

ARIZONA REGISTRAR OF CONTRACTORS

C-53 WATER WELL DRILLING

SCOPE OF WORK

This classification allows the licensee to drill new water wells or deepen existing water wells by use of standard practices including the use of cable tools, compressed air percussion, rotary, air rotary, or reverse circulation rotary methods. Includes installing casing, gravel pack, perforating and sanitary seals. Repair existing wells by sand pumping, jetting, acidizing, swabbing, clean out, re-perforating, swaging, installation of annealed lines, and the removal of debris.

Includes photographing interior of wells with appropriate equipment. Installation of jet and submersible pumps; electrical pump controls and wiring from pump equipment to first readily accessible disconnect; and water line to storage or pressure tank, not to exceed 50 linear feet. Use of a test pump to develop a new well, or repair an existing well, when provided in contract, is limited to 5 horsepower.

Installation of concrete pump bases not to exceed 50 square feet.

Installation of protective fencing when included in original contract.

| # of Questions | Minimum Passing Score | Time Allowed |
|----------------|-----------------------|--------------|
| 30 | 70% | 75 Minutes |

CONTENT OUTLINE

| Subject Area | # of Items |
|--------------------------|------------|
| Drilling and Boreholes | 6 |
| Casings and Screens | 6 |
| Grouting and Sealing | 4 |
| Contamination Prevention | 4 |
| Testing | 3 |
| Pumps and Tanks | 3 |
| OSHA Safety | 4 |

REFERENCE LIST

To purchase reference materials, go to PSI's online store at www.psionlinestore.com

The reference material listed below was used to prepare the questions for this examination. The examination may also contain questions based on trade knowledge or general industry practices. **Except for Code books**, you can base your answers on later editions of references as they become available. For Code questions, the examinations will be based **only** on the edition of the Code book that is listed.

Candidates may use a silent, nonprinting, non-programmable calculator in the examination center.

The following reference material is allowed in the examination center:

Code of Federal Regulations - 29 CFR Part 1926 (OSHA), with latest available amendments, U.S. Government Printing Office, (866) 512-1800
Online version: <https://www.osha.gov/laws-regs/regulations/standardnumber/1926>

This may also be purchased from various vendors including Amazon
Or
Code of Federal Regulations - 29 CFR Part 1926 Selections by PSI, with latest available amendments, 3210 E Tropicana, Las Vegas, NV 89121, (800) 733-9267, www.psiexams.com

Groundwater & Wells, Robert Sterrett (Editor), 3rd Edition, National Groundwater Association (800)833-9473, <https://commerce.smythco.com/bookorder/select.action>

Handbook of Suggested Practices for the Design and Installation of Ground Water Monitoring Wells, National Groundwater Association, 601 Dempsey Road, Westerville, Ohio 43081- 8978, www.ngwa.org

Manual of Water Well Construction Practices, 2nd Edition, 1998, National Ground Water Association, 601 Dempsey Rd Westerville, OH 430818978, 8005517379, www.ngwa.org

Water Systems Handbook, 12th Edition, Water Systems Council, (888) 395-1033, <https://www.watersystemscouncil.org/>

Candidates are responsible for bringing their own references to the examination center. Reference materials may be highlighted, underlined, annotated and/or indexed prior to the examination session. However, references may not be written in during the examination session. Any candidate caught writing, highlighting, underlining and/or indexing in the references during the examination will be reported to the Arizona Registrar of Contractors. Furthermore, candidates are not permitted to bring in any additional papers (loose or attached) with their approved references. References may be tabbed/indexed with permanent tabs only. (permanent tabs are defined as tabs that would tear the page if removed). Temporary tabs, (defined as Post-It notes, or other tabs that may be removed without tearing the page) are not allowed and must be removed from the reference before the exam will begin. If you are downloading from the Internet, you may bring this reference into the testing center with you as long as it is bound. You can have it spiral bound or you may hole-punch it and put it in a binder.