

Rules of **Department of Natural Resources**

Division 23—Well Installation Chapter 6—Test Hole Construction Code

Title		Page
10 CSR 23-6.010	Definitions (Rescinded February 28, 2019)	3
10 CSR 23-6.020	General Protections of Groundwater Quality and Resources	3
10 CSR 23-6.030	Location of Test Holes	3
10 CSR 23-6.040	Construction Standards for Test Holes	3
10 CSR 23-6.050	Plugging of Test Holes	3
10 CSR 23-6.060	Confidentiality of Registration Report Form (Rescinded February 28, 2019)	4



Title 10—DEPARTMENT OF NATURAL RESOURCES

Division 23—Well Installation Chapter 6—Test Hole Construction Code

10 CSR 23-6.010 Definitions

(Rescinded February 28, 2019)

AUTHORITY: sections 256.606 and 256.626, RSMo Supp. 1991. Original rule filed Aug. 17, 1993, effective March 10, 1994. Rescinded: Filed June 27, 2018, effective Feb. 28,

10 CSR 23-6.020 General Protection of **Groundwater Quality and Resources**

PURPOSE: This rule protects the overall groundwater quality and resources in Missouri.

- (1) All test holes shall be constructed in a manner that will conserve and protect the groundwater resources and not be a source or channel of contamination or pollution to any aquifer.
- (2) Test holes may be converted into other types of wells provided advanced written approval is obtained from the department and the well is constructed to the minimum standards provided in 10 CSR 23.

AUTHORITY: sections 256.606, 256.615, and 256.626, RSMo 2016.* Original rule filed Aug. 17, 1993, effective March 10, 1994. Amended: Filed Nov. 1, 1995, effective June 30, 1996. Amended: Filed June 27, 2018, effective Feb. 28, 2019.

*Original authority: 256.606, RSMo 1991; 256.615, RSMo 1991; and 256.626, RSMo 1985, amended 1991.

10 CSR 23-6.030 Location of Test Holes

PURPOSE: This rule sets criteria for the location of test holes.

(1) Setback distances shall be followed pursuant to 10 CSR 23-3.010(1) Table 3.1.

AUTHORITY: sections 256,606 and 256,626. RSMo 2016.* Original rule filed Aug. 17, 1993, effective March 10, 1994. Amended: Filed June 27, 2018, effective Feb. 28, 2019.

*Original authority: 256.606, RSMo 1991 and 256.626, RSMo 1985, amended 1991.

10 CSR 23-6.040 Construction Standards for Test Holes

PURPOSE: This rule describes the minimum standards for a properly constructed test

- (1) Casing when used shall follow the minimum standards pursuant to 10 CSR 23-3.030(1)(A).
- (2) Casing Depth. If permanent surface casing is set, it must be set at least thirty feet (30') into bedrock.
- (3) Temporary Cap. All holes must be capped during the period they remain unplugged pursuant to 10 CSR 23-3.030(1)(E).
- (4) Grout when used to seal casing annulus shall follow materials and methods pursuant to 10 CSR 23-3.030(1)(C).

AUTHORITY: sections 256.606 and 256.626, RSMo 2016.* Original rule filed Aug. 17, 1993, effective March 10, 1994. Amended: Filed Nov. 1, 1995, effective June 30, 1996. Amended: Filed June 27, 2018, effective Feb. 28, 2019.

*Original authority: 256.606, RSMo 1991 and 256.626, RSMo 1985, amended 1991.

10 CSR 23-6.050 Plugging of Test Holes

PURPOSE: This rule establishes criteria for the proper procedures to be followed when plugging a test hole.

- (1) All test holes, except those that are converted to other types of wells shall be plugged in accordance with this chapter within sixty days from the date that the well was drilled. Submit plugging registration records pursuant to section 256.614.1, RSMo. Test holes are exempt from submitting construction certification records.
 - (A) Plugging the Test Hole.
 - 1. Test holes with no surface casing.
- A. Fill the test hole from total depth to within two feet (2') of ground surface with grout.
- B. If the Davis Formation is penetrated, a grout plug shall extend from the bottom of the formation to within two feet (2') of ground surface.
- C. A mechanical packer may be installed at the bottom of the Davis Formation or emplace clean fill from total depth to the bottom of the Davis Formation to hold the grout plug in place.
 - D. Fill the top two feet (2') of hole

with soil.

- 2. Test holes with removable surface casing pipe.
- A. Remove the surface casing and any interior casing if used.
- B. Fill the test hole from total depth to within two feet (2') of ground surface with
- C. If the borehole has collapse potential, add grout as casing is withdrawn.
- D. If the Davis Formation is penetrated, a grout plug shall extend from the bottom of the formation to within two feet (2') of ground surface.
- E. A mechanical packer may be installed at the bottom of the Davis Formation or emplace clean fill from total depth to the bottom of the Davis Formation to hold the grout plug in place.
- F. Fill the top two feet (2') of hole with soil.
- 3. Test holes with grouted nonremovable surface casing.
- A. Cut the casing off two feet (2') below ground surface or three feet in an agricultural area. If bedrock is encountered, cut the casing flush with the top of bedrock.
- B. Fill the test hole from total depth to within two feet (2') of ground surface with grout.
- C. If the Davis Formation is penetrated, a grout plug shall extend from the bottom of the formation to within two feet (2') of ground surface.
- D. A mechanical packer may be installed at the bottom of the Davis Formation or emplace clean fill from total depth to the bottom of the Davis Formation to hold the grout plug in place.
- E. Fill the top two feet (2') of hole with soil.
- (2) Test holes drilled to expand quarrying and surface mining operations.
- (A) Test holes completely destroyed within one (1) year of the advance of the mine or quarry shall have a ten foot (10') surface grout plug and are exempt from plugging registration requirements.
- (B) Test holes that are not destroyed within one (1) year of the advance of the mine or quarry are subject to plugging requirements pursuant to 10 CSR 23-6.050(1).
- (C) Test holes that penetrate the quarry or mine floor which are not completely destroyed by the quarry or mine operation shall be plugged with grout from total depth to the bottom of the quarry or mine and are subject to plugging registration requirements.
- (3) Clay mining operations. Test holes that do not penetrate beneath an impermeable fire



clay deposit shall have a ten foot (10') surface grout plug and are exempt from plugging registration requirements.

- (4) Unconsolidated material test holes less than one hundred feet (< 100') deep.
- (A) Test holes less than twenty feet (<20') in depth may be plugged using clean fill or uncontaminated native material and are exempt from plugging registration requirements.
- (B) One (1) registration report and fee is required per site for test holes that are twenty feet (20') in depth or greater. All test holes plugged may be reported on one (1) form.
- (C) Test holes where no ground water is encountered, may be plugged using clean fill or uncontaminated native material.
- (D) Test holes may not be used for monitoring.

AUTHORITY: sections 256.606, 256.614, 256.615, and 256.626, RSMo 2016.* Original rule filed Aug. 17, 1993, effective March 10, 1994. Amended: Filed July 13, 1994, effective Jan. 29, 1995. Amended: Filed Nov. 1, 1995, effective June 30, 1996. Amended: Filed June 27, 2018, effective Feb. 28, 2019.

*Original authority: 256.606, RSMo 1991; 256.614, RSMo 1985, amended 1991; 256.615, RSMo 1991; and 256.626, RSMo 1985, amended 1991.

10 CSR 23-6.060 Confidentiality of Registration Report Form

(Rescinded February 28, 2019)

AUTHORITY: sections 256.606, 256.614, 256.615 and 256.626, RSMo Supp. 1991. Original rule filed Aug. 17, 1993, effective March 10, 1994. Rescinded: Filed June 27, 2018, effective Feb. 28, 2019.