

WATER PERMIT NO. 8217-3

Name of Applicant: Red Willow Hutterian Brethren Inc.

Address: 20019 474th Ave, White SD 57276 Phone: 605 350-5771

Amount of Water Claimed: 14.57 cfs Total Acres: 1020 acres

Source of Water Supply: groundwater (8 wells)

Water to be used for: irrigation County: Brookings

Type of Waste Disposal System:

Location: 8 miles northwest of White

PRIORITY Date Received: 4-4-16 Application/License Fee: \$ 2550.00 (refund \$100)

Corrected Application Received: 4-11-16 Period of Annual Use: May 1 – Sept 30

Remarks: Water Right No. 5010-3 needs to be cancelled

Diversion Point: SW 1/4 NW 1/4, center NW 1/4

Sec 8; center SW 1/4 Sec 5; SE 1/4 NW 1/4, center

SW 1/4 Sec 9; center NE 1/4, center SW 1/4 Sec

17; all in T112N-R49W

Land to be Irrigated: S 1/2 Sec 5; NE 1/4 Sec 7; N

1/2 Sec 8; W 1/2 Sec 9; NE 1/4, SW 1/4, SE 1/4

NW 1/4 Sec 17; all in T112N-R49W

Depth of Well: 45-62 feet deep

Well Driller:

Remarks:

Type of Map: aerial

Prepared by:

Reviewed and the Number Assigned on: 4-11-16

By: **Karen Schlaak**

Notice of Hearing - date to intervene: _____

FORM 2: Application for irrigation in South Dakota

(type or print)

Mail to: DENR - Water Rights 523 E Capitol Ave Pierre, SD 57501-3182 ph. (605) 773-3352	No. <u>8217-3</u> (office use only) Hydrologic Unit <u>10170202</u>
	Basin <u>Sioux River</u>
	Newspaper <u>Brookings Register</u>
	<u>605-692-6271</u>

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Application For Permit To Appropriate Water For Irrigation

Type of Application: ☒ New ☐ Vested Right ☒ Amendment/Correction to Permit No. 5010-3
(Use predates Mar 2, 1955)

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

1. Name to Appear on Irrigation Permit Red Willow Hutterian Brethren Inc

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

Mailing Address 20019 474th ave white SD 57276
Jerold cell 690-5670 (Address) (City) (State) (Zip Code)

Phone _____ Mobile Joe 350 5771 Email _____

2. Amount of water claimed 14.57*CFS or _____ **GPM _____ ***AF _____ Total Acreage 1028A
(*Cubic Feet per Second) (**Gallons per Minute) (***) Acre Feet - storage capacity of dam/dugout or annual use if applicable)

3. Source of water supply 8 wells

4. Location of point of diversion on map see attached sheets
(example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W)

County Brookings5. County or counties where water will be used Brookings6. Annual period during which water is to be used may 1 - Sept 30

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

Land Description	Acres	Land Description	Acres
NW ¹ / ₄ of the SW ¹ / ₄ of sec 5	33	NW ¹ / ₄ of the SE ¹ / ₄ of Sec 5	33
SW ¹ / ₄ of the SW ¹ / ₄ of sec 5	9	SW ¹ / ₄ of the SE ¹ / ₄ of Sec 5	10
SE ¹ / ₄ of the SW ¹ / ₄ of sec 5	29	SE ¹ / ₄ of the SE ¹ / ₄ of Sec 5	8
NE ¹ / ₄ of the SW ¹ / ₄ of sec 5	33	NE ¹ / ₄ of the SE ¹ / ₄ of Sec 5	15

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

make on 2nd page

I, Joe Gross Joe Gross, 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.

SOUTH DAKOTA
WATER PERMIT NO. 8217-3

Date of first receipt of application April 4, 2016.

Date of return to applicant for corrections, amendments or changes April 4, 2016.

Date of receipt of corrected application April 11, 2016.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 8217-3 to Red Willow Hutterian Brethren Inc., c/o Joe Grosz, 20019 474th Ave, White SD 57276 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. 8217-3 appropriates 14.57 cubic feet of water per second from eight existing wells completed into the Big Sioux:North Deer Creek Aquifer (45 to 62 feet deep) to irrigate 1,020 acres. The wells are located in the SW 1/4 NW 1/4, center of NW 1/4 Section 8; center of SW 1/4 Section 5; SE 1/4 NW 1/4, center of SW 1/4 Section 9; center of NE 1/4 and center of SW 1/4 Section 17; all in T112N-R49W. The 1,020 acres to be irrigated are located in the S 1/2 Section 5; NE 1/4 Section 7; N 1/2 Section 8; W 1/2 Section 9; NE 1/4, SW 1/4, SE 1/4 NW 1/4 Section 17; all in T112N-R49W.
2. The amount of the appropriation may not exceed 2 acre feet annually for each acre of land to which water is actually and beneficially applied for irrigation. The water is to be used during the following described annual period: May 1 – September 30.
3. The date from which applicant may claim right is April 4, 2016.
4. The date of approval of Permit No. 8217-3 is July 5, 2016.
5. One-fifth of the construction is to be completed on or before January 5, 2019.
6. All construction is to be completed on or before July 5, 2021.
7. Water is to be put to beneficial use on or before July 5, 2025.
8. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

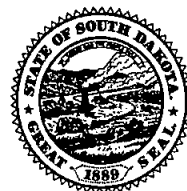
QUALIFICATIONS

1. The wells approved under this Permit 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 his withdrawals 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.
3. Approval of Permit No. 8217-3 cancels Water Right No. 5010-3.

WATER MANAGEMENT BOARD

By: *Jeanne Goodman*
Jeanne Goodman, Chief Engineer
Water Rights Program
Department of Environment and Natural Resources

JUL 21 2016
date



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 8 Provide copy of log(s), if available. Drilled by Lacey Drilling

For either Existing or Proposed Wells:

 c) Well Depth (required) 45 52-62 ft Depth to Top of Water Bearing Material 30 ft Depth to Water from Surface 6

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

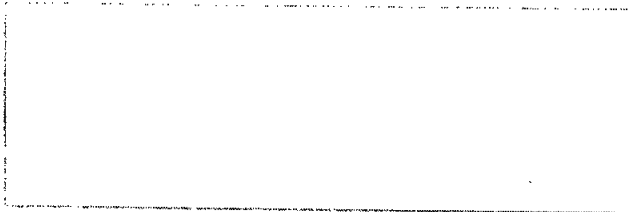
a) Surface Dimensions _____ Depth _____

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

	Land Description	Acres		Land Description	Acres
SECTION 7	NE 1/4 of the NE 1/4 of Section 7	33			
	SE 1/4 of the NE 1/4 of Section 7	33			
	SW 1/4 of the NE 1/4 of Section 7	15			
	NW 1/4 of the NE 1/4 of Section 7	15			
SECTION 8	NW 1/4 of the NW 1/4 of Section 8	33		NW 1/4 of the NE 1/4 of Section 8	33
	NE 1/4 of the NW 1/4 of Section 8	24		SE 1/4 of the NE 1/4 of Section 8	33
	SE 1/4 of the NW 1/4 of Section 8	10		NE 1/4 of the NE 1/4 of Section 8	33
	SW 1/4 of the NW 1/4 of Section 8	24		SW 1/4 of the NE 1/4 of Section 8	33
SECTION 9	NW 1/4 of the NW 1/4 of Section 9	33		SW 1/4 of the SW 1/4 of Section 9	33
	NE 1/4 of the NW 1/4 of Section 9	33		SE 1/4 of the SW 1/4 of Section 9	33
	SE 1/4 of the NW 1/4 of Section 9	33		NW 1/4 of the SW 1/4 of Section 9	33
	SW 1/4 of the NW 1/4 of Section 9	33		NE 1/4 of the SW 1/4 of Section 9	33
SECTION 17	NE 1/4 of the NE 1/4 of Section 17	33		SW 1/4 of the SW 1/4 of Section 17	18
	SE 1/4 of the NE 1/4 of Section 17	33		SE 1/4 of the SW 1/4 of Section 17	33
	NW 1/4 of the NE 1/4 of Section 17	33		NE 1/4 of the SW 1/4 of Section 17	33
	SW 1/4 of the NE 1/4 of Section 17	33		NW 1/4 of the SW 1/4 of Section 17	33
	SE 1/4 of the NW 1/4 of Section 17	18			

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Based on the locations identified on the aerial photo map, the location of the wells are as follows:

All in T112N-R49W

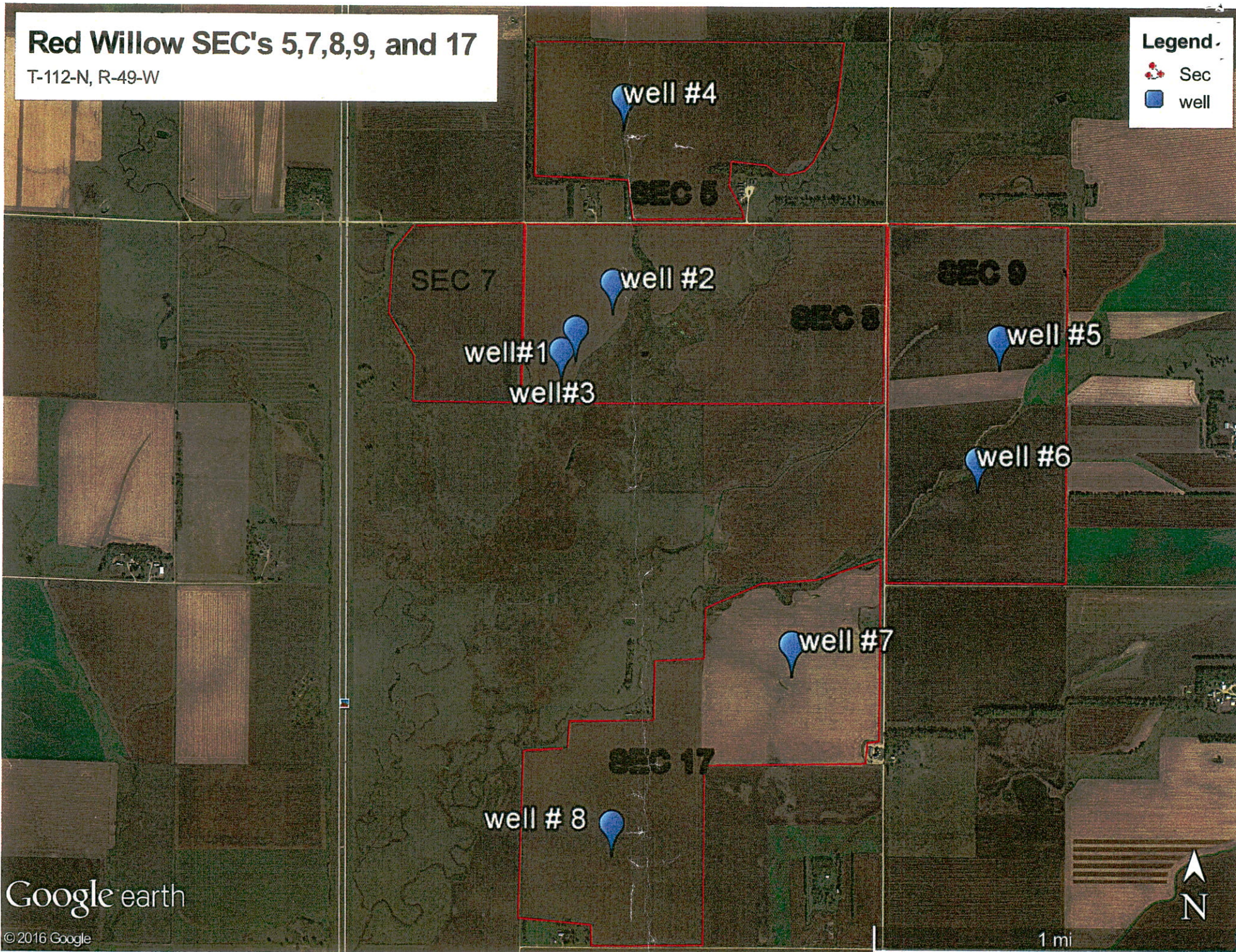
- | | |
|---------|-----------------------------|
| Well #1 | SW 1/4 NW 1/4 Section 8 |
| Well #2 | center of NW 1/4 Section 8 |
| Well #3 | SW 1/4 NW 1/4 Section 8 |
| Well #4 | center of SW 1/4 Section 5 |
| Well #5 | SE 1/4 NW 1/4 Section 9 |
| Well #6 | center of SW 1/4 Section 9 |
| Well #7 | center of NE 1/4 Section 17 |
| Well #8 | center of SW 1/4 Section 17 |

Red Willow SEC's 5,7,8,9, and 17

T-112-N, R-49-W

Legend

- Sec
- well



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Brackley

NOTICE OF WELL CONSTRUCTION

(1) WELL CONSTRUCTION

4

Location of well: SW 1/4 SW 1/4 NW 1/4 Section 8 Township 112 Range 49

Well owner John Probst (Name) Orange City, IA (Address)

Date well drilling completed 1-8-77 Purpose of well Domestic
(domestic, irrigation, municipal, industrial, other)

WELL LOG

Layers, top to top in feet	Description of layer
0-2	Topsoil
2-8	Rusty Gravel
8-24	Coarse Open Sand
24-26	Silty Gravel
26-38	Coarse Gravel
38-45	Very Coarse Grey Gravel

Depth to top of water producing aquifer 6'8" ft.
Depth to static water level 6'8" ft.
Name of producing aquifer (if known) _____
Total depth of drill hole 45' ft.
Depth to bottom of casing 45' ft.

Casing information: In the space below show kind, size, weight, lengths per diameter, etc., for production casing and surface casing, if used.

25'6" x 14" x 1/4" steel casing

Screen information: In the space below show length of screen below bottom of casing, diameter and kind of screen or casing perforations.

20' x 14" x 100 Johnson

If a flowing well, flow of completed well _____ G.P.M.

Ed H. Lorenz & Sons
Name of Drilling Contractor

Attach sheet if more space is needed

(2) PUMP INSTALLATION

Company name and size of pump Western Lead Roller HP 50

Type of pump Turbine Capacity of installed pump 600 G.P.M.

Depth of pump placement 40 ft., Date of pump installation _____

(3) WATER SURFACE MEASURING TUBE

On some wells an air-tight water surface measuring tube is required: See Section 46.408 of Chapter 46.4, MINIMUM WELL CONSTRUCTION STANDARDS.

Show exact vertical length of water surface measuring tube, when installed _____ ft., tube diameter _____, tube material _____.

Ed H. Lorenz & Sons
Name of Pump Installation Contractor

well 1 or 3?

NOTICE OF WELL CONSTRUCTION

(1) WELL CONSTRUCTION

Location of well: 1/4 1/4 Section 8 Township 11 N Range 7 E

Well owner John Brock Orange County, Texas
(Name) (Address)

Date well drilling completed 12-27-76 Purpose of well irrigation
(domestic, irrigation, municipal, industrial, or other)

WELL LOG #2

[illegible]

Attach sheet if more space is needed

Depth to top of water producing aquifer 66' ft.

Depth to static water level: 6.6 ft.

Name of producing aquifer (if known) _____

Total depth of drill hole 25 ft.

Depth to bottom of casing _____ ft.

Casing information: In the space below show kind, size, weight, lengths per diameter, etc., for production casing and surface casing, if used.

35-1/2" x 14" x 1/4" steel
case

Screen information: In the space below show length of screen below bottom of casing, diameter and kind of screen or casing perforations.

12' x 14" x .125 Johnn.
5' x 14" x .050 Johnn.

If a flowing well, flow of completed well: _____ G.P.M.

Ed H. Lane, Jr.
Name of Drilling Contractor

(2) PUMP INSTALLATION

Company name and size of pump _____ HP. _____

Type of pump _____ Capacity of installed pump 900-1000 G.P.M.

Depth of pump placement _____ ft., Date of pump installation _____

(3) WATER SURFACE MEASURING TUBE.

On some wells an air-tight water surface measuring tube is required: See Section 46.408 of Chapter 46.4, MINIMUM WELL CONSTRUCTION STANDARDS.

Show exact vertical length of water surface measuring tube, when installed _____ ft., tube diameter _____, tube material _____.

Ed H. Laves + Son
Name of Pump Installation Contractor

well
1, 2, or 3

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NOTICE OF WELL CONSTRUCTION

(1) WELL CONSTRUCTION

Location of well NW 1/4 SE 1/4 SW 1/4 Section 5 Township 112-N Range 49-WWell owner John Brock et al. Orange City Ia
(Name) (Address)Date well drilling completed 6-23-76 Purpose of well Irrigation
(domestic, irrigation, municipal, industrial, other)

WELL LOG

Layers, top to top in feet	Description of layer	Depth to top of water producing aquifer	
<u>0-2</u>	<u>Topsoil</u>	<u>17</u>	ft.
<u>2-10</u>	<u>SAND & CLAY (MIXED)</u>	<u>17</u>	ft.
<u>10-16</u>	<u>SAND</u>		
<u>16-22</u>	<u>BROWN CLAY</u>		
<u>22-29</u>	<u>GREY SAND</u>		
<u>29-39</u>	<u>COARSE YELLOW GRAVEL</u>		
<u>39-62</u>	<u>VERY COARSE GRAVEL - GREY</u>		
<u>quit at 62' ENVELOPE</u>			
<u>had test auger to 72'</u>			
<u>and still no clay.</u>			

Depth to top of water producing aquifer 17 ft.Depth to static water level 17 ft.

Name of producing aquifer (if known) _____

Total depth of drill hole 62' ft.Depth to bottom of casing 62 ft.

Casing information: In the space below show kind, size, weight, lengths per diameter, etc., for production casing and surface casing, if used.

42' 6" x 14" x 1/4" STEEL CASING

Screen information: In the space below show length of screen below bottom of casing, diameter and kind of screen or casing perforations.

20' x 14" x 100 JOHNSON
IRRIGATOR SCREEN

If a flowing well, flow of completed well _____ G.P.M.

Attach sheet if more space is needed

Name of Drilling Contractor _____

(2) PUMP INSTALLATION

Company name and size of pump WESTERN LAND ROLLER HP. 60Type of pump TURBINE Capacity of installed pump 750 G.P.M.Depth of pump placement 48 ft., Date of pump installation 7-10-76

(3) WATER SURFACE MEASURING TUBE

On some wells an air-tight water surface measuring tube is required: See Section 46.408 of Chapter 46.4, MINIMUM WELL CONSTRUCTION STANDARDS.

Show exact vertical length of water surface measuring tube, when installed _____ ft., tube diameter _____

Name of Pump Installation Contractor _____

Well # 4

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WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date 4-11, 20 16

Red Willow Httm Brethren, 20019 474th Ave, White SD 57276

RECEIVED OF _____

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

Fee for Application for Permit No. <u>8217-3</u> to Appropriate Water, to construct and to put water to beneficial use	500	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>8217-3</u>	200	00
Fee for Filing Transfer Form _____		
Fee for _____		
Fee for Issuing New Well Driller's License No. _____ for C.Y. _____		
Fee for Renewal of Well Driller's License No. _____ for C.Y. _____		
Fee for Issuing Well Pump Installer's License No. _____ for C.Y. _____		
Fee for Renewal of Well Pump Installer's License No. _____ for C.Y. _____		
(Any Other Work Provided by Law)	TOTAL	700.00

No. **07811**

By

Joanne Goodman
Chief Engineer
IKS

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date 4/4, 20 16

RECEIVED OF Red Willow Hutterian Brethren Inc 20019 474th Ave White SD 57276

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

Fee for Application for Permit No. <u>8217-3</u> to Appropriate Water, to construct and to put water to beneficial use	1850	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. _____		
Fee for Filing Transfer Form _____		
Fee for _____		
Fee for Issuing New Well Driller's License No. _____ for C.Y. _____		
Fee for Renewal of Well Driller's License No. _____ for C.Y. _____		
Fee for Issuing Well Pump Installer's License No. _____ for C.Y. _____		
Fee for Renewal of Well Pump Installer's License No. _____ for C.Y. _____		
(Any Other Work Provided by Law)	TOTAL	1850 00

No. **07806**

By *James Goodman*
Chief Engineer



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

April 4, 2016

Red Willow Hutterian Brethren Inc.
c/o Joe Grosz
20019 474th Ave
White SD 57276

Dear Mr. Grosz:

Thank you for submitting the *Application for a Permit to Appropriate Water* for irrigation in Brookings County. In order to complete the application, the following is required.

- State Statutes limit diversions to 1 cubic foot of water per second (cfs) for each 70 acres irrigated. This would mean that you are allowed approximately 14.69 cfs to irrigate the total 1026 acres. The application requests 17.60 cfs. We understand that in order to accommodate certain irrigation methods, a greater diversion rate is required. Please justify in writing your request for a diversion rate greater than the statutory limit (please explain diversion rate requirement for the project).
- The application/license fee to irrigate 1,026 acres is \$2,550.00. We received a check for \$1,850.00. Please submit an additional \$700.00.

If you have any questions, please contact Eric Gronlund or me.

Sincerely,

Karen Schlaak
Water Rights Program
605 773-3352
karen.schlaak@state.sd.us

enclosures

c: Dave Gullickson, Farmers Implement

Water Rights Program - File Documentation

NAME: Dave Gullickson, Farmers Implement & Irrigation

ADDRESS: Brookings

DATE: 4-8-16 **COUNTY:** BG **TELEPHONE:**

RE: Red Willow Httm Brethren application

COMMENTS:

Dave Gullickson stated he talked with Red Willow Hutterian Brethren and they would like to amend the application to 1020 acres. The number of acres to be irrigated in the NW 1/4 SW 1/4 Section 5 should be changed from 39 acres to 33 acres.

They would like to request the statutory limit of 14.57 cfs for the project.

Red Willow mailed the check for the additional \$700 yesterday. The fee to irrigate 1,020 acres will decrease the total fee by \$100. I informed Dave that we will refund the \$100 once the permit is approved.



Karen Schlaak
Water Rights Program



**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. 8217-3, Red Willow Hutterian Brethren**

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. 8217-3, Red Willow Hutterian Brethren, c/o Joe Grosz, 20019 474th Avenue, White SD 57276.

The Chief Engineer is recommending APPROVAL of Application No. 8217-3 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 this Permit 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 his withdrawals 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.
3. Approval of Permit No. 8217-3 cancels Water Right No. 5010-3.

See report on application for additional information.

Jeanne Goodman, Chief Engineer
June 10, 2016

Report to the Chief Engineer
 Water Right Application No. 8217-3
 Red Willow Hutterian Brethren, Inc.
 May 23rd, 2016

Water Permit Application No. 8217-2 proposes to appropriate water at a maximum diversion rate of 14.57 cubic feet per second (cfs) from eight existing wells ranging in depth from 45 to 62 feet. Well locations are summarized in Table 1. The proposed water use is for the irrigation of 1,020 acres located in the S ½ Section 5; NE ¼ Section 7; N ½ Section 8; W ½ Section 9; NE ¼, SW ¼, SE ¼ NW ¼ Section 17; all in T112N-R49W in Brookings County.

Table 1: Well locations for Water Permit Application
 No. 8217-3

Applicant Well Name	Location*
Well 1	SW 1/4 NW 1/4 Sec. 8
Well 2	center of NW 1/4 Sec. 8
Well 3	SW 1/4 NW 1/4 Sec. 8
Well 4	center of SW 1/4 Sec 5
Well 5	SE 1/4 NW 1/4 Sec. 9
Well 6	center of SW 1/4 Sec. 9
Well 7	center of NE 1/4 Sec. 17
Well 8	center of SW 1/4 Sec. 17
*All locations in T112N-R49W in Brookings County	

A portion of this land and diversion points are covered under Water Right No. 5010-3, which is subject to cancellation for nonuse (last reported irrigation was in 2004). Water Right No. 5010-3 authorizes a maximum diversion rate of 6.9 cfs from four diversion points with locations approximately matching the applicants location descriptions of well nos. 1, 2, 3, and 4 and authorized the irrigation of 483 acres located in the SW ¼ Section 5; NW ¼ Section 8; NE ¼, SW ¼, SE ¼ NW ¼ Section 17; all in T112N-R49W in Brookings County. The approximate well location provided for well no. 6 matches the approximate well location for a now cancelled Water Right No. 3210-3 that was held by Red Willow Colony. A review of DENR Water Rights' records did not result in any irrigation well information for the approximate locations of well nos. 5, 7, and 8 (Water Rights, 2016a and Water Rights Program, 2016). However, the inspection report for Water Right No. 5010-3 indicated that, at the time of inspection (1985), there was buried pipeline from wells authorized under Water Right No. 5010-3 to the approximate locations of wells nos. 7 and 8 (Water Rights, 2016a). For the quarter containing the approximate location of well no. 5 there was a Water Permit No. 2909-3 that was cancelled for non-construction (Water Rights, 2016a). However, the information provided with this current application indicates that the diversion points are eight existing wells, and contact with Joe Grosz (Grosz, 2016) with Red Willow Hutterian, Inc. verified that all eight wells are existing wells.

Aquifer: North Deer Creek management unit of the Big Sioux aquifer (BS:NDC)**Hydrogeology and Aquifer Characteristics**

The Big Sioux aquifer is a shallow, glacial aquifer that underlays the Big Sioux River Valley and many of its tributaries (Koch, 1980). It is made up of very permeable, well-sorted glacial outwash sand (mostly medium to very coarse) and gravel (mostly very fine to medium) that overlies a relatively impermeable glacial till (Hamilton, 1989 and Koch, 1980). Near the Big Sioux River and major tributaries, the aquifer is under unconfined conditions; elsewhere it can underlie glacial till and be under confined conditions (Hamilton, 1989).

Based on the available information on the eight existing wells that this application proposes to use, they are completed into the North Deer Creek management unit of the Big Sioux aquifer. The area of the North Deer Creek management unit (as mapped by Hedges et al. (1982)) is approximated at 5,700 acres with an estimated 6,840 acre-feet of recoverable water. Hedges et al. (1982) also makes note of several areas in Brookings County where additional groundwater could be potentially located that were not included in the report's estimated aquifer areas due to data limitations. One of these areas is located adjacent to the area mapped by Hedges et al. (1982) as the North Deer Creek management unit. Hamilton (1989) and additional drilling confirms the presence of surficial groundwater resources in that area (Water Rights Program, 2016). As additional development has occurred in this area, water rights/permits wells have been assigned to the North Deer Creek management unit based on extending the management unit of Hedges et al. (1982) to the hydraulically connected upgradient area. The management unit as mapped by Hedges et al. (1982) and the additional area are shown in Figure 1. The additional area as mapped in Figure 1 covers an area of about 8,320 acres.

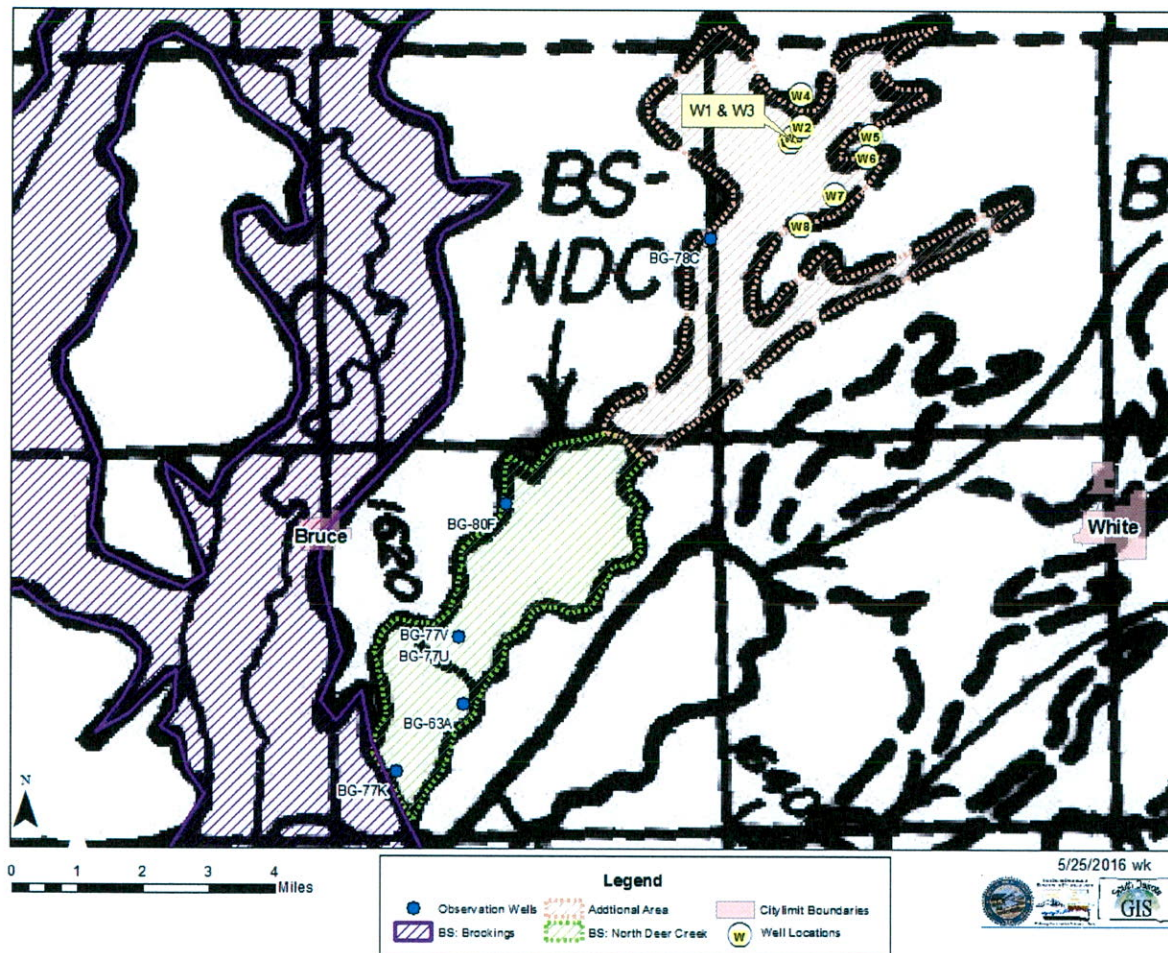


Figure 1: North Deer Creek management unit of the Big Sioux (BS) aquifer as mapped by Hedges et al. (1982) and upgradient additional area that has been included as part of the management unit (modified from Hedges et al., (1982). Also shown are the eight diversion points that this application proposes to use and the Water Rights Program observation wells monitoring the management unit (Water Rights, 2016b).

The available information on the existing wells indicates that in the area of wells no. 1-4 the management unit is under unconfined conditions. Well depths for wells no. 1-4 range from 45 to 62 feet below grade. The thickness of aquifer materials (sand and gravel) ranges from 30 to 51 feet thick. At the times of completion (1976 and 1977) static water levels ranged from 6.5 to 17 feet below grade. An irrigation well completion report in the approximate area of well no. 6, reports clay from 2 to 10 feet below grade and aquifer materials from 10 to 40 feet below grade (Water Rights Program, 2016). A static water level at the time of completion (1977) was reported at three feet below grade (Water Rights Program, 2016). Considering the reported water level and the clay above the management unit in the area of this well, this well, is under confined conditions, however available information indicates that the area of the management unit under confined conditions in the approximate area of well no. 6 is likely of limited aerial extent (Water Rights, 2016b; Water Rights Program, 2016; and Geological Survey Program, 2016).

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

Pursuant to SDCL 46-2A-9, a permit to appropriate water may be issued only if there is a reasonable probability that there is unappropriated water available for the applicant's proposed use, that the proposed diversion can be developed without unlawful impairment of existing rights and that the proposed use is a beneficial use and in the public interest. This report will address the availability of unappropriated water and existing rights from the aquifer that are pertinent to this application.

Water Availability

Water Permit Application No. 8217-3 proposes to appropriate water from the North Deer Creek management unit of the Big Sioux aquifer for irrigation use. 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 pursuant to SDCL 46-1-6 (17), the Board need not consider the recharge/withdrawal issue. Here, a water distribution system is not involved and the North Deer Creek management unit of the Big Sioux aquifer is not older or lower than the Greenhorn Formation, therefore the withdrawal/recharge issue must be considered.

Observation Wells

In determining the availability of unappropriated water for a permit application Administrative Rule 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. When considered together observation wells can offer insight into the overall hydraulic conditions in an aquifer, and when considered singularly or in spatial groups, can offer insights into localized hydraulic conditions.

The Water Rights Program monitors six observation wells completed into the North Deer Creek management unit of the Big Sioux aquifer. The nearest observation well is BG-78C which is located about 1.3 miles to the west southwest of the nearest well (well 8) that this application proposes to utilize (hydrograph shown in Figure 2). The elevations for the water levels of the six observation wells monitoring the management unit is shown in Figure 3 (observation well locations shown in Figure 1).

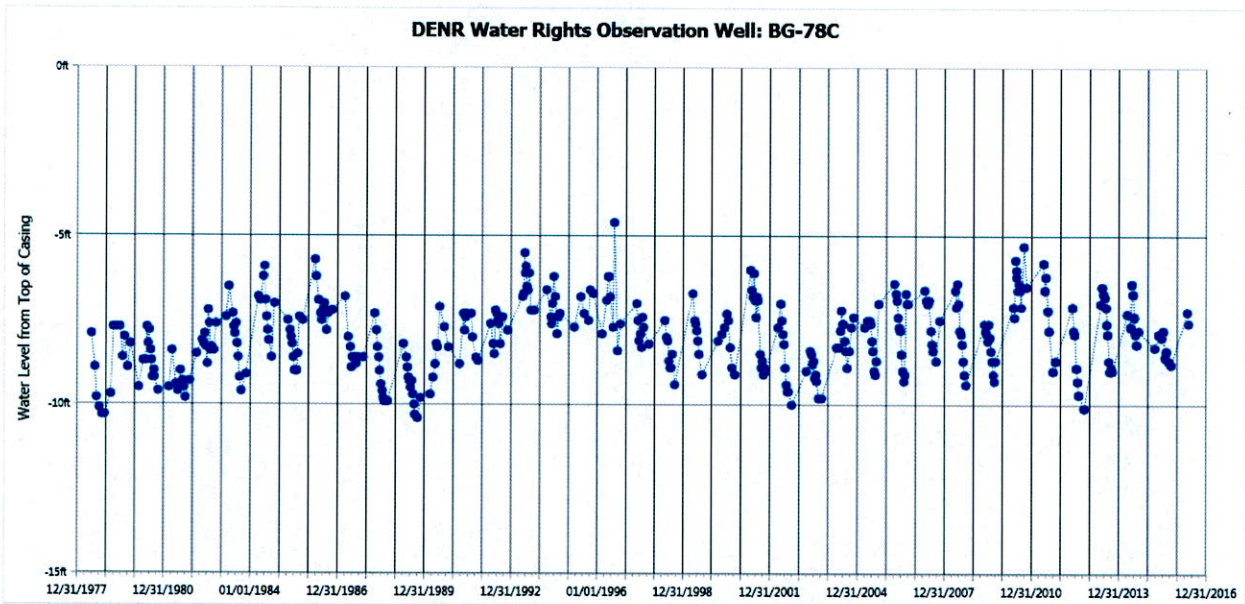


Figure 2: Hydrograph of Observation Well BG-78C (Water Rights, 2016b)

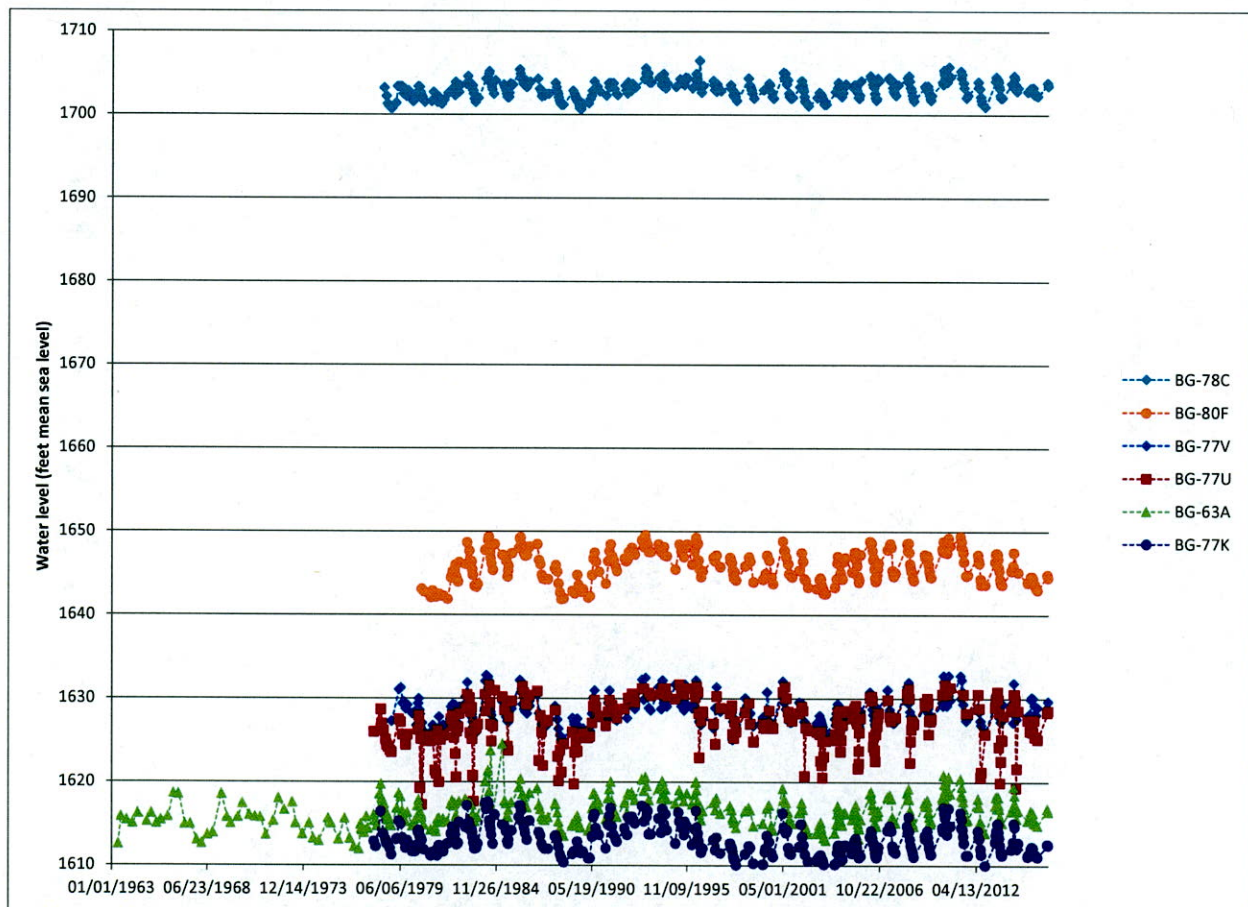


Figure 3: Water Level elevations for the observation well monitoring the management unit (Water Rights, 2016b)

The water level changes in the observation wells monitoring this management unit are the result of the management unit responding to the effect of climate condition on the aquifer. Increases in water levels occur during wetter periods (when recharge exceeds discharge), and decreases in water levels occur during drier periods (when discharge exceeds withdrawals). At the current level of development the effects of climate conditions on the water levels in the management unit masks the temporal impacts of pumping. This indicates that there is water available for capture in the management unit. The water level elevations in these observation wells indicate that water in the management unit flows toward the southwest in the direction of the Brookings management unit of the Big Sioux aquifer (Water Rights, 2016b).

In considering the locations of the diversion points that this application proposes to utilize the majority of the areal extent for this management unit is located downgradient, and as a result, recharge occurring downgradient of the diversion points is not available for pumping at these locations. To examine this in relation to available observation well data, the observation well BG-78C can be used as a reference point to consider localized water availability in the management unit to the northeast of the observation well. The majority of active irrigation under Water Rights No. 5010-3 occurred from 1988 to 1996; several other water rights/permits (3348A-3 and 4981-3) located to the northeast of BG-78C were also being utilized during this time period. In examining the hydrograph for observation well BG-78C, it can be observed that even when greater volumes (than current) of water usage was occurring to the northeast of this observation well, climatic conditions still dominated the hydrograph for this observation wells. Therefore, there is a reasonable probability that water in addition to what has been historically used from the management unit northeast of observation well BG-78C is available for capture.

Hydraulic Budget

Recharge

Recharge to the aquifer occurs primarily during the spring from infiltration of snowmelt and precipitation (Hamilton, 1989). In Hedges, et al. (1985) recharge rates for the management units of the Big Sioux aquifer were estimated to range from 2.7 to 6.9 inches per year based on observation well analysis, base flow recession analysis, and computer model analysis. Hedges, et al. (1985) further addresses the North Deer Creek management unit of the Big Sioux aquifer by estimating recharge based on observation well analysis at 4.9 inches per year. By applying this recharge estimate to the combined area of the management unit (as mapped by Hedges et al., 1982) and the noted additional area in Figure 1, average annual recharge to the management unit is estimated to be about 5,725 acre-feet per year. As noted the diversion points for this application are located upgradient of the majority of the area of the management unit, the observation well BG-78C can again be used as a reference point to examine localized water availability within the management unit. The area of the management unit located to the northeast of observation well BG-78C is about 4,732 acres. When the recharge rate for the management unit is applied to this area, average annual recharge to the management area northeast of BG-78C is estimated at about 1,932 acre-feet per year.

Withdrawals

Withdrawals from the management unit include evapotranspiration, seepage to surface water, pumping, and groundwater outflow to the Brookings management unit of the Big Sioux aquifer (Hamilton, 1989 and Hedges et al., 1982). Withdrawals from domestic wells are not considered a significant portion of the hydraulic budget for the management unit due to their relatively low diversion rates and the development of rural water systems in the area. There are five water rights for irrigation use in the management unit (Nos. 3348A-3, 4252-3, 4981-3, 5010-3, and 7528-3), of which Water Rights No. 5010-3 is subject to cancellation for nonuse.

The Water Rights Program collects and maintains irrigation water use information from across the state. The reported irrigation pumpage and appropriations for the management unit is shown on an annual basis for the period of record in Figure 4. The irrigation for Water Right No. 4981-3 for several different years was reported combined with the irrigation information for several water rights not appropriating water from this management unit, so available information was used to estimate the portion of the reported amount tied to Water Right No. 4981-3. From 2005 to 2015, average reported irrigation for Water Rights Nos. 3348A-3, 4252-3, and 4981-3 is 304 acre-feet per year. For the three years that irrigation has been reported under Water Right No. 7528-3 reported pumpage averaged 78 acre-feet. Therefore average annual use for Water Rights Nos. 3348A-3, 4252-3, 4981-3, and 7528-3 can be estimated at 382 acre-feet per year.

In considering water availability to the area located to the northeast of observation well BG-78C, currently there are three water rights authorized for irrigation in the area, Water Right Nos. 5010-3 (subject to cancellation), 3348A-3, and 4981-3. Average historical reported water use for Water Right Nos. 3348A-3 and 4981-3 is 119 acre-feet per year.

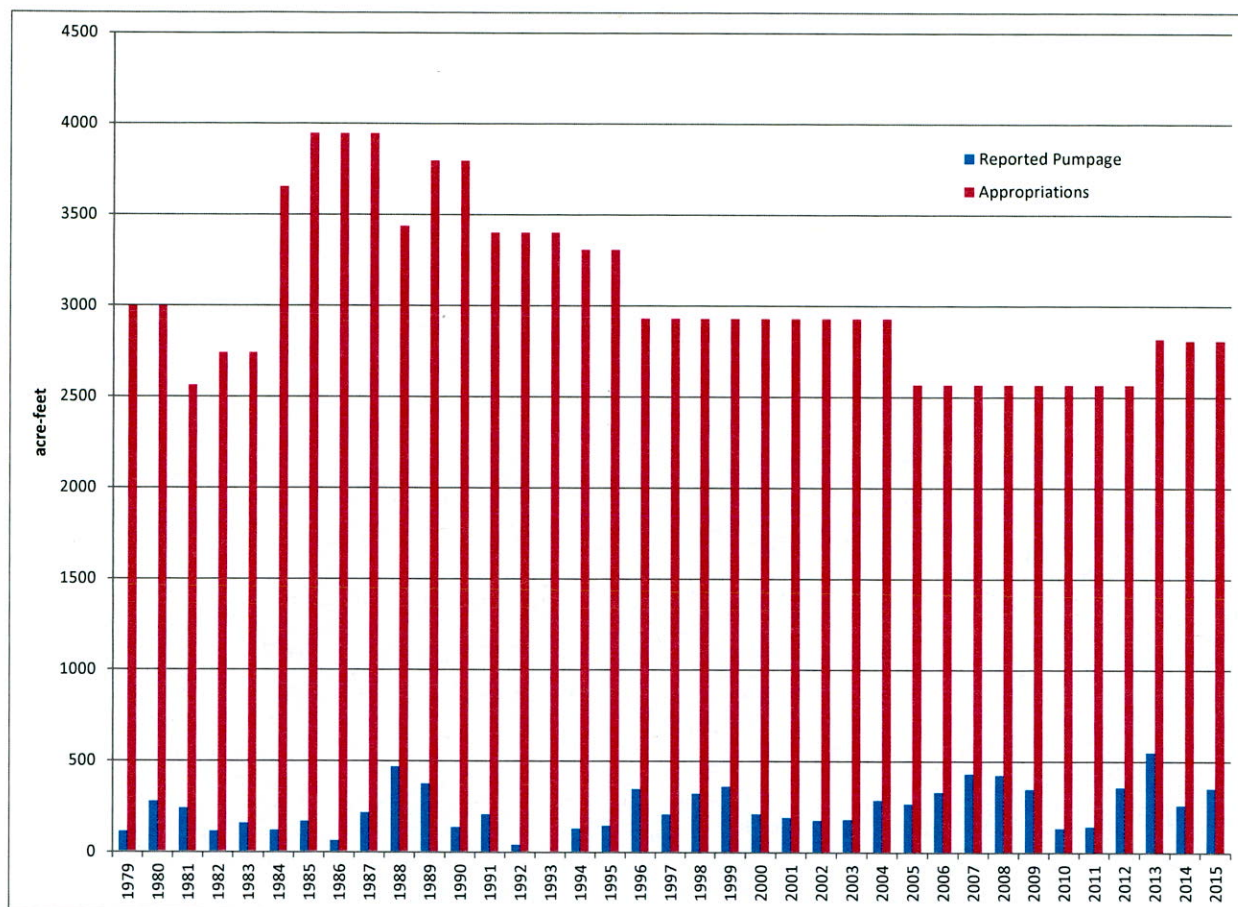


Figure 4: Reported irrigation pumpage for the North Deer Creek management unit and appropriations for the period of record (Water Rights, 1980-2016) (Note: Irrigation for Water Right No. 4981-3 estimate from the combined reported irrigation data of several Water Rights for 1998, 1999, 2000, 2002, 2003, 2005, and 2006)

Balance

Estimated average annual recharge to the management unit is 5,725 acre-feet per year and estimated average annual withdrawals from appropriative users is estimated at 382 acre-feet per year. In considering the area northeast of observation well BG-78C, estimated average annual recharge is 1,932 acre-feet per year and estimated average annual appropriative withdrawals is estimated at 119 acre-feet per year. When comparing estimated average annual recharge to estimated average annual withdrawal for both the entire management unit and the localized area northeast of observation well BG-78C, average annual recharge exceeds average annual withdrawals. In the eastern portion of the state, irrigation water rights/permits for which the application rate per irrigated acre has been quantified application rates are less than ten inches per acre. In considering this average annual water use from this proposed permit, if approved, can be estimated to be less than 850 acre-feet per year. Therefore, there is a reasonable probability that water is available in this management unit to support the request of this application. Additionally, there is a reasonable probability that there is water available upgradient of observation well BG-78C to support the needs of this application.

Existing Water Rights

The approximate location of water right (appropriating water from the North Deer Creek management unit) diversion points in the area of the diversion points that this application proposes to utilize are shown in Figure 5 (Water Right No. 5010-3 not shown). The nearest diversion point to those that this application proposes to utilize is that of Water Right No. 4981-3, which is located about 0.7 miles from the nearest well that this application proposes to use (well 4).

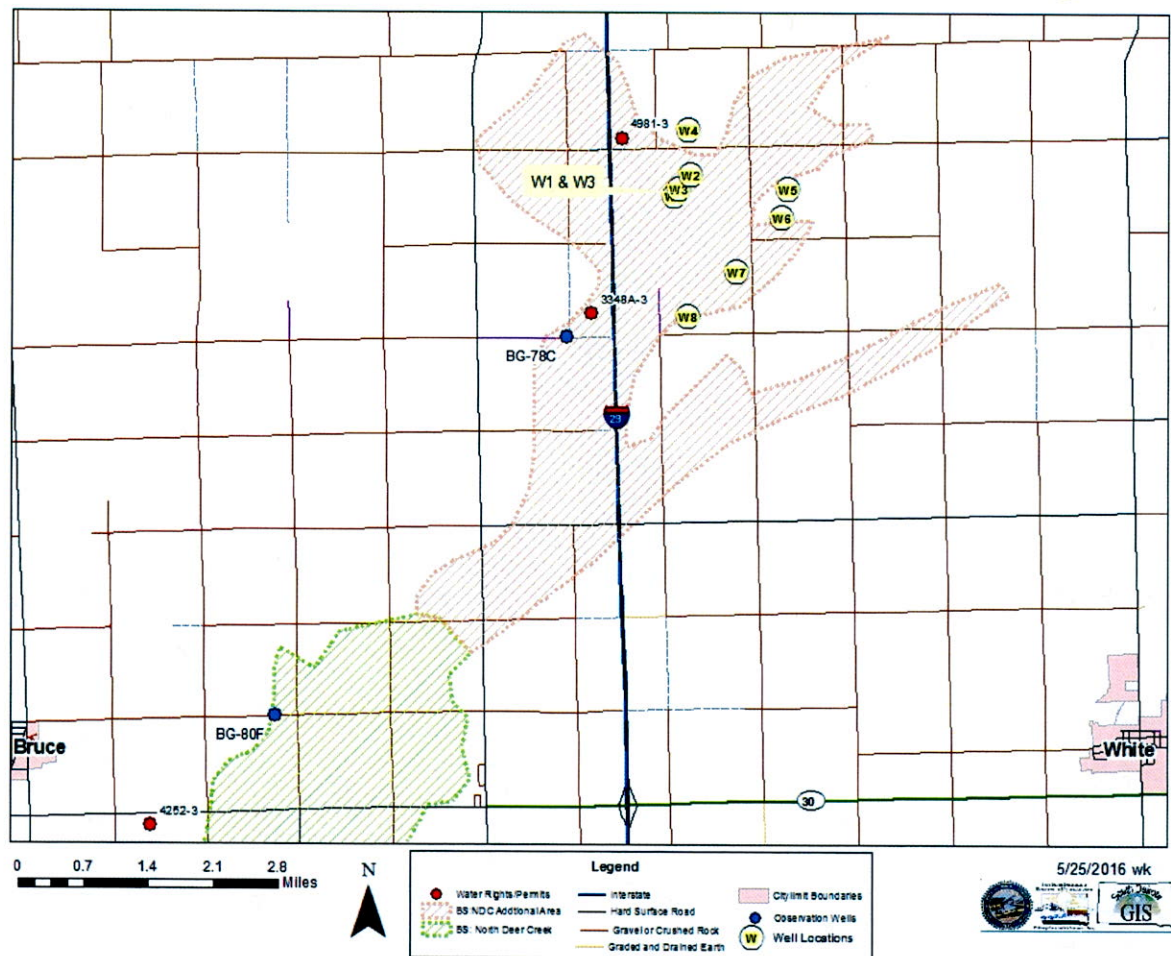


Figure 5: Water Right diversion points appropriating water from the North Deer Creek (NDC) management unit of the Big Sioux (BS) aquifer in the area of the diversion points that Water Permit Application No. 8217-3 proposes to use (Water Rights, 2016a and Water Rights 2016b). Note: Not shown is Water Right No. 5010-3, since it is subject to cancellation.

In the past, the Water Management Board has recognized that to place water to maximum beneficial use, a certain amount of drawdown may occur. In the area of wells no. 1-4, since the management unit is under unconfined conditions drawdown due to pumping would not typically be significant far from the well site. Additionally Hamilton (1989) notes that, "Effects of withdrawals from wells that tap the Big Sioux aquifer generally are small because of extensive recharge and unconfined conditions. Drawdown of water levels is temporary and a few feet at

most at distances of about a mile from large-capacity wells.” Additionally, available information indicates that the diversion points authorized under Water Right No. 5010-3 (wells no. 1-4) have been utilized in several of the same irrigation seasons as Water Right No. 4981-3 with no record of complaints/interference. In regards to the areas where the management unit is under confined conditions, 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. The board has defined 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.” However, since available data indicates that confined conditions in the area of well no. 6 are of limited extent, drawdown as a result of pumping is not expected to adversely impact adequate wells in the area. Therefore, nearby adequate wells are not expected to be adversely impacted by this permit, if approved.

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).

The North Deer Creek management unit is a relatively thin aquifer with a limited amount of water in storage. While the average annual withdrawal would not exceed average annual recharge to the aquifer, conditions may occur when the withdrawal exceeds recharge. When this occurs, water will be removed from storage, consequently reducing the saturated thickness of the aquifer. If this occurs for an extended period of time such that the saturated thickness is reduced to the extent that the water rights/permits can no longer pump at their developed or “historically established” rates, this may be considered an adverse impact.

Conclusions

1. Water Permit Application No. 8217-3 proposes to appropriate a maximum 14.57 cfs from eight existing wells completed into the North Deer Creek management unit of the Big Sioux aquifer for the irrigation of 1,020 acres located in the S ½ Section 5; NE ¼ Section 7; N ½ Section 8; W ½ Section 9; NE ¼, SW ¼, SE ¼ NW ¼ Section 17; all in T112N-R49W in Brookings County.
2. Four of the diversion points this application proposes to utilize and a portion of the acres that this application proposes to irrigate located in the SW ¼ Section 5; NW ¼ Section 8; NE ¼, SW ¼, SE ¼ NW ¼ Section 17; all in T112N-R49W in Brookings County are currently authorized under Water Right No. 5010-3 which is subject to cancellation due to nonuse.

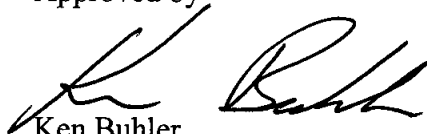
3. There is a reasonable probability that water is available in the management unit to meet the water use proposed by this application.
4. There is a reasonable probability that this application will not adversely impact existing water rights in the management unit with adequate wells.



Whitney Kilts

SDDENR-Water Rights Program

Approved by



Ken Buhler

SDDENR-Water Rights Program

References

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- Grosz, J. 2016. Joe Grosz. Red Willow Hutterian Brethren, Inc. Personal Communication-Telephone. June 6, 2016.
- Hamilton, L. 1989. Water Resources of Brookings and Kingsbury Counties, South Dakota. Water-Resources Investigations Report 88-4185. USGS, Huron, SD.
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- Koch, N. C. 1980. Appraisal of the Water Resources of the Big Sioux Aquifer, Brookings, Deuel and Hamlin Counties, South Dakota. USGS, Huron, SD.
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- Water Rights. 2016a. Water Right/Permit Files. SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.
- Water Rights. 2016b. Water Rights Program Observation Well Files. SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.
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Affidavit of Publication

State of South Dakota

10/

Exhibit "A"

SS

County of Brookings

Katherine Foiles of said county, first duly sworn, on oath, says: That she is the office clerk of THE BROOKINGS REGISTER, a daily newspaper, printed and published in the City of Brookings, in said County of Brookings, and State of South Dakota; that she has full and personal knowledge of the facts herein stated; that said newspaper is a legal newspaper and has a bona fide circulation of at least two hundred copies of each issue daily; that said newspaper has been published within the said County of Brookings and State of South Dakota, for more than one year prior to the first publication of Exhibit "A," hereto attached and herein mentioned, and was and is printed that the

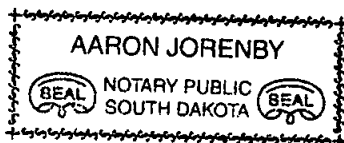
Leg#986 8217-3, Red Willow

same was published, is hereto attached marked Exhibit said newspaper for _____ 1 times, to-wit:

June 22, 2016

said Exhibit "A" inures to the sole benefit for the publishers of said newspaper; that no agreement or understanding for the division thereof has been made with any other person, and that no part thereof has been agreed to be paid to any person whomsoever; that the fees charged for the publication thereof are:

Twenty-Eight Dollars and Six Cents \$28.06



[Handwritten Signature]

23 day of

June

2016

[Handwritten Signature]

Notary Public in and for the County of Brookings, South Dakota.

My Commission expires February 22, 2020.

RECEIVED

JUL - 8 2016

WATER RIGHTS
PROGRAM

Legal 986, 1x, 6/22
NOTICE OF APPLICA-
TION NO. 8217-3 to
Appropriate Water
Notice is given that Red
Willow Hutterian
Brethren, Inc, c/o Joe
Grosz, 20019 474th
Ave, White SD 57276
has filed an application
for a water permit to
appropriate 14.57 cubic
feet of water per second
from eight existing wells
completed into the Big
Sioux/North Deer Creek
Aquifer (45 to 62 feet
deep) to irrigate 1,020
acres. The wells are
located in the SW 1/4
NW 1/4, center of NW
1/4 Section 8; center of
SW 1/4 Section 5; SE
1/4 NW 1/4, center of
SW 1/4 Section 9; cen-
ter of NE 1/4 and center
of SW 1/4 Section 17;
all in T112N-R49W.
The 1,020 acres to be
irrigated are located in
the S 1/2 Section 5; NE
1/4 Section 7; N 1/2
Section 8; W 1/2
Section 9; NE 1/4, SW
1/4, SE 1/4 NW 1/4
Section 17; all in
T112N-R49W.
Pursuant to SDCL 46-
2A-2, the Chief
Engineer recommends
APPROVAL of
Application No. 8217-3

with qualifications
because 1) unappropri-
ated 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 recom-
mendation with quali-
fications, the application,
and staff report are
available at
<http://denr.sd.gov/public>
or contact Eric
Gronlund for this infor-
mation, or other infor-
mation, at the Water
Rights Program
address provided below.
Any person interested in
opposing or supporting
this application or rec-
ommendation must file
a written petition with
BOTH the applicant and
Chief Engineer. The
applicant must file a
petition if contesting the
Chief Engineer's recom-
mendation. The Chief
Engineer's address is
"Water Rights Program,
Foss Building, 523 E
Capitol, Pierre SD
57501 (605-773-3352)"
and the applicant's mail-
ing address is given
above. A petition filed
by either an interested
person or the applicant
must be filed by July 5,
2016.

The petition may be
informal, but must
include a statement
describing the peti-
tioner's interest in the appli-
cation, the petitioner's
reasons for opposing or
supporting the applica-
tion, and the signature
and mailing address of
the petitioner or the
petitioner's legal coun-
sel, if legal counsel is
obtained.

If the applicant does not
contest the recommen-
dation of the Chief
Engineer and no peti-
tion to oppose the appli-
cation is received, the
Chief Engineer shall act
on the application pur-
suant to the recommen-
dation with no hearing
held before the Water
Management Board. If
a petition opposing the
application or contest-
ing 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.
Steven M. Pirner,

Secretary, Department
of Environment and
Natural Resources.
Published once at the
total approximate cost
of \$9.48.

Schlaak, Karen

From: Schlaak, Karen
Sent: Tuesday, June 14, 2016 8:57 AM
To: registerclassifieds (registerclassifieds@brookingsregister.com)
Subject: 8217-3, Red Willow Hutterian Brethren Inc.
Attachments: 8217-3publicnov2015.short1.docx; FORM8.FRM.doc

Attached is a notice to be published on June 22, 2016.

Red Willow Hutterian Brethren Inc., c/o Joe Grosz, 20019 474th Ave, White SD 57276 (605 350-5771) 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.

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

Karen Schlaak

Water Rights Program
523 E Capitol Ave
Pierre SD 57501
Phone: 605 773-3352



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(S) RIGHT AWAY.**

June 13, 2016

Red Willow Hutterian Brethren Inc
Joe Grosz
20019 474th Ave
White SD 57276

Dear Mr. Grosz:

Water Permit Application No. 8217-3 for irrigation use has been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice has been sent to the Brookings Register printed at Brookings SD (Ph # 605-692-6271). You will need to contact the newspaper(s) 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(s) to authorize publication of your Notice and to arrange for payment. Early contact with the paper(s) 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,

Eric Gronlund
Natural Resources Engineer
(605) 773-3352

cc: Dave Gullickson, Farmer's Implement, PO Box 29, Brookings SD 57006

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. 8217-3 to Appropriate Water

Notice is given that Red Willow Hutterian Brethren, Inc, c/o Joe Grosz, 20019 474th Ave, White SD 57276 has filed an application for a water permit to appropriate 14.57 cubic feet of water per second from eight existing wells completed into the Big Sioux:North Deer Creek Aquifer (45 to 62 feet deep) to irrigate 1,020 acres. The wells are located in the SW 1/4 NW 1/4, center of NW 1/4 Section 8; center of SW 1/4 Section 5; SE 1/4 NW 1/4, center of SW 1/4 Section 9; center of NE 1/4 and center of SW 1/4 Section 17; all in T112N-R49W. The 1,020 acres to be irrigated are located in the S 1/2 Section 5; NE 1/4 Section 7; N 1/2 Section 8; W 1/2 Section 9; NE 1/4, SW 1/4, SE 1/4 NW 1/4 Section 17; all in T112N-R49W.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8217-3 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 Eric Gronlund 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 July 5, 2016.

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.

Steven M. Pirner, Secretary, Department of Environment and Natural Resources. Published once at the total approximate cost of _____.

July 20, 2016

PAYMENT REQUEST FORM

PAYEE: Red Willow Hutterian Brethren
Joe Grosz
20019 474th Ave
White SD 57276

FROM: DENR Water Rights Program
523 E. Capitol Ave
Pierre, SD 57501-3181

DESCRIPTION OF SERVICE, PRODUCE OR TRANSFER

refund on No. 8217-3 (overpayment)

AMOUNT: \$100.00

FUNDING SOURCE:

GENERAL: X

FEDERAL:

OTHER:

COMMENTS:

AUTHORIZATION:



I declare and affirm under the penalties of perjury that this claim is in all things, true and correct. I further agree to comply with the provisions of the Civil Rights Act of 1964 and regulations issued thereunder relating to nondiscrimination in federal assisted programs.



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

JUL 21 2016

Red Willow Hutterian Brethren Inc.
Joe Grosz
20019 474th Ave
White SD 57276

Dear Mr. Grosz:

Enclosed is Water Permit No. 8217-3 authorizing construction of the water diversion system and beneficial use of the water, not exceeding the limits as specified in the Water Permit.

The application was submitted with a fee of \$2,550.00. The application /license fee for Permit No. 8217-3 is \$2,450.00. Therefore, \$100.00 will be refunded to you. The refund check should be received within a couple of weeks.

Form 10, *Notice of Completion of Works and Application of Water to Beneficial Use*, is enclosed. Please return the 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,

Jeanne Goodman, Chief Engineer
Water Rights Program
(605) 773-3352

enclosures

8217-3

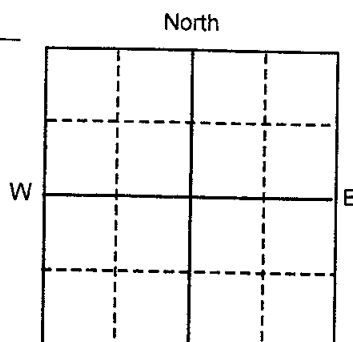
SD EForm - 1621LD V1

SOUTH DAKOTA WATER WELL COMPLETION REPORT

11-02

Location SW ¼ SW ¼ Sec 5 Twp 112N Rg 49W

County Brookings

Please mark well
location with an "X"

Well Completion Date

June 29, 2016

1 Mile

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

PROPOSED USE:

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

METHOD OF DRILLING:

Rotary

CASING DATA:

☐ Steel ☒ Plastic ☐ Other

If other describe

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
LB/FT	14.00 IN	0.0 FT	48.0 FT	17.75 IN
LB/FT	IN	FT	FT	IN
LB/FT	IN	FT	FT	IN

GROUTING DATA:

Grout Type	No. of Sacks	Grout Weight	From	To
Bentonite	18	Lb/gal	0.0 Ft	46.0 Ft
		Lb/gal	Ft	Ft

Describe grouting procedure
tremie piped

SCREEN:

☐ Perforated pipe ☒ Manufactured

Diameter 14.00 Inches Length 20.0 Feet

Material Stainless steel

Slot Size .050 Set From 48.0 Feet to 68.0 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? chlorinated

☐ No, Why Not?
Lab to which water
quality sample sent for analysis

n/a

Well Owner: Red Willow Farms

Business Name:

Address: 20019 474th Ave

City, State, Zip: White SD 57276

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
Black top soil	0	5
Brown clay	5	12
Orange gravel	12	18
Brown clay	18	19
Gravel	19	68
Gray clay	68	68

STATIC WATER LEVEL 11.0 FEET

If flowing: closed in pressure PSI

GPM flow through Inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other

Reduced flow rate GPM

Can well be completely shut in?

WELL TEST DATA:

☒ Pumped Describe:
☐ Bailed
☐ Other

Pumping Level Below Land Surface

Ft. After 8.0 Hrs. pumped 200.0 GPM

Ft. After Hrs. pumped GPM

If pump installed, pump rate: GPM

REMARKS

GPS: N 44 31.928

W 96 44.495

Well #4

Big Sioux: Unnamon Creek ice

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

Drilling firm: Thein Well Co., Inc.

Signature of License Representative:

Signature of Well Owner or Equitable Property Holder:

RECEIVED

SEP 12 2016

Date:

WATER RIGHTS
PROGRAM

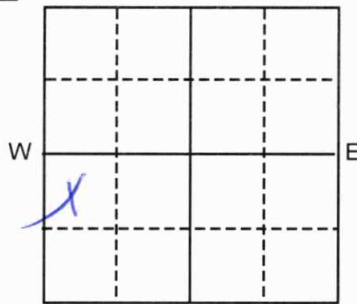
SOUTH DAKOTA WATER WELL COMPLETION REPORT

11-02

Location NW ¼ SW ¼ Sec 9 Twp 112 Rg 49

County BROOKINGS

North

Please mark well
location with an "X"

Well Completion Date

July 25, 2022

1 Mile

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

PROPOSED USE:

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

METHOD OF DRILLING:

MUD ROTARY

CASING DATA:

☐ Steel ☒ Plastic ☐ Other

If other describe

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
LB/FT	12.00 IN	0.0 FT	22.0 FT	17.75 IN
LB/FT	IN	FT	FT	IN
LB/FT	IN	FT	FT	IN

GROUTING DATA:

Grout Type	No. of Sacks	Grout Weight	From	To
BENTONITE	8	Lb/gal	0.0 Ft	21.0 Ft
		Lb/gal	Ft	Ft

Describe grouting procedure
Tremmie Piped

SCREEN:

☐ Perforated pipe ☒ Manufactured

Diameter 12.00 Inches Length 10.0 Feet

Material PVC

Slot Size .050 Set From 22.0 Feet to 32.0 Feet

Other information 12" 10' Stainless Steel .070 slot set from 32 to 42'

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? Chlorination

☐ No, Why Not?
Lab to which water
quality sample sent for analysis

Well Owner: RED WILLOW COLONY

Business Name:

Address: 20019 474TH AVE

City, State, Zip: WHITE SD 57296

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
Top Soil	0	3
Brown Clay	3	5
Sand/ Gravel	5	10
Sand/ Gravel w/ clay lenses	10	15
Sand/ Gravel	15	42

STATIC WATER LEVEL 6.0 FEET

If flowing: closed in pressure PSI

GPM flow through Inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other

Reduced flow rate GPM

Can well be completely shut in?

WELL TEST DATA:

☒ Pumped Describe:

☐ Bailed

☐ Other

Pumping Level Below Land Surface

31.0 Ft. After 8.0 Hrs. pumped 490.0 GPM

Ft. After Hrs. pumped GPM

If pump installed, pump rate: GPM

REMARKS

TH # 2 GPS 44 31.1340 W 96 43.3240

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

Drilling firm: THEIN WELL COMPANY, INCORPORATED

Signature of License Representative:

Signature of Well Owner or Equitable Property Holder

RECEIVED
 AUG 15 2022

Date:

OFFICE OF
WATER

Red Willow Colony 12 " Irr Well Sec 9

Legend
Feature 1

Red Willow Colony TH # 1 160' 3/28/2022

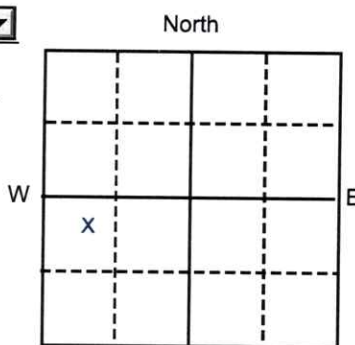
Red Willow TH # 2 140' 3/29/2022 42' 12" Irr Well July 2022



8217-3

SOUTH DAKOTA WATER WELL COMPLETION REPORT

11-02

Location NW $\frac{1}{4}$ SW $\frac{1}{4}$ Sec 9 Twp 112 Rg 49County BrookingsPlease mark well
location with an "X"

Well Completion Date

06/02/2023

← 1 Mile →

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

PROPOSED USE:

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

METHOD OF DRILLING:

Rotary

CASING DATA:

☐ Steel ☐ Plastic ☐ Other

If other describe

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
LB/FT	<u>12</u> IN	<u>0</u> FT	<u>31</u> FT	<u>17</u> IN
LB/FT	<u>12</u> IN	<u>46</u> FT	<u>55</u> FT	<u>17</u> IN
LB/FT	IN	FT	FT	IN

GROUTING DATA:

Grout Type	No. of Sacks	Grout Weight	From	To
<u>HS Bentonite</u>	<u>3</u>	Lb/gal	<u>0.0</u> Ft	<u>15</u> Ft
		Lb/gal	Ft	Ft

Describe grouting procedure

Tremmy

SCREEN:

☐ Perforated pipe ☒ Manufactured
Diameter 12 Inches Length 15 FeetMaterial Stainless SteelSlot Size 100 Set From 31 Feet to 46 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? Chlorine
☐ No, Why Not?
Lab to which water
quality sample sent for analysisWell Owner: Jerrold Waldner

Business Name:

Address: 20019 474th AveCity, State, Zip: White ☒ SD ☒ 57276

WELL LOG:

FORMATION			DEPTH	
			FROM	TO
Top Soil	Black	M	0	3
Gravel	Tan		3	46
Clay	Gray	M-H	46	55

STATIC WATER LEVEL 6 FEET

If flowing: closed in pressure _____ PSI

GPM flow _____ through _____ Inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other _____

Reduced flow rate _____ GPM

Can well be completely shut in?

WELL TEST DATA:

☐ Pumped Describe:☐ Bailed☐ Other

Pumping Level Below Land Surface

_____ Ft. After _____ Hrs. pumped _____ GPM

_____ Ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate: _____ GPM

REMARKS

IRR WELL (TH #3E)

GPS:

44 31 09.50N

96 43 24.40W

This well was drilled under license # 463 and this report is true and accurate.Drilling firm: Steffi Drilling & Pump Inc

Signature of License Representative:

Signature of Well Owner or Equitable Property Holder:

RECEIVED

Date:

DEC 20 2023

OFFICE OF
WATER