

WATER PERMIT NO. 8246-3

Name of Applicant: Verlyn Jelsma

Address: 41414 309th St, Springfield SD 57062

Phone: 605 661-9764

Amount of Water Claimed: no add'l

Total Acres: 144

Source of Water Supply: two existing wells

Water to be used for: irrigation

County: Bon Homme

Type of Waste Disposal System:

Location: 6 miles southwest of Tyndall

PRIORITY

Date Received: 11-21-16

Application/License Fee: \$ 1050

Corrected Application Received:

Period of Annual Use: May 1 – September 30

Remarks: Utilizing wells authorized by Water Permit No. 8187-3

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

1/4 Sec 35-T94N-R60W

Land to be Irrigated: NE 1/4 Sec 35-T94N-R60W

Depth of Well: 130 & 140 feet deep

Well Driller:

Remarks:

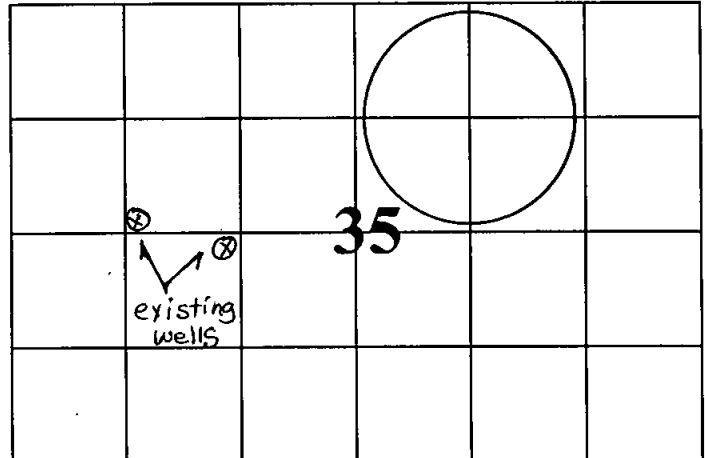
Type of Map: aerial

Prepared by:

Reviewed and the Number Assigned on: 11-21-16

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>8246-3</u> (office use only) Hydrologic Unit <u>10170101</u>
	Basin <u>Missouri River</u>
	Newspaper <u>Tyndall Tribune & Register</u> <u>605-589-3242</u>
	<u>Press of Dakotan Yankton</u> <u>605-665-7811</u>

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NOV 21 2016
WATER RIGHTS
PROGRAM

Application For Permit To Appropriate Water For Irrigation

Type of Application:

☒ New☐ Vested Right

(Use predates Mar 2, 1955)

☐ Amendment/Correction to Permit No.8187-3

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

1. Name to Appear on Irrigation Permit Verlyn Jelsma

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

Mailing Address 41414 309th St. Springfield SD 57062Phone 605 369 2664 Mobile 605 661 9764 Email jeremie@gwtc.net2. Amount of water claimed NO ADDITIONAL CFS or **GPM ***AF Total Acreage 144
(*Cubic Feet per Second) (**Gallons per Minute) (***)Acre Feet - storage capacity of dam/dugout or annual use if applicable)3. Source of water supply 2- Irrigation wells4. Location of point of diversion 2 wells in W1/2 of S35 T-94-N

(example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W)

SW1/4 NW1/4 + NW1/4 SW1/4 Sec. 35 - T94N - R60W County Bon Homme5. County or counties where water will be used Bon Homme6. Annual period during which water is to be used MAY - 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
NENE S35 T-94-N R-60-W	34		
SENE S35 T-94-N R-60-W	34		
SWNE S35 T-94-N R-60-W	38		
NWNE S35 T-94-N R-60-W	38		

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

adding a center pivot to the new piece of property purchased.I, Verlyn Jelsma

Name of Person

owner

Title (if applicable)

, the applicant, certify under

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. 8246-3**

Date of first receipt of application November 21, 2016.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 8246-3 to Verlyn Jelsma, 41414 309th St, Springfield SD 57062 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. 8246-3 authorizes irrigation of 144 new acres. Water Permit No. 8187-3 appropriates 1.78 cubic feet of water per second from two wells completed into the Niobrara Aquifer (130 and 140 feet deep) located in the SW 1/4 NW 1/4 and the NW 1/4 SW 1/4 Section 35 for irrigation of 150 acres located in the S 1/2 NW 1/4, SW 1/4 Section 35; all in T94N-R60W. This permit authorizes irrigation of 144 acres located in the NE 1/4 Section 35-T94N-R60W from the two existing wells. This permit does not authorize any increase in the diversion rate.
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 November 21, 2016.
4. The date of approval of Permit No. 8246-3 is February 6, 2017.
5. One-fifth of the construction is to be completed on or before August 6, 2019.
6. All construction is to be completed on or before February 6, 2022.
7. Water is to be put to beneficial use on or before February 6, 2026.
8. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

QUALIFICATIONS

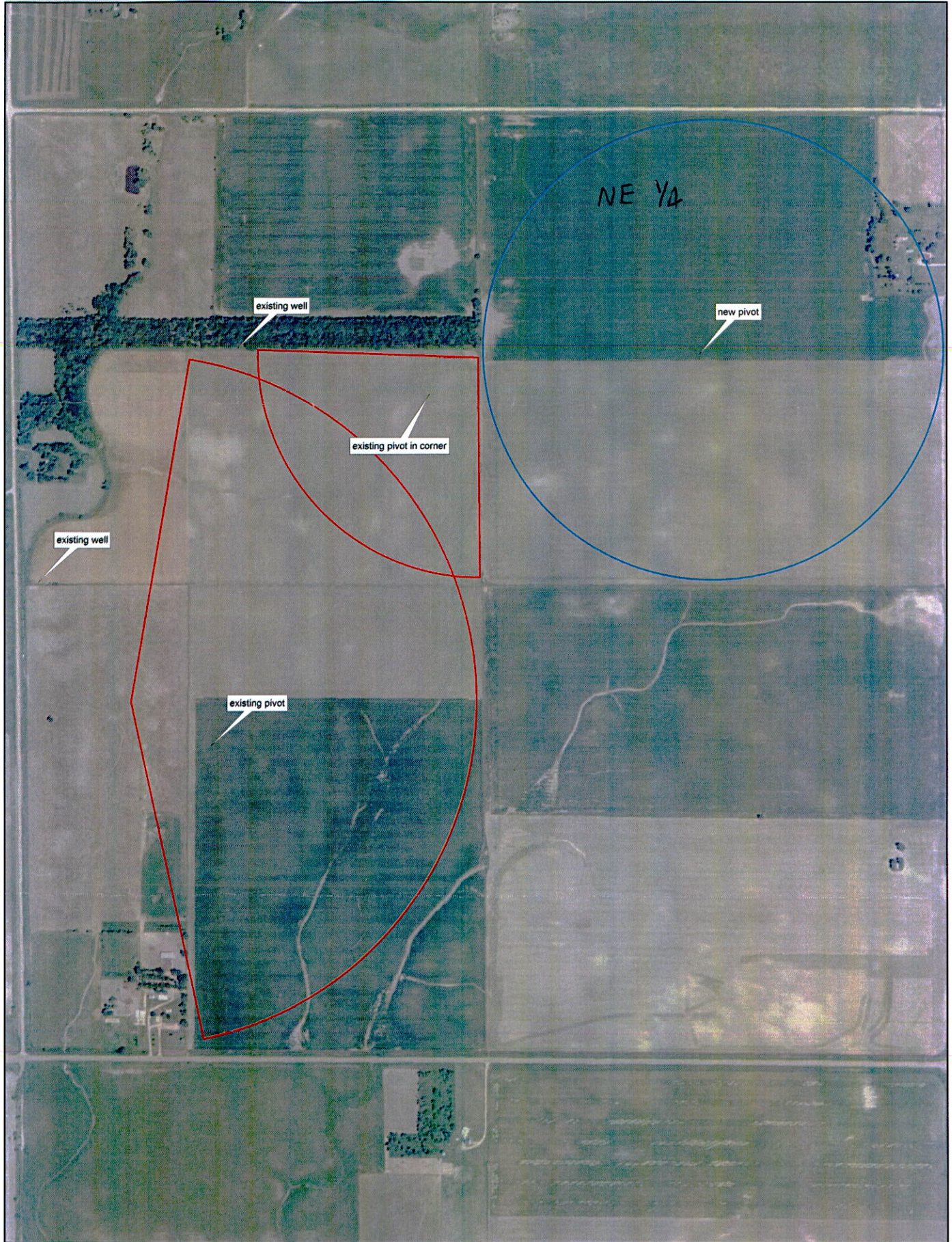
1. The wells approved under Permit Nos. 8187-3 and 8268-3 will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

WATER MANAGEMENT BOARD

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

FEB 15 2017
date





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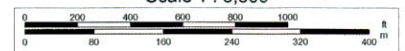
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NOV 21 2016

WATER RIGHTS
PROGRAM



Scale 1 : 8,800



1" = 733.3 ft

Data Zoom 14-5

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date 11/21, 20 16

RECEIVED OF Verlyn J. Jelsma 41414 309th St Springfield SD 57062

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

Fee for Application for Permit No. <u>8246-3</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. <u>8246-3</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	1050	00

No. **07955**

By J. James Goodman Jr.
Chief Engineer



**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. 8246-3, Verlyn Jelsma**

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. 8246-3, Verlyn Jelsma, 41414 309th Street, Springfield SD 57062.

The Chief Engineer is recommending APPROVAL of Application No. 8246-3 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 Permit Nos. 8187-3 and 8246-3 will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control 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.

See report on application for additional information.

Jeanne Goodman, Chief Engineer
January 17, 2017

REPORT TO THE CHIEF ENGINEER
ON
WATER PERMIT APPLICATION NO. 8246-3
VERLYN JELSMA
JANUARY 17, 2017

Water Permit Application No. 8246-3 proposes to authorize the irrigation of 144 acres located in the NE $\frac{1}{4}$ Section 35-T94N-R60W using the diversion rate authority permitted under Water Permit No. 8187-3. Water Permit No. 8187-3 authorizes the diversion of water from the Niobrara aquifer at a maximum rate of 1.78 cubic feet of water per second (cfs) from two wells located in the SW $\frac{1}{4}$ NW $\frac{1}{4}$ and the NW $\frac{1}{4}$ SW $\frac{1}{4}$ Section 35 for the irrigation of 150 acres in S $\frac{1}{2}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$ Section 35; all in T94N-R60W in Bon Homme County. This application, if approved, does not authorize any increase in the diversion rate permitted under Water Permit No. 8187-3. Water Permit No. 8187-3 and this application, if approved, combined would authorize the irrigation of 294 acres at a maximum diversion rate of 1.78 cfs from the Niobrara aquifer.

AQUIFER: Niobrara (NBRR)

Aquifer Characteristics:

The Niobrara Formation is locally called “chalk rock” by well drillers and consists of layers of calcareous shale, chalk, and chalky limestone (Jorgensen, 1971). The Niobrara Formation underlies much of eastern South Dakota (see Figure 1). As Figure 1 shows, the Niobrara Formation is not contiguous across its entire extent. An erosional remnant is a portion of a formation that has been separated from the “main body” of a formation when a portion between the remnant and the main body has been eroded away. The well sites this application proposes to use are completed into one of these erosional remnants of the Niobrara Formation that underlies portions of Bon Homme and Yankton Counties (see Figure 2).

This particular erosional remnant of Niobrara Formation underlies approximately 180,000 acres of Bon Homme and Yankton Counties. The Niobrara Formation in this erosional remnant can be up to 200 feet thick (Christensen, 1974; SDGS, 2017). The Niobrara aquifer is the portion of the Niobrara Formation where there is sufficient porosity and saturated thickness to allow pumping of water from wells completed into the formation. This portion of the Niobrara aquifer can be found under both confined and unconfined conditions (Jorgensen, 1971).

The Niobrara Formation has extensive outcroppings in Bon Homme County especially along the Missouri River and is likely the source for many springs along the river in Bon Homme County (Christensen, 1974; Jorgensen, 1971). This portion of the Niobrara aquifer is in direct contact with several outwash bodies and therefore likely in hydraulic connection with the aquifers most prominently the Choteau: Tyndall, Choteau: West, and Lower James Missouri: Scotland aquifers (SDGS, 2017; Water Rights, 2017a). The potentiometric surfaces of the aquifers indicates a potential for leakage from the Niobrara to the Choteau: Tyndall and Choteau: West aquifers and the potential for leakage from the Lower James Missouri: Scotland into this portion of the Niobrara aquifer (Water Rights, 2017a). The Niobrara Formation overlies the Codell Sandstone which is a member of the Carlile Shale. Jorgensen (1971) stated the Codell Sandstone in this area is in general overlain by 5 to 30 feet of impermeable shale. At the locations where the shale layer

is thin or even absent, there is likely leakage between the Codell and Niobrara aquifers. The potentiometric surfaces of both aquifers in this area suggest leakage between the aquifers would move from the Niobrara aquifer into the Codell aquifer (Water Rights, 2017a).

At the well sites this application proposes to use the aquifer appears to be under confined conditions. The well completion reports on file with the DENR-Water Rights Program for Water Permit No. 8187-3 show the Niobrara Formation ranges from approximately 60 to 110 feet thick at the wells this application proposes to use (Water Rights, 2017b). The static water levels at those locations range from approximately 40 to 80 feet below ground surface (Water Rights, 2017b).

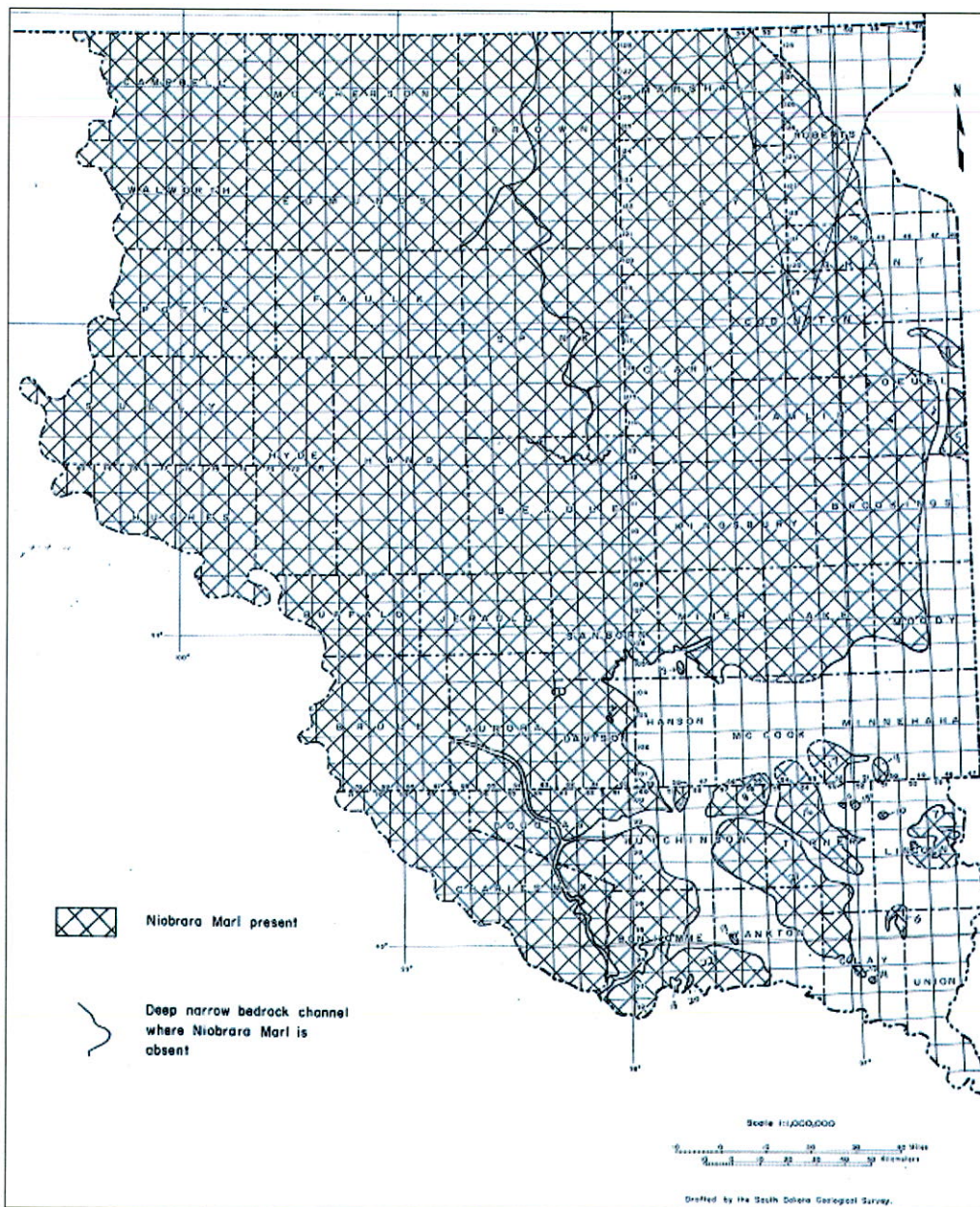


Figure 1- Map of approximate areal extent of the Niobrara Formation in eastern South Dakota (Hedges et. al, 1982)

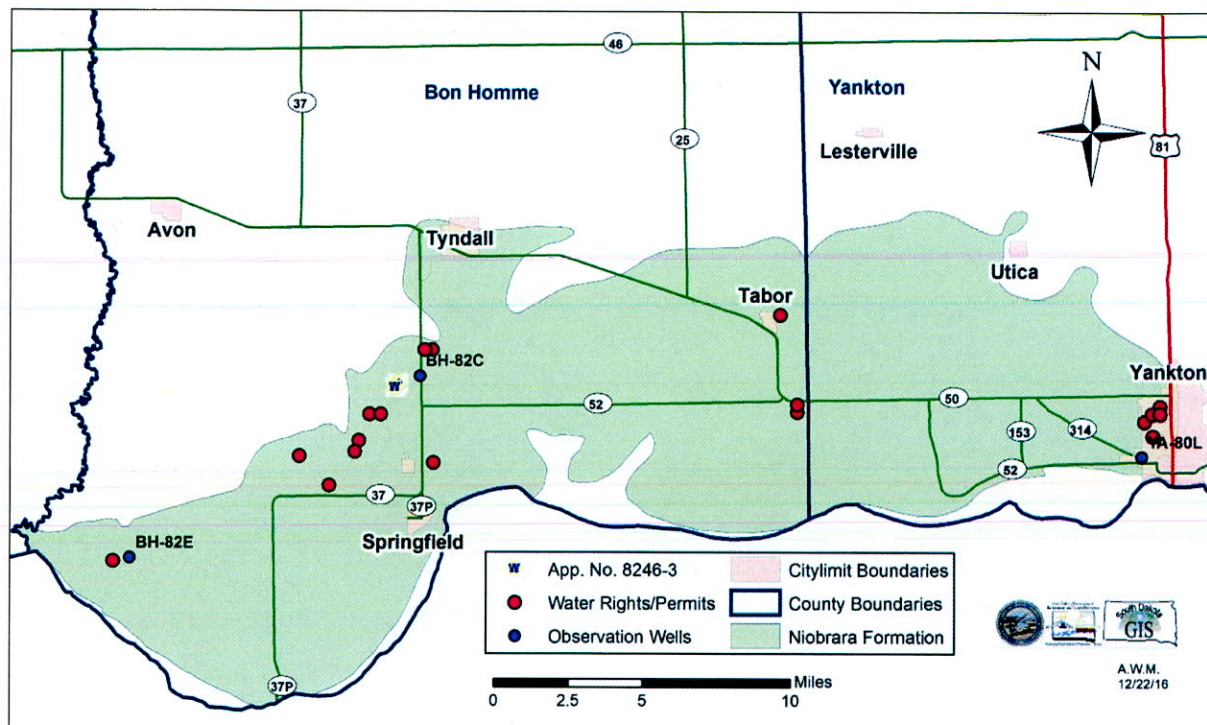


Figure 2- Approximate extent of the Niobrara Formation erosional remnant (Tomhave and Schulz, 2004), and observation wells (Water Rights, 2017a) completed into and water rights/permits (Water Rights, 2017b) authorized to withdraw water from the Niobrara aquifer

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 this 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 effects on existing rights from the aquifer that are pertinent to this application.

WATER AVAILABILITY:

This application proposes to appropriate water from the Niobrara aquifer. The probability of unappropriated water available from the aquifer can be evaluated by considering SDCL 46-6-3.1, which requires "No application to appropriate groundwater may be approved if, according to the best information reasonably available, it is probable that the quantity of water withdrawn annually from a groundwater source will exceed the quantity of the average estimated annual recharge of water to the groundwater source." If the source of the water is older or lower than the Greenhorn Formation and a water distribution system has applied for a permit, the Board need not consider the recharge/withdrawal issue. In this case, the aquifer is not stratigraphically lower than the Greenhorn Formation and the applicant is not a water distribution system.

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 in addition to other data to

determine that the quantity of water withdrawn annually from the aquifer does not exceed the estimated average annual recharge of the aquifer.

The DENR-Water Rights Program monitors three observation wells (BH-82C, BH-82E, and YA-80L) completed into the erosional remnant of the Niobrara Formation this application proposes to withdraw water from (Water Rights, 2017b). The hydrographs for these observation wells are shown in Figures 3 through 5. Observation well BH-82C is approximately 0.8 miles east-northeast, BH-82E is approximately 10.6 miles south west, and YA-80L is approximately 25 miles east-southeast of the wells this application proposes to use (see Figure 2).

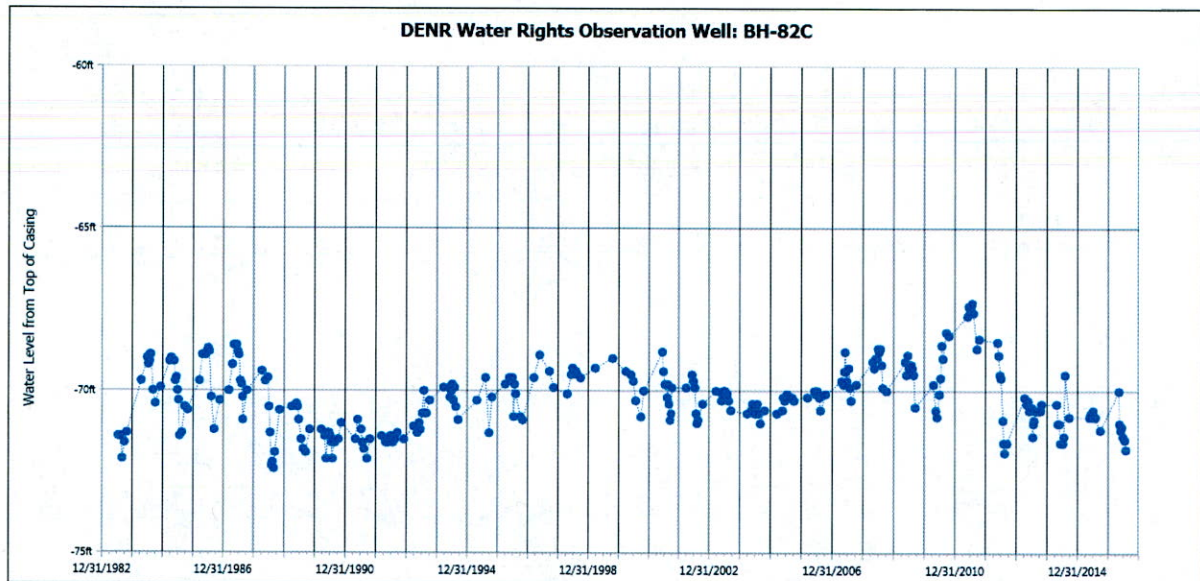


Figure 3- Hydrograph for observation well BH-82C approximately 0.8 miles east-northeast the wells Application No. 8246-3 proposes to use (Water Rights, 2017a)

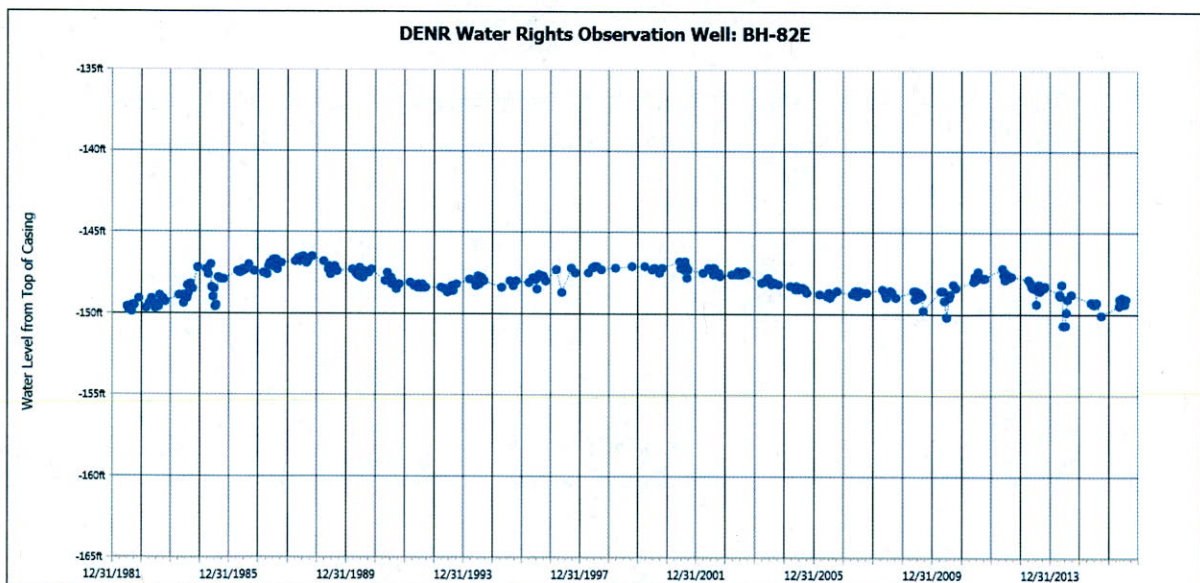


Figure 4- Hydrograph for observation well BH-82E approximately 10.6 miles southwest the wells Application No. 8246-3 proposes to use (Water Rights, 2017a)

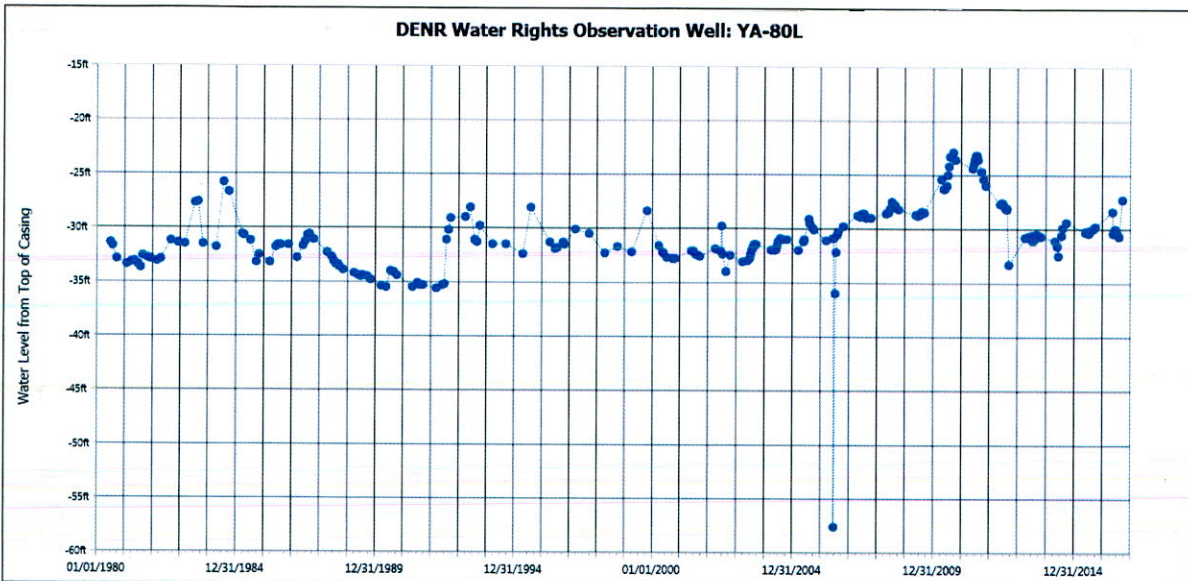


Figure 5- Hydrograph for observation well YA-80L approximately 25 miles east-southeast the wells Application No. 8246-3 proposes to use (Water Rights, 2017a)

The hydrographs for these observation wells show the effect of climate on the water level of the aquifer, rising when recharge exceeds natural discharge plus withdrawals from the aquifer and declining when natural discharge plus withdrawals exceed recharge. The hydrographs also document the relatively small amplitude fluctuations across the period of record. The only notable fluctuation is from 2006 for Observation well YA-80L when it was air developed as part of well maintenance. The low water levels for that year are from the time immediately after development. The water level in the observation well slowly recovered back to static conditions as shown by the water level data after 2006.

The water level data shown in Figures 3 through 5 show natural effects, such as climate, recharge to, and natural discharge from this portion of the Niobrara aquifer, dominates and masks any effects that pumping may have on the water level of the aquifer. Recognizing that natural discharge from an aquifer can be captured for pumping, the hydrographs document there is unappropriated water available from this portion of the Niobrara aquifer to support this proposed appropriation.

Recharge and Discharge:

Recharge:

Jorgenson (1971) stated recharge to the Niobrara aquifer in Bon Homme County is by subsurface inflow and by percolation through the overlying till, outwash, or shale deposits. The percolation of precipitation into the aquifer likely occurs only where the aquifer is near ground surface. The subsurface inflow into the aquifer is likely from the Lower James Missouri: Scotland aquifer. Data is not available to estimate the recharge to this portion of the Niobrara aquifer.

Discharge:

This portion of the Niobrara aquifer discharges through well withdrawals, to the Missouri River and to the Choteau: Tyndall, Choteau: West, and Codell aquifers (Buhler, 2015). The well withdrawals from this portion of the Niobrara aquifer are for domestic use, irrigation, municipal

use, and geothermal heating/cooling (Water Rights, 2017b and 2017c). The water rights/permits authorized to withdraw water from this portion of the Niobrara aquifer are listed in Table 1.

Permit No.	Name	County	Status	Use	CFS	Acres	Vol.
4578-3	Darlene Nagel Revocable Trust	BH	LC	IRR	1.04	73	
4779-3	Terry Balvin	BH	LC	IRR	3.9	287	
5356-3	Town of Tabor	BH	LC	MUN	0.4		0
5840-3	City of Yankton	YA	LC	IRR	0.43	30	
6365-3	City of Yankton	YA	LC	IRR	2.23	99.6	
7176-3	Yankton School District 63-3	YA	PE	GEO	0.11		n/a
7266-3	Verlyn & Jeremie Jelsma	BH	PE	IRR	1.33	109	
7267-3	Verlyn & Jeremie Jelsma	BH	PE	IRR	1.78	171	
7269-3	Verlyn Jelsma	BH	PE	IRR	1.67	162	
7985-3	William Chenoweth	BH	PE	IRR	3.11	233	
8053-3	Blane Nagel	BH	PE	IRR	1.58	140	
8187-3	Verlyn Jelsma	BH	PE	IRR	1.78	150	
BH= Bon Homme County, YA= Yankton County, LC= Water Right, PE= Water Permit, IRR= Irrigation, MUN= Municipal, GEO= Geothermal							

Table 1- Water rights/permits authorized to withdraw water from the same portion of the Niobrara aquifer as requested by Application No. 8246-3 (Water Rights, 2017b)

Water Right No. 5356-3 is used as a backup supply for the Town of Tabor because it is connected to B-Y Rural Water System (Water Rights, 2017b). Therefore, the annual use under Water right No.5356-3 is negligible. Water Permit No. 7176-3 is for a non-consumptive use. The water permit authorizes withdrawal of water from one well and reinjection with a second well (Water Rights, 2017b).

The annual irrigation pumpage from this portion of the Niobrara aquifer is shown in Table 2. The average annual irrigation pumpage is 333.7 ac-ft of water. However, irrigation development in this portion of the Niobrara aquifer has increased starting in 2012. Therefore, it would be more appropriate to consider the total authorized acres and assume a reasonable application rate. In general, the irrigation application rate in eastern South Dakota is less than one foot per year. The water rights/permits authorized to withdraw water from this portion of the Niobrara aquifer for irrigation purposes authorize the irrigation of 1,455 acres. Thus, it is reasonable to assume irrigation pumpage from this portion of the Niobrara aquifer is less than 1,455 ac-ft/yr. This application proposes to irrigate 144 acres and is likely to divert less than 144 ac-ft/yr. Domestic use is insignificant compared to appropriative use.

Natural discharge from this portion of the Niobrara aquifer is proportional to the gradient between the Niobrara aquifer and the aquifer or river receiving the discharge. The aquifer characteristics of the Niobrara aquifer such as hydraulic conductivity are generally site specific and can vary greatly from site to site. Exact values for aquifer characteristics can only be obtained through aquifer testing. Buhler (2015) estimated average aquifer transmissivity, and calculated the approximate discharge to the Missouri River from this portion of the Niobrara aquifer to exceed 11,000 ac-ft/yr. There is insufficient data available to estimate the discharge to the underlying Codell aquifer and overlying outwash aquifers. However, the amount of discharge to those aquifers from this portion of the Niobrara aquifer may be significant.

Year	No. of Water Rights/Permits Reporting	Vol. Water Pumped (ac-ft)
1981	3	99.69
1982	3	136.98
1983	4	290.25
1984	4	170
1985	4	171
1986	4	185
1987	4	266
1988	4	315.1
1989	4	324
1990	3	172
1991	3	310
1992	3	20
1993	3	0
1994	3	378.08
1995	4	266.99
1996	4	504.67
1997	4	307
1998	4	263.28
1999	4	258.63
2000	5	352.07
2001	5	373.89
2002	5	494.49
2003	6	548.66
2004	6	349.16
2005	5	330.07
2006	5	284.15
2007	5	295.59
2008	5	364.97
2009	4	117.58
2010	4	160.02
2011	4	266.33
2012	8	1364.71
2013	8	611.9
2014	9	616.67
2015	10	711.59
Min	3	0
Max	10	1364.71
Avg	4.7	333.7

Table 2- Annual irrigation pumping from the same portion of the Niobrara aquifer as requested by Application No. 8246-3 (Water Rights, 1981-2016)

Additional pumping from this portion of the Niobrara aquifer could induce more recharge from the Lower James Missouri: Scotland aquifer and capture natural discharge that would be going to other aquifers and the Missouri River. The observation well data shows no significant change in water level even though irrigation development of the aquifer has increased in recent years. This indicates the increased irrigation development is not stressing the aquifer. The estimated amount of discharge from this portion of the Niobrara aquifer to the Missouri River is more than enough to supply existing water rights/permits and this proposed appropriation if it were captured. Considering that information, there is a reasonable probability there is unappropriated water available from the Niobrara aquifer for this proposed appropriation.

EXISTING WATER RIGHTS:

Although this application does not propose to increase the 1.78 cfs maximum diversion rate authorized under Water Permit No. 8246-3, any increase of irrigated acres will result in an increase of average diversion rate over an irrigation season. Assuming the irrigation season is

May through September (153 days), the pumping of 144 ac-ft of water would result in an increase of 0.475 cfs (213 gpm) to the average diversion rate. Figure 6 shows a map of the area around the wells this application proposes to use.

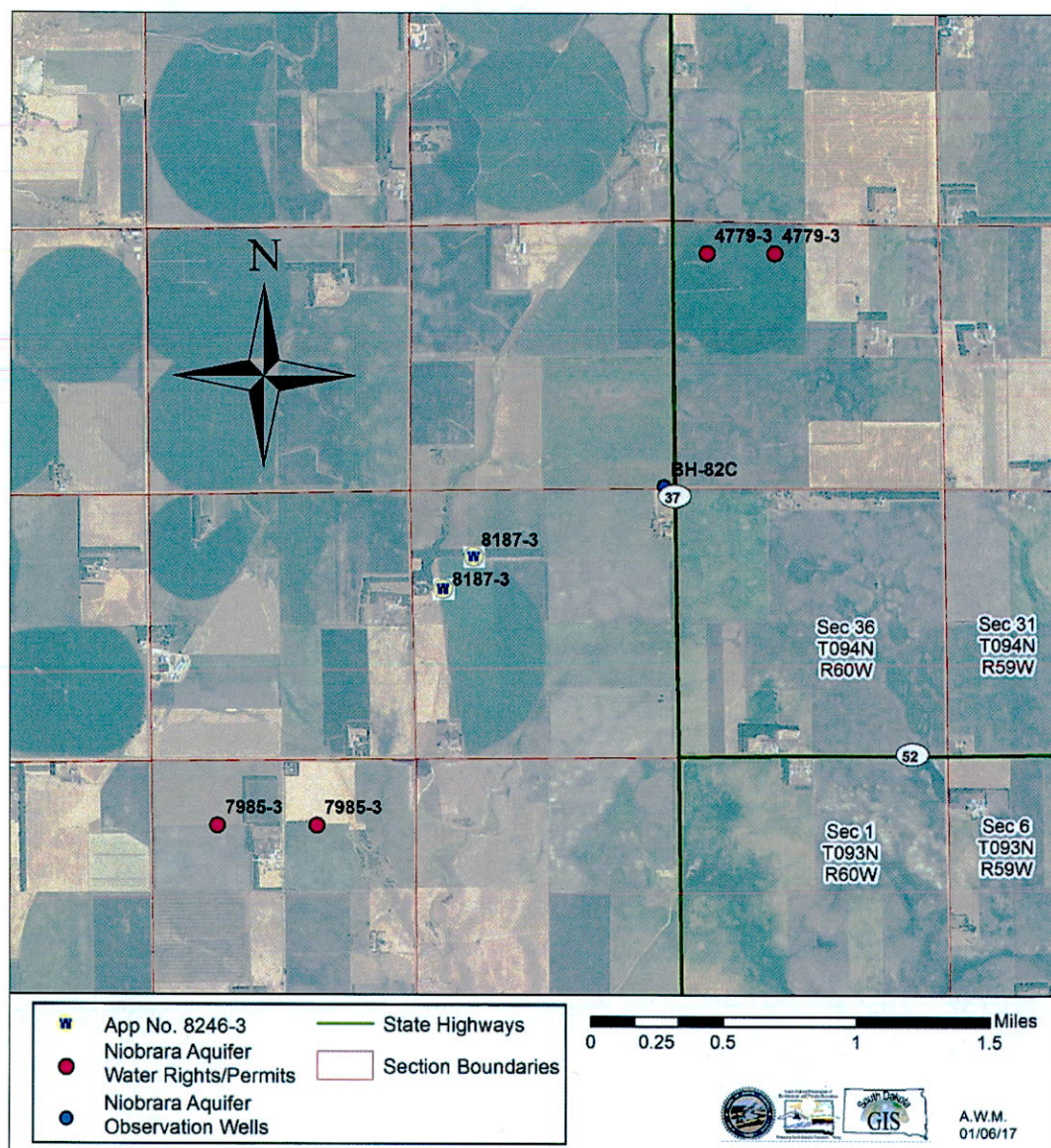


Figure 6- Map of the immediate area around Application No. 8246-3

The wells authorized by Water Right No. 4779-3 and Water Permit No. 7985-3 are approximately 1.6 miles northeast and 1.2 miles southwest of the wells authorized by Water Permit No. 8187-3 that this application proposes to use, respectively (see Figure 6) (Water Rights, 2017b). There are domestic wells within approximately two miles of the wells this application proposes to use that are likely completed into the same portion of the Niobrara aquifer. Well interference has not been an issue from this portion of the Niobrara aquifer in the past.

The hydrograph for observation well BH-82C shows a relatively small annual amplitude of water level change (generally less than three feet) over the course of any one year over the period of record. There is approximately nine feet of artesian head pressure above the top of the aquifer during the lowest recorded water level at BH-82C (Water Rights, 2017a). There has consistently been irrigation under Water Right No. 4779-3 since 1981 and there has been irrigation under Water Permit No. 7985-3 in both 2014 and 2015. There have been minimal effects on the water level of observation well BH-82C caused by pumping the irrigation wells authorized by Water Right No. 4779-3 and Water Permit No. 8246-3. Considering this, there is a reasonable probability there will not be adverse effects on existing appropriative wells if this proposed appropriation is approved.

The Water Management Board has previously considered the effects of pumping on artesian head pressure and has promulgated rules to place water to maximum beneficial use. The Water Management Board has defined an “adversely impacted domestic well” in ARSD 74:02:04:20(7) as:

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

In the past, the Water Management Board has recognized to place water to maximum beneficial use, a certain amount of drawdown may occur. Since the aquifer is under confined conditions at the well sites, drawdown due to pumping may extend some distance from the well sites. The Water Management Board considered the delivery of water by artesian head pressure versus maximum beneficial use of water issued for Water Right No. 2313-2 for Coca-Cola Bottling Company of the Black Hills. The Water Management Board adopted Findings of Facts and Conclusions of Law that noted reservation of artesian head pressure for delivery of water would be inconsistent with SDCL 46-1-4 which states, “general welfare requires that the water resources of the state be put to beneficial use to the fullest extent of which they are capable...” (Water Rights, 1995). Furthermore, the Water Management Board found if increased cost or decreased production as a result of impacts on artesian head pressure by legitimate users is to be considered an adverse impact it would also be in conflict with SDCL 46-1-4 (Water Rights, 1995). With that in mind, some existing well owners may need to lower their pumps to accommodate for deeper water levels depending on the specific characteristics of the Niobrara aquifer at the proposed well sites. However when considering the statute (SDCL 46-6-6.1), rule (ARSD 74:02:04:20(7)), and the artesian head pressure, well interference from this proposed appropriation is not expected to cause an adverse impact. Therefore, there is a reasonable probability that any interference created by pumping for this proposed appropriation will not be adverse.

CONCLUSIONS:

1. Application No. 8246-3 proposes to divert water from an erosional remnant portion of the Niobrara aquifer for the irrigation of 144 acres in Bon Homme County using two existing wells and the diversion rate authority authorized by Water Permit No. 8187-3.
2. Water Permit No. 8187-3 authorizes the irrigation of 150 acres in Bon Homme County at a maximum diversion rate of 1.78 cfs from the Niobrara aquifer.
3. Combined, Water Permit No. 8187-3 and Application No. 8246-3, if approved, would authorize the irrigation of 294 acres and a diversion rate of 1.78 cfs from two wells completed into the Niobrara aquifer.
4. Based on the observation well data and a comparison of recharge to and discharge from the aquifer, there is a reasonable probability unappropriated water is available for this proposed appropriation.
5. There is a reasonable probability the increase in average diversion rate needed to pump water for this proposed appropriation can be made without adversely impacting existing appropriative or domestic users.



Adam Mathiowetz, PE
SD DENR-Water Rights Program

Approved by:



Ken Buhler
SD DENR-Water Rights Program

REFERENCES:

- Buhler, K. 2015. Report to the Chief Engineer on Water Permit Application No. 8187-3 Verlyn Jelsma. SD DENR-Water Rights Program. Pierre, South Dakota.
- Christensen, C.M. 1974. Geology and Water Resources of Bon Homme County, South Dakota Part I; Geology. Bulletin 21. SD DENR-Geological Survey. Vermillion, South Dakota.
- Hedges, L.S., S.L. Burch, D.L. Iles, R.A. Barari, and R.A. Schoon. 1982. Evaluation of Ground-water Resources in 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.
- Jorgensen, D.G. 1971. Geology and Water Resources of Bon Homme County, South Dakota Part II; Water Resources. Bulletin 21. SD DENR-Geological Survey. Vermillion, South Dakota.
- SDGS. Lithologic Logs Database. <<http://cf.sddenr.net/lithdb/>>. Accessed: January 9, 2017. SD DENR-Geological Survey. Vermillion, South Dakota
- Tomhave, D.W. and Schulz, L.D. 2004. Bedrock Geologic Map Showing Configuration of the Bedrock Surface in South Dakota East of the Missouri River. General Map 9. SD DENR-Geological Survey. Vermillion, South Dakota.
- Water Rights. 1981-2016. "1981-2015 Annual Irrigation Questionnaires": SD DENR-Water Rights Program, Joe Foss Building, Pierre, South Dakota.
- Water Rights. 2017a. Observation Well Files. SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.
- Water Rights. 2017b. Water Right/Permit Files. SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.
- Water Rights. 2017c. Well Completion Reports. SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.
- Water Rights. 1995. Findings of Fact, Conclusions of Law, and Final Decision in the Matter of Water Permit Application No. 2313-2, Coca-Cola Bottling Company of the Black Hills. DENR-Water Rights Program file for Water Right No. 2313-2. Pierre, South Dakota.

Affidavit of Publication

RECEIVED

JAN 30 2017

WATER RIGHTS PROGRAM

State of South Dakota }
County of Bon Homme } SS

Rebecca Uys Being first duly sworn says that the **Tyndall Tribune & Register** is a legal weekly newspaper for publication of legal and other official notices as required by Chapter 298 of the Session Laws of South Dakota, 1939; that it has bona fide paid circulation of more than two hundred copies weekly; that it is published in English language in the City of Tyndall, Bon Homme County, South Dakota, and has been admitted to the United States mail under second class mailing privilege for more than one year prior to the first publication of the notice herein mentioned, and that it is printed in an office maintained at the place of publication at Tyndall, South Dakota; and that deponent is the publisher in charge of the advertising department of said newspaper; that the advertisement headed

Elsma Notice of Application to Water appropriate
78 @ 38

a printed copy of which is hereto attached, was printed and published in said newspaper for ~~one~~ successive weeks, upon the following dates:

<i>Jan 25</i> 2017	20
20	20
20	20
20	20

That the full amount of the fee charged for the publication of said notice, \$ *29.64*, inures to the benefit of the publisher of said newspaper, that no agreement or understanding for the division thereof has been made with any other person, and that no part has been agreed to be paid to any person whomsoever.

Rebecca Uys publisher
Subscribed and sworn to before me this
25 day of *Jan* 20*17*.
Peggy Schelske
Notary Public, South Dakota
My Commission Expires Oct, 24, 2021

NOTICE OF APPLICATION

NO. 8246-3 to Appropriate Water

Notice is given that Verlyn Jelsma, 41414 309th St, Springfield SD 57062 has filed an application for a water permit to irrigate 144 new acres. Water Permit No. 8187-3 appropriates 1.78 cubic feet of water per second from two wells completed into the Niobrara Aquifer (130 and 140 feet deep) located in the SW 1/4 NW 1/4 and the NW 1/4 SW 1/4 Section 35 for irrigation of 150 acres located in the S 1/2 NW 1/4, SW 1/4 Section 35; all in T94N-R60W. This application is proposing to irrigate 144 acres located in the NE 1/4 Section 35-T94N-R60W from the two existing wells. This application, if approved, does not authorize any increase in the diversion rate.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8246-3 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 February 6, 2017.

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 an approximate cost of \$29.64

AFFIDAVIT OF PUBLICATION

YANKTON DAILY PRESS AND DAKOTAN

RECEIVED
JAN 30 2017 S
WATER RIGHTS
PROGRAM

VERLYN JELSMA
41414 309TH ST
SPRINGFIELD SD 57062

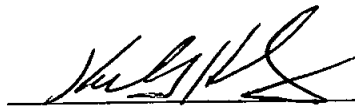
STATE OF SOUTH DAKOTA
COUNTY OF YANKTON

KELLY HERTZ, BEING FIRST DULY SWORN ON OATH DEPOSES
AND SAYS THAT (S)HE IS THE MANAGING EDITOR OF YANKTON
MEDIA INC, A CORPORATION, THE PRINTER AND THE PUBLISHER OF THE
YANKTON DAILY PRESS AND DAKOTAN, A LEGAL DAILY NEWSPAPER
PUBLISHED AND CIRCULATED IN THE CITY OF YANKTON, SAID COUNTY
AND STATE, AND ONE OF THE OFFICIAL NEWSPAPERS OF THE SAID
COUNTY OF FACTS STATED IN THIS AFFIDAVIT; THAT THE ANNEXED
1 + 25 NOTICE OF APPLICATI

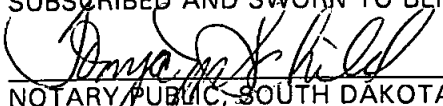
TAKEN FROM THE PAPER, IN WHICH IT WAS LAST PUBLISHED IN THE
NEWSPAPER ON THE 25th DAY OF January, 2017
THAT THE FULL AMOUNT OF THE FEE CHARGED FOR THE PUBLICATION
OF SAID NOTICE TO WIT \$28.09 ENSURES TO THE
BENEFITS OF THE PUBLISHER OF SAID NEWSPAPER AND THAT NO
AGREEMENT AND UNDERSTANDING FOR THE DIVISION THEREOF HAS
BEEN MADE WITH ANY OTHER PERSON, AND THAT NO PART THEREOF
HAS BEEN AGREED TO BE PAID TO ANY PERSON WHOMSOEVER.

PUBLISHED ON: 01/25/2017

FILED ON: 01/25/2017



SUBSCRIBED AND SWORN TO BEFORE ME THIS 25th DAY OF January, 2017



NOTARY PUBLIC, SOUTH DAKOTA
MY COMMISSION EXPIRES 08/19/2021

NOTICE OF APPLICATION NO. 8246-3 to Appropriate Water

Notice is given that Verlyn Jelsma, 41414 309th St, Springfield SD 57062 has filed an application for a water permit to irrigate 144 new acres. Water Permit No. 8187-3 appropriates 1.78 cubic feet of water per second from two wells completed into the Niobrara Aquifer (130 and 140 feet deep) located in the SW 1/4 NW 1/4 and the NW 1/4 SW 1/4 Section 35 for irrigation of 150 acres located in the S 1/2 NW 1/4, SW 1/4 Section 35; all in T94N-R60W. This application is proposing to irrigate 144 acres located in the NE 1/4 Section 35-T94N-R60W from the two existing wells. This application, if approved, does not authorize any increase in the diversion rate.

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Steven M. Pirner, Secretary, Department of Environment and Natural Resources.
Published once at the total approximate cost of \$28.09.

Schlaak, Karen

From: Schlaak, Karen
Sent: Tuesday, January 17, 2017 11:03 AM
To: ttribune@byelectric.com
Subject: 8246-3, Verlyn Jelsma
Attachments: 8246-3public.short.docx; FORM8.FRM.doc

Attached is a notice to be published on January 25, 2017.

Verlyn Jelsma, 41414 309th St, Springfield SD 57062 (605 396-2664 or c 605 661-9764) 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

Schlaak, Karen

From: Schlaak, Karen
Sent: Tuesday, January 17, 2017 11:03 AM
To: 'Tera Schmidt'
Subject: FW: 8246-3, Verlyn Jelsma
Attachments: 8246-3public.short.docx; FORM8.FRM.doc

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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.**

January 17, 2017

Verlyn Jelsma
41414 309th St
Springfield SD 57062

Dear Mr. Jelsma:

Water Permit Application No. 8246-3 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 Tyndall Tribune & Register printed at Tyndall SD (Ph # 605-589-3242) and the Press & Dakotan printed at Yankton SD (Ph # 605-665-7811). 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
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.

NOTICE OF APPLICATION NO. 8246-3 to Appropriate Water

Notice is given that Verlyn Jelsma, 41414 309th St, Springfield SD 57062 has filed an application for a water permit to irrigate 144 new acres. Water Permit No. 8187-3 appropriates 1.78 cubic feet of water per second from two wells completed into the Niobrara Aquifer (130 and 140 feet deep) located in the SW 1/4 NW 1/4 and the NW 1/4 SW 1/4 Section 35 for irrigation of 150 acres located in the S 1/2 NW 1/4, SW 1/4 Section 35; all in T94N-R60W. This application is proposing to irrigate 144 acres located in the NE 1/4 Section 35-T94N-R60W from the two existing wells. This application, if approved, does not authorize any increase in the diversion rate.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8246-3 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.

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



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

denr.sd.gov

FEB 15 2017

Verlyn Jelsma
41414 309th St
Springfield SD 57062

Dear Mr. Jelsma:

Enclosed is Water Permit No. 8246-3 authorizing construction of the water diversion system and beneficial use of the water, not exceeding the limits as specified in the Water Permit.

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

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

Sincerely,

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

enclosures

8246-3
RECEIVED

JUN 14 2017

WATER RIGHTS
PROGRAMNOTICE OF COMPLETION OF WORKS AND
APPLICATION OF WATER TO BENEFICIAL USEDate 6-12-17TO: Water Rights Program, DENR
523 E. Capitol
Pierre, SD 57501-3181

FROM:

Verlyn Jelsma

(name)

41414 309th Street

(address)

Springfield, SD 57062 (605) 369-2664

(city, state, zip)

(phone)

I have completed the construction of the water use system and I have put the water to beneficial use to the maximum extent it is going to be used.

Water Permit No. 8246-3 states that the water use system is to be constructed byJune 1, 2017

(date)

, and water is to be put to beneficial use by June 15, 2017

(date)

The water use system was completed on June 1, 2017

(date)

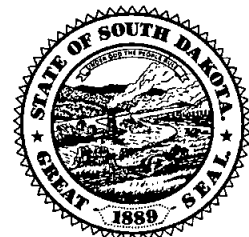
Applying the water to beneficial use was completed on June 15, 2017

(date)

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

Verlyn Jelsma

(signature)





DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3182
<http://denr.sd.gov>

June 21, 2017

8246-3

Verlyn Jelsma
41414 309th St
Springfield SD 57062

Dear Mr. Jelsma:

I am writing to acknowledge receipt of the "Notice of Completion of Works" form that you sent in to let us know that you are completed with your irrigation system.

The system is now ready for inspection. Inspections are done on a county-by-county basis as staff time permits. You have done everything you need to do and the intervening time between the completion of your project and the staff inspection has no bearing on your water permit.

Someone from our office will contact you prior to the inspection to set up a time that is convenient for you. If you have any questions, please contact me.

Sincerely,

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 Nos. 7268-3, 8187-3 and 8246-3

I have this day, May 2, 2018, made a thorough examination of the water use system constructed by Verlyn Jelsma, 41414 309th St., Springfield, SD 57062, holder of Permit Nos. 7268-3 bearing the priority date of September 6, 2011, 8187-3 bearing a priority date of October 29, 2015, and holder of Permit No. 8246-3, bearing the priority date of November 21, 2016, all together authorizing the diversion of 1.78 cu. ft. per second of the waters of groundwater (Niobrara Aquifer) for irrigation purposes, in Bon Homme County.

Inspection contact: Verlyn Jelsma, Owner

A. Works used to divert the water:

Well Information:

- 1) Well Drilling Firm: Christensen Well & Irrigation
- 2) No. of Wells 3

North Well

- 1) Depth(s) 140 feet
- 2) Well log is available Yes

Casing:

- 1) Diameter 16 inches
- 2) Length 73 feet
- 3) Type Plastic

Screen:

- 1) Type None
- 2) Length 67 feet
- 3) Static water level 78 feet

Pump:

- 1) Make Goulds
- 2) Model Unknown
- 3) Capacity 400 GPM

Motor:

- 1) Make Unknown
- 2) Model No. Unknown
- 3) Horsepower rating 40 hp

West Well

- 1) Depth(s) 120 feet
- 2) Well log is available Yes

Casing:

- 1) Diameter 16 inches
- 2) Length 37 feet
- 3) Type Plastic

Screen:

- 1) Type None
- 2) Length 83 feet
- 3) Static water level 37 feet

Pump:

- 1) Make Layne/Vern-Line
- 2) Model 10RH
- 3) Capacity 800 GPM

Motor:

- 1) Make US
- 2) Model No. BF54A
- 3) Horsepower rating 50 hp

South Well

- 1) Depth(s) 140 feet
- 2) Well log is available Yes

Casing:

- 1) Diameter 16 inches
- 2) Length 80 feet
- 3) Type Plastic

Screen:

- 1) Type PVC
- 2) Length 60 feet
- 3) Static water level 52 feet

Pump:

- 1) Make Goulds
- 2) Model Unknown
- 3) Capacity 100 GPM

Motor:

- 1) Make Unknown
- 2) Model No. Unknown
- 3) Horsepower rating 15 hp

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

- 1) Type PVC 2) Size 8 inches 3) Length 5,360 feet

C. Works used to apply water to beneficial use:

Center pivots:

<u>West</u>	<u>Middle</u>	<u>East</u>
1) Make <u>T&L</u>	1) Make <u>T&L</u>	1) Make <u>T&L</u>
2) Overall length <u>1,960</u> feet	2) Overall length <u>1,256</u> feet	2) Overall length <u>1,288</u> feet
3) Number of towers <u>12</u>	3) Number of towers <u>8</u>	3) Number of towers <u>8</u>
4) End gun <u>Yes</u>	4) End gun <u>Yes</u>	4) End gun <u>Yes</u>
5) Capacity <u>800</u> GPM	5) Capacity <u>800</u> GPM	5) Capacity <u>800</u> GPM

D. Compliance with Permit Requirements:

- 1) Permit qualifications being abided by Yes
2) Irrigation Questionnaires checked to determine if permit owner started irrigation by the end of construction period Yes
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: North Well: 1,040 feet east and 3,980 feet north from the southwest corner of Section 35-T94N-R60W (Latitude 42.91948, Longitude -97.90786); West Well: 100 feet east and 2,780 feet north from the southwest corner of Section 35-T94N-R60W (Latitude 42.91619, Longitude -97.91128); South Well: 640 feet east and 2,020 feet north from the southwest corner of Section 35-T94N-R60W (Latitude 42.91409, Longitude -97.90922).
2. The works are capable of diverting and conveying to the place of use 1.78 cu. ft. per second of water which is to be used for irrigation purposes. Water has been put to beneficial use to the maximum extent as follows: all in Section 35-T94N-R60W

<u>SW1/4NW1/4</u>	<u>23 acres</u>
<u>NW1/4NE1/4</u>	<u>39 acres</u>
<u>SW1/4NE1/4</u>	<u>39 acres</u>
<u>NW1/4SW1/4</u>	<u>20 acres</u>
<u>SW1/4SW1/4</u>	<u>13 acres</u>

<u>SE1/4NW1/4</u>	<u>40 acres</u>
<u>NE1/4NE1/4</u>	<u>22 acres</u>
<u>SE1/4NE1/4</u>	<u>33 acres</u>
<u>NE1/4SW1/4</u>	<u>40 acres</u>
<u>SE1/4SW1/4</u>	<u>24 acres</u>

comprising a total of 293 acres of land and the license should be issued for 1.78 cfs.

3. All structures, wells and lands on map Yes

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

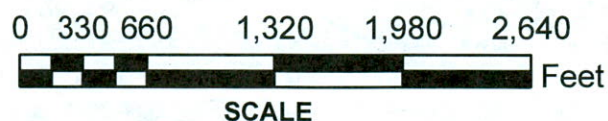
Permit No. 7268-3 was the original permit application dated September 6, 2011, which authorized the west well and 1.78 cfs over 146 acres. Permit No. 8187-3 was applied for on October 29, 2015. This permit replaced Permit No. 7268-3 and added four acres and two wells (south well and north well) to the project without any additional cfs of water. Permit No. 8246-3 was applied for on November 21, 2016, and it added 144 acres to the project with no additional wells. The completed project has three wells, three center pivots and irrigates 293 acres in Section 35-T94N-R60W. It is recommended that one license be issued for the entire project.



Keith DeJong
Water Rights Inspector
DENR, Water Rights Program

Date report completed: **May 22, 2018**

Water Right Nos. 7268-3, 8187-3 and 8246-3 Combined



Keith DeJong
Keith DeJong, PE
Staff Engineer
May 22, 2018



8246-3

DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3182
<http://denr.sd.gov>

JUN 29 2018

8187-3
8246-3

Verlyn Jelsma
41414 309th St
Springfield SD 57062

Dear Mr. Jelsma:

Enclosed is Water License No. 8246-3. 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.

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

Sincerely,

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

enclosures

Note: Upon licensing, the applicable portions of Water Permit No. 8187-3 were incorporated into Water License No. 8246-3.

STATE OF SOUTH DAKOTA
WATER LICENSE NO. 8246-3

(1) Verlyn Jelsma, 41414 309th St., Springfield SD 57062 made Application No. 8246-3, November 21, 2016 for a water permit to add 144 acres to an existing irrigation system located in Bon Homme County, South Dakota. Permit No. 8246-3, with a priority date of November 21, 2016 was approved February 6, 2017 and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before February 6, 2022 and for the application to beneficial use of said water on or before February 6, 2026.

Water Permit No. 8187-3, which incorporated the applicable portions of Water Permit No. 7268-3, authorized diversion of 1.78 cubic feet of water per second (cfs) from three wells for irrigation of 150 acres. Water Permit No. 8246-3 authorized irrigation of an additional 144 acres from the existing wells with no increase in the diversion rate.

The Permit holder submitted a "*Notice of Completion of Works and Application of Water to Beneficial Use*" on June 14, 2017 indicating the water use system was completed and water was placed to beneficial use.

The applicable portions of Water Permit No. 8187-3 are incorporated into this Water License No. 8246-3.

(2) It is certified that the permit holder has complied with the provisions of South Dakota State Law relating to completion of the construction of the water supply system and is entitled to divert 1.78 cubic feet of water per second for beneficial use. The location of the diversion points are:

- **North Well:** 1,040'E and 3,980'N of the SW corner of Section 35, T94N, R60W (NW ¼ NW ¼) Latitude 42.91948, Longitude -97.90786;
- **West Well:** 100'E and 2,780'N of the SW corner of Section 35, T94N, R60W (SW ¼ NW ¼) Latitude 42.91619, Longitude -97.91128;
- **South Well:** 640'E and 2,020'N of the SW corner of Section 35, T94N, R60W (NW ¼ SW ¼) Latitude 42.91409, Longitude -97.90922.

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

Section 35, T94N, R60W					
SW ¼ NW ¼	23 acres	NW ¼ NE ¼	39 acres	NW ¼ SW ¼	20 acres
SE ¼ NW ¼	40 acres	NE ¼ NE ¼	22 acres	NE ¼ SW ¼	40 acres
		SW ¼ NE ¼	39 acres	SW ¼ SW ¼	13 acres
		SE ¼ NE ¼	33 acres	SE ¼ SW ¼	24 acres

Total irrigated – 293 acres

Priority dates:

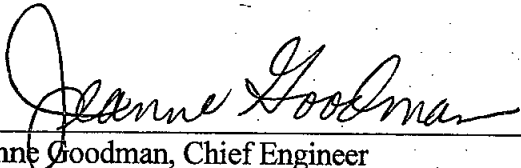
- September 6, 2011 for 1.78 cfs and 146 acres in S ½ NW ¼ and SW ¼ Section 35 (established under No. 7268-3)
- October 29, 2015 for 4 acres in the SE ¼ NW ¼ Section 35 (established under No. 8187-3)
- November 21, 2016 for the NE ¼ Section 35 (established under No. 8246-3)

continued

(4) Pursuant to South Dakota Water Law 46-5-30.1 Verlyn Jelsma, 41414 309th St., Springfield SD 57062 the holder and/or owner of Incorporated Water Right No. 8246-3 is issued a license to appropriate water, the right to use 1.78 cubic feet of water per second from ground water (three wells – Niobrara Aquifer) with priority dates of September 6, 2011, October 29, 2015 and November 21, 2016 from the locations specified in (2) of this license for irrigation purposes.

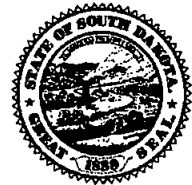
This license is subject to South Dakota Water Law, any limitations or conditions listed in Water Right No. 8246-3 and subject to the following qualifications:

- The wells approved under this Permit Nos. 8187-3 and 8268-3 will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
- This Permit is approved subject to the irrigation water use questionnaire being submitted each year.



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

JUN 29 2018
date





**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

August 13, 2025

8246-3

Verlyn Jelsma
41414 309th St
Springfield SD 57062

Dear Mr. Jelsma:

The South Dakota Water Rights Program is in receipt of a "Water Well Completion Report" for an irrigation well drilled for you by Christensen Well & Irrigation (copy enclosed).

Water Right No. 8246-3 authorizes the diversion of 1.78 cfs (800 gpm) from three wells for the irrigation of 293 acres, located in portions of the S $\frac{1}{2}$ NW $\frac{1}{4}$, NE $\frac{1}{4}$, and SW $\frac{1}{4}$; all in Section 35-T94N-R60W.

With this letter, I hope to determine whether this new well is meant to replace one of the existing wells authorized by Water Right No. 8246-3, was developed as an additional diversion point, and if the new well has resulted in an increase to the currently authorized rate of diversion.

Please contact me via telephone or email to discuss the new well to ensure that Water Right No. 8246-3 property identifies the system as developed.

Sincerely,

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

enclosure

WATER RIGHTS PROGRAM -- FILE DOCUMENTATION

NAME & ADDRESS: Verlyn Jelsma – Springfield SD

DATE: 08/26/2025

TELEPHONE: 605-661-9764

RE: New irrigation well

COMMENTS:

Mr. Jelsma called after receiving my letter dated August 13, 2025. He said that unfortunately, the well drilled by Christensen Well & Irrigation did not produce sufficient water for irrigation (less than 150 gpm). At this time, he was not sure if he was going to connect it to the existing system authorized under 8246-3 as a “helper well”.

A handwritten signature in cursive script that reads "Amanda Dewell".

Amanda Dewell
Water Rights Program