



Verify bore clean-out: sediment, cleanliness, tremie ready

Verify bore clean-out using an interactive checklist: measure sediment thickness, confirm cleanliness, verify tremie readiness; commentable, export as PDF/Excel.

Project:

Date:

Filled by:

Pre-Verification Safety & Access

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| 1 | Establish an exclusion zone around the bore with barriers and signage; verify the permit-to-work is active. Acceptance: zone established and permit valid. Evidence: photo of setup and recorded permit ID/time. |
| 2 | Confirm safe access: stable platform, guardrails, fall protection, tool lanyards. Acceptance: platform rated and inspected today. Evidence: photo of platform tag and supervisor initials. |

Measurement Tools Calibration & Setup

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| 3 | Check weighted tape/sounding rod against a certified steel rule. Acceptance: length accuracy within ± 5 mm over 10 m. Evidence: calibration photo and certificate number. |
| 4 | Verify flat plate sediment disk (150–300 mm diameter) is flat, clean, and labeled with instrument ID. Acceptance: no warping or damage. Evidence: photo with scale and ID. |
| 5 | Function-check echo-sounder/depth logger (if used) in a known-depth tank. Acceptance: reading within ± 5 mm at 1.00 m; battery >50%. Evidence: screenshot/readout and test setup photo. |
| 6 | Tag all instruments with unique IDs and log them in the checklist. Acceptance: IDs recorded for traceability. Evidence: instrument list saved to record. |

Bore Base Cleanliness Verification

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| 7 | Lower a transparent bailer/core sampler to ~0.5 m above base; retrieve a sample. Acceptance: sample free of debris/organics; turbidity per approved project specifications. Evidence: photo of sample against reference scale. |
| 8 | Use a downhole camera or illuminated mirror (when safe/dry) to view the base. Acceptance: no loose cuttings, cobbles, or laitance. Evidence: photos/video of base condition. |
| 9 | Record the time since last clean-out and method used (airlift/pump). Acceptance: verification conducted within the project's allowable window. Evidence: log entry with method and timestamp. |

Sediment Thickness Measurement

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| 10 | Measure depth to firm base with a weighted tape until firm contact is felt. Acceptance: repeat reading within ± 10 mm. Evidence: photo of tape reading and timestamp. |
| 11 | Gently lower the flat plate disk; note depth where it rests on soft sediment. Calculate sediment thickness = (soft surface depth – firm base depth). Acceptance: thickness within project limit (record mm). Evidence: calculation in log. |
| 12 | Repeat sediment measurement at four locations 90° apart using a positioning template or marked cage. Acceptance: each point within limit. Evidence: sketch/grid with point readings. |
| 13 | For bores >1.2 m diameter, include a center reading and additional quadrants. Acceptance: maximum recorded thickness within limit. Evidence: tabulated results highlighting maximum. |
| 14 | If any reading exceeds the limit, require re-clean-out and re-measure all points. Acceptance: all re-measurements within limit. Evidence: nonconformance record and closure sign-off. |

Tremie Readiness Checks

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| 15 | Inspect tremie pipe interiors for cleanliness; check gaskets/clamps; assemble and hold a 1.0 m water head for 5 min. Acceptance: leak-free joints. Evidence: photos and test time noted. |
| 16 | Confirm tremie internal diameter versus mix aggregate size. Acceptance: compliance per approved project specifications. Evidence: caliper measurement photo and mix design reference. |
| 17 | Verify planned tremie length and embedment so the tip remains immersed during placement. Acceptance: embedment per approved project specifications. Evidence: length calculation sheet attached. |
| 18 | Check start plug/foam pig and bottom valve/trumpet shoe fit. Acceptance: plug intact, correct diameter, free movement. Evidence: component photos with dimensions. |
| 19 | Perform a dry run lowering the tremie to 100–200 mm above the base without contact. Acceptance: vertical alignment; no kinks or obstructions. Evidence: photo/video and supervisor initials. |

Documentation & Acceptance

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| 20 | Upload measurements, photos, and approvals; set status Accept/Reject with rationale. Export PDF/Excel and apply QR. Acceptance: complete, traceable record. Evidence: exported file link and QR screenshot. |
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Comments:

Filled by:

Signature:

| Introduction | How to use this checklist |
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| <p>Verify bore clean-out is a targeted quality-control step that confirms sediment thickness, base cleanliness, and tremie readiness for bored piles. This borehole cleanout verification focuses strictly on the final cleanliness of the base and the practical readiness of the tremie system prior to concrete placement. It excludes drilling parameters, tooling, and slurry or polymer design controls. By methodically measuring sediment thickness at several points, documenting base condition, and checking that the tremie pipe is clean, sealed, and able to remain embedded, you reduce risks of soft bases, inclusions, and post-pour defects. The outcome is a uniform, sound pile base that supports durable structural performance. This checklist guides inspectors, site engineers, and foremen to capture evidence with photos, measurements, and approvals aligned with approved project specifications and authority requirements. Use the interactive features to tick off steps, add comments, and export your record as PDF/Excel with an embedded QR for fast retrieval.</p> | <p>1. Preparation: Gather weighted tape, flat plate disk, transparent bailer, optional camera, PPE, and tremie components. Brief the team on scope: sediment thickness, base cleanliness, tremie readiness—no drilling parameters. 2. Open the interactive checklist on your device and enter project, bore ID, and instrument IDs. Set acceptance limits per approved project specifications and authority requirements. 3. Perform measurements and observations in sequence. Tick each item, attach photos/videos, and add comments to clarify locations, depths, and time since clean-out. 4. Review results against acceptance criteria. If any point exceeds limits, raise a nonconformance, trigger re-clean, and re-measure until compliant. 5. Sign-Off: Capture digital signatures from the inspector and contractor representative. The system time-stamps and locks entries for traceability. 6. Export and Archive: Export the record as PDF/Excel, auto-generate a QR, and share with stakeholders. Store the file and QR for audit retrieval.</p> |