

WATER WELL WORKSHEET

Landowner/Operator _____

County _____ CD _____ Farm/Tract No. _____

Prepared By _____ Date _____

Checked By _____ Date _____

Approved By _____ Date _____

Job Approval Class _____

CHECKLIST

- Maximum Water Demand Calculations
 - Ohio Waterworks printout
 - Table 1, Water Demand Summary
- Geologist Packet
 - Geologist Information Sheet
 - Maximum Water Demand Calculations
- Design
 - Utility Check List (WV-ENG-46)
 - Attach landowner's written documentation of WV811 confirmation/ticket number
 - Maximum Water Demand Calculations
 - Map identifying the proposed well site, all facilities (watering facilities, irrigated fields, wash rooms, dairy barns, orchards, etc.) planned to be served by the well, property boundaries, utilities, roads and all items listed in CPS 642 Table A located within 500' of the proposed well site. Show the setbacks for all Table A items. Include bar scale and north arrow on the maps.
 - Well Design
 - Geologist Packet
 - State Geologist Report
 - Water Well Completion Report
 - Well Yield - Maximum Water Demand Comparison
 - Document Maximum Pumping Hours based on Well Yield
 - WVENG642 FS
 - Design
 - As-built
 - Pump & Pipeline Design
 - Document elevations at pump, pressure tank, high points, end use)

- Energy Source (solar, electric (single or three-phase), diesel, wind, other)
- Confirm proposed pump suitable base on Well Yield. Reassess if needed.
- Design for pump and pipeline (Ohio Waterworks or WVENGWS-430 Irrigation Water Conveyance – Pipeline Design)
- Map showing well, pressure tank (if used), pipeline and end use)
- Pressure Tank Sizing (if used)
- Materials list
 - Pump (note horsepower, total head)
 - Pipeline & fittings (ASTM, diameter, wall thickness, length)
- As-built (elevations, materials, quantities, alignment)
 - Pump Curve
 - Elevations
- Associated Conservation Practices:
 - __ Pumping Plant (533)
 - __ Livestock Pipeline (516)
 - __ Critical Area Planting (342)
 - __ Fence (382)
 - __ Access Road (560)
 - __ Watering Facility (642)
 - __ Irrigation System, Microirrigation (441)
 - __ Irrigation Water Management (449)
 - __ Other

GEOLOGIST INFORMATION SHEET

(send to State Geologist with copy to Resource Conservation Engineer)

Landowner/Operator _____

County _____ CD _____ Farm/Tract No. _____

Complete this page and submit request to the WV State Geologist for water well potential and geomorphologic information and send a copy to the Resource Conservation Engineer. The State Geologist will respond by providing relevant geologic maps, reports and recommendations related to the potential well site.

1. This request is for a ___ new non-domestic water well or ___ existing water well.
2. The purpose of the well is for ___ livestock, ___ poultry, ___ irrigation, ___ other (_____).
3. Attached to this request is any available information pertaining to the well such as
 - a. water quality (PH, excessive salts, turbidity, staining, etc.) of wells in area.
 - b. quantity (GPM) of water wells within proximity of site.
 - c. local knowledge of other wells in the area (depth, quality of water, quantity (dry, low, median or high producing), filtration requirements, etc.
 - d. To the landowner's knowledge, there are no known contamination sources or wells near to the proposed well site as shown on the plan drawing and as outlined below
4. Attached to this request is location information:
 - a. ___ proposed well's latitude and longitude or shape file
and
 - b. ___ topographic map

WELL YIELD - WATER DEMAND COMPARISON

Estimated Well Yield¹ _____ GPM Maximum Pumping Hours _____ HR² Maximum Allowable Withdraw _____ GPD

Taken From:

Use	Water Demand			Pump Time ³ (HR)	Daily Volume (Gallons/Day)
	Required Demand (GPM)	125% Increase	Mark Uses Supplied at Same Time		
Livestock		---			
Poultry		---			
Micro- Irrigation ⁴					
Sprinkler Irrigation ⁴					
Dairy Use		---			
Greenhouses		---			
Processing Stations		---			
Other					
Subtotal					
Total⁵					

Checks if ⁶ :	Total Demand ≤ Est. Well Yield	Total Pump Time ≤ Max. Pumping Hours	Total Daily Vol. ≤ Max. Allowable Withdraw ⁷
	≤	≤	≤
	Tank Size if required:		

NOTE:

- 1) The estimated well yield shall be taken from the Water Well Completion Report, Geologists Report, water well pump test (4 hr min), or specified other method.
- 2) The maximum pumping hours per day taken from the table found in CPS 533 Pumping Plant.
- 3) Time needed to supply the volume required for the indicated use.
- 4) The estimated well yield must be a minimum of 125% of the required irrigation rate (GPM). Low volume wells can easily be depleted if over-pumped.
- 5) For multi-purpose systems that include irrigation, check (the Total Required Demand + the Total 125% Increase) less than equal to the Estimated Well Yield. For multi-use systems show calculations on separate sheet that proves the well can meet the demand and volume.
- 6) If Total Required Demand is greater than Estimated Well Yield and the Maximum Allowable Withdraw is greater than the Total Daily Volume then install a storage tank.
- 7) If Total Daily Volume greater than Maximum Allowable Withdraw then stop and re-evaluate the plan.
- 8) Document any concerns or problems with the drilling of the well on a separate sheet.