

WATER PERMIT NO. 7631-3

Name of Applicant: Gregoire Farms

Address: 609 Colonial Court, Vermillion SD 57069

Phone: 605 670-2303

Amount of Water Claimed: 1.61 cfs

Total Acres: 108 acres

Source of Water Supply: groundwater

Water to be used for: irrigation

County: Clay

Type of Waste Disposal System:

Location: 10 miles north of Vermillion

PRIORITY

Date Received: 1-14-13

Application/License Fee: \$ 950

Corrected Application Received:

Period of Annual Use: April 1 – October 31

Remarks: Requesting diversion rate greater than statutory limit

Diversion Point: SW 1/4 SE 1/4 Sec 25-T94N-
R52W

Land to be Irrigated: E 1/2 SW 1/4, SE 1/4 Sec 25-
T94N-R52W

Depth of Well: 70 feet deep

Well Driller:

Remarks:

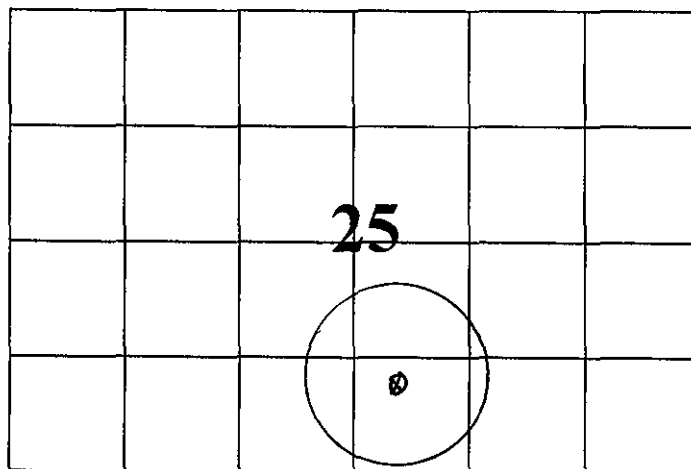
Type of Map: aerial

Prepared by:

Reviewed and the Number Assigned on: 1-14-13

By: Karen Schlaak

Notice of Hearing - date to intervene: _____



FORM 2: Application for irrigation in South Dakota

(type or print)

Mail to: PMB 2020 DENR - Water Rights 523 E Capitol Ave Pierre, SD 57501-3182 ph. (605) 773-3352	No. <u>7631-3</u> (office use only) Hydrologic Unit <u>10170102</u>
	Basin <u>Vermillion River</u> <u>605-624-2695</u>
Newspaper <u>Plain Talk 201 W Cherry St. Vermillion SD 57069</u> <u>Press & Dakotan 319 Walnut Yorkton SD 57078</u> <u>605-665-7811</u>	

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JAN 14 2013

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.)

1. Name to Appear on Irrigation Permit Gregoire Farms(check one) ☒ Owner ☐ Tenant/lessee ☐ Owner's Legal Agent Tim Gregoire

(name and complete address if different than above name)

Mailing Address 609 Colonial Court Vermillion SD 57069
(Address) (City) (State) (Zip Code)Home Phone 605-624-4030 Cell 605-670-2303 Email tgregoire@q.com2. Amount of water claimed 1.61 *CFS or 725 **GPM ***AF Total Acreage 108
(*Cubic Feet per Second) (**Gallons per Minute) (***)Acre Feet - storage capacity of dam/dugout or annual use if applicable)3. Source of water supply 1 well to lower vermillion-missouri aquifer4. Location of point of diversion Well #1 in the sw 1/4 of se 1/4 of Section 25, T94n, R 52w,

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

County Clay5. County or counties where water will be used Clay6. Annual period during which water is to be used April to October annually

7. List below each forty acre division, or lot, or fraction thereof and show number of acres to be irrigated in each.

(Attach sheet if more space is needed)

Land Description	Acres	Land Description	Acres
ne 1/4 of sw 1/4 of Section 25, T94n, R 52w	9	ne 1/4 of se 1/4 of Section 25, T94n, R 52w	9
se 1/4 of sw 1/4 of Section 25, T94n, R 52w	14	nw 1/4 of se 1/4 of Section 25, T94n, R 52w	31
sw 1/4 of se 1/4 of Section 25, T94n, R 52w	33		
se 1/4 of se 1/4 of Section 25, T94n, R 52w	9		

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

Center pivot irrigation of the above listed cropland

- Requesting diversion rate greater than statutory limit.

I, Tim Gregoire, 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. 7631-3

Date of first receipt of application January 14, 2013.

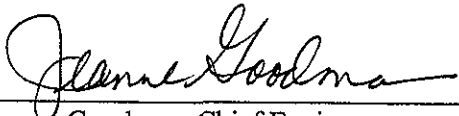
The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 7631-3 to Gregoire Farms, 609 Colonial Court, Vermillion SD 57069 authorizing the construction of the water use system and the placing of water to beneficial use subject to the following limitations, conditions and qualifications:

1. Water Permit No. 7631-3 appropriates 1.61 cubic feet of water per second (cfs) from one well to be completed into the Lower Vermillion:Missouri Aquifer (70 feet deep) located in the SW 1/4 SE 1/4 Section 25 for irrigation of 108 acres located in the E 1/2 SW 1/4, SE 1/4 Section 25; all in T94N-R52W.
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 January 14, 2013.
4. The date of approval of Permit No. 7631-3 is April 1, 2013.
5. One-fifth of the construction is to be completed on or before October 1, 2015.
6. All construction is to be completed on or before April 1, 2018.
7. Water is to be put to beneficial use on or before April 1, 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 well approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. The well authorized by Permit No. 7631-3 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28.
3. 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. 7631-3 authorizes a maximum diversion rate of 1.61 cfs for the irrigation of 108 acres with an annual volume not to exceed 2 acre feet of water per acre per year.
4. 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

MAY 20 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 1 Have test holes been drilled ☐ Yes ☒ No Drilled by _____
(if yes, please provide copies of logs)

b) If existing wells, how many 0 Provide copy of log(s), if available. Drilled by _____

c) Well Depth 70 Depth to Top of Water Bearing Material 25 Depth to Water from Surface 20

d) Distance to nearest existing domestic well:

On applicant's property NA

On property owned by others >5000'

2. Wastewater Disposal System Information

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

b) System Capacity (gallons) _____ Year Constructed _____

c) Connected to the City of _____ Sanitary System

3. Dugout Information

a) Surface Dimensions _____ Depth _____

b) Depth to water (ground surface to water level) _____

4. Water Storage Dams

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

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

b) Freeboard _____

c) Crest Width _____

Crest Length _____

d) Height _____

e) Primary Outlet Capacity _____

If pipe, diameter _____

f) Secondary Spillway Capacity _____

Spillway Width _____

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

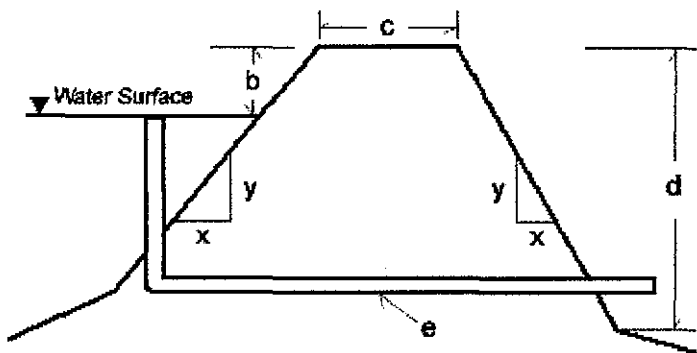
Upstream _____

Downstream _____

h) Surface Area of Impoundment _____

i) Storage _____ Acre Feet

j) Drainage Area Above Dam _____ Acres



Kelly Andersen
 4
 65.45
 NHEL
Clay County FSA
Program Technician



United States Department of Agriculture
 Farm Service Agency

PLSS: 25_94N_52W
 Farm: 4339

Clay County, SD

1:8,581

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 WATER RIGHTS
 PROGRAM

March 11, 2010

Wetland Determination Identifiers

- Restricted Use
- ▽ Limited Restrictions
- Exempt from Conservation Compliance Provisions

□ Common Land Units

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.

2008 Ortho-Photography - Not to Scale

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date 1/14, 20 13

RECEIVED OF Timothy S Gregoire 609 Colonial Ct Vermillion SD 57069

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

Fee for Application for Permit No. <u>71631-3</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>71631-3</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. 05952

By

[Signature]
Chief Engineer



**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. 7631-3, Gregoire Farms**

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. 7631-3, Gregoire Farms, c/o Tim Gregoire, 609 Colonial Court, Vermillion SD 57069.

The Chief Engineer is recommending APPROVAL of Application No. 7631-3 because 1) there is reasonable probability that there is unappropriated water available for the applicant's proposed use, 2) the proposed diversion can be developed without unlawful impairment of existing rights, 3) the proposed use is a beneficial use and 4) it is in the public interest with the following qualifications:

1. The well approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. The well authorized by Permit No. 7631-3 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28.
3. 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. 7631-3 authorizes a maximum diversion rate of 1.61 cfs for the irrigation of 108 acres with an annual volume not to exceed 2 acre feet of water per acre per year.
4. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

See report on application for additional information.

Garland Erbele, Chief Engineer
March 11, 2013

REPORT ON WATER PERMIT APPLICATION NOS. 7631-3 & 7632-3

Gregoire Farms, % Tim Gregoire

February 19, 2013

Water Permit Application No. 7631-3 proposes to appropriate 216 acre-feet annually at a maximum diversion rate of 1.61 cubic feet of water per second (cfs) from one well to be completed into the Lower Vermillion Missouri aquifer located in the SW $\frac{1}{4}$ SE $\frac{1}{4}$ Section 25 for irrigation of 108 acres located in the E $\frac{1}{2}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$ Section 25; all in T94N-R52W.

Water Permit Application No. 7632-3 proposes to appropriate 518 acre-feet annually at a maximum diversion rate of 4.44 cubic feet of water per second (cfs) from two wells to be completed into the Lower Vermillion Missouri aquifer located in the SW $\frac{1}{4}$ SW $\frac{1}{4}$ Section 24 and the SE $\frac{1}{4}$ NW $\frac{1}{4}$ Section 25 for irrigation of 259 acres located in the SW $\frac{1}{4}$ Section 24 and the NW $\frac{1}{4}$, W $\frac{1}{2}$ NE $\frac{1}{4}$, N $\frac{1}{2}$ SW $\frac{1}{4}$, NW $\frac{1}{4}$ SE $\frac{1}{4}$ Section 25; all in T94N-R52W. The applicant is requesting diversion rates greater than the statutory limit. The projects are located approximately 10.5 miles north of the town of Vermillion in Clay County.

AQUIFER: Lower Vermillion Missouri (LVM)

GEOLOGY AND AQUIFER CHARACTERISTICS:

The Lower Vermillion Missouri aquifer is a buried outwash (sand and gravel) aquifer that is under confined conditions in the area of this application, but also has portions under unconfined conditions (Stephens and Christensen, 1967). The aquifer underlies approximately 125,600 acres and contains an estimated 1.9 million acre-feet of recoverable water in storage in Clay and Union Counties (Hedges et al., 1982). The aquifer blends into the Missouri: Elk Point aquifer to the south and into the Upper Vermillion Missouri aquifer to the north. This aquifer is also hydraulically connected to the Vermillion River and the Parker-Centerville aquifer.

Test hole information was not submitted with these permit applications. However, sufficient data is available through well completion reports (Water Rights, 2013c), water right/permit files (Water Rights, 2013b), and SD DENR-Geological Survey test hole logs (SDGS, 2013) to evaluate the applications. The top of the aquifer materials are expected to be found at an elevation of approximately 1135 feet above mean sea level (fmsl) and the potentiometric surface to be found at an elevation of approximately 1145 fmsl. The aquifer thickness is 76 to greater than 127 feet (Water Rights, 2012c).

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:

These applications propose to appropriate a total of 734 acre-feet annually from the Lower Vermillion Missouri aquifer. Although the actual water use if the two applications are approved will most likely be less than 734 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.

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 12 observation wells completed into the Lower Vermillion Missouri aquifer (Water Rights, 2012a). The nearest of these wells, CL-80IR is located approximately 1.5 miles away from the proposed well sites. The aquifer at the site of observation well CL-80IR is under artesian conditions. The top of the aquifer at the observation well site is found 90 feet below the ground surface and the water level fluctuates from 75 to 86 feet below grade. The hydrograph of the observation well is shown in Figures 1.

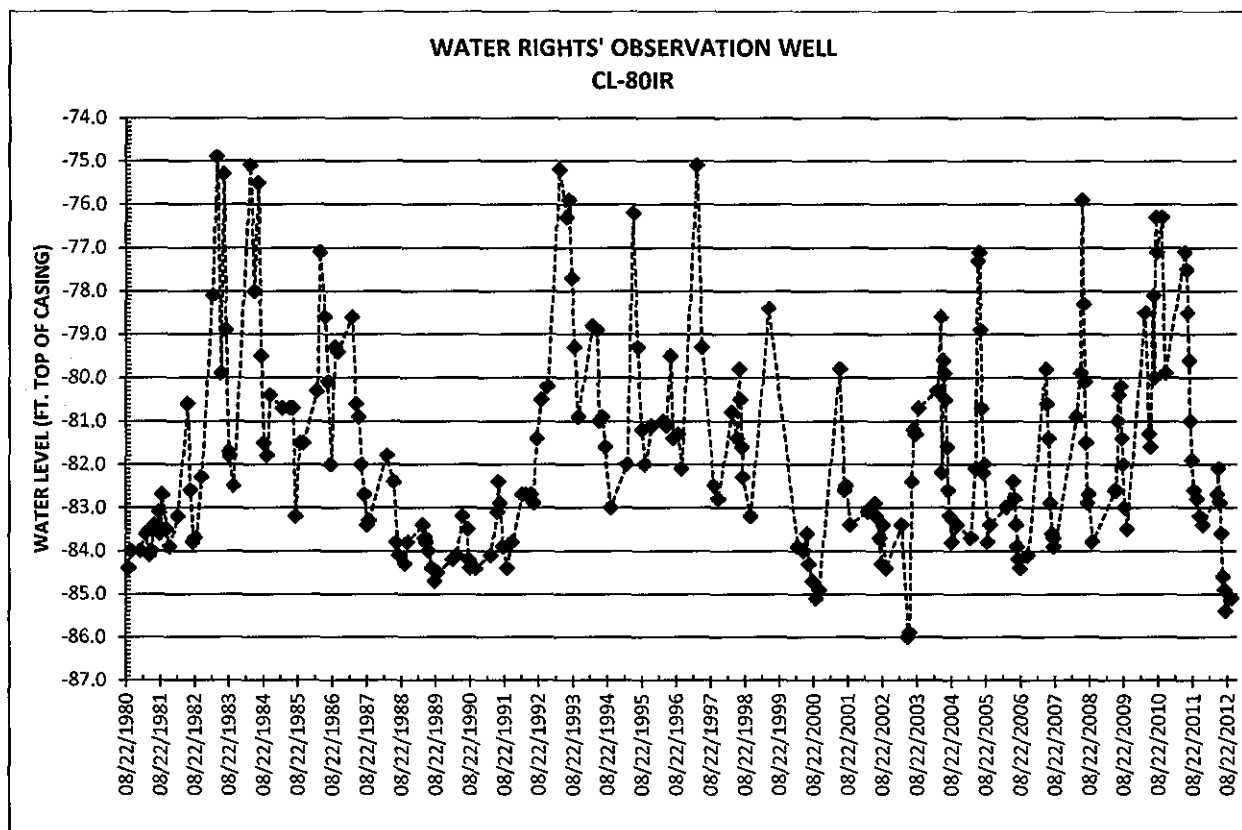


Figure 1- Hydrograph of DENR-Water Rights' observation well CL-80IR, located approximately 1.5 miles west of the proposed well locations (Water Rights, 2013a)

The observation well data documents cyclic conditions of water levels, recharging during wet years and declining during dry years. The hydrograph also shows the effects of nearby pumping on the aquifer. However, at the current level of development, temporal well withdrawal is masked by climatic conditions. Recharge to and natural discharge from the Lower Vermillion Missouri aquifer exceeds well withdrawal. Therefore, the hydrograph indicates that unappropriated water is available from the Lower Vermillion Missouri aquifer to support the proposed appropriation of 734 ac-ft/yr at the proposed well sites.

Recharge versus Withdrawals:

Recharge:

Recharge to the Lower Vermillion Missouri aquifer is due to infiltration of precipitation in areas where the aquifer is near land surface, inflow from the Upper Vermillion Missouri aquifer, and leakage from the underlying Dakota aquifer.

Hedges and others (1985) estimated recharge to the unconfined portion of the aquifer, based on observation well data, of the Lower Vermillion Missouri aquifer to be 3.8 inches per year in the unconfined portions of the aquifer. Total recharge has not been estimated for the aquifer. However, Hedges and others (1985) stated, “for management and development programs the minimum recharge rate to confined aquifers is estimated to be 0.15 inches per year and the maximum rate is 0.60 inches per year.”

Discharge:

Discharge from the Lower Vermillion Missouri aquifer occurs due to evapotranspiration in areas where the aquifer is near land surface, outflow to the Missouri: Elk Point aquifer, outflow to the Vermillion River during periods of low flow, outflow to the aquifer in Union County, and well withdrawals from rural water systems, institutional use, and irrigation. Currently there are a total of 68 water rights/permits appropriating water from the Lower Vermillion Missouri aquifer in Clay and Union Counties. The distribution of appropriation types are shown in table 1 (Water Rights, 2013b).

Water Rights/Permits	Number
Institutional	2
Rural Water Systems	2
Irrigation	64

Table 1 – Water Rights from the Lower Vermillion Missouri aquifer
(Water Rights, 2013b).

From the Lower Vermillion Missouri aquifer, water rights/permits for non-irrigation use that are limited only by diversion rate currently appropriate a total of 2.063 cfs. Water rights/permits for non-irrigation use that are limited by an annual volume currently appropriate a total of 307 ac-ft/yr (Water Rights, 2013b).

The amount of water that can be expected to be withdrawn through water rights/permits authorizing water use for non-irrigation purposes at the current appropriation level can be estimated by assuming:

1. Water rights/permits limited by an annual volume will pump the entire volume appropriated.
2. Water rights/permits limited only by diversion rate will pump at the maximum permitted diversion rate 60 percent of the time.
3. Future use permits can be fully developed.

At the current appropriation amount, the total annual withdrawal from the Lower Vermillion Missouri aquifer in Clay County by non-irrigation use is expected to total less than 1,203 ac-ft/yr (Water Rights, 2013b).

Figure 2 shows the Lower Vermillion Missouri aquifer’s historic irrigation data. The development of this aquifer has been steadily increasing for the last five years, and could continue to increase at this rate for at least the next few years. The annual withdrawal due to irrigation use fluctuates greatly, which is

probably due mostly to yearly climatic conditions. The average pumpage reported equals 1,447.73 ac-ft/yr. The maximum pumpage reported was in 2008 for 4,301.25 ac-ft/yr (Water Rights, 1979-2012).

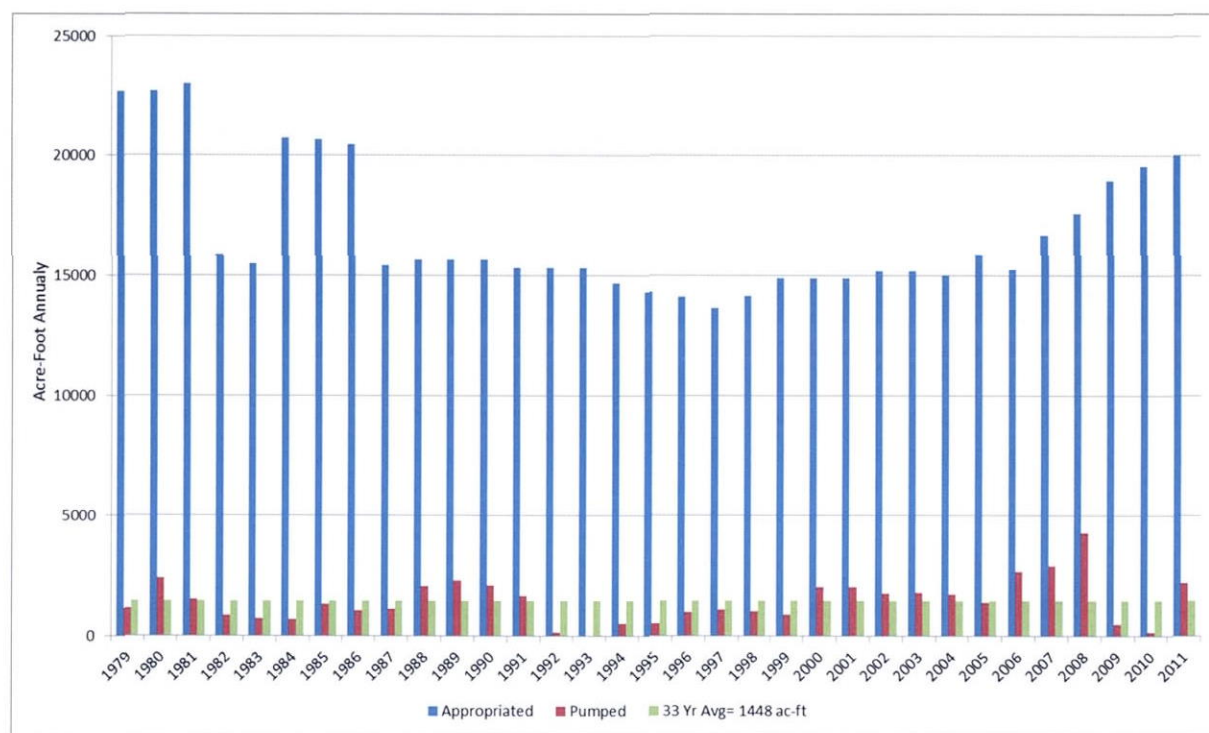


Figure 2- Irrigation water use from the Lower Vermillion Missouri aquifer (Water Rights 1979-2011).

Total estimated average annual withdrawal, including non-irrigation use, is 2,651 acre-feet per year from the Lower Vermillion Missouri aquifer. The observation well hydrograph shows that the water level in the aquifer has remained relatively constant despite changes in annual water use and appropriations. The recharge required to have annual recharge equal annual withdrawal is 0.25 inches per year. If this application is approved, the additional withdrawal will not significantly increase the recharge required to push it out of the range suggested by Hedges and others (1985), under confined or unconfined conditions. Therefore, there is a reasonable probability that unappropriated water is available from the Lower Vermillion Missouri aquifer.

Since the reporting of the 2011 irrigation questionnaires, five new irrigation permits have been issued for withdrawals from the Lower Vermillion Missouri aquifer. Combined, these permits appropriate 1,158 acre-feet/year at a maximum diversion rate of 7.46 cubic feet per second of water. There is one permit pending approval to appropriate 140 acre-feet/year at a maximum diversion rate of 1.33 cubic feet per second of water. With the addition of the permits issued in the past year, the permit pending approval, and this application it is still expected that average annual withdrawals will not exceed average annual recharge to the Lower Vermillion Missouri aquifer.

In addition, there are many completion reports on file with the SD DENR-Water Rights Program in Clay and Union Counties for domestic wells that appear to be completed into the Lower Vermillion Missouri aquifer (Water Rights, 2013c). The annual withdrawal due to domestic use is not significant to the hydrologic budget of the aquifer.

EXISTING WATER RIGHTS:

There are 68 water rights/permits appropriating water from the Lower Vermillion Missouri aquifer. Within two miles of the proposed well site, there are three water rights/permits and one well completion report on record with the SD DENR-Water Rights Program for a domestic well that appear to be

completed into the Lower Vermillion Missouri aquifer. These water rights/permits and the domestic well are shown in Table 2. The nearest well, a domestic well owned by Howard Lind, is located one mile and the rest of the wells are located more than one and one half mile from the proposed well site (Water Rights, 2012b; Water Rights, 2013c).

PERMIT_NO	NAME	STATUS	USE	CFS
3039-3	VIRGINIA R. JOHNSON	LC	IRR	2.0
6303-3	THELMA AND RONALD LIND	LC	IRR	1.78
7217-3	THELMA AND RONALD LIND	PE	IRR	1.78
7562-3	JOHN T. LINDSTROM	PENDING	IRR	1.33
	HOWARD LIND		DOM	

Table 2: Water rights/permits and domestic wells completed into the Lower Vermillion Missouri aquifer within two miles of the proposed well sites (Water Rights, 2013b; Water Rights, 2013c)

Well interference may occur but it is not expected to be significant due to the distance between the wells. Water Management Board rules 74:02:04 and 74:02:05, which were promulgated pursuant to SDCL 46-6-6.1, provide protection for existing wells only to the degree necessary to maintain an adequate depth of water in wells that have the ability to produce water independent of artesian pressure. Hence, the pump placement in a prior appropriator's well is not necessarily protected. The Water Management Board, in the past, has concluded that if increased cost or decreased production is considered an adverse impact, it could be in conflict with SDCL 46-1-4. South Dakota Codified Law 46-1-4 requires South Dakota's water resources to be put to beneficial use to the fullest extent of which they are capable. Therefore, well interference is not likely to adversely impact existing appropriative or domestic users.

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. Water Permit Application 7631-3 proposes to divert 1.61 cfs to irrigate 108 acres and Water Permit Application No. 7632-3 proposes to divert 4.44 cfs to irrigate 259 acres. The applicant does not provide a justification for the request for diversion rates greater than the statutory limit.

The applicant is limited to the maximum statutory limit of 2 acre feet per acre on land irrigated.

CONCLUSIONS:

1. Combined the applications propose to appropriate 734 acre-feet annually for the irrigation of 367 acres, but the amount of water that actually will be used is expected to be less than 734 acre-feet annually.
2. There is a reasonable probability that unappropriated water is available from the Lower Vermillion Missouri aquifer to supply the proposed diversions.
3. There is a reasonable probability that the diversion rates requested by the two applications can be made without adversely affecting existing water rights and domestic use.

4. Water Permit Application 7631-3 proposes to divert 1.61 cfs to irrigate 108 acres and Water Permit Application No. 7632-3 proposes to divert 4.44 cfs to irrigate 259 acres. The applicant does not provide a justification for the request for diversion rates greater than the statutory limit.



For Lynn Beck
Natural Resources Engineer III
SD DENR-Water Rights Program

Approved by



Ken Buhler
SD DENR-Water Rights Program

REFERENCES:

- Hedges, L.S., J. Allen, and D.E. Holly. 1985. Evaluation of Ground-Water Resources Eastern South Dakota and Upper Big Sioux River, South Dakota and Iowa, Task 7: Ground Water Recharge, Final Report. U.S. Army Corps of Engineers. Omaha, Nebraska. Contract DACW 45-80-C-0185.
- Hedges, L.S., S.L. Burch, D.L. Iles, R.A. Barari, and R.A. Schoon. 1982. Evaluation of Ground-Water Resources Eastern South Dakota and Upper Big Sioux River, South Dakota and Iowa, Task 1: Bedrock Topography and Distribution, Task 2: Extent of Aquifers, Task 3: Ground-Water Storage, Task 4: Computerized Data Base, Final Report. U.S. Army Corps of Engineers Contract DACW 45-80-C-0185.
- Stephens, J.C. and C.M. Christensen. 1967. Geology and Water Resources of Clay County, South Dakota Part II. Bulletin 19. SD-DENR Geological Survey. Vermillion, South Dakota
- SDGS. 2013. Lithologic Logs Database. < <http://sddenr.net/lithdb/>>. SD DENR-Geological Survey. Vermillion, SD.
- Water Rights. 1979-2011. "1979-2011 Irrigation Summaries by Aquifer": SD DENR-Water Rights Program, Joe Foss Building, Pierre, SD.
- Water Rights. 2013a. Observation Well Files. SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, SD.
- Water Rights. 2013b. Water Right/Permit Files. SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, SD.
- Water Rights. 2013c. Water Well Completion Report. SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, SD.

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WATER RIGHTS
PROGRAM

AFFIDAVIT OF PUBLICATION

PLAIN TALK

DENR

Division of Environmental Services
Water Rights Program
Joe Foss Building, 523 East Capitol
Pierre, SD 57501

STATE OF SOUTH DAKOTA
COUNTY OF CLAY

TERA SCHMIDT BEING FIRST DULY SWORN ON OATH DEPOSES
AND SAYS THAT SHE IS THE CLASSIFIED MANAGER OF YANKTON
MEDIA INC., A CORPORATION, THE PRINTER AND THE PUBLISHER OF THE
PLAIN TALK, A LEGAL WEEKLY NEWSPAPER PUBLISHED AND CIRCULATED
IN THE CITY OF VERMILLION, SAID COUNTY AND STATE, AND ONE OF THE
OFFICIAL NEWSPAPERS OF THE SAID COUNTY OF FACTS STATED IN THIS
AFFIDAVIT; THAT THE ANNEXED
NOTICE OF APPLICATION TO APPROPRIATE WATER

TAKEN FROM THE PAPER, IN WHICH IT WAS LAST PUBLISHED IN THE
NEWSPAPER ON THE 22 DAY OF MARCH 2013
THAT THE FULL AMOUNT OF THE FEE CHARGED FOR THE PUBLICATION
OF SAID NOTICE TO WIT \$34.59 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: 3/22/13

FILED ON: 3/22/13

SUBSCRIBED AND SWORN TO BEFORE ME THIS

26th DAY OF

March

NOTARY PUBLIC, SOUTH DAKOTA
MY COMMISSION EXPIRES

8/19/2015

The petition may be informal, but must include a statement describing the petitioner's interest in the applications, the petitioner's reasons for opposing or supporting the applications, 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 these applications. Steven M. Pirner, Secretary, Department of Environment and Natural Resources.

Published once at the total approximate cost of \$34.59.

Published: March 22, 2013

NOTICE OF APPLICATION
NOS. 7631-3 and 7632-3 to
Appropriate Water

Notice is given that Gregoire Farms, c/o Tim Gregoire, 609 Colonial Court, Vermillion SD 57069 has filed the following applications for a water permit.

Application No. 7631-3 proposes to appropriate 1.61 cubic feet of water per second (cfs) from one well to be completed into the Lower Vermillion-Missouri Aquifer (70 feet deep) located in the SW 1/4 SE 1/4 Section 25 for irrigation of 108 acres located in the E 1/2 SW 1/4, SE 1/4 Section 25, all in T94N-R52W. The applicant is requesting a diversion rate greater than the statutory limit.

Application No. 7632-3 proposes to appropriate 4.44 cfs from two wells to be completed into the Lower Vermillion-Missouri Aquifer (70 feet deep) located in the SW 1/4 SW 1/4 Section 24 and the SE 1/4 NW 1/4 Section 25 for irrigation of 259 acres located in the SW 1/4 Section 24 and the NW 1/4, W 1/2 NE 1/4, N 1/2 SW 1/4, NW 1/4 SE 1/4 Section 25; all in T94N-R52W. 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 Nos. 7631-3 and 7632-3 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 these applications, as recommended, unless a petition is filed opposing the applications or the applicant files a petition contesting the Chief Engineer's recommendations. If a petition opposing the applications or contesting the recommendations is filed, then a hearing will be scheduled and the Water Management Board will consider these applications. Notice of the hearing will be given to the applicant and any person filing a petition.

Any person interested in opposing or supporting these applications or recommendations must file a written petition with BOTH the applicant and Chief Engineer. The applicant must file a petition if contesting the Chief Engineer's recommendations. 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 April 1, 2013.

RECEIVED

MAR 25 2013

WATER RIGHTS
PROGRAM

AFFIDAVIT OF PUBLICATION

YANKTON DAILY PRESS AND DAKOTAN

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

The petition may be informal, but must include a statement describing the petitioner's interest in the applications, the petitioner's reasons for opposing or supporting the applications, 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 these applications. Steven M. Pirner, Secretary, Department of Environment and Natural Resources.

Published once at the total approximate cost of \$32.94.

KELLY HERTZ BEING FIRST DULY SWORN ON OATH DEPC
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. 7631-2 & 7632-3

TAKEN FROM THE PAPER, IN WHICH IT WAS LAST PUBLISHED IN THE
NEWSPAPER ON THE 22nd DAY OF March 2013
THAT THE FULL AMOUNT OF THE FEE CHARGED FOR THE PUBLICATION
OF SAID NOTICE TO WIT \$32.94 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: 3/22/2013

FILED ON: 3/22/2013

SUBSCRIBED AND SWORN TO BEFORE ME THIS 22nd DAY OF March 2013

NOTARY PUBLIC, SOUTH DAKOTA
MY COMMISSION EXPIRES 8/19/2015

NOTICE OF APPLICATION
NOS. 7631-3 and 7632-3 to
Appropriate Water

Notice is given that Gregoire Farms, c/o Tim Gregoire, 609 Colonial Court, Vermillion SD 57069 has filed the following applications for a water permit.

Application No. 7631-3 proposes to appropriate 1.61 cubic feet of water per second (cfs) from one well to be completed into the Lower Vermillion-Missouri Aquifer (70 feet deep) located in the SW 1/4 SE 1/4 Section 25 for irrigation of 108 acres located in the E 1/2 SW 1/4, SE 1/4 Section 25; all in T94N-R52W. The applicant is requesting a diversion rate greater than the statutory limit.

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DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

denr.sd.gov

March 11, 2013

Plain Talk
201 W Cherry St
Vermillion SD 57069

ATTENTION: Legal Public Notice

Enclosed is a Notice on Application Nos. 7631-3 and 7632-3 to Appropriate Water. Please publish the notice once on March 22, 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 Gregoire Farms, c/o Tim Gregoire, 609 Colonial Court, Vermillion SD 57069 (Ph # 605-624-4030).

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

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

March 11, 2013

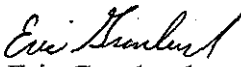
Gregoire Farms
Tim Gregoire
609 Colonial Court
Vermillion SD 57069

Dear Mr. Gregoire:

Water Permit Application Nos. 7631-3 and 7632-3 for irrigation use have been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice has been sent to the Plain Talk printed at Vermillion SD (Ph # 605-624-2695) and the Press & 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 recommendations of the Chief Engineer and reports on the applications 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(s) has also been instructed to send us the Proof of Publication. We must receive Proof of Publication before action can be taken on the applications.

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 applications.

Instruction to Newspaper - Publish the Notice on March 22, 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 NOS. 7631-3 and 7632-3 to Appropriate Water

Notice is given that Gregoire Farms, c/o Tim Gregoire, 609 Colonial Court, Vermillion SD 57069 has filed the following applications for a water permit.

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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

MAY 20 2013

Gregoire Farms
Timothy Gregoire
609 Colonial Court
Vermillion SD 57069

Dear Mr. Gregoire:

Enclosed are Water Permit Nos. 7631-3 and 7632-3 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,

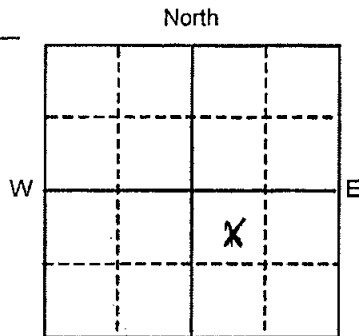
Jeanne Goodman, Chief Engineer
Water Rights Program
(605) 773-3352

enclosures

7631-3

SOUTH DAKOTA WATER WELL COMPLETION REPORT

11-02

Location NW 1/4 Sec 25 Twp 94n Rg 52wCounty ClayPlease mark well
location with an "X"

Well Completion Date

Jan 27, 2013

1 Mile

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

2,000.0 ft. from Septic tank (identify source)

PROPOSED USE:

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

METHOD OF DRILLING:

Bucket Method

CASING DATA:

☐ Steel ☒ Plastic ☐ Other

If other describe

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
LB/FT	16.00 IN	0.0 FT	20.0 FT	24.00 IN
LB/FT	IN	FT	FT	IN
LB/FT	IN	FT	FT	IN

GROUTING DATA:

Grout Type	No. of Sacks	Grout Weight	From	To
bent grout	13	9.5 Lb/gal	0.0 Ft	16.0 Ft
		Lb/gal	Ft	Ft

Describe grouting procedure
tremie method

SCREEN:

☒ Perforated pipe ☐ Manufactured
 Diameter 16.00 Inches Length 29.0 Feet
Material pvcSlot Size 0.80 Set From 20.0 Feet to 49.0 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? chlorine in gravel pack
☐ No, Why Not?
Lab to which water
quality sample sent for analysisWell Owner: Gregoire farms

Business Name:

Address: 609 Colonial CourtCity, State, Zip: Vermillion SD 57069

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
Topsoil, dark brown	0	1
Clay, gray, alluvium	1	17
gravel, medium to coarse, rock at 42	17	42
Gravel, coarse	42	49

STATIC WATER LEVEL 10.7 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

18.7 Ft. After 1.0 Hrs. pumped 500.0 GPM

_____ Ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate: _____ GPM

REMARKS

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:

Date: _____

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

MAIL TO: PMB 2020
DENR - Water Rights Program
523 E Capitol Ave
Pierre, SD 57501-3182
ph. (605) 773-3352

Date

10-31-16

FROM:

Tim Gregoire
(name)609 Colonel Ct.
(address)Vermillion
(city)S.D.
(state)57069
(zip)605-670-2303
(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. 7631-3 states that the water use system is to be constructed by

April 1, 2018
(date)

, and water is to be put to beneficial use by

April 1, 2022
(date)

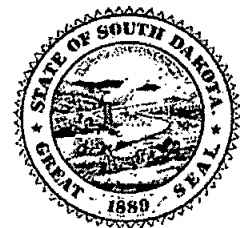
The water use system was completed on

06-13
(date)

Applying the water to beneficial use was completed on

08-2013
(date)

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



Well is actually in SW 1/4 SE 1/4

SD EForm - 1621LD V1

SOUTH DAKOTA WATER WELL COMPLETION REPORT

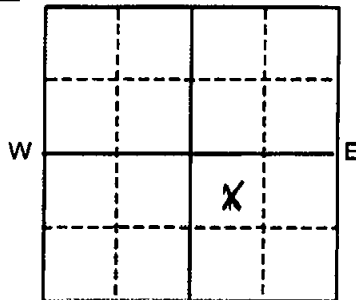
11-02

Location nw 1/4 se 1/4 Sec 25 Twp 94n Rg 52W

County Clay

North

Please mark well location with an "X"



Well Completion Date

Jan 27, 2013

Distance to nearest potential pollution source (septic tank, abandoned well, feed lot, etc.)?
2,000.0 ft. from Septic tank (Identify source)

PROPOSED USE:

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

METHOD OF DRILLING:

Bucket Method

CASING DATA:

☐ Steel ☒ Plastic ☐ Other

If other describe

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
LB/FT	16.00 IN	0.0 FT	20.0 FT	24.00 IN
LB/FT	IN	FT	FT	IN
LB/FT	IN	FT	FT	IN

GROUTING DATA:

Grout Type	No. of Sacks	Grout Weight	From	To
bent grout	13	9.5 Lb/gal	0.0 Ft	16.0 Ft
		Lb/gal	Ft	Ft

Describe grouting procedure
tremie method

SCREEN:

☒ Perforated pipe ☐ Manufactured
Diameter 16.00 Inches Length 29.0 Feet

Material PVC

Slot Size 0.80 Set From 20.0 Feet to 49.0 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? chlorine in gravel pack

Lab to which water
quality sample sent for analysis ☐ No, Why Not?

Well Owner: Gregoire farms

Business Name:

Address: 609 Colonial Court

City, State, Zip: Vermillion SD 57069

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
Topsoil, dark brown	0	1
Clay, gray, alluvium	1	17
gravel, medium to coarse, rock at 42	17	42
Gravel, coarse	42	49

STATIC WATER LEVEL 10.7 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

18.7 Ft. After 1.0 Hrs. pumped 500.0 GPM

_____ Ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate: _____ GPM

REMARKS

This well was drilled under license # 666 and this report is true and accurate.

Drilling firm: Hammond Wetmore Drilling

Signature of License Representative:

Richard H. Hammond

Signature of Well Owner or Equitable Property Holder:

Date:

Report of Examination of Works and/or Application of Water to Beneficial Use For Permit No. 7631-3

I have this day, October 31, 2016, made a thorough examination of the water use system constructed by Gregoire Farms, 609 Colonial Court, Vermillion SD 57069 of Permit No. 7631-3, bearing the priority of January 14, 2013 authorizing the diversion of 1.61 cu. ft. per second of the waters of Lower Vermillion:Missouri Aquifer for irrigation purposes, of 108 acres, in Clay County.

Inspection contact & relationship to permit holder, if applicable: **Tim Gregoire, permit holder**

A. Works used to divert the water:

Well Information:

- 1) Well Drilling Firm: Hammond-Wetmore Drilling, LLC
- 2) No. of Wells 1
- 3) Depth(s) 49 feet
- 4) Well log is available Yes

Casing:

- 1) Diameter 16 inches
- 2) Length 20 feet
- 3) Type PVC

Screen:

- 1) Type PVC Perforated
- 2) Length 29 feet
- 3) Static water level 10.7 feet

Pump:

- 1) Make Submersible
- 2) Model Unknown
- 3) Capacity 725 GPM

Motor:

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

C. Works used to apply water to beneficial use:

Center pivot:

- 1) Make Valley 8000
- 2) Overall length 1091 feet
- 3) Number of towers 5
- 4) End gun Yes
- 5) Capacity 725 GPM

Comments: System is driven by a Portable Diesel Generator Set with above ground diesel fuel tank.

Chemigation Equipment:

- 1) Does chemigate No

D. Compliance with Permit Requirements:

- 1) Permit qualifications being abided by Yes
- 2) Irrigation Questionnaires checked to determine if permit owner started irrigation by the end of construction period Yes, began irrigating in 2013.

List any extended period of nonuse: Did not use in 2014 due to flooding.

- 3) Exceptions to compliance are: None

E. Condition and Location:

1. The system is in good condition with the point(s) of diversion located as follows: West 2040', North 1110' from SE Corner of Sec 25-T94N-R52W; Lat 42.92731/Long -96.93150; SW ¼ SE ¼ Sec 25-T94N-R52W.

2. The works are capable of diverting and conveying to the place of use 1.61 cfs or 725 gpm of water which is to be used for irrigation. Water has been put to beneficial use to the maximum extent as follows:

All land is located in Sec 25-T94N-R52W.

NW ¼ SE ¼ - 27 ac

SW ¼ SE ¼ - 40 ac

NE ¼ SW ¼ - 5 ac

NE ¼ SE ¼ - 7 ac

SE ¼ SE ¼ - 11 ac

SE ¼ SW ¼ - 10 ac

comprising a total of 100 acres of land and the license should be issued for 1.61 cfs or 725 gpm.

3. All structures, wells and lands on map Yes

F. Comments or other permit(s) associated with the project:

Provide detailed explanation when multiple permits are involved or any discrepancy between what the permit was issued for and what was developed.

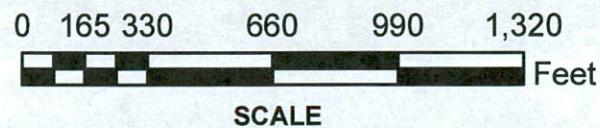
Water Permit No. 7631-3 appropriates a diversion rate of 1.61 cfs for the irrigation of 108 acres which is greater than the statutory limit of 1 cfs per 70 acres irrigated, however, 100 acres are actually irrigated.



Harold Holoch, PE
Staff Engineer
DENR, Water Rights Program

Date report completed: **November 22, 2017**

7631-3



Harold Holoch
Harold Holoch, PE
Staff Engineer
August 16, 2017



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

SEP 26 2018

7631-3

Tim Gregoire
Gregoire Farms
609 Colonial Ct
Vermillion SD 57069

Dear Mr. Gregoire:

Enclosed is Water License No. 7631-3. 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, the State Water Laws provide that you have 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

enclosures

**STATE OF SOUTH DAKOTA
WATER LICENSE NO. 7631-3**

(1) Gregoire Farms, 609 Colonial Ct., Vermillion SD 57069 made Application No. 7631-3, January 14, 2013 for a water permit to divert 1.61 cubic feet of water per second from ground water, one well (Lower Vermillion Missouri Aquifer, Clay County, South Dakota for irrigation purposes. Permit No. 7631-3, with a priority date of January 14, 2013 was approved April 1, 2013 and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before April 1, 2018 and for the application to beneficial use of said water on or before April 1, 2022.

The Permit holder submitted a "*Notice of Completion of Works and Application of Water to Beneficial Use*" on October 31, 2016. The "*Notice*" stated the water use system was completed in June 3, 2013 and the water placed to beneficial use in August, 2013.

(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 1.61 cubic feet of water per second for beneficial use. The location of the diversion point is:

- 2,040'W and 1,110'N of the SE Corner of Section 25, T94N, R52W (SW $\frac{1}{4}$ SE $\frac{1}{4}$)
Latitude 42.92731, Longitude -96.93150

(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 25, T94N, R52W			
NW $\frac{1}{4}$ SE $\frac{1}{4}$	27 acres	NE $\frac{1}{4}$ SW $\frac{1}{4}$	5 acres
NE $\frac{1}{4}$ SE $\frac{1}{4}$	7 acres	SE $\frac{1}{4}$ SW $\frac{1}{4}$	10 acres
SW $\frac{1}{4}$ SE $\frac{1}{4}$	40 acres	Total 100 acres	
SE $\frac{1}{4}$ SE $\frac{1}{4}$	11 acres		

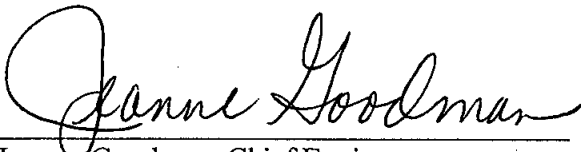
(4) Pursuant to South Dakota Water Law 46-5-30.1 Gregoire Farms, 609 Colonial Ct., Vermillion SD 57069 the holder and/or owner of Water Right No. 7631-3 is issued a license to appropriate water, the right to use 1.61 cubic feet of water per second from ground water, one well (Lower Vermillion Missouri Aquifer) with a priority date of January 14, 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. 7631-3 and subject to the following qualifications:

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

continued

- The well authorized by Permit No. 7631-3 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with the Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28. *The well was constructed in January, 2013 by Hammond Wetmore Drilling. A copy of the well log is on file with the Water Rights Program.*
- 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. 7631-3 authorizes a maximum diversion rate of 1.61 cfs for the irrigation of 100 acres with an annual volume not to exceed 2 acre feet of water per acre per year. *The acreage referenced in the qualification has been reduced from 108 acres as originally permitted to 100 acres based on actual development.*
- 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

SEP 26 2018

date

