

WATER PERMIT NO. 8251-3

Name of Applicant: Willard Schmidt

Address: 43970 306th St, Mission Hill SD 57046

Phone: 605 660-4564

Amount of Water Claimed: no add'l

Total Acres: 34.57

Source of Water Supply: groundwater (1 existing well)

Water to be used for: irrigation

County: Yankton

Type of Waste Disposal System:

Location: 2 miles north of Yankton

PRIORITY

Date Received: 12-12-2016

Application/License Fee: \$ 700

Corrected Application Received:

Period of Annual Use: June 1 – Sept 30

Remarks: Using well authorized by Water Right No. 6483-3

Diversion Point: SW 1/4 SE 1/4 Sec 13-T94N-

R56W

Land to be Irrigated: W 1/2 SW 1/4 Sec 13-T94N-

R56W

Depth of Well: 200 feet deep

Well Driller: Christensen Well & Irrigation

Remarks:

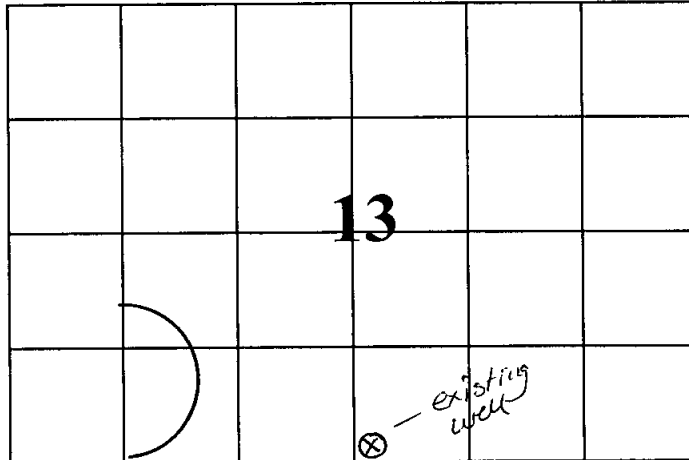
Type of Map: aerial

Prepared by:

Reviewed and the Number Assigned on: 12-12-2016

By: **Karen Schlaak**

Notice of Hearing - date to intervene: _____



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DEC 12 2016
WATER RIGHTS
PROGRAM

Mail to: DENR - Water Rights 523 E Capitol Ave Pierre, SD 57501-3182 ph. (605) 773-3352	No. <u>8251-3</u> (office use only) Hydrologic Unit <u>10160011</u>
	Basin <u>James River</u>
	Newspaper <u>Press & Dakotan - Yankton</u>
	<u>605-665-7811</u>

Application For Permit To Appropriate Water For Irrigation

Type of Application: ☐ New ☐ Vested Right ☒ Amendment/Correction to Permit No. 6483-3
(Use predates Mar 2, 1955) 7253-3

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

Irrigate an additional 34.57 acres1. Name to Appear on Irrigation Permit Willard Schmidt

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

Mailing Address 43970 306th St Yankton SD 57078
(Address) (City) (State) (Zip Code)Phone 6056604564 Mobile Email 2. Amount of water claimed 1.56*CFS or road **GPM ***AF Total Acreage 34.57
(*Cubic Feet per Second) (**Gallons per Minute) (***)Acre Feet - storage capacity of dam/dugout or annual use if applicable)3. Source of water supply well4. Location of point of diversion 2660' east and 50 North from SW corner
(example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W)
of Section 13-T94N-R56W (SW1/4 SE1/4) County Yankton5. County or counties where water will be used Yankton6. Annual period during which water is to be used June - Sept 307. 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
<u>SW 1/2 of SW 1/4</u>	<u>13.99 N 56 W 25</u>		
<u>NW 1/2 of SW 1/4</u>	<u>13.99 N 56 W 9.57</u>		

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

I, Willard Schmidt, owner, the applicant, certify under
Name of Person Title (if applicable)

penalty of perjury that I have read this application, examined the attached map, and that the matters stated are true. I further certify, if acting on behalf of an entity or individual other than myself, that I am authorized to submit this application.

SOUTH DAKOTA
WATER PERMIT NO. 8251-3

Date of first receipt of application December 12, 2016.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 8251-3 to Willard Schmidt, 43970 306th St, Yankton SD 57078 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. 8251-3 authorizes irrigation of 34.57 additional acres. Water Right No. 6483-3 and Water Permit No. 7253-3, combined, appropriate 1.56 cubic feet of water per second from one well completed into the Lower James Missouri Aquifer (200 feet deep) located in the SW 1/4 SE 1/4 Section 13 for irrigation of 180 acres located in the SW 1/4, W 1/2 SE 1/4, SE 1/4 NW 1/4, SW 1/4 NE 1/4 Section 13; all in T94N-R56W. Water Right No. 7202-3 authorizes irrigation of 40 acres in the NE 1/4 NW 1/4 Section 24-T94N-R56W from this same well. This permit authorizes irrigation of 34.57 additional acres located in the W 1/2 SW 1/4 Section 13-T94N-R56W from the existing well. This permit does not authorize any increase in the developed 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: June 1 – September 30.
3. The date from which applicant may claim right is December 12, 2016.
4. The date of approval of Permit No. 8251-3 is March 6, 2017.
5. One-fifth of the construction is to be completed on or before September 6, 2019.
6. All construction is to be completed on or before March 6, 2022.
7. Water is to be put to beneficial use on or before March 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 well approved under Water Permit No. 8251-3 is 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

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

MAR 08 2017

date



Supplemental Information

(type or print)

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

For either Existing or Proposed Wells:

c) Well Depth (required) 220 Depth to Top of Water Bearing Material 140 Depth to Water from Surface 140d) Distance to nearest domestic well on applicant's property 2600 ft Property owned by others Yankton Land & Cattle Co**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

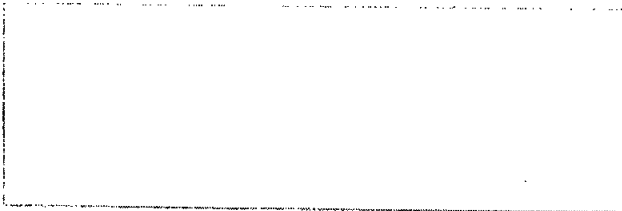
a) Surface Dimensions _____ Depth _____

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

Keiser Ag & Irrigation LLC

301 W. South St.

Hartington, NE 68739

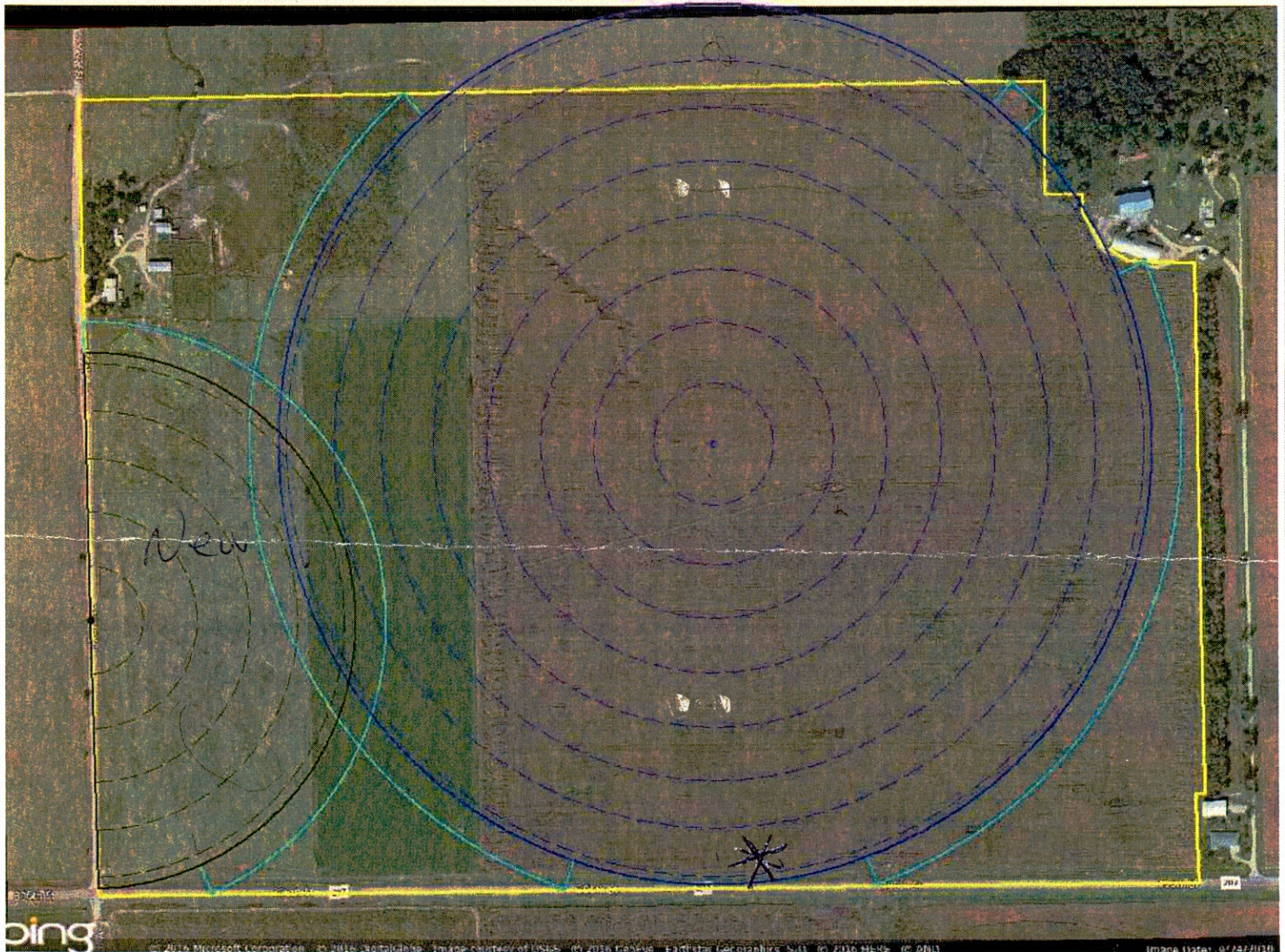
Office: 402-254-9557; (2): 605-661-6941

juddkeiser@outlook.com

Willards Place

New Design (1)

44,200 NoSD Tax



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DEC 12 2016

**WATER RIGHTS
PROGRAM**

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date 12/12, 20 16

RECEIVED OF Willard G Schmidt 43970 306th St Yankton SD 57078

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

Fee for Application for Permit No. <u>8251-3</u> to Appropriate Water, to construct and to put water to beneficial use	500	00
Fee for Application for Permit No. _____ to Appropriate Water for Future use		
Fee to retain Future Use Permit No. _____ after period of seven years.		
Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. <u>8251-3</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	800	00

No. **07977**

By Jamie Goodman
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. 8251-3, Willard Schmidt**

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. 8251-3, Willard Schmidt, 43970 306th Street, Yankton SD 57078.

The Chief Engineer is recommending APPROVAL of Application No. 8251-3 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 Water Permit No. 8251-3 is 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
February 13, 2017

**REPORT TO THE CHIEF ENGINEER
ON
WATER PERMIT APPLICATION NO. 8251-3
WILLARD SCHMIDT
JANUARY 31, 2017**

Application No. 8251-3 proposes a water permit to authorize the irrigation of 34.57 acres located in the W½ SW¼ Sec. 13, T94N-R56W using water from an existing well completed into the Lower James Missouri aquifer. The existing irrigation well, authorized by Water Right No. 6483-3 is 220 feet deep and located in the SW¼SE¼ Sec. 13, T94N-R56W. Water Right No. 6483-3 authorizes the irrigation of 112 acres located in the W½ SE¼, E½ SW¼ Sec. 13, T94N-R56W, and a maximum diversion rate from the well of 1.56 cubic feet of water per second (cfs). Water Permit No. 7202-3 authorizes the irrigation of 40 acres located in the NE¼ NW¼ Sec. 24, T94N-R56W using the same well as authorized by Water Right No. 6483-3 with no increased diversion rate. Water Permit No. 7253-3 authorizes the irrigation of 68 acres located in the W½ SW¼, SE¼NW¼, SW¼NE¼ Sec. 13, T94N-R56W using the same well as authorized by Water Right No. 6483-3. If Water Permit No. 8251-3 is approved, four appropriations (i.e. Water Right No. 6483-3, Water Permit No. 7202-3, Water Permit No. 7253-3 and Water Permit No. 8251-3) will authorize a total diversion rate of 1.56 cfs for the irrigation of 254.57 acres.

AQUIFER: Lower James Missouri (LJM)

GEOLOGY AND AQUIFER CHARACTERISTICS:

The Lower James Missouri (LJM) is a glacial outwash aquifer that underlies approximately 191,700 acres of Clay, Hutchinson and Yankton Counties (Hedges and others, 1982). Bugliosi (1986) separated the LJM into Northern and Southern areas on the “basis of different depositional episodes during the time of glacial deposition that resulted in different thickness of deposits in each area.” Bugliosi’s nomenclature for the aquifer (i.e. Northern and Southern areas) has not been adopted by the SD Department of Environment and Natural Resources or the SD Water Management Board. The DENR continues to use the aquifer boundaries and nomenclature presented by Hedges and others (1982). The Lower James Missouri aquifer is contiguous with the Missouri: Elk Point aquifer and the boundary between the two aquifers resembles the line delineating flood plain from upland as presented by Jorgensen (1960). The Lower James Missouri aquifer occurs on the upland and the Missouri: Elk Point occupies the flood plain. Review of the *First Occurrence of Aquifer Materials in Yankton County, South Dakota* (McCormick, 2003), generally identifies alluvium overlying the outwash in the flood plain (i.e. at the Missouri: Elk Point aquifer) and that the outwash is buried in the upland (i.e. Lower James Missouri aquifer).

The Lower James Missouri aquifer is generally under confined conditions although unconfined conditions also exist. The SD Well Completion Report for this existing well identifies aquifer material starting 150 feet below grade and a May 17, 2004, static water level of 158 feet below grade. Therefore, the aquifer can be considered buried/unconfined at this site. The base of the aquifer material was reported to be 217 feet below grade.

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 from the aquifer and the potential for impairment of existing rights.

WATER AVAILABILITY:

The probability of unappropriated water available from an aquifer can be evaluated by considering SDCL 46-6-3.1, which requires it is probable according to the best information reasonably available the quantity of water withdrawn annually from a groundwater source will not exceed the quantity of average estimated annual recharge of water to the groundwater source. If the source of the groundwater is older or lower than the Greenhorn formation and will be used for a water distribution system, recharge and withdrawal does not need to be considered.

Here, a water distribution system is not involved and the aquifer is above the Greenhorn formation so the issue of withdrawals from the aquifer compared to recharge will be considered. To evaluate how withdrawals from the aquifer compare to recharge to the aquifer, both a hydrologic budget for the aquifer and an analysis of observation well data are presented below.

Hydrologic Budget:*Recharge:*

Recharge to the Lower James Missouri aquifer occurs through infiltration of precipitation where the aquifer is at or near land surface in the James River flood plain, upward leakage from the bedrock aquifers, inflow from surface water, and inflow from the surrounding glacial aquifers (Bugliosi, 1986; Hansen, 1983; Lindgren and Hansen, 1990). The aquifer is hydraulically connected to the Choteau, Lower James Missouri: Scotland, and Niobrara aquifers, and the James and Missouri Rivers. In addition, Stonesifer (2013) postulates that the Plum Creek aquifer in southern Hanson County is actually part of the Lower James Missouri aquifer. Water in the aquifer moves southward and locally toward the James River (Bugliosi, 1986; Hansen, 1983; Lindgren and Hansen, 1990).

Hedges and others (1985) estimated a recharge rate to the southern portion of the Lower James Missouri aquifer through regional flow-net analysis to be 1.5 inches per year (in/yr). In applying this total recharge rate estimate to the total area of the aquifer, recharge is estimated to be 23,963 acre-feet annually (ac-ft/yr). The recharge rate to unconfined portions of the aquifer was estimated to be 3.9 inches per year (in/yr) from observation well analysis (Hedges and others, 1985). However, the observation well analysis used to estimate recharge developed by Hedges and others (1985) essentially assumes that a rise in the water level of an aquifer is the product of recharge only. In actuality, a water level rise is the result of recharge to the aquifer exceeding discharge from the aquifer. Therefore, Hedges' recharge estimate may be conservative. Stonesifer (2014) estimated the areal extent of the portion of the Lower James Missouri aquifer that is under unconfined conditions, and based on Hedges and others (1985) recharge rate estimate, estimated the average annual recharge to the Lower James Missouri aquifer of 26,700 acre-feet annually.

Withdrawals

Discharge from the Lower James Missouri aquifer is from seepage to the James River, evapotranspiration where the aquifer is near the ground surface, groundwater outflow to the Missouri: Elk Point aquifer and withdrawals from wells. Well withdrawals are for domestic use and for uses that require water rights/permits. Although there are a number of domestic use wells completed into the aquifer, withdrawals by these wells is not expected to be a significant portion of the hydraulic budget for the management unit due to their relatively low diversion rates associated with them and the availability of rural water systems.

There are currently 136 water rights/permits appropriating water from the Lower James Missouri aquifer. In addition there are a number of domestic wells completed into the aquifer. Water use by domestic use wells is not expected to be significant to a hydrologic budget for the aquifer due to the relatively low water usage from individual wells. Water uses by category are shown in Table 1.

Table 1. Appropriative uses from the Lower James Missouri aquifer.

Use Type	Number of. Permits/Water Rights
Commercial	4
Commercial & Domestic	1
Commercial/Large confinement Operation	1
Geothermal	1
Industrial	1
Irrigation	126
Irrigation & Commercial	1
Irrigation & Domestic	1

None of the non-irrigation appropriations have annual diversion rate limitations. Historically, average annual water use by non-irrigation appropriations limited only by instantaneous diversion rate has been less than 60% of full time pumping at the permitted diversion rate. Consequently, water use from the aquifer for non-irrigation appropriations can be estimated at less than 1,243 acre-feet per year.

Well withdrawals from the Lower James Missouri aquifer are primarily for irrigation use. Historic irrigation use from the aquifer is shown in Table 2.

Table 2. Historic irrigation use from the Lower James Missouri aquifer (Water Rights, 1980-2016).

Year	Number of Permits	Appropriation (ac-ft/yr)	Pumpage (ac-ft/yr)
1979	22	11265	585.04
1980	23	11561	1299
1981	27	13053	1835
1982	23	9440.1	1301.25
1983	27	9883.1	1306.54
1984	28	12283.1	1360
1985	27	10033.1	1483
1986	30	11613.5	989.6
1987	30	11613.5	1041.6
1988	31	11769.5	2744.9
1989	31	10909.1	2144.8
1990	35	12673.1	2928.1
1991	42	15497.9	2599
1992	45	16791.9	1159
1993	45	16241.9	230.44
1994	45	17094.1	1918.17
1995	41	15088.1	1483.32
1996	49	17240.1	2102.99
1997	50	17072.1	2320
1998	53	16915.1	2787.03
1999	50	15992.1	2102.15
2000	51	17048.1	3751.08
2001	53	17208.1	2940.09
2002	53	17108.3	4061.52
2003	53	17373.1	2843.15
2004	47	14525.1	2886.65
2005	48	14749.1	2866.63
2006	50	15627.1	3630.92
2007	56	17477.7	3425.91
2008	79	23891.7	4494.03
2009	84	25451.1	1463.27
2010	85	25731.1	665.7
2011	89	27367.1	4147.47
2012	93	28626.7	13058.45
2013	118	33664.1	7855.75
2014	125	36286.1	3347.27
2015	127	37695.24	4822.86
<i>max</i>	127	37695.24	13058.45
<i>min</i>	22	9440.1	230.44
<i>average</i>	53	17672	2756

It is apparent upon review of Table 2. That appropriations and irrigation withdrawals have increased significantly over the period of record. With the increased appropriation, the average annual irrigation withdrawal is expected to increase. Kilts (2016), calculated a 1994-2015 average annual irrigation application rate for the Lower James Missouri aquifer of 4.2 inches per permitted acre per year. Based on the number of acres authorized for irrigation from the aquifer, at the time (i.e. 18,242 acres), Kilts (2016) estimated the average annual irrigation use to be 6,385 acre-feet annually. Water Permit No. 8233-3 was approved based on the permit application review by Kilts. Average annual water use by Water Permit No. 8233-3 is expected to be less than 84 ac-ft/yr (Kilts, 2016). Therefore, average annual irrigation withdrawal from

the Lower James Missouri aquifer is expected to be approximately 6,470 ac-ft/yr under current appropriations.

Balance

Average annual appropriative use withdrawal from the Lower James Missouri aquifer is estimated to be 7,713 ac-ft/yr. Recharge estimates for the aquifer ranged from 23,963 to 26,700 ac-ft/yr. Approval of Water Permit Application No. 8251-3 is expected to result in an average annual water use of less than 35 ac-ft/yr. There is a reasonable probability that withdrawals from the aquifer will not exceed recharge to the aquifer, therefore unappropriated water is available for this appropriation.

Observation Well Data:

Administrative Rule of South Dakota (ARSD) 74:02:05:07 requires the Water Management Board to rely on the record of observation well measurements, in addition to other data, to determine that the quantity of water withdrawn annually from the aquifer does not exceed the estimated annual recharge.

The Water Rights Program monitors 33 observation wells completed into the Lower James Missouri aquifer. A number of the observation wells completed into the Lower James Missouri aquifer document declining linear trend lines for water level data. Stonesifer (2014) attributed declining trend lines of water levels in the northern portion of the aquifer to recent development and downward trending water levels in the southern portion of the aquifer to the hydraulic connection between the Lower James Missouri aquifer and the Missouri: Elk Point aquifer. Since the Missouri: Elk Point aquifer has a significant hydraulic connection to the Missouri River and the Missouri River has entrenched, water levels of hydraulically connected aquifers have declined. Therefore, the declining trend lines observed in some observation well water levels do not indicate that withdrawals from the aquifer are exceeding recharge to the aquifer.

There are five observation wells completed into the Lower James Missouri aquifer located within approximately three miles of the well that Application No. 8251-3 proposes to use. Hydrographs for the observation wells are shown in Figures 1-6.

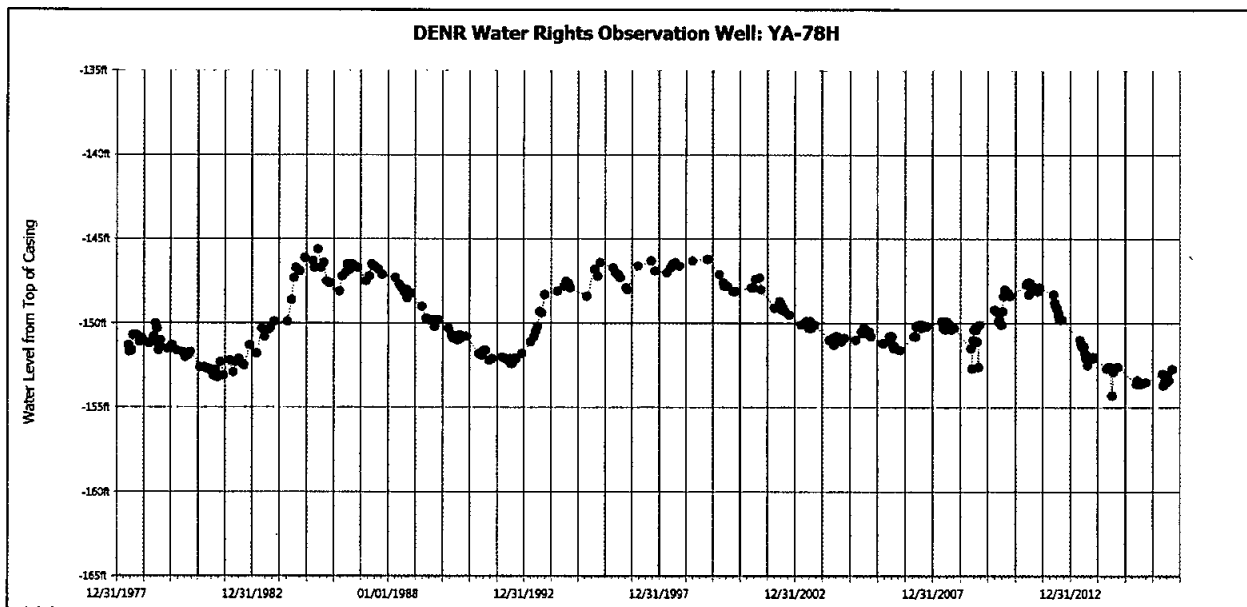


Figure 1. Hydrograph for observation well YA-78H which is completed into the Lower James Missouri aquifer and located approximately one-half mile east of the well that is to be used by Permit No. 8251-3 (if approved).

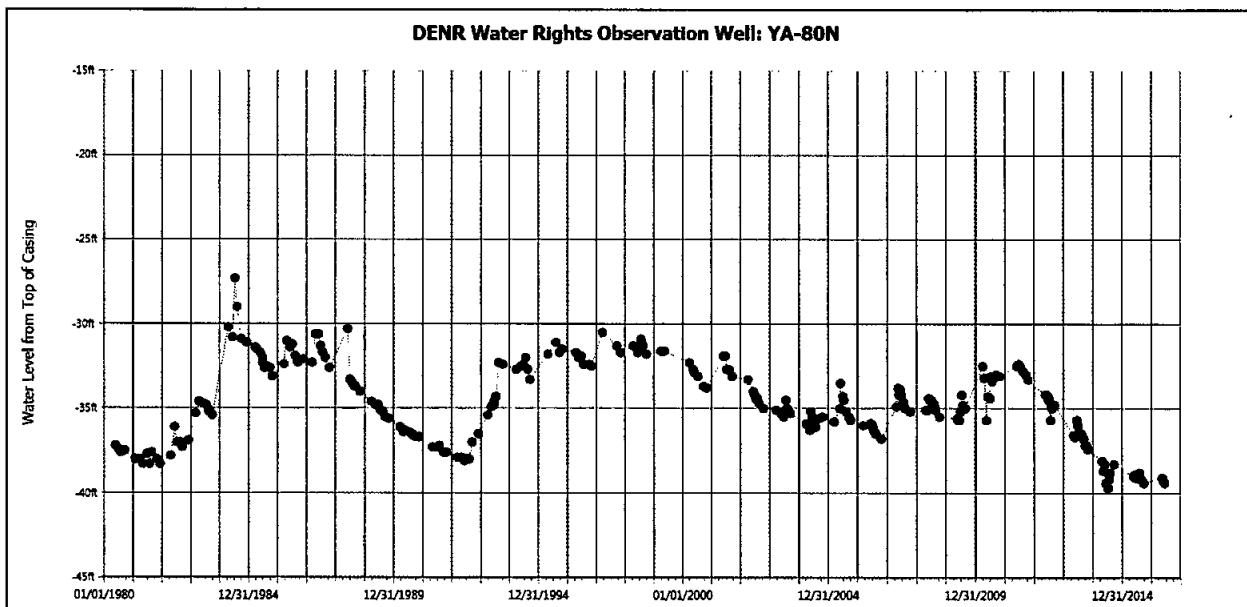


Figure 2. Hydrograph for observation well YA-80N which is completed into the Lower James Missouri aquifer and located approximately one and one-quarter miles northeast of the well that is to be used by Permit No. 8251-3 (if approved).

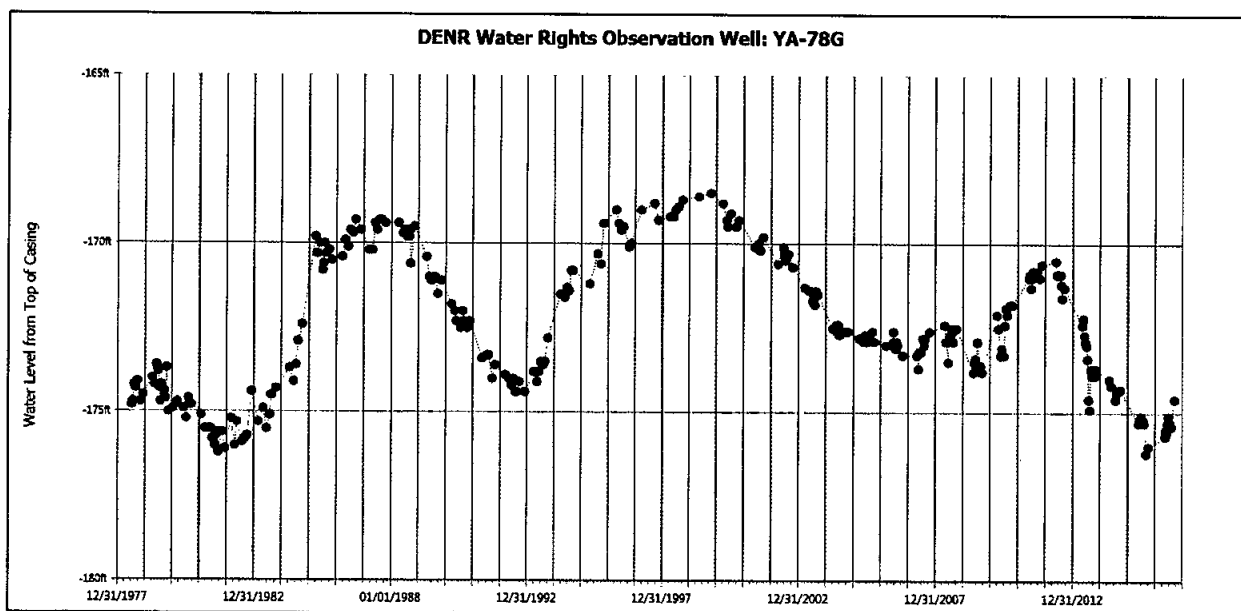


Figure 3. Hydrograph for observation well YA-78G which is completed into the Lower James Missouri aquifer and located approximately one and one-half miles north of the well that is to be used by Permit No. 8251-3 (if approved).

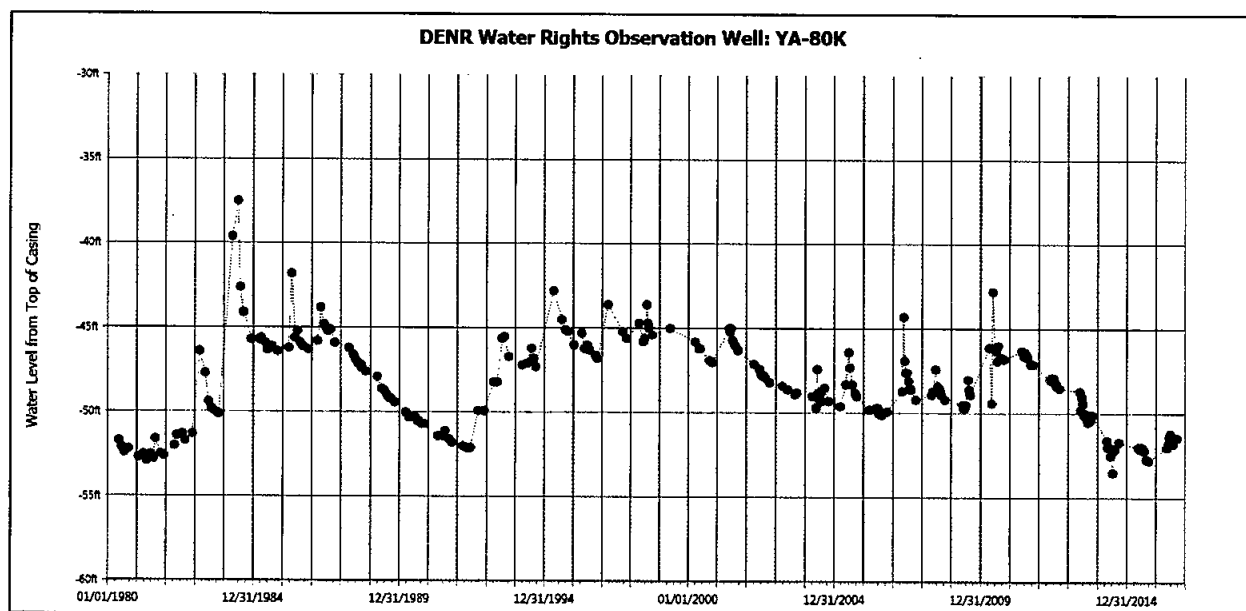


Figure 4. Hydrograph for observation well YA-80K which is completed into the Lower James Missouri aquifer and located approximately two and two-tenths miles north-northwest of the well that is to be used by Permit No. 8251-3 (if approved).

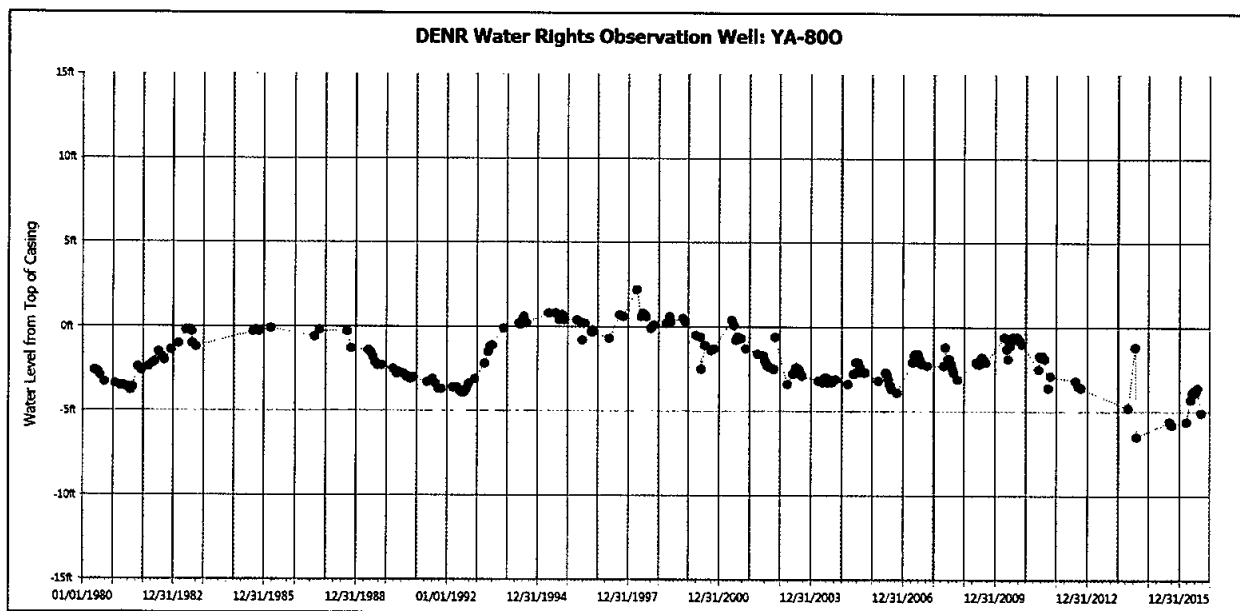


Figure 5. Hydrograph for observation well YA-80O which is completed into the Lower James Missouri aquifer and located approximately two and four-tenths miles northeast of the well that is to be used by Permit No. 8251-3 (if approved).

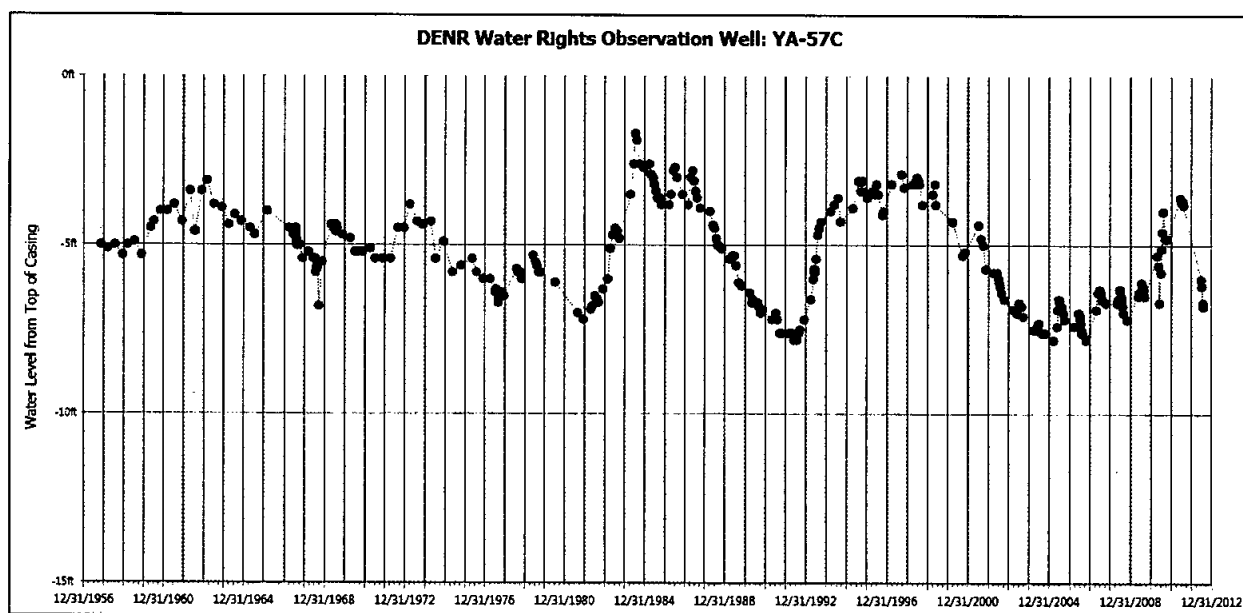


Figure 6. Hydrograph for observation well YA-80O which is completed into the Lower James Missouri aquifer and located approximately two and eight-tenths miles east-southeast of the well that is to be used by Permit No. 8251-3 (if approved).

In general the hydrographs in Figures 1-5 document fairly stable trending water levels over the period of record. The hydrographs document that the aquifer responds well to climatic conditions with rising water levels during wet years and declining water levels during dry years. The data documents that at the current level of development temporal well withdrawal is masked by

climatic conditions. Therefore, recharge to plus natural discharge from the aquifer greatly exceeds well withdrawal, so water is available for capture from natural discharge. Therefore, the observation well data indicates there is a reasonable probability that unappropriated water is available from the Lower James Missouri aquifer to support the proposed appropriation.

EXISTING WATER RIGHTS

As noted above, currently there are 136 water rights/permits appropriating water from the Lower James Missouri aquifer (Water Rights, 2017a). In addition there are a number of domestic wells completed into the aquifer (Water Rights, 2017). Water rights/permits in the vicinity of the well that Application No. 8251-3 proposes to use, that are not associated with the well, are shown in Figure 7 and Table 3. (Note: Water Right No. 6483-3, Water Permit No. 7202-3 and Water Permit No. 7253-3 are all held by the applicant and use the well that Application No. 8251-3 proposes to use. Therefore, the three appropriations are not included in or identified on the figure and the table).

Water Permit Application No. 8251-3 proposes to irrigate 34.57 acres. If Permit No. 8251-3 is approved, it would not authorize any increase in the developed, instantaneous diversion rate from the well. The increased acreage that is to be irrigated will result in an additional annual diversion of 35 ac-ft/yr or less. Based on the 121 day use period proposed by this application, this appropriation will result in an average instantaneous diversion rate approximately 65.5 gpm.

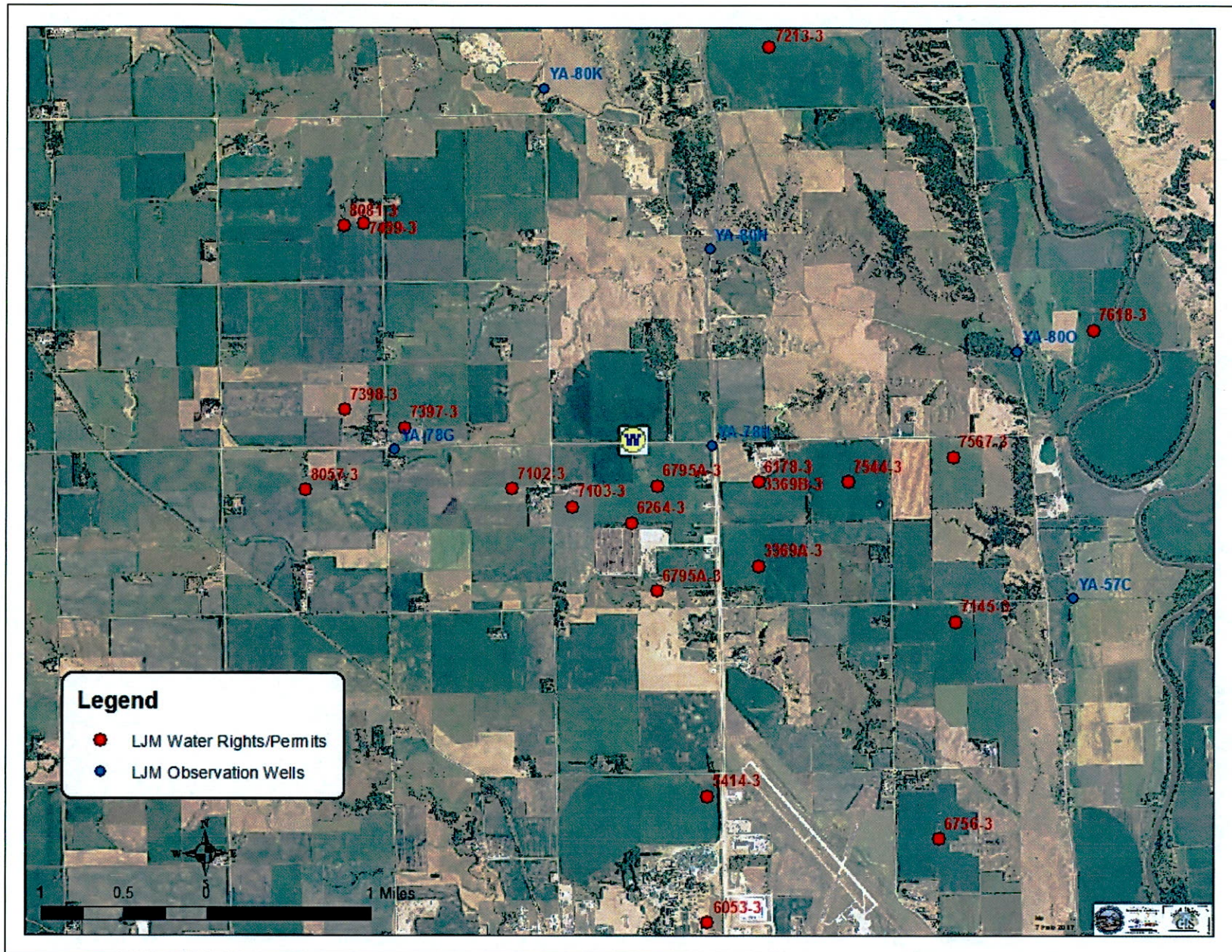


Figure 7. Water Rights/Permits appropriating water from the Lower James Missouri (LJM) aquifer and Observation wells completed into the LJM aquifer within approximately three miles of the well to be used to supply Permit No. 8251-3, if approved.

Table 3. Water rights/permits in the vicinity of the well that Application No. 8251-3 proposes to use.

PERMIT NO	NAME	PRIORITY DATE	STATUS	USE	CFS	ACRES
5414-3	MORRIS NELSON	03/14/1990	LC	IRR	3	300
3369A-3	DELORES NELSON	12/27/1976	LC	IRR	1.44	129
3369B-3	MORRIS NELSON	12/27/1976	LC	IRR	1.67	140
6053-3	CITY OF YANKTON	02/27/1998	LC	IRR	0.21	15
6264-3	YANKTON LAND & CATTLE CO	05/25/2001	LC	COM/LCO	0.56	0
6756-3	NELSON FAMILY PARTNERSHIP	09/15/2006	LC	IRR	2.22	164
6178-3	NELSON FAMILY PARTNERSHIP	02/22/2000	PE	IRR	1.67	145
7102-3	MARY & DAN CWACH	03/09/2009	PE	IRR	2.11	240
7103-3	MARY & DAN CWACH	03/08/2009	PE	IRR	2.11	96
7145-3	DELOS WARRINER	06/08/2009	PE	IRR	1.78	140
7213-3	MARQUARDT FARMS	09/30/2010	PE	IRR	2.44	360
6795A-3	YANKTON LAND & CATTLE COMPANY	07/10/2012	PE	IRR/COM	1.64	115
7397-3	FRANK KRALICEK	07/30/2012	PE	IRR	1.56	249
7398-3	FRANK KRALICEK	07/30/2012	PE	IRR	1.56	114
7459-3	DAVID G STERNHAGEN	10/12/2012	PE	IRR	1.78	113
7544-3	NELSON FAMILY PARTNERSHIP	12/06/2012	PE	IRR	2.22	96
7567-3	TERRY FRICK	12/14/2012	PE	IRR	1.78	83
7618-3	JAMES C & JASON KOKES	12/26/2012	PE	IRR	1.78	105
8057-3	SCHOENFELDER FAMILY TRUST	10/06/2014	PE	IRR	2.67	360
8081-3	DAVID G STERNHAGEN	01/23/2015	PE	IRR	0	58

A number of the well completion reports for the irrigation wells shown in Figure 7 contain data that allows for the calculation of specific capacities for the wells. Specific capacity data available for the area is shown in Table 4.

Table 4. Specific capacity data for area

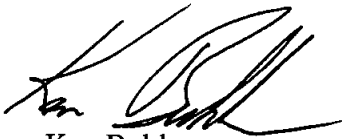
Permit/Right No	Rate (gpm)	Drawdown (ft.)	Specific Capacity (gpm/ft)
6264-3	250	8	31.25
6483-3	1100	7	157.14
7102-3	900	46	19.57
7397-3	700	18	38.89
7398-3	710	11	64.5
8057-3	1800	65	27.69
5414-3	1200	44	27.27

Based on the specific capacities for wells in the area, the drawdown in a production well pumping 65.5 gpm would range from less than one-half foot to as much 3.3 feet. Although the aquifer is buried at this well site it is under unconfined conditions. Therefore, the minimal drawdown at the production well will not be significant at distance. Given the distance to existing wells and the small diversion rate associated with this proposed appropriation, adequate

wells defined by ARSD 74:02:04:20(6) are not expected to be adversely or unlawfully impaired due to the increased use of the well.

CONCLUSIONS

1. Water Permit Application No.8251-3 proposes to irrigate 34.57 acres located in the W½ SW¼ Sec. 13, T94N-R56W using water from an existing well completed into the Lower James Missouri aquifer.
2. Water Permit Application No. 8251-3 does not propose any increase to the diversion rate for this existing well authorized by existing water rights/permits.
3. There is a reasonable probability that water is available in the aquifer.
4. There is a reasonable probability that diversions under this application, if approved, will not adversely impact existing water rights/permits.



Ken Buhler
SD DENR-Water Rights Program

REFERENCES:

- Bugliosi, E. F. 1986. Water Resources of Yankton County, South Dakota. USGS Water-Resources Investigations Report 84-4241. USGS. Huron, SD.
- Hansen, D.S. 1983. Major Aquifers in Hansen and Davison Counties, South Dakota. Information Pamphlet No. 26. S.D. Geological Survey, Vermillion, 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.
- Hedges, L.S., Allen, J. and Holly, D.E. 1985. Evaluation of Ground-Water Resources Eastern South Dakota and Upper Big Sioux River, South Dakota, and Iowa. Task 7: Ground-Water Recharge. U.S. Army Corps of Engineers Contract DACW 45-80-C-0185.
- Jorgensen, D.G., 1960, Geology and Shallow Ground Water Recourses of the Missouri Valley Between North Sioux City and Yankton, South Dakota: South Dakota Geological Survey Report of Investigations 86, Plate 2

- Kilts, W., 2016, Report to the Chief Engineer, Water Permit Application No. 8233-3, Randy & Valerie Swendsen, August 10, 2016: SD DENR-Water Rights Program, Joe Foss Building, Pierre, SD
- Lindgren, R.J. and D.S. Hansen. 1990. Water Resources of Hutchinson and Turner Counties, South Dakota. Water-Resources Investigations Report 90-4093. U.S. Geological Survey, Huron, South Dakota.
- McCormick, K.A., 2003, First Occurrence of Aquifer Materials in Yankton County, South Dakota: South Dakota Geological Survey Aquifer Materials Map 14, Scale 1:100,000
- Stonesifer, J.R., 2014, Report to the Chief Engineer, Water Permit Application No. 7977-3, Dahlerup Family Trust, April 25, 2014: SD DENR-Water Rights Program, Joe Foss Building, Pierre, SD
- Water Rights, 1980-2016, "1979-2015 Irrigation Summaries by Aquifer": SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.
- Water Rights. 2017a, Water Right/Permit Files, SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.
- Water Rights, 2017b, Water Rights Program Observation Well Files, SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.
- Water Rights Program, 2017, Well Completion Reports Database South Dakota Department of Environment and Natural Resources,
<http://arcgis.sd.gov/server/denr/wellLogs/default.aspx>, Retrieved Feb. 2017.

AFFIDAVIT OF PUBLICATION

YANKTON DAILY PRESS AND DAKOTAN

RECEIVED

FEB 27 2017

WATER RIGHTS
PROGRAM

WILLARD SCHMIDT
43970 306TH ST
YANKTON SD 57078

STATE OF SOUTH DAKOTA
COUNTY OF YANKTON

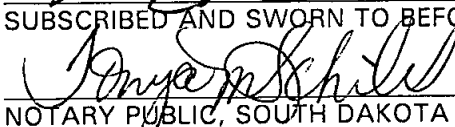
KELLY HERTZ, BEING FIRST DULY SWORN ON OATH DEPOSES
AND SAYS THAT (S)HE IS THE MANAGING EDITOR OF YANKTON
MEDIA INC, A CORPORATION, THE PRINTER AND THE PUBLISHER OF THE
YANKTON DAILY PRESS AND DAKOTAN, A LEGAL DAILY NEWSPAPER
PUBLISHED AND CIRCULATED IN THE CITY OF YANKTON, SAID COUNTY
AND STATE, AND ONE OF THE OFFICIAL NEWSPAPERS OF THE SAID
COUNTY OF FACTS STATED IN THIS AFFIDAVIT; THAT THE ANNEXED
2 + 23 NOTICE OF APPLICATI

TAKEN FROM THE PAPER, IN WHICH IT WAS LAST PUBLISHED IN THE
NEWSPAPER ON THE 23rd DAY OF February, 2017
THAT THE FULL AMOUNT OF THE FEE CHARGED FOR THE PUBLICATION
OF SAID NOTICE TO WIT \$30.12 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: 02/23/2017

FILED ON: 02/23/2017


SUBSCRIBED AND SWORN TO BEFORE ME THIS 23rd DAY OF February, 2017


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

NOTICE OF APPLICATION NO. 8251-3 to Appropriate Water

Notice is given that Willard Schmidt, 43970 306th St, Yankton SD 57078 has filed an application for a water permit to irrigate 34.57 additional acres. Water Right No. 6483-3 and Water Permit No. 7253-3, combined, appropriate 1.56 cubic feet of water per second from one well completed into the Lower James Missouri Aquifer (200 feet deep) located in the SW 1/4 SE 1/4 Section 13 for irrigation of 180 acres located in the SW 1/4, W 1/2 SE 1/4, SE 1/4 NW 1/4, SW 1/4 NE 1/4 Section 13; all in T94N-R56W. Water Right No. 7202-3 authorizes irrigation of 40 acres in the NE 1/4 NW 1/4 Section 24-T94N-R56W from this same well. This application is to irrigate 34.57 additional acres located in the W 1/2 SW 1/4 Section 13-T94N-R56W from the existing well. This application, if approved, does not authorize any increase in the developed diversion rate.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8251-3 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 Engineers 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 March 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 the total approximate cost of \$30.12.

Schlaak, Karen

From: Schlaak, Karen
Sent: Monday, February 13, 2017 4:33 PM
To: 'Tera Schmidt'
Subject: 8251-3, Willard Schmidt
Attachments: 8251-3public.short.docx; FORM8.FRM.doc

Attached is a notice to be published on February 23, 2017.

William Schmidt, 43970 306th St, Yankton SD 57078 (605 660-4564) has been notified to contact you to authorize publication and arrange for payment.

Please send the affidavit or return the attached Proof of Publication form ASAP.

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

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



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

denr.sd.gov

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

February 13, 2017

Willard Schmidt
43970 306th St
Yankton SD 57078

Dear Mr. Schmidt:

Water Permit Application No. 8251-3 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 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
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. 8251-3 to Appropriate Water

Notice is given that Willard Schmidt, 43970 306th St, Yankton SD 57078 has filed an application for a water permit to irrigate 34.57 additional acres. Water Right No. 6483-3 and Water Permit No. 7253-3, combined, appropriate 1.56 cubic feet of water per second from one well completed into the Lower James Missouri Aquifer (200 feet deep) located in the SW 1/4 SE 1/4 Section 13 for irrigation of 180 acres located in the SW 1/4, W 1/2 SE 1/4, SE 1/4 NW 1/4, SW 1/4 NE 1/4 Section 13; all in T94N-R56W. Water Right No. 7202-3 authorizes irrigation of 40 acres in the NE 1/4 NW 1/4 Section 24-T94N-R56W from this same well. This application is to irrigate 34.57 additional acres located in the W 1/2 SW 1/4 Section 13-T94N-R56W from the existing well. This application, if approved, does not authorize any increase in the developed diversion rate.

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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

MAR 08 2017

Willard Schmidt
43970 306th St
Yankton SD 57078

Dear Mr. Schmidt:

Enclosed is Water Permit No. 8251-3 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

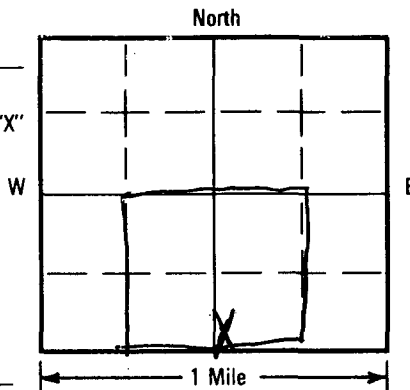
6483-3

SOUTH DAKOTA WATER WELL COMPLETION REPORT

07-92

Location SW 1/4 SE 1/4 Sec 13 Twp 94N Rg 56WCounty granston

Please mark well location with an "X"



Well Completion Date

5-17-2004

LOCATION:

Distance from nearest potential pollution source (septic tank, abandoned well, feed lot, etc.)? 3000 ft. from feed lot (identify source).

PROPOSED USE:

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

METHOD OF DRILLING:

CASING DATA: ☐ Steel ☒ Plastic ☐ Other

If other describe _____

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
<u>SR26</u> LB/FT	<u>16</u> IN	<u>0</u> FT	<u>180</u> FT	<u>28</u> IN
_____ LB/FT	_____ IN	_____ FT	_____ FT	_____ IN
_____ LB/FT	_____ IN	_____ FT	_____ FT	_____ IN

GROUTING DATA

Grout Type	No. of Sacks	Grout Weight	From	To
<u>Pensac</u>	_____	_____ lb./gal	<u>20</u> ft.	<u>120</u> ft.
<u>Cement</u>	_____	_____ lb./gal	<u>0</u> ft.	<u>20</u> ft.

Describe grouting procedure pumped down w/ pressure grouterSCREEN: ☐ Perforated pipe ☐ ManufacturedDiameter 16 IN Length 40 FEETMaterial PVCSlot Size 0.085 Set From 180 Feet to 220 Feet

Other information _____

WAS A PACKER OR SEAL USED? ☐ YES ☒ NO

If so, what material? _____

Describe packer(s) and location? _____

DISINFECTION: Was well disinfected upon completion?

☒ YES, How:chlorine

Laboratory sent to for water quality analysis _____

_____, NO, Why Not? _____

Well Owner:

Willard Schmidt

Business Name:

Address:

43970 306 St
granston, SD 57078

WELL LOG:

DEPTH

FORMATION	FROM	TO
<u>top + blue clay</u>	<u>0</u>	<u>120</u>
<u>BAD ROCKS</u>	<u>120</u>	<u>150</u>
<u>med gravel + sand</u>	<u>150</u>	<u>173</u>
<u>ROCKS</u>	<u>173</u>	<u>185</u>
<u>med gravel</u>	<u>185</u>	<u>217</u>
<u>shale</u>	<u>217</u>	<u>220</u>

STATIC WATER LEVEL

158

Feet

If flowing: closed in pressure _____

PSI

GPM flow _____ through _____

inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other _____

Reduced Flowrate _____

GPM

Can well be completely shut in? _____

WELL TEST DATA:

☒ Pumped

Describe:

4 hrs w/ turbine pump☐ Bailed☐ Other

Pumping Level Below Land Surface

165 ft. After 2 Hrs. pumped 1100 GPM165 ft. After 4 Hrs. pumped 100 GPM

If pump installed, pump rate

700

GPM

REMARKS

This well was drilled under license #

444

And this report is true and accurate

Drilling firm

Christensen Well & Pumping

Signature of License Representative:

Col W. Christensen

RECEIVED

JAN - 3

Signature of Well Owner or Equitable Property Holder:

WATER 113 PROGRAM

Date:

**Report of Examination of Works and/or Application of Water to Beneficial Use
For Permit No. 8251-3, 7253-3, 7202-3**

I have this day, August 18, 2020 made a thorough examination of the water use system constructed by Willard Schmidt, 43970 306th St., Yankton, SD 57078, holder of Permit Nos. 8251-3, 7253-3 and 7202-3, as follows:
(all land is located in Yankton County)

No. 8251-3, bearing the priority of December 12, 2016 authorizing the diversion of 0.0 cu. ft. per second of the waters of groundwater (Lower James Missouri Aquifer) for the irrigation of 34.57 acres;

No. 7253-3, bearing the priority of May 20, 2011 authorizing the diversion of 0.0 cu. ft. per second of the waters of groundwater (Lower James Missouri Aquifer) for the irrigation of 68 acres;

Permit No. 7202-3, bearing the priority of May 17, 2010 authorizing the diversion of 0.0 cu. ft. per second of the waters of groundwater (Lower James Missouri Aquifer) for the irrigation of 40 acres;

Inspection contact: Willard Schmidt

A. Works used to divert the water (well authorized under Water Right No. 6483-3):

Well Information:

- 1) Well Drilling Firm: Christensen Well & Irrigation
- 2) No. of Wells: 1
- 3) Depth(s): 220 feet
- 4) Well log is available: Yes

Casing:

- 1) Diameter: 16 inches
- 2) Length: 180 feet
- 3) Type: Plastic

Screen:

- 1) Diameter: 16 inches
- 2) Length: 40 feet
- 3) Type: PVC
- 4) Static water level: 158 feet

Pump:

- 1) Make: Borer Wholesale
- 2) Model: 12RK-0
- 3) Capacity: 800 gpm

Motor:

- 1) Make: Hydroflo VHS Motors
- 2) Model No.: VSH404TP-4-100S
- 3) Horsepower rating: 100 hp

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

- 1) Type: PVC 2) Size: 8 inches 3) Length: 3,160 feet (well to WR No. 8251-3 pivot)
1) Type: PVC 2) Size: 8 inches 3) Length: 1,720 feet (well to WR No. 7253-3 pivot)
1) Type: PVC 2) Size: 8 inches 3) Length: 1,080 feet (well to WR No. 7202-3 pivot)

C. Works used to apply water to beneficial use:

Water Right No. 8251-3 Center Pivot:

- 1) Make: Zimmatic
2) Overall length: 876 feet
3) Number of towers: 7
4) End gun: Yes
5) Capacity: 800 gpm

Water Right No. 7253-3 Center Pivot:

- 1) Make: Zimmatic
2) Overall length: 1,458 feet
3) Number of towers: 8
4) End gun: Yes
5) Capacity: 800 gpm

Water Right No. 7202-3 Center Pivot:

- 1) Make: Zimmatic
2) Overall length: 660 feet
3) Number of towers: 4
4) End gun: Yes
5) Capacity: 800 gpm

Chemigation Equipment:

- 1) Does chemigate: No

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 systems are in good condition with the point(s) of diversion located as follows:

The well is 2,660 feet east and 50 feet north of the southwest corner of Section 13-T94N-R56W (Latitude 42.95249, Longitude -97.40747 – SW1/4 of the SE1/4).

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:

No. 8251-3	
Section 13, T94N, R56W	
NW1/4SW1/4	7 acres
SW1/4SW1/4	<u>19 acres</u>
	26 acres

No. 7253-3 & 6483-3 (Sec 13, T94N, R56W)			
SW1/4NW1/4	1 acre	SE1/4NW1/4	10 acres
SW1/4NE1/4	4 acres	NW1/4SW1/4	20 acres
NE1/4SW1/4	40 acres	NW1/4SE1/4	28 acres
SW1/4SW1/4	14 acres	SE1/4SW1/4	36 acres
SW1/4SE1/4	22 acres	(total 175 acres)	

No. 7202-3	
Section 24-T94N-R56W	
NE1/4 NW1/4	35 acres

comprising a total of 236 acres of land and the license should be issued for 1.56 cfs.

3. All structures, wells and lands on map Yes

F. Comments or other permit(s) associated with the project: The pivots get water from the well associated with Water Right Nos. 6483-3. Nos. 8251-3, 7253-3, 7202-3 and 6483-3 could be licensed together since they have the same landowner, use the same well and are adjacent to each other.

The pivots are also used to discharge water from the lagoon associated with the Yankton Land & Cattle Company Feedlot. The piping from the well is disconnected from the system when the lagoon water is used, and the piping from the lagoon is disconnected when well water is used.

The pump at the well is rated for a flow rate of 1.78 cfs (800 gpm) instead of the 1.56 cfs (700 gpm) that Water Right No. 6483-3 was licensed for.

There is an empty chemical tank at the well site. Mr. Schmidt stated that a chemigation system was used at one time, but it has not been used in several years. There was not any chemical pumping equipment at the site.

This system irrigates one acre in the SW1/4 NW1/4 of Section 13-T94N-R56W that was not noted on the application. This land is owned by Mr. Schmidt and it is adjacent to the other lands described in the water right.



Keith DeJong
Water Rights Inspector
DENR, Water Rights Program

Date report completed: August 18, 2020

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

Date: August 18, 2020

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

FROM: Willard Schmidt
(name)

43970 306th Street
(address)

Yankton, SD 57078
(city, state, zip)

605-660-4564
(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. 8251-3 states that the water use system is to be constructed by

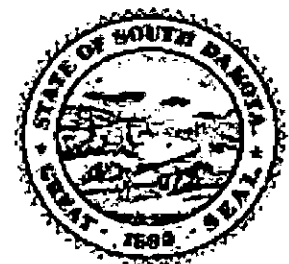
March 6, 2022, and water is to be put to beneficial use by March 6, 2026.
(date) (date)

The water use system was completed on April, 2017.
(date)

Applying the water to beneficial use was completed on July, 2018.
(date)

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

Willard Schmidt
(signature)



Includes irrigation authorized by Water Permits Nos. 7202-3 and 7253-3 and Water Right No. 6483-3

Licensing of Acreage Outside of Permitted Area

NAME: Willard Schmidt

ADDRESS: 43970 306th St Yankton SD 57078

DATE: 08/25/2020

COUNTY: Yankton

TELEPHONE: 605-665-4833

AUTHORITY

Pursuant to SDCL 46-5-30.5, acreage developed for irrigation outside of the area described on the permit may be licensed provided the following conditions are met:

NO INCREASE IN PERMITTED ACREAGE OR WATER APPROPRIATED:

The acreage developed for irrigation is 236 acres as compared to 254.57 acres authorized by the permits.

UNPERMITTED ACREAGE:

- **Contiguous to Permitted Acreage**

Yes, additional 1 acre is located in SW 1/4 NW 1/4 Sec 13 T94N-R56W

- **Owned by Same Property Owner**

Additional land is owned by Willard Schmidt

- **Developed Prior to Expiration of Construction Period**

Yes, land was developed within the construction period

RECOMMENDED ACTION

Based on the above criteria, it is recommended that the 1 acre area be included in the water license.



Mark D Rath, Natural Resources Engineer
Water Rights Program

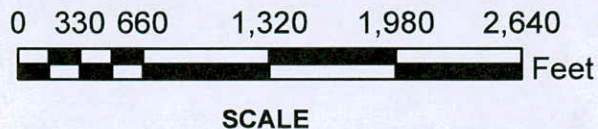
The Chief Engineer makes a finding pursuant to SDCL 46-5-30.5 that:

This acreage change does not impair existing water rights and the overall project, as developed, is consistent with the original application. Licensing of the unpermitted acreage may occur without application or publication pursuant to SDCL 46-2A-4.



Eric Gronlund, Chief Engineer
Water Rights Program

Water Right Nos. 7202-3, 7253-3 and 8251-3



Keith DeJong

Keith DeJong, PE
Staff Engineer
August 18, 2020



DENR
SOUTH DAKOTA

**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

AUG 31 2020

8251-3

Willard Schmidt
43970 306th St
Yankton SD 57078

Dear Mr. Schmidt:

Enclosed is Water License No. 8251-3. 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, State Water Laws provide that you have a continuing right to use the water. If you have any questions, please contact our office.

Sincerely,

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

enclosures

Note: Upon licensing, the applicable portions of Water Right No. 6483-3 and Water Permit Nos. 7202-3 & 7253-3 were incorporated into Water License No. 8251-3.

STATE OF SOUTH DAKOTA
WATER LICENSE NO. 8251-3

(1) Willard Schmidt, 43970 306th St, Yankton SD 57078 made Application No. 8251-3, December 12, 2016 for a water permit to irrigate additional acreage from ground water (an existing well) completed into the Lower James Missouri Aquifer, located in Yankton County, South Dakota. Permit No. 8251-3, with a priority date of December 12, 2016 was approved March 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 March 6, 2022 and for the application to beneficial use of water on or before March 6, 2026.

Water Right No. 6483-3, with a priority date of March 8, 2004 authorizes diversion of 1.56 cubic feet of water per second (cfs) to irrigate 112 acres located in the W ½ SE ¼ and E ½ SW ¼ Section 13, T94N, R56W. The following permits authorized additional acreage to this system with no increase in the developed diversion rate:

- Permit No. 7202-3, with a priority date of May 17, 2010, authorizes an additional 40 acres located in the NE ¼ NW ¼ Section 24, T94N, R56W;
- Permit No. 7253-3, with a priority date of May 20, 2011, authorizes an additional 68 acres located in the W ½ SW ¼, SE ¼ NW ¼ and SW ¼ NE ¼ Section 13, T94N, R56W;
- Permit No. 8251-3, with a priority date of December 12, 2016, authorizes an additional 34.57 acres located in the W ½ SW ¼ Section 13, T94N, R56W.

An investigation of the water use system found one acre located in the SW ¼ NW ¼ Section 13, T94N, R56W to be outside of the permitted area. The Chief Engineer made a finding pursuant to SDCL 46-5-30.5 that the acreage change did not impair existing water rights and the overall project, as developed, was consistent with the original application.

The applicable portions of Water Right No. 6483-3 and Water Permit Nos. 7202-3 and 7253-3 are incorporated into Water License No. 8251-3.

(2) It is certified that the permit holder has complied with the provisions of South Dakota State Law relating to completion of the water supply system and is entitled to divert 1.56 cubic feet of water per second for beneficial use. The diversion point is located 2,660'E and 50'N of the SW corner of Section 13-T94N-R56W (SW ¼ SE ¼) Latitude 42.95249, Longitude -97.40747

(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:

				Priority date
T94N, R56W Section 13	NW ¼ SW ¼	27 acres	December 12, 2016 (7 acres) May 20, 2011 (20 acres)	
	SW ¼ SW ¼	33 acres	December 12, 2016 (19 acres) May 20, 2011 (14 acres)	
	NE ¼ SW ¼	40 acres	March 8, 2004 (31 acres) May 20, 2011 (9 acres)	
	SE ¼ SW ¼	36 acres	March 8, 2004 (31 acres) May 20, 2011 (5 acres)	
	SW ¼ SE ¼	22 acres	March 8, 2004	
	NW ¼ SE ¼	28 acres	March 8, 2004 (25 acres) May 20, 2011 (3 acres)	
	SW ¼ NW ¼	1 acre	May 20, 2011	
	SE ¼ NW ¼	10 acres	May 20, 2011	
	SW ¼ NE ¼	4 acres	May 20, 2011	
	NE ¼ NW ¼	35 acres	May 17, 2010	
T94N, R56W Section 24		Total	236 acres	

(4) Pursuant to South Dakota Water Law 46-5-30.1 Willard Schmidt, 43970 306th St, Yankton SD 57078 the holder and/or owner of Incorporated Water Right No. 8251-3 is issued a license to appropriate water, the right to use 1.56 cubic feet of water per second from ground water, one well (Lower James Missouri Aquifer) with priority dates of March 8, 2004, May 17, 2010, May 20, 2011 and December 12, 2016 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 Incorporated Water Right No. 8251-3 and subject to the following qualifications:

- 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.
- This Water Right is approved subject to the irrigation water use questionnaire being submitted each year.

Eric Gronlund

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

AUG 31 2020

date

