

**WATER PERMIT NO. 8804-3**

Name of Applicant: **Dwight Warkenthien**

Address: **18596 425<sup>th</sup> Avenue, Willow Lake SD 57278**

Phone: **605-625-3342**

Amount of Water Claimed: **no add'l**

Total Acres: **28.5**  
**5**

Source of Water Supply: **Groundwater**

Water to be used for: **Irrigation**

County: **Clark**

Type of Waste Disposal System:

Location: **13 miles south of Clark SD**

**PRIORITY** Date Received: **11-1-23**

Application/License Fee: **\$500.00**

Corrected Application Received:

Period of Annual Use: **May 1 – September 31**

Remarks: **This application corrects the well location authorized by Permit No 8125-3**

Diversion Point: **NE 1/4 NW 1/4 Sec 8-T114N-**  
**R57W**

Land to be Irrigated: **S 1/2 N 1/2 Sec 8-T114N-**  
**R57W**

|  |  |  |   |  |  |
|--|--|--|---|--|--|
|  |  |  |   |  |  |
|  |  |  |   |  |  |
|  |  |  | 8 |  |  |
|  |  |  |   |  |  |

Depth of Well: **160**

Well Driller:

Remarks:

Type of Map: **aerial**

Reviewed and the Number Assigned on: **11-2-23**

By: **Rachel Rodriguez**

Notice of Hearing - date to intervene: \_\_\_\_\_

**SOUTH DAKOTA  
WATER PERMIT NO. 8804-3**

Date of first receipt of application November 1, 2023.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 8804-3 to Dwight Warkenthien, 18596 425<sup>th</sup> Avenue, Willow Lake SD 57278 authorizing the construction of the water use system and the placing of water to beneficial use subject to the following limitations, conditions and qualifications:

1. Water Permit No. 8804-3 authorizes an additional 25.5 irrigated acres to those irrigated under Water Permit No. 8125-3 and corrects the location of the well authorized by No. 8125-3. Water Permit No. 8125-3 authorizes 2.67 cubic feet of water per second (cfs) from one well completed into the Vermillion East Fork: Willow Lake Management Unit Aquifer for irrigation of 280 acres located in the SW 1/4 Section 8 and the S 1/2 NW 1/4, N 1/2 SW 1/4 Section 9; all in T114N-R57W. The well authorized by No. 8125-3 was to be completed in the NE 1/4 SW 1/4 Section 8-T114N-R57W. This application corrects the location of the well, which was developed in the NE 1/4 NW 1/4 Section 8-T114N-57W and authorizes irrigation of an additional 25.5 acres in the S 1/2 NE 1/4, SE 1/4 NW 1/4 Section 8-T114N-57W. Water Right No. 3145-3 authorizes 2.00 cubic feet of water per second (cfs) from one well completed into the Vermillion East Fork: Willow Lake Management Unit Aquifer located in the SE 1/4 NW 1/4 Section 8 for irrigation of 140 acres located in the SE 1/4, E 1/2 SW 1/4, S 1/2 NE 1/4 Section 8; all in T114N-R57W. This permit also authorizes irrigation of the acreage covered by Nos. 8125-3 and 3145-3, plus the 25.5 additional acres, from either of the wells authorized Nos. 8125-3 or 3145-3 with no increase in the permitted diversion rates. This site is located approximately 13 miles south of Clark SD.
2. The amount of the appropriation may not exceed 2 acre feet annually for each acre of land to which water is actually and beneficially applied for irrigation. The water is to be used during the following described annual period: May 1 – September 30.
3. The date from which applicant may claim right is November 1, 2023.
4. The date of approval of Permit No. 8804-3 is January 16, 2024.
5. One-fifth of the construction is to be completed on or before July 16, 2026.
6. All construction is to be completed on or before January 16, 2029.
7. Water is to be put to beneficial use on or before January 16, 2033.
8. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

**QUALIFICATIONS**

1. The wells approved under Water Right No. 3145-3 and Water Permit No. 8125-3 with the well location for No. 8125-3 corrected by Water Permit No. 8804-3 are located near domestic wells and other wells which may obtain water from the same aquifer. Water withdrawals shall be controlled so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

**WATER MANAGEMENT BOARD**

By: Eric Gronlund  
Eric Gronlund, Chief Engineer  
Water Rights Program  
Department of Agriculture and Natural Resources

JAN 29 2024  
date



RECEIVED

NOV 01 2023

**FORM 2: Application for irrigation in South Dakota**  
(type or print)

**OFFICE OF  
WATER**

PAID

NOV 01 2023

Ck# 3816

Rec't# 11/01/23

|                                                                                                               |                                                                                                                                                                              |
|---------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mail to:<br><br>SD DANR, Water Rights<br>523 E Capitol Ave<br>Pierre, SD 57501-3182<br><br>ph. (605) 773-3352 | No. <u>8804-3</u> Hydrologic Unit <u>10170201</u><br>Basin <u>Big Sioux River</u><br>Newspaper <u>Clark Co Courier</u><br><u>Water town Public Opinion</u> (office use only) |
|---------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## Application for Permit to Appropriate Water for Irrigation

Type of Application: ☒ New ☐ Vested Right ☐ Amendment/Correction to Permit No. \_\_\_\_\_  
(Use predates Mar 2, 1955)

Description of amendment/correction: (i.e. change diversion point(s), add diversion point(s), change use, etc.)

1. Name to Appear on Irrigation Permit Dwight Warkenthien

Note: The "Name to Appear on Irrigation Permit" must be the name in which the property to be irrigated is held in.

Mailing Address 18596 425th Ave Willow Lake SD 57278

Phone 605.625.3342 (Address) (City) (State) (Zip Code)  
Mobile \_\_\_\_\_ Email \_\_\_\_\_

2. Amount of water claimed \_\_\_\_\_ \*CFS or \_\_\_\_\_ \*\*GPM \_\_\_\_\_ \*\*\*AF Total Acreage 28.5 25.5  
(\*Cubic Feet per Second) (\*\*Gallons per Minute) (\*\*\*) Acre Feet - storage capacity of dam/dugout or annual use if applicable)

3. Source of water supply 2 existing wells (Vermillion East Fork: Willow Lake Aquifer)

4. Location of point of diversion NE 1/4 NW 1/4 & SE 1/4 NW 1/4; all in Section 8 - T114N - R57W

(example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W)

County Clark

5. County or counties where water will be used Clark

6. Annual period during which water is to be used May 1 - Sept 30

7. List below each forty-acre division, or lot, or fraction thereof and show number of acres to be irrigated in each.  
(Attach sheet if more space is needed)

| Land Description                     | Acres       | Land Description | Acres |
|--------------------------------------|-------------|------------------|-------|
| S 1/2 N 1/2 Section 8 - T114N - R57W | <u>28.5</u> |                  |       |
|                                      |             |                  |       |
|                                      |             |                  |       |
|                                      |             |                  |       |

8. Give a description of the project. (Attach sheet if more space is needed)

Correct the location of the well authorized by Permit No. 8125-3 from the NE 1/4 SW 1/4 to the NE 1/4 NW 1/4 of Section 8 and add an additional 28.5 acres to the reflect the level of development.

2 existing wells are used to irrigate all the acreage covered by No. 3145-3, 8125-3 and this application.

I, Dwight Warkenthien Owner, the applicant, certify under  
Name of Person Title (if applicable)

penalty of perjury that I have read this application, examined the attached map, and that the matters stated are true. I further certify, if acting on behalf of an entity or individual other than myself, that I am authorized to submit this application.

2021-08

Attachments: Attach Form 2A if diversion is from a well or dugout, or if storage of water is proposed. Also, attach map and any other technical information. (see instructions)

## Supplemental Information

(type or print)

**1. Well Information** (check one or both as applicable) ☐ Drilling new well(s) ☐ Using existing well(s)

- a) If new wells, how many \_\_\_\_\_ Have test holes been drilled? ☐ Yes ☐ No Drilled by \_\_\_\_\_  
(if yes, please provide copies of logs)
- b) If existing wells, how many \_\_\_\_\_ Provide copy of log(s), if available. Drilled by \_\_\_\_\_

**For either existing or proposed wells:**

- c) Well Depth (required) \_\_\_\_\_ Depth to Top of Water Bearing Material \_\_\_\_\_ Depth to Water from Surface \_\_\_\_\_
- d) Distance to nearest domestic well on applicant's property \_\_\_\_\_ Property owned by others \_\_\_\_\_

**2. Wastewater Disposal System Information**

- a) Type of System (i.e. septic tank, drain field) \_\_\_\_\_
- b) System Capacity (gallons) \_\_\_\_\_ Year Constructed \_\_\_\_\_
- c) Connected to the City of \_\_\_\_\_ Sanitary System

**3. Dugout Information**

- a) Surface Dimensions \_\_\_\_\_ Depth \_\_\_\_\_
- b) Depth to water (ground surface to water level) \_\_\_\_\_

**4. Water Storage Dams**

If the proposed water use system contains one or more storage dams, please furnish the information requested below for each dam. The locations of the dams need to be shown on the map submitted with the application.

- a) If a private engineering firm or government agency was involved in the design of this dam, please give their name and address:

b) Freeboard \_\_\_\_\_

c) Crest Width \_\_\_\_\_

Crest Length \_\_\_\_\_

d) Height \_\_\_\_\_

e) Primary Outlet Capacity \_\_\_\_\_

If pipe, diameter \_\_\_\_\_

f) Secondary Spillway Capacity \_\_\_\_\_

Spillway Width \_\_\_\_\_

g) X & Y Slope (e.g. 3 to 1 is a typical slope)

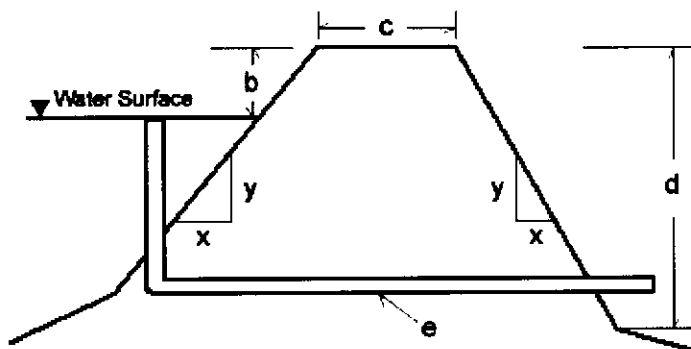
Upstream \_\_\_\_\_

Downstream \_\_\_\_\_

h) Area of Impoundment \_\_\_\_\_

i) Storage \_\_\_\_\_ Acre Feet

j) Drainage Area Above Dam \_\_\_\_\_ Acres





0 0.125 0.25 0.5 0.75 1 Miles



Darrell DeBoer  
Water Right Inspector



8125-3 3  
3145-3  
**DEPARTMENT of AGRICULTURE  
and NATURAL RESOURCES**

JOE FOSS BUILDING  
523 E. CAPITOL AVE  
PIERRE SD 57501-3182  
danr.sd.gov

October 12, 2023

Dwight Warkenthien  
18596 425<sup>th</sup> Ave  
Willow Lake SD 57278

Dear Mr. Warkenthien:

In June of this year, staff engineer Darrel DeBoer conducted a field inspection for the licensing of your Water Permit No. 8125-3, authorizing the irrigation (from one well) of 280 acres within Sections 8 & 9, T114N, R57W.

Some parts of the acreage in Section 8 are also authorized for irrigation under Water Right No. 3145-3 (outlined in orange on the enclosed map). I have enclosed copies of Permit No. 8125-3 and Right No. 3145-3 for you to reference.

The inspection lists the irrigated acres as follows: for a total of 308.5 irrigated acres.

Section 8, T114N, R57W

SW ¼ NE ¼ 38.5 - 11 = 27.5 ac  
SE ¼ NE ¼ 18.0 - 9 = 9.0 ac  
SE ¼ NW ¼ 7.0 ac  
NE ¼ SW ¼ 39.5 - 2 = 37.5 ac  
NW ¼ SW ¼ 29.5 ac  
SW ¼ SW ¼ 28.0 ac  
SE ¼ SW ¼ 35.0 ac

Section 9, T114N, R57W

SW ¼ NW ¼ 35.0 ac  
SE ¼ NW ¼ 33.5 ac  
NW ¼ SW ¼ 35.0 ac  
NE ¼ SW ¼ 31.5 ac  
308.5 - 280 = 28.5 ac

Permit No. 8125-3 only authorizes 280 acres, leaving 28.5 acres irrigated without the proper authorization. For your convenience I have enclosed a partially completed Water Permit Application to cover the 28.5 acres. The fee for Inspection/Licensing would be waived, as it's already been paid under Permit No. 8125-3, leaving a balance due of \$500.00.

If you have any questions or concerns, I'd be happy to help.

Sincerely,

Amanda Dewell  
Water Rights Program  
605 773-3352  
Amanda.Dewell@state.sd.us

# RECEIPT

## WATER RIGHTS PROGRAM South Dakota Department of Agriculture and Natural Resources

Date November 1, 2023

RECEIVED OF Dwight Warkenthien 18596 425<sup>th</sup> Ave., Willow Lake SD 57278

The following amount in fees for services rendered as provided for by law:

|                                                                                                                        |                  |
|------------------------------------------------------------------------------------------------------------------------|------------------|
| Fee for Application for Permit No. <u>8804-3</u> to Appropriate Water, to construct and to put water to beneficial use | \$ <u>500.00</u> |
| Fee for Application for Permit No. _____ to Appropriate Water for Future use                                           | \$ _____         |
| Fee to retain Future Use Permit No. _____ after period of seven years.                                                 | \$ _____         |
| Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. _____                    | \$ _____         |
| Fee for Filing Transfer Form _____                                                                                     | \$ _____         |
| Fee for _____                                                                                                          | \$ _____         |
| Fee for Issuing New Well Driller's License No. _____                                                                   | \$ _____         |
| Fee for Renewal of Well Driller's License No. _____                                                                    | \$ _____         |
| Fee for Issuing Well Pump Installer's License No. _____                                                                | \$ _____         |
| Fee for Renewal of Well Pump Installer's License No. _____                                                             | \$ _____         |
| (Any Other Work Provided by Law)                                                                                       | TOTAL            |
|                                                                                                                        | \$ <u>500.00</u> |

By Eric Gronlund  
Chief Engineer  
ern



**DEPARTMENT of AGRICULTURE  
and NATURAL RESOURCES**

JOE FOSS BUILDING  
523 E. CAPITOL AVE  
PIERRE SD 57501-3182  
danr.sd.gov

**File No. 8804-3**

**WATER RIGHTS PROGRAM -- FILE DOCUMENTATION**

**NAME:** Dwight Warkenthien

**ADDRESS:** 18596 425 Ave, Willow Lake SD 57278

**DATE:** November 3, 2023

**PHONE:** 605.625.3342

**RE:** Well use under Nos. 3145-3, 8125-3, and Application No. 8804-3

**COMMENTS:**

I contacted Mr. Warkenthien to determine whether the two existing wells can be used to irrigate all of the acreage covered by the existing water rights – No. 3145-3 and Permit No. 8125-3. Mr. Warkenthien indicated the system is valved such that any of the wells can be used on any of the acreage in the event one of the wells becomes inoperable for a period of time.

**RECOMMENDED ACTION:**

I informed Mr. Warkenthien that I would modify Application No. 8804-3 so that the wells could be used to irrigate any of the permitted acreage on the existing permits and Application No. 8804-3. Mr. Warkenthien was in agreement with the change to the application.

Ron Duvall, Engineer III  
SD DANR, Water Rights Program



**DEPARTMENT of AGRICULTURE  
and NATURAL RESOURCES**

JOE FOSS BUILDING  
523 E. CAPITOL AVE  
PIERRE SD 57501-3182  
danr.sd.gov

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT  
APPLICATION NO. 8804-3, Dwight Warkenthien**

Pursuant to SDCL 46-2A-2, the following is the recommendation of the Chief Engineer, Water Rights Program, Department of Agriculture and Natural Resources concerning Water Permit Application No. 8804-3, Dwight Warkenthien, 18596 425<sup>th</sup> Avenue, Willow Lake SD 57278.

The Chief Engineer is recommending APPROVAL of Application No. 8804-3 because 1) there is reasonable probability that there is unappropriated water available for the applicant's proposed use, 2) the proposed diversion can be developed without unlawful impairment of existing domestic water uses and water rights, 3) the proposed use is a beneficial use and 4) it is in the public interest as it pertains to matters of public interest within the regulatory authority of the Water Management Board with the following qualifications:

1. The wells approved under Water Right No. 3145-3 and Water Permit No. 8125-3 with the well location for. 8125-3 corrected by Water Permit No. 8804-3 are located near domestic wells and other wells which may obtain water from the same aquifer. Water withdrawals shall be controlled so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

See report on application for additional information.

Eric Gronlund, Chief Engineer  
December 18, 2023

Report to the Chief Engineer  
On Water Permit Application No. 8804-3

Dwight Warkenthien

December 21st, 2023

Water Permit Application No. 8804-3 proposes to add 25.5 acres to the acreage covered by Water Permit No. 8125-3 and corrects the location of the well authorized by Water Permit No. 8125-3. Water Permit No. 8125-3 authorizes 2.67 cubic feet per second (cfs) from one well completed into the Vermillion East Fork: Willow Lake aquifer management unit for irrigation of 280 acres located in the SW  $\frac{1}{4}$  Section 8 and the S  $\frac{1}{2}$  NW  $\frac{1}{4}$ , N  $\frac{1}{2}$  SW  $\frac{1}{4}$  Section 9; all in T114N-R57W. The well authorized by Water Permit No. 8125-3 was to be completed in the NE  $\frac{1}{4}$  SW  $\frac{1}{4}$  Section 8-T114N-R57W. This application corrects the location of the well which is in the NE  $\frac{1}{4}$  NW  $\frac{1}{4}$  Section 8-T114N-R57W plus requests authorization for irrigation of an additional 25.5 acres in the S  $\frac{1}{2}$  NE  $\frac{1}{4}$ , SE  $\frac{1}{4}$  NW  $\frac{1}{4}$  Section 8-T114N-R57W. Water Right No. 3145-3 authorizes 2.00 cfs from one well completed into the Vermillion East Fork: Willow Lake aquifer management unit located in the SE  $\frac{1}{4}$  NW  $\frac{1}{4}$  Section 8 for irrigation of 140 acres located in the SE  $\frac{1}{4}$ , E  $\frac{1}{2}$  SW  $\frac{1}{4}$ , S  $\frac{1}{2}$  NE  $\frac{1}{4}$  Section 8; all in T114N-R57W. This application also requests the irrigation of acreage covered by Nos. 8125-3 and 3145-3, plus the 25.5 additional acres, from either of the wells authorized Nos. 8125-3 or 3145-3 with no increase in the permitted diversion rates. The site is located in Clark County approximately 13 miles south of Clark, SD.

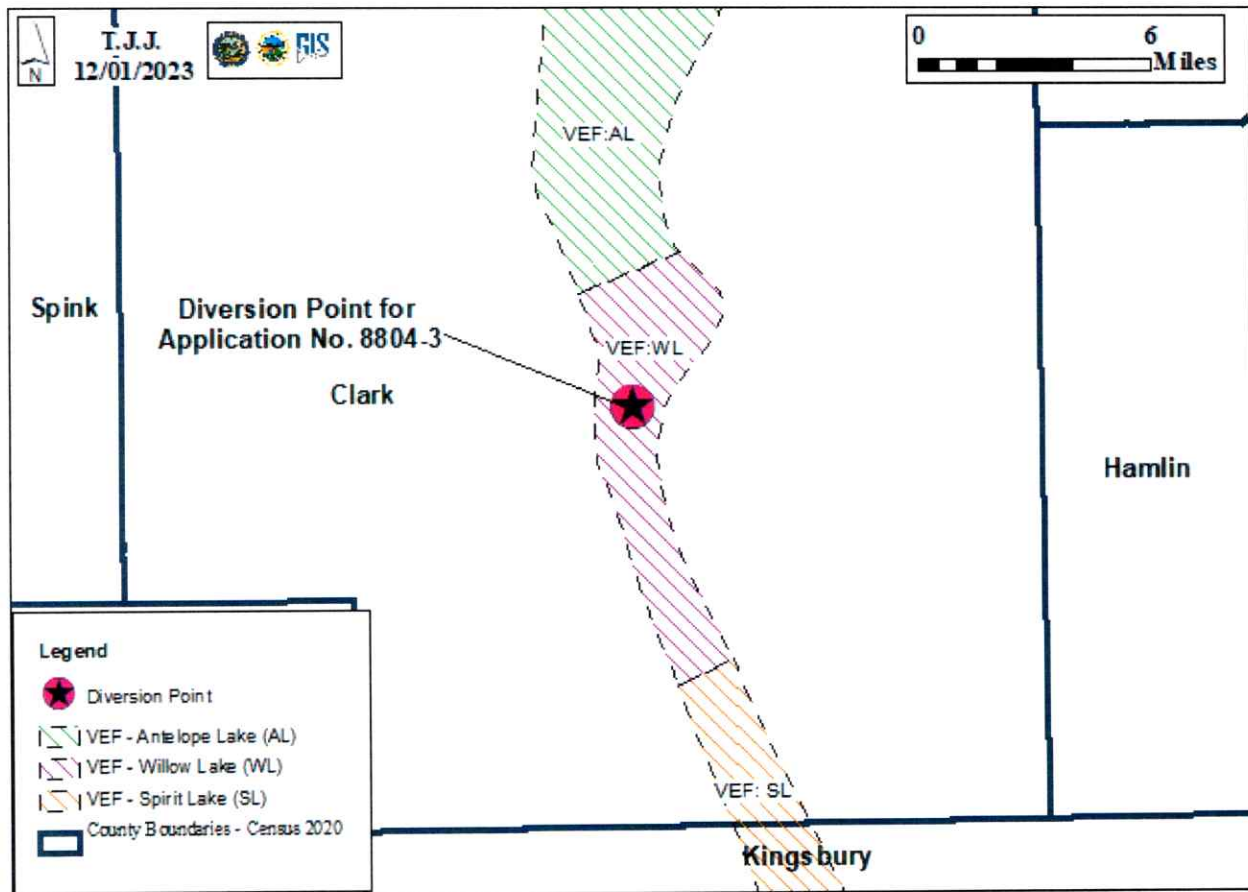
**AQUIFER:** Willow Lake Management unit of the Vermillion East Fork (VEF:WL)

**HYDROGEOLOGY:**

The Willow Lake management unit of the Vermillion East Fork (VEF:WL) aquifer consists of gravel and fine to coarse sand that was deposited by glacial meltwater in a valley cut (Christensen, 1987 and Hamilton, 1986). It should be noted that Hamilton (1978; 1986) refers to the Vermillion East Fork aquifer in Clark County as the Prairie Coteau 1 aquifer; however, for this report, the Water Right Program adopted naming of Vermillion East Fork: Willow Lake will be used. This Vermillion East Fork aquifer naming convention is also used by Hedges et al (1982). Hamilton (1978) describes the aquifer as generally occurring from 5 to 30 feet below ground surface. Water flow in the VEF aquifer is generally to the south (Hamilton, 1986). The VEF: Willow Lake aquifer management unit underlies approximately 13,100 acres, all in Clark County, and contains an estimated 29,480 ac-ft of recoverable water storage (Hedges et al, 1982). The VEF: Willow Lake aquifer management unit is primarily under unconfined conditions (Hamilton, 1986; Water Rights, 2023b).

Water Permit No. 8125-3 has a test hole completion report on file which will be used for this report. The test hole on file for Water Permit No. 8125-3 is 0.4 miles southeast of the proposed diversion point. The well completion report is dated March 25<sup>th</sup>, 2015, and is located in the SW $\frac{1}{4}$  NE  $\frac{1}{4}$  of Section 8-T114N-R57W (Water Rights 2023d). This well is completed into the VEF: Willow Lake aquifer with the depth to the top of aquifer material (sand and gravel) approximately 3 feet below the ground surface, static water level of 10 feet below the ground

surface, and has a total saturated aquifer thickness of 100 feet at the time of well completion (SDGS, 2023; Water Rights, 2023b and 2023d). Based on well completion reports near the diversion point, the VEF: Willow Lake aquifer is expected to be unconfined (SDGS, 2023; Water Rights, 2023b and 2023d). This is consistent with the VEF: Willow Lake aquifer being predominantly under unconfined conditions.



**Figure 1.** Map of the approximate VEF Antelope Lake, VEF: Willow Lake, VEF: Spirit Lake aquifer boundaries (modified from Hedges et al, 1982), and the location of diversion point for Water Permit Application No. 8804-3.

### South Dakota Codified Law (SDCL) 46-2A-9

Pursuant to SDCL 46-2A-9, “A permit to appropriate water may be issued only if there is a reasonable probability that unappropriated water is available for the applicant’s proposed use, the proposed diversion can be developed without unlawful impairment of existing domestic water uses and water rights, the proposed use is a beneficial use, and the permit is in the public interest as it pertains to matters of public interest within the regulatory authority of the Water Management Board as defined by SDCL 46-2-9 and 46-2-11.” This report will address the availability of unappropriated water and the potential for unlawful impairment of existing domestic uses and water rights within the VEF: Willow Lake aquifer.

## **WATER AVAILABILITY:**

Water Permit Application No. 8804-3 proposes to appropriate water from the VEF: Willow Lake aquifer management unit for the purpose of irrigation. The probability of unappropriated water being available from the aquifer can be evaluated by considering SDCL 46-6-3.1, which requires,

*"No application to appropriate groundwater may be approved if, according to the best information reasonably available, it is probable that the quantity of water withdrawn annually from a groundwater source will exceed the quantity of the average estimated annual recharge of water to the groundwater source. An application may be approved, however, for withdrawals of groundwater from any groundwater formation older than or stratigraphically lower than the greenhorn formation in excess of the average estimated annual recharge for use by water distribution systems."*

The VEF: Willow Lake aquifer is not older than or stratigraphically lower than the Greenhorn Formation, and the applicant's proposed use is not for use in a water distribution system as defined by SDCL 46-1-6(17). Therefore, the average annual recharge and average annual withdrawal rates to and from the VEF: Willow Lake aquifer must be considered.

## **HYDROLOGIC BUDGET:**

### **Recharge**

Recharge to the VEF: Willow Lake aquifer is mostly by infiltration of precipitation, seepage of surface water, inflow from till adjacent to the aquifer, and inflow from the Vermillion East Fork: Antelope Lake aquifer (Hamilton, 1986 and Hedges et al, 1982). Based on observation well analysis by Hedges et al (1985) a recharge rate of 5.6 inches per year was estimated for the VEF: Willow Lake aquifer. The VEF: Willow Lake aquifer has an estimated areal extent of approximately 13,100 acres (Hedges et al, 1982). Therefore, the average annual recharge rate (based on Hedges et al, 1982 and 1985) is approximately 6,113 acre-feet/year.

### **Discharge**

Discharge from the VEF: Willow Lake aquifer primarily occurs through well withdrawals, groundwater outflow, and natural discharges into tills, and seepage to surface water (Hamilton, 1986). Currently, there are 19 water rights/permits authorized to appropriate water from the VEF: Willow Lake aquifer (Water Rights, 2023c).

There are 2 non-irrigation water rights/permits authorized to appropriate water from the VEF: Willow Lake aquifer. Table 1 list the non-irrigation water rights/permits with the estimated average annual use for each water right/permit as determined by their limiting diversion rate or annual volume limit. The amount of water that can be withdrawn was estimated by assuming the water rights/permits limited by an annual volume will withdraw their entire appropriated volume every year. It is estimated that the water rights/permits limited only by a diversion rate will pump at their maximum permitted diversion rate for 60 percent of the time. This is a standard method used by the DANR-Water Rights Program for estimating annual withdrawals. Water Right No.

1601-3 sources all of their water from Clark Rural Water System, so their authorized appropriation will not contribute to the total withdrawal rate (Drinking Water, 2023). Overall, the total estimated annual non-irrigation withdrawal rate from the VEF: Willow Lake aquifer is approximately 191 acre-feet/year (Table 1) (Water Rights, 2023c).

**Table 1.** Estimated annual use for non-irrigation water rights/permits authorized to divert water from the VEF: Willow Lake aquifer (Water Rights, 2023c)

| Permit No:                                                                                       | Name/Business:      | Status: | Type of Use: | Authorized Diversion Rate (cfs): | Authorized Annual Volume (ac-ft/yr): | Total Estimated Use (ac-ft/yr): |
|--------------------------------------------------------------------------------------------------|---------------------|---------|--------------|----------------------------------|--------------------------------------|---------------------------------|
| 1601-3*                                                                                          | City of Willow Lake | LC      | MUN          | 0.35                             | 0                                    | 0                               |
| 8370-3                                                                                           | Dwight Warkenthien  | PE      | COM          | 0.44                             | 0                                    | 191                             |
| LC License, PE Permit, MUN Municipal, COM Commercial<br>*Sources their water from another system |                     |         |              |                                  | Total:                               | 191                             |

Currently, there are 17 irrigation water rights/permits appropriating water from the VEF: Willow Lake aquifer (Water Rights, 2023c). Irrigation water rights/permits have been typically required to report their annual usage by submitting an irrigation questionnaire since 1979. The average annual withdrawal rate for the VEF: Willow Lake aquifer irrigation water rights/permits that have reported over the period of record (1979 to 2022) is approximately 555 acre-feet per year (Table 2) (Water Rights, 2023e). To reflect the current development of irrigation water rights/permits more accurately, the average annual withdrawal rate for irrigation appropriations from 2013 to 2022 is approximately 909 acre-feet per year (Table 2) (Water Rights, 2023e).

Report on Water Permit Application No. 8804-3

**Table 2.** Reported historic irrigation use from the VEF: Willow Lake aquifer (Water Rights, 2023e)

| Year                       | Number of Permits | Reported Pumpage (ac-ft) |
|----------------------------|-------------------|--------------------------|
| 1979                       | 7                 | 99                       |
| 1980                       | 8                 | 540                      |
| 1981                       | 8                 | 611                      |
| 1982                       | 9                 | 628                      |
| 1983                       | 8                 | 900                      |
| 1984                       | 8                 | 607                      |
| 1985                       | 8                 | 304                      |
| 1986                       | 8                 | 190                      |
| 1987                       | 8                 | 289                      |
| 1988                       | 8                 | 667                      |
| 1989                       | 8                 | 549                      |
| 1990                       | 8                 | 922                      |
| 1991                       | 8                 | 260                      |
| 1992                       | 8                 | 193                      |
| 1993                       | 8                 | 81                       |
| 1994                       | 8                 | 120                      |
| 1995                       | 7                 | 82                       |
| 1996                       | 8                 | 364                      |
| 1997                       | 8                 | 225                      |
| 1998                       | 9                 | 246                      |
| 1999                       | 9                 | 281                      |
| 2000                       | 9                 | 347                      |
| 2001                       | 9                 | 188                      |
| 2002                       | 9                 | 635                      |
| 2003                       | 9                 | 669                      |
| 2004                       | 9                 | 599                      |
| 2005                       | 9                 | 632                      |
| 2006                       | 9                 | 821                      |
| 2007                       | 9                 | 732                      |
| 2008                       | 9                 | 409                      |
| 2009                       | 9                 | 202                      |
| 2010                       | 11                | 289                      |
| 2011                       | 11                | 665                      |
| 2012                       | 12                | 998                      |
| 2013                       | 14                | 1,239                    |
| 2014                       | 14                | 1,054                    |
| 2015                       | 16                | 721                      |
| 2016                       | 17                | 1,166                    |
| 2017                       | 18                | 1,348                    |
| 2018                       | 18                | 1,367                    |
| 2019                       | 18                | 1                        |
| 2020                       | 18                | 306                      |
| 2021                       | 18                | 818                      |
| 2022                       | 18                | 1,065                    |
| <b>Max</b>                 | <b>18</b>         | <b>1,367</b>             |
| <b>Min</b>                 | <b>7</b>          | <b>1</b>                 |
| <b>Average (1979-2022)</b> | <b>11</b>         | <b>555</b>               |
| <b>Average (2013-2022)</b> | <b>17</b>         | <b>909</b>               |

This application is requesting to irrigate an additional 25.5 acres. Generally, irrigators in eastern South Dakota apply less than one foot of water per acre per year. However, one foot of water per acre per year application rate will be used to somewhat overestimate the annual withdrawal rate for this application. Therefore, the estimated withdrawal rate for this application is approximately 25.5 acre-feet per year.

There are domestic wells completed into the VEF: Willow Lake aquifer that do not require a water right/permit, so the withdrawal amount from those wells is unknown (Water Rights, 2023d). Due to their relatively low diversion rates, withdrawals from domestic wells are not considered to be a significant portion of the hydrologic budget. Additionally, with the development of rural water systems in areas where the VEF: Willow Lake aquifer is present; it is likely some domestic users may have transitioned to rural water. Therefore, the quantity of water withdrawn by domestic wells is estimated to be negligible to the hydrologic budget for the VEF: Willow Lake aquifer.

### **Hydrologic Budget Summary**

The average annual recharge rate to the VEF: Willow Lake aquifer totals to approximately 6,113 acre-feet/year (Hedges et al, 1982 and 1985). The withdrawal rate from the VEF: Willow Lake aquifer, including this application, totals to approximately 1,126 acre-feet/year; (non-irrigation withdrawals: 191 acre-feet/year; irrigation withdrawals: 909 acre-feet/year; this application: 25.5 acre-feet/year). Based on the hydrologic budget, there is a reasonable probability unappropriated water is available from the VEF: Willow Lake aquifer for the proposed appropriation.

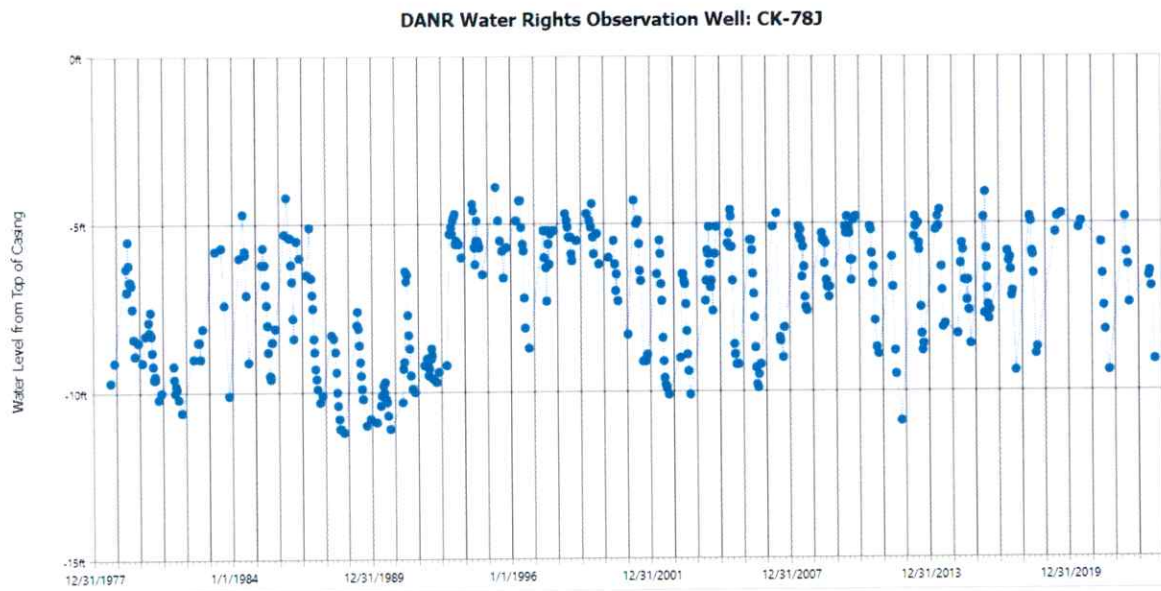
### **OBSERVATION WELL DATA:**

Administrative Rule of South Dakota (ARSD) 74:02:05:07 requires that the Water Management Board shall rely upon the record of observation well measurements in addition to other data to determine that the quantity of water withdrawn annually from the aquifer does not exceed the estimated average annual recharge of the aquifer.

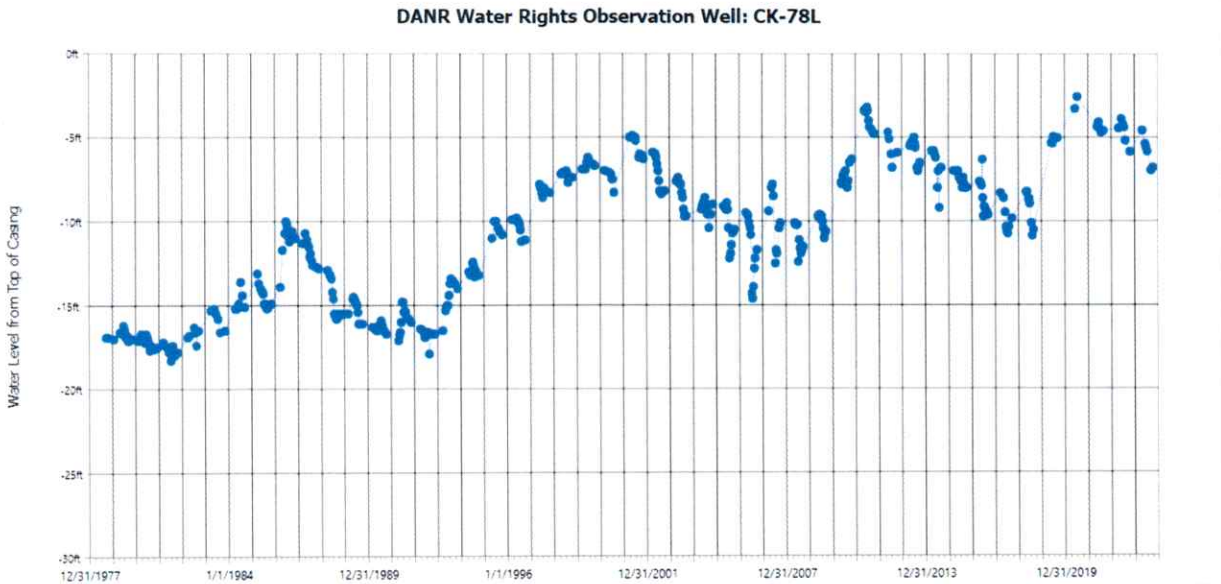
The DANR-Water Rights Program monitors 5 observation wells completed into the VEF: Willow Lake aquifer (Water Rights, 2023b). These observation wells provide data on how the aquifer reacts to regional climatic conditions and local pumping. The three closest observation wells to the diversion point are CK-78K (approximately 1 mile southeast), CK-78J (approximately 2.2 miles north), and CK-78L (approximately 2.9 miles south) (Water Rights, 2023b). The hydrographs for these observation wells are displayed in Figures 2 to 4 (Water Rights, 2023b). The data points utilized to construct the hydrographs are measurement of the static water level in the observation wells from the top of the well casing. The data from Figures 2 & 4 shows a rising trend, while the data from Figure 3 shows a stable trend. Overall, these hydrographs (Figures 2 to 4) show the same stable to rising trend as other observation wells in VEF: Willow Lake aquifer (Water Rights, 2023b).



**Figure 2.** Hydrograph for observation well CK-78K (Water Rights, 2023b)



**Figure 3.** Hydrograph for observation well CK-78J (Water Rights, 2023b)

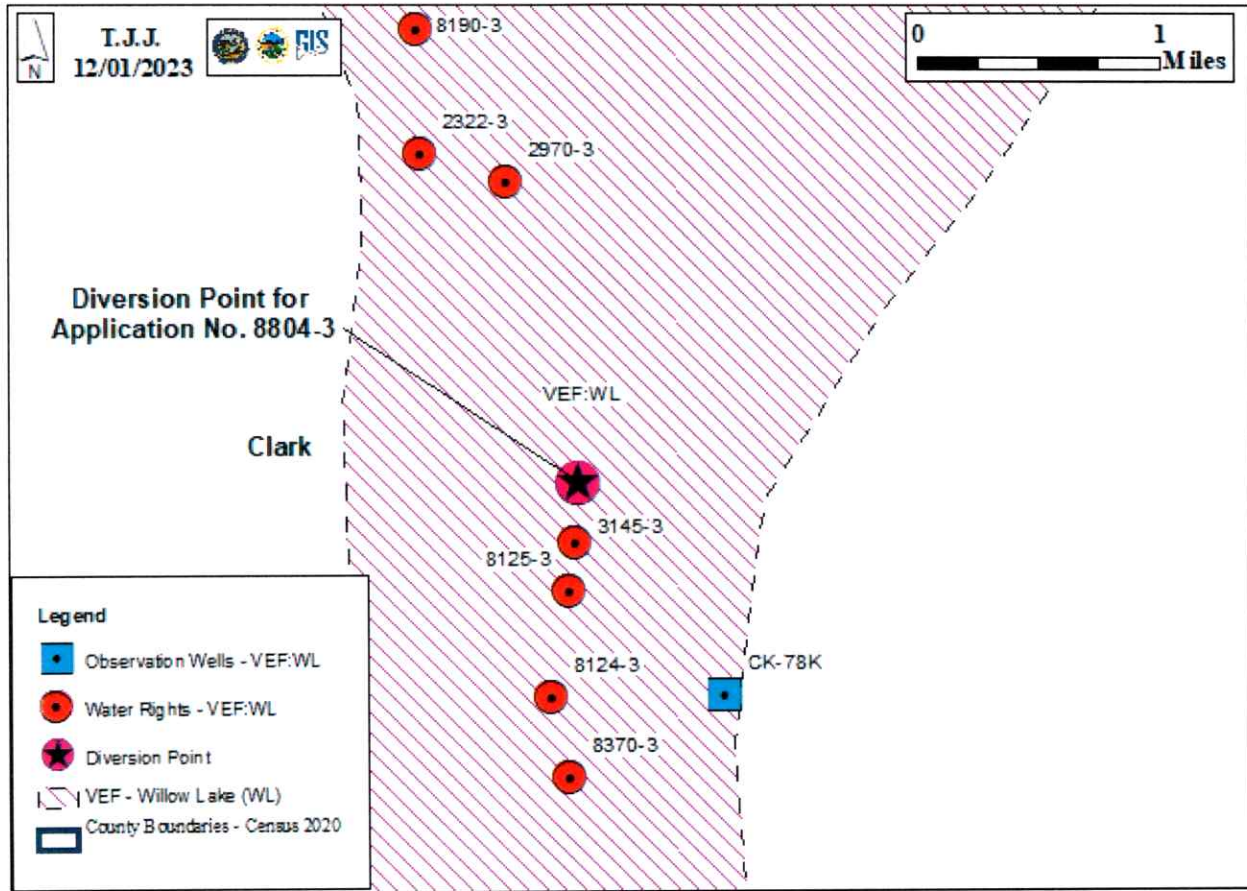


**Figure 4.** Hydrograph for observation well CK-78L (Water Rights, 2023b)

The hydrographs for the VEF: Willow Lake aquifer indicate that the aquifer responds well to climatic conditions because water levels are rising during wetter periods (early spring snowmelt and precipitation) and declining to a stable water level during drier periods. Additionally, the water levels in the observation wells display that the amount of recharge to and natural discharge from the aquifer greatly exceeds pumping with the aquifer returning to pre-pumping conditions between irrigation seasons. Aquifer recovery indicates that climatic conditions and therefore, the effects of recharge to and natural discharges from the aquifer govern the long-term fluctuations of waters levels in the aquifer rather than the impacts of pumping from the VEF: Willow Lake aquifer. By recognizing that both recharge to and natural discharge from an aquifer can be captured for pumping, the observation well hydrographs demonstrate unappropriated water is available for the proposed appropriation.

#### **POTENTIAL FOR UNLAWFUL IMPAIRMENT OF EXISTING WATER RIGHTS:**

Water rights/permits in the general vicinity of the existing well site for this application are shown in Figure 5 and summarized in Table 3 (Water Rights, 2023c). The closest water rights/permits to the diversion point are Water Right Nos. 3145-3, 8125-3, 8124-3, and 8370-3, shown on Figure 5, are all held by the applicant. The closest water right/permit diversion point, not held by the applicant, is Water Right No. 2970-3 held by CT Wildlife Management as shown on Figure 5. The diversion point for Water Right No. 2970-3 is located approximately 1.3 miles northwest of the diversion point for this application (Water Rights, 2023c). There are domestic wells on file with the DANR-Water Rights Program that are completed into the VEF: Willow Lake aquifer, with the closest domestic well on file (not held by the applicant) located approximately 0.4 miles northwest of the diversion point based on the well completion report submitted by the driller (Water Rights, 2023d). There could potentially be other domestic wells completed into the VEF: Willow Lake aquifer near the diversion point that are not on file with the DANR-Water Rights Program.



**Figure 5.** Map of the approximate VEF: Willow Lake aquifer boundary (modified from Hedges et al, 1982), the VEF: Willow Lake aquifer water rights/permits (Water Rights, 2023b and 2023c) within 2 miles of the diversion point for Water Permit Application No. 8804-3.

**Table 3.** List of water rights/permits within 2 miles of the diversion point shown in Figure 5.

| Permit | Name/Business          | Priority   | Status  | Use Type   | CFS  | Acres |
|--------|------------------------|------------|---------|------------|------|-------|
| 2322-3 | CT Wildlife Management | 07/14/1975 | License | Irrigation | 1.78 | 264   |
| 2970-3 | CT Wildlife Management | 08/23/1976 | License | Irrigation | 1.78 | 238   |
| 3145-3 | Dwight Warkenthien     | 10/26/1976 | License | Irrigation | 2    | 140   |
| 8124-3 | Dwight Warkenthien     | 04/06/2015 | License | Irrigation | 0.57 | 60    |
| 8125-3 | Dwight Warkenthien     | 04/06/2015 | Permit  | Irrigation | 2.67 | 280   |
| 8190-3 | Steven M Nicolai       | 11/25/2015 | Permit  | Irrigation | 2    | 140   |
| 8370-3 | Dwight Warkenthien     | 0730-2018  | License | Commercial | 0.44 | 0     |

The VEF: Willow Lake aquifer is under unconfined conditions. In an unconfined aquifer, drawdown created by pumping does not extend far from the pumped well. The Water Management Board recognizes that putting water to beneficial use requires a certain amount of drawdown to occur. The Board has developed rules to allow water to be placed to maximum beneficial use while still protecting domestic users. The Water Management Board defined an “adversely impacted domestic well” in ARSD 74:02:04:20(7) as:

*“A well in which the pump intake was set at least 20 feet below the top of the aquifer at the time of construction or, if the aquifer is less than 20 feet thick, is as near to*

*the bottom of the aquifer as is practical and the water level of the aquifer has declined to a level that the pump will no longer deliver sufficient water for the well owner's needs."*

While the best information available indicates that there is a reasonable probability average annual recharge exceeds average annual withdrawals in the aquifer, conditions can occur where withdrawals in the aquifer exceed recharge for a period of time. Situations may occur where pumping from a thicker part of an unconfined aquifer could cause drawdown impacting adequate wells in a thinner part of the aquifer. Under such conditions an unlawful impairment of senior water rights/permits or adequate domestic wells may occur. Therefore, the applicant should control withdrawals so that nearby adequate domestic wells and senior water rights/permits are able to access needed water. In Clark County, there are no complaints on file with the DANR-Water Rights Program regarding well interference for adequate wells completed into the VEF: Willow Lake aquifer (Water Rights, 2023a).

When considering ARSD 74:02:04:20(7), the saturated aquifer thickness near the diversion point and the lack of well interference complaints for adequate wells completed into the VEF: Willow Lake aquifer in Clark County, any drawdown created from the diversion is not expected to cause an unlawful impairment on existing water right/permit holders or domestic users with adequate wells (Water Rights, 2023a). Therefore, there is a reasonable probability that any interference from the proposed appropriation will not impose unlawful impairment on existing users with adequate wells.

## **CONCLUSIONS:**

1. Water Permit Application No. 8804-3 proposes to irrigate an additional 25.5 irrigated acres to the irrigated acres covered by Water Right No. 8125-3 and correct the location of the well authorized by No. 8125-3. The site of interest is located approximately 13 miles south of Clark, SD.
2. This application requests the authorization for irrigation of acreage covered by Water Rights Nos. 8125-3 and 3145-3, including the additional 25.5 acres, from either of the wells authorized by Nos. 8125-3 and 3145-3 with no increase in the permitted diversion rate.
3. Based on observation well data and the hydrologic budget, there is a reasonable probability that unappropriated water is available from the Vermillion East Fork: Willow Lake aquifer to supply the proposed appropriation.
4. There is a reasonable probability that the diversion by Water Permit Application No. 8804-3 will not unlawfully impair adequate wells for existing water rights/permits holders or domestic users with adequate wells.



Tyler Jensen  
Natural Resources Engineer I  
SD DANR - Water Rights Program

Reviewed by:



Adam Mathiowetz, PE  
Natural Resources Engineer IV  
SD DANR -Water Rights Program

### References

- Christensen, C.M., 1987. Geology and Water Resources of Clark County, South Dakota; Part I: Geology. South Dakota Geologic Survey Bulletin 29. Vermillion, SD.
- Drinking Water, 2023. Drinking Water Reports, SD DANR-Drinking Water Program, Joe Foss Bldg, Pierre, SD.
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- Hamilton, L.J., 1986. Geology and Water Resources of Clark County, South Dakota; Part II: Water Resources. South Dakota Geologic Survey Bulletin 29. Vermillion, SD.
- Hedges, L.S., Allen, J., Holly, D.E., 1985. Evaluation of Ground-Water Resources Eastern South Dakota and Upper Big Sioux River, South Dakota and Iowa, Task 7: Ground Water Recharge; United States Army Corps of Engineers Contract DACW 45-80-C-0185.
- Hedges, L.S., Burch, S.L., Iles, D.L., Barari, R.A., and Schoon, R.A. 1982. Evaluation of Ground-Water Resources Eastern South Dakota and Upper Big Sioux River, South Dakota and Iowa, Task 1: Bedrock Topography and Distribution, Task 2: Extent of Aquifers, Task 3 Ground-Water Storage, Task 4: Computerized Data Base. United States Army Corps of Engineers Contract DACW 45-80-C-0185.
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- Water Rights, 2023a. County Files, SD DANR-Water Rights Program, Joe Foss Bldg, Pierre, SD.
- Water Rights, 2023b. Observation Well Data, SD DANR-Water Rights Program, Joe Foss Bldg, Pierre, SD.

Water Rights, 2023c. Water Right/Permit Files, SD DANR-Water Rights Program, Joe Foss Bldg, Pierre, SD.

Water Rights, 2023d. Well Completion Reports, SD DANR-Water Rights Program, Joe Foss Bldg, Pierre, SD.

Water Rights, 2023e. "1979-2022 Irrigation Summaries by Aquifer", SD DANR-Water Rights Program, Joe Foss Building, Pierre, SD.



**DEPARTMENT of AGRICULTURE  
and NATURAL RESOURCES**

JOE FOSS BUILDING  
523 E CAPITOL AVE  
PIERRE SD 57501-3182  
danr.sd.gov

**NOTE: TO BE SURE OF PUBLICATION ON  
THE CORRECT DATES, CONTACT  
THE NEWSPAPERS RIGHT AWAY.**

December 21, 2023

Dwight Warkenthien  
18596 425<sup>th</sup> Ave  
Willow Lake SD 57278

Dear Mr. Warkenthien:

Water Permit Application No. 8804-3 for irrigation use has been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice has been sent to the Clark County Courier printed in Clark SD (Ph # 605 532-3654) and the Public Opinion printed in Watertown SD (see attachment for contact number). You will need to contact the newspapers and authorize publication of this notice. For your information, a copy of the notice, the recommendation of the Chief Engineer and report on the application are enclosed. Please review the notice prior to publication and notify this office, if you have any corrections or questions.

**Be sure to contact the above newspapers to authorize publication of your Notice and to arrange for payment.** Early contact with the papers can eliminate delays. Upon receiving authorization from you, the publishers have been instructed to publish your notice. The newspapers have also been instructed to send us the Proof of Publication. We must receive Proof of Publication before action can be taken on the application.

Sincerely,

*Rachel Rodriguez*

Rachel Rodriguez  
Water Rights Program  
(605) 773-3352

enclosures

NOTE: If you plan to contest any part of the Chief Engineer's recommendation, you must file a petition pursuant to the procedures outlined in the attached notice of hearing. The Water Management Board will then consider your concerns during a hearing on the application.

NOTICE OF APPLICATION NO. 8804-3 to Appropriate Water

Notice is given that Dwight Warkenthien, 18596 425<sup>th</sup> Avenue, Willow Lake SD 57278 has filed an application for a water permit to add 25.5 irrigated acres to the irrigated acres covered by Water Permit No. 8125-3 and corrects the location of the well authorized by No. 8125-3. Water Permit No. 8125-3 authorizes 2.67 cubic feet of water per second (cfs) from one well completed into the Vermillion East Fork: Willow Lake Management Unit Aquifer for irrigation of 280 acres located in the SW 1/4 Section 8 and the S 1/2 NW 1/4, N 1/2 SW 1/4 Section 9; all in T114N-R57W. The well authorized by No. 8125-3 was to be completed in the NE 1/4 SW 1/4 Section 8-T114N-R57W. This application corrects the location of the well which is in the NE 1/4 NW 1/4 Section 8-T114N-57W plus authorizes irrigation of an additional 25.5 acres in the S 1/2 NE 1/4, SE 1/4 NW 1/4 Section 8-T114N-57W. Water Right No. 3145-3 authorizes 2.00 cubic feet of water per second (cfs) from one well completed into the Vermillion East Fork: Willow Lake Management Unit Aquifer located in the SE 1/4 NW 1/4 Section 8 for irrigation of 140 acres located in the SE 1/4, E 1/2 SW 1/4, S 1/2 NE 1/4 Section 8; all in T114N-R57W. This application also authorizes irrigation of the acreage covered by Nos. 8125-3 and 3145-3, plus the 25.5 additional acres, from either of the wells authorized Nos. 8125-3 or 3145-3 with no increase in the permitted diversion rates. This site is located approximately 13 miles south of Clark SD.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8804-3 with qualifications because 1) unappropriated water is available, 2) existing domestic water uses and water rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest as it pertains to matters within the regulatory authority of the Water Management Board. The Chief Engineer's recommendation with qualifications, the application, and staff report are available at <https://danr.sd.gov/public> or contact Ron Duvall for this information, or other information, at the Water Rights Program address provided below.

Any person interested in opposing this application or recommendation shall allege that the application, upon approval, will cause injury to the person that is unique from any injury suffered by the public in general. The injury must concern a matter either within the regulatory authority found in SDCL 46-2A-9 for approval or denial of the application, or other matter concerning the application within the regulatory authority of the board to act upon as defined by SDCL 46-2-9 and 46-2-11, or both. Any person meeting the petitioner requirements and wishing to be a party of record in a contested case hearing shall file a written petition to oppose the application with BOTH the applicant and Chief Engineer. A petition opposing the application shall be filed on a form provided by the Chief Engineer. The petition form is available online at <https://danr.sd.gov/public> or by contacting the Chief Engineer. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501" or call (605) 773-3352. The applicant's mailing address is given above. If contesting the Chief Engineer's recommendation, the applicant shall also file a petition. A petition filed by either an interested person or the applicant must be filed by January 16, 2024.

The petition shall include a statement describing the unique injury upon approval of the application on the petitioner, the petitioner's reasons for opposing the application, and the name and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained.

Any interested person may file a comment on the application with the Chief Engineer. The comment shall be filed on a form provided by the Chief Engineer and is available online at <https://danr.sd.gov/public> or by calling (605) 773-3352 or writing the Chief Engineer at the address provided above. Filing a comment does not make the commenter a party of record or a participant in any hearing that may be held. Any comment must be filed by January 16, 2024.

If the applicant does not contest the recommendation of the Chief Engineer and no petition to oppose the application is received, the Chief Engineer shall act on the application pursuant to the recommendation with no hearing held before the Water Management Board. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled, and the Water Management Board will consider this application. Notice of the hearing will be given to the applicant and any person filing a petition.

Published once at the total approximate cost of\_

## Rodriguez, Rachel

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**From:** Rodriguez, Rachel  
**Sent:** Thursday, December 21, 2023 11:34 AM  
**To:** Clark Courier  
**Subject:** 8804-3 Dwight Warkenthien - Public Notice  
**Attachments:** 8804-3 public.short\_final.docx; FORM8.FRM.doc

Attached is a notice to be published on January 3, 2024.

Dwight Warkenthien, 18596 425th Avenue, Willow Lake SD 57278, (605-625-3342) has been notified to contact you to authorize publication and arrange for payment.

Please send the affidavit or return the attached Proof of Publication form ASAP to the Water Rights Program, 523 E Capitol Ave, Pierre SD 57501.

Let me know if you have questions. **Please acknowledge receipt of this email.**

Thank you,

Rachel Rodriguez  
DANR | Program Assistant  
Rachel.Rodriguez@state.sd.us



## Rodriguez, Rachel

---

**From:** Rodriguez, Rachel  
**Sent:** Thursday, December 21, 2023 11:35 AM  
**To:** [legals@thepublicopinion.com](mailto:legals@thepublicopinion.com)  
**Subject:** 8804-3 Dwight Warkenthien - Public Notice  
**Attachments:** 8804-3 public.short\_final.docx; FORM8.FRM.doc

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Let me know if you have questions. **Please acknowledge receipt of this email.**

Thank you,

Rachel Rodriguez  
DANR | Program Assistant  
[Rachel.Rodriguez@state.sd.us](mailto:Rachel.Rodriguez@state.sd.us)



# Affidavit of Publication

State of South Dakota

## NOTICE OF APPLICATION NO. 8804-3 to Appropriate Water

§

County of Clark

Notice is given that Dwight Warkentien, 18596 425 Avenue, Willow Lake, S.D. 57278 has filed an application for a water permit to add 25.5 irrigated acres to the irrigated acres covered by Water Permit No. 8125-3 and corrects the location of the well authorized by No. 8125-3. Water Permit No. 8125-3 authorizes 2.67 cubic feet of water per second (cfs) from one well completed into the Vermillion East Fork: Willow Lake Management Unit Aquifer for irrigation of 280 acres located in the SW 1/4 Section 8 and the S 1/2 NW 1/4, N 1/2 SW 1/4 Section 9; all in T114N-R57W. The well authorized by No. 8125-3 was to be completed in the NE 1/4 SW 1/4 Section 8-T114N-R57W. This application corrects the location of the well which is in the NE 1/4 NW 1/4 Section 8-T114N-57W plus authorizes irrigation of an additional 25.5 acres in the S 1/2 NE 1/4, SE 1/4 NW 1/4 Section 8-T114N-57W. Water Right No. 3145-3 authorizes 2.00 cubic feet of water per second (cfs) from one well completed into the Vermillion East Fork: Willow Lake Management Unit Aquifer located in the SE 1/4 NW 1/4 Section 8 for irrigation of 140 acres located in the SE 1/4, E 1/2 SW 1/4, S 1/2 NE 1/4 Section 8; all in T114N-R57W. This application also authorizes irrigation of the acreage covered by Nos. 8125-3 and 3145-3, plus the 25.5 additional acres, from either of the wells, authorized Nos. 8125-3 or 3145-3 with no increase in the permitted diversion rates. This site is located approximately 13 miles south of Clark, S.D.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8804-3 with qualifications because 1) un-

appropriated water is available, 2) existing domestic water uses and water rights will not be unlawfully impaired, 3) it is a beneficial use of water and 4) it is in the public interest as it pertains to matters within the regulatory authority of the Water Management Board. The Chief Engineer's recommendation with qualifications, the application and staff report are available at <https://danr.sd.gov/public> or contact Ron Duvall for this information, or other information, at the Water Rights Program address provided below.

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Paulson of said county, being first duly sworn, says that she is the publisher of the *Clark Courier*, a weekly newspaper printed and published in Clark in said County of Clark and has a personal knowledge of all the facts therein that said newspaper is a legal newspaper with a bona-fide circulation of at least two hundred copies weekly, and has been published within said county for fifty-two successive weeks next prior to publication of the notice herein mentioned, and is printed wholly or in part in an office located at said place of publication; that the

## Water Rights Program

A true and correct copy of which taken from the paper in which the same was published, is attached to this sheet, made a part of this Affidavit, was published in said newspaper at least once in each week for

One

successive week(s), on the day of each week on which said newspaper was regularly published, to

January 3, 2024

the full amount of the fees for the publication of annexed notice is

\$52.45

Karli Paulson

subscribed and sworn to before me this

11th day of January, 2024

Kimberly Paulson

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JAN 16 2024

OFFICE OF  
WATER



Notary Public

Clark County, South Dakota

My Commission expires: 04/27/2029

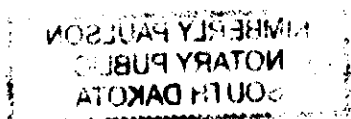
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# LOCALiQ

Aberdeen News  
Watertown Public Opinion

PO Box 630567 Cincinnati, OH 45263-0567

## **PROOF OF PUBLICATION**

Water Rights Program  
Dwight Warkenthien  
18596 425Th AVE  
Willow Lake SD 57278-6104

STATE OF SOUTH DAKOTA, COUNTY OF CODINGTON

The Watertown Public Opinion is, and during all the times hereafter mentioned was, a daily legal newspaper as defined in SDCL 17-2-2.1 through 17-2-2.4, as amended, published at Watertown, Codington County, South Dakota, by Watertown Public Opinion; that the notice, order or advertisement, a printed copy of which is attached, was published in said newspaper in the issue dated:

01/03/2024

and that the fees charged are legal.  
Sworn to and subscribed before on 01/03/2024

Legal Clerk

Notary, State of WI, County of Brown

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*Please do not use this form for payment remittance.*

NOTICE OF  
APPLICATION NO. 8804-3  
to Appropriate Water

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<https://danr.sd.gov/public> or contact Ron Duvall for this information, or other information, at the Water Rights Program address provided below.

Any person interested in opposing this application or recommendation shall allege that the application, upon approval, will cause injury to the person that is unique from any injury suffered by the public in general. The injury must concern a matter either within the regulatory authority found in SDCL 46-2A-9 for approval or denial of the application, or

other matter concerning the application within the regulatory authority of the board to act upon as defined by SDCL 46-2-9 and 46-2-11, or both. Any person meeting the petitioner requirements and wishing to be a party of record in a contested case hearing shall file a written petition to oppose the application with BOTH the applicant and Chief Engineer. A petition opposing the application shall be filed on a form provided by the Chief Engineer. The petition form is available online at <https://danr.sd.gov/public> or by contacting the Chief Engineer. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E. Capitol, Pierre SD 57501" or call (605) 773-3352. The applicant's mailing address is given above. If contesting the Chief Engineer's recommendation, the applicant shall also file a petition. A petition filed by either an interested person or the applicant must be filed by January 16, 2024.

The petition shall include a statement describing the unique injury upon approval of the application on the petitioner, the petitioner's reasons for opposing the application, and the name and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained.

Any interested person may file a comment on the application with the Chief Engineer. The comment shall be filed on a form provided by the Chief Engineer and is available online at

<https://danr.sd.gov/public> or by calling (605) 773-3352 or writing the Chief Engineer at the address provided above. Filing a comment does not make the commenter a party of record or a participant in any hearing that may be held. Any comment must be filed by January 16, 2024.

If the applicant does not contest the recommendation of the Chief Engineer and no petition to oppose the application is received, the Chief Engineer shall act on the application pursuant to the recommendation with no hearing held before the Water Management Board. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled, and the Water Management Board will consider this application. Notice of the hearing will be given to the applicant and any person filing a petition.

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**DEPARTMENT of AGRICULTURE  
and NATURAL RESOURCES**

JOE FOSS BUILDING  
523 E. CAPITOL AVE  
PIERRE SD 57501-3182  
danr.sd.gov

JAN 29 2024

Dwight Warkenthien  
18596 425th Avenue  
Willow Lake SD 57278

Dear Mr. Warkenthien:

Enclosed is Water Permit No. 8804-3 authorizing construction of the water diversion system and beneficial use of the water, not exceeding the limits as specified in the Water Permit.

Form 10, *Notice of Completion of Works and Application of Water to Beneficial Use*, is enclosed. Please return this completed form after you have finished the system and have put the water to beneficial use. An investigation can then be scheduled so the water license may be issued, thus completing the acquisition of a water right.

An informational sheet *Common Water Right Questions?* is also enclosed. This sheet is intended to answer some of the questions associated with obtaining and keeping a water right.

Sincerely,

Eric Gronlund, Chief Engineer  
Water Rights Program  
(605) 773-3352

enclosures



**DEPARTMENT of AGRICULTURE  
and NATURAL RESOURCES**

JOE FOSS BUILDING  
523 E. CAPITOL AVE  
PIERRE SD 57501-3182  
danr.sd.gov

STATE OF SOUTH DAKOTA       )  
                                              ) SS  
COUNTY OF HUGHES        )

**Affidavit of Public Notice  
Posting on DANR Website**

Pursuant to SDCL § 46-2A-4, public notice of the following application was posted on the DANR web site at <https://danr.sd.gov/public>. The posted public notice is the same notice as published in the pertinent newspaper(s) and a copy of the public notice is maintained in the application file. If the application is contested, the posting is moved to the DANR contested case website at <https://danr.sd.gov/public/ContestedCase.aspx> until final action is taken on the application pursuant to SDCL § 46-2A-4.

**Application No.:** 8804-3

**Name of Applicant:** Dwight Warkenthien

**Date of Posting:** 1/1/2024

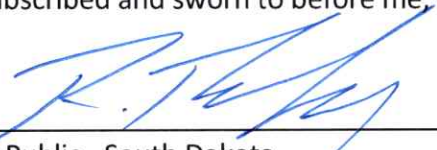
**Date of Removal:** 1/29/2024

  
\_\_\_\_\_  
Ron Duvall, Engineer III

1/29/2024

\_\_\_\_\_  
Date

Subscribed and sworn to before me, a notary public, this 29<sup>th</sup> day of January 2024.

  
\_\_\_\_\_  
Notary Public - South Dakota  
My commission expires:

Rachel Rodriguez  
My Commission Expires  
May 16, 2029



(SEAL)



**DEPARTMENT of AGRICULTURE  
and NATURAL RESOURCES**

JOE FOSS BUILDING  
523 E. CAPITOL AVE  
PIERRE SD 57501-3182  
danr.sd.gov

February 23, 2024

8804-3

Dwight Warkenthien  
18596 425<sup>th</sup> Ave  
Willow Lake SD 57278

Dear Mr. Warkenthien:

I am writing to acknowledge receipt of the "Notice of Completion of Works" form that you sent in to let us know that you are completed with your water use system.

The system is now ready for inspection. Inspections are done on a county-by-county basis as staff time permits. You have done everything you need to do and the intervening time between the completion of your project and the staff inspection has no bearing on your water permit.

Someone from our office will contact you prior to the inspection to set up a time that is convenient for you. If you have any questions, please contact me.

Sincerely,

Amanda Dewell  
Water Rights Program  
(605) 773-3352  
email: Amanda.Dewell@state.sd.us

RECEIVED

FEB 23 2024

OFFICE OF  
WATERNOTICE OF COMPLETION OF WORKS AND  
APPLICATION OF WATER TO BENEFICIAL USEDate 2-21-24TO: Water Rights Program, DANR  
523 E. Capitol  
Pierre, SD 57501-3181

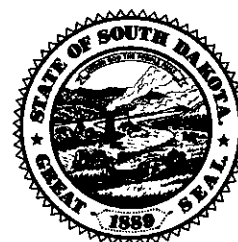
FROM:

Dwight Warkentzien  
(name)18596 925<sup>th</sup> Ave.  
(address)Willow Lake, SD 57278  
(city, state, zip)605-625-3342  
(phone)

I have completed the construction of the water use system and I have put the water to beneficial use to the maximum extent it is going to be used.

Water Permit No. 8804-3 states that the water use system is to be constructed by11-30-23, and water is to be put to beneficial use by 5-30-24.  
(date) (date)The water use system was completed on 11-30-23.  
(date)Applying the water to beneficial use was completed on 5-30-24.  
(date)

You may schedule an investigation so that the water license may be issued.

  
(signature)



**DEPARTMENT of AGRICULTURE  
and NATURAL RESOURCES**

JOE FOSS BUILDING  
523 E. CAPITOL AVE  
PIERRE SD 57501-3182  
danr.sd.gov

STATE OF SOUTH DAKOTA     )  
                                              ) SS  
COUNTY OF HUGHES         )

**Affidavit of Public Notice  
Posting on DANR Website**

Pursuant to SDCL § 46-2A-4, public notice of the following application was posted on the DANR web site at <https://danr.sd.gov/public>. The posted public notice is the same notice as published in the pertinent newspaper(s) and a copy of the public notice is maintained in the application file. If the application is contested, the posting is moved to the DANR contested case website at <https://danr.sd.gov/public/ContestedCase.aspx> until final action is taken on the application pursuant to SDCL § 46-2A-4.

**Application No.:** 8804-3

**Name of Applicant:** Dwight Warkenthien

**Date of Posting:** 1/1/2024

**Date of Removal:**

Ron Duvall, Engineer III

8/26/2024

Date

Subscribed and sworn to before me, a notary public, this 26<sup>th</sup> day of August, 2024.

Notary Public - South Dakota

My commission expires:

**Rachel Rodriguez  
My Commission Expires  
May 16, 2029**

(SEAL)



8125-3  
8804-3



**DEPARTMENT of AGRICULTURE  
and NATURAL RESOURCES**

JOE FOSS BUILDING  
523 E CAPITOL AVE  
PIERRE SD 57501-3182  
danr.sd.gov

August 29, 2025

Dwight Warkenthien  
Dwight Warkenthien Feedlot  
18596 425<sup>th</sup> Avenue  
Willow Lake, SD 57278-9532

Dear Mr. Warkenthien:

On August 28, 2025, John Taylor, acting on your behalf, contacted the Department of Agriculture and Natural Resources (DANR) and reported that your operation may have had a discharge to ground water due to the failure of a check valve in your center pivot irrigation system. Information provided to DANR indicated that while applying wastewater through the center pivot, a representative of your operation began filling a water tank from the irrigation well and noticed the water was discolored. The representative of your operation then shut down the pump from the holding pond and immediately began pumping water from the well through the irrigation system.

Because you reported a potential discharge, we are requiring you to submit a written response by September 15, 2025, providing general information on the potential discharge to allow DANR to determine if a discharge occurred.

1. A description of the cause of the discharge, including all relevant information about how the potential discharge was discovered;
2. The time period of potential discharge, including exact dates and times;
3. The estimated volume of wastewater discharged;
4. Please describe the actions taken to cleanup the discharged wastewater;
5. Please mark the enclosed aerial photos showing the location of the check valve, well, water tank, and where water pumped through the irrigation system was applied;
6. Please list the steps taken or planned to reduce, eliminate, and prevent reoccurrence of similar discharges from occurring.

DANR is also requiring that you hire a consulting firm to collect a sample of the water in the well after pumping from the well to remove any potential wastewater is complete. Please retain the services of a consulting firm familiar with collecting well water samples to collect this sample and have it analyzed. The consulting firm who handles the routine sampling of the monitoring wells at

Dwight Warkenthien  
Dwight Warkenthien Feedlot  
August 29, 2025  
Page 2 of 2

your facility may be able to assist you with this. The sample must be tested for the parameters noted below.

- |                         |                                     |
|-------------------------|-------------------------------------|
| 1. Chlorides (mg/L)     | 5. Total Dissolved Solids (mg/L)    |
| 2. Ammonia as N (mg/L)  | 6. Water Levels (Nearest 0.01-foot) |
| 3. Nitrates as N (mg/L) | 7. Fecal Coliform (#/100 mL)        |
| 4. Sulfates (mg/L)      |                                     |

Once the sample results for the listed parameters are available, please submit the results to DANR.

After the well has been sampled, DANR recommends the well be properly disinfected following the disinfection procedures for new well installation. Please contact Adam Mathiowetz with Water Rights at (605) 773-3352 for information about disinfecting the well.

Please be aware that the U.S. Environmental Protection Agency Region 8 has regulatory authority over Underground Injection Control wells and may have additional requirements. If you have any questions, please feel free to contact me at (605) 773-4647.

Sincerely,



Troy Roth, PE, Administrator  
Livestock Services Program

Cc: John E. Taylor, Taylor Law Firm, PC (email)  
Adam Mathiowetz, DANR – Water Rights Program (email)

