

**WATER PERMIT NO. 7803-3**

Name of Applicant: **Ralph Marquardt**

Address: **PO Box 1040, Yankton SD 57078**

Phone: **605 660-6970**

Amount of Water Claimed: **1.56 cfs**

Total Acres: **68 acres**

Source of Water Supply: **gravel pit**

Water to be used for: **irrigation**

County: **Yankton**

Type of Waste Disposal System:

Location: **2 miles northeast of Yankton**

**PRIORITY**

Date Received: **2-27-13**

Application/License Fee: **\$950**

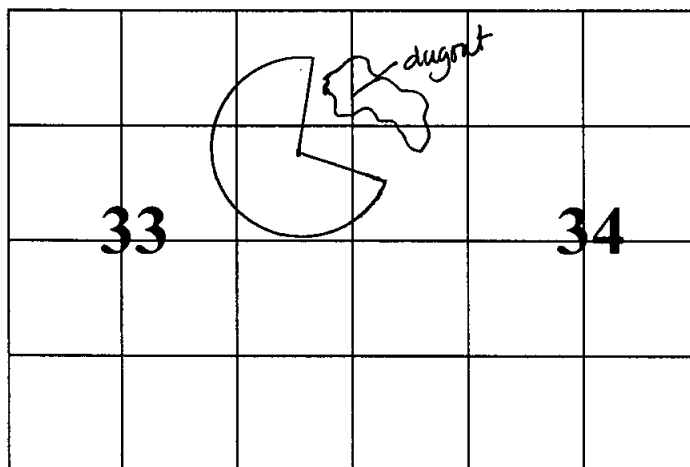
Corrected Application Received: **3-20-13**

Period of Annual Use: **April 1 – October 31**

Remarks:

Diversion Point: **NE 1/4 NE 1/4 Sec 33-T94N-R55W**

Land to be Irrigated: **NE 1/4 Sec 33 and SW 1/4 NW 1/4 Sec 34; all in T94N-R55W**



Depth of Well:

Well Driller:

Remarks:

Type of Map: **aerial**

Prepared by:

Reviewed and the Number Assigned on: **3-21-13**

By: **Karen Schlaak**

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

## SD EForm - 0499LD V4

## FORM 2: Application for irrigation in South Dakota

(type or print)

|                                                                                                                 |                                                                     |
|-----------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|
| Mail to:<br>PMB 2020<br>DENR - Water Rights<br>523 E Capitol Ave<br>Pierre, SD 57501-3182<br>ph. (605) 773-3352 | No. <u>7803-3</u> (office use only) Hydrologic Unit <u>10160001</u> |
|                                                                                                                 | Basin <u>James River</u>                                            |
|                                                                                                                 | Newspaper <u>Press &amp; Dakotan</u> <u>605-665-2811</u>            |
|                                                                                                                 | <u>319 Walnut Yankton 57078</u>                                     |

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## 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.)

1. Name to Appear on Irrigation Permit Ralph Marquardt  
 (check one) ☒ Owner ☐ Tenant/lessee ☐ Owner's Legal Agent Ralph J. Marquardt and Lucille M. Marquardt  
 (name and complete address if different than above name)

Mailing Address PO Box 1040 Yankton SD 57078  
 (Address) (City) (State) (Zip Code)

Home Phone 605-665-4665 Cell 605-660-6970 Email carie1@marquardttrans.com

2. Amount of water claimed 1.56 \*CFS or 700 \*\*GPM        \*\*\*AF Total Acreage 68  
 (\*Cubic Feet per Second) (\*\*Gallons per Minute) (\*\*\*)Acre Feet - storage capacity of dam/dugout or annual use if applicable)

3. Source of water supply Gravel Pit

4. Location of point of diversion Gravel Pit - NENE S33 T94N R55W  
 (example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W)

County Yankton

5. County or counties where water will be used Yankton

6. Annual period during which water is to be used April 1 - October 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 |
|--------------------|-------|------------------|-------|
| SENE S33 T94N R55W | 36    |                  |       |
| SWNE S33 T94N R55W | 16    |                  |       |
| NWNE S33 T94N R55W | 16    |                  |       |
|                    |       |                  |       |

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

To irrigate cropland using a gravel pit.

*Requesting diversion rate greater than statutory limit*

I, Ralph Marquardt, the applicant, certify that I have read this application, have examined the attached map, and that the matters stated are true.

**SOUTH DAKOTA**  
**WATER PERMIT NO. 7803-3**

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Date of first receipt of application February 27, 2013.

Date of return to applicant for corrections, amendments or changes February 28, 2013.

Date of receipt of corrected application March 20, 2013.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 7803-3 to Ralph Marquardt, PO Box 1040, 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. 7803-3 appropriates 1.56 cubic feet of water per second (cfs) from a gravel pit excavated into the Lower James:Missouri Aquifer located in the NE 1/4 NE 1/4 Section 33 for irrigation of 68 acres located in the NE 1/4 Section 33 and SW 1/4 NW 1/4 Section 34; all in T94N-R55W.
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: April 1 – October 31.
3. The date from which applicant may claim right is February 27, 2013.
4. The date of approval of Permit No. 7803-3 is June 3, 2013.
5. One-fifth of the construction is to be completed on or before December 3, 2015.
6. All construction is to be completed on or before June 3, 2018.
7. Water is to be put to beneficial use on or before June 3, 2022.
8. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

**QUALIFICATIONS**

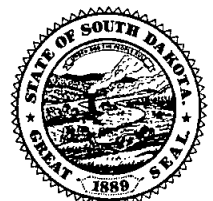
1. The gravel pit which is excavated into the Lower James:Missouri Aquifer and approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. Pursuant to SDCL 46-5-6 which allows a greater diversion rate if the method of irrigation, time constraints, or type of soils so requires, Permit No. 7803-3 authorizes a maximum diversion rate of 1.56 cfs for the irrigation of 68 acres with an annual volume not to exceed 2 acre feet of water per acre per year.
3. 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

JUN 24 2013

date



## Supplemental Information

(type or print)

### 1. Well Information

(check one or both as applicable)

☐ Drilling new well(s)

☐ Using existing well(s)

a) If new wells, how many \_\_\_\_ Have test holes been drilled ☐ Yes ☐ No Drilled by \_\_\_\_  
(if yes, please provide copies of logs)

b) If existing wells, how many \_\_\_\_ Provide copy of log(s), if available. Drilled by \_\_\_\_

c) Well Depth \_\_\_\_ Depth to Top of Water Bearing Material \_\_\_\_ Depth to Water from Surface \_\_\_\_

d) Distance to nearest existing domestic well:

On applicant's property \_\_\_\_ On property owned by others \_\_\_\_

### 2. Wastewater Disposal System Information

a) Type of System (i.e. septic tank, drain field) \_\_\_\_

b) System Capacity (gallons) \_\_\_\_ Year Constructed \_\_\_\_

c) Connected to the City of \_\_\_\_ Sanitary System

### 3. Dugout Information

a) Surface Dimensions Irregular Shaped Gravel Pit Depth 25 Ft

b) Depth to water (ground surface to water level) \_\_\_\_

### 4. Water Storage Dams

If the proposed water use system contains one or more storage dams, please furnish the information requested below for each dam. The locations of the dams need to be shown on the map submitted with the application.

a) If a private engineering firm or government agency was involved in the design of this dam, please give their name and address:

b) Freeboard \_\_\_\_

c) Crest Width \_\_\_\_

Crest Length \_\_\_\_

d) Height \_\_\_\_

e) Primary Outlet Capacity \_\_\_\_

If pipe, diameter \_\_\_\_

f) Secondary Spillway Capacity \_\_\_\_

Spillway Width \_\_\_\_

g) X & Y Slope (e.g. 3 to 1 is a typical slope)

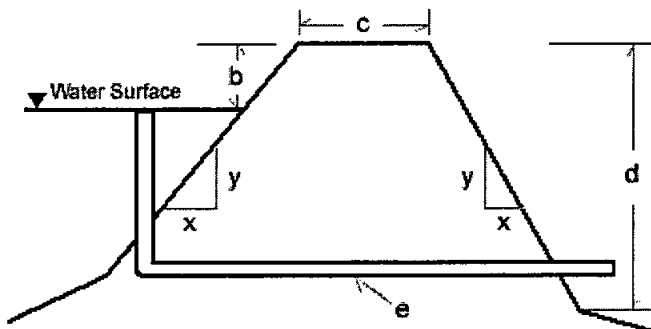
Upstream \_\_\_\_

Downstream \_\_\_\_

h) Surface Area of Impoundment \_\_\_\_

i) Storage \_\_\_\_ Acre Feet

j) Drainage Area Above Dam \_\_\_\_ Acres





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The Leader in Precision Irrigation

Prepared By: **Heine Electric and Irrigation, Inc.**  
For: **Ralph Marquardt Gravel Pit West**

Questions or concerns? Please call us at 402-640-1999!

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Pivot center at 42.919033, -97.340652

Arc Start Bearing: 95.51

Arc Stop Bearing: 12.82

[N] Spray off at 340°, on at 20°.

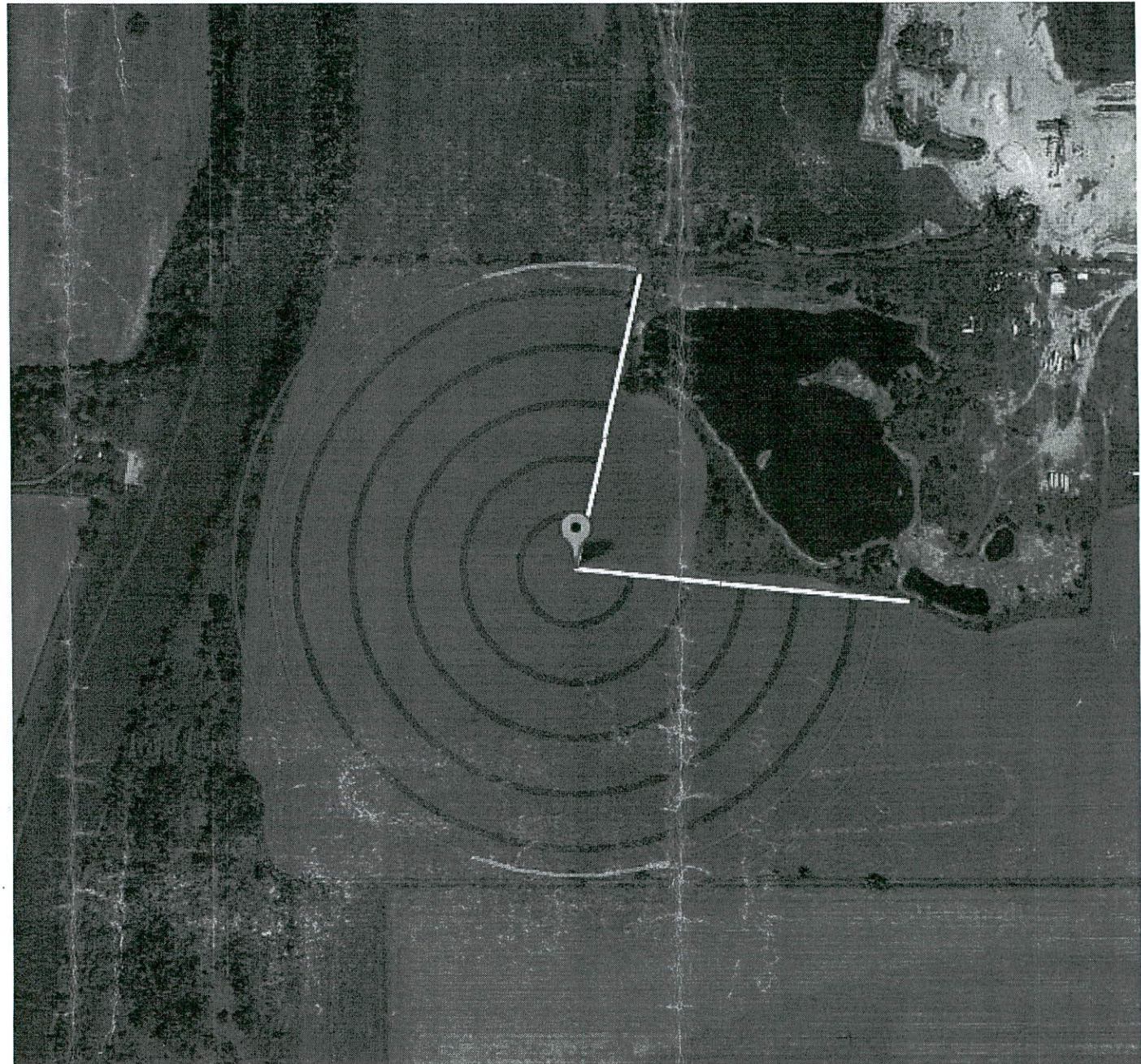
[S] Spray off at 160°, on at 200°.

- 1 185 ft. Total: 185 ft.  
Acreage: 1.89. Total: 1.89 acres.
- 2 185 ft. Total: 370 ft.  
Acreage: 5.68. Total: 7.58 acres.
- 3 185 ft. Total: 555 ft.  
Acreage: 9.47. Total: 17.05 acres.
- 4 185 ft. Total: 740 ft.  
Acreage: 13.26. Total: 30.32 acres.
- 5 185 ft. Total: 925 ft.  
Acreage: 17.05. Total: 47.37 acres.
- Overhang** 85 ft. Total: 1010 ft.  
Acreage: 9.1. Total: 56.48 acres.
- Spray** 120 ft. Total: 1130 ft.  
Acreage: 10.59. Total: 67.08 acres.

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United States Department of Agriculture  
Farm Service Agency

PLSS: 33\_94N\_55W  
Farm: 6409

**Yankton County, SD**

1:8,654

May 17, 2012



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.

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**FEB 27 2013**

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United States Department of Agriculture  
Farm Service Agency

PLSS: 34\_94N\_55W  
Farm: 6409

**Yankton County, SD**  
1:8,765

May 17, 2012



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.

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# RECEIPT

## WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date 2/28, 20 13

RECEIVED OF Marquardt Farms PO Box 1040 Yankton SD 57078

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

|                                                                                                                        |       |        |
|------------------------------------------------------------------------------------------------------------------------|-------|--------|
| Fee for Application for Permit No. <u>7803-3</u> to Appropriate Water, to construct and to put water to beneficial use | 750   | 00     |
| Fee for Application for Permit No. _____ to Appropriate Water for Future use                                           |       |        |
| Fee to retain Future Use Permit No. _____ after period of seven years.                                                 |       |        |
| Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. <u>7803-3</u>            | 200   | 00     |
| Fee for Filing Transfer Form _____                                                                                     |       |        |
| Fee for _____                                                                                                          |       |        |
| Fee for Issuing New Well Driller's License No. _____ for C.Y. _____                                                    |       |        |
| Fee for Renewal of Well Driller's License No. _____ for C.Y. _____                                                     |       |        |
| Fee for Issuing Well Pump Installer's License No. _____ for C.Y. _____                                                 |       |        |
| Fee for Renewal of Well Pump Installer's License No. _____ for C.Y. _____                                              |       |        |
| (Any Other Work Provided by Law)                                                                                       | TOTAL | 950 00 |

No. 06185

By Lance Erbe  
Chief Engineer



DEPARTMENT of ENVIRONMENT  
and NATURAL RESOURCES

PMB 2020  
JOE FOSS BUILDING  
523 EAST CAPITOL  
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

February 28, 2013

Ralph Marquardt  
PO Box 1040  
Yankton SD 57078

Dear Mr. Marquardt:

Thank you for submitting the four *Applications for a Permit to Appropriate Water* for Clay County. In order to complete the applications, the following needs to be clarified.

Regarding the application for irrigation in NE 1/4 Section 33-T94N-R55W

Enclosed is a map we prepared which outlines the 68 acres to be irrigated according to the map you submitted. It appears that some acres to be irrigated will be located in SW 1/4 NW 1/4 Section 34-T94N-R55W. The application does not list any acres located in Section 34. Please make the necessary change on Item No. 7 of the application.

Regarding the application for irrigation in W 1/2 Section 22-T93N-R53W

Enclosed is a map we prepared which outlines the 110 acres to be irrigated according to the map you submitted. Do you agree with the following breakdown of acreages?

|               |          |                          |
|---------------|----------|--------------------------|
| NW 1/4 NW 1/4 | 30 acres |                          |
| NE 1/4 NW 1/4 | 3 acres  |                          |
| SW 1/4 NW 1/4 | 40 acres |                          |
| SE 1/4 NW 1/4 | 15 acres |                          |
| NW 1/4 SW 1/4 | 22 acres | for a total of 110 acres |

It is important that your applications accurately reflect your proposed projects. There are no questions regarding the other two applications.

If you have any questions, please contact me.

Sincerely,

*Karen Schlaak*

Karen Schlaak  
Water Rights Program  
605 773-3352  
[karen.schlaak@state.sd.us](mailto:karen.schlaak@state.sd.us)

enclosures



**DEPARTMENT of ENVIRONMENT  
and NATURAL RESOURCES**

PMB 2020  
JOE FOSS BUILDING  
523 EAST CAPITOL  
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT  
APPLICATION NO. 7803-3, Ralph Marquardt**

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. 7803-3, Ralph Marquardt, PO Box 1040, Yankton SD 57078.

The Chief Engineer is recommending APPROVAL of Application No. 7803-3 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 gravel pit which is excavated into the Lower James:Missouri Aquifer and approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The 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. Pursuant to SDCL 46-5-6 which allows a greater diversion rate if the method of irrigation, time constraints, or type of soils so requires, Permit No. 7803-3 authorizes a maximum diversion rate of 1.56 cfs for the irrigation of 68 acres with an annual volume not to exceed 2 acre feet of water per acre per year.
3. 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  
May 15, 2013

## **REPORT ON WATER PERMIT APPLICATION NO.7803-3**

**Ralph Marquardt**

**April 16, 2013**

Water Permit Application No. 7803-3 proposes to appropriate 1.56 cubic feet of water per second from a gravel pit located in the NE 1/4 NE 1/4 Section 33 for irrigation of 68 acres located in the NE 1/4 Section 33 and SW 1/4 NW 1/4 Section 34; all in T94N-R55W. The gravel pit will also receive incidental surface runoff from the surrounding area. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres. The project is located approximately three miles northeast of the town of Yankton in Yankton County.

### **AQUIFER: Lower James Missouri (LJM)**

#### **GEOLOGY AND AQUIFER CHARACTERISTICS:**

The Lower James Missouri is generally a buried outwash (sand and gravel) that can be generally encountered under confined conditions underlying portions of Clay, Hutchinson and Yankton counties (Bugliosi, 1986). The Lower James Missouri aquifer blends into the Missouri: Elk Point aquifer, and is hydraulically connected to the James River (Bugliosi, 1986). The Lower James Missouri aquifer underlies approximately 92,500 acres and contains an estimated 2.08 million acre-feet of recoverable water in storage in Yankton County alone (Hedges et al., 1982). The depth to aquifer material is generally less than 50 feet below the ground surface (McCormick, 2003). The saturated thickness of the Lower James Missouri aquifer ranges from 50-150 feet thick in the vicinity of the proposed well (Bugliosi, 1986). The specific capacity for wells ranges from 124 to 173 (gal/min)/ft for the Lower James Missouri aquifer (Bugliosi, 1986). Wells can be expected to produce 500 gallons per minute and may yield in excess of 1,000 gallons per minute (Bugliosi, 1986).

#### **SDCL 46-2A-9**

Pursuant to SDCL 46-2A-9, a permit to appropriate water may be issued only if there is reasonable probability that there is unappropriated water available for the applicant's proposed use, that the proposed diversion can be developed without unlawful impairment of existing rights and that the proposed use is a beneficial use and in the public interest. This report will address the availability of unappropriated water and existing rights from the aquifer.

#### **WATER AVAILABILITY:**

This application proposes to appropriate water from the Lower James Missouri aquifer. The actual water use if this application is approved will most likely be less than 136 acre-feet/year. The probability of unappropriated water available from an aquifer can be evaluated by considering SDCL 46-6-3.1 which requires "No application to appropriate groundwater may be approved if, according to the best information reasonably available, it is probable that the quantity of water withdrawn annually from a groundwater source will exceed the quantity of the average estimated annual recharge of water to the groundwater source." If the source of the water is older or lower than the Greenhorn formation and a public water system has applied for a permit, the Water Management Board need not consider the recharge/withdrawal issue. Since this application is not for a public water system, the Board must consider recharge and withdrawal.

## Recharge versus Discharge:

### *Recharge:*

Recharge to the Lower James Missouri aquifer is through seepage from streams and by infiltration of precipitation (Bugliosi, 1986). The average annual recharge rate calculated for the Lower James Missouri aquifer using a regional flow-net analysis is 1.5 inches per year (Hedges and others, 1985). Given the estimated area of the management unit of 92,500 acres in Yankton County, average annual recharge to the aquifer is estimated to be 11,562 acre-feet per year with the total amount of recoverable water of 2,081,250 acre-feet (Hedges and others, 1982).

### *Discharge:*

Discharge from the Lower James Missouri aquifer occurs due to evapotranspiration in areas where the aquifer is near land surface, seepage to the James River, outflow to the aquifer in surrounding counties, and well withdrawals. Currently there are 70 water rights/permits appropriating water from the Lower James Missouri aquifer in Yankton County. Of these existing water rights/permits four are non-irrigation appropriations for 1.94 cfs of water. These four water rights/permits are appropriated for commercial use, industrial use, or geothermal heating/cooling (Water Rights, 2013b). The estimated withdrawal from the aquifer by non-irrigation appropriations is 843 ac-ft per year. This estimation assumes water is being withdrawn from the aquifer 60 percent of the time at the permitted diversion rate for these non-irrigation appropriations. Water use from the Lower James Missouri aquifer from Yankton County as reported to the DENR-Water Rights Program through annual irrigation questionnaires is shown in Figure 1 (Water Rights, 1979-2012). Average annual irrigation water use for the period of record 1979 – 2011 is 1412 ac-ft per year.

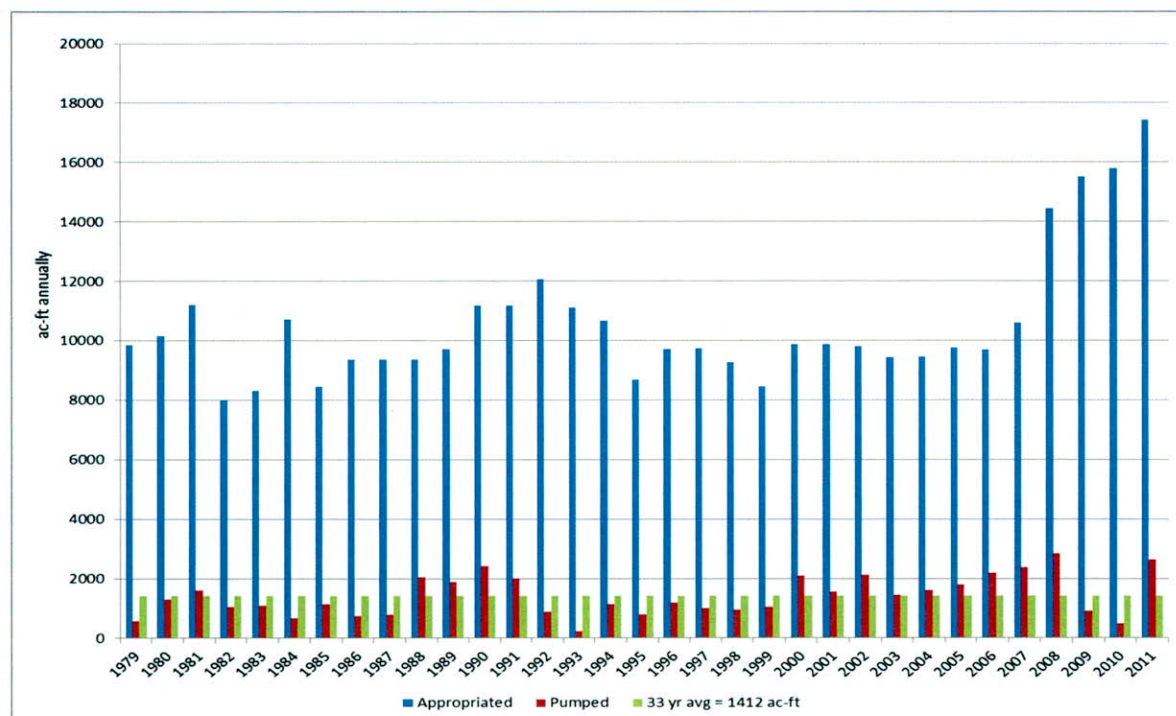


Figure 1- Historic Irrigation Water Use from the Lower James Missouri aquifer from Yankton County. (Water Rights, 1979-2012)

Comparing the average annual recharge calculated by Hedges (1985), 11,562.5 ac-ft in Yankton County, to the estimated average annual withdrawal from the aquifer, 2,255 ac-ft in Yankton County, there is a reasonable probability that unappropriated water is available for this proposed appropriation from the Lower James Missouri aquifer.

#### **Observation Well Data:**

Administrative Rule of South Dakota Section 74:02:05:07 requires that “the Water Management Board shall rely upon the record of observation well measurements to determine that the quantity of water withdrawn annually from the aquifer does not exceed the estimated average annual recharge of the aquifer.”

The DENR-Water Rights Program monitors 33 observation wells completed into the Lower James Missouri aquifer (Water Rights, 2013a). The nearest of these wells (YA-57C) to the well location is located approximately 1.4 miles northwest. Water levels for YA-57C show a good response to climatic conditions. The water levels rise during wet years (recharge) and gradually decline during dry years. The temporal effects of pumping are greatly masked by the climatic effects on the water level in the aquifer. In general the water level record shown in figure 2 indicates that the aquifer is capable of sustaining additional withdrawals (Water Rights, 2013a). There are three wells, two domestic and one for irrigation, within one half mile of YA-57C. Drawdown created by pumping at this distance does not appear significant, as shown by figure 2. Interference is not expected to be a concern.

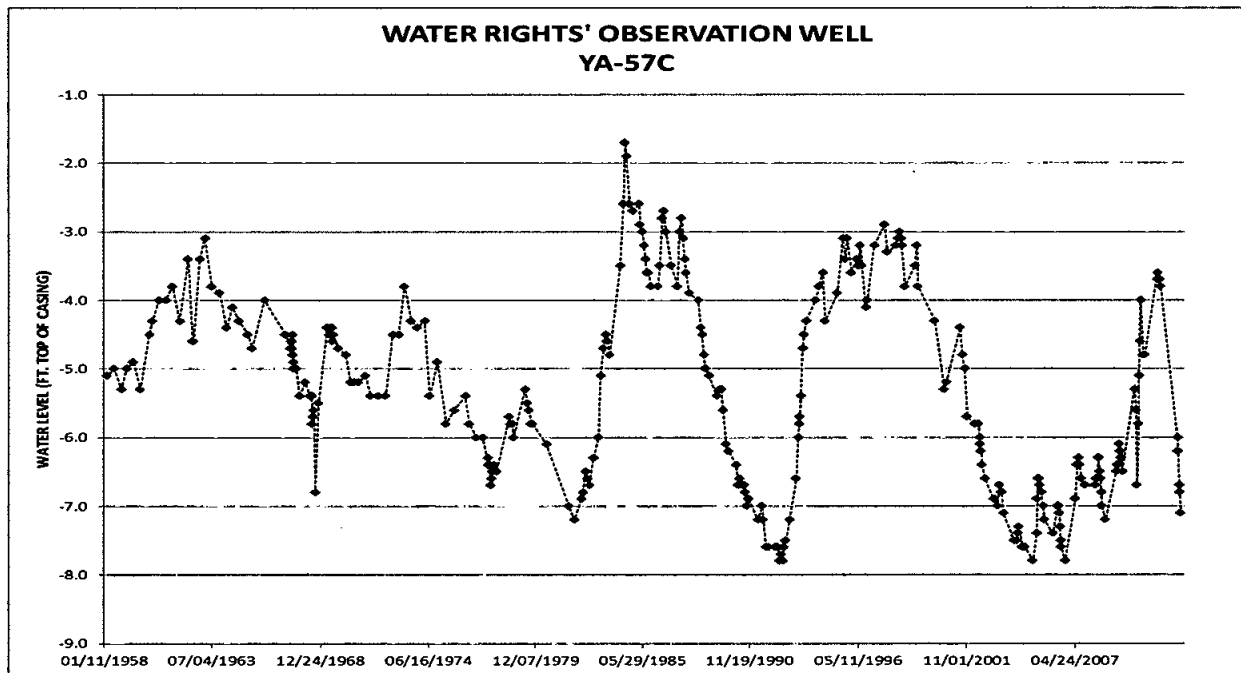


Figure 2- Hydrograph of DENR-Water Rights' observation well YA-57C, located approximately 2.5 miles north of the well site (Water Rights, 2013a).

The hydrograph of the observation well YA-57C shows a slight decline of the Lower James Missouri aquifer's water table over the period of record. This gradual decline has been attributed to entrenching the Missouri River (Goodman, 2007). The declining water table levels demonstrate the hydraulic connection between this aquifer and the Missouri: Elk Point aquifer which has a hydraulic connection with the Missouri River.

#### **EXISTING WATER RIGHTS:**

There are eleven water rights/permits appropriating water within two miles from the proposed well location and several domestic wells on record with SD DENR (Water Rights, 2013b, 2013c). The water rights/permits are listed in table 1.

| PERMIT_NO | NAME                      | STATUS | CFS   | ACRES  |
|-----------|---------------------------|--------|-------|--------|
| 4556-3    | CONCRETE MATERIALS        | LC     | 0.440 | 0.00   |
| 7027-3    | JACK FRICK                | PE     | 1.890 | 160.00 |
| 1687-3    | JOHN FRICK                | LC     | 1.200 | 83.00  |
| 1661-3    | GURNEY SEED & NURSERY     | LC     | 2.850 | 200.00 |
| 4997-3    | DALE & RENA HEBDA         | LC     | 0.280 | 32.00  |
| 4443-3    | D & D NELSON              | LC     | 1.780 | 148.00 |
| 6756-3    | NELSON FAMILY PARTNERSHIP | LC     | 2.220 | 164.00 |
| 7332-3    | RUDOLPH HILL FARM LLLP    | PE     | 2.000 | 157.80 |
| 6917-3    | KARL SCHENK               | PE     | 1.780 | 140.00 |
| 6918-3    | KARL SCHENK               | PE     | 1.330 | 55.00  |
| 7145-3    | DELOS WARRINER            | PE     | 1.780 | 140.00 |

LC= Water Right, PE= Water Permit, IRR= Irrigation, COM= Commercial Use

Table 1- Nearby water rights/permits completed into the Lower James Missouri aquifer from Yankton County. (Water Rights, 2013b)

Historically, well interference has not been a problem with the Lower James Missouri aquifer. While withdrawals would not exceed recharge of the aquifer as a whole, the cumulative impact of withdrawals could lead to a reduction of water levels to the extent that local water rights/permits can no longer pump at their developed, or "historically established," diversion rates. This portion of the Lower James Missouri aquifer is under confined conditions surrounding the gravel pit; therefore, some drawdown due to pumping is likely. Precise drawdown cannot be quantified without aquifer testing. The Water Management Board has consistently recognized that to place water to maximum beneficial use a certain amount of drawdown may occur. SDCL 46-6-6.1 does not require protection of artesian head pressure as a means of groundwater delivery. However, reasonable domestic use must be assured before irrigation use is allowed. Therefore, when considering irrigation projects, the Water Management Board must give consideration to maintaining artesian head pressure as a method of delivery for domestic wells. Depending on the specific characteristics of the Lower James Missouri aquifer at the proposed well site, some existing well owners may need to lower their pumps to accommodate possible reduction of head pressure. If approved, the water permit should include the qualification that the well owner should 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. Since a gravel pit is not

considered an adequate well pursuant to ARSD 74:02:04:20(6) it would not be afforded protection from impairment issues under South Dakota water law.

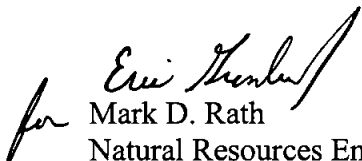
If approved the total acreage for this project would be 68 acres at a diversion rate of 1.56 cfs. The proposed diversion rate would exceed the statutory limit of 1 cfs per 70 irrigated acres. The applicant proposes to use a center pivot irrigation system; however the system will only make a partial rotation.

#### **SDCL 46-5-6**

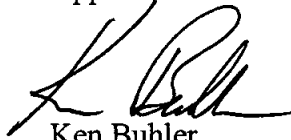
Pursuant to SDCL 46-2A-9, the amount allowed may not be in excess of the rate of one cubic foot of water per second for each seventy acres. The Water Management Board may allow a greater diversion, in volume or rate or both, if the method of irrigation, any time constraints on diversion of water, or the type of soil so requires.

#### **CONCLUSIONS:**

1. This application proposes to appropriate water from a gravel pit constructed into the Lower James Missouri aquifer to irrigate 68 acres.
2. There is a reasonable probability that unappropriated water is available from the Lower James Missouri aquifer to satisfy this proposed appropriation.
3. Withdrawals from the Lower James Missouri by the gravel pit proposed by this application will not be expected to adversely impair existing water rights.
4. If approved the total acreage for this project would be 68 acres at a diversion rate of 1.56 cfs. The proposed diversion rate would exceed the statutory limit of 1 cfs per 70 irrigated acres.

  
for Mark D. Rath  
Natural Resources Engineer  
SD DENR-Water Rights Program

Approved:

  
Ken Buhler  
Natural Resources Engineer  
SD DENR-Water Rights Program

#### **REFERENCES:**

Bugliosi, E.F. 1983. Major Aquifers in Yankton County, South Dakota. U.S. Geological Survey Information Pamphlet No. 28. p 7.

- Bugliosi, E.F. 1986. Water Resources of Yankton County, South Dakota. U.S. Geological Survey Water-Resources Investigations Report 84-4241, p 41.
- Goodman, J.A. 2007. Report on Water Permit Application No. 6869-3 for Lewis and Clark RWS: SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, SD.
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- Water Rights. 2013b. Water Right/Permit Files. SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, SD.
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JUN - 3 2013

WATER RIGHTS  
PROGRAM

**AFFIDAVIT OF PUBLICATION**

**YANKTON DAILY PRESS AND DAKOTAN**

5+24

**NOTICE OF APPLICATION  
NO. 7803-3 to Appropriate  
Water**

Notice is given that Ralph Marquardt, PO Box 1040, Yankton SD 57078 has filed an application for a water permit to appropriate 1.56 cubic feet of water per second from a gravel pit excavated into the Lower James:Missouri Aquifer located in the NE 1/4 NE 1/4 Section 33 for irrigation of 68 acres located in the NE 1/4 Section 33 and SW 1/4 NW 1/4 Section 34; all in T94N-R55W. The applicant is requesting a diversion rate greater than the statutory limit.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 7803-3 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. In accordance with SDCL 46-2A-23, the Chief Engineer will act on this application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the Chief Engineer's recommendation. 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.

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 June 3, 2013.

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. Contact Eric Gronlund at the above Water Rights Program address to request copies of information pertaining to this application. Steven M. Pimer, Secretary, Department of Environment and Natural Resources.

Published once at the total approximate cost of \$27.81.

Department of Environment and Natural Resources  
PMB 2020  
Joe Foss Building  
523 East Capitol  
Pierre, SD 57501-3182

STATE OF SOUTH DAKOTA  
COUNTY OF YANKTON

KELLY HERTZ BEING FIRST DULY SWORN ON OATH DEPOSES AND SAYS THAT 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 Notice of Application No. 7803-3

TAKEN FROM THE PAPER, IN WHICH IT WAS LAST PUBLISHED IN THE NEWSPAPER ON THE 24th DAY OF May 2013 THAT THE FULL AMOUNT OF THE FEE CHARGED FOR THE PUBLICATION OF SAID NOTICE TO WIT \$27.81 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: 5/24/2013

FILED ON: 5/24/2013

SUBSCRIBED AND SWORN TO BEFORE ME THIS 24th DAY OF May 2013

NOTARY PUBLIC, SOUTH DAKOTA

MY COMMISSION EXPIRES 8/19/2015

2013



DEPARTMENT of ENVIRONMENT  
and NATURAL RESOURCES

PMB 2020  
JOE FOSS BUILDING  
523 EAST CAPITOL  
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

May 16, 2013

Press & Dakotan  
319 Walnut  
Yankton SD 57078

ATTENTION: Legal Public Notice

Enclosed is a Notice on Application No. 7803-3 to Appropriate Water. Please publish the notice once on May 24, 2013. The text of the notice can be e-mailed to your paper by contacting Karen Schlaak at (605) 773-3352.

The applicant must verify to you that the notice is to be published and arrange for payment. **Please BILL the APPLICANT for the cost of publication.** The APPLICANT is Ralph Marquardt, PO Box 1040, Yankton SD 57078 (Ph # 605-665-4665).

**Please send the Water Rights Program an affidavit or the enclosed Proof of Publication form immediately.**

The applicant pays the cost of publication, but the Water Rights Program records require an affidavit or Proof of Publication. Delays in receiving the affidavit can be costly to the applicant.

Sincerely,

Eric Gronlund  
Natural Resources Engineer  
605 773-3352

enclosures



**DEPARTMENT of ENVIRONMENT  
and NATURAL RESOURCES**

PMB 2020  
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.**

May 16, 2013

Ralph Marquardt  
PO Box 1040  
Yankton SD 57078

Dear Mr. Marquardt:

Water Permit Application No. 7803-3 for irrigation use has been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice has been sent to the Press & Dakotan printed at Yankton SD (Ph # 605-665-7811). You will need to contact the newspaper(s) and authorize publication of this notice. For your information, a copy of the notice, the recommendation of the Chief Engineer and report on the application are enclosed. Please review the notice prior to publication and notify this office, if you have any corrections or questions.

Be sure to contact the above newspaper(s) to authorize publication of your Notice and to arrange for payment. Early contact with the paper(s) can eliminate delays. Upon receiving authorization from you, the publisher has been instructed to publish your notice. The newspaper has also been instructed to send us the Proof of Publication. We must receive Proof of Publication before action can be taken on the application.

Sincerely,

Eric Gronlund  
Natural Resources Engineer  
(605) 773-3352  
enclosures

**NOTE:** If you plan to contest any part of the Chief Engineer's recommendation, you must file a petition pursuant to the procedures outlined in the attached notice of hearing. The Water Management Board will then consider your concerns during a hearing on the application.

Instruction to Newspaper - Publish the Notice on May 24, 2013. The applicant is responsible for payment. The text of the notice can be e-mailed to your paper by contacting Karen Schlaak at (605) 773-3352 or email: Karen.schlaak@state.sd.us.

---

NOTICE OF APPLICATION NO. 7803-3 to Appropriate Water

Notice is given that Ralph Marquardt, PO Box 1040, Yankton SD 57078 has filed an application for a water permit to appropriate 1.56 cubic feet of water per second from a gravel pit excavated into the Lower James:Missouri Aquifer located in the NE 1/4 NE 1/4 Section 33 for irrigation of 68 acres located in the NE 1/4 Section 33 and SW 1/4 NW 1/4 Section 34; all in T94N-R55W. The applicant is requesting a diversion rate greater than the statutory limit.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 7803-3 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. In accordance with SDCL 46-2A-23, the Chief Engineer will act on this application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the Chief Engineer's recommendation. 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.

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Published once at the total approximate cost of\_\_\_\_\_.



**DEPARTMENT of ENVIRONMENT  
and NATURAL RESOURCES**

PMB 2020  
JOE FOSS BUILDING  
523 EAST CAPITOL  
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

JUN 24 2013

Ralph Marquardt  
PO Box 140  
Yankton SD 57078

Dear Mr. Marquardt:

Enclosed are Water Permit Nos. 7800-3, 7801-3, 7802-3 and 7803-3 authorizing construction of your water diversion systems and beneficial use of the water, not exceeding the limits as specified in the Water Permits.

Form 10's, *Notice of Completion of Works and Application of Water to Beneficial Use*, are enclosed. Please return the completed forms after you have finished the systems and have put the water to beneficial use. An investigation can then be scheduled so the water licenses may be issued, thus completing the acquisition of a water right.

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

Sincerely,

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

enclosures

7803-3  
RECEIVED

AUG - 2 2013

WATER RIGHTS  
PROGRAMNOTICE OF COMPLETION OF WORKS AND  
APPLICATION OF WATER TO BENEFICIAL USEDate 7/29/13TO: Water Rights Program, DENR  
523 E. Capitol  
Pierre, SD 57501-3181

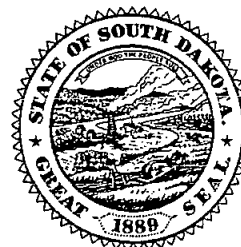
FROM:

Ralph Marguardt  
(name)Po Box 1040  
(address)Yankton SD 57078  
(city, state, zip)605-665-1053  
(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. 7803-3 states that the water use system is to be constructed by6/3/2018, and water is to be put to beneficial use by 6/3/2022  
(date) (date)The water use system was completed on 7/16/13  
(date)Applying the water to beneficial use was completed on 7/16/13  
(date)

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

Ralph Marguardt  
(signature)



**DEPARTMENT of ENVIRONMENT  
and NATURAL RESOURCES**

JOE FOSS BUILDING  
PMB 2020  
523 EAST CAPITOL  
PIERRE SOUTH DAKOTA 57501-3182  
<http://denr.sd.gov>

August 5, 2013

7800-3  
7801-3  
7802-3  
7803-3

Ralph Marquardt  
PO Box 1040  
Yankton SD 57078

Dear Mr. Marquardt:

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

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

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

Sincerely,

A handwritten signature in black ink that reads "Genny McMath". The signature is written in a cursive, flowing style.

Genny McMath  
Water Rights Program  
(605) 773-3352  
email: [genny.mcmath@state.sd.us](mailto:genny.mcmath@state.sd.us)



7803-3  
DEPARTMENT of ENVIRONMENT  
and NATURAL RESOURCES

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

January 25, 2019

NOTICE

TO: MARQUARDT FAMILY LTD PARTNERSHIP, PO BOX 1040, YANKTON, SD 57078  
FROM: Ron Duvall, Natural Resources Engineer  
for Jeanne Goodman, Chief Engineer  
Water Rights Program

SUBJECT: Reporting Requirement for 2018 Irrigation Questionnaire(s)

Our records indicate your 2018 Irrigation Questionnaire(s) has not been submitted for Permit No(s) 5391A-3, 5658A-3, 6978-3, 6979-3, 6980-3, 7152-3, 7213-3, 7214-3 & 7800-3, 7801-3, 7802-3 & 7803-3. The request for the Questionnaire was dated October 30, 2018. The Water Management Board has directed that owners of water permits who have not submitted the 2018 Irrigation Questionnaire(s) be given notice of permit violation and a hearing to be held by the Board. The hearing is to determine what action is to be taken for violation of Water Permit No(s) 5391A-3, 5658A-3, 6978-3, 6979-3, 6980-3, 7152-3, 7213-3, 7214-3 & 7800-3, 7801-3, 7802-3 & 7803-3 qualification:

"This permit is approved subject to the Irrigation Water Use Questionnaire being submitted each year."

The hearing will be held at **Wednesday, March 6, 2019 at 10:30 am (Central Time)** in the Floyd Matthew Training Center, Joe Foss Building, 523 E Capitol Avenue, Pierre, SD and will be conducted pursuant to SDCL 46-1-12, 46-1-14, 46-2-9, 46-2-11 and 46-2-17. These are contested case hearings pursuant to Chapter 1-26. According to SDCL 46-1-12, the Board may suspend a permit for a period of up to one year for the first violation of a permit qualification or up to three years for a second violation, or cancel a permit for a third violation. Following the hearing, the Water Management Board can:

1. Suspend or cancel Permit No(s) 5391A-3, 5658A-3, 6978-3, 6979-3, 6980-3, 7152-3, 7213-3, 7214-3 & 7800-3, 7801-3, 7802-3 & 7803-3 in accordance with applicable provisions of SDCL 46-1-12;
2. Postpone any action; or
3. Take no action.

The hearing is an adversary proceeding. The permit owner has the right to be present or to be represented by a lawyer. These and other due process rights will be forfeited if they are not exercised. Decisions of the Board may be appealed to the Circuit Court and the State Supreme Court as provided by law.

If the questionnaire(s) is (are) received in this office before the **March 6, 2019** hearing you will no longer be in violation of your permit and your name will be removed from the Board agenda. Enclosed are additional questionnaire(s) for your use. If you have questions or need assistance, please contact Genny McMath at (605) 773-3352 or email at [genny.mcmath@state.sd.us](mailto:genny.mcmath@state.sd.us). If you prefer, you can complete the questionnaire online at the following link: <http://denr.sd.gov/iq.aspx>

**NOTE:** Please contact the Water Rights Program, Joe Foss Building, 523 E Capitol, Pierre, SD (605-773-3352) to assure access to the meeting room for the handicapped or to obtain an interpreter for the hearing impaired.

7803-3



DEPARTMENT of ENVIRONMENT  
and NATURAL RESOURCES

JOE FOSS BUILDING  
523 EAST CAPITOL  
PIERRE SOUTH DAKOTA 57501-3182  
[www.denr.sd.gov](http://www.denr.sd.gov)

February 6, 2019

Marquardt Family Ltd Partnership  
PO Box 1040  
Yankton SD 57078

RE: Water Permit/Right Nos. 5391A-3, 5658A-3, 6978-3, 6979-3, 6980-3, 7152-3, 7213-3,  
7214-3 & 7800-3, 7801-3, 7802-3 & 7803-3

Dear Sir:

I am writing to acknowledge receipt of your 2018 irrigation questionnaires.

You may disregard the January 25, 2019, "Notice" concerning reporting requirements for Water Permit or Right Nos. 5391A-3, 5658A-3, 6978-3, 6979-3, 6980-3, 7152-3, 7213-3, 7214-3 & 7800-3, 7801-3, 7802-3 & 7803-3. The information was received in our office prior to the Water Management Board meeting and your name has been deleted from the agenda.

If you have any questions, please contact me.

Sincerely,

A handwritten signature in cursive script that reads "Genny McMath".

Genny McMath  
Water Rights Program  
(605) 773-3352  
email: [genny.mcmath@state.sd.us](mailto:genny.mcmath@state.sd.us)

## Report of Examination of Works and/or Application of Water to Beneficial Use For Permit No. 7803-3

I have this day, March 17, 2022, made a thorough examination of the water use system constructed by Ralph Marquardt, PO Box 1040, Yankton, SD 57078, holder of Permit No. 7803-3, bearing the priority of February 27, 2013 authorizing the diversion of 1.56 cu. ft. per second of the waters of groundwater (Lower James: Missouri Aquifer) for the irrigation of 68 acres located in Yankton County.

Inspection contacts: Dave Husby, Francis Bermel and Breyton Nelson

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

#### Well Information:

- 1) Well Drilling Firm: NA, gravel pit.

#### Pump:

- 1) Make: Berkeley
- 2) Model: B6JQBM
- 3) Capacity: 800 gpm

#### Motor:

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

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

- 1) Type: PVC
- 2) Size: 8 inches
- 3) Length: 670 feet

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

#### Center Pivot:

- 1) Make: Valley
- 2) Overall length: 1,006 feet
- 3) Number of towers: 5
- 4) End gun: Yes
- 5) Capacity: 800 gpm

#### Chemigation Equipment:

- 1) Does chemigate: No

### D. Compliance with Permit Requirements:

- 1) Permit qualifications being abided by: No
- 2) Irrigation Questionnaires checked to determine if permit owner started irrigation by the end of construction period: Yes
- 3) Exceptions to compliance are: The pump flow rate is more than what was permitted.

### E. Condition and Location:

1. The system is in good condition with the point(s) of diversion located as follows:  
The gravel pit pump location is 220 feet west and 1,160 feet south of the northeast corner of Section 33-T94N-R55W (Latitude 42.92027, Longitude -97.33895 – NE1/4 of the NE1/4).

## Report of Examination of Works

Permit No. 7803-3

2. The works are capable of diverting and conveying to the place of use 1.78 cu. ft. per second of water which is to be used for irrigation purposes. Water has been put to beneficial use to the maximum extent as follows:

Section 33-T94N-R55W

|                   |                 |
|-------------------|-----------------|
| <u>NW1/4NE1/4</u> | <u>4 acres</u>  |
| <u>NE1/4NE1/4</u> | <u>12 acres</u> |
| <u>SW1/4NE1/4</u> | <u>11 acres</u> |
| <u>SE1/4NE1/4</u> | <u>34 acres</u> |

Section 34-T94N-R55W

|                   |                |
|-------------------|----------------|
| <u>SW1/4NW1/4</u> | <u>6 acres</u> |
|-------------------|----------------|

comprising a total of 67 acres of land and the license should be issued for 1.56 cfs.

3. All structures, wells and lands on map: Yes

F. Comments or other permit(s) associated with the project: The property renter stated that the pump rpm is adjusted to maintain the 800 gpm that the pivot is nozzled for. The pump and pivot flowrates were not available on the pump or the pivot, so I used the information provided by the renter. The stated and reported pump flowrate is more than the amount authorized by the permit.

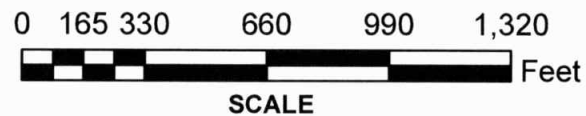
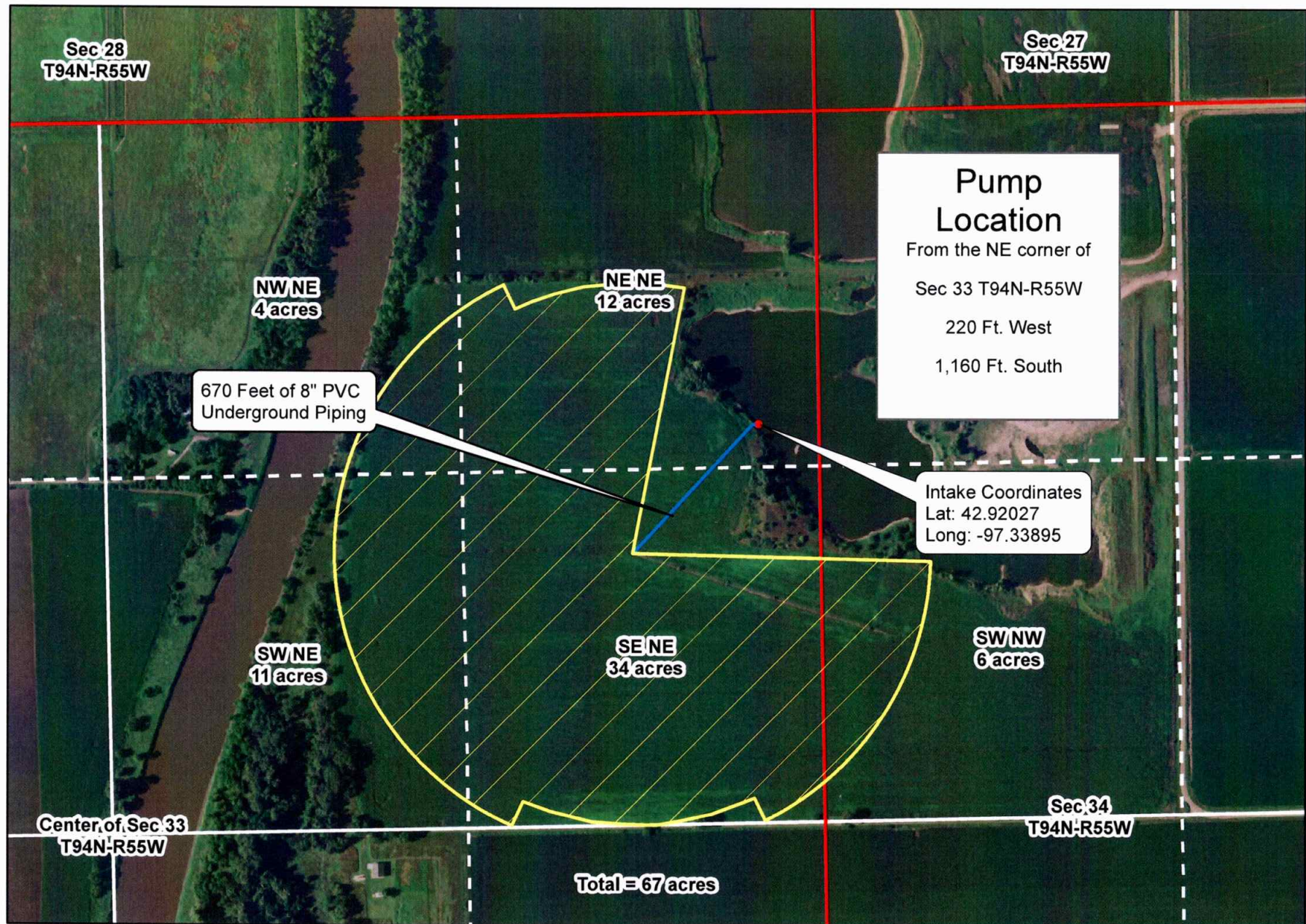


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Keith DeJong, PE Ret.  
Water Rights Inspector  
DANR, Water Rights Program

Date report completed: March 24, 2022

# Water Right No. 7803-3



*Keith DeJong*  
Keith DeJong, PE Ret.  
Staff Engineer  
March 24, 2022



**DEPARTMENT of AGRICULTURE  
and NATURAL RESOURCES**

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

APR 27 2022

7803-3

Ralph Marquardt  
PO Box 1040  
Yankton SD 57078

Dear Mr. Marquardt:

Enclosed is Water License No. 7803-3. This is the final water right document completing your process of obtaining a Water Right. Included with your license is a map prepared by the staff engineer who conducted the field investigation.

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

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

Sincerely,

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

enclosures

**NOTE: The investigation found your irrigation system capable of diverting 1.78 cubic feet of water per second (cfs) which is equivalent to approximately 800 gallons per minute. The permit as originally approved limited the diversion authority to 1.56 cfs (equivalent to 700 gpm). Diversion of water under this water license is limited to 1.56 cfs.**

## STATE OF SOUTH DAKOTA

### WATER LICENSE NO. 7803-3

---

(1) Ralph Marquardt, PO Box 1040, Yankton SD 57078 made Application No. 7803-3, February 27, 2013 for a water permit to divert 1.56 cubic feet of water per second from ground water (gravel pit) Lower James Missouri Aquifer, Yankton County, South Dakota for irrigation purposes. Permit No. 7803-3, with a priority date of February 27, 2013 was approved June 3, 2013 and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before June 3, 2018 and for the application to beneficial use of said water on or before June 3, 2022.

(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 1.56 cubic feet of water per second for beneficial use. The gravel pit pump location is as follows:

- 220' W and 1,160' S of the NE corner of Section 33, T94N, R55W (NE  $\frac{1}{4}$  NE  $\frac{1}{4}$  Section 33)  
Latitude 42.92027, Longitude -97.33895

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

| Section 33, T94N, R55W            |          | Section 34, T94N, R55W            |         |
|-----------------------------------|----------|-----------------------------------|---------|
| NW $\frac{1}{4}$ NE $\frac{1}{4}$ | 4 acres  | SW $\frac{1}{4}$ NW $\frac{1}{4}$ | 6 acres |
| NE $\frac{1}{4}$ NE $\frac{1}{4}$ | 12 acres |                                   |         |
| SW $\frac{1}{4}$ NE $\frac{1}{4}$ | 11 acres |                                   |         |
| SE $\frac{1}{4}$ NE $\frac{1}{4}$ | 34 acres |                                   |         |
| Total 67 acres                    |          |                                   |         |

(4) Pursuant to South Dakota Water Law 46-5-30.1 Ralph Marquardt, PO Box 1040, Yankton SD 57078 the holder and/or owner of Water Right No. 7803-3 is issued a license to appropriate water, the right to use 1.56 cubic feet of water per second from ground water (gravel pit) Lower James Missouri Aquifer with a priority date of February 27, 2013, 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. 7803-3 and subject to the following qualifications:

- The gravel pit which is excavated into the Lower James Missouri Aquifer and approved under this water right will be located near domestic wells and other wells which may obtain water from the same aquifer. The owner under this water right shall control withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
- Pursuant to SDCL 46-5-6 which allows a greater diversion rate if the method of irrigation, time constraints, or type of soils so requires, No. 7803-3 authorizes a maximum diversion rate of 1.56 cfs for the irrigation of 67 acres with an annual volume not to exceed 2 acre feet of water per acre per year. *The acreage was reduced based on the system as developed.*

continued

- This water right is 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

APR 27 2022

date

