

WATER PERMIT NO. 8416-3

Name of Applicant: Jerome Poeschl

Address: 213 Katherine Way, Yankton SD 57078 Phone: 660-0233

Amount of Water Claimed: 1.56 cfs Total Acres: 116 acres

Source of Water Supply: 2 wells

Water to be used for: irrigation County: Clay

Type of Waste Disposal System:

Location: approximately 3 miles northwest of Volin

PRIORITY Date Received: 12-2-19 Application/License Fee: \$ 100

Corrected Application Received: Period of Annual Use: May 1 – Aug 31

Remarks: Reinstatement of Permit No. 8067-3

Diversion Point: NE 1/4 NE 1/4 and SE 1/4 NE 1/4

Sec 17-T94N-R53W

Land to be Irrigated: E 1/2 NE 1/4, E 1/2 SE 1/4

Sec 17-T94N-R53W

Depth of Well: 100 feet deep

Well Driller:

Remarks:

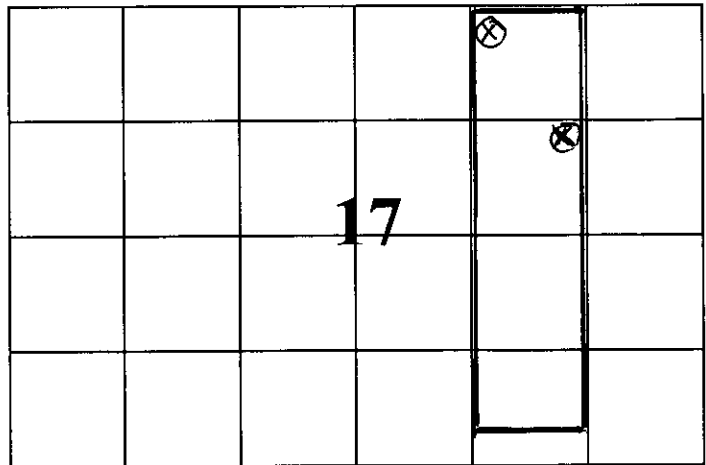
Type of Map: aerial

Prepared by:

Reviewed and the Number Assigned on: 12-2-19

By: **Karen Schlaak**

Notice of Hearing - date to intervene: _____



**SOUTH DAKOTA
WATER PERMIT NO. 8416-3**

Date of first receipt of application December 2, 2019.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 8416-3 to Jerome Poeschl, 213 Katherine Way, 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. 8416-3 authorizes reinstatement of cancelled Permit No. 8067-3. Permit No. 8067-3 appropriates 1.56 cubic feet of water per second from two wells to be completed into the Niobrara Aquifer (100 feet deep) located in the NE 1/4 NE 1/4 and the SE 1/4 NE 1/4 Section 17 to irrigate 116 acres located in the E 1/2 NE 1/4, E 1/2 SE 1/4 Section 17; all in T94N-R53W. The permit was approved February 23, 2015, and the project was to be completed by February 23, 2020, with water being put to beneficial use by February 23, 2024. Permit No. 8416-3 reinstates cancelled Water Permit No. 8067-3 since the project has not been completed. This project is located approximately 3 miles east of Volin SD.
2. The amount of the appropriation may not exceed 2 acre feet annually for each acre of land to which water is actually and beneficially applied for irrigation. The water is to be used during the following described annual period: May 1 – August 31.
3. The date from which applicant may claim right is December 2, 2019.
4. The date of approval of Permit No. 8416-3 is March 16, 2020.
5. One-fifth of the construction is to be completed on or before September 16, 2022.
6. All construction is to be completed on or before March 16, 2025.
7. Water is to be put to beneficial use on or before March 16, 2029.
8. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

QUALIFICATIONS

1. The wells approved under Permit No. 8416-3 will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights. Approval of this permit does not guarantee a maximum diversion rate of 1.56 cfs.
2. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

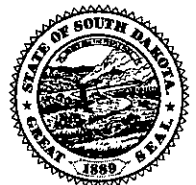
WATER MANAGEMENT BOARD

By: Eric Gronlund
Eric Gronlund, Chief Engineer

Water Rights Program
Department of Environment and Natural Resources

MAR 27 2020

date



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

Mail to: DENR - Water Rights 523 E Capitol Ave Pierre, SD 57501-3182 ph. (605) 773-3352	No. <u>8416-3</u> (office use only)	Hydrologic Unit <u>10170102</u>
	Basin <u>Vermillion River</u>	
	Newspaper <u>Plain Talk</u>	
	<u>Press & Dakotan</u>	

PAID
DEC - 2 2019
Ck# 1525

Application For Permit To Appropriate Water For Irrigation

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

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

Reinstatement of Water Permit No. 8067-3

1. Name to Appear on Irrigation Permit Jerome Poeschl

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

Mailing Address 213 Katherine Way Yankton ☒ SD ☒ 57078
(Address) (City) (State) (Zip Code)

Phone 665-3882 Mobile 660-0233 Email X Farms3117@yahoo.com

2. Amount of water claimed 1.56 *CFS or 700 **GPM ***AF Total Acreage 116
(*Cubic Feet per Second) (**Gallons per Minute) (***)Acre Feet - storage capacity of dam/dugout or annual use if applicable)

3. Source of water supply 2 wells - Niobrara Aquifer

4. Location of point of diversion NE 1/4 NE 1/4 and SE 1/4 NE 1/4 Section 17-T94N-R53W

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

County Clay ☒

5. County or counties where water will be used Clay

6. Annual period during which water is to be used May 1 - August 31

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

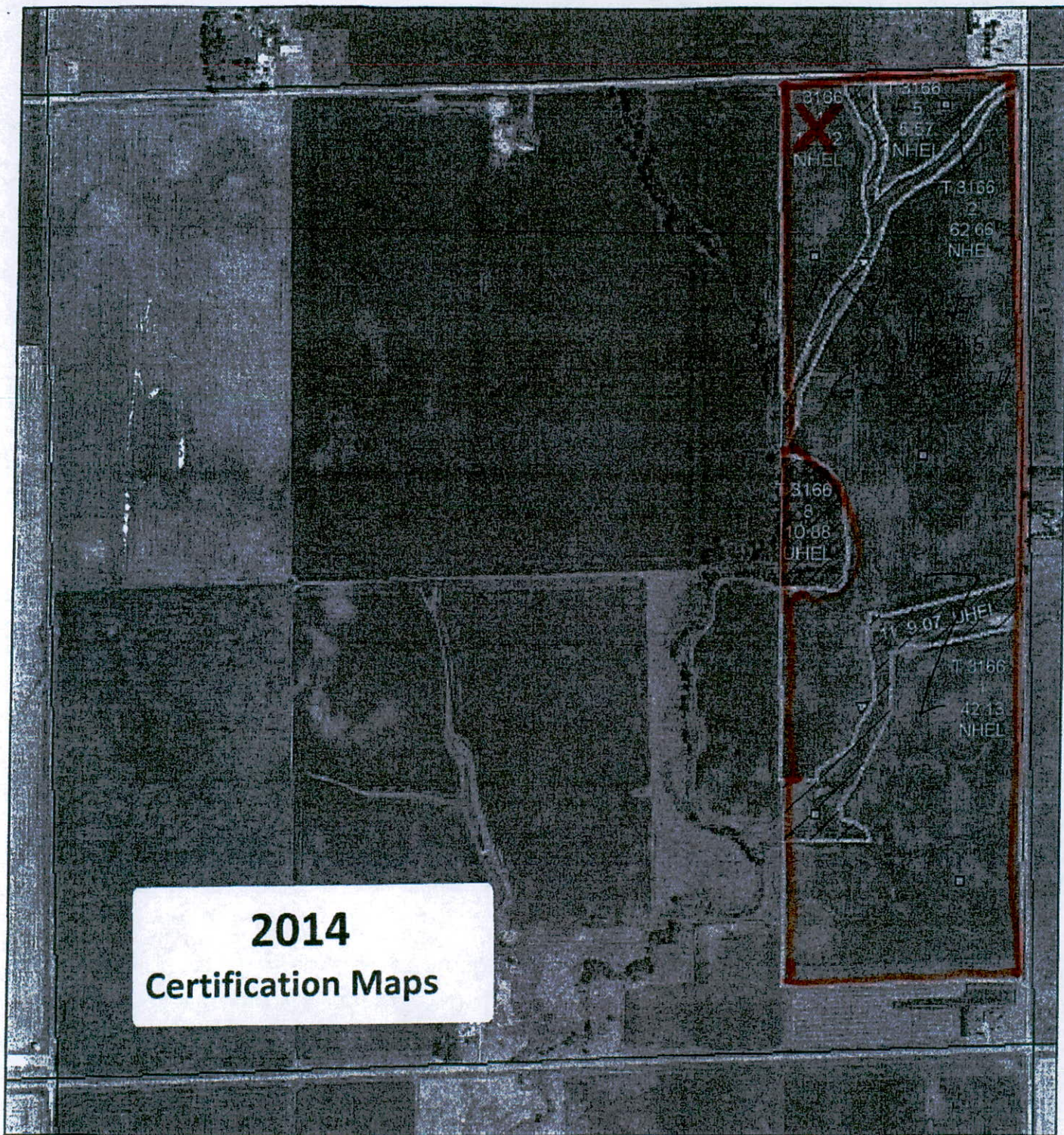
Land Description	Acres	Land Description	Acres
NE 1/4 NE 1/4	30	all in Section 17-T94N-R53W	
SE 1/4 NE 1/4	30		
NE 1/4 SE 1/4	28		
SE 1/4 SE 1/4	28		

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

RECEIVED
DEC 2 2019

X I, Jerome Poeschl, 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.



2014
Certification Maps



United States Department of Agriculture
Farm Service Agency

PLSS: 17_94N_53W
Farm: 4828

Clay County

1 inch equals 729 feet

RECEIVED

DEC 05 2014

Date: 2/26/2014

WATER RIGHTS PROGRAM

Wetland Determination Identifiers

- Restricted Use
- ▽ Limited Restrictions
- Exempt from Conservation Compliance Provisions
- Common Land Units
- CRP
- Non Cropland

Disclaimer: Wetland identifiers do not represent the size, shape or specific determination of the area. Refer to your original determination (CPA-026 and attached maps) for exact wetland boundaries and determinations, or contact NRCS.

2012 Ortho-Photography - Not to Scale

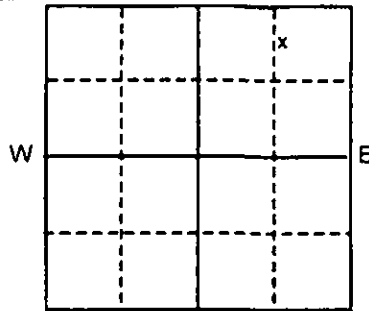


SOUTH DAKOTA WATER WELL COMPLETION REPORT

11-02

Location ne 1/4 ne 1/4 Sec 17 Twp 94n Rg 53wCounty Clay

North

Please mark well
location with an "X"

Well Completion Date

July 17, 2015

1 Mile

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

1,000.0 ft. from septic tank (identify source)

PROPOSED USE:

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

METHOD OF DRILLING:

Bucket method

CASING DATA:

☐ Steel ☒ Plastic ☐ Other

If other describe

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
LB/FT	16.00 IN	0.0 FT	40.0 FT	22.00 IN
LB/FT	IN	FT	FT	IN
LB/FT	IN	FT	FT	IN

GROUTING DATA:

Grout Type	No. of Sacks	Grout Weight	From	To
bent grout	15	9.5 Lb/gal	0.0 Ft	38.0 Ft
		Lb/gal	Ft	Ft

Describe grouting procedure
tremie

SCREEN:

☐ Perforated pipe ☒ Manufactured
Diameter 16.00 Inches Length 60.0 FeetMaterial PVCSlot Size .085 Set From 40.0 Feet to 100.0 Feet

Other information

WAS A PACKER OR SEAL USED?

☐ Yes ☒ No

If so, what material?

Describe packer(s) and location

DISINFECTION: Was well disinfected upon completion?

☐ Yes, How? HTH tablets☐ No, Why Not?Lab to which water
quality sample sent for analysisWell Owner: Jerry Poeschel

Business Name:

Address: 213 Katherine WayCity, State, Zip: Yankton SD 57078

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
topsoil, brown	0	2
Clay, brown, silty, sandy	2	29
Clay, brown, silty, some gravel beds	29	37
Chalk, gray, v. hard	37	100

STATIC WATER LEVEL 2.0 FEETIf flowing: closed in pressure PSIGPM flow through Inch pipeControlled by ☐ Valve ☐ Reducers ☐ OtherReduced flow rate GPM

Can well be completely shut in?

WELL TEST DATA:

☒ Pumped Describe:☐ Bailed☐ Other

Pumping Level Below Land Surface

57.0 Ft. After 4.0 Hrs. pumped 300.0 GPM Ft. After Hrs. pumped GPMIf pump installed, pump rate: GPM

REMARKS

#1

RECEIVED

JAN 29 2016

WATER RIGHTS
PROGRAMThis well was drilled under license # 810 and this
report is true and accurate.Drilling firm: Heine Electric & Irrigation, Inc.

Signature of License Representative:

Ryan Hemmingson

Signature of Well Owner or Equitable Property Holder:

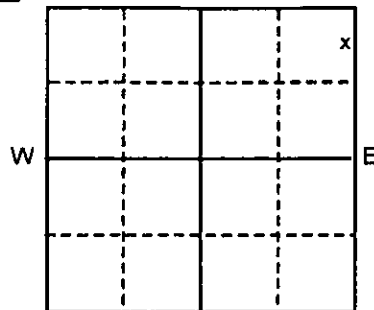
Date: Dec. 15, 2015

SOUTH DAKOTA WATER WELL COMPLETION REPORT

11-02

Location ne 1/4 ne 1/4 Sec 17 Twp 94n Rg 53wCounty Clay

North

Please mark well
location with an "X"

Well Completion Date

Oct 17, 2015

1 Mile

Distance to nearest potential pollution source (septic tank, abandoned well, feed lot, etc.)?
1,100.0 ft. from septic tank (identify source)

PROPOSED USE:

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

METHOD OF DRILLING:

Bucket method

CASING DATA:

☐ Steel ☒ Plastic ☐ Other
 If other describe _____

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
LB/FT	<u>16.00</u> IN	<u>0.0</u> FT	<u>37.0</u> FT	<u>22.00</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>bent grout</u>	<u>18</u>	<u>9.5</u> Lb/gal	<u>0.0</u> Ft	<u>35.0</u> Ft
		Lb/gal	Ft	Ft

Describe grouting procedure
tremie

SCREEN:

☐ Perforated pipe ☒ Manufactured
 Diameter 16.00 Inches Length 78.0 Feet
 Material PVC
 Slot Size .085 Set From 37.0 Feet to 115.0 Feet
 Other information _____

WAS A PACKER OR SEAL USED?

☐ Yes ☒ No

If so, what material? _____

Describe packer(s) and location _____

DISINFECTION: Was well disinfected upon completion?

☐ Yes, How? HTH tablets
☐ No, Why Not? _____
Lab to which water
quality sample sent for analysisWell Owner: Jerry Poeschel

Business Name: _____

Address: 213 Katherine WayCity, State, Zip: Yankton SD 57078

WELL LOG:

DEPTH

FORMATION	FROM	TO
topsoil, brown	0	2
Clay, brown, silty, sandy	2	20
Clay, brown, silty, some gravel beds	20	37
Chalk, gray, v. hard	37	100
Chalk, black, brittle	100	115

STATIC WATER LEVEL 7.0 FEET

If flowing: closed in pressure _____ PSI

GPM flow _____ through _____ Inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other _____

Reduced flow rate _____ GPM

Can well be completely shut in?

WELL TEST DATA:

☒ Pumped Describe: _____☐ Bailed☐ Other

Pumping Level Below Land Surface

50.0 Ft. After 4.0 Hrs. pumped 300.0 GPM

_____ Ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate: _____ GPM

REMARKS

#2

RECEIVED

JAN 29 2016

WATER RIGHTS

This well was drilled under license # 810 PROGRAM and this report is true and accurate.Drilling firm: Heine Electric & Irrigation, Inc.

Signature of License Representative: _____

Ryan Hemminger

Signature of Well Owner or Equitable Property Holder: _____

Date: Dec 15, 2015

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date December 2, 20 19

RECEIVED OF J & R Properties 213 Katherine Way Yankton SD 57078

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

Fee for Application for Permit No. <u>8416-3</u> to Appropriate Water, to construct and to put water to beneficial use	100	00
Fee for Application for Permit No. _____ to Appropriate Water for Future use		
Fee to retain Future Use Permit No. _____ after period of seven years.		
Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. _____		
Fee for Filing Transfer Form _____		
Fee for _____		
Fee for Issuing New Well Driller's License No. _____ for C.Y. _____		
Fee for Renewal of Well Driller's License No. _____ for C.Y. _____		
Fee for Issuing Well Pump Installer's License No. _____ for C.Y. _____		
Fee for Renewal of Well Pump Installer's License No. _____ for C.Y. _____		
(Any Other Work Provided by Law)	TOTAL	100 00

No. **09260**

By

Jeanne Goodman
Chief Engineer
JGM



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

denr.sd.gov

November 18, 2019

Jerome Poeschl
213 Katherine Way
Yankton SD 57078

Dear Mr. Poeschl:

In reference to your phone call with Eric Gronlund, enclosed is a partially completed Application for Reinstatement of Water Permit No. 8067-3.

Please review the application, make any necessary changes and sign where indicated near the bottom. Return the signed application along with the required application filing fee of \$100.00.

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

Sincerely,

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

enclosure

Gronlund, Eric

From: Gronlund, Eric
Sent: Monday, November 18, 2019 11:07 AM
To: Schlaak, Karen
Cc: McMath, Genny
Subject: 8067-3, Jerome Poeschl, 213 Katherine Way, Yankton

Date to complete construction is February 23, 2020. He has two well installed but the system is not constructed and will not be by the Feb, 2020 deadline.

Karen – please partially complete an application for reinstatement and send with a letter (\$100 filing fee). We likely won't process until February.

I discussed an extension of time but he decided to go for reinstatement.

Said he mailed in his irrigation questionnaire this morning.

*Eric Gronlund
Water Rights Program, DENR
605 773-3352
eric.gronlund@state.sd.us*



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 8416-3, Jerome Poeschl**

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. 8416-3, Jerome Poeschl, 213 Katherine Way, Yankton SD 57078.

The Chief Engineer is recommending REINSTATEMENT of Application No. 8416-3 because 1) there is reasonable probability that there is unappropriated water available for the applicant's proposed use, 2) the proposed use is a beneficial use and 3) it is in the public interest with the following qualifications:

1. The wells approved under Permit No. 8416-3 will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights. Approval of this permit does not guarantee a maximum diversion rate of 1.56 cfs.
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 27, 2020

Report to the Chief Engineer on Water Permit Application 8416-3

Jerome Poeschl
2 January 2020

Water Permit Application No. 8416-3 seeks to reinstate Water Permit No. 8067-3. Water Permit No. 8067-3 appropriates 1.56 cubic feet of water per second (cfs) from two wells to be completed into the Niobrara aquifer (100 feet deep) located in the NE $\frac{1}{4}$ NE $\frac{1}{4}$ and the SE $\frac{1}{4}$ NE $\frac{1}{4}$ Section 17 to irrigate 116 acres located in the E $\frac{1}{2}$ NE $\frac{1}{4}$, E $\frac{1}{2}$ SE $\frac{1}{4}$ Section 17; all in T94N-R53W. The permit was approved February 23, 2015, and the project was to be completed by February 23, 2020 with water being put to beneficial use by February 23, 2024. Since Water Permit No. 8067-3 will not be completed by the date required in the permit, it is subject to cancellation. This project is located approximately 3 miles east of Volin, South Dakota.

Aquifer: Niobrara (NBRR)

Hydrogeologic characteristics

The Niobrara Formation is a “white to dark-gray argillaceous chalk, marl, and shale” deposited during the late Cretaceous period that contains bentonite, chalky shale, some sand, and small concretions (Martin, et al., 2004). The Niobrara aquifer consists of the permeable and saturated portions of the Niobrara Formation. Water generally moves through the Niobrara aquifer via secondary types of porosity such as fractures and solution cavities (Christensen, et al., 1967). Since transmissivity in the Niobrara Formation is controlled by secondary porosity, the Niobrara aquifer is discontinuous in the formation. The remnant of the Niobrara aquifer into which the wells for this application are completed is disconnected from the main body of the Niobrara Formation in South Dakota (Tomhave, et al., 2004). The remnant of the Niobrara Formation in which the wells for this application is completed is adjacent to the Lower James Missouri aquifer to the southwest and the Upper Vermillion-Missouri and the Lower Vermillion-Missouri aquifers to the northeast and east. Water in the Niobrara aquifer is generally under confined conditions (Christensen, et al., 1967). For the rest of this report, the portion of the Niobrara Formation/aquifer from which this application seeks to withdraw will be called the Freeman portion, after a city which overlies it.

The applicant has drilled two wells for Water Permit No. 8067-3 (SD Water Rights, 2020a). The first well was completed July 17, 2015. The driller reported topsoil from land surface to 2 feet below grade, silty/sandy clay from 2 to 29 feet, silty clay with some gravel beds from 29 to 37 feet, and very hard chalk from 37 to 100 feet. The static water level at the time of drilling was 2 feet below grade. The second well was completed on October 17, 2015. The driller reported topsoil from land surface to 2 feet below grade, silty/sandy clay from 2 to 20 feet, silty clay with some gravel beds 20 to 37 feet, hard chalk from 37 to 100 feet, and brittle chalk from 100 to 115 feet. The static water level was 7 feet below grade at the time of drilling.

Applicable South Dakota Codified Law (SDCL)

Pursuant to SDCL 46-2A-8.1 the Water Management Board may reinstate a water permit if unappropriated water is available and construction necessary to put the water to beneficial use was not completed timely to the schedule specified in the water permit. Any application to

reinstate a water permit must be made within three years of the expiration of the original construction period. The priority date for the application to reinstate is the date the completed application to reinstate is submitted.

Pursuant to SDCL 46-2A-9, a permit to appropriate water may be issued 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 assess the availability of water and possibility of developing this application without unlawful impairment of existing rights only.

Pursuant to SDCL 46-6-3.1, no application to appropriate groundwater may be approved if, according to the best information reasonably available, it is probable that the quantity of water withdrawn annually from a groundwater source will exceed the quantity of the average estimated annual recharge of the water to the groundwater source. An exception allows water distribution systems to withdraw from groundwater sources older or stratigraphically lower than the Greenhorn Formation regardless of the results of a hydrologic budget. This application is not a water distribution system as defined in SDCL 46-1-6(17), and the Niobrara aquifer is stratigraphically higher than the Greenhorn Formation. Therefore, it is necessary to find that recharge exceeds withdrawals to approve this application.

Availability of water

Hydrologic budget

Recharge

Recharge to the Freeman portion of the Niobrara aquifer is likely from groundwater inflow from adjacent aquifers when the hydraulic head in the adjacent aquifers is higher than the hydraulic head of the Niobrara aquifer and from infiltration from precipitation and surface water features. There is no estimate of average annual recharge available for this portion of the Niobrara aquifer. However, Mathiowetz (2016) made a potentiometric surface based on observation well and water well completion report data from May 2016 to estimate natural discharge from the edge of the aquifer that flows into the Lower James Missouri aquifer in his evaluation for Water Permit Application No. 8216-3. The Mathiowetz (2016) analysis estimates a natural discharge rate of at least 9,837 ac-ft/year.

Discharge

Discharge from the Freeman portion of the Niobrara aquifer is likely by outflow to adjacent aquifers when the hydraulic head of the Niobrara aquifer is higher than the hydraulic head of the adjacent aquifers and from domestic and appropriative well withdrawals. There are few domestic wells completed into this portion of the Niobrara aquifer (SD Water Rights, 2020a). Given the prevalence of rural water systems and small number of domestic wells in the area, domestic well withdrawals are negligible for this hydrologic budget. There are 26 active water rights/permits in this portion of the Niobrara aquifer including Water Permit No. 8067-3, which must be cancelled before this application may be approved. (SD Water Rights, 2020b) Of the water rights/permits currently active, 20 are for irrigation, 3 for municipal use, 2 for commercial use, and 1 for institutional use (SD Water Rights, 2020b).

Report on Water Permit Application No. 8416-3

Table 1 shows the irrigation pumping reported in the Freeman portion of the Niobrara aquifer. The average annual withdrawal over the entire period of record is 137 ac-ft/yr (SD Water Rights, 2019a). However, there was a drought in 2012, and the number of irrigation water rights/permits increased from 3 in 2011 to 17 in 2013 (SD Water Rights, 2020b). There are currently 20 water rights/permits that may withdraw from the Freeman portion of the Niobrara aquifer (SD Water Rights, 2020b). The average reported irrigation withdrawal from 2013 through 2018 is 643 ac-ft/yr (SD Water Rights, 2019a).

Table 1: Irrigation pumping reported over the period of record from the Freeman portion of the Niobrara aquifer (SD Water Rights, 2019a)

Year	No. Permits	Total Pumping
1979	1	0
1980	2	0
1981	2	0
1982	2	65
1983	2	36
1984	2	42
1985	2	50
1986	2	50
1987	2	120
1988	2	73
1989	2	137
1990	2	111
1991	2	126
1992	2	7
1993	3	0
1994	2	33
1995	2	29
1996	4	7
1997	4	9
1998	4	0
1999	4	0
2000	4	0
2001	4	0
2002	4	25
2003	3	8
2004	3	0
2005	3	0
2006	4	85
2007	3	23
2008	3	50
2009	3	28
2010	3	0
2011	3	141
2012	11	382
2013	17	969
2014	18	929
2015	19	725
2016	20	518
2017	20	617
2018	20	98
Avg. 1979-2018	5	137
Avg. 2013-2018	19	643

Report on Water Permit Application No. 8416-3

Irrigation Permit Nos. 7512-3, 7513-3, 7514-3, 7654-3, and 7814-3 have reported no withdrawals since they were approved in 2012 or 2013 (SD Water Rights, 2019a). None of them have submitted a Notice of Completion of Works and may be subject to cancellation. Since those permits have not reported any withdrawals, are near the end of the period by which they must have put water to beneficial use, and may be subject to cancellation, the average annual irrigation withdrawal rate from 2013 onward reflects the average irrigation withdrawals from the Freeman portion of the Niobrara aquifer.

Table 2 shows the non-irrigation water rights/permits that withdraw from the Freeman portion of the Niobrara aquifer. The City of Freeman and Town of Irene purchase their water from another water distribution system and hold their water rights on standby for emergency purposes, so their withdrawal rate is negligible (SD DENR Drinking Water Program). The annual withdrawal for Water Right No. 6524-3 and Water Permit No. 6706-3 is estimated by assuming they pump at their maximum permitted diversion rate 60% of the time. Water Permit No. 8216-3 reports its annual withdrawal from the aquifer, but it has reported increasing use each year since it was approved. Its annual volume limit is used for the hydrologic budget (SD Water Rights, 2019b). The total estimated annual withdrawal by non-irrigation permits is 533 ac-ft/yr.

Table 2: Non-irrigation water rights/permits in Freeman portion of the Niobrara aquifer (SD Water Rights, 2020b)

Permit No.	Name/Business	Priority Date	Status	Use Type	Est. Method	Pump Rate (cfs)	Est. Use (ac-ft/yr)
810-3	City of Freeman	01/01/1950	License	MUN	Standby	1.26	0
1229-3	Town of Irene	01/01/1915	License	MUN	Standby	0.56	0
5239-3	City of Freeman	10/17/1988	License	MUN	Standby	0.33	0
6524-3	Freeman Jr College & Academy	07/19/2004	License	INS	60% pump rate	0.07	30
6706-3	Pheasant Run Farm	02/21/2006	Permit	COM	60% pump rate	0.10	43
8216-3	B & K Dairy Farms LLC	02/01/2016	Permit	COM	volume limit	0.67	460
Total						2.99	533
COM – Commercial, INS – Institutional, MUN – Municipal							

Balance of hydrologic budget

A recharge rate to the Freeman portion of the Niobrara aquifer is not available, but the natural discharge rate from the aquifer in May of 2016 is estimated to be at least 9,837 ac-ft/yr (Mathiowetz, 2016). The estimated natural discharge rate is a portion of the recharge to that aquifer remnant. Any natural discharge is available for appropriation. The average annual irrigation withdrawal rate is 643 ac-ft/yr. The estimated annual non-irrigation withdrawal rate is 533 ac-ft/yr. This application seeks to irrigate 116 acres, so it may withdraw up to 232 ac-ft/yr if it is approved. Therefore, based on the hydrologic budget, unappropriated natural discharge is available for this application.

Observation wells

Administrative Rule of South Dakota 74:02:05:07 requires the Water Management Board to rely on observation well measurements in addition to other information to determine that the quantity of water withdrawn annually from the aquifer does not exceed recharge to the aquifer. The DENR Water Rights Program maintains 12 observation wells completed into the Freeman portion of the Niobrara aquifer. The nearest observation well to the wells for this application is YA-80GA, located approximately 5 miles west of the wells for this application. Figure 1 shows

the water levels of all the DENR Observation Wells completed into the Freeman portion of the Niobrara aquifer and Figure 2 shows a map of those wells. In general, those observation well water levels respond to climate patterns in the area (NCEI, 2020). Some show seasonal declines due to irrigation pumping. Many of the observation wells show an increasing trend over the period of record. Therefore, based on observation well analysis, there is reasonable probability unappropriated water is available for this application.

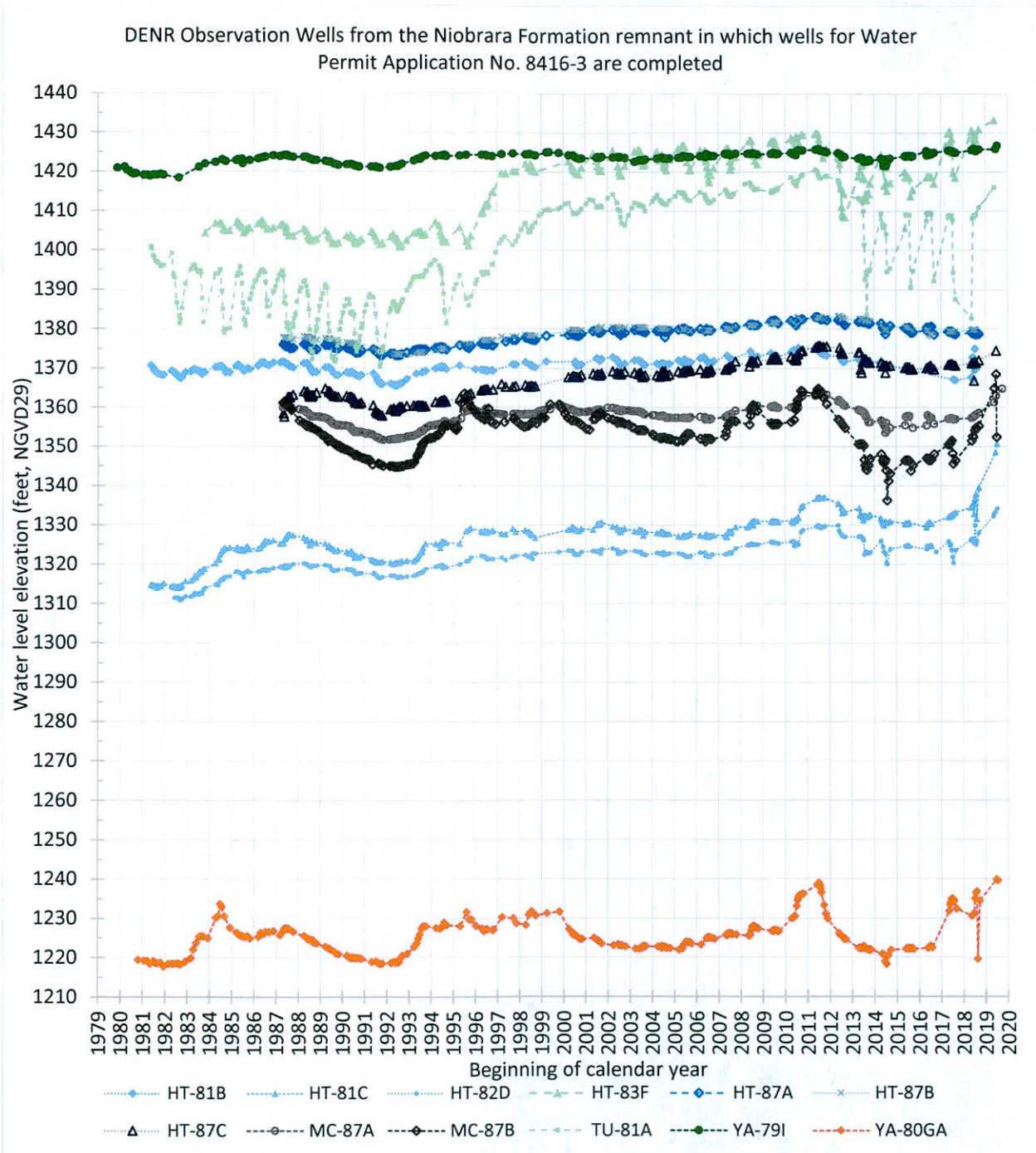


Figure 1: Observation well water levels in the Freeman portion of the Niobrara aquifer (SD Water Rights, 2020c)

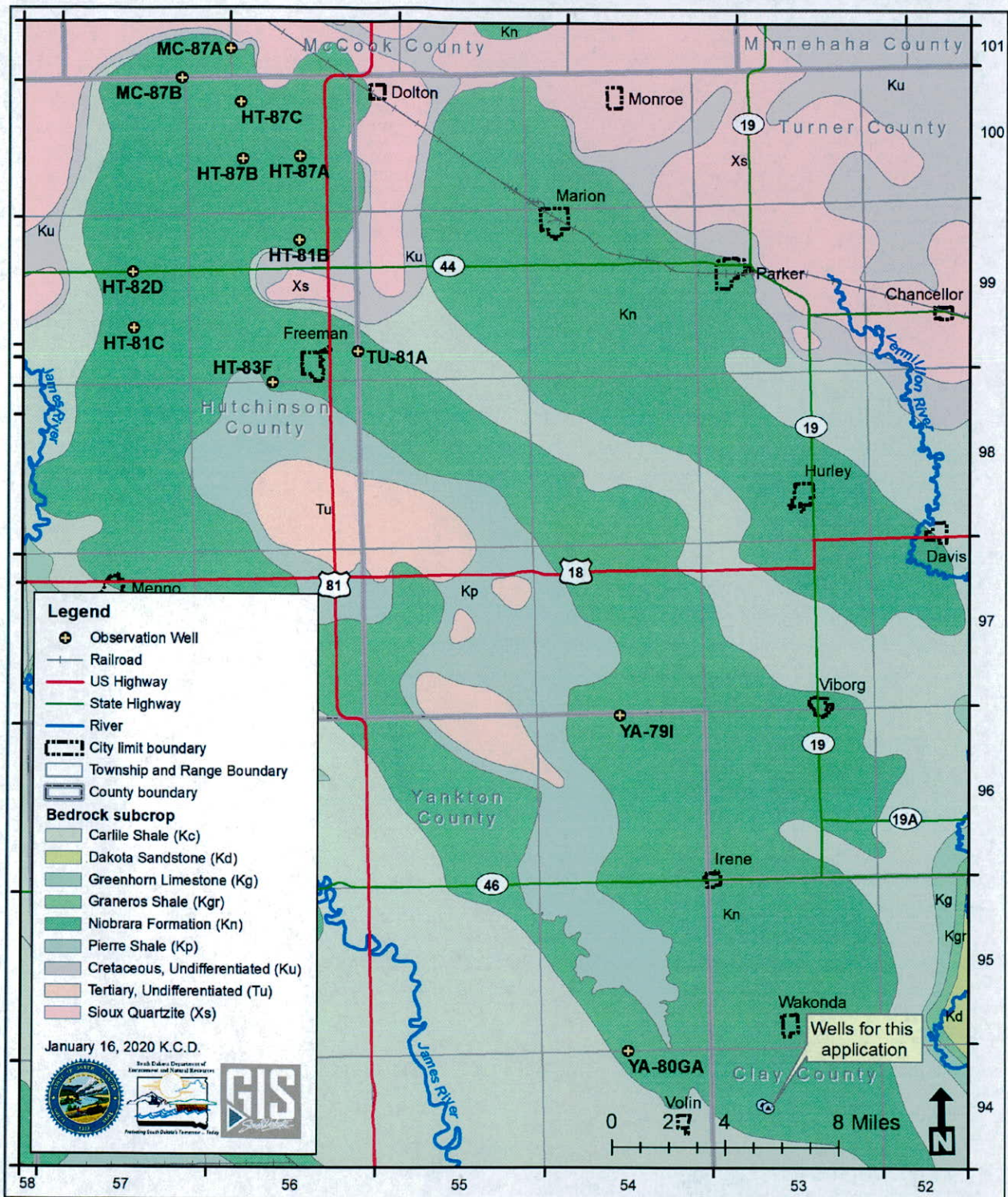


Figure 2: DENR Observation Wells completed into and bedrock subcrops showing the outline of the Freeman portion of the Niobrara aquifer (SD Water Rights, 2020c; Tomhave, et al., 2004)

Existing users

Figure 3 shows all Niobrara aquifer water rights/permits near the wells for this application, including Water Permit 8067-3, which is subject to cancellation. Table 3 shows the details for the water rights/permits within the extents of Figure 3. The nearest water right/permit withdrawing from the Freeman portion of the Niobrara aquifer is Water Permit No. 8162-3, held by Don Schellpfeffer, located approximately 0.5 miles northeast of the wells for this application. The nearest domestic well on file with the DENR that is likely to be completed into the Freeman portion of the Niobrara aquifer is approximately 3.3 miles to the northwest of the wells for this application. Due to the proximity of the wells for this application to Water Permit No. 8162-3, some drawdown may occur. The exact drawdown behavior of the well cannot be known without an aquifer pumping test. However, to put the waters of the state to maximum beneficial use, SDCL 46-6-6.1 does not protect hydraulic head and well owners may be required to lower their pumps. To protect well owners, ARSD 74:02:04:20(6) defines an adequate well as:

“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 to the bottom of the aquifer as is practical if the aquifer thickness is less than 20 feet.”

In her analysis for Water Permit No. 8162-3, Kilts (2015) found it was unlikely that Water Permit No. 8162-3 would unlawfully impact Water Permit No. 8067-3 provided Mr. Schellpfeffer complies with a qualification on his permit to 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 maximum pump rate of Water Permit No. 8162-3 could not be guaranteed due to its proximity to Water Permit No. 8067-3 (Kilts, 2015). Since Water Permit Application No. 8416-3 will have a junior priority date to Water Permit No. 8162-3, it should have a similar qualification to Water Permit 8162-3.

There are no complaints regarding well interference in Clay County on file with the DENR Water Rights Program (SD Water Rights, 2020d). Given the lack of history of well interference in Clay County, there is reasonable probability the applicant can develop Water Permit Application No. 8416-3, as long as there is the following qualification on its permit:

The wells approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights. Approval of this permit does not guarantee a maximum diversion rate of 1.56 cfs.

Special consideration

Based on the information well completion reports provided, the wells may flow at ground surface. The well owner should take steps to ensure control of any potential flow.

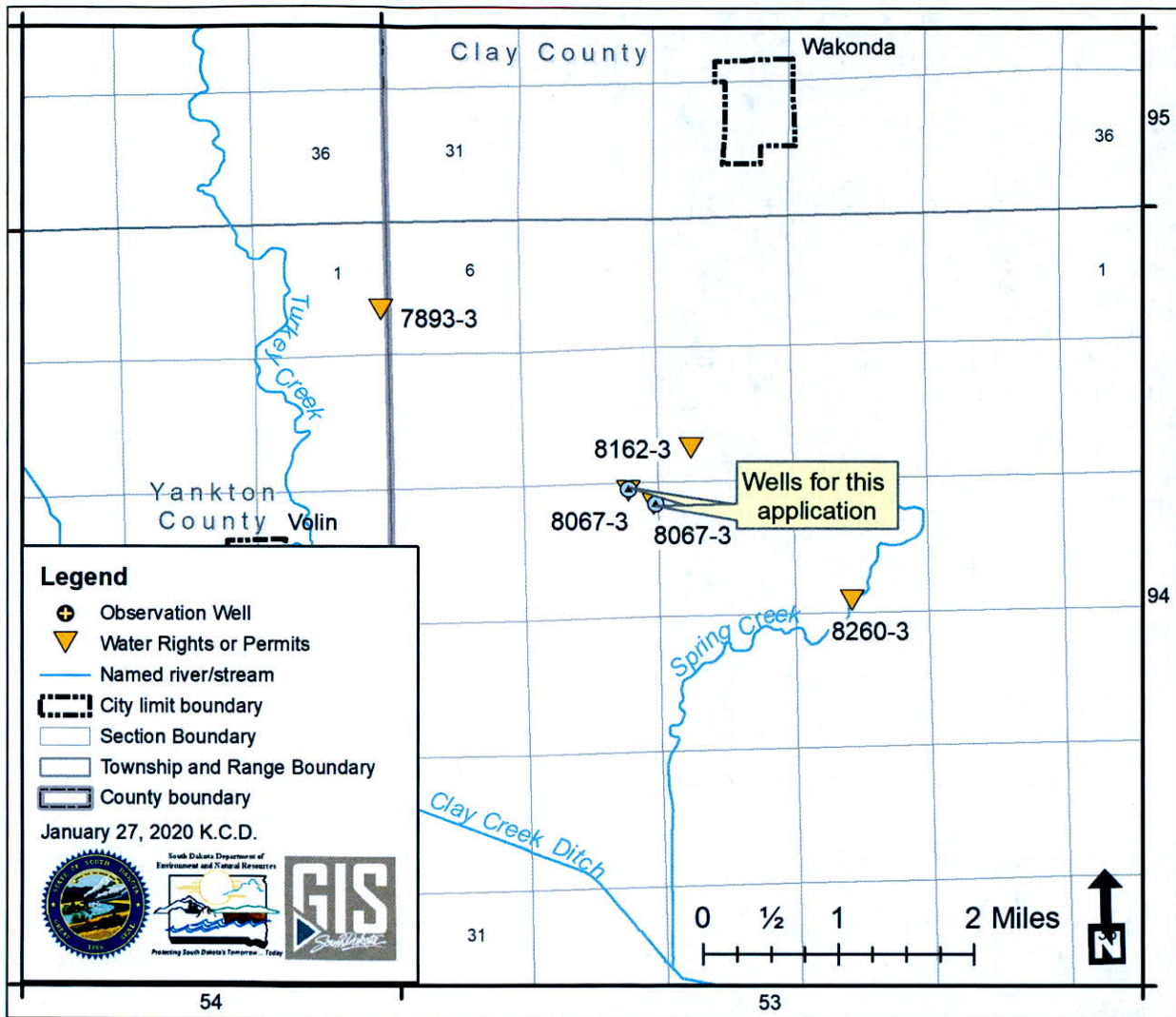


Figure 3: Nearby existing water rights/permits completed into the Niobrara aquifer near this application and Observation Well YA-80GA (SD Water Rights 2020b, 2020c)

Table 3: Niobrara aquifer water rights/permits within the extent of Figure 3 (SD Water Rights, 2020b)

Permit No.	Name/Business	County	Priority Date	Status	Pump Rate (cfs)	Acres Irrigated
7893-3	Wayne or Trina Knutson	Yankton	09/03/2013	License	0.070	1.20
8067-3	Jerome Poeschl	Clay	12/05/2014	Permit	1.560	116.00
8162-3	Don Schellpfeffer	Clay	05/28/2015	Permit	1.780	122.65
8260-3	Cameron Johnsen	Clay	12/27/2016	Permit	1.670	117.35

Conclusions

1. Water Permit Application No. 8416-3 seeks to reinstate Water Permit No. 8067-3.
2. Water Permit No. 8067-3 appropriated 1.56 cfs from the Niobrara aquifer from two wells completed in the NE $\frac{1}{4}$ NE $\frac{1}{4}$ and the SE $\frac{1}{4}$ NE $\frac{1}{4}$ Section 17 to irrigate 116 acres located in the E $\frac{1}{2}$ NE $\frac{1}{4}$, E $\frac{1}{2}$ SE $\frac{1}{4}$ Section 17; all in T94N-R53W.

Report on Water Permit Application No. 8416-3

3. Construction for Water Permit No. 8067-3 was not completed by the time required on the permit and must be cancelled prior to approval of Water Permit Application No. 8416-3.
4. Based on a hydrologic budget and observation well analysis, there is reasonable probability unappropriated water is available for this application.
5. This application, if approved, should carry a qualification protecting prior water rights/permits with adequate wells.
6. A maximum diversion rate for this application cannot be guaranteed, since this application may need to reduce pumping to protect prior water rights/permits.
7. The well completion reports indicate the wells may flow at ground surface. The well owner should take steps to ensure control of any potential flow.

A handwritten signature in black ink, appearing to read 'Kimberly C. Drennon', with a long horizontal flourish extending to the right.

Kimberly C. Drennon
Natural Resources Engineer

References

- Christensen, Cleo M. and Stephens, Jerry C. 1967.** *Geology and hydrology of Clay County, South Dakota Part II: Water Resources*. Vermillion, South Dakota : SD DENR Geological Survey Program, 1967. Bulletin 19.
- Kilts, Whitney. 2015.** *Report to the Chief Engineer on Water Permit Application No. 8162-3*. Joe Foss Bldg., Pierre, South Dakota : SD DENR Water Rights Program, 2015.
- Martin, J. E., et al. 2004.** *Geologic map of South Dakota*. Vermillion, South Dakota : SD DENR Geological Survey Program, 2004. General Map 10.
- Mathiowetz, Adam. 2016.** *Report to the Chief Engineer on Water Permit Application No. 8216-3*. Joe Foss Bldg., Pierre, South Dakota : SD DENR Water Rights Program, 2016.
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- SD DENR Drinking Water Program.** Your Water System Information. *South Dakota Department of Environment and Natural Resources*. [Online] [Cited: January 24, 2020.] <https://denr.sd.gov/des/dw/sysinfo.aspx>.
- SD Water Rights. 2020d.** *County Files*. Joe Foss Bldg., Pierre, South Dakota : SD DENR Water Rights Program, 2020d.
- . **2019a.** *Irrigation Report Summaries*. Joe Foss Bldg., Pierre, South Dakota : SD DENR Water Rights Program, 2019a.
- . **2019b.** *Non-Irrigation Reports*. Joe Foss Bldg., Pierre, South Dakota : SD DENR Water Rights Program, 2019b.
- . **2020c.** *Observation wells*. [Electronic database] Joe Foss Bldg., Pierre, South Dakota : SD DENR Water Rights Program, 2020c.
- . **2020b.** *Water Right/Permit Files*. [Electronic database] Joe Foss Bldg., Pierre, South Dakota : SD DENR Water Rights Program, 2020b.
- . **2020a.** *Well Completion Reports*. [Electronic database] Joe Foss Bldg., Pierre, South Dakota : SD DENR Water Rights Program, 2020a.
- Tomhave, D. W. and Schulz, L. D. 2004.** *Bedrock geologic map showing configuration of the bedrock surface in South Dakota east of the Missouri River*. Vermillion, South Dakota : SD DENR Geological Survey Program, 2004. General Map 9.

Schlaak, Karen

From: Schlaak, Karen
Sent: Friday, February 28, 2020 8:27 AM
To: farms3117@yahoo.com
Subject: Water Permit Application No. 8416-3
Attachments: 8416-3.pdf

Mr. Poeschl,

Attached is the report, recommendation and information regarding the public notice for your Application No. 8416-3. As stated in the letter it is important to contact the 2 newspapers ASAP to authorize publication and arrange for payment.

If you have questions, let me know. This is being mailed today.

Karen Schlaak

SD DENR, Water Rights Program
(605) 773-3352



AFFIDAVIT OF PUBLICATION

PLAIN TALK

RECEIVED

MAR 09 2020

WATER RIGHTS
PROGRAM

WATER RIGHTS PROGRAM
523 E CAPITAL
PIERRE SD 57501

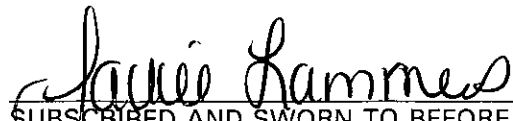
STATE OF SOUTH DAKOTA
COUNTY OF CLAY

JACKIE LAMMERS, BEING FIRST DULY SWORN ON OATH DEPOSES
AND SAYS THAT (S)HE IS THE CLASSIFIED MANAGER OF YANKTON
MEDIA INC, A CORPORATION, THE PRINTER AND THE PUBLISHER OF THE
PLAIN TALK, A LEGAL WEEKLY NEWSPAPER PUBLISHED AND CIRCULATED
IN THE CITY OF VERMILLION, SAID COUNTY AND STATE, AND ONE OF
THE OFFICIAL NEWSPAPERS OF THE SAID COUNTY OF FACTS STATED IN
THIS AFFIDAVIT; THAT THE ANNEXED
NOTICE OF APPLICATION NO.

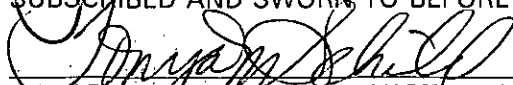
TAKEN FROM THE PAPER, IN WHICH IT WAS LAST PUBLISHED IN THE
NEWSPAPER ON THE 6th DAY OF March, 2020
THAT THE FULL AMOUNT OF THE FEE CHARGED FOR THE PUBLICATION
OF SAID NOTICE TO WIT \$31.58 ENSURES TO THE
BENEFITS OF THE PUBLISHER OF SAID NEWSPAPER AND THAT NO
AGREEMENT AND UNDERSTANDING FOR THE DIVISION 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: 03/06/2020

FILED ON: 03/06/2020



SUBSCRIBED AND SWORN TO BEFORE ME THIS 6th DAY OF March, 2020



NOTARY PUBLIC, SOUTH DAKOTA

MY COMMISSION EXPIRES 08/19/2021

Ad text : NOTICE OF APPLICATION NO. 8416-3 to Reinstate Water Permit No. 8067-3

Notice is given that Jerome Poeschl, 213 Katherine Way, Yankton SD 57078 has filed an application for a water permit to reinstate Permit No. 8067-3. Permit No. 8067-3 appropriates 1.56 cubic feet of water per second from two wells to be completed into the Niobrara Aquifer (100 feet deep) located in the NE 1/4 NE 1/4 and the SE 1/4 NE 1/4 Section 17 to irrigate 116 acres located in the E 1/2 NE 1/4, E 1/2 SE 1/4 Section 17; all in T94N-R53W. The permit was approved February 23, 2015, and the project was to be completed by February 23, 2020, with water being put to beneficial use by February 23, 2024. Application No. 8416-3 proposes to reinstate cancelled Water Permit No. 8067-3 since the project has not been completed. This project is located approximately 3 miles east of Volin SD.

Application No. 8416-3 to reinstate cancelled Permit No. 8067-3 is made pursuant to SDCL 46-2A-8.1 which allows for reinstatement with a new priority date, if unappropriated water is available when construction, necessary to put water to beneficial use, is not completed within the five years of approval of the permit.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends REINSTATEMENT of Application No. 8416-3 with qualifications because 1) unappropriated water is available, 2) it is a beneficial use of water, and 3) it is in the public interest. The Chief Engineer's recommendation with qualifications, the application, and staff report are available at <http://denr.sd.gov/public> or contact Eric Gronlund for this information, or other information, at the Water Rights Program address provided below.

Any person interested in opposing or supporting this application or recommendation must file a written petition with BOTH the applicant and Chief Engineer. The applicant must file a petition if contesting the Chief Engineer's recommendation. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352) and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by March 16, 2020.

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.

Published once at the total approximate cost of \$31.58.

Published March 6, 2020.

AFFIDAVIT OF PUBLICATION

RECEIVED

MAR 09 2020

WATER RIGHTS
PROGRAM

YANKTON DAILY PRESS AND DAKOTAN

JEROME POESCHL
213 KATHERINE WY
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
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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
3 + 6 NOTICE OF APPLICATION

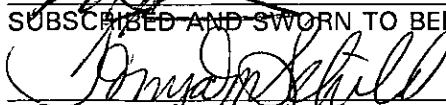
TAKEN FROM THE PAPER, IN WHICH IT WAS LAST PUBLISHED IN THE
NEWSPAPER ON THE 6th DAY OF March, 2020
THAT THE FULL AMOUNT OF THE FEE CHARGED FOR THE PUBLICATION
OF SAID NOTICE TO WIT \$32.01 ENSURES TO THE
BENEFITS OF THE PUBLISHER OF SAID NEWSPAPER AND THAT NO
AGREEMENT AND UNDERSTANDING FOR THE DIVISION 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: 03/06/2020

FILED ON: 03/06/2020



SUBSCRIBED AND SWORN TO BEFORE ME THIS 6th DAY OF March, 2020



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

Ad text : 3+6

NOTICE OF APPLICATION NO. 8416-3 to Reinstate Water
Permit No. 8067-3

Notice is given that Jerome Poeschl, 213 Katherine Way, Yankton SD 57078 has filed an application for a water permit to reinstate Permit No. 8067-3. Permit No. 8067-3 appropriates 1.56 cubic feet of water per second from two wells to be completed into the Niobrara Aquifer (100 feet deep) located in the NE 1/4 NE 1/4 and the SE 1/4 NE 1/4 Section 17 to irrigate 116 acres located in the E 1/2 NE 1/4, E 1/2 SE 1/4 Section 17; all in T94N-R53W. The permit was approved February 23, 2015, and the project was to be completed by February 23, 2020, with water being put to beneficial use by February 23, 2024. Application No. 8416-3 proposes to reinstate cancelled Water Permit No. 8067-3 since the project has not been completed. This project is located approximately 3 miles east of Volin SD.

Application No. 8416-3 to reinstate cancelled Permit No. 8067-3 is made pursuant to SDCL 46-2A-8.1 which allows for reinstatement with a new priority date, if unappropriated water is available when construction, necessary to put water to beneficial use, is not completed with the five years of approval of the permit.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends REINSTATEMENT of Application No. 8416-3 with qualifications because 1) unappropriated water is available, 2) it is a beneficial use of water, and 3) 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 16, 2020.

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.

Published once at the total approximate cost of \$32.01

Schlaak, Karen

From: Schlaak, Karen
Sent: Friday, February 28, 2020 8:17 AM
To: Jackie Lammers (jackie.lammers@yankton.net)
Subject: 8416-3, Jerome Poeschl
Attachments: 8416-3public.short.docx; FORM8.FRM.doc

Attached is a notice to be published on March 6, 2020.

Jerome Poeschl, 213 Katherine Way, Yankton SD 57078 (605 665-3882 or 605 660-0233) 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 to the Water Rights Program, 523 E Capitol, Pierre SD 57501.

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

Karen Schlaak

SD DENR, Water Rights Program
(605) 773-3352



Schlaak, Karen

From: Schlaak, Karen
Sent: Friday, February 28, 2020 8:16 AM
To: 'classifieds@plaintalk.net'
Subject: 8416-3, Jerome Poeschl
Attachments: 8416-3public.short.docx; FORM8.FRM.doc

Attached is a notice to be published on March 6, 2020.

Jerome Poeschl, 213 Katherine Way, Yankton SD 57078 (605 665-3882 or 605 660-0233) has been notified to contact you to authorize publication and arrange for payment.

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

Karen Schlaak
SD DENR, Water Rights Program
(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 NEWSPAPERS RIGHT AWAY.**

February 28, 2020

Jerome Poeschl
213 Katherine Way
Yankton SD 57078

Dear Mr. Poeschl:

Water Permit Application No. 8416-3 to reinstate Water Permit No. 8067-3 has been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice has been sent to the Plain Talk printed at Vermillion SD (Ph # 605 624-2695) and the Press & Dakota printed at Yankton SD (Ph # 605 665-7811). You will need to contact the newspapers 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 newspapers to authorize publication of your Notice and to arrange for payment. Early contact with the papers 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 /1/15
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. 8416-3 to Reinstate Water Permit No. 8067-3

Notice is given that Jerome Poeschl, 213 Katherine Way, Yankton SD 57078 has filed an application for a water permit to reinstate Permit No. 8067-3. Permit No. 8067-3 appropriates 1.56 cubic feet of water per second from two wells to be completed into the Niobrara Aquifer (100 feet deep) located in the NE 1/4 NE 1/4 and the SE 1/4 NE 1/4 Section 17 to irrigate 116 acres located in the E 1/2 NE 1/4, E 1/2 SE 1/4 Section 17; all in T94N-R53W. The permit was approved February 23, 2015, and the project was to be completed by February 23, 2020, with water being put to beneficial use by February 23, 2024. Application No. 8416-3 proposes to reinstate cancelled Water Permit No. 8067-3 since the project has not been completed. This project is located approximately 3 miles east of Volin SD.

Application No. 8416-3 to reinstate cancelled Permit No. 8067-3 is made pursuant to SDCL 46-2A-8.1 which allows for reinstatement with a new priority date, if unappropriated water is available when construction, necessary to put water to beneficial use, is not completed with the five years of approval of the permit.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends REINSTATEMENT of Application No. 8416-3 with qualifications because 1) unappropriated water is available, 2) it is a beneficial use of water, and 3) it is in the public interest. The Chief Engineer's recommendation with qualifications, the application, and staff report are available at <http://denr.sd.gov/public> or contact Eric Gronlund for this information, or other information, at the Water Rights Program address provided below.

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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
<http://denr.sd.gov>

MAY 27 2020

Jerome Poeschl
213 Katherine Way
Yankton SD 57078

Dear Mr. Poeschl:

Enclosed is Water Permit No. 8416-3 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,

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

enclosures

8416-3

RECEIVED

MAY 31 2024

OFFICE OF
WATERNOTICE OF COMPLETION OF WORKS AND
APPLICATION OF WATER TO BENEFICIAL USEDate 8-1-23

MAIL TO: PMB 2020
DANR - Water Rights Program
523 E. Capitol Ave
Pierre, SD 57501-3182

Phone: (605) 773-3352

FROM: Jerome Poeschl
(name)

213 Katherine Way
(address)

Yankton
(city)

SD
(state)

57078
(zip)

605-660-0233
(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. 8416-3 states that the water use system is to be constructed by

March 16, 2025, and water is to be put to beneficial use by March 16, 2029.
(date) (date)

The water use system was completed on May 2023.
(date)

Applying the water to beneficial use was completed on May 2023.
(date)

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

J. Poeschl
(signature)



Report of Examination of Works and/or Application of Water to Beneficial Use For Permit No. **8416-3**

I have this day, **August 1, 2023**, made a thorough examination of the water use systems owned by **Jerome Poeschl, 213 Katherine Way, Yankton, SD 57078**, holder of Permit No. **8416-3**, bearing the priority date of **December 2, 2019**. **This permit is a reinstatement of cancelled Permit No. 8067-3** which authorized the diversion of **1.56** cu. ft. per second of the waters of **groundwater (Niobrara Aquifer)** authorizing the irrigation of **116 acres** located in **Clay** County.

Inspection contacts: **Jerome Poeschl**

A. Works used to divert the water:

Well Information (West Well)

- 1) Well Drilling Firm: **Heine Electric & Irrigation, Inc.**
- 2) No. of Wells: **1**
- 3) Depth(s): **100** feet
- 4) Well log is available: **Yes**

Casing:

- 1) Diameter: **16** inches
- 2) Length: **40** feet
- 3) Type: **Plastic**

Screen:

- 1) Diameter: **16** inches
- 2) Length: **60** feet
- 3) Type: **PVC**
- 4) Static water level: **2** feet

Pump:

- 1) Make: **Shakti**
- 2) Model: **QF75-5B**
- 3) Capacity: **250** GPM

Motor:

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

Well Information (East Well)

- 1) Well Drilling Firm: **Heine Electric & Irrigation, Inc.**
- 2) No. of Wells: **1**
- 3) Depth(s): **115** feet
- 4) Well log is available: **Yes**

Casing:

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

Screen:

- 1) Diameter: **16** inches
- 2) Length: **78** feet
- 3) Type: **PVC**
- 4) Static water level: **7** feet

Pump:

- 1) Make: **Shakti**
- 2) Model: **QF75-5B**
- 3) Capacity: **250** GPM

Motor:

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

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

- | | | |
|---------------------|-----------------------|---|
| 1) Type: PVC | Size: 6 inches | Length: 1,570 feet (West Well to North Pivot) |
| 2) Type: PVC | Size: 6 inches | Length: 2,290 feet (North Pivot to South Pivot) |

C. Works used to apply water to beneficial use:**North Center Pivot:**

- 1) Make: Zimmatic
- 2) Overall length: 1,303 feet
- 3) Number of towers: 8
- 4) End gun: Yes
- 5) Capacity: 460 GPM

South Center Pivot:

- 1) Make: Zimmatic
- 2) Overall length: 1,121 feet
- 3) Number of towers: 6
- 4) End gun: Yes
- 5) Capacity: 453 GPM

Chemigation Equipment:

- 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: Electrical
- 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: Drain Hose

E. Condition and Location:

- 1) The system is in good condition with the point(s) of diversion located as follows:
The west well is 1,190 feet west and 220 feet south of the northeast corner of Section 17-T94N-R53W (Latitude 42.96711, Longitude -97.12571– NE1/4 of the NE1/4).
The east well is 90 feet west and 1,321 feet south of the northeast corner of Section 17-T94N-R53W (Latitude 42.96420, Longitude -97.12164– SE1/4 of the NE1/4).
- 2) The works are capable of diverting and conveying to the places of use 1.11 cu. ft. per second of water from the well which is to be used for irrigation purposes. Water has been put to beneficial use to the maximum extent as follows:

Section 17-T94N-R53W**NE1/4NE1/4 33 acres****SE1/4NE1/4 33 acres****NE1/4SE1/4 33 acres****SE1/4SE1/4 17 acres**

comprising a total of 116 acres of land and the license should be issued for 1.11 cfs.

- 3) All structures, wells and lands on map: Yes

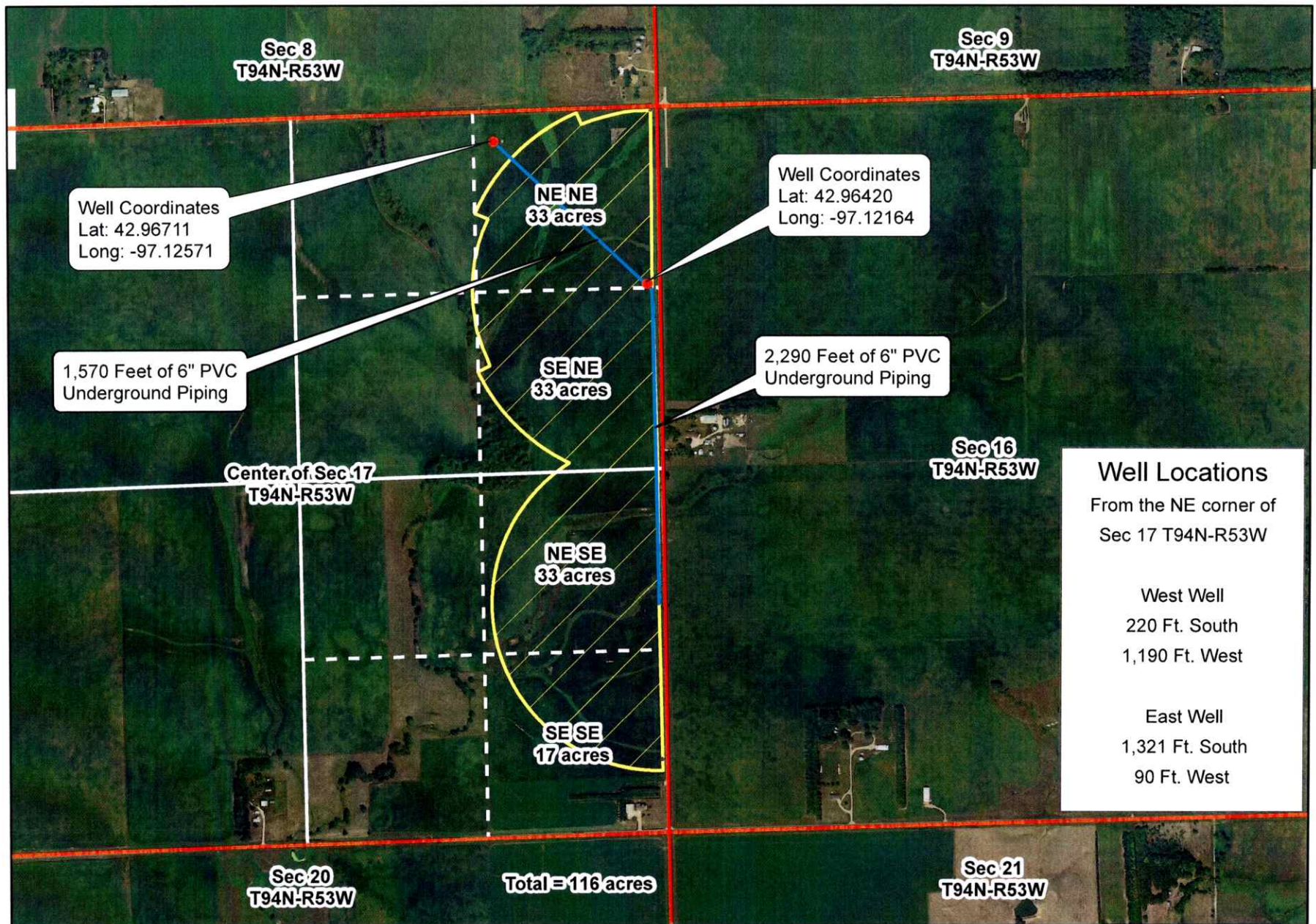
F. Comments or other permit(s) associated with the project: I visited with Mr. Poeschl about adding a drain hose to the chemigation system and he stated that he would do that. The pump and motor information was obtained from Sam Heine Well Company, LLC. They installed the pumps and motors and Heine Electric and Irrigation, Inc. installed the wells.



Keith DeJong, PE Ret.
Water Rights Inspector
DANR, Water Rights Program

Date report completed: May 31, 2024

Water Permit No. 8416-3

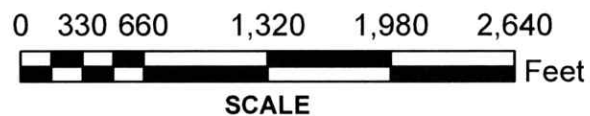


Well Locations

From the NE corner of
Sec 17 T94N-R53W

West Well
220 Ft. South
1,190 Ft. West

East Well
1,321 Ft. South
90 Ft. West



Keith DeJong
Keith DeJong, PE Ret.
Staff Engineer
August 2, 2023



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

JUN 06 2024

8416-3

Jerome Poeschl
213 Katherine Way
Yankton SD 57078

Dear Mr. Poeschl:

Enclosed is Water License No. 8416-3. 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

NOTE: 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

**STATE OF SOUTH DAKOTA
WATER LICENSE NO. 8416-3**

(1) Water Permit No. 8067-3, held by Jermoe Poeschl, authorized the irrigation of 116 acres located within the E ½ E ½ Section 17, T94N-R53W, Clay County, South Dakota. Construction was not completed by the deadline of February 23, 2020. Permit No. 8067-3 was cancelled by the Water Management Board for non-construction on February 26, 2020.

Jerome Poeschl, 213 Katherine Way, Yankton SD, made Application No. 8416-3, December 2, 2019, for a water permit to reinstate cancelled Permit No. 8067-3, authorizing the diversion of 1.56 cubic feet of water per second from groundwater, two wells (Niobrara Aquifer), Clay County, South Dakota for irrigation purposes. Permit No. 8416-3, with a priority date of December 2, 2019, was approved March 16, 2020, and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before March 16, 2025, and for the application to beneficial use of water on or before March 16, 2029.

The permit holder submitted a Notice of Completion of Works and Application of Water to Beneficial Use form dated August 1, 2023. The Notice stated the diversion system was completed and the water was placed to beneficial use in May 2023.

(2) It is certified that the permit holder has complied with the provisions of South Dakota State Law relating to completion of the construction of the water supply system and is entitled to divert 1.11 cubic feet of water per second for beneficial use. The locations of the diversion points are:

- West Well: 1,190 ft W & 220 ft S of the NE corner of Section 17, T94N-R53W (NE ¼ NE ¼)
(Latitude 42.96711 & Longitude -97.12571)
- East Well: 90 ft W & 1,321 ft S of the NE corner Section 17, T94N-R53W (SE ¼ NE ¼)
(Latitude 42.96420 & Longitude -97.12164)

(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: May 1 – August 31.

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

Section 17, T94N-R53W			
NE ¼ NE ¼	33 acres	NE ¼ SE ¼	33 acres
SE ¼ NE ¼	33 acres	SE ¼ SE ¼	17 acres
TOTAL: 116 acres			

(5) Pursuant to South Dakota Water Law 46-5-30.1 Jerome Poeschl, the holder and/or owner of Water Right No. 8416-3 is issued a license to appropriate water, the right to use 1.11 cubic feet of water per second from groundwater, two wells (Niobrara Aquifer), with a priority date of March 16, 2020, from the location specified in (2) of this license for irrigation purposes.

This license is subject to South Dakota Water Law, any limitations or conditions listed in Water Right No. 8416-3 and subject to the following qualifications:

continued

Qualification

1. The wells approved under Permit Right No. 8416-3 will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under Permit No. 8416-3 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. Approval of this permit does not guarantee a maximum diversion rate of 1.56 cfs. (*Diversion under Water Right No. 8416-3 is limited to 1.11 cfs.*)
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 06 2024

date





**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

June 25, 2024

8416-3

Jerome Poeschl
1306 Green St
Yankton SD 57078

Dear Mr. Poeschl:

Enclosed is Water Right No. 8416-3, dated June 6, 2024.

The notice was originally mailed to 213 Katherine Way, Yankton SD 57078. The post office notified our office that your address has changed, and your records have been updated accordingly.

If this change of address is in-correct, please contact our office immediately to update your contact information.

Sincerely,

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

enclosures

553 NFE 1 524C0006/20/24
RETURN TO SENDER
POESCHL
1306 GREEN ST
YANKTON SD 57078-2740
RETURN TO SENDER
|||



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

October 28, 2024

7485-3
8416-3

Jerome Poeschl
1306 Green St
Yankton SD 57078

Dear Mr. Poeschl:

Enclosed are "Notices" dated October 23, 2024, concerning the 2024 Irrigation Questionnaire.

The notices were originally mailed to 213 Katherine Way, Yankton SD 57078. The post office notified our office that your address has changed, and your records have been updated accordingly.

This is a time sensitive matter. Please complete and return the enclosed questionnaire or submit your report online at <https://danr.sd.gov/iq/> using this password *TBUKLLK*.

If this change of address is in-correct, please contact our office immediately to update your contact information.

Sincerely,

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

enclosures

RETURN TO SENDER
POESCHL
1306 GREEN ST
YANKTON SD 57078-2740

RETURN TO SENDER

