

WATER PERMIT NO. 7684-3

Name of Applicant: John Steven Donnelly

Address: 616 S Crawford Rd, Vermillion SD 57069 Phone: 605 677-9310

Amount of Water Claimed: 1.78 cfs Total Acres: 160

Source of Water Supply: groundwater (one well)

Water to be used for: irrigation County: Union

Type of Waste Disposal System:

Location: 6 miles northwest of Elk Point

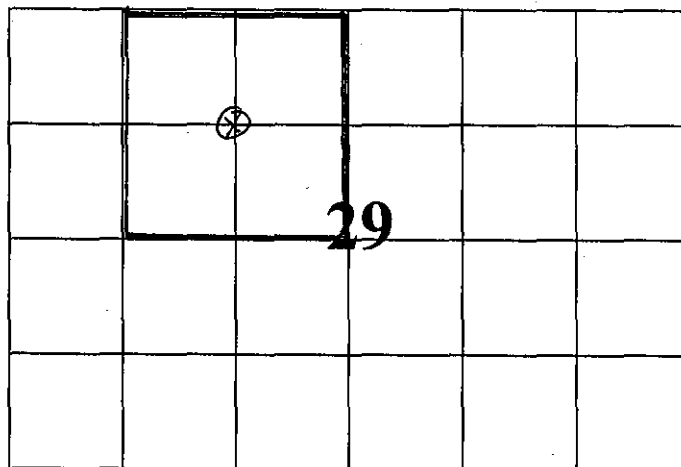
PRIORITY Date Received: 2-6-13 Application/License Fee: \$ 1050

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

Remarks:

Diversion Point: center NW 1/4 Sec 29-T92N-
R50W

Land to be Irrigated: NW 1/4 Sec 29-T92N-R50W



Depth of Well: 110 feet deep

Well Driller:

Remarks:

Type of Map: aerial

Prepared by:

Reviewed and the Number Assigned on: 2-6-13

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	(office use only) No. _____ Hydrologic Unit _____
	Basin _____
	Newspaper _____

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FEB - 6 2013

WATER RIGHTS
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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 John Steven Donnelly
(check one) ☒ Owner ☐ Tenant/lessee ☐ Owner's Legal Agent
(name and complete address if different than above name)
Mailing Address 616 So Crawford Rd Vermillion SD 57069
(Address) (City) (State) (Zip Code)
Home Phone 605 624 4915 Cell 605 677 9310 Email John.S.Donnelly@hotmail.com
2. Amount of water claimed 1.78 *CFS or 800 **GPM ***AF Total Acreage 160
(*Cubic Feet per Second) (**Gallons per Minute) (***) Acre Feet - storage capacity of dam/dugout or annual use if applicable)
3. Source of water supply Well Missouri aquifer
4. Location of point of diversion Center of the NW quarter 29-92-50
(example - 5 wells in SW1/4 NE1/4 section 12-T104N-R53W)
Brule Twp County UNION
5. County or counties where water will be used UNION
6. Annual period during which water is to be used April 1 thru Oct 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
NW 1/4 of Sec 29	40	NE 1/4 of Sec 29	40
S 1/2 of Sec 29	40	S 1/2 of Sec 29-92-50	40
NW 1/4 Sec 29 - T92N - R50W			

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

center pivot irrigation project of above description

I, John S. Donnelly, 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. 7684-3

Date of first receipt of application February 6, 2013.

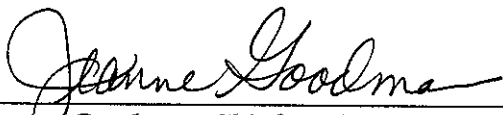
The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 7684-3 to John Steven Donnelly, 616 S Crawford Rd, Vermillion SD 57069 authorizing the construction of the water use system and the placing of water to beneficial use subject to the following limitations, conditions and qualifications:

1. Water Permit No. 7684-3 appropriates 1.78 cubic feet of water per second from one well to be completed into the Missouri:Elk Point Aquifer (110 feet deep) located in the center of the NW 1/4 Section 29 for irrigation of 160 acres located in the NW 1/4 Section 29; all in T92N-R50W.
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 6, 2013.
4. The date of approval of Permit No. 7684-3 is April 8, 2013.
5. One-fifth of the construction is to be completed on or before October 8, 2015.
6. All construction is to be completed on or before April 8, 2018.
7. Water is to be put to beneficial use on or before April 8, 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. 7684-3 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. 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 No Provide copy of log(s), if available. Drilled by _____

c) Well Depth 110 Depth to Top of Water Bearing Material 55 Depth to Water from Surface 23

d) Distance to nearest existing domestic well:

On applicant's property 0

On property owned by others greater than 250 ft

2. Wastewater Disposal System Information

a) Type of System (i.e. septic tank, drain field) None

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)

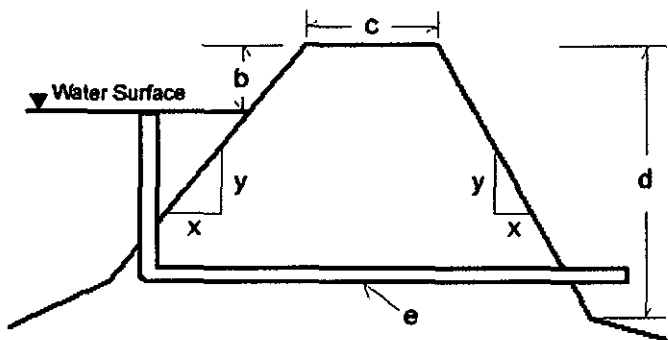
Upstream _____

Downstream _____

h) Surface Area of Impoundment _____

i) Storage _____ Acre Feet

j) Drainage Area Above Dam _____ Acres





United States Department of Agriculture
Farm Service Agency

PLSS: 29_92N_50W
Farm: 5892

Union County

1:8,777

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May 02, 2012

Wetland Determination Identifiers

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

Common Land Units

Non Cropland

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

2010 Ortho-Photography - Not to Scale

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date 2/6/, 20 13

RECEIVED OF Steve Donnelly 32025 White St Burbank SD 57010

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

Fee for Application for Permit No. <u>71684-3</u> to Appropriate Water, to construct and to put water to beneficial use	850	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>71684-3</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	1050	00

No. 06097

By Lance Erbe
Chief Engineer

Water Rights Program - File Documentation

NAME: John Donnelly

ADDRESS: Vermillion SD 57069

DATE: 2-6-13 **COUNTY:** Union **TELEPHONE:** 605 677-9310

RE: Pending application

COMMENTS:

John Donnelly stated that his proposed well depth should be 110 feet deep. His well driller helped him complete the form and he didn't realize he had skipped it.

Karen Schlaak

Karen Schlaak
Water Rights Program



**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. 7684-3, John Steven Donnelly**

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. 7684-3, John Steven Donnelly, 616 S Crawford Rd, Vermillion SD 57069.

The Chief Engineer is recommending APPROVAL of Application No. 7684-3 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. 7684-3 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. 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 18, 2013

REPORT TO THE CHIEF ENGINEER
ON
WATER PERMIT APPLICATION NO. 7684-3
JOHN STEVEN DONNELLY
MARCH 4, 2013

Water Permit Application No. 7684-3 proposes to appropriate water from one well to be completed into the Missouri: Elk Point aquifer at a maximum diversion rate of 1.78 cubic feet of water per second (cfs). The well will be located near the center of the NW ¼ of Section 29, T92N-R50W, Union County, and is expected to be approximately 110 feet deep. This application proposes to irrigate 160 acres located in the same quarter section as the well.

AQUIFER: Elk Point management unit of the Missouri aquifer (M: EP)

GEOLOGY AND AQUIFER CHARACTERISTICS:

Bugliosi (1986) refers to the Elk Point management unit of the Missouri aquifer as the southern portion of the Lower James-Missouri aquifer. For water management purposes, the Water Management Board and the SD DENR-Water Rights Program refer to this aquifer as the Missouri: Elk Point. The aquifer is a surficial aquifer composed of unconsolidated glacial outwash material ranging from fine sand to coarse gravel (Niehus, 1994). The aquifer generally lies below the flood plain of the Missouri River (Bugliosi, 1986), and also below the flood plain of the Big Sioux River in the southern part of Union County (Niehus, 1994). Bugliosi (1986) reported that the aquifer directly overlies and is hydraulically connected to the Dakota aquifer, and is hydraulically connected at its northern boundary to the Lower James-Missouri and the Lower Vermillion-Missouri aquifers as well as the Missouri and Vermillion Rivers. Niehus (1994) found the aquifer is also hydraulically connected to the Big Sioux aquifer in the northeast. The Elk Point management unit of the Missouri aquifer encompasses approximately 234,700 acres of Clay, Union, and Yankton Counties, as determined by Hedges and others (1982), and Niehus (1994). The aquifer contains an estimated 3,287,100 acre feet of recoverable water, of which an estimated 1,494,600 acre-feet of recoverable water is in storage in Union County (Hedges and others, 1982). Bugliosi (1986) found the aquifer can be up to 150 feet thick while Niehus (1994) identified the average thickness of the aquifer in Union County at 84 feet. The transmissivity of the aquifer ranges from 20,700 to 24,700 square feet per day (ft²/d) (Bugliosi, 1986). The specific capacity of wells completed into the aquifer ranges from approximately 124 to 173 gallons per minute per foot ((gal/min)/ft) (Bugliosi, 1986). The aquifer can be under confined or unconfined (water-table) conditions, and is under water-table conditions in the area of this application. Nearby well logs indicate an average saturated thickness of approximately 67 feet as shown in Table 1 (Water Rights, 2013a).

Well Log Description	Saturated Thickness (ft)
Domestic Donnelly	40
Domestic Wensel	35
Well Log for WR 3859-3	70
Well Log for WR 5423-3	109
Well Log for WR 6804-3	82

Table 1. Saturated thickness for nearby wells and lithologic logs (Water Rights, 2013a, b and c).

SDCL 46-2A-9

In accordance with SDCL 46-2A-9, a permit may be issued to appropriate water 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 review the availability of unappropriated water and existing rights within the Missouri: Elk Point aquifer.

WATER AVAILABILITY:

This application proposes to appropriate water from the Missouri: Elk Point aquifer. If this application is approved, it is likely that the actual water use will be less than 320 acre feet per year (ac-ft/yr). The probability of unappropriated water available from the aquifer can be evaluated using 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."

Recharge versus Discharge:

Recharge:

Recharge to the Missouri: Elk Point aquifer occurs through seepage from streams and by infiltration of precipitation (Bugliosi, 1986; Niehus, 1994). Recharge is also provided to the aquifer from the Big Sioux, Lower Vermillion-Missouri, and Dakota aquifers as well as during times of high flow, from the Big Sioux and Missouri Rivers. The average annual recharge rate to the Missouri: Elk Point aquifer is estimated to be 3.8 in/yr based on observation well analysis (Hedges and others, 1985). Given the area of the management unit in Clay, Union, and Yankton Counties of 234,700 acres, average annual recharge to the aquifer is estimated to be 74,322 ac-ft/yr. Recharge in Union County alone is estimated to be 36,480 ac-ft/yr.

Discharge:

Discharge from the Missouri: Elk Point aquifer is by evapotranspiration, discharge to the Big Sioux and Missouri Rivers during low flow, to the underlying Dakota aquifer, and withdrawal from wells (Niehus, 1994). There are a number of completion reports on file with the SD DENR-Water Rights Program for domestic use wells completed into the Missouri: Elk Point aquifer (Water Rights, 2013b) and there are currently 518 water rights/permits appropriating water from the Missouri: Elk Point aquifer of which 299 are in Union County alone (Water Rights, 2013c). In addition, there are five future use permits in Clay County reserving water from the aquifer. The distribution of these appropriations for the entire aquifer and their types are shown in Table 2.

Water Rights/Permits	Number
Commercial	7
Domestic	2
Fish and Wildlife Propagation	4
Industrial	5
Irrigation	485
Municipal	10
Recreational	1
Rural Water System	2
Suburban Housing Development	2
Future Use Permits	Number
Lewis and Clark Rural Water System	4
City of Vermillion	1

Table 2. Water Rights from the Missouri: Elk Point aquifer (Water Rights, 2013c).

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.

The expected water use for non-irrigation purposes, including that reserved for future use, from the Missouri: Elk Point aquifer is less than 61,300 ac-ft/yr based on current water appropriations. Union County accounts for less than 5,700 ac-ft/yr of this based on current water appropriations.

The annual reported water use from the Missouri: Elk Point aquifer for irrigation purposes is displayed in Table 3. The average pumpage reported over the 1979 to 2011 period of record in Union County alone is 10,778 acre-feet per year.

YEAR	NO. OF PERMITS	APPROPRIATION (AC-FT/YR)	PUMPAGE REPORTED (AC-FT/YR)
1979	259	122980	9859
1980	262	124404.9	14586
1981	297	134477.6	13096
1982	269	122297.8	18822.35
1983	273	121483.1	10834.04
1984	281	126221.6	9194.3
1985	282	124546.7	13718.5
1986	286	125320.7	6252.1
1987	281	123601.7	13163.7
1988	282	123601.5	28184.55
1989	292	126354.7	25651.9
1990	297	127965.7	19425
1991	300	126471.7	18798.6
1992	295	125256.7	1881.95
1993	298	125576.3	1475.2
1994	295	122975.1	10221.43
1995	292	121644.3	18320.24
1996	296	124606.2	9412.78
1997	305	126518.2	17182
1998	313	127862.6	11127.24
1999	308	125225.6	14748.02
2000	309	124852.2	26640.12
2001	313	125537.4	19071.88
2002	315	125555.8	23547.22
2003	314	125379.8	26734.67
2004	322	126955.8	23862.25
2005	335	130046.6	23964.5
2006	353	136491.6	27974.54
2007	366	139826.6	30482.84
2008	396	151130.4	16261.88
2009	410	155245.4	6120.97
2010	419	155905.4	2723.87
2011	431	159700.8	12107.55
MIN	259	121483.1	1475.2
MAX	431	159700.8	30482.8
AVE	313.5	129879.4	15922.6

Table 3. Irrigation from the Missouri: Elk Point aquifer (Water Rights, 1980-2012).

There are also new permits and pending applications for water use from the Missouri: Elk Point aquifer that is expected to significantly increase the total volume of water appropriated for irrigation. Since January 1, 2012, 45 new permits were issued authorizing the irrigation of 5,546.1 acres. As of February 22, 2013, an additional 24 permit applications have been submitted for appropriation of water from the Missouri: Elk Point. The pending permits are shown in Table 4 and have a total diversion rate of 43.56 cfs, and 3,268.3 acres of coverage.

Permit No.	Diversion Rate	Acres
7447-3	1.78	160
7454-3	1.78	171
7460-3	3.11	264
7527-3	1.11	117.5
7552-3	0.61	49
7553-3	1.55	136
7554-3	1.89	136
7563-3	2.22	95
7565-3	1.89	160
7566-3	2.22	160
7576-3	3.33	400
7577-3	2	70
7578-3	2	80
7579-3	2	152
7580-3	2	60
7593-3	1.5	105
7606-3	N/A	78.8
7608-3	N/A	105
7621-3	1.89	160
7622-3	1.89	142
7624-3	2	120
7625-3	1.67	120
7627-3	1.78	67
7630-3	3.34	160
TOTAL	43.56	3268.3

Table 4. List of pending permits and their appropriations from the Missouri: Elk Point aquifer (Water Rights, 2013c).

Lewis and Clark Rural Water System (LCRWS) currently reserves 13,000 acre feet per year for future use and has permits appropriating 32,165 acre feet per year (Water Rights, 2013b). This accounts for a significant portion of the annual water usage in Clay County and the aquifer as a whole, and most of the water from these wells will be induced from the Missouri River. That is, more recharge can be induced with more pumping, in particular from the Missouri River because it is hydraulically connected to the aquifer. Recognizing that LCRWS withdraws water from the Missouri: Elk Point aquifer that is induced from the Missouri River, and considering the remaining hydrologic budget, there is reasonable probability that unappropriated water is available for this application.

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 to the aquifer”.

The DENR-Water Rights Program monitors 37 observation wells completed into the Missouri: Elk Point aquifer with two of these observation wells located within four miles of the well site

proposed by this application (Water Rights, 2013a). Hydrographs for these wells are shown in Figures 1 and 2.

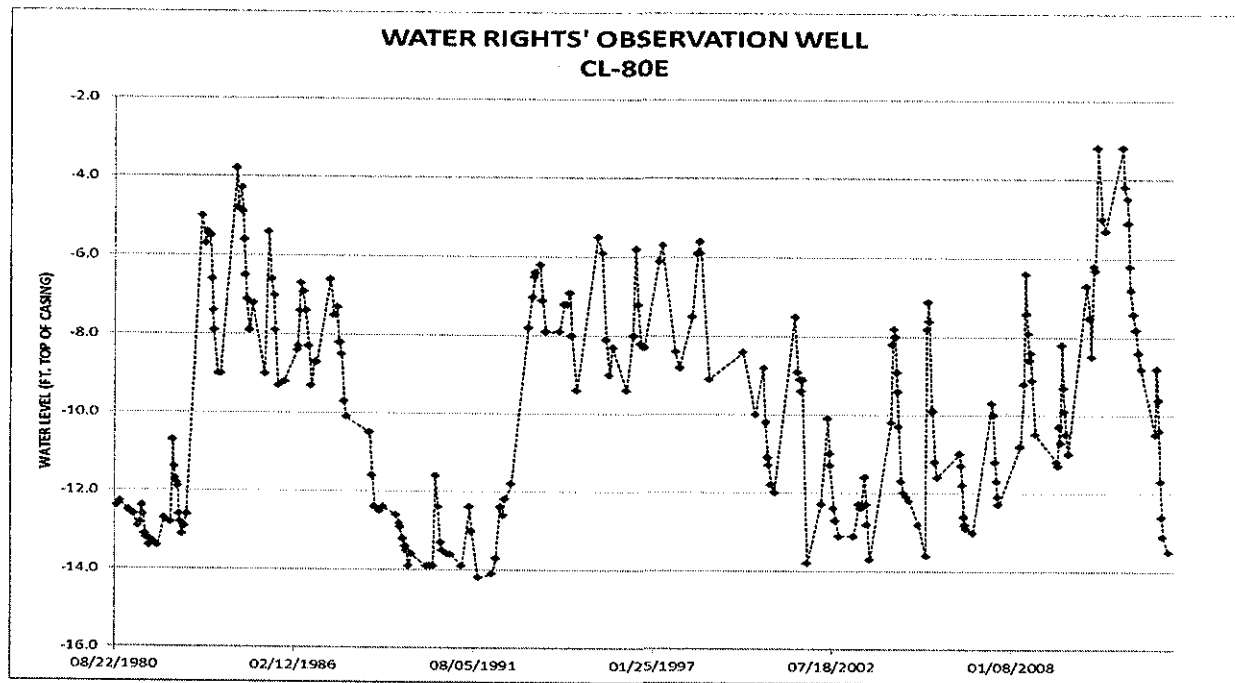


Figure 1. Hydrograph for DENR-Water Rights Observation Well CL-80E completed into the Missouri: Elk Point aquifer approximately 1.5 miles west of the well site proposed by Application No. 7684-3 (Water Rights, 2013b).

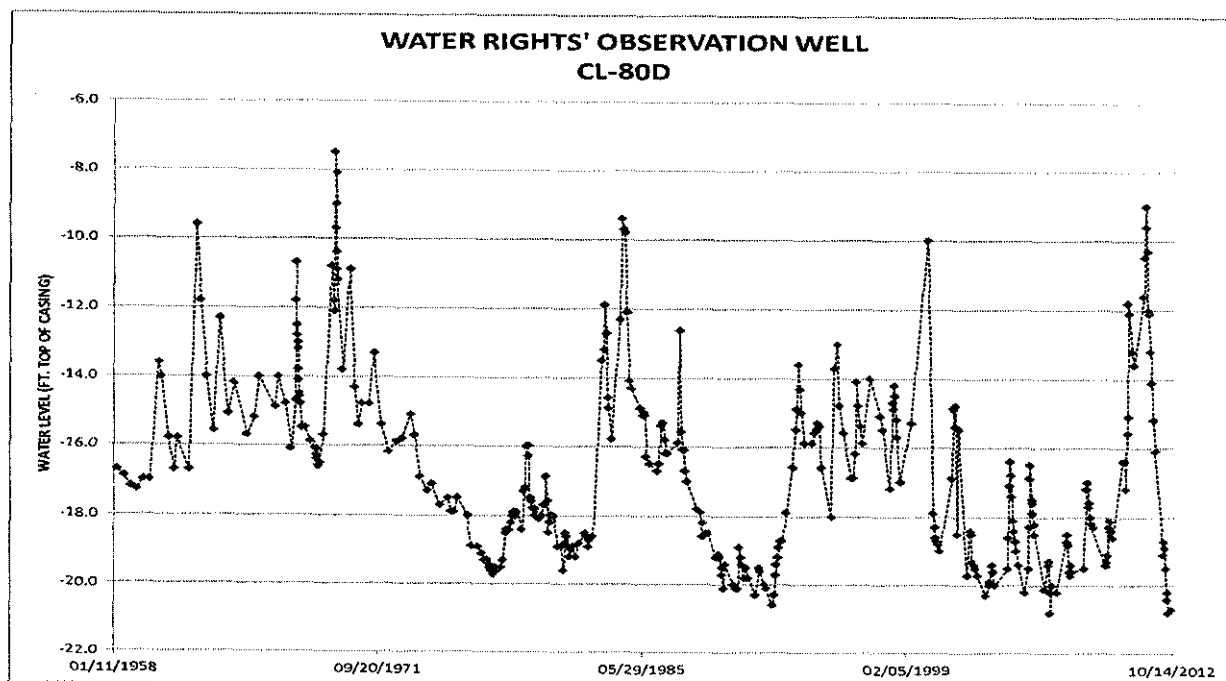


Figure 2. Hydrograph for DENR- Water Rights Observation Well CL-80D completed into the Missouri: Elk Point aquifer approximately 4.0 miles west of the well site proposed by Application No. 7684-3 (Water Rights, 2013b).

The observation well data shows the aquifer responds well to climatic conditions with rising water levels during wet years and gradually declining water levels during dry years; and that at the current level of development, climatic conditions mask the temporal effects of well withdrawals. The observation well data documents the hydraulic connection between the Missouri: Elk Point aquifer and the Missouri River (e.g. in particular, high groundwater levels associated with flooding in 2011).

Because of this obvious hydraulic connection between Missouri: Elk Point aquifer and the Missouri River and the availability of water in the Missouri River, there is a reasonable probability that additional recharge to the Missouri: Elk Point will be induced from the Missouri River with additional pumping. Therefore, there is reasonable probability that unappropriated water is available from the aquifer to support this appropriation.

EXISTING WATER RIGHTS:

The well site proposed by this application is located approximately five miles northeast of the Vermillion River, seven and one half miles west of the Big Sioux River, and four and one half miles northeast of the Missouri River in a portion of the Missouri: Elk Point aquifer that extends northeast of the Missouri River for about five miles to the edge of the aquifer. There are four water rights authorizing wells within a one and one half mile radius of the proposed well site (Water Rights, 2013a and 2013b), these are listed in Table 5.

Permit No.	Name	Status	Type	CFS	Acres
313-3A	Dawn Glover	LC	IRR	2.43	170.4
3859-3	Margaret Ann Peterson	LC	IRR	1.02	72
5423-3	Melvin and Eileen Donnelly	LC	IRR	1.78	126
6804-2	Daniel Heine	LC	IRR	6.69	670.6
LC = Water Right, IRR = Irrigation					

Table 5. Water rights / permits located within one and one half miles of the well site proposed by Water Permit No. 7684-3 (Water Rights, 2013c).

Additional drawdown caused by the proposed well could be measurable in the nearby permitted wells. There are two domestic wells on file with the DENR – Water Rights Program that could have measureable drawdown as well; these wells vary from 0.9 to 1.4 miles distant from the proposed well site. The precise drawdown cannot be quantified without aquifer testing. With that in mind, a standard permit qualification to most groundwater permits/rights states that:

“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 rights.”

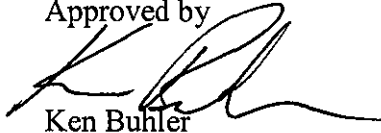
In reality, the assurance of reasonable domestic use provided by SDCL 46-6-6.1 and ARSD 74:02:04:20(7) generally ensures that interference will not be adverse to domestic well users and those with existing appropriative rights. Depending on the characteristics of the Missouri: Elk Point aquifer at the proposed well site, some existing well owners may need to lower their pumps to accommodate for lower water levels. When considering SDCL 46-6-6.1 and ARSD 74:02:04:20(7) in combination with observation well measurements and the expected aquifer transmissivity, the proposed increase in diversion rate is not likely to lead to significant interference or adversely affect existing wells.

CONCLUSIONS:

1. This application proposes to appropriate water at a maximum diversion rate of 1.75 cfs for irrigation of 160 acres from the Missouri: Elk Point aquifer.
2. There is a reasonable probability that unappropriated water is available from the Missouri: Elk Point aquifer to supply this proposed appropriation.
3. The Missouri: Elk Point aquifer is under unconfined (water-table) conditions in this area, and drawdown from pumping is not expected to be significant very far from a production well.
4. There is a reasonable probability that the well proposed by this application will not adversely impact existing water rights or domestic users.


 Dan Gerhardt
 SD DENR-Water Rights Program

Approved by



Ken Buhler

SD DENR-Water Rights Program

REFERENCES:

- Bugliosi, E.F., 1986, Water Resources of Yankton County, South Dakota: U.S. Geological Survey Water-Resources Investigations Report 84-4241. 41 p.
- 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.
- Hedges, L.S., Burch, S.L., Iles, D.L., Barari, R.A., Schoon, R.A., 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
- Hedges, L.S., Allen, J., Holly D.E., 1985, Evaluation of Ground-Water Resources Eastern South Dakota and Upper Big Sioux River, South Dakota and Iowa, Task 7: Ground Water Recharge; U.S. Army Corps of Engineers Contract DACW 45-80-C-0185
- Niehus, C.A., 1994, Water Resources of Lincoln and Union Counties, South Dakota: U.S. Geological Survey Water-Resources Investigations Report 93-4195, 57p.
- Water Rights, 1980-2012, Irrigation Questionnaire Summaries 1979-2011, SD DENR-Water Rights Program, Joe Foss Bldg, Pierre, SD.
- Water Rights, 2013a, Observation Well Files, SD DENR-Water Rights Program, Joe Foss Bldg, Pierre, SD.
- Water Rights, 2013b, Water Well Completion Reports, SD DENR-Water Rights Program, Joe Foss Bldg, Pierre, SD.
- Water Rights, 2013c, Water Right/Permit Files, SD DENR-Water Rights Program, Joe Foss Bldg, Pierre, SD.

AFFIDAVIT OF PUBLICATION

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State of South Dakota)

APR - 1 2013

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WATER RIGHTS
PROGRAM

County of Union)

Kelly Kruithoff,

an employee of the Leader-Courier, deposes and says that

The Leader-Courier

is a legal weekly newspaper of a general circulation, printed and published in Elk Point, County of Union, State of South Dakota, and has been such legal newspaper during the time hereinafter mentioned, and that affiant is and was during all the time hereinafter mentioned in charge of the advertising department thereof, and has personal knowledge of all the facts stated in this affidavit; and that the notice and advertisement headed:

Notice of Application No. 7684-3

To Appropriate Water

a printed copy of which is hereunto attached and made a part hereof, was printed and published in the said newspaper at least once in

each week for 1 successive weeks; that said newspaper at the time of the first publication of said notice hereinafter stated, had, and still has, a bona fide circulation of over two hundred paid copies weekly, and had been published in the said County of Union for more than one year immediately prior to the date of the said publication of said notice, and that said newspaper during said times, was, and is, printed in part in an office maintained at said city of Elk Point, the said place of publication; that the first publication of said notice in said newspaper was

on Thursday, the 28 day of March, 2013

and that the succeeding publications were

on Thursday, the _____ day of _____,

on Thursday, the _____ day of _____,

on Thursday, the _____ day of _____,

that the fees for the printing and publishing of said notice and advertisement in said newspaper as aforesaid were

\$ 26.04, that the full amount of the fee charged insures to the benefit of the publisher of the said newspaper, that no agreement or 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 other person whomsoever.

Kelly Kruithoff

Subscribed and sworn to before me

this 28 day of March, 2013

My commission expires 6-21-17

SUSAN ODSON
NOTARY PUBLIC
SOUTH DAKOTA

Notary Public

NOTICE OF APPLICATION NO. 7684-3

TO APPROPRIATE WATER

Notice is given that John Steven Donnelly, 616 S Crawford Rd, Vermillion SD 57069 has filed an application for a water permit to appropriate 1.78 cubic feet of water per second from one well to be completed into the Missouri-Elk Point Aquifer (110 feet deep) located in the center of the NW 1/4 Section 29 for irrigation of 160 acres located in the NW 1/4 Section 29; all in T92N-R50W.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 7684-3 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 April 8, 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. Pirner, Secretary,
Department of Environment and
Natural Resources.

Publish March 28, 2013

Published once at the total approximate cost of \$26.04
13-13-70

RECEIVED

APR - 1 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

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 7684-3

TAKEN FROM THE PAPER, IN WHICH IT WAS LAST PUBLISHED IN THE
NEWSPAPER ON THE 28th DAY OF March 2013
THAT THE FULL AMOUNT OF THE FEE CHARGED FOR THE PUBLICATION
OF SAID NOTICE TO WIT \$25.49 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: 3/28/2013

FILED ON: 3/28/2013

SUBSCRIBED AND SWORN TO BEFORE ME THIS 28th DAY OF March

2013

NOTARY PUBLIC, SOUTH DAKOTA

MY COMMISSION EXPIRES

8/19/2015

Notice is given that John Steven Donnelly, 616 S. Crawford Rd, Vermillion SD. 57069 has filed an application for a water permit to appropriate 1.78 cubic feet of water per second from one well to be completed into the Missouri/Elk Point Aquifer (110 feet deep) located in the center of the NW 1/4 Section 29 for irrigation of 160 acres located in the NW 1/4 Section 29; all in T92N-R50W.

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Published once at the total approximate cost of \$25.49.



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

denr.sd.gov

March 19, 2013

Leader-Courier
PO Box 310
Elk Point SD 57025

ATTENTION: Legal Public Notice

Enclosed is a Notice on Application No. 7684-3 to Appropriate Water. Please publish the notice once on March 28, 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 John Steven Donnelly, 616 S Crawford Rd, Vermillion SD 57069 (Ph # 605-624-4915).

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

March 19, 2013

Press & Dakotan
319 Walnut
Yankton SD 57078

ATTENTION: Legal Public Notice

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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 John Steven Donnelly, 616 S Crawford Rd, Vermillion SD 57069 (Ph # 605-624-4915).

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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 19, 2013

John Steven Donnelly
616 S Crawford Rd
Vermillion SD 57069

Dear Mr. Donnelly:

Water Permit Application No. 7684-3 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 Leader-Courier printed at Elk Point SD (Ph # 605-356-2632) 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 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 March 28, 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. 7684-3 to Appropriate Water

Notice is given that John Steven Donnelly, 616 S Crawford Rd, Vermillion SD 57069 has filed an application for a water permit to appropriate 1.78 cubic feet of water per second from one well to be completed into the Missouri:Elk Point Aquifer (110 feet deep) located in the center of the NW 1/4 Section 29 for irrigation of 160 acres located in the NW 1/4 Section 29; all in T92N-R50W.

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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

John Steven Donnelly
616 S Crawford Rd
Vermillion SD 57069

Dear Mr. Donnelly:

Enclosed is Water Permit No. 7684-3 authorizing construction of your water diversion system and beneficial use of the water, not exceeding the limits as specified in the Water Permit.

Form 10, *Notice of Completion of Works and Application of Water to Beneficial Use*, is enclosed. Please return this completed form after you have finished the system and have put the water to beneficial use. An investigation can then be scheduled so the water license may be issued, thus completing the acquisition of a water right.

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

Sincerely,

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

enclosures



DEPARTMENT OF ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
denr.sd.gov



November 6, 2014

7684-3

John S Donnelly
616 S Crawford Rd
Vermillion SD 57069

Dear Mr. Donnelly:

Enclosed is your 2014 irrigation questionnaire for Water Permit No. 7684-3.

On the questionnaire you indicated "yes" irrigation took place in 2014. In order for the form to be considered complete, the back side needs to be completed as well. Please fill in the crop type, number of acres irrigated, pump rate, days per month and average hours per day water was pumped.

I am enclosing another postage paid envelope for your use in returning the completed form. Please complete and return it to us by **December 1st**. If I can answer any questions for you, please let me know.

Sincerely,

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

**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 10-19-16

FROM: John Steven Donnelly
(name)
616 So Crawford Rd
(address)
Vermillion SD 57069 605 677 9310
(city) (state) (zip) (phone)

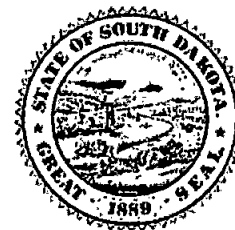
I have completed the construction of the water use system and I have put the water to beneficial use to the maximum extent it is going to be used.

Water Permit No. 7684-3 states that the water use system is to be constructed by
April 8, 2018, and water is to be put to beneficial use by April 8, 2022
(date) (date)

The water use system was completed on 8-2013
(date)

Applying the water to beneficial use was completed on 8-2013
(date)

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

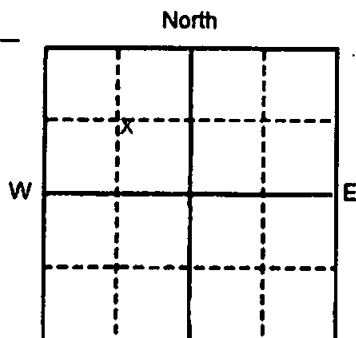


7684-3

SD EForm - 1621LD V1

11-02

SOUTH DAKOTA WATER WELL COMPLETION REPORT

Location SE 1/4 NW 1/4 Sec 29 Twp 92N Rg 50WCounty UnionPlease mark well
location with an "X"

Well Completion Date

August 7, 2013

1 Mile

Distance to nearest potential pollution source (septic tank, abandoned well, feed lot, etc.)?
1,350.0 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	36.0 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
Bentonite	15	9.5 Lb/gal	0.0 Ft	30.0 Ft
		Lb/gal	Ft	Ft

Describe grouting procedure
Tremie Method

SCREEN:

☐ Perforated pipe ☒ Manufactured
Diameter 16.00 Inches Length 40.0 FeetMaterial PVCSlot Size .050 Set From 36.0 Feet to 76.0 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?

☒ No, Why Not? Not Required
 Lab to which water quality sample sent for analysis
Well Owner: John Steven Donnelly

Business Name:

Address: 616 S Crawford RdCity, State, Zip: Vermillion SD 57069

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
Top Soil	0	2
Clay	2	28
Silty Clay	28	36
Gravel	36	76

STATIC WATER LEVEL

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

Ft. After _____ Hrs. pumped _____ 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, LLC

Signature of License Representative:

Signature of Well Owner or Equitable Property Holder:

Date:

9/28/13

Report of Examination of Works and/or Application of Water to Beneficial Use For Permit No. 7684-3

I have this day, October 19, 2016, made a thorough examination of the water use system constructed by John Steven Donnelly, 616 S Crawford Rd, Vermillion SD 57069 of Permit No. 7684-3, bearing the priority of February 6, 2013 authorizing the diversion of 1.78 cu. ft. per second of the waters of Missouri:Elk Point Aquifer for irrigation purposes, of 160 acres, in Union County.

Inspection contact & relationship **John Steven Donnelly, permit holder**
to permit holder, if applicable:

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) 76 feet
- 4) Well log is available Yes

Casing:

- 1) Diameter 16 inches
- 2) Length 36 feet
- 3) Type PVC

Screen:

- 1) Type PVC Manufactured
- 2) Length 40 feet
- 3) Static water level Unknown feet

Pump:

- 1) Make Franklin Submersible
- 2) Model Unknown
- 3) Capacity 800 GPM

Motor:

- 1) Make Franklin Submersible
- 2) Model No. 2366178125
- 3) Horsepower rating 40 hp

C. Works used to apply water to beneficial use:

Center pivot:

- 1) Make Valley
- 2) Overall length 1296 feet
- 3) Number of towers 7
- 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 Yes
- 2) Irrigation Questionnaires checked to determine if permit owner started irrigation by the end of construction period Yes, began irrigating in 2013.
- 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: East 1340', South 1350' from NW Corner of Sec 29-T92N-R50W; Lat 42.76074/Long -96.78114; approximate center of NW 1/4 Sec 29-T92N-R50W.
2. The works are capable of diverting and conveying to the place of use 1.78 cfs or 800 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 29-T92N-R50W.

<u>NW 1/4 NW 1/4 - 31 ac</u>	<u>NE 1/4 NW 1/4 - 33 ac</u>
<u>SW 1/4 NW 1/4 - 33 ac</u>	<u>SE 1/4 NW 1/4 - 34 ac</u>

comprising a total of 131 acres of land and the license should be issued for 1.78 cfs or 800 gpm.

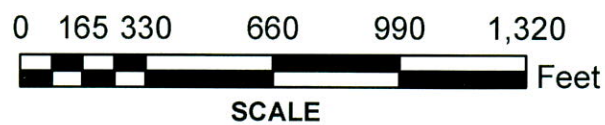
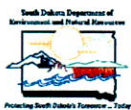
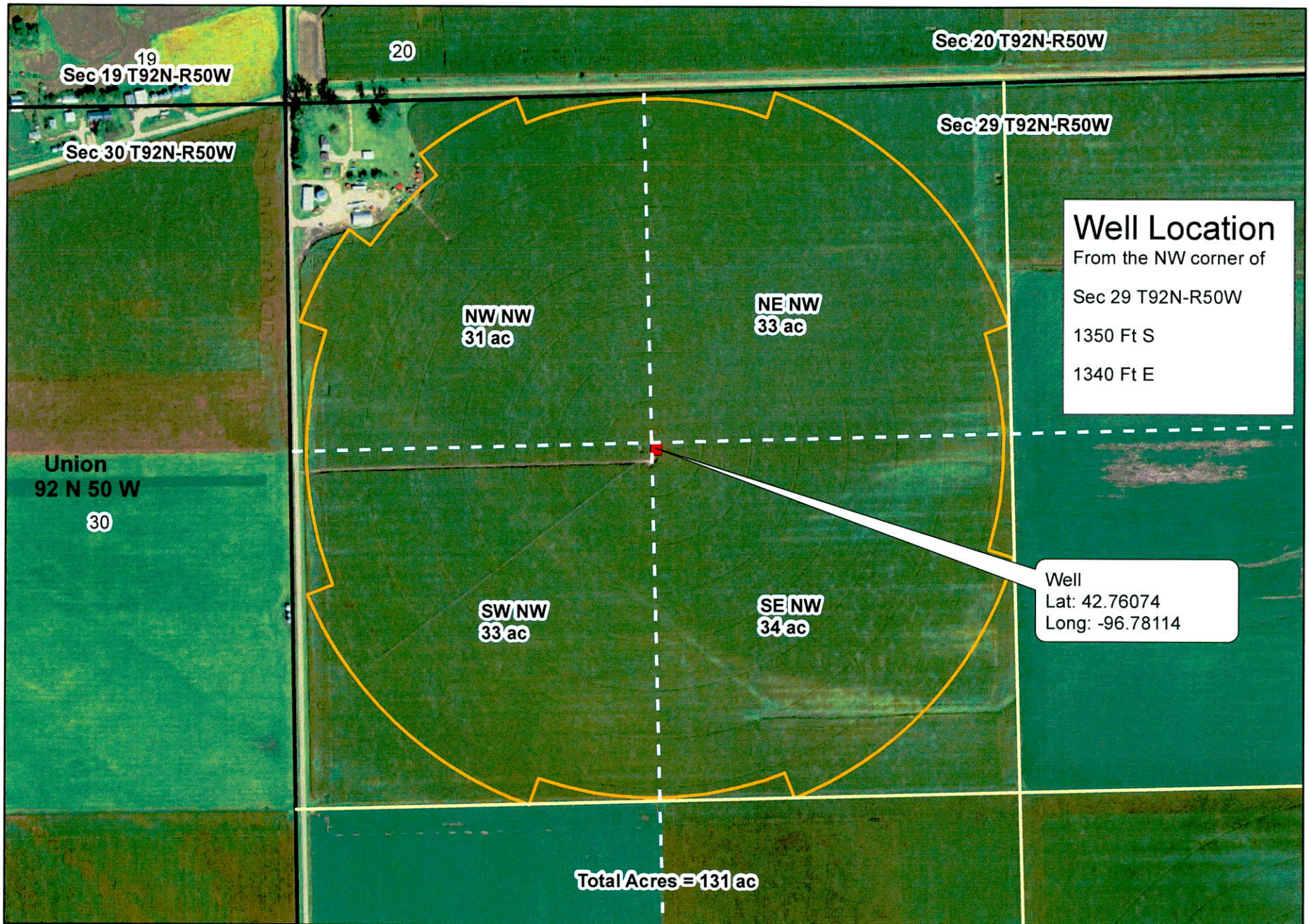
3. All structures, wells and lands on map Yes

Harold Holoch

Harold Holoch, PE
Staff Engineer
DENR, Water Rights Program

Date report completed: April 19, 2017

7684-3



Harold Holoch
Harold Holoch, PE
Staff Engineer
April 19, 2017



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

MAY 30 2017

7684-3

John Steven Donnelly
616 S Crawford Rd
Vermillion SD 57069

Dear Mr. Donnelly:

Enclosed is Water License No. 7684-3. 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 the owner of an existing well, such as the well authorized by Water Right No. 7684-3, 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. 7684-3

(1) John Steven Donnelly, 616 S Crawford Rd, Vermillion SD 57069 made Application No. 7684-3, February 6, 2013 for a water permit to divert 1.78 cubic feet of water per second from ground water, one well (Missouri Elk Point Aquifer), Union County, South Dakota for irrigation purposes. Permit No. 7684-3, with a priority date of February 6, 2013 was approved April 8, 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 8, 2018 and for the application to beneficial use of said water on or before April 8, 2022.

The Permit holder submitted a "*Notice of Completion of Works and Application of Water to Beneficial Use*" on October 19, 2016. The "*Notice*" stated the water use system was completed and water placed 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 1.78 cubic feet of water per second for beneficial use. The location of the diversion point is 1,340 feet east and 1,350 feet south of the NW corner of Section 29, T92N, R50W (approximate center of the NW ¼).

(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 29, T92N, R50W	NW ¼ NW ¼	31 acres
	SW ¼ NW ¼	33 acres
	NE ¼ NW ¼	33 acres
	SE ¼ NW ¼	<u>34 acres</u>
Total		131 acres

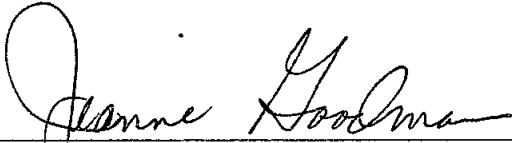
(4) Pursuant to South Dakota Water Law 46-5-30.1 John Steven Donnelly, 616 S Crawford Rd, Vermillion SD 57069 the holder and/or owner of Water Right No. 7684-3 is issued a license to appropriate water, the right to use 1.78 cubic feet of water per second from ground water, one well (Missouri Elk Point Aquifer) with a priority date of February 6, 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. 7684-3 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.
- The well authorized by Permit No. 7684-3 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 drilled in August, 2013 by Hammond-Wetmore Drilling, LLC. A copy of the well completion report is on file with the Water Rights Program.***

continued

- 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

MAY 30 2017

date

