

WATER PERMIT NO. 7561-3

Name of Applicant: Jerry or Joyce Hansen

Address: 303 East Maple, Beresford SD 57004

Phone: 605 763-5732

Amount of Water Claimed: 1.78 cfs

Total Acres: 132

Source of Water Supply: groundwater (one well)

Water to be used for: irrigation

County: Union

Type of Waste Disposal System:

Location: 5 miles southeast of Beresford

PRIORITY

Date Received: 12-10-12

Application/License Fee: \$ 1050

Corrected Application Received: 12-14-12

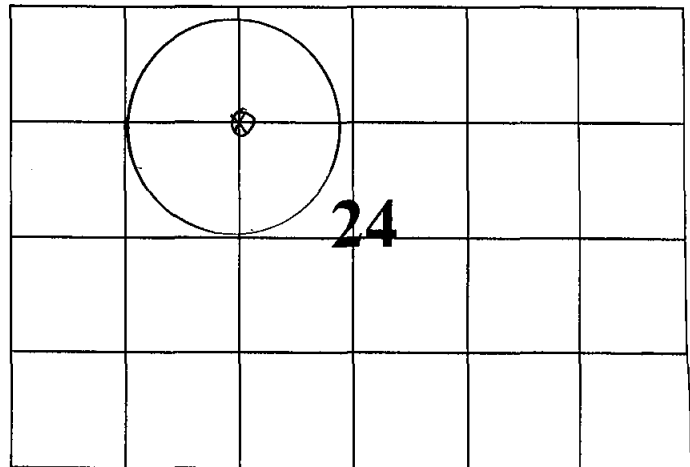
Period of Annual Use: June 1 August 31

Remarks:

Diversion Point: approximate center of NW 1/4

Sec 24-T95N-R50W

Land to be Irrigated: NW 1/4 Sec 24-T95N-R50W



Depth of Well: 80 feet deep

Well Driller:

Remarks:

Type of Map: aerial

Prepared by:

Reviewed and the Number Assigned on: 12-17-12

By: **Karen Schlaak**

Notice of Hearing - date to intervene: _____

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

Mail to: PMB 2020 DENR - Water Rights 523 E Capitol Ave Pierre, SD 57501-3182 ph. (605) 773-3352	No. <u>7561-3</u> (office use only) Hydrologic Unit <u>10170203</u> Basin <u>Sioux River</u> <u>605-763-2006</u> Newspaper <u>Beresford Republican</u> <u>PO Box 111, 57004</u> <u>605-331-2200</u> <u>Argus Leader PO Box 5034 57117</u>
---	--

RECEIVED
DEC 10 2012
WATER RIGHTS PROGRAM

Application For Permit To Appropriate Water For Irrigation

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

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

1. Name to Appear on Irrigation Permit Jerry Or Joyce Hansen
(check one) ☐ Owner ☐ Tenant/lessee ☐ Owner's Legal Agent (name and complete address if different than above name)

Mailing Address 303 East Apple Maple Beresford SD 57004
(Address) (City) (State) (Zip Code)

Home Phone 6057635932 Cell _____ Email _____

2. Amount of water claimed 1.78 *CFS or 800 **GPM ***AF Total Acreage 132
(*Cubic Feet per Second) (**Gallons per Minute) (***)Acre Feet - storage capacity of dam/dugout or annual use if applicable

3. Source of water supply Well

4. Location of point of diversion 1 well in NW 1/4 Section 24 - 95 - 50
(example - 3 wells in SW 1/4 NE 1/4 section 12-T104N-R53W)
(approximate center) County Union

5. County or counties where water will be used Union

6. Annual period during which water is to be used June 1 thru August 31

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

Land Description	Acres	Land Description	Acres
NW 1/4 Sec 24	33		
NE 1/4 Sec 24	33		
SE 1/4 Sec 24	33		
SW 1/4 Sec 24	33		

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

Dig Well put in Center pivot.

I, Jerry Hansen, the applicant, certify that I have read this application, have examined the attached map, and that the matters stated are true.

**SOUTH DAKOTA
WATER PERMIT NO. 7561-3**

Date of first receipt of application December 10, 2012.

Date of return to applicant for corrections, amendments or changes December 12, 2012.

Date of receipt of corrected application December 17, 2012.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 7561-3 to Jerry or Joyce Hansen, 303 East Maple, Beresford SD 57004 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. 7561-3 appropriates 1.78 cubic feet of water per second from one well to be completed into the Brule Creek Aquifer (80 feet deep) located in the approximate center of the NW 1/4 Section 24 for irrigation of 132 acres located in the NW 1/4 Section 24; all in T95N-R50W.
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: June 1 – August 31.
3. The date from which applicant may claim right is December 10, 2012.
4. The date of approval of Permit No. 7561-3 is March 4, 2013.
5. One-fifth of the construction is to be completed on or before September 4, 2015.
6. All construction is to be completed on or before March 4, 2018.
7. Water is to be put to beneficial use on or before March 4, 2022.
8. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

QUALIFICATIONS

1. The well approved under 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. The well authorized by Permit No. 7561-3 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28.
3. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

WATER MANAGEMENT BOARD

By: Garland Erbele

Garland Erbele, Chief Engineer
Water Rights Program
Department of Environment and Natural Resources

MAR 21 2013
date



Supplemental Information

(type or print)

RECEIVED

DEC 14 2012

WATER RIGHTS
PROGRAM

1. Well Information (check one or both as applicable) ☒ Drilling new well(s) ☐ Using existing well(s)
- a) If new wells, how many 1 Have test holes been drilled ☐ Yes ☒ No Drilled by _____
(if yes, please provide copies of logs)

- b) If existing wells, how many _____ Provide copy of log(s), if available. Drilled by _____

- c) Well Depth 80 Depth to Top of Water Bearing Material _____ Depth to Water from Surface _____

- d) Distance to nearest existing domestic well:

On applicant's property _____ On property owned by others 1500

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)

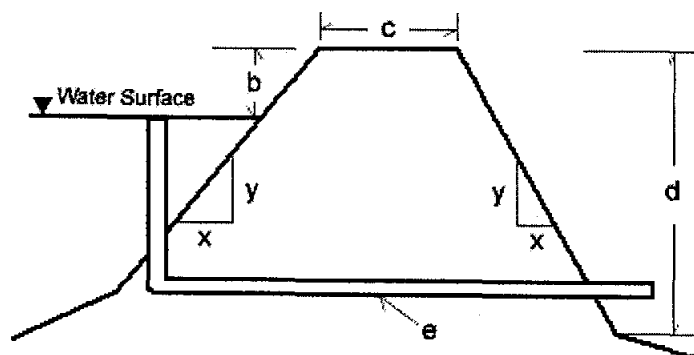
Upstream _____

Downstream _____

- h) Surface Area of Impoundment _____

- i) Storage _____ Acre Feet

- j) Drainage Area Above Dam _____ Acres



NOT TO

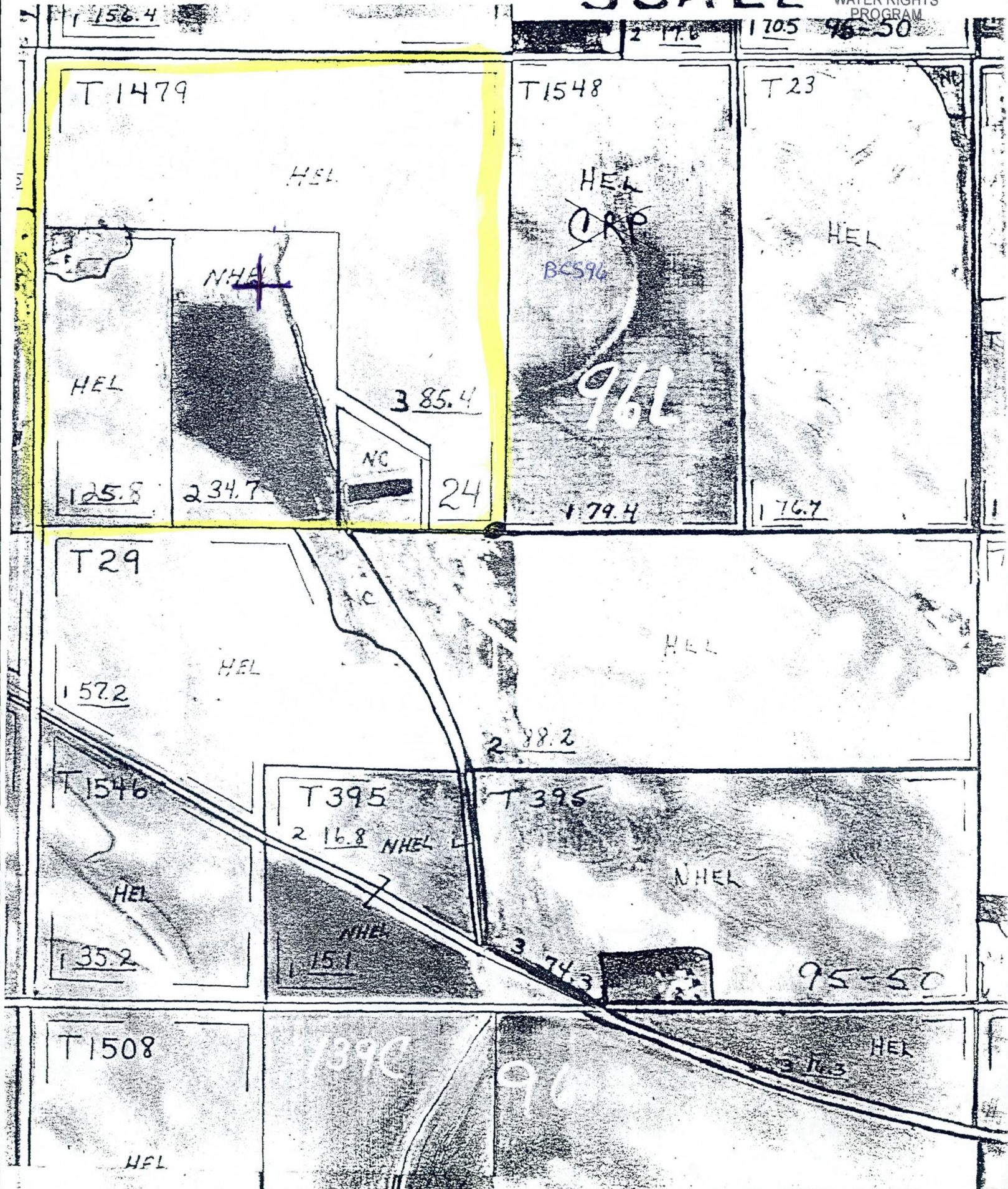
See 24

SCALE

RECEIVED

DEC 10 2012

WATER RIGHTS
PROGRAM



RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date 12/12, 20 12

RECEIVED OF Jerry Hansen

303 E Maple

Beresford SD 57004

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

Fee for Application for Permit No. <u>7561-3</u> to Appropriate Water, to construct and to put water to beneficial use	850	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	850 00

No. **05757**

By

David E. Ellis
Chief Engineer



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

December 12, 2012

Jerry or Joyce Hansen
303 E Maple
Beresford SD 57004

Dear Mr. & Mrs. Hansen:

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

- Please complete item No. 2, Amount of water claimed.
- Also item No. 2 lists total acreage as 140 acres. On item No. 7, the acres listed total 132 acres. Which acre amount is correct?
- Enclosed is the Form 2A, Supplemental Information. On item No. 1, please complete the proposed depth of the well.
- We have received the \$850.00 application/license filing fee. The fee for irrigation of 132 or 140 acres is \$1,050.00. Please submit an additional \$200.00.

If you have any questions, please contact me.

Sincerely,

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

enclosures

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date 12/17, 20 12

RECEIVED OF Jerry Hansen 303 E Maple St Beresford SD 57004

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

Fee for Application for Permit No. <u>7561-3</u> to Appropriate Water, to construct and to put water to beneficial use		
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>7561-3</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	200 00

No. **05773**

By

Harold Erbe
Chief Engineer



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
denr.sd.gov

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 7561-3, Jerry or Joyce 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. 7561-3, Jerry or Joyce Hansen, 303 East Maple, Beresford SD 57004.

The Chief Engineer is recommending APPROVAL of Application No. 7561-3 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 well 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. The well authorized by Permit No. 7561-3 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28.
3. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

See on application for additional information.

Garland Erbele, Chief Engineer
February 12, 2013

REPORT TO THE CHIEF ENGINEER

WATER PERMIT APPLICATION NO. 7561-3

JERRY or JOYCE HANSEN

FEBRUARY 1, 2013

Water Permit Application No. 7561-3 proposes to appropriate up to 264 acre-feet per year (ac-ft/yr) at a maximum diversion rate of 1.78 cubic feet of water per second (cfs) from one well to be completed into the Brule Creek aquifer. The well is expected to be 80 feet deep and is to be located in the approximate center of the NW¼ of Section 24 to irrigate 132 acres located in the NW¼ of Section 24, T95N-R50W in Union County.

AQUIFER: Brule Creek aquifer (BRC)

GEOLOGY AND AQUIFER CHARACTERISTICS:

The Brule Creek aquifer consists of glacial and nonglacial medium sands to coarse gravels that can be under either water table or artesian conditions (Niehus, 1994). The aquifer underlies northern Union County, southern Lincoln County, and a portion of northeast Clay County (Hedges and others, 1982; Niehus, 1994; Stephens, 1967). Hedges and others (1982) estimated that in total the Brule Creek aquifer underlies 78,400 acres and contains 298,950 acre-feet (ac-ft) of recoverable water in storage. Niehus (1994) further delineated the aquifer and estimated that the Brule Creek aquifer underlies 180 square miles, equaling 115,200 acres and contains 570,000 acre-feet (ac-ft) of water in storage in Lincoln and Union Counties. The aquifer is overlain by till and underlain by the Niobrara Formation or Carlile Shale. Water movement in the aquifer is generally south, except in the northern most portion, where water moves northeast toward the hydraulically connected Newton Hills aquifer (Niehus, 1994).

A test hole log was not submitted with this application as required by ARSD 74:02:01:08.01; however, sufficient information is available to evaluate the area of the proposed well site. The Brule Creek aquifer has an average thickness of 33 feet, but can be up to 88 feet thick. The average depth to the top of the aquifer is 46 feet, and ranges from one to 176 feet. The average water level in the aquifer is 70 feet below ground surface, and ranges from ground surface to 153 feet below ground surface (Niehus, 1994).

This aquifer appears to be near ground surface to the west, near Brule Creek, and is buried by approximately 50 feet of till and clay to the east of the creek and in the area of the proposed well site, indicating possible artesian conditions. Near Brule creek the aquifer is approximately 80 feet thick and east of the proposed well site the aquifer is approximately 40 to 60 feet thick. However, the nearest well completion report to the proposed well site indicates that the aquifer thins to approximately 13 feet in this location (SDGS, 2013; Water Rights, 2013b; Water Rights, 2013c).

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:

This application proposes to appropriate 264 ac-ft/yr from the Brule Creek aquifer. If this application is approved, the actual water use will likely be less than the appropriation. The probability of unappropriated water 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 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."

Hydrologic Budget:

Recharge:

Recharge to the Brule Creek aquifer occurs due to infiltration of precipitation where the aquifer is near land surface (Niehus, 1994). The SD DENR-Water Rights Program estimated the recharge rate of unconfined portions of this aquifer using SD DENR observation well data to be 4.5 inches per year (in/yr) (Buhler, 2009). Using observation well data and well completion reports submitted to the SD DENR-Water Rights Program, the unconfined area of the aquifer was estimated to be at least one fourth of the total area (Buhler, 2009). So, when applying Niehus' (1994) estimated area of the aquifer, recharge is conservatively estimated to be 10,800 ac-ft/yr. This recharge estimate does not consider the area of the aquifer in Clay County, nor the possible recharge to confined portions of entire aquifer.

Discharge:

Discharge from the Brule Creek aquifer occurs due to evapotranspiration where the aquifer is near land surface, outflow to the Newton Hills aquifer and possibly the Big Sioux aquifer, and well withdrawals. Currently there are 17 water rights/permits appropriating water from the Brule Creek aquifer, which are shown in Table 1 (Water Rights, 2013b).

Table 1: Water rights/permits appropriating from the Brule Creek aquifer (Water Rights, 2013b)

Permit No.	Name	Status	Type	CFS	Acres
1384-3	Jim Andrews	LC	IRR	1.94	136
2193-3	Larry D Andrews	LC	IRR	1.94	136
2194-3	Larry D Andrews	LC	IRR	1.94	136
4685-3	Allen Andrews	LC	IRR	1.77	136
4909-3	City of Beresford	LC	MUN	1.92	0
5536-3	Don Lerseth	LC	IRR	1.77	136
5660-3	City of Beresford	LC	REC	0	0
5950-3	Larry D Andrews	LC	IRR	1.65	116
6558-3	Marlow Christensen	LC	COM/LCO	0.044	0
672-3	City of Alcester	LC	MUN	0.44	0
758-3	City of Alcester	LC	MUN	0.17	0
6556-3	James Andrews	PE	IRR	1.15	80
6933-3	Steven Andrews	PE	IRR	2.22	249.1
6961-3	Norman Kramer	PE	IRR	1.56	160
6962-3	Norman Kramer	PE	IRR	1.56	160
6963-3	Norman Kramer	PE	IRR	1.44	80
7166-3	Steven Andrews	PE	IRR	0	41.4
LC = Water Right, PE = Water Permit					
IRR = Irrigation, MUN = Municipal, REC = Recreation					
COM = Commercial, LCO = Livestock Confinement Operation					

Figure 1 shows Brule Creek aquifer's historic irrigation data. The irrigation use water right/permit development of this aquifer has remained fairly constant over the period of record, 1979 to 2011, but has increased slightly in recent years. The annual withdrawal due to irrigation use fluctuates greatly, which is probably due mostly to yearly growing season climatic conditions. Over the period of record, the average pumpage reported equals 529 ac-ft/yr. The maximum and minimum pumpage reported was 1,193 and 6 ac-ft/yr, respectively (Water Rights, 1979-2011).

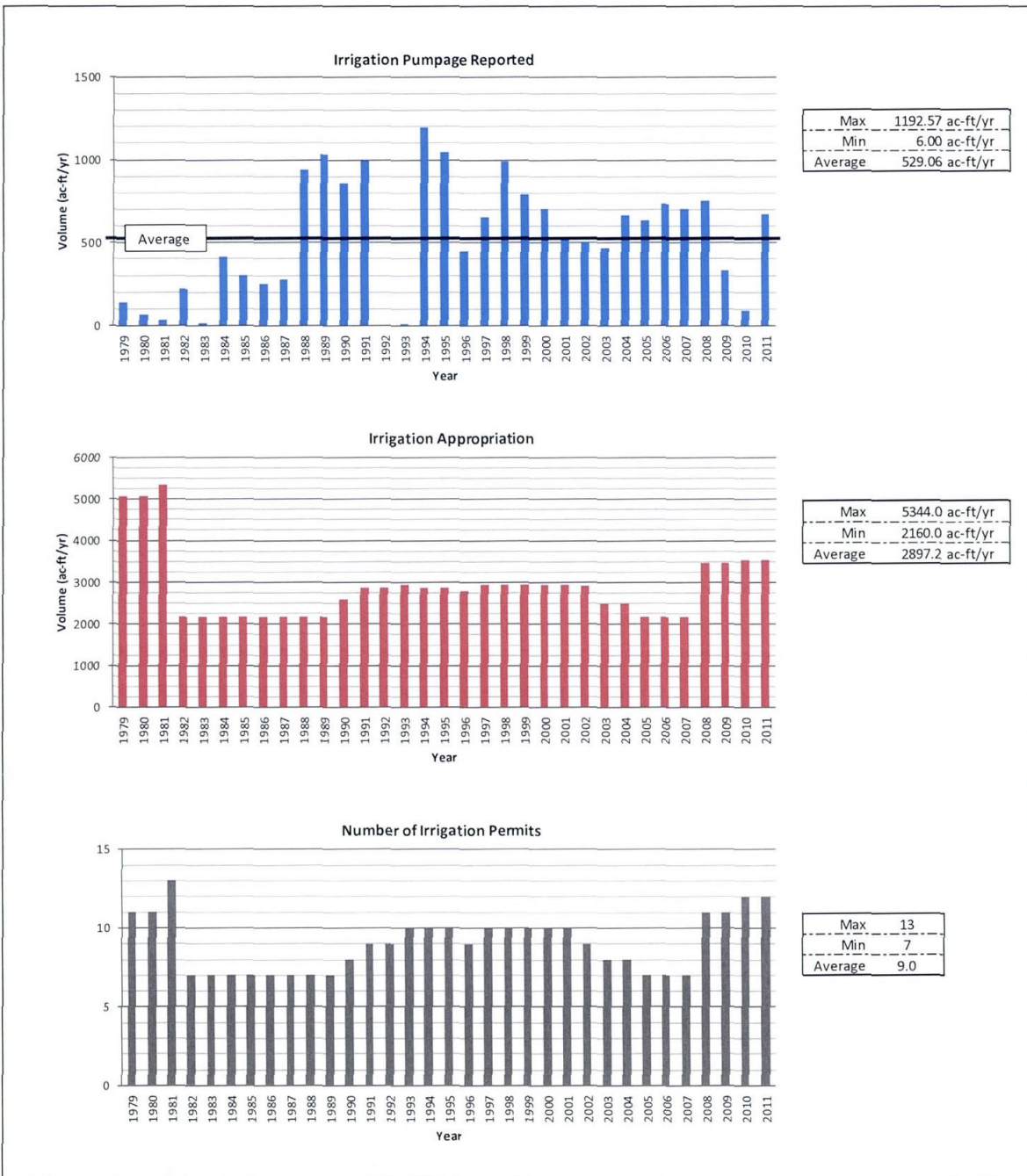


Figure 1: Historic irrigation water use from the Brule Creek aquifer (Water Rights, 1979-2011)

Water rights/permits for non-irrigation use from the Brule Creek aquifer currently authorize a total of 2.574 cfs. The maximum amount of water that can be expected to be withdrawn by non-irrigation use water rights/permits limited only by diversion rate can be estimated by assuming water is pumped at the maximum permitted diversion rate 60 percent of the time. Therefore, the total annual withdrawal from the Brule Creek aquifer by non-irrigation use at the current appropriation amount is conservatively estimated to be 1,200 ac-ft/yr (Water Rights, 2013b).

There are many well completion reports on file with the SD DENR-Water Rights Program for domestic wells that appear to be completed into the Brule Creek aquifer (Water Rights, 2013c). The annual withdrawal due to domestic use is not significant to the hydrologic budget of the aquifer.

Hydrologic Budget:

The average annual withdrawal from the aquifer is estimated to be less than 1,800 ac-ft/yr, which is much less than the estimated annual recharge of 10,800 ac-ft/yr based on Niehus (1994). Therefore, there is a reasonable probability that unappropriated water is available from the Brule Creek aquifer for the proposed appropriation of 264 ac-ft/yr.

Observation Well Data:

Administrative Rule of South Dakota Section 74:02:05:07 requires that “the Water Management Board shall rely upon the record of observation well measurements to determine that the quantity of water withdrawn annually from the aquifer does not exceed the estimated average annual recharge of the aquifer.”

The SD DENR-Water Rights Program monitors 10 observation wells completed into the Brule Creek aquifer. Information of these observations wells is shown in Table 2 (Water Rights, 2013a). Because LN-80B, in Figure 4, is the nearest artesian observation well, the data probably best represents the aquifer at the proposed well site.

Table 2: Brule Creek aquifer observation well information (Water Rights, 2013a)

Name	Distance (from proposed well site)	Direction	Type	Figure
LN-80A	6.7	northwest	artesian	2
UN-80B	1.5	northwest	water table	3
LN-80B	3.3	north	artesian	4
LN-80C	4.7	northeast	artesian	5
UN-80A	4.0	east	water table	6
UN-80C	2.8	south	water table	7
UN-77D	3.9	south	water table	8
UN-77B	2.1	southwest	water table	9
UN-77C	3.6	southwest	artesian	10
UN-77A	1.2	west	water table	11

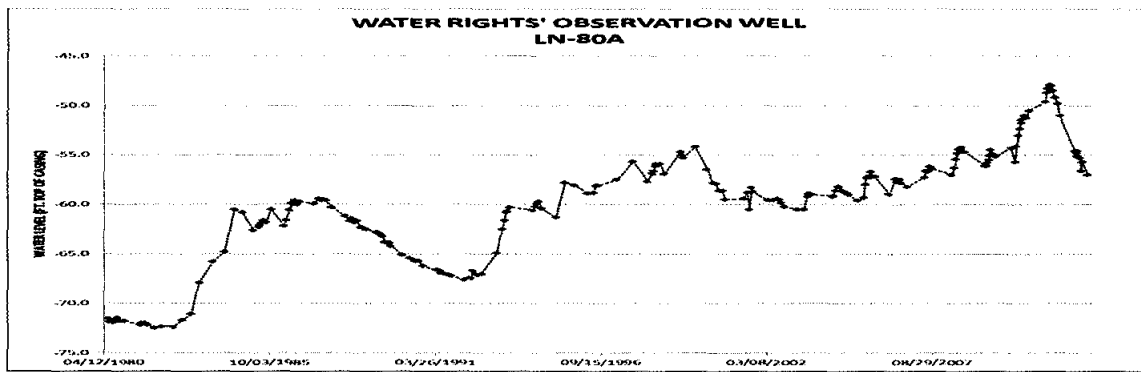


Figure 2: Hydrograph of observation well LN-80A (Water Rights, 0213a)

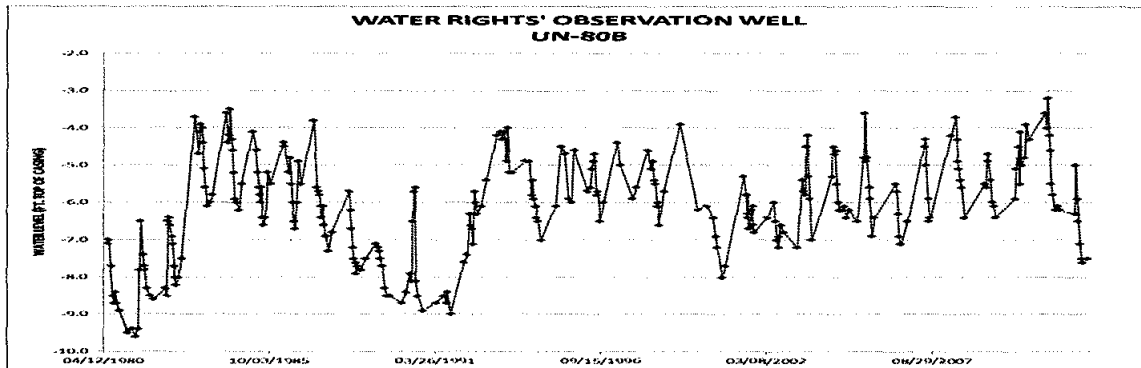


Figure 3: Hydrograph of observation well UN-80B (Water Rights, 0213a)

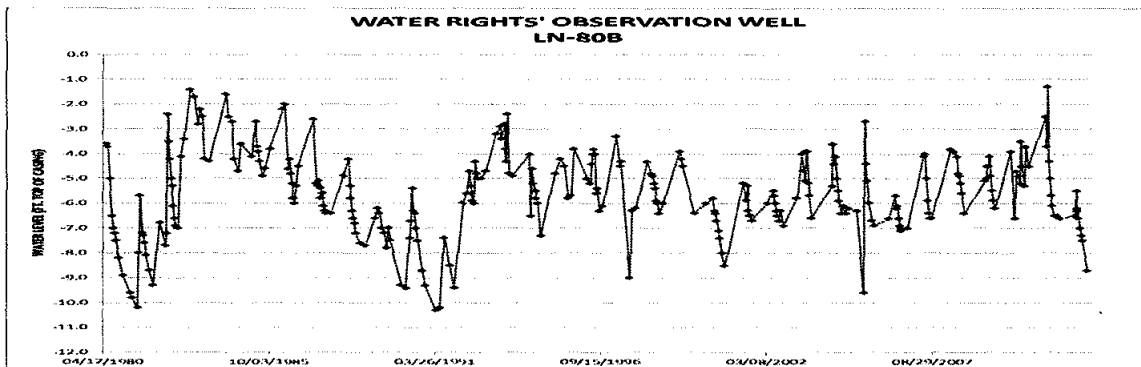


Figure 4: Hydrograph of observation well LN-80B (Water Rights, 0213a)

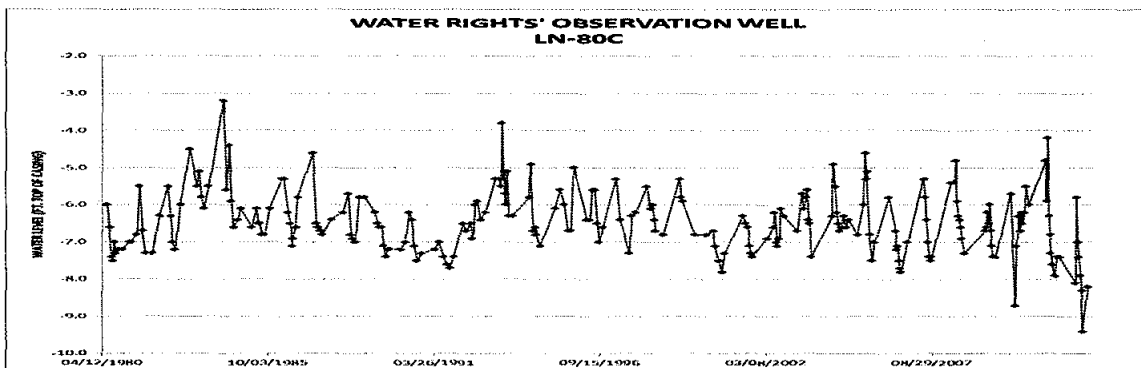


Figure 5: Hydrograph of observation well LN-80C (Water Rights, 0213a)

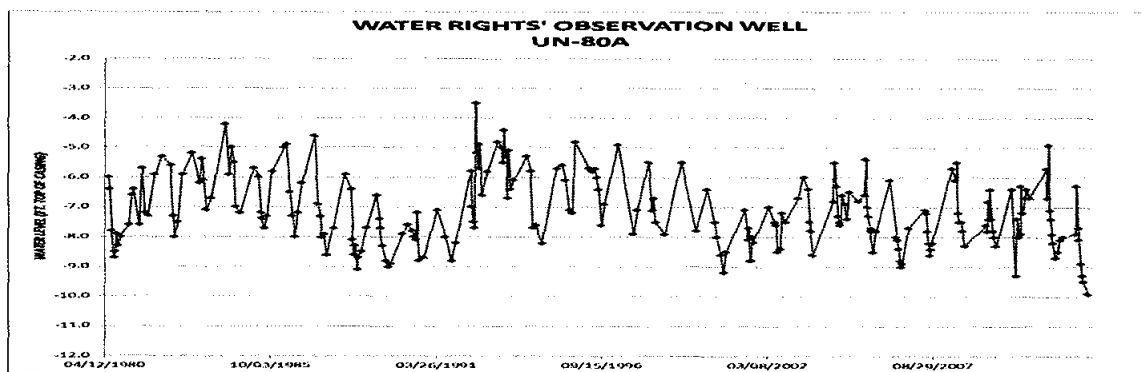


Figure 6: Hydrograph of observation well UN-80A (Water Rights, 0213a)

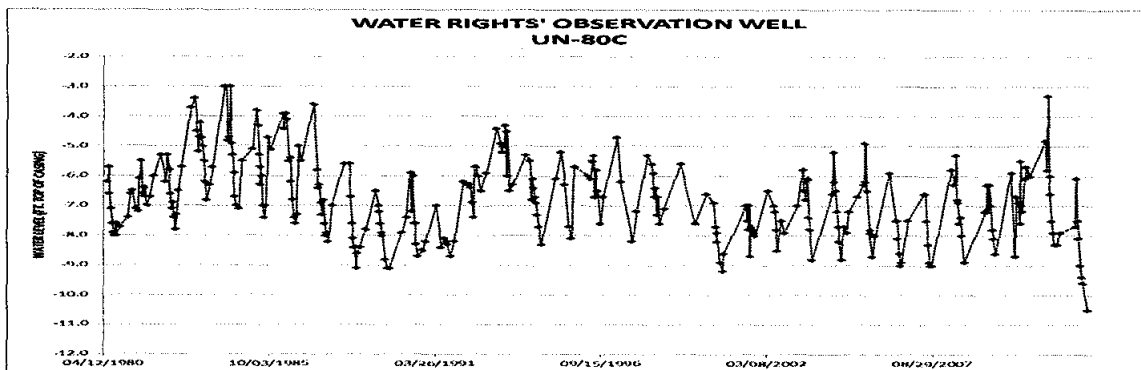


Figure 7: Hydrograph of observation well UN-80C (Water Rights, 0213a)

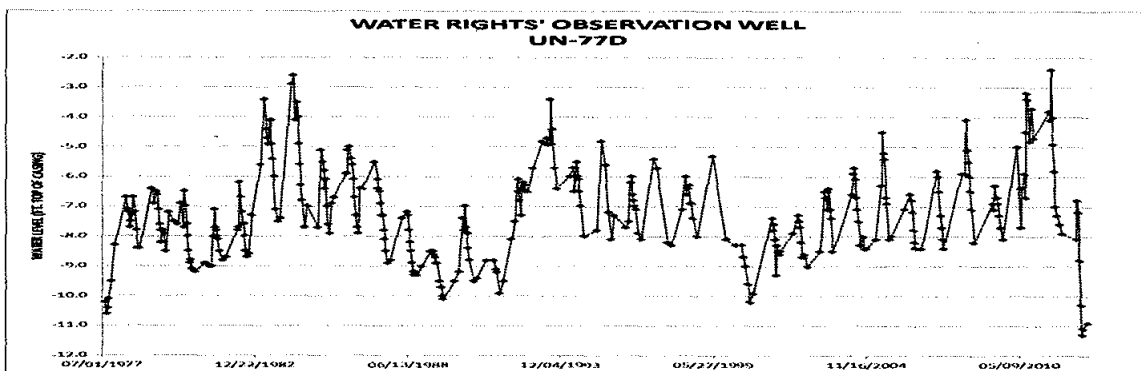


Figure 8: Hydrograph of observation well UN-77D (Water Rights, 0213a)

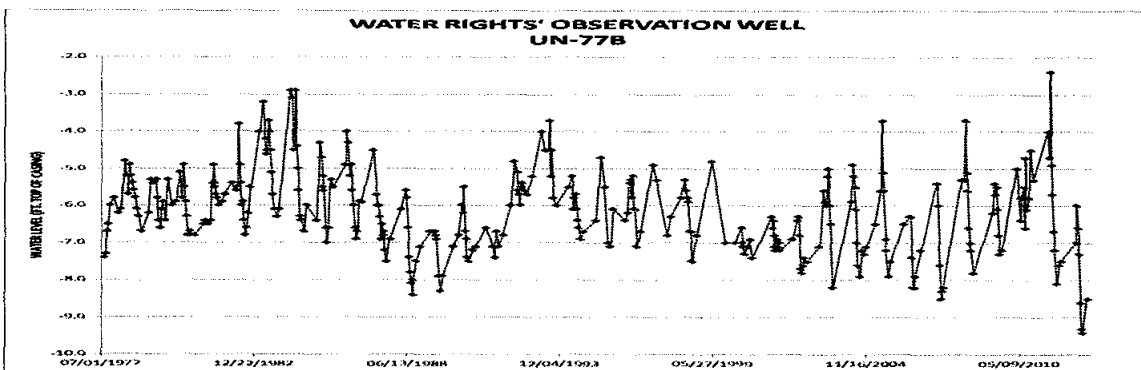


Figure 9: Hydrograph of observation well UN-77B (Water Rights, 0213a)

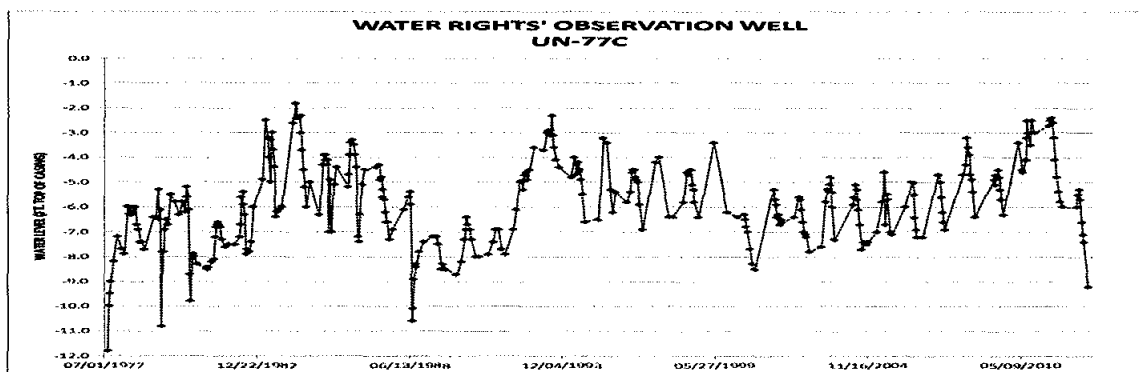


Figure 10: Hydrograph of observation well UN-77C (Water Rights, 0213a)

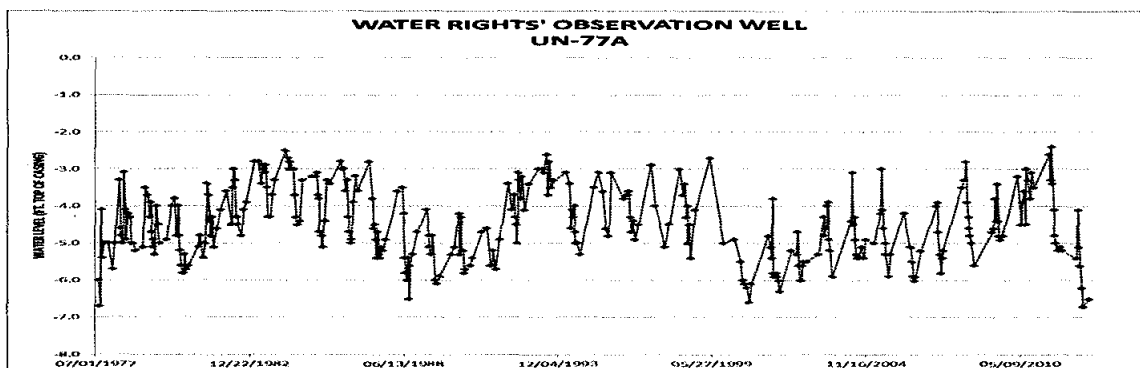


Figure 11: Hydrograph of observation well UN-77A (Water Rights, 0213a)

The observation well data documents cyclic conditions of water levels, recharging during wet years and declining during dry years. The hydrographs also show the effects of nearby pumping on the aquifer. In general, the water levels in all observations well have remained fairly consistent over the periods of record. At the current level of development, temporal well withdrawal is masked by climatic conditions, indicating that recharge to and natural discharge from the aquifer greatly exceeds well withdrawal. Therefore, these hydrographs indicate that unappropriated water is available from the Brule Creek aquifer to support the proposed appropriation of 264 ac-ft/yr.

EXISTING WATER RIGHTS:

If approved, the proposed well will be located near other wells that obtain water from the same aquifer. Water Permit Nos. 6961-3 and 6962-3 are the nearest water rights/permits to the proposed well site, located just over one mile west. The remainder of water rights/permits appropriating water from the Brule Creek aquifer are located two or more miles from the proposed well site (Water Rights, 2013b). There are six domestic wells on record with the SD DENR-Water Rights Program that appear to be completed into the Brule Creek within two miles of the proposed well site; there could be more that are not file. The nearest domestic well, Pat Birgen, appears to be located approximately 1,000 feet southwest of the proposed well site (Water Rights, 2013c).

The Brule Creek aquifer appears to be under artesian conditions at the proposed well site; therefore, some drawdown due to pumping is likely. The Water Management Board has consistently recognized that to place water to maximum beneficial use a certain amount of

drawdown may occur. SDCL 46-6-6.1 does not require protection of artesian head pressure as a means of groundwater delivery. However, reasonable domestic use must be assured before irrigation use is allowed. Therefore, when considering irrigation projects, the Water Management Board must give consideration to maintaining artesian head pressure as a method of delivery for domestic wells. To balance interests between irrigation use and delivery of groundwater by artesian pressure, ARSD 74:02:04:20(7) defines an adversely impacted domestic well as:

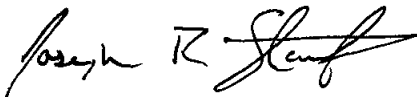
“a well in which the pump intake was set at least 20 feet below the top of the aquifer at the time of construction or, if the aquifer is less than 20 feet thick, is as near to the bottom of the aquifer as is practical and the water level of the aquifer has declined to a level that the pump will no longer deliver sufficient water for the well owner’s needs”

Depending on the specific characteristics of the Brule Creek aquifer at the proposed well site, some existing well owners may need to lower their pumps to accommodate for possible reduction of head pressure.

Observation wells UN-80B, UN-77D, and UN-77B, whose hydrographs are shown in Figures 3, 8, and 9, are located within 800 feet of a water rights/permit. Observation well UN-77B had a water right/permit nearby over most the period of record. Observation wells UN-80B and UN-77D have had a water permit nearby for only the past few years. As previously discussed, the hydrographs for observation wells completed into the Brule Creek aquifer document pumping; however, these effects are minimal relative to climatic conditions (Water Rights, 2013a). Therefore, there is a reasonable probability that any well interference from the proposed appropriation will not cause a significant impact to nearby existing users.

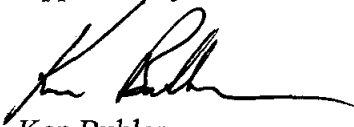
CONCLUSIONS:

1. The application proposes to appropriate 264 ac-ft/yr for irrigation; however, the actual water used will likely be less.
2. There is a reasonable probability that unappropriated water is available from the Brule Creek aquifer to supply the proposed appropriation.
3. There is a reasonable probability that this proposed well will not adversely or unlawfully impair existing users.



Joseph R Stonesifer
SD DENR-Water Rights Program

Approved by



Ken Buhler
SD DENR-Water Rights Program

REFERENCES:

- Buhler, K. 2009. Report of Water Permit Application Nos. 6961-3, 6962-3, & 6963-3 for Norman Kramer. SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.
- Hedges, L.S., Burch, S.L., Iles, D.L., Barari, R.A., and Schoon, R.A. 1982. Evaluation of Ground-Water Resources Eastern South Dakota and Upper Big Sioux River, South Dakota and Iowa, Task 1: Bedrock Topography and Distribution, Task 2: Extent of Aquifers, Task 3: Ground-Water Storage, Task 4: Computerized Data Base, Final Report. U.S. Army Corps of Engineers Contract DACW 45-80-C-0185.
- Niehus, C.A., 1994. Water Resources of Lincoln and Union Counties, South Dakota. USGS WRI Report 93-44195, United State Geological Survey, Rapid City, South Dakota.
- SDGS. 2013. Lithologic Logs Database, South Dakota Department of Environment & Natural Resources Geological Survey, Vermillion, South Dakota.
- Stephens, J.C. 1967. Geology and Hydrogeology of Clay County, South Dakota, Part II: Water Resources. South Dakota DENR-Geological Survey Bulletin 19, 62 p.
- Water Rights. 1979-2011. "Annual Irrigation Summary by Aquifer": SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.
- Water Rights. 2013a. Observation Well Files, SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.
- Water Rights. 2013b. Water Right/Permit Files, SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.
- Water Rights. 2013c. Water Well Completion Reports, SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.

RECEIVED

FEB 25 2013

WATER RIGHTS
PROGRAM

CUSTOMER NUMBER:	078200	Argus Leader	
AD ORDER NUMBER:	1407668		
2/21, 2013		P.O. Box 677349, Dallas, TX 75267-7349	
			\$63.02pd

Joyce Hansen
303 E Maple
Beresford, SD 57004

DETACH THIS STUB AND RETURN WITH PAYMENT

PAYMENT DUE UPON RECEIPT

AFFIDAVIT OF PUBLICATION-

Customer Number: 078200

Invoice Number: 1407668

Argus Leader
AFFIDAVIT OF PUBLICATION

STATE OF SOUTH DAKOTA

COUNTY OF MINNEHAHA } ss

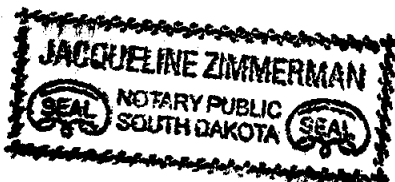
Linda Schulte being duly sworn, says: That The Argus Leader is, and during all the times hereinafter mentioned was, a daily legal newspaper as defined by SDCL 17-2-21, as amended published at Sioux Falls, Minnehaha County, South Dakota; that affiant is and during all of said times, was an employee of the publisher of such newspaper and has personal knowledge of the facts stated in this affidavit; that the notice, order or advertisement, a printed copy of which is hereto attached, was published in said newspaper upon

Wednesday the 21 day of February 2013 ,
 _____ the _____ day of _____ 2013 ,
 _____, the _____ day of _____ 2013
 _____, the _____ day of _____ 2013 ,
 _____, the _____ day of _____ 2013 ,
 _____, the _____ day of _____ 2013 ,
 _____, the _____ day of _____ 2013 ,

and that \$63.02pd was charged for publishing the same

Linda Schulte
 Subscribed and sworn to before me 2/21/2013

J. Zimmerman
 Notary Public, South Dakota
 My Commission expires December 22, 2015



NOTICE OF APPLICATION

NO. 7561-3 to

Appropriate Water

Notice is given that Jerry or Joyce Hansen, 303 East Maple, Beresford, SD 57004 has filed an application for a water permit to appropriate 1.73 cubic feet of water per second from one well to be completed into the Brule Creek Aquifer (80 feet deep) located in the approximate center of the NW 1/4 Section 24 for irrigation of 132 acres located in the NW 1/4 Section 24; all in T95N-R50W.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 7561-3 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. In accordance with SDCL 46-2A-23, the Chief Engineer will act on this application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the Chief Engineer's recommendation. 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.

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 March 4, 2013.

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. Contact Eric Gronlund at the above Water Rights Program address to request copies of information pertaining to this application; Steven M. Pirner, Secretary, Department of Environment and Natural Resources.

Published once at the total approximate cost of \$63.02.
 1407668 Feb. 21, 2013

AFFIDAVIT OF PUBLICATION

STATE OF SOUTH DAKOTA

SS

COUNTY: UNION

CITY: BERESFORD

NEWSPAPER: BERESFORD REPUBLIC

RECEIVED

MAR 11 2013

WATER RIGHTS
PROGRAM

Allyson M. Hill, being first duly sworn, on oath, says that the BERESFORD REPUBLIC IS a weekly newspaper published in said city and county, State of South Dakota; that she has full and personal knowledge of the facts herein stated; that said newspaper is a legal newspaper as defined in SDCL 17-2-2.1 through 17-2-2.4 inclusive, and has met all the requirements for at least one year next prior to the first publication of the attached public notice, and that said notice, a printed copy of which, taken from the paper in which the same was published, and which is hereto attached and made a part of this affidavit, was published in said newspaper

1 time(s) as follows: that the first publication of said notice in said newspaper aforesaid was on Thursday the

21 day of February, 2013, and that the succeeding publications were severally on

Thursday, the ____ day of _____, 2013;

Thursday, the ____ day of _____, 2013;

Thursday, the ____ day of _____, 2013

Affiant further says that the full amount of the fees charged for the publication of said notice inures to the benefit of the publishers of said newspaper; that no agreement of understanding for the division thereof has been made with any other person, that no part therefore has been agreed to be paid to any person whomsoever; and that the fees charges for the publication thereof are:

DOLLARS \$ 20.22

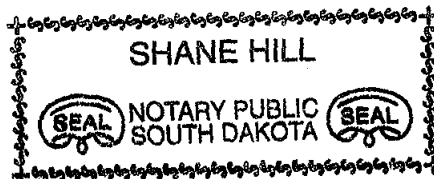
X Allyson M. Hill, Allyson M. Hill

Subscribed and sworn to before me this 21 day of February, 2013.

[Signature]

Notary Public

My commission expires 11/14/2018.



NOTICE OF APPLICATION NO. 7561-3 to Appropriate Water

Notice is given that Jerry or Joyce Hansen, 303 East Maple, Beresford SD 57004 has filed an application for a water permit to appropriate 1.78 cubic feet of water per second from one well to be completed into the Brule Creek Aquifer (80 feet deep) located in the approximate center of the NW 1/4 Section 24 for irrigation of 132 acres located in the NW 1/4 Section 24; all in T95N-R50W.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 7561-3 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. In accordance with SDCL 46-2A-23, the Chief Engineer will act on this application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the Chief Engineer's recommendation. 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.

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 March 4, 2013.

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. Contact Eric Gronlund at the above Water Rights Program address to request copies of information pertaining to this application. Steven M. Pirner, Secretary, Department of Environment and Natural Resources.

Published once at the total approximate cost of \$20.22



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
denr.sd.gov

February 13, 2013

Beresford Republic
PO Box 111
Beresford SD 57004

ATTENTION: Legal Public Notice

Enclosed is a Notice on Application No. 7561-3 to Appropriate Water. Please publish the notice once on February 21, 2013. The text of the notice can be e-mailed to your paper by contacting Karen Schlaak at (605) 773-3352.

The applicant must verify to you that the notice is to be published and arrange for payment. **Please BILL the APPLICANT for the cost of publication.** The APPLICANT is Jerry or Joyce Hansen, 303 E Maple, Beresford SD 57004 (Ph # 605-763-5732).

Please send the Water Rights Program an affidavit or the enclosed Proof of Publication form immediately.

The applicant pays the cost of publication, but the Water Rights Program records require an affidavit or Proof of Publication. Delays in receiving the affidavit can be costly to the applicant.

Sincerely,

Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosures



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
denr.sd.gov

February 13, 2013

Argus Leader
PO Box 5034
Sioux Falls SD 57117

ATTENTION: Legal Public Notice

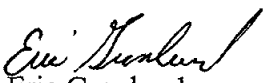
Enclosed is a Notice on Application No. 7561-3 to Appropriate Water. Please publish the notice once on February 21, 2013. The text of the notice can be e-mailed to your paper by contacting Karen Schlaak at (605) 773-3352.

The applicant must verify to you that the notice is to be published and arrange for payment. **Please BILL the APPLICANT for the cost of publication.** The APPLICANT is Jerry or Joyce Hansen, 303 E Maple, Beresford SD 57004 (Ph # 605-763-5732).

Please send the Water Rights Program an affidavit or the enclosed Proof of Publication form immediately.

The applicant pays the cost of publication, but the Water Rights Program records require an affidavit or Proof of Publication. Delays in receiving the affidavit can be costly to the applicant.

Sincerely,


Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosures



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
denr.sd.gov

NOTE: TO BE SURE OF PUBLICATION ON
THE CORRECT DATE, CONTACT
THE NEWSPAPER(S) RIGHT AWAY.

February 13, 2013

Jerry or Joyce Hansen
303 E Maple
Beresford SD 57004

Dear Sir or Madam:

Water Permit Application No. 7561-3 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 Beresford Republic printed at Beresford SD (Ph # 605-763-2006) and the Argus Leader printed at Sioux Falls SD (Ph # 605-331-2200). 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

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.

Instruction to Newspaper - Publish the Notice on February 21, 2013. The applicant is responsible for payment. The text of the notice can be e-mailed to your paper by contacting Karen Schlaak at (605) 773-3352 or email: Karen.schlaak@state.sd.us.

NOTICE OF APPLICATION NO. 7561-3 to Appropriate Water

Notice is given that Jerry or Joyce Hansen, 303 East Maple, Beresford SD 57004 has filed an application for a water permit to appropriate 1.78 cubic feet of water per second from one well to be completed into the Brule Creek Aquifer (80 feet deep) located in the approximate center of the NW 1/4 Section 24 for irrigation of 132 acres located in the NW 1/4 Section 24; all in T95N-R50W.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 7561-3 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. In accordance with SDCL 46-2A-23, the Chief Engineer will act on this application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the Chief Engineer's recommendation. 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.

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 March 4, 2013.

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. Contact Eric Gronlund at the above Water Rights Program address to request copies of information pertaining to this application. Steven M. Pirner, Secretary, Department of Environment and Natural Resources.

Published once at the total approximate cost of _____.



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

MAR 21 2013

Jerry or Joyce Hansen
303 E Maple
Beresford SD 57004

Dear Sir:

Enclosed is Water Permit No. 7561-3 authorizing construction of your water diversion system and beneficial use of the water, not exceeding the limits as specified in the Water Permit.

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

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

Sincerely,

Garland Erbele, Chief Engineer
Water Rights Program
(605) 773-3352

enclosures

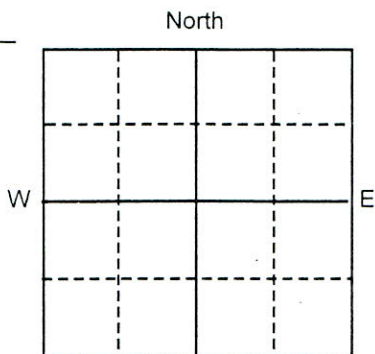
SOUTH DAKOTA WATER WELL COMPLETION REPORT

11-02

Location NW 1/4 NW 1/4 Sec 24 Twp 95N Rg 50W

County Union

Please mark well location with an "X"



Well Completion Date

April 10, 2014

← 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
<u>LB/FT</u>	<u>12.00</u> IN	<u>0.0</u> FT	<u>46.0</u> FT	<u>17.00</u> IN
<u>LB/FT</u>	<u>IN</u>	<u>FT</u>	<u>FT</u>	<u>IN</u>
<u>LB/FT</u>	<u>IN</u>	<u>FT</u>	<u>FT</u>	<u>IN</u>

GROUTING DATA:

Grout Type	No. of Sacks	Grout Weight	From	To
<u>Bentonite</u>	<u>17</u>	<u>Lb/gal</u>	<u>0.0</u> Ft	<u>45.0</u> Ft
		<u>Lb/gal</u>	<u>Ft</u>	<u>Ft</u>

Describe grouting procedure
tremie piped

SCREEN:

☐ Perforated pipe ☒ Manufactured

Diameter 12.00 Inches Length 20.0 Feet

Material stainless steel

Slot Size .080 Set From 46.0 Feet to 66.0 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: Jerry & Joyce Hansen

Business Name: _____

Address: 303 E Maple St

City, State, Zip: Beresford SD 57004

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
Top soil	0	3
Hard Brown Clay	3	6
Yellow Clay	6	15
Blue Clay	15	25
Medium Sand	25	67
Hard Brown Clay	67	-

STATIC WATER LEVEL 10.0 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: well to be test pumped at a later time.

☐ Bailed

☐ Other

Pumping Level Below Land Surface

_____ Ft. After _____ Hrs. pumped _____ GPM

_____ Ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate: _____ GPM

REMARKS

GPS: N 43 2.263

W 096 42.216

RECEIVED

JUN 16 2014

WATER RIGHTS PROGRAM

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: _____

Jerry & Joyce Hansen

Date: 5-19-14



7561-3
DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
PMB 2020
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3182
www.state.sd.us/denr

January 26, 2018

NOTICE

TO: JERRY OR JOYCE HANSEN, 303 E MAPLE, BERESFORD, SD 57004
FROM: Ron Duvall, Natural Resources Engineer
for Jeanne Goodman, Chief Engineer
Water Rights Program

SUBJECT: Reporting Requirement for 2017 Irrigation Questionnaire(s)

Our records indicate your 2017 Irrigation Questionnaire(s) has not been submitted for Permit No(s) 7561-3. The request for the Questionnaire was dated October 20, 2017. The Water Management Board has directed that owners of water permits who have not submitted the 2017 Irrigation Questionnaire(s) be given notice of permit violation and a hearing to be held by the Board. The hearing is to determine what action is to be taken for violation of Water Permit No(s) 7561-3 qualification:

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

The hearing will be held at **Wednesday, March 7, 2018 at 10:00 am (Central Time)** in the Floyd Matthew Training Center, Joe Foss Building, 523 E Capitol Avenue, Pierre, SD and will be conducted pursuant to SDCL 46-1-12, 46-1-14, 46-2-9, 46-2-11 and 46-2-17. These are contested case hearings pursuant to Chapter 1-26. According to SDCL 46-1-12, the Board may suspend a permit for a period of up to one year for the first violation of a permit qualification or up to three years for a second violation, or cancel a permit for a third violation. Following the hearing, the Water Management Board can:

1. Suspend or cancel Permit No(s) 7561-3 in accordance with applicable provisions of SDCL 46-1-12;
2. Postpone any action; or
3. Take no action.

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

If the questionnaire(s) is (are) received in this office before the **March 7, 2018** hearing you will no longer be in violation of your permit and your name will be removed from the Board agenda. Enclosed are additional questionnaire(s) for your use. If you have questions or need assistance, please contact Genny McMath at (605) 773-3352 or email at genny.mcmath@state.sd.us. If you prefer, you can complete the questionnaire online at the following link: <http://denr.sd.gov/iq.aspx>

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



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

February 1, 2018

7561-3

Jerry & Joyce Hansen
303 E Maple
Beresford SD 57004

Dear Mr. & Mrs. Hansen:

I am writing to acknowledge receipt of your 2017 irrigation questionnaire.

You may disregard the January 26, 2018, "Notice" concerning reporting requirements for Water Permit No. 7561-3. The information was received in our office prior to the Water Management Board meeting and your name has been deleted from the agenda.

If you have any questions, please contact me.

Sincerely,

A handwritten signature in cursive script that reads "Genny McMath".

Genny McMath
Water Rights Program
(605) 773-3352
email: genny.mcmath@state.sd.us

**Report of Examination of Works and/or Application of Water to
Beneficial Use
For Permit No. 7561-3**

I have this day, February 25, 2025, made a thorough examination of the water use system constructed by Jerry and Joyce Hansen of 303 East Maple, Beresford SD 57004 holder of Permit No. 7561-3, bearing the priority of December 10, 2012, authorizing the diversion of 1.78 cu. ft. per second of the waters of groundwater, Brule Creek Aquifer for irrigation purposes, in Union County.

Inspection contact & relationship Jerry Hansen, owner

A. Works used to divert the water:

Well Information:

- 1) Well Drilling Firm: Thein Well Company Inc
- 2) No. of Wells 1
- 3) Depth(s) 66 feet
- 4) Well log is available Y

Casing:

- 1) Diameter 12 inches
- 2) Length 46 feet
- 3) Type plastic

Screen:

- 1) Type stainless steel
- 2) Length 20 feet
- 3) Static water level 10 feet

Pump:

- 1) Make MidAmerica
- 2) Model 11CLO
- 3) Size 8 in
- 4) Capacity 650 GPM

Motor:

- 1) Make GE
- 2) Model No. 5KE324DTT6013A
- 3) Horsepower rating 40 hp

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

- 1) Type PVC
 - 2) Size 8 inches
 - 3) Length 720 feet
- Comments: none

C. Works used to apply water to beneficial use:

Center pivot:

- 1) Make T-L
- 2) Overall length 1280 feet
- 3) Number of towers 7
- 4) End gun Y
- 5) Capacity 650 GPM

Chemigation Equipment:

- 1) Does chemigate N

D. Compliance with Permit Requirements:

- 1) Permit qualifications being abided by Diversion point developed outside of what was permitted
- 2) Irrigation Questionnaires checked to determine if permit owner started irrigation by the end of construction period Y
List any extended period of nonuse: none
- 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 24 T95N-R50W 860 ft E and 945 ft S, latitude of 43.03771 and longitude of -96.70354 , NW ¼ NW ¼.
2. The works are capable of diverting and conveying to the place of use 1.44 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: All land is located in Sec 24, T95N, R50W
NW ¼ NW ¼ - 33 ac NE ¼ NW ¼ - 33 ac SE ¼ NW ¼ - 21 ac SW ¼ NW ¼ - 33 ac
comprising a total of 120 acres of land and the license should be issued for 1.44 cfs.
3. All structures, wells and lands on map Y
If no, describe: none

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

none.



Mark D Rath, Water Right Inspector
DANR, Water Rights Program

Date report completed: May 9, 2025



Approval of Location Change and/or Additional Diversion Point(s)

NAME: Jerry or Joyce HansenCOUNTY: UnionADDRESS: 303 E Maple, Beresford, SD 57004DATE: May 14, 2025**GENERAL DESCRIPTION OF AUTHORIZED PROJECT:**

Water Permit No. 7561-3 authorizes diversion of 1.78 cfs from one well (BRC) located in the approx. center of the NW ¼ Section 24, T95N, R50W for irrigation of 132 acres located in the NW ¼; all in Section 24, T95N, R50W.

AUTHORITY:

Pursuant to SDCL 46-5-13.1, the location of a diversion point may be changed, or additional diversion points may be added, provided the following conditions are met and the potential for interference with other existing diversions is not increased:

Developed water source same as permitted source and no additional water appropriated,

The well authorized under Permit No. 7561-3 was completed into the Brule Creek Aquifer, in the NW ¼ NW ¼, 525 feet from the center of the NW ¼; all in Section 24, T95N, R50W. The developed rate of diversion was 1.44 cfs, which is less than the originally permitted amount.

If irrigation, no new land is irrigated,

Only 120 of the 132 permitted acres were developed for irrigation.

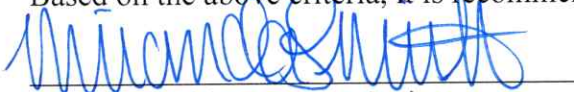
Review of Existing Diversions

There are four other existing water permits/rights within a 2 mile radius of where the diversion point was developed, also authorizing diversion from the Brule Creek Aquifer. The nearest permit authorized for diversion from the BRC is approximately 1.06 miles west of the well in question (6962-3 held by Norman Kramer). The next nearest permit/right would be 7843-3, held by the John Thompson, located approximately 1.49 miles north west. It was determined in the review of the application of Water Permit 7843-3 that there was reasonable probability any interference due to pumping from the original well would not adversely or unlawfully impair existing rights. The same would be expected for the well constructed in the new location.

The closest domestic well (completed into the BRC) is approximately 0.21 miles to the southwest, located in the SW ¼ NW ¼ Section 24, T95N, R50W, on property owned by Joyce Hansen, according to Regrid. The location of the domestic wells in the well completion report database maintained by the Water Rights Program is based on the location listed by the driller on the well completion report.

RECOMMENDED ACTION

Based on the above criteria, it is recommended that the change in diversion point location be approved.



Miranda Smith, Program Assistant
Water Rights Program

The Chief Engineer makes a finding pursuant SDCL 46-5-13.1 and ARSD 74:02:01:14.01 that:

This change in location and/or additional diversion point(s) does not increase the potential for adverse effects to existing diversions.



Mark Mayer, PE
Director of Office of Water



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

JUN 06 2025

Jerry or Joyce Hansen
303 E Maple
Beresfrod, SD 57004

No. 7561-3

Dear Mr. and Mrs. Hansen:

Enclosed is Water License No. 7561-3. This is the final water right document completing your process of obtaining a Water Right. Included with your license is a map prepared by the staff engineer who conducted the field investigation.

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

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

Sincerely,

Mark Mayer, PE
Director of Office of Water
(605) 773-3352

Note: (The maximum diversion rate authorized for irrigation under Water Right No. 7561-3 has been reduced to 1.44 cfs, based on the system as constructed.)

Note: (The number of acres authorized for irrigation under Water Right No. 7561-3 has been reduced to 120, based on the system as constructed.)

enclosures

**STATE OF SOUTH DAKOTA
WATER LICENSE NO. 7561-3**

(1) Jerry or Joyce Hansen, 303 E Maple, Beresford, SD 57004, made Application No. 7561-3, December 10, 2012, for a water permit to divert 1.78 cubic feet of water per second from groundwater, one well (Brule Creek Aquifer), Union County, South Dakota for irrigation purposes. Permit No. 7561-3, with a priority date of December 10, 2012, was approved March 4, 2013, and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before March 4, 2018, and for the application to beneficial use of water on or before March 4, 2022.

An investigation conducted for licensing purposes found the diversion point developed outside of the permitted area. Pursuant to SDCL 46-5-13.1 and ARSD 74:02:01:14.01, the Chief Engineer made a finding that the change in the diversion point location did not increase the potential for adverse effects to existing diversions.

(2) It is certified that the permit holders have 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 1.44 cubic feet of water per second for beneficial use. The location of the diversion point is:

- 860 feet E and 945 feet S from the NW corner of Section 24, T95N, R50W (NW $\frac{1}{4}$ NW $\frac{1}{4}$)
(Latitude 43.03771 and Longitude -96.70354)

(3) The amount of 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: June 1 – August 31.

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

Section 24, T95N, R50W
NE $\frac{1}{4}$ NW $\frac{1}{4}$ - 33 acres
NW $\frac{1}{4}$ NW $\frac{1}{4}$ - 33 acres
SW $\frac{1}{4}$ NW $\frac{1}{4}$ - 33 acres
SE $\frac{1}{4}$ NW $\frac{1}{4}$ - 21 acres
Total – 120 acres

(5) Pursuant to South Dakota Water Law 46-5-30.1 Jerry or Joyce Hansen, the holder and/or owner of Water Right No. 7561-3 are issued a license to appropriate water, the right to use 1.44 cubic feet of water per second from groundwater, one well (Brule Creek Aquifer), with a priority date of December 10, 2012, from the location specified in (2) of this license for irrigation purposes.

This license is subject to South Dakota Water Law, any limitations or conditions listed in Water Right No. 7561-3 and subject to the following qualifications:

1. The well 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.

continued

2. The well authorized by Permit No. 7561-3 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28. *(The well was drilled in 2014 by Thein Well Co Inc. A copy of the well completion report is on file with the Water Rights Program.)*

3. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

Mark Mayer

Mark Mayer, PE
Director of Office of Water

6/6/25

date

