDING OR LANDSCAPED AREAS COVER LEVELS ARE INDICATIVE ONLY.
19. PRIOR TO COMPLETION OF DRAINAGE CONSTRUCTION ON SITE THE CONTRACTOR SHALL COMPLETE THE NEXT LIST OF WORKS IN ACCORDANCE WITH THE SPECIFICATION:
    - CLEANSE THE SYSTEM.
    - TEST ALL PIPE WORK.
    - CARRY OUT A CCTV INSPECTION
    - COMPLETE A SET OF AS CONSTRUCTED DRAWINGS
20. THE CONTRACTOR SHALL BE ENTIRELY RESPONSIBLE FOR LOCATING THE POSITIONS OF ALL EXISTING SERVICES AND SHALL, IF REQUIRED BY THE ENGINEER/CLIENT, REPRESENTATIVE CARRY OUT A SURVEY OF THE SITE TO LOCATE THESE SERVICES INCLUDING WHERE REQUIRED RATES FOR CARRYING OUT EXCAVATION IN ROADS, AND ELSEWHERE WHERE SERVICES ARE ENCOUNTERED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DIVERSION OF EXISTING SERVICES ENCOUNTERED DURING THE COURSE OF THE WORK.
21. ALL EXISTING SERVICES SHOWN ON THE GPR SURVEY PROVIDED IN THE SUPPORTING DOCUMENTATION AND NOT SHOWN ON THIS DRAWING, TO BE BROKEN AND REMOVED.
22. ALL EXISTING DCC AND IRISH WATER SEWERS TO BE MAINTAINED AND KEPT ALIVE DURING WORKS.
23. ALL STACKS TO BE ROODABLE ABOVE SLAB LEVEL.
24. MINIMUM DISTANCE BETWEEN BRANCH CONNECTIONS TO THE MAIN LINES TO BE 300mm.
25. ALL BRANCH CONNECTIONS TO MAIN LINE FOUL SEWER TO BE BY MEANS OF 45 DEGREE "Y" BRANCH CONNECTIONS ONLY.
26. ALL FINAL FOUL INSPECTION CHAMBERS WITHIN THE CURTILAGE OF EACH PROPERTY TO BE IN ACCORDANCE WITH IRISH WATER'S STANDARD DETAILS FOR INSPECTION CHAMBERS.
27. THE CONTRACTOR SHALL NOTE THE TESTING REQUIREMENTS, WHICH SHALL APPLY TO BOTH FOUL AND SURFACE WATER NETWORKS, AS OUTLINED IN THE IRISH WATER QUALITY ASSURANCE FIELD INSPECTION REQUIREMENTS MANUAL AND ALLOW FOR ALL COSTS ASSOCIATED WITH TESTING AND COMMISSIONING. THE CONTRACTOR SHALL NOTE THAT IRISH WATER NOW REQUIRE A CHARTERED ENGINEER TO CERTIFY INSTALLATION / TESTING, MATERIALS COMPLIANCE AND WORKMANSHIP.
28. THE CONTRACTOR SHALL PREPARE ALL FINAL DOCUMENTS PRIOR TO HANDOVER FOR SUBMISSION TO IRISH WATER AS OUTLINED IN APPENDIX 4 OF THE IRISH WATER QUALITY ASSURANCE FIELD INSPECTION REQUIREMENTS MANUAL. IN PARTICULAR, THE CONTRACTOR SHALL NOTE THE REQUIREMENTS FOR MANHOLE INTEGRITY TESTS, PIPELINE AIR TESTS, MANHOLE INSPECTION CARDS, CCTV SURVEYS OF COMPLETED PIPE WORK, AND AS CONSTRUCTED DRAWINGS.

NEW SURFACE WATER MANHOLE

MANHOLE	COVER LEVEL	INVERT LEVEL
1-IC3.0	+21.82	OUT: +20.66
1-IC6.0	+20.80	OUT: +19.79
1-IC6.1	+20.80	IN FROM 1-IC6.0: +19.64 OUT: +19.64
1-S1.0	+21.70	OUT: +20.32
1-S1.1	+20.93	IN FROM 1-S1.0: +19.14 OUT: +19.14
1-S1.2	+20.77	IN FROM 1-S1.1: +19.02 OUT: +19.02
1-S1.3	+20.80	IN FROM 1-S1.2: +18.70 OUT: +18.71
1-S1.4	+20.64	IN FROM 1-S1.3: +18.56 OUT: +18.56
1-S1.5	+20.60	IN FROM 1-S4.0: +18.56 IN FROM 1-S1.4: +18.51 OUT: +18.51
1-S1.6	+20.02	IN FROM 1-S1.5: +18.32 OUT: +18.32
1-S1.7	+19.92	IN FROM 1-S1.6: +18.26 IN FROM 1-S5.3: +18.88 IN FROM 1-SCV1.0: +18.41 OUT: +18.26
1-S1.8	+19.99	IN FROM 1-S1.7: +18.13 OUT: +18.13
1-S1.9	+20.47	IN FROM 1-S1.8: +18.09 OUT: +18.09
1-S1.10	+19.91	IN FROM 1-S1.9: +17.96 OUT: +17.96
1-S1.11	+19.91	IN FROM 1-S1.10: +17.84 OUT: +17.84
1-S1.12	+20.05	IN FROM 1-S1.11: +17.66 OUT: +17.70
1-S1.13	+19.42	IN FROM 1-S1.12: +17.55 OUT: +17.55
1-S1.14	+19.30	IN FROM 1-S1.13: +17.43 IN FROM 1-S7.0: +17.43 OUT: +17.43 OUT: +18.32
1-S1.15	+19.20	IN FROM 1-S1.14: +17.37 OUT: +17.37
1-S1.16	+19.13	IN FROM 1-S1.15: +17.18 OUT: +17.18
1-S1.17	+18.65	IN FROM 1-S1.16: +17.02 IN FROM 1-S8.1: +17.37 OUT: +17.02
1-S1.18	+18.59	IN FROM 1-S1.17: +16.82 OUT: +16.82
1-S1.19	+18.23	IN FROM 1-S10.5: +16.57 IN FROM 1-S1.18: +16.57 OUT: +16.57
1-S1.20	+18.23	IN FROM 1-S9.3/1: +16.56 IN FROM 1-S1.19: +16.56 OUT: +16.56
1-S1.21	+17.85	IN FROM 1-S1.20: +16.48 OUT: +16.48
1-S1.22	+17.93	IN FROM 1-S1.21: +16.46
1-S2.0	+21.34	OUT: +19.56
1-S2.1	+20.82	IN FROM 1-S2.0: +19.29 IN FROM 1-S3.1: +19.45 OUT: +18.91
1-S3.0	+21.71	IN FROM 1-IC3.0: +20.43 OUT: +20.43
1-S3.1	+20.94	IN FROM 1-S3.0: +20.04 OUT: +19.57
1-S4.0	+20.60	OUT: +18.63
1-S5.0	+20.51	OUT: +19.54
1-S5.1	+20.09	IN FROM 1-S5.0: +19.26 OUT: +19.22
1-S5.2	+19.94	IN FROM 1-S5.1: +19.08 IN FROM 1-S6.0: +19.16 OUT: +19.08
1-S5.3	+19.96	IN FROM 1-S5.2: +19.05 OUT: +19.05
1-S6.0	+20.80	IN FROM 1-IC6.1: +19.28 OUT: +19.28
1-S7.0	+19.19	OUT: +17.91
1-S8.0	+19.17	IN FROM 1-S1.14: +18.26 OUT: +18.27
1-S8.1	+18.65	IN FROM 1-S8.0: +17.45 OUT: +17.45
1-S9.0	+19.00	OUT: +17.07
1-S9.1	+18.65	IN FROM 1-S9.0: +16.98 OUT: +16.98
1-S9.2	+18.25	IN FROM 1-S9.1: +16.82 OUT: +16.82
1-S9.3	+18.48	IN FROM 1-S9.2: +16.63 OUT: +16.63
1-S10.0	+19.55	OUT: +17.89
1-S10.1	+19.80	IN FROM 1-S10.0: +17.68 OUT: +17.68
1-S10.2	+19.60	IN FROM 1-S10.1: +17.48 OUT: +17.48
1-S10.3	+19.50	IN FROM 1-S10.2: +17.30 OUT: +17.30
1-S10.4	+18.60	IN FROM 1-S10.3: +17.09 OUT: +17.09
1-S10.5	+18.42	IN FROM 1-S10.4: +16.82 OUT: +16.82
1-S11.0	+20.54	OUT: +19.06
1-S11.1	+20.32	IN FROM 1-S11.0: +18.83 OUT: +18.83
1-S11.2	+20.38	IN FROM 1-S11.1: +18.75 OUT: +18.75
1-S11.3	+20.37	IN FROM 1-S11.2: +18.71 OUT: +18.78
1-SCV1.0	+19.95	OUT: +18.46

NEW FOUL DRAINAGE MANHOLE

MANHOLE	COVER LEVEL	INVERT LEVEL
1-F1.0	+20.66	OUT: +19.31
1-F1.1	+20.79	IN FROM 1-F2.2: +19.16 IN FROM 1-F1.0: +18.99 OUT: +18.99
1-F1.2	+20.66	IN FROM 1-F1.1: +18.84 OUT: +18.84
1-F1.3	+20.62	IN FROM 1-F1.2: +18.88 IN FROM 1-F4.0: +19.10 OUT: +18.83
1-F1.4	+20.08	IN FROM 1-F1.3: +18.63 IN FROM 1-F5.0: +19.09 OUT: +18.65
1-F1.5	+19.97	IN FROM 1-F1.4: +18.55 IN FROM 1-F6.3: +18.55 OUT: +18.55
1-F1.6	+19.90	IN FROM 1-F1.5: +18.53 OUT: +18.53
1-F1.7	+19.97	IN FROM 1-F1.6: +18.20 OUT: +18.20
1-F1.8	+20.41	IN FROM 1-F1.7: +18.10 OUT: +18.10
1-F1.9	+20.30	IN FROM 1-F1.8: +17.85 OUT: +17.85
1-F1.10	+20.10	IN FROM 1-F1.9: +17.60 OUT: +17.60
1-F1.11	+19.85	IN FROM 1-F1.10: +17.22 OUT: +17.22
1-F1.12	+19.43	OUT: +17.00
1-F1.13	+17.76	IN FROM 1-F1.12: +16.93
1-F1.14	+17.68	IN FROM : +16.85 OUT: +16.85
1-F1.15	+17.43	OUT: +16.52
1-F1.16	+17.32	IN FROM 1-F1.15: +16.41 OUT: +16.41
1-F1.17	+18.24	IN FROM 1-F1.16: +16.10 OUT: +16.10
1-F1.18	+18.34	IN FROM 1-F1.17: +15.79 OUT: +15.79
1-F2.0	+21.66	IN FROM 1-IC2.0: +20.89 OUT: +19.82
1-F2.1	+20.91	IN FROM 1-F2.0: +19.56 OUT: +19.56
1-F2.2	+20.78	IN FROM 1-F2.1: +19.43 OUT: +19.43
1-F3.0	+20.80	IN FROM 1-IC3.1: +18.99 OUT: +19.00
1-F4.0	+20.59	OUT: +19.16
1-F5.0	+20.17	OUT: +19.19
1-F6.0	+20.45	OUT: +19.02
1-F6.1	+20.08	IN FROM 1-F6.0: +18.92 OUT: +18.92
1-F6.2	+19.98	IN FROM 1-F6.1: +18.73 IN FROM 1-F3.0: +18.83 OUT: +18.73
1-F6.3	+19.93	IN FROM 1-F6.2: +18.70 OUT: +18.70
1-IC2.0	+22.06	OUT: +21.18
1-IC3.0	+20.80	OUT: +20.11
1-IC3.1	+20.80	IN FROM 1-IC3.0: +19.89 OUT: +19.45
EX F5	+18.03	IN FROM 1-F1.18: +15.68

NEW SURFACE WATER MANHOLE

MANHOLE	COVER LEVEL	INVERT LEVEL
1-S12.1	+20.20	+19.15
1-S12.2	+19.90	+18.78
1-S12.3	+19.90	+18.40
1-S12.4	+19.90	+17.80
1-S13.1	+19.90	+19.15
1-S13.2	+20.00	+18.93
1-S13.3	+19.95	+18.71

PLOT NUMBERS

BLOCK NUMBER	RESIDENTIAL PLOT NUMBERS	NON-RESIDENTIAL
BLOCK BG1	BG1-1 to BG1-152	CRECHE - 248m²
		RETAIL UNIT - 238m²
BLOCK BG2	BG2-1 to BG2-89	RESTAURANT - 159m²
BLOCK BG3	BG3-1 to BG3-52	
BLOCK BG4	BG4-1 to BG4-49	
BLOCK BG5	BG5-1 to BG5-4	

NOTES

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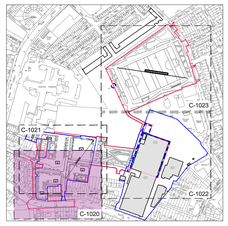
2. CONSULTANTS TO BE INFORMED IMMEDIATELY OF ANY DISCREPANCIES BEFORE WORK PROCEEDS.



KEY PLAN
SCALE @ A0: 1:5000
SCALE @ A2: 1:10000

CIVIL LEGEND

- NEW FOUL MANHOLE — F
- NEW FOUL PIPE — PIPE DESCRIPTION
- EX. SURFACE WATER MANHOLE — Ex.S
- EX. SURFACE WATER PIPE — PIPE DESCRIPTION
- NEW SURFACE WATER MANHOLE — S
- NEW SURFACE WATER PIPE — PIPE DESCRIPTION
- EX. COMBINED MANHOLE — Ex.C
- EX. COMBINED PIPE — PIPE DESCRIPTION
- NEW RISING MAIN — PIPE DESCRIPTION
- DECOMMISSIONED LINE — PIPE DESCRIPTION
- FOUL INSPECTION CHAMBER — IC
- SURFACE ACCESS JUNCTION — AJ
- RAINWATER PIPE — RWP
- SOIL VENT PIPE — SVP
- ROAD GULLEY — RG
- SURFACE RODDING EYE — RE
- GULLEY TRAP — GT
- NEW SIDE INLET KERB GULLY — KG
- PAVEMENT GULLY — PG
- DRAINAGE CHANNEL
- PROPOSED INSPECTION OPENING — IO
- 150mmØ PERFORATED uPVC CONVEYANCE PIPE BENEATH BASE OF TREE PIT
- NEW TREE PIT — TP
- SILT TRAP MANHOLE — ST MH
- EXISTING BUILDING
- BAILEY GIBSON SITE BOUNDARY
- OWNERSHIP LINE
- BASEMENT OUTLINE

ISSUE	DATE	DESCRIPTION	BY
PL6	31.05.22	PLANNING ISSUE	KS
PL5	16.03.22	UPDATED AS PER IW COMMENTS	TN
PL4	24.02.22	IW DIVERSIONS TEAM COMMENTS	TN
PL3	20.01.22	ISSUED FOR IW DESIGN VETTING	TN
PL2	10.12.21	ISSUED FOR IW DESIGN VETTING	TN
PL1	09.11.21	ISSUED FOR PRE-APPLICATION SUBMISSION	TN

Project Engineer: CIARAN O'RAFFERTY | Project Director: CIARAN KENNEDY

BM STAGE: **PLANNING**

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CLIENT: **CWTC MULTI FAMILY ICAV ACTING SOLELY IN RESPECT OF ITS SUB FUND DBTR SCR1 FUND**

PROJECT TITLE: **BAILEY GIBSON SHD 2** — BM PROJECT No.: **19117**

MODEL	REFERENCE	SUITABILITY	REVISION
	BGL-BMD-ZZ-00-DR-C-1020-1022 & 1120-1122	S1	P01

DRAWING TITLE: **PROPOSED DRAINAGE LAYOUT (SHEET 1 OF 4)**

DWG	DRAWING REFERENCE	STATUS	REVISION
	BGL-BMD-ZZ-00-DR-C-1020	D2	PL6

PROPOSED DRAINAGE LAYOUT
SCALE @ A0: 1:200
SCALE @ A2: 1:400

NOTES

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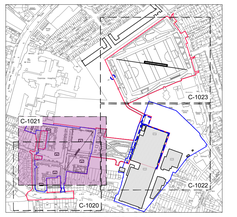
2. CONSULTANTS TO BE INFORMED IMMEDIATELY OF ANY DISCREPANCIES BEFORE WORK PROCEEDS.



KEY PLAN

SCALE @ A0: 1:5000
SCALE @ A2: 1:10000

CIVIL LEGEND

NEW FOUL MANHOLE	F
NEW FOUL PIPE	PIPE DESCRIPTION
EX. SURFACE WATER MANHOLE	Ex.S
EX. SURFACE WATER PIPE	PIPE DESCRIPTION
NEW SURFACE WATER MANHOLE	S
NEW SURFACE WATER PIPE	PIPE DESCRIPTION
EX. COMBINED MANHOLE	Ex.C
EX. COMBINED PIPE	PIPE DESCRIPTION
NEW RISING MAIN	PIPE DESCRIPTION
DECOMMISSIONED LINE	PIPE DESCRIPTION
FOUL INSPECTION CHAMBER	IC
SURFACE ACCESS JUNCTION	AJ
RAINWATER PIPE	RWP
SOIL VENT PIPE	SVP
ROAD GULLEY	RG
SURFACE RODDING EYE	RE
GULLEY TRAP	GT
NEW SIDE INLET KERB GULLY	KG
PAVEMENT GULLY	PG
DRAINAGE CHANNEL	
PROPOSED INSPECTION OPENING	IO
150mmØ PERFORATED uPVC CONVEYANCE PIPE BENEATH BASE OF TREE PIT	TP
NEW TREE PIT	
SILT TRAP MANHOLE	ST MH
EXISTING BUILDING	
BAILEY GIBSON SITE BOUNDARY	
OWNERSHIP LINE	
BASEMENT OUTLINE	

DRAINAGE NOTES

1. SURFACE WATER DRAINS TO BE AS SPECIFIED ON DRAWING BGL-BMD-ZZ-ZZ-DR-C-1220 & 1222.
2. FOUL DRAINS TO BE UNPLASTICISED PVC PIPES TO IS EN 1401 2009/2012 CLASS SN8 IN LINE WITH THE REQUIREMENTS OF IRISH WATER CODE OF PRACTICE FOR WASTEWATER.
3. PIPE DIAMETERS SHOWN ON DRAINAGE LAYOUTS ARE REQUIRED MINIMUM INTERNAL DIAMETERS (MM).
4. ALL DRAINS WITH COVER LESS THAN 0.5M IN GARDENS/ PATHWAYS AND 1.2M UNDER ROADS TO BE BEDDED & SURROUNDED IN C16/20 CONCRETE AS PER BMCE DRAWING BGL-BMD-ZZ-ZZ-DR-C-1220 & 1222 AND SPECIFICATIONS.
5. DUBLIN CITY COUNCIL SURFACE WATER MANHOLES (LOCATED UNDER ALL ROADS) TO BE HIGH DENSITY BLOCKWORK TO IS 20 PART1:1987 OR CAST IN SITU CLASS 30N / 20MM IN LINE WITH THE GREATER DUBLIN REGION (GDR) CODE OF PRACTICE FOR DRAINAGE. REFER TO SUPPORTING DOCUMENTATION AND BMCE DRAWING BGL-BMD-ZZ-ZZ-DR-C-1220 & 1222. ALL MANHOLES TO BE WATERTIGHT STRUCTURES.
6. ALL FOUL DRAINAGE & WATERMAINS OUTSIDE THE BUILDING FOOTPRINT TO BE CONSTRUCTED IN ACCORDANCE WITH IRISH WATER DETAILS & CODES OF PRACTICE.
7. INSPECTION CHAMBERS (IC / AJ) TO BE POLYPROPYLENE 0.5M INTERNAL DIAMETER, MAXIMUM OF 1.0M DEEP. 150MM THICK C16 / 20 CONCRETE BED AND SURROUND.
8. SILT TRAP MANHOLES (ST MH) TO BE CAST IN SITU CONCRETE CL 30N / 20MM IN LINE WITH THE GREATER DUBLIN REGION (GDR) CODE OF PRACTICE FOR DRAINAGE. PIT TO BE 0.5M DEEP (BELOW OUTLET INVERT LEVEL).
9. TREE PITS (TP) TO BE PROPRIETARY UNITS, REFER TO BMCE DRAWING BGL-BMD-ZZ-ZZ-DR-C-1221. INSPECTION OPENINGS (IO) ADJACENT TO TREE PITS TO BE DUCTILE IRON COVERS/FRAMES, MIN CLASS D400 TO IS EN 124:2 2015.
10. MANHOLE COVERS IN TRAFFICKED AREAS TO BE MIN CLASS D400 TO IS EN 124:2 2015 DUCTILE IRON COVERS/ FRAMES. ALL OTHER AREAS TO BE MIN CLASS C250. MANHOLE COVERS IN CARRIAGEWAYS TO HAVE POLYESTER RESIN BEDDING MATERIAL FOR FIXING MANHOLE FRAMES AS PER BMCE CIVIL SPECIFICATION.
11. ROAD GULLIES TO BE CONSTRUCTED OF 215MM ENGINEERING BLOCKS OR 225MM MASS CONCRETE TO GDR CODE OF PRACTICE FOR DRINAAGE, COVER/FRAME TO BE DUCTILE IRON WITH MIN CLASS D400 TO IS EN 124:2 2015. REFER TO SUPPORTING DOCUMENTATION AND BMCE DRAWING BGL-BMD-ZZ-ZZ-DR-C-1210.
12. DRAINS FROM AJ's / IC's TO MAIN LINES TO BE 100mm DIAMETER UPVC (UNLESS OTHERWISE SHOWN ON LAYOUT), BED AND SURROUNDED IN 150mm CONCRETE.
13. LAND DRAIN TO BE 100 DIA. UPVC PERFORATED PIPES, BED & SURROUND IN 150MM THICK PEA GRAVEL & WRAPPED IN TERRAM 1000 OR SIMILAR APPROVED GEOTEXTILE.
14. INFILTRATION TRENCH TO BE GRANULAR FILL MATERIAL TO TII SPECIFICATION TO CLAUSE 505 TYPE B. TRENCH TO BE 400MM DEEP BY 700MM WIDE, UNLESS OTHERWISE SHOWN ON THIS DRAWING.
15. ALL TRENCHES IN ROADS TO BE BACKFILLED TO FORMATION LEVEL WITH CLAUSE 808 MATERIAL TO TII SPECIFICATION.
16. DIMENSIONED POSITION OF BUILDER'S UPSTAND (PU / SVP/ RWP) & STACKS TO BE PROVIDED BY THE ARCHITECT.
17. CONNECTIONS FROM PU'S / RWP'S TO BE 100 DIA. UPVC PIPES UNLESS OTHERWISE SHOWN. FOUL DRAIN CONNECTIONS FROM PU'S (WASTE AND OR SOIL) TO EXTERNAL MANHOLES OR INSPECTION CHAMBERS TO BE LAID TO A MINIMUM FALL OF 1 IN 40. RWP'S CONNECTIONS TO EXTERNAL SYSTEM TO BE LAID TO A MINIMUM FALL OF 1 IN 100.
18. MANHOLE COVERS / INSPECTION CHAMBERS TO MATCH FINISHED LEVELS OF EXTERNAL PAVING, ROAD, HARDSTANDING OR LANDSCAPED AREAS COVER LEVELS ARE INDICATIVE ONLY.
19. PRIOR TO COMPLETION OF DRAINAGE CONSTRUCTION ON SITE THE CONTRACTOR SHALL COMPLETE THE NEXT LIST OF WORKS IN ACCORDANCE WITH THE SPECIFICATION:
    - CLEANSE THE SYSTEM
    - TEST ALL PIPE WORK
    - CARRY OUT A CCTV INSPECTION
    - COMPLETE A SET OF AS CONSTRUCTED DRAWINGS
20. THE CONTRACTOR SHALL BE ENTIRELY RESPONSIBLE FOR LOCATING THE POSITIONS OF ALL EXISTING SERVICES AND SHALL, IF REQUIRED BY THE ENGINEER/CLIENT, REPRESENTATIVE CARRY OUT A SURVEY OF THE SITE TO LOCATE THESE SERVICES INCLUDING WHERE REQUIRED RATES FOR CARRYING OUT EXCAVATION IN ROADS, AND ELSEWHERE WHERE SERVICES ARE ENCOUNTERED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DIVERSION OF EXISTING SERVICES ENCOUNTERED DURING THE COURSE OF THE WORK.
21. ALL EXISTING SERVICES SHOWN ON THE GPR SURVEY PROVIDED IN THE SUPPORTING DOCUMENTATION AND NOT SHOWN ON THIS DRAWING, TO BE BROKEN AND REMOVED.
22. ALL EXISTING DCC AND IRISH WATER SEWERS TO BE MAINTAINED AND KEPT ALIVE DURING WORKS.
23. ALL STACKS TO BE RODDABLE ABOVE SLAB LEVEL.
24. MINIMUM DISTANCE BETWEEN BRANCH CONNECTIONS TO THE MAIN LINES TO BE 300mm.
25. ALL BRANCH CONNECTIONS TO MAIN LINE FOUL SEWER TO BE BY MEANS OF 45 DEGREE "Y" BRANCH CONNECTIONS ONLY.
26. ALL FINAL FOUL INSPECTION CHAMBERS WITHIN THE CURTILAGE OF EACH PROPERTY TO BE IN ACCORDANCE WITH IRISH WATER'S STANDARD DETAILS FOR INSPECTION CHAMBERS.
27. THE CONTRACTOR SHALL NOTE THE TESTING REQUIREMENTS, WHICH SHALL APPLY TO BOTH FOUL AND SURFACE WATER NETWORKS, AS OUTLINED IN THE IRISH WATER QUALITY ASSURANCE FIELD INSPECTION REQUIREMENTS MANUAL AND ALLOW FOR ALL COSTS ASSOCIATED WITH TESTING AND COMMISSIONING. THE CONTRACTOR SHALL NOTE THAT IRISH WATER NOW REQUIRE A CHARTERED ENGINEER TO CERTIFY INSTALLATION / TESTING, MATERIALS COMPLIANCE AND WORKMANSHIP.
28. THE CONTRACTOR SHALL PREPARE ALL FINAL DOCUMENTS PRIOR TO HANDOVER FOR SUBMISSION TO IRISH WATER AS OUTLINED IN APPENDIX 4 OF THE IRISH WATER QUALITY ASSURANCE FIELD INSPECTION REQUIREMENTS MANUAL. IN PARTICULAR, THE CONTRACTOR SHALL NOTE THE REQUIREMENTS FOR MANHOLE INTEGRITY TESTS, PIPELINE AIR TESTS, MANHOLE INSPECTION CARDS, CCTV SURVEYS OF COMPLETED PIPE WORK, AND AS CONSTRUCTED DRAWINGS.

PROPOSED DRAINAGE LAYOUT

SCALE @ A0: 1:200
SCALE @ A2: 1:400

PLOT NUMBERS		
BLOCK NUMBER	RESIDENTIAL PLOT NUMBERS	NON-RESIDENTIAL
BLOCK BG1	BG1-1 to BG1-152	CRECHE - 248m²
		RETAIL UNIT - 238m²
BLOCK BG2	BG2-1 to BG2-89	RESTAURANT - 159m²
BLOCK BG3	BG3-1 to BG3-52	
BLOCK BG4	BG4-1 to BG4-49	
BLOCK BG5	BG5-1 to BG5-4	

NEW SURFACE WATER MANHOLE

MANHOLE	COVER LEVEL	INVERT LEVEL
1-IC3.0	+21.82	OUT: +20.66
1-IC6.0	+20.80	OUT: +19.79
1-IC6.1	+20.80	IN FROM 1-IC6.0: +19.64 OUT: +19.64
1-S1.0	+21.70	OUT: +20.32
1-S1.1	+20.93	IN FROM 1-S1.0: +19.14 OUT: +19.14
1-S1.2	+20.77	IN FROM 1-S1.1: +19.02 OUT: +19.02
1-S1.3	+20.80	IN FROM 1-S1.2: +18.70 OUT: +18.71
1-S1.4	+20.64	IN FROM 1-S1.3: +18.56 OUT: +18.56
1-S1.5	+20.60	IN FROM 1-S4.0: +18.56 IN FROM 1-S1.4: +18.51 OUT: +18.51
1-S1.6	+20.02	IN FROM 1-S1.5: +18.32 OUT: +18.32
1-S1.7	+19.92	IN FROM 1-S1.6: +18.26 IN FROM 1-S5.3: +18.88 IN FROM 1-SCV1.0: +18.41 OUT: +18.26
1-S1.8	+19.99	IN FROM 1-S1.7: +18.13 OUT: +18.13
1-S1.9	+20.47	IN FROM 1-S1.8: +18.09 OUT: +18.09
1-S1.10	+19.91	IN FROM 1-S1.9: +17.96 OUT: +17.96
1-S1.11	+19.91	IN FROM 1-S1.10: +17.84 OUT: +17.84
1-S1.12	+20.05	IN FROM 1-S1.11: +17.66 OUT: +17.70
1-S1.13	+19.42	IN FROM 1-S1.12: +17.55 OUT: +17.55
1-S1.14	+19.30	IN FROM 1-S1.13: +17.43 IN FROM 1-S7.0: +17.43 OUT: +17.43 OUT: +18.32
1-S1.15	+19.20	IN FROM 1-S1.14: +17.37 OUT: +17.37
1-S1.16	+19.13	IN FROM 1-S1.15: +17.18 OUT: +17.18
1-S1.17	+18.65	IN FROM 1-S1.16: +17.02 IN FROM 1-S8.1: +17.37 OUT: +17.02
1-S1.18	+18.59	IN FROM 1-S1.17: +16.82 OUT: +16.82
1-S1.19	+18.23	IN FROM 1-S10.5: +16.57 IN FROM 1-S1.18: +16.57 OUT: +16.57
1-S1.20	+18.23	IN FROM 1-S9.3: +16.56 IN FROM 1-S1.19: +16.56 OUT: +16.56
1-S1.21	+17.85	IN FROM 1-S1.20: +16.48 OUT: +16.48
1-S1.22	+17.93	IN FROM 1-S1.21: +16.46
1-S2.0	+21.34	OUT: +19.56
1-S2.1	+20.82	IN FROM 1-S2.0: +19.29 IN FROM 1-S3.1: +19.45 OUT: +18.91
1-S3.0	+21.71	IN FROM 1-IC3.0: +20.43 OUT: +20.43
1-S3.1	+20.94	IN FROM 1-S3.0: +20.04 OUT: +19.57
1-S4.0	+20.60	OUT: +18.63
1-S5.0	+20.51	OUT: +19.54
1-S5.1	+20.09	IN FROM 1-S5.0: +19.26 OUT: +19.22
1-S5.2	+19.94	IN FROM 1-S5.1: +19.08 IN FROM 1-S6.0: +19.16 OUT: +19.08
1-S5.3	+19.96	IN FROM 1-S5.2: +19.05 OUT: +19.05
1-S6.0	+20.80	IN FROM 1-IC6.1: +19.28 OUT: +19.28
1-S7.0	+19.19	OUT: +17.91
1-S8.0	+19.17	IN FROM 1-S1.14: +18.26 OUT: +18.27
1-S8.1	+18.65	IN FROM 1-S8.0: +17.45 OUT: +17.45
1-S9.0	+19.00	OUT: +17.07
1-S9.1	+18.65	IN FROM 1-S9.0: +16.98 OUT: +16.98
1-S9.2	+18.25	IN FROM 1-S9.1: +16.82 OUT: +16.82
1-S9.3	+18.48	IN FROM 1-S9.2: +16.63 OUT: +16.63
1-S10.0	+19.55	OUT: +17.89
1-S10.1	+19.80	IN FROM 1-S10.0: +17.68 OUT: +17.68
1-S10.2	+19.60	IN FROM 1-S10.1: +17.48 OUT: +17.48
1-S10.3	+19.50	IN FROM 1-S10.2: +17.30 OUT: +17.20
1-S10.4	+18.60	IN FROM 1-S10.3: +17.09 OUT: +17.09
1-S10.5	+18.42	IN FROM 1-S10.4: +16.82 OUT: +16.82
1-S11.0	+20.54	OUT: +19.06
1-S11.1	+20.32	IN FROM 1-S11.0: +18.83 OUT: +18.83
1-S11.2	+20.38	IN FROM 1-S11.1: +18.75 OUT: +18.75
1-S11.3	+20.37	IN FROM 1-S11.2: +18.71 OUT: +18.78
1-SCV1.0	+19.95	OUT: +18.46

NEW FOUL DRAINAGE MANHOLE

MANHOLE	COVER LEVEL	INVERT LEVEL
1-F1.0	+20.66	OUT: +19.31
1-F1.1	+20.79	IN FROM 1-F2.2: +19.16 IN FROM 1-F1.0: +18.99 OUT: +18.99
1-F1.2	+20.66	IN FROM 1-F1.1: +18.84 OUT: +18.84
1-F1.3	+20.62	IN FROM 1-F1.2: +18.88 IN FROM 1-F4.0: +19.10 OUT: +18.83
1-F1.4	+20.08	IN FROM 1-F1.3: +18.63 IN FROM 1-F5.0: +19.09 OUT: +18.63
1-F1.5	+19.97	IN FROM 1-F1.4: +18.55 IN FROM 1-F6.3: +18.55 OUT: +18.55
1-F1.6	+19.90	IN FROM 1-F1.5: +18.53 OUT: +18.53
1-F1.7	+19.97	IN FROM 1-F1.6: +18.20 OUT: +18.20
1-F1.8	+20.41	IN FROM 1-F1.7: +18.10 OUT: +18.10
1-F1.9	+20.30	IN FROM 1-F1.8: +17.85 OUT: +17.85
1-F1.10	+20.10	IN FROM 1-F1.9: +17.60 OUT: +17.60
1-F1.11	+19.85	IN FROM 1-F1.10: +17.22 OUT: +17.22
1-F1.12	+19.43	OUT: +17.00
1-F1.13	+17.76	IN FROM 1-F1.12: +16.93
1-F1.14	+17.68	IN FROM: +16.85 OUT: +16.85
1-F1.15	+17.43	OUT: +16.52
1-F1.16	+17.32	IN FROM 1-F1.15: +16.41 OUT: +16.41
1-F1.17	+18.24	IN FROM 1-F1.16: +16.10 OUT: +16.10
1-F1.18	+18.34	IN FROM 1-F1.17: +15.79 OUT: +15.79
1-F2.0	+21.66	IN FROM 1-IC2.0: +20.89 OUT: +19.82
1-F2.1	+20.91	IN FROM 1-F2.0: +19.56 OUT: +19.56
1-F2.2	+20.78	IN FROM 1-F2.1: +19.43 OUT: +19.43
1-F3.0	+20.80	IN FROM 1-IC3.1: +18.99 OUT: +19.00
1-F4.0	+20.59	OUT: +19.16
1-F5.0	+20.17	OUT: +19.19
1-F6.0	+20.45	OUT: +19.02
1-F6.1	+20.08	IN FROM 1-F6.0: +18.92 OUT: +18.92
1-F6.2	+19.98	IN FROM 1-F6.1: +18.73 IN FROM 1-F3.0: +18.83 OUT: +18.73
1-F6.3	+19.93	IN FROM 1-F6.2: +18.70 OUT: +18.70
1-IC2.0	+22.06	OUT: +21.18
1-IC3.0	+20.80	OUT: +20.11
1-IC3.1	+20.80	IN FROM 1-IC3.0: +19.69 OUT: +19.45
EX F5	+18.03	IN FROM 1-F1.18: +15.68

NEW SURFACE WATER MANHOLE

MANHOLE	COVER LEVEL	INVERT LEVEL
1-S12.1	+20.20	+19.15
1-S12.2	+19.90	+18.78
1-S12.3	+19.90	+18.40
1-S12.4	+19.90	+17.80
1-S13.1	+19.90	+19.15
1-S13.2	+20.00	+18.93
1-S13.3	+19.95	+18.71

ISSUE	DATE	DESCRIPTION	BY
PL6	31.05.22	PLANNING ISSUE	KS
PL5	16.03.22	UPDATED AS PER IW COMMENTS	TN
PL4	24.02.22	IW DIVERSIONS TEAM COMMENTS	TN
PL3	20.01.22	ISSUED FOR IW DESIGN VETTING	TN
PL2	10.12.21	ISSUED FOR IW DESIGN VETTING	TN
PL1	09.11.21	ISSUED FOR PRE-APPLICATION SUBMISSION	TN

Project Engineer: CIARAN O'RAFFERTY | Project Director: CIARAN KENNEDY

BM STAGE

PLANNING

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CLIENT
CWTC MULTI FAMILY ICAV ACTING SOLELY IN RESPECT OF ITS SUB FUND DBTR SCR1 FUND

PROJECT TITLE
BAILEY GIBSON SHD 2

BM PROJECT No.
19117

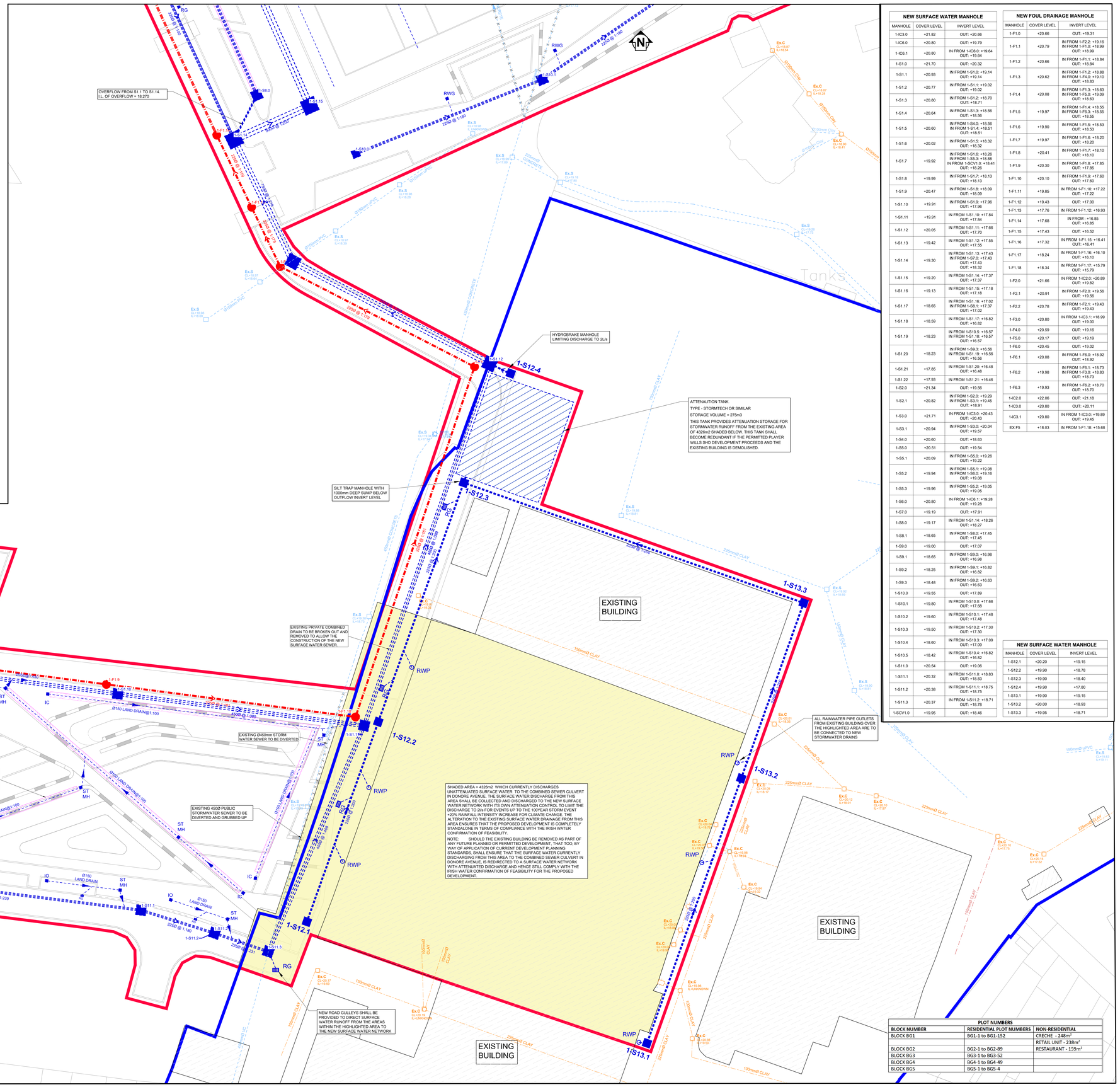
MODEL | REFERENCE: **BGL-BMD-ZZ-00-DR-C-1020-1022 & 1120-1122** | SUITABILITY: **S1** | REVISION: **P01**

DRAWING TITLE
PROPOSED DRAINAGE LAYOUT (SHEET 2 OF 4)

DRG | DRAWING REFERENCE: **BGL-BMD-ZZ-00-DR-C-1021** | STATUS: **D2** | REVISION: **PL6**

DRAINAGE NOTES

1. SURFACE WATER DRAINS TO BE AS SPECIFIED ON DRAWING BGL-BMD-ZZ-ZZ-DR-C-1220 & 1222.
2. FOUL DRAINS TO BE UNPLASTICISED PVC PIPES TO IS EN 1401 2009/2012 CLASS SN8 IN LINE WITH THE REQUIREMENTS OF IRISH WATER CODE OF PRACTICE FOR WASTEWATER.
3. PIPE DIAMETERS SHOWN ON DRAINAGE LAYOUTS ARE REQUIRED MINIMUM INTERNAL DIAMETERS (MM).
4. ALL DRAINS WITH COVER LESS THAN 0.5M IN GARDENS/ PATHWAYS AND 1.2M UNDER ROADS TO BE BEDDED & SURROUNDED IN C16/20 CONCRETE AS PER BMCE DRAWING BGL-BMD-ZZ-ZZ-DR-C-1220 & 1222 AND SPECIFICATIONS.
5. DUBLIN CITY COUNCIL SURFACE WATER MANHOLES (LOCATED UNDER ALL ROADS) TO BE HIGH DENSITY BLOCKWORK TO IS 20 PART1: 1987 OR CAST IN SITU CLASS 30N / 20MM IN LINE WITH THE GREATER DUBLIN REGION (GDR) CODE OF PRACTICE FOR DRAINAGE. REFER TO SUPPORTING DOCUMENTATION AND BMCE DRAWING BGL-BMD-ZZ-ZZ-DR-C-1220 & 1222. ALL MANHOLES TO BE WATERTIGHT STRUCTURES.
6. ALL FOUL DRAINAGE & WATERMAINS OUTSIDE THE BUILDING FOOTPRINT TO BE CONSTRUCTED IN ACCORDANCE WITH IRISH WATER DETAILS & CODES OF PRACTICE.
7. INSPECTION CHAMBERS (IC / AJ) TO BE POLYPROPYLENE 0.5M INTERNAL DIAMETER, MAXIMUM OF 1.0M DEEP. 150MM THICK C16 / 20 CONCRETE BED AND SURROUND.
8. SILT TRAP MANHOLES (ST MH) TO BE CAST IN SITU CONCRETE CL.30N / 20MM IN LINE WITH THE GREATER DUBLIN REGION (GDR) CODE OF PRACTICE FOR DRAINAGE. PIT TO BE 0.5M DEEP (BELOW OUTLET INVERT LEVEL).
9. TREE PITS (TP) TO BE PROPRIETARY UNITS, REFER TO BMCE DRAWING BGL-BMD-ZZ-ZZ-DR-C-1221. INSPECTION OPENINGS (IO) ADJACENT TO TREE PITS TO BE DUCTILE IRON COVERS/FRAMES, MIN CLASS D400 TO IS EN 124:2 2015.
10. MANHOLE COVERS IN TRAFFICKED AREAS TO BE MIN CLASS D400 TO IS EN 124:2 2015 DUCTILE IRON COVERS/ FRAMES, ALL OTHER AREAS TO BE MIN CLASS C250. MANHOLE COVERS IN CARRIAGEWAYS TO HAVE POLYESTER RESIN BEDDING MATERIAL FOR FIXING MANHOLE FRAMES AS PER BMCE CIVIL SPECIFICATION.
11. ROAD GULLIES TO BE CONSTRUCTED OF 215MM ENGINEERING BLOCKS OR 225MM MASS CONCRETE TO GDR CODE OF PRACTICE FOR DRIANAGE, COVER/FRAME TO BE DUCTILE IRON WITH MIN CLASS D400 TO IS EN 124:2 2015. REFER TO SUPPORTING DOCUMENTATION AND BMCE DRAWING BGL-BMD-ZZ-ZZ-DR-C-1210.
12. DRAINS FROM ∧∂'s / IC's TO MAIN LINES TO BE 100mm DIAMETER UPVC (UNLESS OTHERWISE SHOWN ON LAYOUT), BED AND SURROUNDED IN 150mm CONCRETE.
13. LAND DRAIN TO BE 100 DIA. UPVC PERFORATED PIPES, BED & SURROUND IN 150MM THICK PEA GRAVEL & WRAPPED IN TERRAM 1000 OR SIMILAR APPROVED GEOTEXTILE.
14. INFILTRATION TRENCH TO BE GRANULAR FILL MATERIAL TO TII SPECIFICATION TO CLAUSE 505 TYPE B. TRENCH TO BE 400MM DEEP BY 700MM WIDE, UNLESS OTHERWISE SHOWN ON THIS DRAWING.
15. ALL TRENCHES IN ROADS TO BE BACKFILLED TO FORMATION LEVEL WITH CLAUSE 808 MATERIAL TO TII SPECIFICATION.
16. DIMENSIONED POSITION OF BUILDER'S UPSTAND (PU / SVP/ RWP) & STACKS TO BE PROVIDED BY THE ARCHITECT.
17. CONNECTIONS FROM PU'S / RWP'S TO BE 100 DIA. UPVC PIPES UNLESS OTHERWISE SHOWN. FOUL DRAIN CONNECTIONS FROM PU'S (WASTE AND OR SOIL) TO EXTERNAL MANHOLES OR INSPECTION CHAMBERS TO BE LAID TO A MINIMUM FALL OF 1 IN 40. RWP'S CONNECTIONS TO EXTERNAL SYSTEM TO BE LAID TO A MINIMUM FALL OF 1 IN 100.
18. MANHOLE COVERS / INSPECTION CHAMBERS TO MATCH FINISHED LEVELS OF EXTERNAL PAVING, ROAD, HARDSTANDING OR LANDSCAPED AREAS COVER LEVELS ARE INDICATIVE ONLY.
19. PRIOR TO COMPLETION OF DRAINAGE CONSTRUCTION ON SITE THE CONTRACTOR SHALL COMPLETE THE NEXT LIST OF WORKS IN ACCORDANCE WITH THE SPECIFICATION:
    - CLEANSE THE SYSTEM.
    - TEST ALL PIPE WORK
    - CARRY OUT A CCTV INSPECTION
    - COMPLETE A SET OF AS CONSTRUCTED DRAWINGS
20. THE CONTRACTOR SHALL BE ENTIRELY RESPONSIBLE FOR LOCATING THE POSITIONS OF ALL EXISTING SERVICES AND SHALL, IF REQUIRED BY THE ENGINEER/CLIENT, REPRESENTATIVE CARRY OUT A SURVEY OF THE SITE TO LOCATE THESE SERVICES INCLUDING WHERE REQUIRED RATES FOR CARRYING OUT EXCAVATION IN ROADS, AND ELSEWHERE WHERE SERVICES ARE ENCOUNTERED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DIVERSION OF EXISTING SERVICES ENCOUNTERED DURING THE COURSE OF THE WORK.
21. ALL EXISTING SERVICES SHOWN ON THE GPR SURVEY PROVIDED IN THE SUPPORTING DOCUMENTATION AND NOT SHOWN ON THIS DRAWING, TO BE BROKEN AND REMOVED.
22. ALL EXISTING DCC AND IRISH WATER SEWERS TO BE MAINTAINED AND KEPT ALIVE DURING WORKS.
23. ALL STACKS TO BE RODDABLE ABOVE SLAB LEVEL.
24. MINIMUM DISTANCE BETWEEN BRANCH CONNECTIONS TO THE MAIN LINES TO BE 300mm.
25. ALL BRANCH CONNECTIONS TO MAIN LINE FOUL SEWER TO BE BY MEANS OF 45 DEGREE "Y" BRANCH CONNECTIONS ONLY.
26. ALL FINAL FOUL INSPECTION CHAMBERS WITHIN THE CURTILAGE OF EACH PROPERTY TO BE IN ACCORDANCE WITH IRISH WATER'S STANDARD DETAILS FOR INSPECTION CHAMBERS.
27. THE CONTRACTOR SHALL NOTE THE TESTING REQUIREMENTS, WHICH SHALL APPLY TO BOTH FOUL AND SURFACE WATER NETWORKS, AS OUTLINED IN THE IRISH WATER QUALITY ASSURANCE FIELD INSPECTION REQUIREMENTS MANUAL AND ALLOW FOR ALL COSTS ASSOCIATED WITH TESTING AND COMMISSIONING. THE CONTRACTOR SHALL NOTE THAT IRISH WATER NOW REQUIRE A CHARTERED ENGINEER TO CERTIFY INSTALLATION / TESTING, MATERIALS COMPLIANCE AND WORKMANSHIP.
28. THE CONTRACTOR SHALL PREPARE ALL FINAL DOCUMENTS PRIOR TO HANDOVER FOR SUBMISSION TO IRISH WATER AS OUTLINED IN APPENDIX 4 OF THE IRISH WATER QUALITY ASSURANCE FIELD INSPECTION REQUIREMENTS MANUAL. IN PARTICULAR, THE CONTRACTOR SHALL NOTE THE REQUIREMENTS FOR MANHOLE INTEGRITY TESTS, PIPELINE AIR TESTS, MANHOLE INSPECTION CARDS, CCTV SURVEYS OF COMPLETED PIPE WORK, AND AS CONSTRUCTED DRAWINGS.


OVERFLOW FROM S1.1 TO S1.14.
I.L. OF OVERFLOW = 18.270
HYDROBRAKE MANHOLE LIMITING DISCHARGE TO 2L/s
ATTENUATION TANK.
TYPE - STORMTECH OR SIMILAR
STORAGE VOLUME = 275m3
THIS TANK PROVIDES ATTENUATION STORAGE FOR STORMWATER RUNOFF FROM THE EXISTING AREA OF 4326m2 SHADED BELOW. THIS TANK SHALL BECOME REDUNDANT IF THE PERMITTED PLAYER WILLS SHD DEVELOPMENT PROCEEDS AND THE EXISTING BUILDING IS DEMOLISHED.
SILT TRAP MANHOLE WITH 1000mm DEEP SUMP BELOW OUTFLOW INVERT LEVEL
EXISTING BUILDING
EXISTING PRIVATE COMBINED DRAIN TO BE BROKEN OUT AND REMOVED TO ALLOW THE CONSTRUCTION OF THE NEW SURFACE WATER SEWER.
ALL RAINWATER PIPE OUTLETS FROM EXISTING BUILDING OVER THE HIGHLIGHTED AREA ARE TO BE CONNECTED TO NEW STORMWATER DRAINS
REFER TO MEP SUSPENDED DRAINAGE PIPE WORK SYSTEM FOR THE NUMBER OF CONNECTIONS INTO MANHOLE
PERFORATED LAND DRAIN WITH OVERFLOW CONNECTION TO MAIN SURFACE WATER NETWORK TO LIMIT RUN OFF FROM THE PUBLIC PARK TO EXTREME STORM EVENTS
EXISTING Ø450mm STORM WATER SEWER TO BE DIVERTED
EXISTING 450Ø PUBLIC STORMWATER SEWER TO BE DIVERTED AND GRUBBED UP
SHADED AREA = 4326m2 WHICH CURRENTLY DISCHARGES UNATTENUATED SURFACE WATER TO THE COMBINED SEWER CULVERT IN DONORE AVENUE. THE SURFACE WATER DISCHARGE FROM THIS AREA SHALL BE COLLECTED AND DISCHARGED TO THE NEW SURFACE WATER NETWORK WITH ITS OWN ATTENUATION CONTROL TO LIMIT THE DISCHARGE TO 2l/s FOR EVENTS UP TO THE 100YEAR STORM EVENT +20% RAINFALL INTENSITY INCREASE FOR CLIMATE CHANGE. THE ALTERATION TO THE EXISTING SURFACE WATER DRAINAGE FROM THIS AREA ENSURES THAT THE PROPOSED DEVELOPMENT IS COMPLETELY STANDALONE IN TERMS OF COMPLIANCE WITH THE IRISH WATER CONFIRMATION OF FEASIBILITY.
NOTE: SHOULD THE EXISTING BUILDING BE REMOVED AS PART OF ANY FUTURE PLANNED OR PERMITTED DEVELOPMENT, THAT TOO, BY WAY OF APPLICATION OF CURRENT DEVELOPMENT PLANNING STANDARDS, SHALL ENSURE THAT THE SURFACE WATER CURRENTLY DISCHARGING FROM THIS AREA TO THE COMBINED SEWER CULVERT IN DONORE AVENUE, IS REDIRECTED TO A SURFACE WATER NETWORK WITH ATTENUATED DISCHARGE AND HENCE STILL COMPLY WITH THE IRISH WATER CONFIRMATION OF FEASIBILITY FOR THE PROPOSED DEVELOPMENT.
NEW ROAD GULLEYS SHALL BE PROVIDED TO DIRECT SURFACE WATER RUNOFF FROM THE AREAS WITHIN THE HIGHLIGHTED AREA TO THE NEW SURFACE WATER NETWORK
LINEAR SLOT DRAIN DISCHARGING TO SLING DRAINAGE BELOW GROUND FLOOR PODIUM SLAB
1-S1.1
1-S1.2
1-S1.3
1-S1.4
1-S1.5
1-S1.6
1-S1.7
1-S1.8
1-S1.9
1-S1.10
1-S1.11
1-S1.12
1-S1.13
1-S1.14
1-S1.15
1-S1.16
1-S1.17
1-S1.18
1-S1.19
1-S1.20
1-S1.21
1-S2.0
1-S2.1
1-S3.0
1-S3.1
1-S4.0
1-S5.0
1-S5.1
1-S5.2
1-S5.3
1-S6.0
1-S7.0
1-S8.0
1-S8.1
1-S9.0
1-S9.1
1-S9.2
1-S9.3
1-S10.0
1-S10.1
1-S10.2
1-S10.3
1-S10.4
1-S10.5
1-S11.0
1-S11.1
1-S11.2
1-S11.3
1-S12.1
1-S12.2
1-S12.3
1-S12.4
1-S13.1
1-S13.2
1-S13.3
1-SCV1.0
1-F1.0
1-F1.1
1-F1.2
1-F1.3
1-F1.4
1-F1.5
1-F1.6
1-F1.7
1-F1.8
1-F1.9
1-F1.10
1-F1.11
1-F1.12
1-F1.13
1-F1.14
1-F1.15
1-F1.16
1-F1.17
1-F1.18
1-F2.0
1-F2.1
1-F2.2
1-F3.0
1-F4.0
1-F5.0
1-F6.0
1-F6.1
1-F6.2
1-F6.3
1-IC2.0
1-IC3.0
1-IC3.1
EX F5
Tanks
RG
RWG
RWP
IC
ST MH
IO
Ø150 LAND DRAIN
Ø150 LAND DRAIN@1:100
150mmØ PVC
225mmØ CLAY
150mmØ CLAY
100mmØ CLAY
200mmØ CLAY
150mmØ uPVC
Ex.S
Ex.C
Ex.E
Ex.W
Ex.G
Ex.T
Ex.TV
Ex.GAS
Ex.ESB
Ex.BT
Ex.UNKNOWN
D1100mm Clay
D1200mm Clay
D1400mm Clay
D1600mm Clay
D1800mm Clay
D2100mm Clay
D2400mm Clay
D2700mm Clay
D3000mm Clay
D3300mm Clay
D3600mm Clay
D3900mm Clay
D4200mm Clay
D4500mm Clay
D4800mm Clay
D5100mm Clay
D5400mm Clay
D5700mm Clay
D6000mm Clay
D6300mm Clay
D6600mm Clay
D6900mm Clay
D7200mm Clay
D7500mm Clay

FFL 20.290

BLOCK BG5 TOWNHOUSES

FFL 20.590

BLOCK BG5 TOWNHOUSES

FFL 19.985

4" CAST IRON 1920

100mm Ø HDPE (PE80)

3000

100mm Ø HDPE (PE80)

100mm Ø HDPE (PE80)

NEW OFF-LINE HYDRANT, REFER TO IRISH WATER DWG. STD-W-17

NEW METERED 100mm DIA CONNECTION TO EXISTING WATERMAIN WITH BI-DIRECTIONAL WATER METER AND IRISH WATER SPECIFICATION IN IRISH WATER TO STD-W-26 & STD-W-36. (FL... METER KIOSK LOCATION TO BE COORDINATED WITH LANDSCAPE ARCHITECT)

WATERMAIN CONNECTION REQUIRED FOR FIRE FIGHTING PURPOSES. THIS VALVE IS TO REMAIN SHUT DURING NORMAL OPERATIONS

EXISTING HOUSING

110mm MDPVC 2007

EXISTING HYDRANT TO BE RETAINED. EXISTING WATERMAIN TO BE CAPPED AT THE EXISTING HYDRANT LOCATION AND DECOMMISSIONED AND REMOVED BEYOND THE HYDRANT.

110mm MDPVC 2007

100mm Ø HDPE (PE80)

PROPOSED HOUSE

PROPOSED CRECHE

PROPOSED RETAIL UNIT

BLOCK BG1 FFL 20.800

EXISTING HOUSE

NEW 25mm OD MDPE (PE-80) DOMESTIC SERVICE CONNECTION AND BOUNDARY BOX

NEW 32mm DIA MDPE (PE-80) SERVICE CONNECTION TO CRECHE WITH 20mm METER TO IRISH WATER SPECIFICATION IN IRISH WATER APPROVED G1.5 BOUNDARY BOX.

NEW 32mm DIA MDPE (PE-80) SERVICE CONNECTION TO RETAIL UNIT WITH 20mm METER TO IRISH WATER SPECIFICATION IN IRISH WATER APPROVED G1.5 BOUNDARY BOX.

NEW OFF-LINE HYDRANT. REFER TO IRISH WATER DWG. STD-W-19 FOR DETAIL

250mm Ø HDPE (PE 100)

250mm Ø HDPE (PE 100)

250mm Ø HDPE (PE 100)

NEW OFF-LINE HYDRANT. REFER TO IRISH WATER DWG. STD-W-19 FOR DETAIL.

110mm MDPVC 2007

250mm Ø HDPE (PE 100)

BLOCK BG4 FFL 21.900

EXISTING HOUSING

TEMPORARY "DEAD END" (FOR FUTURE EXTENSION) REFER TO STD-W-05 FOR DETAIL

WOH

SV

1-S1.7

SCV

SV

SCOUR CHAMBER TO STORM SEWER ARRANGEMENTS, REFER TO STD-W-30B FOR DETAIL

FH

NEW OFF-LINE HYDRANT, REFER TO IRISH WATER DWG. STD-W-19 FOR DETAIL.

DFSDF

SDSDF

NEW 32mm DIA MDPE(PE-80) SERVICE CONNECTION TO GYM WITH 20mm METER TO IRISH WATER SPECIFICATION IN IRISH WATER APPROVED G1.5 BOUNDARY BOX.

PROPOSED GYM

BLOCK BG2 FFL 20.600

250mm Ø HDPE (PE 100)

NEW 32mm DIA MDPE(PE-80) SERVICE CONNECTION TO RESTAURANT WITH 20mm METER TO IRISH WATER SPECIFICATION IN IRISH WATER APPROVED G1.5 BOUNDARY BOX.

NEW METERED 150ømm DIA CONNECTION TO ENTER IN BASEMENT. PROPOSED DN100 WATER METER IN ACCORDANCE WITH IRISH WATER REQUIREMENTS. REFER TO STD-W-26 & STD-W-36. (FLOW METER KIOSK LOCATION TO BE COORDINATED WITH LANDSCAPE ARCHITECT)

SV

SV

SV

57 10000l/min

FH

NEW OFF-LINE HYDRANT, REFER TO IRISH WATER DWG. STD-W-17.

EXTENT OF BASEMENT

PROPOSED RESTAURANT OVER

DENOTES INDICATIVE ROUTE OF PRIVATE WATER SUPPLY PIPEWORK FROM BASEMENT TO BLOCK BG1. REFER TO OCSC SERVICES ENGINEERS DRAWINGS FOR DETAILS.

BLOCK BG3 FFL 20.800

DENOTES INDICATIVE ROUTE OF PRIVATE WATER SUPPLY PIPEWORK FROM BASEMENT TO BLOCK BG4. REFER TO OCSC SERVICES ENGINEERS DRAWINGS FOR DETAILS.

BLOCK BG4 FFL 20.700

EXISTING WATERMAIN TO BE DECOMMISSIONED, GRUBBED UP WITHIN THE SITE, CAPPED AND SEALED AT THE PROPERTY BOUNDARY.

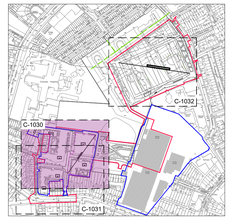
PLOT NUMBERS		
BLOCK NUMBER	RESIDENTIAL PLOT NUMBERS	NON-RESIDENTIAL
BLOCK BG1	BG1-1 to BG1-152	CRECHE - 248m²
		RETAIL UNIT - 238m²
BLOCK BG2	BG2-1 to BG2-89	RESTAURANT - 159m²
BLOCK BG3	BG3-1 to BG3-52	
BLOCK BG4	BG4-1 to BG4-49	
BLOCK BG5	BG5-1 to BG5-4	

PROPOSED WATERMAIN LAYOUT

SCALE @ A0: 1:200
SCALE @ A2: 1:400

NOTES

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL ENGINEERS & ARCHITECT'S DRAWINGS.FIGURED DIMENSIONS ONLY (NOT SCALING) TO BE USED. WHERE A CONFLICT OF INFORMATION EXISTS OR IF IN ANY DOUBT - ASK'.
2. CONSULTANTS TO BE INFORMED IMMEDIATELY OF ANY DISCREPANCIES BEFORE WORK PROCEEDS.



KEY PLAN

SCALE @ A0: 1:5000
SCALE @ A2: 1:10000

CIVIL LEGEND

NEW WATERMAIN	
EXISTING WATERMAIN	
DECOMMISSIONED LINE	X X X X X X X X X X X
SLUICE VALVE	SV
AIR VALVE	AV
HYDRANT	H
I.W. APPROVED BOUNDARY BOX	BB
SCOUR VALVE CHAMBER	SCV
WASHOUT HYDRANT	WOH
FIRE HYDRANT	FH
ELECTROMAGNETIC METER CHAMBER	M
EXISTING BUILDING	
BAILEY GIBSON SITE BOUNDARY	
OWNERSHIP LINE	
BASEMENT OUTLINE	
PRIVATE WATER SUPPLY	

WATERMAIN NOTES

1. THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS, ENGINEERS & MANUFACTURERS DRAWINGS & SPECIFICATIONS.
2. ALL PIPE DIAMETERS ARE NOMINAL.
3. WHERE CONNECTION IS REQUIRED TO AN EXISTING PUBLIC WATERMAIN, THE CONTRACTOR MUST ISSUE DETAILED DOCUMENTATION FOR APPROVAL TO THE RELEVANT LOCAL AUTHORITY AND IRISH WATER. THIS DOCUMENTATION MUST BE ISSUED AT LEAST 40 WORKING DAYS IN ADVANCE OF THE PLANNED WORKS OR AS AGREED WITH THE LOCAL AUTHORITY AND IRISH WATER.
4. ALL THRUST BLOCKS MUST BE CAST AGAINST UNDISTURBED GROUND. FLEXIBLE PIPES SHOULD BE WRAPPED IN ONE LAYER OF 1000 GAUGE POLYTHENE TO AVOID DIRECT CONTACT WITH THE CONCRETE. MARKER POSTS AND PLATES TO BE PROVIDED FOR ALL VALVES, METERS AND HYDRANTS.
5. CHLORINATION AND BACTERIOLOGICAL TESTS TO BE UNDERTAKEN BY EXTERNAL TESTER AND TEST CERTIFICATION TO BE SUBMITTED TO ENGINEER.
6. MARKER POSTS AND PLATES TO BE PROVIDED FOR ALL VALVES.
7. IN ADVANCE OF TESTING OF THE WATERMAINS, THE CONTRACTOR MUST PRESENT TO THE ENGINEER A CALIBRATION CERTIFICATE FOR THE APPARATUS TO BE USED IN THE TEST.
8. ALL DETAILS TO BE AGREED WITH LOCAL AUTHORITY
9. ALL EXISTING WATERMAINS TO BE ADEQUATELY PROTECTED. ANY WATERMAINS DAMAGED DURING THE COURSE OF CONSTRUCTION WILL BE REPLACED BY THE CONTRACTOR AT THEIR COST
10. COVERS OF ALL HYDRANT CHAMBERS TO BE PAINTED YELLOW WITH THE EXCEPTION OF HYDRANT THAT ARE NOT FOR FIRE SERVICES PROPOSES.
11. ALL ROCKER PIPES SHALL BE NO MORE THAN 150mm FROM THEIR ASSOCIATED CHAMBER
12. WHERE PIPE RUN IS LOCATED ADJACENT TO FOUNDATION AND IS AT A LEVEL BELOW UNDERSIDE OF THE FOUNDATION, PIPE TRENCH TO BE BACKFILLED TO FORMATION LEVEL WITH CLASS 15/20 CONCRETE.
13. PROVIDE ANCHOR/THRUST BLOCKS ON ALL BENDS EQUAL TO OR IN EXCESS OF 22.5°, DEAD ENDS AND TEES ON ALL PIPES
14. TRENCHES IN EXISTING SURFACES TO BE SAW CUT.
15. CONTRACTOR SHALL BE RESPONSIBLE FOR SETTING OUT WATERMAINS & SLUICE VALVES TO ENSURE NO CLASHES WITH SERVICE DUCTS OR PIPES.

NOTES FOR CONNECTION TO IRISH WATER SERVICES

1. CONTRACTOR TO LIAISE WITH IRISH WATER PRIOR TO MOBILISATION ON SITE TO DETERMINE THE DURATION OF THE APPROVAL PROCESS AND WHAT DOCUMENTATION AND FEES ARE REQUIRED BY IRISH WATER AND THE LOCAL AUTHORITY AND PROGRAM THIS INTO THE CONSTRUCTION PROGRAM. CONTRACTOR TO CONFIRM EXTENT OF NOTICE REQUIRED BY IRISH WATER TO INSPECT WORKS AND ALSO PROGRAM INTO THE CONSTRUCTION PROGRAM
2. IRISH WATER TO BE CONTACTED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF ANY FOUL SEWER AND WATERMAIN WORKS. ALL DETAILS TO BE AGREED WITH IRISH WATER. IRISH WATER TO BE GIVEN 40 WORKING DAYS NOTICE FOR ALL FOUL SEWER AND WATERMAIN CONNECTION WORKS.
3. EXACT LOCATION AND DEPTH OF THE EXISTING FOUL SEWERS, RISING MAINS AND WATERMAINS SHOULD BE ESTABLISHED BY THE CONTRACTOR IN ADVANCE OF THE MAIN EXCAVATION FOR THE NEW FOUL SEWER AND WATERMAIN SO AS TO AVOID THE POSSIBILITY OF DAMAGE TO THE EXISTING FOUL SEWER, RISING MAINS AND WATERMAIN DURING CONSTRUCTION WORKS. SUIT TRENCHES TO BE UNDERTAKEN
4. ALL EXISTING FOUL SEWERS, RISING MAINS AND WATERMAINS TO BE ADEQUATELY PROTECTED. ANY FOUL SEWERS, RISING MAINS OR WATERMAINS DAMAGED DURING THE COURSE OF CONSTRUCTION WILL BE REPLACED BY THE CONTRACTOR AT THEIR OWN COST.
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6. ALL WATERMAIN EXTENSIONS CONSTRUCTED TO ALLOW FOR FUTURE CONNECTION TO FUTURE PHASES ARE TO BE TERMINATED IN BLANK ENDS WITH A SUITABLE THRUST BLOCK INSTALLED.

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Project Engineer: CIARAN O'RAFFERTY | Project Director: CIARAN KENNEDY

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CLIENT
CWTC MULTI FAMILY ICAV ACTING SOLELY IN RESPECT OF ITS SUB FUND DBTR SCR1 FUND

PROJECT TITLE
BAILEY GIBSON SHD 2

BM PROJECT No.
19117

WIP	REFERENCE	SUITABILITY	REVISION
WIP	BGL-BMD-ZZ-00-DR-C-1030-1031	S1	P01

DRAWING TITLE
PROPOSED WATERMAIN LAYOUT (SHEET 1 OF 3)

WIP	DRAWING REFERENCE	STATUS	REVISION
WIP	BGL-BMD-ZZ-00-DR-C-1030	D2	PL6

EXISTING HYDRANT TO BE RETAINED. EXISTING WATERMAIN TO BE CAPPED AT THE EXISTING HYDRANT LOCATION AND DECOMMISSIONED AND REMOVED BEYOND THE HYDRANT.

110mm MDPVC 2007

100mm DI IRON

PROPOSED HOUSE

PROPOSED CRECHE

PROPOSED RETAIL UNIT

BLOCK BG1
FFL 20.800

EXISTING HOUSE

NEW 25mm OD MDPE (PE-80) DOMESTIC SERVICE CONNECTION AND BOUNDARY BOX

NEW 32mm DIA MDPE (PE-80) SERVICE CONNECTION TO CRECHE WITH 20mm METER TO IRISH WATER SPECIFICATION IN IRISH WATER APPROVED G1.5 BOUNDARY BOX.

NEW 32mm DIA MDPE (PE-80) SERVICE CONNECTION TO RETAIL UNIT WITH 20mm METER TO IRISH WATER SPECIFICATION IN IRISH WATER APPROVED G1.5 BOUNDARY BOX.

NEW OFF-LINE HYDRANT, REFER TO IRISH WATER DWG. STD-W-19 FOR DETAIL

250mm Ø HDPE (PE 100)

NEW OFF-LINE HYDRANT, REFER TO IRISH WATER DWG. STD-W-19 FOR DETAIL

NEW 32mm DIA MDPE(PE-80) SERVICE CONNECTION TO RESTAURANT WITH 20mm METER TO IRISH WATER SPECIFICATION IN IRISH WATER APPROVED G1.5 BOUNDARY BOX.

NEW METERED 150dmm DIA CONNECTION TO ENTER IN BASEMENT. PROPOSED DN150 WATER METER IN ACCORDANCE WITH IRISH WATER REQUIREMENTS. REFER TO STD-W-26 & STD-W-36 (FLOW METER KIOSK LOCATION TO BE COORDINATED WITH LANDSCAPE ARCHITECT).

$\leq$710000dmin

NEW OFF-LINE HYDRANT, REFER TO IRISH WATER DWG. STD-W-17

250mm Ø HDPE (PE 100)

DENOTES INDICATIVE ROUTE OF PRIVATE WATER SUPPLY PIPEWORK FROM BASEMENT TO BLOCK BG1. REFER TO OCSC SERVICES ENGINEERS DRAWINGS FOR DETAILS.

EXTENT OF BASEMENT

PROPOSED RESTAURANT OVER

BLOCK BG3
FFL 20.800

DENOTES INDICATIVE ROUTE OF PRIVATE WATER SUPPLY PIPEWORK FROM BASEMENT TO BLOCK BG4. REFER TO OCSC SERVICES ENGINEERS DRAWINGS FOR DETAILS.

BLOCK BG4
FFL 20.700

BLOCK BG4
FFL 21.900

EXISTING HOUSING

EXISTING WATERMAIN TO BE DECOMMISSIONED, GRUBBED UP WITHIN THE SITE, CAPPED AND SEALED AT THE PROPERTY BOUNDARY.

4" CAST IRON 1890

16" CAST IRON 1927

ON-LINE AIR VALVE REFER TO STD-W-22 FOR DETAIL

NEW METERED 250mm DIA CONNECTION PROPOSED DN200 WATER METER IN ACCORDANCE WITH IRISH WATER REQUIREMENTS. REFER TO STD-W-26 & STD-W-36. (FLOW METER KIOSK LOCATION TO BE COORDINATED WITH LANDSCAPE ARCHITECT)

NEW OFF-LINE HYDRANT, REFER TO IRISH WATER DWG. STD-W-17 FOR DETAIL

250mm Ø HDPE (PE 100)

6" CAST IRON 1900

4" CAST IRON 1900

18" CAST IRON 1927

6" CAST IRON 1920

110mm MDPVC 2007

110mm MDPVC 2001

PLOT NUMBERS		
BLOCK NUMBER	RESIDENTIAL PLOT NUMBERS	NON-RESIDENTIAL
BLOCK BG1	BG1-1 to BG1-152	CRECHE - 248m²
		RETAIL UNIT - 238m²
BLOCK BG2	BG2-1 to BG2-89	RESTAURANT - 159m²
BLOCK BG3	BG3-1 to BG3-52	
BLOCK BG4	BG4-1 to BG4-49	
BLOCK BG5	BG5-1 to BG5-4	

PROPOSED WATERMAIN LAYOUT

SCALE @ A0: 1:200
SCALE @ A2: 1:400

NOTES

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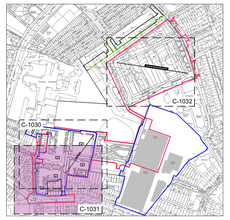

KEY PLAN

SCALE @ A0: 1:5000
SCALE @ A2: 1:10000

CIVIL LEGEND

NEW WATERMAIN	
EXISTING WATERMAIN	
DECOMMISSIONED LINE	X X X X X X X X X X X
SLUICE VALVE	SV
AIR VALVE	AV
HYDRANT	H
I.W. APPROVED BOUNDARY BOX	BB
SCOUR VALVE CHAMBER	SCV
WASHOUT HYDRANT	WOH
FIRE HYDRANT	FH
ELECTROMAGNETIC METER CHAMBER	M
EXISTING BUILDING	
BAILEY GIBSON SITE BOUNDARY	
OWNERSHIP LINE	
BASEMENT OUTLINE	
PRIVATE WATER SUPPLY	

WATERMAIN NOTES

1. THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS, ENGINEERS & MANUFACTURERS DRAWINGS & SPECIFICATIONS.
2. ALL PIPE DIAMETERS ARE NOMINAL.
3. WHERE CONNECTION IS REQUIRED TO AN EXISTING PUBLIC WATERMAIN, THE CONTRACTOR MUST ISSUE DETAILED DOCUMENTATION FOR APPROVAL TO THE RELEVANT LOCAL AUTHORITY AND IRISH WATER. THIS DOCUMENTATION MUST BE ISSUED AT LEAST 40 WORKING DAYS IN ADVANCE OF THE PLANNED WORKS OR AS AGREED WITH THE LOCAL AUTHORITY AND IRISH WATER.
4. ALL THRUST BLOCKS MUST BE CAST AGAINST UNDISTURBED GROUND. FLEXIBLE PIPES SHOULD BE WRAPPED IN ONE LAYER OF 1000 GAUGE POLYTHENE TO AVOID DIRECT CONTACT WITH THE CONCRETE. MARKER POSTS AND PLATES TO BE PROVIDED FOR ALL VALVES, METERS AND HYDRANTS.
5. CHLORINATION AND BACTERIOLOGICAL TESTS TO BE UNDERTAKEN BY EXTERNAL TESTER AND TEST CERTIFICATION TO BE SUBMITTED TO ENGINEER.
6. MARKER POSTS AND PLATES TO BE PROVIDED FOR ALL VALVES.
7. IN ADVANCE OF TESTING OF THE WATERMAINS, THE CONTRACTOR MUST PRESENT TO THE ENGINEER A CALIBRATION CERTIFICATE FOR THE APPARATUS TO BE USED IN THE TEST.
8. ALL DETAILS TO BE AGREED WITH LOCAL AUTHORITY
9. ALL EXISTING WATERMAINS TO BE ADEQUATELY PROTECTED. ANY WATERMAINS DAMAGED DURING THE COURSE OF CONSTRUCTION WILL BE REPLACED BY THE CONTRACTOR AT THEIR COST
10. COVERS OF ALL HYDRANT CHAMBERS TO BE PAINTED YELLOW WITH THE EXCEPTION OF HYDRANT THAT ARE NOT FOR FIRE SERVICES PROPOSES.
11. ALL ROCKER PIPES SHALL BE NO MORE THAN 150mm FROM THEIR ASSOCIATED CHAMBER
12. WHERE PIPE RUN IS LOCATED ADJACENT TO FOUNDATION AND IS AT A LEVEL BELOW UNDERSIDE OF THE FOUNDATION, PIPE TRENCH TO BE BACKFILLED TO FORMATION LEVEL WITH CLASS 15/20 CONCRETE
13. PROVIDE ANCHOR/THRUST BLOCKS ON ALL BENDS EQUAL TO OR IN EXCESS OF 22.5°, DEAD ENDS AND TEES ON ALL PIPES
14. TRENCHES IN EXISTING SURFACES TO BE SAW CUT.
15. CONTRACTOR SHALL BE RESPONSIBLE FOR SETTING OUT WATERMAINS & SLUICE VALVES TO ENSURE NO CLASHES WITH SERVICE DUCTS OR PIPES.

NOTES FOR CONNECTION TO IRISH WATER SERVICES

1. CONTRACTOR TO LIAISE WITH IRISH WATER PRIOR TO MOBILISATION ON SITE TO DETERMINE THE DURATION OF THE APPROVAL PROCESS AND WHAT DOCUMENTATION AND FEES ARE REQUIRED BY IRISH WATER AND THE LOCAL AUTHORITY AND PROGRAM THIS INTO THE CONSTRUCTION PROGRAM. CONTRACTOR TO CONFIRM EXTENT OF NOTICE REQUIRED BY IRISH WATER TO INSPECT WORKS AND ALSO PROGRAM INTO THE CONSTRUCTION PROGRAM
2. IRISH WATER TO BE CONTACTED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF ANY FOUL SEWER AND WATERMAIN WORKS. ALL DETAILS TO BE AGREED WITH IRISH WATER. IRISH WATER TO BE GIVEN 40 WORKING DAYS NOTICE FOR ALL FOUL SEWER AND WATERMAIN CONNECTION WORKS.
3. EXACT LOCATION AND DEPTH OF THE EXISTING FOUL SEWERS, RISING MAINS AND WATERMAINS SHOULD BE ESTABLISHED BY THE CONTRACTOR IN ADVANCE OF THE MAIN EXCAVATION FOR THE NEW FOUL SEWER AND WATERMAIN SO AS TO AVOID THE POSSIBILITY OF DAMAGE TO THE EXISTING FOUL SEWER, RISING MAINS AND WATERMAIN DURING CONSTRUCTION WORKS. SLIT TRENCHES TO BE UNDERTAKEN.
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Project Engineer: CIARAN O'RAFFERTY | Project Director: CIARAN KENNEDY

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CLIENT
CWTC MULTI FAMILY ICAV ACTING SOLELY IN RESPECT OF ITS SUB FUND DBTR SCR1 FUND

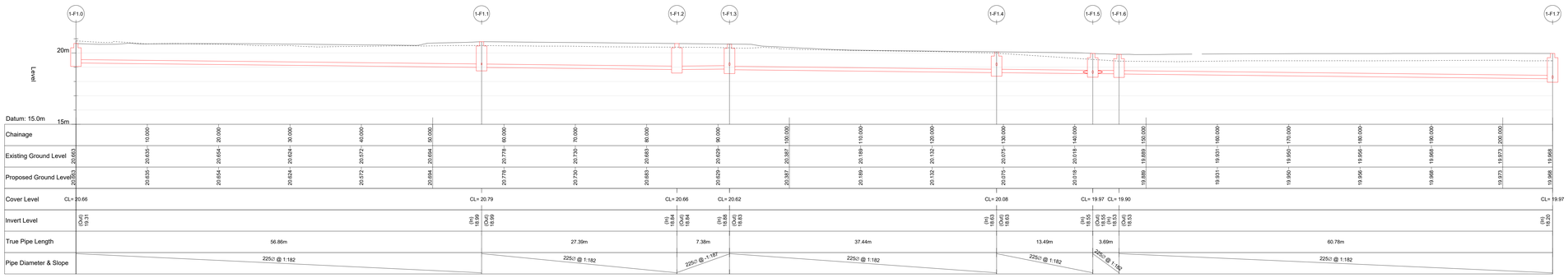
PROJECT TITLE
BAILEY GIBSON SHD 2

BM PROJECT No. **19117**

MODEL | REFERENCE **BGL-BMD-ZZ-00-DR-C-1030-1031** | SUITABILITY **S1** | REVISION **P01**

DRAWING TITLE
PROPOSED WATERMAIN LAYOUT (SHEET 2 OF 3)

DWG | DRAWING REFERENCE **BGL-BMD-ZZ-00-DR-C-1031** | STATUS **D2** | REVISION **PL6**



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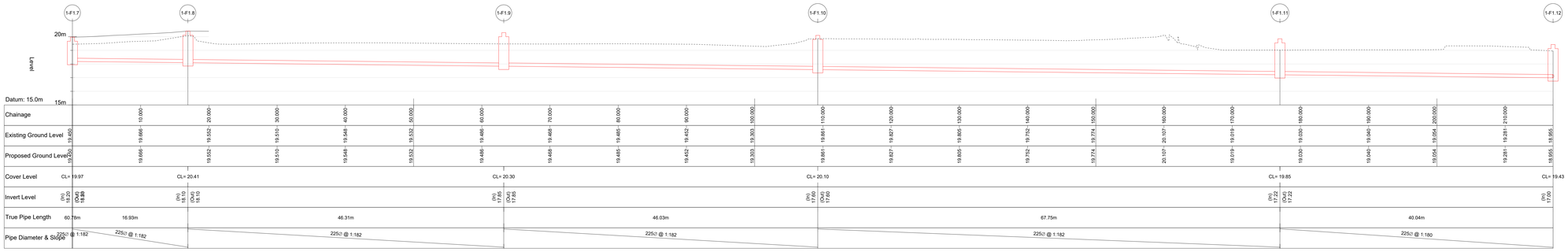

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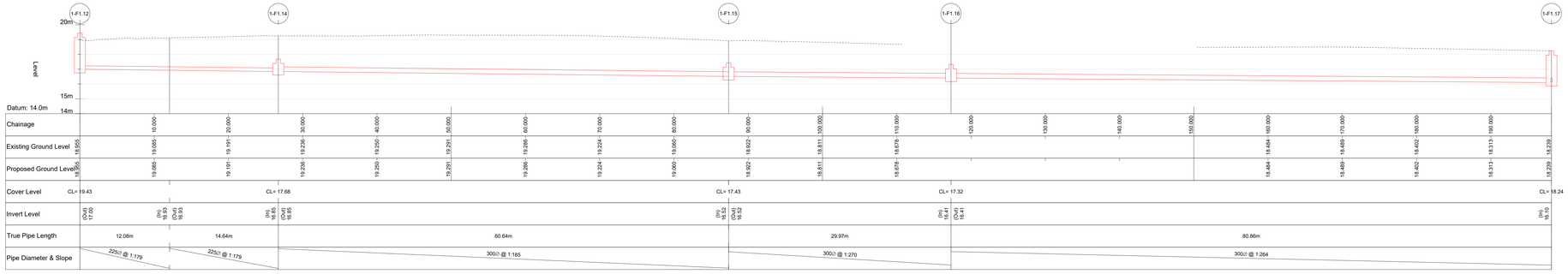

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SCALE @ A2: H=1:500 ; V=1:250

F1 **SECTION**
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SCALE @ A2: H=1:500 ; V=1:250

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SCALE @ A0: H=1:250 ; V=1:125
SCALE @ A2: H=1:500 ; V=1:250

F5 **SECTION**
SCALE @ A0: H=1:250 ; V=1:125
SCALE @ A2: H=1:500 ; V=1:250

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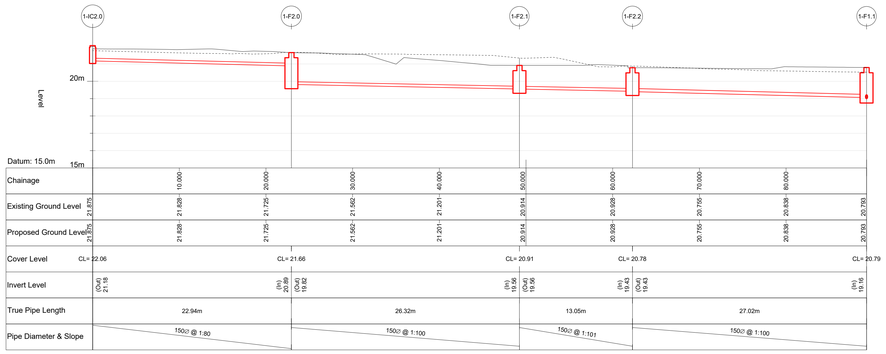
PROJECT TITLE
BAILEY GIBSON SHD 2

BM PROJECT No.
19117

ORIGINAL
REFERENCE: **BGL-BMD-ZZ-00-DR-C-1020-1022 & 1120-1122**
SUITABILITY: **S1**
REVISION: **P01**

DRAWING TITLE
FOUL DRAINAGE LONG SECTIONS (SHEET 1 OF 2)

COPY
DRAWING REFERENCE: **BGL-BMD-ZZ-ZZ-DR-C-1120**
STATUS: **D2**
REVISION: **PL4**



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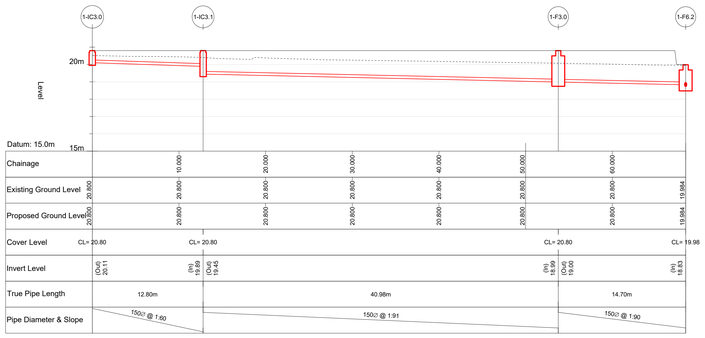

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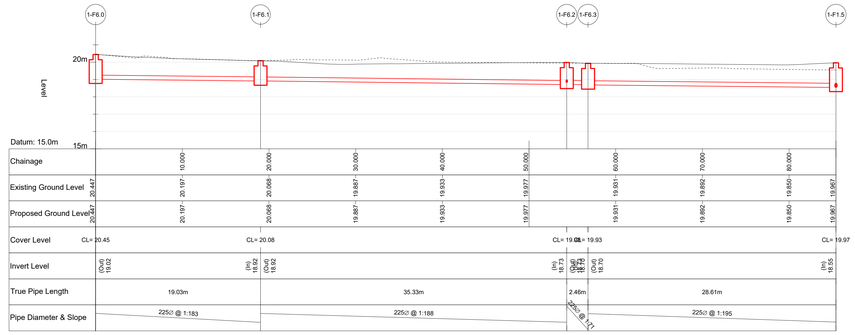

F6 SECTION

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SUITABILITY **S1**

REVISION **P01**

DRAWING TITLE
FOUL DRAINAGE LONG SECTIONS (SHEET 2 OF 2)

DWG

DRAWING REFERENCE
BGL-BMD-ZZ-ZZ-DR-C-1121

STATUS **D2**

REVISION **PL4**

APPENDIX 8.1
ENVIRONMENTAL RISK ASSESSMENT & WASTE CHARACTERISATION

VOLUME III
APPENDICES TO ENVIRONMENTAL IMPACT ASSESSMENT REPORT

JUNE 2022

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O'Callaghan Moran & Associates
ENVIRONMENTAL MANAGEMENT FOR BUSINESS

Environmental Risk Assessment and

Waste Characterisation

Proposed Residential and Retail Development

Bailey Gibson Salvage Yard

South Circular Road

Dublin 8

Prepared For: -
CWTC MULTI FAMILY ICAV
(DBTR SCR1 FUND)
MATHESON
70 Sir John Rogerson's Quay
Dublin 2

Prepared By: -

O' Callaghan Moran & Associates
Unit 15 Melbourne Business Park
Model Farm Road
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January 2021

TABLE OF CONTENTS

PAGE

1 INTRODUCTION 1

1.1 METHODOLOGY 1
1.2 LIMITATIONS 2

2 SITE DESCRIPTION AND ENVIRONMENAL SETTING 3

2.1 SITE LOCATION 3
2.2 SITE LAYOUT 3
2.3 SITE HISTORY 3
2.5 GEOLOGY 6
2.5.2 BEDROCK 6
2.6 HYDROLOGY 6
2.7 HYDROGEOLOGY 6
2.7.1 AQUIFER CLASSIFICATION 6
2.7.2 AQUIFER VULNERABILITY 7
2.8 FLOOD RISK 7
2.10 ECOLOGICALLY SENSITIVE/DESIGNATED AREAS 13

3 SOILS ASSESSMENT 15

3.1 SCOPE 15
3.2 SAMPLE LOCATIONS 15
3.3 GROUND CONDITIONS 15
3.4 SAMPLE COLLECTION 15
3.5 LABORATORY ANALYSIS 15
3.6 RESULTS 16

4 GROUNDWATER ASSESSMENT 20

4.1 SCOPE 20
4.2 WELL LOCATIONS 20
4.3 WELL CONSTRUCTION 20
4.4 GROUNDWATER FLOW DIRECTION 20
4.5 SAMPLING METHODOLOGY 20
4.6 LABORATORY ANALYSIS 21
4.7 RESULTS 21

5 GROUND GAS ASSESSMENT 24

6 WASTE CLASSIFICATION ASSESSMENT 25

6.1 WASTE CLASSIFICATION 25
6.2 WASTE ACCEPTANCE CRITERIA 26
6.3 WASTE MANAGEMENT OPTIONS 33

7 CONCLUSIONS AND RECOMMENDATIONS 36

7.1 SUBSOILS 36
7.2 GROUNDWATER 36
7.3 GROUND GAS 36
7.4 WASTE MANAGEMENT 36

APPENDICES

APPENDIX 1	-	Ordnance Survey of Ireland Maps and Photographs
APPENDIX 2	-	Window Sample Logs
APPENDIX 3	-	Sampling Protocols
APPENDIX 4	-	Soil Laboratory Results
APPENDIX 5	-	Groundwater Sampling Results
APPENDIX 6	-	Waste Classification Report
APPENDIX 7	-	Dig Plans

1 INTRODUCTION

Viridus Project Management, on behalf of CWTC Multi Family ICAV, requested O'Callaghan Moran & Associates (OCM) to undertake an environmental risk assessment and a waste classification at the Bailey Gibson Salvage Yard on South Circular Road, Dublin 8.

The objectives were to determine the environmental risk presented by previous land use to the proposed residential development and to identify offsite disposal options for any soils/wastes that may have to be removed during the development works.

1.1 Methodology

The scope included a site inspection, a desk study of relevant information, an intrusive site investigations undertaken by Ground Investigations Ireland Ltd (GII) under OCM supervision in May and June 2019, the collection and analysis of soil and groundwater samples and ground gas monitoring.

The data sources reviewed in the desk study included:

- Ordnance Survey of Ireland (OSI) Maps.
- Geological Survey of Ireland (GSI) and Teagasc subsoil, geology, aquifer vulnerability and classification maps.
- Environmental Protection Agency Envision Database.
- Eastern River Basin District (ERBD) Management Plan,
- The Dublin City Development Plan.

The site investigation comprised the installation of soil borings, trial pits and slit trenches; the collection of representative soil samples and groundwater and ground gas monitoring at four on-site monitoring wells. The soil and water samples were analysed at an accredited laboratory.

The assessment of the risk to surface water and groundwater was based on the quality standards set in the European Union Environmental Objectives (Surface Water) Regulations 2009, as amended and the European Union Environmental Objectives (Groundwater) Regulations 2010, as amended. The assessment of risk to soils was based on the Soils Geochemical Atlas of Ireland.

The assessment of the risk presented to construction workers and end users was based on the Land Quality Management/Chartered Institute of Environmental Health (LQM/CIEH) S4ULs Human Health Risk Assessment-"Copyright Land Quality Management Limited reproduced with permission; Publication Number S4UL3519. All rights reserved" and the UK Environment Agency Contaminated Land Exposure Assessment (CLEA) guidelines.

The Ground Gas Risk Assessment was undertaken in accordance with CIRIA C665 Assessing risks posed by hazardous ground gases to buildings.

The waste classification undertaken by OCM in accordance with the Environmental Protection Agency (EPA) Guidelines on the Classification of Waste (2015).

1.2 Limitations

The assessment did not include all of the site buildings as access was limited. Some of the buildings are occupied by business units rented out by the site owner and which were not accessible for site investigation purposes due to concerns over potential damage to goods in the units; however the spread of sample locations did facilitate a comprehensive assessment of conditions across the site.

2 SITE DESCRIPTION AND ENVIRONMENAL SETTING

2.1 Site Location

The site is approximately 2.4 km south-west of Dublin city centre (Figure 2.1). It covers c1.78 hectares (ha) and is bounded to the north-west by the Coombe Hospital, to the north, north-east and east by open ground (formerly playing fields), to the east and south-east by residential dwellings, to the south by residential dwellings and the South Circular Road and to the west by residential dwellings. The Player Wills Factory is east of the former playing field.

2.2 Site Layout

The site layout is shown on Figure 2.2. It is site accessed from the South Circular Road. The open yards are predominantly concrete paved and is in poor repair in the north-east of the site.

There is a warehouse in the south-west of the site, which houses salvaged bar furniture. North of the warehouse there is a single storey office building, with a visitors parking area to the east of the office. North of the office is a series of interconnected warehouses that occupy most of the northern section of the site. A large portion of the space is used to store sets and props for film and theatre companies.

There is a 10,000 litre steel oil storage tank in the open yard the north-east of the site. The area around the tank is concrete paved, but it is poor repair. The remainder of the north-eastern section of the site comprises an open yard where masonry stone, gravel, concrete rubble and empty 200 litre steel chemical storage drums are stored.

There is another series of interconnected warehouses in the south-east of the site, which are used primarily to store antiques and furniture. There is spray painting operation and a paint store in the eastern end of the southernmost unit.

2.3 Site History

The historical maps and aerial photographs in Appendix 1 were reviewed to establish the site history. The 1837-1842 series OSI maps show the site occupied by a Nunnery and Female school. The maps from 1888 to 1913 show the northern part of the site occupied by the Rehoboth Tent and Marquee Factory, with residential dwellings (Morton Villa and Brooklyn Terrace) in the south, a Tobacco Factory to the east of the site (former John Players & Sons site) and a printing works to the north of the site.

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CLIENT
Hines

TITLE
Site Location (Bailey Gibson)

Details:
Site Location

Figure 2.1

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TITLE

Site Layout (Bailey Gibson)

Details:

Site Layout

Figure 2.2

The aerial photographs and satellite images of the years between 1995 - 2019 show the existing layout.

2.5 Geology

2.5.1 Soils and Subsoils

The Teagasc subsoils map (Figure 2.3) indicates the site is covered by Made Ground underlain by Limestone till (TLs). The 2019 site investigations established that the open paved areas are underlain by Made Ground comprising dark brown gravelly clay with occasional red brick fragments, ranging in thickness from c0.9 -1.2m.

The underlying Natural Ground comprises greyish brown silty gravelly CLAY with black angular limestone gravel, which is consistent with the Teagasc soils descriptions for glacial tills. The depth was not established, but is expected to be c3-5m.

2.5.2 Bedrock

The site is underlain by the Lucan Limestone Formation, known as "The Calp", which comprises dark-grey to black, fine-grained, occasionally cherty, micritic limestone. (Figure 2.4). Site investigations on adjoining the Player Wills have confirmed the GSI description of the bedrock.

2.6 Hydrology

There are no streams or rivers on or adjacent to the site. The Grand Canal is approximately 130 m south of the site and the River Poddle is 710 m east (Figure 2.5). The river is culverted and flows north and joins the River Liffey approximately 1.4 km to the north of the site. The Water Body status of the Poddle is not addressed in the ERBD Management Plan.

2.7 Hydrogeology

2.7.1 Aquifer Classification

The GSI has developed a classification system for aquifers based on the value of the resource and the hydrogeological characteristics. The bedrock aquifer beneath the site is characterised by the GSI as a Locally Important aquifer which is moderately productive only in Local Zones (**Ll**), as shown on Figure 2.6. T

The ERBD Management Plan shows the site is part of the IE_EA_G_005 Dublin Urban Groundwater Body. The overall status of this waterbody is 'Good'. There are no known groundwater abstractions within 500m of the site.

2.7.2 Aquifer Vulnerability

Vulnerability is defined by the GSI as the intrinsic geological and hydrogeological characteristics that determine the ease with which groundwater may be contaminated by human activities. Vulnerability categories range from Extreme (**E**) to High (**H**) to Moderate (**M**) to Low (**L**) and are dependent on the nature and thickness of subsoils above the water table. The GSI Vulnerability Map (Figure 2.7) indicates that the vulnerability is Extreme **(E)** over most site and High (**H**) y in the eastern section.

2.8 Flood Risk

A Strategic Flood Risk Assessment was undertaken as part of the preparation of the Dublin City Development Plan 2016-2022 (DCDP), in which flood zones were identified. There are three types or levels of flood zones defined;

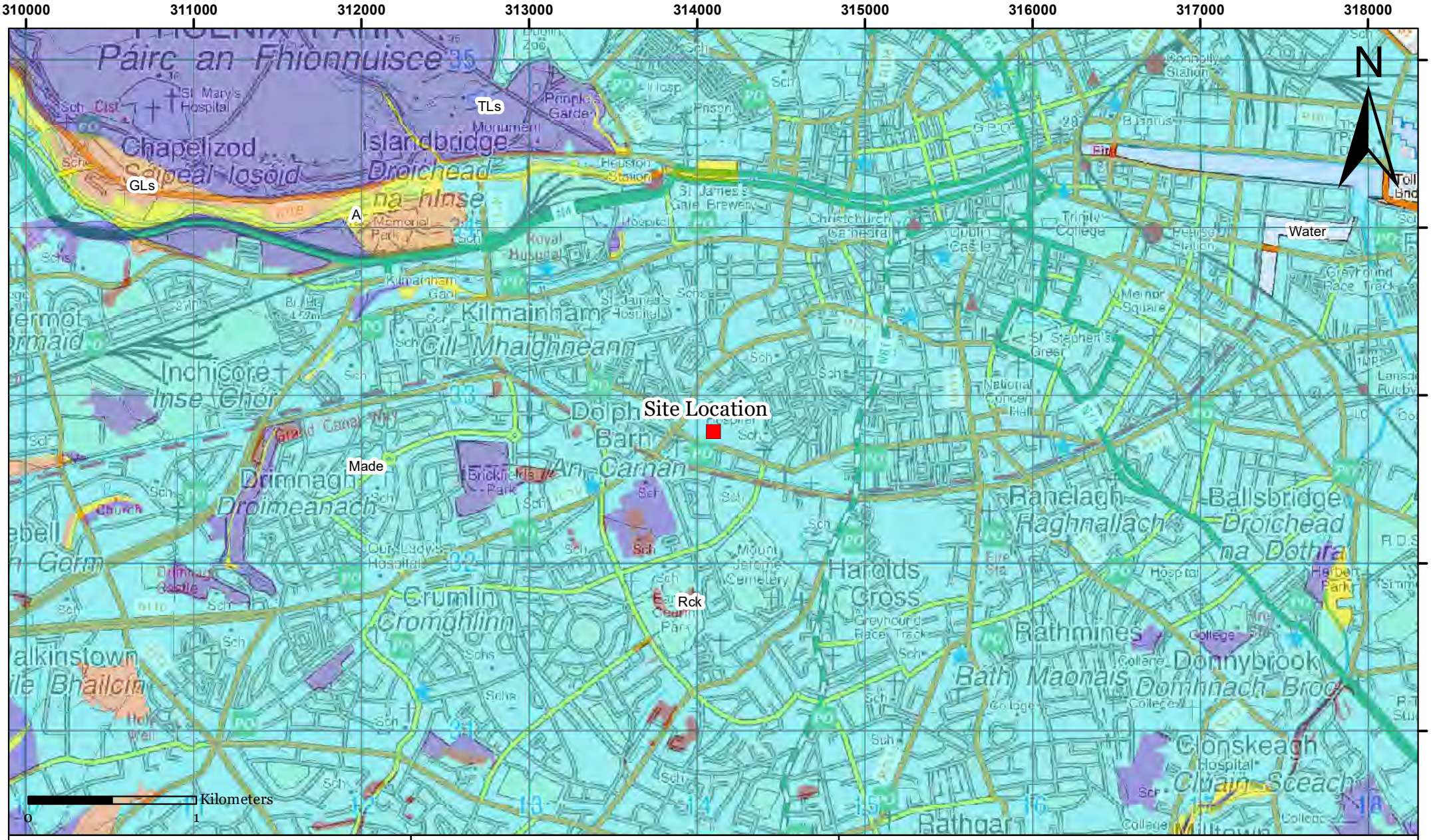
- Flood Zone A – where the probability of flooding from rivers and the sea is highest (greater than 1% or 1 in 100 for river flooding or 0.5% or 1 in 200 for coastal flooding);

- Flood Zone B – where the probability of flooding from rivers and the sea is moderate (between 0.1% or 1 in 1000 and 1% or 1 in 100 for river flooding and between 0.1% or 1 in 1000 year and 0.5% or 1 in 200 for coastal flooding); and

- Flood Zone C – where the probability of flooding from rivers and the sea is low (less than 0.1% or 1 in 1000 for both river and coastal flooding). Flood Zone C covers all other areas that are not in zones A or B.

- Defended Area; where defences are in place for future floods

The site is located is not located in a flood risk area



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TITLE

Subsoils (Bailey Gibson)

Details:

- Site Location
- A - Alluvium undifferentiated
- GLs - Limestone sands and gravels
- Made - Made Ground
- Rck - Bedrock at surface
- TLs - Limestone till

Figure 2.3

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CLIENT

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TITLE

Bedrock Geology (Bailey Gibson)

Details:

- Site Location
- Calp

Figure 2.4

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TITLE
Hydrology (Bailey Gibson)

Details:
- Site Location
- Rivers

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Figure 2.5

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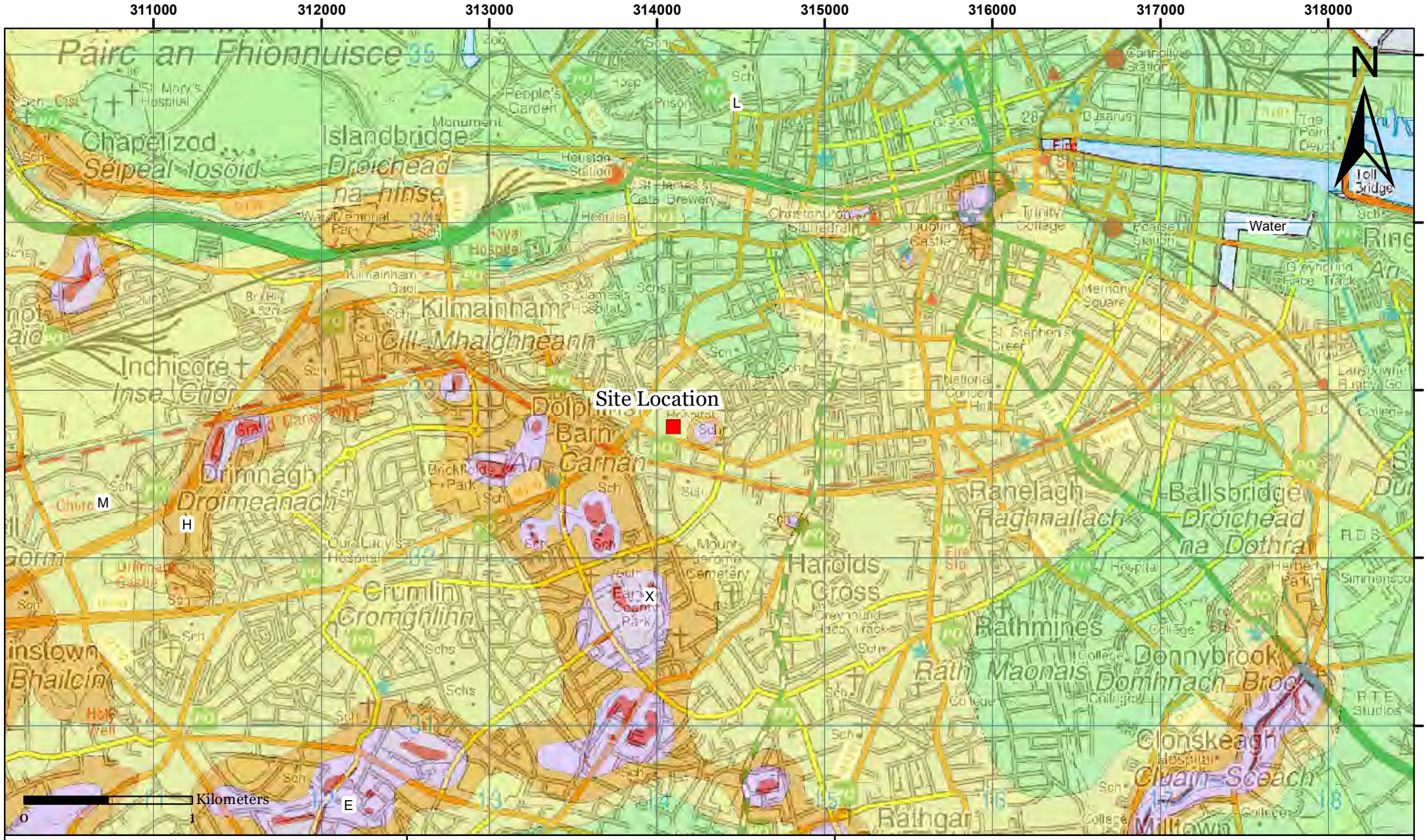
TITLE

Aquifer Classification (Bailey Gibson)

Details:

- Site Location
- LI - Locally Important Aquifer. Moderately Productive only in Local Zones

Figure 2.6



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CLIENT
Hines

TITLE
Groundwater Vulnerability
(Bailey Gibson)

Details:
- Site Location
- X - Bedrock near Surface
- E - Extreme
- H - High
- M - Moderate
- L - Low

Figure 2.7

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2.9 Radon

The Environmental Protection Agency (EPA) maintains a database on radon. A High Radon Area is one where it is predicted that 10 % or more of homes will exceed the Reference Level of 200 bequerel per cubic metre (Bq/m^3).

The EPA have prepared a Radon Risk Map in $10km^2$ blocks nationally. Radon risk is mapped based on the estimated percentage of homes above the reference level ranging from <1%, 1% - 5%, 5% - 10%, 10% - 20%, and >20%. The EPA caution however that high radon levels can occur in any home in any part of the country, but such homes are more likely to be located in High Radon Areas. The site is located in a Low Radon Risk area, where the reference level is 1% - 5%.

2.10 Ecologically Sensitive/Designated Areas

The nearest designated site is the South Dublin Bay Protection Area (SPA), which is approximately 5km to the east of the site at the nearest point. The River Tolka estuary SPA and the North Dublin Bay SAC and North Bull Island Nature Reserve is approximately 7 km north east of the site. There are no other designated sites within 10 km of the site (Figure 2.8).

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TITLE
NPWS (Bailey Gibson))

Details:
- Site Location
- SPAs
- SACs

Figure 2.8

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3 SOILS ASSESSMENT

3.1 Scope

An initial site investigation comprising the installation twenty eight (28 no.) window sample boreholes and seven (7 no.) trial pits was completed in May 2019 by GII under OCM's supervision

Hydrocarbon odours were detected at boring WS-7 in the Made and Natural Ground between 0-3mbgl. Hydrocarbon odours were also detected in the Made Ground (01m) in WS-9. These borings were in open areas close to the 10,000 litre above ground kerosene oil storage tank. The laboratory analysis confirmed presence of hydrocarbon contamination in the samples in WS-7 and WS-9.

A further investigation comprising excavation of slit trenches, field screening using a Photo Ionisation Detector (PID) and the collection of eight additional soil samples was completed in June 2019 to delineate the extent of hydrocarbon contamination.

3.2 Sample Locations

The sample locations are shown on Figure 3.1. OCM collected ninety five (95 no.) samples of the subsoils.

3.3 Ground Conditions

The logs of the window sample borings and trial pit logs prepared by OCM are in Appendix 2. The subsurface comprises a surface concrete layer with granular hard core beneath to c0.3m below ground level (bgl). This is underlain by MADE GROUND consisting of Light brown silty gravelly clay with some red brick fragments to a depth of between 1-1.2m bgl. This is underlain by Natural Ground comprising greyish brown gravelly CLAY to c2m, which changes to a dark brown, stiff, gravelly CLAY between 2-3m bgl.

The follow-up investigation in June 2019 established the presence of hydrocarbon contamination, which the laboratory analysis has identified as kerosene, between c0-2m below ground level across an area of c800m^2. It extends c 15m to the east and 25m to the north and south of the oil tank. The lateral extent of the contamination west of the oil tank could not be definitively established, as it was not possible to collect samples inside the buildings, but it has been assumed it extends partially beneath the buildings.

3.4 Sample Collection

The samples were collected by OCM in accordance with OCM soil sampling protocols, a copy of which is in Appendix 3. They were placed in laboratory prepared containers and stored in coolers prior to shipment to Chemtest Laboratories.

3.5 Laboratory Analysis

The samples were tested for metals (arsenic, barium, cadmium, chromium, copper, mercury, molybdenum, nickel, lead, antimony, selenium and zinc), total organic carbon (TOC), BTEX (benzene, toluene, ethylbenzene and xylene) aliphatic and aromatic hydrocarbons, polychlorinated biphenyls (PCB), polyaromatic hydrocarbons (PAH) and asbestos. Leachate generated from the samples was tested for metals, chloride, fluoride, soluble sulphate, phenols, dissolved organic carbon (DOC), total dissolved solids (TDS).

This parameter range facilitates an assessment of the environmental and human health risk and potentially hazardous properties of the soils, and also allows a determination of appropriate off-site management options based on the landfill Waste Acceptance Criteria (WAC) applied by landfill operators.

The analytical methods were all ISO/CEN approved and the method detection limits were below the relevant guidance/threshold values.

3.6 Results

The full laboratory report is in Appendix 4 along with summary tables which include for comparative purposes the Land Quality Management/Chartered Institute of Environmental Health (LQM/CIEH) S4ULs Human Health Risk Assessment-Risk Levels (S4ULs). The S4ULs for residential end use with home grown produce were used to assess human health risk and Tables 3.1 and 3.2 show the samples where the S4ULs were exceeded.

The samples from WS-7 1-2m and the adjacent slit trench sample ST-EWB 0.5-1.5m) exceeded the S4UL for aliphatic and aromatic hydrocarbons. The samples from TP-11 and WS-28 (0.1m) exceeded the S4UL for the PAH Dibenzo(ah)anthracene.

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TITLE
Trial Pit and Borehole Layout
(Bailey Gibson)

Details:
- Site Layout
- Window Samples
- Boreholes
- Trial Pits

Figure 3.1

Table 3.1 Aliphatic and Aromatic Hydrocarbons exceeding S4UL limits

Parameter	Units	ST-EWB	WS-7	Residential with home-grown produce LQM/CIEH Suitable 4 Use Levels (S4ULs) [mg/kg DW]		
		0.5-1.5m	1.0-2.0	1 % SOM	2.5% SOM	6 % SOM
Aliphatics						
EC 5-6	mg/kg		< 1.0	42	78	160
EC >6-8	mg/kg		15	100	230	530
EC >8-10	mg/kg		880	27	65	150
EC >10-12	mg/kg		1,900	130	330	770
EC >12-16	mg/kg		2,100	1,100	2,400	4,300
EC >16-35	mg/kg		190	65,000	92,000	110,000
EC >35-44	mg/kg		540	65,000	92,000	110,000
Total aliphatics C5-40	mg/kg		7900	NE	NE	NE
Aromatics						
EC 5-7	mg/kg		< 1.0	70	140	300
EC >7-8	mg/kg		< 1.0	130	290	660
EC >8-10	mg/kg		92	34	83	190
EC >10-12	mg/kg		45	74	180	380
EC >12-16	mg/kg		180	140	330	660
EC >16-21	mg/kg		53	260	540	930
EC >21-35	mg/kg		510	1,100	1,500	1,700
EC >35-44	mg/kg		300	1,100	1,500	1,700
Total aromatics C5-40	mg/kg		1,200	NE	NE	NE
Aliphatics + Aromatics EC >44-70	mg/kg	2,400	9,100	1,600	1,800	1,900
VOCs						
MTBE	mg/kg	0.012	0.012	NE	NE	NE
Benzene	mg/kg	< 0.001	< 0.001	0.087	0.17	0.37
Toluene	mg/kg	< 0.001	< 0.001	130	290	660
Ethylbenzene	mg/kg	< 0.001	< 0.001	47	110	260
p-Xylene	mg/kg	< 0.001	< 0.001	56	130	310
m-Xylene	mg/kg	< 0.001	< 0.001	59	140	320
o-Xylene	mg/kg	< 0.001	< 0.001	60	140	330

NE denotes Not Established

Table 3.2 Polycyclic Aromatic Hydrocarbons exceeding S4UL limits

Parameter	Units	TP11	WS-28	Residential with home-grown produce LQM/CIEH Suitable 4 Use Levels (S4ULs) [mg/kg DW]		
		0.0-1.0	0.0-1.0	1 % SOM	2.5% SOM	6 % SOM
PAH MS						
Naphthalene	mg/kg	0.46	0.69	2.3*	5.6*	13*
Acenaphthylene	mg/kg	1.1	0.30	170	420	920
Acenaphthene	mg/kg	< 0.10	0.17	210	510	1,100
Fluorene	mg/kg	0.22	0.21	170	400	860
Phenanthrene	mg/kg	8.4	3.7	95	220	440
Anthracene	mg/kg	1.7	0.63	2,400	5,400	11,000
Fluoranthene	mg/kg	14	7.2	280	560	890
Pyrene	mg/kg	11	6.9	620	1,200	2,000
Benzo(a)anthracene	mg/kg	3.9	3.9	7.2	11	13
Chrysene	mg/kg	4.2	4.9	15	22	27
Benzo(bk)fluoranthene	mg/kg	4.4	5.0	NE	NE	NE
Benzo(a)pyrene (only)	mg/kg	0.86	1.9	2.2	2.7	3.0
Indeno(123cd)pyrene	mg/kg	1.9	2.9	27	36	41
Dibenzo(ah)anthracene	mg/kg	0.76	1.60	0.24	0.28	0.3
Benzo(ghi)perylene	mg/kg	< 0.10	0.19	320	340	350
Coronene	mg/kg	1.2	2.1	NE	NE	NE
PAH 6 Total	mg/kg	< 0.10	< 0.10	NE	NE	NE
PAH 17 Total	mg/kg	54	42	NE	NE	NE
Mineral Oil (C10-C40)	mg/kg	48	33	NE	NE	NE

NE denotes Not Established

4 GROUNDWATER ASSESSMENT

4.1 Scope

The groundwater assessment comprised the installation of five (5 No.) groundwater monitoring wells and the collection and laboratory analysis of four (5 No.) groundwater samples. The objective was to establish baseline groundwater quality and whether historical or current activities including hydrocarbon contamination detected in the subsoils in the vicinity of the oil tank were impacting on groundwater quality beneath the site.

4.2 Well Locations

The well locations are shown on Figure 3.1. BH-2 is in the north central part of the site close to the above ground oil storage tank, BH-3 is in the north-east of the site, BH-4 is in the west of the site, BH-6 is in the east of the site and BH-8 is in the south-west of the site in an allotment used by local residents. It had been intended to install a monitoring BH-1 in the north-could not be done due to concerns over underground services. OCM understand that this well may be installed at a later date when the site is cleared.

4.3 Well Construction

The wells were installed by GII using a track mounted rotary percussion drill rig, capable of travelling on variable terrain to open the boreholes into which well pipes were installed. The installation was supervised by a GGI Engineer and logged in accordance with BS5930. The well logs are in Appendix 1.

uPVC 50 mm diameter standpipes which were slotted in the bedrock section of the borehole were inserted. A gravel filter pack was inserted in the annular space between the boring and the standpipe to a level of 1 m below the top of the bedrock. The solid section of the well pipe was brought above flush to ground level in all wells except BH-8 and fitted with a landfill gas cap and valve. An upright steel protective well casing, set in a concrete base, was placed around BH-8 and the remaining wells had steel covers placed at the ground surface.

4.4 Groundwater Flow Direction

Water levels were recorded in the wells and the data used to calculate the direction of groundwater flow. The flow is to the east as shown on Figure 4.1.

4.5 Sampling Methodology

OCM collected groundwater samples on 4th of July 2019 in accordance with OCM groundwater sampling protocol, a copy of which is in Appendix 3.

Samples were collected from BH-2, BH-3, BH-4 and BH-8. A sample could not be obtained from BH-6 as it was blocked. It is intended to sample this well at a later date when it has been repaired. Measurements of groundwater level, pH, temperature and electrical conductivity were undertaken and the results are presented in Table4.1.

After completion of groundwater level measurements, each well was purged to remove the stagnant water in the well and surrounding gravel pack. Purging is necessary to ensure that the groundwater parameters measured are representative of the formation and not the stagnant water in the monitoring well or surrounding gravel filter.

Measurements of groundwater level, pH, temperature and electrical conductivity were undertaken and the results are presented in Table 4.1.

Table 4.1 Field Hydrochemistry

Date: 0407/2019	Units	BH-2	BH-3	BH-4	BH-8
Electrical Conductivity	µS/cm	1230	508	370	770
Temperature	°c	12.1	12.6	12.7	12.7
pH	(pH units)	8.3	9	8.5	8.4
Water Level	*mbtoc	0.89	0.91	1.14	2.48

* metres below top of casing

The samples were placed in laboratory prepared containers and stored in coolers at below 4°C prior to shipment to Chemtest laboratory in the UK. Chain of custody (C.O.C.) documentation was included with the samples.

4.6 Laboratory Analysis

The samples were analysed for dissolved metals (boron, lead, nickel, copper, zinc, arsenic, cadmium, chromium, and mercury), total petroleum hydrocarbons (speciated), PAH, MTBE (methyl tert butly ether), volatile organic carbons (VOC), BTEX, phenols, pH and, sodium potassium, chloride, sulphide, sulphate, ammonium and nitrate. The parameter range was based on the site history and the need to establish a comprehensive environmental baseline for the groundwater quality. The analytical MDL were all below relevant water quality guidance values.

4.7 Results

The full laboratory test reports are in Appendix 5 and the results are presented on Table 4.2. The tables include Interim Guideline Values (IGV) published by the EPA and the Groundwater Threshold Values (GTV) set out in the European Communities Environmental Objectives (Groundwater) Regulations (S.I. 9 of 2010).

The IGVs are not statutory, but were developed to assist in the assessment of impacts on groundwater quality and are based on, but are more conservative than the Drinking Water quality standards. GTVs have only been established for core indicator parameters.

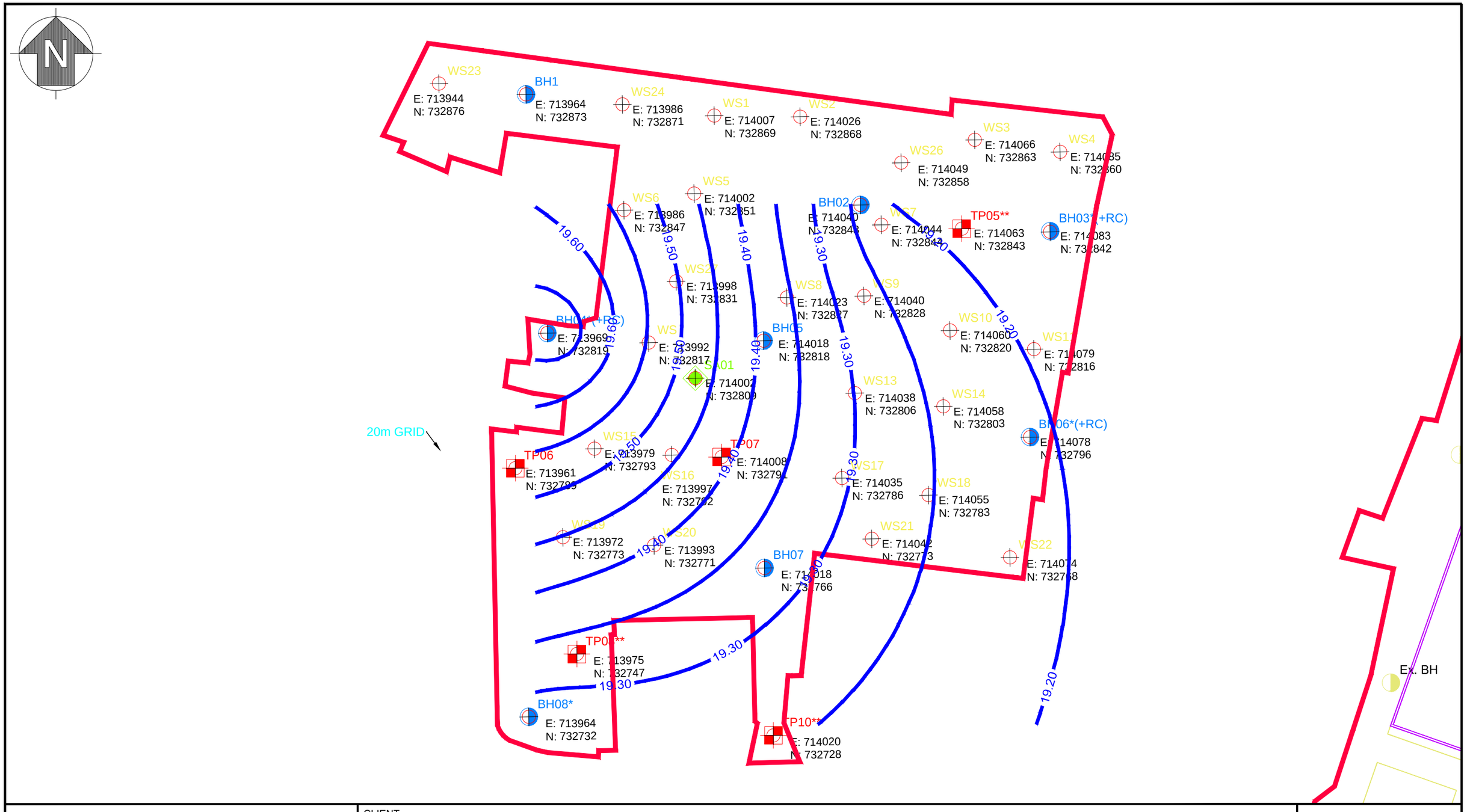
Table 4.1 Groundwater Sampling Results

Date: 4/7/2019	Units	BH-2	BH-3	BH-4	BH-8	GTV 2010	IGV
Physiochemical							
Electrical Conductivity	µS/cm	1230	508	370	770	1875	1,000
Temperature	°c	12.1	12.6	12.7	12.7	NE	25
pH	pH units	8.3	9	8.5	8.4	NE	≥6.5 and 9.5≤
Inorganic & Metals							
Ammonium	mg/l	0.11	0.052	0.087	1.4	0.175	150
Nitrate	mg/l	15	2.3	2.5	7.4	37.5	25
Chloride	mg/l	40	22	30	28	187.5	30
Sulphate	mg/l	200	120	43	59	187.5	200
Sulphide	mg/l	< 0.050	< 0.050	< 0.050	< 0.050	NE	NE
Sodium	mg/l	32	67	11	14	150	150
Boron	µg/l	170	82	29	52	750	1000
Chromium	µg/l	1	< 1.0	< 1.0	< 1.0	37.5	30
Arsenic	µg/l	1.2	3.5	< 1.0	< 1.0	7.5	10
Lead	µg/l	< 1.0	< 1.0	< 1.0	< 1.0	7.5	10
Nickel	µg/l	2.1	2.2	1.5	5	15	20
Mercury	µg/l	< 0.50	< 0.50	< 0.50	< 0.50	0.75	1
Cadmium	µg/l	< 0.080	< 0.080	< 0.080	< 0.080	3.75	5
Copper	µg/l	1.6	< 1.0	< 1.0	< 1.0	1,500	30
Zinc	µg/l	3.7	< 1.0	< 1.0	< 1.0	75	100
Potassium	mg/l	2.3	9.1	6.1	12	NE	5
Hydrocarbons & VOCs							
Phenols	µg/l	< 0.030	< 0.030	< 0.030	< 0.030	NE	0.5
Vinyl Chloride	µg/l	< 1.0	< 1.0	< 1.0	< 1.0	0.375	NE
Methyl Tertiary Butyl Ether	µg/l	< 1.0	< 1.0	< 1.0	< 1.0	10	30
Benzene	µg/l	< 1.0	< 1.0	< 1.0	< 1.0	0.75	1.0
Toluene	µg/l	< 1.0	< 1.0	< 1.0	< 1.0	525	10
Ethylbenzene	µg/l	< 1.0	< 1.0	< 1.0	< 1.0	NE	10
Xylenes	µg/l	< 1.0	< 1.0	< 1.0	< 1.0	NE	10
VOC Suite	µg/l	< 1.0	< 1.0	< 1.0	< 1.0	various	10
Polycyclic Aromatic Hydrocarbons Suite	µg/l	< 2.0	< 2.0	< 2.0	< 2.0	0.075	0.1
Total Petroleum Hydrocarbons C2-C5 & C6-C40	µg/l	< 10	< 10	< 10	< 10	7.5	NE

Electrical conductivity, and chloride exceeded the IGV in BH-2 while the sulphate level exceeded the GTV. Potassium exceeded the IGV in BH3 and 4. Ammonium exceeded the GTV in BH-8. All the remaining parameters were below the GTV or IGV where established.

The elevated parameters in BH-2 may be associated with the presence of concrete at the surface which had to be cored through during the boring process. While potassium levels are slight above the IGV in BH3 and BH-4 they levels are not indicative of significant contamination. The ammonium in BH-8 may be associated with the allotment use of the lands in the vicinity of these well.

Hydrocarbons were not detected in any of the samples indicating that the oil contamination in the soil has not extended to the water table.



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environmental management for business

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FIGURE No.

4.1

TITLE

GW Flow Map

SCALE

SCALE

REV.

A

5 GROUND GAS ASSESSMENT

OCM carried out ground gas monitoring on 6th of July 2019. The monitoring included the measurement of methane, carbon dioxide, oxygen and atmospheric pressure and gas flow rate using a Gas Data LSMx gas analyser. The meter was calibrated before use. The detection limit is 0.1% for methane, carbon dioxide and oxygen.

The results are presented in Table 5.1. The Table include Gas Screening Values (GSV) based on the guideline limits specified in CIRIA C665. Based on the Modified Wilson and Card Classification System the site falls into the Moderate Risk category where borehole air flow rates do not to exceed 70l/hr and where the source of generation comprises natural soil, high peat/organic content or "Typical" made ground. The relevant Gas screening threshold for such a site is <3.5.

The GSVs for methane and carbon dioxide were determined using the maximum level recorded and the maximum gas flow rates. The gas flow rates ranged from -0.1 - 0.0 l/hr. Negative gas flow rates indicate that the pressure of the atmosphere is greater than in the ground i.e. that there is more likely to be air flow into the ground than ground gas ventilating from it.

Table 5.1 Ground Gas Monitoring Results

Parameter		Pressure	Flow rate	H_2S	CH_4 (Peak)	CO_2	O_2	LEL
Location	Date / Unit	(mb)	l/h	ppm	%	%	%	%
BH-2	06/07/2019	1018	0.00	0.00	1.90	0.10	20.00	35.80
BH-3	06/07/2019	1018	-0.10	0.00	1.50	0.00	20.50	28.50
BH-4	06/07/2019	1018	0.00	0.00	0.00	0.10	17.90	0.10
BH-6	06/07/2019	1018	-0.10	0.00	0.70	0.00	20.60	14.10
BH-8	06/07/2019	1018	0.00	0.00	0.00	0.00	21.10	0.00
GSV					0	0		

Methane was detected in BH-02 and BH-3 at 1.9% and 1.5% respectively. Carbon dioxide was detected in BH-2 and BH-4 at 0.1%. As there was no ground gas flow in any of the wells the GSV for the site is 0.0 and there is consequently no ground gas risk.

6 WASTE CLASSIFICATION ASSESSMENT

6.1 Waste Classification

The Haz Waste Online Classification Engine, developed in the UK by One Touch Data Ltd, was used to determine the waste classification. This tool was developed specifically to establish whether waste is non-hazardous or hazardous and has been approved for use in Ireland by the Environmental Protection Agency.

The full Waste Classification Report is in Appendix 6 and the results are summarised in Tables 6.1 and 6.2.

The soils at WS-7 at 1-2m bgl, at ST EW A (0.15m bgl) and ST EW B(0.1.5m bgl) are classified as hazardous and the appropriate List of Waste (LoW) Code for these samples is 17 09 03* (Soil and Stone containing hazardous substances). For the remaining samples the appropriate LoW is 17 05 04 (Soil and stone other than those mentioned in 17 05 03*).

Table 6.1 Waste Classification

Sample No.	Depth (m)	Classification	LoW Code	Determinand
WS-7	1.0-2.0	Hazardous	17 05 03*	Kerosene
ST EWA	0.5-1.5	Hazardous	17 05 03*	Kerosene
ST-EWB	0.5-1.5	Hazardous	17 05 03*	Kerosene

Table 6.2 Waste Classification (Continued)

Sample No.	Depth	Classification	LoW Code	Sample No.	Depth	Classification	LoW Code
TP05	0.0-1.0	Non-Hazardous	17 05 04	WS-12	0.0-1.0	Non-Hazardous	17 05 04
TP05	1.0-2.0	Non-Hazardous	17 05 04	WS-12	1.0-2.0	Non-Hazardous	17 05 04
TP05	2.0-3.0	Non-Hazardous	17 05 04	WS-12	2.0-3.0	Non-Hazardous	17 05 04
TP07	0.0-1.0	Non-Hazardous	17 05 04	WS-13	0.0-1.0	Non-Hazardous	17 05 04
TP07	1.0-2.0	Non-Hazardous	17 05 04	WS-13	1.0-2.0	Non-Hazardous	17 05 04
TP06	0.0-1.0	Non-Hazardous	17 05 04	WS-13	2.0-3.0	Non-Hazardous	17 05 04
TP06	1.0-2.0	Non-Hazardous	17 05 04	WS14	0.0-1.0	Non-Hazardous	17 05 04
TP06	2.0-3.0	Non-Hazardous	17 05 04	WS14	1.0-2.0	Non-Hazardous	17 05 04
TP08	0.0-1.0	Non-Hazardous	17 05 04	WS14	2.0-3.0	Non-Hazardous	17 05 04
TP08	1.0-2.0	Non-Hazardous	17 05 04	WS-15	0.0-1.0	Non-Hazardous	17 05 04
TP08	2.0-3.0	Non-Hazardous	17 05 04	WS-15	1.0-2.0	Non-Hazardous	17 05 04
TP09	0.0-1.0	Non-Hazardous	17 05 04	WS-15	2.0-3.0	Non-Hazardous	17 05 04
TP09	1.0-2.0	Non-Hazardous	17 05 04	WS-16	0.0-1.0	Non-Hazardous	17 05 04
TP09	2.0-3.0	Non-Hazardous	17 05 04	WS-16	1.0-2.0	Non-Hazardous	17 05 04
TP11	0.0-1.0	Non-Hazardous	17 05 04	WS-16	2.0-3.0	Non-Hazardous	17 05 04
TP11	1.0-2.0	Non-Hazardous	17 05 04	WS17	0.0-1.0	Non-Hazardous	17 05 04
TP10	0.0-1.0	Non-Hazardous	17 05 04	WS17	1.0-2.0	Non-Hazardous	17 05 04
TP10	1.0-2.0	Non-Hazardous	17 05 04	WS18	0.0-1.0	Non-Hazardous	17 05 04
TP10	2.0-3.0	Non-Hazardous	17 05 04	WS18	1.0-2.0	Non-Hazardous	17 05 04
WS1	0.0-1.0	Non-Hazardous	17 05 04	WS18	2.0-3.0	Non-Hazardous	17 05 04
WS1	1.0-2.0	Non-Hazardous	17 05 04	WS19	0.0-1.0	Non-Hazardous	17 05 04
WS1	2.0-3.0	Non-Hazardous	17 05 04	WS19	1.0-2.0	Non-Hazardous	17 05 04
WS-2	0.0-1.0	Non-Hazardous	17 05 04	WS19	2.0-3.0	Non-Hazardous	17 05 04
WS-2	1.0-2.0	Non-Hazardous	17 05 04	WS-20	0.0-1.0	Non-Hazardous	17 05 04
WS-2	2.0-3.0	Non-Hazardous	17 05 04	WS-20	1.0-2.0	Non-Hazardous	17 05 04
WS3	0.0-1.0	Non-Hazardous	17 05 04	WS-20	2.0-3.0	Non-Hazardous	17 05 04
WS3	1.0-2.0	Non-Hazardous	17 05 04	WS21	0.0-1.0	Non-Hazardous	17 05 04
WS3	2.0-3.0	Non-Hazardous	17 05 04	WS21	1.0-2.0	Non-Hazardous	17 05 04
WS-4	0.0-1.0	Non-Hazardous	17 05 04	WS21	2.0-3.0	Non-Hazardous	17 05 04
WS-4	1.0-2.0	Non-Hazardous	17 05 04	WS22	0.0-1.0	Non-Hazardous	17 05 04
WS-4	2.0-3.0	Non-Hazardous	17 05 04	WS22	1.0-2.0	Non-Hazardous	17 05 04
WS5	0.0-1.0	Non-Hazardous	17 05 04	WS22	2.0-3.0	Non-Hazardous	17 05 04
WS5	1.0-2.0	Non-Hazardous	17 05 04	WS23	0.0-1.0	Non-Hazardous	17 05 04
WS5	2.0-3.0	Non-Hazardous	17 05 04	WS23	1.0-2.0	Non-Hazardous	17 05 04
WS6	0.0-1.0	Non-Hazardous	17 05 04	WS23	2.0-3.0	Non-Hazardous	17 05 04
WS6	1.0-2.0	Non-Hazardous	17 05 04	WS24	0.0-1.0	Non-Hazardous	17 05 04
WS6	2.0-3.0	Non-Hazardous	17 05 04	WS24	1.0-2.0	Non-Hazardous	17 05 04
WS-7	0.0-1.0	Non-Hazardous	17 05 04	WS24	2.0-3.0	Non-Hazardous	17 05 04
WS-7	2.0-3.0	Non-Hazardous	17 05 04	WS26	0.0-1.0	Non-Hazardous	17 05 04
WS-9	0.0-1.0	Non-Hazardous	17 05 04	WS26	1.0-2.0	Non-Hazardous	17 05 04
WS-9	1.0-2.0	Non-Hazardous	17 05 04	WS26	2.0-3.0	Non-Hazardous	17 05 04
WS-9	2.0-3.0	Non-Hazardous	17 05 04	WS-27	0.0-1.0	Non-Hazardous	17 05 04
WS-10	0.0-1.0	Non-Hazardous	17 05 04	WS-27	1.0-2.0	Non-Hazardous	17 05 04
WS-10	1.0-2.0	Non-Hazardous	17 05 04	WS-27	2.0-3.0	Non-Hazardous	17 05 04
WS-10	2.0-3.0	Non-Hazardous	17 05 04	WS-28	0.0-1.0	Non-Hazardous	17 05 04
WS-11	0.0-1.0	Non-Hazardous	17 05 04	WS-28	1.0-2.0	Non-Hazardous	17 05 04
WS-11	1.0-2.0	Non-Hazardous	17 05 04	WS-28	2.0-3.0	Non-Hazardous	17 05 04
WS-11	2.0-3.0	Non-Hazardous	17 05 04	-			

6.2 Waste Acceptance Criteria

The results of the WAC testing are presented in Table 6.3 - 6.7, which includes for comparative purposes the WAC for Inert, Non Hazardous and Hazardous Waste Landfills pursuant to Article 16 of the EU Landfill Directive 1999/31/EC Annex II which establishes criteria and procedures for the acceptance of waste at landfills.

Eighty three of the samples meet the inert WAC. TOC exceeded the inert WAC in nine locations (TP9, 11, WS-1, 3, 11, and 28 at 0-1m) and in WS1 at 2-3m). TOC exceeded the inert WAC increased limits in (TP05, TP8 and WS-14 at 0.0-1.0m). Selenium exceeded the inert WAC in one location (WS-21, 2-3m). The level of exceedance was marginal at 1.8mg/kg compared to a limit of 1mg/kg. As this is the only sample out of 95 analysed where selenium exceeded the inert WAC it is likely to be anomalous. Fluoride exceeded the inert WAC increased limits in three samples (TP-8 and WS-10 at 01m and in WS-22 at 1-2m).

Table 6.3 WAC Results

Parameter	Unit	TP05	TP05	TP05	TP06	TP06	TP06	TP07	TP07	TP08	TP08	TP08	TP09	TP09	TP09	TP10	TP10	TP10	TP11	TP11	WS1	Inert Landfill	Inert Landfill Increased Limits	Non-Hazardous Landfill
Depth	m	0.0-1.0	1.0-2.0	2.0-3.0	0.0-1.0	1.0-2.0	2.0-3.0	0.0-1.0	1.0-2.0	0.0-1.0	1.0-2.0	2.0-3.0	0.0-1.0	1.0-2.0	2.0-3.0	0.0-1.0	1.0-2.0	2.0-3.0	0.0-1.0	1.0-2.0	0.0-1.0			
Antimony	mg/kg	0.025	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.016	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.06	0.18	0.7
Arsenic	mg/kg	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	0.050	< 0.050	< 0.050	0.5	1.5	2
Barium	mg/kg	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	20	20	100
Cadmium	mg/kg	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.04	0.04	1
Chromium	mg/kg	0.089	0.080	0.072	0.13	0.093	0.089	0.053	0.050	0.082	0.071	0.085	< 0.050	< 0.050	< 0.050	0.089	0.091	0.085	< 0.050	< 0.050	< 0.050	0.5	0.5	10
Copper	mg/kg	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	2	2	50
Lead	mg/kg	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.5	0.5	10
Molybdenum	mg/kg	0.056	0.12	0.075	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	0.070	< 0.050	< 0.050	< 0.050	0.071	0.059	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	0.13	0.5	1.5	10
Nickel	mg/kg	< 0.050	< 0.050	< 0.050	0.059	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	0.4	0.4	10
Selenium	mg/kg	0.014	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.062	0.013	< 0.010	0.015	0.1	0.3	0.5
Zinc	mg/kg	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	4	4	50
Mercury	mg/kg	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.01	0.01	0.2
Phenol	mg/kg	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	1	1	NE
Fluoride	mg/kg	1.7	1.7	1.4	1.4	1.3	1.3	33	1.3	1.2	1.4	1.5	1.9	1.7	1.4	5.4	2.2	1.5	1.9	1.8	2.6	10	10	150
Chloride	mg/kg	< 10	< 10	< 10	< 10	< 10	10	< 10	< 10	< 10	< 10	< 10	< 10	12	< 10	< 10	< 10	< 10	< 10	< 10	37	800	2,400	15,000
Sulphate	mg/kg	290	47	68	150	26	13	< 10	19	< 10	22	11	170	97	42	23	22	38	36	36	38	1000*	3,000	20000*
DOC **	mg/kg	130	81	74	53	55	66	68	65	82	66	87	100	67	69	62	55	54	66	62	340	500	500	800
pH	pH units	8.6	8.2	8.5	8.5	8.5	8.8	8.6	8.5	7.9	8.4	8.6	8.9	8.6	8.5	8.6	8.3	8.6	8.3	8.7	8.7	NE	NE	NE
TDS ***	mg/kg	840	510	550	580	420	440	370	400	430	450	440	650	630	470	420	490	440	710	490	780	4,000	12,000	60,000
TOC	%	7.4	0.68	0.40	0.33	0.26	0.26	0.50	0.56	6.7	0.38	0.55	4.4	0.36	0.60	0.30	0.34	0.43	4.8	0.62	0.42	3	6	NE
Benzene	mg/kg	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	6	6	NE
Toluene	mg/kg	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	6	6	NE
Ethylbenzene	mg/kg	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	6	6	NE
m/p-Xylene	mg/kg	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	6	6	NE
o-Xylene	mg/kg	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	6	6	NE
PCB Total of 7	mg/kg	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	1	1	NE
Total 17 PAH's	mg/kg	5.6	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	4.7	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	54	< 2.0	< 2.0	NE	100	NE
Mineral Oil	mg/kg	22	< 10	< 10	< 10	< 10	< 10	< 10	< 10	44	< 10	< 10	< 10	< 10	< 10	48	< 10	< 10	< 10	< 10	< 10	500	500	NE
Asbestos	% mass	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NE	NE	NE

NAD denotes No Asbestos Detected

* denotes sulphate level exceeding inert waste limit may be considered as complying if the TDS value does not exceed 6,000mg/kg at L/S = 10l/kg.

** denotes a higher limit may be accepted provided the DOC values of 500mg/kg is achieved

*** denotes TDS. The values for TDS can be used alternative to sulphate and chloride.

Table 6.4 WAC Results

Parameter	Unit	WS1	WS1	WS-2	WS-2	WS-2	WS3	WS3	WS3	WS-4	WS-4	WS-4	WS5	WS5	WS5	WS6	WS6	WS6	WS-7	WS-7	WS-7	Inert Landfill	Inert Landfill Increased Limits	Non-Hazardous Landfill
Depth	**m**	**1.0-2.0**	**2.0-3.0**	**0.0-1.0**	**1.0-2.0**	**2.0-3.0**	**0.0-1.0**	**1.0-2.0**	**2.0-3.0**	**0.0-1.0**	**1.0-2.0**	**2.0-3.0**	**0.0-1.0**	**1.0-2.0**	**2.0-3.0**	**0.0-1.0**	**1.0-2.0**	**2.0-3.0**	**0.0-1.0**	**1.0-2.0**	**2.0-3.0**			
Antimony	mg/kg	0.014	< 0.010	< 0.010	< 0.010	< 0.010	0.040	< 0.010	0.049	< 0.010	< 0.010	< 0.010	0.011	< 0.010	< 0.010	0.010	< 0.010	0.023	< 0.010	< 0.010	< 0.010	0.06	0.18	0.7
Arsenic	mg/kg	0.070	< 0.050	< 0.050	< 0.050	< 0.050	0.095	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	0.5	1.5	2
Barium	mg/kg	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	20	20	100
Cadmium	mg/kg	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.04	0.04	1
Chromium	mg/kg	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	0.5	0.5	10
Copper	mg/kg	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	2	2	50
Lead	mg/kg	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.5	0.5	10
Molybdenum	mg/kg	0.081	0.059	< 0.050	< 0.050	< 0.050	< 0.050	0.16	0.11	< 0.050	< 0.050	< 0.050	0.11	0.14	0.072	0.15	0.10	0.14	< 0.050	< 0.050	< 0.050	0.5	1.5	10
Nickel	mg/kg	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	0.4	0.4	10
Selenium	mg/kg	< 0.010	0.048	< 0.010	< 0.010	0.015	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.040	< 0.010	0.017	< 0.010	< 0.010	< 0.010	0.1	0.3	0.5
Zinc	mg/kg	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	4	4	50
Mercury	mg/kg	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.01	0.01	0.2
Phenol	mg/kg	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	1	1	NE
Fluoride	mg/kg	2.5	2.0	1.3	1.1	1.1	2.5	3.3	1.9	1.4	1.1	< 1.0	3.3	3.1	2.0	1.9	2.4	2.4	1.2	1.1	< 1.0	10	10	150
Chloride	mg/kg	37	31	11	< 10	< 10	37	26	19	< 10	< 10	< 10	52	31	30	35	34	55	< 10	11	16	800	2,400	15,000
Sulphate	mg/kg	61	28	15	11	< 10	100	56	110	150	27	12	59	33	35	35	44	48	25	16	70	1000*	3,000	20000*
DOC **	mg/kg	300	380	70	73	82	140	340	330	55	94	69	210	390	370	230	290	310	53	< 50	51	500	500	800
pH	pH units	8.9	8.2	8.7	9.1	9.0	8.2	8.4	8.5	8.6	8.8	8.9	8.3	8.6	8.7	8.6	8.7	8.7	8.8	8.7	8.8	NE	NE	NE
TDS ***	mg/kg	970	770	350	380	390	1000	710	650	620	370	330	1000	840	640	780	840	1000	410	300	380	4,000	12,000	60,000
TOC	%	0.50	4.8	0.77	0.26	0.68	3.3	0.23	0.32	1.6	0.39	0.88	0.62	0.42	< 0.20	0.75	0.34	0.36	0.82	0.42	0.36	3	6	NE
Benzene	mg/kg	< 0.001	< 0.001	< 0.001	< 0.001	0.0016	< 0.001	< 0.001	< 0.001	0.0028	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.0032	6	6	NE
Toluene	mg/kg	< 0.001	< 0.001	0.0017	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	6	6	NE
Ethylbenzene	mg/kg	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.0022	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	6	6	NE
m/p-Xylene	mg/kg	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.0039	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	6	6	NE
o-Xylene	mg/kg	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.0012	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	6	6	NE
PCB Total of 7	mg/kg	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	1	1	NE
Total 17 PAH's	mg/kg	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	3.4	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	NE	100	NE
Mineral Oil	mg/kg	< 10	< 10	< 10	< 10	< 10	63	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	300	< 10	< 10	< 10	< 10	< 10	500	500	NE
Asbestos	% mass	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NE	NE	NE

NAD denotes No Asbestos Detected

* denotes sulphate level exceeding inert waste limit may be considered as complying if the TDS value does not exceed 6,000mg/kg at L/S = 10l/kg.

** denotes a higher limit may be accepted provided the DOC values of 500mg/kg is achieved

*** denotes TDS. The values for TDS can be used alternative to sulphate and chloride.

Table 6.5 WAC Results

Parameter	Unit	WS-9	WS-9	WS-9	WS-10	WS-10	WS-10	WS-11	WS-11	WS-11	WS-12	WS-12	WS-12	WS-13	WS-13	WS-13	WS14	WS14	WS14	WS-15	WS-15	Inert Landfill	Inert Landfill Increased Limits	Non-Hazardous Landfill
Depth	m	0.0-1.0	1.0-2.0	2.0-3.0	0.0-1.0	1.0-2.0	2.0-3.0	0.0-1.0	1.0-2.0	2.0-3.0	0.0-1.0	1.0-2.0	2.0-3.0	0.0-1.0	1.0-2.0	2.0-3.0	0.0-1.0	1.0-2.0	2.0-3.0	0.0-1.0	1.0-2.0			
Antimony	mg/kg	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.06	0.18	0.7
Arsenic	mg/kg	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	0.5	1.5	2
Barium	mg/kg	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	20	20	100
Cadmium	mg/kg	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.04	0.04	1
Chromium	mg/kg	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	0.5	0.5	10
Copper	mg/kg	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	2	2	50
Lead	mg/kg	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.013	< 0.010	< 0.010	< 0.010	< 0.010	0.5	0.5	10
Molybdenum	mg/kg	< 0.050	< 0.050	< 0.050	< 0.050	0.051	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	0.069	< 0.050	0.066	0.11	0.19	< 0.050	< 0.050	< 0.050	0.17	0.11	0.5	1.5	10
Nickel	mg/kg	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	0.4	0.4	10
Selenium	mg/kg	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.088	< 0.010	< 0.010	0.030	< 0.010	< 0.010	0.014	< 0.010	< 0.010	0.036	< 0.010	< 0.010	0.032	< 0.010	< 0.010	0.1	0.3	0.5
Zinc	mg/kg	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	4	4	50
Mercury	mg/kg	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.01	0.01	0.2
Phenol	mg/kg	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	1	1	NE
Fluoride	mg/kg	1.2	1.1	< 1.0	12	1.0	< 1.0	1.4	1.1	1.5	1.7	1.5	1.1	3.3	2.8	2.6	1.2	1.2	1.3	3.8	3.0	10	10	150
Chloride	mg/kg	< 10	15	< 10	17	15	16	< 10	< 10	< 10	13	< 10	< 10	34	56	31	11	< 10	12	74	37	800	2,400	15,000
Sulphate	mg/kg	65	15	33	140	140	110	63	16	< 10	20	< 10	< 10	310	50	56	59	19	22	77	30	1000*	3,000	20000*
DOC **	mg/kg	58	55	56	63	< 50	59	89	90	< 50	75	58	130	53	70	< 50	240	340	340	100	70	500	500	800
pH	pH units	8.9	8.0	8.6	8.5	8.7	8.5	8.3	8.4	8.5	8.8	8.9	8.8	8.7	8.8	8.7	8.3	8.8	8.6	8.6	8.8	NE	NE	NE
TDS ***	mg/kg	270	350	380	650	580	470	430	390	420	420	360	1100	780	650	560	470	420	440	780	610	4,000	12,000	60,000
TOC	%	1.4	1.2	0.34	0.37	< 0.20	0.71	3.7	0.47	0.65	0.34	0.34	0.43	0.34	0.37	0.75	3.3	0.74	0.34	0.31	0.33	3	6	NE
Benzene	mg/kg	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.0025	< 0.001	< 0.001	< 0.001	0.1700	< 0.001	< 0.001	< 0.001	0.0014	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	6	6	NE
Toluene	mg/kg	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.0016	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	6	6	NE
Ethylbenzene	mg/kg	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.0039	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	6	6	NE
m/p-Xylene	mg/kg	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.0055	0.0031	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	6	6	NE
o-Xylene	mg/kg	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.0030	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	6	6	NE
PCB Total of 7	mg/kg	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	1	1	NE
Total 17 PAH's	mg/kg	< 2.0	2.6	< 2.0	< 2.0	< 2.0	< 2.0	3.8	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	NE	100	NE
Mineral Oil	mg/kg	< 10	< 10	< 10	< 10	< 10	< 10	85	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	35	< 10	< 10	< 10	500	500	NE
Asbestos	% mass	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NE	NE	NE

NAD denotes No Asbestos Detected

* denotes sulphate level exceeding inert waste limit may be considered as complying if the TDS value does not exceed 6,000mg/kg at L/S = 10l/kg.

** denotes a higher limit may be accepted provided the DOC values of 500mg/kg is achieved

*** denotes TDS. The values for TDS can be used alternative to sulphate and chloride.

Table 6.6 WAC Results

Parameter	Unit	WS-15	WS-16	WS-16	WS-16	WS17	WS17	WS18	WS18	WS18	WS19	WS19	WS19	WS-20	WS-20	WS-20	WS21	WS21	WS21	WS22	WS22	Inert Landfill	Inert Landfill Increased Limits	Non-Hazardous Landfill
Depth	m	2.0-3.0	0.0-1.0	1.0-2.0	2.0-3.0	0.0-1.0	1.0-2.0	0.0-1.0	1.0-2.0	2.0-3.0	0.0-1.0	1.0-2.0	2.0-3.0	0.0-1.0	1.0-2.0	2.0-3.0	0.0-1.0	1.0-2.0	2.0-3.0	0.0-1.0	1.0-2.0			
Antimony	mg/kg	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.022	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.06	0.18	0.7
Arsenic	mg/kg	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	0.5	1.5	2
Barium	mg/kg	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	20	20	100
Cadmium	mg/kg	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.04	0.04	1
Chromium	mg/kg	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	0.5	0.5	10
Copper	mg/kg	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	2	2	50
Lead	mg/kg	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.5	0.5	10
Molybdenum	mg/kg	< 0.050	0.10	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	0.088	0.16	0.079	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	0.5	1.5	10
Nickel	mg/kg	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	0.4	0.4	10
Selenium	mg/kg	< 0.010	< 0.010	< 0.010	0.037	0.013	< 0.010	< 0.010	< 0.010	0.019	0.016	0.012	0.013	< 0.010	< 0.010	0.095	< 0.010	< 0.010	0.18	< 0.010	< 0.010	0.1	0.3	0.5
Zinc	mg/kg	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	4	4	50
Mercury	mg/kg	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.0071	0.0058	< 0.0050	< 0.0050	< 0.0050	0.01	0.01	0.2
Phenol	mg/kg	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	1	1	NE
Fluoride	mg/kg	3.2	4.6	1.4	1.5	1.2	1.3	1.3	1.2	< 1.0	3.0	2.9	2.8	1.5	1.8	1.3	1.3	1.2	1.0	1.8	15	10	10	150
Chloride	mg/kg	80	55	46	55	< 10	21	14	110	78	26	65	78	52	64	91	14	22	54	12	< 10	800	2,400	15,000
Sulphate	mg/kg	20	120	15	40	44	36	18	17	100	32	110	40	52	40	430	22	52	300	15	14	1000*	3,000	20000*
DOC **	mg/kg	220	110	< 50	< 50	390	400	410	350	380	350	320	320	< 50	< 50	< 50	330	370	390	370	340	500	500	800
pH	pH units	8.9	8.5	8.7	9.7	8.7	8.6	8.5	8.6	8.5	8.5	8.6	8.6	8.6	8.6	8.5	8.7	8.6	8.3	8.7	8.7	NE	NE	NE
TDS ***	mg/kg	650	910	290	470	460	420	440	390	470	780	910	780	510	490	1000	440	450	780	420	360	4,000	12,000	60,000
TOC	%	0.27	0.68	0.30	0.68	0.63	0.84	0.28	0.54	0.63	< 0.20	0.31	< 0.20	0.28	0.35	0.81	0.24	1.0	0.55	0.89	0.53	3	6	NE
Benzene	mg/kg	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	6	6	NE
Toluene	mg/kg	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.0012	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	6	6	NE
Ethylbenzene	mg/kg	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	6	6	NE
m/p-Xylene	mg/kg	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	6	6	NE
o-Xylene	mg/kg	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	6	6	NE
PCB Total of 7	mg/kg	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	1	1	NE
Total 17 PAH's	mg/kg	< 2.0	2.5	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	NE	100	NE
Mineral Oil	mg/kg	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	500	500	NE
Asbestos	% mass	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NE	NE	NE

NAD denotes No Asbestos Detected

* denotes sulphate level exceeding inert waste limit may be considered as complying if the TDS value does not exceed 6,000mg/kg at L/S = 10l/kg.

** denotes a higher limit may be accepted provided the DOC values of 500mg/kg is achieved

*** denotes TDS. The values for TDS can be used alternative to sulphate and chloride.

Table 6.7 WAC Results

Parameter	Unit	WS22	WS23	WS23	WS23	WS24	WS24	WS24	WS26	WS26	WS26	WS-27	WS-27	WS-27	WS-28	WS-28	WS-28	Inert Landfill	Non-Hazardous Landfill	Inert Landfill Increased Limits
Depth	**m**	**2.0-3.0**	**0.0-1.0**	**1.0-2.0**	**2.0-3.0**	**0.0-1.0**	**1.0-2.0**	**2.0-3.0**	**0.0-1.0**	**1.0-2.0**	**2.0-3.0**	**0.0-1.0**	**1.0-2.0**	**2.0-3.0**	**0.0-1.0**	**1.0-2.0**	**2.0-3.0**			
Antimony	mg/kg	< 0.010	0.013	< 0.010	< 0.010	0.012	< 0.010	< 0.010	0.020	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.06	0.7	0.18
Arsenic	mg/kg	< 0.050	< 0.050	< 0.050	< 0.050	0.050	< 0.050	< 0.050	0.065	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	0.5	2	1.5
Barium	mg/kg	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	20	100	20
Cadmium	mg/kg	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.04	1	0.04
Chromium	mg/kg	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	0.5	10	0.5
Copper	mg/kg	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	2	50	2
Lead	mg/kg	< 0.010	< 0.010	< 0.010	< 0.010	0.050	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.019	< 0.010	< 0.010	0.5	10	0.5
Molybdenum	mg/kg	< 0.050	0.24	0.12	0.086	< 0.050	0.088	< 0.050	0.057	0.17	0.097	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	0.5	10	1.5
Nickel	mg/kg	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	0.4	10	0.4
Selenium	mg/kg	0.043	0.022	0.033	0.039	< 0.010	< 0.010	0.016	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.022	< 0.010	0.011	0.015	0.1	0.5	0.3
Zinc	mg/kg	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	4	50	4
Mercury	mg/kg	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.01	0.2	0.01
Phenol	mg/kg	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	1	NE	1
Fluoride	mg/kg	1.0	2.5	2.4	1.9	4.4	3.3	1.7	2.2	3.2	3.0	2.0	2.2	1.7	3.4	1.8	1.8	10	150	10
Chloride	mg/kg	< 10	110	38	24	57	36	20	46	34	37	73	130	71	100	84	92	800	15,000	2,400
Sulphate	mg/kg	28	97	40	22	39	34	21	130	89	61	85	45	41	53	83	29	1000*	20000*	3,000
DOC **	mg/kg	370	380	310	290	220	290	260	94	320	330	< 50	< 50	< 50	< 50	50	< 50	500	800	500
pH	pH units	8.7	8.4	8.6	8.5	7.9	8.6	8.4	7.8	8.5	8.7	8.7	8.7	8.7	8.3	8.4	8.7	NE	NE	NE
TDS ***	mg/kg	370	900	780	710	840	840	710	960	970	710	490	460	440	550	530	420	4,000	60,000	12,000
TOC	%	0.62	0.22	1.8	1.6	0.82	1.7	0.58	7.0	< 0.20	0.71	0.39	0.37	0.81	13	0.53	0.59	3	NE	6
Benzene	mg/kg	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	6	NE	6
Toluene	mg/kg	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	6	NE	6
Ethylbenzene	mg/kg	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	6	NE	6
m/p-Xylene	mg/kg	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	6	NE	6
o-Xylene	mg/kg	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	6	NE	6
PCB Total of 7	mg/kg	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	1	NE	1
Total 17 PAH's	mg/kg	< 2.0	< 2.0	5.4	< 2.0	3.9	< 2.0	< 2.0	4.9	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	42	< 2.0	< 2.0	NE	NE	100
Mineral Oil	mg/kg	14	< 10	14	< 10	71	< 10	< 10	390	< 10	< 10	< 10	< 10	< 10	33	< 10	< 10	500	NE	500
Asbestos	% mass	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NE	NE	NE

NAD denotes No Asbestos Detected

* denotes sulphate level exceeding inert waste limit may be considered as complying if the TDS value does not exceed 6,000mg/kg at L/S = 10l/kg.

** denotes a higher limit may be accepted provided the DOC values of 500mg/kg is achieved

*** denotes TDS. The values for TDS can be used alternative to sulphate and chloride.

6.3 Waste Management Options

The EPA has released new guidance on waste acceptance criteria for a range of parameters for soil recovery facilities. This include;

- Metals in soil and stone (including As, Cd, Cr, Cu, Hg, Ni, Pb, Zn);
- Total organic carbon in soil and stone;
- Total BTEX (benzene, toluene, ethylbenzene, xylenes) in soil and stone;
- Mineral oil in soil and stone;
- Polycyclic aromatic hydrocarbons (PAHs) in soil and stone;
- Polychlorinated Biphenyls (PCBs) in soil and stone;
- Asbestos fibres in soil and stone.

This requires that soils from brownfield sites should not exceed the limits for the parameters specified in Table 6.8 and 6.9 below. For metals the limits have been specified for a range of soil types nationally separated into six domain areas.

Table 6.8 Soil Recovery Site Criteria

Parameter	Limit for Soil Recovery Sites
Total BTEX	0.05 mg/kg
Mineral oil	50 mg/kg
Total PAHs	1 mg/kg
Total PCBs	0.05 mg/kg

The soil and stone cannot be sent for recovery if the trigger levels for a particular domain are exceeded. There is however some flexibility in applying the limits. A derogation applies where up to three parameters can exceed the limit for a sample provided the concentration in the samples is no more than 1.5 times the trigger level. The site which is subject to this investigation is located in Domain 2 and the trigger levels are listed in Table 6.9.

Table 6.9

		Domain 2 Trigger Level	1.5 times Trigger Level
Arsenic	**mg/kg**	24.90	37.35
Cadmium	**mg/kg**	3.28	4.92
Chromium	**mg/kg**	50.30	75.45
Copper	**mg/kg**	63.50	95.25
Mercury	**mg/kg**	0.36	0.54
Nickel	**mg/kg**	61.90	92.85
Lead	**mg/kg**	86.10	129.15
Zinc	**mg/kg**	197.00	295.5

While samples from WS-4 (0.0-1.0m), WS-9 (1.0-2.0m), WS-16 (0.0-1.0m), WS-23 (1.0-2.0m), WS-24 (0.0-1.0m, WS-26 (0.0-1.0m) meet the inert WAC they do not meet the soil recovery criteria for PAHS and/or Mineral Oil. These samples have been classified as B-1 suitable for recovery/disposal to inert waste landfill with increased limits.

The samples from WS-9 (2.0-3.0m) and WS-24 (2.0-3.0m) meet the inert WAC, they do not meet the soil recovery criteria for metal concentrations. WS-9 (2.0-3.0m) exceeds the 1.5 times trigger level for Cadmium and Nickel. WS-24 (2.0-3.0m) exceeds the 1.5 times trigger level for Lead and Zinc. These samples have been classified as B-1 suitable for recovery/disposal to inert waste landfill with increased limits.

Waste Management Options are summarised on Table 4.6-4.8. All are subject to approval of the waste management facility operators. Class A wastes are suitable for recovery at a licensed/permitted soils recovery facility. Class B-1 wastes are suitable for recovery/disposal to inert waste landfill with increased limits. Class C wastes exceed the inert WAC and are suitable for recovery/disposal to a non-hazardous waste landfill site. Class D Waste must be sent for treatment/disposal at licensed hazardous waste facility.

Table 6.10

Sample No.	Depth	Classification	LoW Code	Category	Sample No.	Depth	Classification	LoW Code	Category
TP05	0.0-1.0	Non-Hazardous	17 05 04	C	WS3	0.0-1.0	Non-Hazardous	17 05 04	B-1
TP05	1.0-2.0	Non-Hazardous	17 05 04	A	WS3	1.0-2.0	Non-Hazardous	17 05 04	A
TP05	2.0-3.0	Non-Hazardous	17 05 04	A	WS3	2.0-3.0	Non-Hazardous	17 05 04	A
TP07	0.0-1.0	Non-Hazardous	17 05 04	A	WS-4	0.0-1.0	Non-Hazardous	17 05 04	B-1
TP07	1.0-2.0	Non-Hazardous	17 05 04	A	WS-4	1.0-2.0	Non-Hazardous	17 05 04	A
TP06	0.0-1.0	Non-Hazardous	17 05 04	A	WS-4	2.0-3.0	Non-Hazardous	17 05 04	A
TP06	1.0-2.0	Non-Hazardous	17 05 04	C	WS5	0.0-1.0	Non-Hazardous	17 05 04	A
TP06	2.0-3.0	Non-Hazardous	17 05 04	A	WS5	1.0-2.0	Non-Hazardous	17 05 04	A
TP08	0.0-1.0	Non-Hazardous	17 05 04	C	WS5	2.0-3.0	Non-Hazardous	17 05 04	A
TP08	1.0-2.0	Non-Hazardous	17 05 04	A	WS6	0.0-1.0	Non-Hazardous	17 05 04	B-1
TP08	2.0-3.0	Non-Hazardous	17 05 04	A	WS6	1.0-2.0	Non-Hazardous	17 05 04	A
TP09	0.0-1.0	Non-Hazardous	17 05 04	B-1	WS6	2.0-3.0	Non-Hazardous	17 05 04	A
TP09	1.0-2.0	Non-Hazardous	17 05 04	A	WS-7	0.0-1.0	Non-Hazardous	17 05 04	A
TP09	2.0-3.0	Non-Hazardous	17 05 04	A	WS-7	1.0-2.0	Hazardous	17 05 03	D
TP11	0.0-1.0	Non-Hazardous	17 05 04	A	WS-7	2.0-3.0	Non-Hazardous	17 05 04	A
TP11	1.0-2.0	Non-Hazardous	17 05 04	A	WS-9	0.0-1.0	Non-Hazardous	17 05 04	A
TP10	0.0-1.0	Non-Hazardous	17 05 04	A	WS-9	1.0-2.0	Non-Hazardous	17 05 04	B-1
TP10	1.0-2.0	Non-Hazardous	17 05 04	B-1	WS-9	2.0-3.0	Non-Hazardous	17 05 04	B-1
TP10	2.0-3.0	Non-Hazardous	17 05 04	A	WS-10	0.0-1.0	Non-Hazardous	17 05 04	C
WS1	0.0-1.0	Non-Hazardous	17 05 04	A	WS-10	1.0-2.0	Non-Hazardous	17 05 04	A
WS1	1.0-2.0	Non-Hazardous	17 05 04	A	WS-10	2.0-3.0	Non-Hazardous	17 05 04	A
WS1	2.0-3.0	Non-Hazardous	17 05 04	B-1	WS-11	0.0-1.0	Non-Hazardous	17 05 04	B-1
WS-2	0.0-1.0	Non-Hazardous	17 05 04	A	WS-11	1.0-2.0	Non-Hazardous	17 05 04	A
WS-2	1.0-2.0	Non-Hazardous	17 05 04	A	WS-11	2.0-3.0	Non-Hazardous	17 05 04	A
WS-2	2.0-3.0	Non-Hazardous	17 05 04	A	WS-12	0.0-1.0	Non-Hazardous	17 05 04	A

Table 6.10 continued

Sample No.	Depth	Classification	LoW Code	Category
WS-12	1.0-2.0	Non-Hazardous	17 05 04	A
WS-12	2.0-3.0	Non-Hazardous	17 05 04	A
WS-13	0.0-1.0	Non-Hazardous	17 05 04	A
WS-13	1.0-2.0	Non-Hazardous	17 05 04	A
WS-13	2.0-3.0	Non-Hazardous	17 05 04	A
WS14	0.0-1.0	Non-Hazardous	17 05 04	B-1
WS14	1.0-2.0	Non-Hazardous	17 05 04	A
WS14	2.0-3.0	Non-Hazardous	17 05 04	A
WS-15	0.0-1.0	Non-Hazardous	17 05 04	A
WS-15	1.0-2.0	Non-Hazardous	17 05 04	A
WS-15	2.0-3.0	Non-Hazardous	17 05 04	A
WS-16	0.0-1.0	Non-Hazardous	17 05 04	B-1
WS-16	1.0-2.0	Non-Hazardous	17 05 04	A
WS-16	2.0-3.0	Non-Hazardous	17 05 04	A
WS17	0.0-1.0	Non-Hazardous	17 05 04	A
WS17	1.0-2.0	Non-Hazardous	17 05 04	A
WS18	0.0-1.0	Non-Hazardous	17 05 04	A
WS18	1.0-2.0	Non-Hazardous	17 05 04	A
WS18	2.0-3.0	Non-Hazardous	17 05 04	A
WS19	0.0-1.0	Non-Hazardous	17 05 04	A
WS19	1.0-2.0	Non-Hazardous	17 05 04	A
WS19	2.0-3.0	Non-Hazardous	17 05 04	A
WS-20	0.0-1.0	Non-Hazardous	17 05 04	A
WS-20	1.0-2.0	Non-Hazardous	17 05 04	A
WS-20	2.0-3.0	Non-Hazardous	17 05 04	A
WS21	0.0-1.0	Non-Hazardous	17 05 04	A
WS21	1.0-2.0	Non-Hazardous	17 05 04	A
WS21	2.0-3.0	Non-Hazardous	17 05 04	B-1
WS22	0.0-1.0	Non-Hazardous	17 05 04	A
WS22	1.0-2.0	Non-Hazardous	17 05 04	C
WS22	2.0-3.0	Non-Hazardous	17 05 04	A
WS23	0.0-1.0	Non-Hazardous	17 05 04	A
WS23	1.0-2.0	Non-Hazardous	17 05 04	B-1
WS23	2.0-3.0	Non-Hazardous	17 05 04	A
WS24	0.0-1.0	Non-Hazardous	17 05 04	B-1
WS24	1.0-2.0	Non-Hazardous	17 05 04	A
WS24	2.0-3.0	Non-Hazardous	17 05 04	B-1
WS26	0.0-1.0	Non-Hazardous	17 05 04	B-1
WS26	1.0-2.0	Non-Hazardous	17 05 04	A
WS26	2.0-3.0	Non-Hazardous	17 05 04	A
WS-27	0.0-1.0	Non-Hazardous	17 05 04	A
WS-27	1.0-2.0	Non-Hazardous	17 05 04	A
WS-27	2.0-3.0	Non-Hazardous	17 05 04	A
WS-28	0.0-1.0	Non-Hazardous	17 05 04	C
WS-28	1.0-2.0	Non-Hazardous	17 05 04	A
WS-28	2.0-3.0	Non-Hazardous	17 05 04	A

7 CONCLUSIONS AND RECOMMENDATIONS

7.1 Subsoils

Hydrocarbon contamination has been identified in the upper 2m of the subsurface in the vicinity of the above ground kerosene oil storage tank in the north of the site. It is estimated that the impacted area covers c800m^2 but may extend beneath buildings to the west of the tanks where it was not possible to collect samples. When the buildings have been demolished further investigations should be completed to confirm the lateral extent of the hydrocarbon contaminated soils.

The S4ULs for aliphatic and aromatic hydrocarbons and PAH for residential use were exceeded in four samples. The subsoils in these areas will be removed as part of the redevelopment and this will require construction workers to wear the appropriate personal protection equipment to minimise the risk of exposure. The removal of the impacted soils will eliminate the risk to end users.

7.2 Groundwater

There is no evidence that previous and current land uses have impacted on groundwater quality. Ground gas monitoring indicates that the ground gas risk is insignificant.

7.3 Ground Gas

The site is located in a Low Radon Risk area, where the reference level is 1% - 5%. Ground gas monitoring has established that ground gas does not present a risk to the redevelopment and that gas mitigation measures are not required.

7.4 Waste Management

The subsoils that are contaminated with hydrocarbons and PAH are classified as hazardous waste and must be excavated and sent to an authorised hazardous waste management facility.

Waste management options are summarized in section 6.3. All are subject to the approval of the facility operator.

Dig plans are in Appendix 7. The materials at WS-7 (1-2m bgl), ST EW A (0.15m bgl) and ST EW B(0.1.5m bgl) are classified as hazardous and must be sent to a licensed hazardous waste facility for treatment/disposal.

Appendix 1

OSI Historical Maps and Photographs

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Unit 15 Melbourne Business Park,
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Aerial Photograph 1995 (Bailey Gibson)

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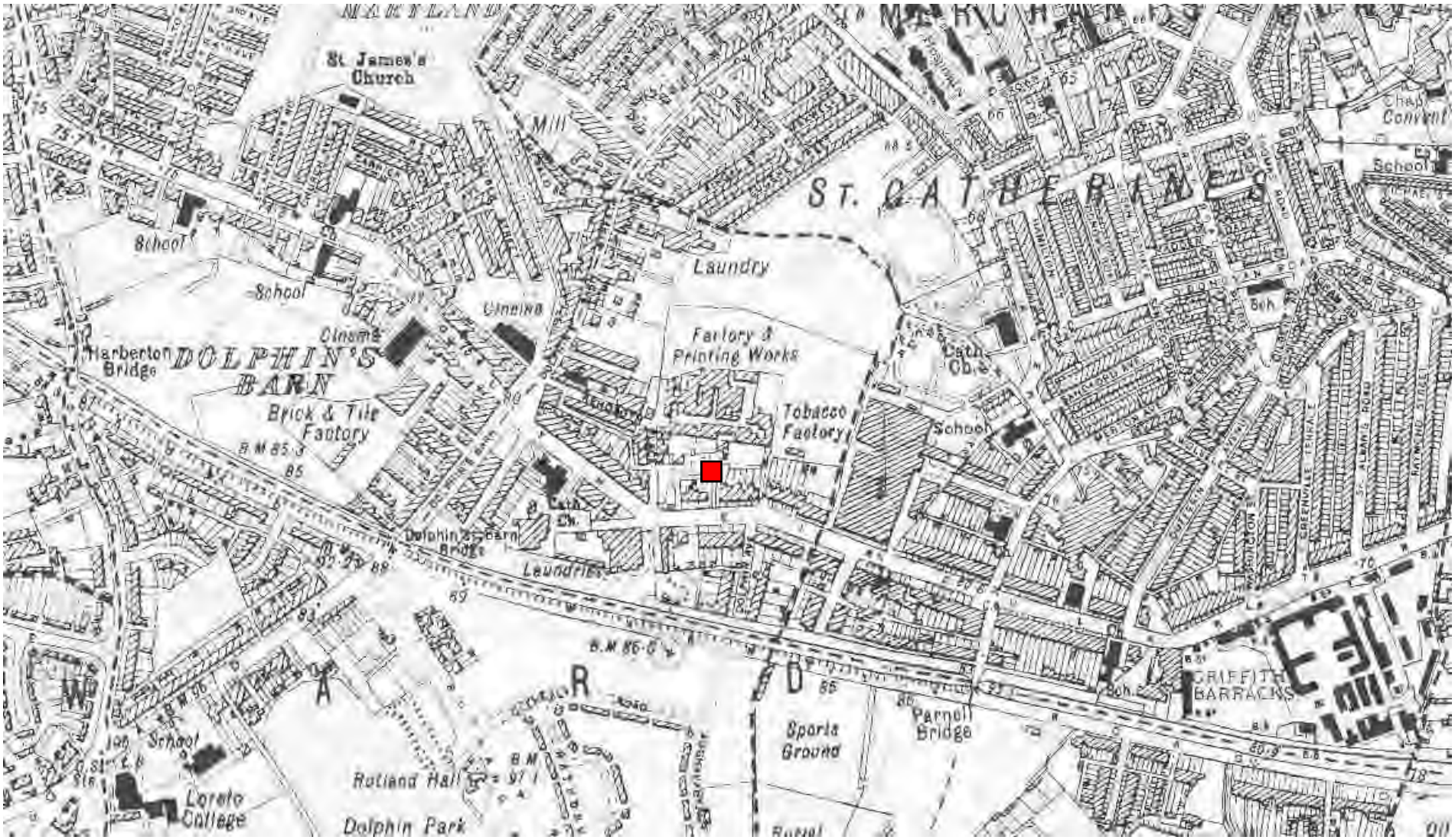

O'Callaghan Moran & Associates,
Unit 15 Melbourne Business Park,
Model Farm Road, Cork.
Tel. (021) 4345366
Email: info@ocallaghanmoran.com

Title:

Historical 6" Cassini (Bailey Gibson)

Legend

- Site Location

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Client:

Hines

O'Callaghan Moran & Associates,
Unit 15 Melbourne Business Park,
Model Farm Road, Cork.
Tel. (021) 4345366
Email: info@ocallaghanmoran.com

Title:

Historical 25" 1888-1913 (Bailey Gibson)

Legend

- Site Location

Client:

Hines

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Appendix 2

Borehole and Trial Pit Logs

Ground Investigations Ireland Ltd
www.gii.ie

Site Bailey Gibson Site			**Borehole Number** BH02
Machine : Dando 2000 **Method :** Cable Percussion	**Casing Diameter** 200 mm to 3.3 m	**Ground Level (mOD)** 20.06	**Client**	**Job Number** 8656-04-19
	Location 714045.9 E 732849.1 N	**Dates** 06/06/2019	**Engineer** Barrett Mahony	**Sheet** 1/1

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					19.86	(0.20) 0.20	CONCRETE		
0.50	B						MADE GROUND: Brown slightly sandy slightly gravelly Clay with rare cobble and rare fragments of redbrick.		
1.00-1.45 1.00	SPT(C) N=9 B			1,2/2,2,2,3		(1.40)			
					18.46	1.60	Soft to firm grey brown slightly sandy slightly gravelly CLAY with occasional subangular to subrounded cobbles.		▼1
2.00-2.45 2.00	SPT(C) N=7 B			1,1/2,1,2,2 Water strike(1) at 2.10m, rose to 1.80m in 20 mins.		(0.90)			▽1
					17.56	2.50	Stiff to very stiff dark grey slightly sandy slightly gravelly CLAY with occasional subangular to subrounded cobbles and rare boulder.		
3.00-3.30 3.00	SPT(C) 50/150 B			4,7/25,25		(0.80)			
					16.76	3.30	Refusal at 3.3m due to boulder/rock.		
							Complete at 3.30m		

Remarks
Groundwater encountered at 2.1m BGL in Borehole.
Borehole backfilled upon completion.
Chiselling from 3.30m to 3.30m for 1.0 hour.

Scale (approx)	Logged By
1:50	CCostigan

Figure No. 8656-04-19.BH02

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Ground Investigations Ireland Ltd
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Site Bailey Gibson Site			**Borehole Number** BH03
Machine : Dando 2000 & Beretta T44 **Method :** Cable Percussion with Rotary Core follow on	**Casing Diameter** 200 mm to 3.70 m 98mm to 9.70 m	**Ground Level (mOD)** 20.00	**Client**	**Job Number** 8656-04-19
	Location 714087.5 E 732837.3 N	**Dates** 06/06/2019-18/06/2019	**Engineer** Barrett Mahony	**Sheet** 1/1

Depth (m)	Sample / Tests	TCR	SCR	RQD	FI	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	Instr
									19.70	(0.30) 0.30	CONCRETE			
0.50	B										MADE GROUND: Brown slightly sandy slightly gravelly Clay with rare cobble and rare fragments of redbrick.			
1.00 1.00-1.45	B SPT(C) N=9							1,1/2,2,3,2		(1.00)				
									18.70	1.30	Soft to firm grey dark brown slightly sandy slightly gravelly CLAY with occasional subangular to subrounded cobbles.		▼1	
2.00 2.00-2.45	B SPT(C) N=8							1,1/2,2,2,2 Water strike(1) at 2.10m, rose to 1.70m in 20 mins.		(1.20)			▽1	
									17.50	2.50	Firm grey dark brown slightly sandy slightly gravelly CLAY with occasional subangular to subrounded cobbles and rare boulder.			
3.00 3.00-3.45	B SPT(C) N=10							2,3/2,2,3,3		(1.10)				
3.60		90	0	0	NI				16.40	3.60 (0.60)	OVERBURDEN: Poor recovery - recovery consists of: Black gravelly slightly sandy CLAY. Driller's Notes: Black boulder CLAY (Very Stiff)			
									15.80	4.20 (1.00)	Weak fine grained thinly laminated calcareous MUDSTONE. Distinctly weathered with occasional residual bands 3.70-5.20m BGL: Mostly Non Intact			
5.20		100	67	32	9				14.80	5.20 (1.30)	Weak to medium strong fine grained thinly laminated dark grey calcareous MUDSTONE with occasional calcite veining and pyrite specs. Partially to distinctly weathered with clay on fracture surfaces 5.20-6.50m BGL - F1: Very closely to medium spaced, subhorizontal to 10 degrees, planar smooth			
6.50					NI				13.50	6.50 (0.40)	Medium strong fine grained LIMESTONE with occasional calcite veining. Distinctly weathered to destructured 6.50-6.70m BGL - Mostly Non Intact			
6.70		100	79	55	21				13.10	6.90	Weak fine grained calcareous MUDSTONE. Distinctly weathered with clay staining on fracture surfaces, occasional specs of pyrite and residual bands			
8.20		100	100	72						(2.80)	6.70-9.70m BGL - F1: Very closely to medium spaced, subhorizontal to 10 degrees, planar smooth			
9.70									10.30	9.70	Complete at 9.70m			

Remarks
Groundwater encountered at 2.1m BGL during cable percussion drilling
Rotary Core follow on from 3.60m BGL
50mm slotted standpipe installed from 4.00m to 1.00m with pea gravel surround, plain pipe installed from 1.00m to ground level with bentonite seal and flush cover.
Chiselling from 3.60m to 3.60m for 1.0 hour.

Scale (approx)	Logged By
1:50	CC & PC

Figure No. 8656-04-19.BH03

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Site Bailey Gibson Site			**Borehole Number** BH04
Machine : Dando 2000 & Beretta T44 **Method :** Cable Percussion with rotary core follow on	**Casing Diameter** 200 mm to 3.30 m 98mm to 8.80m	**Ground Level (mOD)** 20.81	**Client**	**Job Number** 8656-04-19
	Location 713972 E 732819.7 N	**Dates** 07/06/2019	**Engineer** Barrett Mahony	**Sheet** 1/1

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	Instr
					20.61	(0.20) 0.20	CONCRETE			
0.50	B						MADE GROUND: Brown slightly sandy slightly gravelly Clay with rare cobble and rare fragments of redbrick.			
1.00	B					(1.10)				
1.00-1.45	SPT(C) N=6			1,1/1,2,2,1	19.51	1.30	Soft to firm brown slightly sandy slightly gravelly CLAY with occasional subangular to subrounded cobbles.		▼1	
				Water strike(1) at 1.80m, rose to 1.50m in 20 mins.		(0.80)			▽1	
2.00	B			1,2/2,3,2,2	18.71	2.10	Firm grey dark brown slightly sandy slightly gravelly CLAY with occasional subangular to subrounded cobbles.			
2.00-2.45	SPT(C) N=9					(0.90)				
3.00	B				17.81	3.00	Stiff dark grey slightly sandy slightly gravelly CLAY with occasional subangular to subrounded cobbles and rare boulder.			
3.00-3.30	SPT(C) 50/150			5,6/11,39		(0.50)				
3.30	TCR 50 / SCR 38 / RQD 30		FI		17.31	3.50	Medium strong fine grained thinly laminated dark grey LIMESTONE. Partially weathered with calcite veining interbedded with a weak fine grained calcareous Mudstone 3.50-6.30m BGL - F1: Very closely to medium spaced, 25 to 45 degrees, undulose rough to stepped			
3.70	TCR 100 / SCR 47 / RQD 33		24							
5.20	TCR 100 / SCR 58 / RQD 53					(2.80)				
6.30			NI		14.51	6.30	Weak fine grained thinly laminated calcareous MUDSTONE interlaminated with a medium strong fine grained thinly laminated grey LIMESTONE. Distinctly weathered with calcite veining, pyritic concretions and residually weathered bands. 6.30-6.60m BGL - Mostly Non Intact			
6.60										
6.70	TCR 100 / SCR 78 / RQD 71		5				6.60-8.20m BGL - F1: Closely to medium spaced, 10 to 30 degrees, planar smooth			
7.50			NI			(2.50)	7.50-7.80m BGL - Mostly Non Intact			
7.80			2							
8.20	TCR 100 / SCR 30 / RQD 0		NI				8.20-8.80m BGL - Mostly Non Intact			
8.80					12.01	8.80	Complete at 8.80m			

Remarks
Groundwater encountered at 1.8m BGL in Borehole.
Rotary Core follow on from 3.30m BGL
50mm slotted standpipe installed from 3.50m to 1.00m with pea gravel surround, plain pipe installed from 1.00m to ground level with bentonite seal and flush cover.
Chiselling from 3.30m to 3.30m for 1.0 hour.

Scale (approx)	Logged By
1:50	CC & PC

Figure No. 8656-04-19.BH04

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Site	Borehole Number
Bailey Gibson Site	BH05

Machine :	Casing Diameter	Ground Level (mOD)	Client	Job Number
Dando 2000	200 mm to 3.1 m	20.33		8656-04-19
Method : Cable Percussion	**Location** 714019.9 E 732818.2 N	**Dates** 07/06/2019	**Engineer** Barrett Mahony	**Sheet** 1/1

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					20.13	(0.20) 0.20	CONCRETE		
0.50	B					(1.00)	MADE GROUND: Brown slightly sandy slightly gravelly Clay with rare cobble and rare fragments of redbrick and concrete.		
1.00-1.45 1.00	SPT(C) N=5 B			1,1/1,2,1,1	19.13	1.20	Soft to firm grey brown slightly sandy slightly gravelly CLAY with occasional subangular to subrounded cobbles.		▼1
2.00 2.00-2.45	B SPT(C) N=7			Water strike(1) at 1.80m, rose to 1.50m in 20 mins. 1,1/1,2,2,2		(1.50)			▽1
					17.63	2.70	Stiff dark grey slightly sandy slightly gravelly CLAY with occasional subangular to subrounded cobbles and rare boulder.		
3.00-3.10 3.00	SPT(C) 50*/100 50/0 B			25,25/50	17.23	(0.40) 3.10	Refusal at 3.1m due to boulder.		
							Complete at 3.10m		

Remarks
Groundwater encountered at 2.0m BGL in Borehole.
Borehole backfilled upon completion.
Chiselling from 3.10m to 3.10m for 1.0 hour.

Scale (approx)	Logged By
1:50	CCostigan

Figure No. 8656-04-19.BH05

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Site	Borehole Number
Bailey Gibson Site	BH06

Machine	Casing Diameter	Ground Level (mOD)	Client	Job Number
Dando 2000 & Beretta T44	200 mm to 4.0 m 98mm to 9.70 m	20.48		8656-04-19
Method : Cable Percussion with rotary core follow on	**Location**	**Dates**	**Engineer**	**Sheet**
	714075.6 E 732806.8 N	04/06/2019- 18/06/2019	Barrett Mahony	1/1

Depth (m)	Sample / Tests	TCR	SCR	RQD	FI	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	Instr
									20.28	(0.20) 0.20	CONCRETE			
0.50	B										MADE GROUND: Brown slightly sandy slightly gravelly Clay with rare cobble and rare fragments of redbrick and concrete.			
1.00 1.00-1.45	B SPT(C) N=10							1,2/3,3,2,2		(1.00)				
									19.28	1.20	Firm grey brown slightly sandy slightly gravelly CLAY with occasional subangular to subrounded cobbles.			
2.00 2.00-2.45	B SPT(C) N=8							1,1/1,1,3,3		(1.40)				
									17.88	2.60	Stiff dark grey slightly sandy slightly gravelly CLAY with occasional subangular to subrounded cobbles.			
3.00 3.00-3.45	B SPT(C) N=27							5,8/7,5,7,8		(0.90)				
									16.98	3.50	Very stiff dark grey slightly sandy slightly gravelly CLAY with occasional subangular to subrounded cobbles and rare boulder.			
4.00 4.00-4.00	B SPT(C) 50*/0 50/0							25,25/50		(0.50)				
									16.48	4.00	OVERBURDEN: Poor recovery - recovery consists of very stiff black slightly sandy slightly gravelly CLAY with some cobbles and boulder fragments:			
4.00		74	16	0	NI					(0.40)				
									16.08	4.40	Weak fine grained dark grey calcareous MUDSTONE. Distinctly weathered 4.00-5.10m BGL: Mostly Non Intact			
5.10										(0.70)				
					3				15.38	5.10	Strong fine grained thinly laminated dark grey LIMESTONE. Partially weathered with some calcite veining interbedded with a weak fine grained thinly laminated black calcareous MUDSTONE. Distinctly weathered with occasional pyrite specs and residual bands 5.10-5.90m BGL: F1: Closely to medium spaced, sub horizontal to 10 degrees, planar smooth			
5.90		100	83	55	NI					(2.10)				
6.30											5.90-6.30m BGL: Mostly Non Intact			
6.70					8						6.30-7.20m BGL: F1: Closely to medium spaced, subhorizontal to 10 degrees, planar smooth			
7.20		100	40	40					13.28	7.20	Weak fine grained dark grey / black calcareous MUDSTONE. Distinclty weathered to residual with occasional pyrite specs			
8.20		100	10	10	NI					(2.50)	7.20-9.70m BGL: Mostly Non Intact			
9.70									10.78	9.70	Complete at 9.70m			

Remarks
N groundwater encountered during cable percussion drilling
Rotary Core follow on from 4.00m BGL
50mm slotted standpipe installed from 4.00m to 1.00m with pea gravel surround, plain pipe installed from 1.00m to ground level with bentonite seal and flush cover.
Chiselling from 4.00m to 4.00m for 1.0 hour.

Scale (approx)	Logged By
1:50	CC & PC

Figure No.
8656-04-19.BH06

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Site	Borehole Number
Bailey Gibson Site	BH07

Machine : Dando 2000 Method : Cable Percussion	Casing Diameter 200 mm to 3.20 m	Ground Level (mOD) 20.73	Client	Job Number 8656-04-19
	Location 714019 E 732768.1 N	Dates 07/06/2019	Engineer Barrett Mahony	Sheet 1/1

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					20.53	(0.20) 0.20	TARMACADAM		
0.50	B					(0.70)	MADE GROUND: Brown slightly sandy slightly gravelly Clay with rare cobble and rare fragments of redbrick.		
1.00-1.45 1.00	SPT(C) N=9 B			1,2/2,3,2,2	19.83	0.90	Firm grey brown slightly sandy slightly gravelly CLAY with occasional subangular to subrounded cobbles.		
						(1.60)			
2.00-2.45 2.00	SPT(C) N=8 B			1,1/2,2,2,2					
					18.23	2.50	Firm to stiff dark grey slightly sandy slightly gravelly CLAY with occasional subangular to subrounded cobbles.		
						(0.50)			
3.00-3.18 3.00	SPT(C) 50/25 B			25,25/50	17.73 17.53	3.00 (0.20) 3.20	Stiff dark grey slightly sandy slightly gravelly CLAY with occasional subangular to subrounded cobbles and rare boulders. Refusal at 3.2m due to boulder.		
							Complete at 3.20m		

Remarks
No groundwater encountered in Borehole.
Borehole backfilled upon completion.
Chiselling from 3.20m to 3.20m for 1.0 hour.

Scale (approx)	Logged By
1:50	CCostigan

Figure No.
8656-04-19.BH07

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Site Bailey Gibson Site			**Borehole Number** BH08
Machine : Dando 2000 **Method :** Cable Percussion	**Casing Diameter** 200 mm to 2.80 m	**Ground Level (mOD)** 21.68	**Client**	**Job Number** 8656-04-19
	Location	**Dates** 05/06/2019	**Engineer** Barrett Mahony	**Sheet** 1/1

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	Instr
					21.48	(0.20) 0.20	TOPSOIL: Brown slightly sandy slight			
0.50	B					(1.00)	MADE GROUND: Brown slightly sandy slightly gravelly Clay with rare cobble and rare fragments of redbrick.			
1.00-1.45 1.00	SPT(C) N=12 B			2,2/2,3,3,4	20.48	1.20	Firm to stiff grey brown slightly sandy slightly gravelly CLAY with occasional subangular to subrounded cobbles.			
						(1.10)				
2.00-2.45 2.00	SPT(C) N=17 B			1,1/1,2,6,8	19.38	2.30	Stiff dark grey slightly sandy slightly gravelly CLAY with occasional subangular to subrounded cobbles and rare boulders.			
						(0.50)				
2.80	B				18.88	2.80	Refusal at 2.80m due to boulder.			
							Complete at 2.80m			

Remarks
No groundwater encountered in Borehole.
Borehole backfilled upon completion.
50mm Standpipe installed 2.8m BGL in Borehole.
Chiselling from 2.80m to 2.80m for 1.0 hour.

Scale (approx)	Logged By
1:50	CCostigan

Figure No. 8656-04-19.BH08

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O'Callaghan Moran & Associates
Phone: 021 4345366

Trial Pit Number: TP-05

Project: Bailey Gibson

Client: Hines

Location: Dublin 8

Completion Depth: 2.5

Groundwater entry: 1.9

SWL (m): N/A

Depth (m)	Lithology Description	Lithology	Soil Sample Depth (m)	PID Readings (ppm)
0	Ground Surface			
	CONCRETE.			
	FILL. Dark brown gravely silty clay with occasional red brick fragments. Non natural materials comprise <2% of soil matrix.		Sampled 0.0 to 1.0 mb GL.	0.0 0.0
1	***CLAY.*** Greyish brown gravelly CLAY. Becoming damp from 1.3 mb GL.		Sampled 1.0 to 2.0 mb GL.	0.0 0.0
2	***CLAY.*** Dark brown damp stiff gravelly CLAY. Black angular limestone gravels.		Sampled 2.0 to 2.5 mb GL.	0.0
3				
4				
5				

Excavation Method: JCB

Geologist: Conor McGrath

Excavation Date: 17/05/2019

Sheet: 1 of 1

O'Callaghan Moran & Associates
Phone: 021 4345366

Trial Pit Number: TP-06

Project: Bailey Gibson

Client: Hines

Location: Dublin 8

Completion Depth: 2.4

Groundwater entry: 1.9

SWL (m): N/A

Depth (m)	Lithology Description	Lithology	Soil Sample Depth (m)	PID Readings (ppm)
0	Ground Surface			
	CONCRETE.			
	BITUMEN.			
	CLAY. Dark brown gravely silty clay with occasional red brick fragments. Non natural materials comprise <2% of soil matrix.		Sampled 0.0 to 1.0 mb GL.	0.0 0.0
1	***CLAY.*** Greyish brown gravelly CLAY. Becoming damp from 1.3 mb GL.		Sampled 1.0 to 2.0 mb GL.	0.0 0.0
2	***CLAY.*** Dark brown damp stiff gravelly CLAY. Black angular limestone gravels.		Sampled from 2.0 to 2.5 mb GL.	
3				
4				
5				

Excavation Method: JCB

Geologist: Conor McGrath

Excavation Date: 16/05/2019

Sheet: 1 of 1

O'Callaghan Moran & Associates
Phone: 021 4345366

Trial Pit Number: TP-07

Project: Bailey Gibson

Client: Hines

Location: Dublin 8

Completion Depth: 2.5

Groundwater entry: 1.9

SWL (m): N/A

Depth (m)	Lithology Description	Lithology	Soil Sample Depth (m)	PID Readings (ppm)
0	Ground Surface			
	CONCRETE.			
	CLAY. Dark brown gravely silty clay with occasional red brick fragments. Non natural materials comprise <2% of soil matrix.		Sampled 0.0 to 1.0 mb GL.	0.0 0.0
1	***CLAY.*** Greyish brown gravelly CLAY. Becoming damp from 1.3 mb GL.		Sampled 1.0 to 2.0 mb GL.	0.0 0.0
2	***CLAY.*** Dark brown damp stiff gravelly CLAY. Black angular limestone gravels.			
3				
4				
5				

Excavation Method: JCB

Geologist: Conor McGrath

Excavation Date: 16/05/2019

Sheet: 1 of 1

O'Callaghan Moran & Associates
Phone: 021 4345366

Trial Pit Number: TP-08

Project: Bailey Gibson

Client: Hines

Location: Dublin 8

Completion Depth: 2.5

Groundwater entry: 1.9

SWL (m): N/A

Depth (m)	Lithology Description	Lithology	Soil Sample Depth (m)	PID Readings (ppm)
0	Ground Surface			
	TOPSOIL.			
	CLAY. Greyish brown gravelly CLAY. Becoming damp from 1.3 mb GL.		Sampled 0.0 to 1.0 mb GL.	0.0
1				0.0
				0.0
			Sampled 1.0 to 2.0 mb GL.	0.0
2				
			Sampled from 2.0 to 2.5 mb GL.	
3				
4				
5				

Excavation Method: JCB

Geologist: Conor McGrath

Excavation Date: 17/05/2019

Sheet: 1 of 1

O'Callaghan Moran & Associates
Phone: 021 4345366

Trial Pit Number: TP-09

Project: Bailey Gibson

Client: Hines

Location: Dublin 8

Completion Depth: 2.3

Groundwater entry: 1.9

SWL (m): N/A

Depth (m)	Lithology Description	Lithology	Soil Sample Depth (m)	PID Readings (ppm)
0	Ground Surface			
	CONCRETE.			
	FILL. Dark brown gravely silty clay with occasional red brick fragments. Non natural materials comprise <2% of soil matrix.		Sampled 0.0 to 1.0 mb GL.	0.0 0.0
1	***CLAY.*** Greyish brown gravelly CLAY. Becoming damp from 1.3 mb GL.		Sampled 1.0 to 2.0 mb GL.	0.0 0.0
2	***CLAY.*** Dark brown damp stiff gravelly CLAY. Black angular limestone gravels.		Sampled 2.0 to 2.5 mb GL.	0.0
3				
4				
5				

Excavation Method: JCB

Geologist: Conor McGrath

Excavation Date: 17/05/2019

Sheet: 1 of 1

O'Callaghan Moran & Associates
Phone: 021 4345366

Trial Pit Number: TP-10

Project: Bailey Gibson

Client: Hines

Location: Dublin 8

Completion Depth: 2.5

Groundwater entry: 1.9

SWL (m): N/A

Depth (m)	Lithology Description	Lithology	Soil Sample Depth (m)	PID Readings (ppm)
0	Ground Surface			
	CONCRETE.			
	CLAY. Dark brown gravely silty clay with occasional red brick fragments. Non natural materials comprise <2% of soil matrix.		Sampled 0.0 to 1.0 mb GL.	0.0 0.0
1	***CLAY.*** Greyish brown gravelly CLAY. Becoming damp from 1.3 mb GL.		Sampled 1.0 to 2.0 mb GL.	0.0 0.0
2	***CLAY.*** Dark brown damp stiff gravelly CLAY. Black angular limestone gravels.		Sampled 2.0 to 2.5 mb GL.	
3				
4				
5				

Excavation Method: JCB

Geologist: Conor McGrath

Excavation Date: 16/05/2019

Sheet: 1 of 1

O'Callaghan Moran & Associates
Phone: 021 4345366

Trial Pit Number: TP-11

Project: Bailey Gibson

Client: Hines

Location: Dublin 8

Completion Depth: 2.1

Groundwater entry: 1.9

SWL (m): N/A

Depth (m)	Lithology Description	Lithology	Soil Sample Depth (m)	PID Readings (ppm)
0	Ground Surface			
	CONCRETE.			
	FILL. Dark brown gravely silty clay with occasional red brick fragments. Non natural materials comprise <2% of soil matrix.		Sampled 0.0 to 1.0 mb GL.	0.0 0.0
1	***CLAY.*** Greyish brown gravelly CLAY. Becoming damp from 1.3 mb GL.		Sampled 1.0 to 2.0 mb GL.	0.0 0.0
2				
3				
4				
5				

Excavation Method: JCB

Geologist: Conor McGrath

Excavation Date: 17/05/2019

Sheet: 1 of 1

O'Callaghan Moran & Associates
Phone: 021 4345366

Window Sample Number: WS-01

Project: Bailey Gibson

Client: Hines

Location: Dublin 8

Completion Depth: 3.0

Groundwater entry: N/A

SWL (m): N/A

Depth (m)	Lithology Description	Lithology	Soil Sample Depth (m)	PID Readings (ppm)
0	Ground Surface			
	CONCRETE.			
	MADE GROUND. Light brown silty gravelly clay with some red brick fragment. Non natural materials comprise <2% of the soil matrix.		Sample taken from 0.2 to 1.0 mb GL.	0.0
1	***CLAY.*** Greyish brown silty gravelly CLAY with black angular limestone gravel.		Sample taken from 1.0 to 2.0 mb GL.	0.0
2				0.0
	CLAY. Dark brown slightly damp stiff gravelly CLAY.		Sample taken from 2.0 to 3.0 mb GL.	0.0
3				
4				
5				

Excavation Method: Window Sample Rig

Geologist: Conor McGrath

Excavation Date: 21/05/2019

Sheet: 1 of 1

O'Callaghan Moran & Associates
Phone: 021 4345366

Window Sample Number: WS-02

Project: Bailey Gibson

Client: Hines

Location: Dublin 8

Completion Depth: 3.0

Groundwater entry: N/A

SWL (m): N/A

Depth (m)	Lithology Description	Lithology	Soil Sample Depth (m)	PID Readings (ppm)
0	Ground Surface			
	CONCRETE.			
	MADE GROUND. Light brown silty gravelly clay with some red brick fragment. Non natural materials comprise <2% of the soil matrix.		Sample taken from 0.2 to 1.0 mb GL.	0.0
1	***CLAY.*** Greyish brown silty gravelly CLAY with black angular limestone gravel.		Sample taken from 1.0 to 2.0 mb GL.	0.0
2				0.0
	CLAY. Dark brown slightly damp stiff gravelly CLAY.		Sample taken from 2.0 to 3.0 mb GL.	0.0
3				
4				
5				

Excavation Method: Window Sample Rig

Geologist: Conor McGrath

Excavation Date: 22/05/2019

Sheet: 1 of 1

O'Callaghan Moran & Associates
Phone: 021 4345366

Window Sample Number: WS-03

Project: Bailey Gibson

Client: Hines

Location: Dublin 8

Completion Depth: 3.0

Groundwater entry: N/A

SWL (m): N/A

Depth (m)	Lithology Description	Lithology	Soil Sample Depth (m)	PID Readings (ppm)
0	Ground Surface			
	CONCRETE.			
	MADE GROUND. Light brown silty gravelly clay with some red brick fragment. Non natural materials comprise <2% of the soil matrix.		Sample taken from 0.2 to 1.0 mb GL.	0.0
1	***CLAY.*** Greyish brown silty gravelly CLAY with black angular limestone gravel.		Sample taken from 1.0 to 2.0 mb GL.	0.0
2				0.0
	CLAY. Dark brown slightly damp stiff gravelly CLAY.		Sample taken from 2.0 to 3.0 mb GL.	0.0
3				
4				
5				

Excavation Method: Window Sample Rig

Geologist: Conor McGrath

Excavation Date: 22/05/2019

Sheet: 1 of 1

O'Callaghan Moran & Associates
Phone: 021 4345366

Window Sample Number: WS-04

Project: Bailey Gibson

Client: Hines

Location: Dublin 8

Completion Depth: 3.0

Groundwater entry: N/A

SWL (m): N/A

Depth (m)	Lithology Description	Lithology	Soil Sample Depth (m)	PID Readings (ppm)
0	Ground Surface			
	CONCRETE.			
	MADE GROUND. Light brown silty gravelly clay with some red brick fragment. Non natural materials comprise <2% of the soil matrix.		Sample taken from 0.2 to 1.0 mb GL.	0.0
1	***CLAY.*** Greyish brown silty gravelly CLAY with black angular limestone gravel.		Sample taken from 1.0 to 2.0 mb GL.	0.0
2				0.0
	CLAY. Dark brown slightly damp stiff gravelly CLAY.		Sample taken from 2.0 to 3.0 mb GL.	0.0
3				
4				
5				

Excavation Method: Window Sample Rig

Geologist: Conor McGrath

Excavation Date: 23/05/2019

Sheet: 1 of 1

O'Callaghan Moran & Associates
Phone: 021 4345366

Window Sample Number: WS-05

Project: Bailey Gibson

Client: Hines

Location: Dublin 8

Completion Depth: 3.0

Groundwater entry: N/A

SWL (m): N/A

Depth (m)	Lithology Description	Lithology	Soil Sample Depth (m)	PID Readings (ppm)
0	Ground Surface			
	CONCRETE.			
	MADE GROUND. Light brown silty gravelly clay with some red brick fragment. Non natural materials comprise <2% of the soil matrix.		Sample taken from 0.2 to 1.0 mb GL.	0.0
1	***CLAY.*** Greyish brown silty gravelly CLAY with black angular limestone gravel.		Sample taken from 1.0 to 2.0 mb GL.	0.0
2				0.0
	CLAY. Dark brown slightly damp stiff gravelly CLAY.		Sample taken from 2.0 to 3.0 mb GL.	0.0
3				
4				
5				

Excavation Method: Window Sample Rig

Geologist: Conor McGrath

Excavation Date: 21/05/2019

Sheet: 1 of 1

O'Callaghan Moran & Associates
Phone: 021 4345366

Window Sample Number: WS-06

Project: Bailey Gibson

Client: Hines

Location: Dublin 8

Completion Depth: 3.0

Groundwater entry: N/A

SWL (m): N/A

Depth (m)	Lithology Description	Lithology	Soil Sample Depth (m)	PID Readings (ppm)
0	Ground Surface			
	CONCRETE.			
	MADE GROUND. Light brown silty gravelly clay with some red brick fragment. Non natural materials comprise <2% of the soil matrix.		Sample taken from 0.2 to 1.0 mb GL.	0.0
1	***CLAY.*** Greyish brown silty gravelly CLAY with black angular limestone gravel.		Sample taken from 1.0 to 2.0 mb GL.	0.0
2				0.0
	CLAY. Dark brown slightly damp stiff gravelly CLAY.		Sample taken from 2.0 to 3.0 mb GL.	0.0
3				
4				
5				

Excavation Method: Window Sample Rig

Geologist: Conor McGrath

Excavation Date: 21/05/2019

Sheet: 1 of 1

O'Callaghan Moran & Associates
Phone: 021 4345366

Window Sample Number: WS-07

Project: Bailey Gibson

Client: Hines

Location: Dublin 8

Completion Depth: 3.0

Groundwater entry: N/A

SWL (m): N/A

Depth (m)	Lithology Description	Lithology	Soil Sample Depth (m)	PID Readings (ppm)
0	Ground Surface			
	CONCRETE.			
	MADE GROUND. Light brown silty gravelly clay with some red brick fragment. Non natural materials comprise <2% of the soil matrix. Hydrocarbon odour (diesel) from 0.2 to 1.0 mb GL.		Sample taken from 0.2 to 1.0 mb GL.	4.5 6.7
1	***CLAY.*** Greyish brown silty gravelly CLAY with black angular limestone gravel. Strong hydrocarbon odour (diesel) from 1.0 to 2.0 mb GL.		Sample taken from 1.0 to 2.0 mb GL.	34
2	***CLAY.*** Dark brown slightly damp stiff gravelly CLAY. Slight hydrcarbon odour from 2.0 to 3.0 mb GL.		Sample taken from 2.0 to 3.0 mb GL.	27 3.0
3				
4				
5				

Excavation Method: Window Sample Rig

Geologist: Conor McGrath

Excavation Date: 23/05/2019

Sheet: 1 of 1

O'Callaghan Moran & Associates
Phone: 021 4345366

Window Sample Number: WS-09

Project: Bailey Gibson

Client: Hines

Location: Dublin 8

Completion Depth: 3.0

Groundwater entry: N/A

SWL (m): N/A

Depth (m)	Lithology Description	Lithology	Soil Sample Depth (m)	PID Readings (ppm)
0	Ground Surface			
	CONCRETE.			
	MADE GROUND. Light brown silty gravelly clay with some red brick fragment. Non natural materials comprise <2% of the soil matrix. Hydrocarbon odour (diesel) from 0.2 to 1.0 mb GL.		Sample taken from 0.2 to 1.0 mb GL.	2.5 7.9
1	***CLAY.*** Greyish brown silty gravelly CLAY with black angular limestone gravel.		Sample taken from 1.0 to 2.0 mb GL.	0.0
2	***CLAY.*** Dark brown slightly damp stiff gravelly CLAY.		Sample taken from 2.0 to 3.0 mb GL.	0.0
3				
4				
5				

Excavation Method: Window Sample Rig

Geologist: Conor McGrath

Excavation Date: 22/05/2019

Sheet: 1 of 1

O'Callaghan Moran & Associates
Phone: 021 4345366

Window Sample Number: WS-10

Project: Bailey Gibson

Client: Hines

Location: Dublin 8

Completion Depth: 3.0

Groundwater entry: N/A

SWL (m): N/A

Depth (m)	Lithology Description	Lithology	Soil Sample Depth (m)	PID Readings (ppm)
0	Ground Surface			
	CONCRETE.			
	MADE GROUND. Light brown silty gravelly clay with some red brick fragment. Non natural materials comprise <2% of the soil matrix.		Sample taken from 0.2 to 1.0 mb GL.	0.0
1	***CLAY.*** Greyish brown silty gravelly CLAY with black angular limestone gravel.			0.0
			Sample taken from 1.0 to 2.0 mb GL.	0.0
2	***CLAY.*** Dark brown slightly damp stiff gravelly CLAY.			
			Sample taken from 2.0 to 3.0 mb GL.	0.0
3				
4				
5				

Excavation Method: Window Sample Rig

Geologist: Conor McGrath

Excavation Date: 22/05/2019

Sheet: 1 of 1

O'Callaghan Moran & Associates
Phone: 021 4345366

Window Sample Number: WS-11

Project: Bailey Gibson

Client: Hines

Location: Dublin 8

Completion Depth: 3.0

Groundwater entry: N/A

SWL (m): N/A

Depth (m)	Lithology Description	Lithology	Soil Sample Depth (m)	PID Readings (ppm)
0	Ground Surface			
	CONCRETE.			
	MADE GROUND. Light brown silty gravelly clay with some red brick fragment. Non natural materials comprise <2% of the soil matrix.		Sample taken from 0.2 to 1.0 mb GL.	0.0
1	***CLAY.*** Greyish brown silty gravelly CLAY with black angular limestone gravel.			0.0
			Sample taken from 1.0 to 2.0 mb GL.	0.0
2	***CLAY.*** Dark brown slightly damp stiff gravelly CLAY.			
			Sample taken from 2.0 to 3.0 mb GL.	0.0
3				
4				
5				

Excavation Method: Window Sample Rig

Geologist: Conor McGrath

Excavation Date: 22/05/2019

Sheet: 1 of 1

O'Callaghan Moran & Associates
Phone: 021 4345366

Window Sample Number: WS-12

Project: Bailey Gibson

Client: Hines

Location: Dublin 8

Completion Depth: 2.37

Groundwater entry: N/A

SWL (m): N/A

Depth (m)	Lithology Description	Lithology	Soil Sample Depth (m)	PID Readings (ppm)
0	Ground Surface			
	CONCRETE.			
	MADE GROUND. Light brown silty gravelly clay with some red brick fragment. Non natural materials comprise <2% of the soil matrix.		Sample taken from 0.2 to 1.0 mb GL.	0.0 0.0
1	***CLAY.*** Greyish brown silty gravelly CLAY with black angular limestone gravel.		Sample taken from 1.0 to 2.0 mb GL.	0.0 0.0
2				
3				
4				
5				

Excavation Method: Window Sample Rig

Geologist: Conor McGrath

Excavation Date: 22/05/2019

Sheet: 1 of 1

O'Callaghan Moran & Associates
Phone: 021 4345366

Window Sample Number: WS-13

Project: Bailey Gibson

Client: Hines

Location: Dublin 8

Completion Depth: 3.0

Groundwater entry: N/A

SWL (m): N/A

Depth (m)	Lithology Description	Lithology	Soil Sample Depth (m)	PID Readings (ppm)
0	Ground Surface			
	CONCRETE.			
	MADE GROUND. Light brown silty gravelly clay with some red brick fragment. Non natural materials comprise <2% of the soil matrix.		Sample taken from 0.2 to 1.0 mb GL.	0.0
1	***CLAY.*** Greyish brown silty gravelly CLAY with black angular limestone gravel.			0.0
			Sample taken from 1.0 to 2.0 mb GL.	0.0
2	***CLAY.*** Dark brown slightly damp stiff gravelly CLAY.			
			Sample taken from 2.0 to 3.0 mb GL.	0.0
3				
4				
5				

Excavation Method: Window Sample Rig

Geologist: Conor McGrath

Excavation Date: 23/05/2019

Sheet: 1 of 1

O'Callaghan Moran & Associates
Phone: 021 4345366

Window Sample Number: WS-14

Project: Bailey Gibson

Client: Hines

Location: Dublin 8

Completion Depth: 3.0

Groundwater entry: N/A

SWL (m): N/A

Depth (m)	Lithology Description	Lithology	Soil Sample Depth (m)	PID Readings (ppm)
0	Ground Surface			
	CONCRETE.			
	MADE GROUND. Light brown silty gravelly clay with some red brick fragment. Non natural materials comprise <2% of the soil matrix.		Sample taken from 0.2 to 1.0 mb GL.	0.0
1	***CLAY.*** Greyish brown silty gravelly CLAY with black angular limestone gravel.			0.0
			Sample taken from 1.0 to 2.0 mb GL.	0.0
2	***CLAY.*** Dark brown slightly damp stiff gravelly CLAY.			
			Sample taken from 2.0 to 3.0 mb GL.	0.0
3				
4				
5				

Excavation Method: Window Sample Rig

Geologist: Conor McGrath

Excavation Date: 20/05/2019

Sheet: 1 of 1

O'Callaghan Moran & Associates
Phone: 021 4345366

Window Sample Number: WS-15

Project: Bailey Gibson

Client: Hines

Location: Dublin 8

Completion Depth: 3.0

Groundwater entry: N/A

SWL (m): N/A

Depth (m)	Lithology Description	Lithology	Soil Sample Depth (m)	PID Readings (ppm)
0	Ground Surface			
	CONCRETE.			
	MADE GROUND. Light brown silty gravelly clay with some red brick fragment. Non natural materials comprise <2% of the soil matrix.		Sample taken from 0.2 to 1.0 mb GL.	0.0
1	***CLAY.*** Greyish brown silty gravelly CLAY with black angular limestone gravel.			0.0
			Sample taken from 1.0 to 2.0 mb GL.	0.0
2	***CLAY.*** Dark brown slightly damp stiff gravelly CLAY.			
			Sample taken from 2.0 to 3.0 mb GL.	0.0
3				
4				
5				

Excavation Method: Window Sample Rig

Geologist: Conor McGrath

Excavation Date: 21/05/2019

Sheet: 1 of 1

O'Callaghan Moran & Associates
Phone: 021 4345366

Window Sample Number: WS-16

Project: Bailey Gibson

Client: Hines

Location: Dublin 8

Completion Depth: 3.0

Groundwater entry: N/A

SWL (m): N/A

Depth (m)	Lithology Description	Lithology	Soil Sample Depth (m)	PID Readings (ppm)
0	Ground Surface			
	CONCRETE.			
	MADE GROUND. Light brown silty gravelly clay with some red brick fragment. Non natural materials comprise <2% of the soil matrix.		Sample taken from 0.2 to 1.0 mb GL.	0.0
1	***CLAY.*** Greyish brown silty gravelly CLAY with black angular limestone gravel.			0.0
			Sample taken from 1.0 to 2.0 mb GL.	0.0
2	***CLAY.*** Dark brown slightly damp stiff gravelly CLAY.			
			Sample taken from 2.0 to 3.0 mb GL.	0.0
3				
4				
5				

Excavation Method: Window Sample Rig

Geologist: Conor McGrath

Excavation Date: 21/05/2019

Sheet: 1 of 1

O'Callaghan Moran & Associates
Phone: 021 4345366

Window Sample Number: WS-17

Project: Bailey Gibson

Client: Hines

Location: Dublin 8

Completion Depth: 3.0

Groundwater entry: N/A

SWL (m): N/A

Depth (m)	Lithology Description	Lithology	Soil Sample Depth (m)	PID Readings (ppm)
0	Ground Surface			
	CONCRETE.			
	MADE GROUND. Light brown silty gravelly clay with some red brick fragment. Non natural materials comprise <2% of the soil matrix.		Sample taken from 0.2 to 1.0 mb GL.	0.0
1	***CLAY.*** Greyish brown silty gravelly CLAY with black angular limestone gravel.			0.0
			Sample taken from 1.0 to 2.0 mb GL.	0.0
2	***CLAY.*** Dark brown slightly damp stiff gravelly CLAY.			
			Sample taken from 2.0 to 3.0 mb GL.	0.0
3				
4				
5				

Excavation Method: Window Sample Rig

Geologist: Conor McGrath

Excavation Date: 20/05/2019

Sheet: 1 of 1

O'Callaghan Moran & Associates
Phone: 021 4345366

Window Sample Number: WS-18

Project: Bailey Gibson

Client: Hines

Location: Dublin 8

Completion Depth: 3.0

Groundwater entry: N/A

SWL (m): N/A

Depth (m)	Lithology Description	Lithology	Soil Sample Depth (m)	PID Readings (ppm)
0	Ground Surface			
	CONCRETE.			
	MADE GROUND. Light brown silty gravelly clay with some red brick fragment. Non natural materials comprise <2% of the soil matrix.		Sample taken from 0.2 to 1.0 mb GL.	0.0
1	***CLAY.*** Greyish brown silty gravelly CLAY with black angular limestone gravel.			0.0
			Sample taken from 1.0 to 2.0 mb GL.	0.0
2	***CLAY.*** Dark brown slightly damp stiff gravelly CLAY.			
			Sample taken from 2.0 to 3.0 mb GL.	0.0
3				
4				
5				

Excavation Method: Window Sample Rig

Geologist: Conor McGrath

Excavation Date: 20/05/2019

Sheet: 1 of 1

O'Callaghan Moran & Associates
Phone: 021 4345366

Window Sample Number: WS-19

Project: Bailey Gibson

Client: Hines

Location: Dublin 8

Completion Depth: 3.0

Groundwater entry: N/A

SWL (m): N/A

Depth (m)	Lithology Description	Lithology	Soil Sample Depth (m)	PID Readings (ppm)
0	Ground Surface			
	CONCRETE.			
	MADE GROUND. Light brown silty gravelly clay with some red brick fragment. Non natural materials comprise <2% of the soil matrix.		Sample taken from 0.2 to 1.0 mb GL.	0.0
1	***CLAY.*** Greyish brown silty gravelly CLAY with black angular limestone gravel.			0.0
			Sample taken from 1.0 to 2.0 mb GL.	0.0
2	***CLAY.*** Dark brown slightly damp stiff gravelly CLAY.			
			Sample taken from 2.0 to 3.0 mb GL.	0.0
3				
4				
5				

Excavation Method: Window Sample Rig

Geologist: Conor McGrath

Excavation Date: 21/05/2019

Sheet: 1 of 1

O'Callaghan Moran & Associates
Phone: 021 4345366

Window Sample Number: WS-20

Project: Bailey Gibson

Client: Hines

Location: Dublin 8

Completion Depth: 3.0

Groundwater entry: N/A

SWL (m): N/A

Depth (m)	Lithology Description	Lithology	Soil Sample Depth (m)	PID Readings (ppm)
0	Ground Surface			
	CONCRETE.			
	MADE GROUND. Light brown silty gravelly clay with some red brick fragment. Non natural materials comprise <2% of the soil matrix.		Sample taken from 0.2 to 1.0 mb GL.	0.0
1	***CLAY.*** Greyish brown silty gravelly CLAY with black angular limestone gravel.			0.0
			Sample taken from 1.0 to 2.0 mb GL.	0.0
2	***CLAY.*** Dark brown slightly damp stiff gravelly CLAY.			
			Sample taken from 2.0 to 3.0 mb GL.	0.0
3				
4				
5				

Excavation Method: Window Sample Rig

Geologist: Conor McGrath

Excavation Date: 21/05/2019

Sheet: 1 of 1

O'Callaghan Moran & Associates
Phone: 021 4345366

Window Sample Number: WS-21

Project: Bailey Gibson

Client: Hines

Location: Dublin 8

Completion Depth: 3.0

Groundwater entry: N/A

SWL (m): N/A

Depth (m)	Lithology Description	Lithology	Soil Sample Depth (m)	PID Readings (ppm)
0	Ground Surface			
	CONCRETE.			
	MADE GROUND. Light brown silty gravelly clay with some red brick fragment. Non natural materials comprise <2% of the soil matrix.		Sample taken from 0.2 to 1.0 mb GL.	0.0
1	***CLAY.*** Greyish brown silty gravelly CLAY with black angular limestone gravel.			0.0
			Sample taken from 1.0 to 2.0 mb GL.	0.0
2	***CLAY.*** Dark brown slightly damp stiff gravelly CLAY.			
			Sample taken from 2.0 to 3.0 mb GL.	0.0
3				
4				
5				

Excavation Method: Window Sample Rig

Geologist: Conor McGrath

Excavation Date: 20/05/2019

Sheet: 1 of 1

O'Callaghan Moran & Associates
Phone: 021 4345366

Window Sample Number: WS-22

Project: Bailey Gibson

Client: Hines

Location: Dublin 8

Completion Depth: 3.0

Groundwater entry: N/A

SWL (m): N/A

Depth (m)	Lithology Description	Lithology	Soil Sample Depth (m)	PID Readings (ppm)
0	Ground Surface			
	CONCRETE.			
	MADE GROUND. Light brown silty gravelly clay with some red brick fragment. Non natural materials comprise <2% of the soil matrix.		Sample taken from 0.2 to 1.0 mb GL.	0.0
1	***CLAY.*** Greyish brown silty gravelly CLAY with black angular limestone gravel.			0.0
			Sample taken from 1.0 to 2.0 mb GL.	0.0
2	***CLAY.*** Dark brown slightly damp stiff gravelly CLAY.			
			Sample taken from 2.0 to 3.0 mb GL.	0.0
3				
4				
5				

Excavation Method: Window Sample Rig

Geologist: Conor McGrath

Excavation Date: 20/05/2019

Sheet: 1 of 1

O'Callaghan Moran & Associates
Phone: 021 4345366

Window Sample Number: WS-23

Project: Bailey Gibson

Client: Hines

Location: Dublin 8

Completion Depth: 3.0

Groundwater entry: N/A

SWL (m): N/A

Depth (m)	Lithology Description	Lithology	Soil Sample Depth (m)	PID Readings (ppm)
0	Ground Surface			
	CONCRETE.			
	MADE GROUND. Light brown silty gravelly clay with some red brick fragment. Non natural materials comprise <2% of the soil matrix.		Sample taken from 0.2 to 1.0 mb GL.	0.0
1	***CLAY.*** Greyish brown silty gravelly CLAY with black angular limestone gravel.			0.0
			Sample taken from 1.0 to 2.0 mb GL.	0.0
2	***CLAY.*** Dark brown slightly damp stiff gravelly CLAY.			
			Sample taken from 2.0 to 3.0 mb GL.	0.0
3				
4				
5				

Excavation Method: Window Sample Rig

Geologist: Conor McGrath

Excavation Date: 21/05/2019

Sheet: 1 of 1

O'Callaghan Moran & Associates
Phone: 021 4345366

Window Sample Number: WS-24

Project: Bailey Gibson

Client: Hines

Location: Dublin 8

Completion Depth: 3.0

Groundwater entry: N/A

SWL (m): N/A

Depth (m)	Lithology Description	Lithology	Soil Sample Depth (m)	PID Readings (ppm)
0	Ground Surface			
	CONCRETE.			
	MADE GROUND. Light brown silty gravelly clay with some red brick fragment. Non natural materials comprise <2% of the soil matrix.		Sample taken from 0.2 to 1.0 mb GL.	0.0
1	***CLAY.*** Greyish brown silty gravelly CLAY with black angular limestone gravel.			0.0
			Sample taken from 1.0 to 2.0 mb GL.	0.0
2	***CLAY.*** Dark brown slightly damp stiff gravelly CLAY.			
			Sample taken from 2.0 to 3.0 mb GL.	0.0
3				
4				
5				

Excavation Method: Window Sample Rig

Geologist: Conor McGrath

Excavation Date: 21/05/2019

Sheet: 1 of 1

O'Callaghan Moran & Associates
Phone: 021 4345366

Window Sample Number: WS-26

Project: Bailey Gibson

Client: Hines

Location: Dublin 8

Completion Depth: 3.0

Groundwater entry: N/A

SWL (m): N/A

Depth (m)	Lithology Description	Lithology	Soil Sample Depth (m)	PID Readings (ppm)
0	Ground Surface			
	CONCRETE.			
	MADE GROUND. Light brown silty gravelly clay with some red brick fragment. Non natural materials comprise <2% of the soil matrix.		Sample taken from 0.2 to 1.0 mb GL.	0.0
1	***CLAY.*** Greyish brown silty gravelly CLAY with black angular limestone gravel.			0.0
			Sample taken from 1.0 to 2.0 mb GL.	0.0
2	***CLAY.*** Dark brown slightly damp stiff gravelly CLAY.			
			Sample taken from 2.0 to 3.0 mb GL.	0.0
3				
4				
5				

Excavation Method: Window Sample Rig

Geologist: Conor McGrath

Excavation Date: 22/05/2019

Sheet: 1 of 1

O'Callaghan Moran & Associates
Phone: 021 4345366

Window Sample Number: WS-27

Project: Bailey Gibson

Client: Hines

Location: Dublin 8

Completion Depth: 3.0

Groundwater entry: N/A

SWL (m): N/A

Depth (m)	Lithology Description	Lithology	Soil Sample Depth (m)	PID Readings (ppm)
0	Ground Surface			
	CONCRETE.			
	MADE GROUND. Light brown silty gravelly clay with some red brick fragment. Non natural materials comprise <2% of the soil matrix.		Sample taken from 0.2 to 1.0 mb GL.	0.0
1	***CLAY.*** Greyish brown silty gravelly CLAY with black angular limestone gravel.			0.0
			Sample taken from 1.0 to 2.0 mb GL.	0.0
2	***CLAY.*** Dark brown slightly damp stiff gravelly CLAY.			
			Sample taken from 2.0 to 3.0 mb GL.	0.0
3				
4				
5				

Excavation Method: Window Sample Rig

Geologist: Conor McGrath

Excavation Date: 21/05/2019

Sheet: 1 of 1

O'Callaghan Moran & Associates
Phone: 021 4345366

Window Sample Number: WS-28

Project: Bailey Gibson

Client: Hines

Location: Dublin 8

Completion Depth: 3.0

Groundwater entry: N/A

SWL (m): N/A

Depth (m)	Lithology Description	Lithology	Soil Sample Depth (m)	PID Readings (ppm)
0	Ground Surface			
	CONCRETE.			
	MADE GROUND. Light brown silty gravelly clay with some red brick fragment. Non natural materials comprise <2% of the soil matrix.		Sample taken from 0.2 to 1.0 mb GL.	0.0
1	***CLAY.*** Greyish brown silty gravelly CLAY with black angular limestone gravel.			0.0
			Sample taken from 1.0 to 2.0 mb GL.	0.0
2	***CLAY.*** Dark brown slightly damp stiff gravelly CLAY.			
			Sample taken from 2.0 to 3.0 mb GL.	0.0
3				
4				
5				

Excavation Method: Window Sample Rig

Geologist: Conor McGrath

Excavation Date: 22/05/2019

Sheet: 1 of 1

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Site Bailey Gibson Site			**Borehole Number** BH02
Machine : Dando 2000 **Method :** Cable Percussion	**Casing Diameter** 200 mm to 3.3 m	**Ground Level (mOD)** 20.06	**Client**	**Job Number** 8656-04-19
	Location 714045.9 E 732849.1 N	**Dates** 06/06/2019	**Engineer** Barrett Mahony	**Sheet** 1/1

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					19.86	(0.20) 0.20	CONCRETE		
0.50	B						MADE GROUND: Brown slightly sandy slightly gravelly Clay with rare cobble and rare fragments of redbrick.		
1.00-1.45 1.00	SPT(C) N=9 B			1,2/2,2,2,3		(1.40)			
					18.46	1.60	Soft to firm grey brown slightly sandy slightly gravelly CLAY with occasional subangular to subrounded cobbles.		▼1
2.00-2.45 2.00	SPT(C) N=7 B			1,1/2,1,2,2 Water strike(1) at 2.10m, rose to 1.80m in 20 mins.		(0.90)			▽1
					17.56	2.50	Stiff to very stiff dark grey slightly sandy slightly gravelly CLAY with occasional subangular to subrounded cobbles and rare boulder.		
3.00-3.30 3.00	SPT(C) 50/150 B			4,7/25,25		(0.80)			
					16.76	3.30	Refusal at 3.3m due to boulder/rock.		
							Complete at 3.30m		

Remarks
Groundwater encountered at 2.1m BGL in Borehole.
Borehole backfilled upon completion.
Chiselling from 3.30m to 3.30m for 1.0 hour.

Scale (approx)	Logged By
1:50	CCostigan

Figure No. 8656-04-19.BH02

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Site Bailey Gibson Site			**Borehole Number** BH03
Machine : Dando 2000 & Beretta T44 **Method :** Cable Percussion with Rotary Core follow on	**Casing Diameter** 200 mm to 3.70 m 98mm to 9.70 m	**Ground Level (mOD)** 20.00	**Client**	**Job Number** 8656-04-19
	Location 714087.5 E 732837.3 N	**Dates** 06/06/2019-18/06/2019	**Engineer** Barrett Mahony	**Sheet** 1/1

Depth (m)	Sample / Tests	TCR	SCR	RQD	FI	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	Instr
									19.70	(0.30) 0.30	CONCRETE			
0.50	B									(1.00)	MADE GROUND: Brown slightly sandy slightly gravelly Clay with rare cobble and rare fragments of redbrick.			
1.00 1.00-1.45	B SPT(C) N=9							1,1/2,2,3,2	18.70	1.30				
2.00 2.00-2.45	B SPT(C) N=8							1,1/2,2,2,2 Water strike(1) at 2.10m, rose to 1.70m in 20 mins.		(1.20)	Soft to firm grey dark brown slightly sandy slightly gravelly CLAY with occasional subangular to subrounded cobbles.		▼1 ▽1	
3.00 3.00-3.45	B SPT(C) N=10							2,3/2,2,3,3	17.50	2.50	Firm grey dark brown slightly sandy slightly gravelly CLAY with occasional subangular to subrounded cobbles and rare boulder.			
3.60		90	0	0	NI				16.40	(1.10) 3.60	OVERBURDEN: Poor recovery - recovery consists of: Black gravelly slightly sandy CLAY. Driller's Notes: Black boulder CLAY (Very Stiff)			
5.20		100	67	32	9				15.80	(0.60) 4.20	Weak fine grained thinly laminated calcareous MUDSTONE. Distinctly weathered with occasional residual bands 3.70-5.20m BGL: Mostly Non Intact			
6.50					NI				14.80	(1.00) 5.20	Weak to medium strong fine grained thinly laminated dark grey calcareous MUDSTONE with occasional calcite veining and pyrite specs. Partially to distinctly weathered with clay on fracture surfaces 5.20-6.50m BGL - F1: Very closely to medium spaced, subhorizontal to 10 degrees, planar smooth			
6.70		100	79	55	21				13.50	(1.30) 6.50	Medium strong fine grained LIMESTONE with occasional calcite veining. Distinctly weathered to destructured 6.50-6.70m BGL - Mostly Non Intact			
8.20		100	100	72					13.10	(0.40) 6.90	Weak fine grained calcareous MUDSTONE. Distintly weathered with clay staining on fracture surfaces, occasional specs of pyrite and residual bands 6.70-9.70m BGL - F1: Very closely to medium spaced, subhorizontal to 10 degrees, planar smooth			
9.70									10.30	(2.80) 9.70	Complete at 9.70m			

Remarks
Groundwater encountered at 2.1m BGL during cable percussion drilling
Rotary Core follow on from 3.60m BGL
50mm slotted standpipe installed from 4.00m to 1.00m with pea gravel surround, plain pipe installed from 1.00m to ground level with bentonite seal and flush cover.
Chiselling from 3.60m to 3.60m for 1.0 hour.

Scale (approx)	Logged By
1:50	CC & PC

Figure No. 8656-04-19.BH03

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Site Bailey Gibson Site			**Borehole Number** BH04
Machine : Dando 2000 & Beretta T44 **Method :** Cable Percussion with rotary core follow on	**Casing Diameter** 200 mm to 3.30 m 98mm to 8.80m	**Ground Level (mOD)** 20.81	**Client**	**Job Number** 8656-04-19
	Location 713972 E 732819.7 N	**Dates** 07/06/2019	**Engineer** Barrett Mahony	**Sheet** 1/1

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	Instr
					20.61	(0.20) 0.20	CONCRETE			
0.50	B						MADE GROUND: Brown slightly sandy slightly gravelly Clay with rare cobble and rare fragments of redbrick.			
1.00	B					(1.10)				
1.00-1.45	SPT(C) N=6			1,1/1,2,2,1	19.51	1.30	Soft to firm brown slightly sandy slightly gravelly CLAY with occasional subangular to subrounded cobbles.		▼1	
				Water strike(1) at 1.80m, rose to 1.50m in 20 mins.		(0.80)			▽1	
2.00	B			1,2/2,3,2,2	18.71	2.10	Firm grey dark brown slightly sandy slightly gravelly CLAY with occasional subangular to subrounded cobbles.			
2.00-2.45	SPT(C) N=9					(0.90)				
3.00	B				17.81	3.00	Stiff dark grey slightly sandy slightly gravelly CLAY with occasional subangular to subrounded cobbles and rare boulder.			
3.00-3.30	SPT(C) 50/150			5,6/11,39		(0.50)				
3.30	TCR 50 / SCR 38 / RQD 30		FI		17.31	3.50	Medium strong fine grained thinly laminated dark grey LIMESTONE. Partially weathered with calcite veining interbedded with a weak fine grained calcareous Mudstone 3.50-6.30m BGL - F1: Very closely to medium spaced, 25 to 45 degrees, undulose rough to stepped			
3.70	TCR 100 / SCR 47 / RQD 33		24							
5.20	TCR 100 / SCR 58 / RQD 53					(2.80)				
6.30			NI		14.51	6.30	Weak fine grained thinly laminated calcareous MUDSTONE interlaminated with a medium strong fine grained thinly laminated grey LIMESTONE. Distinctly weathered with calcite veining, pyritic concretions and residually weathered bands. 6.30-6.60m BGL - Mostly Non Intact			
6.60										
6.70	TCR 100 / SCR 78 / RQD 71		5				6.60-8.20m BGL - F1: Closely to medium spaced, 10 to 30 degrees, planar smooth			
7.50			NI			(2.50)	7.50-7.80m BGL - Mostly Non Intact			
7.80			2							
8.20	TCR 100 / SCR 30 / RQD 0		NI				8.20-8.80m BGL - Mostly Non Intact			
8.80					12.01	8.80	Complete at 8.80m			

Remarks
Groundwater encountered at 1.8m BGL in Borehole.
Rotary Core follow on from 3.30m BGL
50mm slotted standpipe installed from 3.50m to 1.00m with pea gravel surround, plain pipe installed from 1.00m to ground level with bentonite seal and flush cover.
Chiselling from 3.30m to 3.30m for 1.0 hour.

Scale (approx)	Logged By
1:50	CC & PC

Figure No. 8656-04-19.BH04

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Site	Borehole Number
Bailey Gibson Site	BH05

Machine :	Casing Diameter	Ground Level (mOD)	Client	Job Number
Dando 2000	200 mm to 3.1 m	20.33		8656-04-19
Method : Cable Percussion	**Location** 714019.9 E 732818.2 N	**Dates** 07/06/2019	**Engineer** Barrett Mahony	**Sheet** 1/1

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					20.13	(0.20) 0.20	CONCRETE		
0.50	B					(1.00)	MADE GROUND: Brown slightly sandy slightly gravelly Clay with rare cobble and rare fragments of redbrick and concrete.		
1.00-1.45 1.00	SPT(C) N=5 B			1,1/1,2,1,1	19.13	1.20	Soft to firm grey brown slightly sandy slightly gravelly CLAY with occasional subangular to subrounded cobbles.		▼1
2.00 2.00-2.45	B SPT(C) N=7			Water strike(1) at 1.80m, rose to 1.50m in 20 mins. 1,1/1,2,2,2		(1.50)			▽1
					17.63	2.70	Stiff dark grey slightly sandy slightly gravelly CLAY with occasional subangular to subrounded cobbles and rare boulder.		
3.00-3.10 3.00	SPT(C) 50*/100 50/0 B			25,25/50	17.23	(0.40) 3.10	Refusal at 3.1m due to boulder.		
							Complete at 3.10m		

Remarks
Groundwater encountered at 2.0m BGL in Borehole.
Borehole backfilled upon completion.
Chiselling from 3.10m to 3.10m for 1.0 hour.

Scale (approx)	Logged By
1:50	CCostigan

Figure No. 8656-04-19.BH05

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Site Bailey Gibson Site			**Borehole Number** BH06
Machine : Dando 2000 & Beretta T44 **Method :** Cable Percussion with rotary core follow on	**Casing Diameter** 200 mm to 4.0 m 98mm to 9.70 m	**Ground Level (mOD)** 20.48	**Client**	**Job Number** 8656-04-19
	Location 714075.6 E 732806.8 N	**Dates** 04/06/2019-18/06/2019	**Engineer** Barrett Mahony	**Sheet** 1/1

Depth (m)	Sample / Tests	TCR	SCR	RQD	FI	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	Instr
									20.28	(0.20) 0.20	CONCRETE			
0.50	B									(1.00)	MADE GROUND: Brown slightly sandy slightly gravelly Clay with rare cobble and rare fragments of redbrick and concrete.			
1.00 1.00-1.45	B SPT(C) N=10							1,2/3,3,2,2	19.28	1.20	Firm grey brown slightly sandy slightly gravelly CLAY with occasional subangular to subrounded cobbles.			
2.00 2.00-2.45	B SPT(C) N=8							1,1/1,1,3,3		(1.40)				
3.00 3.00-3.45	B SPT(C) N=27							5,8/7,5,7,8	17.88	2.60	Stiff dark grey slightly sandy slightly gravelly CLAY with occasional subangular to subrounded cobbles.			
4.00 4.00-4.00	B SPT(C) 50*/0							25,25/50 50/0		(0.90)				
4.00		74	16	0	NI				16.98	3.50	Very stiff dark grey slightly sandy slightly gravelly CLAY with occasional subangular to subrounded cobbles and rare boulder.			
5.10		100	83	55	3					(0.50)				
5.90					NI				16.48	4.00	OVERBURDEN: Poor recovery - recovery consists of very stiff black slightly sandy slightly gravelly CLAY with some cobbles and boulder fragments:			
6.30										(0.40)				
6.70		100	40	40	8				16.08	4.40	Weak fine grained dark grey calcareous MUDSTONE. Distinctly weathered 4.00-5.10m BGL: Mostly Non Intact			
7.20										(0.70)				
8.20		100	10	10	NI				15.38	5.10	Strong fine grained thinly laminated dark grey LIMESTONE. Partially weathered with some calcite veining interbedded with a weak fine grained thinly laminated black calcareous MUDSTONE. Distinctly weathered with occasional pyrite specs and residual bands 5.10-5.90m BGL: F1: Closely to medium spaced, sub horizontal to 10 degrees, planar smooth 5.90-6.30m BGL: Mostly Non Intact 6.30-7.20m BGL: F1: Closely to medium spaced, subhorizontal to 10 degrees, planar smooth			
9.70										(2.10)				
									13.28	7.20	Weak fine grained dark grey / black calcareous MUDSTONE. Distinclty weathered to residual with occasional pyrite specs 7.20-9.70m BGL: Mostly Non Intact			
										(2.50)				
									10.78	9.70	Complete at 9.70m			

Remarks
N groundwater encountered during cable percussion drilling
Rotary Core follow on from 4.00m BGL
50mm slotted standpipe installed from 4.00m to 1.00m with pea gravel surround, plain pipe installed from 1.00m to ground level with bentonite seal and flush cover.
Chiselling from 4.00m to 4.00m for 1.0 hour.

Scale (approx)	Logged By
1:50	CC & PC

Figure No. 8656-04-19.BH06

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Site	Borehole Number
Bailey Gibson Site	BH07

Machine : Dando 2000 Method : Cable Percussion	Casing Diameter 200 mm to 3.20 m	Ground Level (mOD) 20.73	Client	Job Number 8656-04-19
	Location 714019 E 732768.1 N	Dates 07/06/2019	Engineer Barrett Mahony	Sheet 1/1

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					20.53	(0.20) 0.20	TARMACADAM		
0.50	B					(0.70)	MADE GROUND: Brown slightly sandy slightly gravelly Clay with rare cobble and rare fragments of redbrick.		
1.00-1.45 1.00	SPT(C) N=9 B			1,2/2,3,2,2	19.83	0.90	Firm grey brown slightly sandy slightly gravelly CLAY with occasional subangular to subrounded cobbles.		
						(1.60)			
2.00-2.45 2.00	SPT(C) N=8 B			1,1/2,2,2,2					
					18.23	2.50	Firm to stiff dark grey slightly sandy slightly gravelly CLAY with occasional subangular to subrounded cobbles.		
						(0.50)			
3.00-3.18 3.00	SPT(C) 50/25 B			25,25/50	17.73 17.53	3.00 (0.20) 3.20	Stiff dark grey slightly sandy slightly gravelly CLAY with occasional subangular to subrounded cobbles and rare boulders. Refusal at 3.2m due to boulder.		
							Complete at 3.20m		

Remarks
No groundwater encountered in Borehole.
Borehole backfilled upon completion.
Chiselling from 3.20m to 3.20m for 1.0 hour.

Scale (approx)	Logged By
1:50	CCostigan

Figure No.
8656-04-19.BH07

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Site Bailey Gibson Site			**Borehole Number** BH08
Machine : Dando 2000 **Method :** Cable Percussion	**Casing Diameter** 200 mm to 2.80 m	**Ground Level (mOD)** 21.68	**Client**	**Job Number** 8656-04-19
	Location	**Dates** 05/06/2019	**Engineer** Barrett Mahony	**Sheet** 1/1

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	Instr
					21.48	(0.20) 0.20	TOPSOIL: Brown slightly sandy slight			
0.50	B					(1.00)	MADE GROUND: Brown slightly sandy slightly gravelly Clay with rare cobble and rare fragments of redbrick.			
1.00-1.45 1.00	SPT(C) N=12 B			2,2/2,3,3,4	20.48	1.20	Firm to stiff grey brown slightly sandy slightly gravelly CLAY with occasional subangular to subrounded cobbles.			
						(1.10)				
2.00-2.45 2.00	SPT(C) N=17 B			1,1/1,2,6,8	19.38	2.30	Stiff dark grey slightly sandy slightly gravelly CLAY with occasional subangular to subrounded cobbles and rare boulders.			
						(0.50)				
2.80	B				18.88	2.80	Refusal at 2.80m due to boulder.			
							Complete at 2.80m			

Remarks
No groundwater encountered in Borehole.
Borehole backfilled upon completion.
50mm Standpipe installed 2.8m BGL in Borehole.
Chiselling from 2.80m to 2.80m for 1.0 hour.

Scale (approx)	Logged By
1:50	CCostigan

Figure No. 8656-04-19.BH08

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O'Callaghan Moran & Associates
Phone: 021 4345366

Trial Pit Number: TP-05

Project: Bailey Gibson

Client: Hines

Location: Dublin 8

Completion Depth: 2.5

Groundwater entry: 1.9

SWL (m): N/A

Depth (m)	Lithology Description	Lithology	Soil Sample Depth (m)	PID Readings (ppm)
0	Ground Surface			
	CONCRETE.			
	FILL. Dark brown gravely silty clay with occasional red brick fragments. Non natural materials comprise <2% of soil matrix.		Sampled 0.0 to 1.0 mb GL.	0.0 0.0
1	***CLAY.*** Greyish brown gravelly CLAY. Becoming damp from 1.3 mb GL.		Sampled 1.0 to 2.0 mb GL.	0.0 0.0
2	***CLAY.*** Dark brown damp stiff gravelly CLAY. Black angular limestone gravels.		Sampled 2.0 to 2.5 mb GL.	0.0
3				
4				
5				

Excavation Method: JCB

Geologist: Conor McGrath

Excavation Date: 17/05/2019

Sheet: 1 of 1

O'Callaghan Moran & Associates
Phone: 021 4345366

Trial Pit Number: TP-06

Project: Bailey Gibson

Client: Hines

Location: Dublin 8

Completion Depth: 2.4

Groundwater entry: 1.9

SWL (m): N/A

Depth (m)	Lithology Description	Lithology	Soil Sample Depth (m)	PID Readings (ppm)
0	Ground Surface			
	CONCRETE.			
	BITUMEN.			
	CLAY. Dark brown gravely silty clay with occasional red brick fragments. Non natural materials comprise <2% of soil matrix.		Sampled 0.0 to 1.0 mb GL.	0.0 0.0
1	***CLAY.*** Greyish brown gravelly CLAY. Becoming damp from 1.3 mb GL.		Sampled 1.0 to 2.0 mb GL.	0.0 0.0
2	***CLAY.*** Dark brown damp stiff gravelly CLAY. Black angular limestone gravels.		Sampled from 2.0 to 2.5 mb GL.	
3				
4				
5				

Excavation Method: JCB

Geologist: Conor McGrath

Excavation Date: 16/05/2019

Sheet: 1 of 1

O'Callaghan Moran & Associates
Phone: 021 4345366

Trial Pit Number: TP-07

Project: Bailey Gibson

Client: Hines

Location: Dublin 8

Completion Depth: 2.5

Groundwater entry: 1.9

SWL (m): N/A

Depth (m)	Lithology Description	Lithology	Soil Sample Depth (m)	PID Readings (ppm)
0	Ground Surface			
	CONCRETE.			
	CLAY. Dark brown gravely silty clay with occasional red brick fragments. Non natural materials comprise <2% of soil matrix.		Sampled 0.0 to 1.0 mb GL.	0.0 0.0
1	***CLAY.*** Greyish brown gravelly CLAY. Becoming damp from 1.3 mb GL.		Sampled 1.0 to 2.0 mb GL.	0.0 0.0
2	***CLAY.*** Dark brown damp stiff gravelly CLAY. Black angular limestone gravels.			
3				
4				
5				

Excavation Method: JCB

Geologist: Conor McGrath

Excavation Date: 16/05/2019

Sheet: 1 of 1

O'Callaghan Moran & Associates
Phone: 021 4345366

Trial Pit Number: TP-08

Project: Bailey Gibson

Client: Hines

Location: Dublin 8

Completion Depth: 2.5

Groundwater entry: 1.9

SWL (m): N/A

Depth (m)	Lithology Description	Lithology	Soil Sample Depth (m)	PID Readings (ppm)
0	Ground Surface			
	TOPSOIL.			
	CLAY. Greyish brown gravelly CLAY. Becoming damp from 1.3 mb GL.		Sampled 0.0 to 1.0 mb GL.	0.0
1				0.0
				0.0
			Sampled 1.0 to 2.0 mb GL.	0.0
2				
			Sampled from 2.0 to 2.5 mb GL.	
3				
4				
5				

Excavation Method: JCB

Geologist: Conor McGrath

Excavation Date: 17/05/2019

Sheet: 1 of 1

O'Callaghan Moran & Associates
Phone: 021 4345366

Trial Pit Number: TP-09

Project: Bailey Gibson

Client: Hines

Location: Dublin 8

Completion Depth: 2.3

Groundwater entry: 1.9

SWL (m): N/A

Depth (m)	Lithology Description	Lithology	Soil Sample Depth (m)	PID Readings (ppm)
0	Ground Surface			
	CONCRETE.			
	FILL. Dark brown gravely silty clay with occasional red brick fragments. Non natural materials comprise <2% of soil matrix.		Sampled 0.0 to 1.0 mb GL.	0.0 0.0
1	***CLAY.*** Greyish brown gravelly CLAY. Becoming damp from 1.3 mb GL.		Sampled 1.0 to 2.0 mb GL.	0.0 0.0
2	***CLAY.*** Dark brown damp stiff gravelly CLAY. Black angular limestone gravels.		Sampled 2.0 to 2.5 mb GL.	0.0
3				
4				
5				

Excavation Method: JCB

Geologist: Conor McGrath

Excavation Date: 17/05/2019

Sheet: 1 of 1

O'Callaghan Moran & Associates
Phone: 021 4345366

Trial Pit Number: TP-10

Project: Bailey Gibson

Client: Hines

Location: Dublin 8

Completion Depth: 2.5

Groundwater entry: 1.9

SWL (m): N/A

Depth (m)	Lithology Description	Lithology	Soil Sample Depth (m)	PID Readings (ppm)
0	Ground Surface			
	CONCRETE.			
	CLAY. Dark brown gravely silty clay with occasional red brick fragments. Non natural materials comprise <2% of soil matrix.		Sampled 0.0 to 1.0 mb GL.	0.0 0.0
1	***CLAY.*** Greyish brown gravelly CLAY. Becoming damp from 1.3 mb GL.		Sampled 1.0 to 2.0 mb GL.	0.0 0.0
2	***CLAY.*** Dark brown damp stiff gravelly CLAY. Black angular limestone gravels.		Sampled 2.0 to 2.5 mb GL.	
3				
4				
5				

Excavation Method: JCB

Geologist: Conor McGrath

Excavation Date: 16/05/2019

Sheet: 1 of 1

O'Callaghan Moran & Associates
Phone: 021 4345366

Trial Pit Number: TP-11

Project: Bailey Gibson

Client: Hines

Location: Dublin 8

Completion Depth: 2.1

Groundwater entry: 1.9

SWL (m): N/A

Depth (m)	Lithology Description	Lithology	Soil Sample Depth (m)	PID Readings (ppm)
0	Ground Surface			
	CONCRETE.			
	FILL. Dark brown gravely silty clay with occasional red brick fragments. Non natural materials comprise <2% of soil matrix.		Sampled 0.0 to 1.0 mb GL.	0.0 0.0
1	***CLAY.*** Greyish brown gravelly CLAY. Becoming damp from 1.3 mb GL.		Sampled 1.0 to 2.0 mb GL.	0.0 0.0
2				
3				
4				
5				

Excavation Method: JCB

Geologist: Conor McGrath

Excavation Date: 17/05/2019

Sheet: 1 of 1

O'Callaghan Moran & Associates
Phone: 021 4345366

Window Sample Number: WS-01

Project: Bailey Gibson

Client: Hines

Location: Dublin 8

Completion Depth: 3.0

Groundwater entry: N/A

SWL (m): N/A

Depth (m)	Lithology Description	Lithology	Soil Sample Depth (m)	PID Readings (ppm)
0	Ground Surface			
	CONCRETE.			
	MADE GROUND. Light brown silty gravelly clay with some red brick fragment. Non natural materials comprise <2% of the soil matrix.		Sample taken from 0.2 to 1.0 mb GL.	0.0
1	***CLAY.*** Greyish brown silty gravelly CLAY with black angular limestone gravel.		Sample taken from 1.0 to 2.0 mb GL.	0.0
2				0.0
	CLAY. Dark brown slightly damp stiff gravelly CLAY.		Sample taken from 2.0 to 3.0 mb GL.	0.0
3				
4				
5				

Excavation Method: Window Sample Rig

Geologist: Conor McGrath

Excavation Date: 21/05/2019

Sheet: 1 of 1

O'Callaghan Moran & Associates
Phone: 021 4345366

Window Sample Number: WS-02

Project: Bailey Gibson

Client: Hines

Location: Dublin 8

Completion Depth: 3.0

Groundwater entry: N/A

SWL (m): N/A

Depth (m)	Lithology Description	Lithology	Soil Sample Depth (m)	PID Readings (ppm)
0	Ground Surface			
	CONCRETE.			
	MADE GROUND. Light brown silty gravelly clay with some red brick fragment. Non natural materials comprise <2% of the soil matrix.		Sample taken from 0.2 to 1.0 mb GL.	0.0
1	***CLAY.*** Greyish brown silty gravelly CLAY with black angular limestone gravel.		Sample taken from 1.0 to 2.0 mb GL.	0.0
2				0.0
	CLAY. Dark brown slightly damp stiff gravelly CLAY.		Sample taken from 2.0 to 3.0 mb GL.	0.0
3				
4				
5				

Excavation Method: Window Sample Rig

Geologist: Conor McGrath

Excavation Date: 22/05/2019

Sheet: 1 of 1

O'Callaghan Moran & Associates
Phone: 021 4345366

Window Sample Number: WS-03

Project: Bailey Gibson

Client: Hines

Location: Dublin 8

Completion Depth: 3.0

Groundwater entry: N/A

SWL (m): N/A

Depth (m)	Lithology Description	Lithology	Soil Sample Depth (m)	PID Readings (ppm)
0	Ground Surface			
	CONCRETE.			
	MADE GROUND. Light brown silty gravelly clay with some red brick fragment. Non natural materials comprise <2% of the soil matrix.		Sample taken from 0.2 to 1.0 mb GL.	0.0
1	***CLAY.*** Greyish brown silty gravelly CLAY with black angular limestone gravel.		Sample taken from 1.0 to 2.0 mb GL.	0.0
2				0.0
	CLAY. Dark brown slightly damp stiff gravelly CLAY.		Sample taken from 2.0 to 3.0 mb GL.	0.0
3				
4				
5				

Excavation Method: Window Sample Rig

Geologist: Conor McGrath

Excavation Date: 22/05/2019

Sheet: 1 of 1

O'Callaghan Moran & Associates
Phone: 021 4345366

Window Sample Number: WS-04

Project: Bailey Gibson

Client: Hines

Location: Dublin 8

Completion Depth: 3.0

Groundwater entry: N/A

SWL (m): N/A

Depth (m)	Lithology Description	Lithology	Soil Sample Depth (m)	PID Readings (ppm)
0	Ground Surface			
	CONCRETE.			
	MADE GROUND. Light brown silty gravelly clay with some red brick fragment. Non natural materials comprise <2% of the soil matrix.		Sample taken from 0.2 to 1.0 mb GL.	0.0
1	***CLAY.*** Greyish brown silty gravelly CLAY with black angular limestone gravel.		Sample taken from 1.0 to 2.0 mb GL.	0.0
2				0.0
	CLAY. Dark brown slightly damp stiff gravelly CLAY.		Sample taken from 2.0 to 3.0 mb GL.	0.0
3				
4				
5				

Excavation Method: Window Sample Rig

Geologist: Conor McGrath

Excavation Date: 23/05/2019

Sheet: 1 of 1

O'Callaghan Moran & Associates
Phone: 021 4345366

Window Sample Number: WS-05

Project: Bailey Gibson

Client: Hines

Location: Dublin 8

Completion Depth: 3.0

Groundwater entry: N/A

SWL (m): N/A

Depth (m)	Lithology Description	Lithology	Soil Sample Depth (m)	PID Readings (ppm)
0	Ground Surface			
	CONCRETE.			
	MADE GROUND. Light brown silty gravelly clay with some red brick fragment. Non natural materials comprise <2% of the soil matrix.		Sample taken from 0.2 to 1.0 mb GL.	0.0
1	***CLAY.*** Greyish brown silty gravelly CLAY with black angular limestone gravel.		Sample taken from 1.0 to 2.0 mb GL.	0.0 0.0
2	***CLAY.*** Dark brown slightly damp stiff gravelly CLAY.		Sample taken from 2.0 to 3.0 mb GL.	0.0
3				
4				
5				

Excavation Method: Window Sample Rig

Geologist: Conor McGrath

Excavation Date: 21/05/2019

Sheet: 1 of 1

O'Callaghan Moran & Associates
Phone: 021 4345366

Window Sample Number: WS-06

Project: Bailey Gibson

Client: Hines

Location: Dublin 8

Completion Depth: 3.0

Groundwater entry: N/A

SWL (m): N/A

Depth (m)	Lithology Description	Lithology	Soil Sample Depth (m)	PID Readings (ppm)
0	Ground Surface			
	CONCRETE.			
	MADE GROUND. Light brown silty gravelly clay with some red brick fragment. Non natural materials comprise <2% of the soil matrix.		Sample taken from 0.2 to 1.0 mb GL.	0.0
1	***CLAY.*** Greyish brown silty gravelly CLAY with black angular limestone gravel.		Sample taken from 1.0 to 2.0 mb GL.	0.0
2				0.0
	CLAY. Dark brown slightly damp stiff gravelly CLAY.		Sample taken from 2.0 to 3.0 mb GL.	0.0
3				
4				
5				

Excavation Method: Window Sample Rig

Geologist: Conor McGrath

Excavation Date: 21/05/2019

Sheet: 1 of 1

O'Callaghan Moran & Associates
Phone: 021 4345366

Window Sample Number: WS-07

Project: Bailey Gibson

Client: Hines

Location: Dublin 8

Completion Depth: 3.0

Groundwater entry: N/A

SWL (m): N/A

Depth (m)	Lithology Description	Lithology	Soil Sample Depth (m)	PID Readings (ppm)
0	Ground Surface			
	CONCRETE.			
	MADE GROUND. Light brown silty gravelly clay with some red brick fragment. Non natural materials comprise <2% of the soil matrix. Hydrocarbon odour (diesel) from 0.2 to 1.0 mb GL.		Sample taken from 0.2 to 1.0 mb GL.	4.5 6.7
1	***CLAY.*** Greyish brown silty gravelly CLAY with black angular limestone gravel. Strong hydrocarbon odour (diesel) from 1.0 to 2.0 mb GL.		Sample taken from 1.0 to 2.0 mb GL.	34
2	***CLAY.*** Dark brown slightly damp stiff gravelly CLAY. Slight hydrcarbon odour from 2.0 to 3.0 mb GL.		Sample taken from 2.0 to 3.0 mb GL.	27 3.0
3				
4				
5				

Excavation Method: Window Sample Rig

Geologist: Conor McGrath

Excavation Date: 23/05/2019

Sheet: 1 of 1

O'Callaghan Moran & Associates
Phone: 021 4345366

Window Sample Number: WS-09

Project: Bailey Gibson

Client: Hines

Location: Dublin 8

Completion Depth: 3.0

Groundwater entry: N/A

SWL (m): N/A

Depth (m)	Lithology Description	Lithology	Soil Sample Depth (m)	PID Readings (ppm)
0	Ground Surface			
	CONCRETE.			
	MADE GROUND. Light brown silty gravelly clay with some red brick fragment. Non natural materials comprise <2% of the soil matrix. Hydrocarbon odour (diesel) from 0.2 to 1.0 mb GL.		Sample taken from 0.2 to 1.0 mb GL.	2.5 7.9
1	***CLAY.*** Greyish brown silty gravelly CLAY with black angular limestone gravel.		Sample taken from 1.0 to 2.0 mb GL.	0.0
2	***CLAY.*** Dark brown slightly damp stiff gravelly CLAY.		Sample taken from 2.0 to 3.0 mb GL.	0.0
3				
4				
5				

Excavation Method: Window Sample Rig

Geologist: Conor McGrath

Excavation Date: 22/05/2019

Sheet: 1 of 1

O'Callaghan Moran & Associates
Phone: 021 4345366

Window Sample Number: WS-10

Project: Bailey Gibson

Client: Hines

Location: Dublin 8

Completion Depth: 3.0

Groundwater entry: N/A

SWL (m): N/A

Depth (m)	Lithology Description	Lithology	Soil Sample Depth (m)	PID Readings (ppm)
0	Ground Surface			
	CONCRETE.			
	MADE GROUND. Light brown silty gravelly clay with some red brick fragment. Non natural materials comprise <2% of the soil matrix.		Sample taken from 0.2 to 1.0 mb GL.	0.0
1	***CLAY.*** Greyish brown silty gravelly CLAY with black angular limestone gravel.			0.0
			Sample taken from 1.0 to 2.0 mb GL.	0.0
2	***CLAY.*** Dark brown slightly damp stiff gravelly CLAY.			
			Sample taken from 2.0 to 3.0 mb GL.	0.0
3				
4				
5				

Excavation Method: Window Sample Rig

Geologist: Conor McGrath

Excavation Date: 22/05/2019

Sheet: 1 of 1

O'Callaghan Moran & Associates
Phone: 021 4345366

Window Sample Number: WS-11

Project: Bailey Gibson

Client: Hines

Location: Dublin 8

Completion Depth: 3.0

Groundwater entry: N/A

SWL (m): N/A

Depth (m)	Lithology Description	Lithology	Soil Sample Depth (m)	PID Readings (ppm)
0	Ground Surface			
	CONCRETE.			
	MADE GROUND. Light brown silty gravelly clay with some red brick fragment. Non natural materials comprise <2% of the soil matrix.		Sample taken from 0.2 to 1.0 mb GL.	0.0
1	***CLAY.*** Greyish brown silty gravelly CLAY with black angular limestone gravel.			0.0
			Sample taken from 1.0 to 2.0 mb GL.	0.0
2	***CLAY.*** Dark brown slightly damp stiff gravelly CLAY.			
			Sample taken from 2.0 to 3.0 mb GL.	0.0
3				
4				
5				

Excavation Method: Window Sample Rig

Geologist: Conor McGrath

Excavation Date: 22/05/2019

Sheet: 1 of 1

O'Callaghan Moran & Associates
Phone: 021 4345366

Window Sample Number: WS-12

Project: Bailey Gibson

Client: Hines

Location: Dublin 8

Completion Depth: 2.37

Groundwater entry: N/A

SWL (m): N/A

Depth (m)	Lithology Description	Lithology	Soil Sample Depth (m)	PID Readings (ppm)
0	Ground Surface			
	CONCRETE.			
	MADE GROUND. Light brown silty gravelly clay with some red brick fragment. Non natural materials comprise <2% of the soil matrix.		Sample taken from 0.2 to 1.0 mb GL.	0.0 0.0
1	***CLAY.*** Greyish brown silty gravelly CLAY with black angular limestone gravel.		Sample taken from 1.0 to 2.0 mb GL.	0.0 0.0
2				
3				
4				
5				

Excavation Method: Window Sample Rig

Geologist: Conor McGrath

Excavation Date: 22/05/2019

Sheet: 1 of 1

O'Callaghan Moran & Associates
Phone: 021 4345366

Window Sample Number: WS-13

Project: Bailey Gibson

Client: Hines

Location: Dublin 8

Completion Depth: 3.0

Groundwater entry: N/A

SWL (m): N/A

Depth (m)	Lithology Description	Lithology	Soil Sample Depth (m)	PID Readings (ppm)
0	Ground Surface			
	CONCRETE.			
	MADE GROUND. Light brown silty gravelly clay with some red brick fragment. Non natural materials comprise <2% of the soil matrix.		Sample taken from 0.2 to 1.0 mb GL.	0.0
1	***CLAY.*** Greyish brown silty gravelly CLAY with black angular limestone gravel.			0.0
			Sample taken from 1.0 to 2.0 mb GL.	0.0
2	***CLAY.*** Dark brown slightly damp stiff gravelly CLAY.			
			Sample taken from 2.0 to 3.0 mb GL.	0.0
3				
4				
5				

Excavation Method: Window Sample Rig

Geologist: Conor McGrath

Excavation Date: 23/05/2019

Sheet: 1 of 1

O'Callaghan Moran & Associates
Phone: 021 4345366

Window Sample Number: WS-14

Project: Bailey Gibson

Client: Hines

Location: Dublin 8

Completion Depth: 3.0

Groundwater entry: N/A

SWL (m): N/A

Depth (m)	Lithology Description	Lithology	Soil Sample Depth (m)	PID Readings (ppm)
0	Ground Surface			
	CONCRETE.			
	MADE GROUND. Light brown silty gravelly clay with some red brick fragment. Non natural materials comprise <2% of the soil matrix.		Sample taken from 0.2 to 1.0 mb GL.	0.0
1	***CLAY.*** Greyish brown silty gravelly CLAY with black angular limestone gravel.			0.0
			Sample taken from 1.0 to 2.0 mb GL.	0.0
2	***CLAY.*** Dark brown slightly damp stiff gravelly CLAY.			
			Sample taken from 2.0 to 3.0 mb GL.	0.0
3				
4				
5				

Excavation Method: Window Sample Rig

Geologist: Conor McGrath

Excavation Date: 20/05/2019

Sheet: 1 of 1

O'Callaghan Moran & Associates
Phone: 021 4345366

Window Sample Number: WS-15

Project: Bailey Gibson

Client: Hines

Location: Dublin 8

Completion Depth: 3.0

Groundwater entry: N/A

SWL (m): N/A

Depth (m)	Lithology Description	Lithology	Soil Sample Depth (m)	PID Readings (ppm)
0	Ground Surface			
	CONCRETE.			
	MADE GROUND. Light brown silty gravelly clay with some red brick fragment. Non natural materials comprise <2% of the soil matrix.		Sample taken from 0.2 to 1.0 mb GL.	0.0
1	***CLAY.*** Greyish brown silty gravelly CLAY with black angular limestone gravel.			0.0
			Sample taken from 1.0 to 2.0 mb GL.	0.0
2	***CLAY.*** Dark brown slightly damp stiff gravelly CLAY.			
			Sample taken from 2.0 to 3.0 mb GL.	0.0
3				
4				
5				

Excavation Method: Window Sample Rig

Geologist: Conor McGrath

Excavation Date: 21/05/2019

Sheet: 1 of 1

O'Callaghan Moran & Associates
Phone: 021 4345366

Window Sample Number: WS-16

Project: Bailey Gibson

Client: Hines

Location: Dublin 8

Completion Depth: 3.0

Groundwater entry: N/A

SWL (m): N/A

Depth (m)	Lithology Description	Lithology	Soil Sample Depth (m)	PID Readings (ppm)
0	Ground Surface			
	CONCRETE.			
	MADE GROUND. Light brown silty gravelly clay with some red brick fragment. Non natural materials comprise <2% of the soil matrix.		Sample taken from 0.2 to 1.0 mb GL.	0.0
1	***CLAY.*** Greyish brown silty gravelly CLAY with black angular limestone gravel.			0.0
			Sample taken from 1.0 to 2.0 mb GL.	0.0
2	***CLAY.*** Dark brown slightly damp stiff gravelly CLAY.			
			Sample taken from 2.0 to 3.0 mb GL.	0.0
3				
4				
5				

Excavation Method: Window Sample Rig

Geologist: Conor McGrath

Excavation Date: 21/05/2019

Sheet: 1 of 1

O'Callaghan Moran & Associates
Phone: 021 4345366

Window Sample Number: WS-17

Project: Bailey Gibson

Client: Hines

Location: Dublin 8

Completion Depth: 3.0

Groundwater entry: N/A

SWL (m): N/A

Depth (m)	Lithology Description	Lithology	Soil Sample Depth (m)	PID Readings (ppm)
0	Ground Surface			
	CONCRETE.			
	MADE GROUND. Light brown silty gravelly clay with some red brick fragment. Non natural materials comprise <2% of the soil matrix.		Sample taken from 0.2 to 1.0 mb GL.	0.0
1	***CLAY.*** Greyish brown silty gravelly CLAY with black angular limestone gravel.			0.0
			Sample taken from 1.0 to 2.0 mb GL.	0.0
2	***CLAY.*** Dark brown slightly damp stiff gravelly CLAY.			
			Sample taken from 2.0 to 3.0 mb GL.	0.0
3				
4				
5				

Excavation Method: Window Sample Rig

Geologist: Conor McGrath

Excavation Date: 20/05/2019

Sheet: 1 of 1

O'Callaghan Moran & Associates
Phone: 021 4345366

Window Sample Number: WS-18

Project: Bailey Gibson

Client: Hines

Location: Dublin 8

Completion Depth: 3.0

Groundwater entry: N/A

SWL (m): N/A

Depth (m)	Lithology Description	Lithology	Soil Sample Depth (m)	PID Readings (ppm)
0	Ground Surface			
	CONCRETE.			
	MADE GROUND. Light brown silty gravelly clay with some red brick fragment. Non natural materials comprise <2% of the soil matrix.		Sample taken from 0.2 to 1.0 mb GL.	0.0
1	***CLAY.*** Greyish brown silty gravelly CLAY with black angular limestone gravel.		Sample taken from 1.0 to 2.0 mb GL.	0.0 0.0
2	***CLAY.*** Dark brown slightly damp stiff gravelly CLAY.		Sample taken from 2.0 to 3.0 mb GL.	0.0
3				
4				
5				

Excavation Method: Window Sample Rig

Geologist: Conor McGrath

Excavation Date: 20/05/2019

Sheet: 1 of 1

O'Callaghan Moran & Associates
Phone: 021 4345366

Window Sample Number: WS-19

Project: Bailey Gibson

Client: Hines

Location: Dublin 8

Completion Depth: 3.0

Groundwater entry: N/A

SWL (m): N/A

Depth (m)	Lithology Description	Lithology	Soil Sample Depth (m)	PID Readings (ppm)
0	Ground Surface			
	CONCRETE.			
	MADE GROUND. Light brown silty gravelly clay with some red brick fragment. Non natural materials comprise <2% of the soil matrix.		Sample taken from 0.2 to 1.0 mb GL.	0.0
1	***CLAY.*** Greyish brown silty gravelly CLAY with black angular limestone gravel.			0.0
			Sample taken from 1.0 to 2.0 mb GL.	0.0
2	***CLAY.*** Dark brown slightly damp stiff gravelly CLAY.			
			Sample taken from 2.0 to 3.0 mb GL.	0.0
3				
4				
5				

Excavation Method: Window Sample Rig

Geologist: Conor McGrath

Excavation Date: 21/05/2019

Sheet: 1 of 1

O'Callaghan Moran & Associates
Phone: 021 4345366

Window Sample Number: WS-20

Project: Bailey Gibson

Client: Hines

Location: Dublin 8

Completion Depth: 3.0

Groundwater entry: N/A

SWL (m): N/A

Depth (m)	Lithology Description	Lithology	Soil Sample Depth (m)	PID Readings (ppm)
0	Ground Surface			
	CONCRETE.			
	MADE GROUND. Light brown silty gravelly clay with some red brick fragment. Non natural materials comprise <2% of the soil matrix.		Sample taken from 0.2 to 1.0 mb GL.	0.0
1	***CLAY.*** Greyish brown silty gravelly CLAY with black angular limestone gravel.			0.0
			Sample taken from 1.0 to 2.0 mb GL.	0.0
2	***CLAY.*** Dark brown slightly damp stiff gravelly CLAY.			
			Sample taken from 2.0 to 3.0 mb GL.	0.0
3				
4				
5				

Excavation Method: Window Sample Rig

Geologist: Conor McGrath

Excavation Date: 21/05/2019

Sheet: 1 of 1

O'Callaghan Moran & Associates
Phone: 021 4345366

Window Sample Number: WS-21

Project: Bailey Gibson

Client: Hines

Location: Dublin 8

Completion Depth: 3.0

Groundwater entry: N/A

SWL (m): N/A

Depth (m)	Lithology Description	Lithology	Soil Sample Depth (m)	PID Readings (ppm)
0	Ground Surface			
	CONCRETE.			
	MADE GROUND. Light brown silty gravelly clay with some red brick fragment. Non natural materials comprise <2% of the soil matrix.		Sample taken from 0.2 to 1.0 mb GL.	0.0
1	***CLAY.*** Greyish brown silty gravelly CLAY with black angular limestone gravel.			0.0
			Sample taken from 1.0 to 2.0 mb GL.	0.0
2	***CLAY.*** Dark brown slightly damp stiff gravelly CLAY.			
			Sample taken from 2.0 to 3.0 mb GL.	0.0
3				
4				
5				

Excavation Method: Window Sample Rig

Geologist: Conor McGrath

Excavation Date: 20/05/2019

Sheet: 1 of 1

O'Callaghan Moran & Associates
Phone: 021 4345366

Window Sample Number: WS-22

Project: Bailey Gibson

Client: Hines

Location: Dublin 8

Completion Depth: 3.0

Groundwater entry: N/A

SWL (m): N/A

Depth (m)	Lithology Description	Lithology	Soil Sample Depth (m)	PID Readings (ppm)
0	Ground Surface			
	CONCRETE.			
	MADE GROUND. Light brown silty gravelly clay with some red brick fragment. Non natural materials comprise <2% of the soil matrix.		Sample taken from 0.2 to 1.0 mb GL.	0.0
1	***CLAY.*** Greyish brown silty gravelly CLAY with black angular limestone gravel.			0.0
			Sample taken from 1.0 to 2.0 mb GL.	0.0
2	***CLAY.*** Dark brown slightly damp stiff gravelly CLAY.			
			Sample taken from 2.0 to 3.0 mb GL.	0.0
3				
4				
5				

Excavation Method: Window Sample Rig

Geologist: Conor McGrath

Excavation Date: 20/05/2019

Sheet: 1 of 1

O'Callaghan Moran & Associates
Phone: 021 4345366

Window Sample Number: WS-23

Project: Bailey Gibson

Client: Hines

Location: Dublin 8

Completion Depth: 3.0

Groundwater entry: N/A

SWL (m): N/A

Depth (m)	Lithology Description	Lithology	Soil Sample Depth (m)	PID Readings (ppm)
0	Ground Surface			
	CONCRETE.			
	MADE GROUND. Light brown silty gravelly clay with some red brick fragment. Non natural materials comprise <2% of the soil matrix.		Sample taken from 0.2 to 1.0 mb GL.	0.0
1	***CLAY.*** Greyish brown silty gravelly CLAY with black angular limestone gravel.		Sample taken from 1.0 to 2.0 mb GL.	0.0 0.0
2	***CLAY.*** Dark brown slightly damp stiff gravelly CLAY.		Sample taken from 2.0 to 3.0 mb GL.	0.0
3				
4				
5				

Excavation Method: Window Sample Rig

Geologist: Conor McGrath

Excavation Date: 21/05/2019

Sheet: 1 of 1

O'Callaghan Moran & Associates
Phone: 021 4345366

Window Sample Number: WS-24

Project: Bailey Gibson

Client: Hines

Location: Dublin 8

Completion Depth: 3.0

Groundwater entry: N/A

SWL (m): N/A

Depth (m)	Lithology Description	Lithology	Soil Sample Depth (m)	PID Readings (ppm)
0	Ground Surface			
	CONCRETE.			
	MADE GROUND. Light brown silty gravelly clay with some red brick fragment. Non natural materials comprise <2% of the soil matrix.		Sample taken from 0.2 to 1.0 mb GL.	0.0
1	***CLAY.*** Greyish brown silty gravelly CLAY with black angular limestone gravel.			0.0
			Sample taken from 1.0 to 2.0 mb GL.	0.0
2	***CLAY.*** Dark brown slightly damp stiff gravelly CLAY.			
			Sample taken from 2.0 to 3.0 mb GL.	0.0
3				
4				
5				

Excavation Method: Window Sample Rig

Geologist: Conor McGrath

Excavation Date: 21/05/2019

Sheet: 1 of 1

O'Callaghan Moran & Associates
Phone: 021 4345366

Window Sample Number: WS-26

Project: Bailey Gibson

Client: Hines

Location: Dublin 8

Completion Depth: 3.0

Groundwater entry: N/A

SWL (m): N/A

Depth (m)	Lithology Description	Lithology	Soil Sample Depth (m)	PID Readings (ppm)
0	Ground Surface			
	CONCRETE.			
	MADE GROUND. Light brown silty gravelly clay with some red brick fragment. Non natural materials comprise <2% of the soil matrix.		Sample taken from 0.2 to 1.0 mb GL.	0.0
1	***CLAY.*** Greyish brown silty gravelly CLAY with black angular limestone gravel.			0.0
			Sample taken from 1.0 to 2.0 mb GL.	0.0
2	***CLAY.*** Dark brown slightly damp stiff gravelly CLAY.			
			Sample taken from 2.0 to 3.0 mb GL.	0.0
3				
4				
5				

Excavation Method: Window Sample Rig

Geologist: Conor McGrath

Excavation Date: 22/05/2019

Sheet: 1 of 1

O'Callaghan Moran & Associates
Phone: 021 4345366

Window Sample Number: WS-27

Project: Bailey Gibson

Client: Hines

Location: Dublin 8

Completion Depth: 3.0

Groundwater entry: N/A

SWL (m): N/A

Depth (m)	Lithology Description	Lithology	Soil Sample Depth (m)	PID Readings (ppm)
0	Ground Surface			
	CONCRETE.			
	MADE GROUND. Light brown silty gravelly clay with some red brick fragment. Non natural materials comprise <2% of the soil matrix.		Sample taken from 0.2 to 1.0 mb GL.	0.0
1	***CLAY.*** Greyish brown silty gravelly CLAY with black angular limestone gravel.			0.0
			Sample taken from 1.0 to 2.0 mb GL.	0.0
2	***CLAY.*** Dark brown slightly damp stiff gravelly CLAY.			
			Sample taken from 2.0 to 3.0 mb GL.	0.0
3				
4				
5				

Excavation Method: Window Sample Rig

Geologist: Conor McGrath

Excavation Date: 21/05/2019

Sheet: 1 of 1

O'Callaghan Moran & Associates
Phone: 021 4345366

Window Sample Number: WS-28

Project: Bailey Gibson

Client: Hines

Location: Dublin 8

Completion Depth: 3.0

Groundwater entry: N/A

SWL (m): N/A

Depth (m)	Lithology Description	Lithology	Soil Sample Depth (m)	PID Readings (ppm)
0	Ground Surface			
	CONCRETE.			
	MADE GROUND. Light brown silty gravelly clay with some red brick fragment. Non natural materials comprise <2% of the soil matrix.		Sample taken from 0.2 to 1.0 mb GL.	0.0
1	***CLAY.*** Greyish brown silty gravelly CLAY with black angular limestone gravel.			0.0
			Sample taken from 1.0 to 2.0 mb GL.	0.0
2	***CLAY.*** Dark brown slightly damp stiff gravelly CLAY.			
			Sample taken from 2.0 to 3.0 mb GL.	0.0
3				
4				
5				

Excavation Method: Window Sample Rig

Geologist: Conor McGrath

Excavation Date: 22/05/2019

Sheet: 1 of 1

Appendix 3

Soil and Groundwater Sampling Protocols

STANDARD OPERATING PROCEDURE

SOIL SAMPLING

The soil sampling technique described below will be followed to ensure that soil samples are representative of the environment which they are intended to characterise.

1.0 SAMPLING

(A) Locate the soil sampling station in accordance with the workplan which will specify the number and type of samples to be taken. Place a wooden stake into the ground one metre from the sample location and record sample location on the stake.

(B) Record the location in the field logbook and, if possible, photograph the location.

(C) Collect soil samples from the depth specified in the workplan and record the depth in the field notebook. Describe the colour and texture of each sample and record in notebook.

(D) Wear appropriate level of protection when taking samples (gloves, safety glasses, hard hat etc.) as specified in the workplan. Collect soil samples as specified in the workplan using decontaminated stainless steel trowel, soil corer, or similar device. Collect discrete soil samples from each station.

(E) If required by the workplan, composite discreet soil samples by placing equal volumes of soil into the container and mixing thoroughly to a homogenous mixture. Samples may be hand picked, if necessary, to remove larger materials, such as leaves, sticks, gravel, rocks etc., if specified in the workplan. Record in notebook the nature of any materials removed from soil samples.

(F) Deposit each soil sampled into a (clean, pre-washed) container. At the time of collection, the sample bottle will be filled to the top with soil sample.

(G) Fill out labels with waterproof ink and attach to the sample container. The following information will be recorded on each sample label: -

- Client/Site Name
- Date Collected
- Time Collected
- Analysis
- Preservative
- Sample Identification Number

(H) Decontaminate sampling equipment as described below unless otherwise specified in the site workplan. When using stainless steel sampling equipment: -

- wash with non-phosphate detergent in potable water,
- rinse sequentially in potable water, methanol, acetone, methanol and D1 water and;
- allow to air dry in a containment free area.

(I) Wrap the decontaminated sampling equipment in aluminium foil which has been decontaminated in accordance with Section H.

2.0 FIELD DOCUMENTATION

Record sample information in the field notebook. Provide a complete description of the sample location, and a photograph, if necessary. Describe the soil appearance, especially if the presence of oil or an odour is noted. Document the sample bottle lot numbers in the field notebook. Record weather conditions at the time of sampling. The Field Team Leader will initial the logbook entries for correctness.

3.0 FIELD QA/QC SAMPLES

See the separate SOP on Field QA/QC samples for appropriateness and preparation of D1 Water Field Blanks, Cross-contamination Field Blanks, Trip Blanks and Field Duplicate Samples.

4.0 PACKAGING AND TRANSPORT

Check to be sure that all necessary information is on the sample container label. Complete the chain-of custody form. Package, label and transport the samples to the testing laboratory in accordance with requirements for packing, shipping and labelling environmental samples.

END.

STANDARD OPERATING PROCEDURE

GROUNDWATER SAMPLING

The primary objective of groundwater sampling is to establish groundwater quality and evaluate whether the potential contaminant sources at a site have impacted the groundwater in the underlying aquifer. The additional objective is to measure hydraulic gradient, or slope, of the water table to evaluate the direction of groundwater flow.

The purpose of this procedure is to ensure that representative samples of groundwater are collected and documented using consistent methods to ensure sample integrity.

1.0 SAMPLING PROCEDURES

1.1 Well Operating and Purging Procedures

All groundwater sampling will be conducted after the installed and developed wells have been allowed to equilibrate for at least 2 to 3 days. A Field Data Sheet for Well Sampling will be completed for each well.

Groundwater sampling teams will use to following procedure for approaching, opening, purging and sampling all wells, unless directed otherwise by a site specific workplan.

1) Prior to placing any equipment into the well, decontaminate the sampling equipment according to standard decontamination protocol.

2) Ensure you have a working FID/PID, a well key, and a depth-to-water meter.

3) Unlock and open the well cap just enough to insert the probe of the PID/FID. Take and record a reading. A decision to upgrade PPE may be necessary based on the FID/PID readings in the breathing zone.

4) Where practical, the surface water column will be visually examined for the presence of hydrocarbons, if present or suspected, the thickness of the hydrocarbon layer will be measured using an oil/water interface probe prior to taking the depth-to-water measurement.

5) Insert the water level probe into the well and measure and record the static water level to the nearest 0.01 m with respect to the established survey point on top of the well casing.

6) Decontaminate the water level probe with DDI water (Do not rinse with any solvents unless product was encountered).

7) Calculate and record the minimum volume of water to be purged according to the following conversion factors: -

1 well volume	=	water column in metres x litres/linear metre
50mm casing	=	2.0 LPM
100mm casing	=	8.1 LPM
150mm casing	=	18.2 LPM
200mm casing	=	32.4 LPM

8) Purge the well of at least 3 casing volumes by pumping or bailing with a decontaminated submersible pump or PVC bailer equipped with a bottom filling check valve (if the purge volume is low, generally less than 100 litres, the sampling team might find it more efficient to purge with a bailer than a pump). Use a graduated bucket to track the amount of water removed from the well. Periodically determine the pH, temperature and specific conductance of the purged water. Continue purging until the well has been completely evacuated or until the pH and specific conductance measurements have stabilised for at least one well volume. Wells that become dewatered before producing three casing volumes will be sampled as soon as practical once they recover sufficiently.

9) Dispose of purge water collected in the graduated bucket by pouring onto the ground at a distance of 50 to 60 metres from the vicinity of the well. If the water is known or suspected to be significantly contaminated, it may be necessary to store the purge water in a secure container, such as a drum, pending proper disposal.

10) Be aware and record any unusual occurrence during purging such as cascading (a shallow water entry zone that trickles into the borehole).

1.2 Field Parameter Measurement

Measurements of field parameters of pH, temperature and electrical conductivity are collected and organic vapour screening is conducted while the well is purged. To facilitate the collection of basic field parameters, the field team needs to: -

- Purge three well volumes of water from the well and measure field parameters for each well volume removed.

- Collection of water samples should take place after stabilisation of the following parameters: -

  - Temperature $^{+}$/- 1^{o}C
  - pH (meter or paper) $^{+}$/- 0.2 units
  - Specific conductivity $^{+}$/- 5%

- If the aforementioned parameters do not stabilise within three purge volumes, the well will be purged up to a maximum of six borehole volumes unless two consecutive sets of stabilised parameters are obtained.

- Note any observations in the field logbook.

1.3 Collection of Water Samples

All samples or chemical analysis will be placed in laboratory prepared bottles. The types of sample containers and preservative required for each type of analysis are described in the workplan. If required, preservatives will be placed in the sample containers prior to collecting the samples.

The following procedure will be used to sample a well: -

1) After the well has been purged and allowed to recover, sample the well using a properly decontaminated or dedicated disposable bailer. Gently lower the bailer into the water column. Allow the bailer to sink and fill with a minimum of surface disturbance.

2) Slowly raise the bailer out of the well. Do not allow the bailer line to contact the ground, either by coiling it on a clean plastic sheet or by looping it from arm to arm as the line is extracted from the well.

3) Samples will be collected for VOCs analysis immediately after purging is complete and before other samples are collected. Pour the samples slowly into the laboratory prepared 40 ml glass vial. Overfill each vial slightly to eliminate air bubbles, a convex meniscus should be present at the top of the vial. Ensure that the Teflon liner of the septum cap is facing inward and that no bubbles are entrapped. After capping securely, turn bottle upside-down, tap it against your other hand, and observe sample water for bubbles. If bubbles are observed, remove the cap, overfill the vial and reseal. Repeat this step for each vial until the samples with no bubbles are obtained.

4) Place a label on the container and enter the following information: -

   Client/Site Name
   Date Collected
   Time Collected
   Analysis
   Preservative
   Sample Identification Number

5) Record pertinent information in the field logbook and on the Field Data Sheet for Well Sampling. Complete chain-of-custody form.

6) Place custody seals on the container caps. As soon as possible, place sample containers in a cooler with ice packs and maintain at $4^{o}C$ until extraction. Surround the bottles with appropriate packaging.

7) Obtain the semi-volatile compound/pesticides/PCBs sample(s) by transferring the water to a laboratory prepared 1000 ml amber glass bottle with Teflon-lined cap. Fill the bottle to the bottom of the neck and follow steps 4, 5 and 6 above.

8) Dissolved metals (if necessary) requires the team to filter the sample water through a .45 micron filter. The water is collected in a 1 litre, unpreserved, plastic or glass bottle with HNO_3 preservative. Filtering must be done within 15 minutes of sample collection.

9) Obtain the total metals sample by directly transferring the water from the bailer into a laboratory prepared 1000 ml plastic or glass bottle with HNO_3 preservative.

10) Be sure the pH of the metals sampled is less than 2 by pouring off an aliquot in a clean jar and testing for pH using litmus paper. Dispose of this water and rinse the jar.

11) Collect and prepare Field QA/QC samples in accordance with separate SOP.

12) Be sure to record all data required on the Field Data Sheet or Well Sampling and appropriate entries into the field logbook.

13) Secure the well cap and replace the locking cover.

14) Decontaminate all sampling equipment according to procedure.

15) Decontaminate submersible pumps as follows: -

Scrub pump and cord in a tub of appropriate detergent and potable water
Pump at least 80 litres of soapy water through pump
Rinse with potable water
Pump at least 80 litres of rinse water through the pump
Rinse with DI water before lowering pump into the next well.

END.

STANDARD OPERATING PROCEDURE

SURFACE WATER SAMPLING

The primary objective of surface water sampling is to evaluate the chemical quality of a water body. The purpose of this procedure is to ensure that representative samples of surface water are collected and documented using consistent methods to ensure sample integrity. Surface water grab samples may be collected from rivers, streams, lakes and wetlands. In cases where the depth of the surface water body prevents sampling from the banks of the water body, sampling from, a boat may be required.

1.0 SAMPLING PROCEDURES

1) 1.1 Equipment Needed

- Personal protective clothing and equipment as required in the site-specific risk assessment.
- Decontamination equipment and supplies if known contaminated site.
- Temperature probe EC meter, pH meter, dissolved oxygen meter.
- Appropriate sample containers (some will be pre-preserved), labels and chain of custody documentation.
- Field logbook.
- Hard plastic cooler with ice pack.

1.2 Field Parameter Measurement

Measurements of field parameters of pH, temperature and electrical conductivity are made during sampling. Note visual (colour, turbidity) and odour (e.g hydrocarbon, hydrogen sulphide) characteristics in the field logbook.

1.3 Collection of Water Samples

All samples for chemical analysis will be placed in laboratory prepared bottles. The types of sample containers and preservative required for each type of analysis are described in the workplan. If required, preservatives will be placed in the sample containers prior to collecting the samples.

The following procedure will be used -

1) Slowly submerge unpreserved one-liter amber glass or plastic-capped bottles completely into the water. Open and fill bottle from below the water surface. If wading is required, approach the sample site from downstream and do not enter the actual sample area. Do not disturb bottom sediments. Open-end of the bottle should be pointed at approximately 90° to the upstream direction, in undisturbed gently flowing water. This procedure will be performed to minimize the effects due to high turbulence and aeration, or if surface scum is prevalent.

2) Collect a sufficient volume of water to fill all sample containers.

3) For VOC analysis. Pour the samples slowly into the laboratory prepared 40 ml glass vial. Overfill each vial slightly to eliminate air bubbles, a convex meniscus should be present at the top of the vial. Ensure that the Teflon liner of the septum cap is facing inward and that no bubbles are entrapped. After capping securely, turn bottle upside-down, tap it against your other hand, and observe sample water for bubbles. If bubbles are observed, remove the cap, overfill the vial and reseal. Repeat this step for each vial until the samples with no bubbles are obtained.

4) Obtain the semi-volatile compound/pesticides/PCBs sample(s) by transferring the water to a laboratory prepared 1000 ml amber glass bottle with Teflon-lined cap. Fill the bottle to the bottom of the neck and follow steps 4, 5 and 6 above.

5) Dissolved metals (if necessary) may require filtering the sample water through a .45 micron filter. The water is collected in a 1 litre, unpreserved, plastic or glass bottle with HNO_3 preservative. Filtering must be done within 15 minutes of sample collection.

6) Obtain the total metals sample by directly transferring the water into a laboratory prepared 1000 ml plastic or glass bottle with HNO_3 preservative. Ensure the pH of the metals sampled is less than 2 by pouring off an aliquot in a clean jar and testing for pH using litmus paper.

7) Collect and prepare Field QA/QC samples in accordance with separate SOP.

8) Place a label on the container and enter the following information: -

    Client/Site Name
    Date Collected
    Time Collected
    Analysis

Preservative
Sample Identification Number

9) Place custody seals on the container caps. As soon as possible, place sample containers in a cooler with ice and maintain at 4^{o}C. Surround the bottles with packaging.

10) Record pertinent information in the field logbook and on the Field Data Sheet for Sampling Location. Complete chain-of-custody form, place in cooler and seal and label the cooler.

11) Be sure to record all data required on the Field Data Sheet or Sampling Location and appropriate entries into the field logbook.

12) Decontaminate all sampling equipment according to procedure.

END.

Appendix 4

Soil Laboratory Reports

Chemtest Ltd.
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070
Email: info@chemtest.com

Final Report

Report No.:	19-16979-1
Initial Date of Issue:	28-May-2019
Client	O Callaghan Moran & Associates
Client Address:	15 Melbourne Business Park Model Farm Road Co. Cork IRELAND
Contact(s):	Conor McGrath
Project	Bailey Gibson

Quotation No.:		**Date Received:**	20-May-2019
Order No.:		**Date Instructed:**	20-May-2019
No. of Samples:	8		
Turnaround (Wkdays):	5	**Results Due:**	24-May-2019
Date Approved:	28-May-2019		

Approved By:

Details: Martin Dyer, Laboratory Manager

Project: Bailey Gibson

Client: O Callaghan Moran & Associates

Results - Leachate

					Chemtest Job No.:	19-16979	19-16979	19-16979	19-16979	19-16979	19-16979	19-16979	19-16979
Quotation No.:					**Chemtest Sample ID.:**	829123	829124	829125	829126	829127	829128	829129	829130
					Sample Location:	TP07	TP07	TP06	TP06	TP06	TP10	TP10	TP10
					Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
					Top Depth (m):	0.0	1.0	0.0	1.0	2.0	0.0	1.0	2.0
					Bottom Depth (m):	1.0	2.0	1.0	2.0	3.0	1.0	2.0	3.0
					Date Sampled:	15-May-2019	15-May-2019	15-May-2019	15-May-2019	15-May-2019	15-May-2019	15-May-2019	15-May-2019
Determinand	**Accred.**	**SOP**	**Type**	**Units**	**LOD**								
Ammonium	U	1220	10:1	mg/l	0.050	0.088	0.16	0.12	0.077	0.22	0.090	0.13	0.089
Ammonium	N	1220	10:1	mg/kg	0.10	0.88	1.6	1.2	0.77	2.2	0.90	1.3	0.89

Chemtest

Results - Soil

Project: Bailey Gibson

Client: O Callaghan Moran & Associates					**Chemtest Job No.:**	19-16979	19-16979	19-16979	19-16979	19-16979	19-16979	19-16979	19-16979
Quotation No.:					**Chemtest Sample ID.:**	829123	829124	829125	829126	829127	829128	829129	829130
					Sample Location:	TP07	TP07	TP06	TP06	TP06	TP10	TP10	TP10
					Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
					Top Depth (m):	0.0	1.0	0.0	1.0	2.0	0.0	1.0	2.0
					Bottom Depth (m):	1.0	2.0	1.0	2.0	3.0	1.0	2.0	3.0
					Date Sampled:	15-May-2019	15-May-2019	15-May-2019	15-May-2019	15-May-2019	15-May-2019	15-May-2019	15-May-2019
					Asbestos Lab:	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY
Determinand	**Accred.**	**SOP**	**Units**	**LOD**									
ACM Type	U	2192		N/A		-	-	-	-	-	-	-	-
Asbestos Identification	U	2192	%	0.001		No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
ACM Detection Stage	U	2192		N/A		-	-	-	-	-	-	-	-
Moisture	N	2030	%	0.020		12	11	10	13	12	12	12	13
pH	U	2010		N/A		8.6	8.5	8.5	8.5	8.8	8.6	8.3	8.6
Boron (Hot Water Soluble)	U	2120	mg/kg	0.40		< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	0.43	0.71	0.61
Sulphur (Elemental)	U	2180	mg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Cyanide (Total)	U	2300	mg/kg	0.50		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Sulphide (Easily Liberatable)	N	2325	mg/kg	0.50		5.1	6.6	5.1	6.7	4.4	6.7	6.6	4.9
Sulphate (Total)	U	2430	%	0.010		0.017	0.048	0.066	0.023	0.020	0.035	0.018	0.040
Arsenic	U	2450	mg/kg	1.0		17	19	20	20	18	19	18	21
Barium	U	2450	mg/kg	10		66	75	56	67	76	68	89	170
Cadmium	U	2450	mg/kg	0.10		2.3	2.3	2.4	2.5	2.3	2.2	2.3	2.9
Chromium	U	2450	mg/kg	1.0		16	16	14	14	15	18	16	18
Molybdenum	U	2450	mg/kg	2.0		7.1	5.0	3.9	4.7	4.4	3.5	5.3	6.1
Antimony	N	2450	mg/kg	2.0		12	3.5	2.4	2.3	2.3	2.0	2.1	2.1
Copper	U	2450	mg/kg	0.50		39	32	33	36	34	34	38	43
Mercury	U	2450	mg/kg	0.10		0.23	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Nickel	U	2450	mg/kg	0.50		52	56	52	55	65	53	59	69
Lead	U	2450	mg/kg	0.50		24	27	19	20	20	26	20	25
Selenium	U	2450	mg/kg	0.20		0.59	1.2	0.39	0.61	0.67	< 0.20	0.51	2.1
Zinc	U	2450	mg/kg	0.50		120	93	80	92	90	75	87	100
Chromium (Trivalent)	N	2490	mg/kg	1.0		16	16	14	14	15	18	16	18
Chromium (Hexavalent)	N	2490	mg/kg	0.50		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Organic Matter	U	2625	%	0.40		0.86	0.97	0.57	0.45	0.45	0.52	0.59	0.74
Total Organic Carbon	U	2625	%	0.20		0.50	0.56	0.33	0.26	0.26	0.30	0.34	0.43
Mineral Oil	N	2670	mg/kg	10		< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C8-C10	U	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C10-C12	U	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C12-C16	U	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C16-C21	U	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C21-C35	U	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Project: Bailey Gibson

Results - Soil

Client: O Callaghan Moran & Associates					Chemtest Job No.:	19-16979	19-16979	19-16979	19-16979	19-16979	19-16979	19-16979	19-16979
Quotation No.:					Chemtest Sample ID.:	829123	829124	829125	829126	829127	829128	829129	829130
					Sample Location:	TP07	TP07	TP06	TP06	TP06	TP10	TP10	TP10
					Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
					Top Depth (m):	0.0	1.0	0.0	1.0	2.0	0.0	1.0	2.0
					Bottom Depth (m):	1.0	2.0	1.0	2.0	3.0	1.0	2.0	3.0
					Date Sampled:	15-May-2019	15-May-2019	15-May-2019	15-May-2019	15-May-2019	15-May-2019	15-May-2019	15-May-2019
					Asbestos Lab:	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY
Determinand	**Accred.**	**SOP**	**Units**	**LOD**									
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0		< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C8-C10	U	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C10-C12	U	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C12-C16	U	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C21-C35	U	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0		< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0		< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Benzene	U	2760	µg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	U	2760	µg/kg	1.0		< 1.0	< 1.0	< 1.0	12	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	U	2760	µg/kg	1.0		< 1.0	< 1.0	< 1.0	7.1	< 1.0	< 1.0	< 1.0	< 1.0
m & p-Xylene	U	2760	µg/kg	1.0		< 1.0	< 1.0	< 1.0	28	< 1.0	< 1.0	< 1.0	< 1.0
o-Xylene	U	2760	µg/kg	1.0		< 1.0	< 1.0	< 1.0	10	< 1.0	< 1.0	< 1.0	< 1.0
Methyl Tert-Butyl Ether	U	2760	µg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Naphthalene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthylene	N	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Anthracene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Pyrene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]anthracene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Chrysene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[b]fluoranthene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[k]fluoranthene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]pyrene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-c,d)Pyrene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Coronene	N	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Of 17 PAH's	N	2800	mg/kg	2.0		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
PCB 28	U	2815	mg/kg	0.010		< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010

Project: Bailey Gibson

Client: O Callaghan Moran & Associates

Results - Soil

				Chemtest Job No.:	19-16979	19-16979	19-16979	19-16979	19-16979	19-16979	19-16979	19-16979
Quotation No.:				Chemtest Sample ID.:	829123	829124	829125	829126	829127	829128	829129	829130
				Sample Location:	TP07	TP07	TP06	TP06	TP06	TP10	TP10	TP10
				Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
				Top Depth (m):	0.0	1.0	0.0	1.0	2.0	0.0	1.0	2.0
				Bottom Depth (m):	1.0	2.0	1.0	2.0	3.0	1.0	2.0	3.0
				Date Sampled:	15-May-2019	15-May-2019	15-May-2019	15-May-2019	15-May-2019	15-May-2019	15-May-2019	15-May-2019
				Asbestos Lab:	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY
Determinand	**Accred.**	**SOP**	**Units**	**LOD**								
PCB 52	U	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 90+101	U	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 118	U	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 153	U	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 138	U	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 180	U	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Total PCBs (7 Congeners)	N	2815	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Phenols	U	2920	mg/kg	0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-16979						
Chemtest Sample ID:	829123						
Sample Ref:							
Sample ID:							
Sample Location:	TP07						
Top Depth(m):	0.0						
Bottom Depth(m):	1.0						
Sampling Date:	15-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.50	3	5	6
Loss On Ignition	2610	U	%	2.0	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.6	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.027	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	< 0.0010	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	0.0053	0.053	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0028	< 0.050	0.5	10	30
Nickel	1450	U	0.0016	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.010	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	3.3	33	10	150	500
Sulphate	1220	U	< 1.0	< 10	1000	20000	50000
Total Dissolved Solids	1020	N	37	370	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	6.8	68	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	12

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-16979						
Chemtest Sample ID:	829124						
Sample Ref:							
Sample ID:							
Sample Location:	TP07						
Top Depth(m):	1.0						
Bottom Depth(m):	2.0						
Sampling Date:	15-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.56	3	5	6
Loss On Ignition	2610	U	%	2.1	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	13	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.5	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.019	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	0.0047	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	0.0050	0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0039	< 0.050	0.5	10	30
Nickel	1450	U	0.0023	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.010	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.13	1.3	10	150	500
Sulphate	1220	U	1.9	19	1000	20000	50000
Total Dissolved Solids	1020	N	40	400	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	6.5	65	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	11

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-16979						
Chemtest Sample ID:	829125						
Sample Ref:							
Sample ID:							
Sample Location:	TP06						
Top Depth(m):	0.0						
Bottom Depth(m):	1.0						
Sampling Date:	15-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.33	3	5	6
Loss On Ignition	2610	U	%	2.1	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.5	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.017	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	0.0017	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	0.013	0.13	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0018	< 0.050	0.5	10	30
Nickel	1450	U	0.0059	0.059	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.010	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.14	1.4	10	150	500
Sulphate	1220	U	15	150	1000	20000	50000
Total Dissolved Solids	1020	N	59	580	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	5.3	53	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	10

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-16979						
Chemtest Sample ID:	829126						
Sample Ref:							
Sample ID:							
Sample Location:	TP06						
Top Depth(m):	1.0						
Bottom Depth(m):	2.0						
Sampling Date:	15-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.26	3	5	6
Loss On Ignition	2610	U	%	2.1	--	--	10
Total BTEX	2760	U	mg/kg	0.056	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.5	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.047	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	0.0014	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	0.0093	0.093	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0027	< 0.050	0.5	10	30
Nickel	1450	U	0.0044	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.010	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.13	1.3	10	150	500
Sulphate	1220	U	2.6	26	1000	20000	50000
Total Dissolved Solids	1020	N	42	420	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	5.5	55	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	13

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-16979						
Chemtest Sample ID:	829127						
Sample Ref:							
Sample ID:							
Sample Location:	TP06						
Top Depth(m):	2.0						
Bottom Depth(m):	3.0						
Sampling Date:	15-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.26	3	5	6
Loss On Ignition	2610	U	%	2.1	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.8	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.061	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	0.0017	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	0.0089	0.089	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0035	< 0.050	0.5	10	30
Nickel	1450	U	0.0043	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.010	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	1.0	10	800	15000	25000
Fluoride	1220	U	0.13	1.3	10	150	500
Sulphate	1220	U	1.3	13	1000	20000	50000
Total Dissolved Solids	1020	N	44	440	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	6.6	66	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	12

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-16979						
Chemtest Sample ID:	829128						
Sample Ref:							
Sample ID:							
Sample Location:	TP10						
Top Depth(m):	0.0						
Bottom Depth(m):	1.0						
Sampling Date:	15-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.30	3	5	6
Loss On Ignition	2610	U	%	2.8	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.6	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.078	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	< 0.0010	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	0.0089	0.089	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0019	< 0.050	0.5	10	30
Nickel	1450	U	0.0036	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.010	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.54	5.4	10	150	500
Sulphate	1220	U	2.3	23	1000	20000	50000
Total Dissolved Solids	1020	N	42	420	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	6.2	62	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	12

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-16979						
Chemtest Sample ID:	829129						
Sample Ref:							
Sample ID:							
Sample Location:	TP10						
Top Depth(m):	1.0						
Bottom Depth(m):	2.0						
Sampling Date:	15-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.34	3	5	6
Loss On Ignition	2610	U	%	2.4	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.3	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.077	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	< 0.0010	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	0.0091	0.091	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0029	< 0.050	0.5	10	30
Nickel	1450	U	0.0042	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.010	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.22	2.2	10	150	500
Sulphate	1220	U	2.2	22	1000	20000	50000
Total Dissolved Solids	1020	N	49	490	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	5.5	55	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	12

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-16979						
Chemtest Sample ID:	829130						
Sample Ref:							
Sample ID:							
Sample Location:	TP10						
Top Depth(m):	2.0						
Bottom Depth(m):	3.0						
Sampling Date:	15-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.43	3	5	6
Loss On Ignition	2610	U	%	2.7	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.6	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.041	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	0.0016	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	0.0085	0.085	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0044	< 0.050	0.5	10	30
Nickel	1450	U	0.0042	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	0.0062	0.062	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.15	1.5	10	150	500
Sulphate	1220	U	3.8	38	1000	20000	50000
Total Dissolved Solids	1020	N	44	440	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	5.4	54	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	13

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

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Test Methods

SOP	Title	Parameters included	Method summary
1020	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Conductivity Meter
1220	Anions, Alkalinity & Ammonium in Waters	Fluoride; Chloride; Nitrite; Nitrate; Total; Oxidisable Nitrogen (TON); Sulfate; Phosphate; Alkalinity; Ammonium	Automated colorimetric analysis using 'Aquakem 600' Discrete Analyser.
1450	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).
1610	Total/Dissolved Organic Carbon in Waters	Organic Carbon	TOC Analyser using Catalytic Oxidation
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.
2010	pH Value of Soils	pH	pH Meter
2015	Acid Neutralisation Capacity	Acid Reserve	Titration
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES
2180	Sulphur (Elemental) in Soils by HPLC	Sulphur	Dichloromethane extraction / HPLC with UV detection
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry
2300	Cyanides & Thiocyanate in Soils	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Allkaline extraction followed by colorimetric determination using Automated Flow Injection Analyser.
2325	Sulphide in Soils	Sulphide	Steam distillation with sulphuric acid / analysis by 'Aquakem 600' Discrete Analyser, using N,N–dimethyl-p-phenylenediamine.
2430	Total Sulphate in soils	Total Sulphate	Acid digestion followed by determination of sulphate in extract by ICP-OES.
2450	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.
2610	Loss on Ignition	loss on ignition (LOI)	Determination of the proportion by mass that is lost from a soil by ignition at 550°C.
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID
2680	TPH A/A Split	Aliphatics: >C5–C6, >C6–C8,>C8–C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35– C44Aromatics: >C5–C7, >C7–C8, >C8– C10, >C10–C12, >C12–C16, >C16– C21, >C21– C35, >C35– C44	Dichloromethane extraction / GCxGC FID detection
2760	Volatile Organic Compounds (VOCs) in Soils by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics.(cf. USEPA Method 8260)*please refer to UKAS schedule	Automated headspace gas chromatographic (GC) analysis of a soil sample, as received, with mass spectrometric (MS) detection of volatile organic compounds.

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Test Methods

SOP	Title	Parameters included	Method summary
2800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS	Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenz[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	Dichloromethane extraction / GC-MS
2815	Polychlorinated Biphenyls (PCB) ICES7Congeners in Soils by GC-MS	ICES7 PCB congeners	Acetone/Hexane extraction / GC-MS
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and TrimethylphenolsNote: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.
640	Characterisation of Waste (Leaching)	Waste material including soil, sludges and granular waste	ComplianceTest for Leaching of Granular Waste Material and Sludge

Report Information

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Report Information

UKAS accredited
MCERTS and UKAS accredited
Unaccredited
This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
This analysis has been subcontracted to an unaccredited laboratory
Insufficient Sample
Unsuitable Sample
not evaluated
"less than"
"greater than"

Comments or interpretations are beyond the scope of UKAS accreditation
The results relate only to the items tested
Uncertainty of measurement for the determinands tested are available upon request
None of the results in this report have been recovery corrected
All results are expressed on a dry weight basis
The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols
For all other tests the samples were dried at < 37°C prior to analysis
All Asbestos testing is performed at the indicated laboratory
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

ıle Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container
E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

ıle Retention and Disposal

All soil samples will be retained for a period of 45 days from the date of receipt
All water samples will be retained for 14 days from the date of receipt
Charges may apply to extended sample storage

require extended retention of samples, please email your requirements to:
customerservices@chemtest.com

Chemtest Ltd.
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070
Email: info@chemtest.com

Final Report

Report No.:	19-16984-1		
Initial Date of Issue:	28-May-2019		
Client	O Callaghan Moran & Associates		
Client Address:	15 Melbourne Business Park Model Farm Road Co. Cork IRELAND		
Contact(s):	Conor McGrath		
Project	Bailey Gibson		
Quotation No.:		**Date Received:**	20-May-2019
Order No.:		**Date Instructed:**	20-May-2019
No. of Samples:	11		
Turnaround (Wkdays):	5	**Results Due:**	24-May-2019
Date Approved:	28-May-2019		

Approved By:

Details: Martin Dyer, Laboratory Manager

Project: Bailey Gibson

Client: O Callaghan Moran & Associates

Results - Leachate

					Chemtest Job No.:	19-16984	19-16984	19-16984	19-16984	19-16984	19-16984	19-16984	19-16984
Quotation No.:					**Chemtest Sample ID.:**	829135	829136	829137	829138	829139	829140	829141	829142
					Sample Location:	TP08	TP08	TP08	TP05	TP05	TP05	TP09	TP09
					Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
					Top Depth (m):	0.0	1.0	2.0	0.0	1.0	2.0	0.0	1.0
					Bottom Depth (m):	1.0	2.0	3.0	1.0	2.0	3.0	1.0	2.0
					Date Sampled:	17-May-2019	17-May-2019	17-May-2019	17-May-2019	17-May-2019	17-May-2019	17-May-2019	17-May-2019
Determinand	**Accred.**	**SOP**	**Type**	**Units**	**LOD**								
Ammonium	U	1220	10:1	mg/l	0.050	0.083	0.10	0.12	0.22	0.10	0.20	0.10	0.21
Ammonium	N	1220	10:1	mg/kg	0.10	0.83	1.0	1.2	2.2	1.0	2.0	1.0	2.1

Chemtest

Results - Leachate

Project: Bailey Gibson

Client: O Callaghan Moran & Associates						**Chemtest Job No.:**	19-16984	19-16984	19-16984
Quotation No.:						**Chemtest Sample ID.:**	829143	829144	829145
						Sample Location:	TP09	TP11	TP11
						Sample Type:	SOIL	SOIL	SOIL
						Top Depth (m):	2.0	0.0	1.0
						Bottom Depth (m):	3.0	1.0	2.0
						Date Sampled:	17-May-2019	17-May-2019	17-May-2019
Determinand	**Accred.**	**SOP**	**Type**	**Units**	**LOD**				
Ammonium	U	1220	10:1	mg/l	0.050		0.16	0.16	0.20
Ammonium	N	1220	10:1	mg/kg	0.10		1.6	1.6	2.0

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Results - Soil

Project: Bailey Gibson

Client: O Callaghan Moran & Associates					**Chemtest Job No.:**	19-16984	19-16984	19-16984	19-16984	19-16984	19-16984	19-16984	19-16984	19-16984
Quotation No.:					**Chemtest Sample ID.:**	829135	829136	829137	829138	829139	829140	829141	829142	829143
					Sample Location:	TP08	TP08	TP08	TP05	TP05	TP05	TP09	TP09	TP09
					Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
					Top Depth (m):	0.0	1.0	2.0	0.0	1.0	2.0	0.0	1.0	2.0
					Bottom Depth (m):	1.0	2.0	3.0	1.0	2.0	3.0	1.0	2.0	3.0
					Date Sampled:	17-May-2019	17-May-2019	17-May-2019	17-May-2019	17-May-2019	17-May-2019	17-May-2019	17-May-2019	17-May-2019
					Asbestos Lab:	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY
Determinand	**Accred.**	**SOP**	**Units**	**LOD**										
ACM Type	U	2192		N/A		-	-	-	-	-	-	-	-	-
Asbestos Identification	U	2192	%	0.001		No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
ACM Detection Stage	U	2192		N/A		-	-	-	-	-	-	-	-	-
Moisture	N	2030	%	0.020		20	11	13	21	22	14	19	12	12
pH	U	2010		N/A		7.9	8.4	8.6	8.6	8.2	8.5	8.9	8.6	8.5
Boron (Hot Water Soluble)	U	2120	mg/kg	0.40		1.9	0.50	0.43	2.6	1.0	0.84	1.1	0.45	0.50
Sulphur (Elemental)	U	2180	mg/kg	1.0		7.8	< 1.0	< 1.0	43	< 1.0	1.5	6.4	< 1.0	< 1.0
Cyanide (Total)	U	2300	mg/kg	0.50		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Sulphide (Easily Liberatable)	N	2325	mg/kg	0.50		4.7	5.7	4.8	9.0	3.0	6.2	3.6	4.9	4.0
Sulphate (Total)	U	2430	%	0.010		0.18	0.036	0.063	0.36	0.042	0.026	0.20	0.043	0.057
Arsenic	U	2450	mg/kg	1.0		72	36	37	47	24	32	49	25	33
Barium	U	2450	mg/kg	10		160	100	86	200	200	95	150	160	170
Cadmium	U	2450	mg/kg	0.10		3.3	2.1	2.0	1.1	3.1	2.1	1.8	1.9	2.2
Chromium	U	2450	mg/kg	1.0		22	15	12	18	23	17	20	12	15
Molybdenum	U	2450	mg/kg	2.0		4.5	5.2	4.8	4.5	5.4	4.7	9.3	3.9	4.8
Antimony	N	2450	mg/kg	2.0		4.1	2.1	2.1	3.1	2.2	< 2.0	2.7	< 2.0	2.1
Copper	U	2450	mg/kg	0.50		120	35	30	100	33	36	89	24	34
Mercury	U	2450	mg/kg	0.10		1.2	< 0.10	< 0.10	0.50	< 0.10	< 0.10	0.42	< 0.10	< 0.10
Nickel	U	2450	mg/kg	0.50		72	56	57	58	68	55	66	38	48
Lead	U	2450	mg/kg	0.50		570	30	20	230	38	27	140	23	32
Selenium	U	2450	mg/kg	0.20		0.24	< 0.20	0.61	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Zinc	U	2450	mg/kg	0.50		740	97	88	180	92	98	160	73	88
Chromium (Trivalent)	N	2490	mg/kg	1.0		22	15	12	18	23	17	20	12	15
Chromium (Hexavalent)	N	2490	mg/kg	0.50		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Organic Matter	U	2625	%	0.40		12	0.66	0.95	13	1.2	0.69	7.6	0.62	1.0
Total Organic Carbon	U	2625	%	0.20		6.7	0.38	0.55	7.4	0.68	0.40	4.4	0.36	0.60
Mineral Oil	N	2670	mg/kg	10		44	< 10	< 10	22	< 10	< 10	< 10	< 10	< 10
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C8-C10	U	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C10-C12	U	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C12-C16	U	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C16-C21	U	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C21-C35	U	2680	mg/kg	1.0		44	< 1.0	< 1.0	22	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

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Results - Soil

Project: Bailey Gibson

Client: O Callaghan Moran & Associates					**Chemtest Job No.:**	19-16984	19-16984	19-16984	19-16984	19-16984	19-16984	19-16984	19-16984	19-16984
Quotation No.:					**Chemtest Sample ID.:**	829135	829136	829137	829138	829139	829140	829141	829142	829143
					Sample Location:	TP08	TP08	TP08	TP05	TP05	TP05	TP09	TP09	TP09
					Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
					Top Depth (m):	0.0	1.0	2.0	0.0	1.0	2.0	0.0	1.0	2.0
					Bottom Depth (m):	1.0	2.0	3.0	1.0	2.0	3.0	1.0	2.0	3.0
					Date Sampled:	17-May-2019	17-May-2019	17-May-2019	17-May-2019	17-May-2019	17-May-2019	17-May-2019	17-May-2019	17-May-2019
					Asbestos Lab:	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY
Determinand	**Accred.**	**SOP**	**Units**	**LOD**										
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0		44	< 5.0	< 5.0	22	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C8-C10	U	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C10-C12	U	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C12-C16	U	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0	3.7	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C21-C35	U	2680	mg/kg	1.0		39	< 1.0	< 1.0	22	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0		39	< 5.0	< 5.0	26	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0		82	< 10	< 10	47	< 10	< 10	< 10	< 10	< 10
Benzene	U	2760	µg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	U	2760	µg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	U	2760	µg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
m & p-Xylene	U	2760	µg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-Xylene	U	2760	µg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Methyl Tert-Butyl Ether	U	2760	µg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Naphthalene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthylene	N	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	2.0	< 0.10	< 0.10	1.2	< 0.10	< 0.10
Anthracene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	0.32	< 0.10	< 0.10	0.28	< 0.10	< 0.10
Fluoranthene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	1.6	< 0.10	< 0.10	1.6	< 0.10	< 0.10
Pyrene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	1.7	< 0.10	< 0.10	1.6	< 0.10	< 0.10
Benzo[a]anthracene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Chrysene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[b]fluoranthene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[k]fluoranthene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]pyrene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-c,d)Pyrene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Coronene	N	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Of 17 PAH's	N	2800	mg/kg	2.0		< 2.0	< 2.0	< 2.0	5.6	< 2.0	< 2.0	4.7	< 2.0	< 2.0
PCB 28	U	2815	mg/kg	0.010		< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010

Project: Bailey Gibson

Client: O Callaghan Moran & Associates

Results - Soil

			Chemtest Job No.:		19-16984	19-16984	19-16984	19-16984	19-16984	19-16984	19-16984	19-16984	19-16984
Quotation No.:			**Chemtest Sample ID.:**		829135	829136	829137	829138	829139	829140	829141	829142	829143
			Sample Location:		TP08	TP08	TP08	TP05	TP05	TP05	TP09	TP09	TP09
			Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Top Depth (m):		0.0	1.0	2.0	0.0	1.0	2.0	0.0	1.0	2.0
			Bottom Depth (m):		1.0	2.0	3.0	1.0	2.0	3.0	1.0	2.0	3.0
			Date Sampled:		17-May-2019	17-May-2019	17-May-2019	17-May-2019	17-May-2019	17-May-2019	17-May-2019	17-May-2019	17-May-2019
			Asbestos Lab:		COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY
Determinand	**Accred.**	**SOP**	**Units**	**LOD**									
PCB 52	U	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 90+101	U	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 118	U	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 153	U	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 138	U	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 180	U	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Total PCBs (7 Congeners)	N	2815	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Phenols	U	2920	mg/kg	0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30

Results - Soil

Project: Bailey Gibson

Client: O Callaghan Moran & Associates					**Chemtest Job No.:**	19-16984	19-16984
Quotation No.:					**Chemtest Sample ID.:**	829144	829145
					Sample Location:	TP11	TP11
					Sample Type:	SOIL	SOIL
					Top Depth (m):	0.0	1.0
					Bottom Depth (m):	1.0	2.0
					Date Sampled:	17-May-2019	17-May-2019
					Asbestos Lab:	COVENTRY	COVENTRY
Determinand	**Accred.**	**SOP**	**Units**	**LOD**			
ACM Type	U	2192		N/A		-	-
Asbestos Identification	U	2192	%	0.001		No Asbestos Detected	No Asbestos Detected
ACM Detection Stage	U	2192		N/A		-	-
Moisture	N	2030	%	0.020		20	12
pH	U	2010		N/A		8.3	8.7
Boron (Hot Water Soluble)	U	2120	mg/kg	0.40		1.7	0.48
Sulphur (Elemental)	U	2180	mg/kg	1.0		6.9	< 1.0
Cyanide (Total)	U	2300	mg/kg	0.50		< 0.50	< 0.50
Sulphide (Easily Liberatable)	N	2325	mg/kg	0.50		5.4	6.5
Sulphate (Total)	U	2430	%	0.010		0.11	0.024
Arsenic	U	2450	mg/kg	1.0		31	21
Barium	U	2450	mg/kg	10		110	45
Cadmium	U	2450	mg/kg	0.10		1.2	1.6
Chromium	U	2450	mg/kg	1.0		17	11
Molybdenum	U	2450	mg/kg	2.0		3.4	3.3
Antimony	N	2450	mg/kg	2.0		2.4	< 2.0
Copper	U	2450	mg/kg	0.50		56	25
Mercury	U	2450	mg/kg	0.10		0.45	< 0.10
Nickel	U	2450	mg/kg	0.50		39	27
Lead	U	2450	mg/kg	0.50		150	19
Selenium	U	2450	mg/kg	0.20		< 0.20	< 0.20
Zinc	U	2450	mg/kg	0.50		91	58
Chromium (Trivalent)	N	2490	mg/kg	1.0		17	11
Chromium (Hexavalent)	N	2490	mg/kg	0.50		< 0.50	< 0.50
Organic Matter	U	2625	%	0.40		8.3	1.1
Total Organic Carbon	U	2625	%	0.20		4.8	0.62
Mineral Oil	N	2670	mg/kg	10		48	< 10
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0		< 1.0	< 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0		< 1.0	< 1.0
Aliphatic TPH >C8-C10	U	2680	mg/kg	1.0		< 1.0	< 1.0
Aliphatic TPH >C10-C12	U	2680	mg/kg	1.0		< 1.0	< 1.0
Aliphatic TPH >C12-C16	U	2680	mg/kg	1.0		< 1.0	< 1.0
Aliphatic TPH >C16-C21	U	2680	mg/kg	1.0		< 1.0	< 1.0
Aliphatic TPH >C21-C35	U	2680	mg/kg	1.0		48	< 1.0
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0		< 1.0	< 1.0

Results - Soil

Project: Bailey Gibson

Client: O Callaghan Moran & Associates					**Chemtest Job No.:**	19-16984	19-16984
Quotation No.:					**Chemtest Sample ID.:**	829144	829145
					Sample Location:	TP11	TP11
					Sample Type:	SOIL	SOIL
					Top Depth (m):	0.0	1.0
					Bottom Depth (m):	1.0	2.0
					Date Sampled:	17-May-2019	17-May-2019
					Asbestos Lab:	COVENTRY	COVENTRY
Determinand	**Accred.**	**SOP**	**Units**	**LOD**			
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0		48	< 5.0
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0		< 1.0	< 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0		< 1.0	< 1.0
Aromatic TPH >C8-C10	U	2680	mg/kg	1.0		< 1.0	< 1.0
Aromatic TPH >C10-C12	U	2680	mg/kg	1.0		< 1.0	< 1.0
Aromatic TPH >C12-C16	U	2680	mg/kg	1.0		< 1.0	< 1.0
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0		11	< 1.0
Aromatic TPH >C21-C35	U	2680	mg/kg	1.0		68	< 1.0
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0		< 1.0	< 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0		79	< 5.0
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0		130	< 10
Benzene	U	2760	µg/kg	1.0		< 1.0	< 1.0
Toluene	U	2760	µg/kg	1.0		< 1.0	< 1.0
Ethylbenzene	U	2760	µg/kg	1.0		< 1.0	< 1.0
m & p-Xylene	U	2760	µg/kg	1.0		< 1.0	< 1.0
o-Xylene	U	2760	µg/kg	1.0		< 1.0	< 1.0
Methyl Tert-Butyl Ether	U	2760	µg/kg	1.0		< 1.0	< 1.0
Naphthalene	U	2800	mg/kg	0.10		0.46	< 0.10
Acenaphthylene	N	2800	mg/kg	0.10		1.1	< 0.10
Acenaphthene	U	2800	mg/kg	0.10		< 0.10	< 0.10
Fluorene	U	2800	mg/kg	0.10		0.22	< 0.10
Phenanthrene	U	2800	mg/kg	0.10		8.4	< 0.10
Anthracene	U	2800	mg/kg	0.10		1.7	< 0.10
Fluoranthene	U	2800	mg/kg	0.10		14	< 0.10
Pyrene	U	2800	mg/kg	0.10		11	< 0.10
Benzo[a]anthracene	U	2800	mg/kg	0.10		3.9	< 0.10
Chrysene	U	2800	mg/kg	0.10		4.2	< 0.10
Benzo[b]fluoranthene	U	2800	mg/kg	0.10		4.4	< 0.10
Benzo[k]fluoranthene	U	2800	mg/kg	0.10		0.86	< 0.10
Benzo[a]pyrene	U	2800	mg/kg	0.10		1.9	< 0.10
Indeno(1,2,3-c,d)Pyrene	U	2800	mg/kg	0.10		0.76	< 0.10
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.10		< 0.10	< 0.10
Benzo[g,h,i]perylene	U	2800	mg/kg	0.10		1.2	< 0.10
Coronene	N	2800	mg/kg	0.10		< 0.10	< 0.10
Total Of 17 PAH's	N	2800	mg/kg	2.0		54	< 2.0
PCB 28	U	2815	mg/kg	0.010		< 0.010	< 0.010

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Project: Bailey Gibson

Results - Soil

Client: O Callaghan Moran & Associates					**Chemtest Job No.:**	19-16984	19-16984
Quotation No.:					**Chemtest Sample ID.:**	829144	829145
					Sample Location:	TP11	TP11
					Sample Type:	SOIL	SOIL
					Top Depth (m):	0.0	1.0
					Bottom Depth (m):	1.0	2.0
					Date Sampled:	17-May-2019	17-May-2019
					Asbestos Lab:	COVENTRY	COVENTRY
Determinand	**Accred.**	**SOP**	**Units**	**LOD**			
PCB 52	U	2815	mg/kg	0.010		< 0.010	< 0.010
PCB 90+101	U	2815	mg/kg	0.010		< 0.010	< 0.010
PCB 118	U	2815	mg/kg	0.010		< 0.010	< 0.010
PCB 153	U	2815	mg/kg	0.010		< 0.010	< 0.010
PCB 138	U	2815	mg/kg	0.010		< 0.010	< 0.010
PCB 180	U	2815	mg/kg	0.010		< 0.010	< 0.010
Total PCBs (7 Congeners)	N	2815	mg/kg	0.10		< 0.10	< 0.10
Total Phenols	U	2920	mg/kg	0.30		< 0.30	< 0.30

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-16984						
Chemtest Sample ID:	829135						
Sample Ref:							
Sample ID:							
Sample Location:	TP08						
Top Depth(m):	0.0						
Bottom Depth(m):	1.0						
Sampling Date:	17-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	6.7	3	5	6
Loss On Ignition	2610	U	%	11	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	82	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		7.9	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.025	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	0.0019	< 0.050	0.5	2	25
Barium	1450	U	< 0.0010	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	0.0082	0.082	0.5	10	70
Copper	1450	U	0.0011	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0070	0.070	0.5	10	30
Nickel	1450	U	0.0045	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.010	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.12	1.2	10	150	500
Sulphate	1220	U	< 1.0	< 10	1000	20000	50000
Total Dissolved Solids	1020	N	43	430	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	8.2	82	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	20

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-16984						
Chemtest Sample ID:	829136						
Sample Ref:							
Sample ID:							
Sample Location:	TP08						
Top Depth(m):	1.0						
Bottom Depth(m):	2.0						
Sampling Date:	17-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.38	3	5	6
Loss On Ignition	2610	U	%	2.3	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.4	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.051	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	< 0.0010	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	0.0071	0.071	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0030	< 0.050	0.5	10	30
Nickel	1450	U	0.0036	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.010	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.14	1.4	10	150	500
Sulphate	1220	U	2.2	22	1000	20000	50000
Total Dissolved Solids	1020	N	46	450	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	6.6	66	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	11

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-16984						
Chemtest Sample ID:	829137						
Sample Ref:							
Sample ID:							
Sample Location:	TP08						
Top Depth(m):	2.0						
Bottom Depth(m):	3.0						
Sampling Date:	17-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.55	3	5	6
Loss On Ignition	2610	U	%	2.0	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.6	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.025	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	0.0015	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	0.0085	0.085	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0027	< 0.050	0.5	10	30
Nickel	1450	U	0.0035	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.010	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.15	1.5	10	150	500
Sulphate	1220	U	1.1	11	1000	20000	50000
Total Dissolved Solids	1020	N	44	440	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	8.7	87	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	13

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-16984						
Chemtest Sample ID:	829138						
Sample Ref:							
Sample ID:							
Sample Location:	TP05						
Top Depth(m):	0.0						
Bottom Depth(m):	1.0						
Sampling Date:	17-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	7.4	3	5	6
Loss On Ignition	2610	U	%	9.6	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	47	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	5.6	100	--	--
pH	2010	U		8.6	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.017	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	0.0045	< 0.050	0.5	2	25
Barium	1450	U	0.0066	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	0.0089	0.089	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0056	0.056	0.5	10	30
Nickel	1450	U	0.0049	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	0.0025	0.025	0.06	0.7	5
Selenium	1450	U	0.0014	0.014	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.17	1.7	10	150	500
Sulphate	1220	U	29	290	1000	20000	50000
Total Dissolved Solids	1020	N	85	840	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	13	130	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	21

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-16984						
Chemtest Sample ID:	829139						
Sample Ref:							
Sample ID:							
Sample Location:	TP05						
Top Depth(m):	1.0						
Bottom Depth(m):	2.0						
Sampling Date:	17-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.68	3	5	6
Loss On Ignition	2610	U	%	3.4	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.2	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.070	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	0.0072	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	0.0080	0.080	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.012	0.12	0.5	10	30
Nickel	1450	U	0.0036	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.010	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.17	1.7	10	150	500
Sulphate	1220	U	4.7	47	1000	20000	50000
Total Dissolved Solids	1020	N	51	510	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	8.1	81	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	22

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-16984						
Chemtest Sample ID:	829140						
Sample Ref:							
Sample ID:							
Sample Location:	TP05						
Top Depth(m):	2.0						
Bottom Depth(m):	3.0						
Sampling Date:	17-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.40	3	5	6
Loss On Ignition	2610	U	%	2.1	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.5	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.084	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	0.0030	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	0.0072	0.072	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0075	0.075	0.5	10	30
Nickel	1450	U	0.0032	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.010	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.14	1.4	10	150	500
Sulphate	1220	U	6.8	68	1000	20000	50000
Total Dissolved Solids	1020	N	55	550	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	7.4	74	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	14

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-16984						
Chemtest Sample ID:	829141						
Sample Ref:							
Sample ID:							
Sample Location:	TP09						
Top Depth(m):	0.0						
Bottom Depth(m):	1.0						
Sampling Date:	17-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	4.4	3	5	6
Loss On Ignition	2610	U	%	6.1	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	4.7	100	--	--
pH	2010	U		8.9	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.049	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	0.0046	< 0.050	0.5	2	25
Barium	1450	U	0.0026	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	0.0012	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0031	< 0.050	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	0.0016	0.016	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.010	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.19	1.9	10	150	500
Sulphate	1220	U	17	170	1000	20000	50000
Total Dissolved Solids	1020	N	65	650	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	10	100	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	19

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-16984						
Chemtest Sample ID:	829142						
Sample Ref:							
Sample ID:							
Sample Location:	TP09						
Top Depth(m):	1.0						
Bottom Depth(m):	2.0						
Sampling Date:	17-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.36	3	5	6
Loss On Ignition	2610	U	%	2.1	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.6	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.12	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	0.0019	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0071	0.071	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.010	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	1.2	12	800	15000	25000
Fluoride	1220	U	0.17	1.7	10	150	500
Sulphate	1220	U	9.7	97	1000	20000	50000
Total Dissolved Solids	1020	N	63	630	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	6.7	67	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	12

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-16984						
Chemtest Sample ID:	829143						
Sample Ref:							
Sample ID:							
Sample Location:	TP09						
Top Depth(m):	2.0						
Bottom Depth(m):	3.0						
Sampling Date:	17-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.60	3	5	6
Loss On Ignition	2610	U	%	2.4	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.5	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.13	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	< 0.0010	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	0.0013	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0059	0.059	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.010	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.14	1.4	10	150	500
Sulphate	1220	U	4.2	42	1000	20000	50000
Total Dissolved Solids	1020	N	47	470	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	6.9	69	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	12

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-16984						
Chemtest Sample ID:	829144						
Sample Ref:							
Sample ID:							
Sample Location:	TP11						
Top Depth(m):	0.0						
Bottom Depth(m):	1.0						
Sampling Date:	17-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	4.8	3	5	6
Loss On Ignition	2610	U	%	7.0	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	130	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	54	100	--	--
pH	2010	U		8.3	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.048	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	0.0050	0.050	0.5	2	25
Barium	1450	U	0.0022	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	0.0012	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0020	< 0.050	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	0.0013	0.013	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.19	1.9	10	150	500
Sulphate	1220	U	3.6	36	1000	20000	50000
Total Dissolved Solids	1020	N	72	710	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	6.6	66	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	20

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-16984						
Chemtest Sample ID:	829145						
Sample Ref:							
Sample ID:							
Sample Location:	TP11						
Top Depth(m):	1.0						
Bottom Depth(m):	2.0						
Sampling Date:	17-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.62	3	5	6
Loss On Ignition	2610	U	%	64	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.7	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.047	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	0.0014	< 0.050	0.5	2	25
Barium	1450	U	0.0014	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0029	< 0.050	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.010	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.18	1.8	10	150	500
Sulphate	1220	U	3.6	36	1000	20000	50000
Total Dissolved Solids	1020	N	49	490	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	6.2	62	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	12

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Test Methods

SOP	Title	Parameters included	Method summary
1020	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Conductivity Meter
1220	Anions, Alkalinity & Ammonium in Waters	Fluoride; Chloride; Nitrite; Nitrate; Total; Oxidisable Nitrogen (TON); Sulfate; Phosphate; Alkalinity; Ammonium	Automated colorimetric analysis using 'Aquakem 600' Discrete Analyser.
1450	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).
1610	Total/Dissolved Organic Carbon in Waters	Organic Carbon	TOC Analyser using Catalytic Oxidation
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.
2010	pH Value of Soils	pH	pH Meter
2015	Acid Neutralisation Capacity	Acid Reserve	Titration
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES
2180	Sulphur (Elemental) in Soils by HPLC	Sulphur	Dichloromethane extraction / HPLC with UV detection
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry
2300	Cyanides & Thiocyanate in Soils	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Allkaline extraction followed by colorimetric determination using Automated Flow Injection Analyser.
2325	Sulphide in Soils	Sulphide	Steam distillation with sulphuric acid / analysis by 'Aquakem 600' Discrete Analyser, using N,N–dimethyl-p-phenylenediamine.
2430	Total Sulphate in soils	Total Sulphate	Acid digestion followed by determination of sulphate in extract by ICP-OES.
2450	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.
2610	Loss on Ignition	loss on ignition (LOI)	Determination of the proportion by mass that is lost from a soil by ignition at 550°C.
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID
2680	TPH A/A Split	Aliphatics: >C5–C6, >C6–C8,>C8–C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35– C44Aromatics: >C5–C7, >C7–C8, >C8– C10, >C10–C12, >C12–C16, >C16– C21, >C21– C35, >C35– C44	Dichloromethane extraction / GCxGC FID detection
2760	Volatile Organic Compounds (VOCs) in Soils by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics.(cf. USEPA Method 8260)*please refer to UKAS schedule	Automated headspace gas chromatographic (GC) analysis of a soil sample, as received, with mass spectrometric (MS) detection of volatile organic compounds.

Test Methods

SOP	Title	Parameters included	Method summary
2800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS	Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenz[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	Dichloromethane extraction / GC-MS
2815	Polychlorinated Biphenyls (PCB) ICES7Congeners in Soils by GC-MS	ICES7 PCB congeners	Acetone/Hexane extraction / GC-MS
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and TrimethylphenolsNote: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.
640	Characterisation of Waste (Leaching)	Waste material including soil, sludges and granular waste	ComplianceTest for Leaching of Granular Waste Material and Sludge

Report Information

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Report Information

UKAS accredited
MCERTS and UKAS accredited
Unaccredited
This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
This analysis has been subcontracted to an unaccredited laboratory
Insufficient Sample
Unsuitable Sample
not evaluated
"less than"
"greater than"

Comments or interpretations are beyond the scope of UKAS accreditation
The results relate only to the items tested
Uncertainty of measurement for the determinands tested are available upon request
None of the results in this report have been recovery corrected
All results are expressed on a dry weight basis
The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols
For all other tests the samples were dried at < 37°C prior to analysis
All Asbestos testing is performed at the indicated laboratory
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

ıle Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container
E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

ıle Retention and Disposal

All soil samples will be retained for a period of 45 days from the date of receipt
All water samples will be retained for 14 days from the date of receipt
Charges may apply to extended sample storage

require extended retention of samples, please email your requirements to:
customerservices@chemtest.com

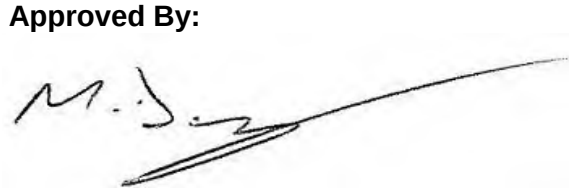
Chemtest Ltd.
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070
Email: info@chemtest.com

Final Report

Report No.:	19-17491-1
Initial Date of Issue:	10-Jun-2019
Client	O Callaghan Moran & Associates
Client Address:	15 Melbourne Business Park Model Farm Road Co. Cork IRELAND
Contact(s):	Conor McGrath
Project	Bailey Gibson

Quotation No.:		**Date Received:**	23-May-2019
Order No.:		**Date Instructed:**	23-May-2019
No. of Samples:	12		
Turnaround (Wkdays):	5	**Results Due:**	30-May-2019
Date Approved:	10-Jun-2019		

Approved By:



Details: Martin Dyer, Laboratory Manager

Results - Leachate

Project: Bailey Gibson

Client: O Callaghan Moran & Associates						Chemtest Job No.:	19-17491	19-17491	19-17491	19-17491	19-17491	19-17491	19-17491	19-17491
Quotation No.:						Chemtest Sample ID.:	831360	831361	831362	831363	831364	831365	831366	831367
						Sample Location:	WS1	WS1	WS1	WS6	WS6	WS6	WS26	WS26
						Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
						Top Depth (m):	0.00	1.00	2.00	0.00	1.00	2.00	0.00	1.00
						Bottom Depth (m):	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00
						Date Sampled:	21-May-2019	21-May-2019	21-May-2019	21-May-2019	21-May-2019	21-May-2019	22-May-2019	22-May-2019
Determinand	**Accred.**	**SOP**	**Type**	**Units**	**LOD**									
Ammonium	U	1220	10:1	mg/l	0.050		0.82	0.73	0.75	1.0	3.0	5.4	0.97	0.62
Ammonium	N	1220	10:1	mg/kg	0.10		8.2	7.3	7.5	10	30	54	9.7	6.2

Results - Leachate

Project: Bailey Gibson

Client: O Callaghan Moran & Associates				**Chemtest Job No.:**		19-17491	19-17491	19-17491	19-17491
Quotation No.:				**Chemtest Sample ID.:**		831368	831369	831370	831371
				Sample Location:		WS26	WS3	WS3	WS3
				Sample Type:		SOIL	SOIL	SOIL	SOIL
				Top Depth (m):		2.00	0.00	1.00	2.00
				Bottom Depth (m):		3.00	1.00	2.00	3.00
				Date Sampled:		22-May-2019	22-May-2019	22-May-2019	22-May-2019
Determinand	**Accred.**	**SOP**	**Type**	**Units**	**LOD**				
Ammonium	U	1220	10:1	mg/l	0.050	0.40	0.52	0.38	0.26
Ammonium	N	1220	10:1	mg/kg	0.10	4.0	5.2	3.8	2.6

Chemtest
The right chemistry to deliver results

Results - Soil

Project: Bailey Gibson

Client: O Callaghan Moran & Associates		Chemtest Job No.:			19-17491	19-17491	19-17491	19-17491	19-17491	19-17491	19-17491	19-17491	19-17491
Quotation No.:		Chemtest Sample ID.:			831360	831361	831362	831363	831364	831365	831366	831367	831368
		Sample Location:			WS1	WS1	WS1	WS6	WS6	WS6	WS26	WS26	WS26
		Sample Type:			SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		Top Depth (m):			0.00	1.00	2.00	0.00	1.00	2.00	0.00	1.00	2.00
		Bottom Depth (m):			1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00
		Date Sampled:			21-May-2019	21-May-2019	21-May-2019	21-May-2019	21-May-2019	21-May-2019	22-May-2019	22-May-2019	22-May-2019
		Asbestos Lab:			LIVERPOOL	LIVERPOOL	LIVERPOOL	LIVERPOOL	LIVERPOOL	LIVERPOOL	LIVERPOOL	LIVERPOOL	LIVERPOOL
Determinand	**Accred.**	**SOP**	**Units**	**LOD**									
ACM Type	U	2192		N/A	-	-	-	-	-	-	-	-	-
Asbestos Identification	U	2192	%	0.001	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
ACM Detection Stage	U	2192		N/A	-	-	-	-	-	-	-	-	-
Moisture	N	2030	%	0.020	15	12	26	13	10	10	29	13	10
pH	U	2010		N/A	8.7	8.9	8.2	8.6	8.7	8.7	7.8	8.5	8.7
Boron (Hot Water Soluble)	U	2120	mg/kg	0.40	< 0.40	< 0.40	1.1	< 0.40	< 0.40	< 0.40	1.8	< 0.40	< 0.40
Sulphur (Elemental)	U	2180	mg/kg	1.0	< 1.0	< 1.0	4.8	1.2	< 1.0	1.0	7.0	< 1.0	< 1.0
Cyanide (Total)	U	2300	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Sulphide (Easily Liberatable)	N	2325	mg/kg	0.50	8.8	9.6	4.6	5.5	9.6	8.7	5.0	4.7	6.0
Sulphate (Total)	U	2430	%	0.010	0.016	0.074	0.13	0.064	0.058	0.032	0.22	0.018	0.093
Arsenic	U	2450	mg/kg	1.0	16	12	30	19	23	24	39	18	21
Barium	U	2450	mg/kg	10	43	27	170	110	89	80	190	49	21
Cadmium	U	2450	mg/kg	0.10	2.0	2.0	2.2	2.1	2.5	2.4	1.4	1.8	1.4
Chromium	U	2450	mg/kg	1.0	17	11	21	15	16	17	25	19	10
Molybdenum	U	2450	mg/kg	2.0	3.6	2.4	5.5	5.5	4.6	5.0	4.7	3.7	3.0
Antimony	N	2450	mg/kg	2.0	2.0	< 2.0	3.1	< 2.0	2.2	2.2	4.9	< 2.0	< 2.0
Copper	U	2450	mg/kg	0.50	30	27	73	23	34	40	130	24	22
Mercury	U	2450	mg/kg	0.10	< 0.10	< 0.10	0.74	0.13	< 0.10	< 0.10	1.5	< 0.10	< 0.10
Nickel	U	2450	mg/kg	0.50	45	31	57	31	56	57	65	45	25
Lead	U	2450	mg/kg	0.50	21	15	220	30	29	28	410	22	19
Selenium	U	2450	mg/kg	0.20	1.1	2.8	0.98	0.37	1.7	0.73	1.2	< 0.20	0.76
Zinc	U	2450	mg/kg	0.50	81	62	350	57	89	98	230	67	58
Chromium (Trivalent)	N	2490	mg/kg	1.0	17	11	21	15	16	17	25	19	10
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Organic Matter	U	2625	%	0.40	0.72	0.86	8.3	1.3	0.59	0.62	12	< 0.40	1.2
Total Organic Carbon	U	2625	%	0.20	0.42	0.50	4.8	0.75	0.34	0.36	7.0	< 0.20	0.71
Mineral Oil	N	2670	mg/kg	10	< 10	< 10	< 10	300	< 10	< 10	390	< 10	< 10
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C8-C10	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	22	< 1.0	< 1.0
Aliphatic TPH >C10-C12	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	140	< 1.0	< 1.0
Aliphatic TPH >C12-C16	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	32	< 1.0	< 1.0
Aliphatic TPH >C16-C21	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	4.2	< 1.0	< 1.0	40	< 1.0	< 1.0
Aliphatic TPH >C21-C35	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	300	< 1.0	< 1.0	150	< 1.0	< 1.0
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0	< 5.0	< 5.0	300	< 5.0	< 5.0	390	< 5.0	< 5.0

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Results - Soil

Project: Bailey Gibson

Client: O Callaghan Moran & Associates		Chemtest Job No.:			19-17491	19-17491	19-17491	19-17491	19-17491	19-17491	19-17491	19-17491	19-17491
Quotation No.:		Chemtest Sample ID.:			831360	831361	831362	831363	831364	831365	831366	831367	831368
		Sample Location:			WS1	WS1	WS1	WS6	WS6	WS6	WS26	WS26	WS26
		Sample Type:			SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		Top Depth (m):			0.00	1.00	2.00	0.00	1.00	2.00	0.00	1.00	2.00
		Bottom Depth (m):			1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00
		Date Sampled:			21-May-2019	21-May-2019	21-May-2019	21-May-2019	21-May-2019	21-May-2019	22-May-2019	22-May-2019	22-May-2019
		Asbestos Lab:			LIVERPOOL	LIVERPOOL	LIVERPOOL	LIVERPOOL	LIVERPOOL	LIVERPOOL	LIVERPOOL	LIVERPOOL	LIVERPOOL
Determinand	**Accred.**	**SOP**	**Units**	**LOD**									
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C8-C10	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	6.3	< 1.0	< 1.0
Aromatic TPH >C10-C12	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	4.2	< 1.0	< 1.0
Aromatic TPH >C12-C16	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	32	< 1.0	< 1.0
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	57	< 1.0	< 1.0
Aromatic TPH >C21-C35	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	38	< 1.0	< 1.0	270	< 1.0	< 1.0
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0	< 5.0	< 5.0	38	< 5.0	< 5.0	370	< 5.0	< 5.0
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	< 10	< 10	< 10	340	< 10	< 10	760	< 10	< 10
Benzene	U	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	U	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	U	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
m & p-Xylene	U	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-Xylene	U	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Methyl Tert-Butyl Ether	U	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Naphthalene	U	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthylene	N	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	U	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	U	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	U	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	1.3	< 0.10	< 0.10
Anthracene	U	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	U	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	1.4	< 0.10	< 0.10
Pyrene	U	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	1.3	< 0.10	< 0.10
Benzo[a]anthracene	U	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.36	< 0.10	< 0.10
Chrysene	U	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.49	< 0.10	< 0.10
Benzo[b]fluoranthene	U	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[k]fluoranthene	U	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]pyrene	U	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-c,d)Pyrene	U	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene	U	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Coronene	N	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Of 17 PAH's	N	2800	mg/kg	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	4.9	< 2.0	< 2.0
PCB 28	U	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 52	U	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 90+101	U	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010

Chemtest
The right chemistry to deliver results

Results - Soil

Project: Bailey Gibson

Client: O Callaghan Moran & Associates					**Chemtest Job No.:**	19-17491	19-17491	19-17491	19-17491	19-17491	19-17491	19-17491	19-17491	19-17491
Quotation No.:					**Chemtest Sample ID.:**	831360	831361	831362	831363	831364	831365	831366	831367	831368
					Sample Location:	WS1	WS1	WS1	WS6	WS6	WS6	WS26	WS26	WS26
					Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
					Top Depth (m):	0.00	1.00	2.00	0.00	1.00	2.00	0.00	1.00	2.00
					Bottom Depth (m):	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00
					Date Sampled:	21-May-2019	21-May-2019	21-May-2019	21-May-2019	21-May-2019	21-May-2019	22-May-2019	22-May-2019	22-May-2019
					Asbestos Lab:	LIVERPOOL	LIVERPOOL	LIVERPOOL	LIVERPOOL	LIVERPOOL	LIVERPOOL	LIVERPOOL	LIVERPOOL	LIVERPOOL
Determinand	**Accred.**	**SOP**	**Units**	**LOD**										
PCB 118	U	2815	mg/kg	0.010		< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 153	U	2815	mg/kg	0.010		< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 138	U	2815	mg/kg	0.010		< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 180	U	2815	mg/kg	0.010		< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Total PCBs (7 Congeners)	N	2815	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Phenols	U	2920	mg/kg	0.30		< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30

Results - Soil

Project: Bailey Gibson

Client: O Callaghan Moran & Associates		**Chemtest Job No.:**			19-17491	19-17491	19-17491
Quotation No.:		**Chemtest Sample ID.:**			831369	831370	831371
		Sample Location:			WS3	WS3	WS3
		Sample Type:			SOIL	SOIL	SOIL
		Top Depth (m):			0.00	1.00	2.00
		Bottom Depth (m):			1.00	2.00	3.00
		Date Sampled:			22-May-2019	22-May-2019	22-May-2019
		Asbestos Lab:			LIVERPOOL	LIVERPOOL	LIVERPOOL
Determinand	**Accred.**	**SOP**	**Units**	**LOD**			
ACM Type	U	2192		N/A	-	-	-
Asbestos Identification	U	2192	%	0.001	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
ACM Detection Stage	U	2192		N/A	-	-	-
Moisture	N	2030	%	0.020	31	16	17
pH	U	2010		N/A	8.2	8.4	8.5
Boron (Hot Water Soluble)	U	2120	mg/kg	0.40	2.1	0.46	< 0.40
Sulphur (Elemental)	U	2180	mg/kg	1.0	4.4	< 1.0	< 1.0
Cyanide (Total)	U	2300	mg/kg	0.50	< 0.50	< 0.50	< 0.50
Sulphide (Easily Liberatable)	N	2325	mg/kg	0.50	4.1	5.4	13
Sulphate (Total)	U	2430	%	0.010	0.15	0.017	0.012
Arsenic	U	2450	mg/kg	1.0	29	28	16
Barium	U	2450	mg/kg	10	110	260	26
Cadmium	U	2450	mg/kg	0.10	1.3	2.9	2.4
Chromium	U	2450	mg/kg	1.0	20	14	12
Molybdenum	U	2450	mg/kg	2.0	4.2	5.7	2.6
Antimony	N	2450	mg/kg	2.0	3.6	2.2	< 2.0
Copper	U	2450	mg/kg	0.50	120	36	36
Mercury	U	2450	mg/kg	0.10	0.62	0.11	< 0.10
Nickel	U	2450	mg/kg	0.50	60	62	43
Lead	U	2450	mg/kg	0.50	210	22	20
Selenium	U	2450	mg/kg	0.20	0.53	0.35	1.5
Zinc	U	2450	mg/kg	0.50	140	83	89
Chromium (Trivalent)	N	2490	mg/kg	1.0	20	14	12
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50	< 0.50	< 0.50
Organic Matter	U	2625	%	0.40	5.7	< 0.40	0.55
Total Organic Carbon	U	2625	%	0.20	3.3	0.23	0.32
Mineral Oil	N	2670	mg/kg	10	63	< 10	< 10
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C8-C10	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C10-C12	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C12-C16	U	2680	mg/kg	1.0	2.2	< 1.0	< 1.0
Aliphatic TPH >C16-C21	U	2680	mg/kg	1.0	1.5	< 1.0	< 1.0
Aliphatic TPH >C21-C35	U	2680	mg/kg	1.0	59	< 1.0	< 1.0
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	63	< 5.0	< 5.0

Results - Soil

Project: Bailey Gibson

Client: O Callaghan Moran & Associates					Chemtest Job No.:	19-17491	19-17491	19-17491
Quotation No.:					Chemtest Sample ID.:	831369	831370	831371
					Sample Location:	WS3	WS3	WS3
					Sample Type:	SOIL	SOIL	SOIL
					Top Depth (m):	0.00	1.00	2.00
					Bottom Depth (m):	1.00	2.00	3.00
					Date Sampled:	22-May-2019	22-May-2019	22-May-2019
					Asbestos Lab:	LIVERPOOL	LIVERPOOL	LIVERPOOL
Determinand	**Accred.**	**SOP**	**Units**	**LOD**				
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0
Aromatic TPH >C8-C10	U	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0
Aromatic TPH >C10-C12	U	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0
Aromatic TPH >C12-C16	U	2680	mg/kg	1.0		1.0	< 1.0	< 1.0
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0		6.6	< 1.0	< 1.0
Aromatic TPH >C21-C35	U	2680	mg/kg	1.0		77	< 1.0	< 1.0
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0		3.4	< 1.0	< 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0		88	< 5.0	< 5.0
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0		150	< 10	< 10
Benzene	U	2760	µg/kg	1.0		< 1.0	< 1.0	< 1.0
Toluene	U	2760	µg/kg	1.0		< 1.0	< 1.0	< 1.0
Ethylbenzene	U	2760	µg/kg	1.0		< 1.0	< 1.0	< 1.0
m & p-Xylene	U	2760	µg/kg	1.0		< 1.0	< 1.0	< 1.0
o-Xylene	U	2760	µg/kg	1.0		< 1.0	< 1.0	< 1.0
Methyl Tert-Butyl Ether	U	2760	µg/kg	1.0		< 1.0	< 1.0	< 1.0
Naphthalene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10
Acenaphthylene	N	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10
Acenaphthene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10
Fluorene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10
Phenanthrene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10
Anthracene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10
Fluoranthene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10
Pyrene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10
Benzo[a]anthracene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10
Chrysene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10
Benzo[b]fluoranthene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10
Benzo[k]fluoranthene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10
Benzo[a]pyrene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10
Indeno(1,2,3-c,d)Pyrene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10
Coronene	N	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10
Total Of 17 PAH's	N	2800	mg/kg	2.0		< 2.0	< 2.0	< 2.0
PCB 28	U	2815	mg/kg	0.010		< 0.010	< 0.010	< 0.010
PCB 52	U	2815	mg/kg	0.010		< 0.010	< 0.010	< 0.010
PCB 90+101	U	2815	mg/kg	0.010		< 0.010	< 0.010	< 0.010

Results - Soil

Project: Bailey Gibson

Client: O Callaghan Moran & Associates					**Chemtest Job No.:**	19-17491	19-17491	19-17491
Quotation No.:					**Chemtest Sample ID.:**	831369	831370	831371
					Sample Location:	WS3	WS3	WS3
					Sample Type:	SOIL	SOIL	SOIL
					Top Depth (m):	0.00	1.00	2.00
					Bottom Depth (m):	1.00	2.00	3.00
					Date Sampled:	22-May-2019	22-May-2019	22-May-2019
					Asbestos Lab:	LIVERPOOL	LIVERPOOL	LIVERPOOL
Determinand	**Accred.**	**SOP**	**Units**	**LOD**				
PCB 118	U	2815	mg/kg	0.010		< 0.010	< 0.010	< 0.010
PCB 153	U	2815	mg/kg	0.010		< 0.010	< 0.010	< 0.010
PCB 138	U	2815	mg/kg	0.010		< 0.010	< 0.010	< 0.010
PCB 180	U	2815	mg/kg	0.010		< 0.010	< 0.010	< 0.010
Total PCBs (7 Congeners)	N	2815	mg/kg	0.10		< 0.10	< 0.10	< 0.10
Total Phenols	U	2920	mg/kg	0.30		< 0.30	< 0.30	< 0.30

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17491						
Chemtest Sample ID:	831360						
Sample Ref:							
Sample ID:							
Sample Location:	WS1						
Top Depth(m):	0.00						
Bottom Depth(m):	1.00						
Sampling Date:	21-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.42	3	5	6
Loss On Ignition	2610	U	%	1.9	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.7	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.029	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	0.0061	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	0.0015	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.013	0.13	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	0.0015	0.015	0.1	0.5	7
Zinc	1450	U	0.0021	< 0.50	4	50	200
Chloride	1220	U	3.7	37	800	15000	25000
Fluoride	1220	U	0.26	2.6	10	150	500
Sulphate	1220	U	3.8	38	1000	20000	50000
Total Dissolved Solids	1020	N	78	780	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	34	340	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	15

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17491						
Chemtest Sample ID:	831361						
Sample Ref:							
Sample ID:							
Sample Location:	WS1						
Top Depth(m):	1.00						
Bottom Depth(m):	2.00						
Sampling Date:	21-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.50	3	5	6
Loss On Ignition	2610	U	%	1.9	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.9	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.061	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	0.0070	0.070	0.5	2	25
Barium	1450	U	0.0061	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	0.0011	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0081	0.081	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	0.0014	0.014	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.010	0.1	0.5	7
Zinc	1450	U	0.0013	< 0.50	4	50	200
Chloride	1220	U	3.7	37	800	15000	25000
Fluoride	1220	U	0.25	2.5	10	150	500
Sulphate	1220	U	6.1	61	1000	20000	50000
Total Dissolved Solids	1020	N	98	970	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	30	300	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	12

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17491						
Chemtest Sample ID:	831362						
Sample Ref:							
Sample ID:							
Sample Location:	WS1						
Top Depth(m):	2.00						
Bottom Depth(m):	3.00						
Sampling Date:	21-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	4.8	3	5	6
Loss On Ignition	2610	U	%	9.1	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.2	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.014	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	0.0096	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0059	0.059	0.5	10	30
Nickel	1450	U	0.0012	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	0.0048	0.048	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	3.1	31	800	15000	25000
Fluoride	1220	U	0.20	2.0	10	150	500
Sulphate	1220	U	2.8	28	1000	20000	50000
Total Dissolved Solids	1020	N	78	770	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	38	380	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	26

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17491						
Chemtest Sample ID:	831363						
Sample Ref:							
Sample ID:							
Sample Location:	WS6						
Top Depth(m):	0.00						
Bottom Depth(m):	1.00						
Sampling Date:	21-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.75	3	5	6
Loss On Ignition	2610	U	%	2.1	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	340	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.6	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.028	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	0.0020	< 0.050	0.5	2	25
Barium	1450	U	0.0029	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.015	0.15	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	0.0010	0.010	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.010	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	3.5	35	800	15000	25000
Fluoride	1220	U	0.19	1.9	10	150	500
Sulphate	1220	U	3.5	35	1000	20000	50000
Total Dissolved Solids	1020	N	78	780	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	23	230	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	13

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17491						
Chemtest Sample ID:	831364						
Sample Ref:							
Sample ID:							
Sample Location:	WS6						
Top Depth(m):	1.00						
Bottom Depth(m):	2.00						
Sampling Date:	21-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.34	3	5	6
Loss On Ignition	2610	U	%	2.2	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.7	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.11	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	0.018	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.010	0.10	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	0.0017	0.017	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	3.4	34	800	15000	25000
Fluoride	1220	U	0.24	2.4	10	150	500
Sulphate	1220	U	4.4	44	1000	20000	50000
Total Dissolved Solids	1020	N	85	840	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	29	290	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	10

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17491						
Chemtest Sample ID:	831365						
Sample Ref:							
Sample ID:							
Sample Location:	WS6						
Top Depth(m):	2.00						
Bottom Depth(m):	3.00						
Sampling Date:	21-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.36	3	5	6
Loss On Ignition	2610	U	%	2.0	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.7	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.14	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	0.0010	< 0.050	0.5	2	25
Barium	1450	U	0.014	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	0.0024	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.014	0.14	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	0.0023	0.023	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.010	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	5.5	55	800	15000	25000
Fluoride	1220	U	0.24	2.4	10	150	500
Sulphate	1220	U	4.8	48	1000	20000	50000
Total Dissolved Solids	1020	N	100	1000	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	31	310	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	10

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17491						
Chemtest Sample ID:	831366						
Sample Ref:							
Sample ID:							
Sample Location:	WS26						
Top Depth(m):	0.00						
Bottom Depth(m):	1.00						
Sampling Date:	22-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	7.0	3	5	6
Loss On Ignition	2610	U	%	12	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	760	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	4.9	100	--	--
pH	2010	U		7.8	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.031	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	0.0065	0.065	0.5	2	25
Barium	1450	U	0.0056	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	0.0028	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0057	0.057	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	0.0020	0.020	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.010	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	4.6	46	800	15000	25000
Fluoride	1220	U	0.22	2.2	10	150	500
Sulphate	1220	U	13	130	1000	20000	50000
Total Dissolved Solids	1020	N	98	960	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	9.4	94	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	29

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17491						
Chemtest Sample ID:	831367						
Sample Ref:							
Sample ID:							
Sample Location:	WS26						
Top Depth(m):	1.00						
Bottom Depth(m):	2.00						
Sampling Date:	22-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	< 0.20	3	5	6
Loss On Ignition	2610	U	%	1.7	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.5	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.070	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	0.0030	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.017	0.17	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.010	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	3.4	34	800	15000	25000
Fluoride	1220	U	0.32	3.2	10	150	500
Sulphate	1220	U	8.9	89	1000	20000	50000
Total Dissolved Solids	1020	N	98	970	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	32	320	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	13

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17491						
Chemtest Sample ID:	831368						
Sample Ref:							
Sample ID:							
Sample Location:	WS26						
Top Depth(m):	2.00						
Bottom Depth(m):	3.00						
Sampling Date:	22-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.71	3	5	6
Loss On Ignition	2610	U	%	1.6	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.7	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.031	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	0.0020	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0097	0.097	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.010	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	3.7	37	800	15000	25000
Fluoride	1220	U	0.30	3.0	10	150	500
Sulphate	1220	U	6.1	61	1000	20000	50000
Total Dissolved Solids	1020	N	72	710	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	33	330	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	10

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17491						
Chemtest Sample ID:	831369						
Sample Ref:							
Sample ID:							
Sample Location:	WS3						
Top Depth(m):	0.00						
Bottom Depth(m):	1.00						
Sampling Date:	22-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	3.3	3	5	6
Loss On Ignition	2610	U	%	9.7	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	150	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.2	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.030	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	0.0095	0.095	0.5	2	25
Barium	1450	U	0.0035	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	0.0019	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0040	< 0.050	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	0.0040	0.040	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.010	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	3.7	37	800	15000	25000
Fluoride	1220	U	0.25	2.5	10	150	500
Sulphate	1220	U	10	100	1000	20000	50000
Total Dissolved Solids	1020	N	100	1000	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	14	140	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	31

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17491						
Chemtest Sample ID:	831370						
Sample Ref:							
Sample ID:							
Sample Location:	WS3						
Top Depth(m):	1.00						
Bottom Depth(m):	2.00						
Sampling Date:	22-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.23	3	5	6
Loss On Ignition	2610	U	%	2.0	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.4	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.065	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	0.0035	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.016	0.16	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.010	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	2.6	26	800	15000	25000
Fluoride	1220	U	0.33	3.3	10	150	500
Sulphate	1220	U	5.6	56	1000	20000	50000
Total Dissolved Solids	1020	N	72	710	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	34	340	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	16

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17491						
Chemtest Sample ID:	831371						
Sample Ref:							
Sample ID:							
Sample Location:	WS3						
Top Depth(m):	2.00						
Bottom Depth(m):	3.00						
Sampling Date:	22-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.32	3	5	6
Loss On Ignition	2610	U	%	1.8	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.5	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.056	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	0.0033	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.011	0.11	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	0.0049	0.049	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.010	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	1.9	19	800	15000	25000
Fluoride	1220	U	0.19	1.9	10	150	500
Sulphate	1220	U	11	110	1000	20000	50000
Total Dissolved Solids	1020	N	65	650	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	33	330	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	17

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Test Methods

SOP	Title	Parameters included	Method summary
1020	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Conductivity Meter
1220	Anions, Alkalinity & Ammonium in Waters	Fluoride; Chloride; Nitrite; Nitrate; Total; Oxidisable Nitrogen (TON); Sulfate; Phosphate; Alkalinity; Ammonium	Automated colorimetric analysis using 'Aquakem 600' Discrete Analyser.
1450	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).
1610	Total/Dissolved Organic Carbon in Waters	Organic Carbon	TOC Analyser using Catalytic Oxidation
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.
2010	pH Value of Soils	pH	pH Meter
2015	Acid Neutralisation Capacity	Acid Reserve	Titration
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES
2180	Sulphur (Elemental) in Soils by HPLC	Sulphur	Dichloromethane extraction / HPLC with UV detection
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry
2300	Cyanides & Thiocyanate in Soils	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Allkaline extraction followed by colorimetric determination using Automated Flow Injection Analyser.
2325	Sulphide in Soils	Sulphide	Steam distillation with sulphuric acid / analysis by 'Aquakem 600' Discrete Analyser, using N,N–dimethyl-p-phenylenediamine.
2430	Total Sulphate in soils	Total Sulphate	Acid digestion followed by determination of sulphate in extract by ICP-OES.
2450	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.
2610	Loss on Ignition	loss on ignition (LOI)	Determination of the proportion by mass that is lost from a soil by ignition at 550°C.
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID
2680	TPH A/A Split	Aliphatics: >C5–C6, >C6–C8,>C8–C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35– C44Aromatics: >C5–C7, >C7–C8, >C8– C10, >C10–C12, >C12–C16, >C16– C21, >C21– C35, >C35– C44	Dichloromethane extraction / GCxGC FID detection

Test Methods

SOP	Title	Parameters included	Method summary
2760	Volatile Organic Compounds (VOCs) in Soils by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics.(cf. USEPA Method 8260)*please refer to UKAS schedule	Automated headspace gas chromatographic (GC) analysis of a soil sample, as received, with mass spectrometric (MS) detection of volatile organic compounds.
2800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS	Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenz[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	Dichloromethane extraction / GC-MS
2815	Polychlorinated Biphenyls (PCB) ICES7Congeners in Soils by GC-MS	ICES7 PCB congeners	Acetone/Hexane extraction / GC-MS
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and TrimethylphenolsNote: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.
640	Characterisation of Waste (Leaching)	Waste material including soil, sludges and granular waste	ComplianceTest for Leaching of Granular Waste Material and Sludge

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Report Information

Key

U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"

Comments or interpretations are beyond the scope of UKAS accreditation
The results relate only to the items tested
Uncertainty of measurement for the determinands tested are available upon request
None of the results in this report have been recovery corrected
All results are expressed on a dry weight basis
The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols
For all other tests the samples were dried at < 37°C prior to analysis
All Asbestos testing is performed at the indicated laboratory
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container
E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 45 days from the date of receipt
All water samples will be retained for 14 days from the date of receipt
Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to:
customerservices@chemtest.com

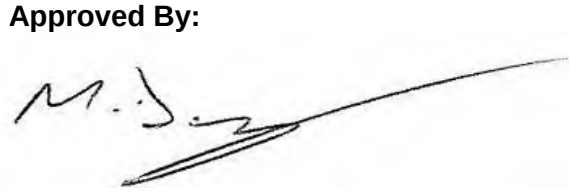
Chemtest Ltd.
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070
Email: info@chemtest.com

Final Report

Report No.:	19-17495-1
Initial Date of Issue:	10-Jun-2019
Client	O Callaghan Moran & Associates
Client Address:	15 Melbourne Business Park Model Farm Road Co. Cork IRELAND
Contact(s):	Conor McGrath
Project	Bailey Gibson

Quotation No.:		**Date Received:**	23-May-2019
Order No.:		**Date Instructed:**	23-May-2019
No. of Samples:	12		
Turnaround (Wkdays):	5	**Results Due:**	30-May-2019
Date Approved:	10-Jun-2019		

Approved By:



Details: Martin Dyer, Laboratory Manager

Results - Leachate

Project: Bailey Gibson

Client: O Callaghan Moran & Associates				**Chemtest Job No.:**		19-17495	19-17495	19-17495	19-17495	19-17495	19-17495	19-17495	19-17495
Quotation No.:				**Chemtest Sample ID.:**		831385	831386	831387	831388	831389	831390	831391	831392
				Sample Location:		WS19	WS19	WS19	WS23	WS23	WS23	WS5	WS5
				Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
				Top Depth (m):		0.00	1.00	2.00	0.00	1.00	2.00	0.00	1.00
				Bottom Depth (m):		1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00
				Date Sampled:		21-May-2019	21-May-2019	21-May-2019	21-May-2019	21-May-2019	21-May-2019	21-May-2019	21-May-2019
Determinand	**Accred.**	**SOP**	**Type**	**Units**	**LOD**								
Ammonium	U	1220	10:1	mg/l	0.050	0.44	1.2	1.2	1.6	0.54	0.43	0.66	0.51
Ammonium	N	1220	10:1	mg/kg	0.10	4.4	12	12	16	5.4	4.3	6.6	5.1

Results - Leachate

Project: Bailey Gibson

Client: O Callaghan Moran & Associates				**Chemtest Job No.:**		19-17495	19-17495	19-17495	19-17495
Quotation No.:				**Chemtest Sample ID.:**		831393	831394	831395	831396
				Sample Location:		WS5	WS24	WS24	WS24
				Sample Type:		SOIL	SOIL	SOIL	SOIL
				Top Depth (m):		2.00	0.00	1.00	2.00
				Bottom Depth (m):		3.00	1.00	2.00	3.00
				Date Sampled:		21-May-2019	21-May-2019	21-May-2019	21-May-2019
Determinand	**Accred.**	**SOP**	**Type**	**Units**	**LOD**				
Ammonium	U	1220	10:1	mg/l	0.050	0.41	0.59	0.67	0.53
Ammonium	N	1220	10:1	mg/kg	0.10	4.1	5.9	6.7	5.3

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Results - Soil

Project: Bailey Gibson

Client: O Callaghan Moran & Associates		Chemtest Job No.:			19-17495	19-17495	19-17495	19-17495	19-17495	19-17495	19-17495	19-17495	19-17495
Quotation No.:		Chemtest Sample ID.:			831385	831386	831387	831388	831389	831390	831391	831392	831393
		Sample Location:			WS19	WS19	WS19	WS23	WS23	WS23	WS5	WS5	WS5
		Sample Type:			SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		Top Depth (m):			0.00	1.00	2.00	0.00	1.00	2.00	0.00	1.00	2.00
		Bottom Depth (m):			1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00
		Date Sampled:			21-May-2019	21-May-2019	21-May-2019	21-May-2019	21-May-2019	21-May-2019	21-May-2019	21-May-2019	21-May-2019
		Asbestos Lab:			COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY
Determinand	**Accred.**	**SOP**	**Units**	**LOD**									
ACM Type	U	2192		N/A	-	-	-	-	-	-	-	-	-
Asbestos Identification	U	2192	%	0.001	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
ACM Detection Stage	U	2192		N/A	-	-	-	-	-	-	-	-	-
Moisture	N	2030	%	0.020	12	11	13	23	14	14	19	14	8.8
pH	U	2010		N/A	8.5	8.6	8.6	8.4	8.6	8.5	8.3	8.6	8.7
Boron (Hot Water Soluble)	U	2120	mg/kg	0.40	< 0.40	< 0.40	< 0.40	1.6	< 0.40	< 0.40	0.92	< 0.40	< 0.40
Sulphur (Elemental)	U	2180	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Cyanide (Total)	U	2300	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Sulphide (Easily Liberatable)	N	2325	mg/kg	0.50	4.1	4.8	10	3.9	5.9	15	2.9	5.6	7.1
Sulphate (Total)	U	2430	%	0.010	0.016	0.038	0.085	0.099	0.12	0.063	0.032	0.022	0.21
Arsenic	U	2450	mg/kg	1.0	19	22	20	9.4	19	26	17	23	21
Barium	U	2450	mg/kg	10	79	78	37	78	35	21	160	99	52
Cadmium	U	2450	mg/kg	0.10	2.2	2.1	2.4	2.7	2.9	3.8	2.2	2.5	1.9
Chromium	U	2450	mg/kg	1.0	13	14	14	16	11	10	18	14	13
Molybdenum	U	2450	mg/kg	2.0	4.5	3.9	4.9	4.5	4.8	19	5.2	5.4	3.4
Antimony	N	2450	mg/kg	2.0	4.7	4.0	3.5	2.4	2.6	8.8	3.0	2.4	< 2.0
Copper	U	2450	mg/kg	0.50	25	29	29	17	24	38	26	29	23
Mercury	U	2450	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.15	< 0.10	< 0.10
Nickel	U	2450	mg/kg	0.50	45	43	44	28	49	60	36	52	35
Lead	U	2450	mg/kg	0.50	30	24	22	27	14	16	31	19	32
Selenium	U	2450	mg/kg	0.20	0.61	0.73	4.6	1.2	1.7	5.6	0.66	0.24	2.9
Zinc	U	2450	mg/kg	0.50	79	72	79	58	76	100	84	98	69
Chromium (Trivalent)	N	2490	mg/kg	1.0	13	14	14	16	11	10	18	14	13
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Organic Matter	U	2625	%	0.40	< 0.40	0.53	< 0.40	< 0.40	3.1	2.8	1.1	0.72	< 0.40
Total Organic Carbon	U	2625	%	0.20	< 0.20	0.31	< 0.20	0.22	1.8	1.6	0.62	0.42	< 0.20
Mineral Oil	N	2670	mg/kg	10	< 10	< 10	< 10	< 10	14	< 10	< 10	< 10	< 10
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C8-C10	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C10-C12	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C12-C16	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C16-C21	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C21-C35	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	14	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0	< 5.0	< 5.0	< 5.0	14	< 5.0	< 5.0	< 5.0	< 5.0

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Results - Soil

Project: Bailey Gibson

Client: O Callaghan Moran & Associates					Chemtest Job No.:	19-17495	19-17495	19-17495	19-17495	19-17495	19-17495	19-17495	19-17495	19-17495
Quotation No.:					Chemtest Sample ID.:	831385	831386	831387	831388	831389	831390	831391	831392	831393
					Sample Location:	WS19	WS19	WS19	WS23	WS23	WS23	WS5	WS5	WS5
					Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
					Top Depth (m):	0.00	1.00	2.00	0.00	1.00	2.00	0.00	1.00	2.00
					Bottom Depth (m):	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00
					Date Sampled:	21-May-2019	21-May-2019	21-May-2019	21-May-2019	21-May-2019	21-May-2019	21-May-2019	21-May-2019	21-May-2019
					Asbestos Lab:	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY
Determinand	**Accred.**	**SOP**	**Units**	**LOD**										
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C8-C10	U	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C10-C12	U	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C12-C16	U	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	2.4	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C21-C35	U	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	32	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0		< 5.0	< 5.0	< 5.0	< 5.0	35	< 5.0	< 5.0	< 5.0	< 5.0
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0		< 10	< 10	< 10	< 10	49	< 10	< 10	< 10	< 10
Benzene	U	2760	µg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	U	2760	µg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	U	2760	µg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
m & p-Xylene	U	2760	µg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-Xylene	U	2760	µg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Methyl Tert-Butyl Ether	U	2760	µg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Naphthalene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthylene	N	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	1.7	< 0.10	< 0.10	< 0.10	< 0.10
Anthracene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	0.31	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	1.6	< 0.10	< 0.10	< 0.10	< 0.10
Pyrene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	1.3	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]anthracene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	0.19	< 0.10	< 0.10	< 0.10	< 0.10
Chrysene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	0.26	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[b]fluoranthene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[k]fluoranthene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]pyrene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-c,d)Pyrene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Coronene	N	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Of 17 PAH's	N	2800	mg/kg	2.0		< 2.0	< 2.0	< 2.0	< 2.0	5.4	< 2.0	< 2.0	< 2.0	< 2.0
PCB 28	U	2815	mg/kg	0.010		< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 52	U	2815	mg/kg	0.010		< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 90+101	U	2815	mg/kg	0.010		< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010

Chemtest
The right chemistry to deliver results

Results - Soil

Project: Bailey Gibson

Client: O Callaghan Moran & Associates					**Chemtest Job No.:**	19-17495	19-17495	19-17495	19-17495	19-17495	19-17495	19-17495	19-17495	19-17495
Quotation No.:					**Chemtest Sample ID.:**	831385	831386	831387	831388	831389	831390	831391	831392	831393
					Sample Location:	WS19	WS19	WS19	WS23	WS23	WS23	WS5	WS5	WS5
					Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
					Top Depth (m):	0.00	1.00	2.00	0.00	1.00	2.00	0.00	1.00	2.00
					Bottom Depth (m):	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00
					Date Sampled:	21-May-2019	21-May-2019	21-May-2019	21-May-2019	21-May-2019	21-May-2019	21-May-2019	21-May-2019	21-May-2019
					Asbestos Lab:	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY
Determinand	**Accred.**	**SOP**	**Units**	**LOD**										
PCB 118	U	2815	mg/kg	0.010		< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 153	U	2815	mg/kg	0.010		< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 138	U	2815	mg/kg	0.010		< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 180	U	2815	mg/kg	0.010		< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Total PCBs (7 Congeners)	N	2815	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Phenols	U	2920	mg/kg	0.30		< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30

Results - Soil

Project: Bailey Gibson

Client: O Callaghan Moran & Associates		**Chemtest Job No.:**			19-17495	19-17495	19-17495
Quotation No.:		**Chemtest Sample ID.:**			831394	831395	831396
		Sample Location:			WS24	WS24	WS24
		Sample Type:			SOIL	SOIL	SOIL
		Top Depth (m):			0.00	1.00	2.00
		Bottom Depth (m):			1.00	2.00	3.00
		Date Sampled:			21-May-2019	21-May-2019	21-May-2019
		Asbestos Lab:			COVENTRY	COVENTRY	COVENTRY
Determinand	**Accred.**	**SOP**	**Units**	**LOD**			
ACM Type	U	2192		N/A	-	-	-
Asbestos Identification	U	2192	%	0.001	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
ACM Detection Stage	U	2192		N/A	-	-	-
Moisture	N	2030	%	0.020	30	17	22
pH	U	2010		N/A	7.9	8.6	8.4
Boron (Hot Water Soluble)	U	2120	mg/kg	0.40	1.4	< 0.40	< 0.40
Sulphur (Elemental)	U	2180	mg/kg	1.0	5.3	< 1.0	< 1.0
Cyanide (Total)	U	2300	mg/kg	0.50	< 0.50	< 0.50	< 0.50
Sulphide (Easily Liberatable)	N	2325	mg/kg	0.50	3.4	6.6	7.6
Sulphate (Total)	U	2430	%	0.010	0.17	0.013	0.044
Arsenic	U	2450	mg/kg	1.0	33	18	17
Barium	U	2450	mg/kg	10	220	36	110
Cadmium	U	2450	mg/kg	0.10	2.0	1.6	2.4
Chromium	U	2450	mg/kg	1.0	19	14	13
Molybdenum	U	2450	mg/kg	2.0	4.9	3.6	3.1
Antimony	N	2450	mg/kg	2.0	4.6	< 2.0	2.5
Copper	U	2450	mg/kg	0.50	82	24	29
Mercury	U	2450	mg/kg	0.10	1.2	< 0.10	< 0.10
Nickel	U	2450	mg/kg	0.50	46	43	39
Lead	U	2450	mg/kg	0.50	410	22	140
Selenium	U	2450	mg/kg	0.20	1.2	0.64	2.3
Zinc	U	2450	mg/kg	0.50	170	65	310
Chromium (Trivalent)	N	2490	mg/kg	1.0	19	14	13
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50	< 0.50	< 0.50
Organic Matter	U	2625	%	0.40	1.4	2.9	1.0
Total Organic Carbon	U	2625	%	0.20	0.82	1.7	0.58
Mineral Oil	N	2670	mg/kg	10	71	< 10	< 10
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C8-C10	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C10-C12	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C12-C16	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C16-C21	U	2680	mg/kg	1.0	1.2	< 1.0	< 1.0
Aliphatic TPH >C21-C35	U	2680	mg/kg	1.0	55	< 1.0	< 1.0
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	15	< 1.0	< 1.0
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	71	< 5.0	< 5.0

Results - Soil

Project: Bailey Gibson

Client: O Callaghan Moran & Associates		**Chemtest Job No.:**			19-17495	19-17495	19-17495
Quotation No.:		**Chemtest Sample ID.:**			831394	831395	831396
		Sample Location:			WS24	WS24	WS24
		Sample Type:			SOIL	SOIL	SOIL
		Top Depth (m):			0.00	1.00	2.00
		Bottom Depth (m):			1.00	2.00	3.00
		Date Sampled:			21-May-2019	21-May-2019	21-May-2019
		Asbestos Lab:			COVENTRY	COVENTRY	COVENTRY
Determinand	**Accred.**	**SOP**	**Units**	**LOD**			
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C8-C10	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C10-C12	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C12-C16	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	58	< 1.0	< 1.0
Aromatic TPH >C21-C35	U	2680	mg/kg	1.0	320	< 1.0	< 1.0
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	370	< 5.0	< 5.0
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	440	< 10	< 10
Benzene	U	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0
Toluene	U	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	U	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0
m & p-Xylene	U	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0
o-Xylene	U	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0
Methyl Tert-Butyl Ether	U	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0
Naphthalene	U	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Acenaphthylene	N	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	U	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Fluorene	U	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	U	2800	mg/kg	0.10	1.3	< 0.10	< 0.10
Anthracene	U	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	U	2800	mg/kg	0.10	1.1	< 0.10	< 0.10
Pyrene	U	2800	mg/kg	0.10	0.89	< 0.10	< 0.10
Benzo[a]anthracene	U	2800	mg/kg	0.10	0.22	< 0.10	< 0.10
Chrysene	U	2800	mg/kg	0.10	0.38	< 0.10	< 0.10
Benzo[b]fluoranthene	U	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Benzo[k]fluoranthene	U	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Benzo[a]pyrene	U	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-c,d)Pyrene	U	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene	U	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Coronene	N	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Total Of 17 PAH's	N	2800	mg/kg	2.0	3.9	< 2.0	< 2.0
PCB 28	U	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010
PCB 52	U	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010
PCB 90+101	U	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010

Chemtest
The right chemistry to deliver results

Results - Soil

Project: Bailey Gibson

Client: O Callaghan Moran & Associates					**Chemtest Job No.:**	19-17495	19-17495	19-17495
Quotation No.:					**Chemtest Sample ID.:**	831394	831395	831396
					Sample Location:	WS24	WS24	WS24
					Sample Type:	SOIL	SOIL	SOIL
					Top Depth (m):	0.00	1.00	2.00
					Bottom Depth (m):	1.00	2.00	3.00
					Date Sampled:	21-May-2019	21-May-2019	21-May-2019
					Asbestos Lab:	COVENTRY	COVENTRY	COVENTRY
Determinand	**Accred.**	**SOP**	**Units**	**LOD**				
PCB 118	U	2815	mg/kg	0.010		< 0.010	< 0.010	< 0.010
PCB 153	U	2815	mg/kg	0.010		< 0.010	< 0.010	< 0.010
PCB 138	U	2815	mg/kg	0.010		< 0.010	< 0.010	< 0.010
PCB 180	U	2815	mg/kg	0.010		< 0.010	< 0.010	< 0.010
Total PCBs (7 Congeners)	N	2815	mg/kg	0.10		< 0.10	< 0.10	< 0.10
Total Phenols	U	2920	mg/kg	0.30		< 0.30	< 0.30	< 0.30

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17495						
Chemtest Sample ID:	831385						
Sample Ref:							
Sample ID:							
Sample Location:	WS19						
Top Depth(m):	0.00						
Bottom Depth(m):	1.00						
Sampling Date:	21-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	< 0.20	3	5	6
Loss On Ignition	2610	U	%	1.9	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.5	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.044	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	0.0024	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0088	0.088	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	0.0016	0.016	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	2.6	26	800	15000	25000
Fluoride	1220	U	0.30	3.0	10	150	500
Sulphate	1220	U	3.2	32	1000	20000	50000
Total Dissolved Solids	1020	N	78	780	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	35	350	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	12

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17495						
Chemtest Sample ID:	831386						
Sample Ref:							
Sample ID:							
Sample Location:	WS19						
Top Depth(m):	1.00						
Bottom Depth(m):	2.00						
Sampling Date:	21-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.31	3	5	6
Loss On Ignition	2610	U	%	1.9	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.6	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.047	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	0.0046	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.016	0.16	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	0.0022	0.022	0.06	0.7	5
Selenium	1450	U	0.0012	0.012	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	6.5	65	800	15000	25000
Fluoride	1220	U	0.29	2.9	10	150	500
Sulphate	1220	U	11	110	1000	20000	50000
Total Dissolved Solids	1020	N	91	910	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	32	320	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	11

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17495						
Chemtest Sample ID:	831387						
Sample Ref:							
Sample ID:							
Sample Location:	WS19						
Top Depth(m):	2.00						
Bottom Depth(m):	3.00						
Sampling Date:	21-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	< 0.20	3	5	6
Loss On Ignition	2610	U	%	2.8	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.6	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.068	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	0.0059	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0079	0.079	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	0.0013	0.013	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	7.8	78	800	15000	25000
Fluoride	1220	U	0.28	2.8	10	150	500
Sulphate	1220	U	4.0	40	1000	20000	50000
Total Dissolved Solids	1020	N	78	780	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	32	320	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	13

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17495						
Chemtest Sample ID:	831388						
Sample Ref:							
Sample ID:							
Sample Location:	WS23						
Top Depth(m):	0.00						
Bottom Depth(m):	1.00						
Sampling Date:	21-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.22	3	5	6
Loss On Ignition	2610	U	%	3.4	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.4	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.024	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	0.0022	< 0.050	0.5	2	25
Barium	1450	U	0.015	< 0.50	20	100	300
Cadmium	1450	U	0.00013	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	0.0013	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.024	0.24	0.5	10	30
Nickel	1450	U	0.0017	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	0.0013	0.013	0.06	0.7	5
Selenium	1450	U	0.0022	0.022	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	11	110	800	15000	25000
Fluoride	1220	U	0.25	2.5	10	150	500
Sulphate	1220	U	9.7	97	1000	20000	50000
Total Dissolved Solids	1020	N	91	900	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	38	380	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	23

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17495						
Chemtest Sample ID:	831389						
Sample Ref:							
Sample ID:							
Sample Location:	WS23						
Top Depth(m):	1.00						
Bottom Depth(m):	2.00						
Sampling Date:	21-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	1.8	3	5	6
Loss On Ignition	2610	U	%	2.1	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	49	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	5.4	100	--	--
pH	2010	U		8.6	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	< 0.0020	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	0.0057	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.012	0.12	0.5	10	30
Nickel	1450	U	0.0012	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	0.0033	0.033	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	3.8	38	800	15000	25000
Fluoride	1220	U	0.24	2.4	10	150	500
Sulphate	1220	U	4.0	40	1000	20000	50000
Total Dissolved Solids	1020	N	78	780	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	31	310	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	14

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17495						
Chemtest Sample ID:	831390						
Sample Ref:							
Sample ID:							
Sample Location:	WS23						
Top Depth(m):	2.00						
Bottom Depth(m):	3.00						
Sampling Date:	21-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	1.6	3	5	6
Loss On Ignition	2610	U	%	2.6	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.5	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.053	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	0.0023	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0086	0.086	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	0.0039	0.039	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	2.4	24	800	15000	25000
Fluoride	1220	U	0.19	1.9	10	150	500
Sulphate	1220	U	2.2	22	1000	20000	50000
Total Dissolved Solids	1020	N	72	710	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	29	290	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	14

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17495						
Chemtest Sample ID:	831391						
Sample Ref:							
Sample ID:							
Sample Location:	WS5						
Top Depth(m):	0.00						
Bottom Depth(m):	1.00						
Sampling Date:	21-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.62	3	5	6
Loss On Ignition	2610	U	%	2.1	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.3	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.010	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	0.0020	< 0.050	0.5	2	25
Barium	1450	U	0.0024	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.011	0.11	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	0.0011	0.011	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.010	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	5.2	52	800	15000	25000
Fluoride	1220	U	0.33	3.3	10	150	500
Sulphate	1220	U	5.9	59	1000	20000	50000
Total Dissolved Solids	1020	N	100	1000	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	21	210	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	19

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17495						
Chemtest Sample ID:	831392						
Sample Ref:							
Sample ID:							
Sample Location:	WS5						
Top Depth(m):	1.00						
Bottom Depth(m):	2.00						
Sampling Date:	21-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.42	3	5	6
Loss On Ignition	2610	U	%	1.9	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.6	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.019	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	0.0012	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.014	0.14	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.010	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	3.1	31	800	15000	25000
Fluoride	1220	U	0.31	3.1	10	150	500
Sulphate	1220	U	3.3	33	1000	20000	50000
Total Dissolved Solids	1020	N	85	840	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	39	390	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	14

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17495						
Chemtest Sample ID:	831393						
Sample Ref:							
Sample ID:							
Sample Location:	WS5						
Top Depth(m):	2.00						
Bottom Depth(m):	3.00						
Sampling Date:	21-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	< 0.20	3	5	6
Loss On Ignition	2610	U	%	2.1	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.7	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.079	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	0.011	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0072	0.072	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	0.0040	0.040	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	3.0	30	800	15000	25000
Fluoride	1220	U	0.20	2.0	10	150	500
Sulphate	1220	U	3.5	35	1000	20000	50000
Total Dissolved Solids	1020	N	64	640	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	37	370	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	8.8

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17495						
Chemtest Sample ID:	831394						
Sample Ref:							
Sample ID:							
Sample Location:	WS24						
Top Depth(m):	0.00						
Bottom Depth(m):	1.00						
Sampling Date:	21-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.82	3	5	6
Loss On Ignition	2610	U	%	11	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	440	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	3.9	100	--	--
pH	2010	U		7.9	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.019	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	0.0050	0.050	0.5	2	25
Barium	1450	U	0.0040	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0023	< 0.050	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	0.0050	0.050	0.5	10	50
Antimony	1450	U	0.0012	0.012	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.010	0.1	0.5	7
Zinc	1450	U	0.0012	< 0.50	4	50	200
Chloride	1220	U	5.7	57	800	15000	25000
Fluoride	1220	U	0.44	4.4	10	150	500
Sulphate	1220	U	3.9	39	1000	20000	50000
Total Dissolved Solids	1020	N	85	840	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	22	220	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	30

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17495						
Chemtest Sample ID:	831395						
Sample Ref:							
Sample ID:							
Sample Location:	WS24						
Top Depth(m):	1.00						
Bottom Depth(m):	2.00						
Sampling Date:	21-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	1.7	3	5	6
Loss On Ignition	2610	U	%	1.9	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.6	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.019	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	< 0.0010	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0088	0.088	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.010	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	3.6	36	800	15000	25000
Fluoride	1220	U	0.33	3.3	10	150	500
Sulphate	1220	U	3.4	34	1000	20000	50000
Total Dissolved Solids	1020	N	85	840	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	29	290	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	17

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17495						
Chemtest Sample ID:	831396						
Sample Ref:							
Sample ID:							
Sample Location:	WS24						
Top Depth(m):	2.00						
Bottom Depth(m):	3.00						
Sampling Date:	21-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.58	3	5	6
Loss On Ignition	2610	U	%	2.4	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.4	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.028	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	0.0037	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0023	< 0.050	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	0.0016	0.016	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	2.0	20	800	15000	25000
Fluoride	1220	U	0.17	1.7	10	150	500
Sulphate	1220	U	2.1	21	1000	20000	50000
Total Dissolved Solids	1020	N	72	710	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	26	260	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	22

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Test Methods

SOP	Title	Parameters included	Method summary
1020	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Conductivity Meter
1220	Anions, Alkalinity & Ammonium in Waters	Fluoride; Chloride; Nitrite; Nitrate; Total; Oxidisable Nitrogen (TON); Sulfate; Phosphate; Alkalinity; Ammonium	Automated colorimetric analysis using 'Aquakem 600' Discrete Analyser.
1450	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).
1610	Total/Dissolved Organic Carbon in Waters	Organic Carbon	TOC Analyser using Catalytic Oxidation
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.
2010	pH Value of Soils	pH	pH Meter
2015	Acid Neutralisation Capacity	Acid Reserve	Titration
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES
2180	Sulphur (Elemental) in Soils by HPLC	Sulphur	Dichloromethane extraction / HPLC with UV detection
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry
2300	Cyanides & Thiocyanate in Soils	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Allkaline extraction followed by colorimetric determination using Automated Flow Injection Analyser.
2325	Sulphide in Soils	Sulphide	Steam distillation with sulphuric acid / analysis by 'Aquakem 600' Discrete Analyser, using N,N–dimethyl-p-phenylenediamine.
2430	Total Sulphate in soils	Total Sulphate	Acid digestion followed by determination of sulphate in extract by ICP-OES.
2450	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.
2610	Loss on Ignition	loss on ignition (LOI)	Determination of the proportion by mass that is lost from a soil by ignition at 550°C.
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID
2680	TPH A/A Split	Aliphatics: >C5–C6, >C6–C8,>C8–C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35– C44Aromatics: >C5–C7, >C7–C8, >C8– C10, >C10–C12, >C12–C16, >C16– C21, >C21– C35, >C35– C44	Dichloromethane extraction / GCxGC FID detection

Test Methods

SOP	Title	Parameters included	Method summary
2760	Volatile Organic Compounds (VOCs) in Soils by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics.(cf. USEPA Method 8260)*please refer to UKAS schedule	Automated headspace gas chromatographic (GC) analysis of a soil sample, as received, with mass spectrometric (MS) detection of volatile organic compounds.
2800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS	Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenz[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	Dichloromethane extraction / GC-MS
2815	Polychlorinated Biphenyls (PCB) ICES7Congeners in Soils by GC-MS	ICES7 PCB congeners	Acetone/Hexane extraction / GC-MS
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and TrimethylphenolsNote: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.
640	Characterisation of Waste (Leaching)	Waste material including soil, sludges and granular waste	ComplianceTest for Leaching of Granular Waste Material and Sludge

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Report Information

Key

U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"

Comments or interpretations are beyond the scope of UKAS accreditation
The results relate only to the items tested
Uncertainty of measurement for the determinands tested are available upon request
None of the results in this report have been recovery corrected
All results are expressed on a dry weight basis
The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols
For all other tests the samples were dried at < 37°C prior to analysis
All Asbestos testing is performed at the indicated laboratory
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container
E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 45 days from the date of receipt
All water samples will be retained for 14 days from the date of receipt
Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to:
customerservices@chemtest.com

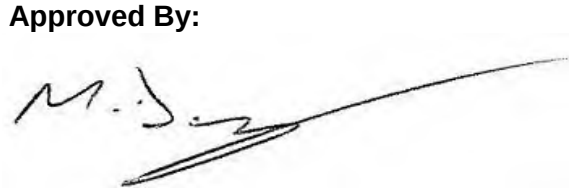
Chemtest Ltd.
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070
Email: info@chemtest.com

Final Report

Report No.:	19-17500-1
Initial Date of Issue:	10-Jun-2019
Client	O Callaghan Moran & Associates
Client Address:	15 Melbourne Business Park Model Farm Road Co. Cork IRELAND
Contact(s):	Conor McGrath
Project	Bailey Gibson

Quotation No.:		**Date Received:**	23-May-2019
Order No.:		**Date Instructed:**	23-May-2019
No. of Samples:	12		
Turnaround (Wkdays):	5	**Results Due:**	30-May-2019
Date Approved:	10-Jun-2019		

Approved By:



Details: Martin Dyer, Laboratory Manager

Results - Leachate

Project: Bailey Gibson

Client: O Callaghan Moran & Associates												
				Chemtest Job No.:		19-17500	19-17500	19-17500	19-17500	19-17500	19-17500	19-17500	19-17500
Quotation No.:				**Chemtest Sample ID.:**		831411	831412	831413	831414	831415	831416	831417	831418
				Sample Location:		WS21	WS21	WS21	WS17	WS17	WS18	WS18	WS18
				Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
				Top Depth (m):		0.00	1.00	2.00	0.00	1.00	0.00	1.00	2.00
				Bottom Depth (m):		1.00	2.00	3.00	1.00	2.00	1.00	2.00	3.00
				Date Sampled:		20-May-2019	20-May-2019	20-May-2019	20-May-2019	20-May-2019	20-May-2019	20-May-2019	20-May-2019
Determinand	**Accred.**	**SOP**	**Type**	**Units**	**LOD**								
Ammonium	U	1220	10:1	mg/l	0.050	0.24	0.33	0.45	0.27	0.40	0.38	0.29	0.17
Ammonium	N	1220	10:1	mg/kg	0.10	2.4	3.3	4.5	2.7	4.0	3.8	2.9	1.7

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Results - Leachate

Project: Bailey Gibson

Client: O Callaghan Moran & Associates				**Chemtest Job No.:**		19-17500	19-17500	19-17500	19-17500
Quotation No.:				**Chemtest Sample ID.:**		831419	831420	831421	831422
				Sample Location:		WS22	WS22	WS22	WS14
				Sample Type:		SOIL	SOIL	SOIL	SOIL
				Top Depth (m):		0.00	1.00	2.00	0.00
				Bottom Depth (m):		1.00	2.00	3.00	1.00
				Date Sampled:		20-May-2019	20-May-2019	20-May-2019	20-May-2019
Determinand	**Accred.**	**SOP**	**Type**	**Units**	**LOD**				
Ammonium	U	1220	10:1	mg/l	0.050	0.29	0.22	0.22	0.20
Ammonium	N	1220	10:1	mg/kg	0.10	2.9	2.2	2.2	2.0

Chemtest
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Results - Soil

Project: Bailey Gibson

Client: O Callaghan Moran & Associates		Chemtest Job No.:			19-17500	19-17500	19-17500	19-17500	19-17500	19-17500	19-17500	19-17500	19-17500
Quotation No.:		Chemtest Sample ID.:			831411	831412	831413	831414	831415	831416	831417	831418	831419
		Sample Location:			WS21	WS21	WS21	WS17	WS17	WS18	WS18	WS18	WS22
		Sample Type:			SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		Top Depth (m):			0.00	1.00	2.00	0.00	1.00	0.00	1.00	2.00	0.00
		Bottom Depth (m):			1.00	2.00	3.00	1.00	2.00	1.00	2.00	3.00	1.00
		Date Sampled:			20-May-2019	20-May-2019	20-May-2019	20-May-2019	20-May-2019	20-May-2019	20-May-2019	20-May-2019	20-May-2019
		Asbestos Lab:			COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY
Determinand	**Accred.**	**SOP**	**Units**	**LOD**									
ACM Type	U	2192		N/A	-	-	-	-	-	-	-	-	-
Asbestos Identification	U	2192	%	0.001	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
ACM Detection Stage	U	2192		N/A	-	-	-	-	-	-	-	-	-
Moisture	N	2030	%	0.020	10	10	7.5	11	8.6	13	11	7.9	8.0
pH	U	2010		N/A	8.7	8.6	8.3	8.7	8.6	8.5	8.6	8.5	8.7
Boron (Hot Water Soluble)	U	2120	mg/kg	0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40
Sulphur (Elemental)	U	2180	mg/kg	1.0	< 1.0	< 1.0	1.7	< 1.0	< 1.0	< 1.0	< 1.0	2.6	< 1.0
Cyanide (Total)	U	2300	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Sulphide (Easily Liberatable)	N	2325	mg/kg	0.50	7.1	7.6	5.3	6.1	9.0	5.8	7.5	8.9	7.2
Sulphate (Total)	U	2430	%	0.010	0.033	0.12	1.7	0.043	0.16	0.032	0.025	0.47	0.030
Arsenic	U	2450	mg/kg	1.0	20	23	19	21	20	19	20	18	20
Barium	U	2450	mg/kg	10	90	110	55	63	93	93	58	31	85
Cadmium	U	2450	mg/kg	0.10	1.7	2.8	1.8	2.4	3.0	1.9	2.2	1.3	1.9
Chromium	U	2450	mg/kg	1.0	12	15	15	15	14	14	17	11	11
Molybdenum	U	2450	mg/kg	2.0	4.8	4.6	5.0	4.0	4.5	3.3	3.5	3.3	3.0
Antimony	N	2450	mg/kg	2.0	2.6	2.1	< 2.0	2.1	2.0	< 2.0	2.6	< 2.0	< 2.0
Copper	U	2450	mg/kg	0.50	30	29	29	30	28	15	31	19	18
Mercury	U	2450	mg/kg	0.10	< 0.10	0.13	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Nickel	U	2450	mg/kg	0.50	47	46	46	48	44	36	49	32	35
Lead	U	2450	mg/kg	0.50	22	24	21	15	21	13	17	15	17
Selenium	U	2450	mg/kg	0.20	0.44	1.3	2.9	0.36	2.5	< 0.20	0.79	2.4	< 0.20
Zinc	U	2450	mg/kg	0.50	72	83	74	88	99	63	80	53	50
Chromium (Trivalent)	N	2490	mg/kg	1.0	12	15	15	15	14	14	17	11	11
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Organic Matter	U	2625	%	0.40	0.41	1.7	0.95	1.1	1.5	0.48	0.93	1.1	1.5
Total Organic Carbon	U	2625	%	0.20	0.24	1.0	0.55	0.63	0.84	0.28	0.54	0.63	0.89
Mineral Oil	N	2670	mg/kg	10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C8-C10	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C10-C12	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C12-C16	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C16-C21	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C21-C35	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0

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Results - Soil

Project: Bailey Gibson

Client: O Callaghan Moran & Associates		Chemtest Job No.:			19-17500	19-17500	19-17500	19-17500	19-17500	19-17500	19-17500	19-17500	19-17500
Quotation No.:		Chemtest Sample ID.:			831411	831412	831413	831414	831415	831416	831417	831418	831419
		Sample Location:			WS21	WS21	WS21	WS17	WS17	WS18	WS18	WS18	WS22
		Sample Type:			SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		Top Depth (m):			0.00	1.00	2.00	0.00	1.00	0.00	1.00	2.00	0.00
		Bottom Depth (m):			1.00	2.00	3.00	1.00	2.00	1.00	2.00	3.00	1.00
		Date Sampled:			20-May-2019	20-May-2019	20-May-2019	20-May-2019	20-May-2019	20-May-2019	20-May-2019	20-May-2019	20-May-2019
		Asbestos Lab:			COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY
Determinand	**Accred.**	**SOP**	**Units**	**LOD**									
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C8-C10	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C10-C12	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C12-C16	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C21-C35	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Benzene	U	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	U	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	U	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
m & p-Xylene	U	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-Xylene	U	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Methyl Tert-Butyl Ether	U	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Naphthalene	U	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthylene	N	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	U	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	U	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	U	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Anthracene	U	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	U	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Pyrene	U	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]anthracene	U	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Chrysene	U	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[b]fluoranthene	U	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[k]fluoranthene	U	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]pyrene	U	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-c,d)Pyrene	U	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene	U	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Coronene	N	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Of 17 PAH's	N	2800	mg/kg	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
PCB 28	U	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 52	U	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 90+101	U	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010

Chemtest
The right chemistry to deliver results

Results - Soil

Project: Bailey Gibson

Client: O Callaghan Moran & Associates					**Chemtest Job No.:**	19-17500	19-17500	19-17500	19-17500	19-17500	19-17500	19-17500	19-17500	19-17500
Quotation No.:					**Chemtest Sample ID.:**	831411	831412	831413	831414	831415	831416	831417	831418	831419
					Sample Location:	WS21	WS21	WS21	WS17	WS17	WS18	WS18	WS18	WS22
					Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
					Top Depth (m):	0.00	1.00	2.00	0.00	1.00	0.00	1.00	2.00	0.00
					Bottom Depth (m):	1.00	2.00	3.00	1.00	2.00	1.00	2.00	3.00	1.00
					Date Sampled:	20-May-2019	20-May-2019	20-May-2019	20-May-2019	20-May-2019	20-May-2019	20-May-2019	20-May-2019	20-May-2019
					Asbestos Lab:	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY
Determinand	**Accred.**	**SOP**	**Units**	**LOD**										
PCB 118	U	2815	mg/kg	0.010		< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 153	U	2815	mg/kg	0.010		< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 138	U	2815	mg/kg	0.010		< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 180	U	2815	mg/kg	0.010		< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Total PCBs (7 Congeners)	N	2815	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Phenols	U	2920	mg/kg	0.30		< 0.30	0.86	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30

Results - Soil

Project: Bailey Gibson

Client: O Callaghan Moran & Associates				**Chemtest Job No.:**	19-17500	19-17500	19-17500
Quotation No.:				**Chemtest Sample ID.:**	831420	831421	831422
				Sample Location:	WS22	WS22	WS14
				Sample Type:	SOIL	SOIL	SOIL
				Top Depth (m):	1.00	2.00	0.00
				Bottom Depth (m):	2.00	3.00	1.00
				Date Sampled:	20-May-2019	20-May-2019	20-May-2019
				Asbestos Lab:	COVENTRY	COVENTRY	COVENTRY
Determinand	**Accred.**	**SOP**	**Units**	**LOD**			
ACM Type	U	2192		N/A	-	-	-
Asbestos Identification	U	2192	%	0.001	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
ACM Detection Stage	U	2192		N/A	-	-	-
Moisture	N	2030	%	0.020	10	14	21
pH	U	2010		N/A	8.7	8.7	8.3
Boron (Hot Water Soluble)	U	2120	mg/kg	0.40	< 0.40	< 0.40	2.2
Sulphur (Elemental)	U	2180	mg/kg	1.0	< 1.0	< 1.0	4.8
Cyanide (Total)	U	2300	mg/kg	0.50	< 0.50	< 0.50	< 0.50
Sulphide (Easily Liberatable)	N	2325	mg/kg	0.50	5.2	9.5	3.6
Sulphate (Total)	U	2430	%	0.010	0.037	0.34	0.13
Arsenic	U	2450	mg/kg	1.0	17	19	27
Barium	U	2450	mg/kg	10	220	31	120
Cadmium	U	2450	mg/kg	0.10	1.9	2.2	1.7
Chromium	U	2450	mg/kg	1.0	11	12	18
Molybdenum	U	2450	mg/kg	2.0	4.1	3.8	4.1
Antimony	N	2450	mg/kg	2.0	< 2.0	< 2.0	2.6
Copper	U	2450	mg/kg	0.50	23	23	49
Mercury	U	2450	mg/kg	0.10	< 0.10	< 0.10	0.44
Nickel	U	2450	mg/kg	0.50	34	33	43
Lead	U	2450	mg/kg	0.50	18	18	130
Selenium	U	2450	mg/kg	0.20	0.70	5.6	0.84
Zinc	U	2450	mg/kg	0.50	75	64	120
Chromium (Trivalent)	N	2490	mg/kg	1.0	11	12	18
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50	< 0.50	< 0.50
Organic Matter	U	2625	%	0.40	0.91	1.1	5.7
Total Organic Carbon	U	2625	%	0.20	0.53	0.62	3.3
Mineral Oil	N	2670	mg/kg	10	< 10	14	< 10
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C8-C10	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C10-C12	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C12-C16	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C16-C21	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C21-C35	U	2680	mg/kg	1.0	< 1.0	14	< 1.0
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0	14	< 5.0

Chemtest
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Results - Soil

Project: Bailey Gibson

Client: O Callaghan Moran & Associates			**Chemtest Job No.:**		19-17500	19-17500	19-17500
Quotation No.:			**Chemtest Sample ID.:**		831420	831421	831422
			Sample Location:		WS22	WS22	WS14
			Sample Type:		SOIL	SOIL	SOIL
			Top Depth (m):		1.00	2.00	0.00
			Bottom Depth (m):		2.00	3.00	1.00
			Date Sampled:		20-May-2019	20-May-2019	20-May-2019
			Asbestos Lab:		COVENTRY	COVENTRY	COVENTRY
Determinand	**Accred.**	**SOP**	**Units**	**LOD**			
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C8-C10	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C10-C12	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C12-C16	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C21-C35	U	2680	mg/kg	1.0	< 1.0	36	< 1.0
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0	37	< 5.0
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	< 10	51	< 10
Benzene	U	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0
Toluene	U	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	U	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0
m & p-Xylene	U	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0
o-Xylene	U	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0
Methyl Tert-Butyl Ether	U	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0
Naphthalene	U	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Acenaphthylene	N	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	U	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Fluorene	U	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	U	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Anthracene	U	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	U	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Pyrene	U	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Benzo[a]anthracene	U	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Chrysene	U	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Benzo[b]fluoranthene	U	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Benzo[k]fluoranthene	U	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Benzo[a]pyrene	U	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-c,d)Pyrene	U	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene	U	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Coronene	N	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Total Of 17 PAH's	N	2800	mg/kg	2.0	< 2.0	< 2.0	< 2.0
PCB 28	U	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010
PCB 52	U	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010
PCB 90+101	U	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010

Chemtest
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Results - Soil

Project: Bailey Gibson

Client: O Callaghan Moran & Associates					**Chemtest Job No.:**	19-17500	19-17500	19-17500
Quotation No.:					**Chemtest Sample ID.:**	831420	831421	831422
					Sample Location:	WS22	WS22	WS14
					Sample Type:	SOIL	SOIL	SOIL
					Top Depth (m):	1.00	2.00	0.00
					Bottom Depth (m):	2.00	3.00	1.00
					Date Sampled:	20-May-2019	20-May-2019	20-May-2019
					Asbestos Lab:	COVENTRY	COVENTRY	COVENTRY
Determinand	**Accred.**	**SOP**	**Units**	**LOD**				
PCB 118	U	2815	mg/kg	0.010		< 0.010	< 0.010	< 0.010
PCB 153	U	2815	mg/kg	0.010		< 0.010	< 0.010	< 0.010
PCB 138	U	2815	mg/kg	0.010		< 0.010	< 0.010	< 0.010
PCB 180	U	2815	mg/kg	0.010		< 0.010	< 0.010	< 0.010
Total PCBs (7 Congeners)	N	2815	mg/kg	0.10		< 0.10	< 0.10	< 0.10
Total Phenols	U	2920	mg/kg	0.30		< 0.30	< 0.30	< 0.30

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17500						
Chemtest Sample ID:	831411						
Sample Ref:							
Sample ID:							
Sample Location:	WS21						
Top Depth(m):	0.00						
Bottom Depth(m):	1.00						
Sampling Date:	20-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.24	3	5	6
Loss On Ignition	2610	U	%	2.1	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.7	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.081	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	0.0014	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	0.00071	0.0071	0.01	0.2	2
Molybdenum	1450	U	0.0016	< 0.050	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.010	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	1.4	14	800	15000	25000
Fluoride	1220	U	0.13	1.3	10	150	500
Sulphate	1220	U	2.2	22	1000	20000	50000
Total Dissolved Solids	1020	N	44	440	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	33	330	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	10

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17500						
Chemtest Sample ID:	831412						
Sample Ref:							
Sample ID:							
Sample Location:	WS21						
Top Depth(m):	1.00						
Bottom Depth(m):	2.00						
Sampling Date:	20-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	1.0	3	5	6
Loss On Ignition	2610	U	%	2.2	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.6	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.082	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	0.0016	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	0.00058	0.0058	0.01	0.2	2
Molybdenum	1450	U	0.0018	< 0.050	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.010	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	2.2	22	800	15000	25000
Fluoride	1220	U	0.12	1.2	10	150	500
Sulphate	1220	U	5.2	52	1000	20000	50000
Total Dissolved Solids	1020	N	46	450	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	37	370	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	10

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17500						
Chemtest Sample ID:	831413						
Sample Ref:							
Sample ID:							
Sample Location:	WS21						
Top Depth(m):	2.00						
Bottom Depth(m):	3.00						
Sampling Date:	20-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.55	3	5	6
Loss On Ignition	2610	U	%	2.1	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.3	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.057	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	0.0027	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0024	< 0.050	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	0.018	0.18	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	5.4	54	800	15000	25000
Fluoride	1220	U	0.10	1.0	10	150	500
Sulphate	1220	U	30	300	1000	20000	50000
Total Dissolved Solids	1020	N	78	780	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	39	390	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	7.5

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17500						
Chemtest Sample ID:	831414						
Sample Ref:							
Sample ID:							
Sample Location:	WS17						
Top Depth(m):	0.00						
Bottom Depth(m):	1.00						
Sampling Date:	20-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.63	3	5	6
Loss On Ignition	2610	U	%	1.8	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.7	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.054	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	0.0014	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0024	< 0.050	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	0.0013	0.013	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.12	1.2	10	150	500
Sulphate	1220	U	4.4	44	1000	20000	50000
Total Dissolved Solids	1020	N	46	460	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	39	390	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	11

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17500						
Chemtest Sample ID:	831415						
Sample Ref:							
Sample ID:							
Sample Location:	WS17						
Top Depth(m):	1.00						
Bottom Depth(m):	2.00						
Sampling Date:	20-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.84	3	5	6
Loss On Ignition	2610	U	%	2.0	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.6	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.064	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	0.0010	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0033	< 0.050	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.010	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	2.1	21	800	15000	25000
Fluoride	1220	U	0.13	1.3	10	150	500
Sulphate	1220	U	3.6	36	1000	20000	50000
Total Dissolved Solids	1020	N	42	420	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	40	400	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	8.6

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17500						
Chemtest Sample ID:	831416						
Sample Ref:							
Sample ID:							
Sample Location:	WS18						
Top Depth(m):	0.00						
Bottom Depth(m):	1.00						
Sampling Date:	20-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.28	3	5	6
Loss On Ignition	2610	U	%	1.9	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.5	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.035	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	0.0012	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0020	< 0.050	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.010	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	1.4	14	800	15000	25000
Fluoride	1220	U	0.13	1.3	10	150	500
Sulphate	1220	U	1.8	18	1000	20000	50000
Total Dissolved Solids	1020	N	44	440	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	41	410	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	13

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17500						
Chemtest Sample ID:	831417						
Sample Ref:							
Sample ID:							
Sample Location:	WS18						
Top Depth(m):	1.00						
Bottom Depth(m):	2.00						
Sampling Date:	20-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.54	3	5	6
Loss On Ignition	2610	U	%	2.2	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.6	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.075	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	0.0021	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0018	< 0.050	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.010	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	11	110	800	15000	25000
Fluoride	1220	U	0.12	1.2	10	150	500
Sulphate	1220	U	1.7	17	1000	20000	50000
Total Dissolved Solids	1020	N	39	390	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	35	350	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	11

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17500						
Chemtest Sample ID:	831418						
Sample Ref:							
Sample ID:							
Sample Location:	WS18						
Top Depth(m):	2.00						
Bottom Depth(m):	3.00						
Sampling Date:	20-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.63	3	5	6
Loss On Ignition	2610	U	%	2.1	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.5	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.16	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	0.0030	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0019	< 0.050	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	0.0019	0.019	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	7.8	78	800	15000	25000
Fluoride	1220	U	0.099	< 1.0	10	150	500
Sulphate	1220	U	10	100	1000	20000	50000
Total Dissolved Solids	1020	N	47	470	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	38	380	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	7.9

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17500						
Chemtest Sample ID:	831419						
Sample Ref:							
Sample ID:							
Sample Location:	WS22						
Top Depth(m):	0.00						
Bottom Depth(m):	1.00						
Sampling Date:	20-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.89	3	5	6
Loss On Ignition	2610	U	%	1.5	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.7	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.12	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	0.0015	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0020	< 0.050	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.010	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	1.2	12	800	15000	25000
Fluoride	1220	U	0.18	1.8	10	150	500
Sulphate	1220	U	1.5	15	1000	20000	50000
Total Dissolved Solids	1020	N	42	420	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	37	370	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	8.0

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17500						
Chemtest Sample ID:	831420						
Sample Ref:							
Sample ID:							
Sample Location:	WS22						
Top Depth(m):	1.00						
Bottom Depth(m):	2.00						
Sampling Date:	20-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.53	3	5	6
Loss On Ignition	2610	U	%	2.0	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.7	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.14	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	0.0012	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0041	< 0.050	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.010	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	1.5	15	10	150	500
Sulphate	1220	U	1.4	14	1000	20000	50000
Total Dissolved Solids	1020	N	36	360	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	34	340	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	10

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17500						
Chemtest Sample ID:	831421						
Sample Ref:							
Sample ID:							
Sample Location:	WS22						
Top Depth(m):	2.00						
Bottom Depth(m):	3.00						
Sampling Date:	20-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.62	3	5	6
Loss On Ignition	2610	U	%	1.8	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	51	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.7	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.11	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	0.0041	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0026	< 0.050	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	0.0043	0.043	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.10	1.0	10	150	500
Sulphate	1220	U	2.8	28	1000	20000	50000
Total Dissolved Solids	1020	N	37	370	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	37	370	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	14

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17500						
Chemtest Sample ID:	831422						
Sample Ref:							
Sample ID:							
Sample Location:	WS14						
Top Depth(m):	0.00						
Bottom Depth(m):	1.00						
Sampling Date:	20-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	3.3	3	5	6
Loss On Ignition	2610	U	%	6.4	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.3	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.028	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	0.0026	< 0.050	0.5	2	25
Barium	1450	U	0.0015	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0032	< 0.050	0.5	10	30
Nickel	1450	U	0.0018	< 0.050	0.4	10	40
Lead	1450	U	0.0013	0.013	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.010	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	1.1	11	800	15000	25000
Fluoride	1220	U	0.12	1.2	10	150	500
Sulphate	1220	U	5.9	59	1000	20000	50000
Total Dissolved Solids	1020	N	48	470	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	24	240	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	21

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Test Methods

SOP	Title	Parameters included	Method summary
1020	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Conductivity Meter
1220	Anions, Alkalinity & Ammonium in Waters	Fluoride; Chloride; Nitrite; Nitrate; Total; Oxidisable Nitrogen (TON); Sulfate; Phosphate; Alkalinity; Ammonium	Automated colorimetric analysis using 'Aquakem 600' Discrete Analyser.
1450	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).
1610	Total/Dissolved Organic Carbon in Waters	Organic Carbon	TOC Analyser using Catalytic Oxidation
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.
2010	pH Value of Soils	pH	pH Meter
2015	Acid Neutralisation Capacity	Acid Reserve	Titration
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES
2180	Sulphur (Elemental) in Soils by HPLC	Sulphur	Dichloromethane extraction / HPLC with UV detection
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry
2300	Cyanides & Thiocyanate in Soils	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Allkaline extraction followed by colorimetric determination using Automated Flow Injection Analyser.
2325	Sulphide in Soils	Sulphide	Steam distillation with sulphuric acid / analysis by 'Aquakem 600' Discrete Analyser, using N,N–dimethyl-p-phenylenediamine.
2430	Total Sulphate in soils	Total Sulphate	Acid digestion followed by determination of sulphate in extract by ICP-OES.
2450	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.
2610	Loss on Ignition	loss on ignition (LOI)	Determination of the proportion by mass that is lost from a soil by ignition at 550°C.
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID
2680	TPH A/A Split	Aliphatics: >C5–C6, >C6–C8,>C8–C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35– C44Aromatics: >C5–C7, >C7–C8, >C8– C10, >C10–C12, >C12–C16, >C16– C21, >C21– C35, >C35– C44	Dichloromethane extraction / GCxGC FID detection

Test Methods

SOP	Title	Parameters included	Method summary
2760	Volatile Organic Compounds (VOCs) in Soils by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics.(cf. USEPA Method 8260)*please refer to UKAS schedule	Automated headspace gas chromatographic (GC) analysis of a soil sample, as received, with mass spectrometric (MS) detection of volatile organic compounds.
2800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS	Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenz[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	Dichloromethane extraction / GC-MS
2815	Polychlorinated Biphenyls (PCB) ICES7Congeners in Soils by GC-MS	ICES7 PCB congeners	Acetone/Hexane extraction / GC-MS
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and TrimethylphenolsNote: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.
640	Characterisation of Waste (Leaching)	Waste material including soil, sludges and granular waste	ComplianceTest for Leaching of Granular Waste Material and Sludge

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Report Information

Key

U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"

Comments or interpretations are beyond the scope of UKAS accreditation
The results relate only to the items tested
Uncertainty of measurement for the determinands tested are available upon request
None of the results in this report have been recovery corrected
All results are expressed on a dry weight basis
The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols
For all other tests the samples were dried at < 37°C prior to analysis
All Asbestos testing is performed at the indicated laboratory
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container
E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 45 days from the date of receipt
All water samples will be retained for 14 days from the date of receipt
Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to:
customerservices@chemtest.com

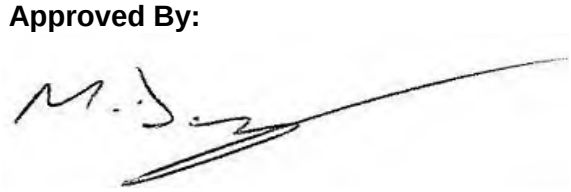
Chemtest Ltd.
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070
Email: info@chemtest.com

Final Report

Report No.:	19-17504-1
Initial Date of Issue:	10-Jun-2019
Client	O Callaghan Moran & Associates
Client Address:	15 Melbourne Business Park Model Farm Road Co. Cork IRELAND
Contact(s):	Conor McGrath
Project	Bailey Gibson

Quotation No.:		**Date Received:**	23-May-2019
Order No.:		**Date Instructed:**	23-May-2019
No. of Samples:	2		
Turnaround (Wkdays):	5	**Results Due:**	30-May-2019
Date Approved:	10-Jun-2019		

Approved By:



Details: Martin Dyer, Laboratory Manager

Results - Leachate

Project: Bailey Gibson

Client: O Callaghan Moran & Associates				**Chemtest Job No.:**		19-17504	19-17504
Quotation No.:				**Chemtest Sample ID.:**		831434	831435
				Sample Location:		WS14	WS14
				Sample Type:		SOIL	SOIL
				Top Depth (m):		1.00	2.00
				Bottom Depth (m):		2.00	3.00
				Date Sampled:		20-May-2019	20-May-2019
Determinand	**Accred.**	**SOP**	**Type**	**Units**	**LOD**		
Ammonium	U	1220	10:1	mg/l	0.050	0.21	0.23
Ammonium	N	1220	10:1	mg/kg	0.10	2.1	2.3

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Results - Soil

Project: Bailey Gibson

Client: O Callaghan Moran & Associates				**Chemtest Job No.:**	19-17504	19-17504
Quotation No.:				**Chemtest Sample ID.:**	831434	831435
				Sample Location:	WS14	WS14
				Sample Type:	SOIL	SOIL
				Top Depth (m):	1.00	2.00
				Bottom Depth (m):	2.00	3.00
				Date Sampled:	20-May-2019	20-May-2019
				Asbestos Lab:	COVENTRY	COVENTRY
Determinand	**Accred.**	**SOP**	**Units**	**LOD**		
ACM Type	U	2192		N/A	-	-
Asbestos Identification	U	2192	%	0.001	No Asbestos Detected	No Asbestos Detected
ACM Detection Stage	U	2192		N/A	-	-
Moisture	N	2030	%	0.020	10	11
pH	U	2010		N/A	8.8	8.6
Boron (Hot Water Soluble)	U	2120	mg/kg	0.40	< 0.40	< 0.40
Sulphur (Elemental)	U	2180	mg/kg	1.0	< 1.0	< 1.0
Cyanide (Total)	U	2300	mg/kg	0.50	< 0.50	< 0.50
Sulphide (Easily Liberatable)	N	2325	mg/kg	0.50	6.5	14
Sulphate (Total)	U	2430	%	0.010	0.026	0.14
Arsenic	U	2450	mg/kg	1.0	17	19
Barium	U	2450	mg/kg	10	110	54
Cadmium	U	2450	mg/kg	0.10	1.7	2.2
Chromium	U	2450	mg/kg	1.0	12	13
Molybdenum	U	2450	mg/kg	2.0	3.9	3.7
Antimony	N	2450	mg/kg	2.0	< 2.0	< 2.0
Copper	U	2450	mg/kg	0.50	30	25
Mercury	U	2450	mg/kg	0.10	< 0.10	< 0.10
Nickel	U	2450	mg/kg	0.50	41	41
Lead	U	2450	mg/kg	0.50	25	19
Selenium	U	2450	mg/kg	0.20	0.81	3.1
Zinc	U	2450	mg/kg	0.50	78	70
Chromium (Trivalent)	N	2490	mg/kg	1.0	12	13
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50	< 0.50
Organic Matter	U	2625	%	0.40	1.3	0.59
Total Organic Carbon	U	2625	%	0.20	0.74	0.34
Mineral Oil	N	2670	mg/kg	10	35	< 10
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	< 1.0	< 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0
Aliphatic TPH >C8-C10	U	2680	mg/kg	1.0	< 1.0	< 1.0
Aliphatic TPH >C10-C12	U	2680	mg/kg	1.0	< 1.0	< 1.0
Aliphatic TPH >C12-C16	U	2680	mg/kg	1.0	2.5	< 1.0
Aliphatic TPH >C16-C21	U	2680	mg/kg	1.0	1.2	< 1.0
Aliphatic TPH >C21-C35	U	2680	mg/kg	1.0	32	< 1.0
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	35	< 5.0

Chemtest
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Results - Soil

Project: Bailey Gibson

Client: O Callaghan Moran & Associates		**Chemtest Job No.:**			19-17504	19-17504
Quotation No.:		**Chemtest Sample ID.:**			831434	831435
		Sample Location:			WS14	WS14
		Sample Type:			SOIL	SOIL
		Top Depth (m):			1.00	2.00
		Bottom Depth (m):			2.00	3.00
		Date Sampled:			20-May-2019	20-May-2019
		Asbestos Lab:			COVENTRY	COVENTRY
Determinand	**Accred.**	**SOP**	**Units**	**LOD**		
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0	< 1.0	< 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0
Aromatic TPH >C8-C10	U	2680	mg/kg	1.0	< 1.0	< 1.0
Aromatic TPH >C10-C12	U	2680	mg/kg	1.0	< 1.0	< 1.0
Aromatic TPH >C12-C16	U	2680	mg/kg	1.0	< 1.0	< 1.0
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	1.7	< 1.0
Aromatic TPH >C21-C35	U	2680	mg/kg	1.0	31	< 1.0
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	34	< 5.0
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	69	< 10
Benzene	U	2760	µg/kg	1.0	< 1.0	< 1.0
Toluene	U	2760	µg/kg	1.0	< 1.0	< 1.0
Ethylbenzene	U	2760	µg/kg	1.0	< 1.0	< 1.0
m & p-Xylene	U	2760	µg/kg	1.0	< 1.0	< 1.0
o-Xylene	U	2760	µg/kg	1.0	< 1.0	< 1.0
Methyl Tert-Butyl Ether	U	2760	µg/kg	1.0	< 1.0	< 1.0
Naphthalene	U	2800	mg/kg	0.10	< 0.10	< 0.10
Acenaphthylene	N	2800	mg/kg	0.10	< 0.10	< 0.10
Acenaphthene	U	2800	mg/kg	0.10	< 0.10	< 0.10
Fluorene	U	2800	mg/kg	0.10	< 0.10	< 0.10
Phenanthrene	U	2800	mg/kg	0.10	< 0.10	< 0.10
Anthracene	U	2800	mg/kg	0.10	< 0.10	< 0.10
Fluoranthene	U	2800	mg/kg	0.10	< 0.10	< 0.10
Pyrene	U	2800	mg/kg	0.10	< 0.10	< 0.10
Benzo[a]anthracene	U	2800	mg/kg	0.10	< 0.10	< 0.10
Chrysene	U	2800	mg/kg	0.10	< 0.10	< 0.10
Benzo[b]fluoranthene	U	2800	mg/kg	0.10	< 0.10	< 0.10
Benzo[k]fluoranthene	U	2800	mg/kg	0.10	< 0.10	< 0.10
Benzo[a]pyrene	U	2800	mg/kg	0.10	< 0.10	< 0.10
Indeno(1,2,3-c,d)Pyrene	U	2800	mg/kg	0.10	< 0.10	< 0.10
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene	U	2800	mg/kg	0.10	< 0.10	< 0.10
Coronene	N	2800	mg/kg	0.10	< 0.10	< 0.10
Total Of 17 PAH's	N	2800	mg/kg	2.0	< 2.0	< 2.0
PCB 28	U	2815	mg/kg	0.010	< 0.010	< 0.010
PCB 52	U	2815	mg/kg	0.010	< 0.010	< 0.010
PCB 90+101	U	2815	mg/kg	0.010	< 0.010	< 0.010

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Results - Soil

Project: Bailey Gibson

Client: O Callaghan Moran & Associates					**Chemtest Job No.:**	19-17504	19-17504
Quotation No.:					**Chemtest Sample ID.:**	831434	831435
					Sample Location:	WS14	WS14
					Sample Type:	SOIL	SOIL
					Top Depth (m):	1.00	2.00
					Bottom Depth (m):	2.00	3.00
					Date Sampled:	20-May-2019	20-May-2019
					Asbestos Lab:	COVENTRY	COVENTRY
Determinand	**Accred.**	**SOP**	**Units**	**LOD**			
PCB 118	U	2815	mg/kg	0.010		< 0.010	< 0.010
PCB 153	U	2815	mg/kg	0.010		< 0.010	< 0.010
PCB 138	U	2815	mg/kg	0.010		< 0.010	< 0.010
PCB 180	U	2815	mg/kg	0.010		< 0.010	< 0.010
Total PCBs (7 Congeners)	N	2815	mg/kg	0.10		< 0.10	< 0.10
Total Phenols	U	2920	mg/kg	0.30		< 0.30	< 0.30

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17504						
Chemtest Sample ID:	831434						
Sample Ref:							
Sample ID:							
Sample Location:	WS14						
Top Depth(m):	1.00						
Bottom Depth(m):	2.00						
Sampling Date:	20-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.74	3	5	6
Loss On Ignition	2610	U	%	2.0	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	69	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.8	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.12	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	< 0.0010	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0016	< 0.050	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.010	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.12	1.2	10	150	500
Sulphate	1220	U	1.9	19	1000	20000	50000
Total Dissolved Solids	1020	N	42	420	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	34	340	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	10

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17504						
Chemtest Sample ID:	831435						
Sample Ref:							
Sample ID:							
Sample Location:	WS14						
Top Depth(m):	2.00						
Bottom Depth(m):	3.00						
Sampling Date:	20-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.34	3	5	6
Loss On Ignition	2610	U	%	2.4	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.6	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.12	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	0.0069	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0027	< 0.050	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	0.0032	0.032	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	1.2	12	800	15000	25000
Fluoride	1220	U	0.13	1.3	10	150	500
Sulphate	1220	U	2.2	22	1000	20000	50000
Total Dissolved Solids	1020	N	44	440	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	34	340	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	11

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Test Methods

SOP	Title	Parameters included	Method summary
1020	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Conductivity Meter
1220	Anions, Alkalinity & Ammonium in Waters	Fluoride; Chloride; Nitrite; Nitrate; Total; Oxidisable Nitrogen (TON); Sulfate; Phosphate; Alkalinity; Ammonium	Automated colorimetric analysis using 'Aquakem 600' Discrete Analyser.
1450	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).
1610	Total/Dissolved Organic Carbon in Waters	Organic Carbon	TOC Analyser using Catalytic Oxidation
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.
2010	pH Value of Soils	pH	pH Meter
2015	Acid Neutralisation Capacity	Acid Reserve	Titration
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES
2180	Sulphur (Elemental) in Soils by HPLC	Sulphur	Dichloromethane extraction / HPLC with UV detection
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry
2300	Cyanides & Thiocyanate in Soils	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Allkaline extraction followed by colorimetric determination using Automated Flow Injection Analyser.
2325	Sulphide in Soils	Sulphide	Steam distillation with sulphuric acid / analysis by 'Aquakem 600' Discrete Analyser, using N,N–dimethyl-p-phenylenediamine.
2430	Total Sulphate in soils	Total Sulphate	Acid digestion followed by determination of sulphate in extract by ICP-OES.
2450	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.
2610	Loss on Ignition	loss on ignition (LOI)	Determination of the proportion by mass that is lost from a soil by ignition at 550°C.
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID
2680	TPH A/A Split	Aliphatics: >C5–C6, >C6–C8,>C8–C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35– C44Aromatics: >C5–C7, >C7–C8, >C8– C10, >C10–C12, >C12–C16, >C16– C21, >C21– C35, >C35– C44	Dichloromethane extraction / GCxGC FID detection

Test Methods

SOP	Title	Parameters included	Method summary
2760	Volatile Organic Compounds (VOCs) in Soils by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics.(cf. USEPA Method 8260)*please refer to UKAS schedule	Automated headspace gas chromatographic (GC) analysis of a soil sample, as received, with mass spectrometric (MS) detection of volatile organic compounds.
2800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS	Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenz[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	Dichloromethane extraction / GC-MS
2815	Polychlorinated Biphenyls (PCB) ICES7Congeners in Soils by GC-MS	ICES7 PCB congeners	Acetone/Hexane extraction / GC-MS
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and TrimethylphenolsNote: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.
640	Characterisation of Waste (Leaching)	Waste material including soil, sludges and granular waste	ComplianceTest for Leaching of Granular Waste Material and Sludge

Report Information

Key

U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"

Comments or interpretations are beyond the scope of UKAS accreditation
The results relate only to the items tested
Uncertainty of measurement for the determinands tested are available upon request
None of the results in this report have been recovery corrected
All results are expressed on a dry weight basis
The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols
For all other tests the samples were dried at < 37°C prior to analysis
All Asbestos testing is performed at the indicated laboratory
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container
E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 45 days from the date of receipt
All water samples will be retained for 14 days from the date of receipt
Charges may apply to extended sample storage

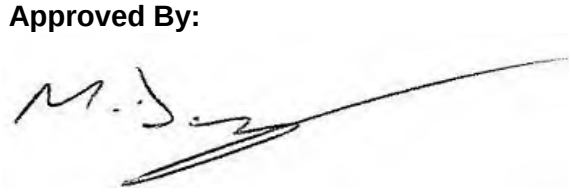
If you require extended retention of samples, please email your requirements to:
customerservices@chemtest.com

Chemtest Ltd.
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070
Email: info@chemtest.com

Final Report

Report No.:	19-17844-1		
Initial Date of Issue:	18-Jun-2019		
Client	O Callaghan Moran & Associates		
Client Address:	15 Melbourne Business Park Model Farm Road Co. Cork IRELAND		
Contact(s):	Conor McGrath		
Project	Bailey Gibson		
Quotation No.:	Q18-15064	**Date Received:**	28-May-2019
Order No.:		**Date Instructed:**	28-May-2019
No. of Samples:	39		
Turnaround (Wkdays):	5	**Results Due:**	03-Jun-2019
Date Approved:	18-Jun-2019		

Approved By:



Details: Martin Dyer, Laboratory Manager

Results - Leachate

Project: Bailey Gibson

Client: O Callaghan Moran & Associates						Chemtest Job No.:	19-17844	19-17844	19-17844	19-17844	19-17844	19-17844	19-17844	19-17844
Quotation No.: Q18-15064						Chemtest Sample ID.:	832873	832874	832875	832876	832877	832878	832879	832880
						Sample Location:	WS-2	WS-2	WS-2	WS-4	WS-4	WS-4	WS-7	WS-7
						Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
						Top Depth (m):	0	1	2	0	1	2	0	1
						Bottom Depth (m):	1	2	3	1	2	3	1	2
						Date Sampled:	22-May-2019	22-May-2019	22-May-2019	23-May-2019	23-May-2019	23-May-2019	23-May-2019	23-May-2019
Determinand	**Accred.**	**SOP**	**Type**	**Units**	**LOD**									
Ammonium	U	1220	10:1	mg/l	0.050		0.12	0.17	0.097	0.099	0.076	0.092	0.12	0.13
Ammonium	N	1220	10:1	mg/kg	0.10		1.2	1.7	0.97	0.99	0.76	0.92	1.2	1.3

Results - Leachate

Project: Bailey Gibson

Client: O Callaghan Moran & Associates				**Chemtest Job No.:**		19-17844	19-17844	19-17844	19-17844	19-17844	19-17844	19-17844	19-17844
Quotation No.: Q18-15064				**Chemtest Sample ID.:**		832881	832882	832883	832884	832885	832886	832887	832888
				Sample Location:		WS-7	WS-9	WS-9	WS-9	WS-10	WS-10	WS-10	WS-11
				Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
				Top Depth (m):		2	0	1	2	0	1	2	0
				Bottom Depth (m):		3	1	2	3	1	2	3	1
				Date Sampled:		23-May-2019	22-May-2019	22-May-2019	22-May-2019	22-May-2019	22-May-2019	22-May-2019	22-May-2019
Determinand	**Accred.**	**SOP**	**Type**	**Units**	**LOD**								
Ammonium	U	1220	10:1	mg/l	0.050	0.15	0.58	0.31	0.13	0.17	0.16	0.11	0.13
Ammonium	N	1220	10:1	mg/kg	0.10	1.5	5.8	3.1	1.3	1.7	1.6	1.1	1.3

Results - Leachate

Project: Bailey Gibson

Client: O Callaghan Moran & Associates				**Chemtest Job No.:**		19-17844	19-17844	19-17844	19-17844	19-17844	19-17844	19-17844	19-17844
Quotation No.: Q18-15064				**Chemtest Sample ID.:**		832889	832890	832891	832892	832893	832894	832895	832896
				Sample Location:		WS-11	WS-11	WS-12	WS-12	WS-12	WS-13	WS-13	WS-13
				Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
				Top Depth (m):		1	2	0	1	2	0	1	2
				Bottom Depth (m):		2	3	1	2	3	1	2	3
				Date Sampled:		22-May-2019	22-May-2019	22-May-2019	22-May-2019	22-May-2019	23-May-2019	23-May-2019	23-May-2019
Determinand	**Accred.**	**SOP**	**Type**	**Units**	**LOD**								
Ammonium	U	1220	10:1	mg/l	0.050	0.11	0.12	0.25	0.080	0.11	0.14	0.15	0.13
Ammonium	N	1220	10:1	mg/kg	0.10	1.1	1.2	2.5	0.80	1.1	1.4	1.5	1.3

Results - Leachate

Project: Bailey Gibson

Client: O Callaghan Moran & Associates				**Chemtest Job No.:**		19-17844	19-17844	19-17844	19-17844	19-17844	19-17844	19-17844	19-17844
Quotation No.: Q18-15064				**Chemtest Sample ID.:**		832897	832898	832899	832900	832901	832902	832903	832904
				Sample Location:		WS-15	WS-15	WS-15	WS-16	WS-16	WS-16	WS-20	WS-20
				Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
				Top Depth (m):		0	1	2	0	1	2	0	1
				Bottom Depth (m):		1	2	3	1	2	3	1	2
				Date Sampled:		21-May-2019	21-May-2019	21-May-2019	21-May-2019	21-May-2019	21-May-2019	21-May-2019	21-May-2019
Determinand	**Accred.**	**SOP**	**Type**	**Units**	**LOD**								
Ammonium	U	1220	10:1	mg/l	0.050	0.26	0.21	0.23	0.19	0.23	0.23	0.33	0.33
Ammonium	N	1220	10:1	mg/kg	0.10	2.6	2.1	2.3	1.9	2.3	2.3	3.3	3.3

Results - Leachate

Project: Bailey Gibson

Client: O Callaghan Moran & Associates				**Chemtest Job No.:**		19-17844	19-17844	19-17844	19-17844	19-17844	19-17844	19-17844
Quotation No.: Q18-15064				**Chemtest Sample ID.:**		832905	832906	832907	832908	832909	832910	832911
				Sample Location:		WS-20	WS-27	WS-27	WS-27	WS-28	WS-28	WS-28
				Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
				Top Depth (m):		2	0	1	2	0	1	2
				Bottom Depth (m):		3	1	2	3	1	2	3
				Date Sampled:		21-May-2019	21-May-2019	21-May-2019	21-May-2019	22-May-2019	22-May-2019	22-May-2019
Determinand	**Accred.**	**SOP**	**Type**	**Units**	**LOD**							
Ammonium	U	1220	10:1	mg/l	0.050	0.32	0.42	0.56	0.33	0.46	0.54	0.45
Ammonium	N	1220	10:1	mg/kg	0.10	3.2	4.2	5.6	3.3	4.6	5.4	4.5

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The right chemistry to deliver results

Results - Soil

Project: Bailey Gibson

Client: O Callaghan Moran & Associates		Chemtest Job No.:			19-17844	19-17844	19-17844	19-17844	19-17844	19-17844	19-17844	19-17844	19-17844
Quotation No.: Q18-15064		Chemtest Sample ID.:			832873	832874	832875	832876	832877	832878	832879	832880	832881
		Sample Location:			WS-2	WS-2	WS-2	WS-4	WS-4	WS-4	WS-7	WS-7	WS-7
		Sample Type:			SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		Top Depth (m):			0	1	2	0	1	2	0	1	2
		Bottom Depth (m):			1	2	3	1	2	3	1	2	3
		Date Sampled:			22-May-2019	22-May-2019	22-May-2019	23-May-2019	23-May-2019	23-May-2019	23-May-2019	23-May-2019	23-May-2019
		Asbestos Lab:			COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY
Determinand	**Accred.**	**SOP**	**Units**	**LOD**									
ACM Type	U	2192		N/A	-	-	-	-	-	-	-	-	-
Asbestos Identification	U	2192	%	0.001	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
ACM Detection Stage	U	2192		N/A	-	-	-	-	-	-	-	-	-
Moisture	N	2030	%	0.020	22	9.7	10	18	12	9.6	21	11	12
pH	U	2010		N/A	8.7	9.1	9.0	8.6	8.8	8.9	8.8	8.7	8.8
Boron (Hot Water Soluble)	U	2120	mg/kg	0.40	1.2	< 0.40	0.68	1.4	0.46	< 0.40	0.87	0.41	< 0.40
Sulphur (Elemental)	U	2180	mg/kg	1.0	< 1.0	< 1.0	2.2	5.3	< 1.0	< 1.0	1.3	1.8	1.0
Cyanide (Total)	U	2300	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Sulphide (Easily Liberatable)	N	2325	mg/kg	0.50	1.0	6.3	7.0	5.2	7.6	7.6	2.5	7.7	8.7
Sulphate (Total)	U	2430	%	0.010	0.050	0.027	0.049	0.094	0.030	0.25	0.092	0.047	0.013
Arsenic	U	2450	mg/kg	1.0	14	13	19	31	20	21	17	22	18
Barium	U	2450	mg/kg	10	180	26	58	140	53	110	130	68	65
Cadmium	U	2450	mg/kg	0.10	2.8	0.87	1.4	1.7	1.8	1.9	3.0	2.1	2.0
Chromium	U	2450	mg/kg	1.0	15	15	16	18	11	13	22	13	12
Molybdenum	U	2450	mg/kg	2.0	6.1	2.3	3.1	6.0	3.6	3.8	7.4	4.2	3.5
Antimony	N	2450	mg/kg	2.0	4.3	3.2	2.8	3.7	2.5	2.4	2.8	2.1	2.0
Copper	U	2450	mg/kg	0.50	23	17	32	68	25	24	32	28	26
Mercury	U	2450	mg/kg	0.10	0.13	< 0.10	0.53	0.43	< 0.10	< 0.10	0.10	< 0.10	< 0.10
Nickel	U	2450	mg/kg	0.50	34	24	33	46	37	37	53	46	40
Lead	U	2450	mg/kg	0.50	33	17	38	130	15	23	42	18	14
Selenium	U	2450	mg/kg	0.20	0.32	< 0.20	0.66	0.45	0.23	2.0	0.94	< 0.20	0.24
Zinc	U	2450	mg/kg	0.50	170	47	71	120	49	58	96	59	63
Chromium (Trivalent)	N	2490	mg/kg	1.0	15	15	16	18	11	13	22	13	12
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Organic Matter	U	2625	%	0.40	1.3	0.45	1.2	2.8	0.67	1.5	1.4	0.72	0.62
Total Organic Carbon	U	2625	%	0.20	0.77	0.26	0.68	1.6	0.39	0.88	0.82	0.42	0.36
Mineral Oil	N	2670	mg/kg	10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	15	< 1.0
Aliphatic TPH >C8-C10	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	880	< 1.0
Aliphatic TPH >C10-C12	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1900	< 1.0
Aliphatic TPH >C12-C16	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	2100	< 1.0
Aliphatic TPH >C16-C21	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	190	< 1.0
Aliphatic TPH >C21-C35	U	2680	mg/kg	1.0	< 1.0	40	< 1.0	< 1.0	47	< 1.0	44	2200	55
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	540	< 1.0
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0	40	< 5.0	< 5.0	47	< 5.0	44	7900	55

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Results - Soil

Project: Bailey Gibson

Client: O Callaghan Moran & Associates					Chemtest Job No.:	19-17844	19-17844	19-17844	19-17844	19-17844	19-17844	19-17844	19-17844	19-17844
Quotation No.: Q18-15064					Chemtest Sample ID.:	832873	832874	832875	832876	832877	832878	832879	832880	832881
					Sample Location:	WS-2	WS-2	WS-2	WS-4	WS-4	WS-4	WS-7	WS-7	WS-7
					Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
					Top Depth (m):	0	1	2	0	1	2	0	1	2
					Bottom Depth (m):	1	2	3	1	2	3	1	2	3
					Date Sampled:	22-May-2019	22-May-2019	22-May-2019	23-May-2019	23-May-2019	23-May-2019	23-May-2019	23-May-2019	23-May-2019
					Asbestos Lab:	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY
Determinand	**Accred.**	**SOP**	**Units**	**LOD**										
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C8-C10	U	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	92	< 1.0
Aromatic TPH >C10-C12	U	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	45	< 1.0
Aromatic TPH >C12-C16	U	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	180	< 1.0
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0		< 1.0	4.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	53	< 1.0
Aromatic TPH >C21-C35	U	2680	mg/kg	1.0		< 1.0	86	< 1.0	< 1.0	39	< 1.0	42	510	29
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	300	< 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0		< 5.0	90	< 5.0	< 5.0	39	< 5.0	42	1200	29
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0		< 10	130	< 10	< 10	85	< 10	86	9100	84
Benzene	U	2760	µg/kg	1.0		< 1.0	< 1.0	1.6	2.8	< 1.0	< 1.0	< 1.0	< 1.0	3.2
Toluene	U	2760	µg/kg	1.0		1.7	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	U	2760	µg/kg	1.0		< 1.0	< 1.0	< 1.0	2.2	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
m & p-Xylene	U	2760	µg/kg	1.0		< 1.0	< 1.0	< 1.0	3.9	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-Xylene	U	2760	µg/kg	1.0		< 1.0	< 1.0	< 1.0	1.2	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Methyl Tert-Butyl Ether	U	2760	µg/kg	1.0		10	11	13	17	5.0	9.8	8.8	12	16
Naphthalene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthylene	N	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	U	2800	mg/kg	0.10		< 0.10	0.20	0.43	0.80	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Anthracene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	U	2800	mg/kg	0.10		< 0.10	0.20	0.64	1.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Pyrene	U	2800	mg/kg	0.10		< 0.10	0.14	0.58	1.0	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]anthracene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	0.21	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Chrysene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	0.33	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[b]fluoranthene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[k]fluoranthene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]pyrene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-c,d)Pyrene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Coronene	N	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Of 17 PAH's	N	2800	mg/kg	2.0		< 2.0	< 2.0	< 2.0	3.4	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
PCB 28	U	2815	mg/kg	0.010		< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 52	U	2815	mg/kg	0.010		< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 90+101	U	2815	mg/kg	0.010		< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010

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Results - Soil

Project: Bailey Gibson

Client: O Callaghan Moran & Associates		**Chemtest Job No.:**			19-17844	19-17844	19-17844	19-17844	19-17844	19-17844	19-17844	19-17844	19-17844
Quotation No.: Q18-15064		**Chemtest Sample ID.:**			832873	832874	832875	832876	832877	832878	832879	832880	832881
		Sample Location:			WS-2	WS-2	WS-2	WS-4	WS-4	WS-4	WS-7	WS-7	WS-7
		Sample Type:			SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		Top Depth (m):			0	1	2	0	1	2	0	1	2
		Bottom Depth (m):			1	2	3	1	2	3	1	2	3
		Date Sampled:			22-May-2019	22-May-2019	22-May-2019	23-May-2019	23-May-2019	23-May-2019	23-May-2019	23-May-2019	23-May-2019
		Asbestos Lab:			COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY
Determinand	**Accred.**	**SOP**	**Units**	**LOD**									
PCB 118	U	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 153	U	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 138	U	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 180	U	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Total PCBs (7 Congeners)	N	2815	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Phenols	U	2920	mg/kg	0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30

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Results - Soil

Project: Bailey Gibson

Client: O Callaghan Moran & Associates		**Chemtest Job No.:**			19-17844	19-17844	19-17844	19-17844	19-17844	19-17844	19-17844	19-17844	19-17844
Quotation No.: Q18-15064		**Chemtest Sample ID.:**			832882	832883	832884	832885	832886	832887	832888	832889	832890
		Sample Location:			WS-9	WS-9	WS-9	WS-10	WS-10	WS-10	WS-11	WS-11	WS-11
		Sample Type:			SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		Top Depth (m):			0	1	2	0	1	2	0	1	2
		Bottom Depth (m):			1	2	3	1	2	3	1	2	3
		Date Sampled:			22-May-2019	22-May-2019	22-May-2019	22-May-2019	22-May-2019	22-May-2019	22-May-2019	22-May-2019	22-May-2019
		Asbestos Lab:			COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY
Determinand	**Accred.**	**SOP**	**Units**	**LOD**									
ACM Type	U	2192		N/A	-	-	-	-	-	-	-	-	-
Asbestos Identification	U	2192	%	0.001	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
ACM Detection Stage	U	2192		N/A	-	-	-	-	-	-	-	-	-
Moisture	N	2030	%	0.020	8.3	23	12	14	9.1	9.0	59	12	8.7
pH	U	2010		N/A	8.9	8.0	8.6	8.5	8.7	8.5	8.3	8.4	8.5
Boron (Hot Water Soluble)	U	2120	mg/kg	0.40	< 0.40	0.73	< 0.40	0.68	2.1	0.54	< 0.40	0.44	0.79
Sulphur (Elemental)	U	2180	mg/kg	1.0	1.7	310	4.1	< 1.0	< 1.0	1.6	7.7	< 1.0	1.4
Cyanide (Total)	U	2300	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Sulphide (Easily Liberatable)	N	2325	mg/kg	0.50	6.3	4.4	5.4	3.7	4.6	6.8	< 0.50	5.5	8.5
Sulphate (Total)	U	2430	%	0.010	0.85	0.23	0.056	0.037	0.031	0.67	0.18	0.028	0.086
Arsenic	U	2450	mg/kg	1.0	18	15	19	15	32	29	33	28	25
Barium	U	2450	mg/kg	10	37	110	170	61	71	80	210	170	100
Cadmium	U	2450	mg/kg	0.10	1.9	3.3	7.8	2.1	2.6	2.1	2.3	3.0	2.1
Chromium	U	2450	mg/kg	1.0	11	22	12	14	16	18	24	19	16
Molybdenum	U	2450	mg/kg	2.0	3.8	5.1	4.7	2.8	5.5	4.8	5.7	5.9	4.5
Antimony	N	2450	mg/kg	2.0	< 2.0	3.2	2.0	< 2.0	2.1	2.0	3.1	2.3	2.0
Copper	U	2450	mg/kg	0.50	22	43	51	27	31	33	70	44	29
Mercury	U	2450	mg/kg	0.10	< 0.10	0.13	< 0.10	< 0.10	< 0.10	< 0.10	0.70	< 0.10	< 0.10
Nickel	U	2450	mg/kg	0.50	35	59	180	39	51	49	58	75	45
Lead	U	2450	mg/kg	0.50	17	37	15	16	17	28	170	24	24
Selenium	U	2450	mg/kg	0.20	4.6	0.75	0.24	0.20	0.63	2.5	0.84	0.40	2.3
Zinc	U	2450	mg/kg	0.50	53	140	190	61	75	79	130	97	67
Chromium (Trivalent)	N	2490	mg/kg	1.0	11	22	12	14	16	18	24	19	16
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Organic Matter	U	2625	%	0.40	2.4	2.1	0.59	0.64	< 0.40	1.2	6.4	0.81	1.1
Total Organic Carbon	U	2625	%	0.20	1.4	1.2	0.34	0.37	< 0.20	0.71	3.7	0.47	0.65
Mineral Oil	N	2670	mg/kg	10	< 10	< 10	< 10	< 10	< 10	< 10	85	< 10	< 10
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C8-C10	U	2680	mg/kg	1.0	19	< 1.0	< 1.0	22	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C10-C12	U	2680	mg/kg	1.0	46	< 1.0	< 1.0	40	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C12-C16	U	2680	mg/kg	1.0	58	< 1.0	< 1.0	69	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C16-C21	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C21-C35	U	2680	mg/kg	1.0	110	< 1.0	< 1.0	130	< 1.0	< 1.0	85	< 1.0	< 1.0
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	230	< 5.0	< 5.0	270	< 5.0	< 5.0	85	< 5.0	< 5.0

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Project: Bailey Gibson

Client: O Callaghan Moran & Associates					Chemtest Job No.:	19-17844	19-17844	19-17844	19-17844	19-17844	19-17844	19-17844	19-17844	19-17844
Quotation No.: Q18-15064					Chemtest Sample ID.:	832882	832883	832884	832885	832886	832887	832888	832889	832890
					Sample Location:	WS-9	WS-9	WS-9	WS-10	WS-10	WS-10	WS-11	WS-11	WS-11
					Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
					Top Depth (m):	0	1	2	0	1	2	0	1	2
					Bottom Depth (m):	1	2	3	1	2	3	1	2	3
					Date Sampled:	22-May-2019	22-May-2019	22-May-2019	22-May-2019	22-May-2019	22-May-2019	22-May-2019	22-May-2019	22-May-2019
					Asbestos Lab:	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY
Determinand	**Accred.**	**SOP**	**Units**	**LOD**										
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C8-C10	U	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C10-C12	U	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C12-C16	U	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C21-C35	U	2680	mg/kg	1.0		47	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	170	< 1.0	< 1.0
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0		47	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	170	< 5.0	< 5.0
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0		280	< 10	< 10	270	< 10	< 10	260	< 10	< 10
Benzene	U	2760	µg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	2.5	< 1.0	< 1.0
Toluene	U	2760	µg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	U	2760	µg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
m & p-Xylene	U	2760	µg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-Xylene	U	2760	µg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Methyl Tert-Butyl Ether	U	2760	µg/kg	1.0		< 1.0	11	24	9.4	10	14	16	5.2	15
Naphthalene	U	2800	mg/kg	0.10		< 0.10	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthylene	N	2800	mg/kg	0.10		< 0.10	0.18	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	U	2800	mg/kg	0.10		< 0.10	0.23	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	U	2800	mg/kg	0.10		< 0.10	0.20	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	U	2800	mg/kg	0.10		< 0.10	0.46	< 0.10	< 0.10	< 0.10	< 0.10	0.92	< 0.10	< 0.10
Anthracene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	U	2800	mg/kg	0.10		< 0.10	0.58	< 0.10	< 0.10	< 0.10	< 0.10	1.1	< 0.10	< 0.10
Pyrene	U	2800	mg/kg	0.10		< 0.10	0.55	< 0.10	< 0.10	< 0.10	< 0.10	0.95	< 0.10	< 0.10
Benzo[a]anthracene	U	2800	mg/kg	0.10		< 0.10	0.14	< 0.10	< 0.10	< 0.10	< 0.10	0.36	< 0.10	< 0.10
Chrysene	U	2800	mg/kg	0.10		< 0.10	0.16	< 0.10	< 0.10	< 0.10	< 0.10	0.44	< 0.10	< 0.10
Benzo[b]fluoranthene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[k]fluoranthene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]pyrene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-c,d)Pyrene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Coronene	N	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Of 17 PAH's	N	2800	mg/kg	2.0		< 2.0	2.6	< 2.0	< 2.0	< 2.0	< 2.0	3.8	< 2.0	< 2.0
PCB 28	U	2815	mg/kg	0.010		< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 52	U	2815	mg/kg	0.010		< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 90+101	U	2815	mg/kg	0.010		< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010

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Results - Soil

Project: Bailey Gibson

Client: O Callaghan Moran & Associates		**Chemtest Job No.:**			19-17844	19-17844	19-17844	19-17844	19-17844	19-17844	19-17844	19-17844	19-17844
Quotation No.: Q18-15064		**Chemtest Sample ID.:**			832882	832883	832884	832885	832886	832887	832888	832889	832890
		Sample Location:			WS-9	WS-9	WS-9	WS-10	WS-10	WS-10	WS-11	WS-11	WS-11
		Sample Type:			SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		Top Depth (m):			0	1	2	0	1	2	0	1	2
		Bottom Depth (m):			1	2	3	1	2	3	1	2	3
		Date Sampled:			22-May-2019	22-May-2019	22-May-2019	22-May-2019	22-May-2019	22-May-2019	22-May-2019	22-May-2019	22-May-2019
		Asbestos Lab:			COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY
Determinand	**Accred.**	**SOP**	**Units**	**LOD**									
PCB 118	U	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 153	U	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 138	U	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 180	U	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Total PCBs (7 Congeners)	N	2815	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Phenols	U	2920	mg/kg	0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30

Chemtest
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Results - Soil

Project: Bailey Gibson

Client: O Callaghan Moran & Associates		**Chemtest Job No.:**			19-17844	19-17844	19-17844	19-17844	19-17844	19-17844	19-17844	19-17844	19-17844
Quotation No.: Q18-15064		**Chemtest Sample ID.:**			832891	832892	832893	832894	832895	832896	832897	832898	832899
		Sample Location:			WS-12	WS-12	WS-12	WS-13	WS-13	WS-13	WS-15	WS-15	WS-15
		Sample Type:			SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		Top Depth (m):			0	1	2	0	1	2	0	1	2
		Bottom Depth (m):			1	2	3	1	2	3	1	2	3
		Date Sampled:			22-May-2019	22-May-2019	22-May-2019	23-May-2019	23-May-2019	23-May-2019	21-May-2019	21-May-2019	21-May-2019
		Asbestos Lab:			COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY
Determinand	**Accred.**	**SOP**	**Units**	**LOD**									
ACM Type	U	2192		N/A	-	-	-	-	-	-	-	-	-
Asbestos Identification	U	2192	%	0.001	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
ACM Detection Stage	U	2192		N/A	-	-	-	-	-	-	-	-	-
Moisture	N	2030	%	0.020	9.3	9.1	11	11	13	8.7	16	9.9	6.9
pH	U	2010		N/A	8.8	8.9	8.8	8.7	8.8	8.7	8.6	8.8	8.9
Boron (Hot Water Soluble)	U	2120	mg/kg	0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	0.41	< 0.40	< 0.40
Sulphur (Elemental)	U	2180	mg/kg	1.0	1.2	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Cyanide (Total)	U	2300	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Sulphide (Easily Liberatable)	N	2325	mg/kg	0.50	7.4	8.0	9.1	7.0	7.1	7.2	3.0	7.3	9.2
Sulphate (Total)	U	2430	%	0.010	0.018	0.015	0.078	0.028	0.025	0.14	0.021	0.036	0.12
Arsenic	U	2450	mg/kg	1.0	27	25	33	24	23	21	16	20	22
Barium	U	2450	mg/kg	10	130	72	72	63	84	100	110	62	35
Cadmium	U	2450	mg/kg	0.10	2.8	1.6	2.5	2.8	2.6	1.8	3.0	1.9	1.8
Chromium	U	2450	mg/kg	1.0	12	13	15	16	16	16	17	10	13
Molybdenum	U	2450	mg/kg	2.0	3.0	3.8	4.5	4.2	5.1	4.6	4.6	3.2	3.2
Antimony	N	2450	mg/kg	2.0	< 2.0	< 2.0	2.0	2.0	2.1	< 2.0	< 2.0	< 2.0	< 2.0
Copper	U	2450	mg/kg	0.50	17	22	30	34	35	28	24	20	21
Mercury	U	2450	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Nickel	U	2450	mg/kg	0.50	37	33	47	54	61	45	50	31	35
Lead	U	2450	mg/kg	0.50	14	14	31	20	19	25	16	13	19
Selenium	U	2450	mg/kg	0.20	< 0.20	0.25	1.2	< 0.20	0.69	6.0	0.28	< 0.20	1.1
Zinc	U	2450	mg/kg	0.50	52	62	98	88	110	70	60	56	61
Chromium (Trivalent)	N	2490	mg/kg	1.0	12	13	15	16	16	16	17	10	13
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Organic Matter	U	2625	%	0.40	0.59	0.59	0.74	0.59	0.64	1.3	0.53	0.57	0.47
Total Organic Carbon	U	2625	%	0.20	0.34	0.34	0.43	0.34	0.37	0.75	0.31	0.33	0.27
Mineral Oil	N	2670	mg/kg	10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C8-C10	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C10-C12	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C12-C16	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C16-C21	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C21-C35	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0

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Results - Soil

Project: Bailey Gibson

Client: O Callaghan Moran & Associates					Chemtest Job No.:	19-17844	19-17844	19-17844	19-17844	19-17844	19-17844	19-17844	19-17844	19-17844
Quotation No.: Q18-15064					Chemtest Sample ID.:	832891	832892	832893	832894	832895	832896	832897	832898	832899
					Sample Location:	WS-12	WS-12	WS-12	WS-13	WS-13	WS-13	WS-15	WS-15	WS-15
					Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
					Top Depth (m):	0	1	2	0	1	2	0	1	2
					Bottom Depth (m):	1	2	3	1	2	3	1	2	3
					Date Sampled:	22-May-2019	22-May-2019	22-May-2019	23-May-2019	23-May-2019	23-May-2019	21-May-2019	21-May-2019	21-May-2019
					Asbestos Lab:	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY
Determinand	**Accred.**	**SOP**	**Units**	**LOD**										
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C8-C10	U	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C10-C12	U	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C12-C16	U	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C21-C35	U	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0		< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0		< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Benzene	U	2760	µg/kg	1.0		< 1.0	170	< 1.0	< 1.0	< 1.0	1.4	< 1.0	< 1.0	< 1.0
Toluene	U	2760	µg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	1.6	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	U	2760	µg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	3.9	< 1.0	< 1.0	< 1.0	< 1.0
m & p-Xylene	U	2760	µg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	5.5	3.1	< 1.0	< 1.0	< 1.0
o-Xylene	U	2760	µg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	3.3	< 1.0	< 1.0	< 1.0	< 1.0
Methyl Tert-Butyl Ether	U	2760	µg/kg	1.0		18	670	15	11	< 1.0	29	5.8	6.8	5.3
Naphthalene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthylene	N	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Anthracene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Pyrene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]anthracene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Chrysene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[b]fluoranthene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[k]fluoranthene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]pyrene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-c,d)Pyrene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Coronene	N	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Of 17 PAH's	N	2800	mg/kg	2.0		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
PCB 28	U	2815	mg/kg	0.010		< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 52	U	2815	mg/kg	0.010		< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 90+101	U	2815	mg/kg	0.010		< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010

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Results - Soil

Project: Bailey Gibson

Client: O Callaghan Moran & Associates		**Chemtest Job No.:**			19-17844	19-17844	19-17844	19-17844	19-17844	19-17844	19-17844	19-17844	19-17844
Quotation No.: Q18-15064		**Chemtest Sample ID.:**			832891	832892	832893	832894	832895	832896	832897	832898	832899
		Sample Location:			WS-12	WS-12	WS-12	WS-13	WS-13	WS-13	WS-15	WS-15	WS-15
		Sample Type:			SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		Top Depth (m):			0	1	2	0	1	2	0	1	2
		Bottom Depth (m):			1	2	3	1	2	3	1	2	3
		Date Sampled:			22-May-2019	22-May-2019	22-May-2019	23-May-2019	23-May-2019	23-May-2019	21-May-2019	21-May-2019	21-May-2019
		Asbestos Lab:			COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY
Determinand	**Accred.**	**SOP**	**Units**	**LOD**									
PCB 118	U	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 153	U	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 138	U	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 180	U	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Total PCBs (7 Congeners)	N	2815	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Phenols	U	2920	mg/kg	0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30

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Results - Soil

Project: Bailey Gibson

Client: O Callaghan Moran & Associates		**Chemtest Job No.:**			19-17844	19-17844	19-17844	19-17844	19-17844	19-17844	19-17844	19-17844	19-17844
Quotation No.: Q18-15064		**Chemtest Sample ID.:**			832900	832901	832902	832903	832904	832905	832906	832907	832908
		Sample Location:			WS-16	WS-16	WS-16	WS-20	WS-20	WS-20	WS-27	WS-27	WS-27
		Sample Type:			SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		Top Depth (m):			0	1	2	0	1	2	0	1	2
		Bottom Depth (m):			1	2	3	1	2	3	1	2	3
		Date Sampled:			21-May-2019	21-May-2019	21-May-2019	21-May-2019	21-May-2019	21-May-2019	21-May-2019	21-May-2019	21-May-2019
		Asbestos Lab:			COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY
Determinand	**Accred.**	**SOP**	**Units**	**LOD**									
ACM Type	U	2192		N/A	-	-	-	-	-	-	-	-	-
Asbestos Identification	U	2192	%	0.001	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
ACM Detection Stage	U	2192		N/A	-	-	-	-	-	-	-	-	-
Moisture	N	2030	%	0.020	15	10	14	12	12	7.6	12	11	10
pH	U	2010		N/A	8.5	8.7	9.7	8.6	8.6	8.5	8.7	8.7	8.7
Boron (Hot Water Soluble)	U	2120	mg/kg	0.40	0.92	< 0.40	0.55	< 0.40	< 0.40	< 0.40	0.44	< 0.40	< 0.40
Sulphur (Elemental)	U	2180	mg/kg	1.0	< 1.0	< 1.0	1.2	< 1.0	< 1.0	2.8	< 1.0	< 1.0	1.0
Cyanide (Total)	U	2300	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Sulphide (Easily Liberatable)	N	2325	mg/kg	0.50	4.9	7.4	17	9.6	7.0	5.9	6.3	7.4	9.3
Sulphate (Total)	U	2430	%	0.010	0.074	0.031	0.40	0.034	0.033	0.52	0.058	0.054	0.11
Arsenic	U	2450	mg/kg	1.0	16	22	17	21	25	15	15	24	23
Barium	U	2450	mg/kg	10	100	100	30	36	110	32	51	49	45
Cadmium	U	2450	mg/kg	0.10	1.3	2.5	2.1	2.1	2.5	2.4	1.3	2.4	2.6
Chromium	U	2450	mg/kg	1.0	18	15	15	14	19	13	13	12	13
Molybdenum	U	2450	mg/kg	2.0	3.4	4.3	4.8	3.8	5.1	5.8	2.5	4.1	4.7
Antimony	N	2450	mg/kg	2.0	< 2.0	< 2.0	2.2	< 2.0	2.1	2.1	< 2.0	< 2.0	2.5
Copper	U	2450	mg/kg	0.50	25	29	22	30	39	24	15	28	29
Mercury	U	2450	mg/kg	0.10	0.15	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Nickel	U	2450	mg/kg	0.50	28	48	41	42	62	45	28	44	57
Lead	U	2450	mg/kg	0.50	40	27	16	23	24	15	23	17	25
Selenium	U	2450	mg/kg	0.20	0.28	0.43	7.9	1.4	0.56	2.8	< 0.20	< 0.20	3.8
Zinc	U	2450	mg/kg	0.50	70	75	60	76	89	67	55	68	76
Chromium (Trivalent)	N	2490	mg/kg	1.0	18	15	15	14	19	13	13	12	13
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Organic Matter	U	2625	%	0.40	1.2	0.52	1.2	0.48	0.60	1.4	0.67	0.64	1.4
Total Organic Carbon	U	2625	%	0.20	0.68	0.30	0.68	0.28	0.35	0.81	0.39	0.37	0.81
Mineral Oil	N	2670	mg/kg	10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C8-C10	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C10-C12	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C12-C16	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C16-C21	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C21-C35	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0

Chemtest
The right chemistry to deliver results

Results - Soil

Project: Bailey Gibson

Client: O Callaghan Moran & Associates					Chemtest Job No.:	19-17844	19-17844	19-17844	19-17844	19-17844	19-17844	19-17844	19-17844	19-17844
Quotation No.: Q18-15064					Chemtest Sample ID.:	832900	832901	832902	832903	832904	832905	832906	832907	832908
					Sample Location:	WS-16	WS-16	WS-16	WS-20	WS-20	WS-20	WS-27	WS-27	WS-27
					Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
					Top Depth (m):	0	1	2	0	1	2	0	1	2
					Bottom Depth (m):	1	2	3	1	2	3	1	2	3
					Date Sampled:	21-May-2019	21-May-2019	21-May-2019	21-May-2019	21-May-2019	21-May-2019	21-May-2019	21-May-2019	21-May-2019
					Asbestos Lab:	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY
Determinand	**Accred.**	**SOP**	**Units**	**LOD**										
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C8-C10	U	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C10-C12	U	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C12-C16	U	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C21-C35	U	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0		< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0		< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Benzene	U	2760	µg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	U	2760	µg/kg	1.0		< 1.0	< 1.0	< 1.0	1.2	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	U	2760	µg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
m & p-Xylene	U	2760	µg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-Xylene	U	2760	µg/kg	1.0		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Methyl Tert-Butyl Ether	U	2760	µg/kg	1.0		10	7.7	19	10	6.3	< 1.0	< 1.0	< 1.0	< 1.0
Naphthalene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthylene	N	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	U	2800	mg/kg	0.10		0.91	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Anthracene	U	2800	mg/kg	0.10		0.12	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	U	2800	mg/kg	0.10		0.87	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Pyrene	U	2800	mg/kg	0.10		0.61	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]anthracene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Chrysene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[b]fluoranthene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[k]fluoranthene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]pyrene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-c,d)Pyrene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene	U	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Coronene	N	2800	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Of 17 PAH's	N	2800	mg/kg	2.0		2.5	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
PCB 28	U	2815	mg/kg	0.010		< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 52	U	2815	mg/kg	0.010		< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 90+101	U	2815	mg/kg	0.010		< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010

Chemtest
The right chemistry to deliver results

Results - Soil

Project: Bailey Gibson

Client: O Callaghan Moran & Associates		**Chemtest Job No.:**			19-17844	19-17844	19-17844	19-17844	19-17844	19-17844	19-17844	19-17844	19-17844
Quotation No.: Q18-15064		**Chemtest Sample ID.:**			832900	832901	832902	832903	832904	832905	832906	832907	832908
		Sample Location:			WS-16	WS-16	WS-16	WS-20	WS-20	WS-20	WS-27	WS-27	WS-27
		Sample Type:			SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		Top Depth (m):			0	1	2	0	1	2	0	1	2
		Bottom Depth (m):			1	2	3	1	2	3	1	2	3
		Date Sampled:			21-May-2019	21-May-2019	21-May-2019	21-May-2019	21-May-2019	21-May-2019	21-May-2019	21-May-2019	21-May-2019
		Asbestos Lab:			COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY
Determinand	**Accred.**	**SOP**	**Units**	**LOD**									
PCB 118	U	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 153	U	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 138	U	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 180	U	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Total PCBs (7 Congeners)	N	2815	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Phenols	U	2920	mg/kg	0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30

Results - Soil

Project: Bailey Gibson

Client: O Callaghan Moran & Associates		**Chemtest Job No.:**			19-17844	19-17844	19-17844
Quotation No.: Q18-15064		**Chemtest Sample ID.:**			832909	832910	832911
		Sample Location:			WS-28	WS-28	WS-28
		Sample Type:			SOIL	SOIL	SOIL
		Top Depth (m):			0	1	2
		Bottom Depth (m):			1	2	3
		Date Sampled:			22-May-2019	22-May-2019	22-May-2019
		Asbestos Lab:			COVENTRY	COVENTRY	COVENTRY
Determinand	**Accred.**	**SOP**	**Units**	**LOD**			
ACM Type	U	2192		N/A	-	-	-
Asbestos Identification	U	2192	%	0.001	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
ACM Detection Stage	U	2192		N/A	-	-	-
Moisture	N	2030	%	0.020	33	14	9.2
pH	U	2010		N/A	8.3	8.4	8.7
Boron (Hot Water Soluble)	U	2120	mg/kg	0.40	0.73	0.80	< 0.40
Sulphur (Elemental)	U	2180	mg/kg	1.0	93	9.0	< 1.0
Cyanide (Total)	U	2300	mg/kg	0.50	< 0.50	< 0.50	< 0.50
Sulphide (Easily Liberatable)	N	2325	mg/kg	0.50	5.9	8.4	9.2
Sulphate (Total)	U	2430	%	0.010	0.26	0.11	0.10
Arsenic	U	2450	mg/kg	1.0	30	24	21
Barium	U	2450	mg/kg	10	390	130	61
Cadmium	U	2450	mg/kg	0.10	1.4	3.0	2.2
Chromium	U	2450	mg/kg	1.0	23	16	14
Molybdenum	U	2450	mg/kg	2.0	3.4	4.4	4.0
Antimony	N	2450	mg/kg	2.0	2.3	< 2.0	4.4
Copper	U	2450	mg/kg	0.50	94	39	27
Mercury	U	2450	mg/kg	0.10	2.4	0.10	< 0.10
Nickel	U	2450	mg/kg	0.50	52	53	42
Lead	U	2450	mg/kg	0.50	960	37	36
Selenium	U	2450	mg/kg	0.20	0.75	1.6	3.0
Zinc	U	2450	mg/kg	0.50	290	89	70
Chromium (Trivalent)	N	2490	mg/kg	1.0	23	16	14
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50	< 0.50	< 0.50
Organic Matter	U	2625	%	0.40	22	0.91	1.0
Total Organic Carbon	U	2625	%	0.20	13	0.53	0.59
Mineral Oil	N	2670	mg/kg	10	33	< 10	< 10
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C8-C10	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C10-C12	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C12-C16	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C16-C21	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C21-C35	U	2680	mg/kg	1.0	50	< 1.0	< 1.0
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	50	< 5.0	< 5.0

Results - Soil

Project: Bailey Gibson

Client: O Callaghan Moran & Associates			**Chemtest Job No.:**		19-17844	19-17844	19-17844
Quotation No.: Q18-15064			**Chemtest Sample ID.:**		832909	832910	832911
			Sample Location:		WS-28	WS-28	WS-28
			Sample Type:		SOIL	SOIL	SOIL
			Top Depth (m):		0	1	2
			Bottom Depth (m):		1	2	3
			Date Sampled:		22-May-2019	22-May-2019	22-May-2019
			Asbestos Lab:		COVENTRY	COVENTRY	COVENTRY
Determinand	**Accred.**	**SOP**	**Units**	**LOD**			
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C8-C10	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C10-C12	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C12-C16	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	3.1	< 1.0	< 1.0
Aromatic TPH >C21-C35	U	2680	mg/kg	1.0	170	< 1.0	< 1.0
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	170	< 5.0	< 5.0
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	220	< 10	< 10
Benzene	U	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0
Toluene	U	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	U	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0
m & p-Xylene	U	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0
o-Xylene	U	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0
Methyl Tert-Butyl Ether	U	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0
Naphthalene	U	2800	mg/kg	0.10	0.69	< 0.10	< 0.10
Acenaphthylene	N	2800	mg/kg	0.10	0.30	< 0.10	< 0.10
Acenaphthene	U	2800	mg/kg	0.10	0.17	< 0.10	< 0.10
Fluorene	U	2800	mg/kg	0.10	0.21	< 0.10	< 0.10
Phenanthrene	U	2800	mg/kg	0.10	3.7	0.13	< 0.10
Anthracene	U	2800	mg/kg	0.10	0.63	< 0.10	< 0.10
Fluoranthene	U	2800	mg/kg	0.10	7.2	0.22	< 0.10
Pyrene	U	2800	mg/kg	0.10	6.9	0.19	< 0.10
Benzo[a]anthracene	U	2800	mg/kg	0.10	3.9	< 0.10	< 0.10
Chrysene	U	2800	mg/kg	0.10	4.9	< 0.10	< 0.10
Benzo[b]fluoranthene	U	2800	mg/kg	0.10	5.0	< 0.10	< 0.10
Benzo[k]fluoranthene	U	2800	mg/kg	0.10	1.9	< 0.10	< 0.10
Benzo[a]pyrene	U	2800	mg/kg	0.10	2.9	< 0.10	< 0.10
Indeno(1,2,3-c,d)Pyrene	U	2800	mg/kg	0.10	1.6	< 0.10	< 0.10
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.10	0.19	< 0.10	< 0.10
Benzo[g,h,i]perylene	U	2800	mg/kg	0.10	2.1	< 0.10	< 0.10
Coronene	N	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Total Of 17 PAH's	N	2800	mg/kg	2.0	42	< 2.0	< 2.0
PCB 28	U	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010
PCB 52	U	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010
PCB 90+101	U	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010

Results - Soil

Project: Bailey Gibson

Client: O Callaghan Moran & Associates					**Chemtest Job No.:**	19-17844	19-17844	19-17844
Quotation No.: Q18-15064					**Chemtest Sample ID.:**	832909	832910	832911
					Sample Location:	WS-28	WS-28	WS-28
					Sample Type:	SOIL	SOIL	SOIL
					Top Depth (m):	0	1	2
					Bottom Depth (m):	1	2	3
					Date Sampled:	22-May-2019	22-May-2019	22-May-2019
					Asbestos Lab:	COVENTRY	COVENTRY	COVENTRY
Determinand	**Accred.**	**SOP**	**Units**	**LOD**				
PCB 118	U	2815	mg/kg	0.010		< 0.010	< 0.010	< 0.010
PCB 153	U	2815	mg/kg	0.010		< 0.010	< 0.010	< 0.010
PCB 138	U	2815	mg/kg	0.010		< 0.010	< 0.010	< 0.010
PCB 180	U	2815	mg/kg	0.010		< 0.010	< 0.010	< 0.010
Total PCBs (7 Congeners)	N	2815	mg/kg	0.10		< 0.10	< 0.10	< 0.10
Total Phenols	U	2920	mg/kg	0.30		< 0.30	< 0.30	< 0.30

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17844						
Chemtest Sample ID:	832873						
Sample Ref:							
Sample ID:							
Sample Location:	WS-2						
Top Depth(m):	0						
Bottom Depth(m):	1						
Sampling Date:	22-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.77	3	5	6
Loss On Ignition	2610	U	%	3.1	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.7	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.014	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	0.0021	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0022	< 0.050	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.010	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	1.1	11	800	15000	25000
Fluoride	1220	U	0.13	1.3	10	150	500
Sulphate	1220	U	1.5	15	1000	20000	50000
Total Dissolved Solids	1020	N	35	350	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon		S	7.0	70	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	22

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17844						
Chemtest Sample ID:	832874						
Sample Ref:							
Sample ID:							
Sample Location:	WS-2						
Top Depth(m):	1						
Bottom Depth(m):	2						
Sampling Date:	22-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.26	3	5	6
Loss On Ignition	2610	U	%	1.8	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	130	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		9.1	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.020	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	0.0015	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0022	< 0.050	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.010	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.11	1.1	10	150	500
Sulphate	1220	U	1.1	11	1000	20000	50000
Total Dissolved Solids	1020	N	38	380	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon		S	7.3	73	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	9.7

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17844						
Chemtest Sample ID:	832875						
Sample Ref:							
Sample ID:							
Sample Location:	WS-2						
Top Depth(m):	2						
Bottom Depth(m):	3						
Sampling Date:	22-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.68	3	5	6
Loss On Ignition	2610	U	%	1.9	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		9.0	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.053	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	0.0035	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0035	< 0.050	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	0.0015	0.015	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.11	1.1	10	150	500
Sulphate	1220	U	< 1.0	< 10	1000	20000	50000
Total Dissolved Solids	1020	N	39	390	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon		S	8.2	82	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	10

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17844						
Chemtest Sample ID:	832876						
Sample Ref:							
Sample ID:							
Sample Location:	WS-4						
Top Depth(m):	0						
Bottom Depth(m):	1						
Sampling Date:	23-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	1.6	3	5	6
Loss On Ignition	2610	U	%	6.5	--	--	10
Total BTEX	2760	U	mg/kg	0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	3.4	100	--	--
pH	2010	U		8.6	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.026	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	0.0025	< 0.050	0.5	2	25
Barium	1450	U	0.0040	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0018	< 0.050	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.010	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.14	1.4	10	150	500
Sulphate	1220	U	15	150	1000	20000	50000
Total Dissolved Solids	1020	N	62	620	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon		S	5.5	55	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	18

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17844						
Chemtest Sample ID:	832877						
Sample Ref:							
Sample ID:							
Sample Location:	WS-4						
Top Depth(m):	1						
Bottom Depth(m):	2						
Sampling Date:	23-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.39	3	5	6
Loss On Ignition	2610	U	%	2.1	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.8	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.040	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	0.0017	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0030	< 0.050	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.010	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.11	1.1	10	150	500
Sulphate	1220	U	2.7	27	1000	20000	50000
Total Dissolved Solids	1020	N	37	370	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon		S	9.4	94	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	12

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17844						
Chemtest Sample ID:	832878						
Sample Ref:							
Sample ID:							
Sample Location:	WS-4						
Top Depth(m):	2						
Bottom Depth(m):	3						
Sampling Date:	23-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.88	3	5	6
Loss On Ignition	2610	U	%	1.6	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.9	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.063	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	0.0017	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0012	< 0.050	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.010	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.092	< 1.0	10	150	500
Sulphate	1220	U	1.2	12	1000	20000	50000
Total Dissolved Solids	1020	N	33	330	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon		S	6.9	69	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	9.6

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17844						
Chemtest Sample ID:	832879						
Sample Ref:							
Sample ID:							
Sample Location:	WS-7						
Top Depth(m):	0						
Bottom Depth(m):	1						
Sampling Date:	23-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.82	3	5	6
Loss On Ignition	2610	U	%	3.1	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	86	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.8	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.027	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	0.0034	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0033	< 0.050	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.010	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.12	1.2	10	150	500
Sulphate	1220	U	2.5	25	1000	20000	50000
Total Dissolved Solids	1020	N	41	410	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon		S	5.3	53	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	21

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17844						
Chemtest Sample ID:	832880						
Sample Ref:							
Sample ID:							
Sample Location:	WS-7						
Top Depth(m):	1						
Bottom Depth(m):	2						
Sampling Date:	23-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.42	3	5	6
Loss On Ignition	2610	U	%	1.7	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	9100	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.7	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.027	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	0.0026	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0014	< 0.050	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.010	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	1.1	11	800	15000	25000
Fluoride	1220	U	0.11	1.1	10	150	500
Sulphate	1220	U	1.6	16	1000	20000	50000
Total Dissolved Solids	1020	N	30	300	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon		S	4.7	< 50	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	11

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17844						
Chemtest Sample ID:	832881						
Sample Ref:							
Sample ID:							
Sample Location:	WS-7						
Top Depth(m):	2						
Bottom Depth(m):	3						
Sampling Date:	23-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.36	3	5	6
Loss On Ignition	2610	U	%	2.0	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	84	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.8	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.029	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	0.0011	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	< 0.0010	< 0.050	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	0.0021	0.021	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	1.6	16	800	15000	25000
Fluoride	1220	U	0.085	< 1.0	10	150	500
Sulphate	1220	U	7.0	70	1000	20000	50000
Total Dissolved Solids	1020	N	38	380	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon		S	5.1	51	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	12

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17844						
Chemtest Sample ID:	832882						
Sample Ref:							
Sample ID:							
Sample Location:	WS-9						
Top Depth(m):	0						
Bottom Depth(m):	1						
Sampling Date:	22-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	1.4	3	5	6
Loss On Ignition	2610	U	%	1.8	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	280	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.9	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.028	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	0.0030	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0030	< 0.050	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.010	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.12	1.2	10	150	500
Sulphate	1220	U	6.5	65	1000	20000	50000
Total Dissolved Solids	1020	N	27	270	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon		S	5.8	58	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	8.3

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17844						
Chemtest Sample ID:	832883						
Sample Ref:							
Sample ID:							
Sample Location:	WS-9						
Top Depth(m):	1						
Bottom Depth(m):	2						
Sampling Date:	22-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	1.2	3	5	6
Loss On Ignition	2610	U	%	4.1	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	2.6	100	--	--
pH	2010	U		8.0	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.013	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	< 0.0010	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0031	< 0.050	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.010	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	1.5	15	800	15000	25000
Fluoride	1220	U	0.11	1.1	10	150	500
Sulphate	1220	U	1.5	15	1000	20000	50000
Total Dissolved Solids	1020	N	35	350	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon		S	5.5	55	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	23

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17844						
Chemtest Sample ID:	832884						
Sample Ref:							
Sample ID:							
Sample Location:	WS-9						
Top Depth(m):	2						
Bottom Depth(m):	3						
Sampling Date:	22-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.34	3	5	6
Loss On Ignition	2610	U	%	2.0	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.6	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.068	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	< 0.0010	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0042	< 0.050	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.010	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.095	< 1.0	10	150	500
Sulphate	1220	U	3.3	33	1000	20000	50000
Total Dissolved Solids	1020	N	38	380	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon		S	5.6	56	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	12

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17844						
Chemtest Sample ID:	832885						
Sample Ref:							
Sample ID:							
Sample Location:	WS-10						
Top Depth(m):	0						
Bottom Depth(m):	1						
Sampling Date:	22-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.37	3	5	6
Loss On Ignition	2610	U	%	2.0	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	270	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.5	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.031	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	< 0.0010	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0022	< 0.050	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.010	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	1.7	17	800	15000	25000
Fluoride	1220	U	1.2	12	10	150	500
Sulphate	1220	U	14	140	1000	20000	50000
Total Dissolved Solids	1020	N	65	650	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon		S	6.3	63	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	14

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17844						
Chemtest Sample ID:	832886						
Sample Ref:							
Sample ID:							
Sample Location:	WS-10						
Top Depth(m):	1						
Bottom Depth(m):	2						
Sampling Date:	22-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	< 0.20	3	5	6
Loss On Ignition	2610	U	%	1.3	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.7	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.073	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	< 0.0010	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0051	0.051	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.010	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	1.5	15	800	15000	25000
Fluoride	1220	U	0.10	1.0	10	150	500
Sulphate	1220	U	14	140	1000	20000	50000
Total Dissolved Solids	1020	N	58	580	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon		S	4.9	< 50	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	9.1

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17844						
Chemtest Sample ID:	832887						
Sample Ref:							
Sample ID:							
Sample Location:	WS-10						
Top Depth(m):	2						
Bottom Depth(m):	3						
Sampling Date:	22-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.71	3	5	6
Loss On Ignition	2610	U	%	1.8	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.5	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.036	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	0.0017	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0018	< 0.050	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	0.0088	0.088	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	1.6	16	800	15000	25000
Fluoride	1220	U	0.090	< 1.0	10	150	500
Sulphate	1220	U	11	110	1000	20000	50000
Total Dissolved Solids	1020	N	47	470	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon		S	5.9	59	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	9.0

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17844						
Chemtest Sample ID:	832888						
Sample Ref:							
Sample ID:							
Sample Location:	WS-11						
Top Depth(m):	0						
Bottom Depth(m):	1						
Sampling Date:	22-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	3.7	3	5	6
Loss On Ignition	2610	U	%	7.5	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	260	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	3.8	100	--	--
pH	2010	U		8.3	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.0060	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	0.0014	< 0.050	0.5	2	25
Barium	1450	U	0.0013	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0016	< 0.050	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.010	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.14	1.4	10	150	500
Sulphate	1220	U	6.3	63	1000	20000	50000
Total Dissolved Solids	1020	N	47	430	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon		S	8.9	89	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	59

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17844						
Chemtest Sample ID:	832889						
Sample Ref:							
Sample ID:							
Sample Location:	WS-11						
Top Depth(m):	1						
Bottom Depth(m):	2						
Sampling Date:	22-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.47	3	5	6
Loss On Ignition	2610	U	%	3.0	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.4	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.080	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	< 0.0010	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0034	< 0.050	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.010	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.11	1.1	10	150	500
Sulphate	1220	U	1.6	16	1000	20000	50000
Total Dissolved Solids	1020	N	39	390	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon		S	9.0	90	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	12

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17844						
Chemtest Sample ID:	832890						
Sample Ref:							
Sample ID:							
Sample Location:	WS-11						
Top Depth(m):	2						
Bottom Depth(m):	3						
Sampling Date:	22-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.65	3	5	6
Loss On Ignition	2610	U	%	2.9	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.5	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.050	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	0.0036	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0047	< 0.050	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	0.0030	0.030	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.15	1.5	10	150	500
Sulphate	1220	U	< 1.0	< 10	1000	20000	50000
Total Dissolved Solids	1020	N	42	420	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon		S	4.9	< 50	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	8.7

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17844						
Chemtest Sample ID:	832891						
Sample Ref:							
Sample ID:							
Sample Location:	WS-12						
Top Depth(m):	0						
Bottom Depth(m):	1						
Sampling Date:	22-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.34	3	5	6
Loss On Ignition	2610	U	%	1.9	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.8	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.049	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	< 0.0010	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0038	< 0.050	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.010	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	1.3	13	800	15000	25000
Fluoride	1220	U	0.17	1.7	10	150	500
Sulphate	1220	U	2.0	20	1000	20000	50000
Total Dissolved Solids	1020	N	42	420	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon		S	7.5	75	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	9.3

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17844						
Chemtest Sample ID:	832892						
Sample Ref:							
Sample ID:							
Sample Location:	WS-12						
Top Depth(m):	1						
Bottom Depth(m):	2						
Sampling Date:	22-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.34	3	5	6
Loss On Ignition	2610	U	%	2.0	--	--	10
Total BTEX	2760	U	mg/kg	0.17	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.9	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.077	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	< 0.0010	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0069	0.069	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.010	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.15	1.5	10	150	500
Sulphate	1220	U	< 1.0	< 10	1000	20000	50000
Total Dissolved Solids	1020	N	36	360	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon		S	5.8	58	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	9.1

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17844						
Chemtest Sample ID:	832893						
Sample Ref:							
Sample ID:							
Sample Location:	WS-12						
Top Depth(m):	2						
Bottom Depth(m):	3						
Sampling Date:	22-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.43	3	5	6
Loss On Ignition	2610	U	%	2.3	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.8	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.077	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	0.0020	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0018	< 0.050	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	0.0014	0.014	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	< 1.0	< 10	800	15000	25000
Fluoride	1220	U	0.11	1.1	10	150	500
Sulphate	1220	U	< 1.0	< 10	1000	20000	50000
Total Dissolved Solids	1020	N	110	1100	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon		S	13	130	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	11

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17844						
Chemtest Sample ID:	832894						
Sample Ref:							
Sample ID:							
Sample Location:	WS-13						
Top Depth(m):	0						
Bottom Depth(m):	1						
Sampling Date:	23-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.34	3	5	6
Loss On Ignition	2610	U	%	3.0	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.7	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.022	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	0.0019	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0066	0.066	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.010	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	3.4	34	800	15000	25000
Fluoride	1220	U	0.33	3.3	10	150	500
Sulphate	1220	U	31	310	1000	20000	50000
Total Dissolved Solids	1020	N	78	780	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon		S	5.3	53	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	11

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17844						
Chemtest Sample ID:	832895						
Sample Ref:							
Sample ID:							
Sample Location:	WS-13						
Top Depth(m):	1						
Bottom Depth(m):	2						
Sampling Date:	23-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.37	3	5	6
Loss On Ignition	2610	U	%	3.2	--	--	10
Total BTEX	2760	U	mg/kg	0.014	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.8	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.039	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	0.0016	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.011	0.11	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.010	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	5.6	56	800	15000	25000
Fluoride	1220	U	0.28	2.8	10	150	500
Sulphate	1220	U	5.0	50	1000	20000	50000
Total Dissolved Solids	1020	N	65	650	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon		S	7.0	70	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	13

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17844						
Chemtest Sample ID:	832896						
Sample Ref:							
Sample ID:							
Sample Location:	WS-13						
Top Depth(m):	2						
Bottom Depth(m):	3						
Sampling Date:	23-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.75	3	5	6
Loss On Ignition	2610	U	%	3.4	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.7	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.067	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	0.0069	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.019	0.19	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	0.0036	0.036	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	3.1	31	800	15000	25000
Fluoride	1220	U	0.26	2.6	10	150	500
Sulphate	1220	U	5.6	56	1000	20000	50000
Total Dissolved Solids	1020	N	56	560	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon		S	3.4	< 50	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	8.7

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17844						
Chemtest Sample ID:	832897						
Sample Ref:							
Sample ID:							
Sample Location:	WS-15						
Top Depth(m):	0						
Bottom Depth(m):	1						
Sampling Date:	21-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.31	3	5	6
Loss On Ignition	2610	U	%	2.4	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.6	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.013	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	0.0016	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.017	0.17	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.010	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	7.4	74	800	15000	25000
Fluoride	1220	U	0.38	3.8	10	150	500
Sulphate	1220	U	7.7	77	1000	20000	50000
Total Dissolved Solids	1020	N	78	780	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon		S	10	100	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	16

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17844						
Chemtest Sample ID:	832898						
Sample Ref:							
Sample ID:							
Sample Location:	WS-15						
Top Depth(m):	1						
Bottom Depth(m):	2						
Sampling Date:	21-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.33	3	5	6
Loss On Ignition	2610	U	%	2.2	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.8	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.079	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	0.0011	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.011	0.11	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.010	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	3.7	37	800	15000	25000
Fluoride	1220	U	0.30	3.0	10	150	500
Sulphate	1220	U	3.0	30	1000	20000	50000
Total Dissolved Solids	1020	N	61	610	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon		S	7.0	70	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	9.9

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17844						
Chemtest Sample ID:	832899						
Sample Ref:							
Sample ID:							
Sample Location:	WS-15						
Top Depth(m):	2						
Bottom Depth(m):	3						
Sampling Date:	21-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.27	3	5	6
Loss On Ignition	2610	U	%	2.2	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.9	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.032	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	0.0032	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0047	< 0.050	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.010	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	8.0	80	800	15000	25000
Fluoride	1220	U	0.32	3.2	10	150	500
Sulphate	1220	U	2.0	20	1000	20000	50000
Total Dissolved Solids	1020	N	65	650	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon		S	22	220	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	6.9

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17844						
Chemtest Sample ID:	832900						
Sample Ref:							
Sample ID:							
Sample Location:	WS-16						
Top Depth(m):	0						
Bottom Depth(m):	1						
Sampling Date:	21-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.68	3	5	6
Loss On Ignition	2610	U	%	3.2	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	2.5	100	--	--
pH	2010	U		8.5	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.023	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	0.0019	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.010	0.10	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.010	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	5.5	55	800	15000	25000
Fluoride	1220	U	0.46	4.6	10	150	500
Sulphate	1220	U	12	120	1000	20000	50000
Total Dissolved Solids	1020	N	91	910	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon		S	11	110	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	15

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17844						
Chemtest Sample ID:	832901						
Sample Ref:							
Sample ID:							
Sample Location:	WS-16						
Top Depth(m):	1						
Bottom Depth(m):	2						
Sampling Date:	21-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.30	3	5	6
Loss On Ignition	2610	U	%	2.6	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.7	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.028	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	< 0.0010	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	< 0.0010	< 0.050	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.010	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	4.6	46	800	15000	25000
Fluoride	1220	U	0.14	1.4	10	150	500
Sulphate	1220	U	1.5	15	1000	20000	50000
Total Dissolved Solids	1020	N	29	290	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon		S	3.0	< 50	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	10

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17844						
Chemtest Sample ID:	832902						
Sample Ref:							
Sample ID:							
Sample Location:	WS-16						
Top Depth(m):	2						
Bottom Depth(m):	3						
Sampling Date:	21-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.68	3	5	6
Loss On Ignition	2610	U	%	4.1	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		9.7	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.053	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	0.0039	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0011	< 0.050	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	0.0037	0.037	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	5.5	55	800	15000	25000
Fluoride	1220	U	0.15	1.5	10	150	500
Sulphate	1220	U	4.0	40	1000	20000	50000
Total Dissolved Solids	1020	N	47	470	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon		S	3.7	< 50	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	14

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17844						
Chemtest Sample ID:	832903						
Sample Ref:							
Sample ID:							
Sample Location:	WS-20						
Top Depth(m):	0						
Bottom Depth(m):	1						
Sampling Date:	21-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.28	3	5	6
Loss On Ignition	2610	U	%	2.4	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.6	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.029	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	0.0017	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	< 0.0010	< 0.050	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.010	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	5.2	52	800	15000	25000
Fluoride	1220	U	0.15	1.5	10	150	500
Sulphate	1220	U	5.2	52	1000	20000	50000
Total Dissolved Solids	1020	N	51	510	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon		S	4.4	< 50	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	12

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17844						
Chemtest Sample ID:	832904						
Sample Ref:							
Sample ID:							
Sample Location:	WS-20						
Top Depth(m):	1						
Bottom Depth(m):	2						
Sampling Date:	21-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.35	3	5	6
Loss On Ignition	2610	U	%	2.8	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.6	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.072	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	0.0010	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	< 0.0010	< 0.050	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.010	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	6.4	64	800	15000	25000
Fluoride	1220	U	0.18	1.8	10	150	500
Sulphate	1220	U	4.0	40	1000	20000	50000
Total Dissolved Solids	1020	N	49	490	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon		S	4.4	< 50	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	12

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17844						
Chemtest Sample ID:	832905						
Sample Ref:							
Sample ID:							
Sample Location:	WS-20						
Top Depth(m):	2						
Bottom Depth(m):	3						
Sampling Date:	21-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.81	3	5	6
Loss On Ignition	2610	U	%	3.6	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.5	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.039	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	0.0075	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0015	< 0.050	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	0.0095	0.095	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	9.1	91	800	15000	25000
Fluoride	1220	U	0.13	1.3	10	150	500
Sulphate	1220	U	43	430	1000	20000	50000
Total Dissolved Solids	1020	N	100	1000	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon		S	4.1	< 50	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	7.6

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17844						
Chemtest Sample ID:	832906						
Sample Ref:							
Sample ID:							
Sample Location:	WS-27						
Top Depth(m):	0						
Bottom Depth(m):	1						
Sampling Date:	21-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.39	3	5	6
Loss On Ignition	2610	U	%	1.8	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.7	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.045	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	< 0.0010	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	< 0.0010	< 0.050	0.5	10	30
Nickel	1450	U	0.0013	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.010	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	7.3	73	800	15000	25000
Fluoride	1220	U	0.20	2.0	10	150	500
Sulphate	1220	U	8.5	85	1000	20000	50000
Total Dissolved Solids	1020	N	49	490	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon		S	4.3	< 50	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	12

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17844						
Chemtest Sample ID:	832907						
Sample Ref:							
Sample ID:							
Sample Location:	WS-27						
Top Depth(m):	1						
Bottom Depth(m):	2						
Sampling Date:	21-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.37	3	5	6
Loss On Ignition	2610	U	%	1.8	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.7	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.023	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	< 0.0010	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	< 0.0010	< 0.050	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.010	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	13	130	800	15000	25000
Fluoride	1220	U	0.22	2.2	10	150	500
Sulphate	1220	U	4.5	45	1000	20000	50000
Total Dissolved Solids	1020	N	46	460	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon		S	3.7	< 50	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	11

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17844						
Chemtest Sample ID:	832908						
Sample Ref:							
Sample ID:							
Sample Location:	WS-27						
Top Depth(m):	2						
Bottom Depth(m):	3						
Sampling Date:	21-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.81	3	5	6
Loss On Ignition	2610	U	%	3.0	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.7	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.018	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	0.0060	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0025	< 0.050	0.5	10	30
Nickel	1450	U	0.0015	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	0.0022	0.022	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	7.1	71	800	15000	25000
Fluoride	1220	U	0.17	1.7	10	150	500
Sulphate	1220	U	4.1	41	1000	20000	50000
Total Dissolved Solids	1020	N	44	440	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon		S	4.6	< 50	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	10

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17844						
Chemtest Sample ID:	832909						
Sample Ref:							
Sample ID:							
Sample Location:	WS-28						
Top Depth(m):	0						
Bottom Depth(m):	1						
Sampling Date:	22-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	13	3	5	6
Loss On Ignition	2610	U	%	16	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	220	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	42	100	--	--
pH	2010	U		8.3	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.010	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	0.0025	< 0.050	0.5	2	25
Barium	1450	U	0.0035	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	< 0.0010	< 0.050	0.5	10	30
Nickel	1450	U	0.0016	< 0.050	0.4	10	40
Lead	1450	U	0.0019	0.019	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.010	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	10	100	800	15000	25000
Fluoride	1220	U	0.34	3.4	10	150	500
Sulphate	1220	U	5.3	53	1000	20000	50000
Total Dissolved Solids	1020	N	56	550	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon		S	3.8	< 50	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	33

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17844						
Chemtest Sample ID:	832910						
Sample Ref:							
Sample ID:							
Sample Location:	WS-28						
Top Depth(m):	1						
Bottom Depth(m):	2						
Sampling Date:	22-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.53	3	5	6
Loss On Ignition	2610	U	%	2.8	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.4	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.013	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	0.0086	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0024	< 0.050	0.5	10	30
Nickel	1450	U	0.0010	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	0.0011	0.011	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	8.4	84	800	15000	25000
Fluoride	1220	U	0.18	1.8	10	150	500
Sulphate	1220	U	8.3	83	1000	20000	50000
Total Dissolved Solids	1020	N	53	530	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon		S	5.0	50	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	14

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: Bailey Gibson

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	19-17844						
Chemtest Sample ID:	832911						
Sample Ref:							
Sample ID:							
Sample Location:	WS-28						
Top Depth(m):	2						
Bottom Depth(m):	3						
Sampling Date:	22-May-2019						
Determinand	**SOP**	**Accred.**	**Units**		**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	U	%	0.59	3	5	6
Loss On Ignition	2610	U	%	2.6	--	--	10
Total BTEX	2760	U	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg	< 2.0	100	--	--
pH	2010	U		8.7	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.020	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1450	U	< 0.0010	< 0.050	0.5	2	25
Barium	1450	U	0.0069	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0016	< 0.050	0.5	10	30
Nickel	1450	U	0.0013	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	< 0.010	0.06	0.7	5
Selenium	1450	U	0.0015	0.015	0.1	0.5	7
Zinc	1450	U	< 0.0010	< 0.50	4	50	200
Chloride	1220	U	9.2	92	800	15000	25000
Fluoride	1220	U	0.18	1.8	10	150	500
Sulphate	1220	U	2.9	29	1000	20000	50000
Total Dissolved Solids	1020	N	42	420	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon		S	4.0	< 50	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	9.2

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Test Methods

SOP	Title	Parameters included	Method summary
1020	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Conductivity Meter
1220	Anions, Alkalinity & Ammonium in Waters	Fluoride; Chloride; Nitrite; Nitrate; Total; Oxidisable Nitrogen (TON); Sulfate; Phosphate; Alkalinity; Ammonium	Automated colorimetric analysis using 'Aquakem 600' Discrete Analyser.
1450	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).
1610	Total/Dissolved Organic Carbon in Waters	Organic Carbon	TOC Analyser using Catalytic Oxidation
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.
2010	pH Value of Soils	pH	pH Meter
2015	Acid Neutralisation Capacity	Acid Reserve	Titration
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES
2180	Sulphur (Elemental) in Soils by HPLC	Sulphur	Dichloromethane extraction / HPLC with UV detection
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry
2300	Cyanides & Thiocyanate in Soils	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Allkaline extraction followed by colorimetric determination using Automated Flow Injection Analyser.
2325	Sulphide in Soils	Sulphide	Steam distillation with sulphuric acid / analysis by 'Aquakem 600' Discrete Analyser, using N,N–dimethyl-p-phenylenediamine.
2430	Total Sulphate in soils	Total Sulphate	Acid digestion followed by determination of sulphate in extract by ICP-OES.
2450	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.
2610	Loss on Ignition	loss on ignition (LOI)	Determination of the proportion by mass that is lost from a soil by ignition at 550°C.
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID
2680	TPH A/A Split	Aliphatics: >C5–C6, >C6–C8,>C8–C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35– C44Aromatics: >C5–C7, >C7–C8, >C8– C10, >C10–C12, >C12–C16, >C16– C21, >C21– C35, >C35– C44	Dichloromethane extraction / GCxGC FID detection

Test Methods

SOP	Title	Parameters included	Method summary
2760	Volatile Organic Compounds (VOCs) in Soils by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics.(cf. USEPA Method 8260)*please refer to UKAS schedule	Automated headspace gas chromatographic (GC) analysis of a soil sample, as received, with mass spectrometric (MS) detection of volatile organic compounds.
2800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS	Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenz[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	Dichloromethane extraction / GC-MS
2815	Polychlorinated Biphenyls (PCB) ICES7Congeners in Soils by GC-MS	ICES7 PCB congeners	Acetone/Hexane extraction / GC-MS
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and TrimethylphenolsNote: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.
640	Characterisation of Waste (Leaching)	Waste material including soil, sludges and granular waste	ComplianceTest for Leaching of Granular Waste Material and Sludge

Report Information

Key

U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"

Comments or interpretations are beyond the scope of UKAS accreditation
The results relate only to the items tested
Uncertainty of measurement for the determinands tested are available upon request
None of the results in this report have been recovery corrected
All results are expressed on a dry weight basis
The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols
For all other tests the samples were dried at < 37°C prior to analysis
All Asbestos testing is performed at the indicated laboratory
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container
E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 45 days from the date of receipt
All water samples will be retained for 14 days from the date of receipt
Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to:
customerservices@chemtest.com

Appendix 5

Groundwater Laboratory Report

Chemtest Ltd.
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070
Email: info@chemtest.com

Final Report

Report No.:	19-23295-1
Initial Date of Issue:	17-Jul-2019
Client	O Callaghan Moran & Associates
Client Address:	15 Melbourne Business Park Model Farm Road Co. Cork IRELAND
Contact(s):	Conor McGrath
Project	BG Bailey Gibson

Quotation No.:		**Date Received:**	10-Jul-2019
Order No.:		**Date Instructed:**	10-Jul-2019
No. of Samples:	4		
Turnaround (Wkdays):	5	**Results Due:**	16-Jul-2019
Date Approved:	17-Jul-2019		

Approved By:

Details: Robert Monk, Technical Manager

Results - Water

Project: BG Bailey Gibson

Client: O Callaghan Moran & Associates		Chemtest Job No.:			19-23295	19-23295	19-23295	19-23295
Quotation No.:		Chemtest Sample ID.:			856045	856046	856047	856048
				Sample Location:	BH-2	BH-3	BH-4	BH-8
				Sample Type:	WATER	WATER	WATER	WATER
Determinand	**Accred.**	**SOP**	**Units**	**LOD**				
pH	U	1010		N/A	[A] 8.3	[A] 9.0	[A] 8.5	[A] 8.4
Chloride	U	1220	mg/l	1.0	[A] 40	[A] 22	[A] 30	[A] 28
Ammonium	U	1220	mg/l	0.050	[A] 0.11	[A] 0.052	[A] 0.087	[A] 1.4
Nitrate	U	1220	mg/l	0.50	[A] 15	[A] 2.3	[A] 2.5	[A] 7.4
Sulphate	U	1220	mg/l	1.0	[A] 200	[A] 120	[A] 43	[A] 59
Sulphide	U	1325	mg/l	0.050	[A] < 0.050	[A] < 0.050	[A] < 0.050	[A] < 0.050
Potassium	U	1415	mg/l	0.50	[A] 2.3	[A] 9.1	[A] 6.1	[A] 12
Sodium	U	1415	mg/l	0.50	[A] 32	[A] 67	[A] 11	[A] 14
Arsenic (Dissolved)	U	1450	µg/l	1.0	[A] 1.2	[A] 3.5	[A] < 1.0	[A] < 1.0
Boron (Dissolved)	U	1450	µg/l	20	[A] 170	[A] 82	[A] 29	[A] 52
Cadmium (Dissolved)	U	1450	µg/l	0.080	[A] < 0.080	[A] < 0.080	[A] < 0.080	[A] < 0.080
Chromium (Dissolved)	U	1450	µg/l	1.0	[A] 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Copper (Dissolved)	U	1450	µg/l	1.0	[A] 1.6	[A] < 1.0	[A] < 1.0	[A] < 1.0
Mercury (Dissolved)	U	1450	µg/l	0.50	[A] < 0.50	[A] < 0.50	[A] < 0.50	[A] < 0.50
Nickel (Dissolved)	U	1450	µg/l	1.0	[A] 2.1	[A] 2.2	[A] 1.5	[A] 5.0
Lead (Dissolved)	U	1450	µg/l	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Zinc (Dissolved)	U	1450	µg/l	1.0	[A] 3.7	[A] < 1.0	[A] < 1.0	[A] < 1.0
Aliphatic TPH >C5-C6	N	1675	µg/l	0.10	[A] < 0.10	[A] < 0.10	[A] < 0.10	[A] < 0.10
Aliphatic TPH >C6-C8	N	1675	µg/l	0.10	[A] < 0.10	[A] < 0.10	[A] < 0.10	[A] < 0.10
Aliphatic TPH >C8-C10	N	1675	µg/l	0.10	[A] < 0.10	[A] < 0.10	[A] < 0.10	[A] < 0.10
Aliphatic TPH >C10-C12	N	1675	µg/l	0.10	[A] < 0.10	[A] < 0.10	[A] < 0.10	[A] < 0.10
Aliphatic TPH >C12-C16	N	1675	µg/l	0.10	[A] < 0.10	[A] < 0.10	[A] < 0.10	[A] < 0.10
Aliphatic TPH >C16-C21	N	1675	µg/l	0.10	[A] < 0.10	[A] < 0.10	[A] < 0.10	[A] < 0.10
Aliphatic TPH >C21-C35	N	1675	µg/l	0.10	[A] < 0.10	[A] < 0.10	[A] < 0.10	[A] < 0.10
Aliphatic TPH >C35-C44	N	1675	µg/l	0.10	[A] < 0.10	[A] < 0.10	[A] < 0.10	[A] < 0.10
Total Aliphatic Hydrocarbons	N	1675	µg/l	5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0
Aromatic TPH >C5-C7	N	1675	µg/l	0.10	[A] < 0.10	[A] < 0.10	[A] < 0.10	[A] < 0.10
Aromatic TPH >C7-C8	N	1675	µg/l	0.10	[A] < 0.10	[A] < 0.10	[A] < 0.10	[A] < 0.10
Aromatic TPH >C8-C10	N	1675	µg/l	0.10	[A] < 0.10	[A] < 0.10	[A] < 0.10	[A] < 0.10
Aromatic TPH >C10-C12	N	1675	µg/l	0.10	[A] < 0.10	[A] < 0.10	[A] < 0.10	[A] < 0.10
Aromatic TPH >C12-C16	N	1675	µg/l	0.10	[A] < 0.10	[A] < 0.10	[A] < 0.10	[A] < 0.10
Aromatic TPH >C16-C21	N	1675	µg/l	0.10	[A] < 0.10	[A] < 0.10	[A] < 0.10	[A] < 0.10
Aromatic TPH >C21-C35	N	1675	µg/l	0.10	[A] < 0.10	[A] < 0.10	[A] < 0.10	[A] < 0.10
Aromatic TPH >C35-C44	N	1675	µg/l	0.10	[A] < 0.10	[A] < 0.10	[A] < 0.10	[A] < 0.10
Total Aromatic Hydrocarbons	N	1675	µg/l	5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0
Total Petroleum Hydrocarbons	N	1675	µg/l	10	[A] < 10	[A] < 10	[A] < 10	[A] < 10
Naphthalene	U	1700	µg/l	0.10	[A] < 0.10	[A] < 0.10	[A] < 0.10	[A] < 0.10
Acenaphthylene	U	1700	µg/l	0.10	[A] < 0.10	[A] < 0.10	[A] < 0.10	[A] < 0.10
Acenaphthene	U	1700	µg/l	0.10	[A] < 0.10	[A] < 0.10	[A] < 0.10	[A] < 0.10
Fluorene	U	1700	µg/l	0.10	[A] < 0.10	[A] < 0.10	[A] < 0.10	[A] < 0.10
Phenanthrene	U	1700	µg/l	0.10	[A] < 0.10	[A] < 0.10	[A] < 0.10	[A] < 0.10

Chemtest
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Results - Water

Project: BG Bailey Gibson

Client: O Callaghan Moran & Associates		**Chemtest Job No.:**			19-23295	19-23295	19-23295	19-23295
Quotation No.:		**Chemtest Sample ID.:**			856045	856046	856047	856048
			Sample Location:		BH-2	BH-3	BH-4	BH-8
			Sample Type:		WATER	WATER	WATER	WATER
Determinand	**Accred.**	**SOP**	**Units**	**LOD**				
Anthracene	U	1700	µg/l	0.10	[A] < 0.10	[A] < 0.10	[A] < 0.10	[A] < 0.10
Fluoranthene	U	1700	µg/l	0.10	[A] < 0.10	[A] < 0.10	[A] < 0.10	[A] < 0.10
Pyrene	U	1700	µg/l	0.10	[A] < 0.10	[A] < 0.10	[A] < 0.10	[A] < 0.10
Benzo[a]anthracene	U	1700	µg/l	0.10	[A] < 0.10	[A] < 0.10	[A] < 0.10	[A] < 0.10
Chrysene	N	1700	µg/l	0.10	[A] < 0.10	[A] < 0.10	[A] < 0.10	[A] < 0.10
Benzo[b]fluoranthene	U	1700	µg/l	0.10	[A] < 0.10	[A] < 0.10	[A] < 0.10	[A] < 0.10
Benzo[k]fluoranthene	U	1700	µg/l	0.10	[A] < 0.10	[A] < 0.10	[A] < 0.10	[A] < 0.10
Benzo[a]pyrene	U	1700	µg/l	0.10	[A] < 0.10	[A] < 0.10	[A] < 0.10	[A] < 0.10
Indeno(1,2,3-c,d)Pyrene	U	1700	µg/l	0.10	[A] < 0.10	[A] < 0.10	[A] < 0.10	[A] < 0.10
Dibenz(a,h)Anthracene	U	1700	µg/l	0.10	[A] < 0.10	[A] < 0.10	[A] < 0.10	[A] < 0.10
Benzo[g,h,i]perylene	U	1700	µg/l	0.10	[A] < 0.10	[A] < 0.10	[A] < 0.10	[A] < 0.10
Total Of 16 PAH's	N	1700	µg/l	2.0	[A] < 2.0	[A] < 2.0	[A] < 2.0	[A] < 2.0
Dichlorodifluoromethane	U	1760	µg/l	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Chloromethane	U	1760	µg/l	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Vinyl Chloride	N	1760	µg/l	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Bromomethane	U	1760	µg/l	5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0
Chloroethane	U	1760	µg/l	2.0	[A] < 2.0	[A] < 2.0	[A] < 2.0	[A] < 2.0
Trichlorofluoromethane	U	1760	µg/l	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
1,1-Dichloroethene	U	1760	µg/l	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Trans 1,2-Dichloroethene	U	1760	µg/l	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
1,1-Dichloroethane	U	1760	µg/l	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
cis 1,2-Dichloroethene	U	1760	µg/l	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Bromochloromethane	U	1760	µg/l	5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0
Trichloromethane	U	1760	µg/l	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
1,1,1-Trichloroethane	U	1760	µg/l	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Tetrachloromethane	U	1760	µg/l	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
1,1-Dichloropropene	U	1760	µg/l	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Benzene	U	1760	µg/l	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
1,2-Dichloroethane	U	1760	µg/l	2.0	[A] < 2.0	[A] < 2.0	[A] < 2.0	[A] < 2.0
Trichloroethene	N	1760	µg/l	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
1,2-Dichloropropane	U	1760	µg/l	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Dibromomethane	U	1760	µg/l	10	[A] < 10	[A] < 10	[A] < 10	[A] < 10
Bromodichloromethane	U	1760	µg/l	5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0
cis-1,3-Dichloropropene	N	1760	µg/l	10	[A] < 10	[A] < 10	[A] < 10	[A] < 10
Toluene	U	1760	µg/l	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Trans-1,3-Dichloropropene	N	1760	µg/l	10	[A] < 10	[A] < 10	[A] < 10	[A] < 10
1,1,2-Trichloroethane	U	1760	µg/l	10	[A] < 10	[A] < 10	[A] < 10	[A] < 10
Tetrachloroethene	U	1760	µg/l	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
1,3-Dichloropropane	U	1760	µg/l	2.0	[A] < 2.0	[A] < 2.0	[A] < 2.0	[A] < 2.0
Dibromochloromethane	U	1760	µg/l	10	[A] < 10	[A] < 10	[A] < 10	[A] < 10
1,2-Dibromoethane	U	1760	µg/l	5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0	[A] < 5.0

Chemtest
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Results - Water

Project: BG Bailey Gibson

Client: O Callaghan Moran & Associates		**Chemtest Job No.:**			19-23295	19-23295	19-23295	19-23295
Quotation No.:		**Chemtest Sample ID.:**			856045	856046	856047	856048
			Sample Location:		BH-2	BH-3	BH-4	BH-8
			Sample Type:		WATER	WATER	WATER	WATER
Determinand	**Accred.**	**SOP**	**Units**	**LOD**				
Chlorobenzene	N	1760	µg/l	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
1,1,1,2-Tetrachloroethane	U	1760	µg/l	2.0	[A] < 2.0	[A] < 2.0	[A] < 2.0	[A] < 2.0
Ethylbenzene	U	1760	µg/l	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
m & p-Xylene	U	1760	µg/l	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
o-Xylene	U	1760	µg/l	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Styrene	U	1760	µg/l	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Tribromomethane	U	1760	µg/l	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Isopropylbenzene	U	1760	µg/l	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Bromobenzene	U	1760	µg/l	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
1,2,3-Trichloropropane	N	1760	µg/l	50	[A] < 50	[A] < 50	[A] < 50	[A] < 50
N-Propylbenzene	U	1760	µg/l	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
2-Chlorotoluene	U	1760	µg/l	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
1,3,5-Trimethylbenzene	U	1760	µg/l	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
4-Chlorotoluene	U	1760	µg/l	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Tert-Butylbenzene	U	1760	µg/l	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
1,2,4-Trimethylbenzene	U	1760	µg/l	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Sec-Butylbenzene	U	1760	µg/l	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
1,3-Dichlorobenzene	N	1760	µg/l	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
4-Isopropyltoluene	U	1760	µg/l	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
1,4-Dichlorobenzene	U	1760	µg/l	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
N-Butylbenzene	U	1760	µg/l	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
1,2-Dichlorobenzene	U	1760	µg/l	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
1,2-Dibromo-3-Chloropropane	U	1760	µg/l	50	[A] < 50	[A] < 50	[A] < 50	[A] < 50
1,2,4-Trichlorobenzene	U	1760	µg/l	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Hexachlorobutadiene	U	1760	µg/l	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
1,2,3-Trichlorobenzene	U	1760	µg/l	2.0	[A] < 2.0	[A] < 2.0	[A] < 2.0	[A] < 2.0
Methyl Tert-Butyl Ether	N	1760	µg/l	1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0	[A] < 1.0
Total Phenols	U	1920	mg/l	0.030	[A] < 0.030	[A] < 0.030	[A] < 0.030	[A] < 0.030

Deviations

In accordance with UKAS Policy on Deviating Samples TPS 63. Chemtest have a procedure to ensure 'upon receipt of each sample a competent laboratory shall assess whether the sample is suitable with regard to the requested test(s)'. This policy and the respective holding times applied, can be supplied upon request.The reason a sample is declared as deviating is detailed below. Where applicable the analysis remains UKAS/MCERTs accredited but the results may be compromised.

Sample:	Sample Ref:	Sample ID:	Sample Location:	Sampled Date:	Deviation Code(s):	Containers Received:
856045			BH-2		A	Coloured Winchester 500ml
856045			BH-2		A	EPA Vial 40ml
856045			BH-2		A	Plastic Bottle 250ml
856046			BH-3		A	Coloured Winchester 500ml
856046			BH-3		A	EPA Vial 40ml
856046			BH-3		A	Plastic Bottle 250ml
856047			BH-4		A	Coloured Winchester 500ml
856047			BH-4		A	EPA Vial 40ml
856047			BH-4		A	Plastic Bottle 250ml
856048			BH-8		A	Coloured Winchester 500ml
856048			BH-8		A	EPA Vial 40ml
856048			BH-8		A	Plastic Bottle 250ml

Test Methods

SOP	Title	Parameters included	Method summary
1010	pH Value of Waters	pH	pH Meter
1220	Anions, Alkalinity & Ammonium in Waters	Fluoride; Chloride; Nitrite; Nitrate; Total; Oxidisable Nitrogen (TON); Sulfate; Phosphate; Alkalinity; Ammonium	Automated colorimetric analysis using 'Aquakem 600' Discrete Analyser.
1325	Sulphide in Waters	Sulphides	Automated colorimetric analysis by 'Aquakem 600' Discrete Analyser using N,N–dimethyl-pphenylenediamine.
1415	Cations in Waters by ICP-MS	Sodium; Potassium; Calcium; Magnesium	Direct determination by inductively coupled plasma - mass spectrometry (ICP-MS).
1450	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).
1675	TPH Aliphatic/Aromatic split in Waters by GC-FID(cf. Texas Method 1006 / TPH CWG)	Aliphatics: >C5–C6, >C6–C8, >C8– C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35– C44Aromatics: >C5–C7, >C7–C8, >C8– C10, >C10–C12, >C12–C16, >C16– C21, >C21– C35, >C35– C44	Pentane extraction / GCxGC FID detection
1700	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Waters by GC-FID	Acenaphthene; Acenaphthylene; Anthracene; Benzo[a]Anthracene; Benzo[a]Pyrene; Benzo[b]Fluoranthene; Benzo[ghi]Perylene; Benzo[k]Fluoranthene; Chrysene; Dibenz[ah]Anthracene; Fluoranthene; Fluorene; Indeno[123cd]Pyrene; Naphthalene; Phenanthrene; Pyrene	Dichloromethane extraction / GC-FID (GC-FID detection is non-selective and can be subject to interference from co-eluting compounds)
1760	Volatile Organic Compounds (VOCs) in Waters by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics. (cf. USEPA Method 8260)	Automated headspace gas chromatographic (GC) analysis of water samples with mass spectrometric (MS) detection of volatile organic compounds.
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.

Report Information

Key

U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"

Comments or interpretations are beyond the scope of UKAS accreditation
The results relate only to the items tested
Uncertainty of measurement for the determinands tested are available upon request
None of the results in this report have been recovery corrected
All results are expressed on a dry weight basis
The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols
For all other tests the samples were dried at < 37°C prior to analysis
All Asbestos testing is performed at the indicated laboratory
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container
E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 45 days from the date of receipt
All water samples will be retained for 14 days from the date of receipt
Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to:
customerservices@chemtest.com

Appendix 6

Waste Classification Reports

Waste Classification Report

DZMPX-6NLNT-DYLKQ

Job name

19-245 (Bailey Gibson)

Description/Comments

Project

19-245

Site

Bailey Gibson

Related Documents

#	Name	Description
None		

Waste Stream Template

O'Callaghan Moran Waste Stream

Classified by

Name:
Austin Hynes
Date:
11 Jul 2019 11:25 GMT
Telephone:
021 4345366

Company:
OCallaghan Moran and Associates
Unit 15 Melbourne Business Park
Model Farm Road
Cork

Report

Created by: Austin Hynes
Created date: 11 Jul 2019 11:25 GMT

Job summary

#	Sample Name	Depth [m]	Classification Result	Hazard properties	Page
1	TP05	0.0-1.0	Non Hazardous		4
2	TP05[2]	1.0-2.0	Non Hazardous		7
3	TP05[3]	2.0-3.0	Non Hazardous		10
4	TP07	0.0-1.0	Non Hazardous		13
5	TP07[2]	1.0-2.0	Non Hazardous		16
6	TP06	0.0-1.0	Non Hazardous		19
7	TP06[2]	1.0-2.0	Non Hazardous		22
8	TP06[3]	2.0-3.0	Non Hazardous		25
9	TP08	0.0-1.0	Non Hazardous		28
10	TP08[2]	1.0-2.0	Non Hazardous		31
11	TP08[3]	2.0-3.0	Non Hazardous		34

#	Sample Name	Depth [m]	Classification Result	Hazard properties	Page
12	TP09	0.0-1.0	Non Hazardous		37
13	TP09[2]	1.0-2.0	Non Hazardous		40
14	TP09[3]	2.0-3.0	Non Hazardous		43
15	TP11	0.0-1.0	Non Hazardous		46
16	TP11[2]	1.0-2.0	Non Hazardous		49
17	TP10	0.0-1.0	Non Hazardous		52
18	TP10[2]	1.0-2.0	Non Hazardous		55
19	TP10[3]	2.0-3.0	Non Hazardous		58
20	WS1	0.0-1.0	Non Hazardous		61
21	WS1[2]	1.0-2.0	Non Hazardous		64
22	WS1[3]	2.0-3.0	Non Hazardous		67
23	WS-2	0.0-1.0	Non Hazardous		70
24	WS-2[2]	1.0-2.0	Non Hazardous		73
25	WS-2[3]	2.0-3.0	Non Hazardous		76
26	WS3	0.0-1.0	Non Hazardous		79
27	WS3[2]	1.0-2.0	Non Hazardous		82
28	WS3[3]	2.0-3.0	Non Hazardous		85
29	WS-4	0.0-1.0	Non Hazardous		88
30	WS-4[2]	1.0-2.0	Non Hazardous		91
31	WS-4[3]	2.0-3.0	Non Hazardous		94
32	WS5	0.0-1.0	Non Hazardous		97
33	WS5[2]	1.0-2.0	Non Hazardous		100
34	WS5[3]	2.0-3.0	Non Hazardous		103
35	WS6	0.0-1.0	Non Hazardous		106
36	WS6[2]	1.0-2.0	Non Hazardous		109
37	WS6[3]	2.0-3.0	Non Hazardous		112
38	WS-7	0.0-1.0	Non Hazardous		115
39	WS-7[2]	1.0-2.0	Hazardous	HP 7, HP 11	118
40	WS-7[3]	2.0-3.0	Non Hazardous		121
41	WS-9	0.0-1.0	Non Hazardous		124
42	WS-9[2]	1.0-2.0	Non Hazardous		127
43	WS-9[3]	2.0-3.0	Non Hazardous		130
44	WS-10	0.0-1.0	Non Hazardous		133
45	WS-10[2]	1.0-2.0	Non Hazardous		136
46	WS-10[3]	2.0-3.0	Non Hazardous		139
47	WS-11	0.0-1.0	Non Hazardous		142
48	WS-11[2]	1.0-2.0	Non Hazardous		145
49	WS-11[3]	2.0-3.0	Non Hazardous		148
50	WS-12	0.0-1.0	Non Hazardous		151
51	WS-12[2]	1.0-2.0	Non Hazardous		154
52	WS-12[3]	2.0-3.0	Non Hazardous		157
53	WS-13	0.0-1.0	Non Hazardous		160
54	WS-13[2]	1.0-2.0	Non Hazardous		163
55	WS-13[3]	2.0-3.0	Non Hazardous		166
56	WS14	0.0-1.0	Non Hazardous		169
57	WS14[2]	1.0-2.0	Non Hazardous		172
58	WS14[3]	2.0-3.0	Non Hazardous		175
59	WS-15	0.0-1.0	Non Hazardous		178
60	WS-15[2]	1.0-2.0	Non Hazardous		181
61	WS-15[3]	2.0-3.0	Non Hazardous		184
62	WS-16	0.0-1.0	Non Hazardous		187
63	WS-16[2]	1.0-2.0	Non Hazardous		190
64	WS-16[3]	2.0-3.0	Non Hazardous		193
65	WS17	0.0-1.0	Non Hazardous		196
66	WS17[2]	1.0-2.0	Non Hazardous		199
67	WS18	0.0-1.0	Non Hazardous		202
68	WS18[2]	1.0-2.0	Non Hazardous		205
69	WS18[3]	2.0-3.0	Non Hazardous		208
70	WS19	0.0-1.0	Non Hazardous		211

#	Sample Name	Depth [m]	Classification Result	Hazard properties	Page
71	WS19[2]	1.0-2.0	Non Hazardous		214
72	WS19[3]	2.0-3.0	Non Hazardous		217
73	WS-20	0.0-1.0	Non Hazardous		220
74	WS-20[2]	1.0-2.0	Non Hazardous		223
75	WS-20[3]	2.0-3.0	Non Hazardous		226
76	WS21	0.0-1.0	Non Hazardous		229
77	WS21[2]	1.0-2.0	Non Hazardous		232
78	WS21[3]	2.0-3.0	Non Hazardous		235
79	WS22	0.0-1.0	Non Hazardous		238
80	WS22[2]	1.0-2.0	Non Hazardous		241
81	WS22[3]	2.0-3.0	Non Hazardous		244
82	WS23	0.0-1.0	Non Hazardous		247
83	WS23[2]	1.0-2.0	Non Hazardous		250
84	WS23[3]	2.0-3.0	Non Hazardous		253
85	WS24	0.0-1.0	Non Hazardous		256
86	WS24[2]	1.0-2.0	Non Hazardous		259
87	WS24[3]	2.0-3.0	Non Hazardous		262
88	WS26	0.0-1.0	Non Hazardous		265
89	WS26[2]	1.0-2.0	Non Hazardous		268
90	WS26[3]	2.0-3.0	Non Hazardous		271
91	WS-27	0.0-1.0	Non Hazardous		274
92	WS-27[2]	1.0-2.0	Non Hazardous		277
93	WS-27[3]	2.0-3.0	Non Hazardous		280
94	WS-28	0.0-1.0	Non Hazardous		283
95	WS-28[2]	1.0-2.0	Non Hazardous		286
96	WS-28[3]	2.0-3.0	Non Hazardous		289
97	ST EW A	0.5-1.5	Hazardous	HP 7, HP 11	292
98	ST EW A [2]	1.5-2.5	Non Hazardous		294
99	ST EW A [3]	2.5-3.0	Non Hazardous		295
100	ST EW B	0.5-1.5	Hazardous	HP 7, HP 11	296
101	ST EW B [2]	2.0-2.5	Non Hazardous		298
102	ST NS	0.5-1.5	Non Hazardous		299
103	ST NS [2]	1.5-2.0	Non Hazardous		300
104	ST NS [3]	2.0-2.5	Non Hazardous		301

Appendices	Page
Appendix A: Classifier defined and non CLP determinands	302
Appendix B: Rationale for selection of metal species	303
Appendix C: Version	304

Classification of sample: TP05

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
TP05
Sample Depth:
0.0-1.0 m
Moisture content:
21%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 21% No Moisture Correction applied (MC)

#	Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number / EC Number / CAS Number							
1	antimony { antimony trioxide }		3.1 mg/kg	1.197	3.711 mg/kg	0.000371 %		
	051-005-00-X / 215-175-0 / 1309-64-4							
2	arsenic { arsenic trioxide }		47 mg/kg	1.32	62.055 mg/kg	0.00621 %		
	033-003-00-0 / 215-481-4 / 1327-53-3							
3	boron { diboron trioxide; boric oxide }		2.6 mg/kg	3.22	8.372 mg/kg	0.000837 %		
	005-008-00-8 / 215-125-8 / 1303-86-2							
4	cadmium { cadmium oxide }		1.1 mg/kg	1.142	1.257 mg/kg	0.000126 %		
	048-002-00-0 / 215-146-2 / 1306-19-0							
5	chromium in chromium(III) compounds { chromium(III) oxide }		18 mg/kg	1.462	26.308 mg/kg	0.00263 %		
	/ 215-160-9 / 1308-38-9							
6	chromium in chromium(VI) compounds { chromium(VI) oxide }		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<**LOD**
	024-001-00-0 / 215-607-8 / 1333-82-0							
7	copper { dicopper oxide; copper (I) oxide }		100 mg/kg	1.126	112.589 mg/kg	0.0113 %		
	029-002-00-X / 215-270-7 / 1317-39-1							
8	lead { lead chromate }	1	230 mg/kg	1.56	358.757 mg/kg	0.023 %		
	082-004-00-2 / 231-846-0 / 7758-97-6							
9	mercury { mercury dichloride }		0.5 mg/kg	1.353	0.677 mg/kg	0.0000677 %		
	080-010-00-X / 231-299-8 / 7487-94-7							
10	molybdenum { molybdenum(VI) oxide }		4.5 mg/kg	1.5	6.751 mg/kg	0.000675 %		
	042-001-00-9 / 215-204-7 / 1313-27-5							
11	nickel { nickel chromate }		58 mg/kg	2.976	172.623 mg/kg	0.0173 %		
	028-035-00-7 / 238-766-5 / 14721-18-7							
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }		<0.2 mg/kg	2.554	<0.511 mg/kg	<0.0000511 %		<**LOD**
	034-002-00-8 / /							
13	zinc { zinc oxide }		180 mg/kg	1.245	224.049 mg/kg	0.0224 %		
	030-013-00-7 / 215-222-5 / 1314-13-2							
14	TPH (C6 to C40) petroleum group		47 mg/kg		47 mg/kg	0.0047 %		
	/ / TPH							

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
17		toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
21		pH				8.6	pH		8.6	pH	8.6 pH		
				PH									
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-917-1	208-96-8									
24		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-469-6	83-32-9									
25		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-695-5	86-73-7									
26		phenanthrene				2	mg/kg		2	mg/kg	0.0002 %		
			201-581-5	85-01-8									
27		anthracene				0.32	mg/kg		0.32	mg/kg	0.000032 %		
			204-371-1	120-12-7									
28		fluoranthene				1.6	mg/kg		1.6	mg/kg	0.00016 %		
			205-912-4	206-44-0									
29		pyrene				1.7	mg/kg		1.7	mg/kg	0.00017 %		
			204-927-3	129-00-0									
30		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.0905 %		

Key	
	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Can be discounted as this is a solid waste without a free draining liquid phase.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0047%)

Classification of sample: TP05[2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
TP05[2]
Sample Depth:
1.0-2.0 m
Moisture content:
22%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 22% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2.2 mg/kg	1.197	2.634 mg/kg	0.000263 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		24 mg/kg	1.32	31.688 mg/kg	0.00317 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		1 mg/kg	3.22	3.22 mg/kg	0.000322 %		
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		3.1 mg/kg	1.142	3.541 mg/kg	0.000354 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		23 mg/kg	1.462	33.616 mg/kg	0.00336 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		33 mg/kg	1.126	37.154 mg/kg	0.00372 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	38 mg/kg	1.56	59.273 mg/kg	0.0038 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.4 mg/kg	1.5	8.101 mg/kg	0.00081 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		68 mg/kg	2.976	202.386 mg/kg	0.0202 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<0.2 mg/kg	2.554	<0.511 mg/kg	<0.0000511 %		<LOD
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		92 mg/kg	1.245	114.514 mg/kg	0.0115 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<**LOD**
16	benzene	601-020-00-8	200-753-7	71-43-2		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<**LOD**
17	toluene	601-021-00-3	203-625-9	108-88-3		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<**LOD**
18	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<**LOD**
19	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<**LOD**
20	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<0.5 mg/kg	1.884	<0.942 mg/kg	<0.0000942 %		<**LOD**
21	pH			PH		8.2 pH		8.2 pH	8.2 pH		
22	naphthalene	601-052-00-2	202-049-5	91-20-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
23	acenaphthylene		205-917-1	208-96-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
24	acenaphthene		201-469-6	83-32-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
25	fluorene		201-695-5	86-73-7		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
26	phenanthrene		201-581-5	85-01-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
27	anthracene		204-371-1	120-12-7		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
28	fluoranthene		205-912-4	206-44-0		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
29	pyrene		204-927-3	129-00-0		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
30	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
31	chrysene	601-048-00-0	205-923-4	218-01-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
32	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
33	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
34	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
35	indeno[123-cd]pyrene		205-893-2	193-39-5		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
36	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
37	benzo[ghi]perylene		205-883-8	191-24-2		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
38	phenol	604-001-00-2	203-632-7	108-95-2		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<**LOD**
39	polychlorobiphenyls; PCB	602-039-00-4	215-648-1	1336-36-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
								Total:	0.0489 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP05[3]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
TP05[3]
Sample Depth:
2.0-3.0 m
Moisture content:
14%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 14% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		<2 mg/kg	1.197	<2.394 mg/kg	<0.000239 %		<LOD
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		32 mg/kg	1.32	42.25 mg/kg	0.00423 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		0.84 mg/kg	3.22	2.705 mg/kg	0.00027 %		
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		2.1 mg/kg	1.142	2.399 mg/kg	0.00024 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		17 mg/kg	1.462	24.846 mg/kg	0.00248 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		36 mg/kg	1.126	40.532 mg/kg	0.00405 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	27 mg/kg	1.56	42.115 mg/kg	0.0027 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.7 mg/kg	1.5	7.051 mg/kg	0.000705 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		55 mg/kg	2.976	163.695 mg/kg	0.0164 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<0.2 mg/kg	2.554	<0.511 mg/kg	<0.0000511 %		<LOD
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		98 mg/kg	1.245	121.982 mg/kg	0.0122 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
17		toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
21		pH				8.5	pH		8.5	pH	8.5 pH		
				PH									
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-917-1	208-96-8									
24		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-469-6	83-32-9									
25		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-695-5	86-73-7									
26		phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-581-5	85-01-8									
27		anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-371-1	120-12-7									
28		fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-912-4	206-44-0									
29		pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-927-3	129-00-0									
30		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.0449 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP07

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
TP07
Sample Depth:
0.0-1.0 m
Moisture content:
12%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 12% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		12 mg/kg	1.197	14.365 mg/kg	0.00144 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		17 mg/kg	1.32	22.446 mg/kg	0.00224 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<**LOD**
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		2.3 mg/kg	1.142	2.627 mg/kg	0.000263 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		16 mg/kg	1.462	23.385 mg/kg	0.00234 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<**LOD**
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		39 mg/kg	1.126	43.91 mg/kg	0.00439 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	24 mg/kg	1.56	37.436 mg/kg	0.0024 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.23 mg/kg	1.353	0.311 mg/kg	0.0000311 %		
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		7.1 mg/kg	1.5	10.651 mg/kg	0.00107 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		52 mg/kg	2.976	154.766 mg/kg	0.0155 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				0.59 mg/kg	2.554	1.507 mg/kg	0.000151 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		120 mg/kg	1.245	149.366 mg/kg	0.0149 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<**LOD**

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<**LOD**
16	benzene	601-020-00-8	200-753-7	71-43-2		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<**LOD**
17	toluene	601-021-00-3	203-625-9	108-88-3		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<**LOD**
18	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<**LOD**
19	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<**LOD**
20	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<0.5 mg/kg	1.884	<0.942 mg/kg	<0.0000942 %		<**LOD**
21	pH			PH		8.6 pH		8.6 pH	8.6 pH		
22	naphthalene	601-052-00-2	202-049-5	91-20-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
23	acenaphthylene		205-917-1	208-96-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
24	acenaphthene		201-469-6	83-32-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
25	fluorene		201-695-5	86-73-7		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
26	phenanthrene		201-581-5	85-01-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
27	anthracene		204-371-1	120-12-7		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
28	fluoranthene		205-912-4	206-44-0		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
29	pyrene		204-927-3	129-00-0		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
30	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
31	chrysene	601-048-00-0	205-923-4	218-01-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
32	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
33	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
34	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
35	indeno[123-cd]pyrene		205-893-2	193-39-5		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
36	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
37	benzo[ghi]perylene		205-883-8	191-24-2		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
38	phenol	604-001-00-2	203-632-7	108-95-2		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<**LOD**
39	polychlorobiphenyls; PCB	602-039-00-4	215-648-1	1336-36-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
								Total:	0.0463 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP07[2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
TP07[2]
Sample Depth:
1.0-2.0 m
Moisture content:
11%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 11% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		3.5 mg/kg	1.197	4.19 mg/kg	0.000419 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		19 mg/kg	1.32	25.086 mg/kg	0.00251 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<**LOD**
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		2.3 mg/kg	1.142	2.627 mg/kg	0.000263 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		16 mg/kg	1.462	23.385 mg/kg	0.00234 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<**LOD**
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		32 mg/kg	1.126	36.028 mg/kg	0.0036 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	27 mg/kg	1.56	42.115 mg/kg	0.0027 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5 mg/kg	1.5	7.501 mg/kg	0.00075 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		56 mg/kg	2.976	166.671 mg/kg	0.0167 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1.2 mg/kg	2.554	3.064 mg/kg	0.000306 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		93 mg/kg	1.245	115.758 mg/kg	0.0116 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<**LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
17		toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
21		pH				8.5	pH		8.5	pH	8.5 pH		
				PH									
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-917-1	208-96-8									
24		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-469-6	83-32-9									
25		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-695-5	86-73-7									
26		phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-581-5	85-01-8									
27		anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-371-1	120-12-7									
28		fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-912-4	206-44-0									
29		pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-927-3	129-00-0									
30		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.0427 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP06

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
TP06
Sample Depth:
0.0-1.0 m
Moisture content:
10%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 10% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2.4 mg/kg	1.197	2.873 mg/kg	0.000287 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		20 mg/kg	1.32	26.407 mg/kg	0.00264 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<LOD
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		2.4 mg/kg	1.142	2.742 mg/kg	0.000274 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		14 mg/kg	1.462	20.462 mg/kg	0.00205 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		33 mg/kg	1.126	37.154 mg/kg	0.00372 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	19 mg/kg	1.56	29.636 mg/kg	0.0019 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		3.9 mg/kg	1.5	5.851 mg/kg	0.000585 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		52 mg/kg	2.976	154.766 mg/kg	0.0155 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				0.39 mg/kg	2.554	0.996 mg/kg	0.0000996 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		80 mg/kg	1.245	99.577 mg/kg	0.00996 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<**LOD**
16	benzene	601-020-00-8	200-753-7	71-43-2		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<**LOD**
17	toluene	601-021-00-3	203-625-9	108-88-3		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<**LOD**
18	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<**LOD**
19	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<**LOD**
20	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<0.5 mg/kg	1.884	<0.942 mg/kg	<0.0000942 %		<**LOD**
21	pH			PH		8.5 pH		8.5 pH	8.5 pH		
22	naphthalene	601-052-00-2	202-049-5	91-20-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
23	acenaphthylene		205-917-1	208-96-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
24	acenaphthene		201-469-6	83-32-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
25	fluorene		201-695-5	86-73-7		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
26	phenanthrene		201-581-5	85-01-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
27	anthracene		204-371-1	120-12-7		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
28	fluoranthene		205-912-4	206-44-0		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
29	pyrene		204-927-3	129-00-0		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
30	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
31	chrysene	601-048-00-0	205-923-4	218-01-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
32	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
33	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
34	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
35	indeno[123-cd]pyrene		205-893-2	193-39-5		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
36	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
37	benzo[ghi]perylene		205-883-8	191-24-2		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
38	phenol	604-001-00-2	203-632-7	108-95-2		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<**LOD**
39	polychlorobiphenyls; PCB	602-039-00-4	215-648-1	1336-36-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
								Total:	0.0385 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP06[2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
TP06[2]
Sample Depth:
1.0-2.0 m
Moisture content:
13%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 13% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2.3 mg/kg	1.197	2.753 mg/kg	0.000275 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		20 mg/kg	1.32	26.407 mg/kg	0.00264 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<**LOD**
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		2.5 mg/kg	1.142	2.856 mg/kg	0.000286 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		14 mg/kg	1.462	20.462 mg/kg	0.00205 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<**LOD**
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		36 mg/kg	1.126	40.532 mg/kg	0.00405 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	20 mg/kg	1.56	31.196 mg/kg	0.002 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.7 mg/kg	1.5	7.051 mg/kg	0.000705 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		55 mg/kg	2.976	163.695 mg/kg	0.0164 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				0.61 mg/kg	2.554	1.558 mg/kg	0.000156 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		92 mg/kg	1.245	114.514 mg/kg	0.0115 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<**LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
17		toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
21		pH				8.5	pH		8.5	pH	8.5 pH		
				PH									
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-917-1	208-96-8									
24		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-469-6	83-32-9									
25		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-695-5	86-73-7									
26		phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-581-5	85-01-8									
27		anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-371-1	120-12-7									
28		fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-912-4	206-44-0									
29		pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-927-3	129-00-0									
30		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.0415 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP06[3]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
TP06[3]
Sample Depth:
2.0-3.0 m
Moisture content:
12%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 12% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2.3 mg/kg	1.197	2.753 mg/kg	0.000275 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		18 mg/kg	1.32	23.766 mg/kg	0.00238 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<**LOD**
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		2.3 mg/kg	1.142	2.627 mg/kg	0.000263 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		15 mg/kg	1.462	21.923 mg/kg	0.00219 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<**LOD**
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		34 mg/kg	1.126	38.28 mg/kg	0.00383 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	20 mg/kg	1.56	31.196 mg/kg	0.002 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.4 mg/kg	1.5	6.601 mg/kg	0.00066 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		65 mg/kg	2.976	193.457 mg/kg	0.0193 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				0.67 mg/kg	2.554	1.711 mg/kg	0.000171 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		90 mg/kg	1.245	112.024 mg/kg	0.0112 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<**LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-020-00-8	200-753-7	71-43-2									
17		toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<**LOD**
		006-007-00-5											
21		pH				8.8	pH		8.8	pH	8.8 pH		
				PH									
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-917-1	208-96-8									
24		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-469-6	83-32-9									
25		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-695-5	86-73-7									
26		phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-581-5	85-01-8									
27		anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			204-371-1	120-12-7									
28		fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-912-4	206-44-0									
29		pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			204-927-3	129-00-0									
30		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.0438 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP08

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
TP08
Sample Depth:
0.0-1.0 m
Moisture content:
20%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 20% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		4.1	mg/kg	1.197	4.908	mg/kg	0.000491 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		72	mg/kg	1.32	95.063	mg/kg	0.00951 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		1.9	mg/kg	3.22	6.118	mg/kg	0.000612 %		
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		3.3	mg/kg	1.142	3.77	mg/kg	0.000377 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		22	mg/kg	1.462	32.154	mg/kg	0.00322 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5	mg/kg	1.923	<0.962	mg/kg	<0.0000962 %		<**LOD**
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		120	mg/kg	1.126	135.107	mg/kg	0.0135 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	570	mg/kg	1.56	889.095	mg/kg	0.057 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		1.2	mg/kg	1.353	1.624	mg/kg	0.000162 %		
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.5	mg/kg	1.5	6.751	mg/kg	0.000675 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		72	mg/kg	2.976	214.291	mg/kg	0.0214 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				0.24	mg/kg	2.554	0.613	mg/kg	0.0000613 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		740	mg/kg	1.245	921.088	mg/kg	0.0921 %		
14	TPH (C6 to C40) petroleum group			TPH		82	mg/kg		82	mg/kg	0.0082 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-020-00-8	200-753-7	71-43-2									
17		toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<**LOD**
		006-007-00-5											
21		pH				7.9	pH		7.9	pH	7.9 pH		
				PH									
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-917-1	208-96-8									
24		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-469-6	83-32-9									
25		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-695-5	86-73-7									
26		phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-581-5	85-01-8									
27		anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			204-371-1	120-12-7									
28		fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-912-4	206-44-0									
29		pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			204-927-3	129-00-0									
30		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.208 %		

Key	
	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Can be discounted as this is a solid waste without a free draining liquid phase.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0082%)

Classification of sample: TP08[2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
TP08[2]
Sample Depth:
1.0-2.0 m
Moisture content:
11%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 11% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2.1 mg/kg	1.197	2.514 mg/kg	0.000251 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		36 mg/kg	1.32	47.532 mg/kg	0.00475 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		0.5 mg/kg	3.22	1.61 mg/kg	0.000161 %		
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		2.1 mg/kg	1.142	2.399 mg/kg	0.00024 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		15 mg/kg	1.462	21.923 mg/kg	0.00219 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		35 mg/kg	1.126	39.406 mg/kg	0.00394 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	30 mg/kg	1.56	46.794 mg/kg	0.003 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.2 mg/kg	1.5	7.801 mg/kg	0.00078 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		56 mg/kg	2.976	166.671 mg/kg	0.0167 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<0.2 mg/kg	2.554	<0.511 mg/kg	<0.0000511 %		<LOD
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		97 mg/kg	1.245	120.737 mg/kg	0.0121 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-020-00-8	200-753-7	71-43-2									
17		toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<**LOD**
		006-007-00-5											
21		pH				8.4	pH		8.4	pH	8.4 pH		
				PH									
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-917-1	208-96-8									
24		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-469-6	83-32-9									
25		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-695-5	86-73-7									
26		phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-581-5	85-01-8									
27		anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			204-371-1	120-12-7									
28		fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-912-4	206-44-0									
29		pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			204-927-3	129-00-0									
30		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.0455 %		

Key	
	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP08[3]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
TP08[3]
Sample Depth:
2.0-3.0 m
Moisture content:
13%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 13% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2.1 mg/kg	1.197	2.514 mg/kg	0.000251 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		37 mg/kg	1.32	48.852 mg/kg	0.00489 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		0.43 mg/kg	3.22	1.385 mg/kg	0.000138 %		
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		2 mg/kg	1.142	2.285 mg/kg	0.000228 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		12 mg/kg	1.462	17.539 mg/kg	0.00175 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		30 mg/kg	1.126	33.777 mg/kg	0.00338 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	20 mg/kg	1.56	31.196 mg/kg	0.002 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.8 mg/kg	1.5	7.201 mg/kg	0.00072 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		57 mg/kg	2.976	169.647 mg/kg	0.017 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				0.61 mg/kg	2.554	1.558 mg/kg	0.000156 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		88 mg/kg	1.245	109.535 mg/kg	0.011 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
17		toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
21		pH				8.6	pH		8.6	pH	8.6 pH		
				PH									
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-917-1	208-96-8									
24		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-469-6	83-32-9									
25		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-695-5	86-73-7									
26		phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-581-5	85-01-8									
27		anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-371-1	120-12-7									
28		fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-912-4	206-44-0									
29		pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-927-3	129-00-0									
30		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.0428 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP09

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
TP09
Sample Depth:
0.0-1.0 m
Moisture content:
19%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 19% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2.7	mg/kg	1.197	3.232	mg/kg	0.000323 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		49	mg/kg	1.32	64.696	mg/kg	0.00647 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		1.1	mg/kg	3.22	3.542	mg/kg	0.000354 %		
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.8	mg/kg	1.142	2.056	mg/kg	0.000206 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		20	mg/kg	1.462	29.231	mg/kg	0.00292 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5	mg/kg	1.923	<0.962	mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		89	mg/kg	1.126	100.204	mg/kg	0.01 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	140	mg/kg	1.56	218.374	mg/kg	0.014 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.42	mg/kg	1.353	0.568	mg/kg	0.0000568 %		
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		9.3	mg/kg	1.5	13.952	mg/kg	0.0014 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		66	mg/kg	2.976	196.433	mg/kg	0.0196 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<0.2	mg/kg	2.554	<0.511	mg/kg	<0.0000511 %		<LOD
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		160	mg/kg	1.245	199.154	mg/kg	0.0199 %		
14	TPH (C6 to C40) petroleum group			TPH		<10	mg/kg		<10	mg/kg	<0.001 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-020-00-8	200-753-7	71-43-2									
17		toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<**LOD**
		006-007-00-5											
21		pH				8.9	pH		8.9	pH	8.9 pH		
				PH									
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-917-1	208-96-8									
24		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-469-6	83-32-9									
25		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-695-5	86-73-7									
26		phenanthrene				1.2	mg/kg		1.2	mg/kg	0.00012 %		
			201-581-5	85-01-8									
27		anthracene				0.28	mg/kg		0.28	mg/kg	0.000028 %		
			204-371-1	120-12-7									
28		fluoranthene				1.6	mg/kg		1.6	mg/kg	0.00016 %		
			205-912-4	206-44-0									
29		pyrene				1.6	mg/kg		1.6	mg/kg	0.00016 %		
			204-927-3	129-00-0									
30		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.0772 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP09[2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
TP09[2]
Sample Depth:
1.0-2.0 m
Moisture content:
12%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 12% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		<2 mg/kg	1.197	<2.394 mg/kg	<0.000239 %		<LOD
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		25 mg/kg	1.32	33.008 mg/kg	0.0033 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		0.45 mg/kg	3.22	1.449 mg/kg	0.000145 %		
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.9 mg/kg	1.142	2.17 mg/kg	0.000217 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		12 mg/kg	1.462	17.539 mg/kg	0.00175 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		24 mg/kg	1.126	27.021 mg/kg	0.0027 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	23 mg/kg	1.56	35.876 mg/kg	0.0023 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		3.9 mg/kg	1.5	5.851 mg/kg	0.000585 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		38 mg/kg	2.976	113.098 mg/kg	0.0113 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<0.2 mg/kg	2.554	<0.511 mg/kg	<0.0000511 %		<LOD
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		73 mg/kg	1.245	90.864 mg/kg	0.00909 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
17		toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
21		pH				8.6	pH		8.6	pH	8.6 pH		
				PH									
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-917-1	208-96-8									
24		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-469-6	83-32-9									
25		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-695-5	86-73-7									
26		phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-581-5	85-01-8									
27		anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-371-1	120-12-7									
28		fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-912-4	206-44-0									
29		pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-927-3	129-00-0									
30		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.0331 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP09[3]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
TP09[3]
Sample Depth:
2.0-3.0 m
Moisture content:
12%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 12% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2.1 mg/kg	1.197	2.514 mg/kg	0.000251 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		33 mg/kg	1.32	43.571 mg/kg	0.00436 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		0.5 mg/kg	3.22	1.61 mg/kg	0.000161 %		
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		2.2 mg/kg	1.142	2.513 mg/kg	0.000251 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		15 mg/kg	1.462	21.923 mg/kg	0.00219 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		34 mg/kg	1.126	38.28 mg/kg	0.00383 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	32 mg/kg	1.56	49.914 mg/kg	0.0032 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.8 mg/kg	1.5	7.201 mg/kg	0.00072 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		48 mg/kg	2.976	142.861 mg/kg	0.0143 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<0.2 mg/kg	2.554	<0.511 mg/kg	<0.0000511 %		<LOD
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		88 mg/kg	1.245	109.535 mg/kg	0.011 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<**LOD**
16	benzene	601-020-00-8	200-753-7	71-43-2		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<**LOD**
17	toluene	601-021-00-3	203-625-9	108-88-3		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<**LOD**
18	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<**LOD**
19	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<**LOD**
20	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<0.5 mg/kg	1.884	<0.942 mg/kg	<0.0000942 %		<**LOD**
21	pH			PH		8.5 pH		8.5 pH	8.5 pH		
22	naphthalene	601-052-00-2	202-049-5	91-20-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
23	acenaphthylene		205-917-1	208-96-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
24	acenaphthene		201-469-6	83-32-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
25	fluorene		201-695-5	86-73-7		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
26	phenanthrene		201-581-5	85-01-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
27	anthracene		204-371-1	120-12-7		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
28	fluoranthene		205-912-4	206-44-0		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
29	pyrene		204-927-3	129-00-0		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
30	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
31	chrysene	601-048-00-0	205-923-4	218-01-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
32	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
33	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
34	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
35	indeno[123-cd]pyrene		205-893-2	193-39-5		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
36	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
37	benzo[ghi]perylene		205-883-8	191-24-2		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
38	phenol	604-001-00-2	203-632-7	108-95-2		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<**LOD**
39	polychlorobiphenyls; PCB	602-039-00-4	215-648-1	1336-36-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
								Total:	0.0417 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP11

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
TP11
Sample Depth:
0.0-1.0 m
Moisture content:
20%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 20% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2.4	mg/kg	1.197	2.873	mg/kg	0.000287 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		31	mg/kg	1.32	40.93	mg/kg	0.00409 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		1.7	mg/kg	3.22	5.474	mg/kg	0.000547 %		
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.2	mg/kg	1.142	1.371	mg/kg	0.000137 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		17	mg/kg	1.462	24.846	mg/kg	0.00248 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5	mg/kg	1.923	<0.962	mg/kg	<0.0000962 %		<**LOD**
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		56	mg/kg	1.126	63.05	mg/kg	0.0063 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	150	mg/kg	1.56	233.972	mg/kg	0.015 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.45	mg/kg	1.353	0.609	mg/kg	0.0000609 %		
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		3.4	mg/kg	1.5	5.101	mg/kg	0.00051 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		39	mg/kg	2.976	116.074	mg/kg	0.0116 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<0.2	mg/kg	2.554	<0.511	mg/kg	<0.0000511 %		<**LOD**
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		91	mg/kg	1.245	113.269	mg/kg	0.0113 %		
14	TPH (C6 to C40) petroleum group			TPH		130	mg/kg		130	mg/kg	0.013 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-020-00-8	200-753-7	71-43-2									
17		toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<**LOD**
		006-007-00-5											
21		pH				8.3	pH		8.3	pH	8.3 pH		
				PH									
22		naphthalene				0.46	mg/kg		0.46	mg/kg	0.000046 %		
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				1.1	mg/kg		1.1	mg/kg	0.00011 %		
			205-917-1	208-96-8									
24		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-469-6	83-32-9									
25		fluorene				0.22	mg/kg		0.22	mg/kg	0.000022 %		
			201-695-5	86-73-7									
26		phenanthrene				8.4	mg/kg		8.4	mg/kg	0.00084 %		
			201-581-5	85-01-8									
27		anthracene				1.7	mg/kg		1.7	mg/kg	0.00017 %		
			204-371-1	120-12-7									
28		fluoranthene				14	mg/kg		14	mg/kg	0.0014 %		
			205-912-4	206-44-0									
29		pyrene				11	mg/kg		11	mg/kg	0.0011 %		
			204-927-3	129-00-0									
30		benzo[a]anthracene				3.9	mg/kg		3.9	mg/kg	0.00039 %		
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				4.2	mg/kg		4.2	mg/kg	0.00042 %		
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				4.4	mg/kg		4.4	mg/kg	0.00044 %		
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				0.86	mg/kg		0.86	mg/kg	0.000086 %		
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				1.9	mg/kg		1.9	mg/kg	0.00019 %		
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				0.76	mg/kg		0.76	mg/kg	0.000076 %		
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				1.2	mg/kg		1.2	mg/kg	0.00012 %		
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.0711 %		

Key	
	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Can be discounted as this is a solid waste without a free draining liquid phase.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.013%)

Classification of sample: TP11[2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
TP11[2]
Sample Depth:
1.0-2.0 m
Moisture content:
12%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 12% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		<2 mg/kg	1.197	<2.394 mg/kg	<0.000239 %		<**LOD**
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		21 mg/kg	1.32	27.727 mg/kg	0.00277 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		0.48 mg/kg	3.22	1.546 mg/kg	0.000155 %		
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.6 mg/kg	1.142	1.828 mg/kg	0.000183 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		11 mg/kg	1.462	16.077 mg/kg	0.00161 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<**LOD**
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		25 mg/kg	1.126	28.147 mg/kg	0.00281 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	19 mg/kg	1.56	29.636 mg/kg	0.0019 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		3.3 mg/kg	1.5	4.951 mg/kg	0.000495 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		27 mg/kg	2.976	80.359 mg/kg	0.00804 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<0.2 mg/kg	2.554	<0.511 mg/kg	<0.0000511 %		<**LOD**
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		58 mg/kg	1.245	72.193 mg/kg	0.00722 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<**LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-020-00-8	200-753-7	71-43-2									
17		toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<**LOD**
		006-007-00-5											
21		pH				8.7	pH		8.7	pH	8.7 pH		
				PH									
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-917-1	208-96-8									
24		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-469-6	83-32-9									
25		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-695-5	86-73-7									
26		phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-581-5	85-01-8									
27		anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			204-371-1	120-12-7									
28		fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-912-4	206-44-0									
29		pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			204-927-3	129-00-0									
30		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.0269 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP10

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
TP10
Sample Depth:
0.0-1.0 m
Moisture content:
12%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 12% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2 mg/kg	1.197	2.394 mg/kg	0.000239 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		19 mg/kg	1.32	25.086 mg/kg	0.00251 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		0.43 mg/kg	3.22	1.385 mg/kg	0.000138 %		
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		2.2 mg/kg	1.142	2.513 mg/kg	0.000251 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		18 mg/kg	1.462	26.308 mg/kg	0.00263 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		34 mg/kg	1.126	38.28 mg/kg	0.00383 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	26 mg/kg	1.56	40.555 mg/kg	0.0026 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		3.5 mg/kg	1.5	5.251 mg/kg	0.000525 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		53 mg/kg	2.976	157.742 mg/kg	0.0158 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<0.2 mg/kg	2.554	<0.511 mg/kg	<0.0000511 %		<LOD
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		75 mg/kg	1.245	93.354 mg/kg	0.00934 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
17		toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
21		pH				8.6	pH		8.6	pH	8.6 pH		
				PH									
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-917-1	208-96-8									
24		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-469-6	83-32-9									
25		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-695-5	86-73-7									
26		phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-581-5	85-01-8									
27		anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-371-1	120-12-7									
28		fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-912-4	206-44-0									
29		pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-927-3	129-00-0									
30		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.0393 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP10[2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
TP10[2]
Sample Depth:
1.0-2.0 m
Moisture content:
12%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 12% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2.1 mg/kg	1.197	2.514 mg/kg	0.000251 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		18 mg/kg	1.32	23.766 mg/kg	0.00238 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		0.71 mg/kg	3.22	2.286 mg/kg	0.000229 %		
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		2.3 mg/kg	1.142	2.627 mg/kg	0.000263 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		16 mg/kg	1.462	23.385 mg/kg	0.00234 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		38 mg/kg	1.126	42.784 mg/kg	0.00428 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	20 mg/kg	1.56	31.196 mg/kg	0.002 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.3 mg/kg	1.5	7.951 mg/kg	0.000795 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		59 mg/kg	2.976	175.6 mg/kg	0.0176 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				0.51 mg/kg	2.554	1.302 mg/kg	0.00013 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		87 mg/kg	1.245	108.29 mg/kg	0.0108 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<**LOD**
16	benzene	601-020-00-8	200-753-7	71-43-2		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<**LOD**
17	toluene	601-021-00-3	203-625-9	108-88-3		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<**LOD**
18	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<**LOD**
19	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<**LOD**
20	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<0.5 mg/kg	1.884	<0.942 mg/kg	<0.0000942 %		<**LOD**
21	pH			PH		8.3 pH		8.3 pH	8.3 pH		
22	naphthalene	601-052-00-2	202-049-5	91-20-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
23	acenaphthylene		205-917-1	208-96-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
24	acenaphthene		201-469-6	83-32-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
25	fluorene		201-695-5	86-73-7		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
26	phenanthrene		201-581-5	85-01-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
27	anthracene		204-371-1	120-12-7		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
28	fluoranthene		205-912-4	206-44-0		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
29	pyrene		204-927-3	129-00-0		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
30	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
31	chrysene	601-048-00-0	205-923-4	218-01-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
32	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
33	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
34	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
35	indeno[123-cd]pyrene		205-893-2	193-39-5		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
36	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
37	benzo[ghi]perylene		205-883-8	191-24-2		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
38	phenol	604-001-00-2	203-632-7	108-95-2		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<**LOD**
39	polychlorobiphenyls; PCB	602-039-00-4	215-648-1	1336-36-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
								Total:	0.0425 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP10[3]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
TP10[3]
Sample Depth:
2.0-3.0 m
Moisture content:
13%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 13% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2.1 mg/kg	1.197	2.514 mg/kg	0.000251 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		21 mg/kg	1.32	27.727 mg/kg	0.00277 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		0.61 mg/kg	3.22	1.964 mg/kg	0.000196 %		
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		2.9 mg/kg	1.142	3.313 mg/kg	0.000331 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		18 mg/kg	1.462	26.308 mg/kg	0.00263 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		43 mg/kg	1.126	48.413 mg/kg	0.00484 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	25 mg/kg	1.56	38.995 mg/kg	0.0025 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		6.1 mg/kg	1.5	9.151 mg/kg	0.000915 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		69 mg/kg	2.976	205.362 mg/kg	0.0205 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				2.1 mg/kg	2.554	5.363 mg/kg	0.000536 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		100 mg/kg	1.245	124.471 mg/kg	0.0124 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
17		toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
21		pH				8.6	pH		8.6	pH	8.6 pH		
				PH									
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-917-1	208-96-8									
24		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-469-6	83-32-9									
25		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-695-5	86-73-7									
26		phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-581-5	85-01-8									
27		anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-371-1	120-12-7									
28		fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-912-4	206-44-0									
29		pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-927-3	129-00-0									
30		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.0494 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS1

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS1
Sample Depth:
0.0-1.0 m
Moisture content:
15%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 15% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2 mg/kg	1.197	2.394 mg/kg	0.000239 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		16 mg/kg	1.32	21.125 mg/kg	0.00211 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<**LOD**
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		2 mg/kg	1.142	2.285 mg/kg	0.000228 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		17 mg/kg	1.462	24.846 mg/kg	0.00248 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<**LOD**
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		30 mg/kg	1.126	33.777 mg/kg	0.00338 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	21 mg/kg	1.56	32.756 mg/kg	0.0021 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		3.6 mg/kg	1.5	5.401 mg/kg	0.00054 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		45 mg/kg	2.976	133.932 mg/kg	0.0134 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1.1 mg/kg	2.554	2.809 mg/kg	0.000281 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		81 mg/kg	1.245	100.822 mg/kg	0.0101 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<**LOD**

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
16	benzene	601-020-00-8	200-753-7	71-43-2		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
17	toluene	601-021-00-3	203-625-9	108-88-3		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
18	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
19	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
20	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<**LOD**
21	pH			PH		8.7	pH		8.7	pH	8.7 pH		
22	naphthalene	601-052-00-2	202-049-5	91-20-3		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
23	acenaphthylene		205-917-1	208-96-8		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
24	acenaphthene		201-469-6	83-32-9		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
25	fluorene		201-695-5	86-73-7		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
26	phenanthrene		201-581-5	85-01-8		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
27	anthracene		204-371-1	120-12-7		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
28	fluoranthene		205-912-4	206-44-0		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
29	pyrene		204-927-3	129-00-0		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
30	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
31	chrysene	601-048-00-0	205-923-4	218-01-9		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
32	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
33	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
34	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
35	indeno[123-cd]pyrene		205-893-2	193-39-5		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
36	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
37	benzo[ghi]perylene		205-883-8	191-24-2		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
38	phenol	604-001-00-2	203-632-7	108-95-2		<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<**LOD**
39	polychlorobiphenyls; PCB	602-039-00-4	215-648-1	1336-36-3		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
										Total:	0.0364 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS1[2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS1[2]
Sample Depth:
1.0-2.0 m
Moisture content:
12%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 12% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		<2 mg/kg	1.197	<2.394 mg/kg	<0.000239 %		<LOD
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		12 mg/kg	1.32	15.844 mg/kg	0.00158 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<LOD
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		2 mg/kg	1.142	2.285 mg/kg	0.000228 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		11 mg/kg	1.462	16.077 mg/kg	0.00161 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		27 mg/kg	1.126	30.399 mg/kg	0.00304 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	15 mg/kg	1.56	23.397 mg/kg	0.0015 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		2.4 mg/kg	1.5	3.6 mg/kg	0.00036 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		31 mg/kg	2.976	92.264 mg/kg	0.00923 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				2.8 mg/kg	2.554	7.15 mg/kg	0.000715 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		62 mg/kg	1.245	77.172 mg/kg	0.00772 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
17		toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
21		pH				8.9	pH		8.9	pH	8.9 pH		
				PH									
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-917-1	208-96-8									
24		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-469-6	83-32-9									
25		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-695-5	86-73-7									
26		phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-581-5	85-01-8									
27		anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-371-1	120-12-7									
28		fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-912-4	206-44-0									
29		pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-927-3	129-00-0									
30		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.0278 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS1[3]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS1[3]
Sample Depth:
2.0-3.0 m
Moisture content:
26%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 26% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		3.1 mg/kg	1.197	3.711 mg/kg	0.000371 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		30 mg/kg	1.32	39.61 mg/kg	0.00396 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		1.1 mg/kg	3.22	3.542 mg/kg	0.000354 %		
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		2.2 mg/kg	1.142	2.513 mg/kg	0.000251 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		21 mg/kg	1.462	30.693 mg/kg	0.00307 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		**<LOD**
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		73 mg/kg	1.126	82.19 mg/kg	0.00822 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	220 mg/kg	1.56	343.159 mg/kg	0.022 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.74 mg/kg	1.353	1.002 mg/kg	0.0001 %		
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.5 mg/kg	1.5	8.251 mg/kg	0.000825 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		57 mg/kg	2.976	169.647 mg/kg	0.017 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				0.98 mg/kg	2.554	2.503 mg/kg	0.00025 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		350 mg/kg	1.245	435.65 mg/kg	0.0436 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		**<LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-020-00-8	200-753-7	71-43-2									
17		toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<**LOD**
		006-007-00-5											
21		pH				8.2	pH		8.2	pH	8.2 pH		
				PH									
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-917-1	208-96-8									
24		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-469-6	83-32-9									
25		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-695-5	86-73-7									
26		phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-581-5	85-01-8									
27		anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			204-371-1	120-12-7									
28		fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-912-4	206-44-0									
29		pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			204-927-3	129-00-0									
30		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.101 %		

Key	
	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS-2

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS-2
Sample Depth:
0.0-1.0 m
Moisture content:
22%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 22% No Moisture Correction applied (MC)

#	Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number / EC Number / CAS Number							
1	antimony { antimony trioxide }		4.3 mg/kg	1.197	5.148 mg/kg	0.000515 %		
	051-005-00-X / 215-175-0 / 1309-64-4							
2	arsenic { arsenic trioxide }		14 mg/kg	1.32	18.485 mg/kg	0.00185 %		
	033-003-00-0 / 215-481-4 / 1327-53-3							
3	boron { diboron trioxide; boric oxide }		1.2 mg/kg	3.22	3.864 mg/kg	0.000386 %		
	005-008-00-8 / 215-125-8 / 1303-86-2							
4	cadmium { cadmium oxide }		2.8 mg/kg	1.142	3.199 mg/kg	0.00032 %		
	048-002-00-0 / 215-146-2 / 1306-19-0							
5	chromium in chromium(III) compounds { chromium(III) oxide }		15 mg/kg	1.462	21.923 mg/kg	0.00219 %		
	/ 215-160-9 / 1308-38-9							
6	chromium in chromium(VI) compounds { chromium(VI) oxide }		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<**LOD**
	024-001-00-0 / 215-607-8 / 1333-82-0							
7	copper { dicopper oxide; copper (I) oxide }		23 mg/kg	1.126	25.895 mg/kg	0.00259 %		
	029-002-00-X / 215-270-7 / 1317-39-1							
8	lead { lead chromate }	1	33 mg/kg	1.56	51.474 mg/kg	0.0033 %		
	082-004-00-2 / 231-846-0 / 7758-97-6							
9	mercury { mercury dichloride }		0.13 mg/kg	1.353	0.176 mg/kg	0.0000176 %		
	080-010-00-X / 231-299-8 / 7487-94-7							
10	molybdenum { molybdenum(VI) oxide }		6.1 mg/kg	1.5	9.151 mg/kg	0.000915 %		
	042-001-00-9 / 215-204-7 / 1313-27-5							
11	nickel { nickel chromate }		34 mg/kg	2.976	101.193 mg/kg	0.0101 %		
	028-035-00-7 / 238-766-5 / 14721-18-7							
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }		0.32 mg/kg	2.554	0.817 mg/kg	0.0000817 %		
	034-002-00-8 / /							
13	zinc { zinc oxide }		170 mg/kg	1.245	211.601 mg/kg	0.0212 %		
	030-013-00-7 / 215-222-5 / 1314-13-2							
14	TPH (C6 to C40) petroleum group		<10 mg/kg		<10 mg/kg	<0.001 %		<**LOD**
	/ / TPH							

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				0.01	mg/kg		0.01	mg/kg	0.000001 %		
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-020-00-8	200-753-7	71-43-2									
17		toluene				0.0017	mg/kg		0.0017	mg/kg	0.00000017 %		
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<**LOD**
		006-007-00-5											
21		pH				8.7	pH		8.7	pH	8.7 pH		
				PH									
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-917-1	208-96-8									
24		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-469-6	83-32-9									
25		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-695-5	86-73-7									
26		phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-581-5	85-01-8									
27		anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			204-371-1	120-12-7									
28		fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-912-4	206-44-0									
29		pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			204-927-3	129-00-0									
30		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.0448 %		

Key	
	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Can be discounted as this is a solid waste without a free draining liquid phase.

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinands:

tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane: (conc.: 1.0e-06%)
toluene: (conc.: 1.7e-07%)

Classification of sample: WS-2[2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS-2[2]
Sample Depth:
1.0-2.0 m
Moisture content:
9.7%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 9.7% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		3.2 mg/kg	1.197	3.831 mg/kg	0.000383 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		13 mg/kg	1.32	17.164 mg/kg	0.00172 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<**LOD**
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.87 mg/kg	1.142	0.994 mg/kg	0.0000994 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		15 mg/kg	1.462	21.923 mg/kg	0.00219 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<**LOD**
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		17 mg/kg	1.126	19.14 mg/kg	0.00191 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	17 mg/kg	1.56	26.517 mg/kg	0.0017 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		2.3 mg/kg	1.5	3.45 mg/kg	0.000345 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		24 mg/kg	2.976	71.43 mg/kg	0.00714 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<0.2 mg/kg	2.554	<0.511 mg/kg	<0.0000511 %		<**LOD**
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		47 mg/kg	1.245	58.502 mg/kg	0.00585 %		
14	TPH (C6 to C40) petroleum group			TPH		130 mg/kg		130 mg/kg	0.013 %		

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				0.011	mg/kg		0.011	mg/kg	0.0000011 %		
	603-181-00-X	216-653-1	1634-04-4									
16	benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2									
17	toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3									
18	ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4									
19	xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
	006-007-00-5											
21	pH				9.1	pH		9.1	pH	9.1 pH		
			PH									
22	naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-052-00-2	202-049-5	91-20-3									
23	acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		205-917-1	208-96-8									
24	acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		201-469-6	83-32-9									
25	fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		201-695-5	86-73-7									
26	phenanthrene				0.2	mg/kg		0.2	mg/kg	0.00002 %		
		201-581-5	85-01-8									
27	anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		204-371-1	120-12-7									
28	fluoranthene				0.2	mg/kg		0.2	mg/kg	0.00002 %		
		205-912-4	206-44-0									
29	pyrene				0.14	mg/kg		0.14	mg/kg	0.000014 %		
		204-927-3	129-00-0									
30	benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-033-00-9	200-280-6	56-55-3									
31	chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-048-00-0	205-923-4	218-01-9									
32	benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-034-00-4	205-911-9	205-99-2									
33	benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-036-00-5	205-916-6	207-08-9									
34	benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-032-00-3	200-028-5	50-32-8									
35	indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		205-893-2	193-39-5									
36	dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-041-00-2	200-181-8	53-70-3									
37	benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		205-883-8	191-24-2									
38	phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
	604-001-00-2	203-632-7	108-95-2									
39	polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	602-039-00-4	215-648-1	1336-36-3									
									Total:	0.035 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Can be discounted as this is a solid waste without a free draining liquid phase.

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinand:

tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane: (conc.: 1.1e-06%)

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.013%)

Classification of sample: WS-2[3]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS-2[3]
Sample Depth:
2.0-3.0 m
Moisture content:
10%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 10% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2.8 mg/kg	1.197	3.352 mg/kg	0.000335 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		19 mg/kg	1.32	25.086 mg/kg	0.00251 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		0.68 mg/kg	3.22	2.19 mg/kg	0.000219 %		
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.4 mg/kg	1.142	1.599 mg/kg	0.00016 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		16 mg/kg	1.462	23.385 mg/kg	0.00234 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<**LOD**
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		32 mg/kg	1.126	36.028 mg/kg	0.0036 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	38 mg/kg	1.56	59.273 mg/kg	0.0038 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.53 mg/kg	1.353	0.717 mg/kg	0.0000717 %		
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		3.1 mg/kg	1.5	4.651 mg/kg	0.000465 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		33 mg/kg	2.976	98.217 mg/kg	0.00982 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				0.66 mg/kg	2.554	1.685 mg/kg	0.000169 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		71 mg/kg	1.245	88.375 mg/kg	0.00884 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<**LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				0.013	mg/kg		0.013	mg/kg	0.0000013 %		
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				0.0016	mg/kg		0.0016	mg/kg	0.00000016 %		
		601-020-00-8	200-753-7	71-43-2									
17		toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
21		pH				9	pH		9	pH	9pH		
				PH									
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-917-1	208-96-8									
24		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-469-6	83-32-9									
25		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-695-5	86-73-7									
26		phenanthrene				0.43	mg/kg		0.43	mg/kg	0.000043 %		
			201-581-5	85-01-8									
27		anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-371-1	120-12-7									
28		fluoranthene				0.64	mg/kg		0.64	mg/kg	0.000064 %		
			205-912-4	206-44-0									
29		pyrene				0.58	mg/kg		0.58	mg/kg	0.000058 %		
			204-927-3	129-00-0									
30		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.0339 %		

Key	
	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Can be discounted as this is a solid waste without a free draining liquid phase.

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinands:

tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane: (conc.: 1.3e-06%)
benzene: (conc.: 1.6e-07%)

Classification of sample: WS3

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS3
Sample Depth:
0.0-1.0 m
Moisture content:
31%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 31% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		3.6 mg/kg	1.197	4.31 mg/kg	0.000431 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		29 mg/kg	1.32	38.289 mg/kg	0.00383 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		2.1 mg/kg	3.22	6.762 mg/kg	0.000676 %		
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.3 mg/kg	1.142	1.485 mg/kg	0.000149 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		20 mg/kg	1.462	29.231 mg/kg	0.00292 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		**<LOD**
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		120 mg/kg	1.126	135.107 mg/kg	0.0135 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	210 mg/kg	1.56	327.561 mg/kg	0.021 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.62 mg/kg	1.353	0.839 mg/kg	0.0000839 %		
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.2 mg/kg	1.5	6.301 mg/kg	0.00063 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		60 mg/kg	2.976	178.576 mg/kg	0.0179 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				0.53 mg/kg	2.554	1.353 mg/kg	0.000135 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		140 mg/kg	1.245	174.26 mg/kg	0.0174 %		
14	TPH (C6 to C40) petroleum group			TPH		150 mg/kg		150 mg/kg	0.015 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-020-00-8	200-753-7	71-43-2									
17		toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<**LOD**
		006-007-00-5											
21		pH				8.2	pH		8.2	pH	8.2 pH		
				PH									
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-917-1	208-96-8									
24		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-469-6	83-32-9									
25		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-695-5	86-73-7									
26		phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-581-5	85-01-8									
27		anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			204-371-1	120-12-7									
28		fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-912-4	206-44-0									
29		pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			204-927-3	129-00-0									
30		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.094 %		

Key	
	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Can be discounted as this is a solid waste without a free draining liquid phase.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.015%)

Classification of sample: WS3[2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS3[2]
Sample Depth:
1.0-2.0 m
Moisture content:
16%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 16% No Moisture Correction applied (MC)

#	Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number / EC Number / CAS Number							
1	antimony { antimony trioxide }		2.2 mg/kg	1.197	2.634 mg/kg	0.000263 %		
	051-005-00-X / 215-175-0 / 1309-64-4							
2	arsenic { arsenic trioxide }		28 mg/kg	1.32	36.969 mg/kg	0.0037 %		
	033-003-00-0 / 215-481-4 / 1327-53-3							
3	boron { diboron trioxide; boric oxide }		0.46 mg/kg	3.22	1.481 mg/kg	0.000148 %		
	005-008-00-8 / 215-125-8 / 1303-86-2							
4	cadmium { cadmium oxide }		2.9 mg/kg	1.142	3.313 mg/kg	0.000331 %		
	048-002-00-0 / 215-146-2 / 1306-19-0							
5	chromium in chromium(III) compounds { chromium(III) oxide }		14 mg/kg	1.462	20.462 mg/kg	0.00205 %		
	/ 215-160-9 / 1308-38-9							
6	chromium in chromium(VI) compounds { chromium(VI) oxide }		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<**LOD**
	024-001-00-0 / 215-607-8 / 1333-82-0							
7	copper { dicopper oxide; copper (I) oxide }		36 mg/kg	1.126	40.532 mg/kg	0.00405 %		
	029-002-00-X / 215-270-7 / 1317-39-1							
8	lead { lead chromate }	1	22 mg/kg	1.56	34.316 mg/kg	0.0022 %		
	082-004-00-2 / 231-846-0 / 7758-97-6							
9	mercury { mercury dichloride }		0.11 mg/kg	1.353	0.149 mg/kg	0.0000149 %		
	080-010-00-X / 231-299-8 / 7487-94-7							
10	molybdenum { molybdenum(VI) oxide }		5.7 mg/kg	1.5	8.551 mg/kg	0.000855 %		
	042-001-00-9 / 215-204-7 / 1313-27-5							
11	nickel { nickel chromate }		62 mg/kg	2.976	184.528 mg/kg	0.0185 %		
	028-035-00-7 / 238-766-5 / 14721-18-7							
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }		0.35 mg/kg	2.554	0.894 mg/kg	0.0000894 %		
	034-002-00-8 / /							
13	zinc { zinc oxide }		83 mg/kg	1.245	103.311 mg/kg	0.0103 %		
	030-013-00-7 / 215-222-5 / 1314-13-2							
14	TPH (C6 to C40) petroleum group		<10 mg/kg		<10 mg/kg	<0.001 %		<**LOD**
	/ / TPH							

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
17		toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
21		pH				8.4	pH		8.4	pH	8.4 pH		
				PH									
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-917-1	208-96-8									
24		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-469-6	83-32-9									
25		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-695-5	86-73-7									
26		phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-581-5	85-01-8									
27		anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-371-1	120-12-7									
28		fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-912-4	206-44-0									
29		pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-927-3	129-00-0									
30		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.0439 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS3[3]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS3[3]
Sample Depth:
2.0-3.0 m
Moisture content:
17%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 17% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		<2 mg/kg	1.197	<2.394 mg/kg	<0.000239 %		<**LOD**
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		16 mg/kg	1.32	21.125 mg/kg	0.00211 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<**LOD**
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		2.4 mg/kg	1.142	2.742 mg/kg	0.000274 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		12 mg/kg	1.462	17.539 mg/kg	0.00175 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<**LOD**
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		36 mg/kg	1.126	40.532 mg/kg	0.00405 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	20 mg/kg	1.56	31.196 mg/kg	0.002 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		2.6 mg/kg	1.5	3.9 mg/kg	0.00039 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		43 mg/kg	2.976	127.979 mg/kg	0.0128 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1.5 mg/kg	2.554	3.83 mg/kg	0.000383 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		89 mg/kg	1.245	110.78 mg/kg	0.0111 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<**LOD**

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<**LOD**
16	benzene	601-020-00-8	200-753-7	71-43-2		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<**LOD**
17	toluene	601-021-00-3	203-625-9	108-88-3		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<**LOD**
18	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<**LOD**
19	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<**LOD**
20	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<0.5 mg/kg	1.884	<0.942 mg/kg	<0.0000942 %		<**LOD**
21	pH			PH		8.5 pH		8.5 pH	8.5 pH		
22	naphthalene	601-052-00-2	202-049-5	91-20-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
23	acenaphthylene		205-917-1	208-96-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
24	acenaphthene		201-469-6	83-32-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
25	fluorene		201-695-5	86-73-7		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
26	phenanthrene		201-581-5	85-01-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
27	anthracene		204-371-1	120-12-7		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
28	fluoranthene		205-912-4	206-44-0		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
29	pyrene		204-927-3	129-00-0		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
30	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
31	chrysene	601-048-00-0	205-923-4	218-01-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
32	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
33	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
34	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
35	indeno[123-cd]pyrene		205-893-2	193-39-5		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
36	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
37	benzo[ghi]perylene		205-883-8	191-24-2		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
38	phenol	604-001-00-2	203-632-7	108-95-2		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<**LOD**
39	polychlorobiphenyls; PCB	602-039-00-4	215-648-1	1336-36-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
								Total:	0.0366 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS-4

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS-4
Sample Depth:
0.0-1.0 m
Moisture content:
18%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 18% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		3.7	mg/kg	1.197	4.429	mg/kg	0.000443 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		31	mg/kg	1.32	40.93	mg/kg	0.00409 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		1.4	mg/kg	3.22	4.508	mg/kg	0.000451 %		
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.7	mg/kg	1.142	1.942	mg/kg	0.000194 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		18	mg/kg	1.462	26.308	mg/kg	0.00263 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5	mg/kg	1.923	<0.962	mg/kg	<0.0000962 %		<**LOD**
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		68	mg/kg	1.126	76.56	mg/kg	0.00766 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	130	mg/kg	1.56	202.776	mg/kg	0.013 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.43	mg/kg	1.353	0.582	mg/kg	0.0000582 %		
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		6	mg/kg	1.5	9.001	mg/kg	0.0009 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		46	mg/kg	2.976	136.908	mg/kg	0.0137 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				0.45	mg/kg	2.554	1.149	mg/kg	0.000115 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		120	mg/kg	1.245	149.366	mg/kg	0.0149 %		
14	TPH (C6 to C40) petroleum group			TPH		<10	mg/kg		<10	mg/kg	<0.001 %		<**LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				0.017	mg/kg		0.017	mg/kg	0.0000017 %		
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				0.0028	mg/kg		0.0028	mg/kg	0.00000028 %		
		601-020-00-8	200-753-7	71-43-2									
17		toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				0.0022	mg/kg		0.0022	mg/kg	0.00000022 %		
		601-023-00-4	202-849-4	100-41-4									
19		xylene				0.0012	mg/kg		0.0012	mg/kg	0.00000012 %		
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
21		pH				8.6	pH		8.6	pH	8.6 pH		
				PH									
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-917-1	208-96-8									
24		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-469-6	83-32-9									
25		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-695-5	86-73-7									
26		phenanthrene				0.8	mg/kg		0.8	mg/kg	0.00008 %		
			201-581-5	85-01-8									
27		anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-371-1	120-12-7									
28		fluoranthene				1.1	mg/kg		1.1	mg/kg	0.00011 %		
			205-912-4	206-44-0									
29		pyrene				1	mg/kg		1	mg/kg	0.0001 %		
			204-927-3	129-00-0									
30		benzo[a]anthracene				0.21	mg/kg		0.21	mg/kg	0.000021 %		
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				0.33	mg/kg		0.33	mg/kg	0.000033 %		
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.0599 %		

Key	
	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Can be discounted as this is a solid waste without a free draining liquid phase.

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinands:

tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane: (conc.: 1.7e-06%)
benzene: (conc.: 2.8e-07%)
ethylbenzene: (conc.: 2.2e-07%)

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

xylene: (conc.: 1.2e-07%)

Classification of sample: WS-4[2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS-4[2]
Sample Depth:
1.0-2.0 m
Moisture content:
12%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 12% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2.5 mg/kg	1.197	2.993 mg/kg	0.000299 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		20 mg/kg	1.32	26.407 mg/kg	0.00264 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		0.46 mg/kg	3.22	1.481 mg/kg	0.000148 %		
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.8 mg/kg	1.142	2.056 mg/kg	0.000206 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		11 mg/kg	1.462	16.077 mg/kg	0.00161 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		25 mg/kg	1.126	28.147 mg/kg	0.00281 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	15 mg/kg	1.56	23.397 mg/kg	0.0015 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		3.6 mg/kg	1.5	5.401 mg/kg	0.00054 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		37 mg/kg	2.976	110.122 mg/kg	0.011 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				0.23 mg/kg	2.554	0.587 mg/kg	0.0000587 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		49 mg/kg	1.245	60.991 mg/kg	0.0061 %		
14	TPH (C6 to C40) petroleum group			TPH		85 mg/kg		85 mg/kg	0.0085 %		

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		0.005 mg/kg		0.005 mg/kg	0.0000005 %		
16	benzene	601-020-00-8	200-753-7	71-43-2		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
17	toluene	601-021-00-3	203-625-9	108-88-3		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
18	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
19	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
20	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<0.5 mg/kg	1.884	<0.942 mg/kg	<0.0000942 %		<LOD
21	pH			PH		8.8 pH		8.8 pH	8.8 pH		
22	naphthalene	601-052-00-2	202-049-5	91-20-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
23	acenaphthylene		205-917-1	208-96-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
24	acenaphthene		201-469-6	83-32-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
25	fluorene		201-695-5	86-73-7		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
26	phenanthrene		201-581-5	85-01-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
27	anthracene		204-371-1	120-12-7		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
28	fluoranthene		205-912-4	206-44-0		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
29	pyrene		204-927-3	129-00-0		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
30	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
31	chrysene	601-048-00-0	205-923-4	218-01-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
32	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
33	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
34	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
35	indeno[123-cd]pyrene		205-893-2	193-39-5		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
36	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
37	benzo[ghi]perylene		205-883-8	191-24-2		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
38	phenol	604-001-00-2	203-632-7	108-95-2		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
39	polychlorobiphenyls; PCB	602-039-00-4	215-648-1	1336-36-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
								Total:	0.0358 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Can be discounted as this is a solid waste without a free draining liquid phase.

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinand:

tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane: (conc.: 5.0e-07%)

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0085%)

Classification of sample: WS-4[3]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS-4[3]
Sample Depth:
2.0-3.0 m
Moisture content:
9.6%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 9.6% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2.4 mg/kg	1.197	2.873 mg/kg	0.000287 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		21 mg/kg	1.32	27.727 mg/kg	0.00277 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<LOD
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.9 mg/kg	1.142	2.17 mg/kg	0.000217 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		13 mg/kg	1.462	19 mg/kg	0.0019 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		24 mg/kg	1.126	27.021 mg/kg	0.0027 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	23 mg/kg	1.56	35.876 mg/kg	0.0023 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		3.8 mg/kg	1.5	5.701 mg/kg	0.00057 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		37 mg/kg	2.976	110.122 mg/kg	0.011 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				2 mg/kg	2.554	5.107 mg/kg	0.000511 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		58 mg/kg	1.245	72.193 mg/kg	0.00722 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				0.01	mg/kg		0.01	mg/kg	0.000001 %		
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-020-00-8	200-753-7	71-43-2									
17		toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<**LOD**
		006-007-00-5											
21		pH				8.9	pH		8.9	pH	8.9 pH		
				PH									
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-917-1	208-96-8									
24		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-469-6	83-32-9									
25		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-695-5	86-73-7									
26		phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-581-5	85-01-8									
27		anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			204-371-1	120-12-7									
28		fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-912-4	206-44-0									
29		pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			204-927-3	129-00-0									
30		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.031 %		

Key	
	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Can be discounted as this is a solid waste without a free draining liquid phase.

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinand:

tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane: (conc.: 1.0e-06%)

Classification of sample: WS5

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS5
Sample Depth:
0.0-1.0 m
Moisture content:
19%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 19% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		3 mg/kg	1.197	3.591 mg/kg	0.000359 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		17 mg/kg	1.32	22.446 mg/kg	0.00224 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		0.92 mg/kg	3.22	2.962 mg/kg	0.000296 %		
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		2.2 mg/kg	1.142	2.513 mg/kg	0.000251 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		18 mg/kg	1.462	26.308 mg/kg	0.00263 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<**LOD**
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		26 mg/kg	1.126	29.273 mg/kg	0.00293 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	31 mg/kg	1.56	48.354 mg/kg	0.0031 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.15 mg/kg	1.353	0.203 mg/kg	0.0000203 %		
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.2 mg/kg	1.5	7.801 mg/kg	0.00078 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		36 mg/kg	2.976	107.146 mg/kg	0.0107 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				0.66 mg/kg	2.554	1.685 mg/kg	0.000169 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		84 mg/kg	1.245	104.556 mg/kg	0.0105 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<**LOD**

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<**LOD**
16	benzene	601-020-00-8	200-753-7	71-43-2		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<**LOD**
17	toluene	601-021-00-3	203-625-9	108-88-3		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<**LOD**
18	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<**LOD**
19	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<**LOD**
20	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<0.5 mg/kg	1.884	<0.942 mg/kg	<0.0000942 %		<**LOD**
21	pH			PH		8.3 pH		8.3 pH	8.3 pH		
22	naphthalene	601-052-00-2	202-049-5	91-20-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
23	acenaphthylene		205-917-1	208-96-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
24	acenaphthene		201-469-6	83-32-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
25	fluorene		201-695-5	86-73-7		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
26	phenanthrene		201-581-5	85-01-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
27	anthracene		204-371-1	120-12-7		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
28	fluoranthene		205-912-4	206-44-0		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
29	pyrene		204-927-3	129-00-0		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
30	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
31	chrysene	601-048-00-0	205-923-4	218-01-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
32	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
33	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
34	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
35	indeno[123-cd]pyrene		205-893-2	193-39-5		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
36	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
37	benzo[ghi]perylene		205-883-8	191-24-2		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
38	phenol	604-001-00-2	203-632-7	108-95-2		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<**LOD**
39	polychlorobiphenyls; PCB	602-039-00-4	215-648-1	1336-36-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
								Total:	0.0353 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS5[2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS5[2]
Sample Depth:
1.0-2.0 m
Moisture content:
14%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 14% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2.4 mg/kg	1.197	2.873 mg/kg	0.000287 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		23 mg/kg	1.32	30.367 mg/kg	0.00304 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<LOD
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		2.5 mg/kg	1.142	2.856 mg/kg	0.000286 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		14 mg/kg	1.462	20.462 mg/kg	0.00205 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		29 mg/kg	1.126	32.651 mg/kg	0.00327 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	19 mg/kg	1.56	29.636 mg/kg	0.0019 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.4 mg/kg	1.5	8.101 mg/kg	0.00081 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		52 mg/kg	2.976	154.766 mg/kg	0.0155 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				0.24 mg/kg	2.554	0.613 mg/kg	0.0000613 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		98 mg/kg	1.245	121.982 mg/kg	0.0122 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
17		toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
21		pH				8.6	pH		8.6	pH	8.6 pH		
				PH									
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-917-1	208-96-8									
24		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-469-6	83-32-9									
25		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-695-5	86-73-7									
26		phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-581-5	85-01-8									
27		anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-371-1	120-12-7									
28		fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-912-4	206-44-0									
29		pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-927-3	129-00-0									
30		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.0409 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS5[3]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS5[3]
Sample Depth:
2.0-3.0 m
Moisture content:
8.8%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 8.8% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		<2 mg/kg	1.197	<2.394 mg/kg	<0.000239 %		<**LOD**
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		21 mg/kg	1.32	27.727 mg/kg	0.00277 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<**LOD**
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.9 mg/kg	1.142	2.17 mg/kg	0.000217 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		13 mg/kg	1.462	19 mg/kg	0.0019 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<**LOD**
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		23 mg/kg	1.126	25.895 mg/kg	0.00259 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	32 mg/kg	1.56	49.914 mg/kg	0.0032 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		3.4 mg/kg	1.5	5.101 mg/kg	0.00051 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		35 mg/kg	2.976	104.169 mg/kg	0.0104 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				2.9 mg/kg	2.554	7.405 mg/kg	0.000741 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		69 mg/kg	1.245	85.885 mg/kg	0.00859 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<**LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-020-00-8	200-753-7	71-43-2									
17		toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<**LOD**
		006-007-00-5											
21		pH				8.7	pH		8.7	pH	8.7 pH		
				PH									
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-917-1	208-96-8									
24		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-469-6	83-32-9									
25		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-695-5	86-73-7									
26		phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-581-5	85-01-8									
27		anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			204-371-1	120-12-7									
28		fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-912-4	206-44-0									
29		pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			204-927-3	129-00-0									
30		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.0327 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS6

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS6
Sample Depth:
0.0-1.0 m
Moisture content:
13%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 13% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		<2 mg/kg	1.197	<2.394 mg/kg	<0.000239 %		<**LOD**
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		19 mg/kg	1.32	25.086 mg/kg	0.00251 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<**LOD**
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		2.1 mg/kg	1.142	2.399 mg/kg	0.00024 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		15 mg/kg	1.462	21.923 mg/kg	0.00219 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<**LOD**
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		23 mg/kg	1.126	25.895 mg/kg	0.00259 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	30 mg/kg	1.56	46.794 mg/kg	0.003 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.13 mg/kg	1.353	0.176 mg/kg	0.0000176 %		
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.5 mg/kg	1.5	8.251 mg/kg	0.000825 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		31 mg/kg	2.976	92.264 mg/kg	0.00923 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				0.37 mg/kg	2.554	0.945 mg/kg	0.0000945 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		57 mg/kg	1.245	70.949 mg/kg	0.00709 %		
14	TPH (C6 to C40) petroleum group			TPH		340 mg/kg		340 mg/kg	0.034 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
17		toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
21		pH				8.6	pH		8.6	pH	8.6 pH		
				PH									
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-917-1	208-96-8									
24		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-469-6	83-32-9									
25		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-695-5	86-73-7									
26		phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-581-5	85-01-8									
27		anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-371-1	120-12-7									
28		fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-912-4	206-44-0									
29		pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-927-3	129-00-0									
30		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.0625 %		

Key	
	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Can be discounted as this is a solid waste without a free draining liquid phase.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.034%)

Classification of sample: WS6[2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS6[2]
Sample Depth:
1.0-2.0 m
Moisture content:
10%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 10% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2.2 mg/kg	1.197	2.634 mg/kg	0.000263 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		23 mg/kg	1.32	30.367 mg/kg	0.00304 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<**LOD**
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		2.5 mg/kg	1.142	2.856 mg/kg	0.000286 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		16 mg/kg	1.462	23.385 mg/kg	0.00234 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<**LOD**
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		34 mg/kg	1.126	38.28 mg/kg	0.00383 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	29 mg/kg	1.56	45.235 mg/kg	0.0029 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.6 mg/kg	1.5	6.901 mg/kg	0.00069 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		56 mg/kg	2.976	166.671 mg/kg	0.0167 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1.7 mg/kg	2.554	4.341 mg/kg	0.000434 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		89 mg/kg	1.245	110.78 mg/kg	0.0111 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<**LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-020-00-8	200-753-7	71-43-2									
17		toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<**LOD**
		006-007-00-5											
21		pH				8.7	pH		8.7	pH	8.7 pH		
				PH									
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-917-1	208-96-8									
24		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-469-6	83-32-9									
25		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-695-5	86-73-7									
26		phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-581-5	85-01-8									
27		anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			204-371-1	120-12-7									
28		fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-912-4	206-44-0									
29		pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			204-927-3	129-00-0									
30		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.0431 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS6[3]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS6[3]
Sample Depth:
2.0-3.0 m
Moisture content:
10%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 10% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2.2 mg/kg	1.197	2.634 mg/kg	0.000263 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		24 mg/kg	1.32	31.688 mg/kg	0.00317 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<**LOD**
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		2.4 mg/kg	1.142	2.742 mg/kg	0.000274 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		17 mg/kg	1.462	24.846 mg/kg	0.00248 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<**LOD**
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		40 mg/kg	1.126	45.036 mg/kg	0.0045 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	28 mg/kg	1.56	43.675 mg/kg	0.0028 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5 mg/kg	1.5	7.501 mg/kg	0.00075 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		57 mg/kg	2.976	169.647 mg/kg	0.017 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				0.73 mg/kg	2.554	1.864 mg/kg	0.000186 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		98 mg/kg	1.245	121.982 mg/kg	0.0122 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<**LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
17		toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
21		pH				8.7	pH		8.7	pH	8.7 pH		
				PH									
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-917-1	208-96-8									
24		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-469-6	83-32-9									
25		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-695-5	86-73-7									
26		phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-581-5	85-01-8									
27		anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-371-1	120-12-7									
28		fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-912-4	206-44-0									
29		pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-927-3	129-00-0									
30		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.0451 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS-7

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS-7
Sample Depth:
0.0-1.0 m
Moisture content:
21%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 21% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2.8	mg/kg	1.197	3.352	mg/kg	0.000335 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		17	mg/kg	1.32	22.446	mg/kg	0.00224 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		0.87	mg/kg	3.22	2.801	mg/kg	0.00028 %		
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		3	mg/kg	1.142	3.427	mg/kg	0.000343 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		22	mg/kg	1.462	32.154	mg/kg	0.00322 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5	mg/kg	1.923	<0.962	mg/kg	<0.0000962 %		**<LOD**
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		32	mg/kg	1.126	36.028	mg/kg	0.0036 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	42	mg/kg	1.56	65.512	mg/kg	0.0042 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.1	mg/kg	1.353	0.135	mg/kg	0.0000135 %		
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		7.4	mg/kg	1.5	11.101	mg/kg	0.00111 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		53	mg/kg	2.976	157.742	mg/kg	0.0158 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				0.94	mg/kg	2.554	2.4	mg/kg	0.00024 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		96	mg/kg	1.245	119.493	mg/kg	0.0119 %		
14	TPH (C6 to C40) petroleum group			TPH		86	mg/kg		86	mg/kg	0.0086 %		

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		0.009	mg/kg		0.009	mg/kg	0.0000009 %		
16	benzene	601-020-00-8	200-753-7	71-43-2		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
17	toluene	601-021-00-3	203-625-9	108-88-3		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
18	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
19	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
20	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<**LOD**
21	pH			PH		8.8	pH		8.8	pH	8.8 pH		
22	naphthalene	601-052-00-2	202-049-5	91-20-3		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
23	acenaphthylene		205-917-1	208-96-8		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
24	acenaphthene		201-469-6	83-32-9		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
25	fluorene		201-695-5	86-73-7		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
26	phenanthrene		201-581-5	85-01-8		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
27	anthracene		204-371-1	120-12-7		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
28	fluoranthene		205-912-4	206-44-0		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
29	pyrene		204-927-3	129-00-0		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
30	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
31	chrysene	601-048-00-0	205-923-4	218-01-9		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
32	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
33	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
34	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
35	indeno[123-cd]pyrene		205-893-2	193-39-5		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
36	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
37	benzo[ghi]perylene		205-883-8	191-24-2		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
38	phenol	604-001-00-2	203-632-7	108-95-2		<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<**LOD**
39	polychlorobiphenyls; PCB	602-039-00-4	215-648-1	1336-36-3		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
										Total:	0.0523 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Can be discounted as this is a solid waste without a free draining liquid phase.

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinand:

tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane: (conc.: 9.0e-07%)

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0086%)

Classification of sample: WS-7[2]

Hazardous Waste
Classified as **17 05 03 ***
in the List of Waste

Sample details

Sample Name:
WS-7[2]
Sample Depth:
1.0-2.0 m
Moisture content:
11%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 03 * (Soil and stones containing hazardous substances)

Hazard properties

HP 7: Carcinogenic "waste which induces cancer or increases its incidence"

Hazard Statements hit:

Carc. 1B; H350 "May cause cancer [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.91%)

HP 11: Mutagenic "waste which may cause a mutation, that is a permanent change in the amount or structure of the genetic material in a cell"

Hazard Statements hit:

Muta. 1B; H340 "May cause genetic defects [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.91%)

Determinands

Moisture content: 11% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2.1 mg/kg	1.197	2.514 mg/kg	0.000251 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		22 mg/kg	1.32	29.047 mg/kg	0.0029 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		0.41 mg/kg	3.22	1.32 mg/kg	0.000132 %		
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		2.1 mg/kg	1.142	2.399 mg/kg	0.00024 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		13 mg/kg	1.462	19 mg/kg	0.0019 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<**LOD**
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		28 mg/kg	1.126	31.525 mg/kg	0.00315 %		

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	18	mg/kg	1.56	28.077	mg/kg	0.0018 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1	mg/kg	1.353	<0.135	mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.2	mg/kg	1.5	6.301	mg/kg	0.00063 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		46	mg/kg	2.976	136.908	mg/kg	0.0137 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<0.2	mg/kg	2.554	<0.511	mg/kg	<0.0000511 %		<LOD
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		59	mg/kg	1.245	73.438	mg/kg	0.00734 %		
14	TPH (C6 to C40) petroleum group			TPH		9100	mg/kg		9100	mg/kg	0.91 %		
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		0.012	mg/kg		0.012	mg/kg	0.0000012 %		
16	benzene	601-020-00-8	200-753-7	71-43-2		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
17	toluene	601-021-00-3	203-625-9	108-88-3		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
18	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
19	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
20	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
21	pH			PH		8.7	pH		8.7	pH	8.7 pH		
22	naphthalene	601-052-00-2	202-049-5	91-20-3		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
23	acenaphthylene		205-917-1	208-96-8		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
24	acenaphthene		201-469-6	83-32-9		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
25	fluorene		201-695-5	86-73-7		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
26	phenanthrene		201-581-5	85-01-8		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
27	anthracene		204-371-1	120-12-7		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
28	fluoranthene		205-912-4	206-44-0		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
29	pyrene		204-927-3	129-00-0		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
30	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
31	chrysene	601-048-00-0	205-923-4	218-01-9		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
32	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
33	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
34		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.943 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Hazardous result
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Can be discounted as this is a solid waste without a free draining liquid phase.

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinand:

tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane: (conc.: 1.2e-06%)

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.91%)

Classification of sample: WS-7[3]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS-7[3]
Sample Depth:
2.0-3.0 m
Moisture content:
12%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 12% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2 mg/kg	1.197	2.394 mg/kg	0.000239 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		18 mg/kg	1.32	23.766 mg/kg	0.00238 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<**LOD**
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		2 mg/kg	1.142	2.285 mg/kg	0.000228 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		12 mg/kg	1.462	17.539 mg/kg	0.00175 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<**LOD**
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		26 mg/kg	1.126	29.273 mg/kg	0.00293 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	14 mg/kg	1.56	21.837 mg/kg	0.0014 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		3.5 mg/kg	1.5	5.251 mg/kg	0.000525 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		40 mg/kg	2.976	119.051 mg/kg	0.0119 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				0.24 mg/kg	2.554	0.613 mg/kg	0.0000613 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		63 mg/kg	1.245	78.417 mg/kg	0.00784 %		
14	TPH (C6 to C40) petroleum group			TPH		84 mg/kg		84 mg/kg	0.0084 %		

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		0.016 mg/kg		0.016 mg/kg	0.0000016 %		
16	benzene	601-020-00-8	200-753-7	71-43-2		0.0032 mg/kg		0.0032 mg/kg	0.00000032 %		
17	toluene	601-021-00-3	203-625-9	108-88-3		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<**LOD**
18	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<**LOD**
19	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<**LOD**
20	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<0.5 mg/kg	1.884	<0.942 mg/kg	<0.0000942 %		<**LOD**
21	pH			PH		8.8 pH		8.8 pH	8.8 pH		
22	naphthalene	601-052-00-2	202-049-5	91-20-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
23	acenaphthylene		205-917-1	208-96-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
24	acenaphthene		201-469-6	83-32-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
25	fluorene		201-695-5	86-73-7		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
26	phenanthrene		201-581-5	85-01-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
27	anthracene		204-371-1	120-12-7		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
28	fluoranthene		205-912-4	206-44-0		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
29	pyrene		204-927-3	129-00-0		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
30	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
31	chrysene	601-048-00-0	205-923-4	218-01-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
32	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
33	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
34	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
35	indeno[123-cd]pyrene		205-893-2	193-39-5		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
36	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
37	benzo[ghi]perylene		205-883-8	191-24-2		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
38	phenol	604-001-00-2	203-632-7	108-95-2		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<**LOD**
39	polychlorobiphenyls; PCB	602-039-00-4	215-648-1	1336-36-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
								Total:	0.0382 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Can be discounted as this is a solid waste without a free draining liquid phase.

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinands:

tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane: (conc.: 1.6e-06%)
benzene: (conc.: 3.2e-07%)

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0084%)

Classification of sample: WS-9

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS-9
Sample Depth:
0.0-1.0 m
Moisture content:
8.3%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 8.3% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		<2 mg/kg	1.197	<2.394 mg/kg	<0.000239 %		<LOD
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		18 mg/kg	1.32	23.766 mg/kg	0.00238 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<LOD
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.9 mg/kg	1.142	2.17 mg/kg	0.000217 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		11 mg/kg	1.462	16.077 mg/kg	0.00161 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		22 mg/kg	1.126	24.77 mg/kg	0.00248 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	17 mg/kg	1.56	26.517 mg/kg	0.0017 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		3.8 mg/kg	1.5	5.701 mg/kg	0.00057 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		35 mg/kg	2.976	104.169 mg/kg	0.0104 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				4.6 mg/kg	2.554	11.747 mg/kg	0.00117 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		53 mg/kg	1.245	65.97 mg/kg	0.0066 %		
14	TPH (C6 to C40) petroleum group			TPH		280 mg/kg		280 mg/kg	0.028 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
17		toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
21		pH				8.9	pH		8.9	pH	8.9 pH		
				PH									
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-917-1	208-96-8									
24		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-469-6	83-32-9									
25		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-695-5	86-73-7									
26		phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-581-5	85-01-8									
27		anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-371-1	120-12-7									
28		fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-912-4	206-44-0									
29		pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-927-3	129-00-0									
30		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.0559 %		

Key	
	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Can be discounted as this is a solid waste without a free draining liquid phase.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.028%)

Classification of sample: WS-9[2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS-9[2]
Sample Depth:
1.0-2.0 m
Moisture content:
23%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 23% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		3.2 mg/kg	1.197	3.831 mg/kg	0.000383 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		15 mg/kg	1.32	19.805 mg/kg	0.00198 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		0.73 mg/kg	3.22	2.351 mg/kg	0.000235 %		
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		3.3 mg/kg	1.142	3.77 mg/kg	0.000377 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		22 mg/kg	1.462	32.154 mg/kg	0.00322 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		43 mg/kg	1.126	48.413 mg/kg	0.00484 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	37 mg/kg	1.56	57.713 mg/kg	0.0037 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.13 mg/kg	1.353	0.176 mg/kg	0.0000176 %		
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.1 mg/kg	1.5	7.651 mg/kg	0.000765 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		59 mg/kg	2.976	175.6 mg/kg	0.0176 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				0.75 mg/kg	2.554	1.915 mg/kg	0.000192 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		140 mg/kg	1.245	174.26 mg/kg	0.0174 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		0.011	mg/kg		0.011	mg/kg	0.0000011 %		
16	benzene	601-020-00-8	200-753-7	71-43-2		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
17	toluene	601-021-00-3	203-625-9	108-88-3		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
18	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
19	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
20	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
21	pH			PH		8	pH		8	pH	8pH		
22	naphthalene	601-052-00-2	202-049-5	91-20-3		0.1	mg/kg		0.1	mg/kg	0.00001 %		
23	acenaphthylene		205-917-1	208-96-8		0.18	mg/kg		0.18	mg/kg	0.000018 %		
24	acenaphthene		201-469-6	83-32-9		0.23	mg/kg		0.23	mg/kg	0.000023 %		
25	fluorene		201-695-5	86-73-7		0.2	mg/kg		0.2	mg/kg	0.00002 %		
26	phenanthrene		201-581-5	85-01-8		0.46	mg/kg		0.46	mg/kg	0.000046 %		
27	anthracene		204-371-1	120-12-7		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
28	fluoranthene		205-912-4	206-44-0		0.58	mg/kg		0.58	mg/kg	0.000058 %		
29	pyrene		204-927-3	129-00-0		0.55	mg/kg		0.55	mg/kg	0.000055 %		
30	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		0.14	mg/kg		0.14	mg/kg	0.000014 %		
31	chrysene	601-048-00-0	205-923-4	218-01-9		0.16	mg/kg		0.16	mg/kg	0.000016 %		
32	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
33	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
34	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
35	indeno[123-cd]pyrene		205-893-2	193-39-5		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
36	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
37	benzo[ghi]perylene		205-883-8	191-24-2		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
38	phenol	604-001-00-2	203-632-7	108-95-2		<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
39	polychlorobiphenyls; PCB	602-039-00-4	215-648-1	1336-36-3		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
										Total:	0.0523 %		

Key	
	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Can be discounted as this is a solid waste without a free draining liquid phase.

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinand:

tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane: (conc.: 1.1e-06%)

Classification of sample: WS-9[3]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS-9[3]
Sample Depth:
2.0-3.0 m
Moisture content:
12%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 12% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2 mg/kg	1.197	2.394 mg/kg	0.000239 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		19 mg/kg	1.32	25.086 mg/kg	0.00251 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<**LOD**
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		7.8 mg/kg	1.142	8.91 mg/kg	0.000891 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		12 mg/kg	1.462	17.539 mg/kg	0.00175 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<**LOD**
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		51 mg/kg	1.126	57.42 mg/kg	0.00574 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	15 mg/kg	1.56	23.397 mg/kg	0.0015 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.7 mg/kg	1.5	7.051 mg/kg	0.000705 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		180 mg/kg	2.976	535.728 mg/kg	0.0536 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				0.24 mg/kg	2.554	0.613 mg/kg	0.0000613 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		190 mg/kg	1.245	236.496 mg/kg	0.0236 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<**LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				0.024	mg/kg		0.024	mg/kg	0.0000024 %		
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
17		toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
21		pH				8.6	pH		8.6	pH	8.6 pH		
				PH									
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-917-1	208-96-8									
24		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-469-6	83-32-9									
25		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-695-5	86-73-7									
26		phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-581-5	85-01-8									
27		anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-371-1	120-12-7									
28		fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-912-4	206-44-0									
29		pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-927-3	129-00-0									
30		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.0922 %		

Key	
	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Can be discounted as this is a solid waste without a free draining liquid phase.

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinand:

tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane: (conc.: 2.4e-06%)

Classification of sample: WS-10

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS-10
Sample Depth:
0.0-1.0 m
Moisture content:
14%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 14% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		<2 mg/kg	1.197	<2.394 mg/kg	<0.000239 %		**<LOD**
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		15 mg/kg	1.32	19.805 mg/kg	0.00198 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		0.68 mg/kg	3.22	2.19 mg/kg	0.000219 %		
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		2.1 mg/kg	1.142	2.399 mg/kg	0.00024 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		14 mg/kg	1.462	20.462 mg/kg	0.00205 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		**<LOD**
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		27 mg/kg	1.126	30.399 mg/kg	0.00304 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	16 mg/kg	1.56	24.957 mg/kg	0.0016 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		**<LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		2.8 mg/kg	1.5	4.201 mg/kg	0.00042 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		39 mg/kg	2.976	116.074 mg/kg	0.0116 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				0.2 mg/kg	2.554	0.511 mg/kg	0.0000511 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		61 mg/kg	1.245	75.928 mg/kg	0.00759 %		
14	TPH (C6 to C40) petroleum group			TPH		270 mg/kg		270 mg/kg	0.027 %		

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		0.009 mg/kg		0.009 mg/kg	0.0000009 %		
16	benzene	601-020-00-8	200-753-7	71-43-2		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
17	toluene	601-021-00-3	203-625-9	108-88-3		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
18	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
19	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
20	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<0.5 mg/kg	1.884	<0.942 mg/kg	<0.0000942 %		<LOD
21	pH			PH		8.5 pH		8.5 pH	8.5 pH		
22	naphthalene	601-052-00-2	202-049-5	91-20-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
23	acenaphthylene		205-917-1	208-96-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
24	acenaphthene		201-469-6	83-32-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
25	fluorene		201-695-5	86-73-7		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
26	phenanthrene		201-581-5	85-01-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
27	anthracene		204-371-1	120-12-7		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
28	fluoranthene		205-912-4	206-44-0		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
29	pyrene		204-927-3	129-00-0		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
30	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
31	chrysene	601-048-00-0	205-923-4	218-01-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
32	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
33	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
34	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
35	indeno[123-cd]pyrene		205-893-2	193-39-5		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
36	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
37	benzo[ghi]perylene		205-883-8	191-24-2		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
38	phenol	604-001-00-2	203-632-7	108-95-2		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
39	polychlorobiphenyls; PCB	602-039-00-4	215-648-1	1336-36-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
								Total:	0.0564 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Can be discounted as this is a solid waste without a free draining liquid phase.

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinand:

tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane: (conc.: 9.0e-07%)

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.027%)

Classification of sample: WS-10[2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS-10[2]
Sample Depth:
1.0-2.0 m
Moisture content:
9.1%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 9.1% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2.1 mg/kg	1.197	2.514 mg/kg	0.000251 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		32 mg/kg	1.32	42.25 mg/kg	0.00423 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		2.1 mg/kg	3.22	6.762 mg/kg	0.000676 %		
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		2.6 mg/kg	1.142	2.97 mg/kg	0.000297 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		16 mg/kg	1.462	23.385 mg/kg	0.00234 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<**LOD**
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		31 mg/kg	1.126	34.903 mg/kg	0.00349 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	17 mg/kg	1.56	26.517 mg/kg	0.0017 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.5 mg/kg	1.5	8.251 mg/kg	0.000825 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		51 mg/kg	2.976	151.79 mg/kg	0.0152 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				0.63 mg/kg	2.554	1.609 mg/kg	0.000161 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		75 mg/kg	1.245	93.354 mg/kg	0.00934 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<**LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				0.01	mg/kg		0.01	mg/kg	0.000001 %		
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-020-00-8	200-753-7	71-43-2									
17		toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<**LOD**
		006-007-00-5											
21		pH				8.7	pH		8.7	pH	8.7 pH		
				PH									
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-917-1	208-96-8									
24		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-469-6	83-32-9									
25		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-695-5	86-73-7									
26		phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-581-5	85-01-8									
27		anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			204-371-1	120-12-7									
28		fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-912-4	206-44-0									
29		pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			204-927-3	129-00-0									
30		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.0399 %		

Key	
	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Can be discounted as this is a solid waste without a free draining liquid phase.

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinand:

tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane: (conc.: 1.0e-06%)

Classification of sample: WS-10[3]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS-10[3]
Sample Depth:
2.0-3.0 m
Moisture content:
9%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 9% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2 mg/kg	1.197	2.394 mg/kg	0.000239 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		29 mg/kg	1.32	38.289 mg/kg	0.00383 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		0.54 mg/kg	3.22	1.739 mg/kg	0.000174 %		
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		2.1 mg/kg	1.142	2.399 mg/kg	0.00024 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		18 mg/kg	1.462	26.308 mg/kg	0.00263 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		33 mg/kg	1.126	37.154 mg/kg	0.00372 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	28 mg/kg	1.56	43.675 mg/kg	0.0028 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.8 mg/kg	1.5	7.201 mg/kg	0.00072 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		49 mg/kg	2.976	145.837 mg/kg	0.0146 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				2.5 mg/kg	2.554	6.384 mg/kg	0.000638 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		79 mg/kg	1.245	98.332 mg/kg	0.00983 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				0.014	mg/kg		0.014	mg/kg	0.0000014 %		
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
17		toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
21		pH				8.5	pH		8.5	pH	8.5 pH		
				PH									
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-917-1	208-96-8									
24		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-469-6	83-32-9									
25		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-695-5	86-73-7									
26		phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-581-5	85-01-8									
27		anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-371-1	120-12-7									
28		fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-912-4	206-44-0									
29		pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-927-3	129-00-0									
30		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.0408 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Can be discounted as this is a solid waste without a free draining liquid phase.

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinand:

tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane: (conc.: 1.4e-06%)

Classification of sample: WS-11

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS-11
Sample Depth:
0.0-1.0 m
Moisture content:
59%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 59% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		3.1 mg/kg	1.197	3.711 mg/kg	0.000371 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		33 mg/kg	1.32	43.571 mg/kg	0.00436 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<**LOD**
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		2.3 mg/kg	1.142	2.627 mg/kg	0.000263 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		24 mg/kg	1.462	35.077 mg/kg	0.00351 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<**LOD**
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		70 mg/kg	1.126	78.812 mg/kg	0.00788 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	170 mg/kg	1.56	265.169 mg/kg	0.017 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.7 mg/kg	1.353	0.947 mg/kg	0.0000947 %		
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.7 mg/kg	1.5	8.551 mg/kg	0.000855 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		58 mg/kg	2.976	172.623 mg/kg	0.0173 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				0.84 mg/kg	2.554	2.145 mg/kg	0.000215 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		130 mg/kg	1.245	161.813 mg/kg	0.0162 %		
14	TPH (C6 to C40) petroleum group			TPH		260 mg/kg		260 mg/kg	0.026 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				0.016	mg/kg		0.016	mg/kg	0.0000016 %		
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				0.0025	mg/kg		0.0025	mg/kg	0.00000025 %		
		601-020-00-8	200-753-7	71-43-2									
17		toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
21		pH				8.3	pH		8.3	pH	8.3 pH		
				PH									
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-917-1	208-96-8									
24		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-469-6	83-32-9									
25		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-695-5	86-73-7									
26		phenanthrene				0.92	mg/kg		0.92	mg/kg	0.000092 %		
			201-581-5	85-01-8									
27		anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-371-1	120-12-7									
28		fluoranthene				1.1	mg/kg		1.1	mg/kg	0.00011 %		
			205-912-4	206-44-0									
29		pyrene				0.95	mg/kg		0.95	mg/kg	0.000095 %		
			204-927-3	129-00-0									
30		benzo[a]anthracene				0.36	mg/kg		0.36	mg/kg	0.000036 %		
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				0.44	mg/kg		0.44	mg/kg	0.000044 %		
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.0948 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Can be discounted as this is a solid waste without a free draining liquid phase.

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinands:

tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane: (conc.: 1.6e-06%)
benzene: (conc.: 2.5e-07%)

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.026%)

Classification of sample: WS-11[2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS-11[2]
Sample Depth:
1.0-2.0 m
Moisture content:
12%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 12% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2.3 mg/kg	1.197	2.753 mg/kg	0.000275 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		28 mg/kg	1.32	36.969 mg/kg	0.0037 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		0.44 mg/kg	3.22	1.417 mg/kg	0.000142 %		
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		3 mg/kg	1.142	3.427 mg/kg	0.000343 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		19 mg/kg	1.462	27.77 mg/kg	0.00278 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		44 mg/kg	1.126	49.539 mg/kg	0.00495 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	24 mg/kg	1.56	37.436 mg/kg	0.0024 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.9 mg/kg	1.5	8.851 mg/kg	0.000885 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		75 mg/kg	2.976	223.22 mg/kg	0.0223 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				0.4 mg/kg	2.554	1.021 mg/kg	0.000102 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		97 mg/kg	1.245	120.737 mg/kg	0.0121 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		0.005 mg/kg		0.005 mg/kg	0.0000005 %		
16	benzene	601-020-00-8	200-753-7	71-43-2		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
17	toluene	601-021-00-3	203-625-9	108-88-3		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
18	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
19	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
20	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<0.5 mg/kg	1.884	<0.942 mg/kg	<0.0000942 %		<LOD
21	pH			PH		8.4 pH		8.4 pH	8.4 pH		
22	naphthalene	601-052-00-2	202-049-5	91-20-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
23	acenaphthylene		205-917-1	208-96-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
24	acenaphthene		201-469-6	83-32-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
25	fluorene		201-695-5	86-73-7		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
26	phenanthrene		201-581-5	85-01-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
27	anthracene		204-371-1	120-12-7		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
28	fluoranthene		205-912-4	206-44-0		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
29	pyrene		204-927-3	129-00-0		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
30	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
31	chrysene	601-048-00-0	205-923-4	218-01-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
32	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
33	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
34	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
35	indeno[123-cd]pyrene		205-893-2	193-39-5		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
36	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
37	benzo[ghi]perylene		205-883-8	191-24-2		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
38	phenol	604-001-00-2	203-632-7	108-95-2		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
39	polychlorobiphenyls; PCB	602-039-00-4	215-648-1	1336-36-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
								Total:	0.0514 %		

Key	
	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Can be discounted as this is a solid waste without a free draining liquid phase.

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinand:

tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane: (conc.: 5.0e-07%)

Classification of sample: WS-11[3]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS-11[3]
Sample Depth:
2.0-3.0 m
Moisture content:
8.7%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 8.7% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2 mg/kg	1.197	2.394 mg/kg	0.000239 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		25 mg/kg	1.32	33.008 mg/kg	0.0033 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		0.79 mg/kg	3.22	2.544 mg/kg	0.000254 %		
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		2.1 mg/kg	1.142	2.399 mg/kg	0.00024 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		16 mg/kg	1.462	23.385 mg/kg	0.00234 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		29 mg/kg	1.126	32.651 mg/kg	0.00327 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	24 mg/kg	1.56	37.436 mg/kg	0.0024 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.5 mg/kg	1.5	6.751 mg/kg	0.000675 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		45 mg/kg	2.976	133.932 mg/kg	0.0134 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				2.3 mg/kg	2.554	5.873 mg/kg	0.000587 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		67 mg/kg	1.245	83.396 mg/kg	0.00834 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				0.015	mg/kg		0.015	mg/kg	0.0000015 %		
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
17		toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
21		pH				8.5	pH		8.5	pH	8.5 pH		
				PH									
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-917-1	208-96-8									
24		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-469-6	83-32-9									
25		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-695-5	86-73-7									
26		phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-581-5	85-01-8									
27		anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-371-1	120-12-7									
28		fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-912-4	206-44-0									
29		pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-927-3	129-00-0									
30		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.0364 %		

Key	
	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Can be discounted as this is a solid waste without a free draining liquid phase.

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinand:

tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane: (conc.: 1.5e-06%)

Classification of sample: WS-12

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS-12
Sample Depth:
0.0-1.0 m
Moisture content:
9.3%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 9.3% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		<2 mg/kg	1.197	<2.394 mg/kg	<0.000239 %		<LOD
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		27 mg/kg	1.32	35.649 mg/kg	0.00356 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<LOD
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		2.8 mg/kg	1.142	3.199 mg/kg	0.00032 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		12 mg/kg	1.462	17.539 mg/kg	0.00175 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		17 mg/kg	1.126	19.14 mg/kg	0.00191 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	14 mg/kg	1.56	21.837 mg/kg	0.0014 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		3 mg/kg	1.5	4.501 mg/kg	0.00045 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		37 mg/kg	2.976	110.122 mg/kg	0.011 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<0.2 mg/kg	2.554	<0.511 mg/kg	<0.0000511 %		<LOD
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		52 mg/kg	1.245	64.725 mg/kg	0.00647 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		0.018	mg/kg		0.018	mg/kg	0.0000018 %		
16	benzene	601-020-00-8	200-753-7	71-43-2		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
17	toluene	601-021-00-3	203-625-9	108-88-3		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
18	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
19	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
20	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
21	pH			PH		8.8	pH		8.8	pH	8.8 pH		
22	naphthalene	601-052-00-2	202-049-5	91-20-3		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
23	acenaphthylene		205-917-1	208-96-8		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
24	acenaphthene		201-469-6	83-32-9		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
25	fluorene		201-695-5	86-73-7		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
26	phenanthrene		201-581-5	85-01-8		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
27	anthracene		204-371-1	120-12-7		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
28	fluoranthene		205-912-4	206-44-0		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
29	pyrene		204-927-3	129-00-0		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
30	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
31	chrysene	601-048-00-0	205-923-4	218-01-9		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
32	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
33	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
34	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
35	indeno[123-cd]pyrene		205-893-2	193-39-5		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
36	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
37	benzo[ghi]perylene		205-883-8	191-24-2		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
38	phenol	604-001-00-2	203-632-7	108-95-2		<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
39	polychlorobiphenyls; PCB	602-039-00-4	215-648-1	1336-36-3		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
										Total:	0.0287 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Can be discounted as this is a solid waste without a free draining liquid phase.

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinand:

tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane: (conc.: 1.8e-06%)

Classification of sample: WS-12[2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS-12[2]
Sample Depth:
1.0-2.0 m
Moisture content:
9.1%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 9.1% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		<2 mg/kg	1.197	<2.394 mg/kg	<0.000239 %		<LOD
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		25 mg/kg	1.32	33.008 mg/kg	0.0033 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<LOD
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.6 mg/kg	1.142	1.828 mg/kg	0.000183 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		13 mg/kg	1.462	19 mg/kg	0.0019 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		22 mg/kg	1.126	24.77 mg/kg	0.00248 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	14 mg/kg	1.56	21.837 mg/kg	0.0014 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		3.8 mg/kg	1.5	5.701 mg/kg	0.00057 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		33 mg/kg	2.976	98.217 mg/kg	0.00982 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				0.25 mg/kg	2.554	0.638 mg/kg	0.0000638 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		62 mg/kg	1.245	77.172 mg/kg	0.00772 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				0.67	mg/kg		0.67	mg/kg	0.000067 %		
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				0.17	mg/kg		0.17	mg/kg	0.000017 %		
		601-020-00-8	200-753-7	71-43-2									
17		toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
21		pH				8.9	pH		8.9	pH	8.9 pH		
				PH									
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-917-1	208-96-8									
24		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-469-6	83-32-9									
25		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-695-5	86-73-7									
26		phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-581-5	85-01-8									
27		anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-371-1	120-12-7									
28		fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-912-4	206-44-0									
29		pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-927-3	129-00-0									
30		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.0293 %		

Key	
	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Can be discounted as this is a solid waste without a free draining liquid phase.

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinands:

tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane: (conc.: 0.00006%)
benzene: (conc.: 0.00001%)

Classification of sample: WS-12[3]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS-12[3]

Sample Depth:
2.0-3.0 m

Moisture content:
11%
(no correction)

LoW Code:

Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)

Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 11% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2 mg/kg	1.197	2.394 mg/kg	0.000239 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		33 mg/kg	1.32	43.571 mg/kg	0.00436 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<**LOD**
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		2.5 mg/kg	1.142	2.856 mg/kg	0.000286 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		15 mg/kg	1.462	21.923 mg/kg	0.00219 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<**LOD**
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		30 mg/kg	1.126	33.777 mg/kg	0.00338 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	31 mg/kg	1.56	48.354 mg/kg	0.0031 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.5 mg/kg	1.5	6.751 mg/kg	0.000675 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		47 mg/kg	2.976	139.884 mg/kg	0.014 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1.2 mg/kg	2.554	3.064 mg/kg	0.000306 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		98 mg/kg	1.245	121.982 mg/kg	0.0122 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<**LOD**

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				0.015	mg/kg		0.015	mg/kg	0.0000015 %		
	603-181-00-X	216-653-1	1634-04-4									
16	benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2									
17	toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3									
18	ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4									
19	xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
	006-007-00-5											
21	pH				8.8	pH		8.8	pH	8.8 pH		
			PH									
22	naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-052-00-2	202-049-5	91-20-3									
23	acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		205-917-1	208-96-8									
24	acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		201-469-6	83-32-9									
25	fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		201-695-5	86-73-7									
26	phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		201-581-5	85-01-8									
27	anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		204-371-1	120-12-7									
28	fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		205-912-4	206-44-0									
29	pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		204-927-3	129-00-0									
30	benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-033-00-9	200-280-6	56-55-3									
31	chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-048-00-0	205-923-4	218-01-9									
32	benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-034-00-4	205-911-9	205-99-2									
33	benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-036-00-5	205-916-6	207-08-9									
34	benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-032-00-3	200-028-5	50-32-8									
35	indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		205-893-2	193-39-5									
36	dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-041-00-2	200-181-8	53-70-3									
37	benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		205-883-8	191-24-2									
38	phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
	604-001-00-2	203-632-7	108-95-2									
39	polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	602-039-00-4	215-648-1	1336-36-3									
									Total:	0.0423 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Can be discounted as this is a solid waste without a free draining liquid phase.

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinand:

tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane: (conc.: 1.5e-06%)

Classification of sample: WS-13

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS-13
Sample Depth:
0.0-1.0 m
Moisture content:
11%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 11% No Moisture Correction applied (MC)

#	Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number / EC Number / CAS Number							
1	antimony { antimony trioxide }		2 mg/kg	1.197	2.394 mg/kg	0.000239 %		
	051-005-00-X / 215-175-0 / 1309-64-4							
2	arsenic { arsenic trioxide }		24 mg/kg	1.32	31.688 mg/kg	0.00317 %		
	033-003-00-0 / 215-481-4 / 1327-53-3							
3	boron { diboron trioxide; boric oxide }		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<LOD
	005-008-00-8 / 215-125-8 / 1303-86-2							
4	cadmium { cadmium oxide }		2.8 mg/kg	1.142	3.199 mg/kg	0.00032 %		
	048-002-00-0 / 215-146-2 / 1306-19-0							
5	chromium in chromium(III) compounds { chromium(III) oxide }		16 mg/kg	1.462	23.385 mg/kg	0.00234 %		
	/ 215-160-9 / 1308-38-9							
6	chromium in chromium(VI) compounds { chromium(VI) oxide }		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<LOD
	024-001-00-0 / 215-607-8 / 1333-82-0							
7	copper { dicopper oxide; copper (I) oxide }		34 mg/kg	1.126	38.28 mg/kg	0.00383 %		
	029-002-00-X / 215-270-7 / 1317-39-1							
8	lead { lead chromate }	1	20 mg/kg	1.56	31.196 mg/kg	0.002 %		
	082-004-00-2 / 231-846-0 / 7758-97-6							
9	mercury { mercury dichloride }		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X / 231-299-8 / 7487-94-7							
10	molybdenum { molybdenum(VI) oxide }		4.2 mg/kg	1.5	6.301 mg/kg	0.00063 %		
	042-001-00-9 / 215-204-7 / 1313-27-5							
11	nickel { nickel chromate }		54 mg/kg	2.976	160.718 mg/kg	0.0161 %		
	028-035-00-7 / 238-766-5 / 14721-18-7							
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }		<0.2 mg/kg	2.554	<0.511 mg/kg	<0.0000511 %		<LOD
	034-002-00-8 / /							
13	zinc { zinc oxide }		88 mg/kg	1.245	109.535 mg/kg	0.011 %		
	030-013-00-7 / 215-222-5 / 1314-13-2							
14	TPH (C6 to C40) petroleum group		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
	/ / TPH							

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				0.011	mg/kg		0.011	mg/kg	0.0000011 %		
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
17		toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
21		pH				8.7	pH		8.7	pH	8.7 pH		
				PH									
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-917-1	208-96-8									
24		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-469-6	83-32-9									
25		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-695-5	86-73-7									
26		phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-581-5	85-01-8									
27		anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-371-1	120-12-7									
28		fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-912-4	206-44-0									
29		pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-927-3	129-00-0									
30		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.0411 %		

Key	
	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Can be discounted as this is a solid waste without a free draining liquid phase.

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinand:

tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane: (conc.: 1.1e-06%)

Classification of sample: WS-13[2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS-13[2]
Sample Depth:
1.0-2.0 m
Moisture content:
13%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 13% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2.1 mg/kg	1.197	2.514 mg/kg	0.000251 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		23 mg/kg	1.32	30.367 mg/kg	0.00304 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<**LOD**
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		2.6 mg/kg	1.142	2.97 mg/kg	0.000297 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		16 mg/kg	1.462	23.385 mg/kg	0.00234 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<**LOD**
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		35 mg/kg	1.126	39.406 mg/kg	0.00394 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	19 mg/kg	1.56	29.636 mg/kg	0.0019 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.1 mg/kg	1.5	7.651 mg/kg	0.000765 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		61 mg/kg	2.976	181.552 mg/kg	0.0182 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				0.69 mg/kg	2.554	1.762 mg/kg	0.000176 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		110 mg/kg	1.245	136.919 mg/kg	0.0137 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<**LOD**

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<**LOD**
16	benzene	601-020-00-8	200-753-7	71-43-2		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<**LOD**
17	toluene	601-021-00-3	203-625-9	108-88-3		0.0016 mg/kg		0.0016 mg/kg	0.00000016 %		
18	ethylbenzene	601-023-00-4	202-849-4	100-41-4		0.0039 mg/kg		0.0039 mg/kg	0.00000039 %		
19	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		0.0085 mg/kg		0.0085 mg/kg	0.00000085 %		
20	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<0.5 mg/kg	1.884	<0.942 mg/kg	<0.0000942 %		<**LOD**
21	pH			PH		8.8 pH		8.8 pH	8.8 pH		
22	naphthalene	601-052-00-2	202-049-5	91-20-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
23	acenaphthylene		205-917-1	208-96-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
24	acenaphthene		201-469-6	83-32-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
25	fluorene		201-695-5	86-73-7		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
26	phenanthrene		201-581-5	85-01-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
27	anthracene		204-371-1	120-12-7		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
28	fluoranthene		205-912-4	206-44-0		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
29	pyrene		204-927-3	129-00-0		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
30	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
31	chrysene	601-048-00-0	205-923-4	218-01-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
32	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
33	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
34	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
35	indeno[123-cd]pyrene		205-893-2	193-39-5		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
36	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
37	benzo[ghi]perylene		205-883-8	191-24-2		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
38	phenol	604-001-00-2	203-632-7	108-95-2		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<**LOD**
39	polychlorobiphenyls; PCB	602-039-00-4	215-648-1	1336-36-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
								Total:	0.0461 %		

Key	
	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Can be discounted as this is a solid waste without a free draining liquid phase.

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinands:

toluene: (conc.: 1.6e-07%)
ethylbenzene: (conc.: 3.9e-07%)

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

xylene: (conc.: 8.5e-07%)

Classification of sample: WS-13[3]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS-13[3]
Sample Depth:
2.0-3.0 m
Moisture content:
8.7%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 8.7% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		<2 mg/kg	1.197	<2.394 mg/kg	<0.000239 %		<LOD
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		21 mg/kg	1.32	27.727 mg/kg	0.00277 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<LOD
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.8 mg/kg	1.142	2.056 mg/kg	0.000206 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		16 mg/kg	1.462	23.385 mg/kg	0.00234 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		28 mg/kg	1.126	31.525 mg/kg	0.00315 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	25 mg/kg	1.56	38.995 mg/kg	0.0025 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.6 mg/kg	1.5	6.901 mg/kg	0.00069 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		45 mg/kg	2.976	133.932 mg/kg	0.0134 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				6 mg/kg	2.554	15.322 mg/kg	0.00153 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		70 mg/kg	1.245	87.13 mg/kg	0.00871 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				0.029	mg/kg		0.029	mg/kg	0.0000029 %		
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				0.0014	mg/kg		0.0014	mg/kg	0.00000014 %		
		601-020-00-8	200-753-7	71-43-2									
17		toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
19		xylene				0.0031	mg/kg		0.0031	mg/kg	0.00000031 %		
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
21		pH				8.7	pH		8.7	pH	8.7 pH		
				PH									
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-917-1	208-96-8									
24		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-469-6	83-32-9									
25		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-695-5	86-73-7									
26		phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-581-5	85-01-8									
27		anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-371-1	120-12-7									
28		fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-912-4	206-44-0									
29		pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-927-3	129-00-0									
30		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.0371 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Can be discounted as this is a solid waste without a free draining liquid phase.

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinands:

tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane: (conc.: 2.9e-06%)
benzene: (conc.: 1.4e-07%)

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

xylene: (conc.: 3.1e-07%)

Classification of sample: WS14

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS14
Sample Depth:
0.0-1.0 m
Moisture content:
21%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 21% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2.6 mg/kg	1.197	3.112 mg/kg	0.000311 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		27 mg/kg	1.32	35.649 mg/kg	0.00356 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		2.2 mg/kg	3.22	7.084 mg/kg	0.000708 %		
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.7 mg/kg	1.142	1.942 mg/kg	0.000194 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		18 mg/kg	1.462	26.308 mg/kg	0.00263 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<**LOD**
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		49 mg/kg	1.126	55.169 mg/kg	0.00552 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	130 mg/kg	1.56	202.776 mg/kg	0.013 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.44 mg/kg	1.353	0.596 mg/kg	0.0000596 %		
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.1 mg/kg	1.5	6.151 mg/kg	0.000615 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		43 mg/kg	2.976	127.979 mg/kg	0.0128 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				0.84 mg/kg	2.554	2.145 mg/kg	0.000215 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		120 mg/kg	1.245	149.366 mg/kg	0.0149 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<**LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-020-00-8	200-753-7	71-43-2									
17		toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<**LOD**
		006-007-00-5											
21		pH				8.3	pH		8.3	pH	8.3 pH		
				PH									
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-917-1	208-96-8									
24		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-469-6	83-32-9									
25		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-695-5	86-73-7									
26		phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-581-5	85-01-8									
27		anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			204-371-1	120-12-7									
28		fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-912-4	206-44-0									
29		pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			204-927-3	129-00-0									
30		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.0559 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS14[2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS14[2]
Sample Depth:
1.0-2.0 m
Moisture content:
10%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 10% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		<2 mg/kg	1.197	<2.394 mg/kg	<0.000239 %		<**LOD**
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		17 mg/kg	1.32	22.446 mg/kg	0.00224 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<**LOD**
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.7 mg/kg	1.142	1.942 mg/kg	0.000194 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		12 mg/kg	1.462	17.539 mg/kg	0.00175 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<**LOD**
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		30 mg/kg	1.126	33.777 mg/kg	0.00338 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	25 mg/kg	1.56	38.995 mg/kg	0.0025 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		3.9 mg/kg	1.5	5.851 mg/kg	0.000585 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		41 mg/kg	2.976	122.027 mg/kg	0.0122 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				0.81 mg/kg	2.554	2.068 mg/kg	0.000207 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		78 mg/kg	1.245	97.088 mg/kg	0.00971 %		
14	TPH (C6 to C40) petroleum group			TPH		69 mg/kg		69 mg/kg	0.0069 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
17		toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
21		pH				8.8	pH		8.8	pH	8.8 pH		
				PH									
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-917-1	208-96-8									
24		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-469-6	83-32-9									
25		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-695-5	86-73-7									
26		phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-581-5	85-01-8									
27		anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-371-1	120-12-7									
28		fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-912-4	206-44-0									
29		pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-927-3	129-00-0									
30		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.0404 %		

Key	
	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Can be discounted as this is a solid waste without a free draining liquid phase.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0069%)

Classification of sample: WS14[3]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS14[3]
Sample Depth:
2.0-3.0 m
Moisture content:
11%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 11% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		<2 mg/kg	1.197	<2.394 mg/kg	<0.000239 %		<**LOD**
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		19 mg/kg	1.32	25.086 mg/kg	0.00251 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<**LOD**
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		2.2 mg/kg	1.142	2.513 mg/kg	0.000251 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		13 mg/kg	1.462	19 mg/kg	0.0019 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<**LOD**
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		25 mg/kg	1.126	28.147 mg/kg	0.00281 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	19 mg/kg	1.56	29.636 mg/kg	0.0019 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		3.7 mg/kg	1.5	5.551 mg/kg	0.000555 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		41 mg/kg	2.976	122.027 mg/kg	0.0122 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				3.1 mg/kg	2.554	7.916 mg/kg	0.000792 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		70 mg/kg	1.245	87.13 mg/kg	0.00871 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<**LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-020-00-8	200-753-7	71-43-2									
17		toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<**LOD**
		006-007-00-5											
21		pH				8.6	pH		8.6	pH	8.6 pH		
				PH									
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-917-1	208-96-8									
24		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-469-6	83-32-9									
25		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-695-5	86-73-7									
26		phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-581-5	85-01-8									
27		anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			204-371-1	120-12-7									
28		fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-912-4	206-44-0									
29		pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			204-927-3	129-00-0									
30		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.0334 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS-15

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS-15
Sample Depth:
0.0-1.0 m
Moisture content:
16%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 16% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		<2 mg/kg	1.197	<2.394 mg/kg	<0.000239 %		<LOD
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		16 mg/kg	1.32	21.125 mg/kg	0.00211 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		0.41 mg/kg	3.22	1.32 mg/kg	0.000132 %		
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		3 mg/kg	1.142	3.427 mg/kg	0.000343 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		17 mg/kg	1.462	24.846 mg/kg	0.00248 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		24 mg/kg	1.126	27.021 mg/kg	0.0027 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	16 mg/kg	1.56	24.957 mg/kg	0.0016 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.6 mg/kg	1.5	6.901 mg/kg	0.00069 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		50 mg/kg	2.976	148.813 mg/kg	0.0149 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				0.28 mg/kg	2.554	0.715 mg/kg	0.0000715 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		60 mg/kg	1.245	74.683 mg/kg	0.00747 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				0.006	mg/kg		0.006	mg/kg	0.0000006 %		
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-020-00-8	200-753-7	71-43-2									
17		toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<**LOD**
		006-007-00-5											
21		pH				8.6	pH		8.6	pH	8.6 pH		
				PH									
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-917-1	208-96-8									
24		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-469-6	83-32-9									
25		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-695-5	86-73-7									
26		phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-581-5	85-01-8									
27		anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			204-371-1	120-12-7									
28		fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-912-4	206-44-0									
29		pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			204-927-3	129-00-0									
30		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.0341 %		

Key	
	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Can be discounted as this is a solid waste without a free draining liquid phase.

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinand:

tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane: (conc.: 6.0e-07%)

Classification of sample: WS-15[2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS-15[2]
Sample Depth:
1.0-2.0 m
Moisture content:
9.9%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 9.9% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		<2 mg/kg	1.197	<2.394 mg/kg	<0.000239 %		<**LOD**
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		20 mg/kg	1.32	26.407 mg/kg	0.00264 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<**LOD**
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.9 mg/kg	1.142	2.17 mg/kg	0.000217 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		10 mg/kg	1.462	14.616 mg/kg	0.00146 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<**LOD**
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		20 mg/kg	1.126	22.518 mg/kg	0.00225 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	13 mg/kg	1.56	20.278 mg/kg	0.0013 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		3.2 mg/kg	1.5	4.801 mg/kg	0.00048 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		31 mg/kg	2.976	92.264 mg/kg	0.00923 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<0.2 mg/kg	2.554	<0.511 mg/kg	<0.0000511 %		<**LOD**
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		56 mg/kg	1.245	69.704 mg/kg	0.00697 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<**LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				0.007	mg/kg		0.007	mg/kg	0.0000007 %		
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
17		toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
21		pH				8.8	pH		8.8	pH	8.8 pH		
				PH									
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-917-1	208-96-8									
24		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-469-6	83-32-9									
25		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-695-5	86-73-7									
26		phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-581-5	85-01-8									
27		anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-371-1	120-12-7									
28		fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-912-4	206-44-0									
29		pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-927-3	129-00-0									
30		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.0264 %		

Key	
	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Can be discounted as this is a solid waste without a free draining liquid phase.

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinand:

tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane: (conc.: 7.0e-07%)

Classification of sample: WS-15[3]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS-15[3]
Sample Depth:
2.0-3.0 m
Moisture content:
6.9%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 6.9% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		<2 mg/kg	1.197	<2.394 mg/kg	<0.000239 %		<LOD
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		22 mg/kg	1.32	29.047 mg/kg	0.0029 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<LOD
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.8 mg/kg	1.142	2.056 mg/kg	0.000206 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		13 mg/kg	1.462	19 mg/kg	0.0019 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		21 mg/kg	1.126	23.644 mg/kg	0.00236 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	19 mg/kg	1.56	29.636 mg/kg	0.0019 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		3.2 mg/kg	1.5	4.801 mg/kg	0.00048 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		35 mg/kg	2.976	104.169 mg/kg	0.0104 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1.1 mg/kg	2.554	2.809 mg/kg	0.000281 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		61 mg/kg	1.245	75.928 mg/kg	0.00759 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				0.005	mg/kg		0.005	mg/kg	0.0000005 %		
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
17		toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
21		pH				8.9	pH		8.9	pH	8.9 pH		
				PH									
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-917-1	208-96-8									
24		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-469-6	83-32-9									
25		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-695-5	86-73-7									
26		phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-581-5	85-01-8									
27		anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-371-1	120-12-7									
28		fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-912-4	206-44-0									
29		pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-927-3	129-00-0									
30		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.0298 %		

Key	
	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Can be discounted as this is a solid waste without a free draining liquid phase.

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinand:

tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane: (conc.: 5.0e-07%)

Classification of sample: WS-16

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS-16
Sample Depth:
0.0-1.0 m
Moisture content:
15%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 15% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		<2 mg/kg	1.197	<2.394 mg/kg	<0.000239 %		<**LOD**
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		16 mg/kg	1.32	21.125 mg/kg	0.00211 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		0.92 mg/kg	3.22	2.962 mg/kg	0.000296 %		
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.3 mg/kg	1.142	1.485 mg/kg	0.000149 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		18 mg/kg	1.462	26.308 mg/kg	0.00263 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<**LOD**
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		25 mg/kg	1.126	28.147 mg/kg	0.00281 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	40 mg/kg	1.56	62.393 mg/kg	0.004 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.15 mg/kg	1.353	0.203 mg/kg	0.0000203 %		
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		3.4 mg/kg	1.5	5.101 mg/kg	0.00051 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		28 mg/kg	2.976	83.335 mg/kg	0.00833 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				0.28 mg/kg	2.554	0.715 mg/kg	0.0000715 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		70 mg/kg	1.245	87.13 mg/kg	0.00871 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<**LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				0.01	mg/kg		0.01	mg/kg	0.000001 %		
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-020-00-8	200-753-7	71-43-2									
17		toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<**LOD**
		006-007-00-5											
21		pH				8.5	pH		8.5	pH	8.5 pH		
				PH									
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-917-1	208-96-8									
24		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-469-6	83-32-9									
25		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-695-5	86-73-7									
26		phenanthrene				0.91	mg/kg		0.91	mg/kg	0.000091 %		
			201-581-5	85-01-8									
27		anthracene				0.12	mg/kg		0.12	mg/kg	0.000012 %		
			204-371-1	120-12-7									
28		fluoranthene				0.87	mg/kg		0.87	mg/kg	0.000087 %		
			205-912-4	206-44-0									
29		pyrene				0.61	mg/kg		0.61	mg/kg	0.000061 %		
			204-927-3	129-00-0									
30		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.0315 %		

Key	
	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Can be discounted as this is a solid waste without a free draining liquid phase.

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinand:

tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane: (conc.: 1.0e-06%)

Classification of sample: WS-16[2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS-16[2]
Sample Depth:
1.0-2.0 m
Moisture content:
10%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 10% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		<2 mg/kg	1.197	<2.394 mg/kg	<0.000239 %		<LOD
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		22 mg/kg	1.32	29.047 mg/kg	0.0029 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<LOD
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		2.5 mg/kg	1.142	2.856 mg/kg	0.000286 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		15 mg/kg	1.462	21.923 mg/kg	0.00219 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		29 mg/kg	1.126	32.651 mg/kg	0.00327 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	27 mg/kg	1.56	42.115 mg/kg	0.0027 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.3 mg/kg	1.5	6.451 mg/kg	0.000645 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		48 mg/kg	2.976	142.861 mg/kg	0.0143 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				0.43 mg/kg	2.554	1.098 mg/kg	0.00011 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		75 mg/kg	1.245	93.354 mg/kg	0.00934 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				0.008	mg/kg		0.008	mg/kg	0.0000008 %		
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
17		toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
21		pH				8.7	pH		8.7	pH	8.7 pH		
				PH									
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-917-1	208-96-8									
24		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-469-6	83-32-9									
25		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-695-5	86-73-7									
26		phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-581-5	85-01-8									
27		anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-371-1	120-12-7									
28		fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-912-4	206-44-0									
29		pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-927-3	129-00-0									
30		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.0375 %		

Key	
	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Can be discounted as this is a solid waste without a free draining liquid phase.

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinand:

tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane: (conc.: 8.0e-07%)

Classification of sample: WS-16[3]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS-16[3]
Sample Depth:
2.0-3.0 m
Moisture content:
14%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 14% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2.2 mg/kg	1.197	2.634 mg/kg	0.000263 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		17 mg/kg	1.32	22.446 mg/kg	0.00224 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		0.55 mg/kg	3.22	1.771 mg/kg	0.000177 %		
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		2.1 mg/kg	1.142	2.399 mg/kg	0.00024 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		15 mg/kg	1.462	21.923 mg/kg	0.00219 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		22 mg/kg	1.126	24.77 mg/kg	0.00248 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	16 mg/kg	1.56	24.957 mg/kg	0.0016 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.8 mg/kg	1.5	7.201 mg/kg	0.00072 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		41 mg/kg	2.976	122.027 mg/kg	0.0122 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				7.9 mg/kg	2.554	20.173 mg/kg	0.00202 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		60 mg/kg	1.245	74.683 mg/kg	0.00747 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		0.019	mg/kg		0.019	mg/kg	0.0000019 %		
16	benzene	601-020-00-8	200-753-7	71-43-2		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
17	toluene	601-021-00-3	203-625-9	108-88-3		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
18	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
19	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
20	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
21	pH			PH		9.7	pH		9.7	pH	9.7 pH		
22	naphthalene	601-052-00-2	202-049-5	91-20-3		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
23	acenaphthylene		205-917-1	208-96-8		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
24	acenaphthene		201-469-6	83-32-9		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
25	fluorene		201-695-5	86-73-7		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
26	phenanthrene		201-581-5	85-01-8		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
27	anthracene		204-371-1	120-12-7		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
28	fluoranthene		205-912-4	206-44-0		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
29	pyrene		204-927-3	129-00-0		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
30	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
31	chrysene	601-048-00-0	205-923-4	218-01-9		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
32	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
33	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
34	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
35	indeno[123-cd]pyrene		205-893-2	193-39-5		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
36	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
37	benzo[ghi]perylene		205-883-8	191-24-2		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
38	phenol	604-001-00-2	203-632-7	108-95-2		<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
39	polychlorobiphenyls; PCB	602-039-00-4	215-648-1	1336-36-3		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
										Total:	0.033 %		

Key	
	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Can be discounted as this is a solid waste without a free draining liquid phase.

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinand:

tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane: (conc.: 1.9e-06%)

Classification of sample: WS17

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS17
Sample Depth:
0.0-1.0 m
Moisture content:
11%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 11% No Moisture Correction applied (MC)

#	Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number / EC Number / CAS Number							
1	antimony { antimony trioxide }		2.1 mg/kg	1.197	2.514 mg/kg	0.000251 %		
	051-005-00-X / 215-175-0 / 1309-64-4							
2	arsenic { arsenic trioxide }		21 mg/kg	1.32	27.727 mg/kg	0.00277 %		
	033-003-00-0 / 215-481-4 / 1327-53-3							
3	boron { diboron trioxide; boric oxide }		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<LOD
	005-008-00-8 / 215-125-8 / 1303-86-2							
4	cadmium { cadmium oxide }		2.4 mg/kg	1.142	2.742 mg/kg	0.000274 %		
	048-002-00-0 / 215-146-2 / 1306-19-0							
5	chromium in chromium(III) compounds { chromium(III) oxide }		15 mg/kg	1.462	21.923 mg/kg	0.00219 %		
	/ 215-160-9 / 1308-38-9							
6	chromium in chromium(VI) compounds { chromium(VI) oxide }		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<LOD
	024-001-00-0 / 215-607-8 / 1333-82-0							
7	copper { dicopper oxide; copper (I) oxide }		30 mg/kg	1.126	33.777 mg/kg	0.00338 %		
	029-002-00-X / 215-270-7 / 1317-39-1							
8	lead { lead chromate }	1	15 mg/kg	1.56	23.397 mg/kg	0.0015 %		
	082-004-00-2 / 231-846-0 / 7758-97-6							
9	mercury { mercury dichloride }		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X / 231-299-8 / 7487-94-7							
10	molybdenum { molybdenum(VI) oxide }		4 mg/kg	1.5	6.001 mg/kg	0.0006 %		
	042-001-00-9 / 215-204-7 / 1313-27-5							
11	nickel { nickel chromate }		48 mg/kg	2.976	142.861 mg/kg	0.0143 %		
	028-035-00-7 / 238-766-5 / 14721-18-7							
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }		0.36 mg/kg	2.554	0.919 mg/kg	0.0000919 %		
	034-002-00-8 / /							
13	zinc { zinc oxide }		88 mg/kg	1.245	109.535 mg/kg	0.011 %		
	030-013-00-7 / 215-222-5 / 1314-13-2							
14	TPH (C6 to C40) petroleum group		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
	/ / TPH							

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
17		toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
21		pH				8.7	pH		8.7	pH	8.7 pH		
				PH									
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-917-1	208-96-8									
24		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-469-6	83-32-9									
25		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-695-5	86-73-7									
26		phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-581-5	85-01-8									
27		anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-371-1	120-12-7									
28		fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-912-4	206-44-0									
29		pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-927-3	129-00-0									
30		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.0378 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS17[2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS17[2]
Sample Depth:
1.0-2.0 m
Moisture content:
8.6%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 8.6% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2 mg/kg	1.197	2.394 mg/kg	0.000239 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		20 mg/kg	1.32	26.407 mg/kg	0.00264 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<**LOD**
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		3 mg/kg	1.142	3.427 mg/kg	0.000343 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		14 mg/kg	1.462	20.462 mg/kg	0.00205 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<**LOD**
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		28 mg/kg	1.126	31.525 mg/kg	0.00315 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	21 mg/kg	1.56	32.756 mg/kg	0.0021 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.5 mg/kg	1.5	6.751 mg/kg	0.000675 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		44 mg/kg	2.976	130.956 mg/kg	0.0131 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				2.5 mg/kg	2.554	6.384 mg/kg	0.000638 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		99 mg/kg	1.245	123.227 mg/kg	0.0123 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<**LOD**

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<**LOD**
16	benzene	601-020-00-8	200-753-7	71-43-2		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<**LOD**
17	toluene	601-021-00-3	203-625-9	108-88-3		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<**LOD**
18	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<**LOD**
19	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<**LOD**
20	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<0.5 mg/kg	1.884	<0.942 mg/kg	<0.0000942 %		<**LOD**
21	pH			PH		8.6 pH		8.6 pH	8.6 pH		
22	naphthalene	601-052-00-2	202-049-5	91-20-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
23	acenaphthylene		205-917-1	208-96-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
24	acenaphthene		201-469-6	83-32-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
25	fluorene		201-695-5	86-73-7		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
26	phenanthrene		201-581-5	85-01-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
27	anthracene		204-371-1	120-12-7		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
28	fluoranthene		205-912-4	206-44-0		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
29	pyrene		204-927-3	129-00-0		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
30	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
31	chrysene	601-048-00-0	205-923-4	218-01-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
32	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
33	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
34	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
35	indeno[123-cd]pyrene		205-893-2	193-39-5		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
36	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
37	benzo[ghi]perylene		205-883-8	191-24-2		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
38	phenol	604-001-00-2	203-632-7	108-95-2		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<**LOD**
39	polychlorobiphenyls; PCB	602-039-00-4	215-648-1	1336-36-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
								Total:	0.0388 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS18

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS18
Sample Depth:
0.0-1.0 m
Moisture content:
13%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 13% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		<2 mg/kg	1.197	<2.394 mg/kg	<0.000239 %		<LOD
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		19 mg/kg	1.32	25.086 mg/kg	0.00251 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<LOD
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.9 mg/kg	1.142	2.17 mg/kg	0.000217 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		14 mg/kg	1.462	20.462 mg/kg	0.00205 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		15 mg/kg	1.126	16.888 mg/kg	0.00169 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	13 mg/kg	1.56	20.278 mg/kg	0.0013 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		3.3 mg/kg	1.5	4.951 mg/kg	0.000495 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		36 mg/kg	2.976	107.146 mg/kg	0.0107 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<0.2 mg/kg	2.554	<0.511 mg/kg	<0.0000511 %		<LOD
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		63 mg/kg	1.245	78.417 mg/kg	0.00784 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
17		toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
21		pH				8.5	pH		8.5	pH	8.5 pH		
				PH									
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-917-1	208-96-8									
24		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-469-6	83-32-9									
25		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-695-5	86-73-7									
26		phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-581-5	85-01-8									
27		anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-371-1	120-12-7									
28		fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-912-4	206-44-0									
29		pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-927-3	129-00-0									
30		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.0286 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS18[2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS18[2]
Sample Depth:
1.0-2.0 m
Moisture content:
11%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 11% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2.6 mg/kg	1.197	3.112 mg/kg	0.000311 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		20 mg/kg	1.32	26.407 mg/kg	0.00264 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<**LOD**
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		2.2 mg/kg	1.142	2.513 mg/kg	0.000251 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		17 mg/kg	1.462	24.846 mg/kg	0.00248 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<**LOD**
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		31 mg/kg	1.126	34.903 mg/kg	0.00349 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	17 mg/kg	1.56	26.517 mg/kg	0.0017 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		3.5 mg/kg	1.5	5.251 mg/kg	0.000525 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		49 mg/kg	2.976	145.837 mg/kg	0.0146 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				0.79 mg/kg	2.554	2.017 mg/kg	0.000202 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		80 mg/kg	1.245	99.577 mg/kg	0.00996 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<**LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-020-00-8	200-753-7	71-43-2									
17		toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<**LOD**
		006-007-00-5											
21		pH				8.6	pH		8.6	pH	8.6 pH		
				PH									
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-917-1	208-96-8									
24		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-469-6	83-32-9									
25		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-695-5	86-73-7									
26		phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-581-5	85-01-8									
27		anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			204-371-1	120-12-7									
28		fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-912-4	206-44-0									
29		pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			204-927-3	129-00-0									
30		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.0377 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS18[3]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS18[3]
Sample Depth:
2.0-3.0 m
Moisture content:
7.9%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 7.9% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		<2 mg/kg	1.197	<2.394 mg/kg	<0.000239 %		<LOD
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		18 mg/kg	1.32	23.766 mg/kg	0.00238 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<LOD
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.3 mg/kg	1.142	1.485 mg/kg	0.000149 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		11 mg/kg	1.462	16.077 mg/kg	0.00161 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		19 mg/kg	1.126	21.392 mg/kg	0.00214 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	15 mg/kg	1.56	23.397 mg/kg	0.0015 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		3.3 mg/kg	1.5	4.951 mg/kg	0.000495 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		32 mg/kg	2.976	95.24 mg/kg	0.00952 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				2.4 mg/kg	2.554	6.129 mg/kg	0.000613 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		53 mg/kg	1.245	65.97 mg/kg	0.0066 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
17		toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
21		pH				8.5	pH		8.5	pH	8.5 pH		
				PH									
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-917-1	208-96-8									
24		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-469-6	83-32-9									
25		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-695-5	86-73-7									
26		phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-581-5	85-01-8									
27		anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-371-1	120-12-7									
28		fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-912-4	206-44-0									
29		pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-927-3	129-00-0									
30		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.0268 %		

Key	
	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS19

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS19
Sample Depth:
0.0-1.0 m
Moisture content:
12%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 12% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		4.7 mg/kg	1.197	5.626 mg/kg	0.000563 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		19 mg/kg	1.32	25.086 mg/kg	0.00251 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<**LOD**
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		2.2 mg/kg	1.142	2.513 mg/kg	0.000251 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		13 mg/kg	1.462	19 mg/kg	0.0019 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<**LOD**
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		25 mg/kg	1.126	28.147 mg/kg	0.00281 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	30 mg/kg	1.56	46.794 mg/kg	0.003 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.5 mg/kg	1.5	6.751 mg/kg	0.000675 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		45 mg/kg	2.976	133.932 mg/kg	0.0134 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				0.61 mg/kg	2.554	1.558 mg/kg	0.000156 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		79 mg/kg	1.245	98.332 mg/kg	0.00983 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<**LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-020-00-8	200-753-7	71-43-2									
17		toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<**LOD**
		006-007-00-5											
21		pH				8.5	pH		8.5	pH	8.5 pH		
				PH									
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-917-1	208-96-8									
24		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-469-6	83-32-9									
25		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-695-5	86-73-7									
26		phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-581-5	85-01-8									
27		anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			204-371-1	120-12-7									
28		fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-912-4	206-44-0									
29		pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			204-927-3	129-00-0									
30		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.0366 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS19[2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS19[2]
Sample Depth:
1.0-2.0 m
Moisture content:
11%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 11% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		4 mg/kg	1.197	4.788 mg/kg	0.000479 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		22 mg/kg	1.32	29.047 mg/kg	0.0029 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<**LOD**
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		2.1 mg/kg	1.142	2.399 mg/kg	0.00024 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		14 mg/kg	1.462	20.462 mg/kg	0.00205 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<**LOD**
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		29 mg/kg	1.126	32.651 mg/kg	0.00327 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	24 mg/kg	1.56	37.436 mg/kg	0.0024 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		3.9 mg/kg	1.5	5.851 mg/kg	0.000585 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		43 mg/kg	2.976	127.979 mg/kg	0.0128 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				0.73 mg/kg	2.554	1.864 mg/kg	0.000186 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		72 mg/kg	1.245	89.619 mg/kg	0.00896 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<**LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
17		toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
21		pH				8.6	pH		8.6	pH	8.6 pH		
				PH									
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-917-1	208-96-8									
24		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-469-6	83-32-9									
25		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-695-5	86-73-7									
26		phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-581-5	85-01-8									
27		anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-371-1	120-12-7									
28		fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-912-4	206-44-0									
29		pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-927-3	129-00-0									
30		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.0354 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS19[3]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS19[3]
Sample Depth:
2.0-3.0 m
Moisture content:
13%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 13% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		3.5 mg/kg	1.197	4.19 mg/kg	0.000419 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		20 mg/kg	1.32	26.407 mg/kg	0.00264 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<**LOD**
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		2.4 mg/kg	1.142	2.742 mg/kg	0.000274 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		14 mg/kg	1.462	20.462 mg/kg	0.00205 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<**LOD**
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		29 mg/kg	1.126	32.651 mg/kg	0.00327 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	22 mg/kg	1.56	34.316 mg/kg	0.0022 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.9 mg/kg	1.5	7.351 mg/kg	0.000735 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		44 mg/kg	2.976	130.956 mg/kg	0.0131 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				4.6 mg/kg	2.554	11.747 mg/kg	0.00117 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		79 mg/kg	1.245	98.332 mg/kg	0.00983 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<**LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-020-00-8	200-753-7	71-43-2									
17		toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<**LOD**
		006-007-00-5											
21		pH				8.6	pH		8.6	pH	8.6 pH		
				PH									
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-917-1	208-96-8									
24		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-469-6	83-32-9									
25		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-695-5	86-73-7									
26		phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-581-5	85-01-8									
27		anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			204-371-1	120-12-7									
28		fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-912-4	206-44-0									
29		pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			204-927-3	129-00-0									
30		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.0372 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS-20

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS-20
Sample Depth:
0.0-1.0 m
Moisture content:
12%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 12% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		<2 mg/kg	1.197	<2.394 mg/kg	<0.000239 %		<LOD
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		21 mg/kg	1.32	27.727 mg/kg	0.00277 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<LOD
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		2.1 mg/kg	1.142	2.399 mg/kg	0.00024 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		14 mg/kg	1.462	20.462 mg/kg	0.00205 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		30 mg/kg	1.126	33.777 mg/kg	0.00338 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	23 mg/kg	1.56	35.876 mg/kg	0.0023 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		3.8 mg/kg	1.5	5.701 mg/kg	0.00057 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		42 mg/kg	2.976	125.003 mg/kg	0.0125 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1.4 mg/kg	2.554	3.575 mg/kg	0.000358 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		76 mg/kg	1.245	94.598 mg/kg	0.00946 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				0.01	mg/kg		0.01	mg/kg	0.000001 %		
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-020-00-8	200-753-7	71-43-2									
17		toluene				0.0012	mg/kg		0.0012	mg/kg	0.00000012 %		
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<**LOD**
		006-007-00-5											
21		pH				8.6	pH		8.6	pH	8.6 pH		
				PH									
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-917-1	208-96-8									
24		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-469-6	83-32-9									
25		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-695-5	86-73-7									
26		phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-581-5	85-01-8									
27		anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			204-371-1	120-12-7									
28		fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-912-4	206-44-0									
29		pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			204-927-3	129-00-0									
30		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.0354 %		

Key	
	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Can be discounted as this is a solid waste without a free draining liquid phase.

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinands:

tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane: (conc.: 1.0e-06%)
toluene: (conc.: 1.2e-07%)

Classification of sample: WS-20[2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS-20[2]
Sample Depth:
1.0-2.0 m
Moisture content:
12%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 12% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2.1 mg/kg	1.197	2.514 mg/kg	0.000251 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		25 mg/kg	1.32	33.008 mg/kg	0.0033 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<**LOD**
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		2.5 mg/kg	1.142	2.856 mg/kg	0.000286 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		19 mg/kg	1.462	27.77 mg/kg	0.00278 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<**LOD**
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		39 mg/kg	1.126	43.91 mg/kg	0.00439 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	24 mg/kg	1.56	37.436 mg/kg	0.0024 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.1 mg/kg	1.5	7.651 mg/kg	0.000765 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		62 mg/kg	2.976	184.528 mg/kg	0.0185 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				0.56 mg/kg	2.554	1.43 mg/kg	0.000143 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		89 mg/kg	1.245	110.78 mg/kg	0.0111 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<**LOD**

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		0.006 mg/kg		0.006 mg/kg	0.0000006 %		
16	benzene	601-020-00-8	200-753-7	71-43-2		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
17	toluene	601-021-00-3	203-625-9	108-88-3		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
18	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
19	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
20	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<0.5 mg/kg	1.884	<0.942 mg/kg	<0.0000942 %		<LOD
21	pH			PH		8.6 pH		8.6 pH	8.6 pH		
22	naphthalene	601-052-00-2	202-049-5	91-20-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
23	acenaphthylene		205-917-1	208-96-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
24	acenaphthene		201-469-6	83-32-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
25	fluorene		201-695-5	86-73-7		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
26	phenanthrene		201-581-5	85-01-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
27	anthracene		204-371-1	120-12-7		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
28	fluoranthene		205-912-4	206-44-0		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
29	pyrene		204-927-3	129-00-0		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
30	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
31	chrysene	601-048-00-0	205-923-4	218-01-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
32	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
33	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
34	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
35	indeno[123-cd]pyrene		205-893-2	193-39-5		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
36	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
37	benzo[ghi]perylene		205-883-8	191-24-2		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
38	phenol	604-001-00-2	203-632-7	108-95-2		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
39	polychlorobiphenyls; PCB	602-039-00-4	215-648-1	1336-36-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
								Total:	0.0454 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Can be discounted as this is a solid waste without a free draining liquid phase.

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinand:

tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane: (conc.: 6.0e-07%)

Classification of sample: WS-20[3]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS-20[3]
Sample Depth:
2.0-3.0 m
Moisture content:
7.6%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 7.6% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2.1 mg/kg	1.197	2.514 mg/kg	0.000251 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		15 mg/kg	1.32	19.805 mg/kg	0.00198 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<**LOD**
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		2.4 mg/kg	1.142	2.742 mg/kg	0.000274 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		13 mg/kg	1.462	19 mg/kg	0.0019 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<**LOD**
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		24 mg/kg	1.126	27.021 mg/kg	0.0027 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	15 mg/kg	1.56	23.397 mg/kg	0.0015 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.8 mg/kg	1.5	8.701 mg/kg	0.00087 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		45 mg/kg	2.976	133.932 mg/kg	0.0134 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				2.8 mg/kg	2.554	7.15 mg/kg	0.000715 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		67 mg/kg	1.245	83.396 mg/kg	0.00834 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<**LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
17		toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
21		pH				8.5	pH		8.5	pH	8.5 pH		
				PH									
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-917-1	208-96-8									
24		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-469-6	83-32-9									
25		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-695-5	86-73-7									
26		phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-581-5	85-01-8									
27		anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-371-1	120-12-7									
28		fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-912-4	206-44-0									
29		pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-927-3	129-00-0									
30		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.0335 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS21

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS21
Sample Depth:
0.0-1.0 m
Moisture content:
10%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 10% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2.6 mg/kg	1.197	3.112 mg/kg	0.000311 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		20 mg/kg	1.32	26.407 mg/kg	0.00264 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<**LOD**
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.7 mg/kg	1.142	1.942 mg/kg	0.000194 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		12 mg/kg	1.462	17.539 mg/kg	0.00175 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<**LOD**
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		30 mg/kg	1.126	33.777 mg/kg	0.00338 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	22 mg/kg	1.56	34.316 mg/kg	0.0022 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.8 mg/kg	1.5	7.201 mg/kg	0.00072 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		47 mg/kg	2.976	139.884 mg/kg	0.014 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				0.44 mg/kg	2.554	1.124 mg/kg	0.000112 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		72 mg/kg	1.245	89.619 mg/kg	0.00896 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<**LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-020-00-8	200-753-7	71-43-2									
17		toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<**LOD**
		006-007-00-5											
21		pH				8.7	pH		8.7	pH	8.7 pH		
				PH									
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-917-1	208-96-8									
24		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-469-6	83-32-9									
25		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-695-5	86-73-7									
26		phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-581-5	85-01-8									
27		anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			204-371-1	120-12-7									
28		fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-912-4	206-44-0									
29		pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			204-927-3	129-00-0									
30		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.0358 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS21[2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS21[2]
Sample Depth:
1.0-2.0 m
Moisture content:
10%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 10% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2.1 mg/kg	1.197	2.514 mg/kg	0.000251 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		23 mg/kg	1.32	30.367 mg/kg	0.00304 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<**LOD**
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		2.8 mg/kg	1.142	3.199 mg/kg	0.00032 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		15 mg/kg	1.462	21.923 mg/kg	0.00219 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<**LOD**
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		29 mg/kg	1.126	32.651 mg/kg	0.00327 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	24 mg/kg	1.56	37.436 mg/kg	0.0024 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.13 mg/kg	1.353	0.176 mg/kg	0.0000176 %		
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.6 mg/kg	1.5	6.901 mg/kg	0.00069 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		46 mg/kg	2.976	136.908 mg/kg	0.0137 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1.3 mg/kg	2.554	3.32 mg/kg	0.000332 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		83 mg/kg	1.245	103.311 mg/kg	0.0103 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<**LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
17		toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
21		pH				8.6	pH		8.6	pH	8.6 pH		
				PH									
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-917-1	208-96-8									
24		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-469-6	83-32-9									
25		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-695-5	86-73-7									
26		phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-581-5	85-01-8									
27		anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-371-1	120-12-7									
28		fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-912-4	206-44-0									
29		pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-927-3	129-00-0									
30		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-883-8	191-24-2									
38		phenol				0.86	mg/kg		0.86	mg/kg	0.000086 %		
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.0381 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS21[3]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS21[3]
Sample Depth:
2.0-3.0 m
Moisture content:
7.5%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 7.5% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		<2 mg/kg	1.197	<2.394 mg/kg	<0.000239 %		<**LOD**
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		19 mg/kg	1.32	25.086 mg/kg	0.00251 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<**LOD**
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.8 mg/kg	1.142	2.056 mg/kg	0.000206 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		15 mg/kg	1.462	21.923 mg/kg	0.00219 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<**LOD**
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		29 mg/kg	1.126	32.651 mg/kg	0.00327 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	21 mg/kg	1.56	32.756 mg/kg	0.0021 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5 mg/kg	1.5	7.501 mg/kg	0.00075 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		46 mg/kg	2.976	136.908 mg/kg	0.0137 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				2.9 mg/kg	2.554	7.405 mg/kg	0.000741 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		74 mg/kg	1.245	92.109 mg/kg	0.00921 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<**LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-020-00-8	200-753-7	71-43-2									
17		toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<**LOD**
		006-007-00-5											
21		pH				8.3	pH		8.3	pH	8.3 pH		
				PH									
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-917-1	208-96-8									
24		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-469-6	83-32-9									
25		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-695-5	86-73-7									
26		phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-581-5	85-01-8									
27		anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			204-371-1	120-12-7									
28		fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-912-4	206-44-0									
29		pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			204-927-3	129-00-0									
30		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.0364 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS22

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS22
Sample Depth:
0.0-1.0 m
Moisture content:
8%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 8% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		<2 mg/kg	1.197	<2.394 mg/kg	<0.000239 %		<LOD
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		20 mg/kg	1.32	26.407 mg/kg	0.00264 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<LOD
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.9 mg/kg	1.142	2.17 mg/kg	0.000217 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		11 mg/kg	1.462	16.077 mg/kg	0.00161 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		18 mg/kg	1.126	20.266 mg/kg	0.00203 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	17 mg/kg	1.56	26.517 mg/kg	0.0017 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		3 mg/kg	1.5	4.501 mg/kg	0.00045 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		35 mg/kg	2.976	104.169 mg/kg	0.0104 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<0.2 mg/kg	2.554	<0.511 mg/kg	<0.0000511 %		<LOD
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		50 mg/kg	1.245	62.236 mg/kg	0.00622 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
17		toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
21		pH				8.7	pH		8.7	pH	8.7 pH		
				PH									
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-917-1	208-96-8									
24		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-469-6	83-32-9									
25		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-695-5	86-73-7									
26		phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-581-5	85-01-8									
27		anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-371-1	120-12-7									
28		fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-912-4	206-44-0									
29		pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-927-3	129-00-0									
30		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.0271 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS22[2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS22[2]
Sample Depth:
1.0-2.0 m
Moisture content:
10%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 10% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		<2 mg/kg	1.197	<2.394 mg/kg	<0.000239 %		<**LOD**
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		17 mg/kg	1.32	22.446 mg/kg	0.00224 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<**LOD**
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.9 mg/kg	1.142	2.17 mg/kg	0.000217 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		11 mg/kg	1.462	16.077 mg/kg	0.00161 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<**LOD**
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		23 mg/kg	1.126	25.895 mg/kg	0.00259 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	18 mg/kg	1.56	28.077 mg/kg	0.0018 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.1 mg/kg	1.5	6.151 mg/kg	0.000615 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		34 mg/kg	2.976	101.193 mg/kg	0.0101 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				0.7 mg/kg	2.554	1.788 mg/kg	0.000179 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		75 mg/kg	1.245	93.354 mg/kg	0.00934 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<**LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-020-00-8	200-753-7	71-43-2									
17		toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<**LOD**
		006-007-00-5											
21		pH				8.7	pH		8.7	pH	8.7 pH		
				PH									
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-917-1	208-96-8									
24		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-469-6	83-32-9									
25		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-695-5	86-73-7									
26		phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-581-5	85-01-8									
27		anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			204-371-1	120-12-7									
28		fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-912-4	206-44-0									
29		pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			204-927-3	129-00-0									
30		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.0305 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS22[3]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS22[3]
Sample Depth:
2.0-3.0 m
Moisture content:
14%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 14% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		<2 mg/kg	1.197	<2.394 mg/kg	<0.000239 %		<LOD
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		19 mg/kg	1.32	25.086 mg/kg	0.00251 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<LOD
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		2.2 mg/kg	1.142	2.513 mg/kg	0.000251 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		12 mg/kg	1.462	17.539 mg/kg	0.00175 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		23 mg/kg	1.126	25.895 mg/kg	0.00259 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	18 mg/kg	1.56	28.077 mg/kg	0.0018 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		3.8 mg/kg	1.5	5.701 mg/kg	0.00057 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		33 mg/kg	2.976	98.217 mg/kg	0.00982 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				5.6 mg/kg	2.554	14.3 mg/kg	0.00143 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		64 mg/kg	1.245	79.662 mg/kg	0.00797 %		
14	TPH (C6 to C40) petroleum group			TPH		51 mg/kg		51 mg/kg	0.0051 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-020-00-8	200-753-7	71-43-2									
17		toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<**LOD**
		006-007-00-5											
21		pH				8.7	pH		8.7	pH	8.7 pH		
				PH									
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-917-1	208-96-8									
24		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-469-6	83-32-9									
25		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-695-5	86-73-7									
26		phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-581-5	85-01-8									
27		anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			204-371-1	120-12-7									
28		fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-912-4	206-44-0									
29		pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			204-927-3	129-00-0									
30		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.0346 %		

Key	
	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Can be discounted as this is a solid waste without a free draining liquid phase.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0051%)

Classification of sample: WS23

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS23
Sample Depth:
0.0-1.0 m
Moisture content:
23%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 23% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2.4 mg/kg	1.197	2.873 mg/kg	0.000287 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		9.4 mg/kg	1.32	12.411 mg/kg	0.00124 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		1.6 mg/kg	3.22	5.152 mg/kg	0.000515 %		
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		2.7 mg/kg	1.142	3.084 mg/kg	0.000308 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		16 mg/kg	1.462	23.385 mg/kg	0.00234 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		17 mg/kg	1.126	19.14 mg/kg	0.00191 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	27 mg/kg	1.56	42.115 mg/kg	0.0027 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.5 mg/kg	1.5	6.751 mg/kg	0.000675 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		28 mg/kg	2.976	83.335 mg/kg	0.00833 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1.2 mg/kg	2.554	3.064 mg/kg	0.000306 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		58 mg/kg	1.245	72.193 mg/kg	0.00722 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-020-00-8	200-753-7	71-43-2									
17		toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<**LOD**
		006-007-00-5											
21		pH				8.4	pH		8.4	pH	8.4 pH		
				PH									
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-917-1	208-96-8									
24		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-469-6	83-32-9									
25		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-695-5	86-73-7									
26		phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-581-5	85-01-8									
27		anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			204-371-1	120-12-7									
28		fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-912-4	206-44-0									
29		pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			204-927-3	129-00-0									
30		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.0272 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS23[2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS23[2]
Sample Depth:
1.0-2.0 m
Moisture content:
14%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 14% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2.6	mg/kg	1.197	3.112	mg/kg	0.000311 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		19	mg/kg	1.32	25.086	mg/kg	0.00251 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4	mg/kg	3.22	<1.288	mg/kg	<0.000129 %		<**LOD**
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		2.9	mg/kg	1.142	3.313	mg/kg	0.000331 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		11	mg/kg	1.462	16.077	mg/kg	0.00161 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5	mg/kg	1.923	<0.962	mg/kg	<0.0000962 %		<**LOD**
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		24	mg/kg	1.126	27.021	mg/kg	0.0027 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	14	mg/kg	1.56	21.837	mg/kg	0.0014 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1	mg/kg	1.353	<0.135	mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.8	mg/kg	1.5	7.201	mg/kg	0.00072 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		49	mg/kg	2.976	145.837	mg/kg	0.0146 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1.7	mg/kg	2.554	4.341	mg/kg	0.000434 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		76	mg/kg	1.245	94.598	mg/kg	0.00946 %		
14	TPH (C6 to C40) petroleum group			TPH		49	mg/kg		49	mg/kg	0.0049 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
17		toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
21		pH				8.6	pH		8.6	pH	8.6 pH		
				PH									
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-917-1	208-96-8									
24		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-469-6	83-32-9									
25		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-695-5	86-73-7									
26		phenanthrene				1.7	mg/kg		1.7	mg/kg	0.00017 %		
			201-581-5	85-01-8									
27		anthracene				0.31	mg/kg		0.31	mg/kg	0.000031 %		
			204-371-1	120-12-7									
28		fluoranthene				1.6	mg/kg		1.6	mg/kg	0.00016 %		
			205-912-4	206-44-0									
29		pyrene				1.3	mg/kg		1.3	mg/kg	0.00013 %		
			204-927-3	129-00-0									
30		benzo[a]anthracene				0.19	mg/kg		0.19	mg/kg	0.000019 %		
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				0.26	mg/kg		0.26	mg/kg	0.000026 %		
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.04 %		

Key	
	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Can be discounted as this is a solid waste without a free draining liquid phase.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0049%)

Classification of sample: WS23[3]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS23[3]
Sample Depth:
2.0-3.0 m
Moisture content:
14%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 14% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		8.8 mg/kg	1.197	10.534 mg/kg	0.00105 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		26 mg/kg	1.32	34.328 mg/kg	0.00343 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<**LOD**
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		3.8 mg/kg	1.142	4.341 mg/kg	0.000434 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		10 mg/kg	1.462	14.616 mg/kg	0.00146 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<**LOD**
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		38 mg/kg	1.126	42.784 mg/kg	0.00428 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	16 mg/kg	1.56	24.957 mg/kg	0.0016 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		19 mg/kg	1.5	28.504 mg/kg	0.00285 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		60 mg/kg	2.976	178.576 mg/kg	0.0179 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				5.6 mg/kg	2.554	14.3 mg/kg	0.00143 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		100 mg/kg	1.245	124.471 mg/kg	0.0124 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<**LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-020-00-8	200-753-7	71-43-2									
17		toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<**LOD**
		006-007-00-5											
21		pH				8.5	pH		8.5	pH	8.5 pH		
				PH									
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-917-1	208-96-8									
24		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-469-6	83-32-9									
25		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-695-5	86-73-7									
26		phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-581-5	85-01-8									
27		anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			204-371-1	120-12-7									
28		fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-912-4	206-44-0									
29		pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			204-927-3	129-00-0									
30		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.0484 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS24

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS24
Sample Depth:
0.0-1.0 m
Moisture content:
30%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 30% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		4.6 mg/kg	1.197	5.507 mg/kg	0.000551 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		33 mg/kg	1.32	43.571 mg/kg	0.00436 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		1.4 mg/kg	3.22	4.508 mg/kg	0.000451 %		
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		2 mg/kg	1.142	2.285 mg/kg	0.000228 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		19 mg/kg	1.462	27.77 mg/kg	0.00278 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<**LOD**
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		82 mg/kg	1.126	92.323 mg/kg	0.00923 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	410 mg/kg	1.56	639.524 mg/kg	0.041 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		1.2 mg/kg	1.353	1.624 mg/kg	0.000162 %		
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.9 mg/kg	1.5	7.351 mg/kg	0.000735 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		46 mg/kg	2.976	136.908 mg/kg	0.0137 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1.2 mg/kg	2.554	3.064 mg/kg	0.000306 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		170 mg/kg	1.245	211.601 mg/kg	0.0212 %		
14	TPH (C6 to C40) petroleum group			TPH		440 mg/kg		440 mg/kg	0.044 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
17		toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
21		pH				7.9	pH		7.9	pH	7.9 pH		
				PH									
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-917-1	208-96-8									
24		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-469-6	83-32-9									
25		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-695-5	86-73-7									
26		phenanthrene				1.3	mg/kg		1.3	mg/kg	0.00013 %		
			201-581-5	85-01-8									
27		anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-371-1	120-12-7									
28		fluoranthene				1.1	mg/kg		1.1	mg/kg	0.00011 %		
			205-912-4	206-44-0									
29		pyrene				0.89	mg/kg		0.89	mg/kg	0.000089 %		
			204-927-3	129-00-0									
30		benzo[a]anthracene				0.22	mg/kg		0.22	mg/kg	0.000022 %		
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				0.38	mg/kg		0.38	mg/kg	0.000038 %		
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.139 %		

Key	
	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Can be discounted as this is a solid waste without a free draining liquid phase.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.044%)

Classification of sample: WS24[2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS24[2]
Sample Depth:
1.0-2.0 m
Moisture content:
17%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 17% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		<2 mg/kg	1.197	<2.394 mg/kg	<0.000239 %		<**LOD**
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		18 mg/kg	1.32	23.766 mg/kg	0.00238 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<**LOD**
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.6 mg/kg	1.142	1.828 mg/kg	0.000183 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		14 mg/kg	1.462	20.462 mg/kg	0.00205 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<**LOD**
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		24 mg/kg	1.126	27.021 mg/kg	0.0027 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	22 mg/kg	1.56	34.316 mg/kg	0.0022 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		3.6 mg/kg	1.5	5.401 mg/kg	0.00054 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		43 mg/kg	2.976	127.979 mg/kg	0.0128 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				0.64 mg/kg	2.554	1.634 mg/kg	0.000163 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		65 mg/kg	1.245	80.906 mg/kg	0.00809 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<**LOD**

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<**LOD**
16	benzene	601-020-00-8	200-753-7	71-43-2		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<**LOD**
17	toluene	601-021-00-3	203-625-9	108-88-3		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<**LOD**
18	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<**LOD**
19	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<**LOD**
20	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<0.5 mg/kg	1.884	<0.942 mg/kg	<0.0000942 %		<**LOD**
21	pH			PH		8.6 pH		8.6 pH	8.6 pH		
22	naphthalene	601-052-00-2	202-049-5	91-20-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
23	acenaphthylene		205-917-1	208-96-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
24	acenaphthene		201-469-6	83-32-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
25	fluorene		201-695-5	86-73-7		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
26	phenanthrene		201-581-5	85-01-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
27	anthracene		204-371-1	120-12-7		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
28	fluoranthene		205-912-4	206-44-0		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
29	pyrene		204-927-3	129-00-0		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
30	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
31	chrysene	601-048-00-0	205-923-4	218-01-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
32	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
33	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
34	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
35	indeno[123-cd]pyrene		205-893-2	193-39-5		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
36	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
37	benzo[ghi]perylene		205-883-8	191-24-2		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
38	phenol	604-001-00-2	203-632-7	108-95-2		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<**LOD**
39	polychlorobiphenyls; PCB	602-039-00-4	215-648-1	1336-36-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
								Total:	0.0329 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS24[3]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS24[3]
Sample Depth:
2.0-3.0 m
Moisture content:
22%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 22% No Moisture Correction applied (MC)

#		Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number / EC Number / CAS Number							
1		antimony { antimony trioxide }		2.5 mg/kg	1.197	2.993 mg/kg	0.000299 %		
		051-005-00-X / 215-175-0 / 1309-64-4							
2		arsenic { arsenic trioxide }		17 mg/kg	1.32	22.446 mg/kg	0.00224 %		
		033-003-00-0 / 215-481-4 / 1327-53-3							
3		boron { diboron trioxide; boric oxide }		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<LOD
		005-008-00-8 / 215-125-8 / 1303-86-2							
4		cadmium { cadmium oxide }		2.4 mg/kg	1.142	2.742 mg/kg	0.000274 %		
		048-002-00-0 / 215-146-2 / 1306-19-0							
5		chromium in chromium(III) compounds { chromium(III) oxide }		13 mg/kg	1.462	19 mg/kg	0.0019 %		
		/ 215-160-9 / 1308-38-9							
6		chromium in chromium(VI) compounds { chromium(VI) oxide }		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<LOD
		024-001-00-0 / 215-607-8 / 1333-82-0							
7		copper { dicopper oxide; copper (I) oxide }		29 mg/kg	1.126	32.651 mg/kg	0.00327 %		
		029-002-00-X / 215-270-7 / 1317-39-1							
8		lead { lead chromate }	1	140 mg/kg	1.56	218.374 mg/kg	0.014 %		
		082-004-00-2 / 231-846-0 / 7758-97-6							
9		mercury { mercury dichloride }		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
		080-010-00-X / 231-299-8 / 7487-94-7							
10		molybdenum { molybdenum(VI) oxide }		3.1 mg/kg	1.5	4.651 mg/kg	0.000465 %		
		042-001-00-9 / 215-204-7 / 1313-27-5							
11		nickel { nickel chromate }		39 mg/kg	2.976	116.074 mg/kg	0.0116 %		
		028-035-00-7 / 238-766-5 / 14721-18-7							
12		selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }		2.3 mg/kg	2.554	5.873 mg/kg	0.000587 %		
		034-002-00-8 / /							
13		zinc { zinc oxide }		310 mg/kg	1.245	385.861 mg/kg	0.0386 %		
		030-013-00-7 / 215-222-5 / 1314-13-2							
14		TPH (C6 to C40) petroleum group		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
		/ / TPH							

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
17		toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
21		pH				8.4	pH		8.4	pH	8.4 pH		
				PH									
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-917-1	208-96-8									
24		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-469-6	83-32-9									
25		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-695-5	86-73-7									
26		phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-581-5	85-01-8									
27		anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-371-1	120-12-7									
28		fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-912-4	206-44-0									
29		pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-927-3	129-00-0									
30		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.0748 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS26

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS26
Sample Depth:
0.0-1.0 m
Moisture content:
29%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 29% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		4.9 mg/kg	1.197	5.866 mg/kg	0.000587 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		39 mg/kg	1.32	51.493 mg/kg	0.00515 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		1.8 mg/kg	3.22	5.796 mg/kg	0.00058 %		
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.4 mg/kg	1.142	1.599 mg/kg	0.00016 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		25 mg/kg	1.462	36.539 mg/kg	0.00365 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		**<LOD**
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		130 mg/kg	1.126	146.365 mg/kg	0.0146 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	410 mg/kg	1.56	639.524 mg/kg	0.041 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		1.5 mg/kg	1.353	2.03 mg/kg	0.000203 %		
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.7 mg/kg	1.5	7.051 mg/kg	0.000705 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		65 mg/kg	2.976	193.457 mg/kg	0.0193 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1.2 mg/kg	2.554	3.064 mg/kg	0.000306 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		230 mg/kg	1.245	286.284 mg/kg	0.0286 %		
14	TPH (C6 to C40) petroleum group			TPH		760 mg/kg		760 mg/kg	0.076 %		

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<**LOD**
16	benzene	601-020-00-8	200-753-7	71-43-2		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<**LOD**
17	toluene	601-021-00-3	203-625-9	108-88-3		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<**LOD**
18	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<**LOD**
19	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<**LOD**
20	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<0.5 mg/kg	1.884	<0.942 mg/kg	<0.0000942 %		<**LOD**
21	pH			PH		7.8 pH		7.8 pH	7.8 pH		
22	naphthalene	601-052-00-2	202-049-5	91-20-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
23	acenaphthylene		205-917-1	208-96-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
24	acenaphthene		201-469-6	83-32-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
25	fluorene		201-695-5	86-73-7		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
26	phenanthrene		201-581-5	85-01-8		1.3 mg/kg		1.3 mg/kg	0.00013 %		
27	anthracene		204-371-1	120-12-7		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
28	fluoranthene		205-912-4	206-44-0		1.4 mg/kg		1.4 mg/kg	0.00014 %		
29	pyrene		204-927-3	129-00-0		1.3 mg/kg		1.3 mg/kg	0.00013 %		
30	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		0.36 mg/kg		0.36 mg/kg	0.000036 %		
31	chrysene	601-048-00-0	205-923-4	218-01-9		0.49 mg/kg		0.49 mg/kg	0.000049 %		
32	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
33	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
34	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
35	indeno[123-cd]pyrene		205-893-2	193-39-5		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
36	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
37	benzo[ghi]perylene		205-883-8	191-24-2		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
38	phenol	604-001-00-2	203-632-7	108-95-2		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<**LOD**
39	polychlorobiphenyls; PCB	602-039-00-4	215-648-1	1336-36-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
								Total:	0.192 %		

Key	
	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Can be discounted as this is a solid waste without a free draining liquid phase.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.076%)

Classification of sample: WS26[2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS26[2]
Sample Depth:
1.0-2.0 m
Moisture content:
13%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 13% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		<2 mg/kg	1.197	<2.394 mg/kg	<0.000239 %		<LOD
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		18 mg/kg	1.32	23.766 mg/kg	0.00238 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<LOD
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.8 mg/kg	1.142	2.056 mg/kg	0.000206 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		19 mg/kg	1.462	27.77 mg/kg	0.00278 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		24 mg/kg	1.126	27.021 mg/kg	0.0027 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	22 mg/kg	1.56	34.316 mg/kg	0.0022 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		3.7 mg/kg	1.5	5.551 mg/kg	0.000555 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		45 mg/kg	2.976	133.932 mg/kg	0.0134 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<0.2 mg/kg	2.554	<0.511 mg/kg	<0.0000511 %		<LOD
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		67 mg/kg	1.245	83.396 mg/kg	0.00834 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
17		toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
21		pH				8.5	pH		8.5	pH	8.5 pH		
				PH									
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-917-1	208-96-8									
24		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-469-6	83-32-9									
25		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-695-5	86-73-7									
26		phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-581-5	85-01-8									
27		anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-371-1	120-12-7									
28		fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-912-4	206-44-0									
29		pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-927-3	129-00-0									
30		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.0344 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS26[3]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS26[3]
Sample Depth:
2.0-3.0 m
Moisture content:
10%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 10% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		<2 mg/kg	1.197	<2.394 mg/kg	<0.000239 %		<**LOD**
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		21 mg/kg	1.32	27.727 mg/kg	0.00277 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<**LOD**
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.4 mg/kg	1.142	1.599 mg/kg	0.00016 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		10 mg/kg	1.462	14.616 mg/kg	0.00146 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<**LOD**
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		22 mg/kg	1.126	24.77 mg/kg	0.00248 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	19 mg/kg	1.56	29.636 mg/kg	0.0019 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		3 mg/kg	1.5	4.501 mg/kg	0.00045 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		25 mg/kg	2.976	74.407 mg/kg	0.00744 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				0.76 mg/kg	2.554	1.941 mg/kg	0.000194 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		58 mg/kg	1.245	72.193 mg/kg	0.00722 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<**LOD**

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<**LOD**
16	benzene	601-020-00-8	200-753-7	71-43-2		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<**LOD**
17	toluene	601-021-00-3	203-625-9	108-88-3		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<**LOD**
18	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<**LOD**
19	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<**LOD**
20	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<0.5 mg/kg	1.884	<0.942 mg/kg	<0.0000942 %		<**LOD**
21	pH			PH		8.7 pH		8.7 pH	8.7 pH		
22	naphthalene	601-052-00-2	202-049-5	91-20-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
23	acenaphthylene		205-917-1	208-96-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
24	acenaphthene		201-469-6	83-32-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
25	fluorene		201-695-5	86-73-7		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
26	phenanthrene		201-581-5	85-01-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
27	anthracene		204-371-1	120-12-7		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
28	fluoranthene		205-912-4	206-44-0		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
29	pyrene		204-927-3	129-00-0		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
30	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
31	chrysene	601-048-00-0	205-923-4	218-01-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
32	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
33	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
34	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
35	indeno[123-cd]pyrene		205-893-2	193-39-5		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
36	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
37	benzo[ghi]perylene		205-883-8	191-24-2		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
38	phenol	604-001-00-2	203-632-7	108-95-2		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<**LOD**
39	polychlorobiphenyls; PCB	602-039-00-4	215-648-1	1336-36-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
								Total:	0.0258 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS-27

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS-27
Sample Depth:
0.0-1.0 m
Moisture content:
12%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 12% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		<2 mg/kg	1.197	<2.394 mg/kg	<0.000239 %		<LOD
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		15 mg/kg	1.32	19.805 mg/kg	0.00198 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		0.44 mg/kg	3.22	1.417 mg/kg	0.000142 %		
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.3 mg/kg	1.142	1.485 mg/kg	0.000149 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		13 mg/kg	1.462	19 mg/kg	0.0019 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		15 mg/kg	1.126	16.888 mg/kg	0.00169 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	23 mg/kg	1.56	35.876 mg/kg	0.0023 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		2.5 mg/kg	1.5	3.75 mg/kg	0.000375 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		28 mg/kg	2.976	83.335 mg/kg	0.00833 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<0.2 mg/kg	2.554	<0.511 mg/kg	<0.0000511 %		<LOD
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		55 mg/kg	1.245	68.459 mg/kg	0.00685 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
17		toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
21		pH				8.7	pH		8.7	pH	8.7 pH		
				PH									
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-917-1	208-96-8									
24		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-469-6	83-32-9									
25		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-695-5	86-73-7									
26		phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-581-5	85-01-8									
27		anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-371-1	120-12-7									
28		fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-912-4	206-44-0									
29		pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-927-3	129-00-0									
30		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.0254 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS-27[2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS-27[2]
Sample Depth:
1.0-2.0 m
Moisture content:
11%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 11% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		<2 mg/kg	1.197	<2.394 mg/kg	<0.000239 %		<**LOD**
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		24 mg/kg	1.32	31.688 mg/kg	0.00317 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<**LOD**
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		2.4 mg/kg	1.142	2.742 mg/kg	0.000274 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		12 mg/kg	1.462	17.539 mg/kg	0.00175 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<**LOD**
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		28 mg/kg	1.126	31.525 mg/kg	0.00315 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	17 mg/kg	1.56	26.517 mg/kg	0.0017 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.1 mg/kg	1.5	6.151 mg/kg	0.000615 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		44 mg/kg	2.976	130.956 mg/kg	0.0131 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<0.2 mg/kg	2.554	<0.511 mg/kg	<0.0000511 %		<**LOD**
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		68 mg/kg	1.245	84.641 mg/kg	0.00846 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<**LOD**

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
16	benzene	601-020-00-8	200-753-7	71-43-2		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
17	toluene	601-021-00-3	203-625-9	108-88-3		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
18	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
19	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
20	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<**LOD**
21	pH			PH		8.7	pH		8.7	pH	8.7 pH		
22	naphthalene	601-052-00-2	202-049-5	91-20-3		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
23	acenaphthylene		205-917-1	208-96-8		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
24	acenaphthene		201-469-6	83-32-9		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
25	fluorene		201-695-5	86-73-7		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
26	phenanthrene		201-581-5	85-01-8		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
27	anthracene		204-371-1	120-12-7		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
28	fluoranthene		205-912-4	206-44-0		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
29	pyrene		204-927-3	129-00-0		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
30	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
31	chrysene	601-048-00-0	205-923-4	218-01-9		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
32	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
33	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
34	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
35	indeno[123-cd]pyrene		205-893-2	193-39-5		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
36	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
37	benzo[ghi]perylene		205-883-8	191-24-2		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
38	phenol	604-001-00-2	203-632-7	108-95-2		<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<**LOD**
39	polychlorobiphenyls; PCB	602-039-00-4	215-648-1	1336-36-3		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
										Total:	0.034 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS-27[3]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS-27[3]
Sample Depth:
2.0-3.0 m
Moisture content:
10%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 10% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2.5 mg/kg	1.197	2.993 mg/kg	0.000299 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		23 mg/kg	1.32	30.367 mg/kg	0.00304 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<**LOD**
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		2.6 mg/kg	1.142	2.97 mg/kg	0.000297 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		13 mg/kg	1.462	19 mg/kg	0.0019 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<**LOD**
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		29 mg/kg	1.126	32.651 mg/kg	0.00327 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	25 mg/kg	1.56	38.995 mg/kg	0.0025 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.7 mg/kg	1.5	7.051 mg/kg	0.000705 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		57 mg/kg	2.976	169.647 mg/kg	0.017 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				3.8 mg/kg	2.554	9.704 mg/kg	0.00097 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		76 mg/kg	1.245	94.598 mg/kg	0.00946 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<**LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
17		toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
21		pH				8.7	pH		8.7	pH	8.7 pH		
				PH									
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-917-1	208-96-8									
24		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-469-6	83-32-9									
25		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-695-5	86-73-7									
26		phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-581-5	85-01-8									
27		anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-371-1	120-12-7									
28		fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-912-4	206-44-0									
29		pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-927-3	129-00-0									
30		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.0409 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS-28

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS-28
Sample Depth:
0.0-1.0 m
Moisture content:
33%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 33% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2.3 mg/kg	1.197	2.753 mg/kg	0.000275 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		30 mg/kg	1.32	39.61 mg/kg	0.00396 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		0.73 mg/kg	3.22	2.351 mg/kg	0.000235 %		
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.4 mg/kg	1.142	1.599 mg/kg	0.00016 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		23 mg/kg	1.462	33.616 mg/kg	0.00336 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		**<LOD**
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		94 mg/kg	1.126	105.834 mg/kg	0.0106 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	960 mg/kg	1.56	1497.423 mg/kg	0.096 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		2.4 mg/kg	1.353	3.248 mg/kg	0.000325 %		
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		3.4 mg/kg	1.5	5.101 mg/kg	0.00051 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		52 mg/kg	2.976	154.766 mg/kg	0.0155 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				0.75 mg/kg	2.554	1.915 mg/kg	0.000192 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		290 mg/kg	1.245	360.967 mg/kg	0.0361 %		
14	TPH (C6 to C40) petroleum group			TPH		220 mg/kg		220 mg/kg	0.022 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-020-00-8	200-753-7	71-43-2									
17		toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<**LOD**
		006-007-00-5											
21		pH				8.3	pH		8.3	pH	8.3 pH		
				PH									
22		naphthalene				0.69	mg/kg		0.69	mg/kg	0.000069 %		
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				0.3	mg/kg		0.3	mg/kg	0.00003 %		
			205-917-1	208-96-8									
24		acenaphthene				0.17	mg/kg		0.17	mg/kg	0.000017 %		
			201-469-6	83-32-9									
25		fluorene				0.21	mg/kg		0.21	mg/kg	0.000021 %		
			201-695-5	86-73-7									
26		phenanthrene				3.7	mg/kg		3.7	mg/kg	0.00037 %		
			201-581-5	85-01-8									
27		anthracene				0.63	mg/kg		0.63	mg/kg	0.000063 %		
			204-371-1	120-12-7									
28		fluoranthene				7.2	mg/kg		7.2	mg/kg	0.00072 %		
			205-912-4	206-44-0									
29		pyrene				6.9	mg/kg		6.9	mg/kg	0.00069 %		
			204-927-3	129-00-0									
30		benzo[a]anthracene				3.9	mg/kg		3.9	mg/kg	0.00039 %		
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				4.9	mg/kg		4.9	mg/kg	0.00049 %		
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				5	mg/kg		5	mg/kg	0.0005 %		
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				1.9	mg/kg		1.9	mg/kg	0.00019 %		
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				2.9	mg/kg		2.9	mg/kg	0.00029 %		
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				1.6	mg/kg		1.6	mg/kg	0.00016 %		
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				0.19	mg/kg		0.19	mg/kg	0.000019 %		
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				2.1	mg/kg		2.1	mg/kg	0.00021 %		
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.194 %		

Key	
	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Can be discounted as this is a solid waste without a free draining liquid phase.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.022%)

Classification of sample: WS-28[2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS-28[2]
Sample Depth:
1.0-2.0 m
Moisture content:
14%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 14% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		<2 mg/kg	1.197	<2.394 mg/kg	<0.000239 %		<**LOD**
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		24 mg/kg	1.32	31.688 mg/kg	0.00317 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		0.8 mg/kg	3.22	2.576 mg/kg	0.000258 %		
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		3 mg/kg	1.142	3.427 mg/kg	0.000343 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		16 mg/kg	1.462	23.385 mg/kg	0.00234 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<**LOD**
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		39 mg/kg	1.126	43.91 mg/kg	0.00439 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	37 mg/kg	1.56	57.713 mg/kg	0.0037 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.1 mg/kg	1.353	0.135 mg/kg	0.0000135 %		
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.4 mg/kg	1.5	6.601 mg/kg	0.00066 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		53 mg/kg	2.976	157.742 mg/kg	0.0158 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1.6 mg/kg	2.554	4.086 mg/kg	0.000409 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		89 mg/kg	1.245	110.78 mg/kg	0.0111 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<**LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
17		toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
21		pH				8.4	pH		8.4	pH	8.4 pH		
				PH									
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-917-1	208-96-8									
24		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-469-6	83-32-9									
25		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-695-5	86-73-7									
26		phenanthrene				0.13	mg/kg		0.13	mg/kg	0.000013 %		
			201-581-5	85-01-8									
27		anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-371-1	120-12-7									
28		fluoranthene				0.22	mg/kg		0.22	mg/kg	0.000022 %		
			205-912-4	206-44-0									
29		pyrene				0.19	mg/kg		0.19	mg/kg	0.000019 %		
			204-927-3	129-00-0									
30		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.0438 %		

Key	
	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS-28[3]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS-28[3]
Sample Depth:
2.0-3.0 m
Moisture content:
9.2%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 9.2% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		4.4 mg/kg	1.197	5.267 mg/kg	0.000527 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		21 mg/kg	1.32	27.727 mg/kg	0.00277 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<**LOD**
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		2.2 mg/kg	1.142	2.513 mg/kg	0.000251 %		
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		14 mg/kg	1.462	20.462 mg/kg	0.00205 %		
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<**LOD**
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		27 mg/kg	1.126	30.399 mg/kg	0.00304 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	36 mg/kg	1.56	56.153 mg/kg	0.0036 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4 mg/kg	1.5	6.001 mg/kg	0.0006 %		
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		42 mg/kg	2.976	125.003 mg/kg	0.0125 %		
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				3 mg/kg	2.554	7.661 mg/kg	0.000766 %		
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		70 mg/kg	1.245	87.13 mg/kg	0.00871 %		
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<**LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
16		benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-020-00-8	200-753-7	71-43-2									
17		toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<**LOD**
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
20		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<**LOD**
		006-007-00-5											
21		pH				8.7	pH		8.7	pH	8.7 pH		
				PH									
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
23		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-917-1	208-96-8									
24		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-469-6	83-32-9									
25		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-695-5	86-73-7									
26		phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-581-5	85-01-8									
27		anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			204-371-1	120-12-7									
28		fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-912-4	206-44-0									
29		pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			204-927-3	129-00-0									
30		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-033-00-9	200-280-6	56-55-3									
31		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-048-00-0	205-923-4	218-01-9									
32		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-034-00-4	205-911-9	205-99-2									
33		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-036-00-5	205-916-6	207-08-9									
34		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-032-00-3	200-028-5	50-32-8									
35		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-893-2	193-39-5									
36		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-041-00-2	200-181-8	53-70-3									
37		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-883-8	191-24-2									
38		phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
39		polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.0363 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: ST EW A

Hazardous Waste
Classified as **17 05 03 ***
in the List of Waste

Sample details

Sample Name:
ST EW A
Sample Depth:
0.5-1.5 m
Moisture content:
24%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 03 * (Soil and stones containing hazardous substances)

Hazard properties

HP 7: Carcinogenic "waste which induces cancer or increases its incidence"

Hazard Statements hit:

Carc. 1B; H350 "May cause cancer [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.13%)

HP 11: Mutagenic "waste which may cause a mutation, that is a permanent change in the amount or structure of the genetic material in a cell"

Hazard Statements hit:

Muta. 1B; H340 "May cause genetic defects [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.13%)

Determinands

Moisture content: 24% No Moisture Correction applied (MC)

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
1		TPH (C6 to C40) petroleum group		TPH		1300 mg/kg		1300 mg/kg	0.13 %		
								Total:	0.13 %		

Key

- User supplied data
- Hazardous result
- Determinand defined or amended by HazWasteOnline (see Appendix A)

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Can be discounted as this is a solid waste without a free draining liquid phase.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.13%)

Classification of sample: ST EW A [2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
ST EW A [2]
Sample Depth:
1.5-2.5 m
Moisture content:
13%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 13% No Moisture Correction applied (MC)

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
1		TPH (C6 to C40) petroleum group		TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<**LOD**
								Total:	0.001 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
<LOD	Below limit of detection

Classification of sample: ST EW A [3]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
ST EW A [3]
Sample Depth:
2.5-3.0 m
Moisture content:
9.5%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 9.5% No Moisture Correction applied (MC)

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
1		TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		<**LOD**
				TPH							
								Total:	0.001 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
<LOD	Below limit of detection

Classification of sample: ST EW B

Hazardous Waste
Classified as **17 05 03 ***
in the List of Waste

Sample details

Sample Name:
ST EW B
Sample Depth:
0.5-1.5 m
Moisture content:
15%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 03 * (Soil and stones containing hazardous substances)

Hazard properties

HP 7: Carcinogenic "waste which induces cancer or increases its incidence"

Hazard Statements hit:

Carc. 1B; H350 "May cause cancer [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.24%)

HP 11: Mutagenic "waste which may cause a mutation, that is a permanent change in the amount or structure of the genetic material in a cell"

Hazard Statements hit:

Muta. 1B; H340 "May cause genetic defects [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.24%)

Determinands

Moisture content: 15% No Moisture Correction applied (MC)

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
1		TPH (C6 to C40) petroleum group		TPH		2400 mg/kg		2400 mg/kg	0.24 %		
								Total:	0.24 %		

Key

- User supplied data
- Hazardous result
- Determinand defined or amended by HazWasteOnline (see Appendix A)

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Can be discounted as this is a solid waste without a free draining liquid phase.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.24%)

Classification of sample: ST EW B [2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
ST EW B [2]
Sample Depth:
2.0-2.5 m
Moisture content:
8.1%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 8.1% No Moisture Correction applied (MC)

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
1		TPH (C6 to C40) petroleum group		TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<**LOD**
								Total:	0.001 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
<LOD	Below limit of detection

Classification of sample: ST NS

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
ST NS
Sample Depth:
0.5-1.5 m
Moisture content:
15%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 15% No Moisture Correction applied (MC)

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
1		TPH (C6 to C40) petroleum group				480 mg/kg		480 mg/kg	0.048 %		
				TPH							
								Total:	0.048 %		

Key

	User supplied data
	Determinand defined or amended by HazWasteOnline (see Appendix A)

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Can be discounted as this is a solid waste without a free draining liquid phase.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.048%)

Classification of sample: ST NS [2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
ST NS [2]
Sample Depth:
1.5-2.0 m
Moisture content:
12%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 12% No Moisture Correction applied (MC)

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
1		TPH (C6 to C40) petroleum group		TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<**LOD**
								Total:	0.001 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
<LOD	Below limit of detection

Classification of sample: ST NS [3]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
ST NS [3]
Sample Depth:
2.0-2.5 m
Moisture content:
12%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 12% No Moisture Correction applied (MC)

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
1		TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		<**LOD**
				TPH							
								Total:	0.001 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
<LOD	Below limit of detection

Appendix A: Classifier defined and non CLP determinands

TPH (C6 to C40) petroleum group (CAS Number: TPH)

Description/Comments: Hazard statements taken from WM3 1st Edition 2015; Risk phrases: WM2 3rd Edition 2013
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: Aquatic Chronic 2 H411 , Repr. 2 H361d , Carc. 1B H350 , Muta. 1B H340 , STOT RE 2 H373 , Asp. Tox. 1 H304 , Flam. Liq. 3 H226

chromium(III) oxide (EC Number: 215-160-9, CAS Number: 1308-38-9)

Conversion factor: 1.462
Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Aquatic Chronic 1 H410 , Aquatic Acute 1 H400 , Repr. 1B H360FD , Skin Sens. 1 H317 , Resp. Sens. 1 H334 , Skin Irrit. 2 H315 , STOT SE 3 H335 , Eye Irrit. 2 H319 , Acute Tox. 4 H302 , Acute Tox. 4 H332

ethylbenzene (EC Number: 202-849-4, CAS Number: 100-41-4)

CLP index number: 601-023-00-4
Description/Comments:
Data source: Commission Regulation (EU) No 605/2014 – 6th Adaptation to Technical Progress for Regulation (EC) No 1272/2008. (ATP6)
Additional Hazard Statement(s): Carc. 2 H351
Reason for additional Hazards Statement(s)/Risk Phrase(s):
03 Jun 2015 - Carc. 2 H351 hazard statement sourced from: IARC Group 2B (77) 2000

salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex

CLP index number: 006-007-00-5
Description/Comments: Conversion factor based on a worst case compound: sodium cyanide
Data source: Commission Regulation (EC) No 790/2009 - 1st Adaptation to Technical Progress for Regulation (EC) No 1272/2008. (ATP1)
Additional Hazard Statement(s): EUH032 >= 0.2 %
Reason for additional Hazards Statement(s)/Risk Phrase(s):
14 Dec 2015 - EUH032 >= 0.2 % hazard statement sourced from: WM3, Table C12.2

pH (CAS Number: PH)

Description/Comments: Appendix C4
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: None.

acenaphthylene (EC Number: 205-917-1, CAS Number: 208-96-8)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Skin Irrit. 2 H315 , STOT SE 3 H335 , Eye Irrit. 2 H319 , Acute Tox. 1 H310 , Acute Tox. 1 H330 , Acute Tox. 4 H302

acenaphthene (EC Number: 201-469-6, CAS Number: 83-32-9)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Aquatic Chronic 2 H411 , Aquatic Chronic 1 H410 , Aquatic Acute 1 H400 , Skin Irrit. 2 H315 , STOT SE 3 H335 , Eye Irrit. 2 H319

fluorene (EC Number: 201-695-5, CAS Number: 86-73-7)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Aquatic Chronic 1 H410 , Aquatic Acute 1 H400

phenanthrene (EC Number: 201-581-5, CAS Number: 85-01-8)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Skin Irrit. 2 H315 , Aquatic Chronic 1 H410 , Aquatic Acute 1 H400 , Skin Sens. 1 H317 , Carc. 2 H351 , STOT SE 3 H335 , Eye Irrit. 2 H319 , Acute Tox. 4 H302

anthracene (EC Number: 204-371-1, CAS Number: 120-12-7)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Aquatic Chronic 1 H410 , Aquatic Acute 1 H400 , Skin Sens. 1 H317 , Skin Irrit. 2 H315 , STOT SE 3 H335 , Eye Irrit. 2 H319

fluoranthene (EC Number: 205-912-4, CAS Number: 206-44-0)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 21 Aug 2015
Hazard Statements: Aquatic Chronic 1 H410 , Aquatic Acute 1 H400 , Acute Tox. 4 H302

pyrene (EC Number: 204-927-3, CAS Number: 129-00-0)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 2014
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 21 Aug 2015
Hazard Statements: Aquatic Chronic 1 H410 , Aquatic Acute 1 H400 , STOT SE 3 H335 , Eye Irrit. 2 H319 , Skin Irrit. 2 H315

indeno[123-cd]pyrene (EC Number: 205-893-2, CAS Number: 193-39-5)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Carc. 2 H351

benzo[ghi]perylene (EC Number: 205-883-8, CAS Number: 191-24-2)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 28/02/2015
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 23 Jul 2015
Hazard Statements: Aquatic Chronic 1 H410 , Aquatic Acute 1 H400

polychlorobiphenyls; PCB (EC Number: 215-648-1, CAS Number: 1336-36-3)

CLP index number: 602-039-00-4
Description/Comments: Worst Case: IARC considers PCB Group 1; Carcinogenic to humans; POP specific threshold from ATP1 (Regulation 756/2010/EU) to POPs Regulation (Regulation 850/2004/EC). Where applicable, the calculation method laid down in European standards EN 12766-1 and EN 12766-2 shall be applied.
Data source: Regulation 1272/2008/EC - Classification, labelling and packaging of substances and mixtures. (CLP)
Additional Hazard Statement(s): Carc. 1A H350
Reason for additional Hazards Statement(s)/Risk Phrase(s):
29 Sep 2015 - Carc. 1A H350 hazard statement sourced from: IARC Group 1 (23, Sup 7, 100C) 2012

Appendix B: Rationale for selection of metal species

antimony {antimony trioxide}

Worst case CLP species based on hazard statements/molecular weight and low solubility. Industrial sources include: flame retardants in electrical apparatus, textiles and coatings

arsenic {arsenic trioxide}

Reasonable case CLP species based on hazard statements/molecular weight and most common (stable) oxide of arsenic. Industrial sources include: smelting; main precursor to other arsenic compounds

boron {diboron trioxide; boric oxide}

Reasonable case CLP species based on hazard statements/ molecular weight, physical form and low solubility. Industrial sources include: fluxing agent for glass/enamels; additive for fibre optics, borosilicate glass

cadmium {cadmium oxide}

Reasonable case CLP species based on hazard statements/molecular weight, very low solubility in water. Industrial sources include: electroplating baths, electrodes for storage batteries, catalysts, ceramic glazes, phosphors, pigments and nematocides. Worst case compounds in CLP: cadmium sulphate, chloride, fluoride & iodide not expected as either very soluble and/or compound's industrial usage not related to site history

chromium in chromium(III) compounds {chromium(III) oxide}

Reasonable case species based on hazard statements/molecular weight. Industrial sources include: tanning, pigment in paint, inks and glass

chromium in chromium(VI) compounds {chromium(VI) oxide}

Worst case CLP species based on hazard statements/molecular weight. Industrial sources include: production stainless steel, electroplating, wood preservation, anti-corrosion agents or coatings, pigments

copper {dicopper oxide; copper (I) oxide}

Reasonable case CLP species based on hazard statements/molecular weight and insolubility in water. Industrial sources include: oxidised copper metal, brake pads, pigments, antifouling paints, fungicide. Worse case copper sulphate is very soluble and likely to have been leached away if ever present and/or not enough soluble sulphate detected.

lead {lead chromate}

Worst case CLP species based on hazard statements/molecular weight

mercury {mercury dichloride}

Worst case CLP species based on hazard statements/molecular weight

molybdenum {molybdenum(VI) oxide}

Worst case CLP species based on hazard statements/molecular weight

nickel {nickel chromate}

Worst case CLP species based on hazard statements/molecular weight

selenium {selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex}

Harmonised group entry used as most reasonable case. Pigment cadmium sulphoselenide not likely to be present in this soil. No evidence for the other CLP entries: sodium selenite, nickel II selenite and nickel selenide, to be present in this soil.

zinc {zinc oxide}

Laboratory analysis shows Hexavalent Chromium is below detection, thus Zinc Chromate is extremely unlikely to have formed.

cyanides {salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex}

Harmonised group entry used as most reasonable case as complex cyanides and those specified elsewhere in the annex are not likely to be present in this soil: [Note conversion factor based on a worst case compound: sodium cyanide] (edit as required)

Appendix C: Version

HazWasteOnline Classification Engine: WM3 1st Edition v1.1, May 2018
HazWasteOnline Classification Engine Version: 2019.190.3901.7928 (09 Jul 2019)
HazWasteOnline Database: 2019.190.3901.7928 (09 Jul 2019)

This classification utilises the following guidance and legislation:
WM3 v1.1 - Waste Classification - 1st Edition v1.1 - May 2018
CLP Regulation - Regulation 1272/2008/EC of 16 December 2008
1st ATP - Regulation 790/2009/EC of 10 August 2009
2nd ATP - Regulation 286/2011/EC of 10 March 2011
3rd ATP - Regulation 618/2012/EU of 10 July 2012
4th ATP - Regulation 487/2013/EU of 8 May 2013
Correction to 1st ATP - Regulation 758/2013/EU of 7 August 2013
5th ATP - Regulation 944/2013/EU of 2 October 2013
6th ATP - Regulation 605/2014/EU of 5 June 2014
WFD Annex III replacement - Regulation 1357/2014/EU of 18 December 2014
Revised List of Wastes 2014 - Decision 2014/955/EU of 18 December 2014
7th ATP - Regulation 2015/1221/EU of 24 July 2015
8th ATP - Regulation (EU) 2016/918 of 19 May 2016
9th ATP - Regulation (EU) 2016/1179 of 19 July 2016
10th ATP - Regulation (EU) 2017/776 of 4 May 2017
HP14 amendment - Regulation (EU) 2017/997 of 8 June 2017
13th ATP - Regulation (EU) 2018/1480 of 4 October 2018
POPs Regulation 2004 - Regulation 850/2004/EC of 29 April 2004
1st ATP to POPs Regulation - Regulation 756/2010/EU of 24 August 2010
2nd ATP to POPs Regulation - Regulation 757/2010/EU of 24 August 2010

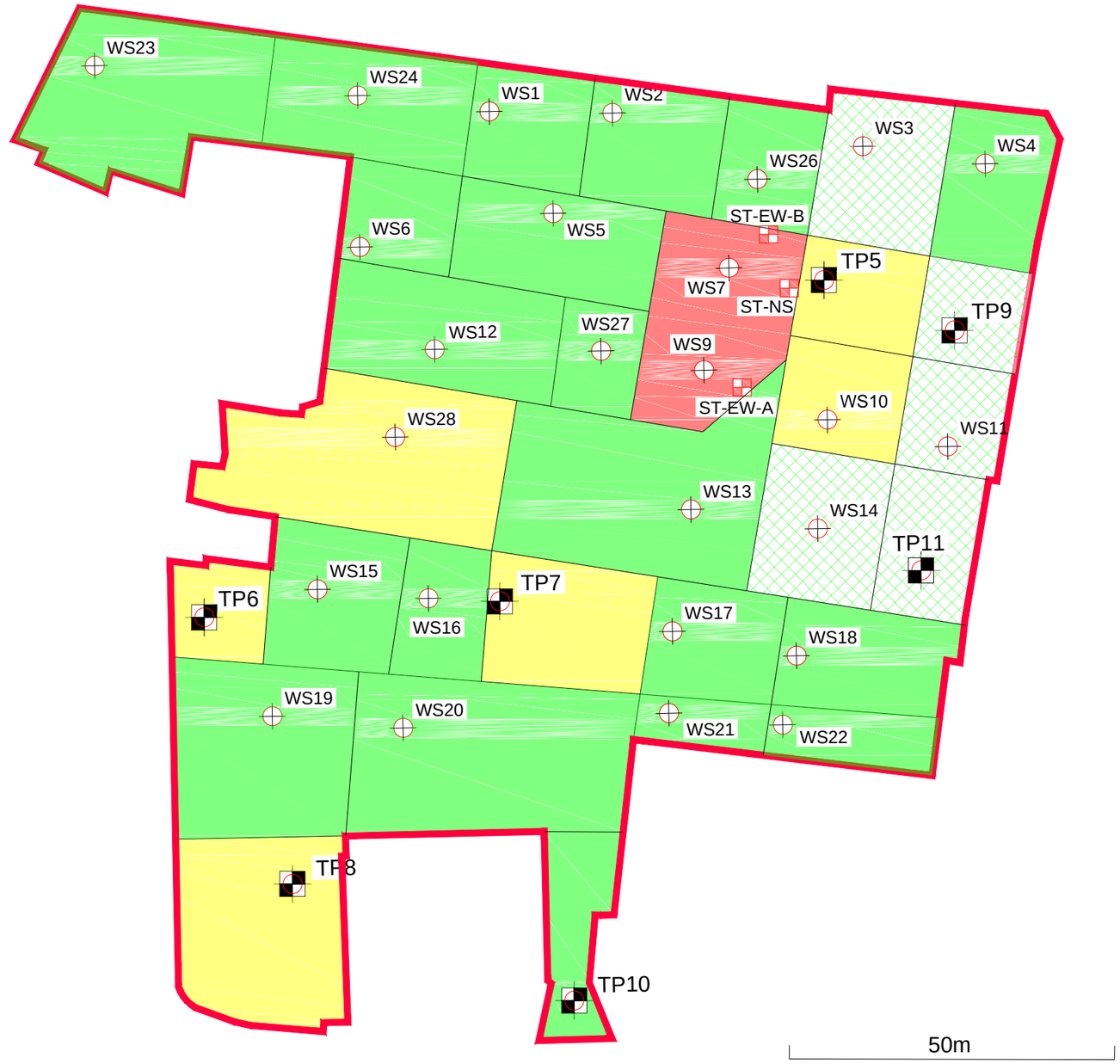
Appendix 7

Dig Plans

N

Legend:

- 17 05 04 Meets Inert WAC
- 17 05 03 Hazardous
- 17 05 04 Meets Non Haz
- 17 05 04 Meets Inert Landfill Limits
- Window Sample
- Borehole
- Trial Pit
- Slit Trench Sample



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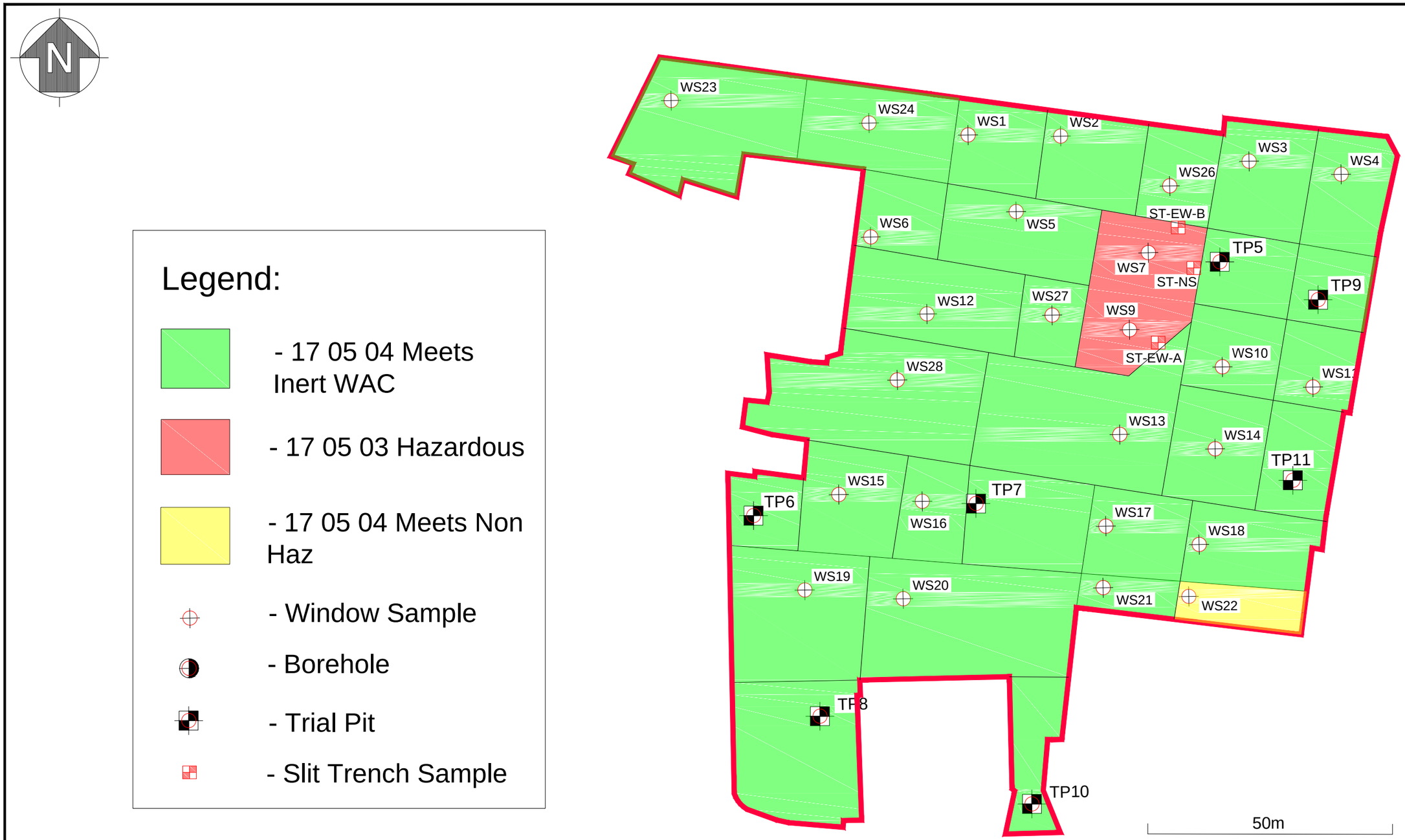
CLIENT: Hines

FIGURE No.: X

TITLE: Excavation Plan 0–1m

SCALE: SCALE

REV.: A



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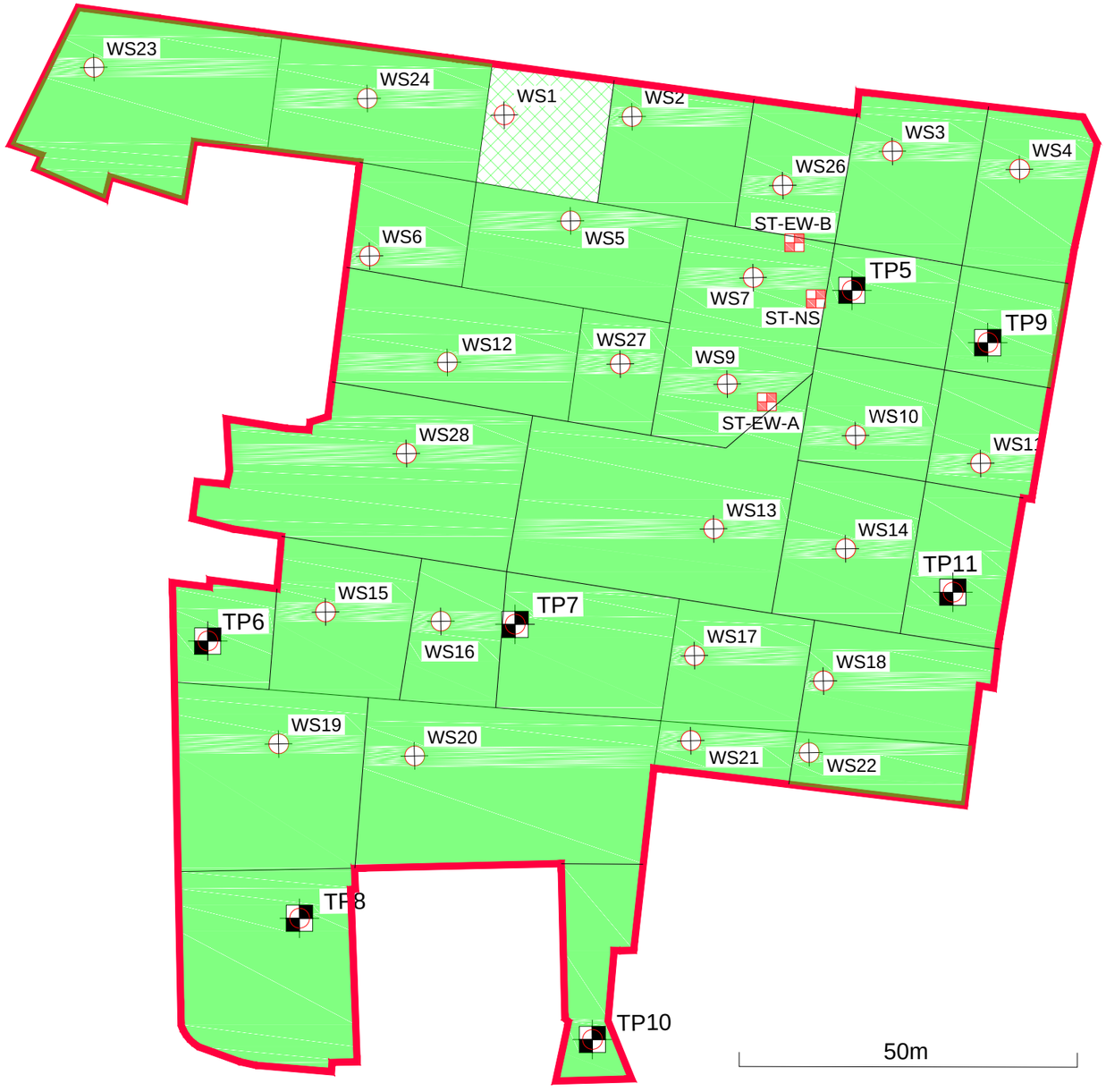
CLIENT
Hines

FIGURE No.
X

TITLE
Excavation Plan 1–2m

SCALE
SCALE

REV.
A



Legend:

- 17 05 04 Meets Inert WAC
- 17 05 04 Meets Inert Landfill Limits
- Window Sample
- Borehole
- Trial Pit
- Slit Trench Sample

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CLIENT: Hines

FIGURE No.: X

TITLE: Excavation Plan 2–3m

SCALE: SCALE

REV.: A

APPENDIX 10.1
BAT SURVEY

VOLUME III
APPENDICES TO ENVIRONMENTAL IMPACT ASSESSMENT REPORT

JUNE 2022

A Bat Assessment at the site of the former Bailey Gibson property South Circular Road for the Proposed development.

Brian Keeley B. Sc. (Hons) in Zool.

May 2022

Introduction

Most of Ireland's mammals enjoy protection under the Wildlife Acts (1976 and 2000, as amended), and the European Communities (Birds and Natural Habitats) Regulations, 2011-2015) as well as the Bonn Convention (The Convention on the Conservation of Migratory Species of Wild Animal) and the Bern Convention (Convention on the Conservation of European Wildlife and Natural Habitats). All native mustelid species and bat species are protected with further protection given to otters and lesser horseshoe bats. Lesser horseshoe bats are not found in County Dublin.

Bats account for nine of Ireland's terrestrial mammal species, approximately one quarter of the species of the Irish land mass. All of the species found to date and indeed all bat species that may remain undetected up to the present are afforded legal protection. A speedy and productive means of determining the bat fauna within a site is to walk the entire site concerned, paying

particular attention to all hedgerow, woodland, watercourses, fence lines, paths etc. with the aid of an ultrasonic receiver ("bat detector").

In an urban area this reduces the number of transects to building perimeters and any vegetation within a site. Where buildings allow access to bats, this may also include the internal area of the building.

Determining the bat fauna of the surrounding area may involve a much greater level of assessment if the aim of the survey is to catalogue all bats in all townlands but this is too detailed for the aim of creating mitigation for most developments except where the species under consideration are particularly elusive or specialised and leave few signs.

The survey undertaken within the site at the former Bailey Gibson buildings and yard allows a targeting of mitigation measures to the appropriate or most efficient sites to prevent accidental death or injury in a development and to assist in providing mitigation for losses brought about in feeding and commuting. The lands are within inner city Dublin where bat fauna and bat activity are low compared to most of the island of Ireland.

Construction and development create numerous changes to a site that usually lead to considerable vegetation loss and a change from a green site to a greater level of concrete and land management. This may alter the elements of the landscape of benefit to bats including roost sites, hedgerow (in less urban areas) or other vegetation, mature trees and the associated insects.

Methodology

The site was examined visually for evidence of bat roosts over two summers in 2019 and 2021 and in winter of 2021 and again in February 2022. The first visual inspection was undertaken on 19th August 2019 and this examination was followed by a night-time bat detector survey (activity survey) for each site utilising ultrasonic receivers to convert bat signals used in navigation and social interaction to a recordable and measurable pulse. In the field, broad spectrum handheld and static monitors were used to record and identify bat signals. An Echometer 3 (EM3 – see below) provided a screen for instant evaluation while the capacity to record signals allowed for bat identification to be confirmed using sound analysis software (Kaleidoscope) over the two survey dates. The analysis was carried out by automatic identification and then evaluation of the identifications by the bat specialist. Sunset was at 20.45 hours and sunrise was at 06.13 hours.

In 2021, two surveyors examined the site, one equipped with an EM3 while the second used an Echometer Touch 2 Pro attached to an android smartphone. The two surveyors maintained a distance between each other to ensure that the entire site was covered during the assessment.

The site was walked before and following sunset and a transect of the site covering all building perimeters, the edge of the site and including entry into safer buildings both after sunset and prior to sunrise. Sunset was at 19:26 hours and Sunrise was at 07:11 hours.

A winter assessment of the buildings was undertaken on December 13th, 2021, and again on February 16th, 2022, to check for any evidence of significant hibernation sites within the property.

Equipment employed:

Echometer 3 Real Time Expansion monitor with SD card recording (EM3)
Echometer Touch 2 Pro broad spectrum microphone with Kaleidoscope identification software.
Songmeter2Bat+ monitor for overnight recordings within the site (SM2) (2019)
Songmeter Mini Bat (2021)
Kaleidoscope sound analysis software
Maps of proposed development, Google Earth and Google Maps
Huawei Smartphone 6 with digital camera
An EM3 was held for the entire survey period and recorded all bat signals detectable by its transducer. A SM2 was positioned within the site from sunset to sunrise on the night of survey in 2019. A Songmeter Mini Bat was used for overnight monitoring in 2021 and placed closer to the buildings than the open green area at which it was positioned in 2019.

Survey constraints

Conditions for surveying were suited to bat activity for the entire period of survey in both years. There was no rain on the nights of survey and temperatures were highly suited to bat feeding activity. There was no strong wind at the commencement of the two nights or at any stage in the surveys. The site was examined over two years and in three seasons: summer, autumn and winter. The survey included static monitors, hand-held ultrasonic receivers, visual inspection of all buildings and data searches from Bat Conservation Ireland's database.

This is consistent with the level of survey recommended in the NPWS document, "Bat Mitigation Guidelines for Ireland Wildlife Manuals No. 134 and No. 25.

Bat species noted in 2021 in the proposed site

Roost sites

No bats were noted within the site. There is a record from 2021 of a common pipistrelle within an ivy-covered ruin adjacent to the site. Evidence of bat occupancy was also noted within a building adjoining the site. Neither building is altered or removed as a consequence of this proposed development.

Bats species noted to feed or commute through the site in 2021

Common pipistrelle	***Pipistrellus pipistrellus***
Leisler's bat	***Nyctalus leisleri***

Bat species noted to feed or commute through the site in 2019

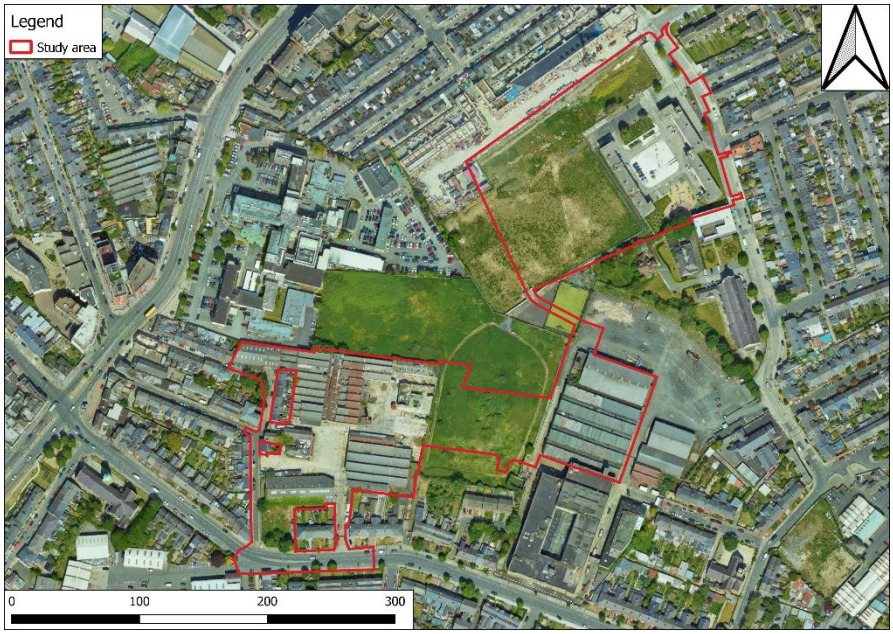
Common pipistrelle	***Pipistrellus pipistrellus***
Leisler's bat	***Nyctalus leisleri***
Soprano pipistrelle	***Pipistrellus pygmaeus***

Bat activity was very low in both assessments (September 2021 and August 2019). This is a time of year when bat activity is very high in good foraging areas or close to bat roosts. Bat activity was low throughout the night in August 2019 with most bat activity occurring in the green area (the Dublin City Council-owned lands). The principal bat activity was common pipistrelle. Lighting from existing buildings illuminated areas of the site.

There was no bat activity within the site prior to sunrise in 2019. Bat activity during the night was occasional and ceased at 03.29 hours (2 hours 44 minutes prior to sunrise).

Bat activity was even lower in September 2021 with a total of 6 bat passes of 2 species from all combined sources (EM3, Touch 2 Pro and Songmeter Mini). This was possibly partially due to the positioning of the monitor away from the green area where it had been placed in 2021.

Bats did not swarm at the site and were not seen to either emerge from a building after sunset or return to a building prior to sunrise either in 2019 or 2021.



Red line boundary of Bailey Gibson site

Proposal for the Bailey Gibson site

Modifications or Features introduced by the development

Buildings demolition

There will be substantial building modification and demolition within the site. As no buildings were noted as roost sites, this is unlikely to have any significance for bats.

Vegetation alterations

There will be a requirement to remove all of the vegetation from the site to facilitate the project. There is an absence of either mature or immature trees with any roost potential and as bat activity was not high in the site, this may have a limited impact upon bats.

Lighting

There will be an increased level of lighting as there will be an introduction of residential development to an unused open site. There will be increased lighting for the construction and operation of the new buildings. This would lead to the disturbance of light intolerant or shy species while the more urban-adapted species will be affected to a lesser extent.

Pipistrelles and Leisler's bats, the only species recorded, are less affected by light than all other species, but Pipistrelles will avoid light where possible. Leisler's bats may be attracted to lighting later into the night-time to feed on moths that themselves are attracted or disorientated by the lights. Species such as brown long-eared bat typically avoid light and *Myotis* species (such as Natterer's bat) are also typically intolerant of light. These species were not recorded at the site.

Impacts of The Proposed Development

Potential roost loss

Building demolition creates a risk of roost loss. This could lead to injury or death to a species protected under the Wildlife Act and Habitats Directive (if a roost were present and not identified) and would therefore constitute a breach of the Irish and EU legislation. There is no evidence that the buildings within the site are in use as bat roosts from the survey of August 2019. Bats move in and out of roosts on a regular basis and individuals may be present at times other than a specific survey without any clear evidence.

There is no evidence of this from droppings or staining. This impact is likely to be moderate and long-term if there is roost loss and no obvious equivalent replacement for the roost loss.

However, as noted in this report, no evidence of roosting bats has been recorded on the site to date.

Disturbance from lighting

Lighting will be utilised for two different functions:

1. Access and safety and 2) Security and policing. The former is to allow ease of use at night. The latter is to ensure a perceived higher security level. This may affect light-intolerant bat species during foraging and if directed at emergence points would affect all bat species, even those that will feed in illuminated areas.

Species such as Leisler's bat and common pipistrelles are less affected than almost all other Irish bat species and this would not be a significant impact for this species. Brown long eared and Natterer's bats are more light intolerant but have not been noted within the site. At worst, it would be a permanent slightly negative impact.

Reduced Feeding

Reduced vegetation including the removal of any of the trees within the site may lead to reduced insect abundance. On the night of survey in 2019, three species were noted. The feeding activity level was higher in green areas within the site and adjoining it rather than within the built areas of the site and the impacts upon bats feeding and commuting past the site may be greatest from the above impact (lighting) rather than through any loss of good feeding habitat.

Without mitigation in the form of appropriate planting, this will be a permanent slight negative impact.

Proposed Mitigation

Demolition shall be monitored by a bat specialist if undertaken in winter

Given that bats enter hibernation in winter and cannot escape injury if demolition is undertaken at this time, it is proposed that a bat specialist shall check potential roost sites for bats in advance of such works. Demolition in autumn is much less likely to be a risk to roosting bats while summer may be harmful to nesting birds.

Incorporation of 6 Schwegler bat boxes

6 Schwegler bat boxes (types 2FE or 2F or equivalent) are proposed for the site to provide bat roost opportunities. All bat boxes must be *unlit* and should be at least 2.5 metres above ground height and preferably 3 metres or higher.

2FE Wall-mounted shelter

2F with double front panel

Plate 1: Schwegler Bat Boxes proposed

The bat boxes shall be installed on buildings. All boxes shall be attached to suitable buildings away from lighting and scrub. There are no trees capable of holding bat boxes within the site.

Planting of vegetation

Where there is an opportunity to provide vegetative cover, native and local plant species should be employed including typical plants such as oak (the greatest value for most wildlife), hawthorn, blackthorn, elder, gorse, bramble, in addition to other species such as dog rose with an encouragement of species such as *Clematis* and other species attractive to moths.

Lighting

Lighting should be controlled to avoid light pollution of green areas and should be targeted to areas of human activity and for priority security areas.

Motion-activated sensor lighting is preferable to reduce light pollution.

- All luminaires shall lack UV elements when manufactured and shall be LED
- A warm white spectrum (ideally <2700 Kelvin but as low as the Council limitations allow) shall be adopted to reduce blue light component
- Luminaires shall feature peak wavelengths higher than 550 nm

Impacts of The Proposed Development After Mitigation

There will be no impacts upon the bats of the area following the mitigation proposed

Appendices

Bat activity at Bailey Gibson 21st to 22nd September 2021

The active survey noted only two bat passes: 20.09 hours (a common pipistrelle near the centre yard and 06.42 hours (a common pipistrelle on the edge of the green area).

Green circle Common pipistrelle location

White box Static monitor location (Songmeter Mini Bat)

Weather conditions were ideal for a bat survey (e.g., the temperature at sunrise was 15^0C, with a wind speed of 9 kmph)

References

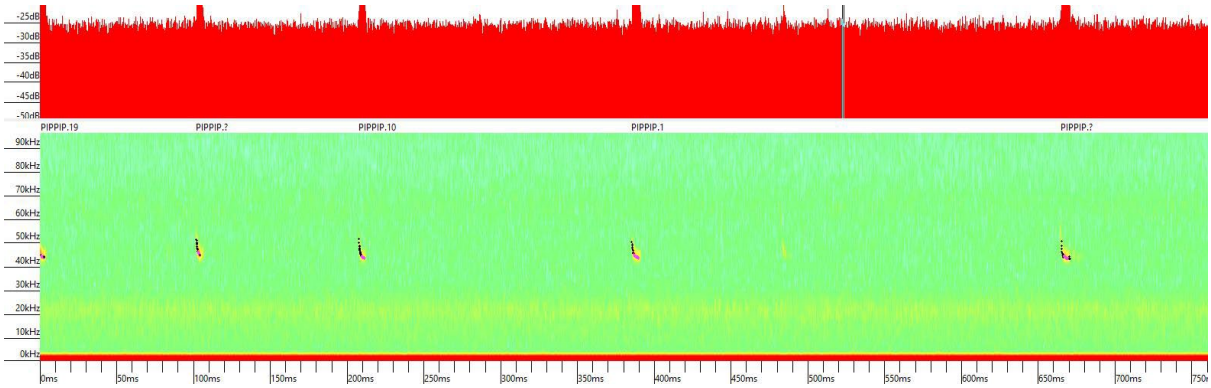
Bat Conservation Ireland database

Guidelines for Ireland, Kelleher, C. & Marnell, F. Irish Wildlife Manuals, No. 25, National Parks and Wildlife Service, Department of Environment, Heritage and Local Government, Dublin, Ireland, ISSN 1393 – 6670 and the 2022 update of this (No 134 Marnell, Kelleher and Mullen).

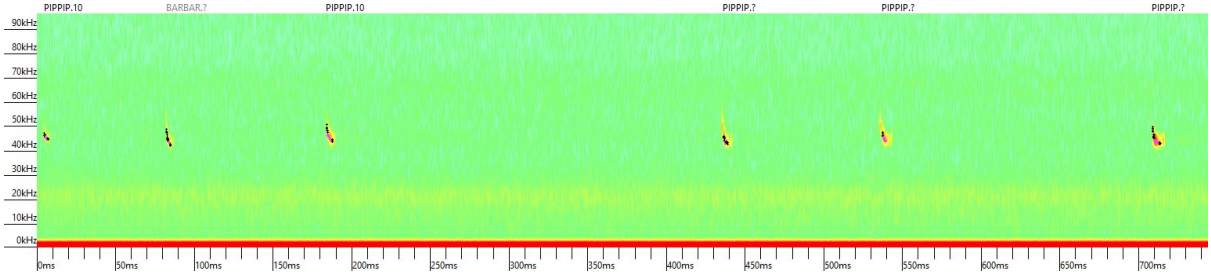
National Biodiversity Data Centre database

Spectrograms of bats recorded on the Songmeter Mini static monitor

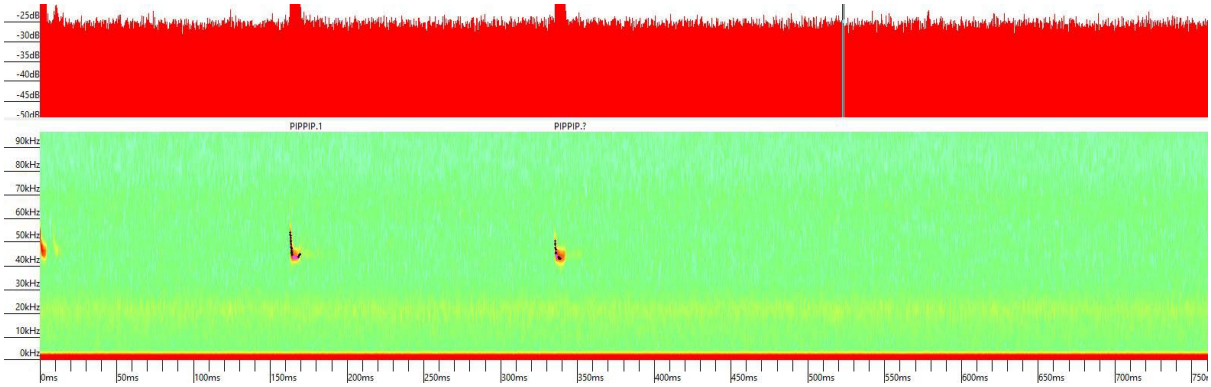
All signals for the period of survey are shown (i.e., 4 signals from 2 species)



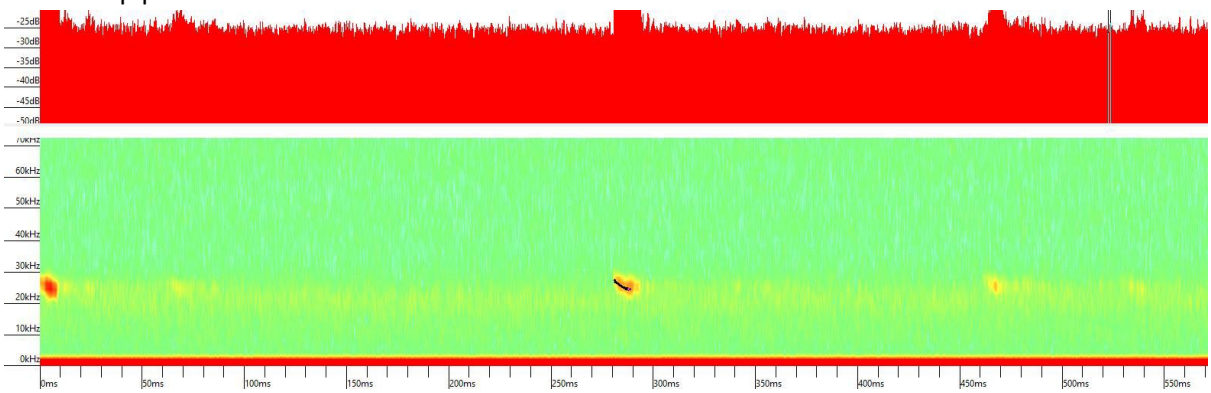
Common pipistrelle at 18.50 hours



Common pipistrelle at 04.31 hours



Common pipistrelle at 05.45 hours



Leisler's bat at 20.35 hours

Bat activity at Bailey Gibson 19th August 2019

Legend

Yellow paddle Leisler's bat Green paddle Common pipistrelle

White box Static monitor location (Songmeter)

Buildings examined within the site

Buildings within the site examined for bat presence

Building in neighbouring site with reported pipistrelle in 2021
There were no bats discovered here during the active survey and no evidence of bats in February 2022. Given that this is a dense growth of ivy, evidence or signs of a perching bat would be virtually impossible to find once the bat has left

Data from handheld monitor within Bailey Gibson August 2019

DATE	TIME	AUTO ID	MANUAL ID
19/08/2019	21:25:04	Leisler's Bat	Leisler's Bat
19/08/2019	21:31:15	Common Pipistrelle	Common Pipistrelle
19/08/2019	22:17:08	Leisler's Bat	Leisler's Bat

Bat Conservation Ireland data: search results 20 Jan 2022

Search parameters: Roosts Transects Ad-hoc observation sites with observations all bats within 1000m of O1407332825.

Roosts			
Name	Grid reference	Address	Species observed
St Marys	O1533	Grange Rd; Rathfarnam;	Nyctalus leisleri
St Pius	O1533	Fortfield; Dublin	Unidentified bat
Viking Components Europe	O1533	Citywest Business Campus;	Unidentified bat
Transects			
Name	Grid reference start	Species	
Dolphins Barn: Dublin Transect	O1368932684		
Ad-hoc observations			
Survey	Grid reference	Date	Species
Bat Survey - Scott Cawley	O135329	09/10/2003	Pipistrellus spp. (45kHz/55kHz)
Bat Survey - Scott Cawley	O148338	2006-07-00	Pipistrellus pipistrellus (45kHz)
BATLAS 2010	O1533	16/06/2008	Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus
Faith Wilson	O149333	01/08/2007	Nyctalus leisleri

Bat Activity Within the Bailey Gibson Site In August 2019

DATE	TIME	AUTO ID	MANUAL ID
19/08/2019	21:09:53	Leisler's Bat	Leisler's Bat
19/08/2019	21:25:23	Soprano Pipistrelle	Soprano Pipistrelle
19/08/2019	21:47:04	Leisler's Bat	Leisler's Bat
19/08/2019	21:50:04	Leisler's Bat	Leisler's Bat
19/08/2019	21:50:34	Noid	Pipistrelle (soprano or common)
19/08/2019	22:01:34	Soprano Pipistrelle	Soprano Pipistrelle
19/08/2019	22:03:34	Soprano Pipistrelle	Soprano Pipistrelle
19/08/2019	22:08:04	Soprano Pipistrelle	Soprano Pipistrelle
19/08/2019	22:14:34	Soprano Pipistrelle	Soprano Pipistrelle
19/08/2019	22:16:34	Leisler's Bat	Leisler's Bat
19/08/2019	22:28:14	Soprano Pipistrelle	Soprano Pipistrelle
19/08/2019	22:36:44	Common Pipistrelle	Common Pipistrelle
19/08/2019	22:54:00	Soprano Pipistrelle	Soprano Pipistrelle
19/08/2019	23:01:00	Soprano Pipistrelle	Soprano Pipistrelle
19/08/2019	23:02:30	Soprano Pipistrelle	Soprano Pipistrelle
19/08/2019	23:09:30	Leisler's Bat	Leisler's Bat
19/08/2019	23:11:00	Leisler's Bat	Leisler's Bat
19/08/2019	23:19:30	Soprano Pipistrelle	Soprano Pipistrelle
19/08/2019	23:30:41	Common Pipistrelle	Common Pipistrelle
19/08/2019	23:31:11	Common Pipistrelle	Common Pipistrelle
19/08/2019	23:41:11	Soprano Pipistrelle	Soprano Pipistrelle
19/08/2019	23:42:41	Soprano Pipistrelle	Soprano Pipistrelle
19/08/2019	23:55:41	Common Pipistrelle	Common Pipistrelle
20/08/2019	00:16:00	Soprano Pipistrelle	Soprano Pipistrelle
20/08/2019	00:31:00	Common Pipistrelle	Common Pipistrelle
20/08/2019	00:51:41	Soprano Pipistrelle	Soprano Pipistrelle
20/08/2019	00:55:11	Soprano Pipistrelle	Soprano Pipistrelle
20/08/2019	00:56:11	Common Pipistrelle	Common Pipistrelle
20/08/2019	01:38:51	Soprano Pipistrelle	Soprano Pipistrelle
20/08/2019	01:39:51	Common Pipistrelle	Common Pipistrelle
20/08/2019	01:52:21	Common Pipistrelle	Common Pipistrelle
20/08/2019	01:54:21	Common Pipistrelle	Common Pipistrelle
20/08/2019	01:56:51	Leisler's Bat	Leisler's Bat
20/08/2019	01:57:21	Leisler's Bat	Leisler's Bat
20/08/2019	02:12:51	Soprano Pipistrelle	Soprano Pipistrelle
20/08/2019	02:14:21	Soprano Pipistrelle	Soprano Pipistrelle
20/08/2019	02:28:31	Soprano Pipistrelle	Soprano Pipistrelle
20/08/2019	02:29:31	Common Pipistrelle	Common Pipistrelle
20/08/2019	02:30:01	Common Pipistrelle	Common Pipistrelle
20/08/2019	03:08:30	Common Pipistrelle	Common Pipistrelle
20/08/2019	03:09:00	Common Pipistrelle	Common Pipistrelle
20/08/2019	03:10:30	Common Pipistrelle	Common Pipistrelle
20/08/2019	03:11:00	Leisler's Bat	Common Pipistrelle
20/08/2019	03:15:00	Noid	Common Pipistrelle
20/08/2019	03:15:30	Common Pipistrelle	Common Pipistrelle
20/08/2019	03:16:00	Soprano Pipistrelle	Soprano Pipistrelle
20/08/2019	03:18:00	Common Pipistrelle	Common Pipistrelle
20/08/2019	03:18:30	Common Pipistrelle	Common Pipistrelle
20/08/2019	03:29:30	Leisler's Bat	Leisler's Bat

APPENDIX 11.1
BAILEY GIBSON PRELIMINARY CONSTRUCTION NOISE & VIBRATION MANAGEMENT PLAN

VOLUME III
APPENDICES TO
ENVIRONMENTAL IMPACT ASSESSMENT REPORT

JUNE 2022

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BAILEY GIBSON DEVELOPMENT

PRELIMINARY CONSTRUCTION NOISE & VIBRATION MANAGEMENT PLAN

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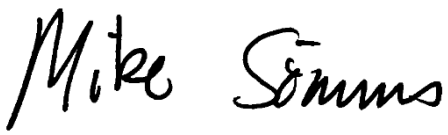
Signature		
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CONTENTS

			Page
1.0	Introduction		4
2.0	Overview		5
3.0	Site Context		6
	3.1	Description	6
	3.2	Noise & Vibration Sensitive Locations	6
4.0	Baseline Noise Survey		7
5.0	Management of Construction Noise & Vibration		9
	5.1	Air Quality Monitoring and Noise Control Unit's Good Practice Guide for Construction and Demolition (Dublin City Council)	9
	5.2	Best Practice Guidelines for the Control of Construction Noise & Vibration	19
	5.3	Noise Control Audits	15
	5.4	Introducing New Noise Sources onto the Site	15
		Ongoing Noise & Vibration Monitoring During Construction	16

Figure 1 – Construction Noise & Vibration Management Flow Diagram 5
Figure 2 – Noise & Vibration Sensitive Locations 6
Figure 3 – Preliminary Baseline Survey Locations 7
Figure 4 – Transient Vibration Guide Values for Cosmetic Damage 19
Figure 5 – Construction Noise Monitoring Locations 21

Appendix A – Glossary of Acoustic Terminology 24
Appendix B – Form to be Completed by the Contractor when Introducing a New Noise Source 27
Appendix C – Noise Control Audit Record Street 29
Appendix D – *In-Situ* Noise Measurement Procedure and Survey Sheet 30

1.0 INTRODUCTION

This document deals with measures to be employed and procedures to be followed in order to ensure the effective management of noise and vibration associated with the construction phase of the proposed a mixed-use combined Build to Rent and Build to Sell Strategic Housing Development at the Bailey Gibson site, South Circular Road, Dublin 2.

The measures set out herein have been formulated in accordance with current best practice as detailed in Section 5. Proposed Construction Noise Alert Threshold Levels are presented in Section 5.5.2. Details of a proposed construction noise monitoring programme are presented in Section 5.5.4.

2.0 OVERVIEW

The approach that has been adopted in respect of construction noise and vibration management involves a number of strands as follows:

- A review of off-site noise and vibration sensitive locations in the vicinity of the site;
- A general comment on baseline noise and vibration levels expected in the vicinity of the development. A baseline noise survey was conducted as part of the noise assessment in support of the planning application;
- Proposed ongoing noise and vibration monitoring at critical locations;
- Implementation of best practice noise and vibration control measures; and
- Regular noise control audits.

Figure 1 presents a flow diagram illustrating how it is envisaged that the integrated noise and vibration management plan will operate in practice.

Further details in respect of these and other considerations are provided in the relevant sections in this document. This report must be considered in conjunction with the detailed guidance set out in BS5228: Part 1: 2009[1] and BS5228: Part 2: 2009[2].

A glossary of key items of acoustic terminology is included in Appendix A.

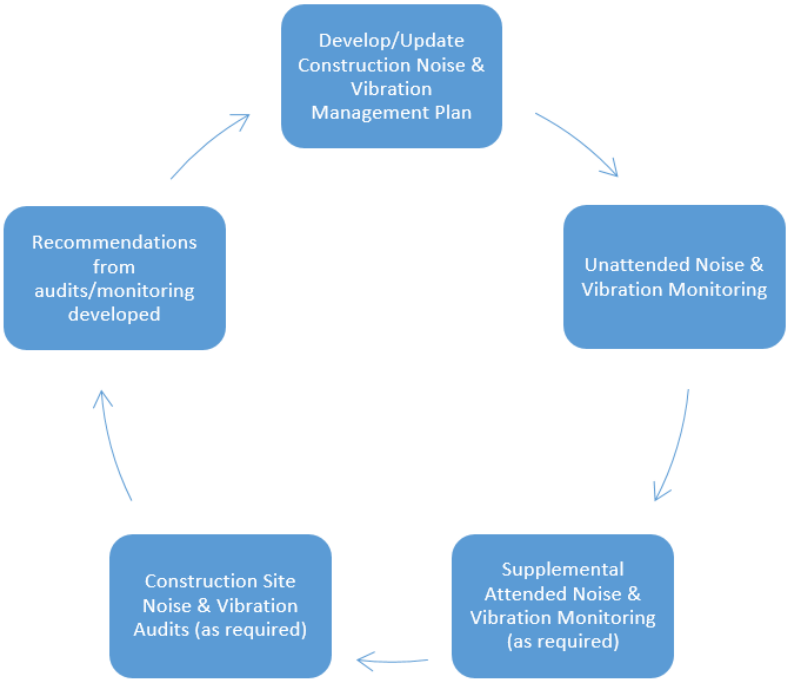


Figure 1 Construction Noise & Vibration Management Flow Diagram

1 BRITISH STANDARDS INSTITUTION, 2009. *BS 5228: 2009 +A1 2014 – Code of practice for noise and vibration control on construction and open sites – Part 1: Noise.*

2 BRITISH STANDARDS INSTITUTION, 2009. *BS 5228: 2009 +A1 2014 – Code of practice for noise and vibration control on construction and open sites – Part 2: Vibration.*

3.0 SITE CONTEXT

3.1 Description

The subject site is located within the Dublin 8 area, bound to the south by South Circular Road, to the east by existing buildings on Dolphin's Barn Street and Cork Street and to west Donore Avenue. Dublin City Council lands lie to the north of the site. The surrounding environment in the vicinity of the development site is mixed in nature with apartment buildings, retail units and warehousing making up the majority of the surrounding building uses. Coombe Women's and Infant's University Hospital shares a boundary with the northern area of the site.

3.2 Noise & Vibration Sensitive Locations

Figure 2 shows the current closest sensitive locations to the site. Prior to construction, the contractor shall carry out an inspection of the area surrounding the site to confirm whether any additional noise-sensitive locations are present.

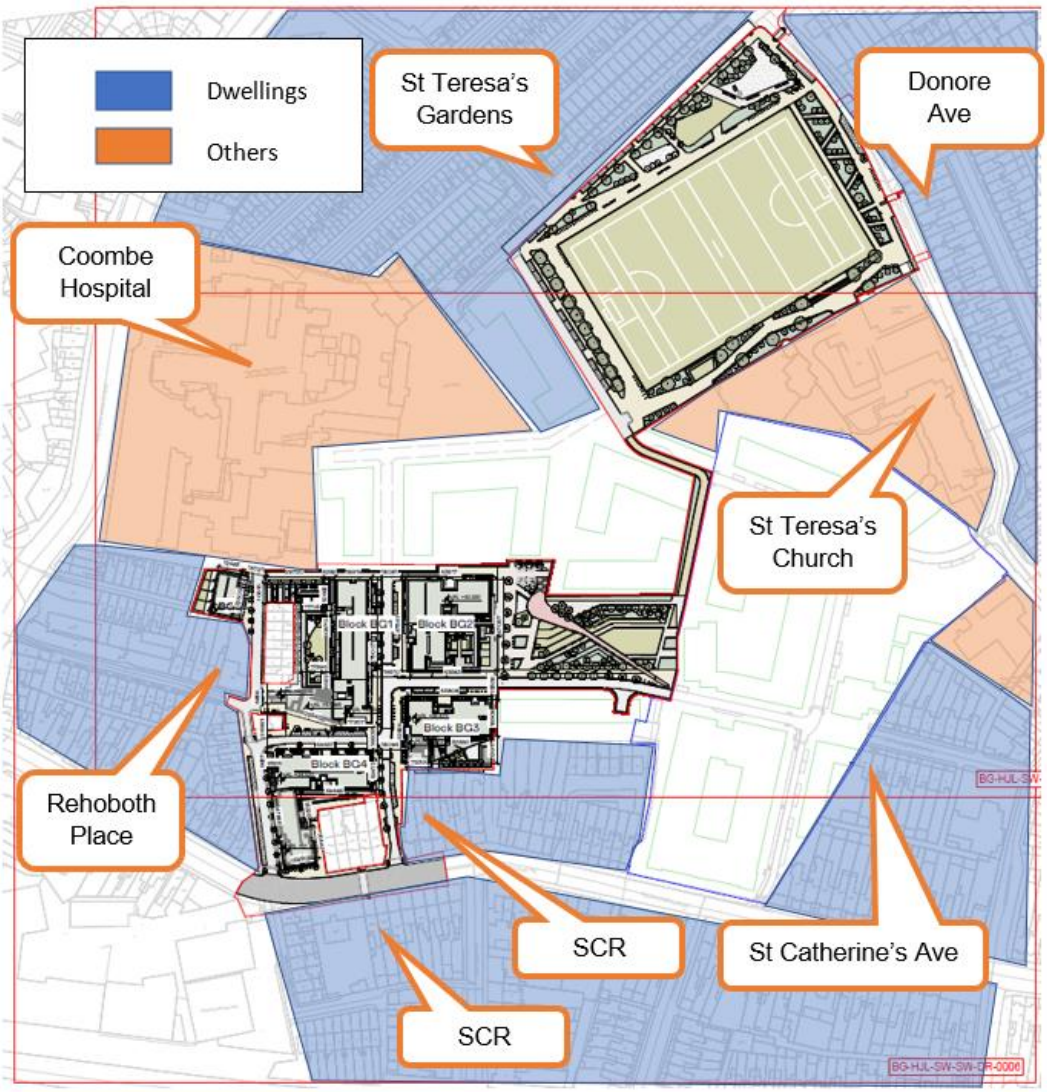


Figure 2 Noise & Vibration Sensitive Locations

4.0 BASELINE NOISE SURVEY

A baseline noise survey to determine typical noise and vibration levels at the nearest sensitive locations has been completed in order to inform this preliminary construction noise and vibration management plan. Figure 3 indicates the locations used for the baseline survey.

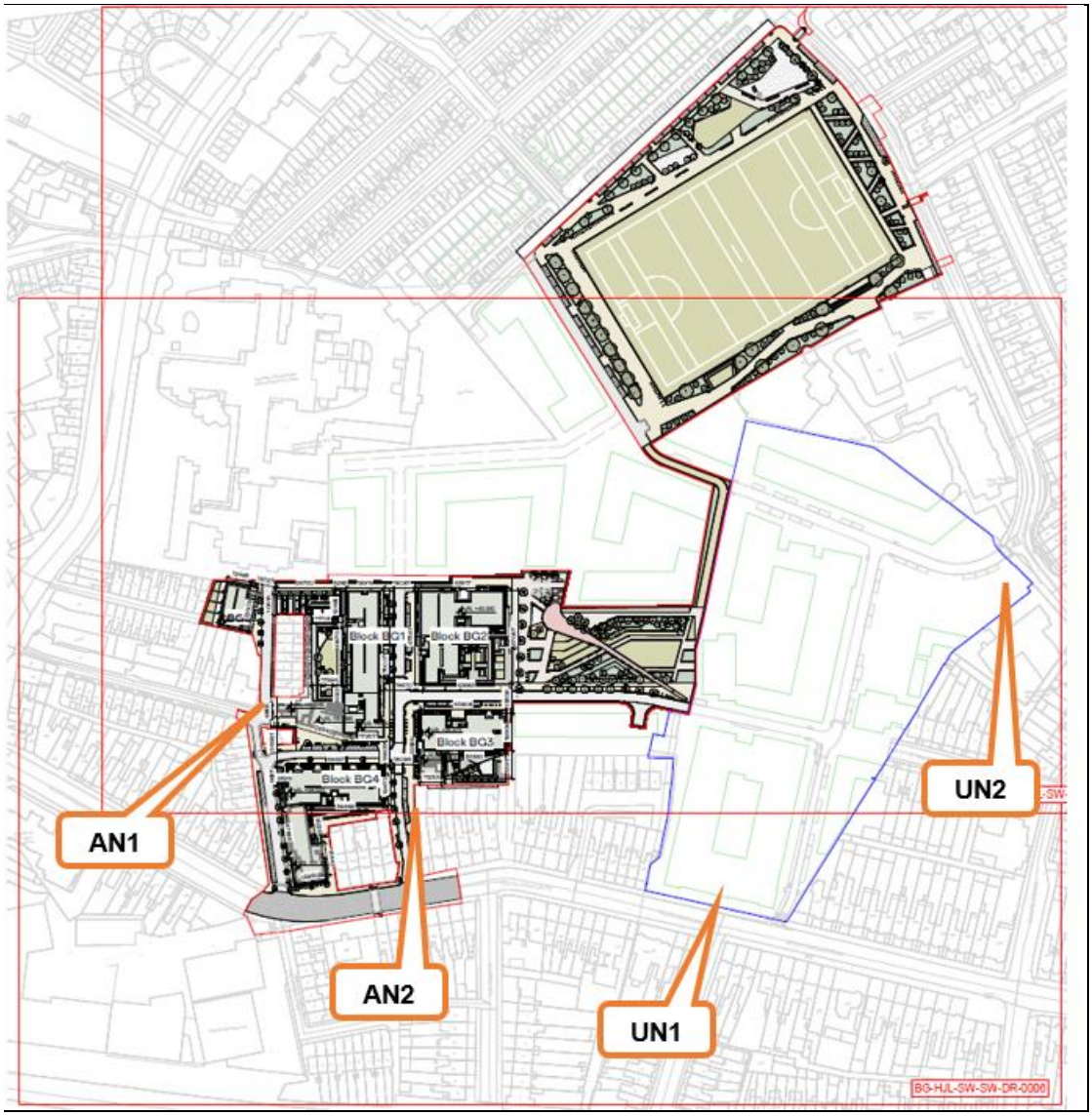


Figure 3 Baseline Survey Locations

Table 1 reviews the daytime noise levels and presents subjective comments on the pre-existing noise environment in the vicinity of the proposed development site.

Location	Daytime Noise Levels		Comment
	Range of Daily Average dB $L_{Aeq,15min}$	Range of dB L_{Amax}	
UN1	60 - 62	74 - 76	Road Traffic
UN2	52 - 57	68 – 75	Road Traffic
AN1	45 – 50	68 - 75	Road Traffic and birdsong
AN2	54 – 56	69 - 76	Road Traffic and birdsong

Table 1 Review of Baseline Survey Information

Measured noise levels are typical of elevated levels that would be expected in an urban situation such as the one being considered here. The soundscape comprises a number of different sources including road traffic noise and birdsong.

5.0 MANAGEMENT OF CONSTRUCTION NOISE & VIBRATION

This section deals with measures that should be employed in order to ensure that associated impacts are minimized to the greatest extent practicable.

5.1 Air Quality Monitoring and Noise Control Unit's Good Practice Guide for Construction and Demolition (Dublin City Council)

Dublin City Council have published the "Air Quality Monitoring and Noise Control Unit's Good Practice Guide for Construction and Demolition" to provide guidance for the development of construction and demolition plans. The guidance provides a means to measure the risk of the construction site (from low to high risk) from which mitigation measures and considerations should be drawn. In this instance the result of the risk assessment for this construction site is that the total risk can be considered as high, as presented in Table 2.

	Low	Medium	High
Risk Assessment A (Locality)	1	1	2
Risk Assessment B (Work Information)	--	3	2
Total	1	4	4

Table 2 Site Risk Assessment

The risk assessment indicates that the considerations and mitigation measures include (but are not limited to) the list presented below:

- All site staff shall be briefed on noise mitigation measures and the application of best practicable means to be employed to control noise
- Material and plant loading and unloading shall only take place during normal working hours unless the requirement for extended hours is for traffic management (i.e road closure) or health and reasons(application must be made to DCC a minimum of 4 days prior to proposed works)
- Ensure that each item of plant and equipment complies with the noise limits quoted in the relevant European Commission Directive 2000/14/EC
- Fit all plant and equipment with appropriate mufflers or silencers of the type recommended by the manufacturer
- Use all plant and equipment only for the tasks for which it has been designed
- Shut down all plant and equipment in intermittent use in the intervening periods between work or throttle down to a minimum
- Locate movable plant away from noise sensitive receptors
- Ensure all vehicle movements (on site) occur within normal working hours. (other than where extension of work requiring such movements has been granted in cases of required road closures or for health and safety reasons)
- If working out of hours for Health and Safety reasons (following approval by DCC) limit demolition activities to low level noise activity unless absolutely unavoidable

Note that further applicable noise mitigation measures are presented in the *Air Quality Monitoring and Noise Control Unit's Good Practice Guide for Construction and Demolition* document by Dublin City Council.

5.2 Best Practice Guidelines for the Control of Construction Noise & Vibration

The following recommendations must be considered in conjunction with the detailed guidance set out in the following documents:

- BS 5228-1: 2009+A1: 2014: *Code of practice for noise and vibration control on construction and open sites – Noise*, and;
- BS 5228-2: 2009+A1: 2014: *Code of practice for noise and vibration control on construction and open sites – Vibration*.

BS5228 includes guidance on various aspects of construction site noise & vibration mitigation, including, but not limited to:

- Hours of work;
- Liaison with neighbours;
- Selection of quiet plant;
- Control of noise sources;
- Screening; and
- Noise & vibration monitoring.

These issues are discussed in the following paragraphs. Noise control measures that should be considered include the selection of suitable plant, enclosures and screens around noise sources, consideration of the hours of work and ongoing monitoring.

5.2.1 Hours of Work

Demolition and construction activities associated with the proposed development shall take place between the hours of:

Mondays to Fridays – 08:00 to 19:00hrs
Saturdays – 08:00 to 13:00hrs

On Sundays and Public Holidays there should be no activity on the site.

If it is deemed necessary to conduct works outside these times, prior written approval will be sought from DCC.

5.2.2 Liaison with Interested Parties

The Contractor should be proactive in engaging with all interested parties and should notify them of any works forecast to generate appreciable levels of noise and/or vibration, explaining the nature and duration of the works.

A designated noise and vibration liaison should be appointed by the contractor for the duration of the construction works. This person should log any issues and follow up in a prompt fashion.

5.2.3 Selection of Quiet Plant

Careful consideration must be given to the noise emission levels of plant items when they are being considered for use on the site. A comprehensive procedure for this is provided in Appendix B.

5.2.4 Control of Noise Sources

If the use of low noise plant or replacing a noisy item of plant are not viable or practicable options, consideration should be given to noise control "at source". This refers to the modification of an item of plant or the application of improved sound reduction methods, often in consultation with the supplier. For example, resonance effects in panel work or cover plates can be reduced through stiffening or application of damping compounds; rattling and grinding noises can often be controlled by fixing resilient materials in between the surfaces in contact.

BS5228 states that *"as far as reasonably practicable sources of significant noise should be enclosed"*. In applying this guidance, constraints such as mobility, ventilation, access and safety must be taken into account. Items suitable for enclosure include pumps and generators. Demountable enclosures that could be moved around site as necessary may also be used to screen operatives using hand tools such as angle grinders.

In practice, a balance may need to be struck between the use of all available techniques and the resulting costs of doing so. it is therefore proposed to adopt the concept of *"Best Available Techniques"* (BAT).

BAT is defined as follows in EC Directive 96/61:

> *""...the most effective and advanced stage in the development of an activity and its methods of operation which indicate the practical suitability of particular techniques for providing, in principle, the basis for emission limit values designed to prevent or eliminate or, where that is not practicable, generally to reduce an emission and its impact on the environment as a whole."*

In this context "*best*" means "*the most effective in achieving a high general level of protection of the environment as a whole*".

The expression "*available techniques*" means "*those techniques developed on a scale which allows implementation…., under economically and technically viable conditions, taking into consideration the costs and advantages, whether or not the techniques are used or produced within the State, as long as they are reasonably accessible to the operator carrying on the activity*".

The term "*techniques*" includes "*both the technology used and the way in which the installation is designed, built, managed, maintained, operated and decommissioned*".

In specifying or otherwise determining BAT, consideration should be given to a specified list of considerations and also to "*the likely costs and advantages of measures*" as well as "*the principles of precaution and prevention*".

Thus, the concept of BAT requires a degree of balance between the attainment of environmental benefits and the likely cost implications. In the identification of BAT, regard should be had to a wide range of factors, however, emphasis should be given to "*practical suitability*" and the need "*to reduce an emission and its impact on the environment as a whole*".

Proposed techniques should also be evaluated in light of their potential effect on occupational health and safety.

BS5228 makes a number of recommendations in relation to "*use and siting of equipment*". These are relevant and hence are reproduced below. These recommendations should be implemented on the site.

> *"Plant should always be used in accordance with manufacturers' instructions. Care should be taken to site equipment away from noise-sensitive areas. Where possible, loading and unloading should also be carried out away from such areas.*
>
> *Circumstances can arise when night-time working is unavoidable. Bearing in mind the special constraints under which such work has to be carried out, steps should be taken to minimise disturbance to occupants of nearby premises.*
>
> *Machines such as cranes that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum. Machines should not be left running unnecessarily, as this can be noisy and waste energy.*
>
> *Plant known to emit noise strongly in one direction should, when possible, be orientated so that the noise is directed away from noise-sensitive areas. Attendant operators of the plant can also benefit from this acoustical phenomenon by sheltering, when possible, in the area with reduced noise levels.*
>
> *Acoustic covers to engines should be kept closed when the engines are in use and idling. The use of compressors that have effective acoustic enclosures and are designed to operate when their access panels are closed is recommended.*
>
> *Materials should be lowered whenever practicable and should not be dropped. The surfaces on to which the materials are being moved could be covered by resilient material."*

Also note the following outline guidance in relation to specific considerations.

- For mobile plant items such as cranes, dump trucks, excavators and loaders, the installation of an acoustic exhaust and/or maintaining enclosure panels closed during operation can reduce noise levels by up to 10dB. Mobile plant should be switched off when not in use and not left idling.

- For piling plant, noise reduction can be achieved by enclosing the driving system in an acoustic shroud. For steady continuous noise, such as that generated by diesel engines, it may be possible to reduce the noise emitted by fitting a more effective exhaust silencer system or utilising an acoustic canopy to replace the normal engine cover.

- For percussive tools such as pneumatic concrete breakers, rock drills and tools a number of noise control measures include fitting muffler or sound reducing equipment to the breaker 'tool' and ensuring any leaks in the air lines are sealed. Erect localised screens around breaker or drill bit when in operation in close proximity to noise sensitive boundaries.

- For concrete mixers, control measures should be employed during cleaning to ensure no impulsive hammering is undertaken at the mixer drum.

- For all materials handling ensure that materials are not dropped from excessive heights and drop chutes/dump trucks are lined with resilient materials.

- For compressors, generators and pumps, these can be surrounded by acoustic lagging or enclosed within acoustic enclosures providing air ventilation.

- Demountable enclosures can also be used to screen operatives using hand tools and may be moved around site as necessary.

- All items of plant should be subject to regular maintenance. Such maintenance can prevent unnecessary increases in plant noise and can serve to prolong the effectiveness of noise control measures.

5.2.5 Screening

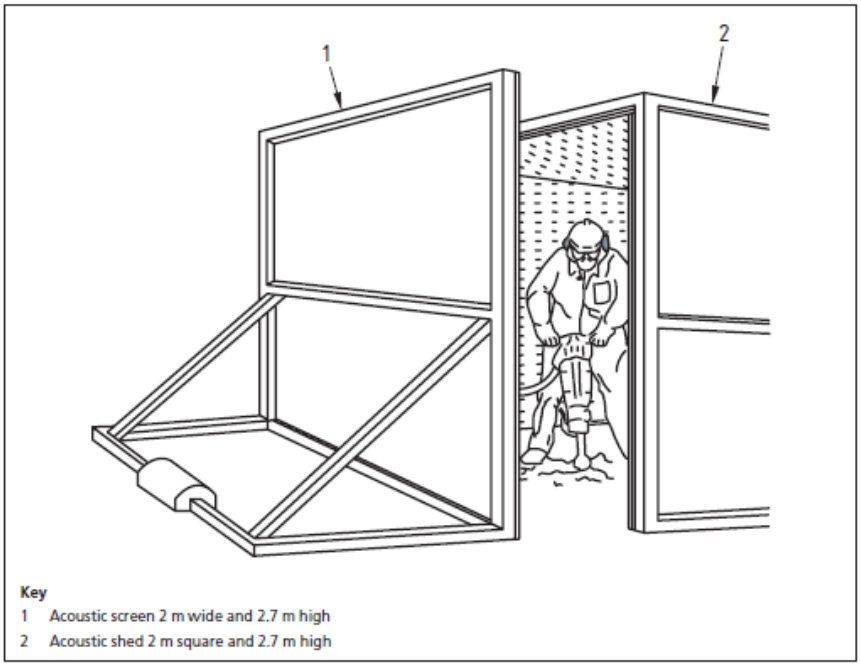
Current proposals call for a site hoarding along the boundary of the construction site that will provide a degree of barrier screening. Further benefits may be achieved through the use of additional smaller localized screens on the site itself.

The use of screens can be effective in reducing the noise level at a receiver location and should be employed as a complementary measure to all other forms of noise control. The effectiveness of a noise screen will depend on the height and length of the screen and its position relative to both the source and receiver. The height and length of any screen should, where practicable, be such that there is no direct line of sight between the source and the receiver.

BS5228 states that on level sites the screen should be placed as close as possible to either the source or the receiver. The construction of the screen should be such that there are no gap or openings at joints in the screen material. In most practical situations the effectiveness of the screen is limited by the sound transmission over the barrier rather than the transmission through the barrier itself. Screens constructed of materials with a surface mass greater than 10kg/m^2 typically offer adequate sound insulation performance.

Annex B of BS5228 (Figures B1, B2 and B3) provide typical details for temporary and mobile acoustic screens, sheds and enclosures that can be constructed on site from standard materials. BS5228 Figure B2 is included below for information purposes.

Figure B.2 **Typical acoustic shed**



Key
1 Acoustic screen 2 m wide and 2.7 m high
2 Acoustic shed 2 m square and 2.7 m high

Table B.4 **Measured sound reduction given by types of partial enclosure**

Type of enclosure (see Figure B.3)	Reduction dB(A)		
	Facing the opening(s)	Sideways	Facing rear of shed
Open-sided shed lined with absorbent material; no screen	1	9	14
Open-sided shed lined with absorbent material; with reflecting screen in front	10	6	8
Open-sided shed lined with absorbent material; with absorbent screen in front	10	10	10

Proprietary alternatives are also available.

5.2.6 Noise & Vibration Monitoring

Noise and vibration monitoring should be conducted at a number of locations throughout the construction period at noise sensitive locations. See Section 5.4 for more details.

The noise and vibration monitoring programme should be complemented by regular noise control audits, details of which are provided in Section 5.3.

5.3 Noise Control Audits

It is recommended that noise control audits be conducted at regular intervals throughout the demolition/construction programme.

The purpose of the audits will be to ensure that all appropriate steps are being taken to control construction noise emissions. To this end, consideration should be given to issues such as the following:

- Hours of operation being correctly observed;
- Opportunities for noise control "at source";
- Optimum siting of plant items;
- Plant items being left to run unnecessarily;
- Correct use of proprietary noise control measures;
- Materials handling;
- Poor maintenance, and;
- Correct use of screening provided and opportunities for provision of additional screening.

This list is not intended to be exhaustive.

Appendix C contains an example of the noise control audit record sheet that should be completed during each audit.

5.4 Introducing New Noise Sources onto the Site

5.4.1 Consideration of Alternatives

The potential for any item of plant to generate noise must be assessed prior to the item being brought onto the site. Where practicable and cost-effective, preference should always be given to the unit with the lowest noise output. This may necessitate the use of manufacturers' proprietary acoustic enclosures, noise control kits or other forms of ameliorative measure.

5.4.2 Information to be submitted by the Contractor

In order to allow for the ongoing appraisal of construction noise during the work period, the contractor will be required to supply details of key plant items. Appendix C contains a form that should be filled out and submitted.

This procedure is to be followed for all items of plant with a sound power level that is greater than or equal to 105dB L_{WA}.

If there is any doubt, the form in Appendix D should be completed and submitted in order that a detailed investigation may be undertaken.

5.4.3 *In-Situ* Noise Measurement

If there are any concerns in relation to the level of noise emissions from an item of plant already on the site, or if there is doubt over the output from an item that has recently been introduced, this should be investigated by way of *in situ* noise level measurements.

A comprehensive procedure for *in-situ* noise level measurement is provided in Appendix E, along with a survey record sheet to be completed by the person(s) conducting the measurement.

5.5 Ongoing Noise & Vibration Monitoring During Construction

Noise & vibration monitoring will be conducted throughout the construction period. This section sets out details of the proposed monitoring along with appropriate alert threshold levels and protocols to be followed in the event of certain findings.

5.5.1 Alert Threshold Levels Applicable During Demolition and Construction

No mandatory or statutory limits apply to the site in respect of either noise or vibration. The relevant planning permissions do not contain noise or vibration limits. Accordingly, it is proposed to establish alert threshold levels in respect of both noise & vibration in order to assist with the interpretation and management of emissions from the site. Alert threshold levels will be applied to all vibration monitors and external noise monitors.

It is appropriate to establish “Amber” and “Red” alert threshold levels in respect of both noise & vibration. The discussion in Section 5.4.2 presents the rationale for selection of the initial values of alert threshold levels.

It is important to note that the alert threshold levels do not represent any kind of limit value. They are used to provide guidance as to when it may be appropriate to exercise caution and/or implement additional or enhanced mitigation measures. An exceedance of an alert threshold level does not therefore imply that emissions from the site constitute a problem.

5.5.2 Selection of Values for Alert Threshold Levels

NOISE

There is no published statutory Irish guidance relating to the maximum permissible noise level that may be generated during the construction phase of a project. Local authorities normally control construction activities by imposing limits on the hours of operation and may consider noise limits at their discretion. Such limits have not been imposed in this instance however due to the proximity to the site it is considered that the proposed levels are onerous and will place restrictive constraints on site operations during certain periods. In developing the following sections consideration has been given to best practice guidance typically considered in an Irish context.

BS 5228: 2009 +A1 2014: Code of practice for noise and vibration control on construction and open sites, Part 1: Noise

BS5228, which is referenced in the scheme planning permissions, is directly applicable to the constructions activities on the site. It presents some guidance as how appropriate target values for noise emissions may be derived through the consideration of various factors.

The approach calls for the designation of a noise sensitive location into a specific category (A, B or C) based on existing ambient noise levels in the absence of construction noise. This then enables an appropriate threshold to be identified as per Table 3.

Assessment category and threshold value period (L_{Aeq})	Threshold value, in decibels (dB)		
	Category A [A]	Category B [B]	Category C [C]
Night-time (23:00 to 07:00hrs)	45	50	55
Evenings and weekends [D]	55	60	65
Daytime (07:00 – 19:00) and Saturdays (07:00 – 13:00)	65	70	75

Table 3 Example Threshold Values at Dwellings

A) Category A: threshold values to use when ambient noise levels (when rounded to the nearest 5dB) are less than these values.
B) Category B: threshold values to use when ambient noise levels (when rounded to the nearest 5dB) are the same as category A values.
C) Category C: threshold values to use when ambient noise levels (when rounded to the nearest 5dB) are higher than category A values.
D) 19:00 – 23:00 weekdays , 13:00 – 23:00 Saturdays and 07:00 – 23:00 Sundays.

It should be noted that this assessment method is only valid for residential properties and if applied to commercial premises without consideration of other factors may result in an excessively onerous thresholds being set.

National Roads Authority

Overall acceptable levels of construction noise for large construction projects are set out in the National Roads Authority (NRA) publication *Guidelines for the Treatment of Noise and Vibration in National Road Schemes*[3]. The levels should not be exceeded at noise sensitive locations during the construction phase of the development. Table 4 sets out these levels.

Days and Times	Noise Levels (dB re. $2x10^{-5}$ Pa)	
	$L_{Aeq(1hr)}$	L_{Amax}
Monday to Friday 07:00 to 19:00hrs	70	80
Monday to Friday 19:00 to 22:00hrs	60*	65*
Saturdays 08:00 to 16:30hrs	65	75
Sundays & Bank Holidays 08:00 to 16:30hrs	60*	65*

Table 4 Maximum permissible noise levels at the facade of dwellings during construction

Note * Construction activity at these times, other than that required for emergency works, will normally require the explicit permission of the relevant local authority.

3 *Guidelines for the Treatment of Noise and Vibration in National Road Schemes, Revision 1, 25 October 2004*, National Roads Authority

Belfast City Council

Belfast City Council Pollution Control Division's document 'Advice Note for Construction and Demolition Sites' (2000) provides some suggested target values for construction noise.

Days and Times	Noise Levels (dB re. 2x10-5 Pa)
	$L_{Aeq,1hr}$
Monday to Friday 07:00 to 19:00hrs	75
Monday to Friday 19:00 to 22:00hrs	65
Saturdays 08:00 to 13:00hrs	75
Saturdays 13:00 to 22:00hrs	60
Night-time	40

Table 5 Maximum Permissible Noise Levels at the Facade of Dwellings during Construction Set by the Belfast City Council Pollution Control Division

Suggested Alert Threshold Levels for Noise

Taking all of the above into account, the following initial values for alert threshold levels are applicable at the boundary of the construction site with the nearest noise sensitive locations.

Location	Alert Level	Noise Levels, $L_{Aeq,1hr}$ (dB re. $2x10^{-5}$ Pa)
Boundary with Private Residences	Amber	65
	Red	70
Boundary with Commercial Properties	Amber	70
	Red	75

Table 6 Proposed Noise Triggers

Details of the appropriate course of action to be followed whenever an alert is received are set out in Section 5.4.6.

VIBRATION

Vibration standards come in two varieties: those dealing with human comfort and those dealing with cosmetic or structural damage to buildings. For the purpose of this development, vibration values levels used for the purposes of evaluating building protection and human comfort are expressed in terms of Peak Particle Velocity (PPV) in mm/s.

Building Damage

Guidance relevant to acceptable vibration within buildings is contained in the following documents:

- BS 7385: *Evaluation and measurement for vibration in buildings – Part 2: Guide to damage levels from groundborne vibration (1993)*; and
- BS 5228: 2009 +A1 2014: *Code of practice for noise and vibration control on construction and open sites – Part 2: Vibration.*

BS 7385 states that there should typically be no cosmetic damage if transient vibration does not exceed 15 mm/s at low frequencies rising to 20 mm/s at 15 Hz and 50 mm/s at 40 Hz and above. These guidelines relate to relatively modern buildings and should be reduced to 50% or less for more critical buildings.

BS 5228-2 recommends that, for soundly constructed residential property and similar structures that are generally in good repair, a threshold for minor or cosmetic (i.e. non-structural) damage should be taken as a peak particle velocity of 15 mm/s for transient vibration at frequencies below 15 Hz and 20 mm/s at frequencies above than 15 Hz. Below these vibration magnitudes minor damage is unlikely, although where there is existing damage these limits may be reduced by up to 50%. In addition, where continuous vibration is such that resonances are excited within structures the limits discussed above may need to be reduced by 50%.

Suggested levels of allowable vibration (in terms of peak particle velocity) at the closest part of a sensitive property to the source of vibration are summarized in Table 7.

Line (see Figure 3)	Type of Building	Peak component particle velocity in frequency range of predominant pulse	
		4Hz to 15Hz	15Hz and above
1	Reinforced or framed structures Industrial and heavy commercial buildings.	50 mm/s at 4Hz and above	
2	Unreinforced or light framed structures. Residential or light commercial building types.	15 mm/s at 4Hz increasing to 20 mm/s at 15Hz	20 mm/s at 15 Hz increasing to 50 mm/s at 40 Hz and above.

Table 7 Transient Vibration Guide Values for Cosmetic Building Damage

Note 1 Values referred to are at the base of the building.
Note 2 For Line 2, at frequencies below 4Hz, a maximum displacement of 0.6mm (zero to peak) should not be exceeded.

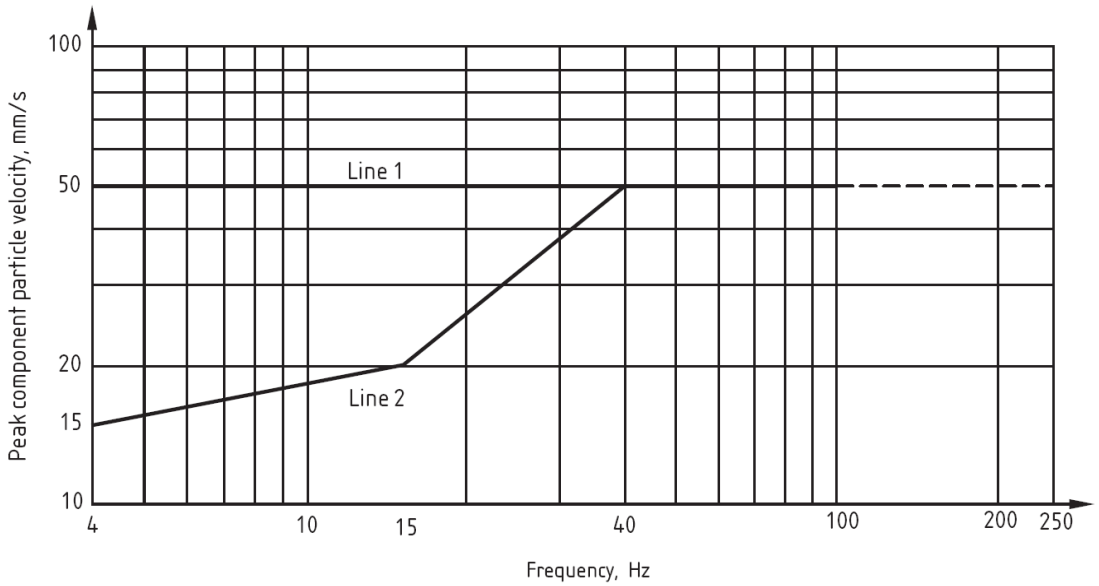


Figure 4 Transient Vibration Guide Values for Cosmetic Damage

The guide values contained in Table 5 relate to predominantly transient vibration which does not give rise to resonant responses in structures, and to low rise buildings.

Human Perception

It is acknowledged that humans are particularly sensitive to vibration stimuli and that any perception of vibration may lead to concern. In the case of traffic, vibration is perceptible at around 0.5mm/s and may become disturbing or annoying at higher magnitudes. Higher levels of vibration, however, are typically tolerated for single events or events of short duration. For example, during piling, one of the primary sources of vibration during construction, vibration levels may typically be tolerated at up to 2.5mm/s. This guidance is applicable to the daytime only; it is unreasonable to expect people to be tolerant to such activities during the night-time (or if they are trying to sleep during the daytime).

BS 5228-2 also provides a useful guide relating to the assessment of human response to vibration in terms of the peak particle velocity (PPV). Table 7 below summarises the range of vibration values and the associated potential effects on humans.

Vibration Level, PPV	Effect
0.14 mm/s	Vibration might be just perceptible in the most sensitive situations for most vibration frequencies. At lower frequencies people are less sensitive to vibration.
0.3 mm/s	Vibration might be just perceptible in residential environments.
1 mm/s	It is likely that a vibration level of this magnitude in residential environments will cause complaint.
10 mm/s	Vibration is likely to be intolerable for any more than a brief exposure to this level

Table 8 Guidance on effects of human response to PPV magnitudes

Suggested Alert Threshold Levels for Vibration

Taking all of the above into account, and given the usage of nearby buildings, the following alert threshold levels are applicable.

Alert Level	Allowable vibration (in terms of peak particle velocity) at the closest part of sensitive property to the source of vibration, at a frequency of		
	Less than 11Hz	11 to 50Hz	50Hz and above
Amber	3 mm/s	8 mm/s	10 mm/s
Red	5 mm/s	10 mm/s	20 mm/s

Table 9 Proposed Alert Threshold Levels for Vibration

5.5.3 Protocol for Varying Alert Threshold Levels

In the event that alert threshold levels are being regularly exceeded without there being corresponding disturbances in the vicinity of the site, then this is clear evidence of the alert threshold levels having been set at a level that is too low. In such cases the alert threshold levels may be adjusted upwards.

In the event that disturbances are being experienced in the vicinity of the site due to construction activities without there being corresponding exceedances of the alert threshold level, then this suggests that the alert threshold levels are set at a level that is too high. In such cases the alert threshold levels may be adjusted downwards.

Any alteration to alert threshold levels will be based on a review of monitoring data and associated exceedances, with justification put forward on the basis of one or other of the scenarios outlined above.

5.5.4 Details of Noise Monitoring

External noise monitoring will be undertaken at the following 2 no. locations as illustrated in Figure 5.

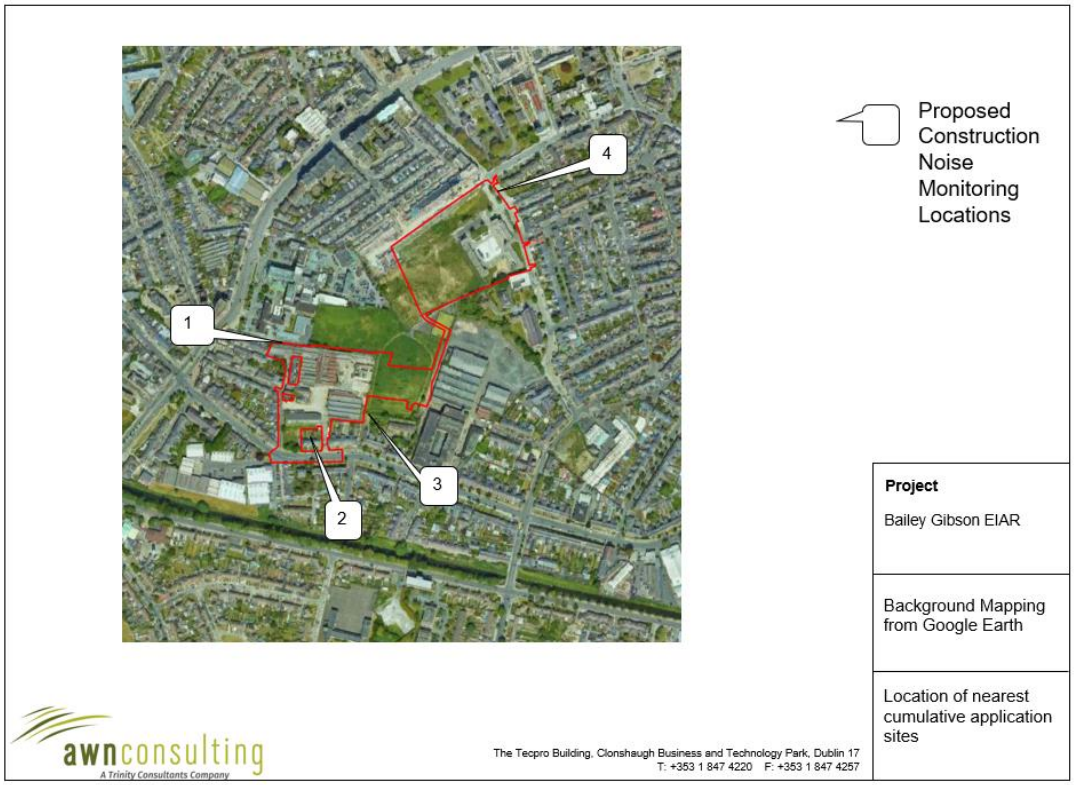


Figure 5 Construction Noise & Vibration Monitoring Locations

It is considered that it will be appropriate to amend the monitoring programme as the works progress. Accordingly, monitors may be added, removed or relocated as necessary.

The noise monitoring terminals should provide the following at minimum:

- Logging of two concurrent periods, i.e. 15-minute & hourly;
- Daily CIC automated calibrations;
- Text message and e-mail alert on threshold exceedance;
- E-mail alert on low battery and low memory; and

5.5.5 Details of Vibration Monitoring

External vibration monitoring will be undertaken at the locations illustrated in Figure 5 (i.e. in proximity of the noise monitoring devices).

It is considered that it will be appropriate to amend the monitoring programme as the works progress. Accordingly, vibration monitors may be added, removed or relocated as necessary.

Vibration monitoring terminals should continually log vibration levels using the Peak Particle Velocity parameter (PPV, mm/s) in the X, Y and Z directions, in accordance with BS ISO 4866: 2010: *Mechanical vibration and shock – Vibration of fixed structures – Guidelines for the measurement of vibrations and evaluation of their effects on structures.* The monitoring equipment should also:

- Be set to monitor vibration in 5 minute periods;
- Issue a text message and e-mail alert on threshold level exceedance (to contain unit serial number, date & time of the exceedance, confirmation of the channel on which the exceedance was measured and the associated value for PPV in mm/s); and

The mounting of the transducer to the vibrating structure, by way of resin fixings only, will need to comply with BS EN ISO 5348: 1998: *Mechanical vibration and shock – Mechanical mounting of accelerometers*. In summary, the following ideal mounting conditions apply:

- The transducer and its mountings should be as rigid as possible;
- The mounting surfaces should be as clean and flat as possible;
- Simple symmetric mountings are best, and;
- The mass of the mounting should be small in comparison to that of the structure under test.

Detailed appraisal and measurement of vibration levels should be conducted at the outset of any activity with the potential to give rise to values exceeding the agreed limits.

5.5.6 Actions to be taken when an Alert Threshold Level is Exceeded

Whenever an alert threshold level is exceeded, whether in respect of noise or vibration, the monitor in question will issue an alert by way of text message to designated recipients as follows:

- The company responsible for the monitoring;
- The main contractor; and
- Any sub-contractors nominated by the main contractor.

In the event of an alert being received, the following actions are to be taken:

- “Amber” – if deemed necessary, the contractor should assess activities currently taking place on the site and may take steps to limit emissions where practicable; and

- “Red” – the contractor should conduct a detailed review of activities on the site, in particular those deemed responsible for the exceedance of the alert threshold level. In particular, it should be verified that noise & vibration control

measures have been implemented in accordance with BS5228 and BAT. Additional measures should be considered and introduced as required. This may include possible plant replacement or alternative methods of working

Where deemed necessary, supplemental information relating to measured levels of noise & vibration should be obtained through remote interrogation of the monitors by the company responsible for the monitoring programme.

The contractor should maintain a log of alert threshold level exceedances along with details of subsequent investigations and any actions taken. Note that it is not incumbent upon the contractor to notify any other party of any alert threshold level exceedances unless they coincide with a disturbance being caused.

5.5.7 Reporting

Noise & vibration levels will be continuously monitored and alerts will be issued immediately following any period in which the alert threshold levels have been exceeded. In the event that an issue arises, the monitors can be interrogated remotely to obtain a comprehensive record of recent measured levels.

The data will be downloaded by the company responsible for the monitoring using an automated weekly download setting. The raw data will be converted into spreadsheet format and posted to a shared folder to which all parties will have access. Remote online access will be available for noise monitors only.

A monthly summary report will be provided, along with the raw data from all monitors, a copy of the contractor's log of exceedances/issues and a summary note reviewing the month's activities and monitoring results. The summary note will also contain a discussion of the level of compliance with the relevant provisions of the management plan, with particular reference to BS5228 and relevant planning conditions. The intention is to issue the monthly summary reports before the end of the calendar month immediately following the month to which the summary data applies.

APPENDIX A
GLOSSARY OF ACOUSTIC TERMINOLOGY

ambient noise — The totally encompassing sound in a given situation at a given time, usually composed of sound from many sources, near and far.

background noise — The steady existing noise level present without contribution from any intermittent sources. The A-weighted sound pressure level of the residual noise at the assessment position that is exceeded for 90 per cent of a given time interval, T ($L_{AF90,T}$).

broadband — Sounds that contain energy distributed across a wide range of frequencies.

dB — Decibel - The scale in which sound pressure level is expressed. It is defined as 20 times the logarithm of the ratio between the **RMS** pressure of the sound field and the reference pressure of 20 micro-pascals (20 µPa).

Hertz (Hz) — The unit of sound frequency in cycles per second.

impulsive — A noise that is of short duration (typically less than one second), the sound pressure level of which is significantly higher than the background.

$L_{Aeq,T}$ — This is the equivalent continuous sound level. It is a type of average and is used to describe a fluctuating noise in terms of a single noise level over the sample period (T). The closer the L_{Aeq} value is to either the L_{AF10} or L_{AF90} value indicates the relative impact of the intermittent sources and their contribution. The relative spread between the values determines the impact of intermittent sources, such as traffic, on the background.

L_{AFN} — The A-weighted noise level exceeded for N% of the sampling internal. Measured using the “Fast” time weighting.

L_{AF10} — Refers to those A-weighted noise levels in the top 10 percentile of the sampling interval; it is the level which is exceeded for 10% of the measurement period. It is used to determine the intermittent high noise level features of locally generated noise and usually gives an indicator of the level of road traffic. Measured using the “Fast” time weighting.

L_{AF90} — Refers to those A-weighted noise levels in the lower 90 percentile of the sampling interval; it is the level which is exceeded for 90% of the measurement period. It will therefore exclude the intermittent features of traffic and is used to describe a background level. Measured using the “Fast” time weighting.

L_{ASmax} — The maximum **RMS** A-weighted sound pressure level occurring within a specified time period. Measured using the “Slow” time weighting.

L_{pA} (dB) An 'A-weighted decibel' - a measure of the overall level of sound across the audible frequency range (20Hz – 20kHz) with A-frequency weighting (i.e. 'A–weighting') to compensate for the varying sensitivity of the human ear to sound at different frequencies.

noise Any sound, that has the potential to cause disturbance, discomfort or psychological stress to a person exposed to it, or any sound that could cause actual physiological harm to a person exposed to it, or physical damage to any structure exposed to it, is known as noise.

noise sensitive location NSL – any dwelling house, hotel or hostel, health building, educational establishment, place of worship or entertainment, or any other facility or other area of high amenity which for its proper enjoyment requires the absence of noise at nuisance levels.

octave band A frequency interval, the upper limit of which is twice that of the lower limit. For example, the 1,000Hz octave band contains acoustical energy between 707Hz and 1,414Hz. The centre frequencies used for the designation of octave bands are defined in ISO and ANSI standards.

PPV Peak Particle Velocity(PPV), measured in mm/s, is defined in BS 5228-2 (2009): *Code of practice for noise and vibration control on construction and open sites – Part 2: Vibration* as the*:*

> *'instantaneous maximum velocity reached by a vibrating element as it oscillates about its rest position.'*

sound power level The logarithmic measure of sound power in comparison to a referenced sound intensity level of one picowatt (1pW) where:

$$Lw = 10Log\frac{W}{W_0}\ \text{dB}$$

Where: W is the rms value of sound power in pascals; and
W_0 is 1 pW.

sound pressure level Sound pressure refers to the fluctuations in air pressure caused by the passage of a sound wave. It may be expressed in terms of sound pressure level at a point, which is defined as:

$$Lp = 20Log\frac{P}{P_0}\ \text{dB}$$

Where: P is the sound pressure;
P_o is a reference pressure for propagation of sound in air and has a value of $2x10^{-5}$Pa.

time weighting One of the averaging times (Fast, Slow or Impulse) used for the measurement of RMS sound pressure level in sound level meters.

tonal	Sounds which cover a range of only a few Hz which contains a clearly audible tone, i.e. distinguishable, discrete or continuous noise (whine, hiss, screech, or hum etc.) are referred to as being ‘tonal’.

APPENDIX B

FORM TO BE COMPLETED BY THE CONTRACTOR WHEN INTRODUCING A NEW NOISE SOURCE

Details of Proposed New Noise Source

This form is to be completed for every new construction noise source being introduced onto the site with a sound power level that is greater than or equal to 105dB L_{wA}.

Project and Contractor Information

Project Details		Contractor Details	
Client		Company Name	
Site		Contact	
Reference		Telephone/E-mail	

Construction Noise Source

Details of Plant Item	
Type	
Manufacturer	
Model No.	

Provide Details of Activity and Proposed Location(s) on site.

Provide Details of Alternatives considered.

Low Noise Alternative Available? *(if yes, state why the alternative has not been put forward for use)*

Noise Data

Reference 1	Octave Band Centre Frequency (hz)								Overall
Operating Conditions	63	125	250	500	1k	2k	4k	8k	dB(A)

Confirm Parameter: Sound Power Level (L_w)? ☐
Sound Pressure Level (L_p)? ☐ Measurement Distance: m

Reference 2	Octave Band Centre Frequency (hz)								Overall
Operating Conditions	63	125	250	500	1k	2k	4k	8k	dB(A)

Confirm Parameter: Sound Power Level (L_w)? ☐
Sound Pressure Level (L_p)? ☐ Measurement Distance: m

Reference 2	Octave Band Centre Frequency (hz)								Overall
Operating Conditions	63	125	250	500	1k	2k	4k	8k	dB(A)

Confirm Parameter: Sound Power Level (L_w)? ☐
Sound Pressure Level (L_p)? ☐ Measurement Distance: m

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Completed by ..... Date .....

APPENDIX C
NOISE CONTROL AUDIT RECORD SHEET

RECORD OF NOISE CONTROL AUDIT

awnconsulting

Audit Information			
Project Details		Date	
Client		Start/End Time	
Site		Conducted By	
Reference		Signature	

Inspection Summary			
Ref.		Location	
Observation		*Recommendation*	
Ref.		Location	
Observation		*Recommendation*	
Ref.		Location	
Observation		*Recommendation*	
Ref.		Location	
Observation		*Recommendation*	
Ref.		Location	
Observation		*Recommendation*	

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Page ..... of .....

APPENDIX D
IN SITU NOISE MEASUREMENT PROCEDURE AND SURVEY SHEET

D1.0 PREAMBLE

D1.1 This procedure outlines a methodology for the measurement of sound pressure levels generated by construction plant.

D1.2 It is intended to be employed *in situ* and therefore takes account of the likely variable nature of the test environment.

D1.3 Outline details are provided in relation to:

- the item of plant to be tested;
- the environment in which the measurements are to be conducted;
- the method of measurement, and;
- information to be recorded.

D1.4 The measurement results may be used for a variety of purposes, including comparison of emissions from alternative items of plant and the derivation of sound power level data for the purposes of noise modelling.

D2.0 PLANT ITEM UNDER TEST

D2.1 The plant item shall be positioned and operated as if it were in normal use.

D2.2 The level of sound emissions from a plant item, whether stationary or moving, can be affected by the load applied, the running speed and the conditions under which it is operating. It is therefore necessary to measure associated sound output under conditions that are reproducible and representative of both typical and (where different) noisiest operations in normal usage.

D2.3 Typical modes of operation for the purposes of sound level measurement are as follows:

- plant item under specified load and conditions;
- plant item under full load (if different from above);
- plant item under no load (idling);
- plant item at maximum operating under conditions corresponding to maximum sound generation representative of normal use, and;
- plant item undergoing a characteristic work cycle under defined conditions.

D2.4 If the sound level associated with operation of the plant item is a function of secondary operating parameters, (e.g. ground type, hardness of rock), those parameters should be selected, as far as is practicable, to give results that are representative of the highest sound levels in normal use.

D3.0 TEST ENVIRONMENT

D3.1 Measurements should ideally be conducted in a location where the influence of other sources of noise is minimal, i.e. the time-averaged sound pressure level of the background noise measured at the assessment location(s) should be at least 6dB, and preferably more than 15dB, below the corresponding sound level of the plant item under test when measured in the presence of this same background noise.

D3.2 Background noise corrections should be applied in accordance with the methodology set out in paragraph 8.2.3 of BS EN ISO 3744: 2010: *Acoustics – Determination of sound power levels and sound energy levels of noise sources using sound pressure – Engineering methods for an essentially free field over a reflecting plane*.

D3.3 Care shall be taken to minimize the effects of adverse meteorological conditions (e.g. temperature, wind, precipitation) on sound propagation and on sound generation over the frequency range of interest. This applies to measurement of both background noise and the specific level of the item of plant under consideration.

D4.0 METHOD OF MEASUREMENT

D4.1 For each mode of operation, sound level measurements should be conducted at locations chosen in order to provide results that give a clear representation of sound propagation from the plant item of concern. This will typically involve measurements in multiple directions and at a range of distances.

D4.2 Each sample measurement should be of sufficient duration to encompass the full range of operations engaged in by the plant item during normal use.

D4.3 The key indicator will normally be the equivalent continuous sound level ($L_{eq,T}$), although maxima (L_{max}) may also be of interest depending on the nature of the operation.

D4.4 At minimum, sufficient data will be required in order to allow the nominal sound power level to be derived from the *in situ* sound level measurements.

D4.5 At the discretion of survey personnel, more comprehensive measurements may be conducted in accordance with BS EN ISO 3744.

D5.0 INFORMATION TO BE RECORDED

D5.1 For the plant item under test:

- Description (manufacturer, type, technical data, dimensions, serial number, year of manufacture);
- Any treatments applied, for the purposes of the test or otherwise;
- The mode(s) of operation used for the test and the relevant measurement time interval, and;
- Location in the test environment.

D5.2 For the test environment:

- Description of the surrounding terrain and the surface over which the sound propagated;
- A sketch showing the location of the plant item;
- Details of any reflecting surfaces in the vicinity, and;
- A summary of meteorological conditions.

D5.3 For the instrumentation:

- A summary of meteorological conditions.
- The equipment used for the measurements, and;
- Calibration details.

D5.4 Acoustical data:

- Date and time of the survey;
- Microphone locations;
- Duration of the measurement period;
- Confirmation of the measurement indicator (e.g. $L_{eq,T}$, L_{max} etc.);
- Measured sound pressure level data associated with the operation of the plant item, spectral and A-weighted overall values;
- Measured background noise levels, spectral and A-weighted overall values, and;
- Detailed notes relating to the survey, in particular any issues that may affect the accuracy of the measured data.

Construction Plant Noise Survey

Client	
Project	
Contract No.	

Part 1 - Acoustical Data

awnconsulting
The Tecpro Building
Clonshaugh Business and Technology Park
Dublin 17
T: +353 1 847 4220
F: +353 1 847 4257
E: info@awnconsulting.com

Location		Date/Time		Engineer(s)	
Instrumentation		Calibration			

Mic Locn.	Sample Ref.	Mode of Operation	Measurement Period	Measurement Record	Octave Band Centre Frequency (Hz)								Overall dB(A)	Indicator	Notes
					63	125	250	500	1k	2k	4k	8k			

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Construction Plant Noise Survey

Part 2 - Plant Data & Test Environment

awnconsulting
The Tecpro Building
Clonshaugh Business and Technology Park
Dublin 17
T: +353 1 847 4220
F: +353 1 847 4257
E: info@awnconsulting.com

A. Details of Plant Item Under Test	
Manufacturer	
Type	
Serial Number	
Year	
SWL (from badge)	
Misc. Info	

B. Plant Item Modes of Operation	
Reference	Details

C. Test Environment	
Meteorological Conditions	
Noise Climate	

D. Sketch Map

Include: position of the plant item, microphone locations, reflecting surfaces.
Describe: surrounding terrain, ground conditions.

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APPENDIX 12.1
AMBIENT AIR QUALITY STANDARDS

VOLUME III
APPENDICES TO
ENVIRONMENTAL IMPACT ASSESSMENT REPORT

JUNE 2022

APPENDIX 12.1
AMBIENT AIR QUALITY STANDARDS

National standards for ambient air pollutants in Ireland have generally ensued from Council Directives enacted in the EU (& previously the EC & EEC). The initial interest in ambient air pollution legislation in the EU dates from the early 1980s and was in response to the most serious pollutant problems at that time which was the issue of acid rain. As a result of this sulphur dioxide, and later nitrogen dioxide, were both the focus of EU legislation. Linked to the acid rain problem was urban smog associated with fuel burning for space heating purposes. Also apparent at this time were the problems caused by leaded petrol and EU legislation was introduced to deal with this problem in the early 1980s.

In recent years the EU has focused on defining a basis strategy across the EU in relation to ambient air quality. In 1996, a Framework Directive, Council Directive 96/62/EC, on ambient air quality assessment and management was enacted. The aims of the Directive are fourfold. Firstly, the Directive's aim is to establish objectives for ambient air quality designed to avoid harmful effects to health. Secondly, the Directive aims to assess ambient air quality on the basis of common methods and criteria throughout the EU. Additionally, it is aimed to make information on air quality available to the public via alert thresholds and fourthly, it aims to maintain air quality where it is good and improve it in other cases.

As part of these measures to improve air quality, the European Commission has adopted proposals for daughter legislation under Directive 96/62/EC. The first of these directives to be enacted, Council Directive 1999/30/EC, has been passed into Irish Law as S.I. No 271 of 2002 (Air Quality Standards Regulations 2002), and has set limit values which came into operation on 17th June 2002. The Air Quality Standards Regulations 2002 detail margins of tolerance, which are trigger levels for certain types of action in the period leading to the attainment date. The margin of tolerance varies from 60% for lead, to 30% for 24-hour limit value for PM_{10}, 40% for the hourly and annual limit value for NO_2 and 26% for hourly SO_2 limit values. The margin of tolerance commenced from June 2002, and started to reduce from 1 January 2003 and every 12 months thereafter by equal annual percentages to reach 0% by the attainment date. A second daughter directive, EU Council Directive 2000/69/EC, has published limit values for both carbon monoxide and benzene in ambient air. This has also been passed into Irish Law under the Air Quality Standards Regulations 2002.

The most recent EU Council Directive on ambient air quality was published on the 11/06/08 which has been transposed into Irish Law as S.I. 180 of 2011. Council Directive 2008/50/EC combines the previous Air Quality Framework Directive and its subsequent daughter directives. Provisions were also made for the inclusion of new ambient limit values relating to $PM_{2.5}$. The margins of tolerance specific to each pollutant were also slightly adjusted from previous directives. In regards to existing ambient air quality standards, it is not proposed to modify the standards but to strengthen existing provisions to ensure that non-compliances are removed. In addition, new ambient standards for $PM_{2.5}$ are included in Directive 2008/50/EC. The approach for $PM_{2.5}$ was to establish a target value of 25 $\mu g/m^3$, as an annual average (to be attained everywhere by 2010) and a limit value of 25 $\mu g/m^3$, as an annual average (to be attained everywhere by 2015), coupled with a target to reduce human exposure generally to $PM_{2.5}$ between 2010 and 2020. This exposure reduction target will range from 0% (for $PM_{2.5}$ concentrations of less than 8.5 $\mu g/m^3$ to 20% of the average exposure indicator (AEI) for

concentrations of between 18 - 22 µg/m^3). Where the AEI is currently greater than 22 µg/m^3 all appropriate measures should be employed to reduce this level to 18 µg/m^3 by 2020. The AEI is based on measurements taken in urban background locations averaged over a three year period from 2008 - 2010 and again from 2018 - 2020. Additionally, an exposure concentration obligation of 20 µg/m^3 was set to be complied with by 2015 again based on the AEI.

Although the EU Air Quality Limit Values are the basis of legislation, other thresholds outlined by the EU Directives are used which are triggers for particular actions. The Alert Threshold is defined in Council Directive 96/62/EC as "a level beyond which there is a risk to human health from brief exposure and at which immediate steps shall be taken as laid down in Directive 96/62/EC". These steps include undertaking to ensure that the necessary steps are taken to inform the public (e.g. by means of radio, television and the press).

The Margin of Tolerance is defined in Council Directive 96/62/EC as a concentration which is higher than the limit value when legislation comes into force. It decreases to meet the limit value by the attainment date. The Upper Assessment Threshold is defined in Council Directive 96/62/EC as a concentration above which high quality measurement is mandatory. Data from measurement may be supplemented by information from other sources, including air quality modelling.

An annual average limit for both NO_X (NO and NO_2) is applicable for the protection of vegetation in highly rural areas away from major sources of NO_X such as large conurbations, factories and high road vehicle activity such as a dual carriageway or motorway. Annex VI of EU Directive 1999/30/EC identifies that monitoring to demonstrate compliance with the NO_X limit for the protection of vegetation should be carried out distances greater than:

- 5 km from the nearest motorway or dual carriageway
- 5 km from the nearest major industrial installation
- 20 km from a major urban conurbation
- As a guideline, a monitoring station should be indicative of approximately 1000 km^2 of surrounding area.

Under the terms of EU Framework Directive on Ambient Air Quality (96/62/EC), geographical areas within member states have been classified in terms of zones. The zones have been defined in order to meet the criteria for air quality monitoring, assessment and management as described in the Framework Directive and Daughter Directives. Zone A is defined as Dublin and its environs, Zone B is defined as Cork City, Zone C is defined as 23 urban areas with a population greater than 15,000 and Zone D is defined as the remainder of the country. The Zones were defined based on among other things, population and existing ambient air quality.

EU Council Directive 96/62/EC on ambient air quality and assessment has been adopted into Irish Legislation (S.I. No. 33 of 1999). The act has designated the Environmental Protection Agency (EPA) as the competent authority responsible for the implementation of the Directive and for assessing ambient air quality in the State. Other commonly referenced ambient air quality standards include the World Health Organisation. The WHO guidelines differ from air quality standards in that they are primarily set to protect public health from the effects of air

pollution. Air quality standards, however, are air quality guidelines recommended by governments, for which additional factors, such as socio-economic factors, may be considered.

APPENDIX 12.2
DUST MANAGEMENT PLAN

VOLUME III
APPENDICES TO ENVIRONMENTAL IMPACT ASSESSMENT REPORT

JUNE 2022

APPENDIX 12.2
DUST MANAGEMENT PLAN

The objective of dust control at the site is to ensure that no significant nuisance occurs at nearby sensitive receptors. In order to develop a workable and transparent dust control strategy, the following management plan has been formulated by drawing on best practice guidance from Ireland, the UK (IAQM (2014), BRE (2003), The Scottish Office (1996), UK ODPM (2002)) and the USA (USEPA, 1997).

Site Management
The aim is to ensure good site management by avoiding dust becoming airborne at source. This will be done through good design and effective control strategies.

At the construction planning stage, the siting of activities and storage piles will take note of the location of sensitive receptors and prevailing wind directions in order to minimise the potential for significant dust nuisance (see Figure 12.1 for the windrose for Dublin Airport). As the prevailing wind is predominantly south-westerly to south-easterly, locating construction compounds and storage piles downwind of sensitive receptors will minimise the potential for dust nuisance to occur at sensitive receptors.

Good site management will include the ability to respond to adverse weather conditions by either restricting operations on-site or quickly implementing effective control measures before the potential for nuisance occurs. When rainfall is greater than 0.2mm/day, dust generation is generally suppressed (IAQM, 2014; UK ODPM, 2002). The potential for significant dust generation is also reliant on threshold wind speeds of greater than 10 m/s (19.4 knots) (at 7m above ground) to release loose material from storage piles and other exposed materials (USEPA, 1986). Particular care should be taken during periods of high winds (gales) as these are periods where the potential for significant dust emissions are highest. The prevailing meteorological conditions in the vicinity of the site are favourable in general for the suppression of dust for a significant period of the year. Nevertheless, there will be infrequent periods were care will be needed to ensure that dust nuisance does not occur. The following measures shall be taken in order to avoid dust nuisance occurring under unfavourable meteorological conditions:

- The Principal Contractor or equivalent must monitor the contractors' performance to ensure that the proposed mitigation measures are implemented and that dust impacts and nuisance are minimised;
- During working hours, dust control methods will be monitored as appropriate, depending on the prevailing meteorological conditions;
- The name and contact details of a person to contact regarding air quality and dust issues shall be displayed on the site boundary, this notice board should also include head/regional office contact details;
- It is recommended that community engagement be undertaken before works commence on site explaining the nature and duration of the works to local residents and businesses;
- A complaints register will be kept on site detailing all telephone calls and letters of complaint received in connection with dust nuisance or air quality concerns, together with details of any remedial actions carried out;

- It is the responsibility of the contractor at all times to demonstrate full compliance with the dust control conditions herein;
- At all times, the procedures put in place will be strictly monitored and assessed.

The dust minimisation measures shall be reviewed at regular intervals during the works to ensure the effectiveness of the procedures in place and to maintain the goal of minimisation of dust through the use of best practice and procedures. In the event of dust nuisance occurring outside the site boundary, site activities will be reviewed and satisfactory procedures implemented to rectify the problem. Specific dust control measures to be employed are described below.

Demolition

- Prior to demolition blocks should be soft striped inside buildings (retaining walls and windows in the rest of the building where possible, to provide a screen against dust).
- During the demolition process, water suppression should be used, preferably with a hand-held spray. Only the use of cutting, grinding or sawing equipment fitted or used in conjunction with a suitable dust suppression technique such as water sprays/local extraction should be used.
- Drop heights from conveyors, loading shovels, hoppers and other loading equipment should be minimised, if necessary fine water sprays should be employed.

Site Roads / Haulage Routes

Movement of construction trucks along site roads (particularly unpaved roads) can be a significant source of fugitive dust if control measures are not in place. The most effective means of suppressing dust emissions from unpaved roads is to apply speed restrictions. Studies show that these measures can have a control efficiency ranging from 25 to 80% (UK ODPM, 2002).

- A speed restriction of 20 km/hr will be applied as an effective control measure for dust for on-site vehicles using unpaved site roads;
- Access gates to the site shall be located at least 10m from sensitive receptors where possible;
- Bowsers or suitable watering equipment will be available during periods of dry weather throughout the construction period. Research has found that watering can reduce dust emissions by 50% (USEPA, 1997). Watering shall be conducted during sustained dry periods to ensure that unpaved areas are kept moist. The required application frequency will vary according to soil type, weather conditions and vehicular use;
- Any hard surface roads will be swept to remove mud and aggregate materials from their surface while any unsurfaced roads shall be restricted to essential site traffic only.

Land Clearing / Earth Moving

Land clearing / earth-moving works during periods of high winds and dry weather conditions can be a significant source of dust.

- During dry and windy periods, and when there is a likelihood of dust nuisance, watering shall be conducted to ensure moisture content of materials being moved is high enough to increase the stability of the soil and thus suppress dust;
- During periods of very high winds (gales), activities likely to generate significant dust emissions should be postponed until the gale has subsided.

Storage Piles

The location and moisture content of storage piles are important factors which determine their potential for dust emissions.

- Overburden material will be protected from exposure to wind by storing the material in sheltered regions of the site. Where possible storage piles should be located downwind of sensitive receptors;
- Regular watering will take place to ensure the moisture content is high enough to increase the stability of the soil and thus suppress dust. The regular watering of stockpiles has been found to have an 80% control efficiency (UK ODPM, 2002).
- Where feasible, hoarding will be erected around site boundaries to reduce visual impact. This will also have an added benefit of preventing larger particles from impacting on nearby sensitive receptors.

Site Traffic on Public Roads

Spillage and blow-off of debris, aggregates and fine material onto public roads should be reduced to a minimum by employing the following measures:

- Vehicles delivering or collecting material with potential for dust emissions shall be enclosed or covered with tarpaulin at all times to restrict the escape of dust;
- At the main site traffic exits, a wheel wash facility shall be installed if feasible. All trucks leaving the site must pass through the wheel wash. In addition, public roads outside the site shall be regularly inspected for cleanliness, as a minimum on a daily basis, and cleaned as necessary.

Summary of Dust Mitigation Measures

The pro-active control of fugitive dust will ensure that the prevention of significant emissions, rather than an inefficient attempt to control them once they have been released, will contribute towards the satisfactory performance of the contractor. The key features with respect to control of dust will be:

- The specification of a site policy on dust and the identification of the site management responsibilities for dust issues;
- The development of a documented system for managing site practices with regard to dust control;
- The development of a means by which the performance of the dust minimisation plan can be regularly monitored and assessed; and
- The specification of effective measures to deal with any complaints received.

APPENDIX 13.1
RMP SITES WITHIN THE SURROUNDING AREA

VOLUME III
APPENDICES TO ENVIRONMENTAL IMPACT ASSESSMENT REPORT

JUNE 2022

Appendix 13.1 RMP Sites within the Surrounding Area

SMR No.	DU018-020
RMP	Yes
Location	Dolphin's Barn Street
Barony	Dublin
Classification	Historic Town
Dist. To Development	Within proposed application area
Description	Zone of archaeological potential surrounding the historic town of Dublin. The area within the proposed application area relates to the culverted course of the River Poddle
Reference	www.archaeology.ie

SMR No.	DU018-020576
RMP	Yes
Location	Dolphin's Barn Street
Barony	Dublin
I.T.M.	714413/732939
Classification	Watercourse
Dist. To Development	105m west
Description	Path of historic watercourse.
Reference	www.archaeology.ie

SMR No.	DU018-043001
RMP	Yes
Location	Reuben Street
Barony	Dublin
Classification	Watercourse
Dist. To Development	105m west
Description	Path of historic watercourse.
Reference	www.archaeology.ie

SMR No.	DU018-047-001
RMP	Yes
Location	Donore Ave.
Barony	Dublin
I.T.M.	713851/732939
Classification	Castle - unclassified
Dist. To Development	173m east
Description	Shown on the OS 1837 map as 'Site of Donore castle'. The site is occupied by a business park. This castle was located within a medieval borough which is mentioned in Alen's Register for the year 1228 (Martin 1981, 40). No visible surface traces.
Reference	www.archaeology.ie

SMR No.	DU018-043002
RMP	Yes
Location	Rutland Ave.
Barony	Dublin
Classification	Watercourse
Dist. To Development	260m southwest
Description	Path of historic watercourse.
Reference	www.archaeology.ie

SMR No.	DU018-020398
RMP	Yes
Location	Mill Street.
Barony	Dublin
Classification	Mill - unclassified
Dist. To Development	335m east
Description	Site of mill pond
Reference	www.archaeology.ie

SMR No.	DU018-020332
RMP	Yes
Location	Ardee Street
Barony	Dublin
Classification	Hospital
Dist. To Development	365m north east
Description	Site of hospital
Reference	www.archaeology.ie

SMR No.	DU018-020679
RMP	Yes
Location	Ardee Street
Barony	Dublin
Classification	Hospital
Dist. To Development	375m NE north east
Description	Site of hospital
Reference	www.archaeology.ie

SMR No.	DU018-020490
RMP	Yes
Location	Ardee Street
Barony	Dublin
Classification	House - indeterminate date
Dist. To Development	380m north east
Description	House - indeterminate date
Reference	www.archaeology.ie

SMR No.	DU018-020331
RMP	Yes
Location	Ardee Street
Barony	Dublin
Classification	Bridge
Dist. To Development	410m north east
Description	Bridge
Reference	www.archaeology.ie

SMR No.	DU018-020575
RMP	Yes
Location	Cork Street
Barony	Dublin
Classification	Watercourse
Dist. To Development	410m north east
Description	Path of historic watercourse.
Reference	www.archaeology.ie

SMR No.	DU018-020329
RMP	Yes
Location	Poole Street
Barony	Dublin
Classification	House - 18th/19th century
Dist. To Development	410m north northeast
Description	House - 18th/19th century
Reference	www.archaeology.ie

SMR No.	DU018-121
RMP	No
Location	Cork Street
Barony	Dublin
Classification	Mill - unclassified
Dist. To Development	420m northeast
Description	Mill - unclassified
Reference	www.archaeology.ie

SMR No.	DU018-122
RMP	No
Location	Cork Street
Barony	Dublin
Classification	Tannery
Dist. To Development	420m northeast
Description	Tannery
Reference	www.archaeology.ie

SMR No.	DU018-020330
RMP	Yes
Location	Ardee Street
Barony	Dublin
Classification	Mill - unclassified
Dist. To Development	430m northeast
Description	Mill - unclassified
Reference	www.archaeology.ie

SMR No.	DU018-020364
RMP	Yes
Location	John Street South
Barony	Dublin
Classification	House - indeterminate date
Dist. To Development	430m northeast
Description	House - indeterminate date
Reference	www.archaeology.ie

SMR No.	DU018-020203
RMP	Yes
Location	Ardee Street
Barony	Dublin
Classification	Bridge
Dist. To Development	445m northeast
Description	Bridge
Reference	www.archaeology.ie

SMR No.	DU018-020202
RMP	Yes
Location	Mill Street
Barony	Dublin
Classification	House - 18th/19th century
Dist. To Development	450m east
Description	House - 18th/19th century
Reference	www.archaeology.ie

SMR No.	DU018-020400
RMP	Yes
Location	Ardee Street
Barony	Dublin
Classification	Mill - unclassified
Dist. To Development	455m northeast
Description	Mill - unclassified
Reference	www.archaeology.ie

SMR No.	DU018-020092
RMP	Yes
Location	Mill Street
Barony	Dublin
Classification	Water mill - unclassified
Dist. To Development	475m east
Description	Water mill - unclassified
Reference	www.archaeology.ie

SMR NO.	DU018-020692
RMP	Yes
Location	Reuben Street
Barony	Dublin
I.T.M.	713752/733205
Classification	Watercourse
Dist. To Development	370m northwest
Description	Path of historic watercourse.
Reference	www.archaeology.ie

SMR NO.	DU018-043004
RMP	Yes
Location	South Circular Road
Barony	Dublin
Classification	Watercourse
Dist. To Development	423m south southeast
Description	Path of historic watercourse.
Reference	www.archaeology.ie

SMR NO.	DU018-020358
RMP	Yes
Location	Dublin South City
Barony	Dublin
I.T.M.	714466/733267
Classification	House - 18th/19th century
Dist. To Development	230m east northeast
Description	No information available
Reference	www.archaeology.ie

SMR NO.	DU018-020503
RMP	No
Location	Dublin South City
Barony	Dublin
I.T.M.	714223/733343
Classification	Graveyard
Dist. To Development	220m north
Description	No information available
Reference	www.archaeology.ie

SMR NO.	DU018-020357
RMP	Yes
Location	Dublin South City
Barony	Dublin
I.T.M.	714676/733222
Classification	House - 18th/19th century
Dist. To Development	390m east
Description	No information available
Reference	www.archaeology.ie

SMR NO.	DU018-048
RMP	Yes
Location	Kimmage
Barony	Dublin
I.T.M.	714508/732299
Classification	Mill - unclassified
Dist. To Development	495m southeast
Description	No information available
Reference	www.archaeology.ie

APPENDIX 13.2
STRAY FINDS WITHIN THE SURROUNDING AREA

VOLUME III
APPENDICES TO ENVIRONMENTAL IMPACT ASSESSMENT REPORT

JUNE 2022

Appendix 13.2 Stray Finds within the Surrounding Area

Information on artefact finds from the study area in County Dublin has been recorded by the National Museum of Ireland since the late 18th century. Location information relating to these finds is important in establishing prehistoric and historic activity in the study area.

A review of the topographical files for the study area revealed that no stray finds have been recovered.

APPENDIX 13.3
LEGISLATION PROTECTING THE ARCHAEOLOGICAL RESOURCE

VOLUME III
APPENDICES TO ENVIRONMENTAL IMPACT ASSESSMENT REPORT

JUNE 2022

Appendix 13.3 Legislation Protecting the Archaeological Resource

PROTECTION OF CULTURAL HERITAGE

The cultural heritage in Ireland is safeguarded through national and international policy designed to secure the protection of the cultural heritage resource to the fullest possible extent (Department of Arts, Heritage, Gaeltacht and the Islands 1999, 35). This is undertaken in accordance with the provisions of the European Convention on the Protection of the Archaeological Heritage (Valletta Convention), ratified by Ireland in 1997.

THE ARCHAEOLOGICAL RESOURCE

The National Monuments Act 1930 to 2014 and relevant provisions of the National Cultural Institutions Act 1997 are the primary means of ensuring the satisfactory protection of archaeological remains, which includes all man-made structures of whatever form or date except buildings habitually used for ecclesiastical purposes. A National Monument is described as 'a monument or the remains of a monument the preservation of which is a matter of national importance by reason of the historical, architectural, traditional, artistic or archaeological interest attaching thereto' (National Monuments Act 1930 Section 2). A number of mechanisms under the National Monuments Act are applied to secure the protection of archaeological monuments. These include the Register of Historic Monuments, the Record of Monuments and Places, and the placing of Preservation Orders and Temporary Preservation Orders on endangered sites.

OWNERSHIP AND GUARDIANSHIP OF NATIONAL MONUMENTS

The Minister may acquire national monuments by agreement or by compulsory order. The state or local authority may assume guardianship of any national monument (other than dwellings). The owners of national monuments (other than dwellings) may also appoint the Minister or the local authority as guardian of that monument if the state or local authority agrees. Once the site is in ownership or guardianship of the state, it may not be interfered with without the written consent of the Minister.

REGISTER OF HISTORIC MONUMENTS

Section 5 of the 1987 Act requires the Minister to establish and maintain a Register of Historic Monuments. Historic monuments and archaeological areas present on the register are afforded statutory protection under the 1987 Act. Any interference with sites recorded on the register is illegal without the permission of the Minister. Two months' notice in writing is required prior to any work being undertaken on or in the vicinity of a registered monument. The register also includes sites under Preservation Orders and Temporary Preservation Orders. All registered monuments are included in the Record of Monuments and Places.

PRESERVATION ORDERS AND TEMPORARY PRESERVATION ORDERS

Sites deemed to be in danger of injury or destruction can be allocated Preservation Orders under the 1930 Act. Preservation Orders make any interference with the site illegal. Temporary Preservation Orders can be attached under the 1954 Act. These perform the same function as a Preservation Order but have a time limit of six months, after which the situation must be reviewed. Work may only be undertaken on or in the vicinity of sites under Preservation Orders with the written consent, and at the discretion, of the Minister.

RECORD OF MONUMENTS AND PLACES

Section 12(1) of the 1994 Act requires the Minister for Arts, Heritage, Gaeltacht and the Islands (now the Minister for the Department of Culture, Heritage and the Gaeltacht) to establish and

maintain a record of monuments and places where the Minister believes that such monuments exist. The record comprises a list of monuments and relevant places and a map/s showing each monument and relevant place in respect of each county in the state. All sites recorded on the Record of Monuments and Places receive statutory protection under the National Monuments Act 1994. All recorded monuments on the proposed development site are represented on the accompanying maps.

Section 12(3) of the 1994 Act provides that 'where the owner or occupier (other than the Minister for Arts, Heritage, Gaeltacht and the Islands) of a monument or place included in the Record, or any other person, proposes to carry out, or to cause or permit the carrying out of, any work at or in relation to such a monument or place, he or she shall give notice in writing to the Minister of Arts, Heritage, Gaeltacht and the Islands to carry out work and shall not, except in case of urgent necessity and with the consent of the Minister, commence the work until two months after giving of notice'.

Under the National Monuments (Amendment) Act 2004, anyone who demolishes or in any way interferes with a recorded site is liable to a fine not exceeding €3,000 or imprisonment for up to 6 months. On summary conviction and on conviction of indictment, a fine not exceeding €10,000 or imprisonment for up to 5 years is the penalty. In addition, they are liable for costs for the repair of the damage caused.

In addition to this, under the European Communities (Environmental Impact Assessment) Regulations 1989, Environmental Impact Statements (EIS) are required for various classes and sizes of development project to assess the impact the proposed development will have on the existing environment, which includes the cultural, archaeological and built heritage resources. These document's recommendations are typically incorporated into the conditions under which the proposed development must proceed, and thus offer an additional layer of protection for monuments which have not been listed on the RMP.

THE PLANNING AND DEVELOPMENT ACT 2000

Under planning legislation, each local authority is obliged to draw up a Development Plan setting out their aims and policies with regard to the growth of the area over a five-year period. They cover a range of issues including archaeology and built heritage, setting out their policies and objectives with regard to the protection and enhancement of both. These policies can vary from county to county. The Planning and Development Act 2000 recognises that proper planning and sustainable development includes the protection of the archaeological heritage. Conditions relating to archaeology may be attached to individual planning permissions.

Dublin City Council Development Plan 2016-2022

It is the policy of Dublin City Council

CHC9: To protect and preserve National Monuments.

To protect archaeological material in situ by ensuring that only minimal impact on archaeological layers is allowed, by way of the re-use of buildings, light buildings, foundation design or the omission of basements in the Zones of Archaeological Interest.

That where preservation in situ is not feasible, sites of archaeological interest shall be subject to 'preservation by record' according to best practice in advance of re-development.

That sites within Zones of Archaeological Interest will be subject to consultation with the City Archaeologist and archaeological assessment prior to a planning application being lodged.

That the National Monuments Service will be consulted in assessing proposals for development which relate to Monuments and Zones of Archaeological Interest.

To preserve known burial grounds and disused historic graveyards, where appropriate, to ensure that human remain are re-interred, except where otherwise agreed with the National Museum of Ireland.

That in evaluating proposals for development in the vicinity of the surviving sections of the city wall that due recognition be given to their national significance and their special character.

To have regard to the Shipwreck inventory maintained by the DAHG. Proposed developments that may have potential to impact on riverine, inter-tidal and sub-tidal environments shall be subject to an underwater archaeological assessment in advance of works.

To have regard to DAHG policy documents and guidelines relating to archaeology.

It is an objective of Dublin City Council:

CHCO10:

To implement the archaeological actions of the Dublin City Heritage Plan 2002-6 in light of the Dublin City Heritage Plan Review 2012.

To prepare and implement conservation plans for National Monuments and Monuments in DCC care (City Walls, St Luke's Church, St James's Graveyard, St. Thomas's Abbey, St Canice's Graveyard etc).

To maintain, develop and promote the Dublin City Archaeological Archive (DCAA) at Pearse Street Library and Archives.

To ensure the public dissemination of the findings of licensed archaeological activity in Dublin through the Dublin County Archaeology GIS.

To develop a long-term management plan to promote the conservation, management and interpretation of archaeological sites and monuments and to identify areas for strategic research.

To have regard to the city's industrial heritage and Dublin City Industrial Heritage Record (DCIHR) in the preparation of Local Area Plans (LAPs) and the assessment of planning applications and to publish the DCIHR online. To review the DCIHR in accordance with Ministerial recommendations arising from the national Inventory of Architectural Heritage (NIAH) survey of Dublin City and in accordance with the Strategic Approach set out in Section 11.1.4 of this Chapter

To promote awareness of, and access to, the city's archaeological inheritance and foster high-quality public archaeology.

To promote archaeological best practice in Dublin city.

To promote the awareness of the international significance of Viking Dublin and to support post-excavation research into the Wood Quay excavations 1962-81.

To develop a strategy for the former Civic Museum collection and for other collections of civic interest and importance.

To investigate the potential for the erection of Columbarium Walls.

To support the implementation of the Kilmainham Mill Conservation Plan.

Dublin City Council will seek to work with Diageo to undertake a more comprehensive industrial heritage survey of the constituent historic buildings within the Guinness Brewery complex at Saint James's Gate.

To implement and promote The Dublin Principles (ICOMOS, 2011) as guiding principles to assist in the documentation, protection, conservation and appreciation of industrial heritage as part of the heritage of Dublin and Ireland.

To continue to implement actions of the Saint Luke's Conservation Plan on the basis of funds available to conserve the monument, recover the graveyard, provide visitor access, improve visual amenity and secure an appropriate new use.

APPENDIX 13.4
IMPACT ASSESSMENT AND THE CULTURAL HERITAGE RESOURCE

VOLUME III
APPENDICES TO ENVIRONMENTAL IMPACT ASSESSMENT REPORT

JUNE 2022

Appendix 13.4 Impact Assessment and the Cultural Heritage Resource

POTENTIAL IMPACTS ON ARCHAEOLOGICAL AND HISTORICAL REMAINS

Impacts are defined as 'the degree of change in an environment resulting from a development' (Environmental Protection Agency 2003: 31). They are described as profound, significant or slight impacts on archaeological remains. They may be negative, positive or neutral, direct, indirect or cumulative, temporary or permanent.

Impacts can be identified from detailed information about a project, the nature of the area affected and the range of archaeological and historical resources potentially affected. Development can affect the archaeological and historical resource of a given landscape in a number of ways.

- Permanent and temporary land-take, associated structures, landscape mounding, and their construction may result in damage to or loss of archaeological remains and deposits, or physical loss to the setting of historic monuments and to the physical coherence of the landscape.

- Archaeological sites can be affected adversely in a number of ways: disturbance by excavation, topsoil stripping and the passage of heavy machinery; disturbance by vehicles working in unsuitable conditions; or burial of sites, limiting accessibility for future archaeological investigation.

- Hydrological changes in groundwater or surface water levels can result from construction activities such as de-watering and spoil disposal, or longer-term changes in drainage patterns. These may desiccate archaeological remains and associated deposits.

- Visual impacts on the historic landscape sometimes arise from construction traffic and facilities, built earthworks and structures, landscape mounding and planting, noise, fences and associated works. These features can impinge directly on historic monuments and historic landscape elements as well as their visual amenity value.

- Landscape measures such as tree planting can damage sub-surface archaeological features, due to topsoil stripping and through the root action of trees and shrubs as they grow.

- Ground consolidation by construction activities or the weight of permanent embankments can cause damage to buried archaeological remains, especially in colluviums or peat deposits.

- Disruption due to construction also offers in general the potential for adversely affecting archaeological remains. This can include machinery, site offices, and service trenches.

Although not widely appreciated, positive impacts can accrue from developments. These can include positive resource management policies, improved maintenance and access to archaeological monuments, and the increased level of knowledge of a site or historic landscape as a result of archaeological assessment and fieldwork.

PREDICTED IMPACTS

The severity of a given level of land-take or visual intrusion varies with the type of monument, site or landscape features and its existing environment. Severity of impact can be judged taking the following into account:

- The proportion of the feature affected and how far physical characteristics fundamental to the understanding of the feature would be lost;
- Consideration of the type, date, survival/condition, fragility/vulnerability, rarity, potential and amenity value of the feature affected;
- Assessment of the levels of noise, visual and hydrological impacts, either in general or site-specific terms, as may be provided by other specialists.

APPENDIX 13.5
MITIGATION MEASURES AND THE CULTURAL HERITAGE RESOURCE

VOLUME III
APPENDICES TO ENVIRONMENTAL IMPACT ASSESSMENT REPORT

JUNE 2022

Appendix 13.5 Mitigation Measures and the Cultural Heritage Resource

POTENTIAL MITIGATION STRATEGIES FOR CULTURAL HERITAGE REMAINS

Mitigation is defined as features of the design or other measures of the proposed development that can be adopted to avoid, prevent, reduce or offset negative effects.

The best opportunities for avoiding damage to archaeological remains or intrusion on their setting and amenity arise when the site options for the development are being considered. Damage to the archaeological resource immediately adjacent to developments may be prevented by the selection of appropriate construction methods. Reducing adverse effects can be achieved by good design, for example by screening historic buildings or upstanding archaeological monuments or by burying archaeological sites undisturbed rather than destroying them. Offsetting adverse effects is probably best illustrated by the full investigation and recording of archaeological sites that cannot be preserved *in situ*.

DEFINITION OF MITIGATION STRATEGIES

Archaeological Resource

The ideal mitigation for all archaeological sites is preservation *in situ*. This is not always a practical solution, however. Therefore, a series of recommendations are offered to provide ameliorative measures where avoidance and preservation *in situ* are not possible.

Archaeological Test Trenching can be defined as 'a limited programme of intrusive fieldwork which determines the presence or absence of archaeological features, structures, deposits, artefacts or ecofacts within a specified area or site on land, inter-tidal zone or underwater. If such archaeological remains are present field evaluation defines their character, extent, quality and preservation, and enables an assessment of their worth in a local, regional, national or international context as appropriate' (CIfA 2020a).

Full Archaeological Excavation can be defined as 'a programme of controlled, intrusive fieldwork with defined research objectives which examines, records and interprets archaeological deposits, features and structures and, as appropriate, retrieves artefacts, ecofacts and other remains within a specified area or site on land, inter-tidal zone or underwater. The records made and objects gathered during fieldwork are studied and the results of that study published in detail appropriate to the project design' (CIfA 2020b).

Archaeological Monitoring can be defined as 'a formal programme of observation and investigation conducted during any operation carried out for non-archaeological reasons. This will be within a specified area or site on land, inter-tidal zone or underwater, where there is a possibility that archaeological deposits may be disturbed or destroyed. The programme will result in the preparation of a report and ordered archive (CIfA 2020c).

Underwater Archaeological Assessment consists of a programme of works carried out by a specialist underwater archaeologist, which can involve wade surveys, metal detection surveys and the excavation of test pits within the sea or riverbed. These assessments are able to access and assess the potential of an underwater environment to a much higher degree than terrestrial based assessments.

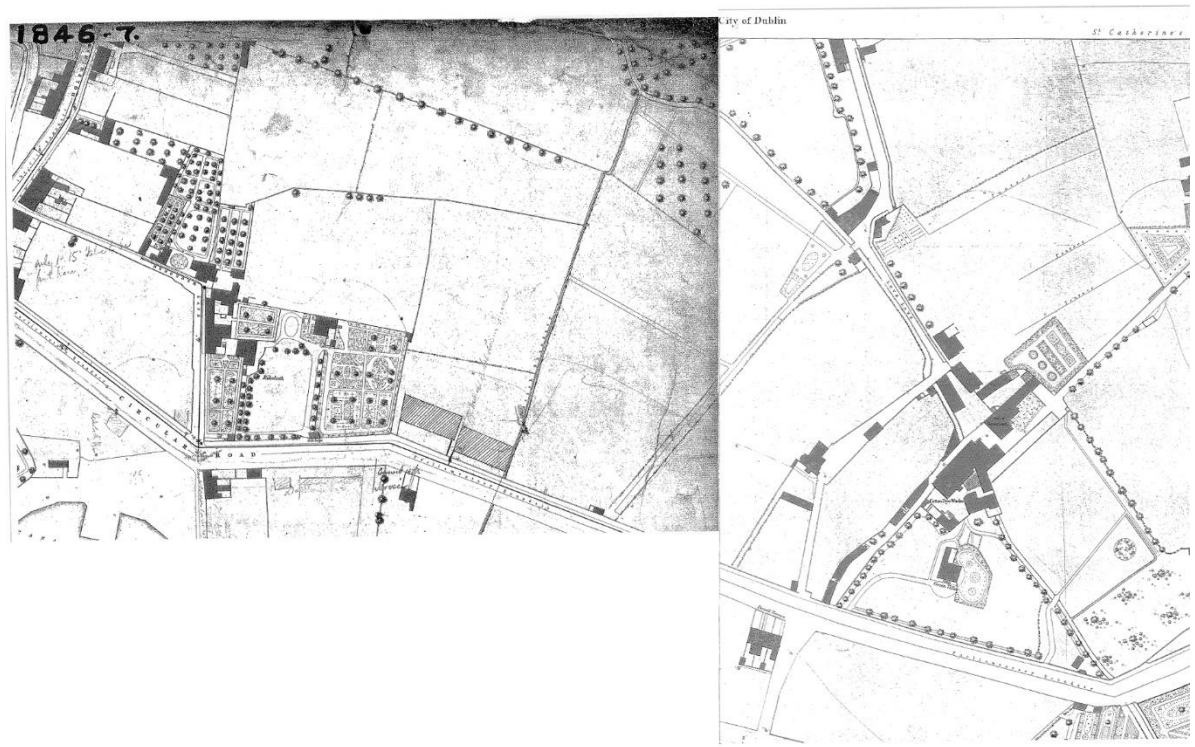
APPENDIX 14.1
HISTORIC MAP EXTRACTS

VOLUME III
APPENDICES TO
ENVIRONMENTAL IMPACT ASSESSMENT REPORT

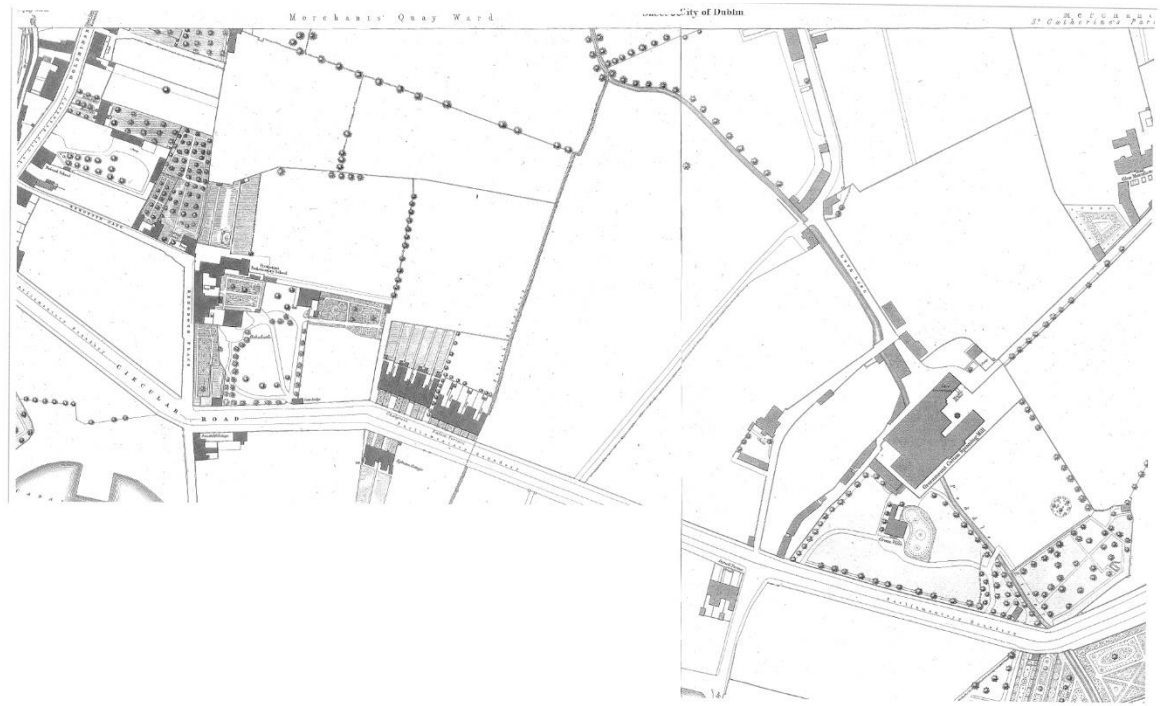
JUNE 2022

Bailey Gibson (Former Rehoboth Works) Site, South Circular Road, Dublin 8.

Historic Maps



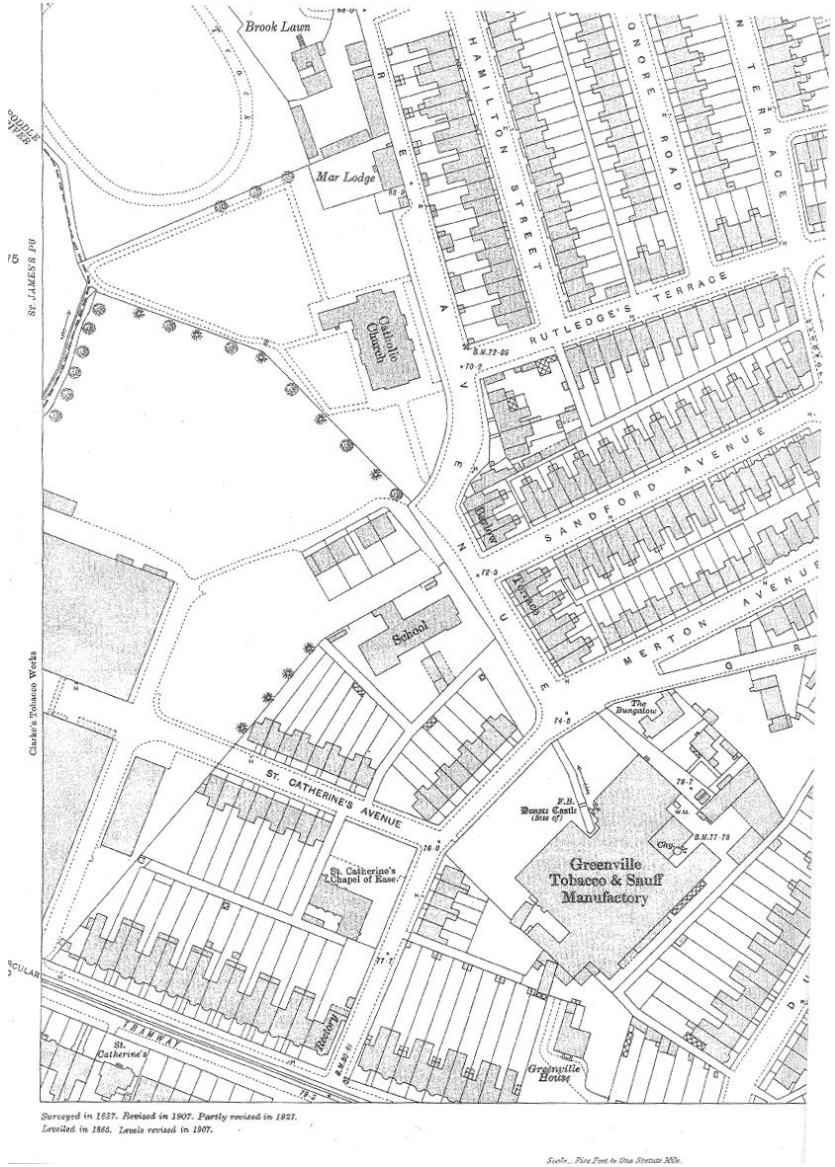
1. Extract from Ordnance Survey Map, 1838-47



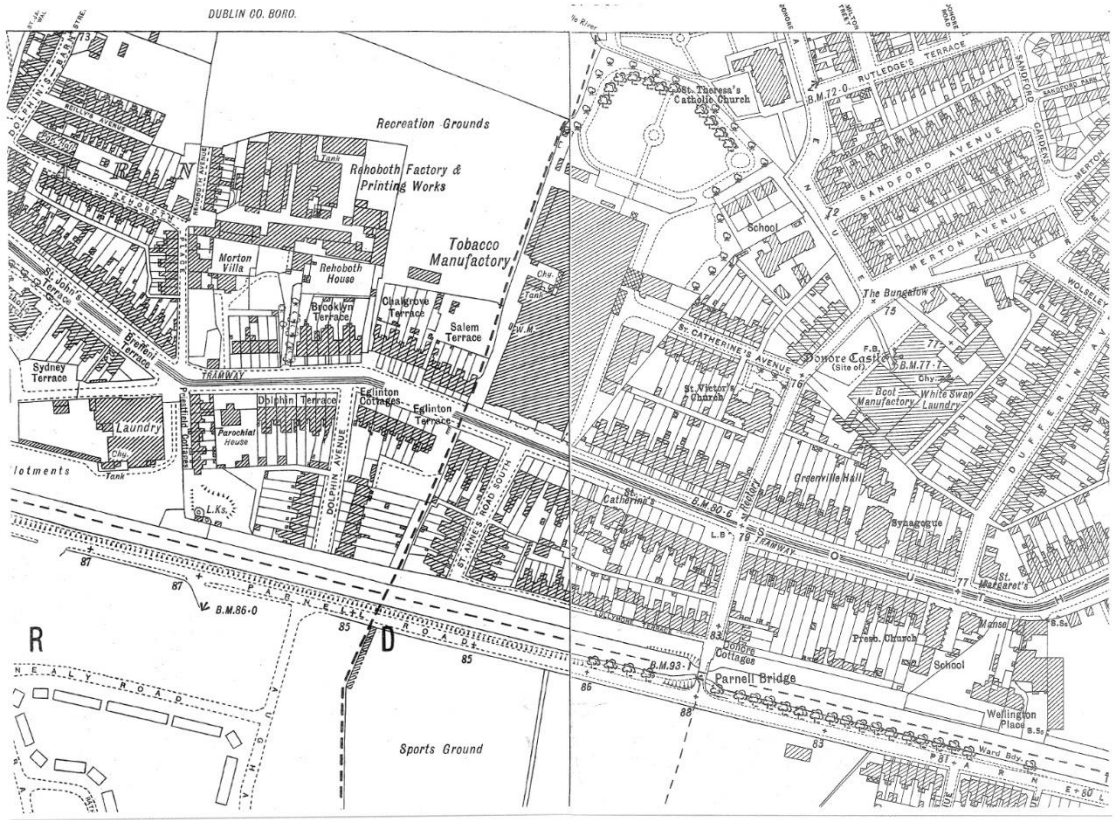
2. Extract from Ordnance Survey Map, 1864-66

3. Extract from Ordnance Survey Map, 1886-88

Extract from Ordnance Survey Map, 1907-09



5. Extract from Ordnance Survey Map, 1927-28 showing partial view of the eastern section of the site. Mapping for the western section was not available for this date.

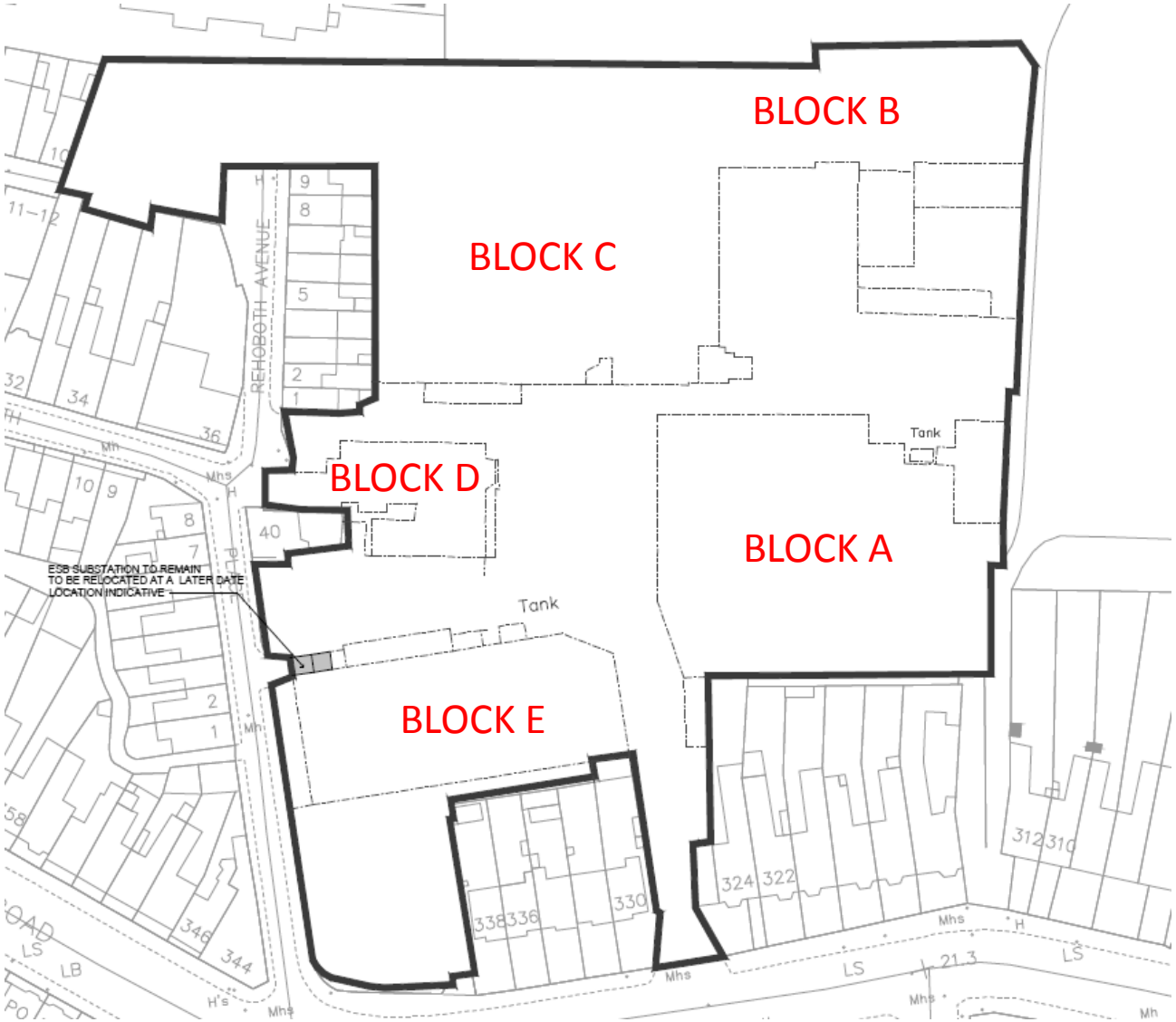


6. Extract from Ordnance Survey Map, 1943-62

APPENDIX 14.2
KEY PLAN

VOLUME III
APPENDICES TO
ENVIRONMENTAL IMPACT ASSESSMENT REPORT

JUNE 2022



1. Key Plan showing the block layout on site

APPENDIX 14.3
PHOTOGRAPHIC RECORD - EXTERNAL

VOLUME III
APPENDICES TO ENVIRONMENTAL IMPACT ASSESSMENT REPORT

JUNE 2022

Bailey Gibson (Former Rehoboth Works) Site, South Circular Road, Dublin 8.

Photographic Record – External Views

1. View towards entrance of site from South Circular Road

2. View through entrance to site

3. Oblique view of entrance from South Circular Road, showing minimal visual impact of site to the streetscape

4. View looking out entrance, with Block E to the RHS

5. View of gable end of Block D

6. Panoramic view of northern elevation of Block D

7. Oblique view of Block D, with Block E in the background

8. Panoramic view of western section of Block D

9. Door surround to western section of Block D

10. Southern elevation of Block C

11. Panoramic view across yard, showing Blocks D and C

12. Panoramic view across yard, showing Blocks A and E.

13. Panoramic view across yard towards rear of Block D

14. Panoramic view of yard showing rear of Block D

15. Panoramic view across yard looking at northern elevation of Block E

16. View of the chimney

17. Panoramic view across rear yard, showing Blocks C and B

18. Panoramic view across rear yard, looking west

19. Panoramic view across rear yard, showing Blocks C and B

20. Panoramic view across rear yard looking North

21. Panoramic view of ruinous structure adjoining Block B

22. View of eastern façade of Block C

23. Oblique view of Blocks B and C

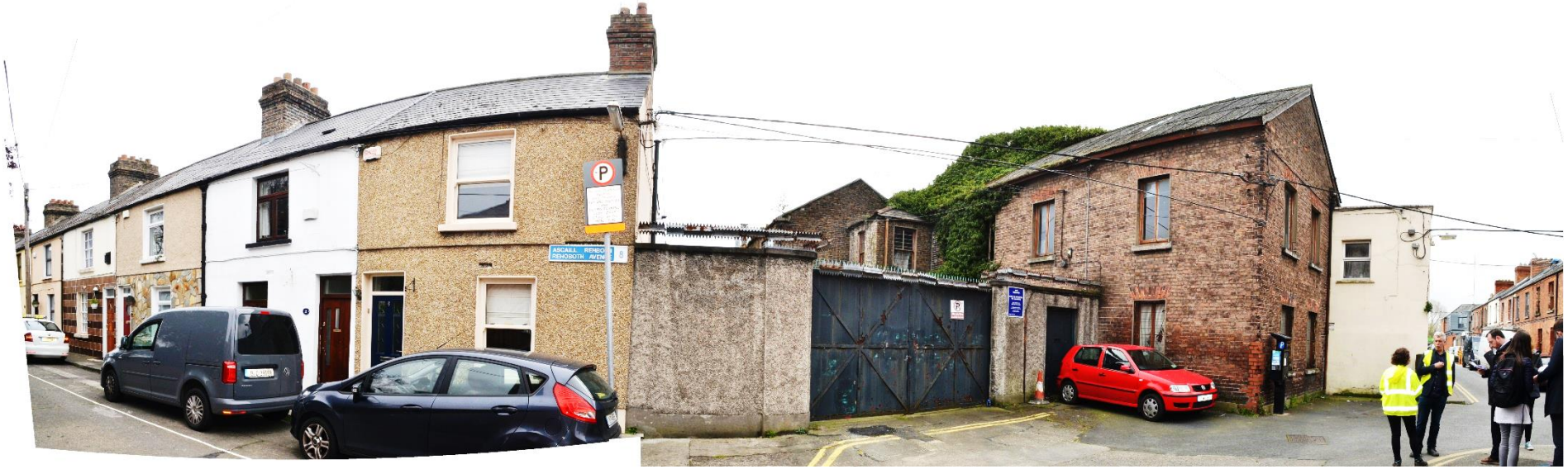
24. Panoramic view of corner between South Circular Road and Rehoboth Place

25. Panoramic view along Rehoboth Place

26. Panoramic view along Rehoboth Place

27. View along Rehoboth Place towards Block D

28. View along Rehoboth Place towards Block D



29. View along Rehoboth Place towards Block D

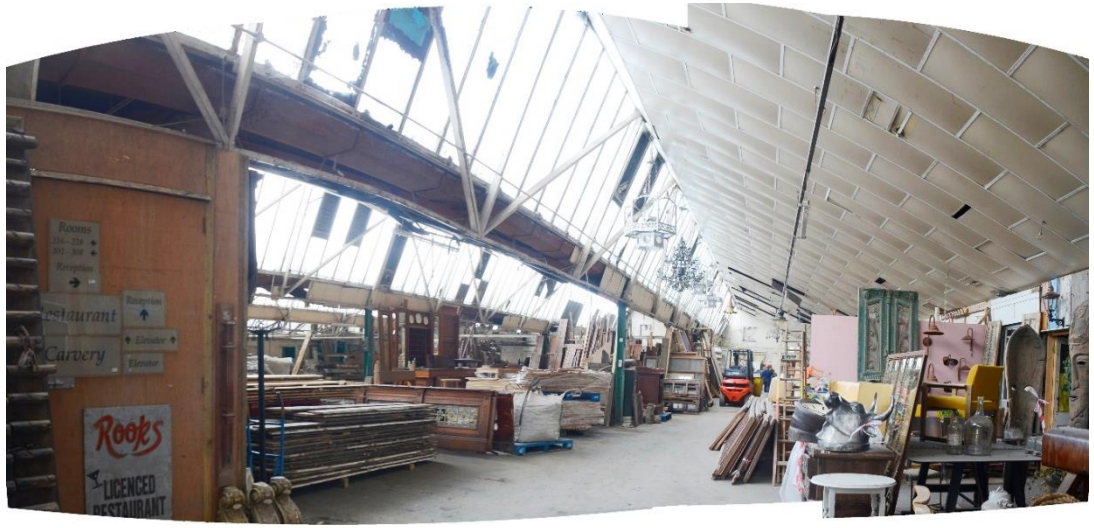
APPENDIX 14.4
PHOTOGRAPHIC RECORD - INTERNAL

VOLUME III
APPENDICES TO ENVIRONMENTAL IMPACT ASSESSMENT REPORT

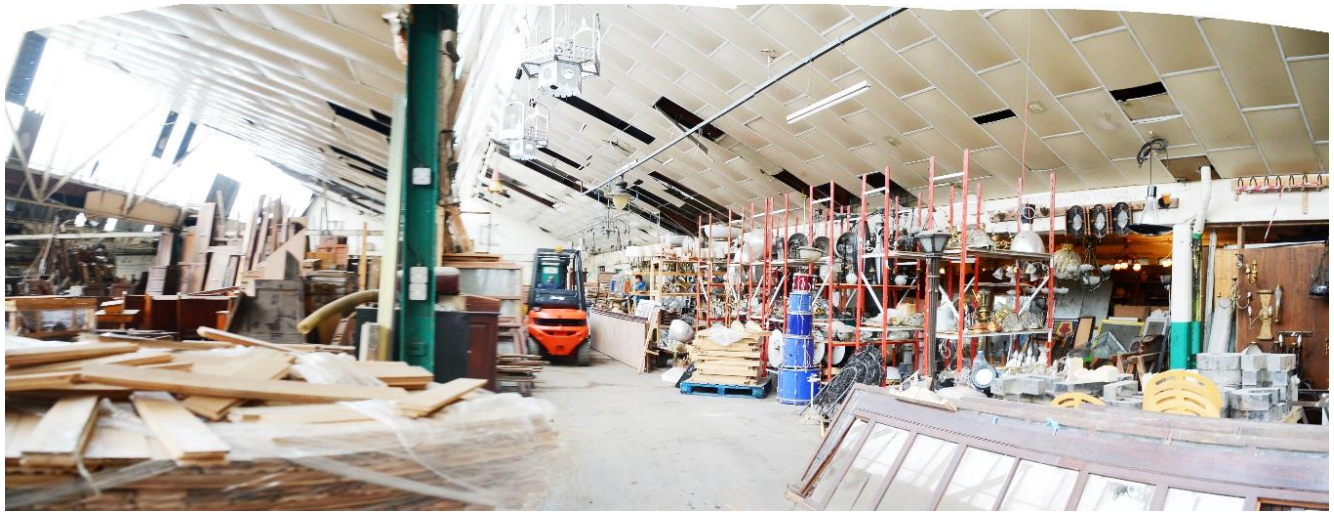
JUNE 2022

Bailey Gibson (Former Rehoboth Works) Site, South Circular Road, Dublin 8.

Photographic Record – Internal Views
Block A



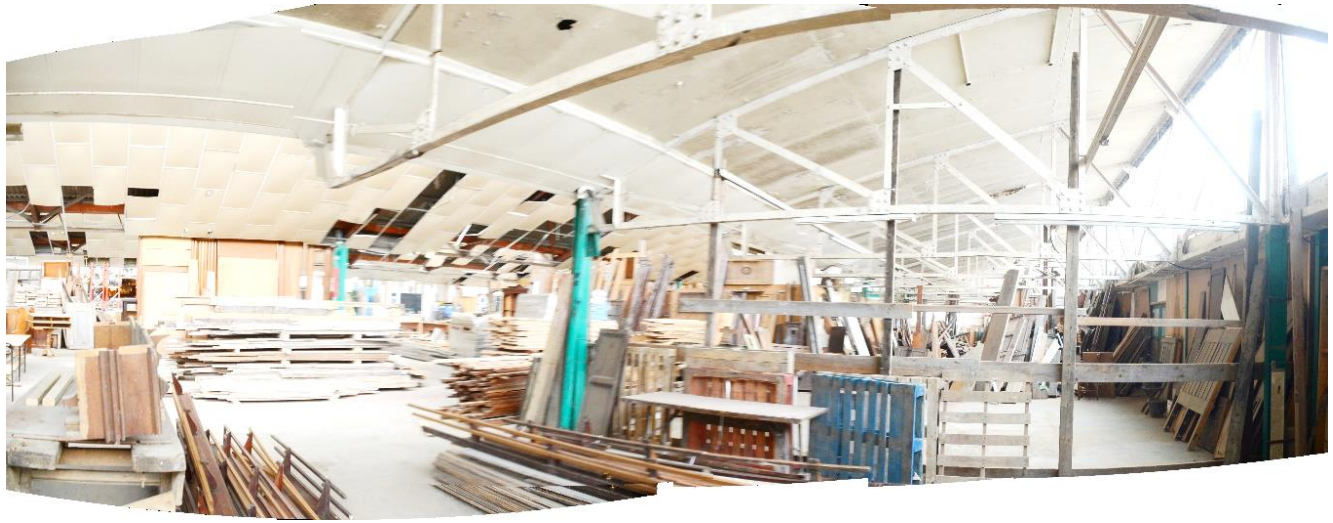
1. Internal panorama of Block A



2. Internal panorama of Block A

3. Internal panorama of Block A

4. Internal panorama of Block A



5. Internal panorama of Block A

6. Internal panorama of Block A

Bailey Gibson (Former Rehoboth Works) Site, South Circular Road, Dublin 8.

Photographic Record – Internal Views
Block B

1. Internal panorama of Block B

2. Internal panorama of Block B

3. Internal panorama of Block B

4. Internal panorama of Block B

5. Internal panorama of Block B

Bailey Gibson (Former Rehoboth Works) Site, South Circular Road, Dublin 8.

Photographic Record – Internal Views
Block C

1. Internal panorama of Block C

2. Internal view of steel structure, Block C.
Manufacturers mark is visible, and reads Dorman Long & Co. Middlesbrough.

3. Internal panorama of Block C

4. Internal panorama of Block C

5. Internal panorama of Block C

6. Internal panorama of Block C

7. Internal panorama of Block C

8. Internal panorama of Block C

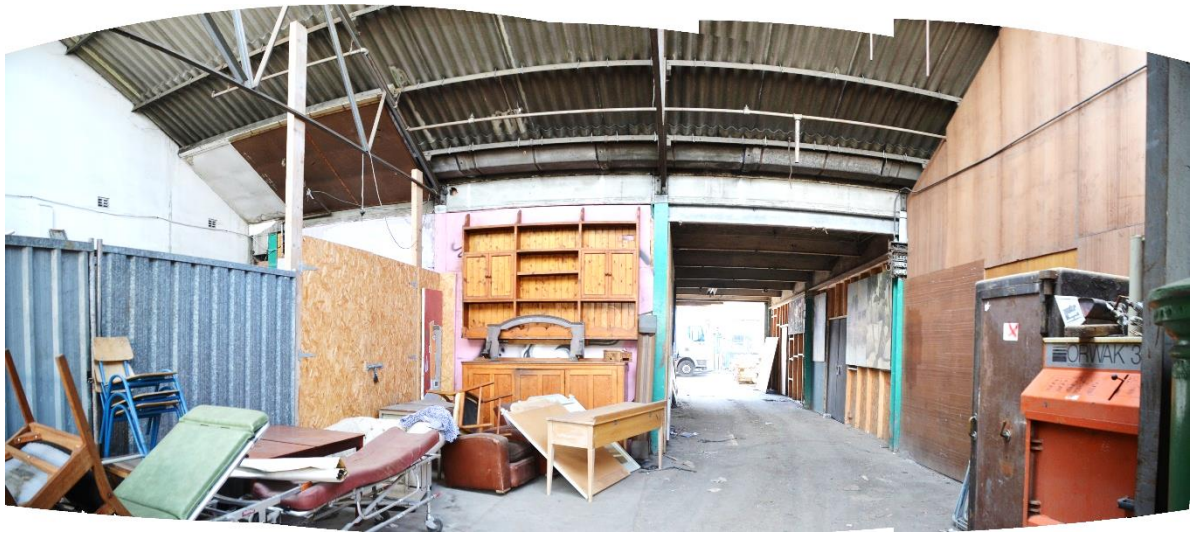
9. Internal panorama of Block C

10. Internal panorama of Block C

11. Internal panorama of Block C

12. Internal panorama of Block C

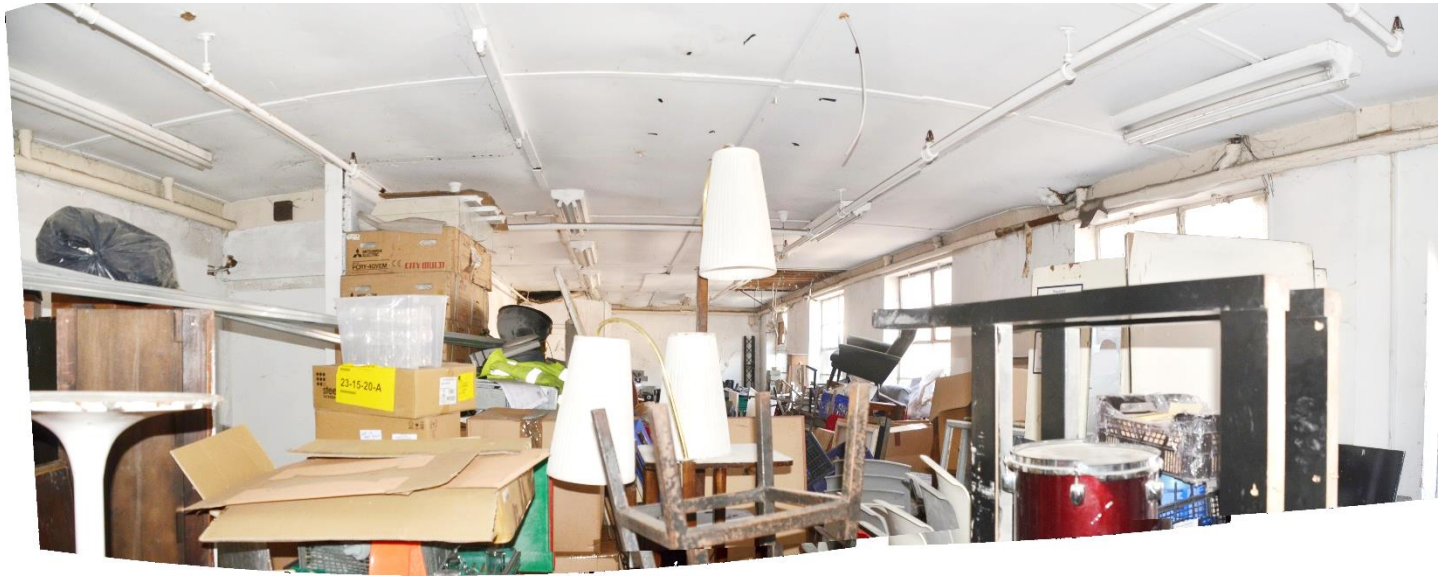
13. Internal panorama of Block C



14. Internal panorama of Block C

Bailey Gibson (Former Rehoboth Works) Site, South Circular Road, Dublin 8.

Photographic Record – Internal Views
Block D



1. Internal panorama of Block D

2. Internal panorama of Block D

3. Internal panorama of Block D

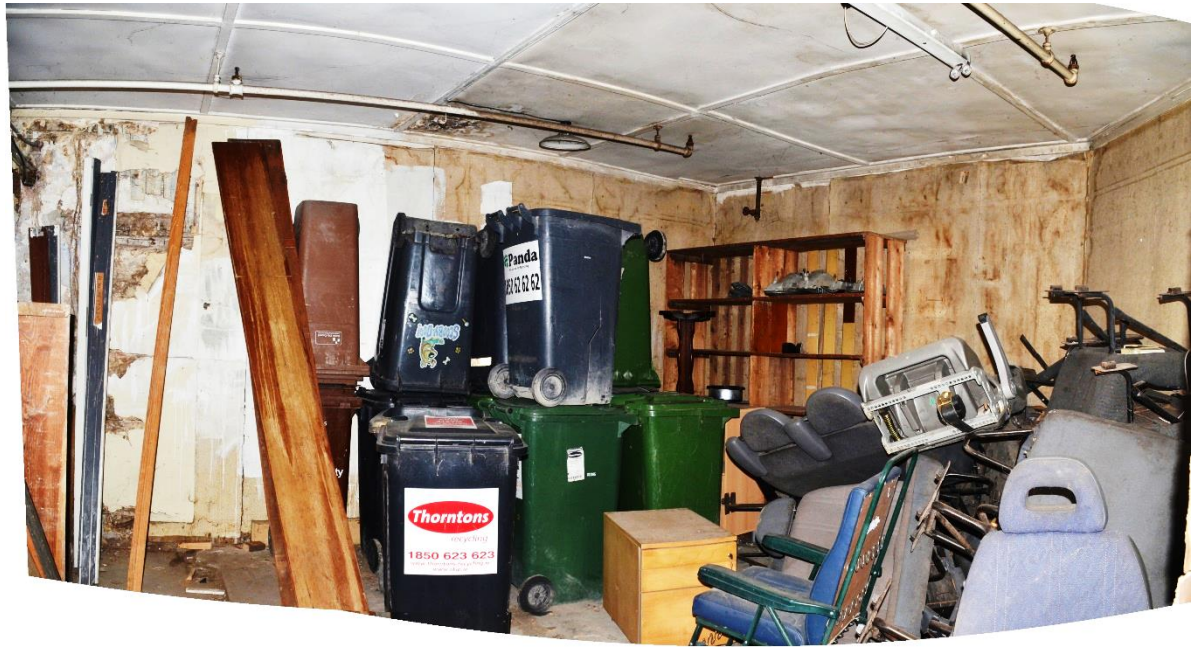
4. Internal panorama of Block D

5. Internal panorama of Block D

6. Internal panorama of Block D

7. Internal panorama of Block D

8. Encaustic Floor Tiles in entrance hall of western section of Block D



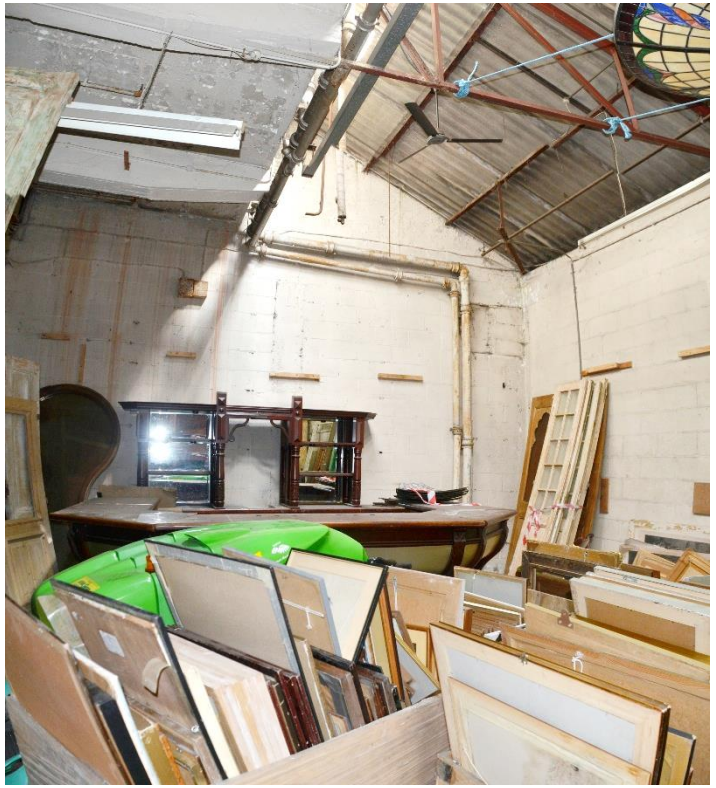
9. Internal panorama of Block D

10. Internal panorama of Block D

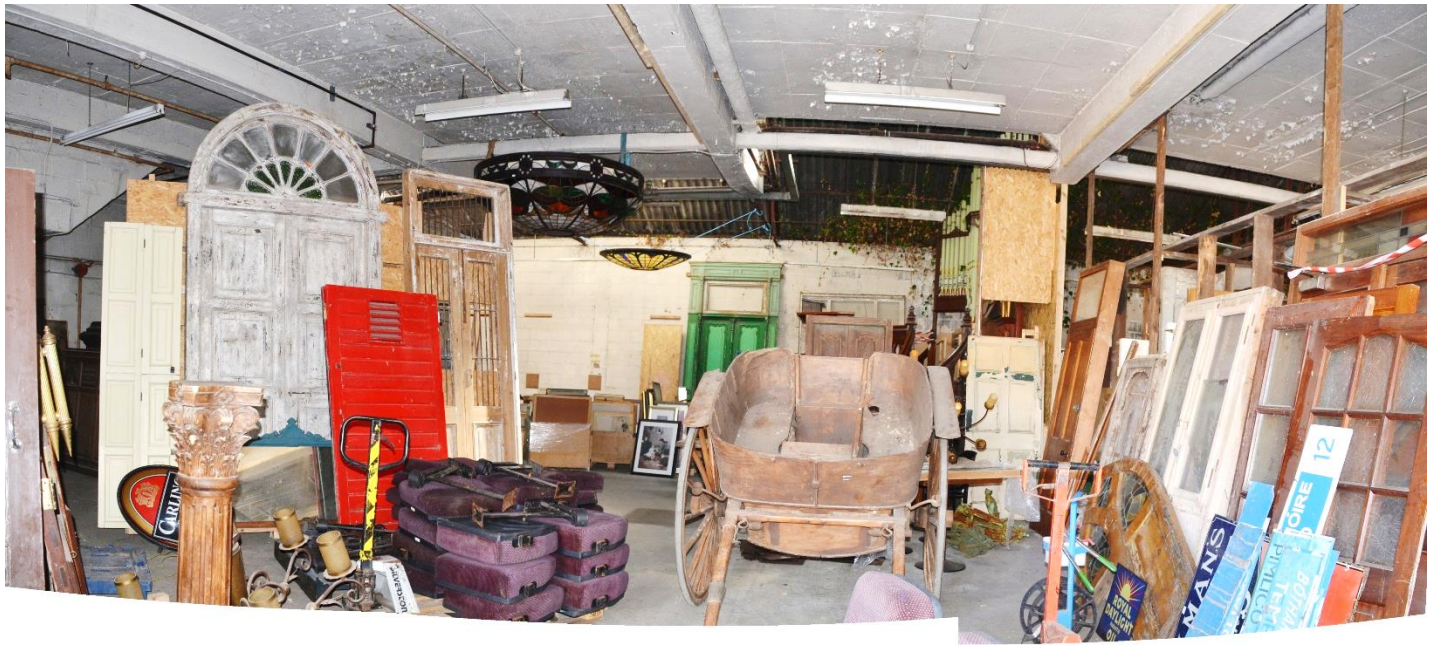
Bailey Gibson (Former Rehoboth Works) Site, South Circular Road, Dublin 8.

Photographic Record – Internal Views
Block E

1. Internal panorama of Block E



2. Internal panorama of Block E



3. Internal panorama of Block E

4. Internal panorama of Block E

APPENDIX 14.5
OUTLINE CONSERVATION METHOD STATEMENT

VOLUME III
APPENDICES TO ENVIRONMENTAL IMPACT ASSESSMENT REPORT

JUNE 2022

OUTLINE CONSERVATION

SPECIFICATION

FOR

WORKS TO BE CARRIED OUT

AT

BAILEY GIBSON, SOUTH CIRCULAR ROAD,

DUBLIN 8.

March 2020

DAVID SLATTERY CONSERVATION ARCHITECTS LIMITED
Historic Buildings Consultants

8, Vergemount, Clonskeagh, Dublin 6, IRELAND. Tel: 01-2697344 Fax: 01-2696700
e-mail: slatcon@iol.ie

CONTENTS

CONTENTS **1**
Section 1 Introduction **2**
1.1. General 3
1.2. Preliminary Method Statement 3
1.3. General Conservation Methodology 5
1.4. Extent of Conservation Works 7
Section 2 Specifications **8**
2.1. Taking Down And Removals. 9

Section 1 Introduction

1.1. General 3
1.2. Preliminary Method Statement 3
1.3. General Conservation Methodology 5
1.4. Extent of Conservation Works 7

1.1. General

The works shall be carried in compliance with *RIAI Guidelines for the Conservation of Buildings* (3rd edition December 2010), and the conservation charters referenced therein, in addition to the publication *Architectural Heritage Protection: Guidelines for Planning Authorities* (as issued by the Department of Arts, Heritage & the Gaeltacht 2011).

1.2. Preliminary Method Statement

General
The Contractor will be required to prepare a detailed method statement for the works and to amend or augment this statement to take account of matters discovered during the works. He will be required to obtain the Architect's approval for the statement at each stage during the works and amend the statement as necessary to achieve the Architect's approval.

Guidance
The contractor will be advised that all works must be completed in accordance with good conservation practice and in conformity with the publication "*Architectural Heritage Protection: Guidelines for Planning Authorities – DoAHG, 2011.*"

Guidance on the application of conservation practice is to be found in the following documents which shall be adhered to:

- Architectural Heritage Protection: Guidelines for Planning Authorities. Department of the Arts, Heritage & the Gaeltacht 2011.
- Archaeology in the Planning Process. (Planning Leaflet PL13) Department of the Environment, Heritage and Local Government, 2007.

Drawings and Schedules
The Contractor may be required to prepare full survey drawings of each element to be repaired before commencing, together with full size details of the various components, joints, profiles etc. etc. and schedules of the various components to enable the correct procedure for repair. A full photographic record should also be kept. In addition, the various components shall be clearly labelled and recorded on the drawings. When fully examined, the full size details of the various repairs necessary will be prepared by the Contractor before commencing any repair works and all repairs scheduled. The Architect's approval to this documentation shall be obtained at each stage before proceeding to the next stage and two copies of all such documentation shall be given to the Architect for his records.

Deviations
No deviations from the Architect's details will be permitted without prior approval. No deviation from the approved full sized drawings will be permitted without the Architect's prior approval. All dimensions as shown on the drawings shall be finished sizes unless otherwise indicated.

General Matters
All components shall be carefully examined to determine the method of assembly. All items shall be referenced and locations logged. No damage to the items shall be result from these works other than that unavoidable arising from the examination. The full records shall be handed to the Architect upon completion.

Detailed Method Statement
Based on this document and the results of the contractor's preliminary inspection, the contractor will prepare a detailed method statement covering all aspects of the works. He will be required to submit this statement to the Architect before any works is put in hands and to adjust, amend and revise the statement until the Architect is satisfied that is offers the most appropriate methodology for the works and approves the statement. It should be noted that it will be necessary for the contractor to further adjust, amend and revise the statement as works progress to take account of particular matters encountered during the works. Such alterations will be subject to the same approval process as the original statement. Once the statement, or alterations to the statement have been approved, the contractor may embark on the works, however, such approvals shall not relieve the contractor for any liability for unavoidable damage to the items.

Tests
Should the contractor feel that, in order to prepare his detailed method statement, it would be necessary to undertake test disassembly or removal operations, he will be permitted to do so with the prior approval of the Architect and under the constant monitoring of Architect's representatives. The Architect will co-operate with the contractor in designating the most appropriate items to be the subject of such tests. However, if any test is deemed to be causing damage to any item, it must be stopped immediately upon the Architect's request to do so. In such cases, an alternative item may be designated for test if the Architect deems such a course of action is appropriate.

Records
All items shall be fully recorded by photograph, highlighting all extant damage to the items and any other means considered necessary to properly record the extant appearance and condition of the items. The Contractor shall include for all costs in connection with the proper photographic recording of all necessary items including ceilings, walls, tiling, stonework and repair works to same. The contractor will be held responsible for any damage not recorded before removal or disassembly. The precise location shall be recorded and coded so each item or dismantled part of each item can be precisely located. This code shall be marked on each item or dismantled item by such means as cannot be accidentally removed but can be easily removed without blemish upon completion of the repairs at a later stage. Similarly, each individual disassembled part of an item shall be coded so that its relationship to adjoining parts can be precisely identified and recorded on drawings, photographs or other approved means. Two copies of the above records shall be handed to the Architect upon completion of these works.

Detailed Inspection
Before commencing disassembly or removal and following the approval of the Detailed Method Statement, the contractor shall very carefully examine the item to confirm or otherwise the accuracy and effectiveness of his proposed method. The Contractor's attention is drawn to the fact that items may have different methods of assembly or that individual parts may differ from those already disassembled or removed and he will be required to adjust his work methodology to accommodate these variations. He will be require to undertake such detailed inspection on a continual basis during the complete disassembly and removal operations.

Damage
Any damage not recorded before disassembly and removal or arising from disassembly and agreed with the Architect as unavoidable, shall be the responsibility of the contractor. He will be required to repair the damage at his own expense or to reimburse the Architect for the

cost of such repairs by means of deductions from any payments made by the Architect to the contractor.

Repairs
When all of the components are ready for inspection, the Contractor shall, in conjunction with the Architect. He shall prepare all necessary full sized details to illustrate each and every type of repair and agree the details with the Architect before commencing the repair operations. All repairs shall be executed as specified later in this document. The Contractor shall note that existing repairs shall be undone and remade if the standard is not acceptable or may be left if the standard is acceptable. The repaired work shall be finished to match the original.. All softwood originally intended to be unfinished shall remain unfinished. All moving or movable parts shall be checked and repaired as necessary to ensure proper operation.

Reinstatement
Reinstatement shall be undertaken in the reverse order or removal. Great care shall be taken to ensure that each item and component is reinstated in its original location. Any damage caused by the reinstatement shall be made good or replaced at the Contractor's expense to the Architect's satisfaction. Any damage to the finishes shall be repaired in such a manner that the repair is not visible.

1.3. General Conservation Methodology

1.3.1. Protection Of Existing Structures And Materials

The Contractor shall ensure that no damage occurs to the Existing Structures as a result of the execution of the Works.

1.3.2. Protection Method Statement

The Contractor shall prepare a site specific method statement detailing the proposed protection measures to be implemented in respect of the Existing Structures. This shall include, as a minimum, details of the following:

- Measures to ensure protection of the existing roof structure and materials during the course of the Works;
- Measures to ensure protection of existing building fabric, both external and internal, during the course of the Works;
- Measures to prevent water ingress during execution of the Works;
- Proposed method of access to roof Areas – both during the Construction Period and Service Period;
- Measures to ensure the stability and protection of Existing Structures during repair and replacement works to the structural fabric of the Existing Structures; and
- Details of other measures required to address Site specific issues.

The Conservation Architect shall review all such method statements for compliance with conservation best practice.

1.3.3. Protection And Storage

The Contractor shall ensure that retained floors along the main construction route must be protected.

Storage of builder's equipment and materials must be in designated compound Area/s. While works are underway, equipment and materials being transported around the Project Facility, temporarily stored and used, must be carefully positioned so that retained historic fabric and surfaces are not damaged.

1.3.4. Movement Of Equipment And Material

Transport & erection of scaffolding poles / planks pose a particular threat to fabric. These and all long items such as floor boards must be carried by minimum of two operatives at all times to ensure no damage and impact to fabric.

Loading
Positioning of any removed or stored materials shall not overload the existing structure.

Fixing to Historical Fabric
Scaffolding and working platforms must be independently supported and may not be fixed to the Existing Structures. Full plywood protections must be provided between scaffolding supports and retained historic flooring / paving of Existing Structures.

Specialist Contractors
The Contractor shall ensure that all parties engaged to undertake works to Existing Structures are competent to undertake the elements for which they are engaged. Contractors must have the relevant training and experience to carry out specialist works within historic buildings.

1.3.5. Works Methodology

The Contractor shall prepare a Site specific method statement detailing the proposed methodology and sequencing to be implemented in respect of the retained fabric of the Existing Structures.

The methodology shall also describe how mitigation measures set out in the conservation impact assessments forming part of the Planning Decision are complied with.

1.3.6. Recording

The Contractor shall clearly and comprehensively record all Areas opened up within Existing Structures through the use of good digital photographs (minimum 10.1MP). Photographs shall record all principle features uncovered including architectural and structural elements, service routes, chases, floor voids and areas that will be closed up. As-built record drawings are to be provided to the Authority at the completion of the works including with referenced digital photographs.

1.4. Extent of Conservation Works

The following is an outline of the work to be carried out. Please refer to drawings, schedules and specifications for more detailed descriptions of the proposal.

It is proposed to salvage some items of architectural heritage interest within the site. These are as follows:

- Surviving historic brickwork at Block D.
- Surviving historic stonework, including cills, coping stones and the Gibbsian doorway, all at Block D.
- Surviving historic slates and ridge tiles at Block D.
- Surviving encaustic floor tiles at the entrance hall to Block D.
- Surviving cast-iron rainwater goods to Block D.

Section 2 Specifications

2.1. Taking Down and Removals 9

2.1. Taking Down And Removals.

2.1.1. Taking Down And Removals.

Code of Practice
The works shall comply with the requirements of B.S. 6187.

Taking Down Works
The works may be undertaken by the Main Contractor provided he can demonstrate that the workforce employed on the site has the skill and experience to complete the works without damage to the adjoining structures retained or a specialist approved by the Architect and/or Engineer.

No portion of the works shall be sub-let without the prior written approval of the Architect.

Should approval to sub-let be given it will not relieve the Contractor of his responsibility under this contract and any sub-contractor must accept fully the conditions of contract and work in accordance with the Specification. Furthermore, the Architect shall be empowered to instruct the sub-contractor who will in turn carry out such instructions as if he were the Contractor.

Nature of Site
The Contractor is specifically informed of the restricted and confined nature of the site, the proximity of other buildings and the special nature of the adjacent buildings. All reasonable measures shall be taken to ensure the minimum disruption to all of these and to the need for express specific consent regarding any proposed works within adjoining sites (or buildings).

All plant and equipment to be used in taking down shall be appropriate to the confined location and the sensitive nature of the works.

The Contractor is specifically informed of the historical nature of the site and will be obliged to report any finding which may be of historical interest to the Architect and Structural Engineer and shall await inspection by Archaeologist to assess the significance of any such finding prior to removal or further disturbance of same. In addition, the Contractor shall note that any works which would disturb the ground or other archaeological strata will be the subject of constant inspection by an Archaeologist appointed by the Employer. The Contractor will be required to co-operate with the Archaeologist and to suspend or re-programme the order of the works to facilitate archaeological investigation that may be deemed necessary by the Archaeologist. The Contractor will be deemed to have taken all the matters into account at the time of tender and no extras will be allowed for his failure to do so.

Superintendence
The Contractor shall give all necessary personal superintendence during the execution of the works and keep constantly thereon a competent general foreman with power to act in the Contractor's absence and for all purposes as his general agent.

Survey
Before starting work, the Contractor shall examine all available information, and shall carry out a survey of the structure(s), site and surrounding area and submit a survey report and method statement to the Architect and Structural Engineer covering all relevant matters listed

below and set out in the relevant Health and Safety Authority Guidance Notes and the relevant clauses of B.S. 6187:

The form, condition and removal methods of the structures.

The form, location and removal methods of any toxic or hazardous materials.

The type and location of adjoining or surrounding premises which may be adversely affected by noise, vibration, dust or removal of structure.

The identification and location of services above and below ground.

Investigate risks
In accordance with BS 6187, clause 4, the Contractor shall investigate the features of the structure to determine if shock of vibration could damage the buildings being retained, surrounding building, equipment contained in the buildings, buried services and check for the existence of toxic of flammable substances or asbestos. In addition, the Contractor shall decide which portions of the existing structures need to be secured.

Bench Marks
Report to the Architect any bench marks and other survey information found on structure(s) to be taken down. Do not remove or destroy unless specifically instructed.

Feature(s) to be retained
All structure, components and features not specifically identified for removal are to be kept in place and adequately protected.

Insurance
As provided in the contract under insurance clauses, the Contractor shall prior to commencement of the works obtain the Employer's approval for all insurances. Such insurances shall indemnify the Employer against all claims arising out of:

(1) Collapse, subsidence, vibration or weakening of supports.

(2) Liability assumed under the Contract.

(3) Use of mobile or lifting plant.

(4) Claims for consequential damage and consequent loss

(5) Fire.

(6) Public and Employers Liability lnsurances against injury to persons and property as required by the contract.

(7) All Risks Insurance in the joint names of the Employer and the Contractor for the full value of the works and ancillary items required by the contract.

(8) Collapse, subsidence, vibration or weakening of supports not arising out of the negligence of the Contractor.

Service Regulations
Any work carried out to or which affects new or existing services must be in accordance with the bylaws or regulations of the relevant statutory authority.

Location of Services
The Contractor is specifically informed that live services cross the site and in its vicinity, and he shall ensure that these are investigated, located and adequately protected during the course of the work. Locate and mark the positions of services affected by the work. Arrange with the appropriate authorities for the location and marking of the positions of the mains services.

Existing Services
Disconnect and remove existing services made redundant by the works. Carefully protect all services to be re-used. All structure, components and features not specifically identified for removal are to be kept in place and adequately protected.

Drains in Use
Protect rainwater pipes, hopperheads, vent pipes and fittings still in use
and ensure that they are kept free of debris at all times. Make good any damage arising from demolition works and leave clean and in working order at completion.

Old Materials
In general, old materials removed by the works shall become the property of the Contractor, who will allow credits for any salvage value against the costs of the works. However, materials such as stone, slate etc. which are to be salvaged for re-use shall remain the property of the Employer and shall be sorted and set aside for re-use as specified later. In addition, items of finishes, such as the various joinery elements, access hatches, doors and surrounds etc. shall be carefully removed where necessary, protected as necessary to ensure no damage occurs, and set aside for re-use.
Any coins, fossils, curiosities, money or articles having a monetary or intrinsic value (including historic, artistic or other values) other than ordinary building materials shall become the property of the Employer and must be handed over to the Employer.

Materials to be Salvaged for Re-use
All existing masonry, slate, joinery elements, etc., to be removed and to be retained for re-use shall be carefully removed by hand in such a manner that no damage is occasioned to the components being removed. Under the direction of the Architect, the removed materials shall be carefully sorted by and the material for re-use shall be carefully placed on pallets. These materials shall be carefully cleaned to remove old mortar, plaster, render etc. at the time of sorting so that minimal works are necessary during re-building operations. No material shall be disposed of until such time as its disposal is approved by the Architect and, if required, the Contractor will be required to repeat the sorting operation should any material suitable for re-use be discovered in the materials designated for disposal. The pallets shall be located close to the works so that handling and transport is kept to a minimum and the sorting, cleaning and rebuilding operations minimise any further damage during transport or other re-location of the materials. Samples of the original mortars, renders and plasters shall be retained for analysis. The Contractor shall arrange for samples designated by the Architect to be forwarded to an approved laboratory for

analysis of all properties including shape, sizes, texture, grading and binder type and proportion which will be used to replicate the original mixes.

All material unsuitable for re-use shall be retained on site until its removal is approved by the Architect. Once this approval is given, it shall be immediately removed from the site. Similarly, any material found unsuitable during the rebuilding operations shall be piled according to type and only removed when the Architects has given his approval.

Taking Down Methods
The Contractor shall only employ such methods that cause no shock or vibration to adjacent buildings and equipment or buried services being retained. In general, sections being taken down should be disconnected from sections being retained by hand methods before any removal is undertaken in order to prevent any accidental damage to the fabric or structure retained. The use of explosives is forbidden.

The Contractor should note the particular difficulties in connection with the taking down works and make his own assessment as to the most appropriate methods to be used at the time of tender. He should note that it may be necessary to undertake the removal works in part or in total by hand demolition.

Where necessary, leave adequate temporary support and protection at each stage and arrange for inspection by the Architect. Maintain and alter temporary supports and protection as necessary as work progresses.

Arrange inspection and approval of a suitably qualified where any works will involve Mechanical and/or Electrical services.

Take down structure(s) causing a minimum of damage to adjacent property and leave no unnecessary or unstable projections.

Report to the Architect any defects exposed or becoming apparent in adjoining property.

Promptly repair any damage caused to adjoining property by demolition work. Make good to ensure safety, stability, weather protection and security.

Structure(s) to be retained
Adequately protect parts of existing structure(s) which are to be kept in place

Cut away and strip out the minimum necessary and with care to reduce the amount of making good to a minimum.

Prevent debris from overloading any part of the structure which is not to be taken down.

Services which are to remain
Notify the Architect and service authority of any damage. Make all arrangements for repair to the satisfaction of the Architect and service authority. Bear any costs arising.

Method Statement
The Contractor will be required to prepare a method statement detailing the precise details of his proposals for the demolition works and submit same to the Architect for this approval before

the work is put in hands. He will be required to modify the method statement as necessary until such approvals are obtained. Such approvals, once given by the Architect shall not relieve the Contractor of any responsibility for any aspect of the taking down works including safety, preventing damage to fabric retained, preventing damage to materials to be salvaged for re-use etc. etc..

Schedules of Works and Programme.

The Contractor shall submit to the Architect:

(a) A Schedule of his intended working procedures and taking down works for approval.

(b) An itemised programme chart. This shall be kept continuously up to date during the progress of the works.

The Contractor shall include for the erection of shores and ties where required. He shall satisfy himself that the proposals are adequate, and shall include for, and put forward his alternative proposals if he feels they are not. Drawings and details of such alternative proposals shall be submitted for comment by the Architect in advance.

All propping, needling and shoring required shall be designed, erected (and, where applicable, removed) in accordance with latest codes of practice

No approval issued by the Architect shall relieve the Contractor of his responsibility for the safety of the general public, site personnel and adjoining properties during the course of the demolition works.

Safety Precautions

Take all safety precautions necessary, including those noted in BS 6187, Clause 5, and relevant Health and Safety Authority Guide Notes. Site staff responsible for supervision and control of the work are to be experienced in the assessment of the risks involved and in the methods of taking down to be used.

Taking down in confined areas and adjacent to structure and fabric to be retained shall be carried out by hand. On no account shall the buildings, scaffolding etc., become overloaded by debris etc. The site shall be kept secure at all times.

General Precautions to Avoid Damage

The Contractor shall carry out the work in such manner as to cause as little inconvenience as possible to the owners and/or occupants of the adjoining premises or the public and shall include in his tender for any costs such as the provision of water for sprinkling the debris to keep down dust. In particular, noise and vibration shall be kept to a minimum, and the Contractor shall take all necessary steps to abate these to avoid inconvenience to others.

The Contractor shall protect adjoining properties roads and footpaths from damage and provide adequate support to them at each stage of taking down, and adapt and re-arrange such support as necessary from time to time. He shall provide all necessary temporary shorings, screens and coverings.

The Contractor shall make good at his own expense any damage done to public roads and footpaths which may be caused by his operations.

The Contractor shall provide all necessary watching and lighting including lights on hoardings or scaffoldings projecting over public footpaths during the progress of the works and shall be responsible for any damage arising from insufficient watching or lighting.

Temporary Supports
The Contractor shall be responsible for the design and provision of all necessary temporary supports, needling, shoring, raking shoring, horsing etc.

Nuisance
The Contractor shall be responsible for the prevention of all nuisance arising from the works, in particular, noise, dust etc. To this end, all dry material shall be periodically dampened to prevent dust rising and no debris shall be allowed to be deposited on the public roadway or adjoining building either during the works and transport of debris from the site.

Health Hazard
Take adequate precautions to protect site operatives and the general public from health hazards associated with dangerous fumes and dust arising during the course of the works.

Debris.
All debris, demolished materials etc., shall be removed from the site and deposited in an approved site provided by the Contractor.

Burning Material
On no account will the burning of material be permitted on site,

Gas or Vapour Risks
Take adequate precautions to prevent **fire** or explosion caused by gas or vapour.

Decayed Timber
All decayed or infested timber shall be carefully removed to prevent the spread of spores or larvae, immediately wrapped before removal from the building and disposed off site. Similarly, other materials adjoining the site of such decayed timber shall, if necessary, be carefully removed and disposed off site or treated with an approved chemical to prevent contamination spreading to adjoining retained structures.

Adjacent Structures
Areas for taking down shall be disconnected from areas being retained by hand by means least Rely to cause damage to the retained structures and approved by the Architect. All unnecessary projections shall be removed.

Make Good
The Contractor shall make good as required to ensure safety stability and security of the retained buildings and provide such weather protection to the retained structures as may be necessary.

Protection
Provide all necessary protection as required under BS 6187, Clause 5. In addition, the Contractor shall provide all necessary temporary screens etc., as required for safety, control of noise and dust, temporary weather protection, security etc., or to facilitate the works.

Partly Demolished Structure(s)
Leave partly demolished structure in a stable condition, with adequate temporary support at each stage to prevent risk of uncontrolled collapse.

Prevent debris from overloading scaffolding platforms.

Prevent access of unauthorised persons to partly demolished structure(s). Leave safe outside working hours.

Asbestos based Materials
Report immediately to the Architect any suspected asbestos based materials discovered during taking down work. Avoid disturbing such materials. Agree with the Architect / Engineer methods for safe removal.

Unknown Hazards
Inform the Architect of any unrecorded voids, tanks, chemicals, etc., discovered during taking down work. Agree with the Architect and Engineer, methods for safe removal, filling, etc.

Completion
Clear away all debris and leave the site in a tidy and safe condition on completion.

APPENDIX 14.6
RELEVANT EXTRACTS FROM ARCHITECTURAL HERITAGE PROTECTION GUIDELINES & DCC DEVELOPMENT PLAN

VOLUME III
APPENDICES TO ENVIRONMENTAL IMPACT ASSESSMENT REPORT

JUNE 2022

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Relevant Extracts from the *'Architectural Heritage Protection: Guidelines for Planning Authorities'* (2011) and the Dublin City Council Development Plan 2016-22.

Architectural Heritage Protection Guidelines

3.10.2 Proposals for demolition

Where it is proposed to demolish a structure that contributes to the character of an ACA or to demolish behind a retained façade, the onus should be on the applicant to make the case for demolition. The planning authority should consider the effect both on the character of the area and on any adjacent protected structures. When it is proposed to demolish an undistinguished building in an ACA, the proposed replacement should not be of lesser quality or interest than the existing one and should not adversely affect the character of the area.

3.10.3 The applicant and the planning authority should consider the material effect that that proposed demolition may have on the character of the ACA:

a) Does the structure (or part of the structure) to be demolished contribute to the character of the area?

b) What effect would removal of the structure have on the setting of other structures in the area, the balance of an architectural composition or the setting of any adjacent protected structures?

c) Would the character and special interest of the whole of the structure or of the ACA be diminished by the demolition of a part?

d) Has the extent and potential impact of the proposed demolition been minimised?

e) Are there alternatives to demolition, even where the structure is in poor condition?

f) In the case of accidental damage, could demolition be avoided and the structure saved by carrying out repairs or providing temporary support or shelter to the fabric?

g) Is partial demolition justifiable in the interests of the retention of the remainder of the structure? h) If the special interest of the structure lies in its largely unaltered state, could permission be given to demolish any part of it without damaging that special interest?

i) Has the incorporation of the structure (or part of the structure) into a new development on the site been given adequate consideration?

j) What are the merits of alternative proposals for the site, taking into consideration the development plan objective to conserve the character of the area?

6.7.3 Recording as a condition of permission

The demolition of a protected structure, or of elements which contribute to its special interest, may only be permitted in exceptional circumstances. Where the dismantling or demolition of all or part of a protected structure is permitted, it may be a condition of permission that a record be made of the structure prior to the commencement of any works It should be considered that this is a permanent record which will have to substitute for the structure itself and should be capable of detailed analysis and interpretation.

Such archive-standard drawings should be produced on polyester film, linen, acid-free or rag paper, using permanent black ink. In these circumstances, dyeline prints are not acceptable, nor are copies of computer-aided design files. In addition to the full set of drawings, copies of original survey notes should be included with the report, as should copies of relevant earlier drawings, photographs with negatives (preferably dated), plans and maps.

6.7.5 Where a photographic record is to be made of all, or part of, a structure, the photographs should be of high quality. The use of a professional photographer should be considered and, where appropriate, the use of recording techniques such as rectified photography could be required. Black-and-white photography should be used when creating a permanent archive-quality record. Where it is essential to make an archive record of the colour of features, such as old or interesting wallpapers or painted decoration, colour slide film should be used and should be considered to be a supplement to, not a replacement for, black and white photography. Historic photographs should be identified by their archive name and negative number. One or more sets of legibly-sized prints should be included (for example, 20cm x 25cm).

6.7.6 Architectural salvaging as a condition of permission
The Act provides for making a condition of planning permission, where appropriate, the salvage of elements of special interest of a protected structure, or any element of a protected structure that is about to be altered or removed The removal of important or decorative elements should only be permitted where the developer has indicated how these elements will be used or maintained in the future, which, in order to mitigate the impact, should be relocated within the structure wherever possible. In such a case, the state of the structure or of the relevant interior spaces before dismantling should also be recorded, and two copies of the report sent to the planning authority (one for forwarding to the Irish Architectural Archive). All items permitted for removal and reinstatement should be tagged, photographed and stored securely, preferably on site.

6.7.7 In the case of the industrial heritage this may present particular problems, and expert advice should be sought, for example from the Industrial Heritage Association of Ireland.

Demolition 6.8.11 The Act provides that permission may only be granted for the demolition of a protected structure or proposed protected structure in exceptional circumstances.25 Where a proposal is made to demolish such a structure, it requires the strongest justification before it can be granted permission and will require input from an architect or engineer with specialist knowledge so that all options, other than demolition, receive serious consideration. 6.8.12 It may happen that the special interests of a protected structure have been damaged or eroded to an extent that demolition is permissible. In such cases, in order to avoid setting a precedent of permitting the demolition of a protected structure, it would be preferable to first remove it from the RPS. Any such cases should be carefully considered, as deliberate erosion of character or endangerment may be more appropriately tackled by enforcement action rather than permitting demolition.

6.8.13 Caution should be used when considering proposals to demolish parts of protected and proposed protected structures as these parts may be of importance to the cumulative historic interest of a building. Where partial demolition of a protected structure is proposed, the onus should be on the applicant to make a case that the part – whether or not it is original to the structure – does not contribute to the special interest of the whole, or that the demolition is essential to the proposed development and will allow for the proper conservation of the whole structure.

6.8.14 There may be cases where an existing addition is of little architectural quality, or is even damaging, to the original architectural design. This may arise, for example, where a porch addition has obscured a fine entrance doorway or where a poor-quality extension has unbalanced a good symmetrical façade. Partial demolition may be permitted in such cases, providing it can be achieved without any adverse structural or architectural impact on the protected structure.

6.8.15 Where a protected structure has suffered fire or other accidental damage and substantial demolition is necessary, the elements that contribute to its special interest that have survived should be retained in any reconstruction or repair.

6.8.16 The demolition of a protected structure or a proposed protected structure may be permitted if it has become a dangerous structure. However, if a protected structure has become dangerous, every effort should be made to retain its special interest by specifying works that limit, as far as possible, material damage or alteration to the character of the structure.

APPENDIX 14.7

INDUSTRIAL HERITAGE ASSESSMENT OF THE BAILEY GIBSON SITE, PREPARED BY IAC ARCHAEOLOGY, 2019

VOLUME III

APPENDICES TO
ENVIRONMENTAL IMPACT ASSESSMENT REPORT

JUNE 2022

IAC Archaeology

INDUSTRIAL HERITAGE ASSESSMENT AT THE BAILEY GIBSON SITE, SOUTH CIRCULAR ROAD, DUBLIN 8

ON BEHALF OF: CWTC MULTI FAMILY ICAV ACTING SOLELY IN RESPECT OF ITS SUB FUND DBTR SCR 1 FUND

AUTHOR: ROB GOODBODY

JULY 2019

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ABSTRACT

Irish Archaeological Consultancy Ltd has prepared this report on behalf of CWTC Multi Family ICAV acting solely in respect of its sub fund DBTR SCR 1 Fund to ascertain what elements of industrial heritage significance may be salvaged from the Bailey Gibson premises, South Circular Road, Dublin 8 (OS Dublin Sheet 18). The report was undertaken by Rob Goodbody of IAC Ltd.

The report finds that there is great deal of equipment, fittings, fixtures and services on the site that has no industrial heritage significance and that need not be salvaged.

There are elements on the site that are worthy of being salvaged for reuse and this includes cast-iron rainwater goods and some elements from brick buildings. It is also suggested that consideration be given to retaining the brick chimney.

CONTENTS

ABSTRACT I
CONTENTS II
List of Figures iii
List of Plates iii
1 INTRODUCTION 1
1.1 General 1
1.2 The Development 1
1.3 Planning history 1
2 METHODOLOGY 3
3 RESULTS OF FIELD INSPECTION AND ANALYSIS OF PHOTOGRAPHS 4
3.1 Photographs: Items not for salvage 7
4 REFERENCES 11

LIST OF FIGURES

Figure 1: Location of proposed development .....**Error! Bookmark not defined.**

LIST OF PLATES

Plate 1: Older brick buildings 4
Plate 2: Gibbsian doorway.....5
Plate 3: Encaustic floor tiles 5
Plate 4: Chimney 6
Plate 5: Steel roof trusses.....7
Plate 6: Steel roof trusses.....7
Plate 7: Streel beams and stanchion.....8
Plate 8: Steel trusses and corrugated iron cladding 8
Plate 9: Corrugated fibre-cement roof covering and sliding door 9
Plate 10: Steel windows.....9
Plate 11: Non-traditional rainwater goods 9
Plate 12: Cast-iron downpipe 10
Plate 13: Cast-iron downpipe within warehouse 10

1 INTRODUCTION

1.1 GENERAL

This report has been prepared in response to a request for an assessment of the industrial heritage of the Bailey Gibson site in South Circular Road, Dublin 8 (Figure 1). In particular, the report is intended to identify what industrial heritage elements are of such significance that their retention may be required.

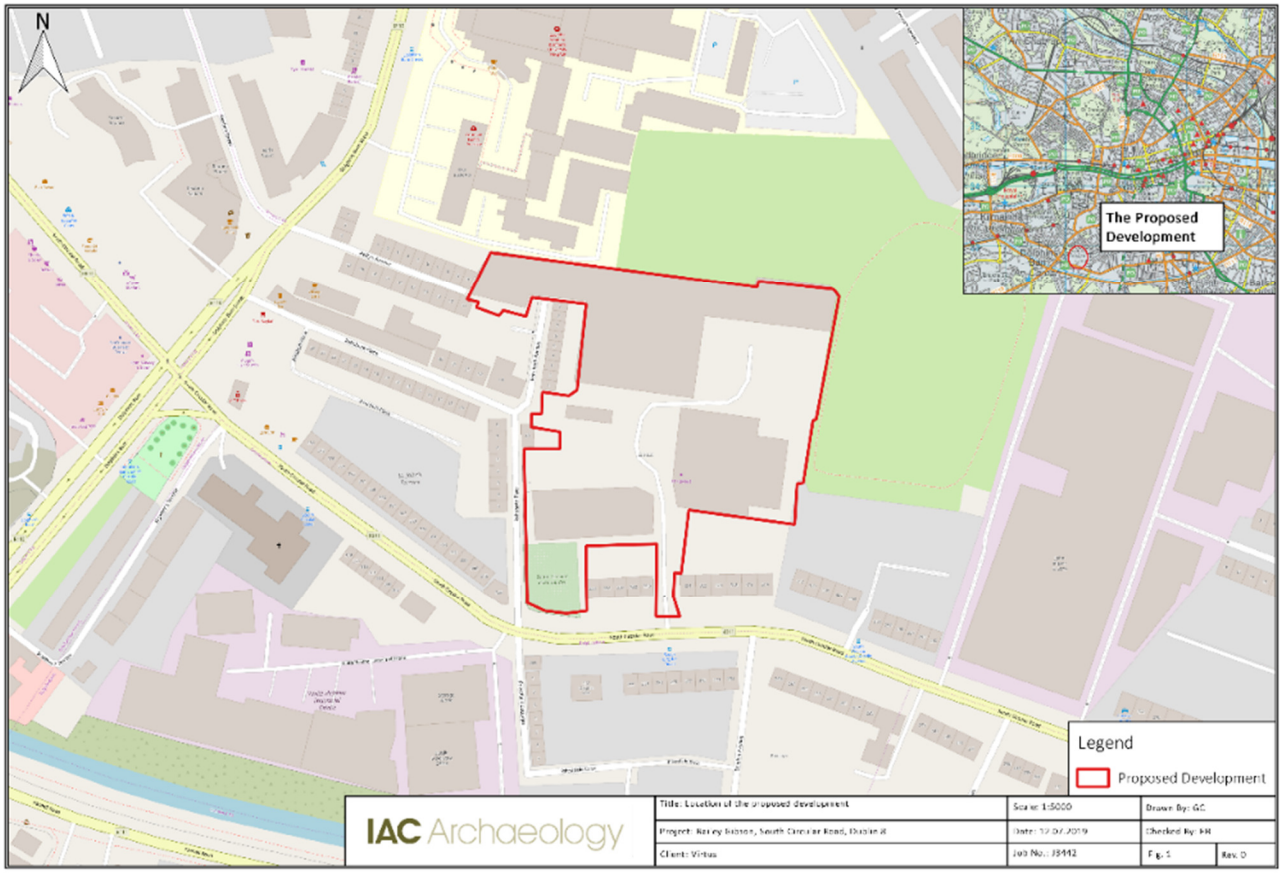

Figure 1: Location of proposed development

1.2 THE DEVELOPMENT

It is proposed to develop the Bailey Gibson site which will include the demolition of the buildings on the site.

1.3 PLANNING HISTORY

A planning application was submitted in 2006 seeking permission for the development of the combined Players-Wills and Bailey Gibson sites (planning authority reference 3130/06). A decision to grant issued from Dublin City Council and following an appeal to An Bord Pleanála permission was granted in April 2008 (An Bord Pleanála reference PL.29S.221190). The development then proposed included the demolition of all buildings on the sites, though the permission as granted following the appeal included

a condition that the front section of the former cigarette factory be retained, extending back three bays from the frontage.

A search of the Dublin City Council planning website has revealed that there is no copy of the planner's report or the decision notice, though the individual conditions attached to the decision to grant are available. An environmental impact assessment report was submitted with the application, though most of it is not available on the website. One section that has been made available includes the archaeology and cultural heritage report and the non-technical summary is also available. From examination of those documents it seems that no architectural heritage assessment of the buildings was submitted.

The direction of the board and the order issued by Bord Pleanála are available on that authority's website, though the inspector's report is not available – though these reports are normally made available through that website. It is clear from the direction and the decision that it had been the inspector's recommendation that permission be refused, though in the absence of the report it is not known what the reasons were for that recommendation.

In the absence of any report from the planning authority's planner or conservation officer or from the board's inspector it is difficult to be certain what was the thinking behind the decisions and whether any reference was made to architectural heritage or to the possibility of salvaging any materials or equipment. No condition requiring such salvage was included on the initial decision by the planning authority or in the final decision by the board, though both required a photographic survey of the cigarette factory to be made and lodged with An Bord Pleanála.

The planning permission granted in 2008 expired in 2013 without being implemented.

2 METHODOLOGY

A visit to the site was undertaken on 14th June 2019 to examine the exterior of the buildings and some interiors, where access was possible. This report has been compiled from information gained on that visit.

3 RESULTS OF FIELD INSPECTION AND ANALYSIS OF PHOTOGRAPHS

The Bailey Gibson premises has its origin in the late nineteenth century when William Bailey was a rope and twine maker living at Reheboth Place and with a factory at Harold's Cross. In about 1900 the partnership of Bailey, Son and Gibson was established at South Circular Road and Reheboth Place, while Bailey & Co were also on the site as manufacturers of tents, flags, ropes and other products.

The Bailey Gibson site consists of a number of buildings of different periods, mostly of an industrial nature and mainly constructed with concrete. At the time of the inspection there was a large quantity of material in the buildings and in the open on the site. For the most part this is the stock-in-trade of Bailey Gibson and not fixtures and fittings associated with the buildings and hence it is not taken into account in this report. However, this material will be visible in photographs.

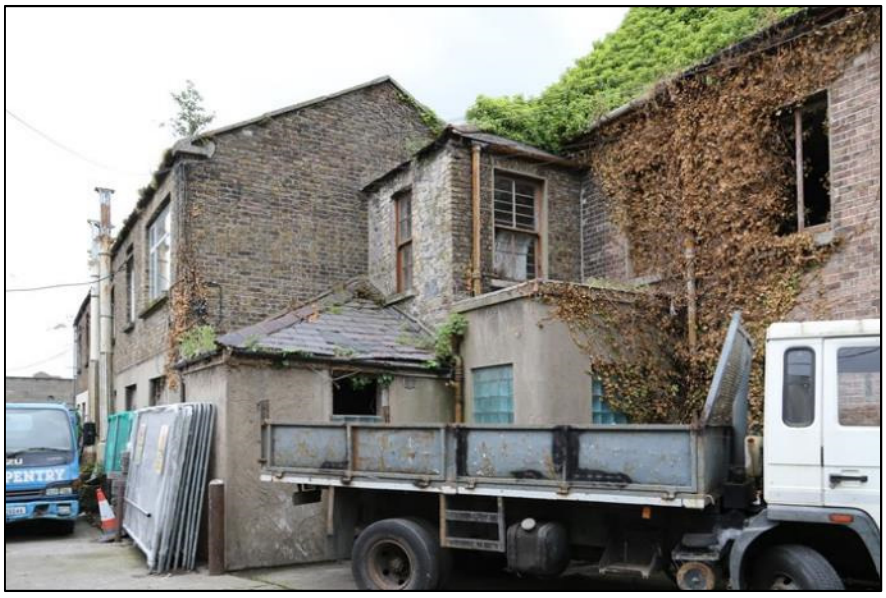

Plate 1: Older brick buildings

At the access to Reheboth Place there are some older brick-built buildings (plate 1). If these are to be removed as part of the development there are elements that are likely to be in reasonable condition and suitable for salvage. This includes a Gibbsian doorway, though the building to which it is attached seems to be of later date than would be expected with such a doorway, to judge by the quality of the bricks, and the doorway may have been salvaged or reused from a previous building.

Those parts of the building that were available for inspection have been heavily altered inside and little remains of internal features. There is an area of encaustic floor tiles in one location.

- Bricks
- Slates and ridge tiles

- Stone copings and kneelers
- Stone sills
- Gibbsian doorway (plate 2)
- Encaustic tiles (plate 3)

Plate 2: Gibbsian doorway

Plate 3: Encaustic floor tiles

Through the rest of the site the buildings are of a much later date, generally built of concrete, as noted above. There is very little in the building fabric that would be of heritage significance. One element that is of note is a brick chimney (plate 4). It should be noted that the brick chimney of the former Swastika Laundry in Ballsbridge has been retained as part of a development, as have the former gasworks chimney in Hibernian Road, off Sir John Rogerson's Quay and the former Dublin Laundry site in Milltown. In Donnybrook there is a brick chimney at the former Magdalen Laundry site in The Crescent and it is proposed to retain it as part of a development on the site. Unlike these four examples, the chimney at the Bailey Gibson site is not freestanding and the lower section of it is either concrete or rendered, rather than the brick continuing to ground level. Consideration should be given to the practicality of retaining the chimney.

Plate 4: Chimney

Amongst the structural elements and other features of the buildings on the site, the following would not be considered to be of heritage significance or worthy of being salvaged:

- Steel roof trusses (plates 5, 6 and 8)
- Steel beams and stanchions (plate 7)
- Corrugated-iron roof coverings and cladding (plate 8)
- Corrugated-fibre-cement roof coverings and cladding (plate 9)
- Profiled steel roof coverings and cladding
- Sliding doors and runners (plate 9)
- Steel windows, including roof lights (plate 10)
- Steel, fibre-cement, aluminium and PVC rainwater goods (plate 11)

In addition to the elements of the older brick buildings that have been listed above, the following are of industrial heritage significance and worthy of being salvaged for reuse:

- Cast-iron rainwater goods, including downpipes within buildings (plates 12 & 13)

3.1 PHOTOGRAPHS: ITEMS NOT FOR SALVAGE

Plate 5: Steel roof trusses

Plate 6: Steel roof trusses

Plate 7: Streel beams and stanchion

Plate 8: Steel trusses and corrugated iron cladding

Plate 9: Corrugated fibre-cement roof covering and sliding door

Plate 10: Steel windows

Plate 11: Non-traditional rainwater goods

Plate 12: Cast-iron downpipe

Plate 13: Cast-iron downpipe within warehouse

4 REFERENCES

Thom's Directory, various editions

CARTOGRAPHIC SOURCES

Ordnance Survey, various editions

ELECTRONIC SOURCES

http://www.dublincity.ie/swiftlg/apas/run/WPHAPPDETAIL.DisplayUrl?theApnID=3130/06&theTabNo=2&backURL=Search Criteria > Search Results accessed 11th July 2019

www.pleanala.ie, accessed 11th July 2019.

APPENDIX 14.8

ARCHITECTURAL HERITAGE ASSESSMENT OF THE FORMER PLAYER WILLS FACTORY, BY DAVID SLATTERY CONSERVATION ARCHITECTS, 2020

VOLUME III

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ENVIRONMENTAL IMPACT ASSESSMENT REPORT

JUNE 2022

ASSESSMENT OF THE ARCHITECTURAL/HISTORIC SIGNIFICANCE OF

THE FORMER PLAYER WILLS FACTORY SOUTH CIRCULAR ROAD, DOLPHIN'S BARN, DUBLIN 8,

AND

ASSESSMENT OF THE IMPACT OF THE PROPOSED REDEVELOPMENT OF THE SITE.

Figure 1: 1955 Aerial photograph of the former Player Wills Factory NPA MOR909.

March 2020

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Assessment Of The Architectural/Historic Significance Of The Former Player Wills Factory, South Circular Road, Dolphin's Barn, Dublin 8, And Assessment Of The Impact Of The Proposed Redevelopment Of The Site.

1. Introduction

This report has been prepared on instruction from Virtus PM, on behalf of their clients, Hines Ltd. It provides an assessment of the significance of the former Player Wills Factory, its setting and context, and identifies any associated special architectural and historic character and any other features which are of note. An evaluation of the chronology of the site is also included. In the preparation of this report the site was evaluated and photographically recorded internally and externally. These photographs are appended to the report. The significance and character of the site has been assessed in accordance with the 2000 Planning Act and the DoAHG Guidelines on Architectural Heritage.

It should be noted that the subject building is not a Protected Structure. The building is included on the National Inventory of Architectural Heritage (rated Regional).

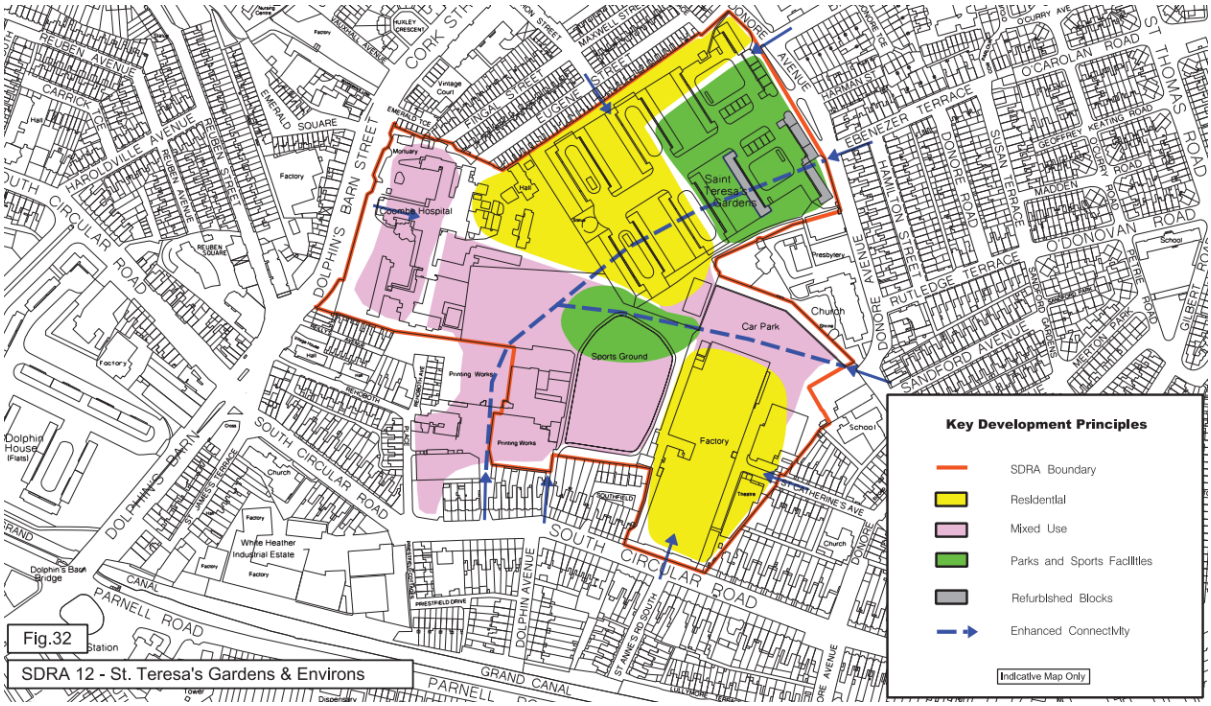

Figure 2: Extract from Dublin City Development Plan 2016-22, showing S.D.R.A. 12: St. Teresa's Gardens and Environs.

The subject site is located within a designated Strategic Development and Regeneration Area in the Dublin City Development Plan 2016-22, S.D.R.A. 12: St. Teresa's Gardens and Environs. The site of the former Player Wills site is noted in the 2016-22 DCC Development Plan as being a key site within the SDRA, and the development plan draws attention to a previous planning permission for the full redevelopment of the site (now lapsed).

2. History, Context, Typology

A full evaluation of the chronology of the subject site and of the building fabric has been carried out in the preparation of this report. This evaluation has been carried out with reference to a number of important resources. These include the following -

- Trinity College Map Library
- the National Library of Ireland
- the Irish Architectural Archive
- Dictionary of Irish Architects
- Pearse Street Library – Dublin City Archive
- Archinfo in UCD
- Britain from Above – Online Photographic Collection
- Irish Photo Archive – Online Photographic Collection
- Irish Times Archive
- Irish Newspaper Archive

The subject site is located along the South Circular Road, in the vicinity of Dolphin's Barn. Historic maps show that the area was in open fields throughout the 18th and much of the 19th centuries. Regarding the development of the South Circular Road, Christine Casey notes in her 2005 book "*Buildings of Ireland: Dublin*":

"Trustees for making a circular road were established by statue in 1763 in order to improve the principal city approaches and to reduce congestion. Subsequent acts of 1776 and 1778 permitted extensions of the route, and in the case of the South Circular the incorporation of existing streets (Harcourt, Adelaide, Mespil and Haddington roads) to complete a circuit from the Phoenix Park to the River Liffey. The South Circular runs for 4 ½ mils from Harrington Street to Islandbridge, with even numbering on the North side and odd on the South. The siting of the Richmond Penitentiary halfway along, planned from 1790 and begun in 1813, may have had an adverse effect on building development. Unlike the North Circular there are no 18th century buildings and precious few of Late Georgian or Early Victorian date… In the 1880s development spread West of Clanbrassil Street North of the former penitentiary, which was converted to a barracks in 1877."

The development of this site as a tobacco factory began in the early 1920s, following the creation of the Irish Free State. An Irish Times newspaper article on September 6th 1923 notes that *"one result of the establishment of the Irish Free State and the exercise of its functions of levying Customs duties has been to give an impetus to the building of tobacco factories in Dublin. Several new buildings are in course of erection, and others are being adapted to the manufacture of this commodity."* One of the new buildings noted in this article is the subject site, originally the tobacco factory for Messrs William Clarke and Son, Ltd. The phased development of the site can be roughly traced through various newspaper articles during the 1920s and 1930s. The full text of these articles is appended below.

Figure 3: 1916 Aerial Photograph of the subject site, prior to the development of the tobacco factory.

Development of the site commenced in 1923, with the first building on the site, Factory No. 1, being constructed to the northern end of the site, at a distance of 300ft from the South Circular Road. Four cottages were also constructed on the site at this time, to house English foremen who would be brought over to oversee the works. These cottages were in the north-eastern corner of the site, and appear to have survived until the mid-1990s. The architects for the works were Beckett and Harrington, in collaboration with the Engineer's Department of the Imperial Tobacco Company.

Beckett and Harrington was an architectural partnership between George F. Beckett and Cyril A. Harrington, formed in 1918. The practice was the appointed architect to the Munster and Leinster Banking Company, and designed a large number of bank branch buildings throughout the country. The list of their known works on the Dictionary of Irish Architects includes a large number of commercial, banking, and industrial projects, with some houses and other minor alteration works.

A description of the development is provided in the Building News section of the Irish Times, on September 6th 1923:

"One of the most important of the new tobacco factory schemes is that which has been started by Messrs Wm Clarke and Son, Ltd., on a site extending over seven acres on the north side of the South Circular road, near Donore Avenue. Three hundred feet back from the roadway about two hundred workmen are employed in the construction of the No. 1 factory, where Messrs Clarke hope within a short time to have several hundred Dublin worked employed in the manufacture of tobacco. The building covers three-quarters of an acre, is of the single-storey type, with north lights. It is constructed of County Dublin stock brick, has a frontage of 198feet to the South Circular Road, and runs 160ft to the north. It has been placed 300 feet back from the main road, because it is only the first section of a larger scheme of buildings which the firms contemplate, and it is probable that the space between the road and the No. 1 factory will ultimately be occupied by a much more extensive and imposing building than that now in course of erection.

The No. 1 factory, shown in our illustrations, is being constructed by Messrs McLaughlin and Harvey, Ltd., to the designs of Messrs Beckett and Harrington, architects, St. Stephen's Green, whose plans were prepared in collaboration with the Engineer's Department of the Imperial

Tobacco Co., Bristol. The cast-iron columns used in the constructional work were supplied by Messrs Tonge and Taggart. The steel principals carrying the roof were the work of Messrs J and C McGloughlin, Ltd., Great Brunswick Street. The factory is being roofed throughout with the well-known fireproof Poilite tiles, and the adjoining houses will be covered with the russet coloured Poilite Pantiles, which will give them a very picturesque appearance. The whole of the roofing is being fixed under the personal supervision of Mr Peter Kearney, 24 Eden Quay, on behalf of the makers. Mr. W. Sinnott Glenn, of 199 Great Brunswick Street, Dublin, secured instructions for the laying of 'Decolite' jointless flooring over the entire concrete surface of the factory floor. The colour will be dull red.

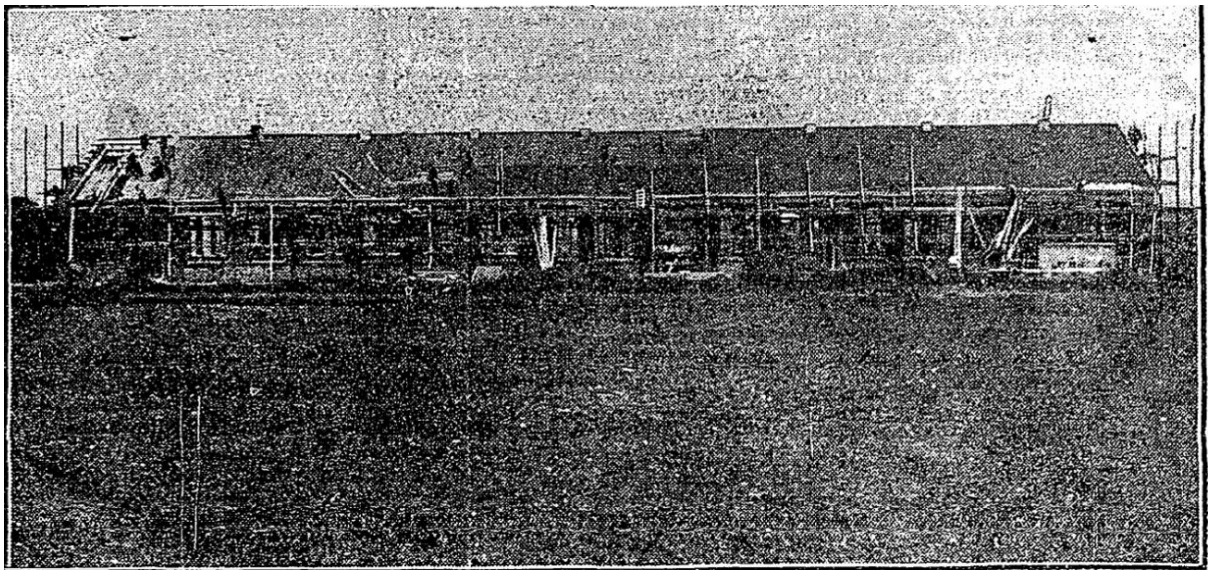

Figure 4: "The New Factory as seen from the South Circular Road", photograph from the Irish Times, September 6th 1923.

Adjacent to the factory four cottages are being constructed for the accommodation of the foremen who are to be brought across the Channel to give the necessary technical instruction to the Dublin workers, it being the intention of the firm to employ local labour for every possible post. Messrs Clarke at present manufacture tobacco in Liverpool, but their scheme provides for the complete removal of all manufacturing from the English City to Dublin and when the entire building scheme at the South Circular road is completed about a thousand people will be employed. The family of Clarke have had a long connection with Ireland, especially in the City and County of Cork, where several members have resided for a considerable period."

A second building, Factory No. 2, was constructed the following year, 1924. This second building comprised a large manufactory area, with a suite of offices to the front, along South Circular Road. A description of the development is provided in the Building News section of the Irish Times, on April 10th 1924:

"Having acquired a site extending over seven acres on the north side of the South Circular road near Dolphin's Barn, Messrs. William Clarke and Son first erected their No. 1 factory, which is now in full operation. This building was erected some 300 feet back from the main road, leaving space for the erection of a more substantial structure nearer to the South Circular road. Here No. 2 factory is now in course of execution, as shown in the photograph on this page.

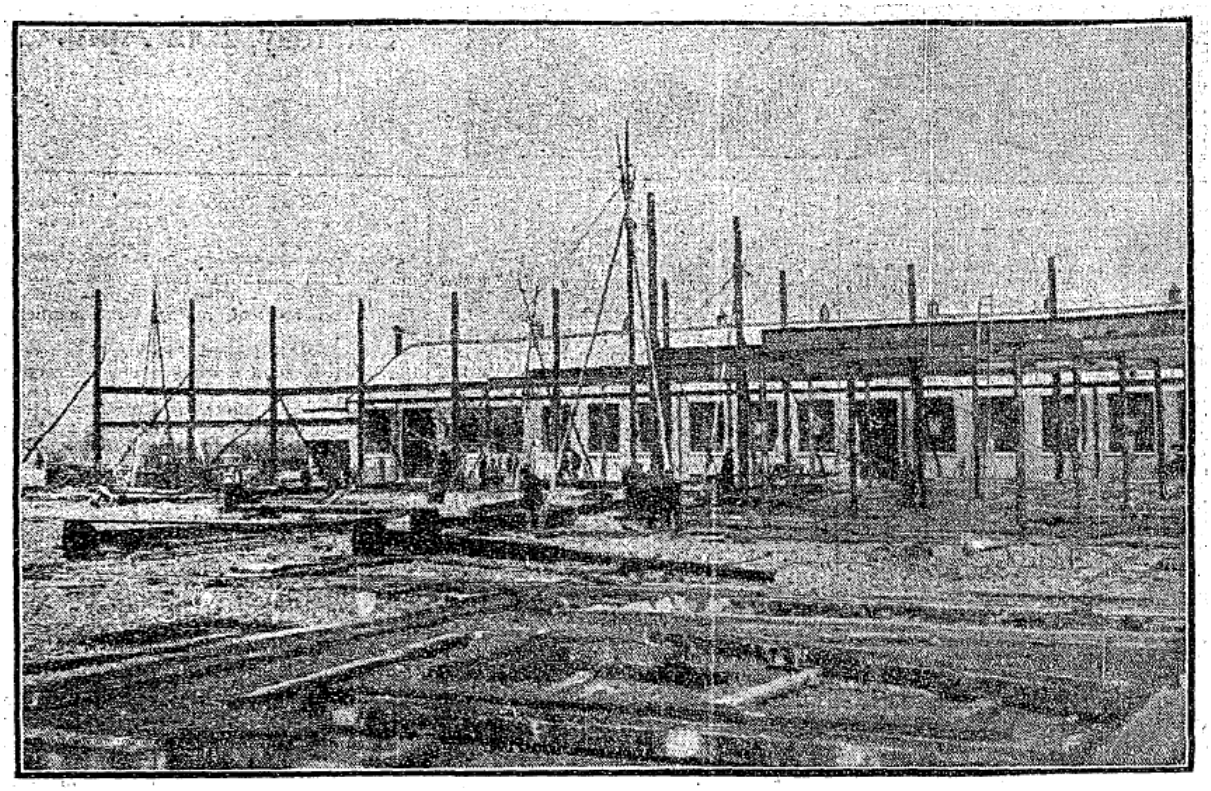

Figure 5: "This view shows the erection of the steel structure for the No. 2 Factory. No. 1 Factory is seen in the background", photograph from the Irish Times, April 10th, 1924.

The factory will be a two-storeyed building, 254 ft. long and 180ft wide. It is to be a steel frame structure with concrete floors, and a flat concrete roof. The enclosing walls will be built of brick, and the windows will have steel sashes. The heavy machinery employed in the manufacture of tobacco will be installed on the ground floor. The building will include a handsome suite of offices, a restaurant for the workers, and a boiler house.

The No. 2 factory has been designed by the Engineers' Department of the Imperial Tobacco Company, Ltd., Bristol, in collaboration with Messrs Beckett and Harrington, architects, Dublin, and is being carried out under the supervision of Messrs Beckett and Harrington by Messrs McLaughlin and Harvey, Ltd., Dartmouth Works, Dublin.

The No. 1 factory, which has been completed, and in which the process of manufacturing tobacco now gives employment to several hundred people, was also constructed by Messrs McLaughlin and Harvey, Ltd., to the design of Messrs Beckett and Harrington. This building is of the single-storey type, with north-lights. It is constructed of Co. Dublin stock brick, has a frontage of 198 ft., and runs 160 ft. to the north.

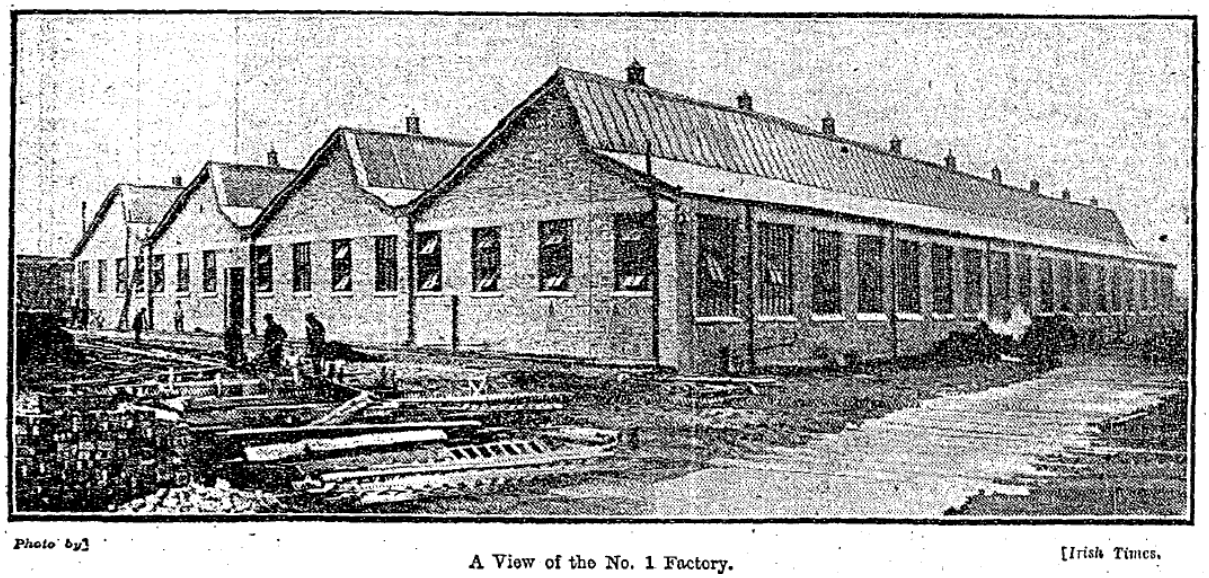

Figure 6: "A View of the No. 1 Factory", photograph from the Irish Times, April 10th, 1924.

The cast iron columns used in this building were supplied by Messrs Tonge and Taggart. The steel principals carrying the roofs were the work of Messrs J. and C. McGloughlin, Ltd., Great Brunswick Street. The factory was roofed with Poilite fire-proof tiles, under the supervision of Mr. Peter Kearney, 24 Eden Quay, Dublin; on behalf of the makers.

Messrs Clarke formerly manufactured tobacco in Liverpool, and when the entire building scheme at the South Circular road is completed a large number of people will be employed. The family of Clarke have had a long connection with Ireland, especially in the city and county of Cork, where several members have resided for a considerable period."

The subject site was originally the premises for tobacco manufacture for the firm Messrs William Clarke and Son, Ltd., a subsidiary group of the Imperial Tobacco Company. The firm of William Clarke and Son was founded in Cork, in 1830. In 1870, the business was transferred to Liverpool, with depots being maintained in Ireland. In 1923, following the formation of the Irish Free State, the Clarke Branch was transferred to Dublin, and its United Kingdom trade was taken over by the Ogden Branch. The Clarke Branch commenced manufacture at its Dolphin's Barn factory in January 1924.

The Engineer's Department of the Imperial Tobacco Company were involved in the design of both No. 1 and No. 2 Factories. Construction was carried out by Messrs McLaughlin and Harvey, and overseen by local architects Beckett and Harrington.

An advert for Clarke's Tobacco from 1927 shows the front offices of the Clarke Tobacco Factory following the completion of the No. 1 Factory, with a two-storey multi-bay façade to South Circular Road.

Figure 7: Advert from Connacht Tribune, April 16th 1927: Chief Cherokee sees the factory where Cherokee Plug is made. Clarke's Tobacco Factory, Dolphin's Barn, Dublin.

The figure below shows the extent of the building following the extension to Factory No. 2, and the construction of the single-storey building to the east of Factory No. 1. Note also the row of semi-detached houses in the bottom right hand corner of the photo, these are the 1923 workers cottages, referred to above. A later 3-storey extension has been constructed between Factory No. 1 and Factory No. 2. A third-storey appears to have been added to the western wing of Factory No. 2.

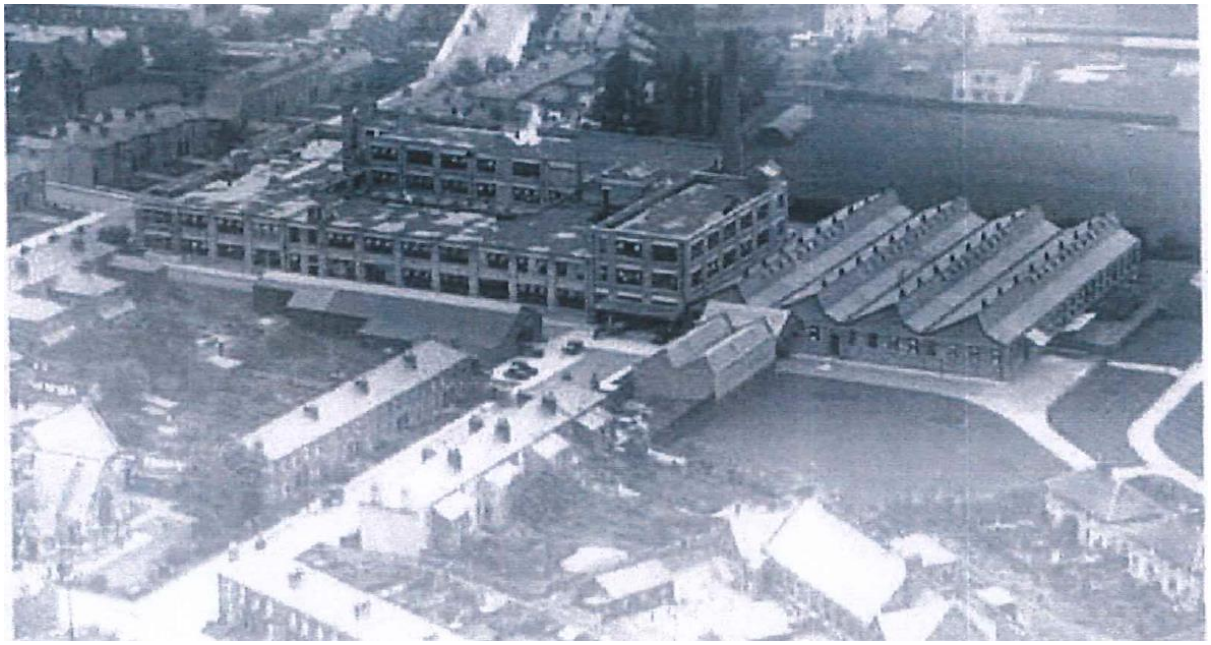

Figure 8: Undated aerial photograph, showing the factory in the mid-late 1920s.

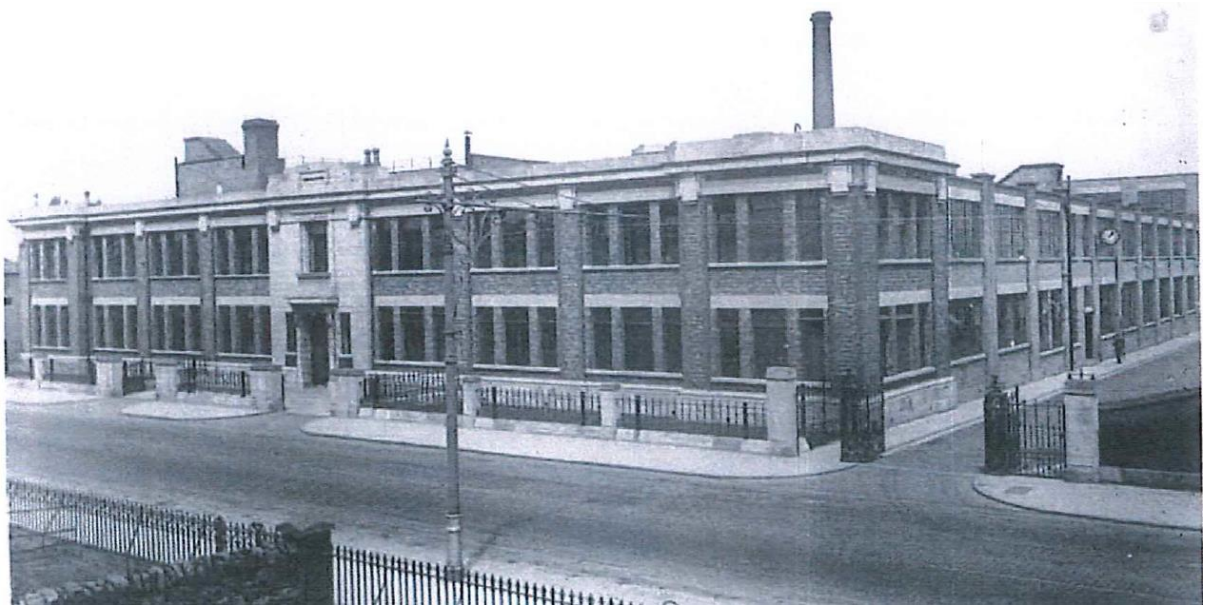

Figure 9: Undated photograph of the front façade along South Circular Road, showing the south and east elevations in the mid-late 1920s. This photograph pre-dates the c. 1929 addition of the second floor.

By 1929, the Imperial Tobacco Company decided that the factory should also house another of their tobacco companies, W. D. and H. O. Wills, who moved here from their premises on nearby Marrowbone Lane. It appears that substantial extensions were carried out at this time, including the addition of the second storey to the front elevation.

Figure 10: Undated photograph, showing the factory following the late 1920s addition of the second floor.

A 1939 Architectural Supplement in the Irish Times, written by architect George Beckett, of Beckett and Harrington, gave an overview of recent factory development and design. In this article, Beckett refers to developments in the design principles, with a shift towards the welfare of the workers within the factories:

"Now we see a better conception of the relation of the worker to the work produced: we see a care for the welfare of the operative that comes from a genuine desire to bring into the life of the workers, through their surroundings, more cheerful conditions. One sees this not only in the actual formation of the buildings themselves, but in the relationship evidently existing between the staff in charge and the hand-workers themselves…

The provision of adequate facilities for recreations has now become a matter of course in the development of factories of any considerable size. Well laid-out pleasure grounds are becoming fairly common, and factory managers are realising the importance of these amenities, and of keeping them in good order."

These principles are evident in the design of the subject building, with historic maps and photographs clearly showing recreation/pleasure grounds for the workers at the northern end of the site.

A restaurant and staff canteen were added to the building in 1949, to designs by Beckett and Harrington.

In the 1960s, John Player and Sons and W. D. and H. O. Wills and William Clarke and Sons were combined to form Player and Wills (Ireland) Ltd. It was decided to centralise the offices and manufacturing operations to the larger premises at South Circular Road at this time. This necessitated further extensions to the subject building, and the construction of a new block.

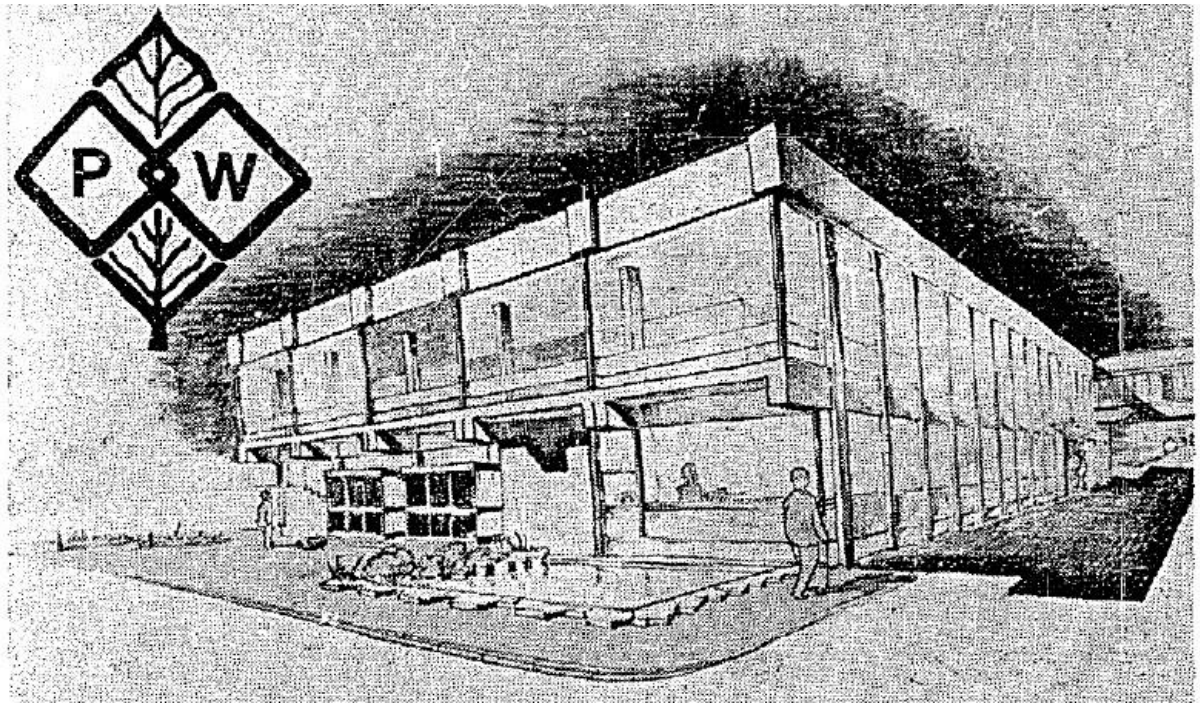

Figure 11: Architect's sketch of the proposed new building, published in the Irish Independent, March 30th 1967.

Later, undated, works to the factory and site are evidenced by late 20th century mapping. These works largely comprised the construction of large modern warehouse structures towards the northern end of the site. The factory closed in the early 2000s.

Figure 12: Overlay on aerial image from Google Maps, showing the phased development of the existing site of the former Player Wills Factory. Red indicates the original 1923 No. 1 Factory; Green indicates the later 1924 No. 2 Factory; Orange indicates late 1920s additions; Blue indicates 1930s additions; Pink indicates the 1949 restaurant and canteen extension; Turquoise indicates a later warehouse addition, in evidence by 1955; Purple indicates the 1960s building; Yellow indicates later additions, in evidence by 1985. This is based on historic maps, photos, and descriptions in contemporary newspaper articles.

In order to determine the chronology of building on the subject site, a number of historic maps and images were consulted (the relevant plates are appended to the report and should be referred to). These are as follows –

2.1 1st Edition Ordnance Survey Map, 1838-47

The subject site is undeveloped, and appears to be in open fields at this time. A watercourse and row of trees are visible at the northern end of the site. The South Circular Road has been laid out, as has Donore Avenue to the east of the site. There has been very little development along this section of the South Circular Road.

2.2 Ordnance Survey Map, 1864-66

The terrace of houses, Salem Terrace, to the immediate west of the subject site has been laid out by this time. The subject site remains undeveloped.

2.3 Ordnance Survey Map, 1886-88

There are no alterations to the subject site or its immediate surroundings apparent in this map.

2.4 Ordnance Survey Map, 1907-09

There are no alterations to the subject site in this map. The surrounding area has been extensively developed with housing.

2.5 Ordnance Survey Map, 1927-28

Only partial coverage of the site was available for this edition. The map shows No. 1 Factory to the north, with the later No. 2 Factory to the south, and a gap between the two buildings. It appears that there was some connection between the two buildings. There is a long building to the east of No. 2 Factory, in the location of the later 1960s block. There are two pairs of semi-detached houses to the north-east of the site, near the local school.

2.6 Ordnance Survey Map, 1943-62

An infill building has been constructed between the two factory blocks by this time. A building has been constructed at the northern corner with St. Catherine's Avenue, this appears to be an entrance gate lodge. The footprint of the 1960s block appears to be in evidence at this time. The northern area of the site has been laid out with walkways, to function as a recreation ground.

2.7 Ordnance Survey Map, 1985

A large extension has been constructed to the north of No. 1 Factory, and two large extensions to the north of the Gate Lodge. The recreation grounds to the north of the site are no longer noted.

2.8 Current Ordnance Survey Map

The four houses in the north-eastern corner of the site have been demolished. Aerial photography indicates that this occurred in the 1990s. The former recreation area to the north of the site is now in use as a car park. There are no apparent changes to the footprint of the building.

3. Description

The subject site is comprised of five buildings, as illustrated in the key plans appended below.

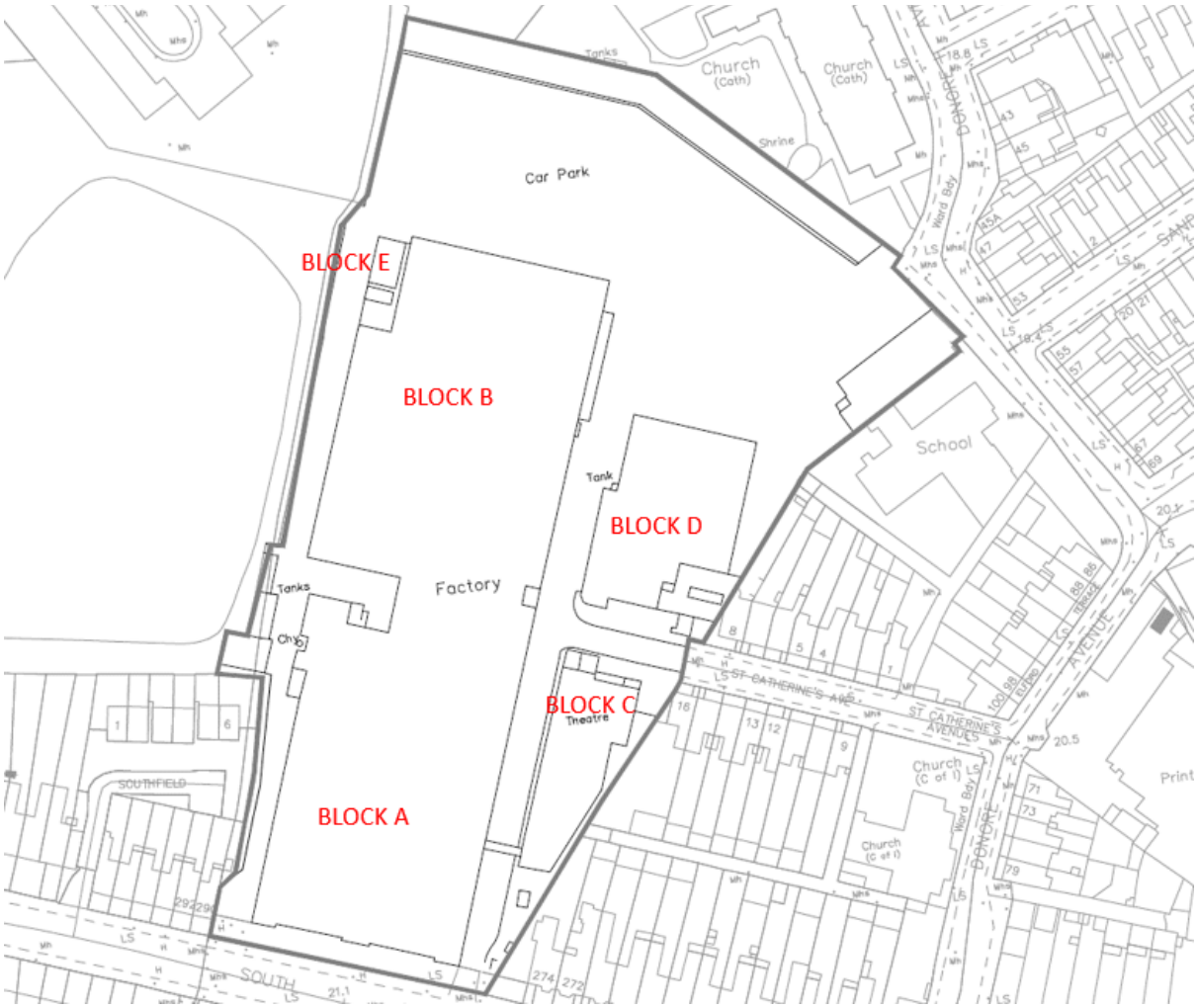

Figure 13: Outline key plan showing the four blocks on the subject site.

A full photographic survey of all buildings, internal and external, was carried out in the preparation of this report. These photographs are appended below in the form of a full photographic record. This should be read alongside this section.

3.1 Block A

This Block is comprised of two distinct sections: Factory No. 2, the three-storey block surrounding the central covered courtyard, and; the Front Offices.

External

The NIAH description of the building reads:

"*Detached nine-bay three-storey factory having projecting end-bays and central breakfront to front (south-west) elevation, built 1935, arranged around central courtyard, now with glazed roof over basement. Three-storey extension to rear (north-east) elevation, extensive multiple-pile single-storey warehouse adjoining rear. Flat roof to factory, saw tooth roof to warehouse*

to rear. Red brick parapet to front, having render coping, stepped render parapets to end-bays and breakfront, and carved insignia panels to parapets over breakfronts. Yellow brick parapet having render coping to side elevations. Yellow brick laid in English garden wall bond to walls, with render eaves course, moulded plinth course, lined-and-ruled render to central breakfront, moulded render cornice over first floor comprising cornice and frieze, fluted and having roundels to projecting bays, over red brick and render platbands punctuated by raised blocks. Yellow brick pilasters flanking bays, with red brick quoins. Rendered wall to rear (north-east) elevation of warehouse. Bracket clocks to front and rear elevations. Square-headed window openings having cornice forming continuous render sill course to second floor windows to front, tripartite arrangement of windows to ground and first floors with shared render sills and render lintels. Square-headed window opening to first floor centre bay, having granite sill, stepped reveal, and decorative entablature. Timber, steel and replacement uPVC windows. Square-headed window openings to rear building, having render sills and surrounds, steel, timber and replacement uPVC windows. Loading bay to rear of east elevation comprising square-headed openings, render lintel, timber shelf, yellow brick piers and steel roller shutters to openings. Steel canopy over corrugated sheeting. Square-headed door opening to front, having decorative render surround with corbelled cornice, double-leaf timber panelled door, sidelights, overlight, approached by render step. Cast-iron gate screen having double-leaf gates flanked by square-profile open-work columns, having matching pedestrian gates and railings to north-west and south-east of façade."

Figure 14: Oblique view along Southern (front) and eastern elevation of Block A.

Internal

The interiors of the factory building are typically large open-plan spaces. There are few surviving details of any architectural interest. A high level of water ingress, particularly to the front section along South Circular Road, has caused a significant level of damage to the joinery details. Internally, the steel structure survives. Historic internal photos show the former machinery that was located in these open-plan areas.

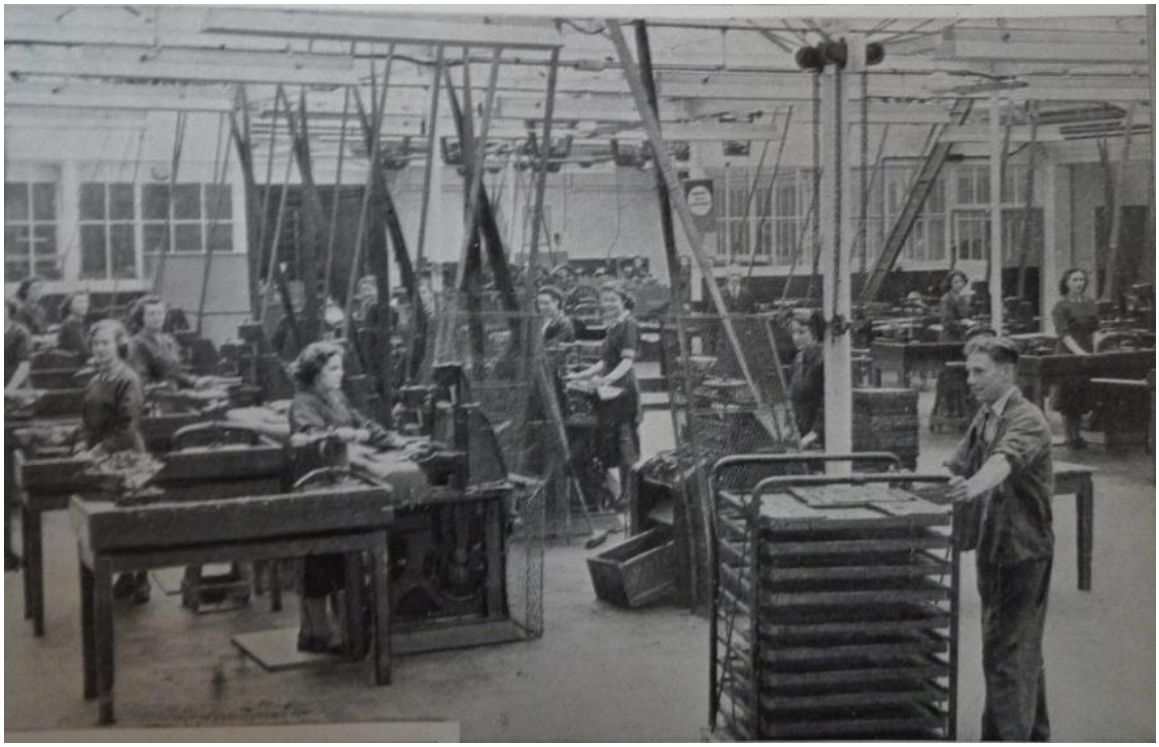

Figure 11: 1920s internal photograph showing the manufacture of Clarke's tobacco in the subject building.

3.2 Block B

This Block is to the rear of Block A, and comprised the original Factory No. 1 block, constructed c. 1923. The block was originally a five bay structure, as visible in the figure below.

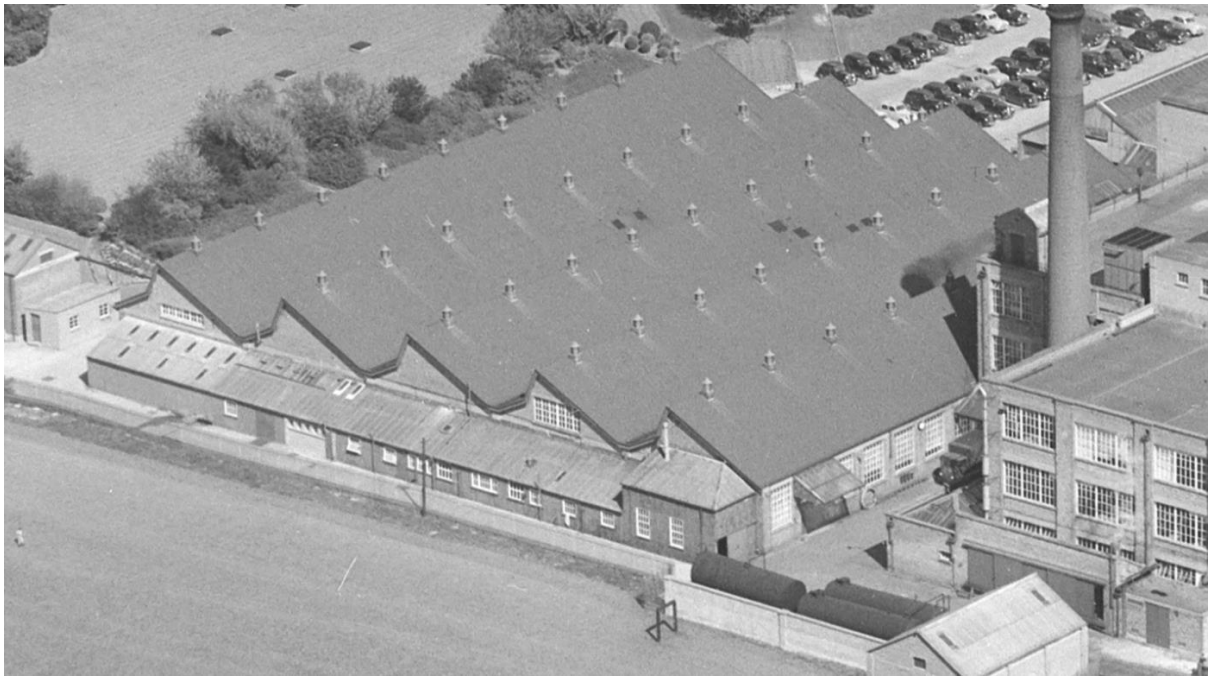

Figure 15: 1955 Aerial Photograph showing Block B. NPA MOR1190.

The building is an open-plan steel frame saw-tooth roof structure with north lights. The walls appear to be Dolphin's Barn brick. Modern industrial entrances have been constructed to the building.

Figure 16: Oblique view along the eastern elevation of Block B, looking North towards the later extension.

A large single-bay warehouse structure was constructed against the northern edge of the original structure in the mid/late 20th century, and is in evidence by the 1985 OS Map. There was previously an entrance to the Factory on this elevation.

3.3 Block C

Figure 17: Photo of main entrance to Block C, on northern elevation. Note that the 'Garda' sign dates from the use of the site as a set for a TV show.

This building is a 1960s office block, incorporating a large room previously used as a theatre. The interior is largely comprised of lightweight partitions forming offices. There is an air bridge connecting the building into Block A.

3.4 Block D

Figure 18: View of southern elevation of Block D. The building was used as part of a TV set in recent years.

This block is comprised of three different phases of construction, as illustrated in the fabric chronology diagram of the wider site.

Section A: The earliest section is to the south, a single-storey double-pitch block with a curved bay to the south-west. This section appears to have been constructed in the late 1920s or early 1930s.

Section B: The second phase of development is the central section of the building. This single storey warehouse building appears to have been constructed between 1936 and 1955.

Section C: The final phase of development is to the north. This warehouse building appears to have been constructed between 1955 and 1985.

These three phases are illustrated in the figure below, with Sections A, B and C highlighted in Green, Blue and Red, respectively.

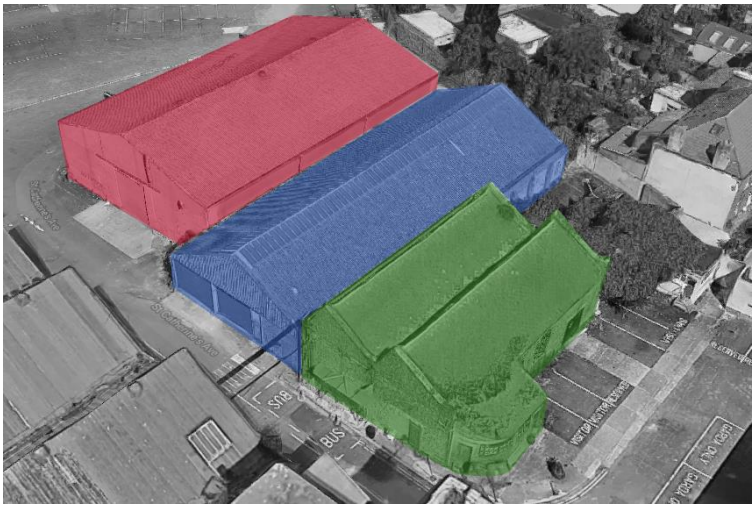

Figure 19: Overlay over aerial imagery from Google Maps, showing the phases of development of the subject building.

It appears that the subject building was constructed shortly after the completion of Factory No. 2, the main factory building along South Circular Road, in the late 1920s. An extract from the 1927 Ordnance Survey map shows the two factory buildings at this time, with Factory No. 1 to the north at the right-hand-side of the image, and Factory No. 2 to its immediate south. The exit from the factory along St. Catherine's Avenue appears to the west of the site by this time.

An undated aerial photograph of the site illustrates the next phase of development of the factory, with the three-storey infill section between Factory No. 1 and Factory No. 2 appearing by this time. Section A of the subject building has been constructed at this time, along with a pitched roof structure over the roadway between the building and Factory No. 1. It appears that Section A and the three-storey infill section may have been constructed at the same time. The photo appears to date from the late 1920s or early 1930s.

The 1936 Ordnance Survey Map shows the original footprint of Section A of the subject building. The curved bay to the south-western corner is clearly visible in this map. The pitched roof shelter over the roadway is also visible. Section B, a single-storey warehouse building, has been constructed by the time of a later 1955 aerial photo. A small kiosk appears has been constructed at the entrance gate from St. Catherine's Avenue by this time.

It appears that the curved form of the south-western bay of Section A is to facilitate the turning of cars and vans to turn the corner from the rear of the site to the exit on St. Catherine's Avenue.

Figure 20: Extract from 1955 Aerial Photo, National Library NPA MOR0906.

Section C appears to have been constructed by this time. It is a second single-storey warehouse, adjoining the existing warehouse (Section B). A number of small ancillary structures also appear to have been constructed in the immediate vicinity of Sections A and B. These structures are no longer extant on the site today.

3.5 Block E

This is a single-storey single-room red brick block to the north-western corner of Block B. It appears to date from the mid-20th century, as it does not appear on the 1943 OS Map but is visible in 1955 Aerial photos. The original use of this building is not known.

Figure 21: 1955 Aerial photograph showing Block E, with Block B to the right-hand-side. NLI MOR1190.

There is a single large ope on the western wall, and the building has a pitched slate roof. Access to the interior of the building was not available during the preparation of the report. The immediate setting and context of this block was radially altered by the late 20th century construction of the large warehouse extension to the north of Block B.

Figure 22: Oblique view of the northern and western elevations of Block E.

4. Assessment of Cultural Significance

None of the buildings on the subject site have been included on the Dublin City Council Record of Protected Structures. The area was surveyed as part of the National Inventory of Architectural Heritage Dublin City Phase IV Survey, in 2013, and Block A was given a rating of 'Regional' significance. Despite this rating of Regional Significance, the structure does not appear to have been included on the list of Ministerial Recommendations. Nonetheless, this report finds that Block A is of architectural, historic, social and artistic significance, and is worthy of retention. The remaining blocks are not considered to be of sufficient significance to warrant their retention, as detailed below.

The Planning and Development Act (2000) requires that a protected structure be of significance or special interest under at least one of the following headings:

- Architectural
- Historic
- Artistic
- Cultural
- Archaeological
- Social
- Scientific
- Technical

The significance of the subject site will be analysed under each of these headings.

4.1 Architectural

The DoCHG Architectural Heritage Guidelines lists examples of how a structure may be attributed special architectural interest:

a) *A generally agreed exemplar of good quality architectural design;*
b) *The work of a known and distinguished architect, engineer, designer or craftsman;*
c) *An exemplar of a building type, plan-form, style or styles of any period but also the harmonious interrelationship of differing styles within one structure;*
d) *A structure which makes a positive contribution to its setting, such as a streetscape or a group of structures in an urban area, or the landscape in a rural area;*
e) *A structure with an interior that is well designed, rich in decoration, complex or spatially pleasing.*

Block A

The subject building is a former industrial building, and was developed and extended over a series of phases, in response to the requirements of the industry. It should be noted that many of the early phases of developments were overseen by the same architectural firm, Beckett and Harrington. This has resulted in an overall harmonious character to the altered Block A, particularly with regard to the front elevation along South Circular Road. The side and rear elevations do not display the same level of architectural harmony.

Inappropriate later interventions, including the modern warehouses to the northern end of the Factory Building and the Single-Storey building, as well as the replacement of the original multi-pane steel windows with modern UPVC windows detracts from the character of the building.

The NIAH Appraisal of the building reads:

"Built to designs by Beckett & Harrington for W.D. and H.O. Wills in 1935, this building remained in use as a tobacco factory until 2005. Its form, scale and design make it an imposing presence on South Circular Road, and its obviously industrial function creates a striking contrast to the predominantly domestic architecture of the street. One of the rare surviving examples of the Art Deco style in Dublin, the render consoles and frieze are typical features of this style. A modernist influence can be seen in the expansive glazing to the front, and a strong sense of symmetry is created by projecting end-bays and a central breakfront. Cast-iron gate screens flanking the building are of technical and aesthetic interest, adding to the overall character of the composition."

Externally, the replacement of a number of the original steel windows with modern uPVC windows detracts from the character of the building.

The contribution of the subject building to the character of its setting along South Circular Road. Although the industrial building is not in keeping with the earlier residential character of the street, it functions as a landmark building within the streetscape.

Internally, there are minimal features of significance. The timber stairs and panelling to the entrance hall of the Front Offices are of some interest. The remainder of the building was in industrial use, and has no internal features of note.

Block B

The subject building is an early 1920s industrial structure. The building appears to have undergone internal alterations and was extended to the north in the late-20th century. The primary original elevations, i.e. the South and North elevations, have been lost due to later developments on the site. This has reduced the architectural significance of the building. The remaining eastern and western elevations, and roof structure, are considered to be of some architectural interest.

The building is largely invisible from the surrounding area, and has no presence on the streetscape of either Donore Avenue or the South Circular Road. The building therefore cannot be considered to contribute to the architectural character of the area.

Block C

This building is an 1960s office block by an unknown architect. It is not considered to be of particular architectural quality or significance. The building does not contribute to the character of the surrounding area and is largely invisible from the streetscape.

Block D

This building appears to have been constructed shortly after the construction of Blocks A and B, and it is in keeping with the architectural style and materiality of the site. The small scale of the subject building contrasts the larger industrial structures on site. The building cannot be considered to contribute to the streetscape of St. Catherine's Avenue. The building is considered to be of minimal architectural significance.

Block E

This building is a later addition to the site and clashes with the materiality of the earlier yellow-brick structures. The building cannot be considered to be of any particular architectural significance in and of itself, and does not contribute to the character of the wider area.

4.2 Historic

The criteria given by the DoCHG for a building to merit inclusion on the RPS on the basis of its historical significance are as follows:

a) *A structure may have historical interest as the location of an important event that occurred in, or is associated with it, or by its association with a historic personality…*
b) *A structure may have influenced, or been influenced by, an historic figure…*
c) *Historic interest can be attributed where light is thrown on the character of a past age by virtue of the structure's design, plan, original use, materials or location…*
d) *A structure may be a memorial to a past event.*
e) *A structure may itself by an example of the effects of change over time. The design and fabric of the structure may contain evidence of its former use or symbolic meaning…*
f) *Some fixtures and features may survive, for example in consistory courts and courts of law, that are important evidence of former liturgical or legal practice and may have special historical interest for that reason.*

g) *Some unusual structures may have historical or socio-historical interest, for example, early electricity substations…*
h) *Special historical interest may exist because of the rarity of a structure. Either few structures of an identifiable type were built at a particular time, or few have survived…*

The construction and development of the site as a tobacco factory in the early years of the Irish Free State is part of a wider, national history of this period. Rowley notes in "*Art and Architecture of Ireland*" that:

"*The policy of protectionism, though successful in generating employment, had restricted the growth of Irish manufacturers. British and other foreign companies were often allowed to establish factories in Ireland to preserve their Irish sales. The mid-century period was marked by such compromised and cautious industrialisation: to the core food and drink products were added nylon, cotton, footwear, tobacco and small-scale technological and pharmaceutical goods, all housed in individual factory buildings, thus pushing the development of the building type.*"

Block A

The subject building can be considered to be of some historic significance, due to its place within this history of the Irish nation. It should be noted, however, that the high level of alterations from its original form, the construction of late 20th century warehouses, and the loss of significant original features, such as cottages for foremen and pleasure grounds for staff, detract from the character of the building, and its historic significance.

The subject building cannot be considered to be an intact example of factory development in the early years of the Irish Free State, and can be ascribed a minor level of historic significance only.

Block B

Similarly to Block A, this building is considered to be of historic interest as an early Irish Free State tobacco factory. However, the level of alteration and intervention to the building are such that it cannot be considered to be an intact example of a 1920s tobacco factory.

Block C

This building dates from the 1960s and cannot be considered to be of any particular historic significance.

Block D

This building is an ancillary structure to the original factory blocks and its original use is not known. It cannot be considered to be of any particular historic significance.

Block E

This building is a mid-20th century ancillary structure. Its original use is not known. It cannot be considered to be of any particular historic significance.

4.3 Artistic

The DoCHG guidelines state that special artistic interest may be attributed to a structure for its *craftsmanship, design* or *decoration.* Examples given in the guidelines are:

a) *Examples of good craftsmanship;*
b) *Decoratively carved statuary or sculpture that is part of an architectural composition;*
c) *Decoratively-carved timber or ceramic-tiled shopfronts;*
d) *Ornate plasterwork ceilings;*
e) *Decorative wrought-iron gates;*
f) *Religious art in a place of public worship such as the Stations of the Cross or stained-glass windows;*
g) *Fixtures and fittings such as carved fireplaces, staircases or light-fittings;*
h) *Funerary monuments within a graveyard;*
i) *The relationship of materials to each other and to the totality of the building in which they are situated, if these have been designed as an ensemble.*

The subject building is a 20th century industrial building which utilises mass-produced materials and has a functional design with minimal decoration. The building was constructed over a series of phases, expanding to meet the demands of the factory, as outlined above. It is difficult to consider this building to be of special artistic interest.

However, features such as the wrought-iron gates to the South Circular Road, and internal fixtures such as the cast-metal covers of service boxes (Block A) are considered to be of artistic interest.

4.4 Cultural

The DoCHG provides guidance for what might constitute cultural significance:

a) *Those structures to which the Granada convention refers as 'more modest works of the past that have acquired cultural significance with the passing of time';*
b) *Structures that literary or cinematic associations, particularly those that have a strong recognition value*
c) *Other structures that illustrate the development of society such as early schoolhouses, library buildings, swimming baths or printworks.*

The subject building cannot be considered to be of any particular cultural significance.

4.5 Archaeological

This report does not address archaeological issues. A separate report on the archaeological heritage of the site and a report on the industrial archaeological heritage of the site have been prepared and submitted alongside this report.

4.6 Social

Special Social interest is defined in the DoCHG guidelines as `*those qualities for which a structure, a complex or an area has become a focus of spiritual, political, symbolic or other sentiment to any group of people. A community may have an attachment to a place because it is an essential reference point for that community's identity, whether as a meeting place or*

a place of tradition, ritual or ceremony. The configuration, disposition or layout of a space or group of structures, where they facilitate behaviour that would otherwise be difficult or impossible, may be of social interest.'

The NIAH survey of the Block A considered it to be of social significance. This is likely due to the fact that the factory employed thousands of local Dublin people over the many years of its operation. This intangible dimension of the structure's significance was diminished when the manufacture of tobacco ceased at the premises.

4.7 Scientific

Examples of how a structure may be of particular scientific significance are provided in the DoCHG guidelines:

a) *The results of scientific research may be seen in the execution of the structure;*
b) *the materials used in the structure may have the potential to contribute to scientific research, for example extinct pollen or plant species preserved in the base layers of ancient thatch roofs;*
c) *The structure may be associated with scientific research that has left its mark on the place, such as early Ordnance Survey benchmarks carved into stonework.*

None of the buildings on the subject site are considered to be of any particular scientific significance.

4.8 Technical

The DoCHG guidelines provide examples of how a structure may be attributed special technical interest:

a) *It displays structural or engineering innovation evidenced in its design or construction techniques such as the use of cast- or wrought- iron prefabrication or an early use of concrete;*
b) *It is the work of a known and distinguished engineer;*
c) *It is an exemplar of engineering design practice of its time. For example, a bridge may be a masonry arch, an iron suspension or a concrete span;*
d) *it displays technically unusual or innovative construction of cladding materials, such as early examples of glazed curtain walling, prefabricated concrete plank cladding or Code stone;*
e) *It contains innovative mechanical fixtures, machinery or plant or industrial heritage artefacts that describe the character of the production processes. The specifically industrial aspect of some sites like mill buildings, mill ponds, tailings, or derelict mines can often have a technical heritage value;*
f) *Purely special technical interest can be ascribed to the innovative engineering qualities of a structure, as distinct from the building's appropriateness for use, or its appearance or form.*

None of the buildings on the subject site are considered to be of any particular technical significance. There is no evidence of surviving internal mechanical fixtures, plant or machinery.

Figure 12: Photograph from Irish Photo Archive, showing the internal factory floor, in Factory No. 2. None of the machinery involved in the production of tobacco remains on site today.

The ICOMOS-TICCH *Dublin Principles for Conservation of Industrial Heritage* notes that "*their heritage value may be greatly jeopardised or reduced if machinery or other significant components are removed, or if subsidiary elements which form part of a while site are destroyed."*

4.9 Summary

It is considered that Block A is of primary significance, largely on architectural, historic and social grounds. Some features in Block A and in its immediate setting are of artistic interest. The significance of Block A is largely based on its external appearance, and its visual prominence on the South Circular Road. The front façade is of primary significance, with the more decorative front three bays of the side elevations also considered to be of significance.

Block B is considered to be of secondary significance, on architectural and historic grounds. This significance is diminished by the loss of the original primary facades of the building, and of all internal machinery etc.

Blocks C, D and E are not considered to be of any particular significance.

5. Conclusion

As detailed above, the much-altered, former industrial buildings on the subject site are of limited significance and, with the exception of Block A, are not considered to be of sufficient interest to warrant retention within the proposal.

Block A has been altered significantly from its original form, but is considered to be of significance in architectural, historic, artistic and social terms. The building's industrial form and relationship to the street is inappropriate to its urban setting. The front (south) façade can only be considered as having very limited interest in terms of its use of materials but even this must be measured against the radical alterations to that façade.

The subject building was constructed over a series of phases during the first decade of the Irish Free State, and has been further altered throughout the 20th and 21st century. We do not agree with the NIAH assessment of the building as being of Regional significance under the categories of architectural, historic, social and artistic significance. The building has architectural interest, largely limited to the front section of the building and its landmark status along the South Circular Road, and artistic interest can be ascribed to some removable features within the site only. Quite correctly, the structure was not included in the list of Ministerial Recommendations arising from the NIAH survey.

The industrial heritage interest of the structures and site is limited, following the removal of all plant, machinery and industrial artefacts. Refer to the Industrial Archaeology Assessment, prepared by Rob Goodbody and submitted as part of this package, for greater detail.

The limited architectural significance of the building has been established to a large extent by the previous direction of An Bord Pleanala which accepted the principle of development to its rear and the introduction of an ope for access through the façade's central breakfront (DCC Reg. Ref: 3130/06).

It should be noted that permission to demolish a similar style industrial structure (Twilfit House) by the same architectural firm was granted by Dublin City Council, Reg. Ref: 4110/17. This grant was conditional on the completion of a full record of the structure in accordance with Historic England's publication *Understanding Historic Buildings: A Guide to Good Recording Practice.* A full record of the structures on site, in accordance with this publication, will be carried out prior to any proposed demolitions if required. A full keyed photographic survey of al buildings on site has been carried out, and is appended below (access to Block E, a single-room structure, was not possible during the preparation of this report). This is in line with Section 16.10.17 of the Dublin City Development Plan 2016-2022, '*Retention and Re-Use of Older Buildings of Significance which are not Protected*':

"*Where the planning authority accepts the principle of demolition a detailed written and photographic inventory of the building shall be required for record purposes.*"

The subject proposal involves the demolition of Blocks B, C, D and E. These are the blocks on site which are considered to be of little or no significance, as detailed above, due to the extensive alterations to Blocks B and D, the modern provenance of Blocks C and E, and the fact that these buildings make no contribution to the character of the streetscape or of the surrounding area. A full photographic record of these buildings (with the exception of Block E) has been carried out, and appended below. Fabric of architectural or historic interest from Blocks B and D will be salvaged for re-use within the site, in accordance with the accompanying Conservation Method Statement and Salvage Schedule. This will ensure minimal loss of historic fabric. It is not considered that the demolition of any of these blocks will be detrimental to the character of the primary structure, Block A, nor will the demolition have any visual impact on views of the front façade to the South Circular Road, the primary significance of Block A.

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2. Larmour, P. *Free State Architecture: Modern Movement Architecture in Ireland, 1922-49.* 2009.
3. Rothery, S. *Ireland and the New Architecture, 1900-1940.* 1991.
4. Rowley, E. *Industrial and Commercial Architecture.* In: *Art and Architecture of Ireland Volume IV: Architecture 1600-2000.* 2015.
5. Rowley, E. (ed.). *More than Concrete Blocks: Vol. 1: 1900-1940.* 2016.

APPENDIX 14.9

CONSERVATION RECORD STUDY OF ST. TERESA'S GARDENS, BY KELLY AND COOGAN ARCHITECTS, 2013

VOLUME III

APPENDICES TO
ENVIRONMENTAL IMPACT ASSESSMENT REPORT

JUNE 2022

Conservation Record Study
of
St Teresa's Gardens, Donore Avenue, Dublin 8

DCC PLAN.NO: 2475/18
RECEIVED 12 MAR 18

PPREPARED FOR DUBLIN CITY COUNCIL
BY
KELLY AND COGAN ARCHITECTS
NOVEMBER 2013

Contents:

Section:	Description:	Page:
A	***Synopsis:***	**4 - 5**
B	***Purpose of the Study:***	**5**
C	***Methodology:***	**6**
D	***Description of the Housing Scheme:***	**6 - 8**
E	***Site Evolution and Historical Background:***	**9 - 16**
	Early History to 1700; The Poddle and other Water-Courses	*9 - 10*
	Map History	*10*
	Rocques Map of Dublin, 1756-8:	*10 - 11*
	1837 Dublin OS, 6" to 1 mile,	*11 - 12*
	1847 Dublin OS, 5" to 1 mile,	*12 - 13*
	1849 Dublin OS Sheet 18, 6" to 1 mile,	*13 - 14*
	1888 Dublin OS Sheets 18-75, 6" to 1 mile	*14 - 15*
	1907 Dublin OS Sheets 18, 6" to 1 mile	*15 - 16*
	1935-36 Dublin OS 25" to 1 mile	*16*
F	***Design and Construction:***	**17 – 30**
	Government Policy on Housing in the 1930's	*17 - 18*
	Impact Upon Housing Construction and the Construction Industry	*18*
	Site Acquisition	*18 - 19*
	Dating the Design	*19*
	Tendering and Construction	*19*
	Delay, Amendment and Completion	*20*
	The Design as Completed	*20 - 22*

	Design Typology and Influences	*22*
	Simms and Contemporary Dutch Design	*22 - 25*
	British Contemporary Architectural Influences	*26*
	Design Quality	*27 - 28*
	H.G. Simms, Housing Architect Dublin Corporation	*28 - 30*
	Simms Architectural Legacy	*30 - 31*
G	***The Rise and Fall of St Teresa's Gardens:***	**31**
	The Early St. Teresa's Gardens	*31*
	Recent History of St Teresa's Gardens	*31 - 32*
H	***Key Conservation Issues:***	**32**
	The Simms 'Connection'	*32 - 33*
	• Recommendation 1.	*33*
	• Recommendation 2.	*33*
	The Medieval Watercourses	*33*
	• Recommendation 3.	*33*
	References and Bibliography:	**33 - 34**

Appendices:

A	***Map Record:***
B	***Photographic Record:***
C	***Drawing Record:***

DCC PLAN.NO: 2475/18
RECEIVED 12 MAR 18

A - Synopsis

The development by the (then) Dublin Corporation in the late 1940's of 346 flats in 12 separate blocks at St Teresa's Gardens played a major part in attempts to deal with Dublin's terrible housing problems in the early 20th century.

It is to the design, H.G. Simms, Housing architect to Dublin Corporation from 1932 until 1948 and whose work is now highly regarded and has been the subject of critical appraisal in newspapers, design journals and academic publications in Ireland.

The housing scheme at St Teresa's gardens has proven to be ultimately unsuccessful due to a variety of reasons that are beyond the scope of this document. As a result Dublin City Council have concluded that the best course is to demolish and rebuild on the site on a phased process.

The design of St Teresa's Gardens contains some notable aspects of Simm's work in the design of the elevations of the flat blocks.

Site planning however, (which was generally a weakness in Simm's work) is a particularly flawed aspect of the St Teresa's Gardens Design and is exacerbated in this instance by the change in approach by Simms and his team from his previous strategy of perimeter planning. Instead, here we see a housing complex laid out at right angles to the main road entered via a central broad avenue through the complex to either side of which are ranged a series of six blocks per side in a highly symmetrical and regimented formation that has little to recommend it. (Fig 1)

Fig1: Regimented Axial Site Layout

The absence of interior landscaping, problems of entrance control and the lack of differentiation of public/private spheres and social disconnection and isolation have all contributed to the failure of the scheme.

The original site upon which St Teresa's Gardens is built was, until the development of the Flat Complex, one of the few remaining tranches of agricultural lands within the confines of the City – a unique survival from the mediaeval period and the great mediaeval Abbey farmsteads.

It still retains part of the medieval fabric and heritage of Dublin in the form of two water courses that traverse the site below ground: the Abbey Stream and the Tenter's Water.

This is an important part of the history of the city that should not be lost again, the demolition of the housing scheme will give an opportunity to find, identify and conserve that historic morphology.

Arising from this study we would propose three key recommendations:

1. Dublin City Council as the protector of the architectural heritage should set down its policy in relation to the future of the other Simms schemes in order that a proper strategy for the retention and conservation of those schemes will take place.

2. The record of Simms works should be correlated into a single archive to enable the better understanding and appreciation of his work and to facilitate the better management and conservation of his projects

3. The design of the scheme being planned to replace St Teresa's Gardens should take due cognisance of the information concerning the routes of the medieval water courses and where any doubt applies should be preceded by studies to identify the exact location. These historic artefacts should be incorporated into the new design to give 'a sense of place' within the proposed development and to protect their heritage.

B - Purpose of the Study

The purpose of the Study is to provide record of the St Teresa's Gardens housing scheme to Dublin City Council in the context of the imminent demolition of the scheme as decided by Dublin City Council at their meting of 02/09/2013, the proposal having been put forward through Part 8, Planning and Development Regulations, 2001.

Dublin City Council requires the Study to incorporate the following elements

> *"A 'Preservation by Record Study' ..... in respect of12 no Flat Blocks at St Teresa's Gardens comprising the following:*
>
> 1. *Review of accessible published and publicly held information on the history of the complex to include and overview of the relevant information contained in publications, theses and Archive sources.*
> 2. *Analysis of the primary record and available copies of original drawings and survey drawings in the possession of City Architects and commentary on the Design Philosophy and its influences.*
> 3. *A photographic survey of typologies and overall context.*
> 4. *Identification of materials, components and elements deemed to be of historic interest with advice on salvage and re-use.*
> 5. *Reference and inclusion of the Archaeological desktop study separately carried out by Dublin City Council.*
> 6. *The completed photographic and written record to be provided in hard copy (two copies) and digital format for archiving in the City Archive and the Irish Architectural Archive."*

DCC PLAN.NO: 2475/18
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C - Methodology

The record study has been carried out in November 2013 upon the request of Dublin City Council Architects and in accordance with the ICOMOS Principles for the Recording of Monuments. The following sources have been examined:

A. The physical record of the buildings extant on site.
B. The drawings and documentary record sources of Dublin City Council's architectural and housing archives.
C. Dublin City Council Heritage Conservation Publications
D. The records of The Irish Architectural Archive.
E. The archaeological record of the site prepared for Dublin City Council.
F. The newspaper records of the national papers being published during the mid 20th century when the scheme was designed and built.
G. The Gilbert Library historic archive for Dublin.
H. The U.C.D. Thesis by Eddie Conroy, South Dublin Co Architect on the work of Herbert Simms.
I. Architectural publications regarding design of 'slab block' housing in the early 20th century.
J. Publications regarding the housing crisis in Dublin during the period 1900-1950.

D - A Brief Description of St Teresa's Gardens.

St Teresa's Gardens is located in the SE inner city of Dublin occupying a site area of 3.9 Hectares and lying approximately 2 miles from O Connell Bridge; it is a local authority flat block now comprising twelve isolated blocks on four stories.

The City Council intends to demolish ten blocks in two phases, the remaining two blocks at the south eastern corner are scheduled to be consolidated and refurbished (temporary) but may be demolished in the future.

The lands of St Teresa's gardens together with the adjoining former industrial lands of The Player Wills factory and the Bailey Gibson site have been identified as A Strategic Development and Regeneration Area (SDRA) in the current City Development Plan.

The complex was designed in the 1940's; the foundations for the project were cast in place in 1942[1] but construction of superstructures was deferred due to material shortages during WWII and the units were first occupied in 1951.

The site on which the complex is built is bounded to the east by Donore Avenue to which it has a frontage of approximately 195m. To the south the site is bounded by former industrial sites – Players, Will and Bailey Gibson and to the west the lands abut the Coombe Hospital. Interestingly, the Coombe Hospital lands were originally part of the lands planned for housing but were sold on to the Coombe Hospital for £ 27,295.00 in 1948[2]. To the north-west the site is bounded by two storey terraced housing on Eugene St.

The buildings are all of four floors in height, brick faced to the flat faces of the buildings (Fig 2) while the elevations to the gallery access areas are rendered in cement render (Fig 3).

---

[1] McManus, Ruth, (2008), *Crampton Built*, G. & T. Crampton. Dublin.
[2] Irish Press (newspaper, now defunct), 28/08/1948, p.5

Fig 2: Typical Front Elevation

Fig 3: Detail of Internal Elevations

Fig 4: Portholes on Internal Tower Elevations

A band beam in reinforced concrete is exposed at first floor level, a common feature in Simms work.

The roofs are flat concrete roofs, finished in asphalt and pierced only by chimneys that are largely invisible from street level. They are notable for their over-sailing canopies which project some distance beyond the facades below.

The windows and doors were of timber construction when built.

The bricks used appear to be a local stock brick with slight surface dragging laid in a Flemish bond within a cement / lime mortar bed.

Some decorative features are visible in the form of rusticated brick coursing to the bases of corner 'towers' (Fig 5) and stacked soldier coursing above a central window on the gable ends to the street of the front east and west blocks (Fig 6).

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Fig 5: Brickwork Detail to base of Corner Tower

Fig 6: Brickwork Detail to Gable

Additionally, a number of 'porthole' windows are incorporated on the returns of the corner 'towers' (Fig 4) to the balcony faces and adjacent to the ground floor shop-fronts facing onto the street.

The buildings were designed by Dublin Corporation Architects under the aegis of H.G. Simms, Chief Housing Architect; The design appears to have its origins in the pre-war period with construction commencing in 1942, ceasing due to material shortages in wartime, re-commencing in 1949 and being completed in 1951.

Simms died by suicide in 1948.

Conroy[3] gives the following account of the design for St Teresa's gardens:

15.1.2 DONORE AVENUE (St. Theresa's Gardens) [Ref: p.254]

This was the second in the final three great schemes of Simms. As at Fatima Mansions it was socially unsuccessful, although, speaking architecturally it was a far superior scheme. It consisted of a long four-storied range of buildings, arranged symmetrically to either side of the central access road at Donore Avenue. The ground floor is composed of shops (and other facilities) and runs out past the block to form a single-storied **"curved corner"** at the entrance to the street. The entrance to the scheme is enhanced by elegant curved corner and the use of a protruding brick tower at the curved section. **Porthole** windows appear for the first time in a Simms design.

The site itself had no contextual issues of streets, corners or frontality. The arrangement of flats in array appears to owe more to Hilberseimer than the Amsterdam School. **This is the first time in a design of Simms that the blocks are arranged in a non-perimeter fashion. However, he adheres to the familiar "access-gallery" system, creating the usual interface problem between the interior world and the public one.**

The **elevations** to the blocks are built entirely in brick. The **book-end towers** appear on each block as in previous schemes. Overall, it is the simplicity of the site arrangement which lends style to this endeavour. The façade towards Donor Avenue with its shops, the elegant entrance to the scheme itself and the rhythm of the flat block in array reveals considerable architectural skill.

[3] Conroy, E., (1997), *H.G. Simms and, the problem of slum clearance in Dublin,* M.Arch.Sc. Thesis, U.C.D., Dublin

E - Site Evolution and Historical Background

Early History to 1700; The Poddle and other Water-Courses

The City of Dublin in medieval times was accessed by a number of routes radiating outwards into the countryside, these routes served as roadways for cattle, poultry, pigs, vegetables etc to be carried into the city for sale to the citizens[4].

Cork St (immediately north of the site) whose name derives from its location as part of the road from Dublin to Cork, lies on one of these ancient routes called 'Sli Dhala' (the way of assemblies).

Prior to the seventeenth century the lands in this area formed part of 'The Liberty of Donore'. The lands were part of the abbeylands belonging to the Abbey of St Thomas (Fig 7).

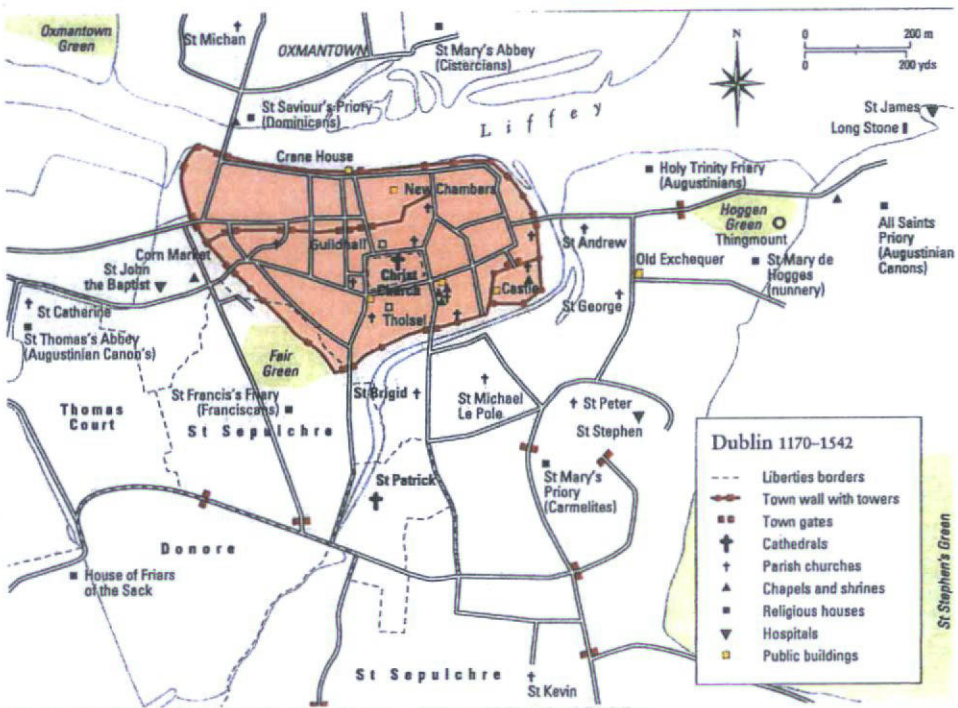

Fig 7: Mediaeval Dublin Monastery Lands – Atlas of Historical Dublin

Following the dissolution of the monasteries during the reign of Henry VIII, the lands were forfeit to the Brabazon family, later Earls of Meath.

The Brabazons were zealous in guarding the rights to the watercourses which had been developed in medieval times to bring water from the Poddle and Dodder rivers into the City and serving mills and other uses along their routes. Several channels had been made to maximise the use of those waters and they proved an important factor in the development of the leather tanning, brewing and textile trades along their routes.

One of these channels, a part of the Poddle system known as the Abbey Stream, flowed through the site from SE to NW and another channel joined it at a point in the middle of the site.

[4] *Weavers Square and Newmarket*, Dublin City Council Heritage Conservation

DCC PLAN.NO: 2475/18
RECEIVED 12 MAR 18

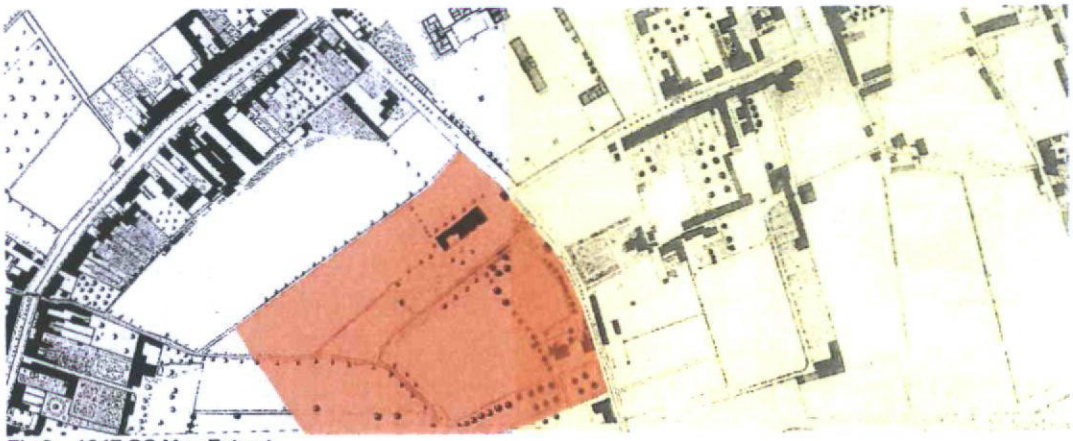

Fig 8: 1847 OS Map Extract

This secondary channel, known as 'the Tenter's Water', flowed east through the site towards Brown St; the name 'tenter' derived from the use of the open land south of Brown St to stretch and dry fabrics (especially linen) after dyeing (Fig 8).

Map History

The maps in the accompanying appendices show the evolution of the site and its surrounding streetscape transition from a rural setting outside of the developed part of the city and gradually becoming encircled by residential and industrial uses along the Poddle using the water supplies connected to and served by the Poddle and Dodder rivers.

The archaeological record[5] prepared for Dublin City Council gives a thorough analysis of the site and environs prior to 1700 to the former industrial sites in the area and the way in which the Poddle River (and other natural streams in the area) was channelled and diverted to provide water for the city and for the land users along its course.

Rocques Map of Dublin, 1756-8 (Fig 9)*:*

In its early rural context as seen in Rocque, only the northern portion of the site adjoining Love Lane is visible.

Rocque shows these lands in agricultural use, laid out as series of rectangular fields oriented SW-NE and fronting onto Love Lane* (latterly Donore Avenue). Although the context is still mainly agricultural there are signs of encroaching urbanisation. The quarries shown on Dolphins Barn Lane to the north are probably brick clay-pits used for the local brick used in Dublin housing through the 18th and early 19th centuries.

An early form of ribbon development can be seen in the intermittent groups of terraced housing built on both sides of Dolphins Barn Lane.

Brown Street to the east and on the opposite side of Love Lane has been developed with terraced housing leading into Weaver's Square an area then being developed as housing for many of the Huguenot immigrants into Dublin who had specialised in the cloth and textile trades. Even at this early stage the road and field boundaries that shaped the future development of the area are already firmly in place.

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[5] Duffy, S., Giacometti, A., (2013) *Archaeological Desk-Top Study of St Teresa's Gardens for Dublin City Council*

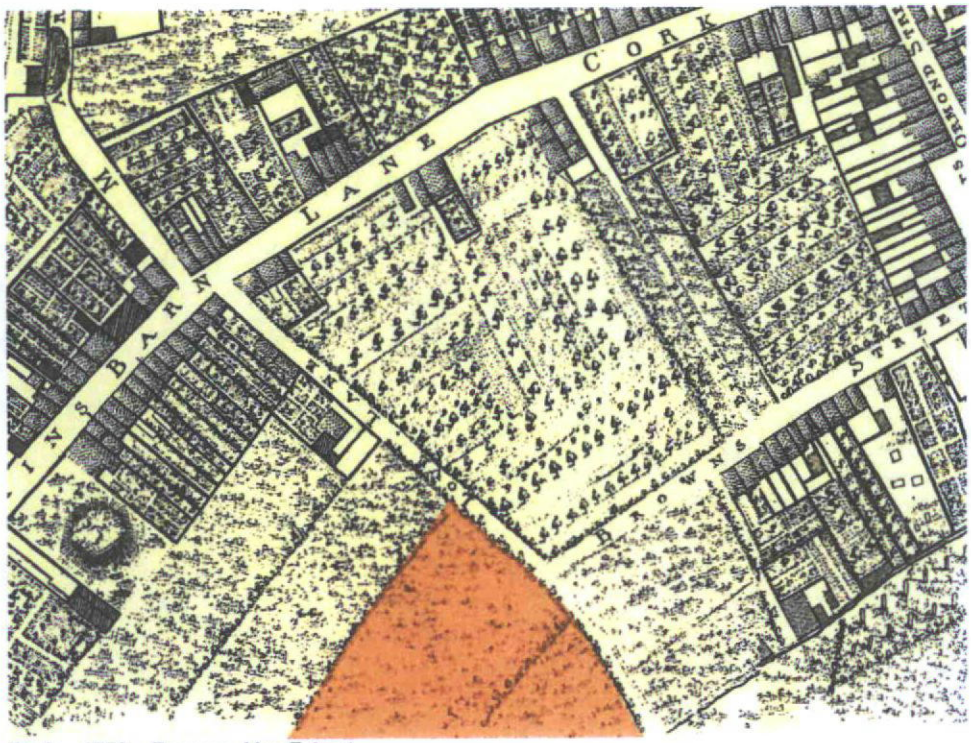

Fig 9: 1756 - Rocques Map Extract

Land uses are denoted on the Rocque map and the new housing as well accommodating residential use would also have incorporated ancillary trade uses for its occupants.

The dominant impression however is of agricultural character, with very clear indication of extensive market garden activity, much of which continued well into 20th century.

1837 Dublin OS, 6" to 1 mile, (Fig 10)*:*

The1837 map shows a significant change in the site and neighbourhood.

The northern portion of the site now contains middle sized house sited at right angles to Love Lane and whose gable axially terminates the well-established Brown Street. The lands are shown with regular tree planting and basic paths and what appear to be a series of paddocks and a smaller house to the south west.

To the south the Poddle tributary is visible and forms the southern boundary of the site.

Industrial use is also becoming apparent in the form of the Calico Printing Mills on Donore Avenue south of the site and south of it the Glue manufactory while a Cotton Factory is shown located at the site of the former Donore Castle and Mill.

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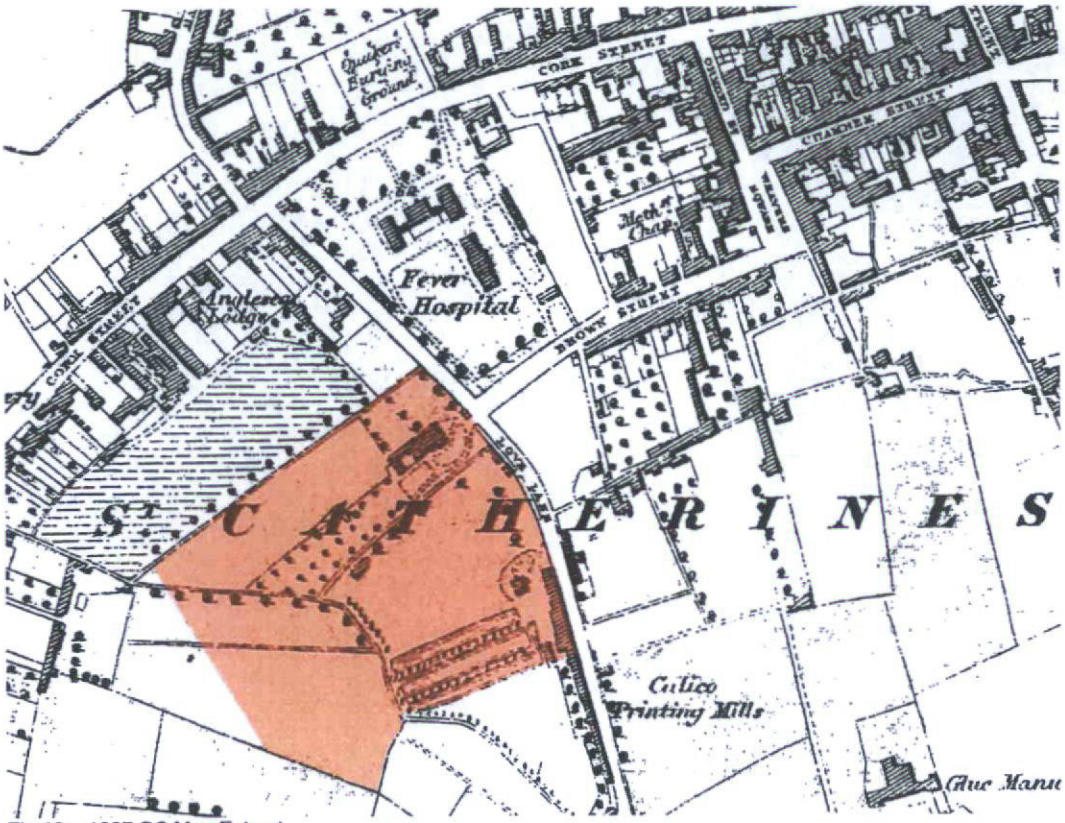

Fig 10: 1837 OS Map Extract

Institutional use is also becoming apparent in the neighbourhood in the form of the Fever Hospital opposite the site on the corner of Love Lane and Cork Street, a nunnery and 'Female School' to the south-east and the Richmond Penitentiary to the south-west.

1847 Dublin OS, 5" to 1 mile, (Fig 11)*:*

The superb 1847 map shows the greater part of the site and its immediate surroundings in detail.

The large house opposite Brown Street has now matured apparently with an extensive scheme of ornamental gardens and a handsomely curved carriageway. More practically an extensive range of vegetable gardens has been developed as part of the site to the south, while the site boundaries in the form of the Poddle tributary to the south and a artificial water course to the west terminating in a cistern opposite Brown Street.

The smaller house to the south west has been similarly aggrandised and has also acquired a name 'Brook Lawn'. While smaller it retains the larger proportion of the site and although the immediate area surrounding the house has been landscaped the surrounding field patterns suggest grazing lands and paddocks. It is perhaps notable that this house and lands remained in the ownership of the Daye family into the 20th century, the Dayes being well known Doctors and Horse breeders.

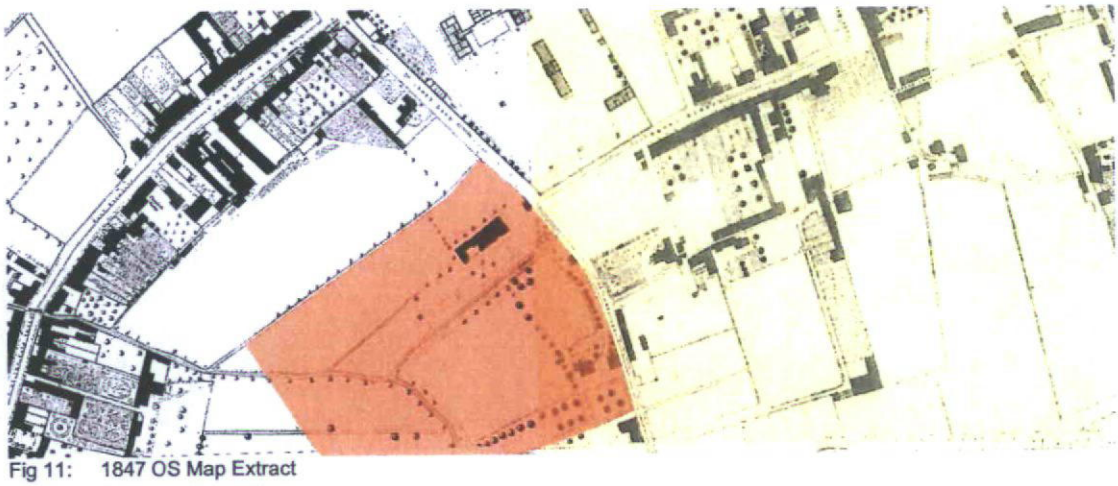

Fig 11: 1847 OS Map Extract

To the south the Poddle tributary is visible and forms the southern boundary of the site.

Notwithstanding the (now established) industrial uses which have been joined by a new venture - a 'Chemical Works', it is interesting that the housing on Brown Street appear to have retained a character of prosperity as apparent from the ornate garden arrangements visible to the south of Donor Court, while a rather peculiar and isolated ornate garden or park has been developed along south western boundary of the Fever Hospital at the abutment of Brown Street and Love Lane.

1849 Dublin OS Sheet 18, 6" to 1 mile, (Fig 12)***:***

By 1849 the transitional stage has been clearly reached with a number of industrial uses such as The Calico Printing Mills on Donore Avenue south of the site and further south the Cotton Factory located at the site of the former Donore Castle, Glue manufacturing south-east of the site and a new 'chemical works' on the lands facing the site on the east side of Love Lane and another is located north of Cork St north-west of the site. The collection of textile industries indicates that the textile trade persisted in the area for several generations.

On the site the two houses can still be seen with Brook Lawn occupying approximately two-thirds of the frontage to Love Lane. It is accessed by a driveway coming from the north and has an extensive ornamental garden north of the house.

A structure, possibly a stable block is located to the east and abutting Love Lane.

The second and larger of the two houses remains as previously delineated on the northern part, set back about 30m from Love lane with a short driveway and some ornamental gardens to he south of the house and an orchard in the south west quadrant of the site. The building is rectangular in shape with a courtyard within the rear part surrounded by buildings on three sides and a screen wall to the south side.

A Fever Hospital remains on the map having been built on the land between Brown St and Cork St, north of the site and with side frontage onto Love Lane. On the north side of Cork St a Quaker burial ground has been noted opposite the Fever Hospital.

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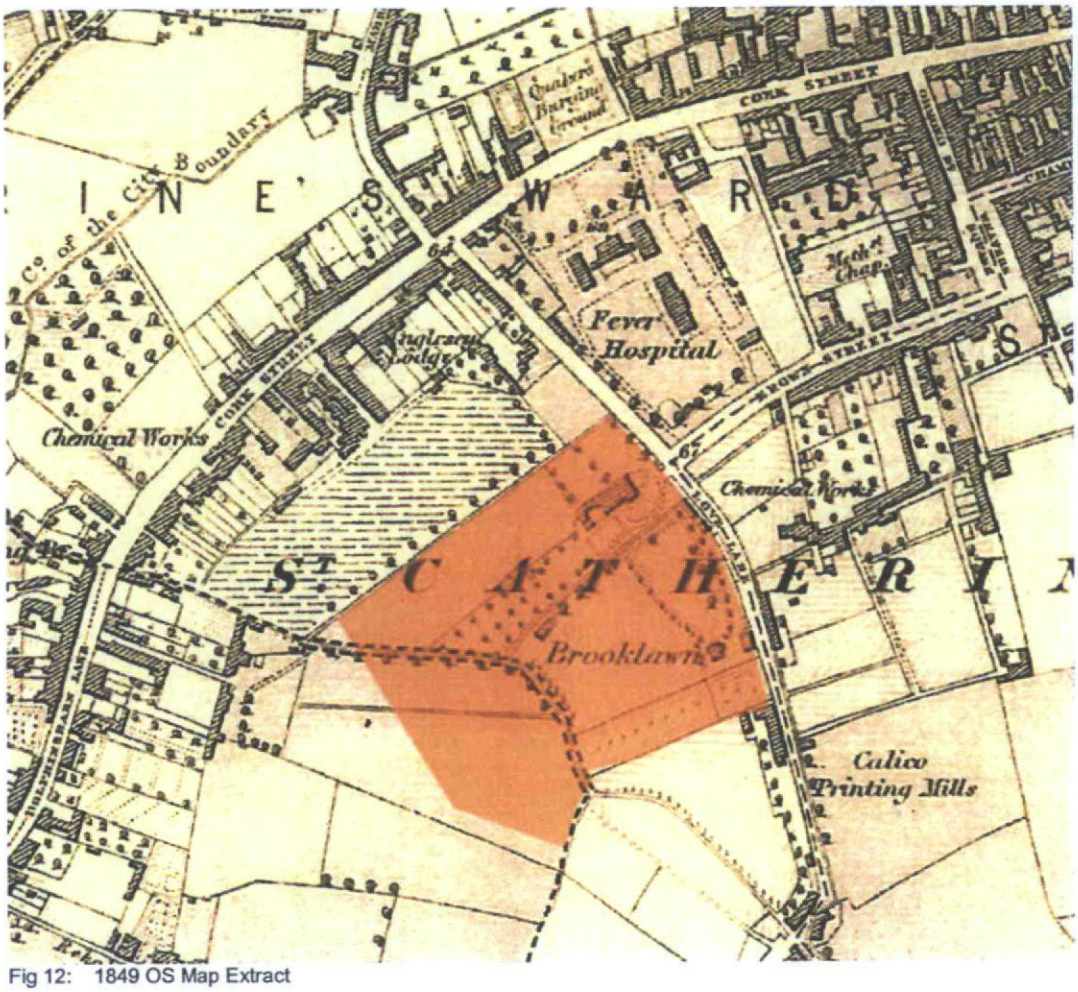

Fig 12: 1849 OS Map Extract

Although the city had not expanded greatly in this area in the intervening period since Rocque's map was published, the ribbon development along Cork St/Dolphins Barn Lane has been strengthened into a street pattern.

The two great encirclements of Dublin City – the Canal and
the Circular Road have been put in place now making the site part of the urban core of the city although that urban core is still partly in agricultural use.

1888 Dublin OS Sheets 18-75, 6" to 1 mile, (Fig 13)***:***

This map shows clearly the junction of the Abbey Stream, assigned the title Poddle river, and the 'tenter's water' mid-point on the lands of St Teresa's gardens.

Fig 13: 1888 OS Map Extract

Also we see on the northern boundary of the site a 'fire works manufactory' and in the corner abutting the 'Poddle' a 'powder magazine'. This unusual use was the establishment of John Hodsman, described in his obituary of 1903 as a 'Firework manufacturer, Pyrotechnic, and Aeronaut, of Love Lane.[6]

In fact the growth of industries continued unabated, until the numbers of mills along the Abbey and Tenter Waters was 'beyond counting' (Ronan 1927, 45), and the tanning industry had in excess of 100 master manufacturers, with several tanyards located in Dolphin's Barn (Lewis 1837, 535; 463). Other sources list seven tanners on Cork Street alone, with a further five tanneries on Dolphin's Barn Lane (Kelly 2009, 64). In addition to this grain mills, malsters, paper mills, metal working industries and a chemical works could all be found in the immediate vicinity (*ibid*., 64-66), while brickmaking was carried out to the south of the canal (DeCourcy 1996, 44). One of the more unusual industries – a fireworks factory and powder magazine – was located on the site of the St. Teresa's Gardens complex. The proprietor of this establishment was John Hodsman, described in his obituary of 1903 as 'Firework Manufacturer, Pyrotechnist and Aeronaut, of Love Lane' (Scuffil 1993, 49).

1907 Dublin OS Sheets 18, 6" to 1 mile, (Fig 14)***:***

At this stage the urban form has been clearly developed and the site of St Teresa's Gardens is an undeveloped site within a tightly packed matrix of residential and industrial building.

The site still contains Brooklawn – in a different form on the same site with a U-shaped group of ancillary buildings south of the house and abutting the road. The road is now called Donore Avenue, recalling the connection with the Earls of Meath and the location of the eponymous castle to the south of the site.

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[6] Duffy, S., Giacometti, A., (2013) *Archaeological Desk-Top Study of St Teresa's Gardens for Dublin City Council*

DCC PLAN.NO: 2475/18
RECEIVED 12 MAR 18

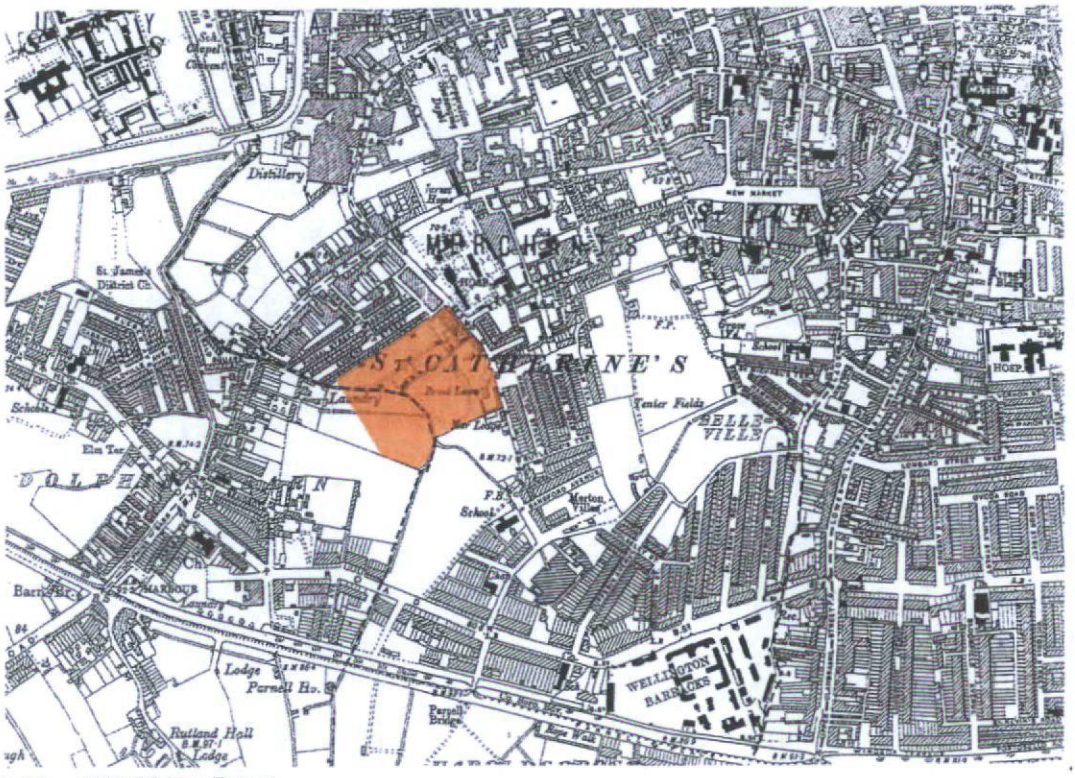


Fig 14: 1907 OS Map Extract

The unnamed house to the north shown on the 1849 map has disappeared, replaced by a group of houses/cottages facing onto Donore Avenue.

Industry is still is very prevalent and the Fever Hospital remains in place. The Tenter Fields south of Weaver's Square remain the other significant open space in the area.

1935-36 Dublin OS Sheets 18, 10+11, 25" to 1 mile:

The urban form differs only slightly from the 1907 map

The site still contains Brooklawn – and the housing to the north of the frontage to Donore Avenue remains with the addition of a new house named Cremorne, located to their rear whose access way is unclear.

The Tenter Fields have now been built upon by a scheme of local authority houses laid out on two stories in short terraces.

Donnelly's Bacon Curing Factory now adjoins the old Fever Hospital. The Quakers Burial Ground bears the title Nurse's Home

F - Design and Construction (Fig 15, 16):

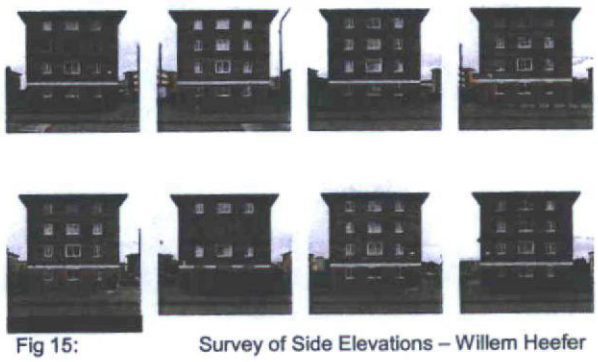


Fig 15: Survey of Side Elevations – Willem Heefer

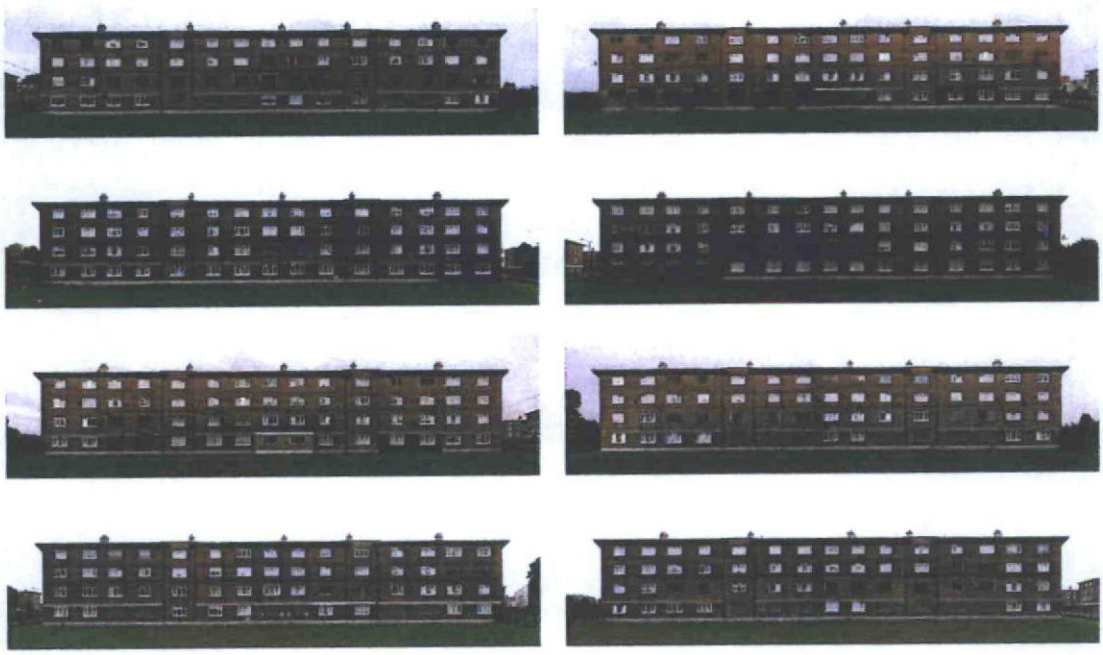


Fig 16: Survey of Front Elevations – Willem Heefer

Government Policy on Housing in the 1930's:

With the onset of the 1930s Government policy in respect of housing focussed on the eradication of tenement slums. The area of the Coombe and around Donore Avenue was one such area (Fig 17).

DCC PLAN.NO: 2475/18
RECEIVED 12 MAR 18

110

Fig 17: Brown Street Facing Weavers Square c. 1900

This was no new policy, having been pursued at various stages through the late 19th and early 20th centuries at various periods by a variety of agencies including the Local Authorities and the Artisan Development Companies.

By this stage however, during a period of economic depression it had become apparent that the existing policy of providing new homes in form of houses for eventual tenant purchase was not going to address the underlying problem in that purchase was only really an option for semi-skilled tradesmen in employment.

This realisation led to a policy of identifying slum areas for clearance and erecting new flat Blocks on suitable local sites for rental by occupants.

Impact Upon Housing Construction and the Construction Industry:

The switch to Flat Block construction meant a greater output of housing units during the 30s as well as a more economical use of scarce resources.

It also radically affected the Building Trades: At that stage only four Contractors had the capacity to carry out work of this scale and complexity due to the nature of construction, logistics and height in respect of such schemes.

Site Acquisition:

Thom's Directory for 1936 lists a ...*Harvey Day, Horse Dealer*... as the owner of Brooklawn.

By 1938, his lands had been compulsorily acquired by Dublin Corporation for the development of an extensive new flat complex.

That purchase was part of a larger process which anticipated a much larger housing scheme than was eventually built of some 550 units and extended far across Donore Avenue and up to the site of the current Coombe Hospital.

Dating the Design:

The design of the scheme almost certainly dates to the period between 1940 and 1942 as the foundations were put in place by Crampton builders in 1942. To do so the site layout must have been designed and at least part of the superstructure design must have been known then to permit calculations of loads onto the foundations (Fig 18). .

Dublin City Councils records of Monthly City Managers Reports for 1941 note that approval had been conveyed by letter dated 6th November 1941 from the Department of Local Government and Public Health for the Plans, Specifications etc. in respect of the 'Donore Avenue Scheme Foundations Contracts'.

Tendering and Construction:

Messrs. G&T Crampton's were the successful tendering contractors and their records note that this permission covered ten Blocks of Flats on the site including demolitions, and the construction of new boundary walling. The Contract noted that the value of the works was £29,540.00 with a £540.00 provision for old materials and with works to be completed within 20 weeks.

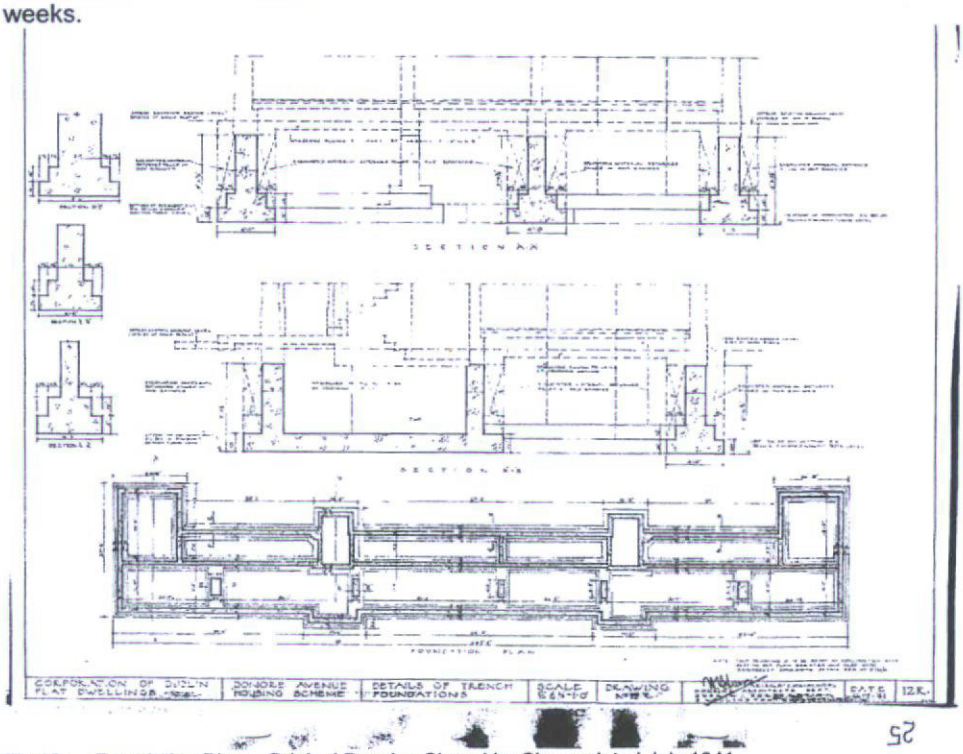


Fig 18: Foundation Plan – Original Drawing Signed by Simms dated July 1941

In the Autumn of 1942, Dublin Corporations records show a completion of the foundations works for 280 flats (out of a total of 556 units) at Donore Avenue.

DCC PLAN.NO: 2475/18
RECEIVED 12 MAR 18

Delay, Amendment and Completion:

After the foundations were in place a delay followed of nine years (an interim review took place in 1944 which resulted in the project being left in stasis) until the scheme was complete. Contemporary records indicate the delay was due to shortages of building materials, especially steel, during and after the war.

In the meantime however, the site and scope of the eventual works was reduced considerably when as reported in the Irish Press Newspaper of 28th September 1948, the Corporation agreed following representations from the Minister for Health to sell the undeveloped four acres of the site to the Coombe Hospital for a new hospital to meet the acute shortage of maternity beds in the City for £27,2495.00 (the original cost to the Corporation of the land acquisition). The Irish Press further reported that the proposal to give the site had been approved by the Housing Committee and Town Planning Committee in January of 1948.

The Design as Completed:

The final layout of the reduced development was in the form of 12 slab blocks with shared stairs serving horizontal covered walkways to the door of each upper floor flat.

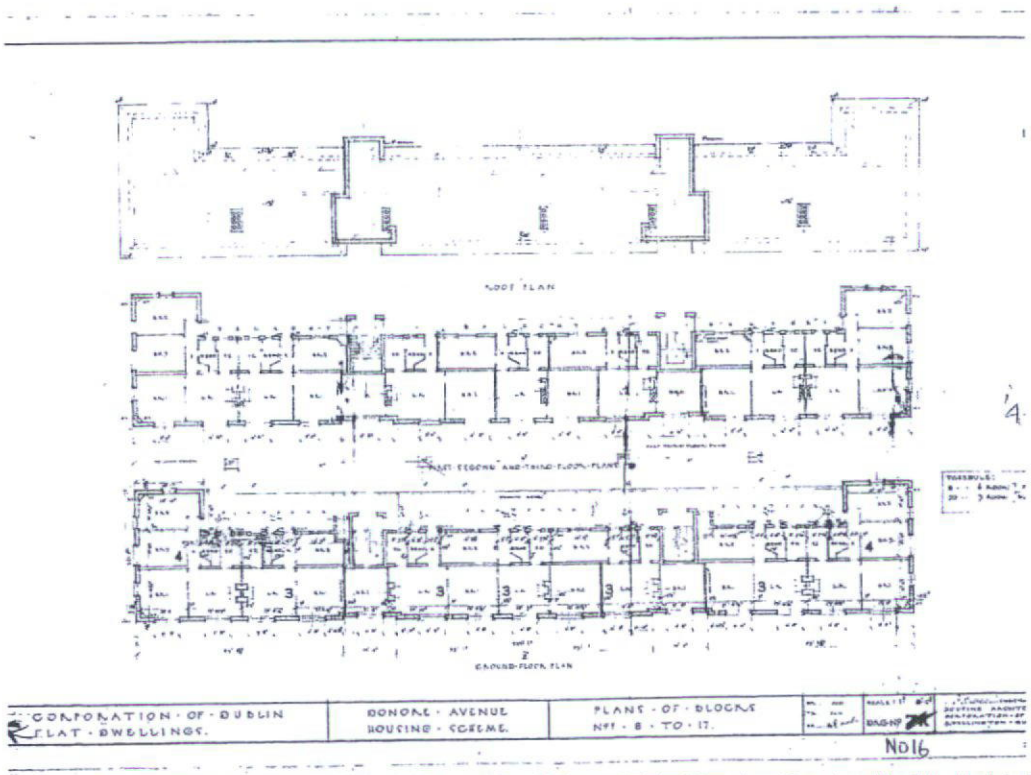


Fig 19: Ground, First, Second and Third Floors and Roof Plan – Original Drawing, Signature Illegible, Undated

As was the usual practice in Dublin Corporation designs the ground floor flats were separately accessed at ground level. The design of the three upper floors was entirely the same on each level (Fig 19). .

The layout at St Teresa's Gardens breaks new ground (as noted by Conroy) as the blocks are not arrayed around the perimeter as had been the case in Simms' earlier schemes. The strong

axial planning and symmetry employed in the design of St Teresa's Gardens is very much at odds with his previous schemes.[7]

As well as the blocks the edges to north and south of the blocks were defined by screen walls and bin storage areas, this form of perimeter, reminiscent of the workhouse planning of the 19th century, was a planning disaster as it left areas outside of the perimeter as a no-mans land that was subsequently exploited by anti-social activities.

There were two types of block within the St Teresa's Avenue plan:

1. A straight block with two stairwells and five intermediate flats and two larger flats at each which terminated the walkway as a form of book-ended arrangement (Fig 21). This bookend was expressed on the elevations by returning the brick around the gables onto a short section of the 'gallery access' side. The stair towers were also expressed by a slight adjustment in the roof height, the breaking of the overhanging eaves and a small recess in the brick faced elevation. There were ten of these blocks arranged two parallel rows of five blocks. The blocks were 61.28m long, 10.6m wide at the ends and 11.14m high over ground level. There were ten of these blocks each containing 28 residential units.

2. The two blocks that fronted onto Donore Avenue were staggered in plan, forming a breakfront arrangement,these also had two stair towers and horizontal external covered walkways at 1st, 2nd and 3rd floor levels (Fig 20). These blocks had deeper returns at the ends than the straight blocks and had bow ends at ground floor level facing across the central entrance into the site interior. The design incorporated the same elevational devices as in the other blocks cited above. Both of these blocks contained 32 residential units and a string of offices, shops/communal facilities along the ground floor 'breakfront'.

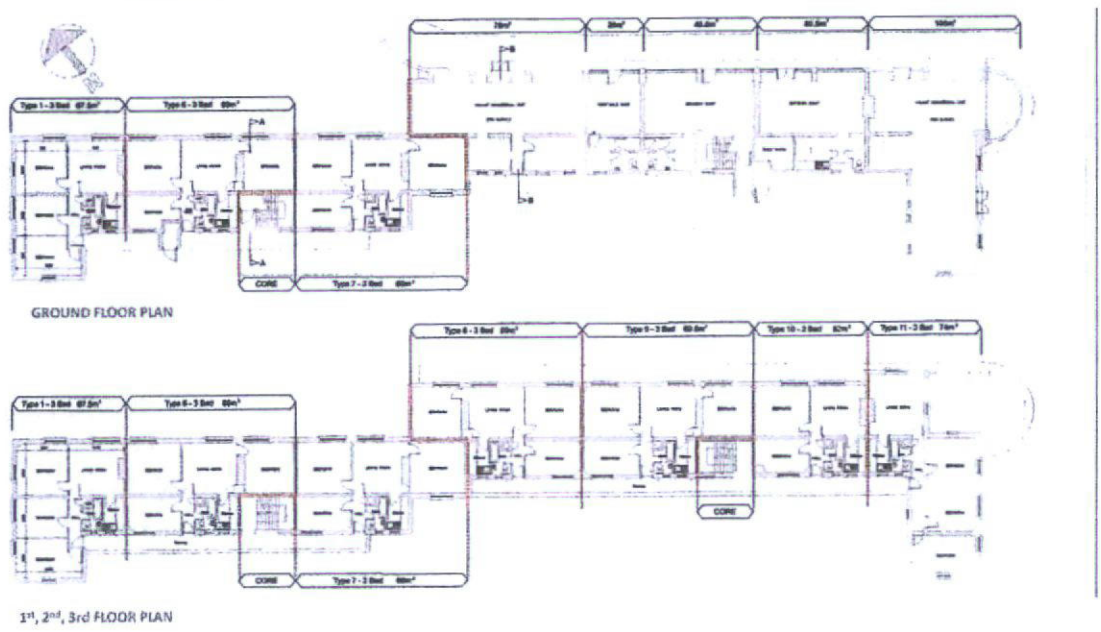


Fig 20: Dublin City Council Survey Drawings Showing West Range Facing Donore Avenue

[7] Conroy, E., (1997), M.Arch.Sc. Thesis, U.C.D. *H.G. Simms and, the problem of slum clearance in Dublin*

DCC PLAN.NO: 2475/18
RECEIVED 12 MAR 18

TYPICAL BLOCK FLOOR PLAN EXISTING - 28 no units - 8 X 3 BED / 20 X 2 BED
(2 x 3 BEDROOM UNITS / 5 x 2 BEDROOM UNITS PER FLOOR)

Fig 21: Dublin City Council Survey Drawings Showing Typical Block Plan

Two matching blocks of houses of two stories in height (no longer extant), were aligned symmetrically at right angles between the first and second row of blocks from the east. These blocks were added in between 1952 and 1969 and have been demolished in the last two years.

Design Typology and Influences

Slab blocks are synonymous in most minds with 'the modern style' in housing architecture. To understand the issues and the issues connected with their design we have to look at the social and historical context of Dublin in the early to mid 20th century.

Simms and Contemporary Dutch Design:

In the early 20th century this form of housing was referred to in newspapers and journals as Dutch style municipal housing because it followed a visual pattern that bore considerable resemblance to that built on a large scale in Holland in the period.

Simms had greatly admired Dutch housing, he had books and magazines depicting the new architecture being built in Holland and a copy of Nieuw Nederlandische Bouwkunst (Amsterdam 1926) carrying his signature on the title page (Fig 22) has been identified ; Examination of that publication certainly illustrates a number of instances of features later adopted by Simms and we can conclude that Dutch design of the period had a considerable effect upon his development as an Architect and the aesthetic sensibility of much of his work in the 1930s

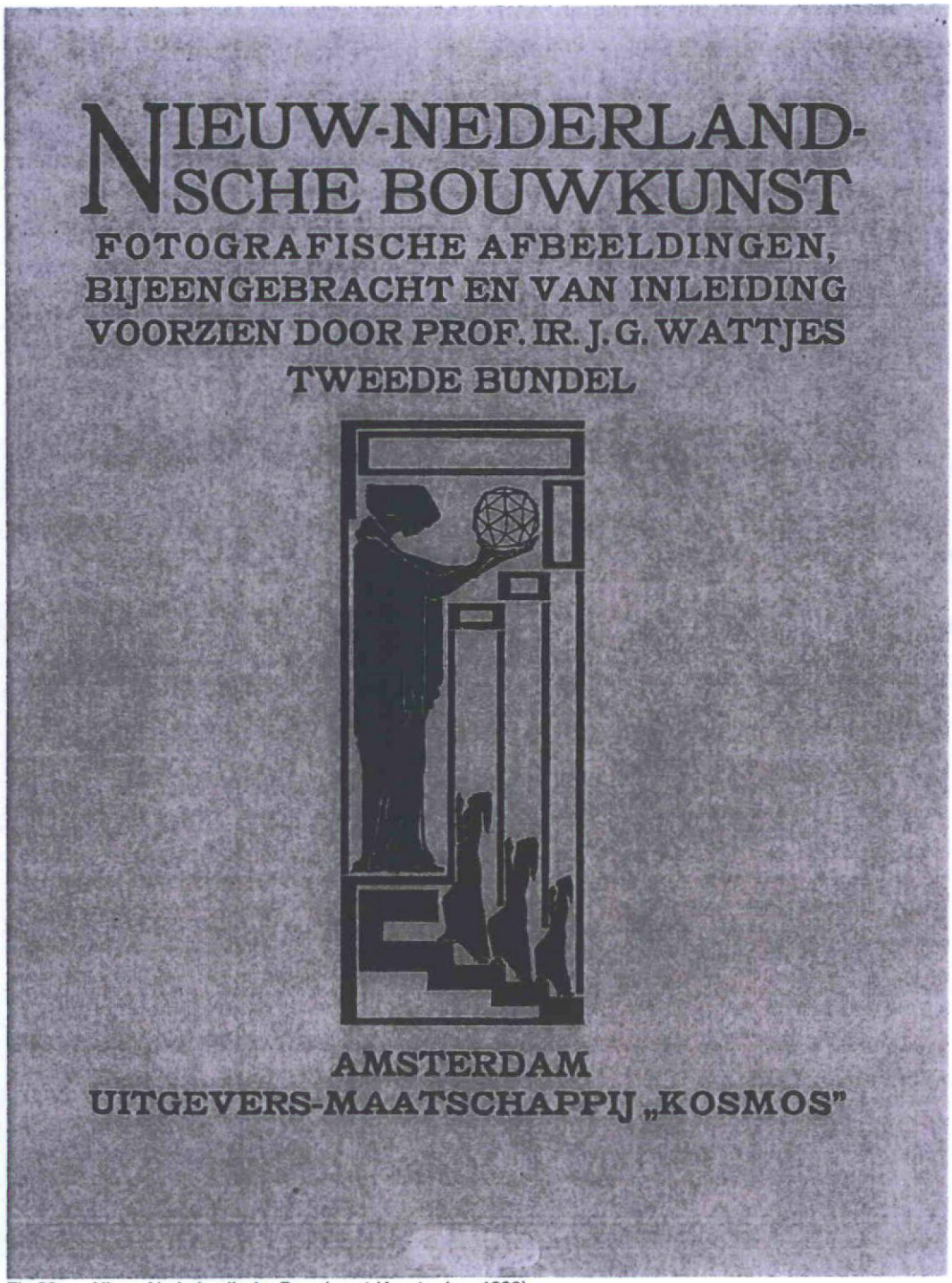


Fig 22: Nieuw Nederlandische Bouwkunst (Amsterdam 1926)

However, as Conroy has pointed out, the actual form of housing that was built in Dublin was a very much a modified form of the Dutch Style and in fact was very strongly influenced by British municipal housing of the period.

DCC PLAN.NO: 2475/18
RECEIVED 12 MAR 18

The similarities in respect of contemporary Dutch housing (Fig 23, 24, 25, 26) are all stylistic in the horizontal banding of elevations the use of concrete flat roofs with overhanging eaves, curved corners, corner towers with corner windows etc.

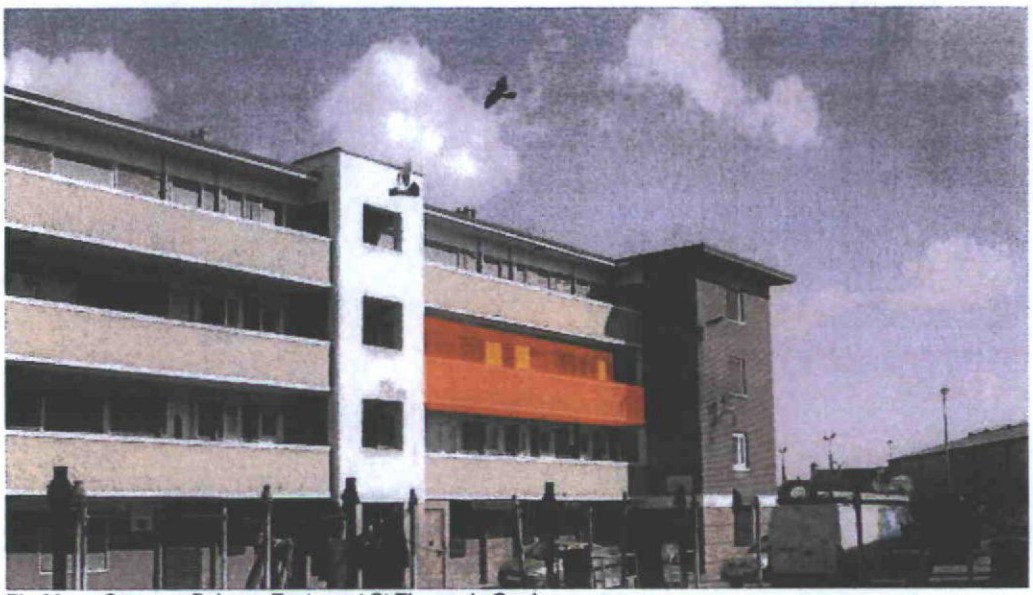
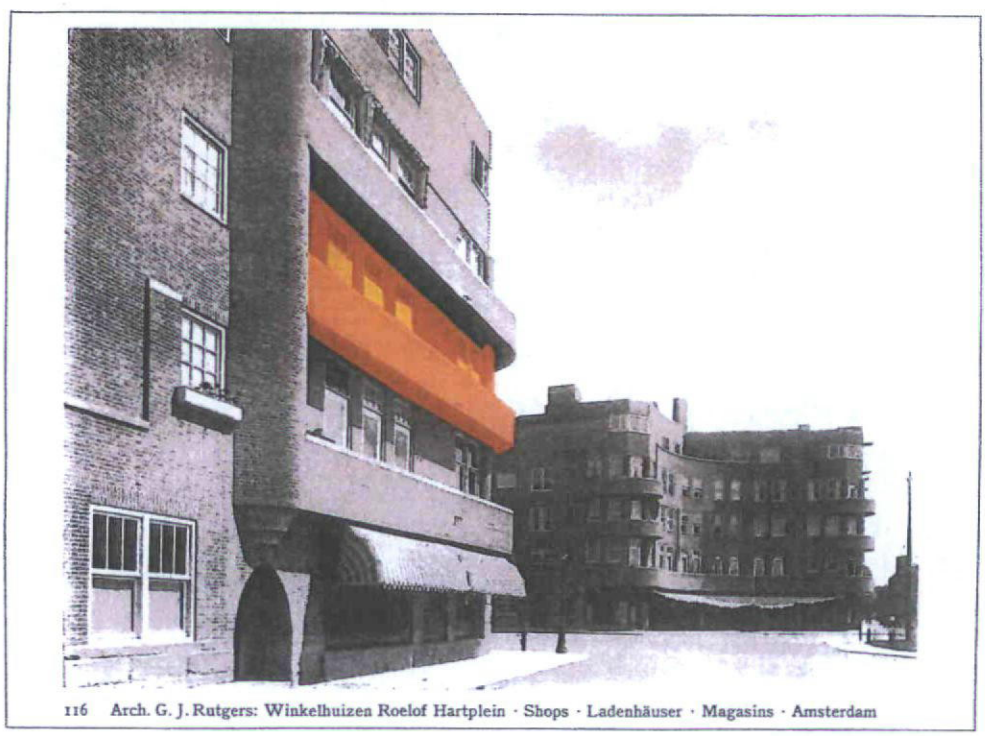


Fig 23: Common Balcony Feature at St Theresa's Garden



116 Arch. G. J. Rutgers: Winkelhuizen Roelof Hartplein · Shops · Ladenhäuser · Magasins · Amsterdam

Fig 24: Nieuw Nederlandische Bouwkunst (Amsterdam 1926) Common Balconies as a Feature

Fig 25: Strong Axial Planning as a Feature

Arch. M. de Klerk: Woningen Meerhuizenplein · Dwelling-houses · Wohnhäuser · Maisons d'habitation Amsterdam

55

Fig 26: Nieuw Nederlandische Bouwkunst (Amsterdam 1926) Strong Axial Planning as a Feature

DCC PLAN.NO: 2475/18
RECEIVED 12 MAR 18

British Contemporary Architectural Influences:

The construction and planning methods that Simms used in Dublin, however, followed much more closely the English model.

There are many reasons for this, our architectural schools were very much under British influence and our local government administration although very recently freed from governance by Westminster was still essentially the same model with little in the form of structural change.

However, another major factor in the form chosen in Dublin related to the history of tenement houses in the city. Dublin had been noted as having the worst slums in Europe with e possible exception of Edinburgh at the turn of the 19th/20th centuries. This slum housing was almost entirely occupying formerly grand 18th and even 17th century town-houses that had become redundant/out of favour as a result of political and demographic changes in the city.

These town-houses were built with a stairwell off which each room usually housed one family with only the most rudimentary sanitary and kitchen facilities. It was one of the chief goals of the new state to provide housing to replace the tenements and it was in this context that the local government councillors, architects and administrators looked to what had been achieved in mass housing in Britain and Europe.

In this regard the Dutch form of housing had the serious drawback that it was designed with access from stairwells as the sole means of circulation and this was too similar in many peoples eyes here in Ireland to the form of housing that it was intended to replace.

London City Council (LCC) had evolved a form of slab block housing that had stairwells at intervals serving 'gallery access' walkways creating a primary and secondary form of circulation that was adopted here as the most desirable form. Other local authorities had followed suit and Conroy records that Simms and others visited housing schemes in England in 1936 to see what was being done there. Bracken House (Fig 27).

Fig 27: Bracken House, Bromley by Bow, London – 1930's

Design Quality:

The use of materials and the sparing use of details as exemplified by the bow ends to the front blocks framing the entrance into St Teresa's Gardens (Fig 28) is a testament to Simm's architectural skill and represents his work at its best.

Fig28: Entrance Articulation at Donore Avenue

The elevations to the blocks are simple but well composed using a repetitive theme of three-part casement windows set in pairs. Although his blocks were often set back from street lines he did achieve a more lively streetscape by incorporating shops and community uses in the ground floor facing Donore Avenue (Fig 29) as he had done at Markievicz House (Fig 30).

Fig 29: St Theresas Gardens Detail of Shop-fronts

Fig 30: Markievicz House Detail of Shop-fronts

DCC PLAN.NO: 2475/18
RECEIVED 12 MAR 18

However, Simms's designs were not without fault. His architecture had some serious flaws, (many of them generic and not confined to any single scheme) that were to prove problematic and in some instances fatal over the course of their existence (Fig 31, 32):

- Design and layout of communal spaces within the housing areas was very poor and rarely comprised more than concrete slabs on occasion punctuated by play structures and washing lines.
- The layouts were organised so that the flats were entered from within the site without any 'front doors' on the public or street side with the result that the public face of the developments although well composed as elevations had no interaction with the street; this was partly counteracted in those schemes where there were shops/communal facilities on the street front.
- The absence of any supervision of entrance areas and restriction of access to stairwells and balconies made these areas particularly vulnerable to anti-social elements and became a major issue in the fight against drug suppliers dealing in the schemes.
- The ground floor flats (generally designed as accommodation for the elderly) were very vulnerable to antisocial activity and in most similar schemes became untenable, contributing further to the decline of the complexes.

Fig 31: Poor Design Quality to Communal Spaces

Fig 32: Lack of Security at ground floor and stairwell entrances

St Theresa's Gardens, while of interesting design does tend to encapsulate all of the generic flaws associated with the large Flat Block Schemes of the period.

H.G. Simms, Housing Architect Dublin Corporation

Herbert Simms, a London born and Liverpool educated architect and author of the St Theresa's Gardens Scheme, was the driving force behind the design and realisation of much of the new Dublin Housing during the 1930s.

Simms had an illustrious career as evidenced by the following extract from his profile in The Dictionary of Irish Architects

"Housing architect to Dublin Corporation from 1932 until 1948. Herbert George Simms, son of George William Simms, train driver, of 33 Victoria Road, London, was born in London on 30 November 1898. He was educated at Haverstock Industrial and Commercial School. During the First World War he served in the Royal Field Artillery, and, as a result, was awarded an ex-service scholarship of £150 and tuition fees for three years which enabled him to study architecture at Liverpool University. He entered the university in October 1919 but had to give up the Diploma course for financial reasons when the three years were up. By this time he had received the Certificate in Architecture in 1921 and had passed the third and fourth years of the Diploma course in June 1921 and June 1922. On the grounds of his previous office experience and the standard he had reached in his studies, he was permitted to take the course for the Certificate in Civic Design in the summer term of 1922 in lieu of practical work. He was awarded the Certificate in March 1923.

On leaving the university Simms came to Dublin, where he worked for a time in the office of Aubrey Vincent O'Rourke_. In February 1925 he was appointed temporary architect to Dublin Corporation at a salary of eight guineas per week. The appointment, initially for six months, was extended at least until December 1927. In 1926 he was authorized to visit London, Liverpool and Manchester to investigate the latest trends in flat buildings. In 1929-1930 he worked for about a year in India as a town planner in the Punjab, before returning to Dublin.

Until 1932 new housing in Dublin had been the responsibility of the city architect, HORACE O'ROURKE_. Between 1923 and 1931 new dwellings were being erected at an average rate of 555 per annum, but the shortage of adequate housing in the city remained acute. In 1932 or 1933 a separate housing architect's Department was formed with specific responsibility for the design and erection of new dwellings, as distinct from their administration and maintenance. Simms was appointed to the new post of Corporation housing architect. He immediately recruited a temporary staff to assist him in the task which confronted him. In 1935 alone 1,552 dwellings were completed. During the sixteen years he was in office, Simms was responsible for for the design and erection of some 17,000 new homes, ranging from striking blocks of flats in the central city, influenced, as Rothery points out, by new apartment blocks by de Klerk in Amsterdam and J.P. Oud in Rotterdam, to extensive suburban housing schemes such as those at Crumlin and Cabra.

When Horace O'Rourke retired in 1945, the post of city architect remained unfilled, which increased the pressure of work on the housing architect. On 28 September 1948 Simms, who had already suffered one nervous breakdown, took his own life by throwing himself onto the railway line at Dun Laoghaire; he was not killed immediately but died later the same day at St Michael's Hospital, Dun Laoghaire. According to the suicide note found on his person, he felt that overwork was threatening his sanity. He was survived by his widow, Eileen (1908-1978), daughter of Garda Superintendent Thomas Clarke of Mount Merrion, Co. Dublin, whom he had married in 1929. He was buried in Deansgrange cemetery.

A tribute by Ernest F.N. Taylor, the city surveyor, was published in the Irish Builder: 'Behind a quiet and unassuming manner there lurked a forceful personality; and Mr Simms could uphold his point of view with a vigour that sometimes surprised those who did not know him well. By sheer hard work and conscientious devotion to duty, he has made a personal contribution towards the solution of Dublin's housing problem, probably unequalled by anyone in our time…It is not given to many of us to achieve so much in the space of a short lifetime for the benefit of our fellow men.' "

His death was recorded in the Irish Press[8]:

"Mr. Herbert G. Simms, Chief Housing Architect Dublin Corporation, 45 Mobhi Road, Glasnevin died yesterday at St Michael's Hospital, Dun Laoghaire…… Mr Simms first joined the

[8] Irish Press, 29 September, 1948

DCC PLAN.NO: 2475/18
RECEIVED 12 MAR 18

Corporation staff in 1925..... Later he resigned and went to India, but returned a year later, rejoined..... and was made Chief Housing Architect in 1934. He had a considerable part in the planning of the Corporation housing schemes of the next 14 years."

Simms Architectural Legacy:

Flat Block Schemes attributed to Simms are as follows:

Scheme	Year of Completion	No. of Flats
Pre-War		
Mary's Lane Phase 2	1934	Unknown
Mercer House, Cuffe St	1934	104
Chancery House, Chancery St	1935	27
St Audoen's House, Cook St	1936	55
Oliver Bond House, Bridgefoot St	1936	391
Railway Street	1936	81
Whelan House Thorncastle Street, Ringsend	1936	64
Avondale House, Nth Cumberland St	1936	66
Emmet Buildings, Watling St;	1938	72
Pearse House, Hanover Street	1938	345
Countess Markievicz House, Townsend Street	1939	170
Henrietta House, Henrietta Place	1939	48
Poplar Row, Ballybough	1939	111
Mary Aikenhead House, James Street	1940	150
Marrowbone Lane	1940	112
Aldborough House Housing, Portland Row	1940	Unknown
Post-War		
Fatima Mansions, Rialto (Demolished)	1946	364
St.Laurence's Mansions, St.Bridget's Gardens, and Phil Shanahan House, Sheriff St (Demolished)	Unknown	Unknown
St Teresa's Gardens, Donore Avenue	1951	346

The three post war schemes mentioned above are described by Conroy as 'mega schemes' as the numbers of units in each were of a greater order of scale to those that he had been developed earlier.

It is perhaps notable that all of these schemes have had major problems associated with anti-social activity, drug abuse and criminality and that with the demolition of St Teresas Gardens all three Schemes will have been demolished

As well as flat blocks Simms designed many schemes of suburban one and two storey houses.

Simms most successful contribution in the designs he made for Dublin Corporation was in the achievement of stylish, often sleek modernistic facades onto buildings that were essentially very simple and repetitive.

G - The Rise & Fall of St. Teresa's Gardens

The Early St. Teresa's Gardens:

When the estate was built, St. Teresa's Gardens was considered 'a fine place to live'. For many new tenants, many of whom came from slum tenement rooms, it would have had been the first time they had conveniences like running water, electric lighting and sanitation. The complex was highly regarded for its location, thanks to its proximity to town and to employers and many of the original residents claim there was a very friendly atmosphere and a strong sense of community in the flats. [Ref.1]

In a period between the late 1970's and early 1980's, following the recession of the early 1970's, a number of issues began to arise in the flats. The recession affected working class families the hardest, and unemployment in the flats was prevalent. On top of this, Dublin Corporation's heavily numbered housing transfer list at the time meant there were very high numbers of people in urgent need of new accommodation.

The area became undesirable as some families began moving away, and the flats became synonymous with a rapid turnover of residents. Crime also began to rise in the estate around this time, perhaps due to unemployment and the growth of the drug industry.

Around this time the estate also began to suffer greatly from maintenance issues. In early 1982, a period of heavy rainfalls and blocked drains meant part of the flat complex became flooded, and remained so for a number of weeks. Tenants organised to try to deal with this and other maintenance issues. While progress was made, many of the core issues remained unresolved and the flats continued their downward spiral.

Recent History of St Teresa's Gardens:

Despite efforts over the years, St. Teresa's Gardens continued to suffer from various issues including crime, drug use, and unemployment. The building themselves also continued to experience serious problems.

A regeneration board was established in December of 2005 by Dublin City Council and they a number of years working on a master plan for the redevelopment. A Public Private Partnership (PPP) development was proposed which was to include the demolition of the existing units and

DCC PLAN.NO: 2475/18
RECEIVED 12 MAR 18

replacement with a substantial development of 300 social and affordable units[9], 300 private apartments, retail and commercial units and community facilities. The project was put out to tender in 2008 however the project fell through in mid 2009 due to the economic recession.

In October 2010, a maintenance survey conducted by the estate's regeneration board cited many problems affecting residents e.g. rat infestations, dampness and sewage problems. The situation in the flats was now being described as a crisis and most of the residents wished to be moved out as soon as possible[10].

In October 2012, Dublin City Council, having considered various options, voted for the demolition of St. Teresa's Gardens in a two phase process with the exception of two blocks[11] and in April of 2013, it was decided to go ahead with a PPP scheme, following its postponement almost four years previously.

H - Key Conservation Issues

As the purpose of this exercise is to record the scheme prior to demolition the discussion is limited as to how best to maintain the memory of what has been a significant part of the history of municipal housing in Dublin for over sixty years.

The significant factors are:

- The association with H.G. Simms a leading architect, a pioneer of modern architecture in the area of municipal housing and the key figure in the implementation of high density, medium-rise housing in central Dublin.

- The existence of medieval watercourses – the Abbey Stream and The Tenter's Water in or around the site.

The Simms 'Connection':

The importance of Simms as a key figure in early 20th century architecture in Dublin is not contested. We acknowledge that the decision to demolish this scheme of housing has been taken by Dublin City Council after due deliberation and all of the relevant factors have been taken into account.

We do not recommend salvage or re-use of any surviving building elements as the scheme is significant in its totality rather than in the quality of its materials, detail or workmanship.

Nonetheless there is a serious point to be considered. If this decision to demolish St Teresa's Gardens is seen as a precedent then a major damage to the legacy of early 20th century public housing in Dublin could follow.

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[9] http://www.irishbuildingmagazine.ie/2013/04/19/3919/

[10] http://www.rte.ie/news/2010/1022/137174-dublin/

[11] http://www.thejournal.ie/10-two-storey-premises-in-st-teresas-gardens-to-be-demolished-619124-Oct2012/

It is never a completely satisfactory arrangement when the body responsible for protection of the built heritage is also the landlord responsible for the running and maintenance of that heritage. It is important that the legacy of Simms be protected; this will require an analysis of his output and the nomination of certain works to be conserved

In this case we see this scheme as an example of the work of Simms; in architectural terms it lacks the finesse of some of his finer work and its layout is not characteristic of his best work done in the pre-war years.

Recommendation:

1. Dublin City Council as the protector of the architectural heritage should set down its policy in relation to the future of the other Simms schemes in order that a proper strategy for the retention and conservation of those schemes will take place.

2. The record of Simms works should be correlated into a single archive to enable the better understanding and appreciation of his work and to facilitate the better management and conservation of his projects

The Medieval Watercourses:

The presence on or on the site boundary of the medieval watercourses is an issue that requires further investigation and assessment.

3. Recommendation:

The design of the scheme being planned to replace St Teresa's Gardens should take due cognisance of the information concerning the routes of the medieval water courses and where any doubt applies should be preceded by studies to identify the exact location. These historic artefacts should be incorporated into the new design to give 'a sense of place' within the proposed development and to protect their heritage.

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Ref 1 Fighting Back Document, page 4
Ref 2 Fighting back Document survey results
Ref 3 http://www.anphoblacht.com/contents/20797
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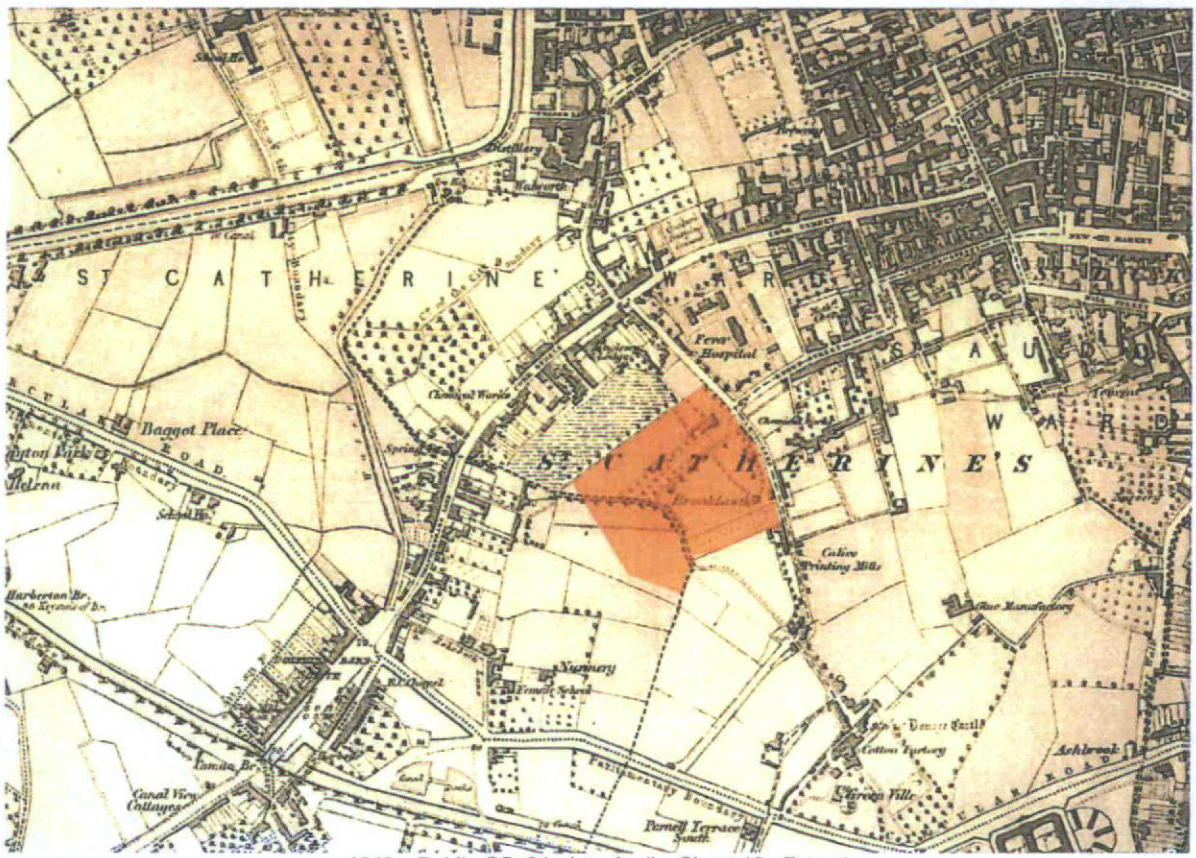
Conservation Record Study
of
St Teresa's Gardens, Donore Avenue, Dublin 8

APPENDIX A

MAP RECORD



1849 – Dublin OS, 6 inch to 1 mile, Sheet 18 - Extract

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BY
KELLY AND COGAN ARCHITECTS
NOVEMBER 2013

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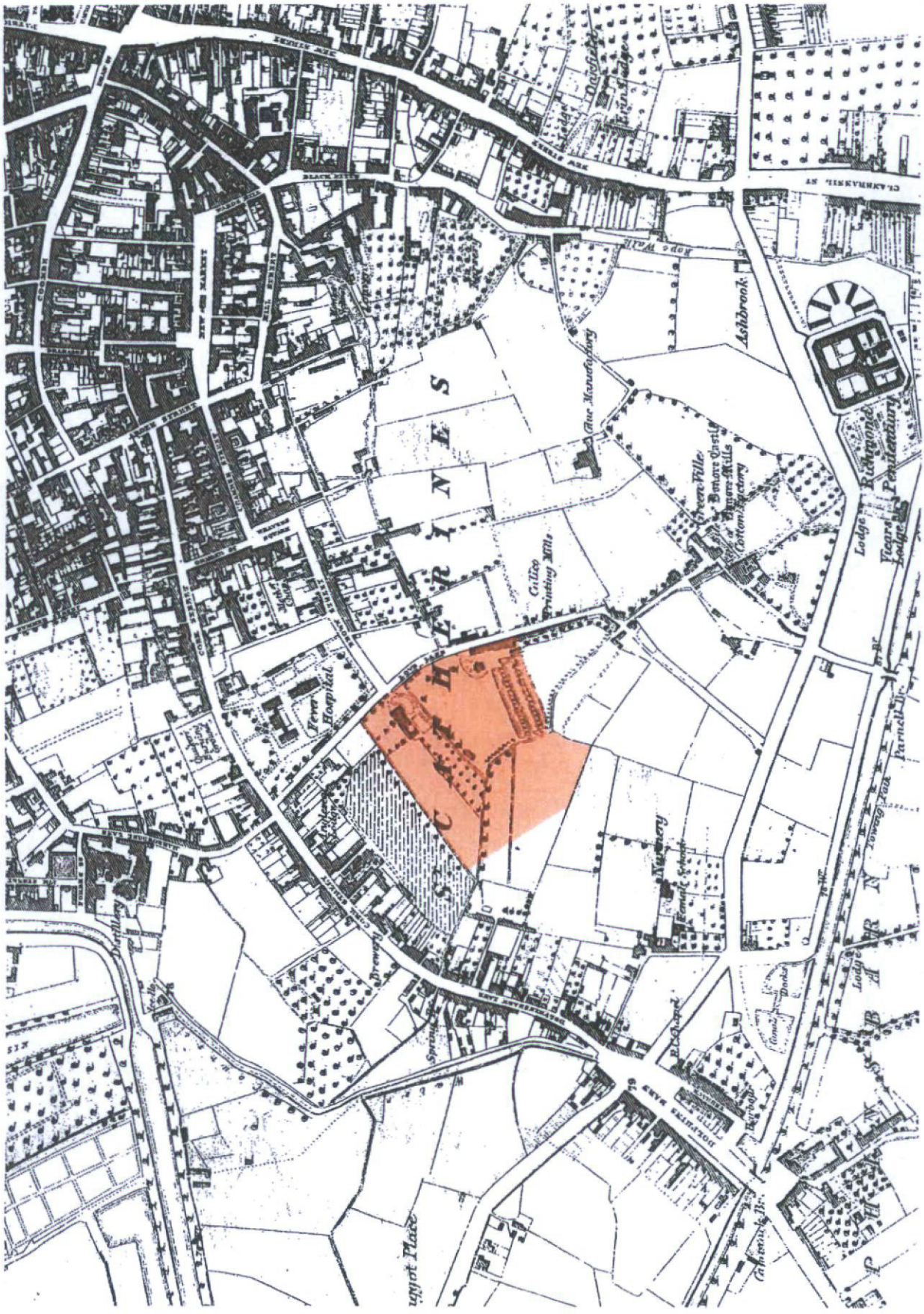
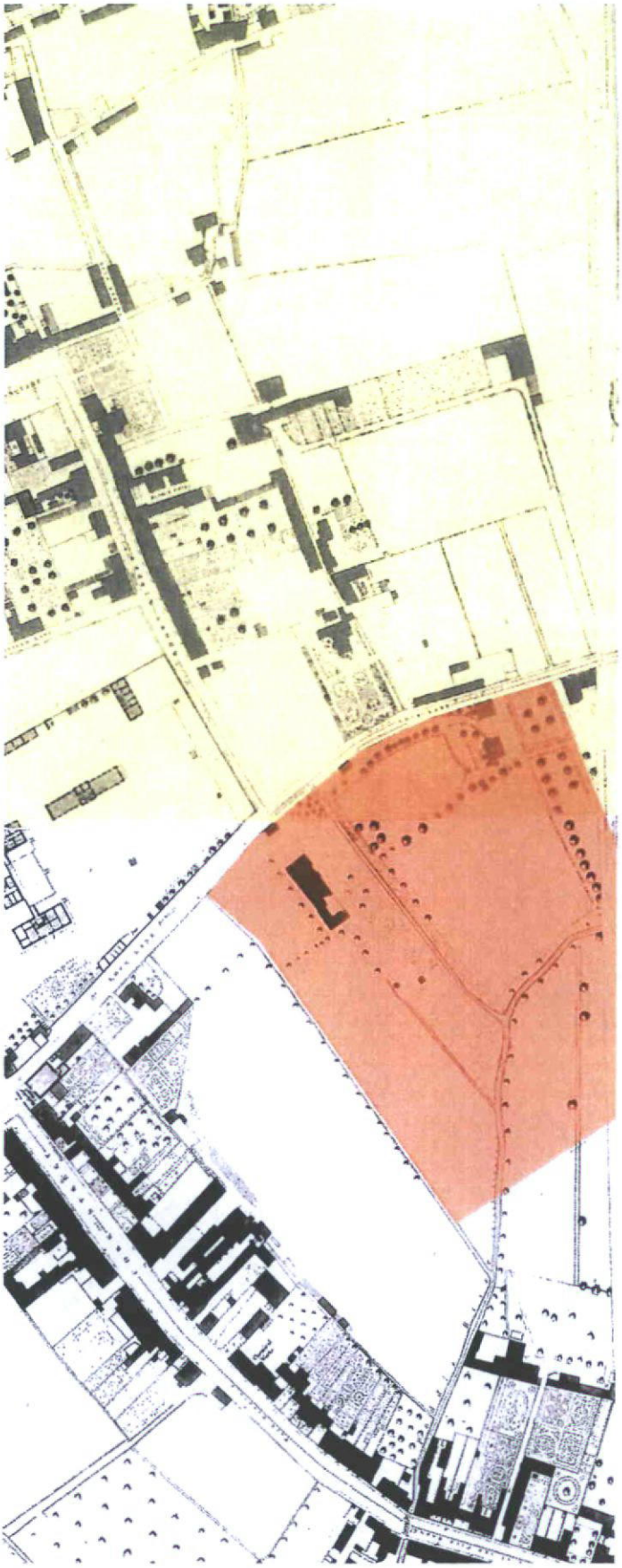
1756 – John Rocque's Map of Dublin - Extract

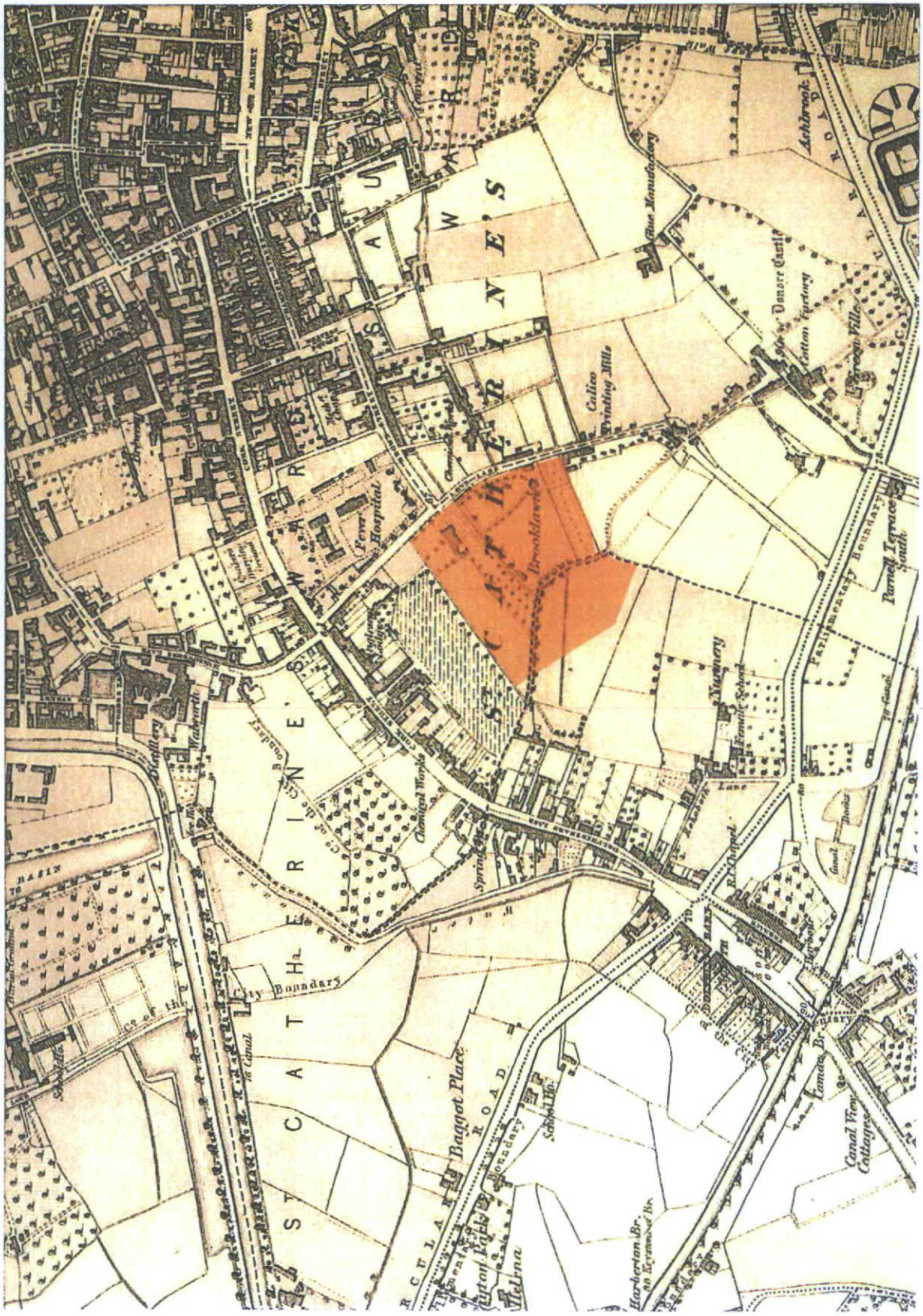
1837 – Dublin OS, 6 inch to 1 mile, Sheet 18 - Extract


Ashbrook
Fever Hospital
Printing Mills
Nursery
Richmond Penitentiary
Lodge
Drumcondra Lodge
Tolka R.
Drumcondra Rd.
Distillery
Brewery
Spring Gdns.
Canal
Dock
Basin
Tolka Bridge
Glasnevin Bridge
Glasnevin Ho.
Glasnevin Cemetery
Glasnevin Rd.
Prospect Cemetery
Cemetery
Female School
Lodge
Tower
Tower Ho.
Parnell Dr.
Rope Walk
Clarmahil St.
Black Horse
Church
Mill
Cotton Factory
Green Fille
Bonnet Castle
Mills
Manufactory
Glasnevin
Finglas Rd.
Finglas Bridge
Finglas Village
Finglas Rd.
Finglas Bridge
Finglas Village
Finglas Rd.
Finglas Bridge
Finglas Village

1847 – Dublin OS, 6 inch to 1 mile, Sheets 18 and 25 – Composite



1849 – Dublin OS, 6 inch to 1 mile, Sheets 18 – Extract



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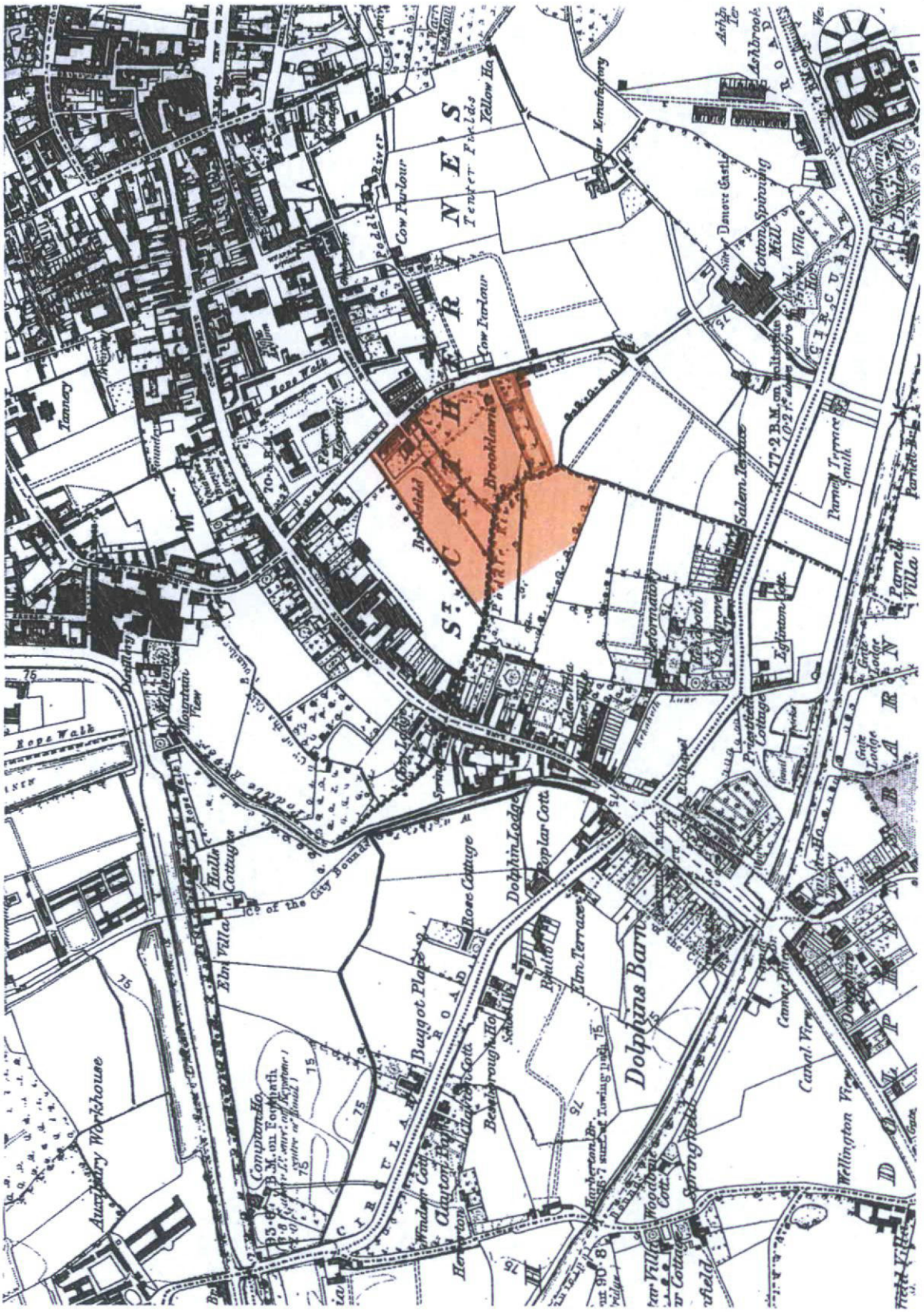
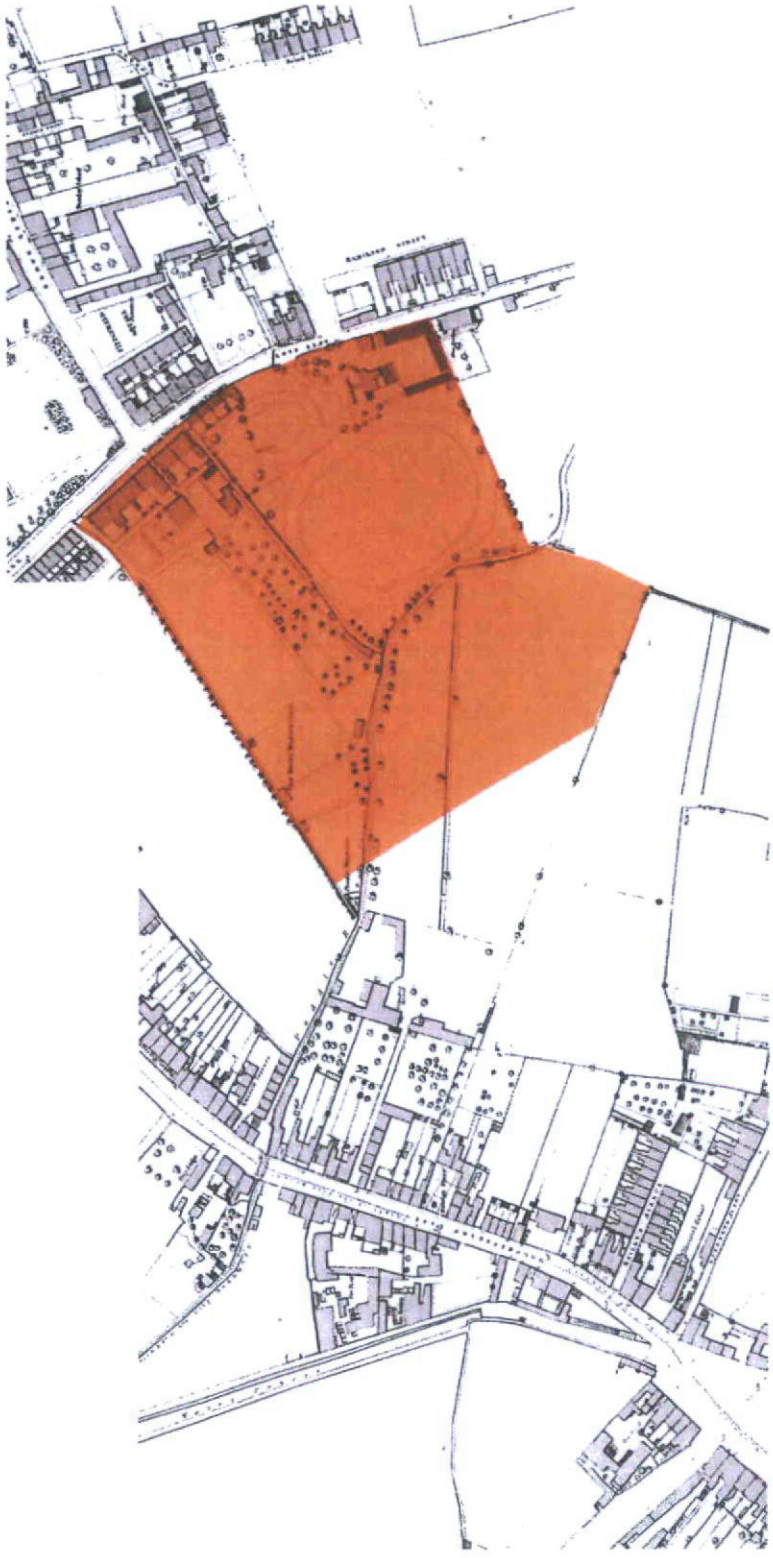
1876 – Dublin OS, 6 inch to 1 mile, Sheet 18 – Extract



1886 – Dublin OS, 5 foot to 1 mile, Sheets 18 and 76 – Composite



DCC PLAN.NO: 2475/18
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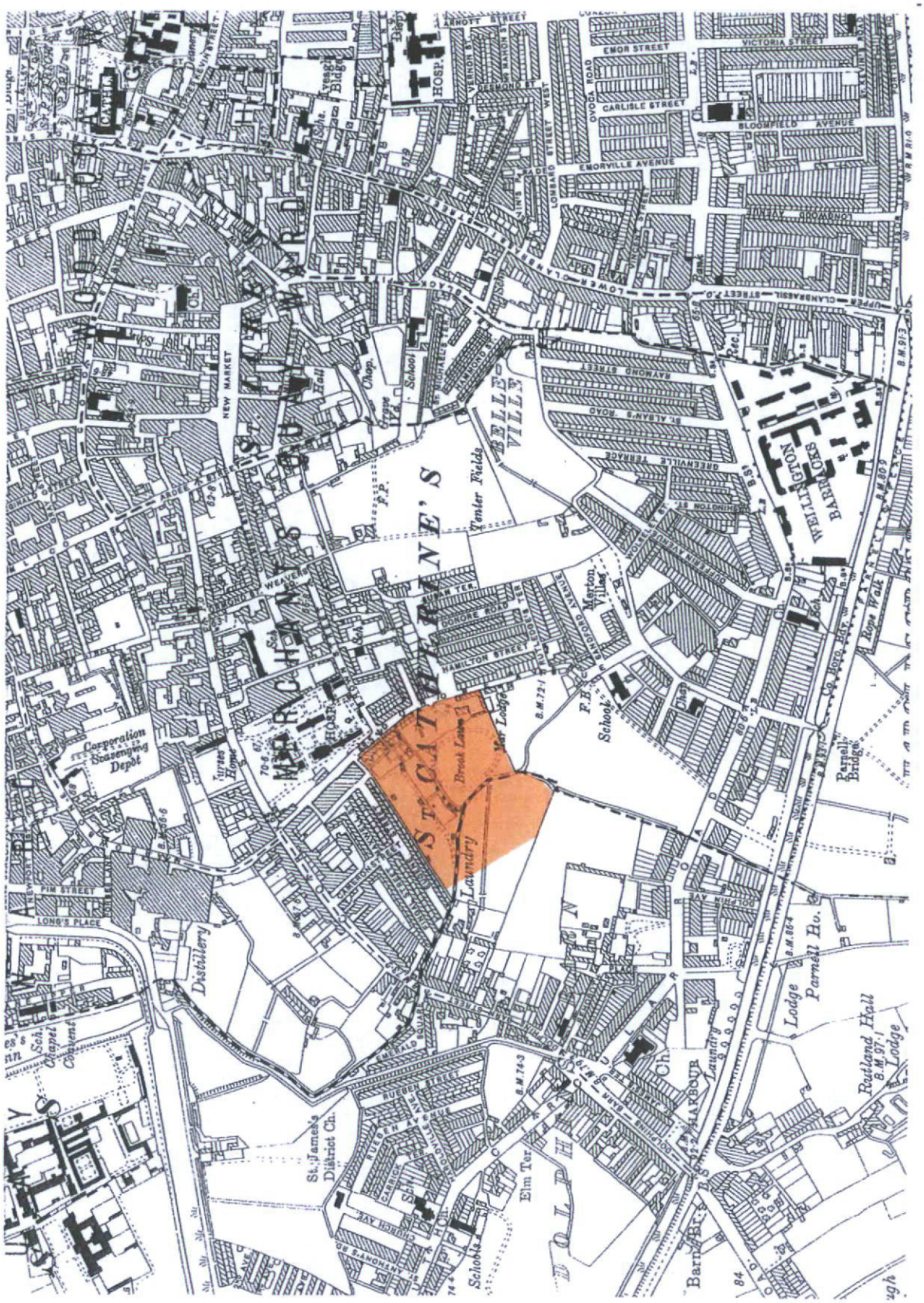
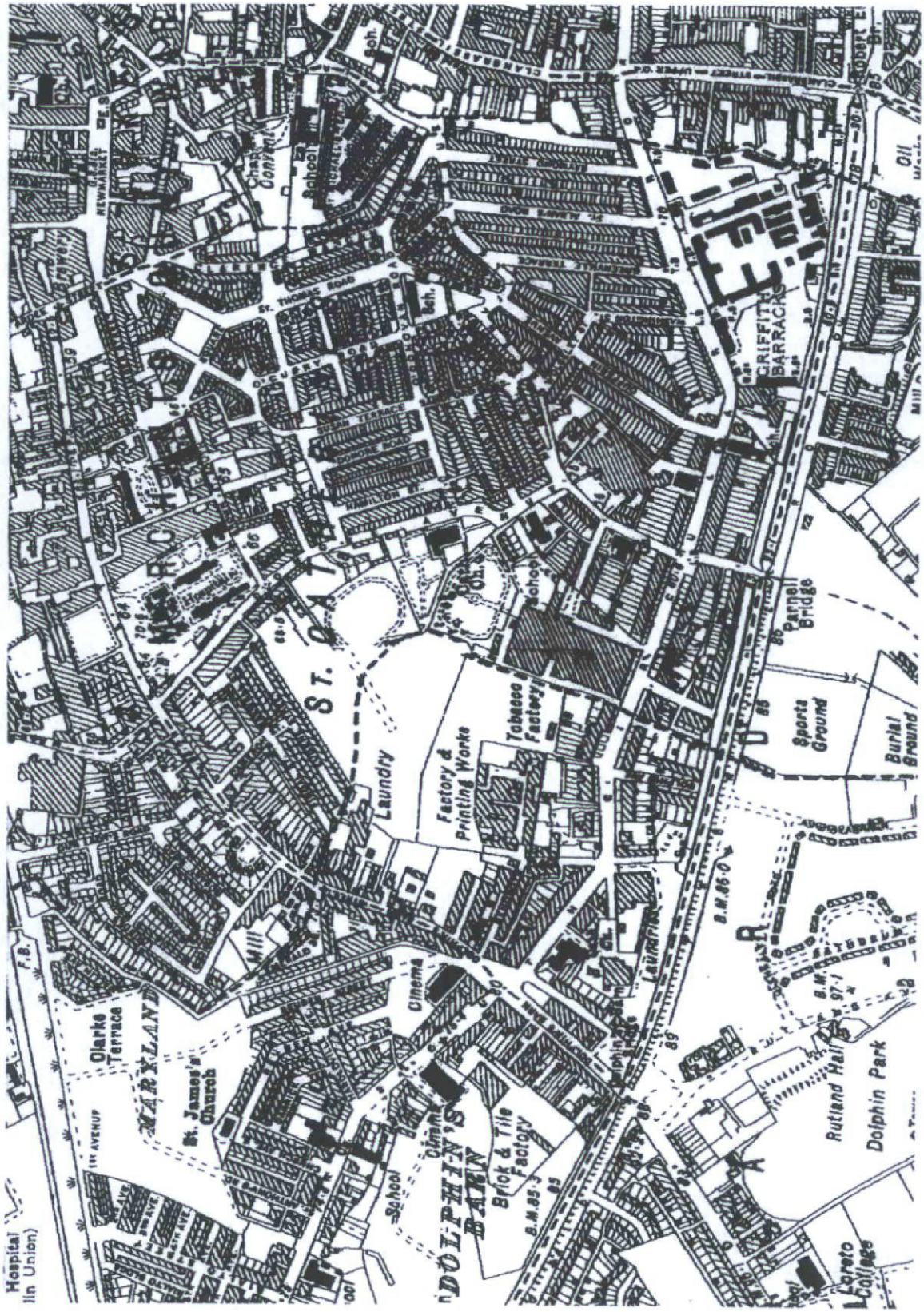
1907 - 08 – Dublin OS, 6 inch to 1 mile, Sheet 18 – Extract

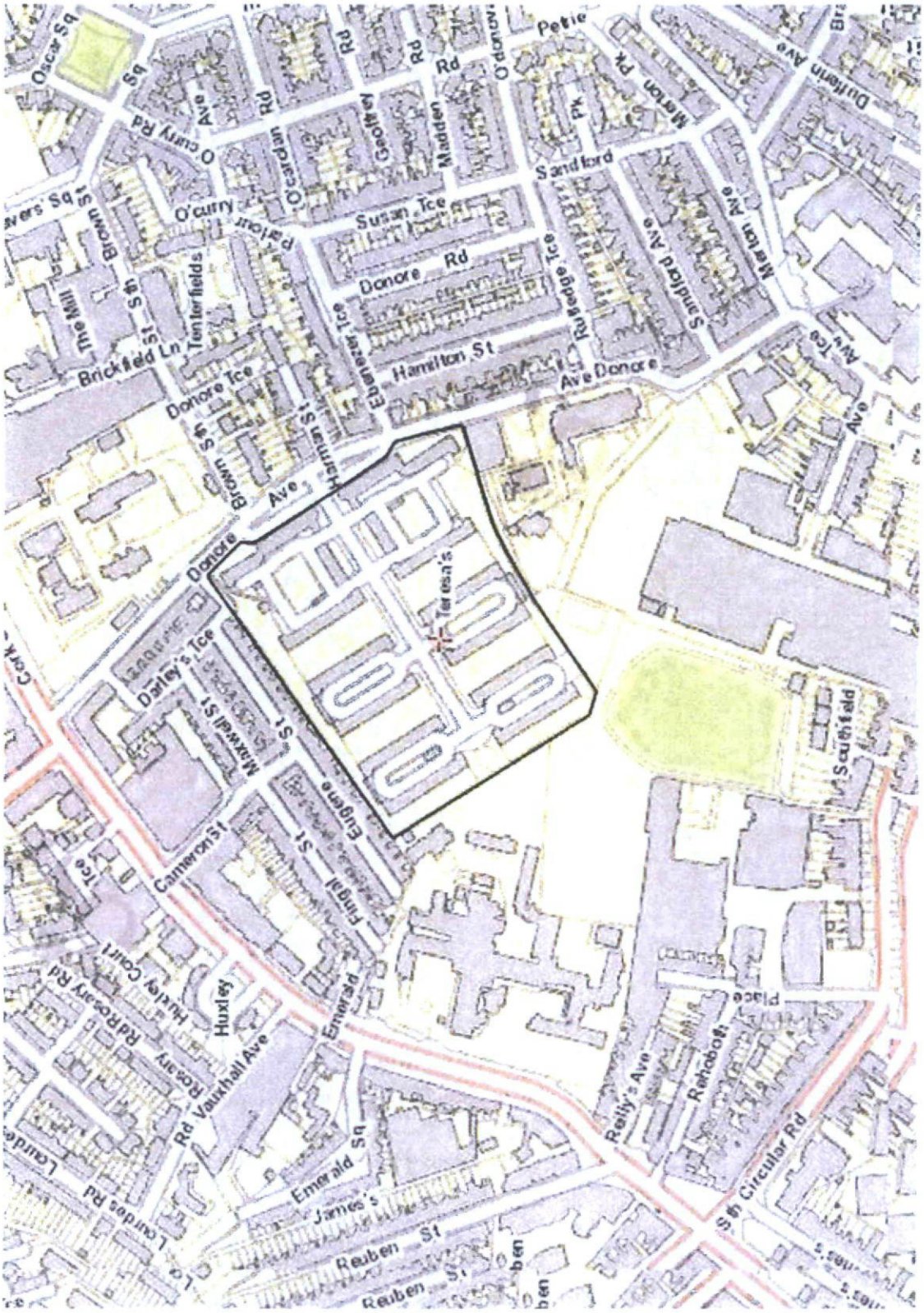


1935 - 36 – Dublin OS, 6 inch to 1 mile, Sheet 18 – Extract



DCC PLAN.NO: 2475/18
RECEIVED 12 MAR 18

Contemporary – Dublin, Google Earth



Conservation Record Study
of
St Teresa's Gardens, Donore Avenue, Dublin 8

APPENDIX B

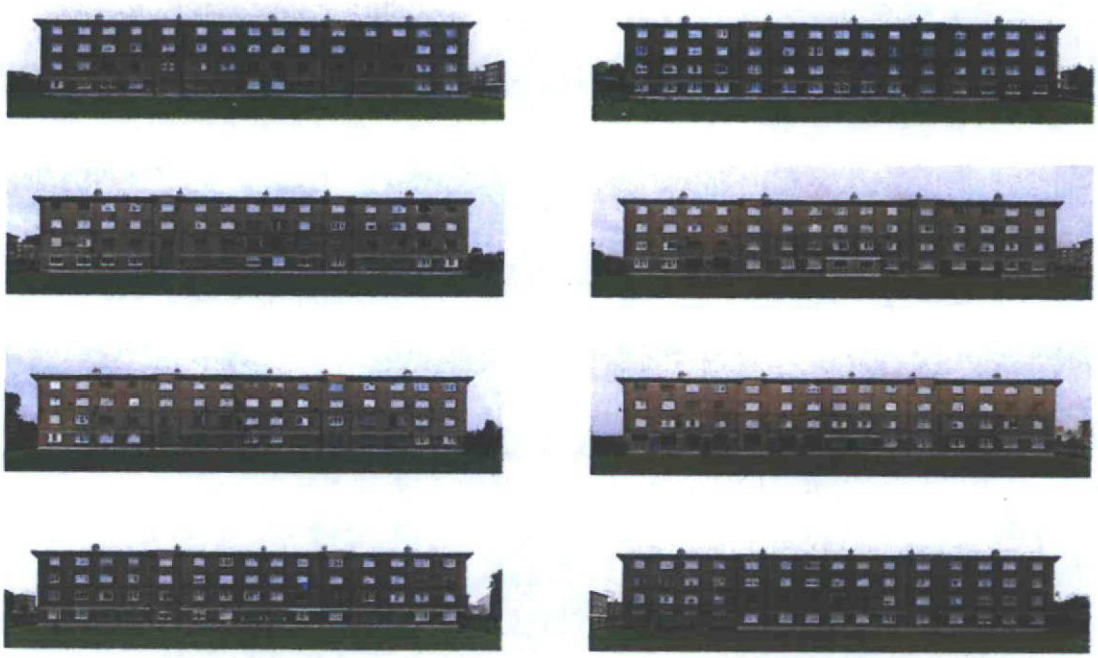
Photographic Record

View from Central Street showing Block Elevation and Relationship to Courtyard

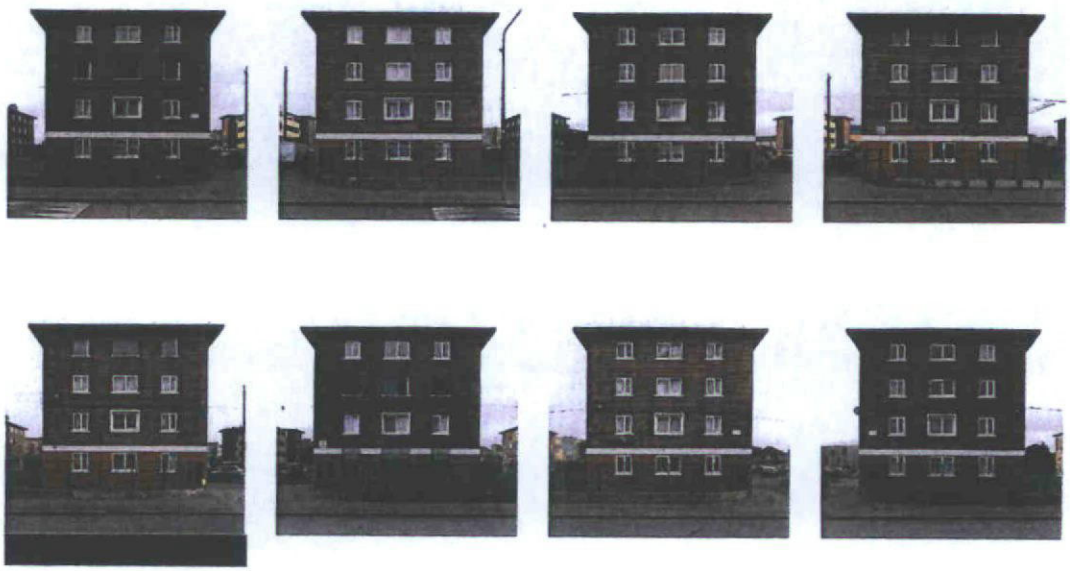
PPREPARED FOR DUBLIN CITY COUNCIL
BY
KELLY AND COGAN ARCHITECTS
NOVEMBER 2013

DCC PLAN.NO: 2475/18
RECEIVED 12 MAR 18

Long Elevation of Each Block, photographed by William Heefer



Side Elevation of Each Block, photographed by William Heefer



Central Street of Estate with Blocks on either Side, photo taken from the North East

End of Central Street showing small statue, photo taken from the North East.

DCC PLAN.NO: 2475/18
RECEIVED 12 MAR 18

View of Shared Courtyard from Central Street, photo taken from North West.

View of Shared Courtyard Space, photo taken from S. East.

View of Front of Block and courtyard from Central Street, photo taken from North

View of Front of Block and courtyard from Central Street, Photo taken from West.

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Front of Block showing Balconies, photo taken from the East.

Front Elevation of Blocks showing relationship to Courtyard, photo taken from South.

View from Shared Courtyard Showing End and Rear Elevation of Blocks

View from central Street showing Rear Elevation on Block

DCC PLAN.NO: 2475/18
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View of Run Through Space to the Side of the Estate

View of Open

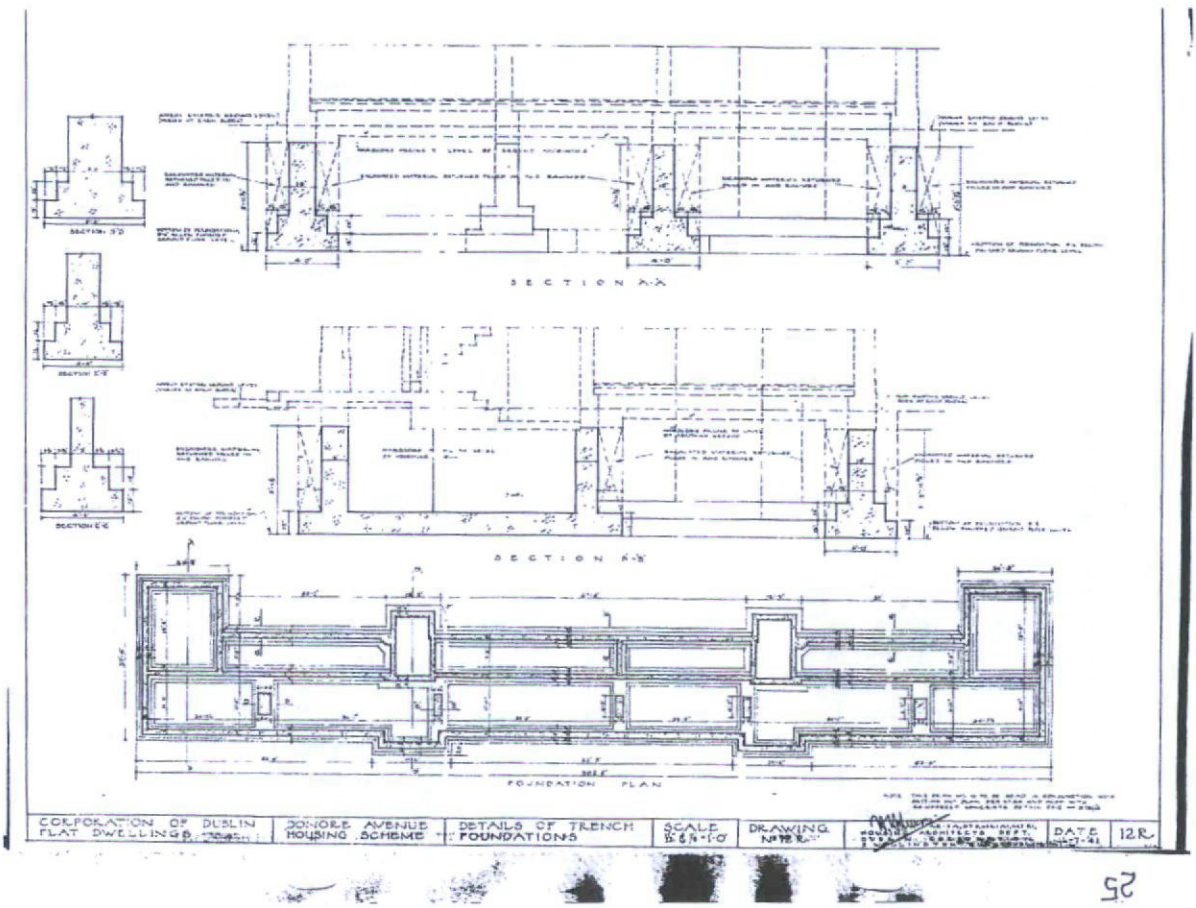
Views of Adjacent Sports Ground

DCC PLAN.NO: 2475/18
RECEIVED 12 MAR 18

Conservation Record Study
of
St Teresa's Gardens, Donore Avenue, Dublin 8

APPENDIX C

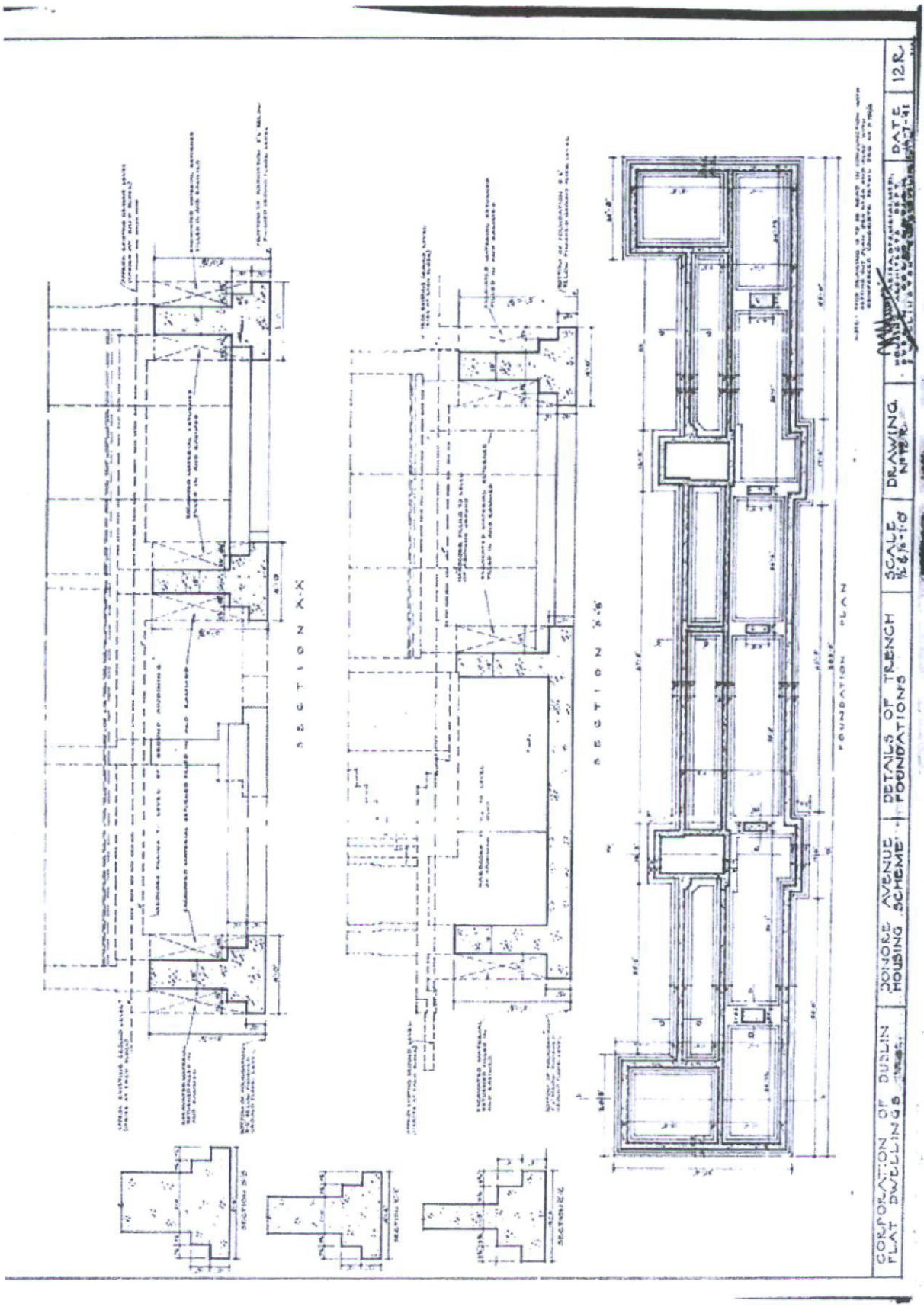
DRAWING RECORDS



1941 – Foundation Layout Drawing, Dublin Corporation

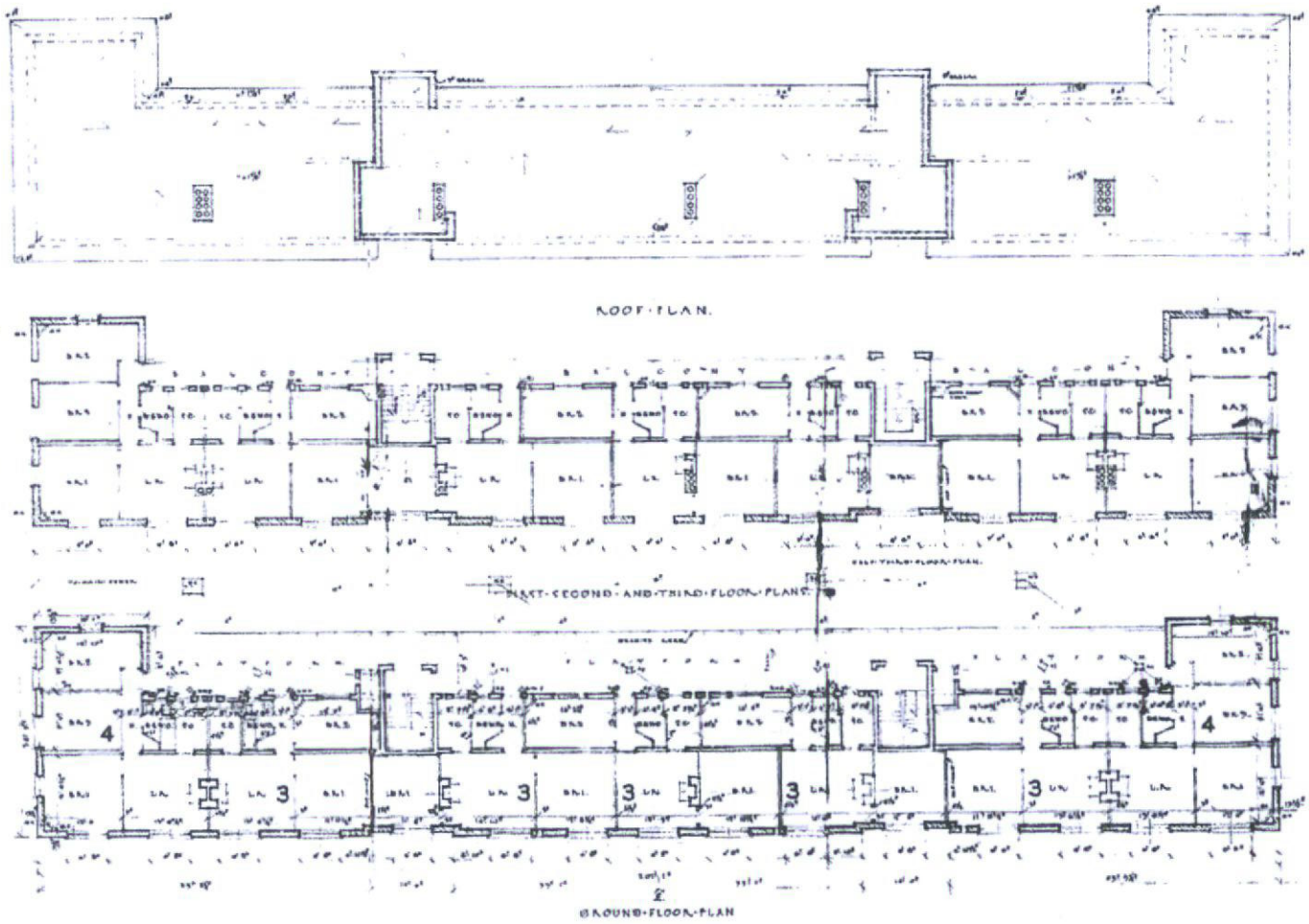
PPREPARED FOR DUBLIN CITY COUNCIL
BY
KELLY AND COGAN ARCHITECTS
NOVEMBER 2013

1941 – Dublin Corporation, Foundation Layout, Dated 16/7/41, Signed HG Simms



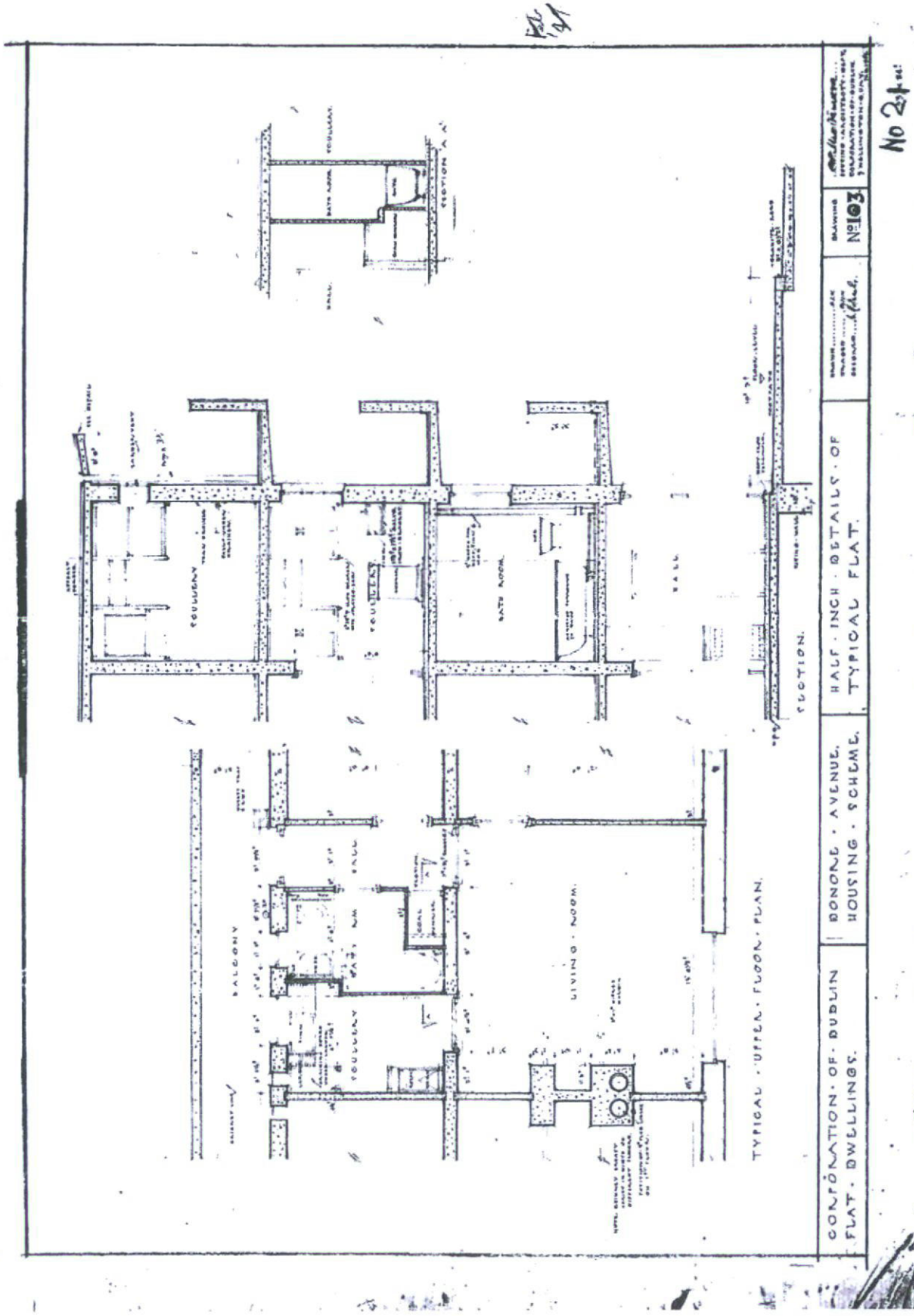
25

DCC PLAN.NO: 2475/18
RECEIVED 12 MAR 18

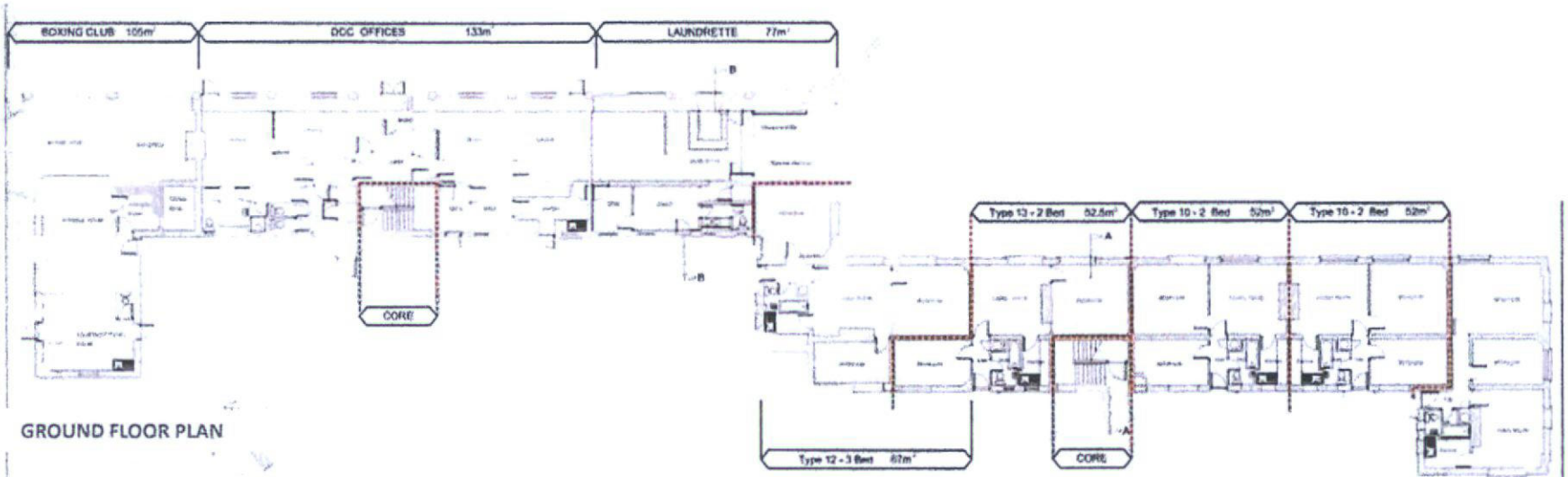


Undated – Dublin Corporation, Donore Avenue Housing Scheme, Plans of Block No's 8 to 17, Signature Illegible

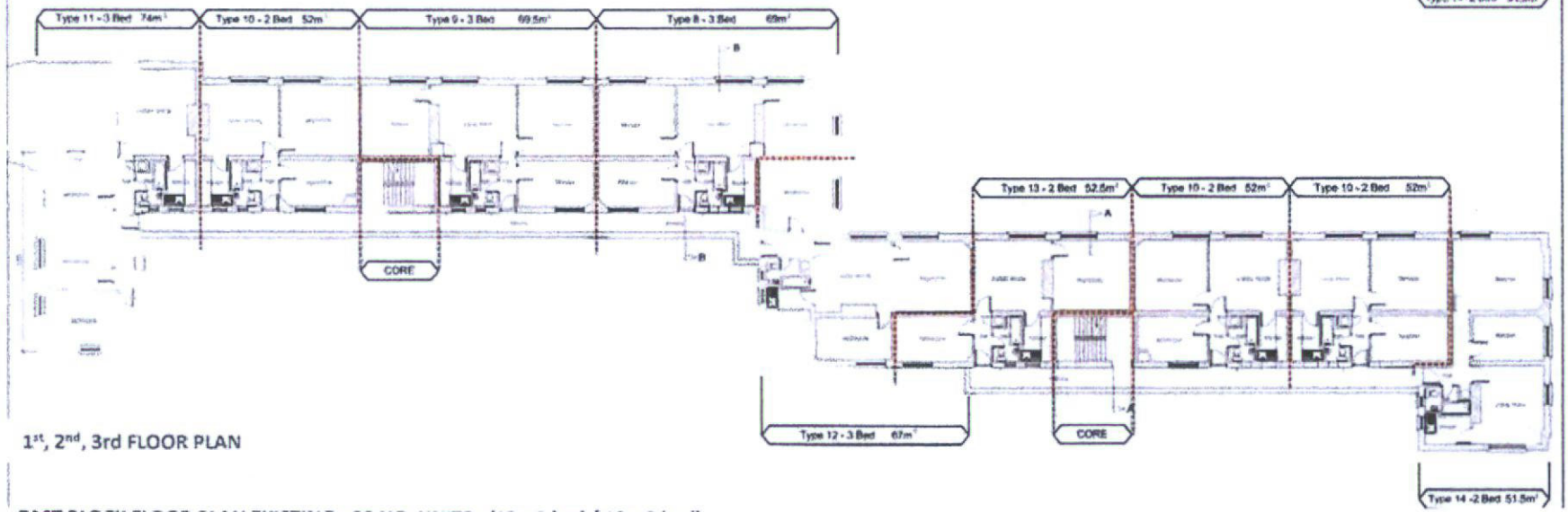
Feb 1949 – Dublin Corporation, Donore Avenue Housing Scheme, Half Inch Details of Typical Flats, Signature Illegible



DCC PLAN.NO: 2475/18
RECEIVED 12 MAR 18



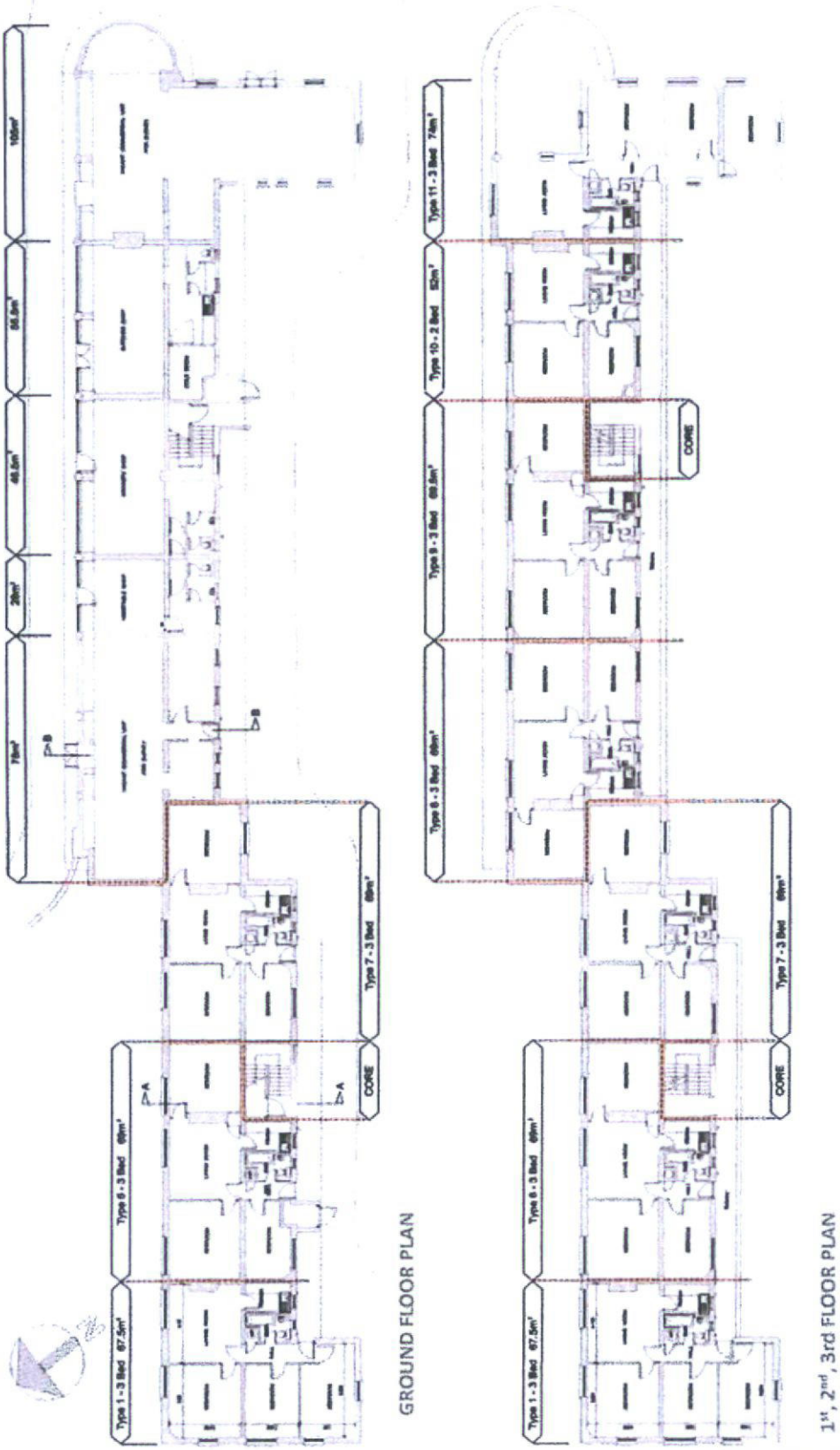
GROUND FLOOR PLAN



1st, 2nd, 3rd FLOOR PLAN

EAST BLOCK FLOOR PLAN EXISTING - 32 NO. UNITS - (13 x 3 bed / 19 x 2 bed)
4 x 3 bedroom units / 5 x 2 bedroom units - nine units per upper floor
1 x 3 bedroom units / 4 x 2 bedroom units - five units per ground floor

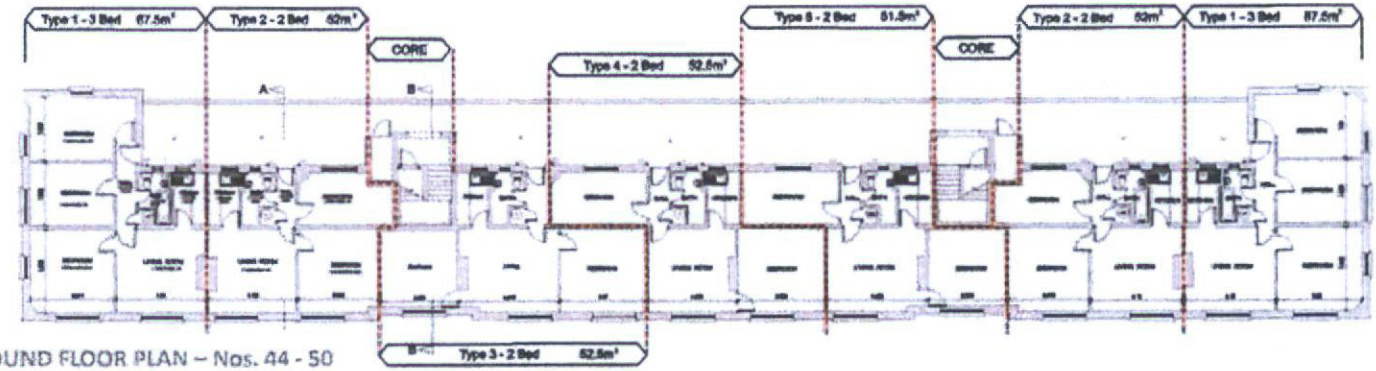
November 2013 – Dublin City Council, St Teresa's Gardens, Survey Drawings by City Architects Division



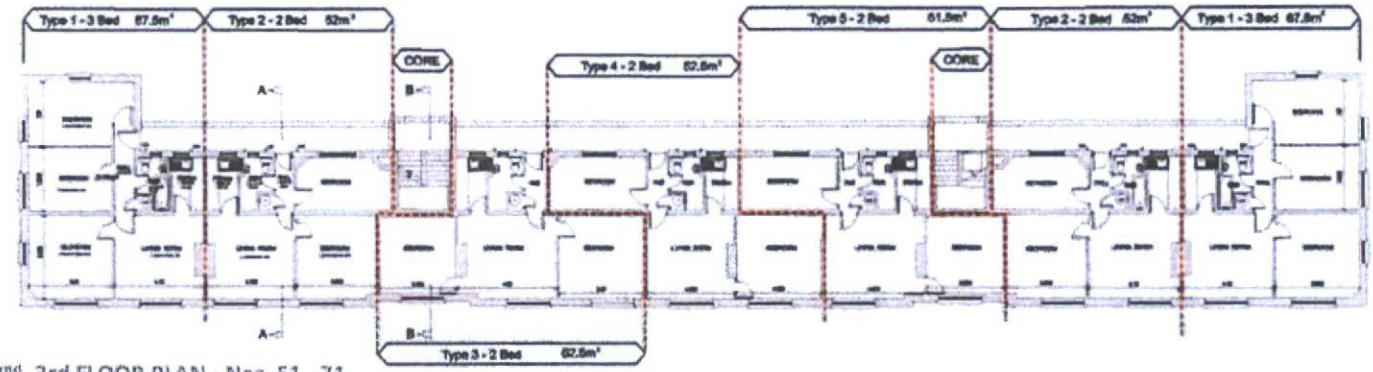
GROUND FLOOR PLAN

1st, 2nd, 3rd FLOOR PLAN

DCC PLAN.NO: 2475/18
RECEIVED 12 MAR 18



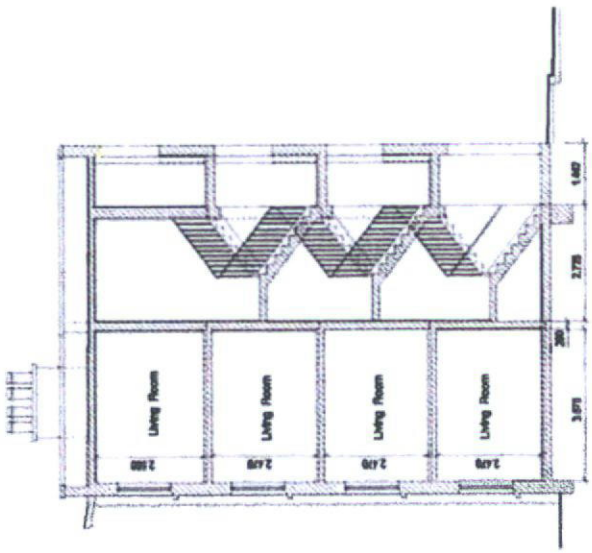
GROUND FLOOR PLAN – Nos. 44 - 50



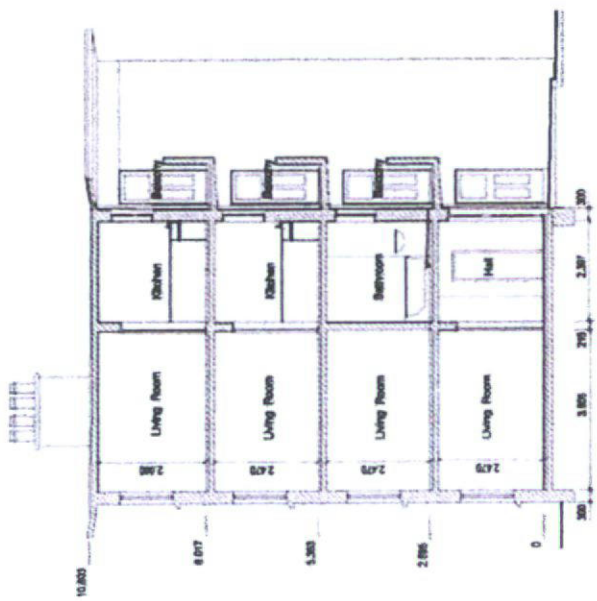
1st, 2nd, 3rd FLOOR PLAN - Nos. 51 - 71

TYPICAL BLOCK FLOOR PLAN EXISTING - 28 no units - 8 X 3 BED / 20 X 2 BED
(2 x 3 BEDROOM UNITS / 5 x 2 BEDROOM UNITS PER FLOOR)

November 2013 – Dublin City Council, St Teresa's Gardens, Survey Drawings by City Architects Division



SECTION THROUGH EXISTING APARTMENT AND STAIRCORE



SECTION THROUGH EXISTING APARTMENT

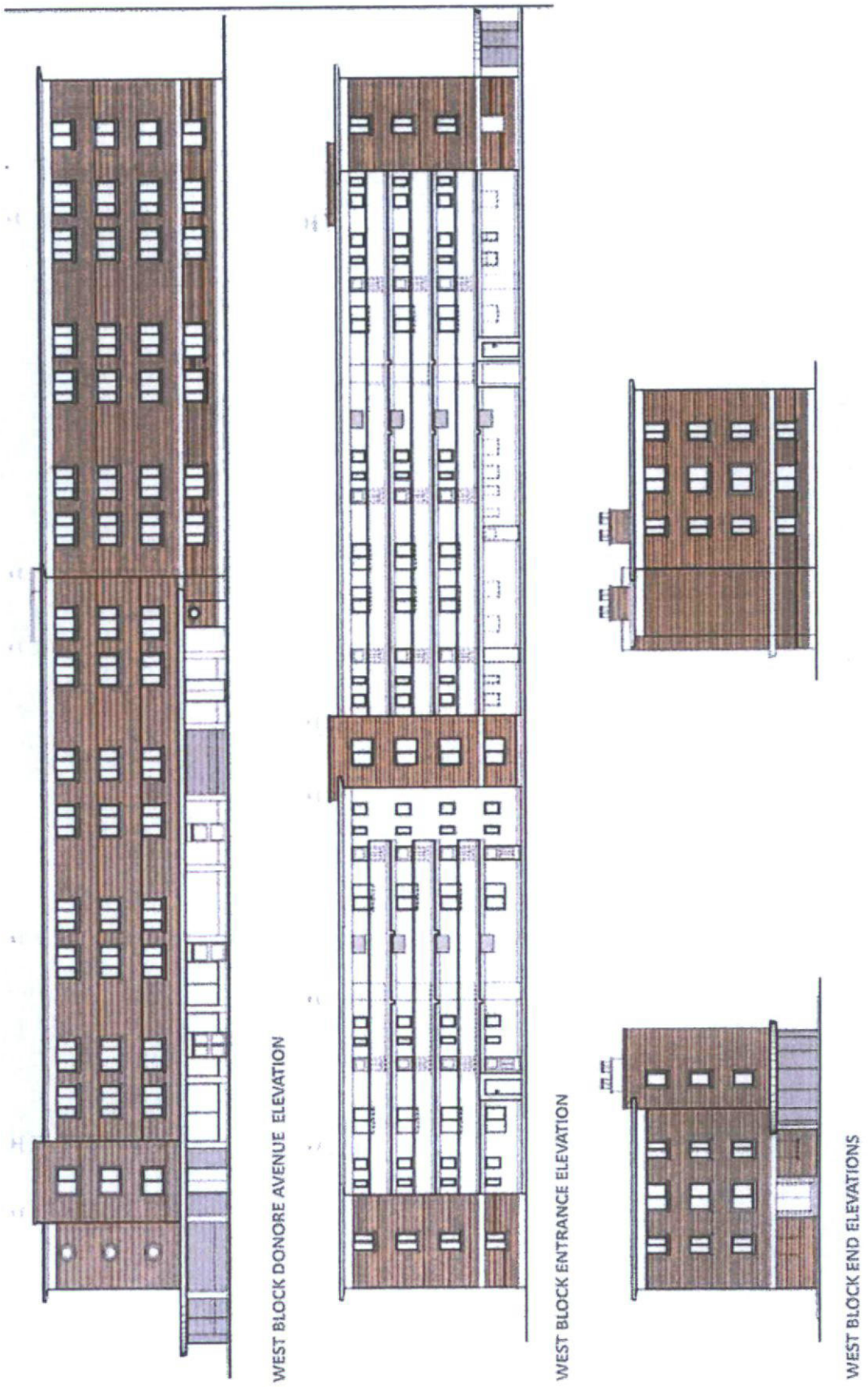
DCC PLAN.NO: 2475/18
RECEIVED 12 MAR 18

EAST BLOCK DONORE AVENUE ELEVATION

EAST BLOCK ENTRANCE ELEVATION

EAST BLOCK END ELEVATIONS

November 2013 – Dublin City Council, St Teresa's Gardens, Survey Drawings by City Architects Division



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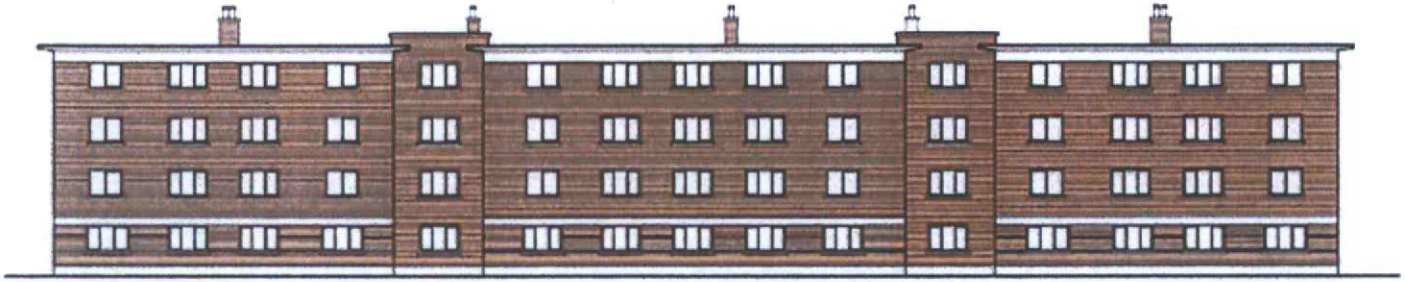
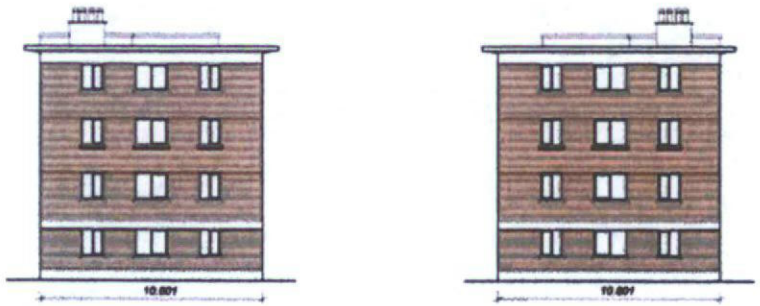
RECEIVED 12 MAR 18



TYPICAL BLOCK REAR ELEVATION

TYPICAL BLOCK ENTRANCE ELEVATION



TYPICAL BLOCK END ELEVATIONS

September 1988 – Dublin Corporation, Area Waterworks Layout, Overlay on OS by Waterworks Division

DCC PLAN.NO: 2475/18
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