



Performance Verification Packet

Hydroblasting Technician

This performance verification is designed as one method to evaluate job skills and safe work habits of a participant. The performance of the participant must be evaluated by an NCCER certified evaluator, at an NCCER authorized assessment site and be approved by an NCCER accredited assessment center.

NCCER * 13614 Progress Blvd., Alachua, FL 32615 * Phone 888.622.3720 * www.nccer.org

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Performance Verification Form

How to fill out and file your information

Participant

- 1) Print your last name, first name, and social security number.
- 2) Print your company name, current employer, and the state where your employer's main office is located.
- 3) In the space provided for "Participant Signature," sign your name and enter the date you signed the form.

Performance Evaluator

- 1) In the space provided for "Site Code," enter the postal zip code of the location where the performance verification is being conducted.
- 2) In the column provided for "Date," enter the date the participant completed each of the tasks. This date is important because there may be times a participant does not complete a performance verification in one day.
- 3) In the space provided for "Performance Evaluator," sign your name.
- 4) In the space provided for "Date," next to your signature, list the date the participant successfully completed all of the tasks.

Administrator

- 1) In the space provided for "Administrator," sign your name. Your signature indicates that the performance evaluator is certified to conduct this performance verification and that it was conducted within the guidelines of the NCCER.
- 2) In the space provided for "Date," next to your signature, list the date that this performance verification form is being sent to the NCCER for entry into the National Registry.
- 3) In the space provided for "Accredited Assessment Center," print the name of the accredited assessment center that is conducting this performance verification.

NCCER PERFORMANCE VERIFICATION CANDIDATE SUMMARY

HYDROBLASTING TECHNICIAN

Objectives

This Performance Verification will serve as a guideline to verify the worker's physical capabilities to perform hydroblasting activities. Additionally, candidates will be provided with the experience of the force, flow and pressure pertaining to various hydroblasting or water jetting applications and equipment. Furthermore, it will measure comprehension of materials delivered during the course work. Candidate shall also demonstrate the ability to perform all necessary tasks required to achieve the standard requirements established in this Performance Verification.

Scope

This Performance Verification provides a means to observe and evaluate competencies in the following areas:

- Flex lancing of exchanger tubes / vertical pipe runs
- Shotgunning of masonry and lumber materials
- Line moleing of straight and vertical pipe runs

Materials Required

Setup station

- PPE
 - rain gear
 - PVC gloves
 - rubber boots
 - face shield / bracket
 - safety glasses
 - ear plugs
 - hard hat
 - steel toe rubber boots
- duct tape
- gun
- foot pedal
- 2 hoses
- whip
- shell cleaner
- whip checks
- stingers
- hand tools
 - wrenches
 - small pipe wrench

Station 2 – Flex Lancing

- 2 hydroblast hoses
- foot pedal
- whip checks
- flex lance
- whip
- stinger
- applicable tips / nozzles
- anti-withdrawal device (hand-held)

Station 3 - Shotgunning of masonry and lumber materials

- 2 hydroblast hoses

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HYDROBLASTING TECHNICIAN

- whip checks
- applicable tips / nozzles
- lumber
- shotgun

Station 4 - Line moleing of straight and vertical pipe runs

- hydroblast hose
- whip checks
- applicable tips / nozzles
- foot pedal
- line mole frame (fixed anti-withdrawal device)

Required Training Facility Equipment

- hydroblast machine(s)
- simulated pump
- exchanger bundle with straight run tubes
- exchanger bundle with “U” bend tubes
- elevated working platforms with horizontal and vertical pipe runs (installed scaffolding)
- multiple dimension pipe rack
- steel plating with welds
- exchanger shell
- simulated vertical tower with trays
- vertical tank entry (permit-required confined space)
- lock-out tag-out station

Time Required

Task	Time Required
Flex lancing of exchanger tubes / vertical pipe runs	25 min.
Shotgunning of masonry and lumber materials	25 min.
Line moleing of straight and vertical pipe runs	25 min.

Tasks

The following three (3) tasks shall follow all procedures listed below. Please refer to the time limits for additional consideration on the rating of each task.

1. Flex lancing of exchanger tubes / vertical pipe runs
2. Shotgunning of masonry and lumber materials
3. Line moleing of straight and vertical pipe runs
 - Setup
 - Inspect equipment’s overall integrity and visual deficiencies
 - Inspect job area for equipment accommodation
 - Equipment placement
 - Safe hose layout
 - Appropriate pump placement
 - High-pressure connections

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NCCER PERFORMANCE VERIFICATION CANDIDATE SUMMARY HYDROBLASTING TECHNICIAN

- Anti-whip devices (whip checks) installed accordingly
 - Check all connections are secured (locked) properly
- Hose flushing
 - Test for leaks
 - Test for plugs
 - Remove residual debris or sediment
- Cleaning operation and application
 - Evaluate surface condition
 - Determine what is the most appropriate method to accomplish the task (example, shotgunning, flex lancing, etc.)
 - Determine adequate tips
 - Determine adequate pressure
- Demonstrate ability to operate
 - Connecting couplings properly
 - Making proper connections
 - Demonstrate proper use of control devices (*not for the case of shotgunning*)
 - Anti-withdrawal device (line mole)
 - Hand-held back-out preventer
 - Stinger
- Stance (Candidate has proper body posture in relation to task)
- PPE (Candidate demonstrates proper selection and use)
- Job outcome
 - Proper clean-up of equipment and area (housekeeping)
 - Upon completion, the candidate should determine proper management procedure(s) for waste and/or hazardous material (waste water and solids)

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**NCCER PERFORMANCE EVALUATOR CHECKLIST
HYDROBLASTING TECHNICIAN**

Date Completed Task To Perform

- __-__-__ 1. Flex lancing of exchanger tubes / vertical pipe runs
- a. Setup
 - i. Candidate inspected equipment's overall integrity and visual deficiencies
 - ii. Candidate inspected the job area for equipment accommodation
 - iii. Equipment placement
 - 1. Safe hose layout
 - 2. Appropriate pump placement
 - iv. High-pressure connections
 - 1. Anti-whip devices (whip checks) installed accordingly
 - 2. Check all connections are secured (locked) properly
 - v. Hose flushing
 - 1. Candidate tested for leaks
 - 2. Candidate tested for plugs
 - 3. Candidate removed residual debris or sediment
 - b. Cleaning operation and application
 - i. Candidate evaluated surface condition
 - ii. Candidate determined adequate tips
 - iii. Candidate determined adequate pressure
 - c. Candidate demonstrated the ability to operate
 - i. Candidate connected couplings properly
 - ii. Candidate made the proper connections
 - iii. Candidate demonstrated proper use of control devices
 - 1. Anti-withdrawal device (line mole)
 - 2. Hand-held back-out preventer
 - 3. Stinger
 - d. Stance (Candidate had proper body posture in relation to task)
 - e. PPE (Candidate demonstrated proper selection and use)
 - f. Job outcome
 - i. Proper clean-up of equipment and area (housekeeping)
 - ii. Upon completion, the candidate determined proper management procedure(s) for waste and/or hazardous material (waste water and solids)
-

- __-__-__ 2. Shotgunning of masonry and lumber materials
- a. Setup
 - i. Candidate inspected the equipment's overall integrity and visual deficiencies
 - ii. Candidate inspected job area for equipment accommodation
 - iii. Equipment placement
 - 1. Safe hose layout
 - 2. Appropriate pump placement
 - iv. High-pressure connections
 - 1. Anti-whip devices (whip checks) installed accordingly
 - 2. Candidate checked all connections were secured (locked) properly
 - v. Hose flushing
 - 1. Candidate tested for leaks
 - 2. Candidate tested for plugs
 - 3. Candidate removed residual debris or sediment
 - b. Cleaning operation and application
 - i. Candidate evaluated surface condition
 - ii. Candidate determined adequate tips

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**NCCER PERFORMANCE EVALUATOR CHECKLIST
HYDROBLASTING TECHNICIAN**

Date Completed Task To Perform

- iii. Candidate determined adequate pressure
 - c. Candidate demonstrated the ability to operate by:
 - i. Connecting couplings properly
 - ii. Making proper connections
 - d. Stance (Candidate had proper body posture in relation to task)
 - e. PPE (Candidate demonstrated proper selection and use)
 - f. Job outcome
 - i. Candidate performed proper clean-up of equipment and area (housekeeping)
 - ii. Upon completion, the candidate determined the proper management procedure(s) for waste and/or hazardous material (waste water and solids)
-

__-__-__ 3. Line moleing of straight and vertical pipe runs

- a. Setup
 - i. Candidate inspected equipment's overall integrity and visual deficiencies
 - ii. Candidate inspected the job area for equipment accommodation
 - iii. Equipment placement
 - 1. Safe hose layout
 - 2. Appropriate pump placement
 - iv. High-pressure connections
 - 1. Anti-whip devices (whip checks) installed accordingly
 - 2. Check all connections are secured (locked) properly
 - v. Hose flushing
 - 1. Candidate tested for leaks
 - 2. Candidate tested for plugs
 - 3. Candidate removed residual debris or sediment
- b. Cleaning operation and application
 - i. Candidate evaluated surface condition
 - ii. Candidate determined adequate tips
 - iii. Candidate determined adequate pressure
- c. Candidate demonstrated the ability to operate
 - i. Candidate connected couplings properly
 - ii. Candidate made the proper connections
 - iii. Candidate demonstrated proper use of control devices
 - 1. Anti-withdrawal device (line mole)
 - 2. Hand-held back-out preventer
 - 3. Stinger
- d. Stance (Candidate had proper body posture in relation to task)
- e. PPE (Candidate demonstrated proper selection and use)
- f. Job outcome
 - i. Proper clean-up of equipment and area (housekeeping)
 - ii. Upon completion, the candidate determined proper management procedure(s) for waste and/or hazardous material (waste water and solids)

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