

WATER PERMIT NO. 8452-3

Name of Applicant: TJ Farms LLC

Address: c/o Jeff Popham, 44440 168th St, Henry SD 57243

Phone: 605 881-2978

Amount of Water Claimed: 0.10 cfs

Total Acres: NA

Source of Water Supply: groundwater (2 existing wells)

Water to be used for: commercial use

County: Codington

Type of Waste Disposal System:

Location: 7 miles east and 5 miles north of Henry

PRIORITY

Date Received: 10-6-20

Application/License Fee: \$ 300

Corrected Application Received:

Period of Annual Use: January 1 – December 31

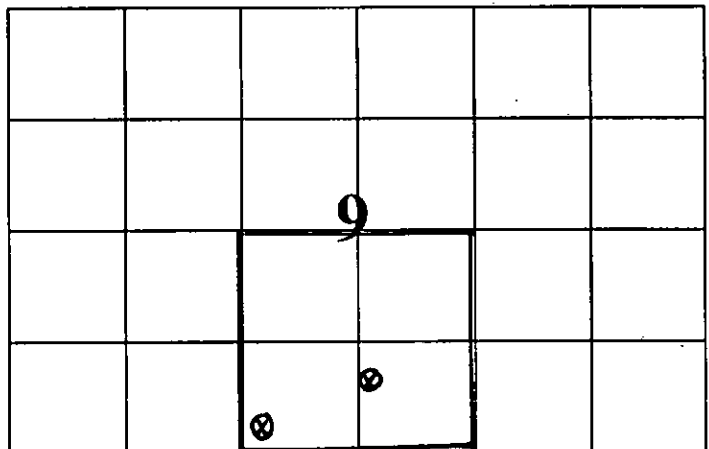
Remarks: feedlot operation

Diversion Point: SW 1/4 SE 1/4 and SE 1/4 SW 1/4

Sec 9-T117N-R54W

Feedlot Location: W 1/2 SE 1/4, E 1/2 SW 1/4 Sec

9-T117N-R54W



Depth of Well: 120 – 140 feet deep

Well Driller:

Remarks:

Type of Map: aerial

Prepared by:

Reviewed and the Number Assigned on: 10-6-20

By: Karen Schlaak

Notice of Hearing - date to intervene: _____

**SOUTH DAKOTA
WATER PERMIT NO. 8452-3**

Date of first receipt of application October 6, 2020.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 8452-3 to TJ Farms LLC, c/o Jeff Popham, 44440 168th St, Henry SD 57243 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. 8452-3 appropriates 67.2 acre-feet of water annually at a maximum pump rate of 0.10 cubic feet of water per second from two existing wells completed into the Prairie Coteau Aquifer (120 - 140 feet deep) located in the SW 1/4 SE 1/4 and the SE 1/4 SW 1/4 Section 9 for commercial use in a feedlot operation located in the W 1/2 SE 1/4, E 1/2 SW 1/4 Section 9; all in T117N-R54W. This site is located approximately 7 miles east and 5 miles north of Henry SD.
2. The water appropriated shall be used for the purpose of commercial use and may not exceed the amount of water needed for beneficial use.
3. The water is to be used during the following described annual period: January 1 – December 31.
4. The date of approval of Permit No. 8452-3 is December 28, 2020.
5. The date from which applicant may claim right is October 6, 2020.
6. One-fifth of the construction is to be completed on or before June 28, 2023.
7. All construction is to be completed on or before December 28, 2025.
8. Water is to be put to beneficial use on or before December 28, 2029.
9. 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 Permit No. 8452-3 will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner, under this Permit shall control withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. Water Permit No. 8452-3 is subject to compliance with requirements of the Department's Water Pollution Control Permit issued pursuant to SDCL 34A-2-36 or 34A-2-36.2 or 34A-2-112 or 34A-2-124 for concentrated animal feeding operations.

(continued)

3. Water Permit No. 8452-3 is subject to compliance with all existing and applicable Water Management Board Rules including but not limited to:
 - a. Chapter 74:54:01 Ground Water Quality Standards,
 - b. Chapter 74:54:02 Ground Water Discharge Permit,
 - c. Chapter 74:51:01 Surface Water Quality Standards,
 - d. Chapter 74:51:02 Uses Assigned to Lakes,
 - e. Chapter 74:51:03 Uses Assigned to Streams, and
 - f. Chapter 74:52:01 through 74:52:11 Surface Water Discharge Provisions
4. The Permit holder shall report to the Chief Engineer annually the amount of water withdrawn from the Prairie Coteau aquifer.
5. Water Permit No. 8452-3 authorizes a total annual diversion of 67.2 acre-feet of water from the Prairie Coteau aquifer.

WATER MANAGEMENT BOARD

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

JAN 19 2021

date



PAID

OCT -6 2020

Ck# 5033

Mail to: DENR - Water Rights 523 E Capitol Ave Pierre, SD 57501-3182 ph. (605) 773-3352	No. <u>8452-3</u>	(office use only) Hydrologic Unit <u>10170201</u>
	Basin <u>Sioux River</u>	
	Newspaper <u>Public Opinion</u>	

Application For Permit To Appropriate Water Within The State Of South Dakota

Check use(s) of water:

☐ Municipal	☐ Water Distribution System	☐ Recreational	☐ Institutional
☐ Rural Water System	☒ Commercial	☐ Fish & Wildlife	☐ Geothermal
☐ Domestic (over 18 gpm)	☐ Industrial	☐ Other	

Type of Application:
(check one)

☒ New	☐ Vested Right (Use predates Mar 2, 1955)	☐ Future Use Reservation
☐ Place to Beneficial Use Water Reserved by Future Use Permit No. _____		
☐ Amendment/Correction to Permit No. _____		

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

- Name to Appear on Water Permit TJ FARMS, LLC
Mailing Address 44440 168TH STREET HENRY SD 57243
(Address) (City) (State) (Zip Code)
Phone N/A Mobile (605) 881-2978 Email tspopham5@gmail.com
- Amount of water claimed 0.1 *CFS or 45 **GPM and 67.2 ***AF or _____ Gallons
Flow rate and volume are both required. (*Cubic Feet per Second) (**Gallons per Minute) (***)Acre Feet - storage capacity of dam/dugout or annual use)
- Source of water supply 2 WELLS IN PRAIRIE COTEAU AQUIFER
- Location of point of diversion 2 WELLS IN SW 1/4 of SE 1/4 and SE 1/4 of SW 1/4 Sec. 9, T117N R54W County CODINGTON
(example - 3 wells in SW 1/4 NE 1/4 section 12-T104N-R53W)
If not a public water supply (e.g. municipal), will water be used outside of the area described above? ☐ Yes ☒ No
If "Yes," where will water be used? feedlot location: W 1/2 SE 1/4, E 1/2 SW 1/4 Sec 9-T117N-R54W
(example - NW 1/4 section 12-T104N-R53W)
- County or counties where water will be used CODINGTON
- Annual period during which water is to be used JANUARY 1 - DECEMBER 31
- Give a description of the project. When available include any preliminary engineering report or other reports or information that will help explain the project. (Attach sheet if more space is needed)

OBTAIN WATER RIGHT FOR WITHDRAW FROM TWO EXISTING WELLS SUPPLYING STOCK WATERING FOR EXISTING FEEDLOT PROPOSING TO OBTAIN LARGE CAFO PERMIT.

RECEIVED

OCT 06 2020

WATER RIGHTS PROGRAM

I, [Signature] 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 ____ Have test holes been drilled ☐ Yes ☐ No Drilled by ____
(if yes, please provide copies of logs)
- b) If existing wells, how many 2 Provide copy of log(s), if available. Drilled by STADHEIM WELL DRILLING, BULLIS BROTHERS

For either Existing or Proposed Wells:

- c) Well Depth (required) 120-140 Depth to Top of Water Bearing Material ~90 Depth to Water from Surface 40-50
- d) Distance to nearest domestic well on applicant's property SAME WELL 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

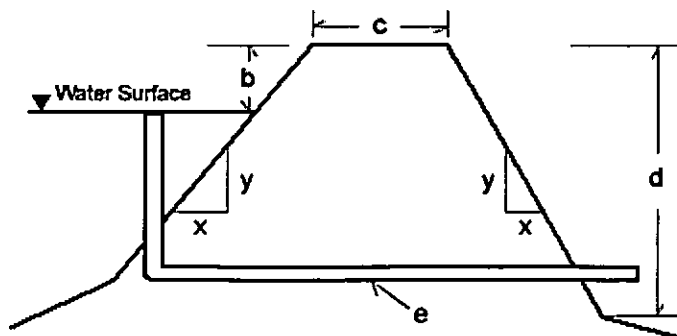
3. Dugout Information

- 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:



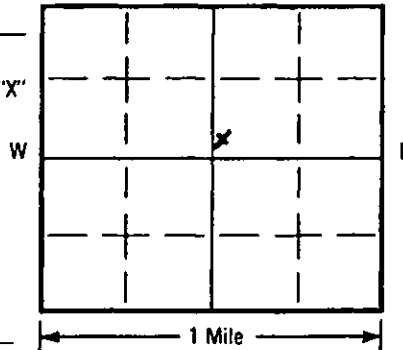
- b) Freeboard ____
- c) Crest Width ____
Crest Length ____
- d) Height ____
- e) Primary Outlet Capacity ____
If pipe, diameter ____
- f) Secondary Spillway Capacity ____
Spillway Width ____
- g) X & Y Slope (e.g. 3 to 1 is a typical slope)
Upstream ____
Downstream ____
- h) Surface Area of Impoundment ____
- i) Storage ____ Acre Feet
- j) Drainage Area Above Dam ____ Acres

SOUTH DAKOTA WATER WELL COMPLETION REPORT

07-92

Location SW 1/4 SE 1/4 Sec 9 Twp 117N Rg 54W
 County Codington

Please mark well location with an "X"



Well Completion Date

5-31-05

LOCATION:

Distance from nearest potential pollution source (septic tank, abandoned well, feed lot, etc.)? 100 ft. from P2STUR (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
SPR21 LB/FT 5 IN 0 FT 101 FT 7 1/8 IN
 _____ LB/FT _____ IN _____ FT _____ FT _____ IN
 _____ LB/FT _____ IN _____ FT _____ FT _____ IN

GROUTING DATA

Grout Type Cement No. of Sacks 9 Grout Weight _____ lb./gal From 0 ft To 60 ft
 _____ lb./gal _____ ft _____ ft

Describe grouting procedure Pressure Grouted
Through Tremie Pipe

SCREEN: ☐ Perforated pipe ☒ ManufacturedDiameter 5 IN Length 20 FEETMaterial PlasticSlot Size .016 Set From 101 Feet to 121 Feet

Other information _____

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: Circulated
Chlorine
before + during
Gravel Packing

Laboratory sent to for water
 quality analysis

Well Owner: Jeff PophamBusiness Name: 44440 168th STAddress: Henry, S.D. 57243

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
<u>Top Soil</u>	<u>0</u>	<u>1 1/2</u>
<u>Dark Brown Clay (Firm)</u>	<u>1 1/2</u>	<u>6 1/2</u>
<u>Yellow Clay (Firm)</u>	<u>6 1/2</u>	<u>30</u>
<u>Blue Clay (Firm)</u>	<u>30</u>	<u>56</u>
<u>Soft Blue Clay w/</u>		
<u>Thin Gravel lenses</u>	<u>56</u>	<u>67</u>
<u>Coarse Gray Gravel</u>	<u>67</u>	<u>90</u>
<u>Fine Sand w/ Clay lenses</u>	<u>90</u>	<u>114</u>
<u>med Gray Sand</u>	<u>114</u>	<u>121</u>
<u>Blue Clay (Firm)</u>	<u>121</u>	<u>125</u>

STATIC WATER LEVEL 40 Feet

If flowing: closed in pressure _____ PSI

GPM flow _____ through _____ inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other _____

Reduced Flowrate _____ GPM

Can well be completely shut in? _____

WELL TEST DATA:

☐ PumpedDescribe: Developed w/Air☐ BailedGood☐ Other _____

Pumping Level Below Land Surface

_____ ft. After _____ Hrs. pumped _____ GPM

_____ ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate _____ GPM

REMARKS

RECEIVED

FEB 16 2006

WATER RIGHTS
PROGRAMThis well was drilled under license # 4

And this report is true and accurate.

Drilling firm Bullis Bros

Signature of License Representative:

Se Roy Bullis

Signature of Well Owner or Equitable Property Holder:

Jeff Popham
 Date: 5-31-05

2-31-06

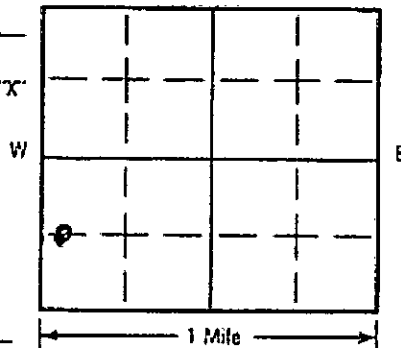
SOUTH DAKOTA WATER WELL COMPLETION REPORT

07-92

Location 1/4 SW Sec 9 Twp 117N Rg 54
County Codington North

Please mark well location with an "X"

Well Completion Date

7-18-97

LOCATION:

Distance from nearest potential pollution source (septic tank, abandoned well, feed lot, etc.)? 160 ft. from Pasture (identify source).

PROPOSED USE:

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

METHOD OF DRILLING:

RotaryCASING DATA: ☐ Steel ☒ Plastic ☐ Other

If other describe _____

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
<u>250</u> LB/FT	<u>5</u> IN	<u>0</u> FT	<u>140</u> FT	<u>9</u> IN
_____ LB/FT	_____ IN	_____ FT	_____ FT	_____ IN
_____ LB/FT	_____ IN	_____ FT	_____ FT	_____ IN

GROUTING DATA

Grout Type	No. of Sacks	Grout Weight	From	To
<u>Cement</u>	<u>28</u>	_____ lb./gal	<u>8</u> ft	<u>120</u> ft
_____	_____	_____ lb./gal	_____ ft	_____ ft

Describe grouting procedure Tree line Thick AS
could Be PumpedSCREEN: ☐ Perforated pipe ☒ ManufacturedDiameter 5 IN Length 10 FEETMaterial Plastic Extra OpeningSlot Size .30 Set From 130 Feet to 140 Feet

Other information _____

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: Clorox
☐ NO, Why Not? During Drilling

Laboratory sent to for water quality analysis

NOWell Owner: Jeff PophamBusiness Name: NONEAddress: 613 - 8th St NW
Watertown, SD 57201

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
<u>Black Dirt</u>	<u>0</u>	<u>1</u>
<u>Sand</u>	<u>1</u>	<u>3</u>
<u>Yellow Clay</u>	<u>3</u>	<u>25</u>
<u>Blue Clay</u>	<u>25</u>	<u>72</u>
<u>Sand</u>	<u>72</u>	<u>91</u>
<u>Coarse Gravel</u>	<u>91</u>	<u>139</u>

STATIC WATER LEVEL 49 Feet

If flowing: closed in pressure _____ PSI

GPM flow _____ through _____ Inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other _____

Reduced Flowrate _____ GPM

Can well be completely shut in? _____

WELL TEST DATA:

☒ Pumped Describe: Air☐ Bailed _____☐ Other _____

Pumping Level Below Land Surface

49 ft. After 6-5 Hrs. pumped 200 GPM

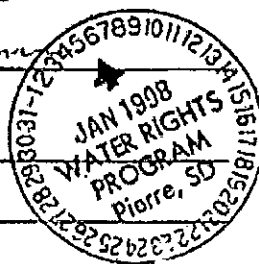
_____ ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate 15 GPMREMARKS NO IRON 79 Grain HardThis well was drilled under license # 414

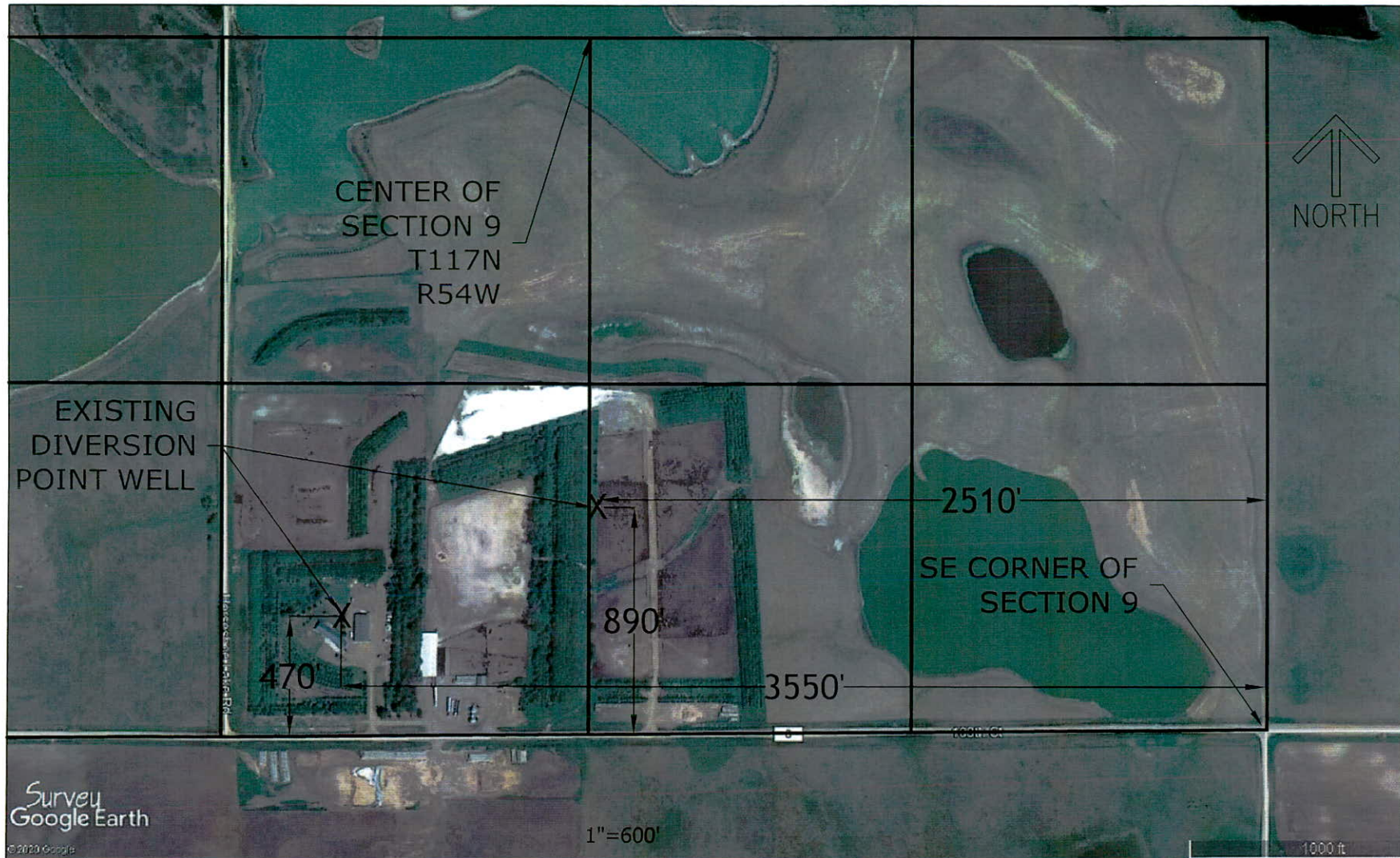
And this report is true and accurate.

Drilling firm Stadler's Well DrillingSignature of License Representative: Harlan Stadler

Signature of Well Owner or Equitable Property Holder: _____

Date: 1-3-98

TJ FARMS INC. DIVERSION POINT WELLS



RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date October 6, 2020

RECEIVED OF TJ Farms, LLC 44440 168th Street Henry SD 57243

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

Fee for Application for Permit No. <u>8452-3</u> to Appropriate Water, to construct and to put water to beneficial use	\$100.00
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>8452-3</u>	\$200.00
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	\$300.00

By Eric Gronlund
Chief Engineer

VM

Schlaak, Karen

From: Schlaak, Karen
Sent: Tuesday, October 6, 2020 9:45 AM
To: brian@dakotaenv.com
Subject: Water Permit Application for TJ Farms LLC

Brian,

As I said in our phone call this morning, I need to know the extent of the location of the feedlot area.

From the map, it appears to include the SW ¼ SE ¼ and the SE ¼ SW ¼ Section 9-T117-R54W . Didn't know if the NE ¼ SW1/4 Section 9 or/and the NE ¼ NW1/4 Section 16 should be included.

Let me know. Thanks for our help.

Karen Schlaak

Water Rights Program
(605) 773-3352



DENR
SOUTH DAKOTA

Water Rights Program - File Documentation

NAME: Brian Friedrichsen, Dakota Environmental

ADDRESS:

DATE: 10-6-20

RE: Application for TJ Farms LLC

COMMENTS:

Brian called regarding my email and said that the feedlot may possibly be extended into the NE 1/4 SW 1/4, NW 1/4 SE 1/4 Section 9. He said I should include that on the application.

Karen Schlaak

Karen Schlaak
Water Rights Program



OFFICE OF THE SECRETARY OF STATE

STEVEN J. BARNETT, SECRETARY OF STATE

JASON LUTZ, DEPUTY SECRETARY OF STATE

Filing Information

Name: **TJ Farms, L.L.C.**

General Information

SOS Business ID DL037165
Filing Type: Limited Liability Company - Domestic
01/24/2014
Delayed Effective Date: 01/24/2014 12:00 AM
Status: Good Standing
Duration Term: Perpetual
Managed By: Member-Managed

Registered Agent Address

JEFF POPHAM
44440 168TH ST
WATERTOWN, SD 57201

Principal Address

44440 168TH ST
WATERTOWN, SD 57201

The following document(s) was/were filed in this office on the date(s) indicated below:

Date Filed	Filing Description	Image #
11/20/2019	2020 Annual Report	B0119-9326
12/18/2018	2019 Annual Report	B0083-5772
12/06/2017	2018 Annual Report	B0046-7994
02/01/2017	2017 Annual Report	B0022-9724
04/05/2016	2016 Annual Report	
03/31/2015	2015 Annual Report	
01/24/2014	Initial Filing (Delayed Date 01/24/2014)	DL037165



DENR
SOUTH DAKOTA

**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
denr.sd.gov

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 8452-3, TJ Farms LLC**

Pursuant to SDCL 46-2A-2, the following is the recommendation of the Chief Engineer, Water Rights Program, Department of Environment and Natural Resources concerning Water Permit Application No. 8452-3, TJ Farms LLC, c/o Jeff Popham, 44440 168th Street, Henry SD 57243.

The Chief Engineer is recommending APPROVAL of Application No. 8452-3 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 rights, 3) the proposed use is a beneficial use and, 4) it is in the public interest with the following qualifications:

1. The wells approved under Water Permit No. 8452-3 will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner, under this Permit shall control withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. Water Permit No. 8452-3 is subject to compliance with requirements of the Department's Water Pollution Control Permit issued pursuant to SDCL 34A-2-36 or 34A-2-36.2 or 34A-2-112 or 34A-2-124 for concentrated animal feeding operations.
3. Water Permit No. 8452-3 is subject to compliance with all existing and applicable Water Management Board Rules including but not limited to:
 - a) Chapter 74:54:01 Ground Water Quality Standards,
 - b) Chapter 74:54:02 Ground Water Discharge Permit,
 - c) Chapter 74:51:01 Surface Water Quality Standards,
 - d) Chapter 74:51:02 Uses Assigned to Lakes,
 - e) Chapter 74:51:03 Uses Assigned to Streams, and
 - f) Chapter 74:52:01 through 74:52:11 Surface Water Discharge Provisions
4. The Permit holder shall report to the Chief Engineer annually the amount of water withdrawn from the Prairie Coteau aquifer.
5. Water Permit No. 8452-3 authorizes a total annual diversion of 67.2 acre-feet of water from the Prairie Coteau aquifer.

See report on application for additional information.

Eric Gronlund, Chief Engineer
December 8, 2020

Report to the Chief Engineer
Water Permit Application No. 8452-3
TJ Farms
December 4, 2020

Water Permit Application No. 8452-3 proposes to appropriate up to 67.2 acre-feet of water per year at a maximum instantaneous diversion rate of 0.10 cubic feet per second (cfs) from the Prairie Coteau aquifer. The diversion points are two existing wells (120-140 feet deep) located in the SW $\frac{1}{4}$ SE $\frac{1}{4}$ and the SE $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 9-T117N-R54W. The proposed use for the water is for commercial use in a feedlot operation located in W $\frac{1}{2}$ SE $\frac{1}{4}$, E $\frac{1}{2}$ SW $\frac{1}{4}$ Section 9-T117N-R54W approximately 5 miles north and 7 miles east of Henry, SD in Codington County.

Aquifer: Prairie Coteau (PCO)

Hydrogeologic Information and Aquifer Characteristics

The Prairie Coteau aquifer is the name used by the SD DENR-Water Rights Program and accepted by the Water Management Board for discontinuous intermediate aquifers located on the Coteau des Prairies in northeastern South Dakota that are not a part of another named aquifer (Water Rights, 2020a, 2020b, and 2020c). Intermediate aquifer is a term used to describe bodies of glacial outwash (sand and gravel) that do not typically include surficial (at or very near land surface) or basal (in contact with or very near bedrock) aquifers, such as the Big Sioux and Altamont aquifers, respectively (Hedges et al., 1982). These discontinuous outwash deposits can be in lenses separated by layers of glacial till (vertical separation) as well as being geographically separated (horizontal separation) (SDGS, 2020; Water Rights, 2020b). In Codington County, the Prairie Coteau aquifer can be found anywhere from 21 to 380 feet below land surface depending on location (Hansen, 1990). Hedges et al. (1982) estimates that discontinuous deposits of the Prairie Coteau aquifer underlie as least 23,700 acres of Codington County.

Two well completion reports were submitted with this application. The report for the well completed July 18, 1997, reported sand from 72 to 91 feet below grade and coarse gravel from 91 to 139 feet below grade. Based on the well completion report, this well was screened into the coarse gravel and had a static water level at the time of completion of 49 feet below grade. The report for the well completed May 31, 2005, reported gray coarse gravel from 67 to 90 feet below grade, fine sand with clay lenses from 90 to 114 feet below grade, and gray medium sand from 114 to 121 feet below grade. Based on the well completion report, the screen for the well was set from 101 to 121 feet below grade, and the well had a static water level at the time of completion of 49 feet below grade. Thickness of the aquifer materials at the two wells is 67 feet and 54 feet, respectively. The aquifer is under confined conditions at the well locations for this application (Water Rights, 2020c). Based on the well completion reports and the location of the wells, these wells are completed into a portion of the Prairie Coteau aquifer with an approximate elevation range of 1,631 to 1,703 feet above mean sea level at the well locations.

Stonesifer (2013) delineated a portion of the Prairie Coteau aquifer, as part of the review for Water Permit No. 7809-3, that was generally found in the elevation range of 1,640 to 1,710

feet mean sea level. The area delineated by Stonesifer (2013) is shown in Figure 1. Figure 1 also shows the location of the wells for this application. Given the location and elevation range of the aquifer materials for this application, there is a reasonable probability that the wells for this application are completed into the portion of the Prairie Coteau aquifer delineated by Stonesifer (2013). This portion of the Prairie Coteau aquifer is generally 20 to 40 feet thick (Stonesifer, 2013; Water Rights, 2020c). In addition, this portion of the Prairie Coteau aquifer is primarily under confined conditions and the direction of water movement is generally north to south (Stonesifer, 2013). Stonesifer (2013) estimated that this portion of the Prairie Coteau underlies approximately 323,000 acres of Codington, Day, and Clark County, with approximately 99,608 acres of that area in Codington County. Given the direction of water movement and the presence of constrictions in the areal extent of the aquifer both north and west of Codington County, water availability for this portion of the Prairie Coteau aquifer will be analyzed both over the entire delineation and with a localized area made up of just the portion of the aquifer in Codington County.

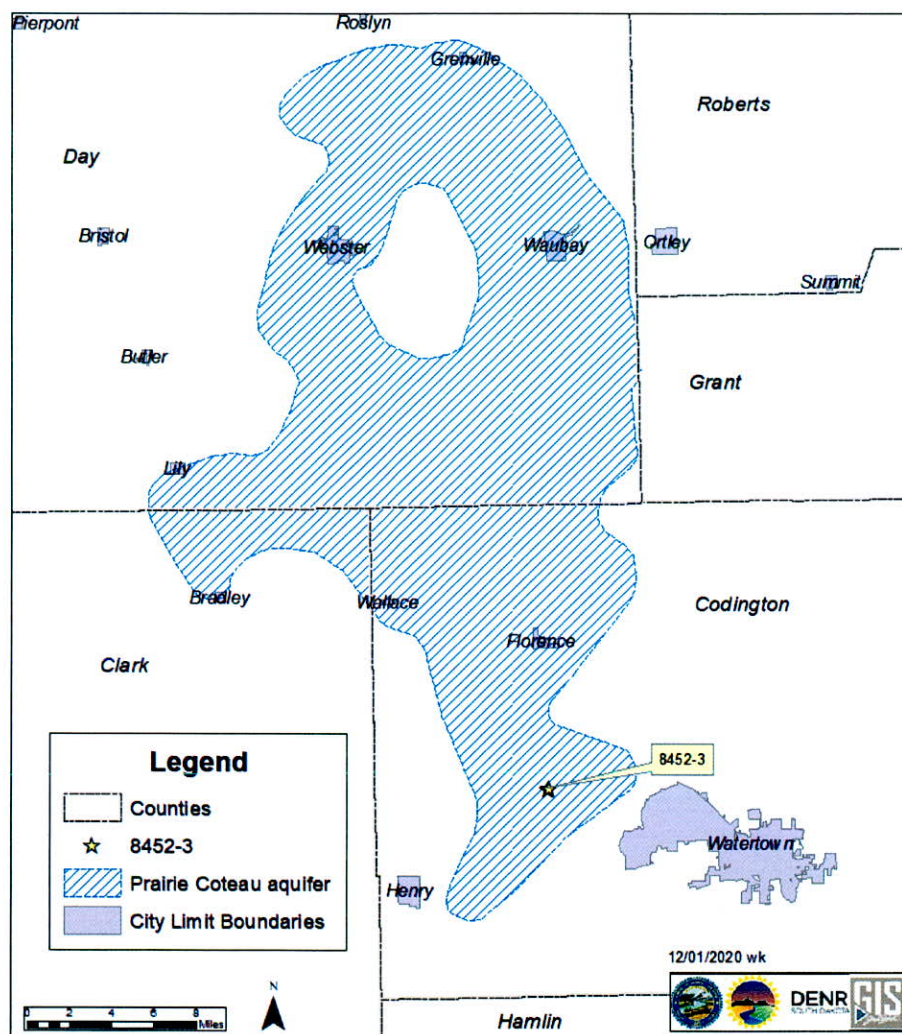


Figure 1: Map of portion of Prairie Coteau aquifer delineated by Stonesifer (2013) and location of the wells for this application (modified from Stonesifer, 2013)

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 there is unappropriated water available for the applicant's proposed use, the proposed diversion can be developed without unlawful impairment of existing rights, and the proposed use is a beneficial use and in the public interest. This report will address the availability of unappropriated water and potential effects on existing rights from the aquifer that are pertinent to this application.

Water Availability

Water Permit Application No. 8452-3 proposes to appropriate water from a portion of the Prairie Coteau aquifer for commercial use in a feedlot operation. The probability of unappropriated water being available from an 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." If the source of the water is older or lower than the Greenhorn Formation and the application is for a water distribution system defined in SDCL 46-1-6 (17), the Board need not consider the recharge/withdrawal issue. This portion of the Prairie Coteau aquifer is not older or lower than the Greenhorn Formation, therefore the withdrawal/recharge issue must be considered.

Hydrologic Budget

Recharge

Recharge to this portion of the Prairie Coteau aquifer likely occurs through infiltration of precipitation, leakage through till, and leakage from adjacent or overlaying outwash deposits where present (Hansen, 1990; Stonesifer, 2013). A recharge rate specific to the portion of the Prairie Coteau aquifer has not been determined (Water Rights, 2020b). For confined aquifers, Hedges et al. (1985) recommended recharge rates of 0.15 to 0.60 inches per year for use by management and development programs. Since this portion of the Prairie Coteau aquifer is primarily a confined aquifer, the recommended recharge range for confined aquifers will be used to examine the hydrologic budget of this portion of the Prairie Coteau aquifer. Using the area estimate by Stonesifer (2013) and the range of recharge from Hedges et al. (1985), the estimated average annual recharge to this portion of the Prairie Coteau aquifer ranges from 4,037 to 16,150 acre-feet per year with the estimated amount to just the Codington County portion of the aquifer ranging from 1,245 to 4,980 acre-feet.

Discharge

Discharge from this portion of the Prairie Coteau aquifer occurs by outflow to underlying basal and bedrock aquifers and well withdrawals (Stonesifer, 2013). Figure 2 and Table 1 show and summarize the water rights/permits currently authorized to appropriate water or reserve water for future use from the Prairie Coteau aquifer located within the extent of the delineation by Stonesifer (2013). In addition, there are well completion reports for domestic use on file with the

Water Rights Program that appear to be completed into this portion of the Prairie Coteau aquifer. Stonesifer (2013) concluded that annual withdrawal due to domestic use is not a significant portion of the hydrologic budget of this portion of the Prairie Coteau aquifer. This is likely due to the presence of rural water systems in the area and the relatively low diversion rates associated with domestic use.

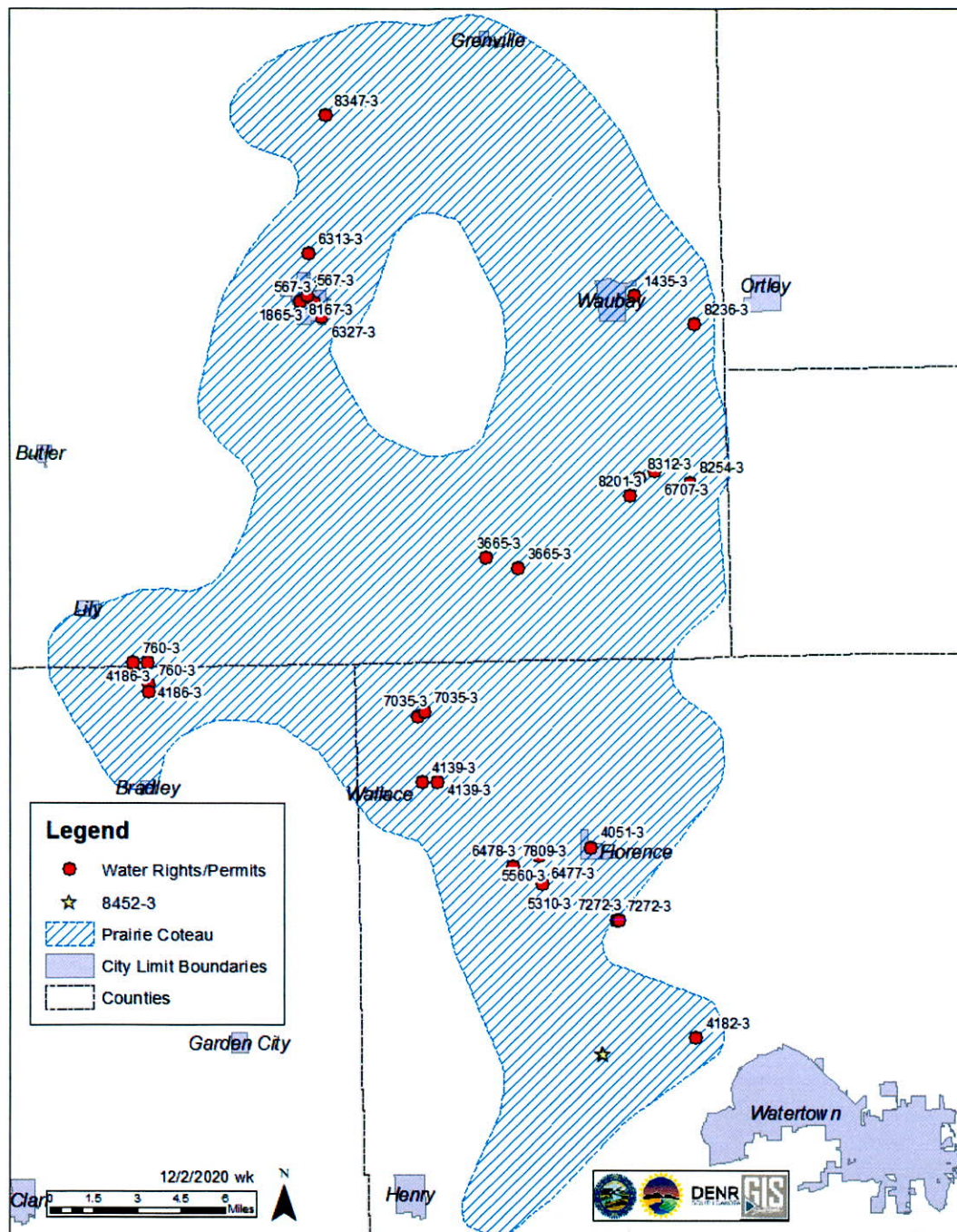


Figure 2: Water rights/permits currently authorized to appropriate water or reserve water for future use from the Prairie Coteau aquifer located within the extent of the delineation by Stonesifer (2013) (Water Rights, 2020b; modified from Stonesifer, 2013)

Table 1: Summary of Water Rights/Permit Shown in Figure 2 (Water Rights, 2020b)

Permit No.	Name	County	Priority Date	Status	Type	Rate (cfs)	Acres	Annual Volume (acre-feet)
4182-3	JABE KAHNKE	CD	09/29/1975	LC	IRR	1.78	132	n/a
4051-3	TOWN OF FLORENCE	CD	10/20/1976	FU	MUN	0	n/a	38
4139-3	CORY RISLOV	CD	09/15/1977	LC	IRR	3.74	262	n/a
5310-3	DELBERT TSCHAKERT	CD	03/13/1989	LC	IRR	1.88	132	n/a
5560-3	DELBERT TSCHAKERT	CD	06/06/1991	LC	IRR	1.88	150	n/a
6477-3	DELBERT TSCHAKERT	CD	03/03/2004	PE	IRR	0	100	n/a
6478-3	DELBERT TSCHAKERT	CD	03/03/2004	PE	IRR	2	260	n/a
7035-3	NATHAN MELAND	CD	05/21/2008	LC	COM & LCO	0.067	n/a	n/a
7272-3	JOHN G MOES	CD	10/04/2011	LC	COM & LCO	0.09	n/a	n/a
7809-3	DELBERT TSCHAKERT	CD	03/14/2013	PE	IRR	0	60	n/a
1016-3	JOE MATTHEWS	CK	01/31/1963	LC	IRR	1.33	114	n/a
4186-3	JOE/MIKE MATTHEWS	CK	11/14/1977	LC	IRR	2	264	n/a
567-3	CITY OF WEBSTER	DA	01/01/1918	LC	MUN	1.34	n/a	n/a
1435-3	CITY OF WAUBAY	DA	01/01/1944	LC	MUN	0.46	n/a	n/a
760-3	JOE MATTHEWS	DA	01/26/1961	LC	IRR	2	167.2	n/a
1865-3	CITY OF WEBSTER	DA	10/23/1970	LC	MUN	0.44	0	n/a
3665-3	FLORENCE DAVIS	DA	02/22/1977	PE	IRR	9	640	n/a
5087-3	LARSON CONCRETE COMPANY	DA	04/04/1986	LC	IND	0.1	n/a	n/a
6313-3	CONSOLIDATED READY MIX	DA	03/20/2002	LC	IND	0.089	n/a	n/a
6327-3	CITY OF WEBSTER	DA	05/10/2002	LC	IRR	0.56	7	n/a
6707-3	PRAIRIE COTEAU RESTORATION	DA	03/24/2006	LC	FWP & DOM	1.11	n/a	n/a
6760-3	DAY COUNTY	DA	10/11/2006	LC	IND	0.022	n/a	n/a
8167-3	WEBSTER AREA SCHOOL DISTRICT	DA	05/28/2015	PE	IRR	0.09	2	n/a
8201-3	KERRY HOLSCHER	DA	02/03/2016	PE	IRR	2.22	240	n/a
8236-3	ARNIE BEISCH	DA	08/24/2016	PE	IRR	2.2	180	n/a
8254-3	DAVID ZUBKE	DA	12/16/2016	PE	IRR	4.46	420	n/a
8312-3	RONALD OLSON	DA	09/05/2017	PE	IRR	1.78	130	n/a
8347-3	LOREN HANSEN	DA	03/23/2018	PE	COM	0.074	n/a	n/a

CD-Codington, DA-Day, CK- Clark, LC- water right, PE- water permit, FU- future use, IRR- irrigation, Mun-municipal, COM-commercial, LCO-livestock confinement operation, FWP-fish and wildlife production, DOM-domestic

A review of the reports for Water Permit Nos. 8167-3, 8201-3, 8236-3, 8254-3, 8312-3, and 8347-3 all indicate that these water permits are completed into separate portions of the Prairie Coteau aquifer than the wells for this application (Water Rights, 2020b). Additionally, the Prairie Coteau delineations done more recently than Stonesifer's (2013) for the aforementioned water permits indicate that Water Right Nos. 567-3, 1435-3, 1865-3, 5087-3, 6313-3, 6327-3, 6707-3, and 6760-3 are also in separate portions of the Prairie Coteau aquifer (Water Rights, 2020b). This leaves the remaining water right/permits (highlighted in Table 1) as being potentially completed into the same portion of the Prairie Coteau aquifer as the wells for this application.

There are 14 water rights/permits potentially completed into the same portion of the Prairie Coteau aquifer as the well for this application. Of these, eleven water rights/permits are for irrigation use, one is a municipal future use permit, and two are for commercial use. Historically, average water use by non-irrigation appropriations limited by instantaneous diversion rate has been less than 60% of full time pumping at the permitted diversion rate. So average annual usage for the two commercial water rights/permit are estimated based on 60% of full time pumping at the permitted diversion rate. Future use permits reserve an amount of water from an aquifer for future municipal development. For purposes of examining the hydrologic budget for an aquifer, the entire future use reservation is assumed to be fully developable. Estimated average annual water use for the non-irrigation water rights/permits is shown in Table 2. There are 2,281.2 acres authorized for

irrigation out of this portion of the Prairie Coteau aquifer of which 1,096 acres are in Codington County. Average reported irrigation pumping for the 11 irrigation water rights/permits is shown in Table 2 (Water Rights, 1980-2020).

Table 2: Estimated appropriative use from this portion of the Prairie Coteau (Water Rights, 2020b; Water Rights, 1980-2020)

Permit No.	Name	County	Status	Type	Rate (cfs)	Acres	Non-irrigation Annual Volume (acre-feet)	Average reported Irrigation use (acre-feet)	Non-irrigation 60% Use
4182-3	JABE KAHNKE	CD	LC	IRR	1.78	132	n/a	57.6	n/a
4051-3	TOWN OF FLORENCE	CD	FU	MUN	0	n/a	38	n/a	n/a
4139-3	CORY RISLOV	CD	LC	IRR	3.74	262	n/a	81.6	n/a
5310-3	DELBERT TSCHAKERT	CD	LC	IRR	1.88	132	n/a	36.5	n/a
5560-3	DELBERT TSCHAKERT	CD	LC	IRR	1.88	150	n/a	14.8	n/a
6477-3	DELBERT TSCHAKERT	CD	PE	IRR	0	100	n/a	1.6	n/a
6478-3	DELBERT TSCHAKERT	CD	PE	IRR	2.0	260	n/a	38.4	n/a
7035-3	NATHAN MELAND	CD	LC	COM & LCO	0.067	n/a	n/a	n/a	29.1
7272-3	JOHN G MOES	CD	LC	COM & LCO	0.09	n/a	n/a	n/a	39.1
7809-3	DELBERT TSCHAKERT	CD	PE	IRR	0	60	n/a	9.2	n/a
CD County Subtotals					11.437	1096.0	38.0	239.8	68.2
1016-3	JOE MATTHEWS	CK	LC	IRR	1.33	114	n/a	79.9	n/a
4186-3	JOE/MIKE MATTHEWS	CK	LC	IRR	2.0	264	n/a	111.3	n/a
760-3	JOE MATTHEWS	DA	LC	IRR	2.0	167.2	n/a	91.0	n/a
3665-3	FLORENCE DAVIS	DA	PE	IRR	9.0	640	n/a	109.0	n/a
Entire Portion of Prairie Coteau Subtotals					25.767	2281.2	38.0	630.9	68.2

Estimate average annual appropriative use from this portion of the Prairie Coteau aquifer is 737 acre-feet per year of which 346 acre-feet per year is in Codington County. This application is requesting proposes to appropriate up to 67.2 acre-feet of water per year. Estimated average annual recharge to this portion of the Prairie Coteau aquifer ranges from 4,037 to 16,150 acre-feet per year with the estimated amount to just the Codington County portion of the aquifer ranging from 1,245 to 4,980 acre-feet. Therefore, there is a reasonable probability that unappropriated water is available for the appropriation requested by this application.

Observation Wells

In determining the availability of unappropriated water for a permit application, Administrative Rule of South Dakota 74:02:05:07 requires the Water Management Board to rely on 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 annual recharge.

The Water Rights Program monitors 60 observation wells completed into various portions of the Prairie Coteau aquifer, of those Stonesifer (2013) identifies 12 that are completed in this portion of the Prairie Coteau aquifer. In general, observation wells monitoring this portion of the Prairie Coteau aquifer show either rising or relatively stable water levels when comparing the start of the period of record to recent water level readings with fluctuations in response to climatic conditions.

Water levels in the observation wells monitoring the aquifer generally rise during wet periods and gradually decline during dry periods or remain relatively stable. This indicates that natural conditions govern the long term water level changes of the aquifer, and recharge to and natural discharge from the aquifer exceeds pumping. Since recharge to and natural discharge from an aquifer can be captured for pumping, there is a reasonable probability that unappropriated water

is available from this portion of the Prairie Coteau aquifer. The hydrographs for the Codington County observation wells in this portion of the Prairie Coteau aquifer are shown in Figure 3, Figure 4, and Figure 5 and are generally representative of the rest of observation wells in the aquifer.

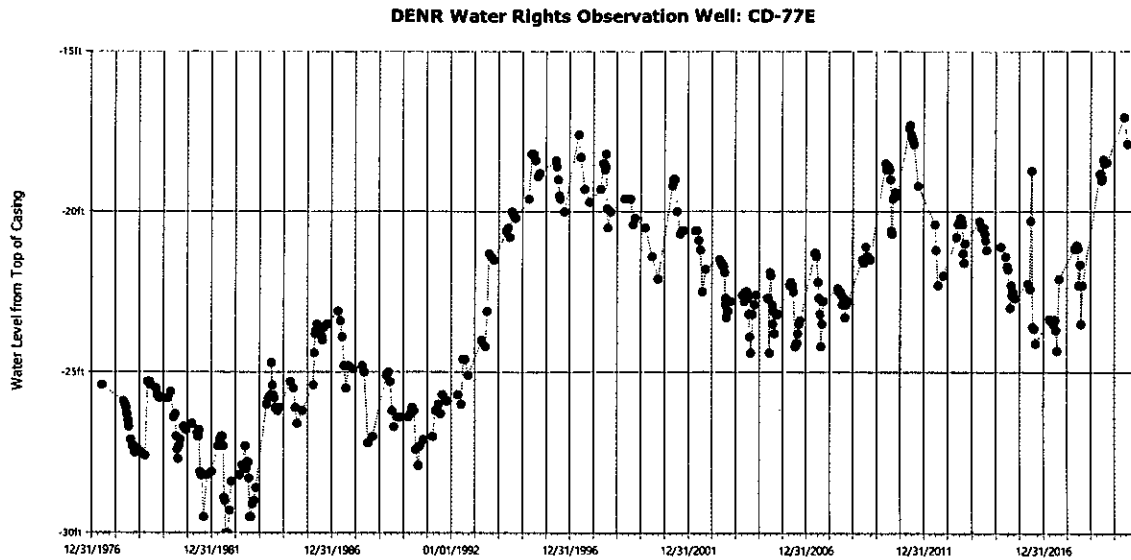


Figure 3: Hydrograph for Observation Well CD-77E located approximately 10.9 miles to the northwest of the wells for this application (Water Rights, 2020a)

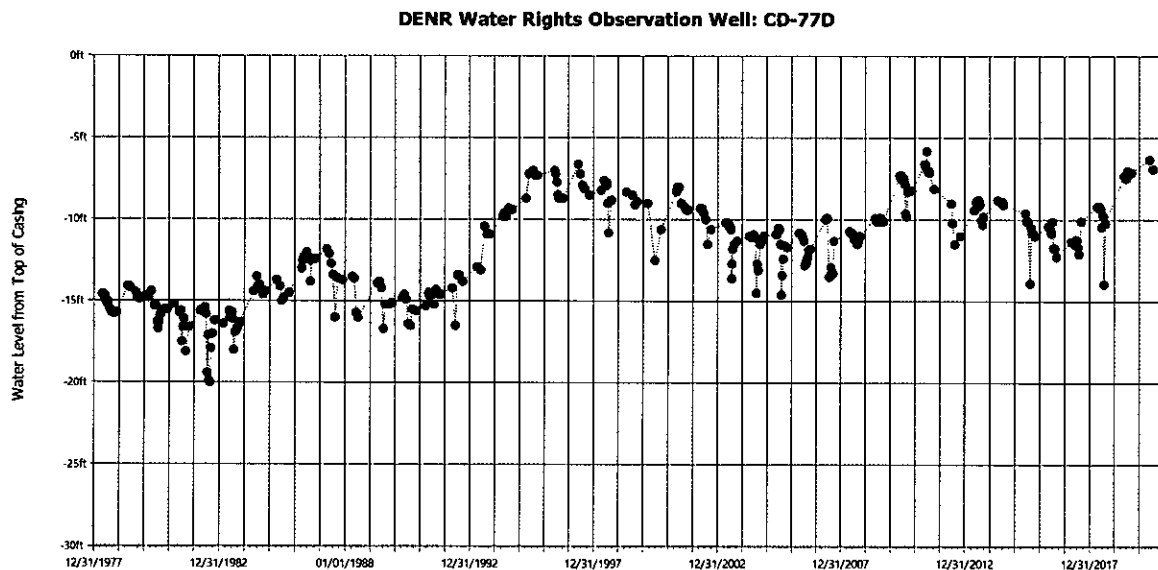


Figure 4: Hydrograph for Observation Well CD-77D located approximately 11.3 miles to the northwest of the wells for this application (Water Rights, 2020a)

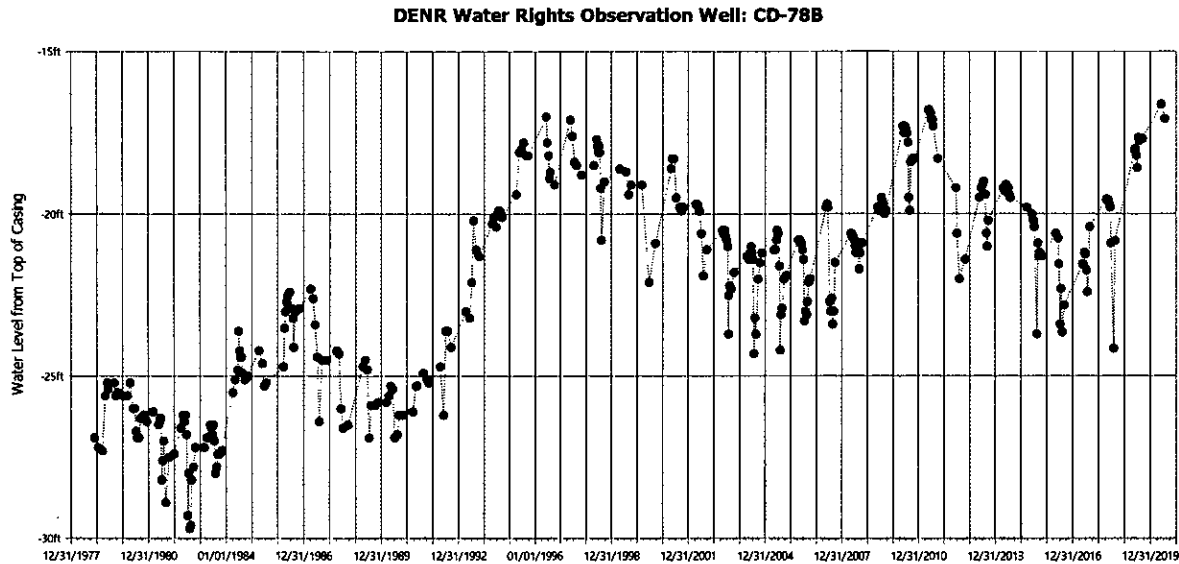


Figure 5: Hydrograph for Observation Well CD-78B located approximately 11.7 miles to the northwest of the wells for this application (Water Rights, 2020a)

Potential for Unlawful Impairment for Existing Water Rights

The approximate well locations for this application and the nearest water rights/permits are shown in Figure 6. The nearest water right/permit to the well sites for this application is for Water Right No. 4182-3 for irrigation use located approximately 3.3 miles to the east (Water Rights, 2020b). A review of well completion reports on file with the Water Rights Program that there are likely domestic wells completed into this aquifer in the area of the well locations for this application (Water Rights, 2020c).

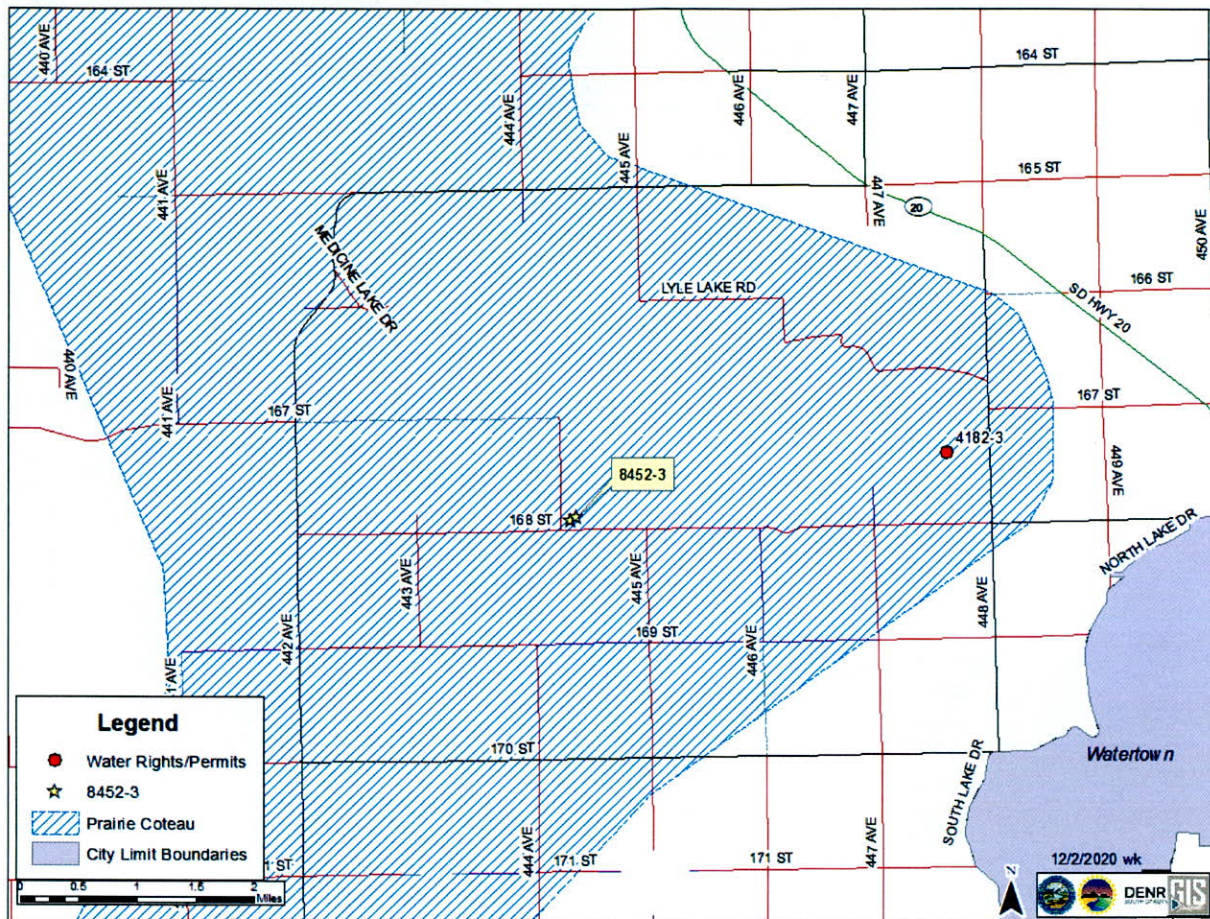


Figure 6: Water rights/permits currently authorized to appropriate water from this portion of the Prairie Coteau in the area of the wells for this application (Water Rights, 2020b)

The exact amount of drawdown as the result of pumping due to this proposed diversion cannot be quantified without more extensive aquifer testing. Since the aquifer is under confined conditions in the area of the well, some amount of draw down from pumping is expected. The well completion reports submitted with this application indicate approximately 23 to 27 feet of artesian head pressure. Observation wells CD-78B and CD-77D are both within a mile of the diversion points for Water Right No. 4139-3 for irrigation. In examining, the hydrographs for these observation wells (Figure 3 and Figure 5), any potential impacts of drawdown due to pumping appear to be minimal to none.

The Water Management Board has promulgated rules that allow water to be placed to maximum beneficial use without the necessity of maintaining artesian head pressure for domestic use. Administrative Rule of South Dakota (ARSD) 74:02:04:20(7) defines an adversely impacted domestic well 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.” In the case of Water Permit Application No. 2313-2 for the Coca-Cola Bottling Company of the Black Hills, the Water Management Board adopted findings that noted that if the increased costs or decreased production

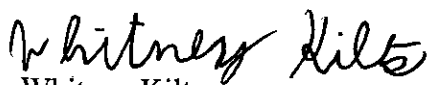
as a result of the impacts of legitimate users on artesian head pressure could be considered an adverse impact it would conflict with SDCL 46-1-4 (Water Rights, 1995). SDCL 46-1-4 requires the water resources of the state be put to beneficial use to the maximum extent of which they are capable (Water Rights, 1995). Given the artesian head pressure in the area, the diversion rate proposed by this application, and the response of observation wells in the aquifer to the pumping of existing water rights/permits, there is a reasonable probability that this application, if approved, will not unlawfully impair existing water rights/permits or domestic users with adequate wells

History

In 1976, concerns developed in northern Codington and southern Grant Counties around the development of irrigation from confined (artesian) aquifers in the area (Water Rights, 2020b). Several of the irrigation water rights in this portion of the Prairie Coteau aquifer were applied for in the late 1970s and were part of these concerns (Water Rights, 2020b). After further study of the confined aquifers in the area, a number of the permits were ultimately issued, including Water Right No. 4182-3 and Water Rights No. 4139-3 (Water Rights, 2020b). In 1985, a complaint was made to the Water Rights Program regarding Water Right No. 4182-3 and concerns that the pumping for irrigation under the water right was impacting area domestic wells and area lake levels (Water Rights, 2020b). An investigation into the matter by Water Rights staff concluded that the irrigation wells were not affecting the lake levels or the domestic wells (Water Rights, 2020b). While there have been additional and more recent complaints regarding the impacts to domestic wells by appropriative pumping in the Prairie Coteau aquifer in Codington County, these complaints have been for a different and separate portion of the Prairie Coteau aquifer than the wells for this application (Water Rights, 2020b; Water Rights, 2020d). Regardless, no unlawful impairment was found (Water Rights, 2020b; Water Rights, 2020d).

Conclusions

1. Water Permit Application No. 8452-3 proposes to appropriate up to 67.2 acre-feet of water per year at a maximum instantaneous diversion rate of 0.10 cfs from two wells in the Prairie Coteau aquifer located in the SW $\frac{1}{4}$ SE $\frac{1}{4}$ and the SE $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 9-T117N-R54W for commercial use in a feedlot operation.
2. Based on a review of the hydrologic budget and the observation well information for this portion of the Prairie Coteau aquifer and the Codington County portion of the aquifer, there is a reasonable probability that unappropriated water is available in the aquifer for the applicant's proposed use as required by SDCL 46-2A-9.
3. There is a reasonable probability that this application, if approved, will not unlawfully impair existing water rights/permits or domestic users with adequate wells.



Whitney Kilts

SD DENR-Water Rights Program

References

- Hansen, D.S. 1990. Water Resources of Codington and Grant Counties, South Dakota. Water-Resources Investigations Report 89-4147. United States Geological Survey, Huron, South Dakota.
- 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 3: Ground-Water Storage. U.S. Army Corps of Engineers Contract DACW 45-80-C-0185.
- Hedges, L.S., Allen, J. and 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. U.S. Army Corps of Engineers Contract DACW 45-80-C-0185.
- SDGS. 2020. South Dakota Geological Survey Lithologic Logs Database. Accessed November 2020. <<http://cf.sddenr.net/lithdb/>>.
- Stonesifer, J. R. 2013. Report to the Chief Engineer Water Permit Application No. 7809-3: Delbert Tschakert. SD DENR-Water Rights Program, Joe Foss Building, Pierre, South Dakota.
- Water Rights. 1980-2020. 1979-2019 Irrigation Questionnaire Data Summaries: SD DENR-Water Rights Program, Joe Foss Building, Pierre, South Dakota.
- Water Rights. 1995. Water Rights File No. 2313-2 Coca-Cola Bottling Company of the Black Hills. SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.
- Water Rights. 2020a. Observation Well Files, SD DENR-Water Rights Program, Joe Foss Building, Pierre, South Dakota.
- Water Rights. 2020b. Water Right/Permit Files. SD DENR-Water Rights Program, Joe Foss Building, Pierre, South Dakota.
- Water Rights. 2020c. Well Completion Reports. SD DENR-Water Rights Program, Joe Foss Building, Pierre, South Dakota.
- Water Rights. 2020d. Codington County File. SD DENR-Water Rights Program, Joe Foss Building, Pierre, South Dakota.

Schlaak, Karen

From: Schlaak, Karen
Sent: Tuesday, December 8, 2020 10:38 AM
To: tspopham5@gmail.com
Subject: Water Permit Application No. 8452-3
Attachments: 0169.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 as soon as possible to authorize publication and arrange for payment. This information is being mailed to you today.

Karen Schlaak
Water Rights Program
(605) 773-3352



DENR
SOUTH DAKOTA

RECEIVED

DEC 21 2020

WATER RIGHTS
PROGRAM

Form 8

PROOF OF PUBLICATION

STATE OF SOUTH DAKOTA)

County of Codington) SSI, Jackie Wettstadcertify that the attached printed Notice was
takenfrom the Watertown
Public Opinionprinted and published in WatertownCounty of Codington andstate of South Dakota. The notice was
published

in the newspaper on the following date:

December 17, 2020Cost of Printing \$45.03Jackie Wettstad
(Signature)Office Manager
(Title)12-17-2020
(Date Signed)WATER RIGHTS
PROGRAMNOTICE OF APPLICATION NO. 8452-3
to Appropriate Water

Notice is given that TJ Farms LLC, c/o Jeff Popham, 44440 168th St, Henry SD 57243 has filed an application for a water permit to appropriate 67.2 acre-feet of water annually at a maximum pump rate of 0.10 cubic feet of water per second from two existing wells completed into the Prairie Aquifer (120 - 140 feet deep) located in the SW 1/4 SE 1/4 and the SE 1/4 SW 1/4 Section 9 for commercial use in a feedlot operation located in the W 1/2 SE 1/4, E 1/2 SW 1/4 Section 9; all in T117N-R54W. This site is located approximately 7 miles east and 5 miles north of Henry SD. Pursuant to SDCL 48-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8452-3 with qualifications because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. The Chief Engineer's recommendation with qualifications, the application, and staff report are available at <http://denr.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 or supporting this application or recommendation must file a written petition with BOTH the applicant and Chief Engineer. The applicant must file a petition if contesting the Chief Engineer's recommendation. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by December 28, 2020. The petition may be informal but must include a statement describing the petitioner's interest in the application, the petitioner's reasons for opposing or supporting the application, and the signature and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained. 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 approximate cost

45.03 (December 17, 2020)

Schlaak, Karen

From: Schlaak, Karen
Sent: Tuesday, December 8, 2020 10:34 AM
To: Watertown Public Opinon (legals@thepublicopinion.com)
Subject: 8452-3, TJ Farms LLC
Attachments: 8452-3public.short.docx; FORM8.FRM.doc

Attached is a notice to be published on December 17, 2020.

TJ Farms LLC, c/o Jeff Popham, 44440 168th St, Henry SD 57243 (605 881-2978) 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

Water Rights Program
(605) 773-3352





DENR
SOUTH DAKOTA

**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
denr.sd.gov

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

December 8, 2020

TJ Farms LLC
c/o Jeff Popham
44440 168th St
Henry SD 57243

Dear Mr. Popham:

Water Permit Application No. 8452-3 for commercial use has been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice has been sent to the Public Opinion printed at Watertown SD (Ph # 605 886-6901). You will need to contact the newspaper 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 newspaper to authorize publication of your Notice and to arrange for payment. Early contact with the paper can eliminate delays. Upon receiving authorization from you, the publisher has been instructed to publish your notice. The newspaper has 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. 8452-3 to Appropriate Water

Notice is given that TJ Farms LLC, c/o Jeff Popham, 44440 168th St, Henry SD 57243 has filed an application for a water permit to appropriate 67.2 acre-feet of water annually at a maximum pump rate of 0.10 cubic feet of water per second from two existing wells completed into the Prairie Aquifer (120 - 140 feet deep) located in the SW 1/4 SE 1/4 and the SE 1/4 SW 1/4 Section 9 for commercial use in a feedlot operation located in the W 1/2 SE 1/4, E 1/2 SW 1/4 Section 9; all in T117N-R54W. This site is located approximately 7 miles east and 5 miles north of Henry SD.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8452-3 with qualifications because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. The Chief Engineer's recommendation with qualifications, the application, and staff report are available at <http://dennr.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 or supporting this application or recommendation must file a written petition with BOTH the applicant and Chief Engineer. The applicant must file a petition if contesting the Chief Engineer's recommendation. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by December 28, 2020.

The petition may be informal but must include a statement describing the petitioner's interest in the application, the petitioner's reasons for opposing or supporting the application, and the signature and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained.

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 _



DENR
SOUTH DAKOTA

**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
denr.sd.gov

JAN 19 2021

TJ Farms LLC
c/o Jeff Popham
44440 168th St
Henry SD 57243

Dear Mr. Popham:

Enclosed is Water Permit No. 8452-3 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

8452-3



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

January 5, 2024

8452-3

TJ Farms LLC
44440 168th St
Henry SD 57243

To whom it may concern:

I am writing to acknowledge receipt of the "Notice of Completion of Works" form that was sent to our office, confirming 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



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

RECEIVED

JAN 02 2024

OFFICE OF
WATER

**NOTICE OF COMPLETION OF WORKS AND
APPLICATION OF WATER TO BENEFICIAL USE**

TO: Water Rights Program, DANR
523 E. Capitol Ave.
Pierre, SD 57501-3182
or via email to DANRmail@state.sd.us

Date 12/26/23

FROM: TJ FARMS LLC
(name)

605-881-2978
(phone)

44440 168th St
(address)

tsophan5@gmail.com
(email)

Henry SD 57243
(city, state, zip)

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. 8452-3 states that the water use system is to be constructed by

12/28/2025, and water is to be put to beneficial use by 12/28/2029.
(date) (date)

The water use system was completed on 2/1/21
(date)

Applying the water to beneficial use was completed on 2/1/21
(date)

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



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

8452-3

December 13, 2023

8452-3

TJ Farms LLC
c/o Jeff Popham
44440 168th St
Henry SD 57243

Dear Mr. Popham:

On November 13, 2023, a staff engineer from the Water Rights Program made a site visit to conduct an inspection of the water use system authorized under Permit No. 8452-3 for a commercial feedlot operation.

With the inspection having been conducted and the report completed, we are ready to proceed with the licensing of your water use system. However, as stated in Permit No. 8452-3, you have until December 28, 2025, to complete the construction of your water use system and until December 28, 2029, to put that water to beneficial use.

If you have finished the construction and are satisfied with your water use system, please complete the highlighted portions of the enclosed "Notice of Completion of Works" form and return it in the postage paid envelope. Once we have this completed for back from you, we will proceed with the licensing of your system.

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

Sincerely,

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

enclosure

**Report of Examination of Works and/or Application of Water to Beneficial Use
For Permit No. 8452-3**

I have this day, November 13, 2023, made a thorough examination of the water use system constructed by TJ Farms LLC, c/o Jeff Popham 44440 168th St, Henry, SD 57243 of Permit No. 8452-3, bearing the priority of October 6, 2020 authorizing the diversion of 0.10 cu. ft. per second of the waters of the Prairie Coteau Aquifer for commercial feedlot purposes, in Codington County.

A. Works used to divert the water:

Well Information:

- 1) Well Drilling Firm: Bullis Brothers(east well) & Stadheim Well Drilling – (west well)
- 2) No. of Wells 2
- 3) Depth(s) 121 & 140 feet
- 4) Well log is available Y

Casing:

- 1) Diameter 5 & 5 inches
- 2) Length 101 & 130 feet
- 3) Type Plastic (both)

Screen:

- 1) Type Plastic (both)
- 2) Length 20 & 10 feet
- 3) Static water level 40 & 49 feet

Pump:

- 1) Make Submersible (both)
- 2) Model Unknown (both)
- 3) Size Unknown (both)
- 4) Capacity 10 & 10 (20 total) GPM

Motor:

- 1) Make Unknown (both)
- 2) Model No. Unknown (both)
- 3) Horsepower rating Unknown (both) hp

B. Works used to transport water to place of use:

- 1) Type Buried PVC 2) Size unknown inches 3) Length unknown feet

Comments: 1 in diameter black polyline

D. Compliance with Permit Requirements:

- 1) Permit qualifications being abided by Y
2) Exceptions to compliance are: None

E. Condition and Location:

1. The system is in good condition with the point(s) of diversion located as follows: WELL LOCATIONS
2. From the SW corner Sec 9 T117N R54W WEST WELL: 465 ft N & 1825 ft E, Lat 44.95005 Long -97.32315 (SE ¼ SW ¼) EAST WELL: 880 ft N & 2760 ft E, Lat 44.95120 Long -97.31969 (SW ¼ SE ¼).
3. The works are capable of diverting and conveying to the place of use 0.045 cu. ft. per second of water the license should be issued for 0.045 cfs

All structures, wells and lands on map Y

F. Comments or other permit(s) associated with the project:

The pump rates are still needed to establish the system flow capacity.

The buried pipe sizes still needs to be determined.

The mailing address and the telephone number in the permit materials are current.



Darrell W DeBoer
Water Rights Inspector
DANR, Water Rights Program

Date report completed: November 21, 2023

12/12/23 Amanda Dewell spoke with Jeff Popham on the phone. Jeff confirmed the pumps in each well are set for 10GPM and the buried pipe system is made of 1in diameter black polyline.



0 0.075 0.15 0.3 0.45 0.6 Miles



Darrell DeBoer
Water Right Inspector
DANR-Water Rights Program

**STATE OF SOUTH DAKOTA
WATER LICENSE NO. 8452-3**

(1) TJ Farms LLC; 44440 168th St, Henry SD 57243, made Application No. 8452-3, October 6, 2020, for a water permit to divert 0.10 cubic feet of water per second from groundwater, two existing wells (Prairie Coteau Aquifer), Codington County, South Dakota for commercial use in a cattle feedlot operation. Permit No. 8452-3, with a priority date of October 6, 2020, was approved December 28, 2020, and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before December 28, 2025, and for the application to beneficial use of water on or before December 28, 2029.

The applicant submitted a "Notice of Completion of Works" on December 25, 2023, indicating that construction was completed, and water was put to beneficial use February 1, 2021.

(2) It is certified that the permit holder has complied with the provisions of South Dakota State Law relating to completion of the construction of the water supply system and is entitled to divert 0.045 cubic feet of water per second for beneficial use. The locations of the diversion points are:

- West Well: 465 ft N & 1,825 ft W of the SW corner of Section 9, T117N, R54W (SE ¼ SW ¼)
(Latitude 44.95005 & Longitude -97.32315)
- East Well: 880 ft N & 2,760 ft E of the SW corner of Section 9, T117N, R54W (SW ¼ SE ¼)
(Latitude 44.95120 & Longitude -97.31969)

(3) The water is to be used during the following described annual period: January 1 – December 31.

(4) The permit holder has complied with the provisions of South Dakota State Law relating to the application of water to beneficial use.

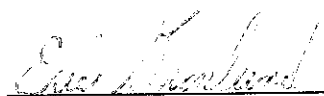
(5) Pursuant to South Dakota Water Law 46-5-30.1 TJ Farms LLC, the holder and/or owner of Water Right No. 8452-3 is issued a license to appropriate water, the right to use 0.045 cubic feet of water per second from groundwater, two existing wells (Prairie Coteau Aquifer), with a priority date of October 6, 2020, from the location specified in (2) of this license for commercial use in a cattle feedlot operation.

This license is subject to South Dakota Water Law, any limitations or conditions listed in Water Right No. 8452-3 and subject to the following qualifications:

1. The wells approved under Water Right No. 8452-3 will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner, under this Water Right shall control their withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. Water Right No. 8452-3 is subject to compliance with requirements of the Department's Water Pollution Control Permit issued pursuant to SDCL 34A-2-36.2 or 34A-2-124 for concentrated animal feeding operations.

continued

3. Water Right No. 8452-3 is subject to compliance with all existing and applicable Water Management Board Rules including but not limited to:
 - a) Chapter 74:54:01 Ground Water Quality Standards
 - b) Chapter 74:54:02 Ground Water Discharge Permit
 - c) Chapter 74:51:01 Surface Water Quality Standards
 - d) Chapter 74:51:02 Uses Assigned to Lakes
 - e) Chapter 74:51:03 Uses Assigned to Streams
 - f) Chapter 74:52:01 through 74:52:11 Surface Water Discharge Provisions
4. The Water Right holder shall report to the Chief Engineer annually the amount of water withdrawn from the Prairie Coteau Aquifer.
5. Water Right No. 8452-3 authorizes a total annual diversion of 67.2 acre-feet of water from the Prairie Coteau Aquifer. *(Total annual diversion is reduced to 32.5 acre-feet of water based on system as developed.)*



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

JAN 16 2024
date





**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

JAN 16 2024

8452-3

TJ Farms LLC
c/o Jeff Popham
44440 168th St
Henry SD 57243

Dear Mr. Popham:

Enclosed is Water License No. 8452-3. This is the final water right document completing your process of obtaining a Water Right. Included with your license is a map prepared by the staff engineer who conducted the field investigation.

For your information SDCL 46-6-27 requires that if in the future, the owner of an existing well, constructs a replacement well and does not plan to use the old well, the old well is considered abandoned and must be plugged. Also, any well that is being used or is not considered abandoned must be valved and controlled, if flowing, or sealed and capped so that no leaking occurs either underground or at the surface.

So long as you use the water beneficially, as stated in the Water License, State Water Laws provide that you have a continuing right to use the water. If you have any questions, please contact our office.

Sincerely,

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

enclosures