

### WELL PLUGGING (DECOMMISSIONING) (351)

Well Owner \_\_\_\_\_

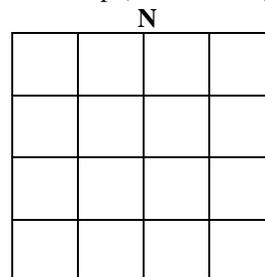
Address \_\_\_\_\_

County \_\_\_\_\_

Program \_\_\_\_\_

GPS \_\_\_\_\_

Section Map (mark with X)



Sec \_\_\_\_\_ T \_\_\_\_\_ R \_\_\_\_\_

Prepared by & Date \_\_\_\_\_ Plugging Completion Date \_\_\_\_\_

**Existing Well** X in box >

Unconfined Aquifer (Shallow Well) \_\_\_\_\_ Confined Aquifer (Artesian) \_\_\_\_\_ Multiple Aquifer \_\_\_\_\_

Well Depth, Ft. \_\_\_\_\_ Casing Material \_\_\_\_\_ Casing Sizes, In. \_\_\_\_\_

Casing Condition and Other Notes -  
\_\_\_\_\_  
\_\_\_\_\_

**Test Hole** X in box >

Hole Depth, Feet \_\_\_\_\_ Hole Diameter, Inches \_\_\_\_\_

#### Plugging Details

Describe Plugging Procedure:  
\_\_\_\_\_  
\_\_\_\_\_

Describe Grout or Plugging Material:  
\_\_\_\_\_  
\_\_\_\_\_

#### Certifications

*I certify the above well or test hole was plugged according to requirements of the SD Well Construction Standards.*

Signature of Well Owner \_\_\_\_\_ Date \_\_\_\_\_

*This well or test hole was plugged under SD License No. \_\_\_\_\_ and this report is true and accurate.*

Drilling Firm \_\_\_\_\_ Signature of Licensed Rep. \_\_\_\_\_ Date \_\_\_\_\_

**Initial Steps prior to plugging a well:**

- Remove any pumping equipment and piping.
- Obtain drill logs from DENR Division of Water Rights (Internet - [www.state.sd.us/denr](http://www.state.sd.us/denr), (phone 605 773 3353).

**Plugging Wells in Single Unconfined Aquifers (water table aquifers):**

Backfill to the top of the aquifer with clean sand or gravel. To insure the sand and gravel is clean and free of contaminants, one gallon of 51/4% chlorine bleach is first poured into the well and then add the sand or gravel backfill.

Above the aquifer, backfill the well using one of the following methods:

- Fill the remainder of the well with cement grout or bentonite grout. The top three feet of the casing or hole may be filled with native material.
- Fill a minimum of two feet of dry bentonite, bentonite grout, or cement grout above the aquifer. Then backfill the remaining casing or hole with compacted clay. The top three feet of casing or hole may be filled with native material or clay.

Plugging materials must be added to the hole via a tremie if the well or test hole is less than 16 inches diameter or more than 50 feet deep.

If it cannot be verified by drill log or by digging around the casing that the well casing was grouted, an effort must be made to plug the area around the casing (between well casing and drill hole) from bottom to top with the same materials required for plugging the inside of the casing.

**Plugging Wells in Confined Aquifers (artesian wells) and wells with Multiple Aquifers:**

The well must be plugged using one of the following methods:

- Fill the well from bottom to top with cement grout; except that the top three feet of casing may be removed and backfilled with native material.
- Fill the well from bottom to within eight feet of the surface with bentonite grout. Then fill with a minimum of five feet of cement grout. The top three feet of casing may be removed and backfilled with native material.

The well must be filled with a pipe lowered inside the casing to fill the well from bottom to the top (cement grout or bentonite grout), or by making a tight connection to the top of the casing and pumping a volume (sufficient to fill the well) of cement grout under pressure into the well.

If the weight of the bentonite grout is not sufficient to overcome the bottom hole pressure, or if a pipe cannot be lowered inside the well casing to fill the well from bottom to top, then cement grout must be used.

If it cannot be verified by drill log or by digging around the casing that the well casing was grouted, an effort must be made to plug the area around the casing (between the well casing and drill hole) from bottom to top with the same material required for plugging the inside of the casing.

**Records:**

If owners plug their own wells, they are not required to report the plugging to DENR, however, reporting is advised. Well drillers are required to send a copy of the well plugging reports to DENR and also to the landowner.

**Volume and Depth:**

Hole Dia., In.	Gal./Ft.	Ft. <sup>3</sup> /Ft.		Hole Dia., In.	Gal./Ft.	Ft. <sup>3</sup> /Ft.
2	0.16	0.02		10	4.1	0.55
3	0.37	0.05		12	5.9	0.79
4	0.65	0.09		16	10.5	1.4
5	1.0	0.14		20	16.4	2.2
6	1.5	0.20		24	24.6	3.1
7	2.0	0.27		36	53.0	7.1
8	2.6	0.35		48	94.2	12.6