

WATER PERMIT NO. 8250-3

Name of Applicant: Steve Schmidt

Address: 44847 207th St, Mission Hill SD 57046

Phone: 605 267-2408

Amount of Water Claimed: no add'l

Total Acres: ~~57.62~~ 63

Source of Water Supply: groundwater (1 existing well)

Water to be used for: irrigation

County: Yankton

Type of Waste Disposal System:

Location: 8 miles northeast of Yankton

PRIORITY

Date Received: 12-12-2016

Application/License Fee: \$ 700

Corrected Application Received:

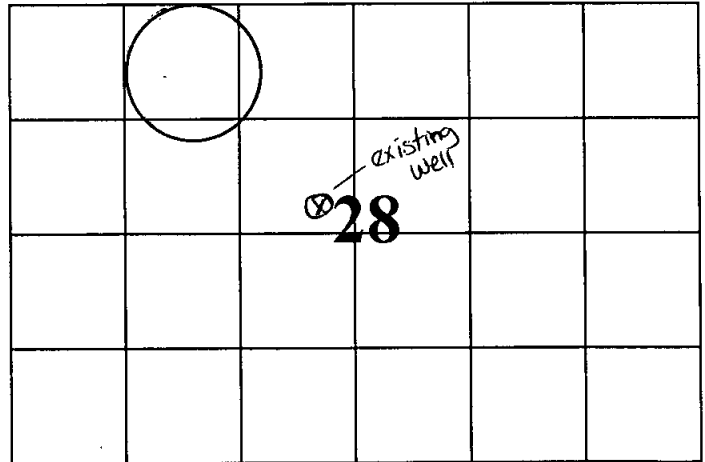
Period of Annual Use: June 1 – Sept 30

Remarks: Using well authorized by Water Right No. 6498-3

Diversion Point: SE 1/4 NW 1/4 Sec 28-T94N-

R54W

Land to be Irrigated: N 1/2 NW 1/4, SW 1/4 NW
1/4 Sec 28-T94N-R54W



Depth of Well: 65 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: _____

Mail to: DENR - Water Rights 523 E Capitol Ave Pierre, SD 57501-3182 ph. (605) 773-3352	No. <u>8250-3</u> (office use only)	Hydrologic Unit <u>10170102</u>
	Basin <u>Vermillion River</u>	
	Newspaper <u>605-665-7811</u>	
	<u>Press & Dakotan-Yankton</u>	

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DEC 12 2016
WATER RIGHTS
PROGRAM

Application For Permit To Appropriate Water For Irrigation

Type of Application: ☐ New ☐ Vested Right ☒ Amendment/Correction to Permit No. 6498-3 ⁴
(Use predates Mar 2, 1955) 6781-3

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

addition 57.62 Acres off of Existing Well

1. Name to Appear on Irrigation Permit Steve 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 44847 - 307th Misson Hill SD 57046
(Address) (City) (State) (Zip Code)

Phone — Mobile 605-267-2408 Email —

2. Amount of water claimed 1.56 *CFS or no add **GPM ***AF Total Acreage 63
(*Cubic Feet per Second) (**Gallons per Minute) (***)Acre Feet - storage capacity of dam/dugout or annual use if applicable)

3. Source of water supply Well

4. Location of point of diversion

(SE 1/4 NW 1/4)

(examine - 3 wells in SW 1/4 NE 1/4 section 12-1104N-R55W)

Section 28 T94N-R54W County Yankton

5. County or counties where water will be used Yankton

6. Annual period during which water is to be used June 1 to 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
<u>NW 1/2 NW 1/4 - Section 28</u>			
<u>+ 94N-R54W</u>	<u>63</u>		
<u>NE 1/4 NW 1/4</u>			
<u>SW 1/4 NW 1/4</u>			

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

I, Steve Schmidt
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. 8250-3**

Date of first receipt of application December 12, 2016.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 8250-3 to Steve Schmidt, 44847 307th, Mission Hill SD 57046 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. 8250-3 authorizes irrigation of 63 additional acres. Water Right No. 6781-3 appropriates 2.22 cubic feet of water per second from one well completed into the Missouri:Elk Point Aquifer (65 feet deep) located in the SE 1/4 NW 1/4 Section 28 to irrigate 190 acres SW 1/4 NW 1/4, E 1/2 NW 1/4, N 1/2 SW 1/4, W 1/2 NE 1/4, NW 1/4 SE 1/4 Section 28; all in T94N-R54W. This permit authorizes irrigation of 63 additional acres located in the W 1/2 NW 1/4, NE 1/4 NW 1/4 Section 28-T94N-R54W 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. 8250-3 is February 21, 2017.
5. One-fifth of the construction is to be completed on or before August 21, 2019.
6. All construction is to be completed on or before February 21, 2022.
7. Water is to be put to beneficial use on or before February 21, 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 Right No. 6781-3 and Water Permit No. 8250-3 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

APR 19 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 ____ Provide copy of log(s), if available. Drilled by ____

For either Existing or Proposed Wells:

c) Well Depth (required) 100 Depth to Top of Water Bearing Material 40 Depth to Water from Surface 20d) Distance to nearest domestic well on applicant's property 2000 ft. Property owned by others John Gunderson**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

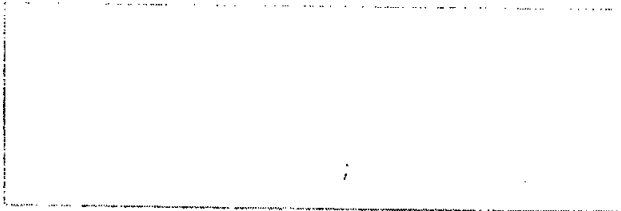
a) Surface Dimensions _____ Depth _____

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

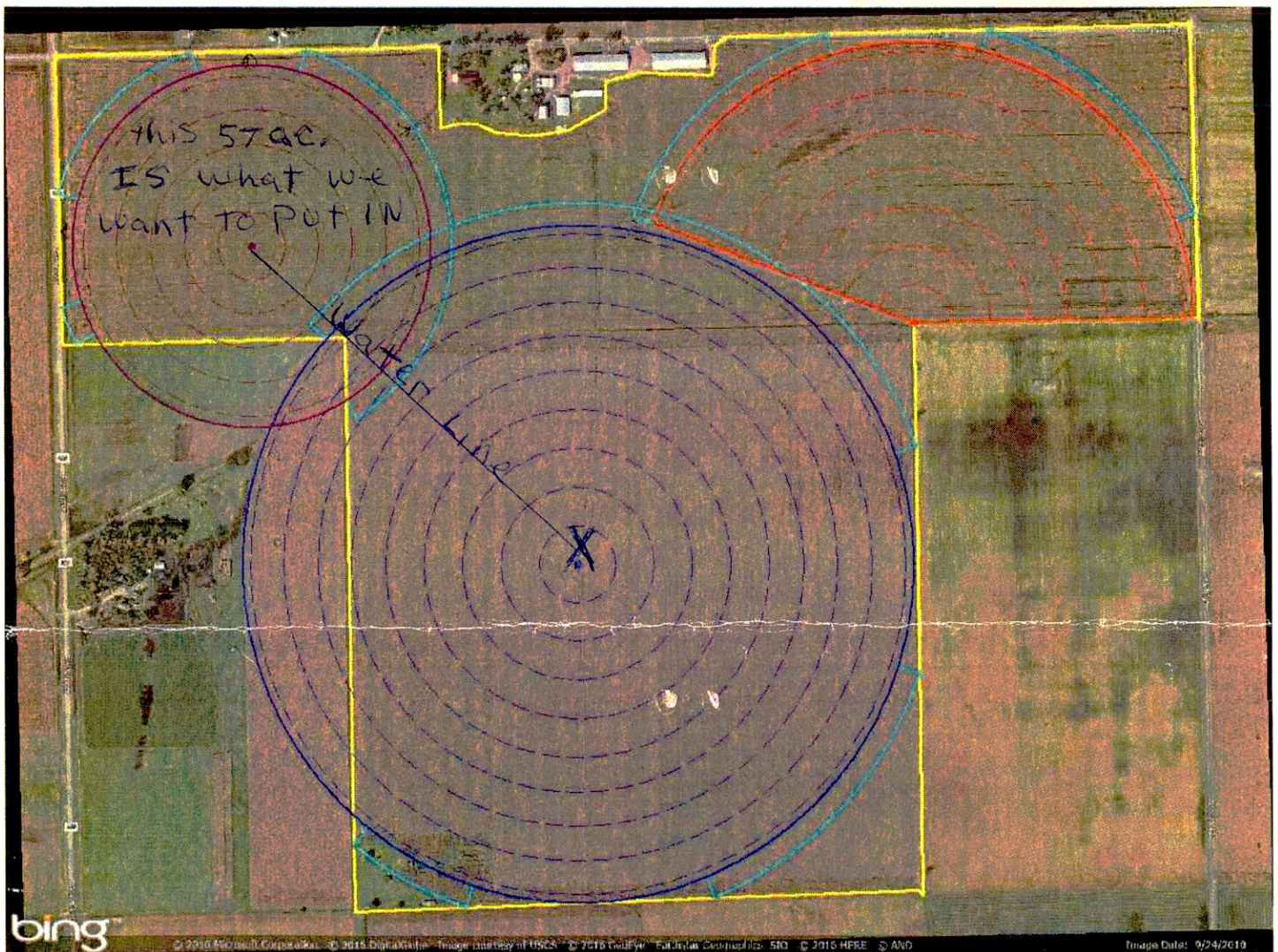
Office: 402-254-9557; (2): 605-661-6941

juddkeiser@outlook.com

Steves Place

New Design (1)

7-126 Span Zimm 410



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SOUTH DAKOTA WATER WELL COMPLETION REPORT

6498-3

07-92

Location SW 1/4 NE 1/4 Sec. 28 Twp. 94N Rg. 54W
County Yankton

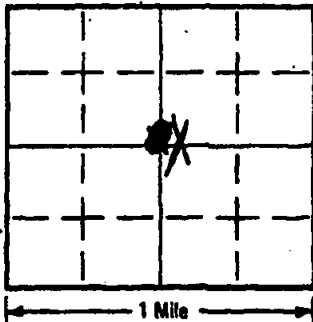
Well Owner: Russ + Steve Schmidt

Business Name:

Address: 2949 55th Ave NW, Minneapolis, MN 55412

Please mark well location with an "X"

Location SW 1/4 NE 1/4 SE 1/4 NW 1/4 NE 1/4 SW 1/4 NW 1/4
Well Completion Date SE 1/4



WELL LOG:

DEPTH

FORMATION

FROM

TO

Top of silt clay	0	30
Med gravelly sand	30	55
Coarse gravel + ROCK	55	65

LOCATION:

Distance from nearest potential pollution source (septic tank, abandoned well, feed lot, etc.)? 2000 ft. from Septic tank (identify source).

PROPOSED USE:

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

METHOD OF DRILLING:

Reverse Rotary

CASING DATA: ☐ Steel ☒ Plastic ☐ Other

If other describe

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
<u>SD 2 1/2</u> LB/FT	<u>16</u> IN	<u>0</u> FT	<u>25</u> FT	<u>28</u> IN
_____ LB/FT	_____ IN	_____ FT	_____ FT	_____ IN
_____ LB/FT	_____ IN	_____ FT	_____ FT	_____ IN

GROUTING DATA

Grout Type Cement No. of Sacks _____ Grout Weight _____ lb./gal 15 ft. 25 ft.

Describe grouting procedure pumped down w/ pressure grouter

SCREEN: ☐ Perforated pipe ☒ Manufactured 40 FEET

Diameter 16 IN Length _____ FEET

Material PVC

Slot Size 0.05 Set From 25 Feet to 65 Feet

Other information _____

STATIC WATER LEVEL 10 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: Turbine pump

☐ Bailed

☐ Other

Pumping Level Below Land Surface

24 ft. After 2 Hrs. pumped 800 GPM

24 ft. After 4 Hrs. pumped 800 GPM

If pump installed, pump rate 900 GPM

REMARKS

This well was drilled under license # 444

And this report is true and accurate.

Drilling firm Chickman Wells & Drilling

Signature of License Representative Cody W. Chickman

Signature of Well Owner or Equitable Property Holder: RECEIVED

JAN 3 2005

Date:

WATER RIGHTS PROGRAM

DISINFECTION: Was well disinfected upon completion?

YES How: Albion

Laboratory sent to for water quality analysis

NO, Why Not?

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date 12/12, 20 16

RECEIVED OF Steven C Schmidt 44847 307th St Mission Hill SD 57046

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

Fee for Application for Permit No. <u>8250-3</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>8250-3</u>	200	00
Fee for Filing Transfer Form _____		
Fee for _____		
Fee for Issuing New Well Driller's License No. _____ for C.Y. _____		
Fee for Renewal of Well Driller's License No. _____ for C.Y. _____		
Fee for Issuing Well Pump Installer's License No. _____ for C.Y. _____		
Fee for Renewal of Well Pump Installer's License No. _____ for C.Y. _____		
(Any Other Work Provided by Law) TOTAL	700	00

No. **07978**

By Jeanne Goodman
Chief Engineer

Application No. 8250-3

Water Rights Program - DENR Conversation File Documentation

NAME OF FILE: Steve Schmidt

ADDRESS: 44847 307th, Mission Hill SD 57046 COUNTY: Yankton County

DATE: December 13, 2016 TELEPHONE: 605 267-2408

RE: call to Mr. Schmidt about his application

I contacted Mr. Schmidt for clarification on his application.

His application stated the amount of water claimed is 1.56 cfs. Mr. Schmidt indicated that the application is for no additional diversion rate authority from the well. The application will use the well authorized by Water Right No. 6781-3. No changes will be made to the pump in this existing well. He asked that the application be amended to reflect no additional diversion rate authority. This is only for irrigation of new acres.

He said the irrigation technician was out in the field yesterday. The pivot will be 25 feet longer than originally planned. He asked that the application be amended to reflect irrigation of a total of 63 acres.

I stated that the area where the pivot was planned had been permitted under Water Permit No. 7048-3. However, the time to complete construction expired in September 2013. Mr. Schmidt indicated he was unaware that a portion of this land was on another permit. However, a pivot was never set up in this location and therefore the portion of Permit No. 7048-3 in this area is subject to cancellation for non-construction and a permit is again needed to develop.

NAME: *Eric Brunklund*



**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. 8250-3, Steve 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. 8250-3, Steve Schmidt, 44847 207th Street, Mission Hill SD 57046.

The Chief Engineer is recommending APPROVAL of Application No. 8250-3 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 Right No. 6781-3 and Water Permit No. 8250-3 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 3, 2017

**REPORT TO THE CHIEF ENGINEER
ON
WATER PERMIT APPLICATION NO. 8250-3
STEVE SCHMIDT
JANUARY 12, 2017**

Water Permit Application No. 8250-3 proposes to appropriate water from the Missouri: Elk Point aquifer for the purpose of irrigating 63 acres. Water Right No. 6781-3 appropriates water from the Missouri: Elk Point aquifer for the irrigation of 190 acres located in the SW $\frac{1}{4}$ NW $\frac{1}{4}$, E $\frac{1}{2}$ NW $\frac{1}{4}$, N $\frac{1}{2}$ SW $\frac{1}{4}$, S $\frac{1}{2}$ NE $\frac{1}{4}$, NW $\frac{1}{4}$ SE $\frac{1}{4}$ Sec. 28, T94N-R54W. Water Right No. 6781-3 authorizes a maximum diversion rate of 2.22 cubic feet of water per second (cfs) from a well completed into the Missouri: Elk Point aquifer, located in the SE $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 38, T94N-R54W. Water Permit Application No. 8250-3 proposes to authorize the irrigation of 63 acres located in the W $\frac{1}{2}$ NW $\frac{1}{4}$ and in the NE $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 28, T94N-R54W. This application proposes to use the well that was authorized by Water Right No. 6781-3 as a water source. If approved, Water Permit No. 8250-3 will not authorize any increase to the diversion rate currently authorized for the well (2.22 cfs).

AQUIFER: MISSOURI: ELK POINT (M:EP)

GEOLOGY AND AQUIFER CHARACTERISTICS:

The Missouri aquifer consists of unconsolidated glacial outwash deposits composed of fine sand to very coarse gravel. The Elk Point management unit of the Missouri aquifer underlies an estimated 210,100 acres of Yankton, Clay, and Union Counties, and contains an estimated 3,287,100 acre feet (ac-ft) of recoverable water in storage (Hedges and others, 1982). The Missouri: Elk Point aquifer is generally restricted to the Missouri River floodplain. The outwash is often overlain by permeable alluvial deposits. The permeable alluvium and outwash form a single aquifer (Stephens, 1967). Near the edge of the floodplain, the Elk Point management unit is overlain by relatively impermeable glacial till (Niehus, 1994; Bugliosi, 1986; and Stephens, 1967). Hydrologically, the Elk Point Management unit is generally under unconfined conditions although confined conditions do exist (Stephens, 1967). The Elk Point management unit is hydraulically connected to the Lower-Vermillion-Missouri aquifer and the Lower James-Missouri aquifer, the Missouri River, the Vermillion River, and the Big Sioux River (Niehus, 1994; Bugliosi, 1986; and Stephens, 1967).

The general direction of water movement in the aquifer is to the southeast toward the Missouri River (Stephens, 1967). The South Dakota Water Well Completion Report on file for this existing well identifies 30 feet of top soil and silty clay overlying 35 feet of the sand and gravel of the Missouri: Elk Point aquifer. A May 21, 2004 static water level of the well was reported to be 10 feet. The well report indicates the well produced 800 gallons per minute with 24 feet of drawdown (Water Rights, 2017c).

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 reasonable probability that there is unappropriated water available for the applicant's proposed use, that the proposed diversion can be developed without unlawful impairment of existing rights and that the

proposed use is a beneficial use and in the public interest. This report will address the availability of unappropriated water and existing rights from the aquifer.

WATER AVAILABILITY:

Water Permit Application No. 8250-3 proposes to appropriate water for the irrigation of 63 acres using the well that is authorized by Water Right No. 6781-3. The applicable portions of Water Permit No. 6498-3 were incorporated into Water Right No. 6781-3. Historic water use by the system authorized by Water Right No. 6781-3 is shown in Table 1.

Table 1. Historic water use reported for Water Right No. 6781-3 (Water Rights, 2004-2015)

Year	Acres	Pumped (acre-feet)	Application Rate (in/ac/yr)
2015	190	128.16	8.1
2014	190	12.37	0.8
2013	190	92.8	5.9
2012	190	149.52	9.4
2011	190	25.85	1.6
2010	0	0	0
2009	0	0	0
2008	190	55.68	3.5
2007	190	80.43	5.1
2006	140	49.5	4.2
2005	140	42.42	3.6
2004	140	25.63	2.2
<i>Maximum</i>		<i>149.52</i>	<i>9.4</i>
<i>Minimum</i>		<i>0</i>	<i>0</i>
<i>Average</i>		<i>55.2</i>	<i>3.7</i>

Based on the historic water use by the applicant in this section, if Water Permit No. 8250-3 is approved, the average annual water use that can be expected under the appropriation is estimated to be less than 20 acre-feet annually (ac-ft/yr). The probability that 20 ac-ft/yr of unappropriated water is available from the Missouri: Elk Point aquifer can be evaluated by considering SDCL 46-6-3.1, which requires “No application to appropriate groundwater may be approved if, according to the best information reasonably available, it is probable the quantity of water withdrawn annually from a groundwater source will exceed the quantity of the average estimated annual recharge of water to the groundwater source.” 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. Here, a water distribution system is not involved and the Missouri: Elk Point aquifer is not older or lower than the Greenhorn Formation therefore withdrawal/recharge issue must be considered.

Recharge versus Discharge:

Recharge to the Missouri aquifer is through infiltration of precipitation, groundwater inflow from other aquifers and streamflow losses from rivers and streams (Bugliosi, 1986). Hedges and others (1985) estimated recharge to the aquifer at approximately 3.8 inches per year, based on observation well analysis.

Discharge from the aquifer is: (1) by well withdrawals; (2) evapotranspiration where the aquifer is near land surface; (3) to the Big Sioux and Missouri Rivers when the stage of the rivers are lower than the water table of the aquifer; and (4) to the Dakota aquifer when water levels of the Missouri: Elk Point aquifer are higher than the water levels of the Dakota aquifer (Niehus, 1997).

A hydrologic budget for the Missouri: Elk Point aquifer was developed based on the appropriations from the aquifer as of June 24, 2013 (Stonesifer, 2013). Water rights/permits and future use permits at the time account for an expected withdrawal of 81,108 ac-ft/yr, which includes expected use of new irrigation water permits. Recharge to the aquifer is estimated to be at least 91,964 ac-ft/yr, which considers recharge induced from the Missouri River. Therefore, approximately 10,856 ac-ft/yr of unappropriated water was available at that stage of development (Stonesifer, 2013).

The probability of unappropriated water available for this application can be evaluated by considering the water permits issued since June 24, 2013, in conjunction with the water availability analysis of Stonesifer (2013). Water Permits approved since Stonesifer concluded his water availability analysis for the aquifer are shown in Table 2. In addition, there are two deferred applications for permits from the Elk Point management unit.

Table 2. Water permits approved or reinstated since the Stonesifer water availability analysis for the Missouri: Elk Point (Water Rights, 2017a)

PERMIT NO	NAME	USE	CFS	ACRES
7848-3	MISSOURI VALLEY FARMS INC	IRR	3.04	213
7856-3	MIKE & STEVE ALLARD	IRR	1.78	129.3
7895-3	TODD HANSON	IRR	1.89	180
7898-3	JAMES ORR	IRR	1.56	132
7899-3	JUSTIN ORR	IRR	1.56	97
7904-3	CRAIG S MCINERNEY	IRR	1.78	160
7933-3	DOUGLAS G BYE	IRR	0.89	90
7936-3	DONALD JOHNSON	IRR	1.39	83
7938-3	RUSSELL M HALL	IRR	0	53
7941-3	JOSEPH F CHICOINE	IRR	1	37.69
7074A-3	CALVIN HANSON	IRR	1.78	162
7951-3	ALLEN PACE	IRR	1.78	150
7955-3	KARL M SCHENK	IRR	1.78	140
7971-3	BARRY VAN OSDEL	IRR	1.11	68
7980-3	FRANCIS HEINE	IRR	0	5
7987-3	FRANCIS M ARMSTRONG LIVING TRUST	IRR	1.78	102
8010-3	RYAN RUSHER	IRR	0.1	2.5
8016-3	AMELIA BERTRAND TRUST	IRR	1.67	66
8022-3	REDWOOD SOUTH DAKOTA HOLDINGS LLP	IRR	1.91	134
8023-3	REDWOOD SOUTH DAKOTA HOLDINGS LLP	IRR	4.14	290
8024-3	REDWOOD SOUTH DAKOTA HOLDINGS LLP	IRR	3.36	235.2
8025-3	REDWOOD SOUTH DAKOTA HOLDINGS LLP	IRR	3.82	267.2
8029-3	DAKOTA DUNES COMM IMPROVEMENT	IRR	0.78	17.8
8031-3	DAKOTA PROTEIN CONVERSION INC	COM	0.22	
8040-3	HEINE ELECTRIC & IRRIGATION INC	IRR	0.33	3
8069-3	CIMPLS LLC (452 AC-FT/YR)	COM	0.44	
7009A-3	ROGER D HANSON	IRR	1.78	120
8080-3	LARRY & MELVIN DONNELLY	IRR	1.78	160
8079-3	MELVIN & LARRY DONNELLY	IRR	1.78	160
8147-3	DOUG LAFLEUR (160 AC-FT/YR)	COM	1	
8175-3	GAYVILLE-VOLIN SCHOOL DISTRICT 63-1	IRR	0.058	4
8176-3	CALVIN & MARY HANSON	IRR	1.113	31
8177-3	D A OLSON & SONS	IRR	1.23	62
8181-3	MARC T BERNARD	IRR	0.89	40
8192-3	STOP DROP LOCK INC	IRR	2.22	152
8203-3	GERALD BENJAMIN	IRR	1.89	264
8204-3	DOUGLAS BYE	IRR	0.89	70
8211-3	TIMBER8 LLC	IRR	1.78	96
8212-3	CITY OF YANKTON (6,050 AC-FT/YR)	MUN	20.12	
8237-3	CALVIN HANSON	IRR	No Add'l	51
IRR= Irrigation, COM= Commercial, MUN= Municipal				

Average annual water usage for the irrigation permits listed in Table 1 is estimated using a method prescribed by Stonesifer (2013) in which a ratio of pumpage to appropriation of developed appropriations is established. Stonesifer (2013) calculated an average pumpage to appropriations ratio for the Missouri: Elk Point aquifer to be 13.7%. Subsequently, an average pumpage to appropriation ratio for the aquifer was calculated to be 13.8% (Kilts, 2015). Appropriations made since June 10, 2013 have authorized an additional 4,027.69 acres of irrigation. Assuming an average annual use of 13.8% of appropriation, water use for irrigation is expected to increase by approximately 1,112 acre-feet annually. Water Permit Nos. 8069-3, 8147-3, and 8212-3 appropriate an additional 6,662 ac-ft/yr.

Historically, the DENR-Water Rights Program and the SD Water Management Board have estimated average annual water use by non-irrigation appropriations, limited by instantaneous diversion rate only, to equate to less than 60% of full time pumping at the permitted diversion rate. The total instantaneous diversion rate authorized by Water Permit No. 8031-3 is 0.22 cfs. Therefore, average annual water use assumed for the water permit is approximately 95 ac -ft/yr.

The total water use that can be expected from the appropriations identified in Table 2 is expected to be 7,869 ac-ft/yr. In addition, two deferred water permit applications (Nos. 5749-3 & 5750-3) would result in an average annual withdrawal of approximately 50 ac-ft/yr if approved. The combination of pre-2013 expected water use (81,108 ac-ft/yr) plus post-2013 expected water use (7,869 ac-ft/yr) plus the average annual withdrawal that would result from approval of the two deferred applications (50 ac-ft/yr) totals 89,027 ac-ft/yr. This estimated average annual withdrawal is approximately 2,937 ac-ft less than the estimated average annual recharge value obtained by Stonesifer (2013) therefore, from a gross accounting perspective, unappropriated water is available from the Missouri: Elk Point aquifer.

Observation Wells

In determining the availability of unappropriated water for a permit application Administrative Rule 74:02:05:07 requires the Water Management Board to rely on the record of observation well measurements, in addition to other data, to determine that the quantity of water withdrawn annually from the aquifer does not exceed the estimated annual recharge.

The Water Rights Program monitors 37 observation wells in the Elk Point management unit of the Missouri aquifer. Five observation wells are located within approximately three and one-half miles of the well this application proposes as a source. Hydrographs for the wells are shown in Figures 1-5.

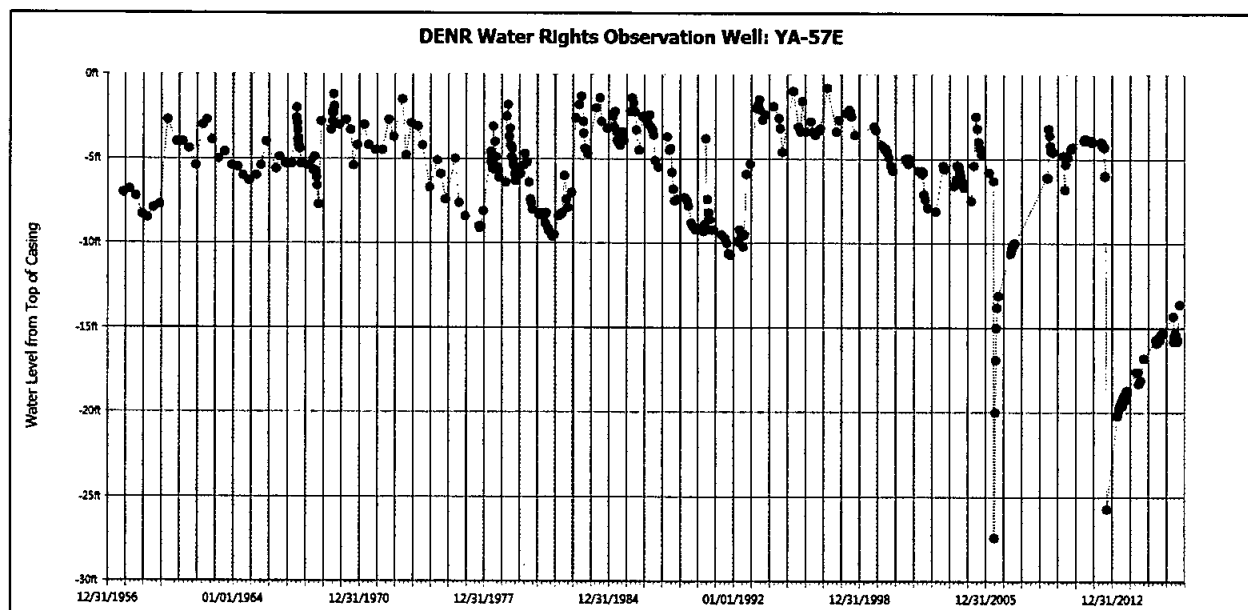


Figure 1. Hydrograph for observation well YA-57E which is completed into the Missouri: Elk Point aquifer approximately one-half mile northeast of the well this application proposes to use.

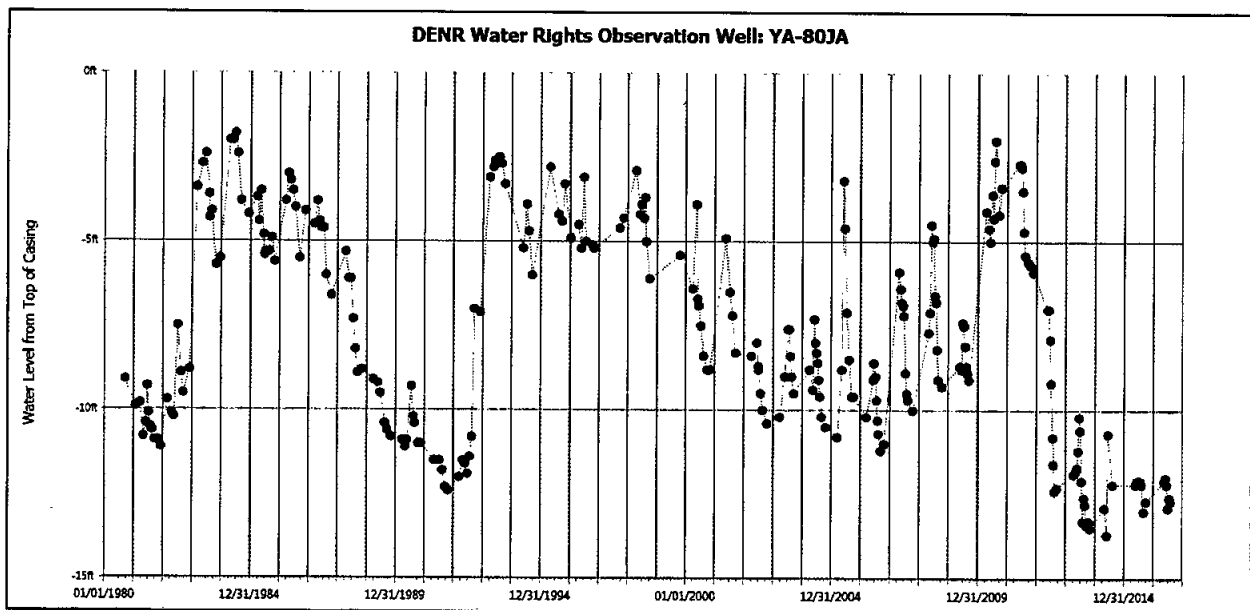


Figure 2. Hydrograph for observation well YA-80JA which is completed into the Missouri: Elk Point aquifer approximately 1.3 miles northwest of the well this application proposes to use.

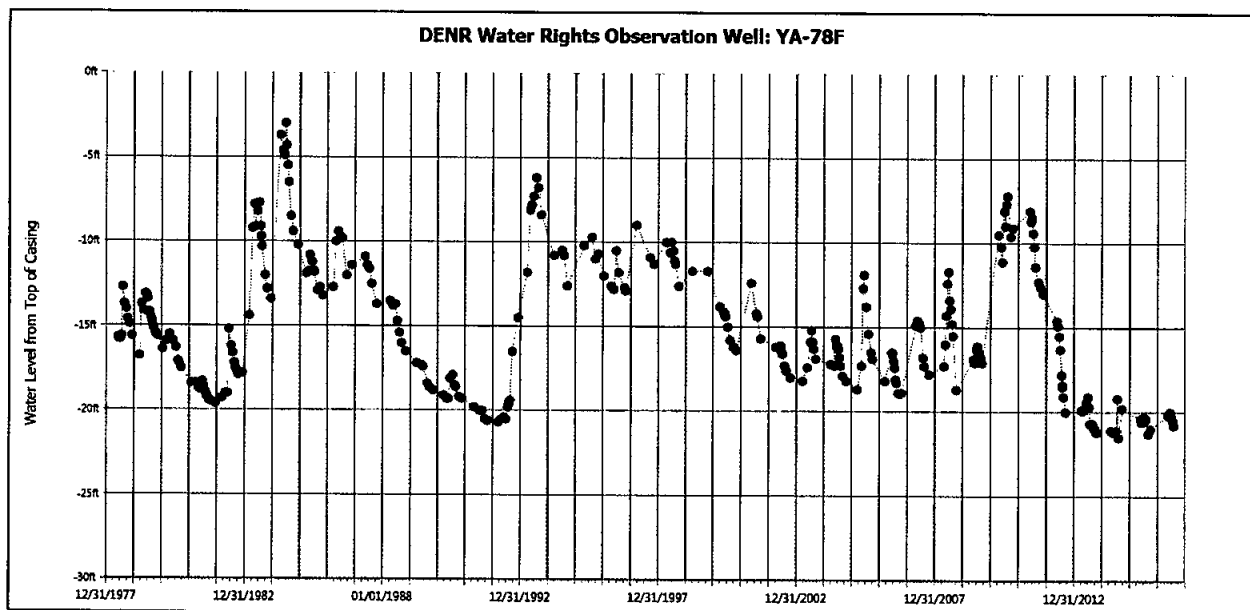


Figure 3. Hydrograph for observation well YA-78F which is completed into the Missouri: Elk Point aquifer approximately 2.25 miles north-northwest of the well this application proposes to use.

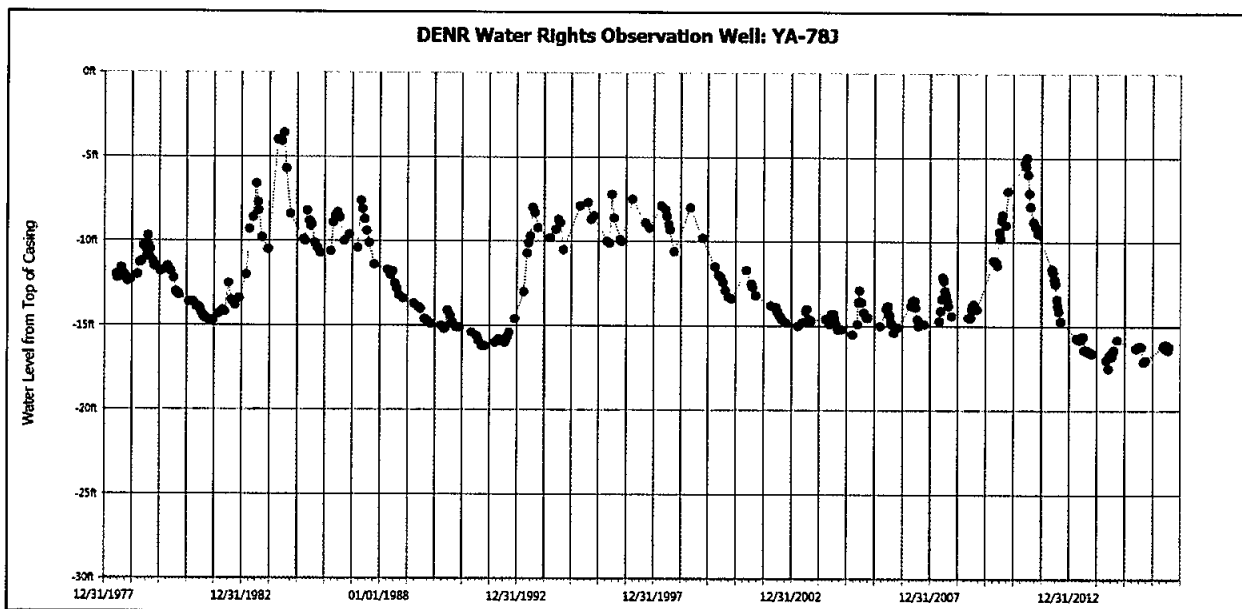


Figure 4. Hydrograph for observation well YA-78J which is completed into the Missouri: Elk Point aquifer approximately 2.7 miles south-southwest of the well this application proposes to use.

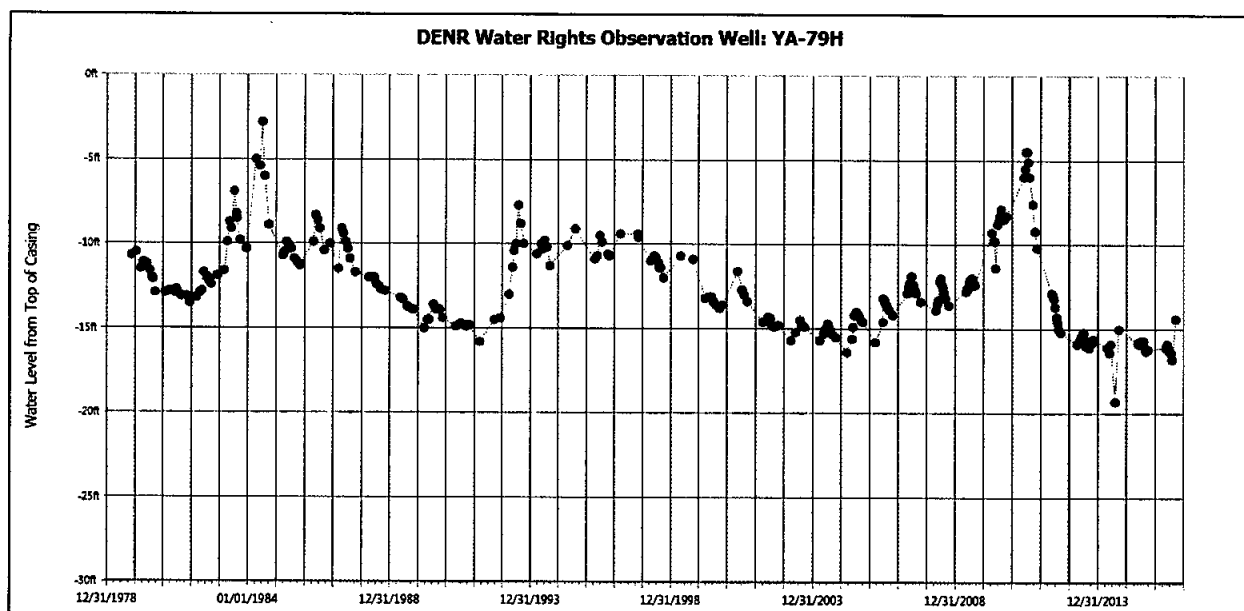


Figure 5. Hydrograph for observation well YA-79H which is completed into the Missouri: Elk Point aquifer approximately three miles southwest of the well this application proposes to use.

Although observation well YA-57A shows the effect of well maintenance and subsequent slow recovery in 2012 and 2002, in general, the observation well data documents that the Missouri: Elk Point aquifer responds well to climatic conditions with rising water levels during wetter periods (when recharge exceeds discharge), and declining water levels during periods where discharge exceeds recharge. Hydrographs for observation wells completed in the Elk Point

management unit near the Missouri River show the hydrologic connection between the river and the management unit. Observation wells with sufficient periods of record document a lowering of the water table in the aquifer in response to the decreased flooding that resulted from the closure of Gavins Point Dam (Stephens, 1967). The hydrographs for Missouri: Elk Point observation wells also document the entrenchment of the Missouri River below the Gavins Point Dam (Iles, 1979; and Goodman, 2007). At the current level of development, the temporal effects of well withdrawals from the aquifer are masked by the climatic conditions on the aquifer and effects of the hydraulic connection between the aquifer and the Missouri River. Since recharge to the management unit and natural discharge from the management unit dominate the system, water is available to capture for additional well withdrawals. Therefore there is a reasonable probability that unappropriated water is available for this appropriation.

EXISTING WATER RIGHTS:

Currently, there are 607 water permits/rights appropriating water from the Missouri: Elk Point aquifer in addition to five future use permits and two deferred applications (Water Rights, 2017a). The water rights/permits in the vicinity of the acreage associated with this application are shown in Figure 6 and Table 3. In addition to wells supplying appropriative rights, there are a number of domestic use wells on file with the DENR-Water Rights Program in the vicinity of this proposed well site.

Although this application proposes no increase to the maximum diversion rate for this existing well (i.e. 2.22 cfs), the water demand of irrigating an additional 63 acres (i.e. approximately 20 ac-ft/yr) from June 1 through September 30 will result in an increased average diversion rate from the well of approximately 37.4 gallons per minute. The completion report for this existing well reported 800 gallons per minute resulted in 24 feet of drawdown in the well. Therefore, an additional average pumping rate of 37 gallons per minute is expected to produce an additional average drawdown of 1.12 feet at the production well. Thus the increased average diversion rate of 37 gallons per minute is not expected to be measurable very far from the production well.

Drawdown from pumping wells completed into the Missouri: Elk Point aquifer is typically not significant very far from the pumping well. Examination of the hydrographs of observation wells completed into the Missouri: Elk Point aquifer, shows no signs of being significantly impacted by drawdown despite being located in the proximity of a number of irrigation wells. Although precise drawdown cannot be quantified without aquifer testing this application, if approved, is not expected to adversely impact nearby adequate wells. An adequate well as defined by South Dakota Administrative Rules is “a well-constructed or rehabilitated to allow various withdrawal methods to be used, to allow the inlet to the pump to be placed not less than 20 feet into the saturated aquifer or formation material when the well is constructed, or to allow the pump to be placed as near as possible to the bottom of the aquifer as is practical if the aquifer thickness is less than 20 feet.” In the past the Water Management Board has recognized that to place water to maximum beneficial use a certain amount of drawdown may occur.

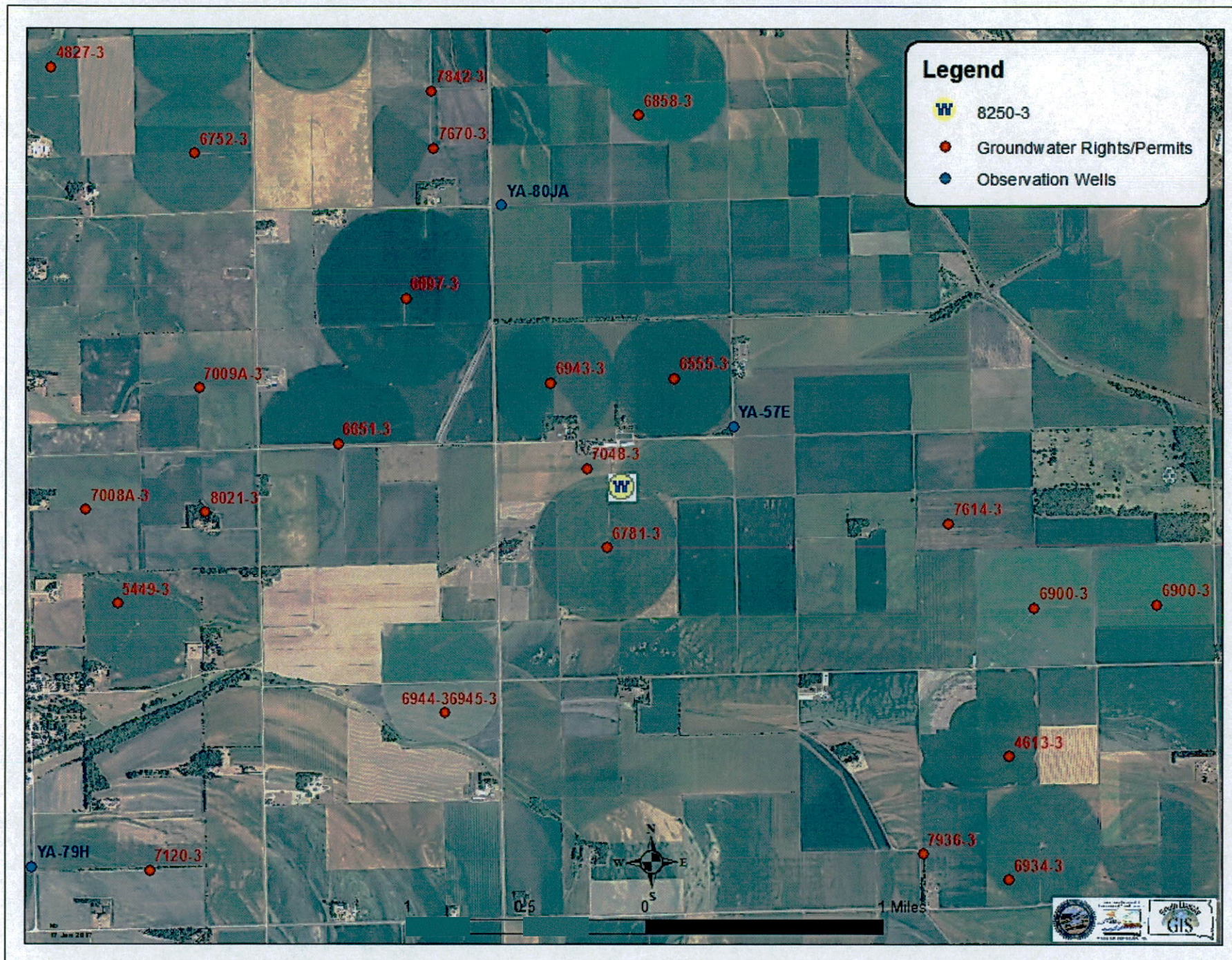


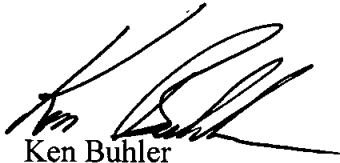
Figure 6. Water rights/permits appropriating groundwater in the vicinity of the well that is to be used to supply 8250-3 (Water Rights 2017a).

Table 3. Water Rights/Permits in the area as shown in Figure 6.

PERMIT NO	NAME	STATUS	AQUIFER	USE	CFS	ACRES
4613-3	D A OLSON & SONS	LC	M:EP	IRR	2	148
4827-3	GARY SMITH	LC	LJM	IRR	1.83	128
5449-3	HEINE FARMS	LC	LJM	IRR	1.3	91
6555-3	STEVE C SCHMIDT	LC	M:EP	IRR	1.78	129
6651-3	FREEBURG LIMITED PARTNERSHIP	LC	M:EP	IRR	1.78	119
6752-3	ROBERT SMITH	LC	M:EP	IRR	1.78	136
6781-3	STEVE C SCHMIDT	LC	M:EP	IRR	2.22	190
6858-3	FREEBURG LIMITED PARTNERSHIP	PE	M:EP	IRR	2	35
6897-3	JOHN & JACQUELINE SMITH	PE	M:EP	IRR	2.78	310
6900-3	WADE A LARSON	LC	M:EP	IRR	3.12	265
6934-3	DON A JOHNSON	PE	M:EP	IRR	1.56	245
6943-3	JEROME & DOROTHY SYLLIAASEN	PE	M:EP	IRR	1.56	123
6944-3	JEROME & DOROTHY SYLLIAASEN	PE	M:EP	IRR	1.56	68
6945-3	JEROME & DOROTHY SYLLIAASEN	PE	M:EP	IRR	1.56	68
7008A-3	ROGER D HANSON	PE	LJM	IRR	1.78	160
7009A-3	ROGER D HANSON	PE	M:EP	IRR	1.78	120
7048-3	STEVE C SCHMIDT	PE	M:EP	IRR	1.33	160
7120-3	JAY CUTTS	LC	M:EP	IRR	1.29	90
7614-3	PAUL & DEAN GUSTAD	PE	M:EP	IRR	1.67	140
7670-3	KARL M SCHENK	LC	M:EP	IRR	1.78	120
7842-3	KARL M SCHENK	LC	M:EP	IRR	1.33	135
7936-3	DONALD JOHNSON	PE	M:EP	IRR	1.39	83
8021-3	JAY CUTTS	PE	LJM	IRR	1.78	96

CONCLUSIONS:

1. Water Permit Application No. 8250-3 proposes a water permit that will allow diversions from an existing well for the irrigation of 63 acres.
2. Water Permit Application No. 8250-3 does not propose any increase to the diversion rate authorized for this existing well.
3. There is a reasonable probability that unappropriated water is available from the Missouri: Elk Point aquifer to support the proposed increased diversions.
4. There is a reasonable probability that nearby adequate wells will not be adversely impaired if Water Permit Application No. 8250-3 is approved.



Ken Buhler
SD DENR-Water Rights Program

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Water Rights, 2017b, Observation Well Files. SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.

Water Rights, 2017c, Well Completion Reports Database South Dakota Department of Environment and Natural Resources.
<http://arcgis.sd.gov/server/denr/wellLogs/default.aspx>. Retrieved October 2016.

AFFIDAVIT OF PUBLICATION

YANKTON DAILY PRESS AND DAKOTAN

RECEIVED
FEB 13 2017
WATER RIGHTS
PROGRAM

STEVE SCHMIDT
44847 307TH ST
MISSION HILL SD 57046

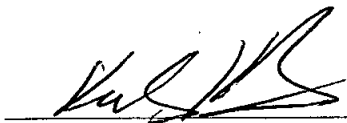
STATE OF SOUTH DAKOTA
COUNTY OF YANKTON

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+9 NOTICE OF APPLICATIO

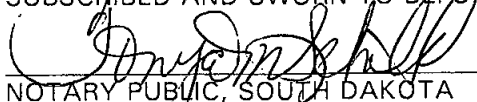
TAKEN FROM THE PAPER, IN WHICH IT WAS LAST PUBLISHED IN THE
NEWSPAPER ON THE 9th DAY OF February, 2017
THAT THE FULL AMOUNT OF THE FEE CHARGED FOR THE PUBLICATION
OF SAID NOTICE TO WIT \$28.38 ENSURES TO THE
BENEFITS OF THE PUBLISHER OF SAID NEWSPAPER AND THAT NO
AGREEMENT AND UNDERSTANDING FOR THE DIVISION 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: 02/09/2017

FILED ON: 02/09/2017



SUBSCRIBED AND SWORN TO BEFORE ME THIS 9th DAY OF February, 2017


NOTARY PUBLIC, SOUTH DAKOTA

MY COMMISSION EXPIRES 08/19/2021

Ad text : 2 + 9

NOTICE OF APPLICATION NO. 8250-3 to Appropriate Water

Notice is given that Steve Schmidt, 44847 307th St, Mission Hill SD 57046 has filed an application for a water permit to irrigate 63 additional acres. Water Right No. 6781-3 appropriates 2.22 cubic feet of water per second from one well completed into the Missouri:Elk Point Aquifer (65 feet deep) located in the SE 1/4 NW 1/4 Section 28 to irrigate 190 acres SW 1/4 NW 1/4, E 1/2 NW 1/4, N 1/2 SW 1/4, W 1/2 NE 1/4, NW 1/4 SE 1/4 Section 28; all in T94N-R54W. This application is to irrigate 63 additional acres located in the W 1/2 NW 1/4, NE 1/4 NW 1/4 Section 28-T94N-R54W from the existing well. This permit, 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. 8250-3 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 February 21, 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 \$28.38.

Schlaak, Karen

From: Schlaak, Karen
Sent: Friday, February 03, 2017 2:25 PM
To: 'Tera Schmidt'
Subject: 8250-3, Steve Schmidt
Attachments: 8250-3public.short.docx; FORM8.FRM.doc

Attached is a notice to be published on February 9, 2017.

Steve Schmidt, 44847 307th St, Mission Hill SD 57046 (605 267-2408) 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 3, 2017

Steve Schmidt
44847 307th St
Mission Hill SD 57046

Dear Mr. Schmidt:

Water Permit Application No. 8250-3 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. 8250-3 to Appropriate Water

Notice is given that Steve Schmidt, 44847 307th St, Mission Hill SD 57046 has filed an application for a water permit to irrigate 63 additional acres. Water Right No. 6781-3 appropriates 2.22 cubic feet of water per second from one well completed into the Missouri:Elk Point Aquifer (65 feet deep) located in the SE 1/4 NW 1/4 Section 28 to irrigate 190 acres SW 1/4 NW 1/4, E 1/2 NW 1/4, N 1/2 SW 1/4, W 1/2 NE 1/4, NW 1/4 SE 1/4 Section 28; all in T94N-R54W. This application is to irrigate 63 additional acres located in the W 1/2 NW 1/4, NE 1/4 NW 1/4 Section 28-T94N-R54W from the existing well. This permit, if approved, does not authorize any increase in the developed diversion rate.

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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 _____.



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

denr.sd.gov

APR 19 2017

Steve Schmidt
44847 307th
Mission Hill SD 57046

Dear Mr. Schmidt:

Enclosed is Water Permit No. 8250-3 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

8250-3

NOTICE OF COMPLETION OF WORKS AND
APPLICATION OF WATER TO BENEFICIAL USEDate November 15, 2021MAIL TO: PMB 2020
DANR - Water Rights Program
523 E. Capitol Ave
Pierre, SD 57501-3182

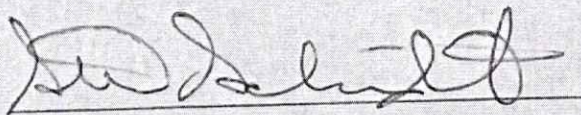
Ph: (605) 773-3352

FROM: Steve Schmidt
(name)44847 207th Street
(address)Mission Hill SD 57046 605-267-2408
(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. 8250-3 states that the water use system is to be constructed by
February 21, 2022, and water is to be put to beneficial use by February 21, 2026.
(date) (date)The water use system was completed on April, 2017.
(date)Applying the water to beneficial use was completed on April, 2017.
(date)

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


(signature)

Report of Examination of Works and/or Application of Water to Beneficial Use For Permit Nos. 7048-3 & 8250-3

I have this day, **November 9, 2021** made a thorough examination of the water use systems constructed by **Steven Schmidt, 44847 307th St., Mission Hill, SD 57046**, holder of Permit No. **7048-3**, bearing the priority of **July 16, 2008** authorizing the diversion of **1.33** cu. ft. per second of the waters of **groundwater (Missouri: Elk Point Aquifer)** using the existing well authorized by Licensed Water Right No. 6781-3 for the **irrigation of 160 acres** located in **Yankton** County, as well as, holder of Permit No. **8250-3**, bearing the priority of **December 12, 2016** authorizing the diversion of **0.00** cu. ft. per second of the waters of **groundwater (Missouri: Elk Point Aquifer)** for the **irrigation of 63 acres** located in **Yankton** County.

Inspection contact: **Steven Schmidt**

A. Works used to divert the water:

Well Information: (from licensed Water Right No. 6781-3 and updated equipment)

- 1) Well Drilling Firm: **Christensen Well & Irrigation**
- 2) No. of Wells: **1**
- 3) Depth(s): **65** feet
- 4) Well log is available: **Yes**

Casing:

- 1) Diameter: **16** inches
- 2) Length: **25** feet
- 3) Type: **Fiberglass**

Screen:

- 1) Diameter: **16** inches
- 2) Length: **40** feet
- 3) Type: **Fiberglass**
- 4) Static water level: **10** feet

Pump:

- 1) Make: **Mid-America Pump & Supply**
- 2) Type: **Goulds**
- 3) Model No.: **MA60159-04**
- 4) Capacity: **1,100 total** gpm

Motor:

- 1) Make: **John Deere, Diesel, Model Number Unknown**
- 2) Horsepower rating: **Amarillo Gear Drive of 80** hp

B. Works used to transport water to place of use: (7048-3)

- 1) Type: **PVC**
- 2) Size: **8** inches
- 3) Length: **1,880** feet

Works used to transport water to place of use: (8250-3)

- 1) Type: **PVC**
- 2) Size: **8** inches
- 3) Length: **2,120** feet

C. Works used to apply water to beneficial use: (7048-3)

Center Pivot:

- 1) Make: Zimmatic
- 2) Overall length: 1301 feet
- 3) Number of towers: 7
- 4) End gun: Yes
- 5) Capacity: 700 gpm

Works used to apply water to beneficial use: (8250-3)

Center Pivot:

- 6) Make: Zimmatic
- 7) Overall length: 870 feet
- 8) Number of towers: 5
- 9) End gun: Yes
- 10) Capacity: 900 gpm

Chemigation Equipment: (both)

- 1) Does chemigate: Yes
- 2) Main line check valve: Yes
- 3) Inspection port/air relief: Yes
- 4) Low pressure drain: Yes
- 5) Discharge is 20' from source: No
- 6) Interlock type: Mechanical
- 7) Injection pump: Positive Displacement
- 8) Injection check valve: Yes
- 9) Injection line check valve or positive displacement pump: Yes

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: I mentioned to Mr. Schmidt that he needs a 20 foot discharge hose for the chemigation drain discharge.

E. Condition and Location:

1. The system is in good condition with the point(s) of diversion located as follows:
The well is 2,400 feet south and 2,400 feet east of the northwest corner of Section 28-T94N-R54W (Latitude 42.93173, Longitude -97.23078 – SE1/4 of the NW1/4).
2. The works are capable of diverting and conveying to the place of use 2.45 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 28-T94N-R54W

<u>NE ¼ NE ¼</u>	<u>33 acres</u>
<u>NW ¼ NE ¼</u>	<u>34 acres</u>
<u>SW ¼ NE ¼</u>	<u>38 acres</u>

<u>NE ¼ NW ¼</u>	<u>24 acres</u>
<u>NW ¼ NW ¼</u>	<u>36 acres</u>
<u>SW ¼ NW ¼</u>	<u>22 acres</u>
<u>SE ¼ NW ¼</u>	<u>40 acres</u>

<u>NW ¼ SE ¼</u>	<u>32 acres</u>
<u>NE ¼ SW ¼</u>	<u>38 acres</u>
<u>NW ¼ SW ¼</u>	<u>7 acres</u>

comprising a total of 304 acres of land, and the license should be issued for 2.45 cfs .

3. All structures, wells and lands on map Yes

F. Comments or other permit(s) associated with the project: The pivot for Water Permit No. 7048-3 is nozzled for 700 gpm (1.56 cfs). The water for this pivot comes from the well associated with licensed Water Right No. 6781-3. The pivot for Water Right No. 6781-3 is nozzled for 1,100 gpm (2.45 cfs) and the pump is rated at 900 gpm (2.0 cfs). However, the pump is driven by a diesel engine and it is possible that if the engine is operated at a higher rpm or if the required head and friction losses are reduced, the pump could produce 1,100 gpm (2.45 cfs).

Water Permit No. 7048-3 appropriated 1.33 cfs from the well licensed under Water Right No. 6781-3. Water Right No. 6781-3 is licensed at 2.22 cfs bearing priority dates of December 7, 2006 (0.66 cfs) and March 8, 2004 (1.56 cfs). Since Water Permit No. 7048-3 appropriated additional flow from this well, it would be appropriate to combine these two water rights into the same license with an additional flow of 0.23 cfs for a total flow rate of 2.45 cfs (1,100 gpm).

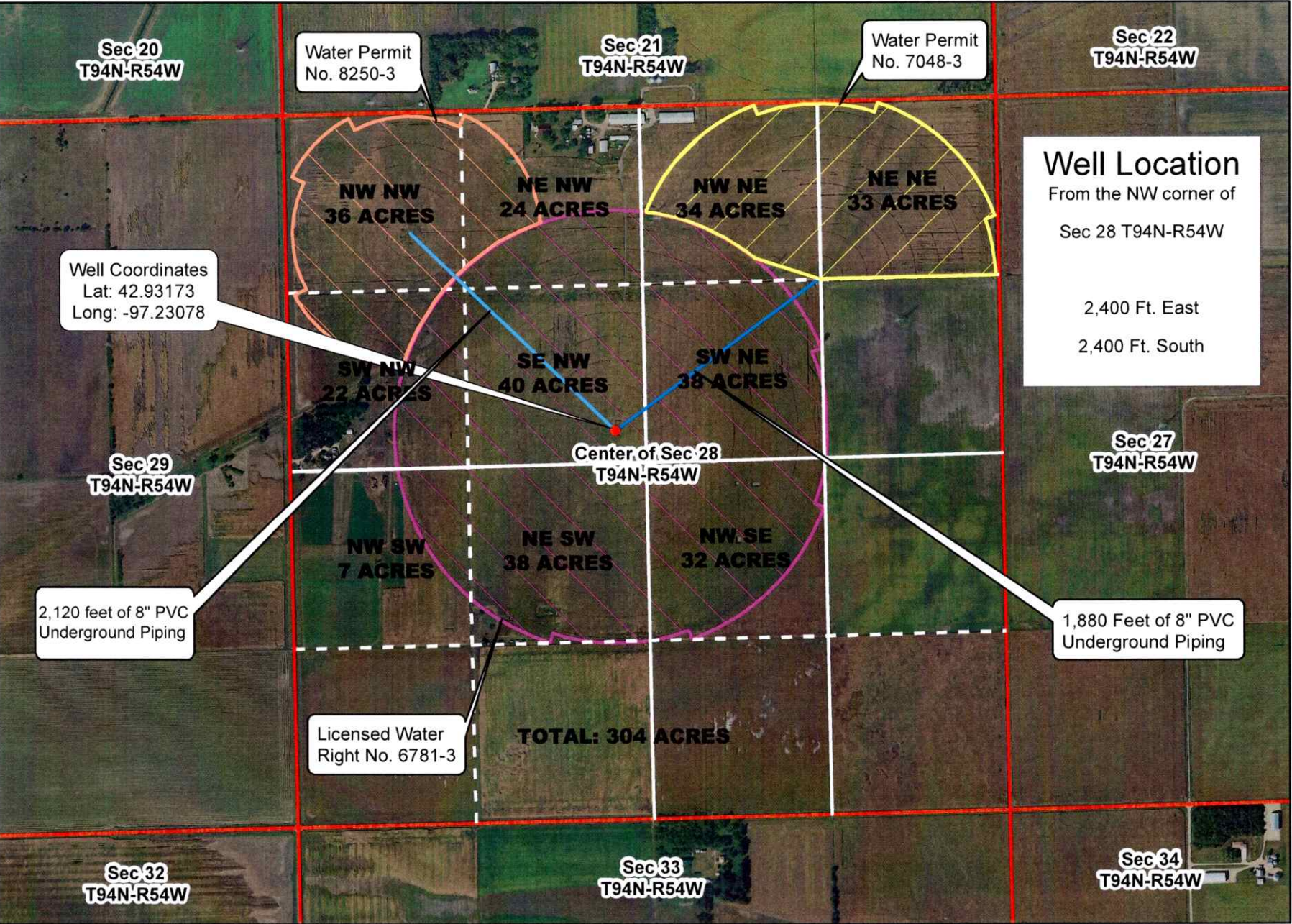
Also, Water Permit No. 8250-3 added additional acres to be irrigated from this same well without any additional flow. Thus, it would be appropriate to combine Water Permit Nos. 8250-3, 7048-3 and Water Right No. 6781-3 into one license. All three water systems are owned by the same person, are adjacent to each other, and all three pivots overlap, so it would be difficult to separate the water rights. Water Permit No. 8250-3 is located on land that was previously authorized for an irrigation system by Water Permit No. 7048-3. The irrigation system was not constructed on this piece of property by the authorized construction completion date, so Water Permit No. 8250-3 was approved to allow construction of an irrigation system on this land. Water Permit Nos. 7048-3 and 8250-3 could be combined with licensed Water Right No. 6781-3 since all three systems use the same well, are adjacent to each other and have the same owner.



Keith DeJong
Water Rights Inspector
DANR, Water Rights Program

Date report completed: November 15, 2021

Water Right No. 8250-3



SCALE



Keith DeJong

Keith DeJong, PE
Staff Engineer
November 15, 2021

**STATE OF SOUTH DAKOTA
WATER LICENSE NO. 8250-3**

(1) Water Right No. 6781-3, held by Steve Schmidt, appropriates 2.22 cubic feet of water per second (cfs) from groundwater, one well (Missouri: Elk Point Aquifer), for the irrigation of 190 acres.

Steven Schmidt, 44847 307th St, Mission Hill SD 57046, made Application No. 7048-3, July 16, 2008, for a water permit to divert an additional 1.33 cubic feet of water per second from the well authorized by Water Right No. 6781-3, for the irrigation of an additional 160 acres. Permit No. 7048-3 was approved September 15, 2008, and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before September 15, 2013, and for the application to beneficial use of water on or before September 15, 2017.

Steven Schmidt made Application No. 8250-3, December 12, 2016, for a water permit to add an additional 63 irrigated acres, to what was already authorized by Water Right No. 6781-3 & Permit No. 7048-3, with no increase to the rate of diversion. Permit No. 8250-3 was approved February 21, 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 21, 2022, and for the application to beneficial use of water on or before February 21, 2022.

The permit holder submitted a Notice of Completion of Works and Application of Water to Beneficial Use form for Permit No. 8250-3, on November 15, 2021. The Notice stated the diversion system was completed and the water was placed to beneficial use in April 2017.

The applicable portions of Water Right No. 6781-3 & Water Permit No. 7048-3 have been incorporated into this license.

(2) It is certified that the permit holder has complied with the provisions of South Dakota State Law relating to completion of the construction of the water supply system and is entitled to divert 2.45 cubic feet of water per second for beneficial use. The location of the diversion point is:

- 2,400 ft S & 2,400 ft E of the NW corner Section 28, T94N, R54W (SE $\frac{1}{4}$ NW $\frac{1}{4}$)
(Latitude 42.93173 & Longitude -97.23078)

(3) The amount of appropriation may not exceed 2 acre-feet annually for each acre of land to which water is actually and beneficially applied for irrigation. The water is to be used during the following described annual period: June 1 – September 30.

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

Section 28, T94N, R54W, Yankton County

NE $\frac{1}{4}$ NE $\frac{1}{4}$	33 acres	NE $\frac{1}{4}$ NW $\frac{1}{4}$	24 acres	NW $\frac{1}{4}$ SE $\frac{1}{4}$	32 acres
NW $\frac{1}{4}$ NE $\frac{1}{4}$	34 acres	NW $\frac{1}{4}$ NW $\frac{1}{4}$	36 acres	NE $\frac{1}{4}$ SW $\frac{1}{4}$	38 acres
SW $\frac{1}{4}$ NE $\frac{1}{4}$	38 acres	SW $\frac{1}{4}$ NW $\frac{1}{4}$	22 acres	NW $\frac{1}{4}$ SW $\frac{1}{4}$	7 acres
		SE $\frac{1}{4}$ NW $\frac{1}{4}$	40 acres		

TOTAL: 304 acres

continued

(5) Pursuant to South Dakota Water Law 46-5-30.1 Steven Schmidt, the holder and/or owner of Water Right No. 8250-3 is issued a license to appropriate water, the right to use 2.45 cubic feet of water per second from groundwater, one well (Missouri: Elk Point Aquifer), with priority dates outlined below, from the location specified in (2) of this license for irrigation purposes.

March 8, 2004	1.56 cfs	140 acres
December 7, 2006	0.66 cfs	50 acres
July 16, 2008	0.32 cfs	59 acres
December 12, 2016	-	55 acres

This license is subject to South Dakota Water Law, any limitations or conditions listed in Water Right No. 8250-3 and subject to the following qualifications:

1. The well approved under Water Right No. 6781-3 & Water Permit No. 8250-3 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. *(The applicable portions of Water Right No. 6781-3 & Permit No. 7048-3 have been incorporated into Water Right No. 8250-3. All diversion authority is now held by Water Right No. 8250-3.)*
2. 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 Agriculture and Natural Resources

JUN 04 2024

date





**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

JUN 04 2024

8250-3
7048-3
6781-3

Steven Schmidt
44847 307th St
Mission Hill SD 57046

Dear Mr. Schmidt:

Enclosed is Water License No. 8250-3. This is the final water right document completing your process of obtaining a Water Right. Included with your license is a map prepared by the staff engineer who conducted the field investigation.

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

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

Sincerely,

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

NOTES: The applicable portions of Water Right No. 6781-3 & Water Permit No. 7048-3 have been incorporated into Water Right No. 8250-3.

The investigation of your irrigation system noted the absence of a 20 ft discharge hose on the chemigation system. Please contact Ron Duvall (605) 773.3352 with any questions regarding chemigation rules and regulations.

enclosures