

WV NRCS	WATER WELL WORKSHEET	WV ENG 642
Field Office _____; County _____; Land Owner _____; Date __/__/__.		
Well Driller Certification Completed by. _____		
Designed by _____; Checked _____; Approved _____; Job Classification _____		

Check and/or fill in the blanks, as appropriate, pertaining to the water well.

1. ___ This is for a ___ new, ___ retrofit or ___ existing water well.
2. ___ The purpose of the water well is to supply ___ non-potable livestock, ___ irrigation, ___ supplemental water supply or _____ water supply.
3. ___ The planned well's pump energy is supplied by a ___ diesel, ___ electric, ___ solar, ___ wind or ___ other source.
4. ___ The elevation difference from the well surface (___ elev.) to the highest summit (___ elev.) is _____ ft. and the furthest point of application is approximately ___ ft. in length.
5. ___ The well is located in / out of the 25-year flood plain and is protected from contamination.
6. ___ The estimated daily water need is ___ GPM for _____ hours/day.
7. A constant supply of water is needed for _____ hours/day.
8. ___ The well shall supply a minimum of 110% of the daily water needs (gallons).
9. The maximum required pressure to deliver the water to the source is ___ psi (from the well surface).
10. ___ A geological investigation from the State Geologist providing relevant geologic maps and reports.
 - a. Submit request and provide a map (shape file) of location and outline of the property requiring groundwater development with respect to known references such as roads, streams, section lines, or streets.
11. ___ Document geologist recommendation(s) for the proposed well location and potential for securing water pertaining to CPS 642 criteria.
12. ___ Document reliable local source(s) and history of proven wells in the area.
13. ___ The well shall have a minimum 4 inch thick concrete slab installed extending at least 2 feet in all directions of the casing.
14. ___ Document location/s of all chemical storage areas, feeding equipment and points of chemical application within and 300' outside of the property boundary.
15. ___ Owner documents no other known contamination sources or wells within 100 feet of the proposed drill site as shown on the drawing or layout.
16. ___ Document that the location can be maintained and is accessible for cleaning, treatment, repair, testing, abandonment or other necessary work.
17. ___ Attach the WV Water Well completion report signed by a certified WV Well Driller.
18. ___ Document well material and pump or yield test according to the certified WV Well Driller report. Include
 - a. Purpose of the well and intended use.
 - b. Well casing material: ___, diameter: ___ inches, casing length: ___ ft.; screen type _____
 - c. Well depth ___ ft., Depth to water supply ___ ft.
 - d. Estimated pump rate during test _____ (GPM) and ___ depth (ft.)
 - e. Water level at beginning of test ___ ft.; Water level at end of test ___ ft.,

duration of test _____ minutes/hours.

- f. Time to recover to 90% of initial water depth; _____ minutes.
- g. Recommended maximum pumping rate; _____ GPM for _____ hours/day; without lowering the water level below the top boundary of the aquifer, the top of the perforations, or below the pump.

19. ___ Note any concerns or problems with the drilling of the well;
_____.

20. ___ Document or note, on the plan map, the location of all existing and potential sources of pollution that may affect the water source or underground treated water storage facilities.

WV NRCS required minimum upslope horizontal distance between a water well, other than a well serving a public water system, and the source or potential source of pollution or contamination shall be as follows:	
➤ Property Lines	10 feet
➤ Streams, Rivers and Impoundments ²	25 feet
➤ Sewers and Drains ¹ (Hydrostatically Tested)	25 feet
➤ Existing Buildings or Foundations	30 feet
➤ Sewage Holding or Septic Tanks ¹	100 feet
➤ Sewage Absorption Fields, Privies (Vault)	100 feet
➤ Sewers and Drains (Non-Watertight),	100 feet
➤ Barnyard/Feeding, Watering Areas, Manure Piles	100 feet
➤ Other Known or Potential Contamination Sites	100 feet
➤ Other existing wells	100 feet
➤ Silo, Pit, Seepage pit	150 feet
➤ Lagoons, Waste Storage Ponds	300 feet

¹Sewer and drain materials shall be of potable water main standards, installed, and hydrostatically tested as approved by the director.

²Where possible, the upper well casing shall extend above the fifty (50) year flood level. When this level is not known, the flood level shall be that level that is six feet (6') above the normal water level of the surface.

- 21. ___ The well casing extends 12 inches above ground surface or more.
- 22. ___ A WV Certified Well Driller is on site and in direct charge of drilling, construction, altering, decommissioning or abandonment of water well.
- 23. ___ The well yield information was compared to the pump selection chart and according to Conservation Practice Pumping Plant 533, the pump's yield (GPM) and pressure (psi) meets the yield the required demand requirements.
- 24. ___ Credit for storage in the water column of the well shall not exceed 80% of the anticipated normal water depth.
- 25. ___ Note associated other practices such as PC 533 Pumping Plant, PC 342 Critical Area Planting, PC 382 Fence, PC 560 Access Road, etc. _____.
- 26. ___ Quantities, material and estimate included.
- 27. ___ As built documentation complete.
- 28. ___ Job Class and signatures for practice implementation approval complete.

29. ___ WV-Eng-63 Water Well drawing.
30. ___ All known utilities have been located (ENG.-5) and documented the landowner has verified MISS UTILITY (-1-800-248-4848) contacted and utilities marked.
31. ___ **ANY DEVIATION OF THIS STANDARD REQUIRES APPROVAL BY THE STATE CONSERVATION ENGINEER.**