

**WATER PERMIT NO. 8588-3**

Name of Applicant: **T & D Farms**

Address: **525 Broadway, Centerville SD 57014**

Phone: **605 351-7627**

Amount of Water Claimed: **1.78 cfs**

Total Acres: **160 acres**

Source of Water Supply: **groundwater (one well)**

Water to be used for: **irrigation**

County: **Lincoln**

Type of Waste Disposal System:

Location: **2 miles east of Centerville**

**PRIORITY**

Date Received: **2-03-22**

Application/License Fee: **\$ 1,050**

Corrected Application Received:

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

Remarks:

Diversion Point: **Near center of NE 1/4 Sec 30-T96N-R51W**

Land to be Irrigated: **NE 1/4 Sec 30-T96N-R51W**

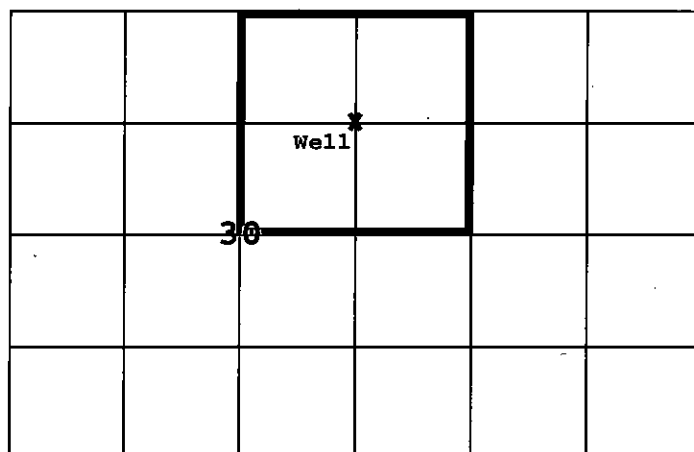
Depth of Well: **129 feet deep**

Well Driller:

Remarks:

Type of Map: **aerial photo**

Prepared by:



Reviewed and the Number Assigned on: **2-03-22**

By: **Ron Duvall**

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

**SOUTH DAKOTA  
WATER PERMIT NO. 8588-3**

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Date of first receipt of application February 3, 2022.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 8588-3 to T & D Farms, 525 Broadway, Centerville SD 57014 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. 8588-3 appropriates 1.78 cubic feet of water per second from one well to be completed into the Upper Vermillion:South Aquifer (approximately 129 feet deep) located near the center of the NE1/4 section 30 for irrigation of 160 acres located in the NE1/4 section 30; all in T96N-R51W. This site is located approximately two miles east of Centerville 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 – October 31.
3. The date from which applicant may claim right is February 3, 2022.
4. The date of approval of Permit No. 8588-3 is April 18, 2022.
5. One-fifth of the construction is to be completed on or before October 18, 2024.
6. All construction is to be completed on or before April 18, 2027.
7. Water is to be put to beneficial use on or before April 18, 2031.
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 well approved under Water Permit No. 8588-3 is 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. The well authorized by Permit No. 8588-3 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28.
3. 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

APR 28 2022  
date



PAID

FEB 3 2022

Ck# 2182

Rec't# \_\_\_\_\_

RECEIVED

FEB 03 2022

WATER RIGHTS  
PROGRAM

|                                                                                                             |                                                                        |
|-------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|
| Mail to:<br><br>DENR - Water Rights<br>523 E Capitol Ave<br>Pierre, SD 57501-3182<br><br>ph. (605) 773-3352 | (office use only)<br>No. <u>8588-3</u> Hydrologic Unit <u>10170102</u> |
|                                                                                                             | Basin <u>Vermillion River</u>                                          |
|                                                                                                             | Newspaper <u>Sioux Valley News</u>                                     |
|                                                                                                             | <u>Argus Leader</u>                                                    |

## 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 TSD Farms

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

Mailing Address 4014 525 Broadway Centerville SD 57024  
(Address) (City) (State) (Zip Code)Phone 605-351-7627 Mobile \_\_\_\_\_ Email knudsonmasonry@gmail.com2. Amount of water claimed 1.78 \*CFS or 800 \*\*GPM \*\*\*AF Total Acreage 160  
(\*Cubic Feet per Second) (\*\*Gallons per Minute) (\*\*\*)Acre Feet - storage capacity of dam/dugout or annual use if applicable)3. Source of water supply Aquifer4. Location of point of diversion 1 well NE 1/4 NE 1/4 (near center)  
(example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W)S 30 T 096 N R 051 W County Lincoln5. County or counties where water will be used Lincoln6. Annual period during which water is to be used May 1 - Oct 31

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 |
|-----------------------------|-------|------------------|-------|
| NE of NE Sec 30 T096N R051W | 40    |                  |       |
| SE of NE " "                | 40    |                  |       |
| SW of NE " "                | 40    |                  |       |
| NW of NE " "                | 40    |                  |       |

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

Center Pivot for above listed PropertyI, Tracy Knudson 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.

## 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 1 Have test holes been drilled ☒ Yes ☐ No Drilled by Thein Well Co  
(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:

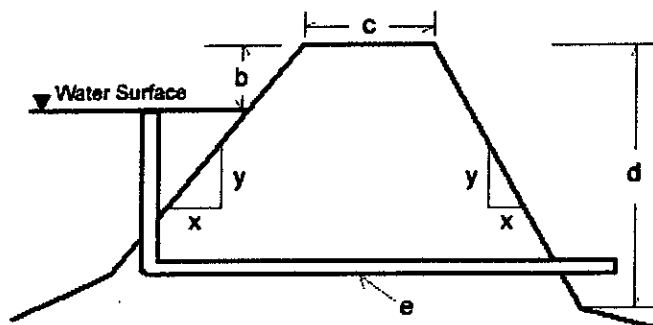
c) Well Depth (required) 129' Depth to Top of Water Bearing Material 60' Depth to Water from Surface     d) Distance to nearest domestic well on applicant's property 3,000' Property owned by others ~~100~~ 1300'**2. Wastewater Disposal System Information**a) Type of System (i.e. septic tank, drain field)     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 &amp; Y Slope (e.g. 3 to 1 is a typical slope)

Upstream     Downstream     h) Surface Area of Impoundment     i) Storage      Acre Feetj) Drainage Area Above Dam      Acres

***Troy Knutson Test hole Formation Log***

| <b>Formation Log</b>            | <b>From</b> | <b>To</b> |
|---------------------------------|-------------|-----------|
| Top Soil                        | 0           | 3         |
| Clay Brown                      | 3           | 46        |
| Clay Blue                       | 46          | 60        |
| Gravel a few clay layers @ 70'  | 60          | 104       |
| Gravel                          | 104         | 129       |
| Clay Blue w/ thin gravel layers | 129         | 134       |
| Clay Blue                       | 134         | 140       |
|                                 |             |           |

Formation - 60 - 129

# Water Well Completion Reports

SEARCH WELLS    DRILLERS    PUMP  
INSTALLERS    Disclaimer    Help    Tools



Zoo

Search

Proposed  
well  
location

T096N R051W S30

T096N

Streets

# RECEIPT

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

Date February 3, 2022

RECEIVED OF T&D Farms 525 Broadway Centerville SD 57014

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

|                                                                                                                        |                   |
|------------------------------------------------------------------------------------------------------------------------|-------------------|
| Fee for Application for Permit No. <u>8588-3</u> to Appropriate Water, to construct and to put water to beneficial use | \$ <u>850.00</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. <u>8588-3</u>            | \$ <u>200.00</u>  |
| 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>1050.00</u> |

By Eric Gronlund  
Chief Engineer  
vm



# SOUTH DAKOTA SECRETARY OF STATE



SOUTH DAKOTA  
SECRETARY OF STATE

(605) 773-4845

corpinfo@state.sd.us

Contact us

## STEVE BARNETT

Doing Business As (DBA) - Business Name Registry > Search For A DBA - Business Name > DBA - Business Name  
Detail

[Login](#)

## DBA - Business Name Registration Detail

Entity details cannot be edited. This detail reflects the current state of the filing in the system.

Return to the [DBA - Business Name Information Search](#).

### Available Actions for this Registration:

[File Amendment](#) DBA - Business Name

[File Cancellation](#)

[Print a Registration Confirmation](#)

Business ID:

Business ID:

UB970429

Name:

Name:

T & D FARMS

Status:

Status:

Active

Initial Filing Date:

Initial Filing Date:

10/28/2016

Expiration Date:

Expiration Date:

10/28/2026

Inactive Date:

Inactive Date:

Principal Office:

**Principal Office:**

525 BROADWAY

CENTERVILLE, SD 57014 USA

**Owners****Owner Name:****Owner Name:**

TROY KNUDSON

**Physical Address:****Physical Address:**

46454 295TH ST

CENTERVILLE, SD 57014

USA

**Mailing Address:****Mailing Address:**

USA

**Owner Name:****Owner Name:**

JENNIFER KNUDSON

**Physical Address:****Physical Address:**

46454 295TH ST

CENTERVILLE, SD 57014

USA

**Mailing Address:****Mailing Address:**

USA

**Owner Name:****Owner Name:**

DANA KNUDSON

**Physical Address:****Physical Address:**

46526 291ST ST  
CENTERVILLE, SD 57014  
USA

Mailing Address:

Mailing Address:

USA

**PLEASE NOTE:** No images are available prior to 8/15/2017.

| History                                               |            |                                       |        |
|-------------------------------------------------------|------------|---------------------------------------|--------|
| Type                                                  | File Date  | View All Document Links (Scroll Down) | Detail |
| Fictitious Business Name Renewal                      | 10/12/2021 | <a href="#">B0195-7965</a>            |        |
| Expiration Date Changed From:10/28/2021 To:10/28/2026 |            |                                       |        |
| Initial Filing                                        | 10/28/2016 |                                       |        |

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**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. 8588-3, T & D Farms**

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. 8588-3, T & D Farms, 525 Broadway, Centerville SD 57014.

The Chief Engineer is recommending APPROVAL of Application No. 8588-3 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 well approved under Water Permit No. 8588-3 is 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. The well authorized by Permit No. 8588-3 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28.
3. 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  
March 28, 2022

Report to the Chief Engineer  
On Water Permit Application No. 8588-3

T & D Farms

March 28, 2022

Water Permit Application No. 8588-3 proposes to divert water at a maximum instantaneous diversion rate of 1.78 cubic feet of water per second (cfs) from one well to be completed into the Upper Vermillion Missouri: South aquifer (approximately 129 feet deep) near the center of the NE  $\frac{1}{4}$  of Section 30 for the irrigation of 160 acres located in the NE  $\frac{1}{4}$  of Section 30; all in T96N-R51W. The site of interest is located in Lincoln County approximately two miles east of Centerville, SD.

**AQUIFER:** Upper Vermillion Missouri: South (UVM: S)

**HYDROGEOLOGY:**

The Upper Vermillion Missouri aquifer is a glacial outwash that is composed of fine sand to medium-pebble gravel (Lindgren and Hansen, 1990; Niehus, 1997). The aquifer generally lays in a bedrock valley that trends northwest to southeast with the direction of groundwater movement generally to the south/southeast (Lindgren and Hansen, 1990; Holmes and Filipovic, 2015). Most of the Upper Vermillion Missouri aquifer is overlain by till that can be up to 160 feet thick but in some localized areas, the aquifer can be encountered near the ground surface (Holmes and Filipovic, 2015). From 2013 to 2014, the SD DENR-Geological Survey completed a study to further understand the geologic and hydrologic conditions of the Upper Vermillion Missouri aquifer (Holmes and Filipovic, 2015). As a result, the aquifer is now divided into three management units (i.e. North, South, and West) that were adopted by the Water Management Board at the March 6, 2014 meeting (Water Rights, 2014). It is worth noting that of the south boundary of the Upper Vermillion Missouri aquifer Buhler (2014) states, "Although the southern boundary has not been delineated at this time, data shows that it extends south several miles from the original border as it merges with or transitions into the Lower Vermillion Missouri aquifer." Although described as not yet delineated, the mapping and areas presented in Buhler (2014) reflected a southern boundary for the Upper Vermillion Missouri aquifer extending several miles south from the original border and includes sufficient information to allow for the examination of water availability in the South management unit of the Upper Vermillion Missouri aquifer.

The proposed diversion point is located in the South management unit of the Upper Vermillion Missouri aquifer. The areal extent of the Upper Vermillion Missouri: South aquifer is approximately 78,820 acres in Clay, Lincoln, and Turner Counties (Figure 1) (Buhler, 2014). The Upper Vermillion Missouri: South aquifer is generally under confined conditions except near the Clay-Turner County line where the aquifer is in hydrologic connection with the overlying Parker-Centerville aquifer (Holmes and Filipovic, 2015; Lindgren and Hansen, 1990; Niehus, 1997). In Lincoln County, the aquifer is approximately 41 feet thick on average and has a documented maximum thickness of 116 feet (Niehus, 1997).

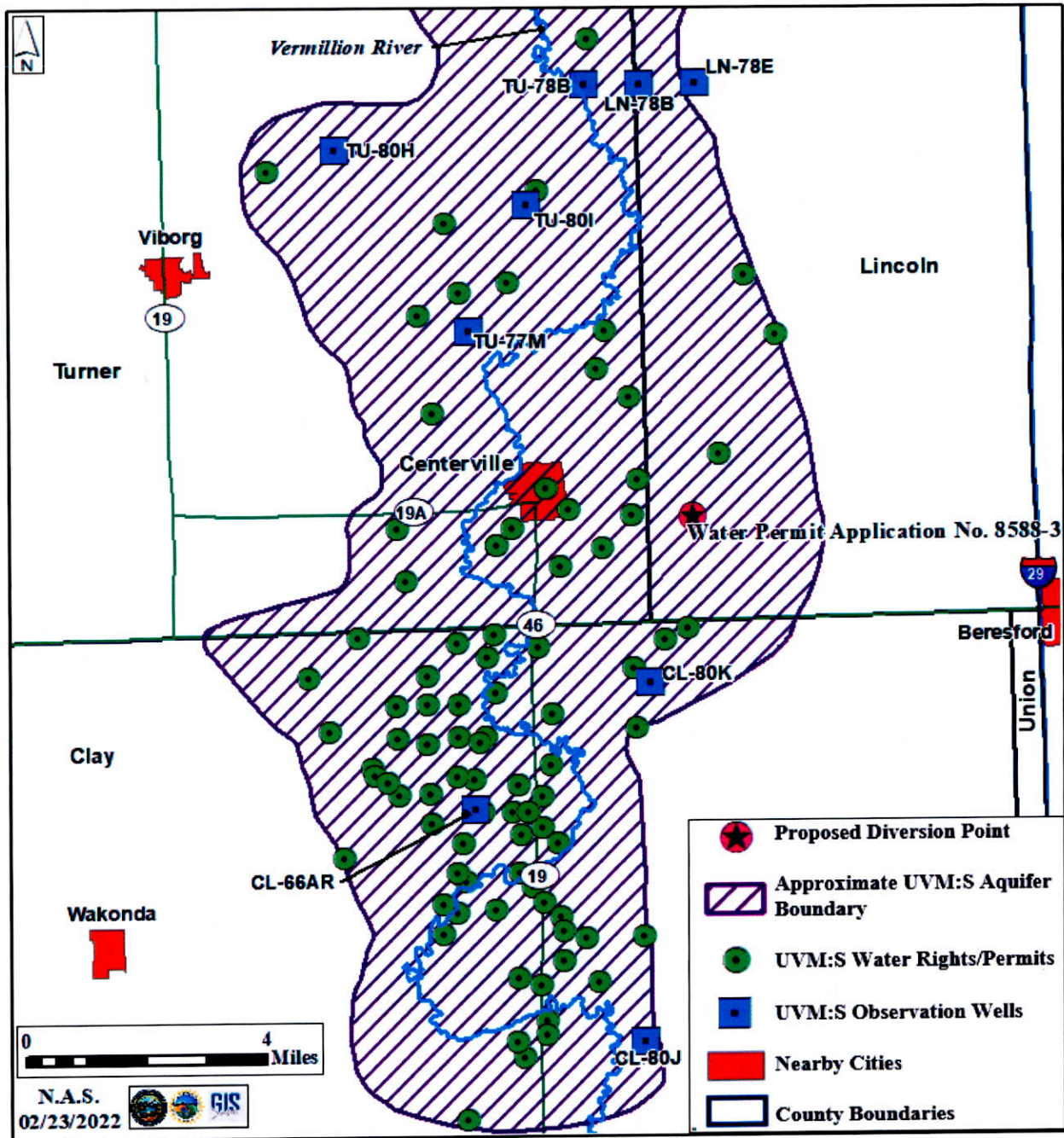
No water well completion report was submitted with Water Permit Application No. 8588-3; however, a test hole completion report was submitted. The test hole completion report lists, "Top Soil" from 0 to 3 feet below the ground surface, "Clay Brown" from 3 to 46 feet, "Clay Blue" from 46 to 60, "Gravel, a few clay layers @ 70 feet" from 60 to 104 feet, "Gravel" from 104 to 129, "Clay Blue w/ thin gravel layers" from 129 to 134 feet, and "Clay Blue" from 134 to 140 feet. The test hole completion report indicated the water bearing formation is from 60 to 129 feet below the ground surface. Within approximately two miles of the proposed diversion point, water well and test hole completion reports on file have saturated aquifer thicknesses ranging from approximately 40 to 90 feet, with the depth to the top of aquifer materials ranging from approximately 35 to 170 feet below the ground surface, and static water levels varying between 10 to 90 below the ground surface at the time of well completion (Water Rights, 2022c). The Upper Vermillion Missouri: South aquifer is confined at the proposed diversion point based on the submitted test hole completion report, and well completion reports and lithologic logs on file for nearby water rights/permits and observation wells (SDGS, 2022; Water Rights, 2022a, 2022b and 2022c).

#### **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 there is unappropriated water available for the applicant's proposed use, that the diversion point can be developed without unlawful impairment of existing domestic water uses and water rights, and that the proposed use is a beneficial use and 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 water uses and water rights within the Upper Vermillion Missouri: South aquifer.

#### **WATER AVAILABILITY:**

Water Permit Application No. 8588-3 proposes to appropriate water from the Upper Vermillion Missouri: South aquifer. 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 Upper Vermillion Missouri: South aquifer is not older than or stratigraphically lower than the Greenhorn Formation (Fahrenbach et al., 2010), 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 Upper Vermillion Missouri: South aquifer must be considered.



**Figure 1.** Map of the approximate Upper Vermillion Missouri: South aquifer delineated from Buhler (2014), the proposed diversion point for Water Permit Application No. 8588-3, and the Upper Vermillion Missouri: South aquifer water rights/permits and observation wells (Water Rights, 2022a and 2022b)

## HYDROLOGIC BUDGET:

### Recharge

Recharge to the Upper Vermillion Missouri aquifer occurs primarily through the infiltration of precipitation where the aquifer is at or near the ground surface. Additional recharge occurs where the Upper Vermillion Missouri aquifer is in direct contact with the Parker-Centerville aquifer

(Holmes and Filipovic, 2015; Lindgren and Hansen, 1990; Niehus, 1997). There has been no quantification of the specific recharge rate to the Upper Vermillion Missouri: South aquifer. However, Hedges and others (1985) estimated a recharge rate of 0.25 inches per year using a regional flow net analysis for the entire Upper Vermillion Missouri as delineated at that time. The Upper Vermillion Missouri aquifer as delineated by Hedges and others (1982) had the North, South, and West management units as one singular aquifer. Applying the 0.25 inches per year recharge rate over the current areal extent of the Upper Vermillion Missouri: South aquifer leads to an estimated recharge rate of 1,642 acre-feet per year for the Upper Vermillion Missouri: South aquifer. This recharge rate is lower than what the observation well data shows and Buhler's (2014) flow net analysis estimate.

### **2014 Flow Net Analysis**

Buhler (2014) completed an analysis of the Upper Vermillion Missouri aquifer that indicates recharge exceeded withdrawals from the Upper Vermillion Missouri: South aquifer by an estimated 5,637 to 8,223 acre-feet per year at that time based on estimated groundwater outflow from the Upper Vermillion Missouri: South aquifer. Buhler's (2014) analysis included all previously defined Upper Vermillion Missouri and Lower Vermillion Missouri aquifer water rights/permits that are now identified as withdrawing water from the South management unit of the Upper Vermillion Missouri aquifer. On the March 6, 2014, Water Management Board meeting, the Board approved twelve water permit applications: Nos. 7441-3, 7442-3, 7466-3, 7467-3, 7600-3, 7601-3, 7603-3, 7623-3, 7653-3, 7690-3, 7900-3, and 7919-3 (Water Rights, 2014 and 2022b). However, Water Permit Nos. 7623-3 and 7653-3 were cancelled in 2018 (Water Rights, 2022b). The remaining ten water permits authorize the irrigation of approximately 1,295.83 acres (Water Rights, 2022b). Buhler (2014) calculated an average annual application rate per permitted acre from the Upper Vermillion Missouri aquifer of six inches per permitted acre. Using Buhler's (2014) *average application rate per permitted acreage* for the Upper Vermillion Missouri aquifer, the average annual withdrawal rate that is expected from these ten Upper Vermillion Missouri: South aquifer water permits is approximately 648 acre-feet per year.

The Water Management Board has approved 24 additional water permit applications for wells completed into the Upper Vermillion Missouri: South aquifer since the March 6, 2014, Board meeting and the use type for each permit is irrigation (Water Rights, 2022b). These 24 water permits authorize the irrigation of approximately 2,315 acres (Water Rights, 2022b). Using Buhler's (2014) *average application rate per permitted acreage* for the Upper Vermillion Missouri aquifer, the average annual withdrawal rate that is expected from these Upper Vermillion Missouri: South aquifer water permits is approximately 1,157 acre-feet per year.

### **Discharge**

Discharge from the Upper Vermillion Missouri aquifer is primarily through evapotranspiration where the aquifer is near the ground surface, subsurface outflow to other glacial aquifers, and through well withdrawals (Lindgren and Hansen, 1990; Water Rights, 2022b and 2022c).

Currently, there are 89 water rights/permits authorized to appropriate water from the Upper Vermillion Missouri: South aquifer (Water Rights, 2022b). The average annual withdrawal rate for the Upper Vermillion Missouri: South aquifer water rights/permits (approved after the March 6, 2014, Water Management Board meeting) is approximately 1,805 acre-feet per year.

Table 1 summarizes these 34 Upper Vermillion Missouri: South aquifer water rights/permits, and their estimated use based on Buhler's (2014) *average application rate per permitted acreage* for the Upper Vermillion Missouri aquifer. Collectively, the average annual withdrawal rate for the Upper Vermillion Missouri: South aquifer water rights/permits (approved after the March 6, 2014, Water Management Board meeting) is approximately 1,805 acre-feet per year (Table 1). Therefore, since Buhler's (2014) analysis estimated recharge exceeds withdrawals by 5,637 to 8,223 acre-feet per year, there is a reasonable probability that unappropriated water is available to supply this proposed appropriation.

There are domestic wells completed into the Upper Vermillion Missouri: South aquifer that do not require a water right/permit, so the withdrawal amount from those wells is unknown (Water Rights, 2022c). Due to their relatively low diversion rates, withdrawals from domestic wells are not considered to be a significant portion of the withdrawal rate from the Upper Vermillion Missouri: South aquifer. Additionally, with the development of rural water systems in areas where the Upper Vermillion Missouri: South aquifer is the uppermost aquifer available; 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 withdrawal rate for the Upper Vermillion Missouri: South aquifer.

### **Hydrologic Budget Summary**

Buhler's (2014) analysis of the Upper Vermillion Missouri aquifer indicates recharge exceeded withdrawals from the Upper Vermillion Missouri: South aquifer by an estimated 5,637 to 8,223 acre-feet per year at that time. That analysis included all previously defined Upper Vermillion Missouri and Lower Vermillion Missouri aquifer water rights/permits that are now identified as withdrawing water from the South management unit of the Upper Vermillion Missouri aquifer (Buhler, 2014). The average annual withdrawal rate for the Upper Vermillion Missouri: South aquifer water rights/permits, approved after the March 6, 2014, Water Management Board meeting, is approximately 1,805 acre-feet per year. Therefore, there is a reasonable probability that unappropriated water is available to supply this proposed appropriation.

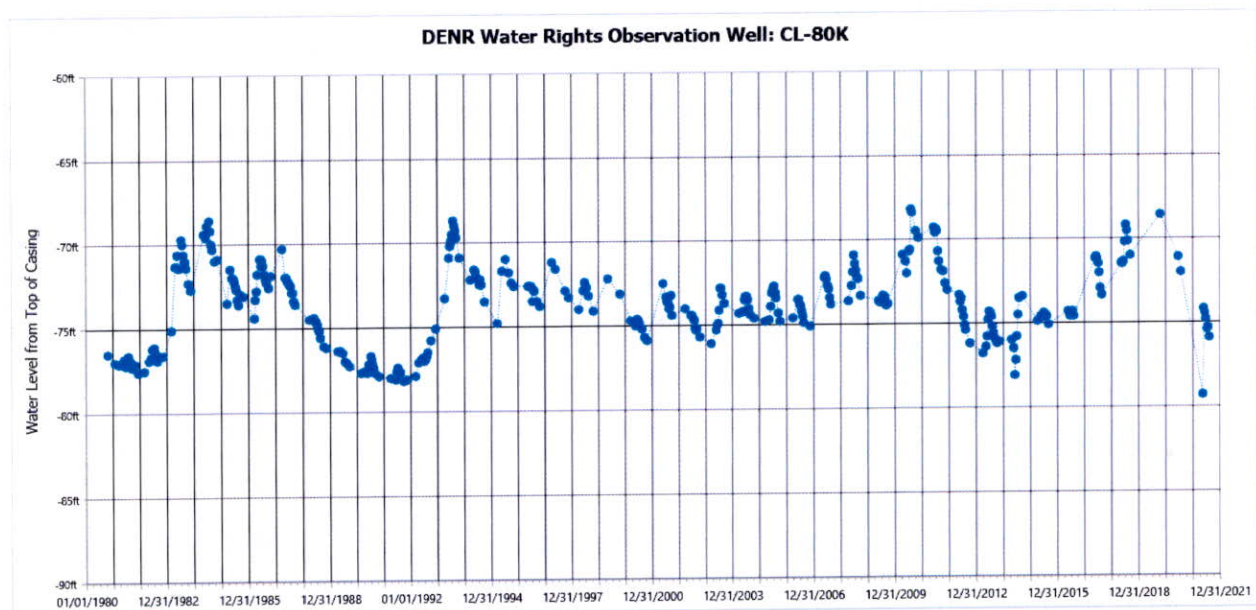
**Table 1.** The average annual withdrawal rate for the Upper Vermillion Missouri: South aquifer water rights/permits that were approved after the March 6, 2014, Water Management Board meeting (Water Rights, 2022b)

| Permit No.                        | Name                            | Priority Date | Status | Use          | Acres  | Estimated Use (acre-feet/year) |
|-----------------------------------|---------------------------------|---------------|--------|--------------|--------|--------------------------------|
| 6811A-3                           | Jesse & Tanya Vandestroet       | 04/10/2014    | PE     | IRR          | 115    | 57.5                           |
| 6820A-3                           | Jesse & Tanya Vandestroet       | 01/23/2014    | PE     | IRR          | 43     | 21.5                           |
| 7383-3                            | Metabank                        | 07/20/2012    | PE     | IRR          | 25     | 12.5                           |
| 7384-3                            | Nicholas & Courtney Blake       | 07/20/2012    | PE     | IRR          | 80     | 40                             |
| 7441-3                            | Jason or Alicia Knutson         | 09/26/2012    | PE     | IRR          | 140    | 70                             |
| 7442-3                            | Leah Johnson                    | 09/26/2012    | PE     | IRR          | 40     | 20                             |
| 7466-3                            | Bethel Hagen Trust              | 10/18/2012    | PE     | IRR          | 152    | 76                             |
| 7467-3                            | Cleland Hagen Trust             | 10/18/2012    | PE     | IRR          | 152    | 76                             |
| 7600-3                            | Michael D Stevens               | 12/28/2012    | PE     | IRR          | 180    | 90                             |
| 7601-3                            | Michael D Stevens               | 12/28/2012    | PE     | IRR          | 132    | 66                             |
| 7603-3                            | Michael D Stevens               | 12/28/2012    | PE     | IRR          | 120    | 60                             |
| 7690-3                            | Tim or Dave Ostrem              | 12/20/2013    | PE     | IRR          | 160    | 80                             |
| 7693-3                            | Metabank                        | 02/06/2013    | PE     | IRR          | 27.7   | 13.85                          |
| 7900-3                            | Leon Thompson                   | 09/11/2013    | PE     | IRR          | 136    | 68                             |
| 7919-3                            | Larry & Marlene Erickson        | 10/23/2013    | PE     | IRR          | 83.83  | 41.915                         |
| 7945-3                            | Brad R or Linda R Trudeau       | 01/17/2014    | PE     | IRR          | 60     | 30                             |
| 7947-3                            | Leon, Holly and Jordan Rozeboom | 01/23/2014    | PE     | IRR          | 133.44 | 66.72                          |
| 7948-3                            | Majestic Farms LLP              | 01/23/2014    | PE     | IRR          | 55.02  | 27.51                          |
| 7949-3                            | Jesse & Tanya Vandestroet       | 01/23/2014    | PE     | IRR          | 100.9  | 50.45                          |
| 7964-3                            | Paul, Mike & John Shubeck       | 02/12/2014    | PE     | IRR          | 128    | 64                             |
| 7976-3                            | Vasgaard Properties             | 02/27/2014    | PE     | IRR          | 160    | 80                             |
| 7990-3                            | Robert P Walsh                  | 04/02/2014    | PE     | IRR          | 240    | 120                            |
| 7993-3                            | Jesse & Tanya Vandestroet       | 04/10/2013    | PE     | IRR          | 53     | 26.5                           |
| 7994-3                            | Metabank                        | 04/10/2014    | PE     | IRR          | 72     | 36                             |
| 7995-3                            | Jesse & Tanya Vandestroet       | 04/10/2014    | PE     | IRR          | 25     | 12.5                           |
| 8007-3                            | Louis Latendresse               | 04/18/2014    | PE     | IRR          | 150    | 75                             |
| 8037-3                            | Tyler Anderson                  | 06/10/2014    | PE     | IRR          | 103    | 51.5                           |
| 8070-3                            | Hansen Irrigated Farms LLC      | 01/07/2015    | PE     | IRR          | 96     | 48                             |
| 8071-3                            | Hansen Irrigated Farms LLC      | 01/07/2015    | PE     | IRR          | 51     | 25.5                           |
| 8072-3                            | Jesse & Tanya Vandestroet       | 01/07/2015    | PE     | IRR          | 40     | 20                             |
| 8469-3                            | Double A Farms LLC              | 03/15/2021    | PE     | IRR          | 114    | 57                             |
| 8470-3                            | Nicholas Blake                  | 03/22/2021    | PE     | IRR          | 160    | 80                             |
| 8492-3                            | Tim or Kari Ostrem              | 02/19/2021    | PE     | IRR          | 180    | 90                             |
| 8542-3                            | Tyler Anderson                  | 08/09/2021    | PE     | IRR          | 103    | 51.5                           |
| PE: Water Permit, IRR: Irrigation |                                 |               |        | <b>TOTAL</b> | 3,611  | 1,805                          |

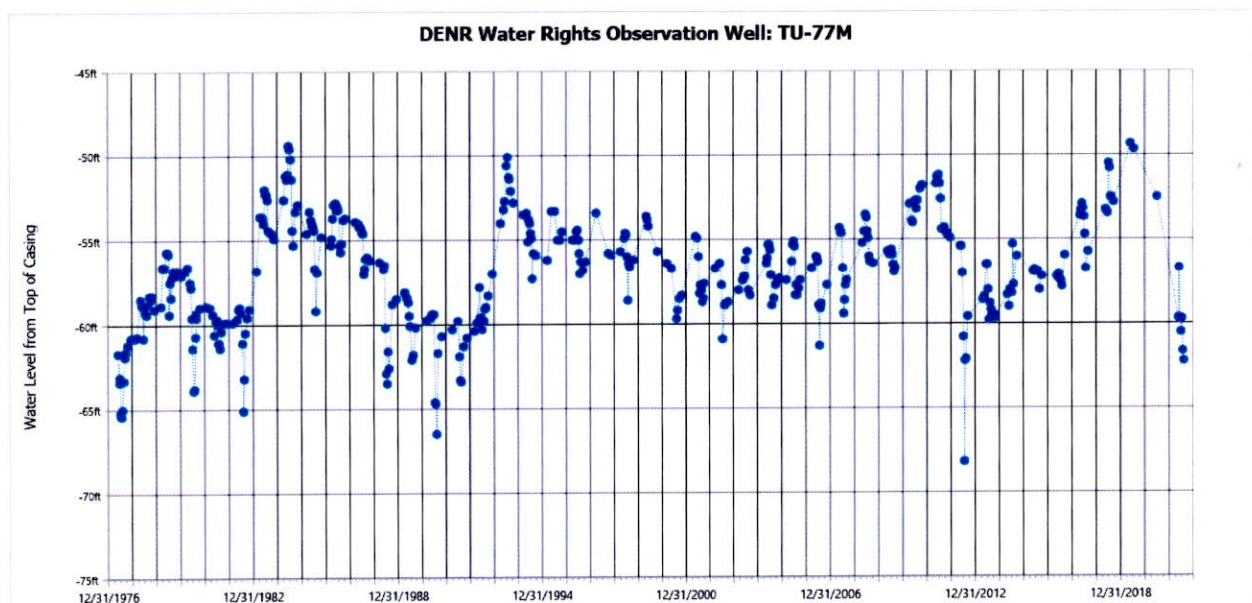
## OBSERVATION WELL DATA:

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.

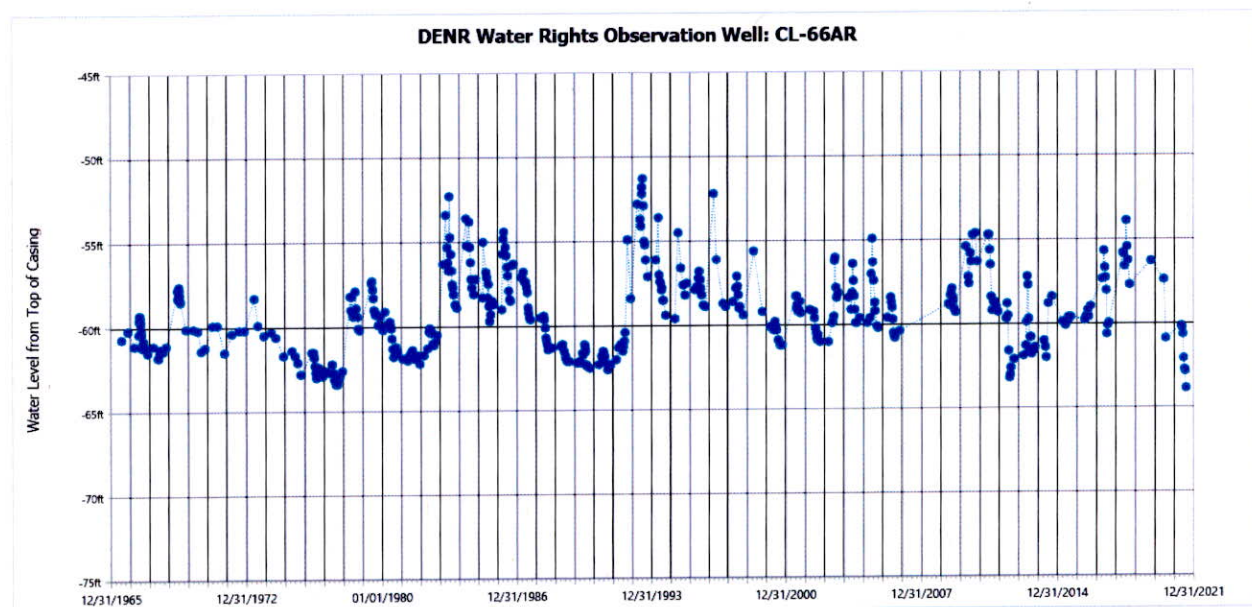
Observation wells provide data on how the aquifer reacts to regional climatic conditions and local pumping. The DANR-Water Rights Program monitors nine observation wells completed into the Upper Vermillion Missouri: South aquifer (Water Rights, 2022a). The three closest observation wells to the proposed diversion point are CL-80K (approximately three miles southwest), TU-77M (approximately five miles northwest), and CL-66AR (approximately six miles southwest) (as shown in Figure 1). The hydrographs for these observation wells are displayed in Figures 2 to 4 (Water Rights, 2022a). The data points utilized to construct the hydrographs are measurements of the static water level in the observation wells from the top of the well casing. It is worth noting the hydrograph titles state DENR Water Rights Observation Well on the hydrographs when the titles should say DANR Water Rights Observation Well on the hydrographs.



**Figure 2.** Hydrograph for observation well CL-80K (Water Rights, 2022a)



**Figure 3.** Hydrograph for observation well TU-77M (Water Rights, 2022a)



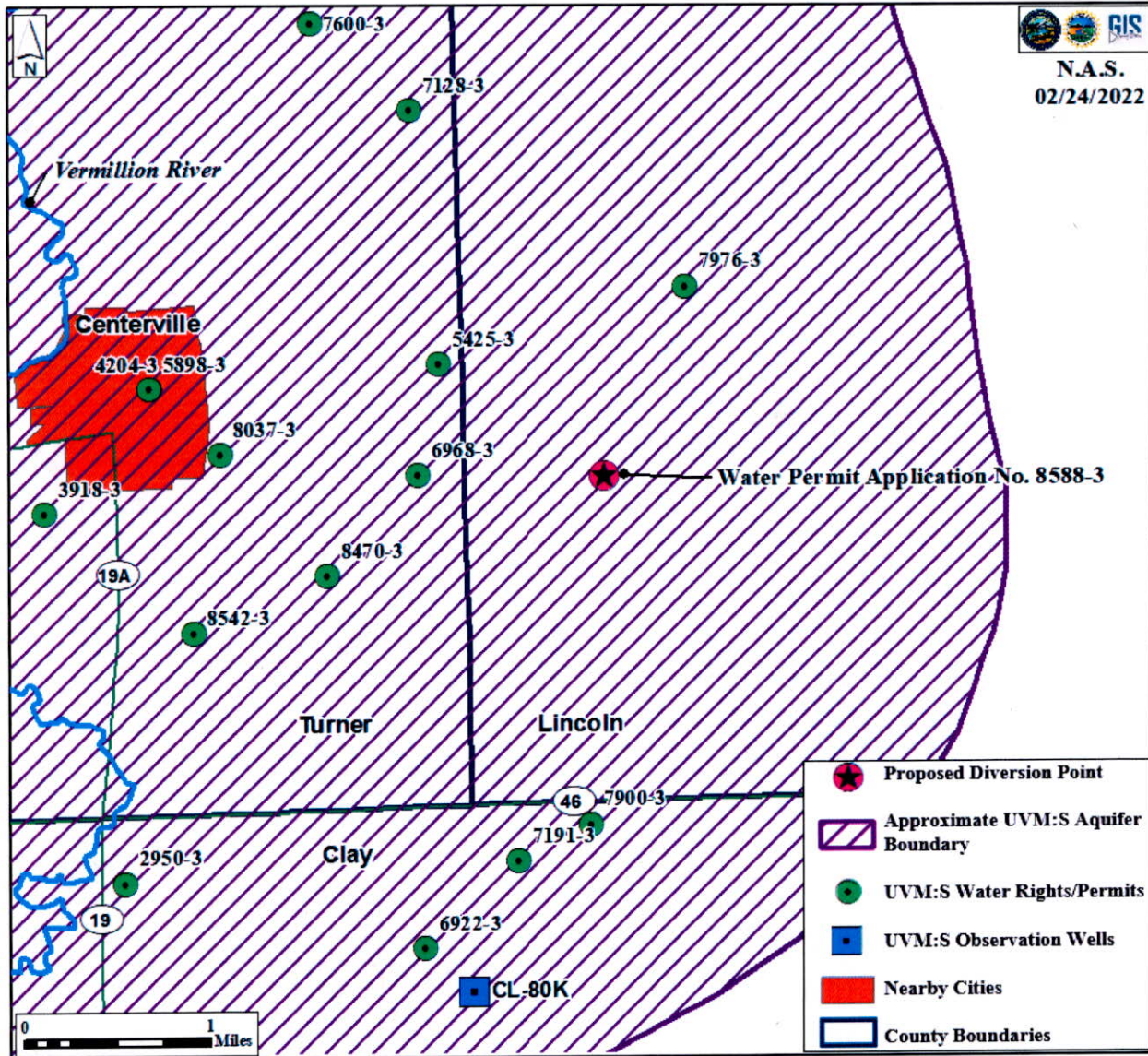
**Figure 4.** Hydrograph for observation well CL-66AR (Water Rights, 2022a)

The hydrographs for the observation wells display stable to increasing water levels over their respective periods of record. The hydrographs for these three observation wells were compared to the hydrographs for the other observations wells completed into the Upper Vermillion Missouri: South aquifer and each displayed a similar trend as shown on the hydrographs displayed in Figures 2 to 4 (Water Rights, 2022a). The hydrographs for the Upper Vermillion Missouri: South 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 Upper Vermillion Missouri: South 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. It is worth noting, the most recent water level readings for the Upper Vermillion Missouri: South aquifer observation wells are approximately the lowest readings on the hydrographs displayed in Figures 2 to 4. These water level readings are not of concern at this time as they were measured during the middle of the irrigation season in 2021 (Water Rights, 2022a). Additionally, the 2010 water level reading in observation well TM-77M is likely an incorrect reading (Water Rights, 2022a).

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

Currently, there are 89 water rights/permits authorized to appropriate water from the Upper Vermillion Missouri: South aquifer (Water Rights, 2022b). The wells authorized by Water Right Nos. 5425-3 and 6968-3 and Water Permit No. 7976-3 are all located approximately one mile of the proposed diversion point for this application (as shown in Figure 5) (Table 2) (Water Rights, 2022b).

There are domestic wells on file with the DANR-Water Rights Program that are completed into the Upper Vermillion Missouri: South aquifer, with the closest domestic well on file (not held by the applicant) approximately 3.1 miles northwest of the proposed diversion point (Water Rights, 2022c). There could potentially be other domestic wells completed into the Upper Vermillion Missouri: South aquifer near the proposed diversion point that are not on file with the DANR-Water Rights Program.



**Figure 5.** Location of the proposed diversion point for Water Permit Application No. 8588-3 with the Upper Vermillion Missouri: South aquifer water rights/permits and observation well within approximately three miles (Water Rights, 2022a and 2022b)

**Table 2.** Upper Vermillion Missouri: South aquifer water rights/permits within approximately three miles of the proposed diversion point, as shown in Figure 5 (Water Rights, 2022b)

| Permit No.                                                                   | Name                       | Status | Use | Authorized Diversion Rate (cfs) | Acres in IRR |
|------------------------------------------------------------------------------|----------------------------|--------|-----|---------------------------------|--------------|
| 2950-3                                                                       | Terry & Alberta Surprenant | LC     | IRR | 1.57                            | 110          |
| 3918-3                                                                       | JBS Hansen Farms           | LC     | IRR | 2.66                            | 295.3        |
| 4204-3                                                                       | City of Centerville        | LC     | MUN | 0.22                            |              |
| 5425-3                                                                       | Johnke Land Trust          | LC     | IRR | 1.88                            | 132          |
| 5898-3                                                                       | City of Centerville        | LC     | MUN | 0.89                            |              |
| 6922-3                                                                       | Paul Shubeck               | LC     | IRR | 1.78                            | 122          |
| 6968-3                                                                       | Roger Blake                | LC     | IRR | 1.47                            | 103          |
| 7128-3                                                                       | Paul Shubeck               | PE     | IRR | 1.78                            | 207          |
| 7191-3                                                                       | Roger Blake                | LC     | IRR | 1.56                            | 255          |
| 7900-3                                                                       | Leon Thompson              | PE     | IRR | 1.89                            | 136          |
| 7976-3                                                                       | Vasgaard Properties        | PE     | IRR | 1.78                            | 160          |
| 8037-3                                                                       | Tyler Andersen             | PE     | IRR | 1.61                            | 103          |
| 8470-3                                                                       | Nicholas Blake             | PE     | IRR | 1.78                            | 160          |
| 8542-3                                                                       | Tyler Andersen             | PE     | IRR | 1.61                            | 103          |
| LC: Licensed Water Right; PE: Water Permit, IRR: Irrigation ; MUN: Municipal |                            |        |     |                                 |              |

The Upper Vermillion Missouri: South aquifer is generally under confined conditions except near the Clay-Turner County line where the aquifer is in hydrologic connection with the overlying Parker-Centerville aquifer (Holmes and Filipovic, 2015; Lindgren and Hansen, 1990; Niehus, 1997). The Upper Vermillion Missouri: South aquifer is confined at the proposed diversion point based on the submitted test hole completion report, and well completion reports and lithologic logs on file for nearby water rights/permits and observation wells (SDGS, 2022; Water Rights, 2022a, 2022b and 2022c). Drawdown created by pumping a well generally does not extend far from the pumped well in an unconfined aquifer; however, in a confined aquifer, drawdown from pumping could extend a distance from the diversion point. The exact drawdown behavior of a well cannot be known without an aquifer performance test. However, observation wells completed into the Upper Vermillion Missouri: South aquifer near permitted/licensed diversion points can provide some insight on how the aquifer responds to pumping.

Observation well TU-77M (approximately five miles northwest of the proposed diversion point) has five high-yield (assumed to be a well with an authorized diversion rate greater than 0.2 cfs) irrigation wells within approximately two miles of it (Water Rights, 2022a and 2022b). The lithologic log on file for TU-77M noted the well was drilled 185 feet below the ground surface, with a casing stick up height of 2.1 feet, and the top of aquifer approximately 108 feet below the top of the well casing (SDGS, 2022). The lowest recorded static water level on the hydrograph (shown in Figure 3) is approximately 68 feet from the top of the well casing, which indicates there was still approximately 40 feet of artesian head pressure in TU-77M even during drier periods when high-yield irrigation wells are expected to be pumping more water (Water Rights, 2022a).

In Lincoln County, the Upper Vermillion Missouri: South aquifer is approximately 41 feet thick on average and has a documented maximum thickness of 116 feet (Niehus, 1997). Within approximately two miles of the proposed diversion point, water well and test hole completion reports on file have saturated aquifer thicknesses ranging from approximately 40 to 90 feet (Water Rights, 2022c). This would generally allow for enough thickness for a pump to be placed 20 feet below the top of the aquifer, which is required for the well to be considered adequate under ARSD 74:02:04:20(6). Any drawdown as a result of the proposed diversion is not expected to unlawfully impair nearby adequate wells. In Clay, Lincoln, and Turner Counties, there are no complaints on file with the DANR-Water Rights Program regarding well interference for adequate wells completed into the Upper Vermillion Missouri: South aquifer (Water Rights, 2022d).

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 without the necessity of maintaining artesian head pressure for domestic use. 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.”

The Water Management Board considered the delivery of water by artesian head pressure versus maximum beneficial use during the issuance of Water Right No. 2313-2 for Coca-Cola Bottling Company of the Black Hills. The Board adopted the Findings of Facts and Conclusions of Law that noted the reservation of artesian head pressure for delivery of water would be inconsistent with SDCL 46-1-4 which states, “general welfare requires that the water resources of the state be put to beneficial use to the fullest extent of which they are capable...” (Water Rights, 1995). Furthermore, the Water Management Board found if increased cost or decreased production as a result of impacts on artesian head pressure by legitimate users is to be considered as an unlawful impairment, it would also conflict with SDCL 46-1-4 (Water Rights, 1995). With that in mind, some existing well owners may need to install or lower pumps depending on the specific characteristics of the Upper Vermillion Missouri: South aquifer at their location. However, when considering the statutes (SDCL 46-1-4 and 46-6-6.1), rules (ARSD 74:02:04:20(6) and (7)), the saturated aquifer thickness near the proposed diversion point, the artesian head pressure in observation wells and appropriative user’s wells completed into the aquifer near the proposed diversion point, and the lack of well interference complaints for adequate wells completed into the Upper Vermillion Missouri: South aquifer in Clay, Lincoln, and Turner Counties, any drawdown created from the proposed diversion is not expected to cause an unlawful impairment on existing water right/permit holders or domestic users with adequate wells. Therefore, there is a reasonable probability that any interference from the proposed appropriation will not impose unlawful impairments on existing users with adequate wells.

## CONCLUSIONS:

1. Water Permit Application No. 8588-3 proposes to divert water at a maximum instantaneous diversion rate of 1.78 cfs from one well to be completed into the Upper Vermillion Missouri: South aquifer (approximately 129 feet deep) for the irrigation of 160 acres. The site of interest is located in Lincoln County approximately two miles east of Centerville, SD.
2. Based on Buhler's (2014) Flow Net Analysis and the observation well data, there is a reasonable probability that unappropriated water is available from the Upper Vermillion Missouri: South aquifer to supply the proposed appropriation.
3. There is a reasonable probability that the proposed diversion by Water Permit Application No. 8588-3 will not unlawfully impair adequate wells for existing water right/permit holders and domestic users.

*Nakaila Steen*

Nakaila Steen  
Natural Resources Engineer I  
SD DANR - Water Rights Program

Reviewed by:

*Adam Mathiowetz*

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

## References

- Buhler, K.A., 2014. Report to the Chief Engineer on 21 Water Permit Applications from the Upper Vermillion Missouri Aquifer. SD DENR – Water Rights Program, Joe Foss Bldg., Pierre, SD.
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- 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, Final Report. U.S. Army Corps of Engineers Contract DACW 45-80-C-0185.

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- Water Rights, 2022a. Observation Well Data, SD DANR-Water Rights Program, Joe Foss Bldg, Pierre, SD.
- Water Rights, 2022b. Water Right/Permit Files, SD DANR-Water Rights Program, Joe Foss Bldg, Pierre, SD.
- Water Rights, 2022c. Well Completion Reports, SD DANR-Water Rights Program, Joe Foss Bldg, Pierre, SD.
- Water Rights, 2022d. County Files, SD DANR-Water Rights Program, Joe Foss Bldg, Pierre, SD.

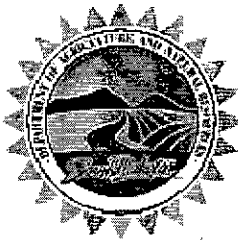
## Schlaak, Karen

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**From:** Schlaak, Karen  
**Sent:** Monday, March 28, 2022 12:53 PM  
**To:** knudsonmasonry@gmail.com  
**Subject:** Water Permit Application No. 8588-3  
**Attachments:** 8588-3\_rec.pdf

Attached is a copy of the report, chief engineer recommendation and information regarding the public notice for your water permit application. As stated in the letter, please contact the paper(s) as soon as possible to authorize publication and arrange for payment. This information is being mailed to you today.

*Karen Schlaak*  
DANR - Water Rights Program  
(605) 773-3352  
Website: <https://danr.sd.gov>



# Affidavit of Publication

STATE OF SOUTH DAKOTA  
COUNTY OF LINCOLN

**TERESA ZOMER**

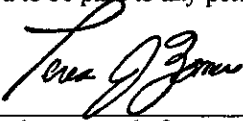
being first duly sworn on his oath says; that the Sioux Valley News is a legal weekly newspaper of general circulation as required by South Dakota Code of Nineteen Hundred Thirty-Nine, and any acts amendatory thereto, printed and published by the Sioux Valley News, Inc., in Canton, in said county and State, and has been such legal newspaper during the time hereinafter mentioned; that he is and during all of said time was publisher of said newspaper and has personal knowledge of the facts stated in this affidavit; that the advertisement headed:

**T & D Farms--  
Notice of Application**

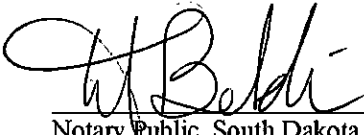
a printed copy of which is hereto attached, was printed and published in said newspaper for ONE successive week(s) upon the following dates, to-wit:

**April 7, 2022**

that the full amount of the fees charged for publishing the same to-wit: the sum of \$41.05 inures solely to the benefit of the publishers of said newspaper; that no agreement or understanding for any division of this sum has been made with any other person; and that no part of said sum has been agreed to be paid to any person whomsoever.



Ascribed and sworn to before me this 7th day of  
**April, 2022**



Notary Public, South Dakota

(Seal)



My Commission Expires  
January 12, 2024

RECEIVED

APR 14 2022

WATER RIGHTS  
PROGRAM

**NOTICE OF APPLICATION NO.  
8588-3 to Appropriate Water**

Notice is given that T & D Farms, 525 Broadway, Centerville SD 57014 has filed an application for a water permit to appropriate 1.78 cubic feet of water per second from one well to be completed into the Upper Vermillion/South Aquifer (approximately 129 feet deep) located near the center of the NE1/4 section 30 for irrigation of 160 acres located in the NE1/4 section 30; all in T96N-R51W. This site is located approximately two miles east of Centerville SD.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8588-3 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 April 18, 2022.

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 April 18, 2022.

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 in the Sioux Valley News on April 7, 2022 at the total approximate cost of \$41.05.

# Argus Leader

P.O. Box 677349, Dallas, TX 75267-7349

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APR 11 2022

WATER RIGHTS  
PROGRAM

Account No.: 6053517627

Ad No.: 0005194076

PO #: APPLICATION NO. 8588-3

Lines : 154

Ad Total: \$49.93

T & D FARMS  
525 BROADWAY  
CENTERVILLE, SD 57014

**This is not an invoice**

# of Affidavits 1

Account No.: 6053517627

Ad No.: 0005194076

## Argus Leader AFFIDAVIT OF PUBLICATION

**State of Wisconsin**

**County of Brown**

I being duly sworn, says: That The Argus Leader is, and during all the times hereinafter mentioned was, a daily legal newspaper published at Sioux Falls, Minnehaha County, South Dakota; that affiant is and during all of said times, was an employee of the publisher of such newspaper and has personal knowledge of the facts stated in this affidavit; that the notice, order or advertisement, a printed copy of which is hereto attached, was published in said newspaper issue(s) :

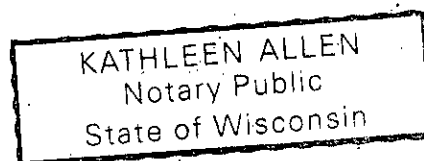
Thursday, April 7, 2022

Sworn to and subscribed before me this 7 day of April, 2022.

Legal Clerk

Notary Public, State of Wisconsin, County of Brown

My Commission expires



NOTICE OF APPLICA-  
TION NO. 8588-3 to Appra-  
pate Water

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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 April 18, 2022.

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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 \$49.93.  
5194076 Apr. 7, 2022

## Schlaak, Karen

---

**From:** Schlaak, Karen  
**Sent:** Monday, March 28, 2022 11:11 AM  
**To:** 'legals@argusleader.com'  
**Subject:** 8588-3, T & D Farms  
**Attachments:** 8588-3public.short\_final.docx; FORM8.FRM.doc

Attached is a notice to be published on April 7, 2022.

T & D Farms, c/o Troy Knutson, 525 Broadway, Centerville SD 57014 (605 351-7627) 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, Pierre SD 57501.

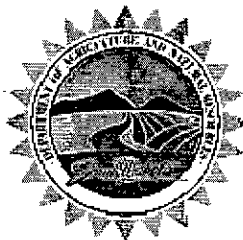
Let me know if you have questions. Please acknowledge receipt of this email.

Karen Schlaak

DANR - Water Rights Program

(605) 773-3352

Website: <https://danr.sd.gov>



## Schlaak, Karen

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**From:** Schlaak, Karen  
**Sent:** Monday, March 28, 2022 11:10 AM  
**To:** siouxvalleynews@vastbb.net  
**Subject:** 8588-3, T & D Farms  
**Attachments:** 8588-3public.short\_final.docx; FORM8.FRM.doc

Attached is a notice to be published on April 7, 2022.

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

Karen Schlaak

DANR - Water Rights Program

(605) 773-3352

Website: <https://danr.sd.gov>





**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.**

March 28, 2022

T & D Farms  
c/o Troy Knutson  
525 Broadway  
Centerville SD 57014

Dear Mr. Knutson:

Water Permit Application No. 8588-3 for irrigation use have been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice has been sent to the Sioux Valley News printed at Canton (Ph # 605 296-3181) and the Argus Leader printed at Sioux Falls (Ph # 605 331-2345). 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,

*Karen Schlaak*

Karen Schlaak  
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. 8588-3 to Appropriate Water

Notice is given that T & D Farms, 525 Broadway, Centerville SD 57014 has filed an application for a water permit to appropriate 1.78 cubic feet of water per second from one well to be completed into the Upper Vermillion:South Aquifer (approximately 129 feet deep) located near the center of the NE1/4 section 30 for irrigation of 160 acres located in the NE1/4 section 30; all in T96N-R51W. This site is located approximately two miles east of Centerville SD.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8588-3 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 April 18, 2022.

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 April 18, 2022.

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\_



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danr.sd.gov

APR 28 2022

T & D Farms  
c/o Troy Knutson  
525 Broadway  
Centerville SD 57014

Dear Mr. Knutson:

Enclosed is Water Permit No. 8588-3 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

8588-3

SD EForm - 1621LD V1

## SOUTH DAKOTA WATER WELL COMPLETION REPORT

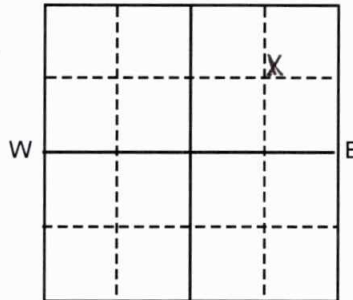
11-02

Location NE ¼ NE ¼ Sec 30 Twp 96 Rg 51

County LINCOLN

North

Please mark well location with an "X"



Well Completion Date

June 28, 2022

1 Mile

Distance to nearest potential pollution source (septic tank, abandoned well, feed lot, etc.)?  
1,000.0 ft. from CREEK (identify source)

## PROPOSED USE:

☐ Domestic/Stock ☐ Municipal ☐ Business ☐ Test holes  
☒ Irrigation ☐ Industrial ☐ Institutional ☐ Monitoring well

## METHOD OF DRILLING:

MUD ROTARY

## CASING DATA:

☐ Steel ☒ Plastic ☐ Other

If other describe

| PIPEWEIGHT | DIAMETER | FROM   | TO      | HOLE DIAMETER |
|------------|----------|--------|---------|---------------|
| LB/FT      | 12.00 IN | 0.0 FT | 88.0 FT | 17.75 IN      |
| LB/FT      | IN       | FT     | FT      | IN            |
| LB/FT      | IN       | FT     | FT      | IN            |

## GROUTING DATA:

| Grout Type | No. of Sacks | Grout Weight | From   | To      |
|------------|--------------|--------------|--------|---------|
| BENTONITE  | 28           | Lb/gal       | 0.0 Ft | 83.0 Ft |
|            |              | Lb/gal       | Ft     | Ft      |

Describe grouting procedure  
Tremie piped

## SCREEN:

☐ Perforated pipe ☒ Manufactured

Diameter 12.00 Inches Length 40.0 Feet

Material PVC/Stainless steel

Slot Size .50/.80 Set From 88.0 Feet to 128.0 Feet

Other information 20' of PVC and 20' of Stainless steel

WAS A PACKER OR SEAL USED? ☐ Yes ☒ No

If so, what material?

Describe packer(s) and location

## DISINFECTION: Was well disinfected upon completion?

☒ Yes, How? Chlorinated

Lab to which water quality sample sent for analysis

Well Owner: TROY KNUDSON

Business Name: T &amp; D FARMS

Address: 525 BROADWAY

City, State, Zip: CENTERVILLE SD 57014

## WELL LOG:

| FORMATION  | DEPTH |     |
|------------|-------|-----|
|            | FROM  | TO  |
| TOP SOIL   | 0     | 2   |
| CLAY BROWN | 2     | 37  |
| CLAY GREY  | 37    | 59  |
| GRAVEL     | 59    | 127 |
| CLAY       | 127   | 140 |
|            |       |     |
|            |       |     |
|            |       |     |

STATIC WATER LEVEL 67.0 FEET

If flowing: closed in pressure PSI

GPM flow through Inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other

Reduced flow rate GPM

Can well be completely shut in?

## WELL TEST DATA:

☒ Pumped Describe:☐ Bailed☐ Other

Pumping Level Below Land Surface

100.0 Ft. After 2.0 Hrs. pumped 700.0 GPM

Ft. After Hrs. pumped GPM

If pump installed, pump rate: GPM

## REMARKS

GPS N 43 6' 32.3" W 96 54' 34.6"

This well was drilled under license # 475 and this report is true and accurate.

Drilling firm: THEIN WELL COMPANY, INC

Signature of License Representative:

RECEIVED

SEP 27 2022

Signature of Well Owner or Equitable Property Holder:

OFFICE OF WATER

Date:

# Troy Knudson - T&D Farms

12" Irrigation Well  
Lincoln County - Sec 30

## Legend

-  Feature 1
-  Knudson Masonry

N 43° 6' 32.3" w 96° 54' 34.6"  128' 12" Irrigation well



DEPARTMENT of AGRICULTURE  
and NATURAL RESOURCES  
JOE FOSS BUILDING  
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PIERRE SD 57501-3182  
danr.sd.gov

January 14, 2025

**NOTICE**

TO: T & D FARMS, TROY KNUTSON, 525 BROADWAY ST, CENTERVILLE, SD 57014

FROM: Ron Duvall, Engineer III  
for Eric Gronlund, Chief Engineer  
Water Rights Program

SUBJECT: Reporting Requirement for 2024 Irrigation Questionnaire(s)

Our records indicate your 2024 Irrigation Questionnaire(s) has not been submitted for Permit No(s) 8588-3. The request for the Questionnaire was dated October 23, 2024. The Water Management Board has directed owners of water permits who have not submitted the 2024 Irrigation Questionnaire(s) be given notice of permit violation and a hearing to be held by the Board. The hearing is to determine what action is to be taken for violation of Water Permit No(s) 8588-3 qualification:

"This permit is approved subject to the Irrigation Water Use Questionnaire being submitted each year."

The hearing will be held on **Wednesday, March 5, 2025, at 9:30 am (Central Time)** in the Floyd Matthew Training Center, Joe Foss Building, 523 E Capitol Avenue, Pierre, SD and will be conducted pursuant to SDCL 46-1-12, 46-1-14, 46-2-9, 46-2-11 and 46-2-17. These are contested case hearings pursuant to Chapter 1-26. According to SDCL 46-1-12, the Board may suspend a permit for a period of up to one year for the first violation of a permit qualification or up to three years for a second violation or cancel a permit for a third violation. Following the hearing, the Water Management Board can:

1. Suspend or cancel Permit No(s) 8588-3 in accordance with applicable provisions of SDCL 46-1-12;
2. Postpone any action; or
3. Take no action.

The hearing is an adversary proceeding. The permit owner has the right to be present or to be represented by a lawyer. These and other due process rights will be forfeited if they are not exercised. Decisions of the Board may be appealed to the Circuit Court and the State Supreme Court as provided by law.

If the questionnaire(s) is (are) received in this office before the **March 5, 2025**, hearing you will no longer be in violation of your permit and your name will be removed from the Board agenda. Enclosed are additional questionnaire(s) for your use. If you have questions or need assistance, please contact Amanda Dewell at (605) 773-3352 or email at [amanda.dewell@state.sd.us](mailto:amanda.dewell@state.sd.us). **If you prefer, you can complete the questionnaire online at the following link: <https://danr.sd.gov/iq> using this password: BUEQET**

**NOTE:** Please contact the Water Rights Program, Joe Foss Building, 523 E Capitol, Pierre, SD (605-773-3352) to assure access to the meeting room for the handicapped or to obtain an interpreter for the hearing impaired.



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PIERRE SD 57501-3182  
danr.sd.gov

January 27, 2025

8588-3

T & D Farms  
c/o Troy Knutson  
525 Broadway St  
Centerville SD 57014

Dear Mr. Knutson:

I am writing to acknowledge the receipt of your 2024 irrigation questionnaire(s).

You may disregard the January 14, 2025, "Notice" concerning the reporting requirements for Water Permit No(s). 8588-3. The information was received prior to the March 5, 2025, Water Management Board meeting and the above listed permit number(s) have been removed from the agenda.

If you have any questions or concerns, please contact me.

Sincerely,

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