

Water Well (642) Requirements

Environmental Quality Incentives Program (EQIP) 2012

Purpose:

1. Water supply for livestock.
2. Alternative water supply for certified organic operations only when converting from a public water supply.

Eligibility: Only when a resource concern will be addressed by one of the following:

1. Rotational grazing.
2. Access control of sensitive areas.
3. Conversion from a public water supply.

Specifications:

1. Install water well in accordance with:
 - a. Water Well Conservation Practice Standard No. 642; and
 - b. Tennessee Department of Environment and Conservation (TDEC) Water Well Licensing and Well Construction Standards Chapter 1200-4-9.
2. Well depth not to exceed 50 feet past the water bearing zone that yields sufficient quality and quantity of water to meet the design requirement. General well depth, yield, and water quality problems per aquifer are presented on the next page.
3. Well depth not to exceed 450 feet unless otherwise approved by the NRCS geologist.

Producer Requirements for Payment: Provide NRCS with a copy of the Tennessee Water Well Drillers Report (See the attached example).



TENNESSEE WATER WELL DRILLERS REPORT
DEPARTMENT OF ENVIRONMENT & CONSERVATION

THIS REPORT TO BE SUBMITTED BY DRILLER WITHIN 30 DAYS
 AFTER COMPLETION OF DRILLING WATER WELL WITH REQUIRED FEE
 TO: DIRECTOR, DIVISION OF WATER SUPPLY, 401 CHURCH ST.
 L & C TOWER 6TH FLOOR, NASHVILLE, TENNESSEE 37243-1549

OFFICE USE ONLY

Well No.: _____
 Date Rec'd: _____
 Check#: _____
 Amount Rec'd: _____
 Receipt# _____ Cd# _____

PLEASE PRINT

(1) **WELL CONTRACTOR**
 Firm _____ Lic. No. _____
 Rig. Operator _____
 Driller Tag# _____

(9) **WELL OWNER**
 Name _____ FIRST _____ LAST _____
 or Company _____
 Address _____
 City _____ State _____ Zip _____
 Phone # (_____) _____

(2) **WELL LOCATION**
 County _____
 Driller _____
 Map No. _____ (W) (X) (Y) (Z)
 or NUMBER LETTER
 Latitude: _____ DEG MIN SEC Longitude _____ DEG MIN SEC
 Well Address: _____ ROAD OR STREET
 City: _____ Zip _____
 _____ Miles (N) (E) (S) (W) of _____ LANDMARK

(10) **PROPOSED USE OF WELL**
 Residential Commercial Industrial Monitor Test
 Farm Irrigation Heat Pump Municipal Other
 (Specify) _____

(3) **TYPE OF WORK**
 Date drill rig left site: ____/____/____
 New Well Deepen Rework
 Backfill And Abandon

(11) **PRIMARY CASING**
 Diameter _____ Inches Top Set _____ Above In Ground
 From Land Surface to _____ Ft. below ground
 Type: Plastic Steel Galvanized
 Concrete Other None
 Wall Thickness _____ or SDR# _____

(4) **WELL COMPLETION DATA**
 Date Completed ____/____/____ Static Level _____ Ft.
 Total Depth _____ Ft. Estimated Yield _____ GPM
 Depth to bedrock _____ Ft.

(12) **WELL FINISH**
 Open Hole Screen Slotted or Perf. Pipe
 From _____ Ft. To _____ Ft.
 If Screen, Plastic Metal Slot Size _____ In.
 Gravel Pack From: _____ Ft. to _____ Ft.

(5) **WATER-BEARING ZONES**

DEPTH IN FT.	GPM	WATER QUALITY
_____	_____	_____
_____	_____	_____
_____	_____	_____

(13) **BACK FILL MATERIAL**
 Bentonite Cement From 3 Ft. to 10 Ft.
 From _____ To _____ From _____ To _____
 Cuttings _____ Sand _____
 Bentonite _____ Cement _____
 Other (Specify) _____

(6) **WELL TEST**
 Tested By: Pumping Blowing Bailing
 Static Level _____ Ft. Pumping Level _____ Ft. After _____ Hr.
 _____ Min. At _____ GPM
 Development Time Prior to Test _____ Hr. _____ Min.

(14) **LINER CASING** Yes No
 Type: Plastic Steel Diameter _____ In.
 From: _____ Ft. to _____ Ft.
 Packers Installed? Yes No
 Location: _____ Ft. and _____ Ft.

(7) **FORMATION LOG**

DEPTH IN FT. FROM	TO	DESCRIPTION (DENOTE ROCK COLOR & TYPE & CAVES)
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

(If additional space is needed, use back of form or use comments section)

(15) **ANTICIPATED WATER QUALITY**
 Clear Cloudy Dingy Muddy
 Good Fair Bad Iron Sulfur
 Gas Oil Salt
 Other (specify) _____

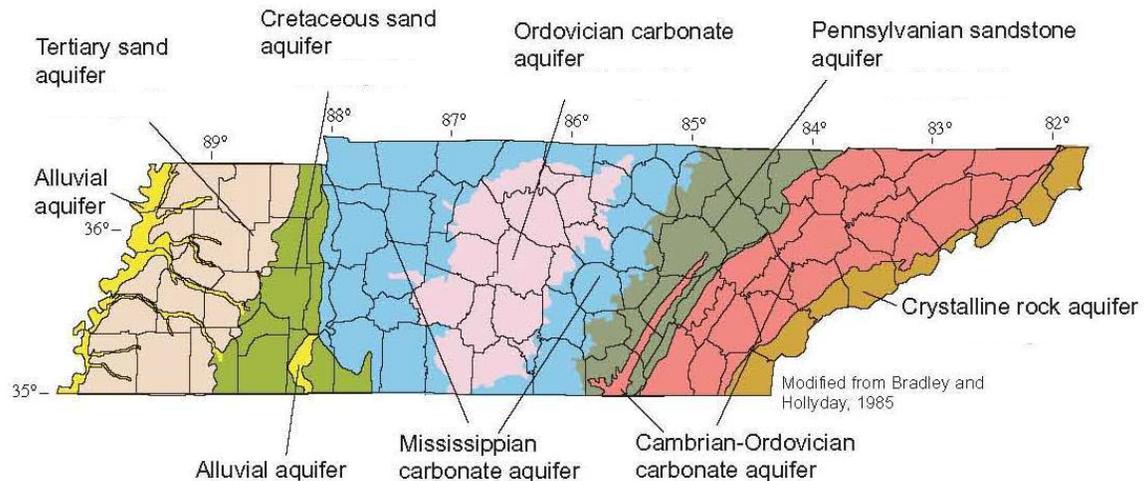
(8) **COMMENTS**

(16) **GENERAL INFORMATION**
 Well Disinfected: Yes No
 Well Capped: Yes No
 Well located greater than fifty feet from septic tank & field line: Yes No
 From information provided by:
 Property owner (provide written statement by owner)
 Driller determination
 Health Department permit
 Drilling process water obtained from:
 Well Springbox Public Supply Surface Supply
 Pump Installed by Driller: Yes No

I certify that the above information is true and accurate to the best of my knowledge. Signed _____ Licensed Driller

Distribution: White - Central Office Canary - Driller Pink - Homeowner

General Water Supply Well Characteristics



Modified from Carmichael and Bennett, 1993

Aquifer Name	General Water Supply Well Characteristics				General Water Quality Problems
	Depth (feet)		Yield (gallons per minute)		
	Common Range	May Exceed	Common Range	May Exceed	
Alluvial	10 - 75	100	20 - 50	1,500	High iron concentrations in some areas.
Tertiary Sand	100 - 1,300	1,500	200 - 1,000	2,000	High iron concentrations in some areas.
Cretaceous Sand	100 - 1,500	2,500	50 - 500	1,000	
Pennsylvanian Sandstone	100 - 200	250	5 - 50	200	High iron concentrations in some areas.
Mississippian Carbonate	50 - 200	250	5 - 50	400	Water generally hard; high iron, sulfide, or sulfate concentrations in some areas. Aquifer susceptible to contamination.
Ordovician Carbonate	50 - 150	200	5 - 20	300	Water generally hard; high iron, sulfide, or sulfate concentrations in some areas. Aquifer susceptible to contamination.
Cambrian-Ordovician Carbonate	100 - 300	400	5 - 200	2,000	Water generally hard.
Crystalline Rock	50 - 150	200	5 - 20	1,000	Low pH and high iron concentrations in some areas.