

**WATER PERMIT NO. 8407-3**

Name of Applicant: Gayville-Volin School District 63-1

Address: PO Box 158, Gayville SD 57031 Phone: 605 267-4476

Amount of Water Claimed: 25 gpm (add'l) Total Acres: 0.5 acres (add'l)

Source of Water Supply: groundwater (1 well)

Water to be used for: irrigation County: Yankton

Type of Waste Disposal System:

Location: northwest corner of Gayville

PRIORITY Date Received: 8-19-19 Application/License Fee: \$100

Corrected Application Received: Period of Annual Use: March 1 – October 31

Remarks: Increase div rate authority, add well and add 0.0 acres to Permit No. 8175-3

Diversion Point: NE 1/4 NW 1/4 Sec 12-T93N-  
R54W

Land to be Irrigated: NE 1/4 NW 1/4, NW 1/4 NE  
1/4 Sec 12-T93N-R54W

Depth of Well: 104 feet deep

Well Driller:

Remarks:

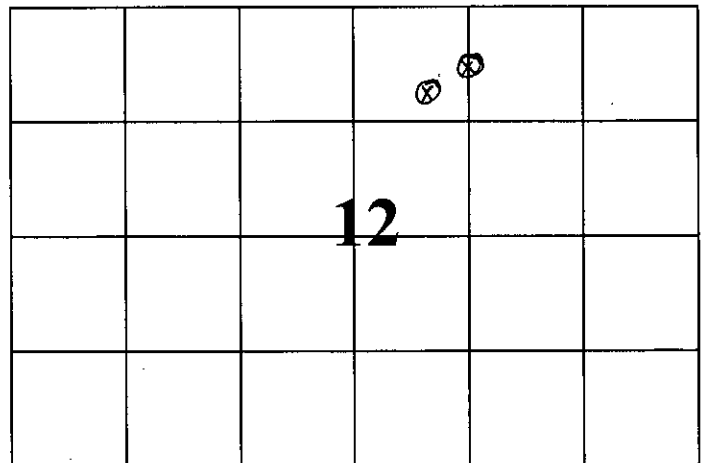
Type of Map: aerial

Prepared by: Keith DeJong

Reviewed and the Number Assigned on: 8-19-19

By: Karen Schlaak

Notice of Hearing - date to intervene: \_\_\_\_\_



|                                                                                                         |                                      |                                                      |
|---------------------------------------------------------------------------------------------------------|--------------------------------------|------------------------------------------------------|
| Mail to:<br><br>DENR - Water Rights<br>523 E Capitol Ave<br>Pierre, SD 57501-3182<br>ph. (605) 773-3352 | No. <u>8407-3</u>                    | (office use only)<br>Hydrologic Unit <u>10170102</u> |
|                                                                                                         | Basin <u>Vermillion River</u>        |                                                      |
|                                                                                                         | Newspaper <u>Press &amp; Dakotan</u> |                                                      |
|                                                                                                         |                                      |                                                      |

PAID

AUG 19 2019

Ck# 011394

RECEIVED

AUG 19 2019

WATER RIGHTS  
PROGRAM

## Application For Permit To Appropriate Water For Irrigation

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

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

increase diversion rate authority, add a well and add 0.5 acres to what is authorized by Permit No. 8175-31. Name to Appear on Irrigation Permit Gayville-Volin school District 63-1

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

Mailing Address PO Box 158 Gayville SD 57031  
(Address) (City) (State) (Zip Code)Phone 605 267 4476 Mobile \_\_\_\_\_ Email Alice.Hight@K12.SD.US2. Amount of water claimed \_\_\_\_\_ \*CFS or 25 add \*\*GPM \_\_\_\_\_ \*\*\*AF Total Acreage 0.5 add  
(\*Cubic Feet per Second) (\*\*Gallons per Minute) (\*\*\*)Acre Feet - storage capacity of dam/dugout or annual use if applicable3. Source of water supply 2005 well and 2014 well (authorized by Permit no. 8175-3)4. Location of point of diversion NE 1/4 NW 1/4 Section 12-T93N-R54W

(example - 3 wells in SW 1/4 NE 1/4 section 12-T104N-R53W)

County Yankton5. County or counties where water will be used Yankton6. Annual period during which water is to be used March 1 - October 317. 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 |
|------------------------------------------------|-------|------------------------------------|-------|
| acres authorized by Permit No. 8175-3 and this |       | NE 1/4 NW 1/4 Section 12-T93N-R54W | 4.1   |
| application                                    |       | NW 1/4 NE 1/4 Section 12-T93N-R54W | 0.3   |
|                                                |       | SE 1/4 NW 1/4 Section 12-T93N-R54W | 0.1   |
|                                                |       |                                    |       |

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

Application seeks to obtain water permit to reflect the system completed under No. 8175-3

I, Alice Hight Alice Hight Business Manager, the applicant, certify under  
Name of Person Title (if applicable)

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

**SOUTH DAKOTA**  
**WATER PERMIT NO. 8407-3**

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Date of first receipt of application August 19, 2019.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 8407-3 to Gayville-Volin School District 63-1, PO Box 158, Gayville SD 57031 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. 8407-3 authorizes an additional 0.056 cubic feet of water per second (cfs), irrigates an additional 0.5 acres and adds an additional well to what is currently authorized by Water Permit No. 8175-3. Water Permit No. 8175-3 appropriates 0.058 cfs from one well completed into the Missouri:Elk Point Aquifer (115 feet deep) located in the NE 1/4 NW 1/4 Section 12 for irrigation of 4 acres located in the NE 1/4 NW 1/4, NW 1/4 NE 1/4 Section 12; all in T93N-R54W. An investigation of the permit found the system capable of diverting an additional 0.056 cfs from the additional well and irrigation of an additional 0.5 acres located in the area described above and the SE 1/4 NW 1/4 Section 12-T93N-R54W. The additional well is completed into the Missouri:Elk Point Aquifer (104 feet deep) located in the NE 1/4 NW 1/4 Section 12-T93N-R54W. This permit and Water Permit No. 8175-3 will authorize a total diversion rate of 0.114 cfs (51 gallons per minute) from two existing wells for irrigation of 4.5 acres of the school's athletic complex located in Gayville 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: March 1 – October 31.
3. The date from which applicant may claim right is August 19, 2019 (0.056 cfs and 0.5 acres).
4. The date of approval of Permit No. 8407-3 is October 21, 2019.
5. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

**QUALIFICATIONS**

1. The wells approved under Permit Nos. 8175-3 and 8407-3 will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

**WATER MANAGEMENT BOARD**

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

NOV 07 2019  
date



# STATE OF SOUTH DAKOTA

## WATER LICENSE NO. 8407-3

(1) Gayville-Volin School District 63-1, PO Box 158, Gayville SD 57031 made Application No. 8407-3, August 19, 2019 for a water permit to divert an additional 0.056 cubic feet of water per second (cfs), irrigate 0.5 additional acres and an additional well from the Missouri:Elk Point Aquifer, Yankton County, South Dakota to what is currently authorized under Water Permit No. 8175-3. Permit No. 8407-3, with a priority date of August 19, 2019 was approved October 21, 2019 and issued to the applicant for diversion of water with construction of the described water supply system and the application to beneficial use of water completed.

Water Permit No. 8175-3, with a priority date of July 17, 2015 authorized 0.058 cfs from one well for irrigation of 4 acres. The applicable portions of Permit No. 8175-3 have been incorporated into this water license.

(2) The water supply system has been completed and water applied to beneficial use in accordance with South Dakota State Law. Pursuant to South Dakota Codified Law 46-5-30.1, the holder and/or owner of Incorporated Water Right No. 8407-3 is issued a license, bearing priority dates of July 17, 2015 (4 acres and 0.058 cfs) and August 19, 2019 (0.5 acres and 0.056 cfs) to appropriate 0.114 cfs from two wells (Missouri: Elk Point Aquifer) to irrigate 4.5 acres.

The diversion points are located: North well – 2,670 feet east and 650 feet south of the NW corner of Section 12-T93N-R54W (NE 1/4 NW 1/4) Latitude 42.893582 Longitude -97.170740; South Well – 2,330 feet east and 1,050 feet south of the NW corner Section 12-T93N-R54W (NE 1/4 NW 1/4) Latitude 42.892630 Longitude -97.172009

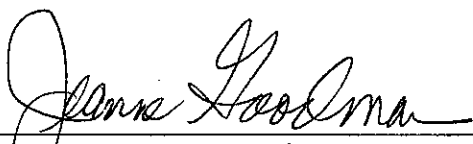
The acres authorized for irrigation are: All in Section 12-T93N-R54W

NE 1/4 NW 1/4 4.1 acres    NW 1/4 NE 1/4 0.3 acres    SE 1/4 NW 1/4 0.1 acre

Total 4.5 acres

(3) This license is subject to South Dakota Water Law, any limitations or conditions listed in Incorporated Water Permit No. 8407-3 including the following qualifications:

- The wells approved under Permit Nos. 8175-3 and 8407-3 will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
- This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

  
Jeanne Goodman, Chief Engineer

Water Rights Program

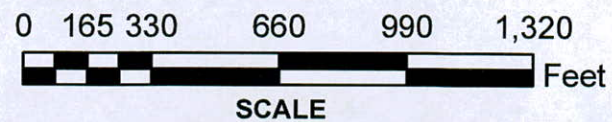
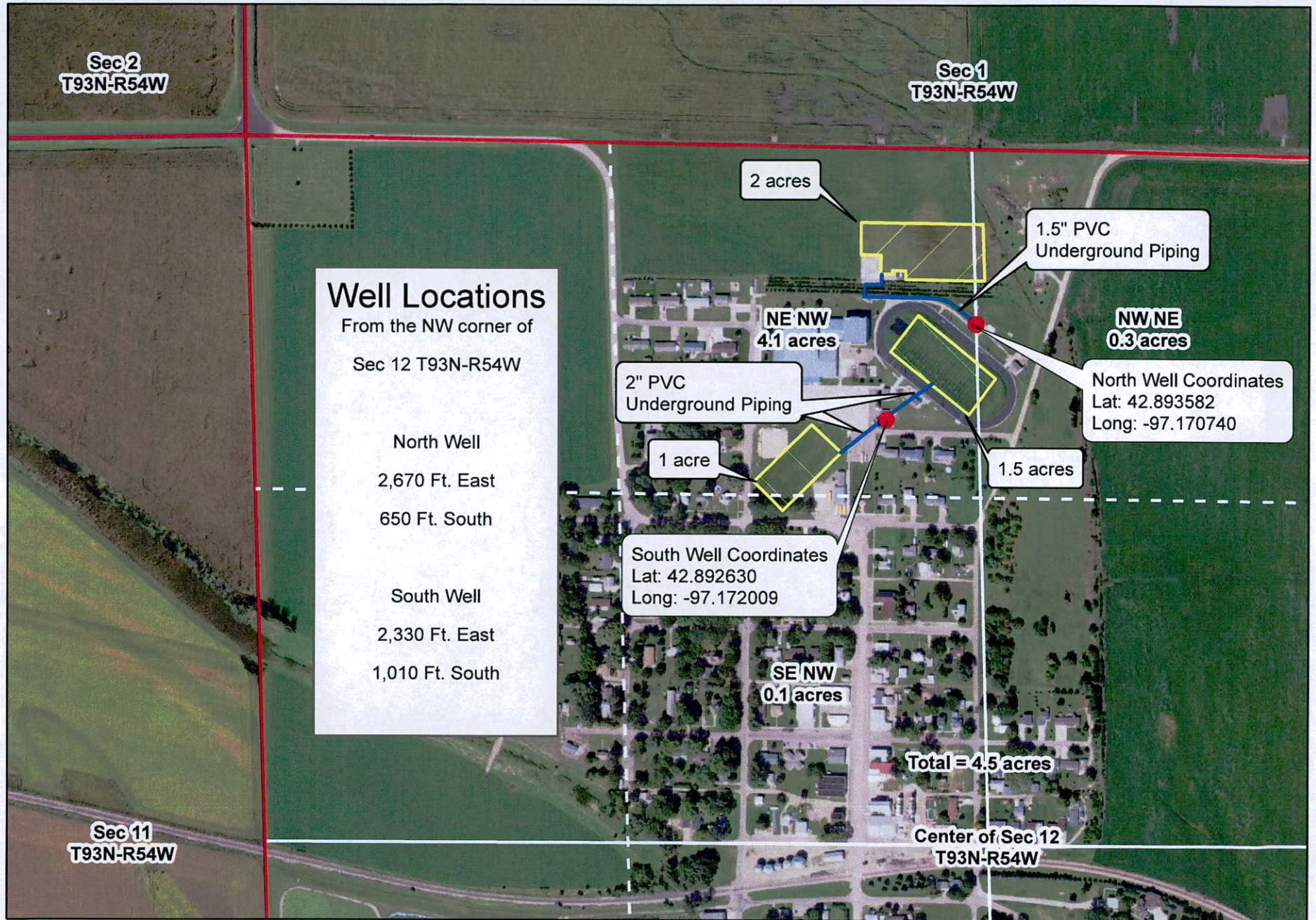
Department of Environment and Natural Resources

NOV 07 2019

date



# Water Right No. 8407-3



*Keith DeJong*  
Keith DeJong, PE  
Staff Engineer  
July 31, 2019

# RECEIPT

## WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date Aug 19, 20 19

Gayville-Volin School Dist 63-1, PO Box 158, Gayville SD

RECEIVED OF \_\_\_\_\_

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

|                                                                                                                        |       |        |
|------------------------------------------------------------------------------------------------------------------------|-------|--------|
| Fee for Application for Permit No. <u>8407-3</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. **09182**

By Joanne Goodman  
Chief Engineer  
1/15

**Report of Examination of Works and/or Application of Water to Beneficial Use  
For Permit No. 8175-3 (8407-3)**

I have this day, July 29, 2019, made a thorough examination of the water use system constructed by Gayville-Volin School District 63-1, 100 Kingsburg Street, Box 158, Gayville, SD 57031, holder of Permit No. 8175-3, bearing the priority of July 17, 2015 authorizing the diversion of 0.058 cu. ft. per second of the waters of groundwater (Missouri: Elk Point Aquifer) for the irrigation of 4 acres located in Yankton County.

Inspection contact: Pat Haisch

**A. Works used to divert the water:**

**Well Information:**

**North Well (2014- No. 8175-3)**

1) Well Drilling Firm: Hammond-Wetmore Drilling LLC

2) No. of Wells 1

3) Depth(s) 115 feet

4) Well log is available Yes

**Casing:**

1) Diameter 5 inches

2) Length 95 feet

3) Type PVC

**Screen:**

1) Diameter 5 inches

2) Length 20 feet

3) Type PVC

4) Static water level 15 feet

**Pump:**

1) Make Jacussi

2) Model Unknown

3) Capacity 25 GPM

**Motor:**

1) Make Unknown

2) Model No. Unknown

3) Horsepower rating 1.5 hp

**South Well (2005 – No. 8407-3)**

1) Well Drilling Firm: Hammond-Wetmore Drilling

2) No. of Wells 1

3) Depth(s) 104 feet

4) Well log is available Yes

**Casing:**

1) Diameter 5 inches

2) Length 80 feet

3) Type PVC

**Screen:**

1) Diameter 5 inches

2) Length 20 feet

3) Type PVC

4) Static water level 16 feet

**Pump:**

1) Make Grundfos

2) Model 22SQE15

3) Capacity 26 GPM

**Motor:**

1) Make Franklin Electric

2) Model No. Unknown

3) Horsepower rating 1.5 hp

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

**Water Permit No. 8175-3 (north well and north practice field)**

- 1) Type PVC                      2) Size 1.5 inches                      3) Length Unknown

**Water Permit No. 8407-3 (south well, main football field and southwest practice field)**

- 1) Type PVC                      2) Size 2 inches                      3) Length Unknown

**C. Works used to apply water to beneficial use:**

**Underground Sprinkler Systems**

Chemigation Equipment: No

**D. Compliance with Permit Requirements:**

- 1) Permit qualifications being abided by: Yes
- 2) Irrigation Questionnaires checked to determine if permit owner started irrigation by the end of construction period: Yes
- 3) Exceptions to compliance are: There are two wells and irrigation systems.

**E. Condition and Location:**

1. The system is in good condition with the point(s) of diversion located as follows:

**The north well (Water Permit No. 8175-3) is 2,670 feet east and 650 feet south of the northwest corner of Section 12-T93N-R54W (Latitude 42.893582, Longitude -97.170740 – NE1/4 of the NW1/4).**

**The south well (Water Permit No. 8407-3) is 2,330 feet east and 1,050 feet south of the northwest corner of Section 12-T93N-R54W (Latitude 42.892630, Longitude -97.172009 – NE1/4 of the NW1/4).**

2. The works are capable of diverting and conveying to the place of use 0.114 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 12-T93N-R54W:

**Water Permit No. 8175-3 (0.58 cfs)**

|                   |                  |
|-------------------|------------------|
| <u>NE1/4NW1/4</u> | <u>1.8 acres</u> |
| <u>NW1/4NE1/4</u> | <u>0.2 acres</u> |

**Water Permit No. 8407-3 (0.056 cfs)**

|                   |                  |
|-------------------|------------------|
| <u>NE1/4NW1/4</u> | <u>2.3 acres</u> |
| <u>NW1/4NE1/4</u> | <u>0.1 acres</u> |
| <u>SE1/4NW1/4</u> | <u>0.1 acres</u> |

comprising a total of 4.5 acres of land and the license should be issued for 0.114 cfs.

3. All structures, wells and lands on map Yes

Water Permit No. 8407-3 was obtained for the additional acreage, diversion authority and well. Water Permit No. 8175-3 will be incorporated into No. 8407-3 at licensing.

F. Comments or other permit(s) associated with the project: The area being irrigated by Water Permit No. 8175-3 is 2.0 acres and is called the main practice field. The school district also has a well that was installed in 2005 that irrigates the main football field and the southwest field that is used for baseball and occasionally for football practice. There does not appear to be a permit for the 2005 well. I got the pump information for each well from Richard Hammond  
(Water Permit No. 8407-3 was obtained to cover the additional well).

*Keith DeJong*

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Keith DeJong  
Water Rights Inspector  
DENR, Water Rights Program

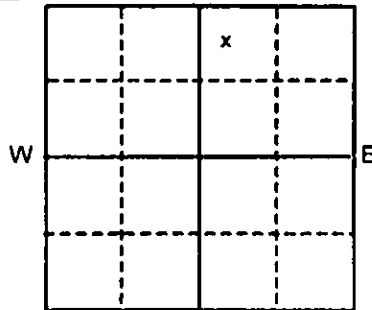
Date report completed: July 31, 2019

## SOUTH DAKOTA WATER WELL COMPLETION REPORT

11-02

Location NW 1/4 R6 1/4 Sec 12 Twp 93n Rg 54WNE 1/4 NW 1/4County Yankton

North

Please mark well  
location with an "X"

Well Completion Date

9/30/14

1 Mile

Distance to nearest potential pollution source (septic tank, abandoned well, feed lot, etc.)?  
300.0 ft. from septic system (Identify source)

## PROPOSED USE:

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

## METHOD OF DRILLING:

Direct Rotary

## CASING DATA:

☐ Steel ☒ Plastic ☐ Other

If other describe

| PIPEWEIGHT | DIAMETER       | FROM          | TO             | HOLE DIAMETER  |
|------------|----------------|---------------|----------------|----------------|
| LB/FT      | <u>5.00</u> IN | <u>6.0</u> FT | <u>95.0</u> FT | <u>8.75</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>Bentonite</u> | <u>9</u>     | <u>9.4</u> Lb/gal | <u>6.0</u> Ft | <u>90.0</u> Ft |
|                  |              | Lb/gal            | Ft            | Ft             |

Describe grouting procedure  
Tremie method

## SCREEN:

☐ Perforated pipe ☒ Manufactured
Diameter 5.00 Inches Length 20.0 FeetMaterial pvcSlot Size 0.40 Set From 95.0 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: Gayville Volin School District

Business Name:

Address: 100 Kingsbury StreetCity, State, Zip: Gayville SD 57031

## WELL LOG:

| FORMATION                              | DEPTH |     |
|----------------------------------------|-------|-----|
|                                        | FROM  | TO  |
| Silt, Tan                              | 0     | 5   |
| Sand, fine, gray                       | 5     | 43  |
| Sand, gray, thin bedded with silt/clay | 43    | 85  |
| Gravel, medium to coarse, sandy        | 85    | 115 |
|                                        |       |     |
|                                        |       |     |
|                                        |       |     |
|                                        |       |     |

STATIC WATER LEVEL 15.0 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

17.0 Ft. After 3.0 Hrs. pumped 25.0 GPM

\_\_\_\_\_ Ft. After \_\_\_\_\_ Hrs. pumped \_\_\_\_\_ GPM

If pump installed, pump rate: 18.0 GPM

## REMARKS

Permit No. 8407-3

RECEIVED

APR 15 2015

WATER RIGHTS  
PROGRAMThis well was drilled under license # 666 and this  
report is true and accurate.Drilling firm: Hammond Wetmore Drilling LLC

Signature of License Representative:

Signature of Well Owner or Equitable Property Holder:

Date: 11/19/2014



DEPARTMENT of ENVIRONMENT  
and NATURAL RESOURCES

PMB 2020  
JOE FOSS BUILDING  
523 EAST CAPITOL  
PIERRE, SOUTH DAKOTA 57501-3182  
[www.state.sd.us/denr](http://www.state.sd.us/denr)

February 22, 2006

Gayville Volin School District  
100 Kingsbury St  
Gayville SD 57031

Dear Sir:

A well driller's report filed by Hammond-Wetmore Drilling shows that they completed a new well for your school district on August 22, 2005. The report indicates the well water will be used for irrigation. Based on the information in the report, it appears you may need a water permit.

A water permit must be obtained for any water use except for reasonable, private domestic use. Reasonable domestic use is defined as use of less than 25,920 gallons per day with a maximum rate not to exceed 25 gallons per minute. Irrigation of more than one acre requires obtaining a water permit. Irrigation of a noncommercial family garden, trees, shrubbery, etc. greater than one acre in area requires obtaining a water permit.

1. Also, as a new well owner, you need to be aware of some of your responsibilities. Enclosed is a copy of "Well Owner Responsibilities". Please review these responsibilities to ensure you are complying with all of the requirements.
2. Enclosed are application forms and an instruction sheet to apply for a water permit for irrigation. The completed forms with the application fee and map can be returned to the "Water Rights Program, 523 E Capitol, Pierre SD 57501.

If you believe your water use does not require a water permit or that you have an existing permit, or if help is needed completing the application forms, please contact Eric Gronlund or me at (605) 773-3352. We will be happy to assist you in any way possible.

Sincerely,

Karen Schlaak  
Water Rights Program  
[karen.schlaak@state.sd.us](mailto:karen.schlaak@state.sd.us)

enclosures

## SOUTH DAKOTA WATER WELL COMPLETION REPORT

11-02

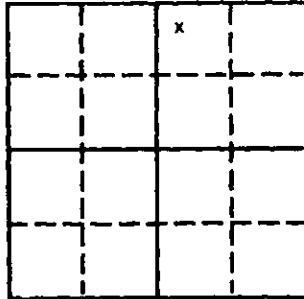
Location NW 1/4 NE 1/4 Sec 12 Twp 93N Rg 54W

County

Yankton

North

Please mark well location with an "X"



Well Completion Date

8/22/2005

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

300.0 ft. from Septic system (Identify source)

## PROPOSED USE:

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

## METHOD OF DRILLING:

Rotary

## CASING DATA:

☐ Steel
 ☒ Plastic
 ☐ Other
 

If other describe

| PIPEWEIGHT<br>LB/FT | DIAMETER<br>IN | FROM<br>FT | TO<br>FT | HOLE DIAMETER<br>IN |
|---------------------|----------------|------------|----------|---------------------|
|                     | 5.00           | 0.0        | 80.0     | 9.00                |
| LB/FT               | IN             | FT         | FT       | IN                  |
| LB/FT               | IN             | FT         | FT       | IN                  |

## GROUTING DATA:

| Grout Type | No. of Sacks | Grout Weight<br>Lb/gal | From<br>0.0 Ft | To<br>78.0 Ft |
|------------|--------------|------------------------|----------------|---------------|
| Port Grt   | 7            | 9.5                    |                |               |
|            |              | Lb/gal                 | Ft             | Ft            |

Describe grouting procedure  
Tremie method

## SCREEN:

☐ Perforated pipe
 ☒ Manufactured
 

Diameter 5.00 Inches Length 20.0 Feet

Material PVC-slotted pipe

Slot Size .040 Set From 80.0 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 sample sent to for water quality analysis

Well Owner: Gayville Volin School District

Business Name:

Address: 100 Kingsbury Street

City, State, Zip: Gayville, SD 57031

## WELL LOG:

| FORMATION             | DEPTH |     |
|-----------------------|-------|-----|
|                       | FROM  | TO  |
| Silt, tan             | 0     | 12  |
| Sand, fine, gray      | 12    | 54  |
| Clay, gray, silty     | 54    | 61  |
| Sand, fine to medium  | 61    | 80  |
| Gravel, coarse, sandy | 80    | 104 |
|                       |       |     |
|                       |       |     |
|                       |       |     |

STATIC WATER LEVEL 16.0 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

17.0 Ft. After 2.0 Hrs. pumped 50.0 GPM

Ft. After Hrs. pumped GPM

If pump installed, pump rate: 18.0 GPM

## REMARKS

Permit No. 8407-3

This well was drilled under license # 666

And this report is true and accurate.

Drilling firm: Hammond-Wetmore Drilling

Signature of License Representative:

Signature of Well Owner or Equitable Property Holder:

RECEIVED

FEB 02 2006

Date:

8/22/05

WATER RIGHTS PROGRAM

2-3-06



**DEPARTMENT of ENVIRONMENT  
and NATURAL RESOURCES**

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

August 14, 2019

[denr.sd.gov](http://denr.sd.gov)

Pat Haisch  
Gayville-Volin School District 63-1  
PO Box 158  
Gayville SD 57031

Dear Mr. Haisch:

The School District holds Water Permit No. 8175-3 that appropriates 26 gallons per minute (gpm) from one well to irrigate 4.0 acres. The permit filed for in 2014 was for a new well to supply water for irrigation of the football practice facility. Recently Keith DeJong a water right inspector with DENR conducted the standard on-site visit for the purpose of licensing the permit for the level of development. He found that two wells were in place for watering of the main football field, an area to the southwest used for baseball and the practice field to the north.

Apparently when the new application was filed there was no recognition by the School District or DENR that there was no water permit in place for the 2005 well that is used to irrigate the main football field and other field to the southwest.

The two systems as constructed have a combined pump rate of 51 gpm and irrigate a total of 4.5 acres. This is 25 gpm and 0.5 acres more than what is authorized by the existing water permit.

Enclosed is a partially completed application to obtain a water permit for this additional amount. The application filing fee will be \$100 made payable to the Water Rights Program. The School District will be responsible for the cost of the public notice in the newspaper when we get to that point. Also enclosed is a self-addressed stamped envelope.

Once the new permit is in place, the two permits will be incorporated into one water license which will give the School District flexibility in what well is used to irrigate the property.

Our goal is to have water rights in place to reflect the systems that exist. Please feel free to contact me if you have questions.

Sincerely,

A handwritten signature in cursive script that reads 'Eric Gronlund'.

Eric Gronlund  
Water Rights Program, DENR  
605 773-3352  
[Eric.gronlund@state.sd.us](mailto:Eric.gronlund@state.sd.us)

enclosure



**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. 8407-3, Gayville Volin School District 63-1**

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. 8407-3, Gayville Volin School District 63-1, c/o Alice Hight, Business Manager, PO box 158, Gayville SD 57031.

The Chief Engineer is recommending APPROVAL of Application No. 8407-3 because 1) there is reasonable probability that there is unappropriated water available for the applicant's proposed use, 2) the proposed diversion can be developed without unlawful impairment of existing rights, 3) the proposed use is a beneficial use and 4) it is in the public interest with the following qualifications:

1. The wells approved under Permit Nos. 8175-3 and 8407-3 will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

See report on application for additional information.

A handwritten signature in black ink, reading "Jeanne Goodman". The signature is written in a cursive, flowing style.

Jeanne Goodman, Chief Engineer  
October 1, 2019

**Report to the Chief Engineer  
Water Permit Application No. 8407-3**

Gayville-Volin School District 63-1

September 3, 2019

Water Permit Application No. 8407-3 seeks to appropriate an additional 0.056 cubic feet of water per second (cfs), irrigate an additional 0.5 acres, and add an additional well to what is currently authorized by Water Permit No. 8175-3. Water Permit No. 8175-3 appropriates 0.058 cfs from one well completed into the Missouri: Elk Point Aquifer (115 ft deep) located in the NE  $\frac{1}{4}$  NW  $\frac{1}{4}$  Section 12 for irrigation of 4 acres located in the NE  $\frac{1}{4}$  NW  $\frac{1}{4}$ , NW  $\frac{1}{4}$  NE  $\frac{1}{4}$  Section 12; all in T93N-R54W. An investigation of the permit found the system capable of diverting an additional 0.056 cfs from the additional well and irrigation of an additional 0.4 acres located in the area described above as well as 0.1 acres in the SE  $\frac{1}{4}$  NW  $\frac{1}{4}$  Section 12-T93N-R54W. The additional well is completed into the Missouri: Elk Point aquifer (104 ft deep) located in the NE  $\frac{1}{4}$  NW  $\frac{1}{4}$  Section 12-T93N-R54W. This application, if approved, and Water Permit No. 8175-3 will authorize a total diversion rate of 0.114 cfs (51 gallons per minute) from two existing wells for irrigation of 4.5 acres of the school's athletic complex located in Gayville, SD.

**Aquifer: Missouri: Elk Point (M:EP)**

*Hydrogeologic characteristics*

The Missouri: Elk Point aquifer is a Quaternary Period glacial outwash aquifer composed of sand and gravel. In general, the outwash in the Missouri: Elk Point aquifer is highly transmissive (Bugliosi, 1986). Bugliosi (1986) categorized all glacial outwash within Yankton County as Lower James-Missouri aquifer. However, Hedges et al. (1982) defines the Lower James-Missouri aquifer differently than Bugliosi (1986). In Hedges et al.'s (1982) report, the Lower James-Missouri aquifer extends from the southern boundary of the Choteau: East aquifer in Hutchinson county south to the Missouri River valley, and defines the Missouri aquifer as a separate aquifer that follows the Missouri River valley from just upstream of Yankton down to Elk Point. Hedges et al. (1982) mapped the boundaries at a 1:500,000 scale and estimated the area of the Missouri aquifer to total 219,100 acres in South Dakota. For Task 7 of the groundwater assessment, Hedges et al. (1985) divided the Missouri aquifer into management units. Therefore, the Missouri aquifer in this area is called the Missouri: Elk Point aquifer management unit by the Water Rights Program currently (SD Water Rights, 2019a).

The well for Water Permit No. 8175-3 (the north well) was drilled September 30, 2014, and an investigation of that permit found an additional well was drilled August 22, 2005, and not included in the original water permit. The driller reported for the 2014 well tan silt from land surface to 5 feet below grade, fine gray sand from 5 to 43 feet, gray sand with thin silt/clay beds from 43 to 85 feet, and sandy gravel from 85 to 115 feet. The static water level at the time of drilling was 15 feet below grade (SD Water Rights, 2019b). For the 2005 well, the driller reported tan silt from 0 to 12 feet below grade, fine gray sand from 12 to 54 feet, silty gray clay from 54 to 61 feet, fine to medium sand from 61 to 80 feet, and coarse sandy gravel from 80 to 104 feet. The static water level at the time of drilling was 16 feet below grade (SD Water Rights, 2019b). By comparing the two well logs and static water levels, it is clear that the wells are both

in the same aquifer, which Buhler (2015) determined is the Missouri: Elk Point aquifer management unit. Figure 1 shows a map of the area.

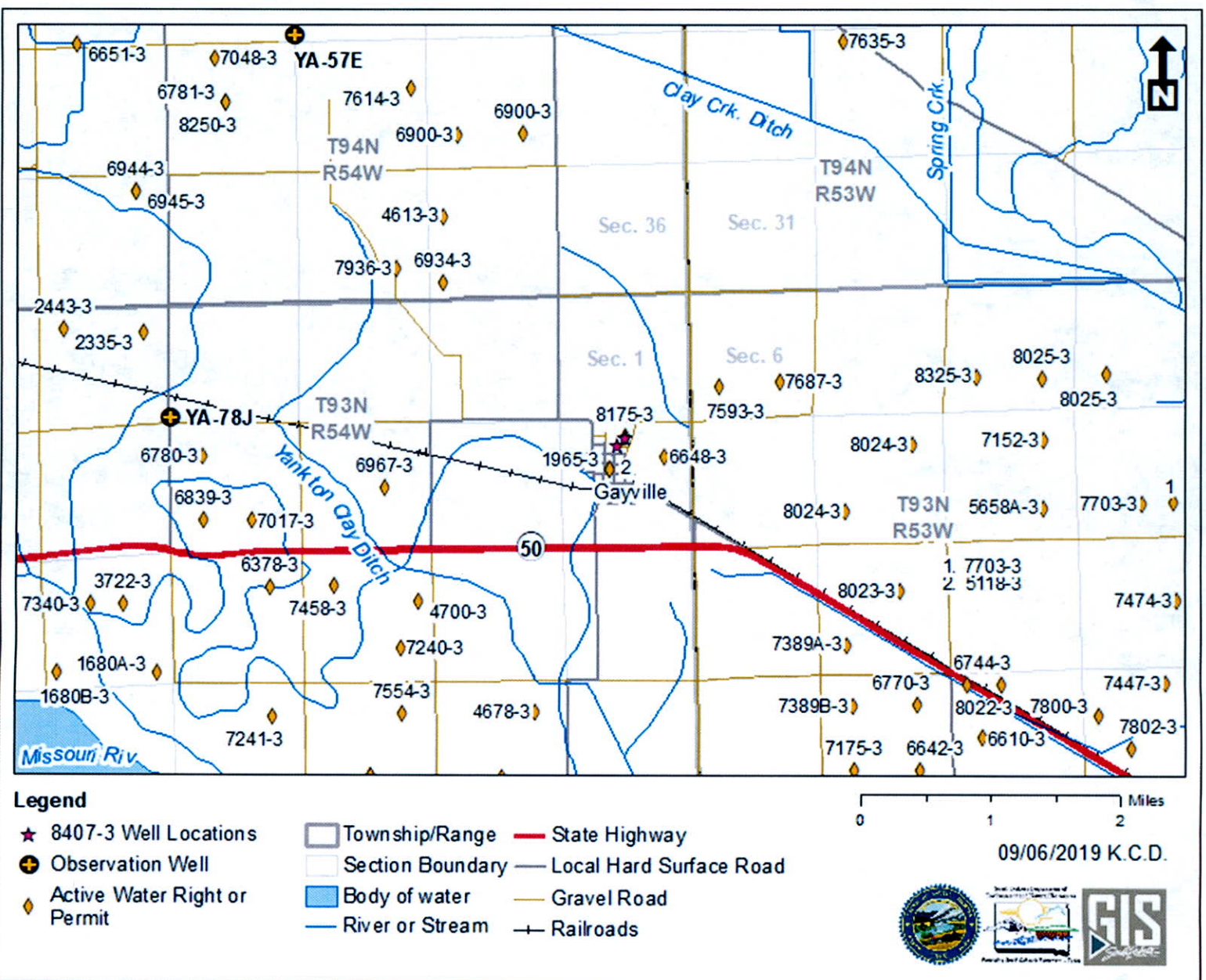


Figure 1: Map of the area including active Missouri: Elk Point water rights/permits (SD Water Rights, 2019a), Observation wells (SD Water Rights, 2019c), and the wells for this application

### **Applicable South Dakota Codified Law (SDCL)**

Pursuant to SDCL 46-2A-9, a permit to appropriate water may be issued if there is reasonable probability unappropriated water is 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. The Gayville-Volin School District is not a water distribution system as defined in SDCL 46-1-6(17) and the Missouri: Elk Point aquifer is younger and stratigraphically higher than the Greenhorn Formation. Therefore, it is necessary to find that withdrawals from the groundwater source will not exceed recharge to approve this application.

### **Water availability**

#### *Hydrologic budget*

##### Recharge

Recharge to the aquifer occurs by infiltration from precipitation, groundwater inflow from adjacent glacial outwash and alluvial aquifers, and infiltration from the Missouri River when the stage of the river is above the hydraulic head of the aquifer. Hedges, et al. (1985) analyzed observation well data to estimate the recharge to the Missouri: Elk Point aquifer to be 3.8 inches per year over the area of the aquifer. Applied over the 219,100 acres estimated by Hedges, et al. (1982), the estimated average annual recharge by observation well analysis to the Missouri: Elk Point aquifer is 69,382 ac-ft/yr. However, pumping from the aquifer will induce recharge supplied by the Missouri River or capture natural discharge before it leaves the aquifer (Christensen, et al., 1967). Stonesifer (2013) estimated the induced recharge to the aquifer, due to the pumping of Lewis and Clark RWS wells near the Missouri River, to be approximately 22,582 ac-ft/yr. Other water rights/permits within the Missouri: Elk Point aquifer may also induce recharge from the adjacent rivers, although this amount has not been quantified. Combining these recharge estimates for the Missouri: Elk Point aquifer results in an estimated average annual recharge of approximately 91,964 ac-ft/yr, although the actual annual recharge is likely higher, due to the unaccounted induced recharge from pumping near adjacent rivers (Stonesifer, 2013).

##### Discharge

Discharge from the aquifer occurs by outflow to the Missouri River when the hydraulic head in the aquifer is higher than the stage of the river, evapotranspiration when the level of the aquifer

is near land surface, and withdrawals by domestic and appropriative wells. Due to the prevalence of rural water systems and low pump rate of domestic wells, withdrawals by domestic users are not significant for the hydrologic budget. There are 619 active water rights and permits withdrawing from the Missouri: Elk Point aquifer, one pending water permit application, and five future use permits reserving water from the aquifer, although two reserve no water (SD Water Rights, 2019a). The rest of the future use permits reserve a total of 14,900 ac-ft/yr (SD Water Rights, 2019a). Of the active water rights and permits, 581 are for irrigation, 15 are for various kinds of water distribution systems, five are for industrial use, four are for fish and wildlife propagation, two are primarily for domestic use although they have other uses listed, and one is for recreation (SD Water Rights, 2019a). One pending application, Water Permit Application No. 8403-3, is for commercial use (Drennon, 2019). Drennon (2019) analyzed a hydrologic budget for the Missouri: Elk Point aquifer management unit approximately two weeks prior to the analysis for this application. This application is the first one for the Missouri: Elk Point aquifer since that analysis and no new information regarding withdrawals (other than the existence of the pending application) is available. Therefore, the estimates of average annual withdrawal in this report are based on the analysis for Water Permit Application No. 8403-3 (Drennon, 2019).

Irrigation use reported for the period of record is shown in Figure 2. The average annual withdrawal reported for irrigation is 18,903 ac-ft/yr for the period of record (SD Water Rights, 2019d). However, the average annual withdrawals may not be represented by the average over the period of record in the future, since the number of irrigation permits in the Missouri: Elk Point aquifer has increased from 410 water rights/permits in 2010 to 570 water rights/permits in 2018, and the permits issued for the past nine years may not be fully developed yet. For this reason, Farmer (2018) developed a method to estimate irrigation withdrawals using the permitted acreage instead of the appropriated volume or average annual reported withdrawal, finding an average withdrawal rate of 0.35 ft of water per acre per year on all acres permitted. A total of 80,855.44 acres are permitted or licensed to irrigate with water from the Missouri: Elk Point aquifer. Applying 0.35 ft over that acreage, the average estimated withdrawal is 28,299 ac-ft/yr for irrigation. This application seeks to irrigate an additional 0.5 acres, which means it is estimated to withdraw an additional 0.135 ac-ft/yr using the above method.

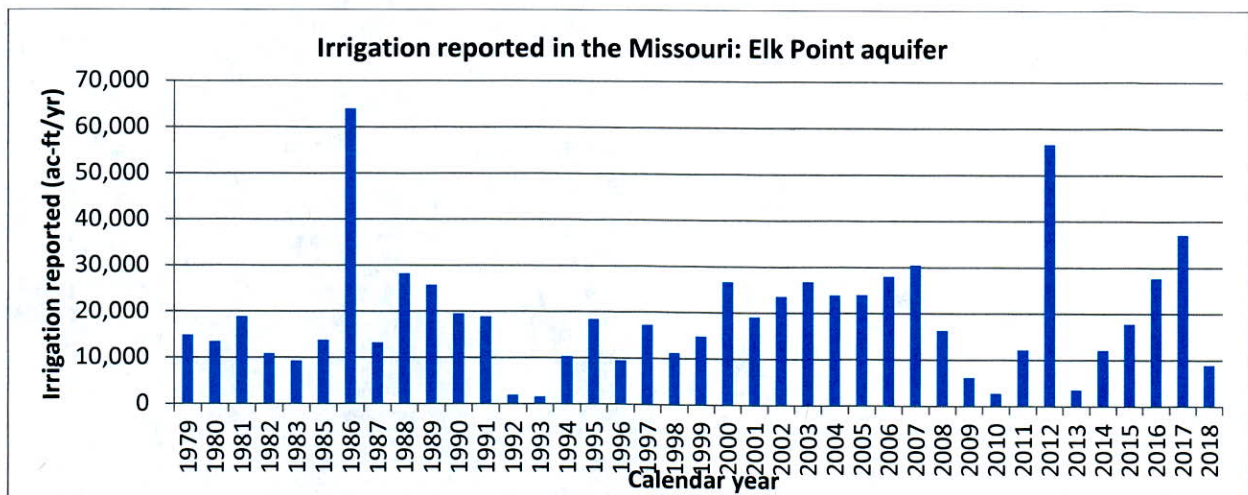


Figure 2: Irrigation reported in the Missouri: Elk Point aquifer (SD Water Rights, 2019d)

## Report on Water Permit Application No. 8407-3

Of the 38 non-irrigation permits, 24 water rights/permits (Table 1) are only limited by their maximum instantaneous pump rate and most are not required to report their annual withdrawals to the Chief Engineer (SD Water Rights, 2019a). The total pump rate for those 24 permits is 21.146 cfs (SD Water Rights, 2019a). Water Permit No. 7388-3 is required to report its annual withdrawals, but in general their withdrawals have increased with time, so their average annual withdrawal is estimated the same way as the other water rights/permits in Table 1. To estimate the annual withdrawal by those permits, it is conservatively assumed that they all pump 60% of the time at their maximum instantaneous pump rate, which equates to 8,887 ac-ft/yr. The Town of Gayville holds two water rights but does not use a significant amount of water because they are connected to Clay County Rural Water System. Their estimated annual withdrawals are zero ac-ft/yr (SD Water Rights, 2019a).

Table 1: Water rights/permits not required to report annual use (SD Water Rights, 2019a)

| Permit No:                                                                                                                                                   | Status: | Name/Business:              | Type of use: | Priority Date: | Pump Rate (cfs) | Est. Annual Use (ac-ft/yr) |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|-----------------------------|--------------|----------------|-----------------|----------------------------|
| 5453-3                                                                                                                                                       | License | AaLadin Industries Inc      | IND          | 05/24/1990     | 0.050           | 22                         |
| 1255-3                                                                                                                                                       | License | City of Elk Point           | MUN          | 01/01/1914     | 1.130           | 491                        |
| 5782-3                                                                                                                                                       | License | City of North Sioux City    | MUN          | 08/12/1993     | 1.140           | 496                        |
| 7388-3                                                                                                                                                       | Permit  | Clay Rural Water System Inc | DOM, IRR     | 07/30/2012     | 2.00            | 869                        |
| 6170-3                                                                                                                                                       | License | Concrete Materials          | IND          | 01/03/2000     | 0.222           | 96                         |
| 5827-3                                                                                                                                                       | License | Don Lantis                  | COM          | 06/08/1994     | 0.022           | 10                         |
| 5592-3                                                                                                                                                       | License | East Winds Court Inc        | SHD          | 10/09/1991     | 0.110           | 48                         |
| 4501-3                                                                                                                                                       | License | Eddie Wohl                  | COM          | 03/27/1980     | 0.050           | 22                         |
| 5953-3                                                                                                                                                       | License | H & K Oil Co                | COM          | 08/19/1996     | 0.037           | 16                         |
| 6744-3                                                                                                                                                       | Permit  | Judith I Grant              | DOM, COM     | 07/24/2006     | 0.780           | 339                        |
| 5388-3                                                                                                                                                       | License | L G Everist Inc             | IND          | 01/30/1990     | 0.450           | 196                        |
| 5581-3                                                                                                                                                       | License | Larson's Landing            | SHD          | 07/30/1991     | 0.089           | 39                         |
| 1965-3                                                                                                                                                       | License | Town of Gayville            | MUN          | 01/01/1914     | 0.370           | 0                          |
| 5118-3                                                                                                                                                       | License | Town of Gayville            | MUN          | 01/28/1987     | 0.330           | 0                          |
| 4207-3                                                                                                                                                       | License | Town of Jefferson           | MUN          | 01/01/1916     | 0.900           | 391                        |
| 5907-3                                                                                                                                                       | License | US Fish/Wildlife Service    | FWP          | 01/26/1996     | 3.780           | 1,643                      |
| 6733-3                                                                                                                                                       | Permit  | US Fish/Wildlife Service    | FWP          | 06/07/2006     | 2.890           | 1,256                      |
| 7094-3                                                                                                                                                       | Permit  | US Fish/Wildlife Service    | FWP          | 12/01/2008     | 2.670           | 1,161                      |
| 5490-3                                                                                                                                                       | License | US Geological Survey        | FWP          | 11/15/1990     | 0.090           | 39                         |
| 6151-3                                                                                                                                                       | License | Vernon & Norma Vakoc        | COM          | 10/04/1999     | 0.670           | 291                        |
| 5021-3                                                                                                                                                       | License | Vishay-Dale Electronics Inc | IND          | 05/04/1984     | 0.100           | 43                         |
| 5593-3                                                                                                                                                       | License | Vishay-Dale Electronics Inc | IND          | 10/31/1991     | 0.056           | 24                         |
| 7059-3                                                                                                                                                       | Permit  | We Investments LLC          | REC          | 08/28/2008     | 3.110           | 1,352                      |
| 6580-3                                                                                                                                                       | License | West Shore Acres LLC        | COM          | 01/28/2005     | 0.100           | 43                         |
| Total                                                                                                                                                        |         |                             |              |                | 21.146          | 8,887                      |
| COM – Commercial, DOM – Domestic, FWP – Fish & Wildlife Propagation, IND – Industrial, MUN – Municipal, REC – Recreation, SHD – Suburban Housing Development |         |                             |              |                |                 |                            |

The 14 other non-irrigation water rights/permits and Water Permit Application No. 8403-3 (Table 2) have an annual withdrawal limit less than if they pumped at their maximum

## Report on Water Permit Application No. 8407-3

instantaneous pump rate continuously or report their annual withdrawals (SD Water Rights, 2019a). Of the water rights/permits in Table 2, the ones that are licensed/permitted with an annual withdrawal limit less than the maximum instantaneous pump rate are generally assumed to withdraw at their annual limit (SD Water Rights, 2019a). The City of Vermillion has not been developing further water use in the last 10 years and holds one license limited by an annual withdrawal and three licenses limited only by their maximum instantaneous pump rate, so their average annual reported withdrawal is used for the hydrologic budget (SD Water Rights, 2019e).

Table 2: Water rights/permits limited by an annual withdrawal rate (SD Water Rights 2019a, 2019e)

| Permit No:                                                                                     | Status: | Name/Business:                          | Type of use: | Priority Date: | Pump Rate (cfs) | Est. Annual Use (ac-ft/yr) |
|------------------------------------------------------------------------------------------------|---------|-----------------------------------------|--------------|----------------|-----------------|----------------------------|
| 5616-3*                                                                                        | License | Cimpls Inc                              | COM          | 01/31/1992     | 0.44            | 452                        |
| 8069-3*                                                                                        | Permit  | Cimpls LLC                              | COM          | 12/15/2014     | 0.44            | (combined)                 |
| 143-3                                                                                          | License | City of Vermillion                      | MUN          | 01/21/1956     | 1.780           | 1,207                      |
| 147-3                                                                                          | License |                                         | MUN          | 01/01/1935     | 2.660           |                            |
| 6236-3*                                                                                        | License |                                         | MUN          | 11/06/2000     | 2.60            |                            |
| 6354-3                                                                                         | License |                                         | MUN          | 08/12/2002     | 0.022           |                            |
| 8212-3*                                                                                        | Permit  | City of Yankton                         | MUN          | 03/25/2016     | 20.12           | 6,050                      |
| 5437-3*                                                                                        | License | Dakota Dunes Comm. Improvement District | MUN          | 04/12/1990     | 3.33            | 2,412                      |
| 8031-3                                                                                         | Permit  | Dakota Protein Conversion Inc           | COM          | 06/18/2014     | 0.220           | 96                         |
| 8147-3*                                                                                        | Permit  | Doug Lafleur                            | COM          | 04/06/2015     | 1.00            | 160                        |
| 6736-3*                                                                                        | Permit  | Lewis & Clark RWS                       | RWS          | 07/08/1994     | 27.85           | 20,165                     |
| 7207-3*                                                                                        | Permit  | Lewis & Clark RWS                       | RWS          | 07/08/1994     | 20.00           | 12,000                     |
| 8381-3*                                                                                        | Permit  | R P Constructors                        | COM          | 11/19/2018     | 0.040           | 1                          |
| 7200-3*                                                                                        | Permit  | RC Investments LLC                      | COM          | 04/29/2010     | 0.22            | 25                         |
| 8403-3*                                                                                        | Pending | Stockmen's Livestock, Inc               | COM          | 07/08/2019     | 2.00            | 40                         |
| Total withdrawals estimated by water rights/permits limited annually and/or required to report |         |                                         |              |                |                 | 42,607                     |
| COM – Commercial, DOM – Domestic, IRR – Irrigation, MUN – Municipal, RWS – Rural Water System  |         |                                         |              |                |                 |                            |
| * Water right/permit is limited to an annual withdrawal less than maximum diversion rate       |         |                                         |              |                |                 |                            |

### Balance of hydrologic budget

The estimated recharge, including induced recharge by the Lewis and Clark RWS, to the Missouri: Elk Point aquifer is at least 91,964 ac-ft/yr. The estimated withdrawals from the aquifer are 28,299 ac-ft/yr for irrigation and 51,494 ac-ft/yr for non-irrigation, with 14,900 ac-ft/yr reserved for future use. Therefore, total estimated withdrawals are 94,693 ac-ft/yr including water reserved for future use and Water Permit Application No. 8403-3. This application is estimated to withdraw an additional 0.175 ac-ft/yr. Since additional recharge to the aquifer is induced by pumping in the aquifer, there is reasonable probability that withdrawals from the aquifer will not exceed recharge if this application is approved.

*Observation wells*

Pursuant to Administrative Rule of South Dakota (ARSD) 74:02:05:07, the availability of unappropriated water must be evaluated based on the analysis of observation well measurements in addition to other data. The Water Rights Program maintains 37 observation wells completed into the Missouri: Elk Point aquifer (SD Water Rights, 2019c). A graph of selected observation well levels and Missouri River stage as measured by a USGS Stream Gauge No. 06467500 "Missouri River at Yankton SD," located approximately 11 miles west of the wells for this application, is shown in Figure 3. The nearest observation well to the wells for this application is Observation Well YA-78J, located approximately 3.5 miles west of the wells for this application. The next nearest observation well is Observation Well YA-57E, located approximately 4.0 miles northwest of the wells for this application. Observation Well YA-57E is closer to the Missouri River than the other observation well and shows the close relationship between Missouri River stage and the Missouri: Elk Point aquifer. The sharp decrease in water level at Observation Well YA-57D during 2018 corresponds to well maintenance records which state that well was pumped briefly, seven days before the decrease was measured (SD Water Rights, 2019c). Because the aquifer is normally highly transmissive, the slow return to normal levels after pumping may indicate that well has not been functioning properly recently.

Since Gavins Point Dam closed in 1955, fewer sediments flow downstream of the dam (US Army Corps of Engineers, 2017). As a result, the Missouri River bed's elevation has declined due to erosion below the dam (US Army Corps of Engineers, 2017). Since the stage of the river and the water levels in the Missouri: Elk Point aquifer are hydrologically connected, declines in the river stage cause the declining trend shown in Figure 3 (Bugliosi, 1986; Christensen et al., 1967). Other than declines due to river entrenchment, trends from the two observation well levels shown are generally representative of trends in the aquifer and the observation well level trends generally correspond to stream gage level trends in the Missouri River. In general, water level rises and declines in the Missouri: Elk Point aquifer are indistinguishable from the effects due to climate and weather variations in the region (NOAA, 2019). Based on observation well analysis, there is reasonable probability unappropriated water is available for this application.

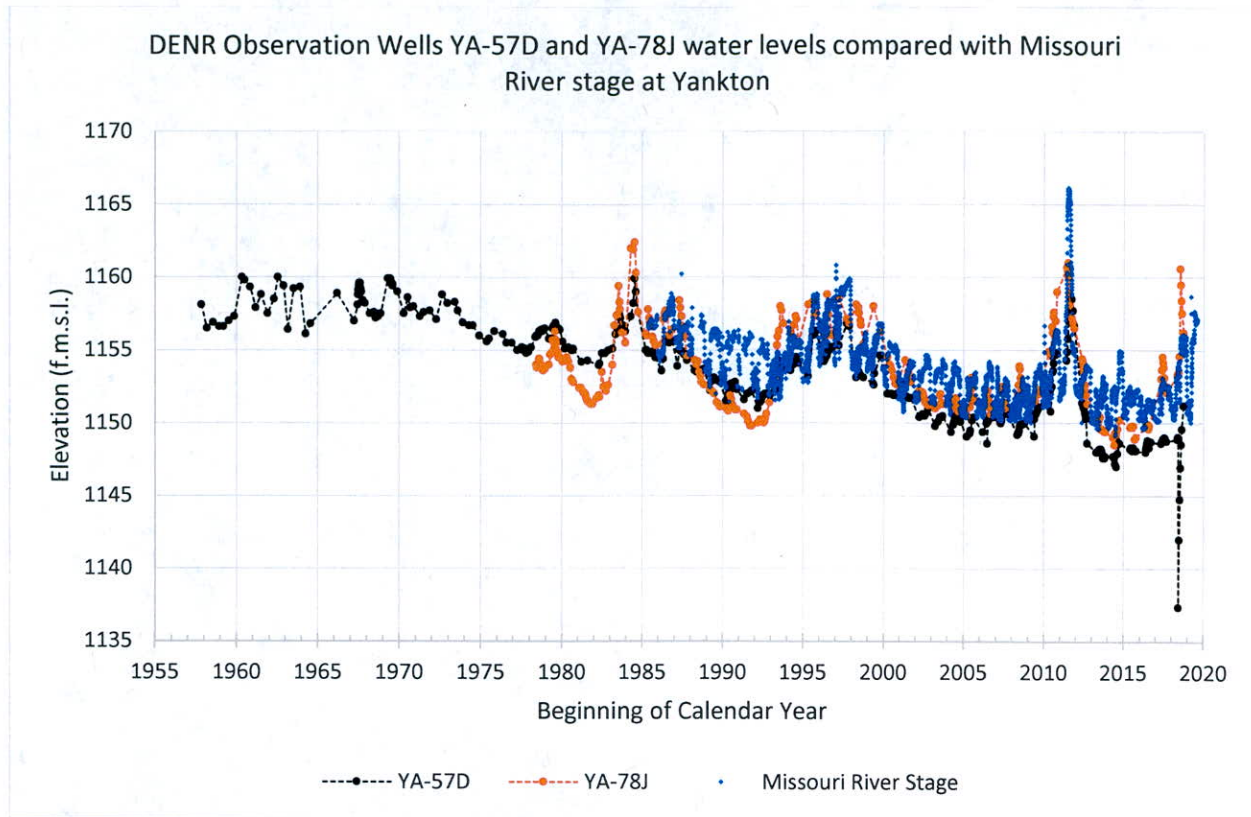


Figure 3: DENR observation well water levels (SD Water Rights, 2019c) compared with Missouri River stage at Yankton (USGS, 2019)

### Existing users

The nearest domestic well on file with DENR that is likely to be in the Missouri: Elk Point aquifer is approximately 1.2 miles north of the wells for this application. The nearest water rights/permits in the Missouri: Elk Point aquifer other than the applicant are Water Right Nos. 1965-3 and 5118-3 held by the town of Gayville approximately 0.2 miles south of the wells for this application. As noted in the hydrologic budget discussion, the town of Gayville does not use their wells often. The next nearest water right/permit to the wells for this application is Water Right No. 6648-3, located approximately 0.3 miles east of the wells for this application. The Water Management Board has recognized that in order to put the waters of the state to maximum beneficial use, a certain amount of drawdown may occur. In order to protect domestic users, an adversely impacted domestic well is defined in ARSD 74:02:04:20(7) as:

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

The wells for this application have existed and been in use since approximately 2005 and 2014 (SD Water Rights, 2019b). The DENR Water Rights program does not have any complaints on

file regarding well interference in Yankton County (SD Water Rights, 2019f). Given the generally unconfined conditions of the aquifer, the lack of well interference complaints in Yankton County, the highly transmissive nature of the aquifer, and given that these wells have existed for a while without complaints, drawdown due to the wells for this application is unlikely to unlawfully impact nearby domestic wells or senior water rights/permits.

## Conclusions

1. Water Permit Application No. 8407-3 seeks to appropriate an additional 0.056 cfs, irrigate an additional 0.5 acres, and add an additional well to what is currently authorized by Water Permit No. 8175-3.
2. Water Permit No. 8175-3 appropriates 0.058 cfs from one well completed into the Missouri: Elk Point aquifer located in the NE  $\frac{1}{4}$  NW  $\frac{1}{4}$  Section 12 for irrigation of 4 acres located in the NE  $\frac{1}{4}$  NW  $\frac{1}{4}$ , NW  $\frac{1}{4}$  NE  $\frac{1}{4}$  Section 12; all in T93N-R54W.
3. Based on a hydrologic budget and observation well analysis, there is reasonable probability unappropriated water is available for this application.
4. There is reasonable probability this permit can be developed without impairment of senior water rights/permits or domestic use.



Kimberly C. Drennon  
Natural Resources Engineer

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STATE OF SOUTH DAKOTA  
COUNTY OF YANKTON

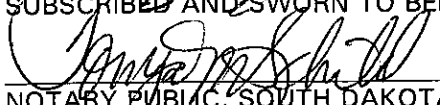
KELLY HERTZ, BEING FIRST DULY SWORN ON OATH DEPOSES  
AND SAYS THAT (S)HE IS THE MANAGING EDITOR OF YANKTON  
MEDIA INC, A CORPORATION, THE PRINTER AND THE PUBLISHER OF THE  
YANKTON DAILY PRESS AND DAKOTAN, A LEGAL DAILY NEWSPAPER  
PUBLISHED AND CIRCULATED IN THE CITY OF YANKTON, SAID COUNTY  
AND STATE, AND ONE OF THE OFFICIAL NEWSPAPERS OF THE SAID  
COUNTY OF FACTS STATED IN THIS AFFIDAVIT; THAT THE ANNEXED  
10+10 NOTICE OF APPLICATI

TAKEN FROM THE PAPER, IN WHICH IT WAS LAST PUBLISHED IN THE  
NEWSPAPER ON THE 10th DAY OF October, 2019  
THAT THE FULL AMOUNT OF THE FEE CHARGED FOR THE PUBLICATION  
OF SAID NOTICE TO WIT \$32.16 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: 10/10/2019

FILED ON: 10/10/2019

  
SUBSCRIBED AND SWORN TO BEFORE ME THIS 10th DAY OF October, 2019

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

Ad text : 10 + 10

NOTICE OF APPLICATION NO. 8407-3 to Appropriate Water

Notice is given that Gayville-Volin School District 63-1, c/o Alice Hight, Business Mgr., PO Box 158, Gayville SD 57031 has filed an application for a water permit to appropriate an additional 0.056 cubic feet of water per second (cfs), irrigate an additional 0.5 acres and add an additional well to what is currently authorized by Water Permit No. 8175-3. Water Permit No. 8175-3 appropriates 0.058 cfs from one well completed into the Missouri: Elk Point Aquifer (115 feet deep) located in the NE 1/4 NW 1/4 Section 12 for irrigation of 4 acres located in the NE 1/4 NW 1/4, NW 1/4 NE 1/4 Section 12; all in T93N-R54W. An investigation of the permit found the system capable of diverting an additional 0.056 cfs from the additional well and irrigation of an additional 0.5 acres located in the area described above and the SE 1/4 NW 1/4 Section 12-T93N-R54W. The additional well is completed into the Missouri:Elk Point Aquifer (104 feet deep) located in the NE 1/4 NW 1/4 Section 12-T93N-R54W. This application, if approved and Water Permit No. 8175-3 will authorize a total diversion rate of 0.114 cfs (51 gallons per minute) from two existing wells for irrigation of 4.5 acres of the schools athletic complex located in Gayville SD.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8407-3 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 October 21, 2019.

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 \$32.16

## Schlaak, Karen

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**From:** Schlaak, Karen  
**Sent:** Tuesday, October 1, 2019 9:57 AM  
**To:** Jackie Lammers (jackie.lammers@yankton.net)  
**Subject:** 8407-3, Gayville-Volin School District 63-1  
**Attachments:** 8407-3public.short.docx; FORM8.FRM.doc

Attached is a notice to be published on October 10, 2019.

Gayville-Volin School District 63-1, c/o Alice Hight, Bus Mgr, PO Box 158, Gayville SD 57031 (605 267-4476) 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



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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

[denr.sd.gov](http://denr.sd.gov)

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

October 1, 2019

Gayville-Volin School District 63-1  
c/o Alice Hight, Business Mgr  
PO Box 158  
Gayville SD 57031

Dear Ms. Hight:

Water Permit Application No. 8407-3 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 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 to authorize publication of your Notice and to arrange for payment. Early contact with the paper 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 /KS*

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.



DEPARTMENT of ENVIRONMENT  
and NATURAL RESOURCES

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

NOV 07 2019

Gayville-Volin School District 63-1  
c/o Alice Hight, Business Manager  
PO Box 158  
Gayville SD 57031

Dear Ms. Hight:

Enclosed are Water Permit and License No. 8407-3. These are the final water right documents completing the process of obtaining a Water Right. Also, included with the license is a map prepared by the staff engineer who conducted the investigation.

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

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

Sincerely,

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

Note: The applicable portions of No. 8175-3 are incorporated into Water License No. 8407-3.

enclosures