

WATER PERMIT NO. 8564-3

Name of Applicant: David R Hansen

Address: 46339 133th St, Wilmot SD 57279

Phone: 605 949-0224

Amount of Water Claimed: 0.03 add'l cfs

Total Acres: 11 add'l acres

Source of Water Supply: one existing well

Water to be used for: irrigation

County: Roberts

Type of Waste Disposal System:

Location: 5 miles northwest of Wilmot

PRIORITY

Date Received: 11-29-21

Application/License Fee: \$ 500

Corrected Application Received:

Period of Annual Use: April 1 – November 1

Remarks: Water Permit Nos. 7568-3 & 7820-3 authorized 0.86 cfs for irrigation of 120 acres from one well. Inspection found the system capable of an add'l 0.03 cfs and 11 add'l acres being irrigated from one existing well.

Diversion Point: NW 1/4 NW 1/4 Sec 9-T123N-R50W (res)

Land to be Irrigated: W 1/2 NW 1/4, NE 1/4 NW 1/4 Sec 9-T123N-R50W (res) and S 1/2 NE 1/4, N 1/2 SE 1/4 Sec 21-T123N-R50W

Depth of Well: 220 feet deep

Well Driller:

Remarks:

Type of Map: aerial

Prepared by: Darrell DeBoer

Reviewed and the Number Assigned on: XX

By: Karen Schlaak

Notice of Hearing - date to intervene: _____

**SOUTH DAKOTA
WATER PERMIT NO. 8564-3**

Date of first receipt of application November 29, 2021.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 8564-3 to David R Hansen, 46339 133th St, Wilmot SD 57279 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. 8564-3 appropriates an additional 0.03 cubic feet of water per second (cfs) and irrigates an additional 11 acres. Water Permit Nos. 7568-3 and 7820-3, combined, appropriate 0.86 cfs from one well completed into the Reville Aquifer (220 feet deep) located in the NW 1/4 Section 9 for irrigation 120 acres located in the NW 1/4 Section 9 (within the former boundaries of the Lake Traverse Reservation), S 1/2 NE 1/4, N 1/2 SE 1/4 Section 21; all in T123N-R50W. This permit authorizes an additional 0.03 cfs from the existing well and irrigation of an additional 11 acres in the area described above. This permit and Water Permit Nos. 7568-3 and 7820-3, combined, will authorize a total diversion rate of 0.89 cfs for irrigation of 131 acres. This site is located approximately 5 miles northwest of Wilmot 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: April 1 – November 30.
3. The date from which applicant may claim right is November 29, 2021.
4. The date of approval of Permit No. 8564-3 is February 7, 2022.
5. 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 Nos. 7568-3 and 7820-3 and this Permit 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. 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

JUN 01 2022
date



NOV 29 2021

Mail to: DENR - Water Rights 523 E Capitol Ave Pierre, SD 57501-3182 ph. (605) 773-3352	No. <u>8564-3</u> (office use only) Hydrologic Unit <u>07020001</u> WATER RIGHTS PROGRAM
	Basin <u>Minnesota-Whetstone</u>
	Newspaper <u>Wilmot Enterprise</u>
	<u>Public Opinion</u>

PAID
NOV 29 2021
Ck# 3681

Application For Permit To Appropriate Water For Irrigation

Type of Application: ☐ New ☐ Vested Right ☒ Amendment/Correction to Permit No. 7820-3
(Use predates Mar 2, 1955)

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

Water Permit Nos. 7568-3 and 7820-3 were authorized to irrigate 120 acres from a common well. A water permit inspection found 131 acres had been developed. This application is to add the 11 additional acres.

1. Name to Appear on Irrigation Permit David R Hansen ± 0.03 add'l cfs

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

Mailing Address 46339 133th St Wilmot ☒ SD ☒ 57279
(Address) (City) (State) (Zip Code)

Phone _____ Mobile 605-949-0224 Email dbhansen@live.com
(0.03 add'l)

2. Amount of water claimed 0.889 *CFS or 406 **GPM ***AF Total Acreage 131 (11 add'l acres)
(*Cubic Feet per Second) (**Gallons per Minute) (***)Acre Feet - storage capacity of dam/dugout or annual use if applicable)

3. Source of water supply ground water from a single well constructed into the Renville Aquifer

4. Location of point of diversion 1 well in the NW 1/4 NW 1/4 Sec 9 T123N-R50W (Res)
(example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W)

County Roberts ☒

5. County or counties where water will be used Roberts

6. Annual period during which water is to be used April 1 - November 1

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
NW 1/4 NW 1/4 Sec 9 T123N-R50W (Res)	34	SE 1/4 NE 1/4 Sec 21 T123N-R50W	24
SW 1/4 NW 1/4 Sec 9 T123N-R50W (Res)	10	SW 1/4 NE 1/4 Sec 21 T123N-R50W	19
NE 1/4 NW 1/4 Sec 9 T123N-R50W (Res)	4	NW 1/4 SE 1/4 Sec 21 T123N-R50W	16
		NE 1/4 SE 1/4 Sec 21 T123N-R50W	24

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

Water Permit No. 7568-3 and 7820-3, combined irrigate 131 acres from a common well. This application is to add 11 acres beyond the 120 acres authorized.

I, David R. Hansen David R. Hansen, 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 1 Provide copy of log(s), if available. Drilled by LTP Enterprises Inc

For either Existing or Proposed Wells:

c) Well Depth (required) 227 Depth to Top of Water Bearing Material 186 Depth to Water from Surface 86.5

d) Distance to nearest domestic well on applicant's property _____ Property owned by others _____

2. Wastewater Disposal System Information

a) Type of System (i.e. septic tank, drain field) _____

b) System Capacity (gallons) _____ Year Constructed _____

c) Connected to the City of _____ Sanitary System

3. Dugout Information

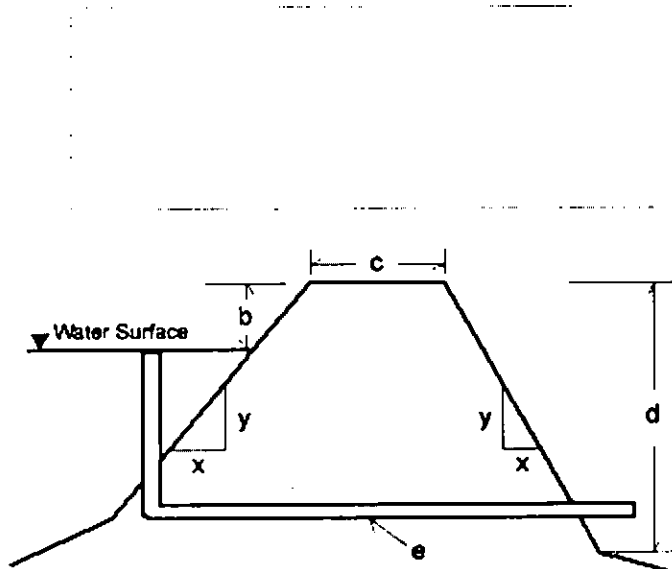
a) Surface Dimensions _____ Depth _____

b) Depth to water (ground surface to water level) _____

4. Water Storage Dams

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

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



b) Freeboard _____

c) Crest Width _____

Crest Length _____

d) Height _____

e) Primary Outlet Capacity _____

If pipe, diameter _____

f) Secondary Spillway Capacity _____

Spillway Width _____

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

Upstream _____

Downstream _____

h) Surface Area of Impoundment _____

i) Storage _____ Acre Feet

j) Drainage Area Above Dam _____ Acres



LTP
Enterprises, Inc.
Well Drilling

DRILLERS LOG

Location of Test Hole 20' west of test hole

Size or test hole 1 1/4 Date started 7-18-13 Date completed _____ Total Hours _____

[illegible]

Signed Jerry Fluesse Driller

WATER RIGHTS PROGRAM

SOUTH DAKOTA WATER WELL COMPLETION REPORT

7820-3
07-92

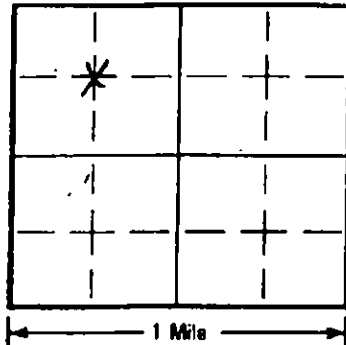
Location SE 1/4 NW 1/4 Sec 29 Twp 123 Rg 50
 County Roberts
 North

Please mark well location with an "X"

W

E

Well Completion Date

7-25-13Well Owner: David Hanson

Business Name:

Address: 46339 133rd St.
Wilmot, SD 57279

WELL LOG:

DEPTH

FORMATION

FROM

TO

LOCATION:

Distance from nearest potential pollution source (septic tank, abandoned well,

feed lot, etc.)? _____ ft. from _____ (identify source).

PROPOSED USE:

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

METHOD OF DRILLING:

CASING DATA: ☒ Steel ☐ Plastic ☐ Other

If other describe _____

PIPEWEIGHT DIAMETER FROM TO HOLE DIAMETER
 _____ LB/FT 8" IN 0 FT 197 FT 14 IN
 _____ LB/FT _____ IN _____ FT _____ FT _____ IN
 _____ LB/FT _____ IN _____ FT _____ FT _____ IN

GROUTING DATA

Grout Type Cement No. of Sacks 30 Grout Weight _____ lb./gal From 0 ft To 150 ft
 _____ lb./gal _____ ft _____ ft

Describe grouting procedure pumped grout from bottom
up.SCREEN: ☐ Perforated pipe ☒ ManufacturedDiameter 8 IN Length 30 FEETMaterial Stainless SteelSlot Size 40 Set From 197 Feet to 227 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: _____

NO, Why Not? _____

Laboratory sent to for water
quality analysis _____STATIC WATER LEVEL 86.5 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: _____☐ Bailed _____☐ Other _____

Pumping Level Below Land Surface

87.2 ft. After 4 Hrs. pumped 60 GPM

_____ ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate 100 GPM

REMARKS

RECEIVED

MAR 12 2014

WATER RIGHTS
PROGRAMThis well was drilled under license # 381

And this report is true and accurate.

Drilling firm LTP Enterprises Inc.

Signature of License Representative:

Chris Rauer

Signature of Well Owner or Equitable Property Holder:

Date: 2/17/14

RECEIPT

WATER RIGHTS PROGRAM South Dakota Department of Agriculture and Natural Resources

Date November 29, 2021

RECEIVED OF David/Becky Hansen 46339 133th St., Wilmot SD 57279

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

Fee for Application for Permit No. <u>8564-3</u> to Appropriate Water, to construct and to put water to beneficial use	\$ <u>500.00</u>
Fee for Application for Permit No. _____ to Appropriate Water for Future use	\$ _____
Fee to retain Future Use Permit No. _____ after period of seven years.	\$ _____
Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. _____	\$ _____
Fee for Filing Transfer Form _____	\$ _____
Fee for _____	\$ _____
Fee for Issuing New Well Driller's License No. _____	\$ _____
Fee for Renewal of Well Driller's License No. _____	\$ _____
Fee for Issuing Well Pump Installer's License No. _____	\$ _____
Fee for Renewal of Well Pump Installer's License No. _____	\$ _____
(Any Other Work Provided by Law) TOTAL	\$ <u>500.00</u>

By Eric Gronlund
Chief Engineer
vm



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

September 7, 2021

David R Hansen
46339 133th St
Wilmot, SD 57279

Dear Mr. Hansen:

Recently one of our water right inspectors inspected your Water Permit Nos. 7820-3 and 7568-3 authorizing irrigation of a combined 120 acres. At the time of the inspection, he found you had constructed both center pivots and were irrigating a total of 131 acres, 11 acres beyond what was permitted.

In order to amend your existing permits to include the additional acres, enclosed is a partially completed application form, well log, map and instruction sheet. Please finish completing the application, sign, and submit along with a \$500 application fee to obtain a permit for the additional acres.

Obtaining a water permit that accurately reflects actual water use ultimately benefits you by protecting your right to use water. If you want more information regarding the permitting process, please go to our website at danr.sd.gov/des/wr/wr.aspx.

If you have any additional questions, please contact me at phone (605) 773-3352.

Sincerely,

Mark D. Rath
Natural Resources Engineer III
Water Rights Program



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 8564-3, David R. Hansen**

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. 8564-3, David R. Hansen, 46339 133th St, Wilmot SD 57279.

The Chief Engineer is recommending APPROVAL of Application No. 8564-3 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 Nos. 7568-3 and 7820-3 and this Permit 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. 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
January 12, 2022

**Report to the Chief Engineer on
Water Permit Application No. 8564-3**

David R. Hansen
4 January 2022

Water Permit Application No. 8564-3 seeks to appropriate an additional 0.03 cubic feet of water per second (cfs) and irrigate an additional 11 acres to what is authorized by Water Permit Nos. 7568-3 and 7820-3. Water Permit Nos. 7568-3 and 7820-3 appropriate a total of 0.86 cfs from one existing well completed into the Reville aquifer (220 ft deep) located in the NW ¼ Section 9 for irrigation of 120 acres located in the NW ¼ Section 9 (within the boundaries of the former Lake Traverse Reservation), S ½ NE ¼, and N ½ SE ¼ Section 21; all in T123N-R50W. This application, if approved, and Water Permit Nos. 7568-3 and 7820-3, will authorize a total diversion rate of 0.89 cfs for irrigation of 131 acres. This site is located approximately 5 miles northwest of Wilmot, South Dakota.

Aquifer: Reville (REV)

Hydrogeologic characteristics

The Reville aquifer is a sand and gravel outwash that was deposited during the Quaternary Period in the bedrock valley that extends south-southeast from beneath Agency Village to Grant and Roberts Counties [1] [2] [3]. The average thickness of the Reville aquifer is approximately 60 feet [2] [1]. The elevation of the top of the aquifer is generally between 1,000 and 1,100 feet above NGVD29 [1]. The Reville aquifer is buried beneath approximately 110 to 660 feet of glacial deposits [1], and is under confined conditions [4]. Based on its tendency to contact bedrock, the Reville aquifer may be in contact with the Niobrara aquifer and the Codell aquifer, if it is present in the area of this application [5]. The Reville aquifer may also contact the Veblen and Wilmot aquifers, which overlie the Reville aquifer in some places [3]. The Reville aquifer underlies approximately 60,000 acres of Roberts County and approximately 130,000 acres of Grant County [1] [2]. The boundaries of the Reville aquifer are currently under review by the SD DNR Geological Survey Program [3]. Figure 1 shows the Reville aquifer as it is currently mapped in Grant [2] and Roberts [1] Counties, the major bedrock formations underlying it [5], and Reville aquifer observation wells maintained by the Water Rights Program [4].

The applicant submitted a well completion report for a well completed on July 25, 2013. The driller reported encountering sand that “took lots of water” from 186 feet below grade to 227 feet below grade and placed the screen for the well from 197 to 227 feet below grade. The static water level at the time the well was completed was 86.5 feet below grade, so the well is under confined conditions.

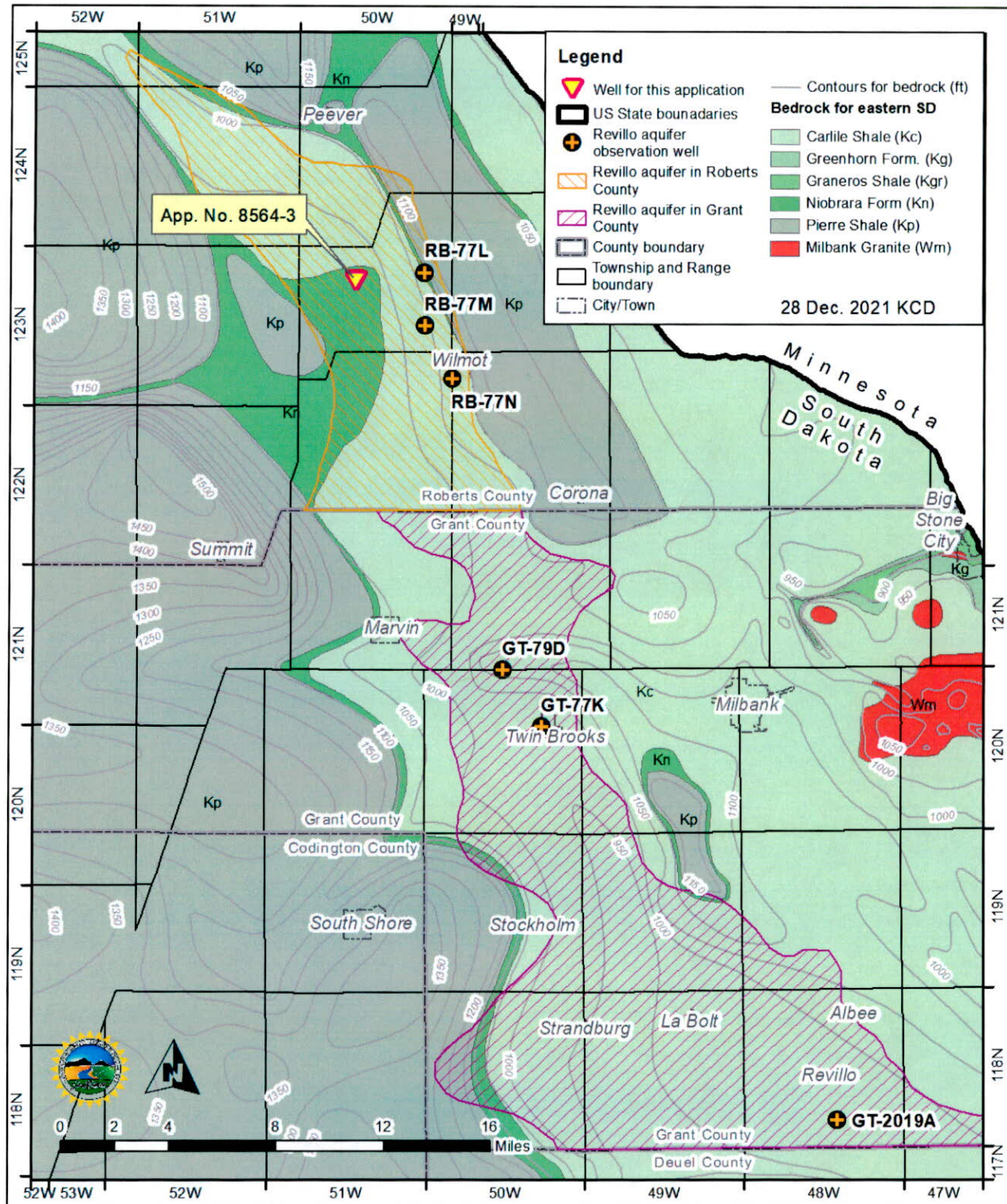


Figure 1: Renville aquifer mapped in Grant [2] and Roberts Counties [1], bedrock formations and elevation contours (in feet above NGVD29) [5], and Renville aquifer observation wells [4].

Applicable South Dakota Codified Law

Pursuant to SDCL 46-2A-9, a permit to appropriate water may be issued if there is reasonable probability that there is unappropriated water available for the applicant's proposed use, that the proposed diversion 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. This report will only assess the availability of water and possibility of developing this application without unlawful impairment of existing domestic water uses and water rights.

Pursuant to SDCL 46-6-3.1, 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 the water to the groundwater source. An exception allows water distribution systems to withdraw from groundwater sources older or stratigraphically lower than the Greenhorn Formation regardless of the results of a hydrologic budget. The applicant is not a water distribution system as defined in SDCL 46-1-6(17). The Revillo aquifer is younger and stratigraphically higher than the Greenhorn Formation. Therefore, it is necessary to find that recharge exceeds withdrawals to approve this application.

Availability of Water

Hydrologic Budget

Recharge

Recharge to the Revillo aquifer is mainly by groundwater inflow from aquifers in contact with the Revillo aquifer when the hydraulic head of those aquifers is higher than that of the Revillo aquifer [1]. There is no estimate for the recharge to the Revillo aquifer available. Hedges, Allen, and Holly [6] recommend that people estimating recharge to buried, unconfined aquifers for water management purposes use a range between 0.15 inches per year to 0.6 inches per year. Applying that range over the 190,000 acres of area delineated by Hansen [2] and Thompson [1], the estimated recharge to the Revillo aquifer ranges between 2,400 and 9,500 acre-feet per year (ac-ft/yr).

Discharge

Discharge from the Revillo aquifer is likely to be mainly by groundwater outflow to aquifers in contact with the Revillo aquifer when the hydraulic head of the Revillo aquifer is higher than that of the aquifers it contacts and by well withdrawals from domestic and appropriative water users. Due to the low rate of withdrawal and presence of stratigraphically higher aquifers [4], domestic use from the Revillo aquifer is assumed to be negligible. There are 13 water rights/permits authorized to withdraw from the Revillo aquifer (see Table 1 on pg. 4) [7]. Three are for municipal use and 10 are for irrigation use, and currently authorize a total of 2,061 acres to be irrigated [7].

While the Water Rights Program has maintained irrigation questionnaire records since at least 1979 [8], the Revillo aquifer was not classified as a separate aquifer from other Quaternary period aquifers in Grant County until Hansen [2] delineated it in 1994 in Grant County and Thompson [1] delineated it in 2001 in Roberts County. Three of the active irrigation water

rights/permits currently classified as withdrawing from the Reville aquifer predate the Hansen [2] and Thompson [1] reports [7]. From 1996 through 2008 inclusive, irrigation questionnaire summaries indicated one water right/permit as withdrawing from the Reville aquifer [8]. Therefore, irrigation questionnaire summaries prior to 2009 do not accurately reflect irrigation withdrawals over time from the Reville aquifer. Figure 2 (see pg. 5) shows irrigation reported in the Reville aquifer and the number of irrigation rights/permits reporting withdrawals from the Reville aquifer from 2009 through 2020 [8]. The average reported irrigation from 2009 through 2020 was 334 ac-ft/yr [8]. Following the drought of 2012, the number of irrigation water rights/permits from the Reville aquifer increased from 6 to 12 water rights/permits from 2012 to 2013 [8]. In 2021, one of those 12 water rights/permits was canceled due to non-construction and another was incorporated into another license [7]. The average irrigation reported from 2013 through 2020 was 442 ac-ft/yr [8]. The 442 ac-ft/yr divided over the 2,061 acres authorized for irrigation indicates on average, irrigators have reported approximately 2.6 inches of water irrigated per year per acre authorized. Given the number of water rights/permits approved in the Reville aquifer since 2012, the average irrigation reported from 2013 through 2020 is the value most likely to represent average annual withdrawals due to irrigation with the current number of water rights/permits authorized to withdraw.

Of the three municipal water rights/permits, the Town of Wilmot purchases its water from another system [9], so it is likely to withdraw a negligible amount from the Reville aquifer. The City of Milbank holds the other two municipal water rights in the Reville aquifer [7]. Their combined appropriation of 3.44 cfs is estimated to withdraw at their maximum instantaneous diversion rate 60% of the time, for an estimated average annual withdrawal of 1,495 ac-ft/yr [7]. This is likely to be an overestimate based on previous Water Rights Staff experience.

Table 1: Water rights/permits authorized to withdraw from the Reville aquifer [7] [9].

Permit No.	Status	Type of Use	Name/Business	Max. CFS	Irrigated Acres	Priority Date
1764-3	License	Municipal	Town of Wilmot*	0.390	N/A	01/01/1954
1769-3	License	Municipal	City of Milbank	2.160	N/A	08/07/1970
3250-3	License	Irrigation	Delton L Strasser	1.890	132	10/25/1976
4785-3	License	Municipal	City of Milbank	0.890	N/A	08/27/1958
5044-3	License	Irrigation	Ray A & David R Hansen	2.280	459	01/04/1984
5482-3	License	Irrigation	Alan Or Linda Schneck	4.280	410	04/02/1981
7148-3	Permit	Irrigation	Jason E Frerichs	1.440	60	06/25/2009
7306-3	Permit	Irrigation	Tyler Ammann	2.220	91	01/13/2012
7471-3	License	Irrigation	David Pierce	2.000	280	10/17/2012
7530-3	License	Irrigation	Tyler L Ammann	2.900	349	03/27/2012
7568-3	Permit	Irrigation	David R Hansen	0.860	60	12/20/2012
7710-3	Permit	Irrigation	Argo Brothers	1.670	160	02/22/2013
7820-3	Permit	Irrigation	David Hansen	0.860	60	04/05/2013
* Purchases its water from another system						

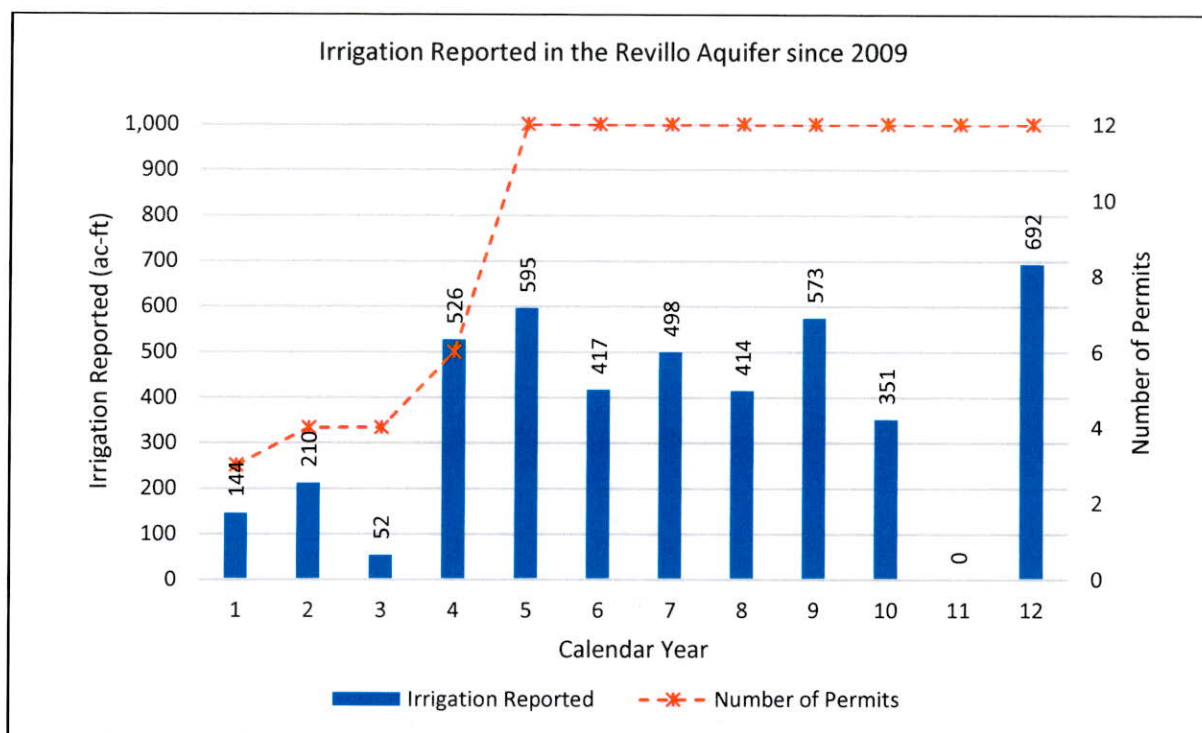


Figure 2: Irrigation reported and number of irrigation permits reporting in the Reville aquifer from 2009 through 2020 [8].

Balance of Hydrologic Budget

Recharge to the Reville aquifer is estimated to range between approximately 2,400 and 9,500 ac-ft/yr [1] [2] [6]. Withdrawals from the Reville aquifer are estimated to be approximately 1,938 ac-ft/yr [7] [8] [9]. This application seeks to irrigate 131 acres, so if it is approved, it may withdraw up to 262 ac-ft/yr. However, based on current irrigation reported, the applicant's average annual use is likely to be much less. If the applicant irrigated at the rate of 2.6 inches per acre as others in the Reville aquifer have done, the applicant's average annual withdrawal would be approximately 28 ac-ft/yr. Therefore, based on the hydrologic budget, there is reasonable probability unappropriated water is available for this application.

Observation Wells

Administrative Rule of South Dakota 74:02:05:07 requires that the Water Management Board rely upon the record of observation wells, in addition to other information, to determine that recharge to the aquifer exceeds withdrawals. The Water Rights Program maintains 6 observation wells completed into the Reville aquifer. The nearest observation well is RB-77L, located 2.8 miles east of the well for this application. Valseth and Driscoll [10] characterized factors affecting groundwater levels within the boundaries of the former Lake Traverse Reservation and ten miles around in all directions for water years 1956 through 2017. They indicated that there was a statistically significant upward trend in total annual precipitation near the area of this application and a statistically significant upward trend in all three of the Water Rights Program observation wells completed into the Reville aquifer within the Valseth and Driscoll [10] study area boundaries. Observation Well RB-77L is one of the wells included in the Valseth and Driscoll [10] study. Figure 3 shows the water levels in Observation Well RB-77L from 1977

through 2021, which is representative of the behavior of the Renville aquifer in the area of this application. In general, springtime water levels decline during periods of lower-than-average annual precipitation and increase during periods of higher-than-average annual precipitation [11]. During the summer, declines in the water level in the observation wells occur due to seasonal withdrawals. The water levels rising and declining with changes in annual precipitation means that water is flowing out of the aquifer naturally whenever there is an excess of water in the aquifer, and it means that recharge exceeds withdrawals. Therefore, there is reasonable probability unappropriated water is available for this application.

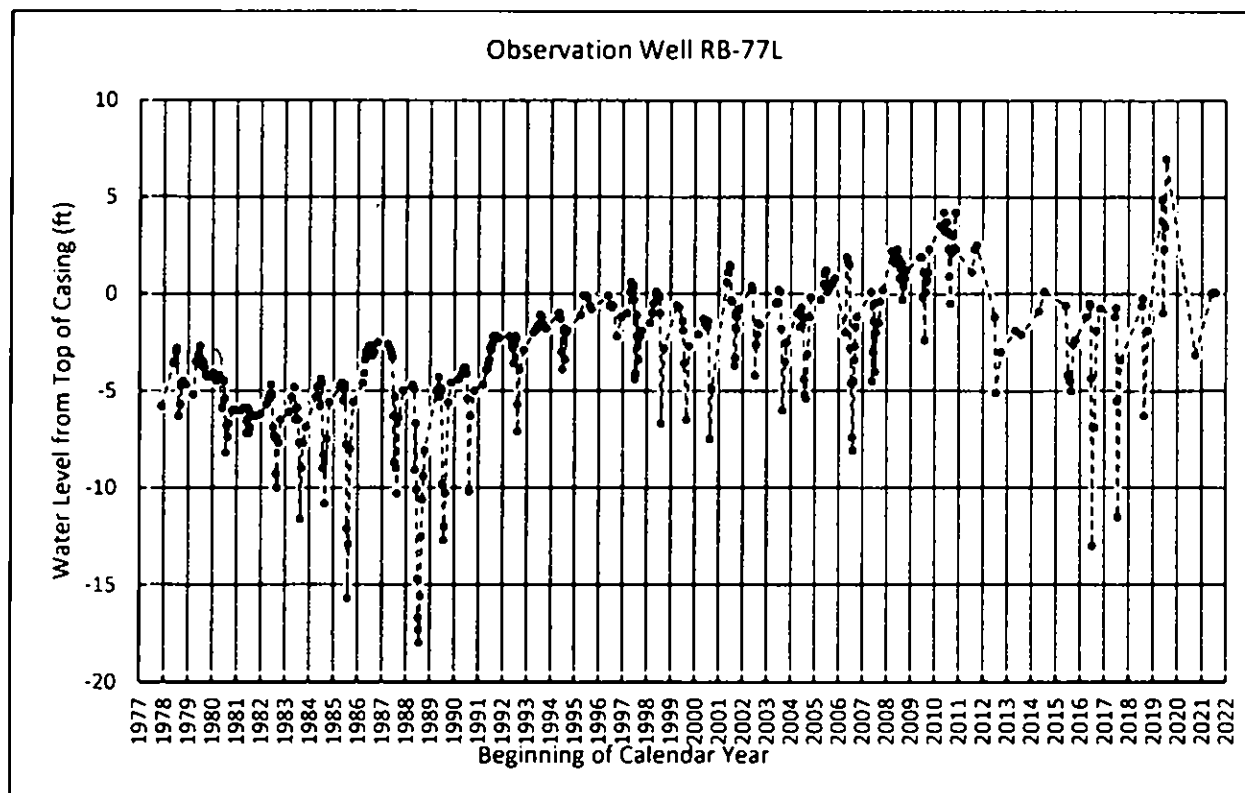


Figure 3: Water levels in Observation Well RB-77L over the period of record (1977-2021) [4].

Potential for Unlawful Impairment of Existing Water Rights

The nearest water right/permit to this application that is not held by the applicant is Water Permit No. 7496-3, located approximately 1.5 miles southeast of this application. The nearest domestic well on file with the Water Rights Program that is likely to be completed into the Renville aquifer is located approximately 1.2 miles north of this application. Figure 4 shows the location of nearby water rights/permits completed into the Renville aquifer [7], nearby observation wells completed into the Renville aquifer [4], and the land surface elevation in the area of this application [12]. The Water Rights Program has historically interpreted an unlawful impairment of existing water rights to occur if a junior water right/permit causes a nearby adequate well with a senior water right/permit to become unable to withdraw at the rate it is entitled to or, if a domestic well is impacted, the water right/permit causes the adequate domestic well to be unable to withdraw at the rate needed to supply reasonable domestic use of water. Administrative Rule of South Dakota (ARSD) 74:02:04:20(6) defines an adequate well as:

- [4] SD DANR Water Rights Program, "Observation wells," Pierre, South Dakota, 2022.
- [5] D. W. Tomhave and L. D. Schulz, "Bedrock geologic map showing configuration of the bedrock surface in South Dakota east of the Missouri River," SD DANR Geological Survey Program, Vermillion, South Dakota, 2004. General Map 9.
- [6] L. S. Hedges, J. Allen and D. E. Holly, "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, Omaha, Nebraska, 1985.
- [7] SD DANR Water Rights Program, "Water right permit file database," SD DANR Water Rights Program, Pierre, South Dakota, 2022.
- [8] SD DANR Water Rights Program, "Irrigation questionnaire summaries," SD DANR Water Rights Program, Joe Foss Bldg., Pierre, SD, 2021.
- [9] SD DANR Drinking Water Program, "Drinking Water Reports," SD DANR Drinking Water Program, Joe Foss Bldg., Pierre, South Dakota, 2021.
- [10] K. J. Valseth and D. G. Driscoll, "Characterization of factors affecting groundwater levels in and near the former Lake Traverse Indian Reservation, South Dakota, Water Years 1956-2017," United States Geological Survey, Reston, Virginia, 2021. Scientific Investigations Report 2020-5151.
- [11] NOAA, "Climate at a Glance - Divisional Time Series for South Dakota Region 3," NOAA, 1 January 2022. [Online]. Available: <https://www.ncdc.noaa.gov/cag/divisional/time-series>. [Accessed 3 January 2022].
- [12] Intermap, "IFSAR 5-meter Digital Elevation Model," Not published, Pierre, South Dakota, 2008.
- [13] South Dakota Water Management Board. *On the Matter of Water Permit Application No. 2313-2 for Coca Cola Bottling Company*, 1995.
- [14] SD Water Rights Program, "County files," SD DENR Water Rights Program, Joe Foss Bldg., Pierre, South Dakota, 2022.

...a well constructed or rehabilitated to allow various withdrawal methods to be used, to allow the inlet to the pump to be placed not less than 20 feet into the saturated aquifer or formation material when the well is constructed, or to allow the pump to be placed as near to the bottom of the aquifer as is practical if the aquifer thickness is less than 20 feet

In order to put the waters of the state to maximum beneficial use, the Water Management Board does not protect hydraulic head in an aquifer as a means of water delivery [13]. Consequently, well owners may need to lower their pumps to deliver needed water. This is not necessarily considered an unlawful impairment of existing water rights. There are no complaints on file with the Water Rights Program regarding unlawful impairment of existing water rights [14] and the additional 0.03 cfs sought by this application is a small increase and has been in use for a number of years. Based on the lack of complaints, relatively low additional withdrawal rate, and the fact that this application has already been in use without complaints, there is reasonable probability this application can be developed without unlawful impairment of existing water rights with adequate wells or adequate domestic wells.

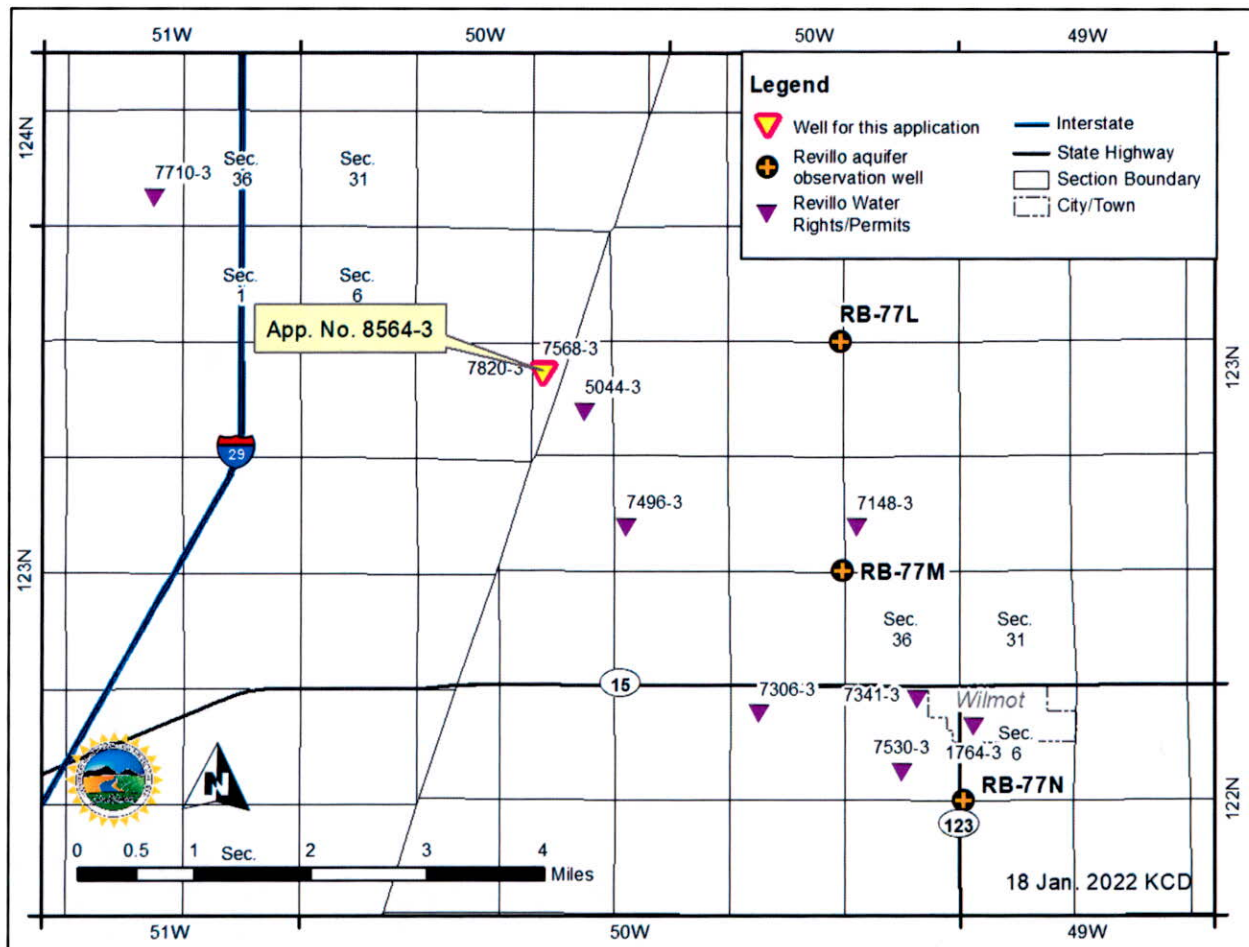


Figure 4: Water rights/permits near this application [7], nearby observation wells [4].

Special Consideration: Water Level Rising Above Land Surface

Occasionally, water levels in Observation Well RB-77L have risen above the top of the casing (Figure 3) [4], which means there may be places in the Reville aquifer that wells will flow without a pump lifting the water. The elevation of the top of the casing of RB-77L is 1,178 feet above NGVD29 [4], whereas the land surface elevation near this application is approximately 1,250-1,260 feet above NGVD29 [12]. The highest reading in RB-77L was 6.93 feet above the top of the casing, or 1,184 feet above NGVD29, on July 17, 2019, so it is unlikely that the well for this application will flow.

Conclusions

1. Water Permit Application No. 8564-3 seeks to appropriate an additional 0.03 cfs and irrigate an additional 11 acres to what is authorized by Water Permit Nos. 7568-3 and 7820-3.
2. Water Permit Nos. 7568-3 and 7820-3 appropriate a total of 0.86 cfs from one well completed into the Reville aquifer (220 ft deep) located in the NW $\frac{1}{4}$ Section 9 for irrigation of 120 acres located in the NW $\frac{1}{4}$ Section 9 (within the boundaries of the former Lake Traverse Reservation), S $\frac{1}{2}$ NE $\frac{1}{4}$, and N $\frac{1}{2}$ SE $\frac{1}{4}$ Section 2; all in T123N-R50W.
3. This application, if approved, and Water Permit Nos. 7568-3 and 7820-3, will authorize a total diversion rate of 0.89 cfs for irrigation of 131 acres.
4. Based on the hydrologic budget and record of observation wells, there is reasonable probability unappropriated water is available for this application.
5. There is reasonable probability this application can be developed without unlawful impairment of existing water rights.



Kimberly C. Drennon, E.I.
Engineer II – DANR Water Rights Program

References

- [1] R. F. Thompson, "Water resources of the Lake Traverse Reservation, South and North Dakota, and Roberts County, South Dakota," United States Geological Survey, Rapid City, South Dakota, 2001. Water-Resources Investigation Report 01-4219.
- [2] D. S. Hansen, "Major aquifers in Codington and Grant Counties, South Dakota," SD DANR Geological Survey Program, Vermillion, South Dakota, 1994. Information Pamphlet No. 47.
- [3] W. P. Christensen, Interviewee, *Environmental Scientist I - SD DANR Geological Survey Program*. [Interview]. 15 December 2021.

Schlaak, Karen

From: Schlaak, Karen
Sent: Wednesday, January 19, 2022 3:57 PM
To: dbhansen@live.com
Subject: Water Permit Application No. 8564-3
Attachments: 2427.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>



LOCALiQ

Aberdeen News
Watertown Public Opinion

PO Box 630567 Cincinnati, OH 45263-0567

PROOF OF PUBLICATION

Karen Schlaak
David R Hansen
46339 133Rd ST
Wilmot SD 57279-8021

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FEB 17 2022

WATER RIGHTS
PROGRAM

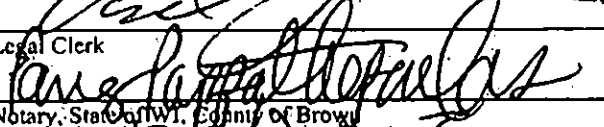
STATE OF SOUTH DAKOTA, COUNTY OF CODINGTON

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

01/29/2022

and that the fees charged are legal.
Sworn to and subscribed before on 01/29/2022



Legal Clerk


Notary, State of WI, County of Brown
10/23/2020

My commission expires

Publication Cost: \$52.88

Order No: 6839416

of Copies:

Customer No: 675420

1

PO #:

THIS IS NOT AN INVOICE!

Please do not use this form for payment remittance.

PANG PAPPATHOPOULOS
Notary Public
State of Wisconsin

NOTICE OF
APPLICATION NO. 8564-3

to Appropriate Water
Notice is given that David R Hansen, 46339 133rd St, Willmot SD 57279 has filed an application for a water permit to appropriate an additional 0.03 cubic feet of water per second (cfs) and irrigate an additional 11 acres. Water Permit Nos. 7568-3 and 7820-3, combined, appropriate 0.86 cfs from one well completed into the Revilla Aquifer (220 feet deep) located in the NW 1/4 Section 9 for irrigation 120 acres located in the NW 1/4 Section 9 (within the former boundaries of the Lake Traverse Reservation), S 1/2 NE 1/4, N 1/2 SE 1/4 Section 21; all in T123N-R50W. This application proposes to appropriate an additional 0.03 cfs from the existing well and irrigate an additional 11 acres in the area described above. This application, if approved, and Water Permit Nos. 7568-3 and 7820-3, combined, will authorize a total diversion rate of 0.89 cfs for irrigation of 131 acres. This site is located approximately 5 miles northwest of Willmot SD.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8564-3 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 February 7, 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 February 7, 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 \$_.
Jan. 29, 2022 #6839416

RECEIVED

FEB 09 2022

WATER RIGHTS PROGRAM

Affidavit of Publication

STATE OF SOUTH DAKOTA } ss.
County of Roberts

Terry O'Keefe of said county, being first duly sworn, on oath says, that he is publisher of THE WILMOT ENTERPRISE, a weekly newspaper printed and published in Wilmot, in said county of Roberts, and has full and personal knowledge of all the facts herein stated; that said newspaper is a legal newspaper and has a bonafide circulation of at least two hundred copies weekly, and has been published within said county for 52 successive weeks next prior to the publication of the notice herein mentioned, and was and is printed wholly or in part in an office maintained at said place of publication; that the Notice of Application/
Water Permit - Hansen, a printed copy of which, taken from the paper in which the same was published, is attached to this sheet, and is made a part of this affidavit, was published in said newspaper at least once in each week for 1-27, 2022 successive weeks, on the day of each week on which said newspaper was regularly published, to-wit:

1-27, 2022; _____;
_____; _____;
_____; _____;
_____; _____;
_____; _____;

that the full amount of the fee is charged for publication of said Notice insures to the benefit of the publisher of said newspaper; that no agreement or understanding for the division there has been made with any other person, and that no part thereof has been agreed to be paid to any person whomsoever and that the fees charged for the publication there of are \$ 46.51

Terry O'Keefe

Subscribed and sworn to before me this 2 day of

Feb, A.D., 2022

Kathy O'Keefe

Notary Public, Roberts County, South Dakota

My commission expires Sept. 1, 2026

NOTICE OF APPLICATION

NO. 8564-3

to Appropriate Water

Notice is given that David R Hansen, 46339 133rd St, Wilmot SD 57279 has filed an application for a water permit to appropriate an additional 0.03 cubic feet of water per second (cfs) and irrigate an additional 11 acres. Water Permit Nos. 7568-3 and 7820-3, combined, appropriate 0.86 cfs from one well completed into the Revillo Aquifer (220 feet deep) located in the NW 1/4 Section 9 for irrigation 120 acres located in the NW 1/4 Section 9 (within the former boundaries of the Lake Traverse Reservation), S 1/2 NE 1/4, N 1/2 SE 1/4 Section 21; all in T123N-R50W. This application proposes to appropriate an additional 0.03 cfs from the existing well and irrigate an additional 11 acres in the area described above.

This application, if approved, and Water Permit Nos. 7568-3 and 7820-3, combined, will authorize a total diversion rate of 0.89 cfs for irrigation of 131 acres. This site is located approximately 5 miles northwest of Wilmot SD.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8564-3 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://damr.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://damr.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 February 7, 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://damr.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 February 7, 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 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 \$46.51. (Jan. 27, 2022)

Schlaak, Karen

From: Schlaak, Karen
Sent: Wednesday, January 19, 2022 2:23 PM
To: 'legals@thepublicopinion.com'
Subject: 8564-3, David R Hansen
Attachments: 8564-3public.short_final.docx; FORM8.FRM.doc

Attached is a notice to be published on January 27, 2022.

David R Hansen, 46339 133th St, Wilmot SD 57279 (605 949-0224) 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

From: Schlaak, Karen
Sent: Wednesday, January 19, 2022 2:23 PM
To: Wilmot Enterprise (wilnews@tnics.com)
Subject: 8564-3, David R Hansen
Attachments: 8564-3public.short_final.docx; FORM8.FRM.doc

Attached is a notice to be published on January 27, 2022.

David R Hansen, 46339 133th St, Wilmot SD 57279 (605 949-0224) 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>





**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.**

January 19, 2022

David R Hansen
46339 133th St
Wilmot SD 57279

Dear Mr. Hansen:

Water Permit Application No. 8564-3 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 Wilmot Enterprise printed at Wilmot (Ph # 605 938-4651) and the Public Opinion printed at Watertown (Ph # 605 886-6901). 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. 8564-3 to Appropriate Water

Notice is given that David R Hansen, 46339 133rd St, Wilmot SD 57279 has filed an application for a water permit to appropriate an additional 0.03 cubic feet of water per second (cfs) and irrigate an additional 11 acres. Water Permit Nos. 7568-3 and 7820-3, combined, appropriate 0.86 cfs from one well completed into the Revillo Aquifer (220 feet deep) located in the NW 1/4 Section 9 for irrigation 120 acres located in the NW 1/4 Section 9 (within the former boundaries of the Lake Traverse Reservation), S 1/2 NE 1/4, N 1/2 SE 1/4 Section 21; all in T123N-R50W. This application proposes to appropriate an additional 0.03 cfs from the existing well and irrigate an additional 11 acres in the area described above. This application, if approved, and Water Permit Nos. 7568-3 and 7820-3, combined, will authorize a total diversion rate of 0.89 cfs for irrigation of 131 acres. This site is located approximately 5 miles northwest of Wilmot SD.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8564-3 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.

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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 February 7, 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.

**Report of Examination of Works and/or Application of Water to Beneficial Use
For Permit Nos. 7568-3 & 7820-3
(License will be issued under No. 8564-3)**

I have this day, August 30, 2021, made a thorough examination of the water use system constructed by David R Hansen, 46339 133rd St, Wilmot, SD 57279 of Permit No. 7820-3, bearing the priority of April 5, 2013 authorizing the diversion of 0.86 cfs and Permit No. 7568-3 bearing a priority date of December 20, 2012 authorizing diversion of 0.86 cfs from the Revillo Aquifer for irrigation purposes, in Roberts County.

A. Works used to divert the water:

Well Information: Well authorized by Permit 7568-3

- 1) Well Drilling Firm: L T P Enterprises, Inc
- 2) No. of Wells 1
- 3) Depth 227 feet
- 4) Well log is available Y

Casing

- 1) Diameter 14 inches
- 2) Length 197 feet
- 3) Type steel

Screen:

- 1) Type stainless steel - slotted
- 2) Length 30 feet
- 3) Static water level feet

Pump:

- 1) Make
- 2) Model Submersible (source -
Mr Hansen)
- 3) Size
- 4) Capacity 400 GPM

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

Pivot is located at the well in the NW ¼ Section 9; buried pipeline transports water to pivot in Section 21

C. Works used to apply water to beneficial use: (two center pivots)

Center pivot (Section 21):

- 1) Make Zimmatic
- 2) Overall length 1020 feet
- 3) Number of towers 5
- 4) End gun Y
- 5) Capacity 400 GPM

Center pivot (Section 9):

- 1) Make Zimmatic
- 2) Overall length 760 feet
- 3) Number of towers 4
- 4) End gun Y
- 5) Capacity 400 GPM

No chemigation equipment

D. Compliance with Permit Requirements:

1. Permit qualifications being abided by Y
2. Irrigation Questionnaires checked to determine if permit owner started irrigation by the end of construction period Y
3. 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: From the NW corner of Sec 9 T123N R50W, 925 ft S & 745 ft E, Lat 45.45367 Long -969350 (NW ¼ NW ¼ Sec 9). (located within the boundaries of the former Lake Traverse Reservation)
2. The works are capable of diverting and conveying to the place of use 0.89 cu. ft. per second of water which is to be used for irrigation. Water has been put to beneficial use to the maximum extent as follows:

Sec 21 T123N R50W
SW ¼ NE ¼ - 19 acres
SE ¼ NE ¼ - 24 acres
NE ¼ SE ¼ - 24 acres
NW ¼ SE ¼ - 16 acres

Sec 9 T123N R50W
NW ¼ NW ¼ - 34 acres
NE ¼ NW ¼ - 4 acres
SW ¼ NW ¼ - 10 acres

comprising a total of 131 acres of land and the license should be issued for 0.89 cfs (located within the boundaries of the former Lake Traverse Reservation)

3. All structures, wells and lands on map Y

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

The irrigated acreage was determined with the aid of FSA imagery and ArcMAP software.

The address is correct as shown on the inspection materials, but the telephone number should be 605/949-0224.



Darrell W DeBoer
Water Rights Inspector
DANR, Water Rights Program

Date report completed: September 2, 2021

Note: An additional 11 acres were developed which required a new water permit. Once approved, the applicable portions of Water Permit Nos. 7658-3 and 7820-3 will be incorporated into the new permit/license. One well is used to irrigate both pivots.

Genny



STATE OF SOUTH DAKOTA

WATER LICENSE NO. 8564-3

(1) David R Hansen, 46339 133rd St, Wilmot SD 57279 made Application No. 8564-3, November 29, 2021 for a water permit for additional diversion authority and additional acres to what is currently authorized under Water Permit Nos. 7568-3 and 7820-3 from groundwater (one well) Reville Aquifer, Roberts County, South Dakota. Permit No. 8564-3, with a priority date of November 29, 2021 was approved February 7, 2022 and issued to the applicant for diversion of water with construction of the described water supply system and application to beneficial use completed.

Water Permit No. 7568-3, with a priority date of December 20, 2012 authorized 0.86 cubic feet of water per second (cfs) from one well for irrigation of 60 acres. Water Permit No. 7820-3, with a priority date of April 5, 2013 authorized 0.86 cfs from the existing well for irrigation of 60 additional acres. The applicable portions of Nos. 7568-3 and 7820-3 are incorporated into this water license.

(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 0.89 cubic feet of water per second for beneficial use. The location of the diversion point is:

- 925'S and 745'E of the NW corner of Section 9-T123N-R50W (NW 1/4 NW 1/4)
Latitude 45.45367 Longitude -96.93501

(3) The permit holder has complied with the provisions of South Dakota State Law relating to the application of water to beneficial use to irrigate the following land: (RES – within former boundaries of reservation)

Section 21-T123N-R50W		Section 9-T123N-R50W (RES)	
SW 1/4 NE 1/4	19 acres	NW 1/4 NW 1/4	34 acres
SE 1/4 NE 1/4	24 acres	NE 1/4 NW 1/4	4 acres
NE 1/4 SE 1/4	24 acres	SW 1/4 NW 1/4	10 acres
NW 1/4 SE 1/4	16 acres		

Total 131 acres

(4) Pursuant to South Dakota Water Law 46-5-30.1 David R Hanson, 46339 133th St, Wilmot SD 57279 the holder and/or owner of Incorporated Water Right No. 8564-3 is issued a license to appropriate water, the right to use 0.89 cubic feet of water per second from groundwater (one well) Reville Aquifer with priority dates of December 20, 2012 (60 acres), April 5, 2013 (60 acres) and November 29, 2021 (11 acres) from the location specified in (2) of this license for irrigation purposes.

This license is subject to South Dakota State Law, any limitations or conditions listed in Incorporated Water Right No. 8564-3 and subject to the following qualifications:

- The well approved under Water Permit Nos. 7568-3, 7820-3, and this Permit is located near domestic wells and other wells which may obtain water from the same aquifer. Water withdrawals under this Permit 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.
- This water right is approved subject to the irrigation water use questionnaire being submitted each year.

Eric Gronlund

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

JUN 01 2022
date





**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

JUN 01 2022

David R Hansen
46339 133rd St
Wilmot SD 57279

Dear Mr. Hansen:

Enclosed are Water Permit and Water License No. 8564-3. These are the final water right documents completing your process of obtaining a Water Right.

As long as you use the water beneficially, as stated in the Water License, the 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

Note: The applicable portions of Nos. 7568-3 and 7820-3 are incorporated into Water License No. 8564-3.

enclosures