

Water Network Technician

Portfolio and Grading Guidance

Overview

The portfolio is one of two assessment methods used in the Water Process Technician end-point assessment. The other method is a knowledge test.

The portfolio has two parts:

- Evidence of successful completion of the trade test, worth 42 points
 - These points are 'banked' when the apprentice passes the trade test
- The work log, scored out of a maximum 58 points

The work log may be in a paper and / or electronic format. It provides evidence of the range of water network experience and work carried out by the apprentice in the workplace, mapped to the requirements of the standard, as described in this guidance. Only include the evidence required for the Water Network Technician standard.

Portfolio Grading Criteria within the Published Assessment Plan

The following table outlines the scoring criteria published in the WPT assessment plan. Detailed guidance is in the next section.

Fail Criteria	Pass Criteria	Distinction Criteria
Fail ≤69 Portfolio lacks sufficient evidence and structure to demonstrate knowledge, skills and competency through the work log, progress reviews and progressive authorisation assessments across the standard	Pass (70-84) Portfolio well-structured and contains sufficient and robust evidence to demonstrate knowledge, skills and competency across the standard through the work log, progress reviews and progressive authorisation assessments	Distinction (85-100) The portfolio demonstrates evidence which is over and above the requirements of the standard through the work log, progress reviews and progressive authorisation assessments
Fail in the final trade test	Pass in the final trade test	Pass in the final trade test
Poor application of knowledge in the work place	Good application of knowledge in the work place	Outstanding application of knowledge in the work place
Poor reasoning skills displayed on practical tasks	Good critical reasoning skills displayed on practical tasks	High level of critical reasoning skills displayed on practical tasks
Negative team working and interpersonal skills	Good team working and interpersonal skills and ability to respect the opinion of others	Outstanding team and interpersonal skills and the ability to respect the opinion of others
Subject to a company disciplinary procedure		

Portfolio Evidence Requirement and Grading Guidance

Pass evidence can come from Work Log or Trade Test, **unless stated otherwise**.

Distinction evidence can only come from Work Log.

Whilst evidence is not required for every bullet point, in each section, it is best practice to ensure that there is depth and breadth of evidence which tells the story of completed jobs from start to finish.

- If the Trade Test has been passed, then **42 points** can be awarded towards the portfolio score
- Each portfolio evidence requirement should be awarded a points score in line with the portfolio grading guidance documentation/ guidance below
- Evidence for the following sections must be presented in the work log (not normally assessed in the Trade Test)
 - Section 4: Drive vehicles equipped with tools and materials to other sites as required
 - Section 11: Ensure the safety of pedestrians, vehicles and site staff and where required act as supervisor of Street Works
 - Section 12: Use technical knowledge to operate electronic location equipment to identify and locate underground cables and services
 - Section 13: Plan network operations ensuring water mains and water service pipe couplings and methods are suitable for use.

The Work Log grading criteria are divided into 14 sections for knowledge and skills, and 5 sections for behaviours:

- Grading the Pass criteria:
 - If there is no evidence for any of the Pass criteria in any section, then 0 points should be awarded, **and a Pass cannot be achieved**
 - If there is a sufficient range of evidence to assess competence, 1 point will be awarded. Suggested minimum requirements are stated in each section
 - In a section where there is a range of points available AND if the apprentice has met the minimum requirements for that section, additional points can be awarded for evidence covering **additional** Pass statements. An additional point can be awarded for each additional statement met, up to the maximum points available for that section
 - **To achieve an overall pass, all sections must be awarded at least 1 point.**

- Grading the Distinction Criteria:
 - If there is no evidence for any of the Distinction criteria, then 0 points should be awarded
 - If there is evidence for at least one of the Distinction criteria, 1 point should be awarded
 - In a section where there is a range of points available, additional points can be awarded for evidence covering additional Distinction statements. An additional point can be awarded for each additional statement met, up to the maximum points available for that section.

IMPORTANT: the criteria listed in each section are indicative of the evidence that should be presented. Owing to variation in employer practises and operational conditions, the list of criteria is not exhaustive and other evidence may be presented that matches the section description. Providers should support apprentices in selecting evidence that matches the section description, and where necessary, cross-check with the relevant knowledge, skill or behaviour.

Portfolio Grade Boundaries

Max Points	Minimum Points Required to Achieve a Pass	Minimum Points Required to Achieve Distinction
100 (42 from trade test)	70	85

Referencing the Work Log

Providers should support apprentices to select evidence for their Work Log and to reference it so the assessor can find relevant sections easily. A Work Log Mapping Template is available from EUIAS at www.euias.co.uk/end-point-assessment/epa-resources

Each section is numbered, and each criterion is referenced with a letter. The combination of number and letter should be used to reference the evidence in the Work Log.

- For example, reference **3b** should be used in the Work Log to indicate evidence of testing and maintaining H&S equipment.

Evidence for Behaviours can come from company behavioural reviews typically from the last three months of training.

Section	Max Points	Grade	Portfolio Evidence Requirement from Work Log
1. Knowledge and application of relevant health and safety, environmental and industry standards and regulations, policies and procedures K1, K3, S7, S8, S9	2	Pass	Minimum requirement to evidence at least 2 'Pass' examples, such as <ul style="list-style-type: none"> a) Training / certificates / attendance at training courses relating to H&S, environmental, regulatory and HR requirements (e.g. Toolbox talks, induction) b) Knowledge of where to access H&S, environmental and industry information c) Reporting any faults, loss or issues with equipment d) Suggesting and implementing appropriate control measures e) Identifying changing situations in the workplace and taking the appropriate action

Section	Max Points	Grade	Portfolio Evidence Requirement from Work Log
	3	Distinction	<ul style="list-style-type: none"> f) Voluntarily engaging with employer to make contributions to health and safety improvements and initiatives g) Understanding of the wider ranging consequences of not following standards, regulations, policies and procedures h) Continuously updating knowledge regarding health, safety, environmental and industry standards and procedures i) Understanding of wider ranging consequences of not working safely and carrying out risk assessments j) Explaining the need to maintain and store PPE and other safety equipment k) Explaining the wider ranging consequences of not working appropriately with (including storage and disposal of) chemicals l) Monitoring safety equipment use and compliance in others m) Voluntarily taking an active role in completing safety compliance checks for others

Section	Max Points	Grade	Portfolio Evidence Requirement from Work Log
2. Knowledge and application of water industry operations and maintenance practices, processes and procedures in water network operations K2, K4, S10	1	Pass	Minimum requirement to evidence at least 2 'Pass' examples, such as <ul style="list-style-type: none"> a) Knowledge of company operations and maintenance policies and procedures and where to find them e.g. sampling procedures, flow monitoring b) Training / certificates / attendance at training courses relating to operations and maintenance practices, processes and procedures
3. Use theory and principles to undertake fault finding, testing and analysis on specific equipment, instruments and IT systems and interpret the results to implement effective solutions K5, K6, S7, S12, S13	2	Pass	Minimum requirement to evidence at least 2 'Pass' examples, such as <ul style="list-style-type: none"> a) Training / certificates / attendance at courses relating to specific equipment, instruments and IT systems b) Testing and maintaining H&S equipment c) Knowledge and use of the operation of flow monitoring equipment d) Identifying faults and alarms e) Understanding alarms, priorities, consequences and responses f) Consulting and working with others to investigate, identify and resolve the root cause of problems g) Verifying IT systems are working correctly

Section	Max Points	Grade	Portfolio Evidence Requirement from Work Log
	3	Distinction	<ul style="list-style-type: none"> h) Independently conducting fault or route cause analysis to successful conclusion without guidance i) Presenting and sharing findings in a logical and consistent manner j) Technical understanding of process equipment options and practical assessment and application of their suitability for use k) Suggesting improvements in alarm management
4. Drive vehicles equipped with tools and materials to other sites as required S15	1	Pass	Minimum requirement to evidence at least 1 example, such as <ul style="list-style-type: none"> a) Full driving licence b) Additional driving category training as required c) Complying with company driving policies and procedures on a regular basis e.g. vehicle checks completed d) Safe loading of vehicles e) Keeping company vehicles maintained and cleaned to a high standard
5. Complete reports and ensure records are maintained for audit and reporting purposes S17	1	Pass	Completion of 4 different types of company records, specific to pathway, as required

Section	Max Points	Grade	Portfolio Evidence Requirement from Work Log
6. Work with focus and clear purpose in all weather conditions, covering 24/7 operations, sometimes working alone and safely adapt working methods to reflect changes in working environments S14, S18, SB6	1	Pass	Minimum requirement to evidence at least 2 'Pass' examples, such as a) Completing planned work activities accurately and on time in all weather conditions b) Completion of tasks when on their own c) Completion of tasks out of hours d) Compliance with company working time directives
	2	Dist.	e) Consistent dynamic risk assessments on a variety of jobs f) Willingly assisting in emergency situations outside of normal working hours
7. Analyse and assess network performance measures e.g. water pressure, flows and leakage WNT1	2	Pass	Minimum requirement to evidence at least 2 'Pass' examples, such as a) Knowledge and application of target operating regimes for different networks b) Identifying trends and faults and solving potential network problems based on monitoring c) Implementing process changes and monitoring these for effectiveness d) Work with others to identify the root cause of problems and resolve issues

Section	Max Points	Grade	Portfolio Evidence Requirement from Work Log
	2	Dist.	<ul style="list-style-type: none"> e) Independent optimisation of processes showing opex savings or process efficiencies f) Independently solving problems via root cause analysis and resolving issues g) Use of innovative solutions to solve problems
8. Use hydraulic theories and principles to investigate, carry out fault diagnosis and identify resolutions to network performance issues WNT2, WNT7	2	Pass	Minimum requirement to evidence at least 2 'Pass' examples, such as <ul style="list-style-type: none"> a) Knowledge of hydraulic theories and principles used in the water distribution network b) Identifying trends and potential faults and network issues based on monitoring c) Completion of risk assessments and method statements relating to networks tasks d) Work with others to identify the root cause of problems and resolve issues
	3	Dist.	<ul style="list-style-type: none"> e) Independently solving problems via root cause analysis and resolving issues f) Identifying and communicating additional and relevant information pertaining to faults identified e.g. part numbers, accessibility issues g) Independent optimisation of processes showing opex savings or process efficiencies

Section	Max Points	Grade	Portfolio Evidence Requirement from Work Log
9. Apply procedures and their control measures to the network to minimise the risk of supply interruptions to customers WNT3	2	Pass	Minimum requirement to evidence at least 2 'Pass' examples, such as <ul style="list-style-type: none"> a) Knowledge of company operations and maintenance policies and procedures relating to the water distribution network b) Knowledge of where to access company policies and procedures c) Completion of risk assessments and method statements relating to networks tasks
	2	Dist.	<ul style="list-style-type: none"> a) Sharing techniques and imparting knowledge to others outside of direct team e.g. presentations b) Developing techniques further to provide useful solutions to supply problems c) Positive customer feedback and exceeding customer expectations d) The use of innovative techniques to manage and mitigate interruption to supply

Section	Max Points	Grade	Portfolio Evidence Requirement from Work Log
10. Maintain network, equipment and systems including pumps and control valves WNT4	2	Pass	<p>Minimum requirement to evidence at least 3 'Pass' examples, such as</p> <ul style="list-style-type: none"> a) Understanding of network schematics and the interdependencies of the system b) Identifying, raising and prioritising work requests correctly based on known information c) Monitoring, maintaining and controlling systems to maintain optimum performance distribution networks including analysing data to identify trends d) Taking appropriate action to maintain network equipment, pumps and control valves e) Isolation and preparation of equipment for maintenance activities
	2	Dist.	<ul style="list-style-type: none"> f) Identifying and communicating additional and relevant information pertaining to work priorities and faults identified e.g. GIS, part numbers, accessibility issues g) Independent optimisation of processes showing opex savings or process efficiencies

Section	Max Points	Grade	Portfolio Evidence Requirement from Work Log
11. Ensure the safety of pedestrians, vehicles and site staff and where required act as supervisor of Street Works WNT5	1	Pass	<p>Minimum requirement to evidence at least 2 'Pass' examples, such as</p> <ul style="list-style-type: none"> a) Training / certificates / attendance and successful completion of training courses relating to Street Works or Street Works Supervision where required b) Arranging permits as required c) Planning, setting out and removing signing lighting and guarding correctly in various situations and scenarios
12. Use technical knowledge to operate electronic location equipment to identify and locate underground cables and services WNT6	2	Pass	<p>Minimum requirement to evidence at least 3 'Pass' examples, such as</p> <ul style="list-style-type: none"> a) Training / certificates / attendance at courses relating to electronic location equipment b) Checking, maintaining and storing the locating equipment in line with company and manufacturer's instructions c) Demonstrating the understanding of the abilities and limitations of available equipment d) Using locating equipment in the different modes available e) Identifying mains and services correctly f) Recording mains and services in line with company procedures g) Communicating the types and positions of mains and services to other personnel as required

Section	Max Points	Grade	Portfolio Evidence Requirement from Work Log
13. Plan network operations ensuring water mains and water service pipe couplings and methods are suitable for use WNT8	1	Pass	Minimum requirement to evidence at least 2 'Pass' examples, such as a) Demonstration of knowledge of how to find out if fittings are approved for use under Regulation 31 b) Demonstration of knowledge of high pressure and low-pressure fittings c) Trench inspections d) Company recording and reporting procedures being followed
14. Authorise and carry out valve operations on water networks in accordance with operations and maintenance strategies and procedures and giving due consideration to the impact on customers, ensuring continuity of supply and minimising water quality problems WNT9, WNT10	2	Pass	Minimum requirement to evidence at least 3 'Pass' examples, such as a) Knowledge of where to access company policies and procedures b) Knowledge and application of company operations and maintenance policies and procedures relating to valving operations in the water distribution network c) Knowledge and application of DG3 reporting d) Applying company policies and procedures in the water distribution network to minimise the risks to water supply e) Completion of risk assessments and method statements relating to networks tasks f) Authorisation of valving operations g) Following mains recharging processes and procedures h) Use of innovative techniques to manage and mitigate interruption to supply

Section	Max Points	Grade	Portfolio Evidence Requirement from Work Log
	3	Distinction	<ul style="list-style-type: none"> i) Use of innovative techniques to manage and/or mitigate interruption to supply Sharing techniques and imparting knowledge to others outside of direct team e.g. presentations j) Developing techniques further to provide useful solutions to supply problems k) Positive customer feedback and exceeding customer expectations l) The identification of network improvements to reduce the risk of future interruptions to supplies

Section	Max Points	Grade	Portfolio Evidence Requirement from <u>Work Log</u>
<p>15. Ownership, responsibility and customer focus. Accepts ownership and responsibility for own work to accomplish, an activity safely and on time, whilst</p>	3	Pass	<p>Minimum requirement to evidence at least 1 'Pass' example, such as</p> <ul style="list-style-type: none"> a) Accomplishes an activity safely, correctly and on time b) Interacts well with customers, colleagues and members of the public c) Maintains self-discipline, motivation and always works in a professional manner

Section	Max Points	Grade	Portfolio Evidence Requirement from <u>Work Log</u>
maintaining self-discipline working well with others delivering a polite, courteous, professional service B1, B2, B3	1	Dist.	d) Consistently takes responsibility for own performance and strives to go beyond expectations
16. Health and safety/risk awareness. Takes responsibility for own and others health and safety, following procedures and policy to think things through whilst being aware of potential consequences, hazards, distractions and changing circumstances for an activity. B4	3	Pass	Minimum requirement to evidence at least 1 'Pass' example, such as a) Demonstrates strict compliance with operational procedures and processes b) Shows an awareness of the impact of changing circumstances on an activity c) Able to identify and deal appropriately with distractions to enable tasks to be achieved
	1	Dist.	d) Consistently monitors and checks information to see if changes to plans are required for an activity

Section	Max Points	Grade	Portfolio Evidence Requirement from <u>Work Log</u>
<p>17. Task management. Possesses and enhances appropriate knowledge, skills and experience to perform the duties of the job. Accomplishes goals by</p> <ul style="list-style-type: none"> • accepting and following instructions given by supervisor • responding to training • allocating and supervising technical and other required tasks <p>B5, B8</p>	2	Pass	<p>Minimum requirement to evidence at least 1 'Pass' example, such as</p> <ol style="list-style-type: none"> Enhances competency through seeking guidance to help accomplish a task. e.g. Guidance may be provided via operational handbook, digital resources or asking someone. Allocates and supervises technical and other required tasks to efficiently accomplish goals
<p>18. Results driven. Identifies, organises and effectively uses resources to complete tasks in a timely fashion, considering cost, quality, safety, security and environmental impact.</p> <p>B7</p>	3	Pass	<p>Minimum requirement to evidence at least 1 'Pass' example, such as</p> <ol style="list-style-type: none"> Identifies, organises and uses resources effectively to complete tasks, Considers cost, quality, safety, security Considers environmental impact

Section	Max Points	Grade	Portfolio Evidence Requirement from <u>Work Log</u>
19. Sustainability and ethical behaviour. Thinks and behaves ethically and undertakes work in a way that contributes to a positive corporate social responsibility. B9, B10, B11	3	Pass	Minimum requirement to evidence at least 1 'Pass' example, such as <ul style="list-style-type: none"> a) Attitude is respectful and positive, concerning the needs or concerns of others. b) Awareness of the needs and concerns of others especially where related to diversity and equality c) Maintains a positive approach to ethical requirements and undertakes work in a way that contributes to sustainable development.

© Energy & Utility Skills

All rights reserved. No part of this publication may be reproduced, stored in a retrievable system, or transmitted in any form or by any means whatsoever without prior written permission from the copyright holder.

www.euskills.co.uk