

WATER PERMIT NO. 8050-3

Name of Applicant: **Ronald W Benson**

Address: **1492 Heights Blvd, Winona MN 55987**

Phone: **507 429-9406**

Amount of Water Claimed: **2.22 cfs**

Total Acres: **172 acres**

Source of Water Supply: **groundwater (two wells)**

Water to be used for: **irrigation**

County: **Kingsbury**

Type of Waste Disposal System:

Location: **1 miles southeast of DeSmet**

PRIORITY

Date Received: **9-19-14**

Application/License Fee: **\$ 1050**

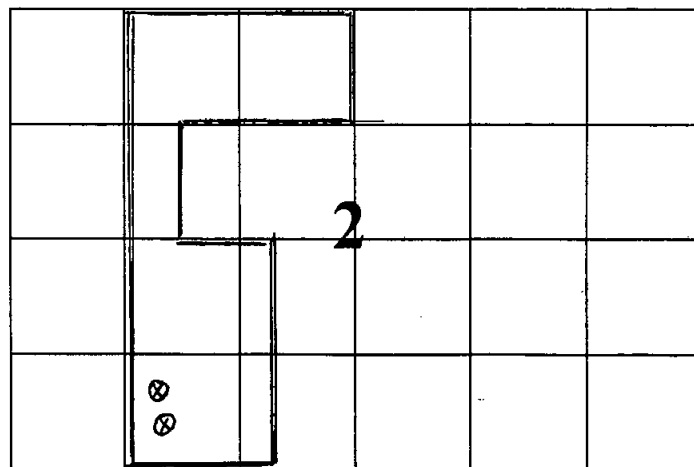
Corrected Application Received:

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

Remarks:

Diversion Point: **SW 1/4 SW 1/4 Sec 2-T110N-R56W**

Land to be Irrigated: **W 1/2 NW 1/4, NE 1/4 NW 1/4, SW 1/4 Sec 2-T110N-R56W**



Depth of Well: **35 feet deep**

Well Driller: **Lacey Well Drilling**

Remarks:

Type of Map: **aerial**

Prepared by:

Reviewed and the Number Assigned on: **9-22-14**

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. <u>8050-3</u>	Hydrologic Unit <u>10170103</u>
	Basin <u>Vermillion River</u>	<u>605-854-3331</u>
	Newspaper <u>De Smet News Box 69 57231</u>	<u>605-353-7401</u>
<u>Plainsman Box 1278 Huron 57350</u>		

RECEIVED
SEP 19 2014
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 RONALD W. BENSON
(check one) ☒ Owner ☐ Tenant/lessee ☐ Owner's Legal Agent _____
(name and complete address if different than above name)

Mailing Address 1492 HEIGHTS BLVD WINONA MINN 55987
(Address) (City) (State) (Zip Code)

Home Phone (507) 454-4780 Cell (507) 429-9406 Email RWB@CHARTER.NET

2. Amount of water claimed 2.22*CFS or 1,000 **GPM ***AF Total Acreage 172
(*Cubic Feet per Second) (**Gallons per Minute) (***)Acre Feet - storage capacity of dam/dugout or annual use if applicable)

3. Source of water supply 2 WELLS

4. Location of point of diversion 2 WELLS in SW 1/4 SW 1/4 section 2 - T110N - R56W
(example - 3 wells in SW 1/4 NE 1/4 section 12 - T104N - R53W)

County KINGSBURY

5. County or counties where water will be used KINGSBURY

6. Annual period during which water is to be used APRIL - OCTOBER 30

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 NW 1/4 SEC 2 T110N R56W	35	SW 1/4 SW 1/4 SEC 2 T110N R56W	33
SW 1/4 NW 1/4 SEC 2 T110N R56W	16	NW 1/4 SW 1/4 SEC 2 T110N R56W	38
NE 1/4 NW 1/4 SEC 2 T110N R56W	35	NE 1/4 SW 1/4 SEC 2 T110N R56W	10
		SE 1/4 SW 1/4 SEC 2 T110N R56W	5

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

WELLS to supply irrigation

I, RONALD W. BENSON, 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. 8050-3

Date of first receipt of application September 19, 2014.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 8050-3 to Ronald W Benson, 1492 Heights Blvd, Winona MN 55987 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. 8050-3 appropriates 2.22 cubic feet of water per second from two wells to be completed into the Vermillion:East Fork Aquifer (35 feet deep) located in the SW 1/4 SW 1/4 Section 2 for irrigation of 172 acres located in the W 1/2 NW 1/4, NE 1/4 NW 1/4 and the SW 1/4 Section 2; all in T110N-R56W.
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 September 19, 2014.
4. The date of approval of Permit No. 8050-3 is November 24, 2014.
5. One-fifth of the construction is to be completed on or before May 24, 2017.
6. All construction is to be completed on or before November 24, 2019.
7. Water is to be put to beneficial use on or before November 24, 2023.
8. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

QUALIFICATIONS

1. The wells approved under 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 wells authorized by Permit No. 8050-3 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*

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

DEC 22 2014

date



(type or print)

(check one or both as applicable)

☒ Drilling new well(s)

☐ Using existing well(s)

- On applicant's property

On property owned by others 1,300'

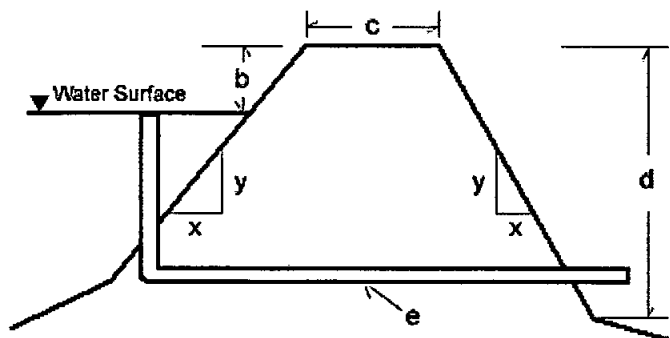
a) Type of System (i.e. septic tank, drain field)

- ### 3. Dugout Information

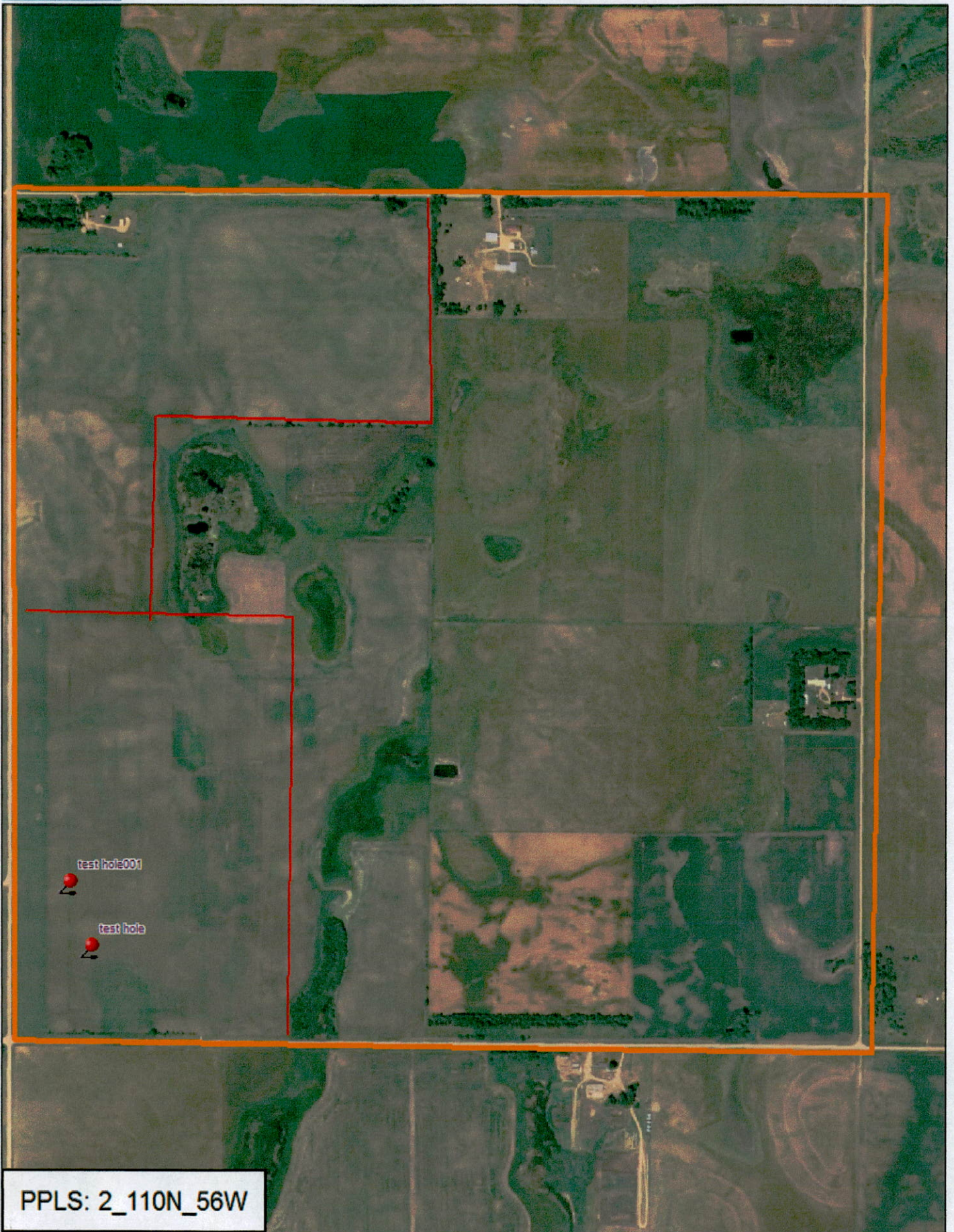
- a) Surface Dimensions _____ Depth _____
- b) Depth to water (ground surface to water level) _____

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:



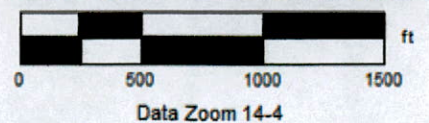
- b) Freeboard _____
- c) Crest Width _____
Crest Length _____
- d) Height _____
- e) Primary Outlet Capacity _____
If pipe, diameter _____
- f) Secondary Spillway Capacity _____
Spillway Width _____
- g) X & Y Slope (e.g. 3 to 1 is a typical slope)
Upstream _____
Downstream _____
- h) Surface Area of Impoundment _____
- i) Storage _____ Acre Feet
- j) Drainage Area Above Dam _____ Acres



Data use subject to license.

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Down-Hole Camera
Water Specialists
Irrigation Supplies

Ronald Bensen
1492 Height Blvd.
Winona, Minn. 55987

9-10-14

Test hole

0-2 Topsoil

2-6 Gravel

6-10 Sand

10-20 Grey Sand

20-35 Good Grey Gravel

35-Blue Clay

10' SWL

Est. 500 GPM

Drilled - 9-4-14

By - Lacey Well Drilling Inc.

Driller - Joan Redder-Lacey
Joan Reddi-Lacey

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date Sept 19, 20 14
Ronald W Benson, 1492 Heights Blvd, Winona MN 55987

RECEIVED OF _____

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

Fee for Application for Permit No. <u>8050-3</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>8050-3</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. **06954**

By

Jeanne Goodman
Chief Engineer

1/KS



**DEPARTMENT OF ENVIRONMENT
and NATURAL RESOURCES**

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

denr.sd.gov



**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 8050-3, Ronald W Benson**

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. 8050-3, Ronald W Benson, 1492 Heights Blvd, Winona MN 55987.

The Chief Engineer is recommending APPROVAL of Application No. 8050-3 because 1) there is reasonable probability that there is unappropriated water available for the applicant's proposed use, 2) the proposed diversion can be developed without unlawful impairment of existing rights, 3) the proposed use is a beneficial use and 4) it is in the public interest with the following qualifications:

1. The wells approved under 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 wells authorized by Permit No. 8050-3 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.

for Eric Brunland
Jeanne Goodman, Chief Engineer
November 7, 2014

REPORT TO THE CHIEF ENGINEER
ON
WATER PERMIT APPLICATION NO. 8050-3
RONALD W. BENSON
OCTOBER 18, 2014

Water Permit Application No. 8050-3 proposes to appropriate water from the Vermillion East Fork aquifer from two wells, at a maximum diversion rate of 2.22 cubic feet per second. The wells are expected to be approximately 35 feet deep and are to be located in the SW $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 2, T110N-R56W. This application proposes the irrigation of 172 acres located in the W $\frac{1}{2}$ NW $\frac{1}{4}$, NE $\frac{1}{4}$ NW $\frac{1}{4}$ and the SW $\frac{1}{4}$ of Section 2, T110N-R56W.

AQUIFER: Vermillion East Fork (VEF)

GENERAL:

The Vermillion East Fork aquifer is a glacial meltwater deposit consisting of medium to very coarse sand and fine gravel. The aquifer extends from Clark County to Turner County where it blends into the Parker Centerville outwash (Hedges and others, 1982). The Vermillion East Fork underlies approximately 94 square miles of Kingsbury County along a northwest trending two to four mile wide band (Hamilton, 1989). Due to a groundwater flow divide identified in the aquifer approximately four miles north of DeSmet, SD, the portion of the aquifer north of the divide is considered the Spirit Lake management unit of the Vermillion East Fork aquifer. As a result of a constriction in the areal extent of the aquifer and a groundwater divide near the Kingsbury/Miner County line, Stonesifer (2014) postulated a separate management unit of the aquifer located south of Township 112 North and north of the Kingsbury/Miner County line. This unnamed management unit of the Vermillion East Fork aquifer is estimated to have a total areal extent of approximately 42,500 acres and contain an estimated 127,000 acre feet of water in storage (Stonesifer, 2014). The aquifer is generally under unconfined conditions and groundwater movement is likely from the northwest to southeast (Hamilton, 1989). The aquifer is hydraulically connected to Lake Thompson. The hydraulic conductivity of the aquifer is estimated to range from 200 to 600 ft²/d, and well yields may be as high as 1,000 gallons per minute (Hamilton, 1989). The report for the test hole submitted with this application indicates sand and gravel from 2-35 feet below grade and a static water level of 10 feet below grade.

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 water availability and existing rights issues only.

WATER AVAILABILITY:

Water Permit Application No. 8050-3 proposes to appropriate water from the Vermillion East Fork aquifer. Approval of this application is likely to result in an average annual water use of less than 143 acre-feet annually (ac-ft/yr). The probability of unappropriated water available from an aquifer can be evaluated by considering SDCL 46-6-3.1 which requires "No application

to appropriate groundwater may be approved if, according to the best information reasonably available, it is probable that the quantity of water withdrawn annually from a groundwater source will exceed the quantity of the average estimated annual recharge of water to the groundwater source.” If the source of the water is older or lower than the Greenhorn Formation and a public water system has applied for a permit, the Board need not consider the recharge/withdrawal issue. Here, a public water system is not involved and the aquifer is not older or lower than the Greenhorn Formation, therefore the withdrawal/recharge issue must be considered.

In applying SDCL 46-6-3.1, the Sixth Judicial Circuit Court ruled in 2005, that if the Water Management Board uses average annual recharge, then it should also use average annual withdrawals to determine if unappropriated water is available from the aquifer (*Hines v. South Dakota Dept. of Environ. and Nat'l. Resources, Hughes County 04-37*) (Memorandum Decision, April 29, 2005).

A 2012 First Judicial Circuit Court’s rulings basically stated that data must be presented to show it is probable the average annual recharge exceeds the average annual discharge by at least the amount requested by the water permit application being considered (*Hanson County Dairy v. Robert Bender and Stace Nelson*) (Memorandum Decision, April 11, 2012).

Later in 2012, the First Judicial Circuit Court stated that in deciding whether or not it is probable that the quantity of water withdrawn will exceed the quantity of the average estimated annual recharge is to be based according to the best information reasonably available, and that nothing in South Dakota law requires a recharge study (*Longview Farms, LLP v. South Dakota Dept. of Environ. and Nat'l. Resources*), (Memorandum Decision, May 17, 2012).

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 eight observation wells completed into the unnamed management unit of the Vermillion East Fork aquifer. The location of the observation wells and the well sites proposed by this application are shown in Figure 1. (Water Rights 2014a).

Hydrographs for the observation wells are shown in Figures 2-9.



Figure 1. Location of DENR-Water Rights Observation Wells and the well sites proposed by Application No. 8050-3

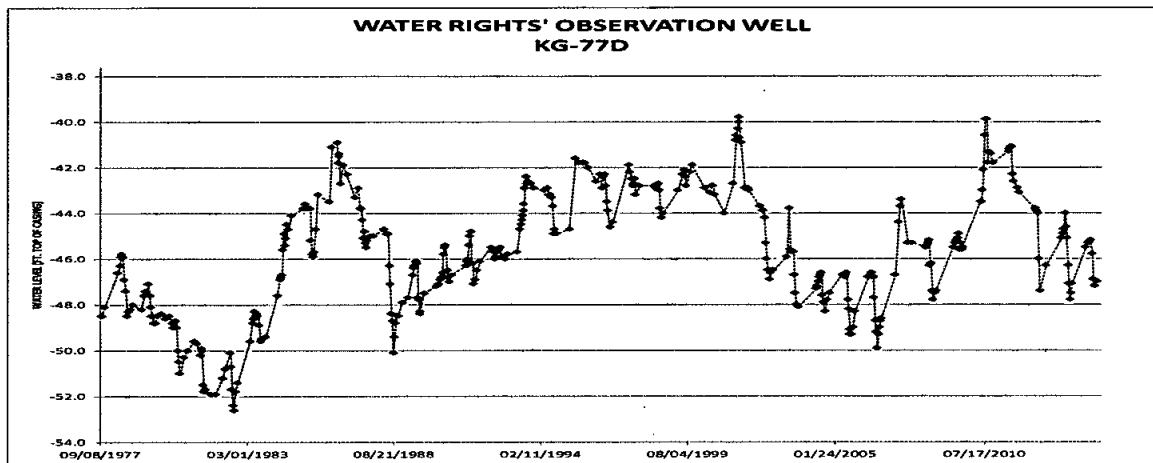


Figure 2. Hydrograph of DENR-Water Rights Program observation well completed into the Vermillion East Fork aquifer (see Figure 1 for location).

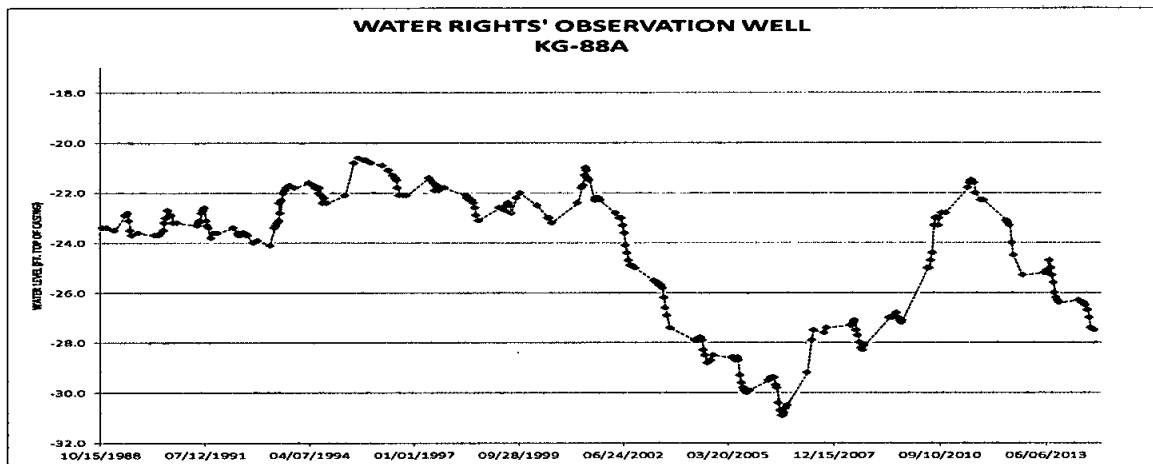


Figure 3. Hydrograph of DENR-Water Rights Program observation well completed into the Vermillion East Fork aquifer (see Figure 1 for location).

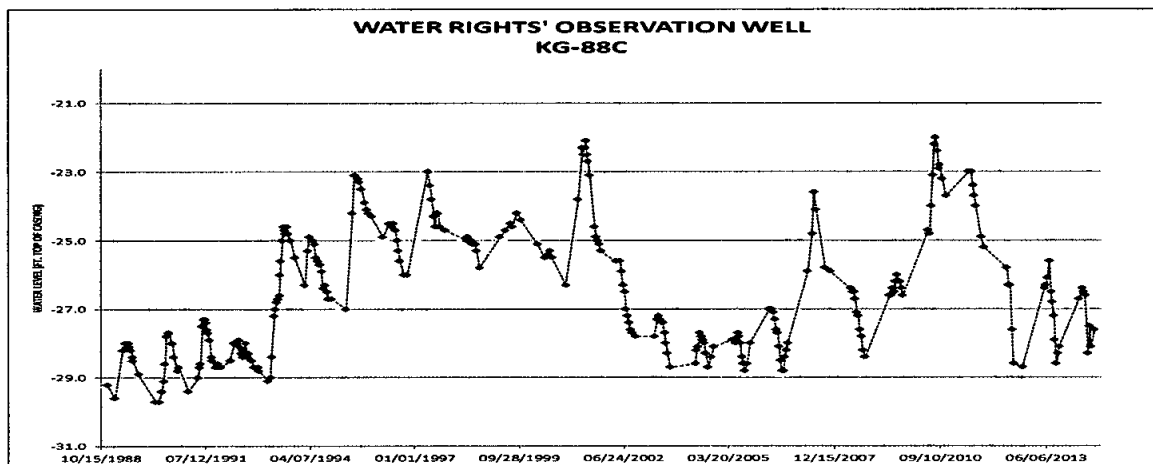


Figure 4. Hydrograph of DENR-Water Rights Program observation well completed into the Vermillion East Fork aquifer (see Figure 1 for location).

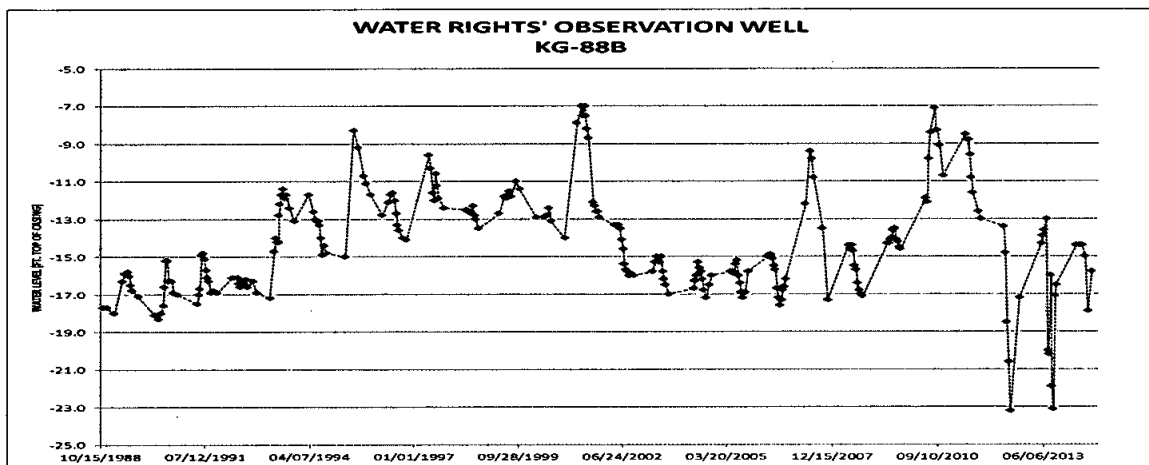


Figure 5. Hydrograph of DENR-Water Rights Program observation well completed into the Vermillion East Fork aquifer (see Figure 1 for location).

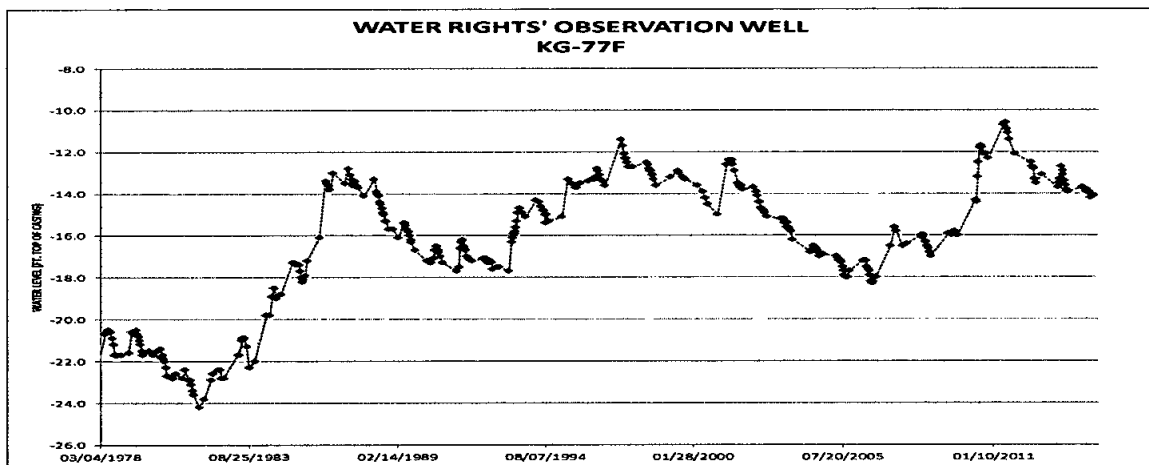


Figure 6. Hydrograph of DENR-Water Rights Program observation well completed into the Vermillion East Fork aquifer (see Figure 1 for location).

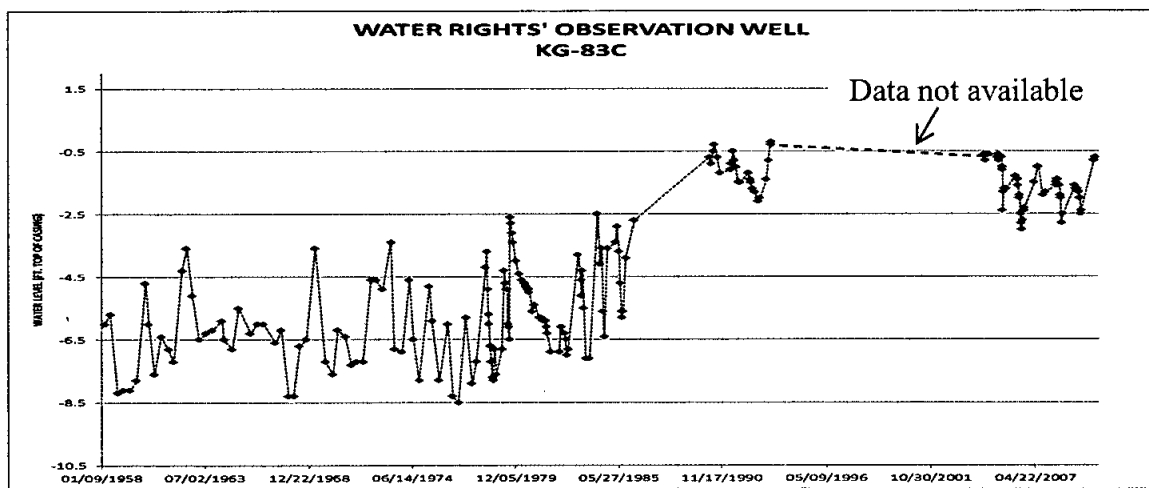


Figure 7. Hydrograph of DENR-Water Rights Program observation well completed into the Vermillion East Fork aquifer (see Figure 1 for location).

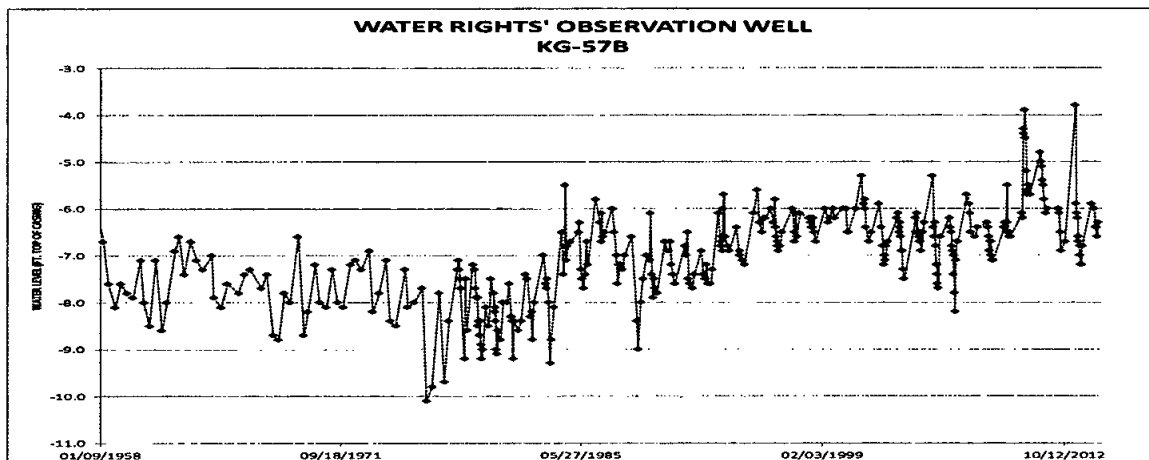


Figure 8. Hydrograph of DENR-Water Rights Program observation well completed into the Vermillion East Fork aquifer (see Figure 1 for location).

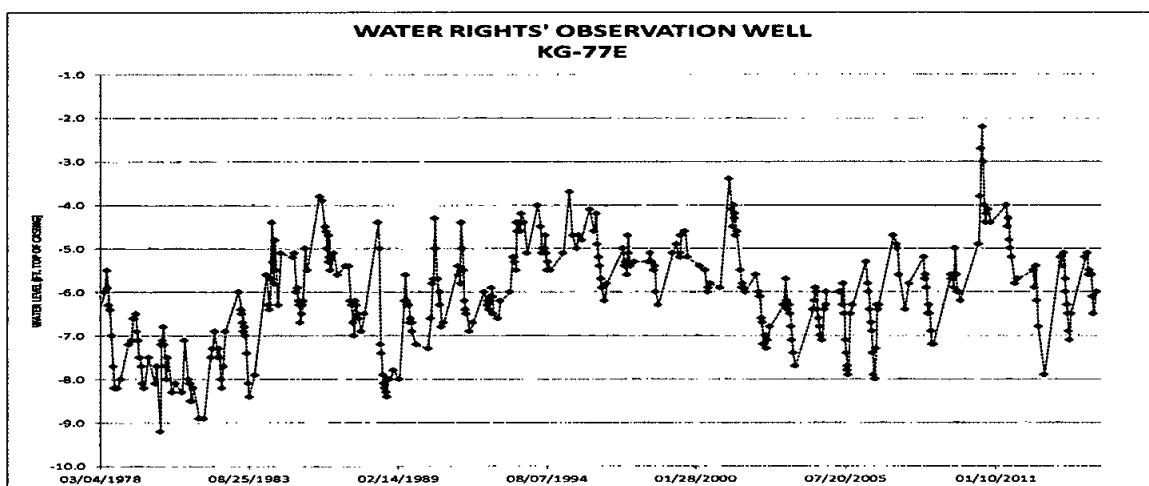


Figure 9. Hydrograph of DENR-Water Rights Program observation well completed into the Vermillion East Fork aquifer (see Figure 1 for location).

In general, the hydrographs show upward trending water levels over the period of record. The hydrograph for KG-88A (Figure 3) is an exception due to the proximity and influence of the Kingbrook Rural Water System well field. Note the break in data shown in the hydrograph for observation well KG-83C (Figure 7), which is the result of the well's inaccessibility due to high water for a number of years. The hydrographs document that the aquifer responds well to climatic conditions with rising water levels during wet years and declining water levels during dry years. The data documents that at the current level of development temporal well withdrawal is masked by climatic conditions. Therefore, recharge to and natural discharge from the aquifer greatly exceeds well withdrawal, so water is available for capture before natural discharge. Therefore, unappropriated water is available from the Vermillion East Fork aquifer to support the proposed appropriation.

Hydrologic Budget:

Recharge:

Recharge to the Vermillion East Fork aquifer occurs through infiltration of precipitation, leakage from adjacent and underlying till, and inflow from other management units (Hamilton, 1989). The average annual recharge for this unnamed management unit of the Vermillion East Fork aquifer has not been quantified. However, average annual recharge to the adjacent Spirit Lake management unit was estimated to be approximately 4.0 inches per year through observation well analysis (Hedges and others, 1985). Due to the proximity of the two management units and their similar characteristics, the recharge rate to the two management units is expected to be similar. Therefore, the average annual recharge to this unnamed management unit is estimated to be approximately 14,200 acre-feet per year.

Withdrawals:

Withdrawals from this unnamed management unit of the Vermillion East Fork aquifer are through evapotranspiration, groundwater outflow to Miner County, and well withdrawals for domestic, commercial, rural water system, municipal, and irrigation use (Water Rights, 2014b and Water Rights 2014c). The water rights/permits appropriating water from the unnamed management unit of the Vermillion East Fork aquifer that Water Permit Application No. 8050-3 proposes to appropriate from are shown in Table 1.

Although there are a number of domestic wells on file, rural water has replaced most domestic wells as a primary source. The relatively low amount of water used by a typical domestic well and the amount of water withdrawn annually for domestic use is not significant to the hydrologic budget for this management unit.

There are four water rights appropriating water for rural water system use, three municipal water rights, two future use permits, and one water permit for commercial use from this unnamed management unit of the Vermillion East Fork aquifer. Water use by these non-irrigation uses is estimated assuming water rights/permits limited by diversion rate only will divert at the maximum authorized diversion rate 60 percent of the time and water rights limited to an annual volume of water will divert the entire allotment. It is assumed that future use permits can be fully developed.

Kingbrook Rural Water System, Inc., has four water rights authorizing a total diversion rate of 5.76 cfs and a total annual appropriation of 1,350 ac-ft/yr, and one future use permit reserving 1,100 ac-ft/yr (Water Rights, 2014b). The amount of water that can be expected to be withdrawn through these appropriations is estimated to be 2,502 ac-ft/yr.

The City of DeSmet has three water rights authorizing a total diversion rate of 4.334 cfs and one future use permit reserving 625 ac-ft/yr. The amount of water that can be expected to be withdrawn through these appropriations is estimated to 1,883 ac-ft/yr.

Water Permit No. 5069-3, D & D RV Park, authorizes a maximum diversion rate of 0.1 cfs for commercial use. It is estimated the use by D & D Park to be 44 ac-ft/yr.

Historic irrigation use from the Vermillion East Fork aquifer is shown in Table 2.

PERMIT NO	NAME	PRIORITY DATE	STATUS	USE	CFS	ACRES
1212-3	PAGE BROTHERS	08/09/1965	LC	IRR	2.28	270
1456A-3	H T ALBRECHT & SONS INC	11/09/1967	LC	IRR	1.33	124
1487-3	IRA ALBECK	12/29/1967	LC	IRR	1.85	130
1533-3	RUSTIN E & AUSTIE LEE	11/09/1967	LC	IRR	2.66	293
1652-3	CITY OF DESMET	12/24/1968	LC	MUN	2.22	0
2037-3A	TIM SULLIVAN	12/17/1973	LC	IRR	1.89	132
3131-3	ROBERT B/SCOTT A LEE	10/05/1976	LC	IRR	1.67	117
3132-3	GEIB FAMILY TRUST	10/05/1976	LC	IRR	1.78	136
3312-3	CLARENCE STUBBE	12/07/1976	LC	IRR	1.88	132
3478-3	FARRON PRATT	12/10/1976	LC	IRR	1.33	110
3499A-3	WILLIAM POPPEN	12/28/1976	LC	IRR	1.77	132
3822-3	JOAN A JENCKS	02/15/1977	LC	IRR	1.34	126
3825-3	SHIRLEY ALLEN	03/04/1977	LC	IRR	1.31	92
3937-3	WENDELL SCHUBLOOM	04/27/1977	LC	IRR	0.4	28.7
3960-3	WALLUM FARMS INC	03/09/1977	LC	IRR	0.94	66
4137-3	KINGBROOK RWS INC	03/04/1977	LC	RWS	1.06	0
4245-3	ALAN AUGHENBAUGH	02/27/1978	LC	IRR	1.77	205
4282-3	MARVIN OGREN	05/04/1978	LC	IRR	1.76	155
4795-3	CITY OF DESMET	01/01/1922	LC	MUN	2.11	0
5069-3	D & D RV PARK	04/29/1985	PE	COM	0.1	0
5186-3	KINGBROOK RWS INC	03/29/1988	LC	RWS	0.7	0
5209-3	KINGBROOK RWS INC	08/15/1988	FU	RWS	na	na
524-3	CITY OF DESMET	03/09/1958	FU	MUN	na	na
5258-3	KINGSBURY CO COUNTRY CLUB	12/07/1988	LC	IRR	0.52	37
5426-3	KINGBROOK RWS INC	08/15/1988	LC	RWS	1.4	0
60-3	ARTHUR GEYER	06/24/1950	LC	IRR	0.86	60
6480-3	KEITH LARSON	03/12/2004	LC	IRR	0	0
6731-3	KINGBROOK RWS INC	06/05/2006	LC	RWS	2.6	0
6759-3	CITY OF DESMET	09/27/2006	LC	MUN	0.004	0
7279-3	H T ALBRECHT & SONS INC	11/17/2011	PE	IRR	1.92	135
7307-3	WESLEY TOEWS FAMILY TRUST	01/17/2012	PE	IRR	4	296
7674-3	BOB TIMP	01/24/2013	PE	IRR	4.44	360
7855-3	WILLIAM POPPEN	07/08/2013	PE	IRR	0.89	40
7981-3	FARRON PRATT	03/06/2014	PE	IRR	0.58	24
IL= Incorporated, LC= Water Right, PE= Water Permit, IRR= Irrigation, MUN= Municipal, RWS= Rural Water System, COM= Commercial						

Table 1. Water Rights/Permits appropriating water from the Vermillion East Fork aquifer in Kingsbury County

Year	Pumpage
1979	1748.47
1980	1640.87
1981	1038.76
1982	676.26
1983	696.00
1984	714.00
1985	880.00
1986	430.00
1987	703.00
1988	1198.70
1989	1340.60
1990	2017.50
1991	1124.40
1992	683.60
1993	189.20
1994	1204.71
1995	428.83
1996	1070.86
1997	1225.00
1998	1099.27
1999	1099.99
2000	1336.04
2001	1295.74
2002	1704.70
2003	1801.58
2004	1652.90
2005	1356.07
2006	1659.39
2007	1654.43
2008	1851.50
2009	686.88
2010	465.27
2011	760.63
2012	2255.33
2013	2014.90
Maximum	2255.33
Minimum	189.2
Average	1191.58

Table 2. Irrigation appropriation and pumpage from the Vermillion East Fork aquifer (Water Rights, 1980-2014)

Water Balance:

The annual average withdrawal from this unnamed management unit of the Vermillion East Fork aquifer is expected to be 5,621 ac-ft/yr, while average annual recharge is estimated to be 14,200 ac-ft/yr. Therefore, there is a reasonable probability that unappropriated water is available to support the proposed appropriation.

AFFECTS ON EXISTING RIGHTS:

The approximate location of wells supplying water rights/permits appropriating water from the Vermillion East Fork aquifer are shown in Figure 10.

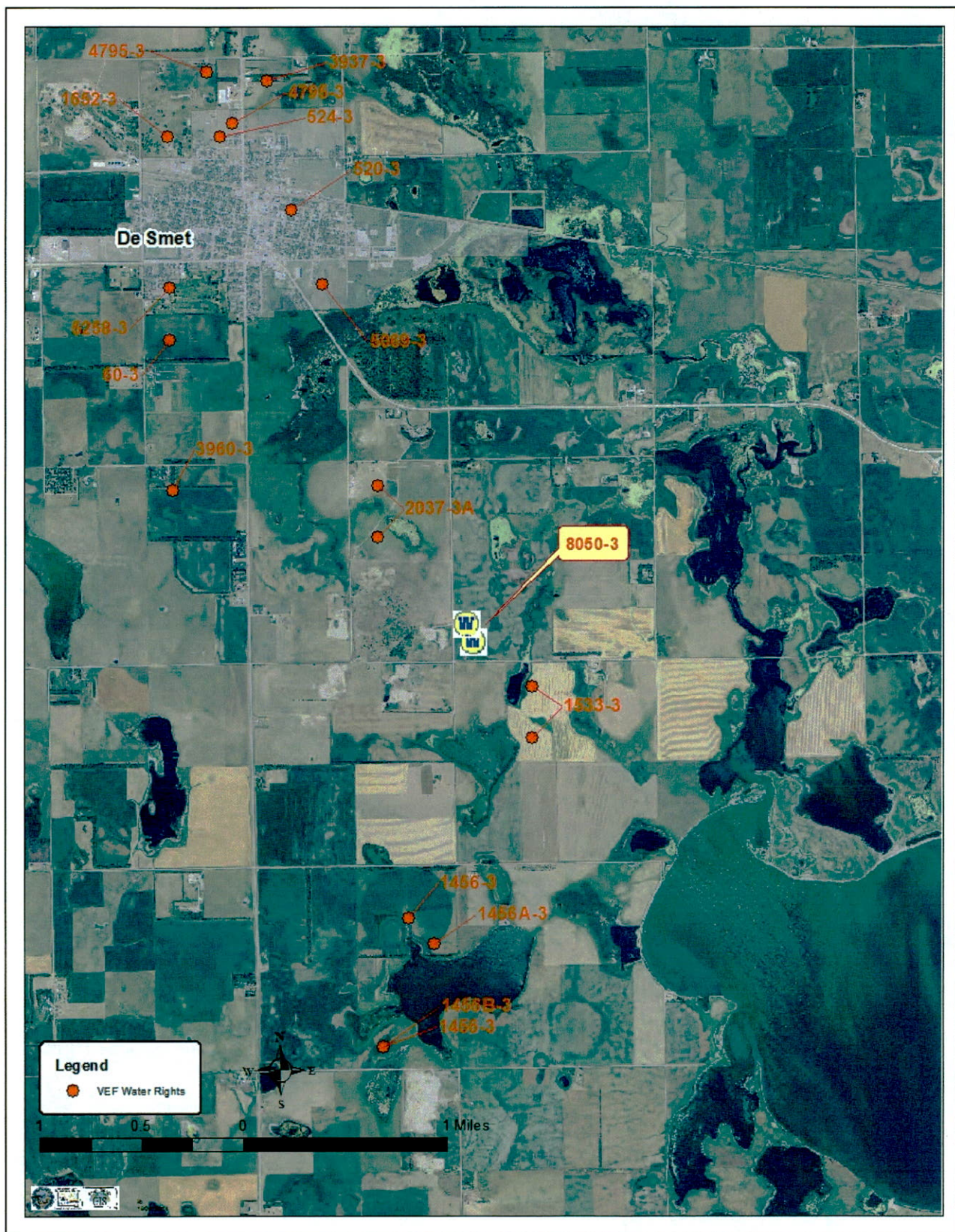


Figure 10. The approximate location of wells supplying water rights/permits appropriating water from the Vermillion East Fork aquifer and well sites proposed by Application No. 8050-3.

Since the Vermillion East Fork aquifer is under unconfined conditions, drawdown does not extend very far from individual production wells. This is shown by the observation well hydrographs (Figures 2-9). Except for KG-88C (Figure 4) and KG-83C (Figure 7), the observation wells are located within one-half mile of one or more high production wells (either irrigation or RWS) yet the effects of pumping are not significant on the water levels of the observation wells. Precise drawdown estimates cannot be quantified at this time. The Water Management Board has consistently recognized that to place water to maximum beneficial use a certain amount of drawdown will occur. Adequate wells defined by ARSD 74:02:20(7) are not expected to be adversely impaired due to the additional diversion from the well.

Conditions could occur where withdrawal exceeds the average annual recharge. When this occurs, the saturated thickness of the already thin aquifer could be reduced. If the saturated thickness is reduced to the extent that water rights/permits can no longer pump at their developed or "historically established" diversion rates, this may be considered an adverse impact.

CONCLUSIONS:

1. The Vermillion East Fork aquifer is a viable aquifer in this area.
2. There is a reasonable probability that unappropriated water is available from the Vermillion East Fork aquifer for this proposed appropriation.
3. There is a reasonable probability that this appropriation can be developed without an adverse impact on existing users.



Ken Buhler
SD DENR-Water Rights Program

REFERENCES:

- Hamilton, L.J., 1989, Water Resources of Brookings and Kingsbury Counties, South Dakota: U.S. Geological Survey Water-Resources Investigations Report 88-4185, 82 p.
- 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., and 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, Final Report; U.S. Army Corps of Engineers Contract DACW 45-80-C-0185
- Stonesifer, J.R., 2014, Report to the Chief Engineer, Water Permit Application No. 7981-3, Farron Pratt, April 28, 2014: South Dakota DENR-Water Rights Program, Joe Foss Bldg., Pierre, SD.

Water Rights, 1998-2014, "Irrigation Questioner Summaries", SD DENR-Water Rights Program, Joe Foss Bldg, Pierre, SD.

Water Rights, 2014a, Observation Well Files, SD DENR-Water Rights Program, Joe Foss Bldg, Pierre, SD.

Water Rights, 2014b, Water Right/Permit Files, SD DENR-Water Rights Program, Joe Foss Bldg, Pierre, SD.

Water Rights, 2014c, Water Well Completion Reports, SD DENR-Water Rights Program, Joe Foss Bldg, Pierre, SD.

AFFIDAVIT OF PUBLICATION

RECEIVED

STATE OF SOUTH DAKOTA,
County of Kingsbury.

SS. NOV 18 2014

David Tittle

WATER RIGHTS
PROGRAM

county being first duly sworn on oath, says that he is the publisher of **THE DE SMET NEWS**, a weekly newspaper printed and published in De Smet in said County of Kingsbury and has full and personal knowledge of all the facts herein stated; that said newspaper is a legal newspaper and has a bona-fide circulation of a least two hundred copies weekly, and has been published within said County for fifty-two successive weeks next prior to the publication of the notice herein mentioned, and was and is printed wholly or in part in an office maintained at said place of publication; that the

Notice of Application No. 8050-3

to Appropriate Water, a printed copy of which, taken from the paper in which the same was published, is attached to this sheet, and is made a part of this Affidavit, was published in said newspaper at least

once in each week for 1 successive weeks, on the day of each week on which said newspaper was regularly published, to-wit:

11-12-2014: 20
20: 20
20: 20
20: 20

that the full amount of the fee charged for the publication of said notice accrues to the benefit of the publisher of 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 person whomsoever, and that the fees charged for the publication thereof are

\$27.15

[Signature]

Subscribed and sworn to before me this 14th

day of November A.D. 20 14

Margaret A. Wilde

Notary Public

Kingsbury County, South Dakota

My commission expires May 30, 2018

NOTICE OF APPLICATION NO. 8050-3 to Appropriate Water

Notice is given that Ronald W. Benson, 1492 Heights Blvd., Winona, MN 55987 has filed an application for a water permit to appropriate 2.22 cubic feet of water per second from two wells to be completed into the Vermillion: East Fork Aquifer (35 feet deep) located in the SW 1/4 SW 1/4 Section 2 for irrigation of 172 acres located in the W 1/2 NW 1/4, NE 1/4 NW 1/4 and the SW 1/4 Section 2; all in T110N-R56W in Kingsbury County.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8050-3 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 November 24, 2014.

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. Information concerning this application is available at <http://denr.sd.gov/public>.

Contact Eric Grönlund at the above Water Rights Program address to request copies of information pertaining to this application. Steven

M. Pirm...ry, Department of
Environ...and Natural Resources.

Published once at the total
approximate cost of \$27.15

PRINTER'S AFFIDAVIT

STATE OF SOUTH DAKOTA,
COUNTY OF BEADLE: ss

RECEIVED

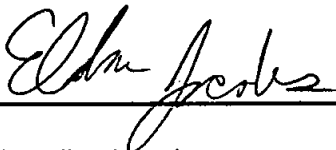
NOV 20 2014

WATER RIGHTS
PROGRAM

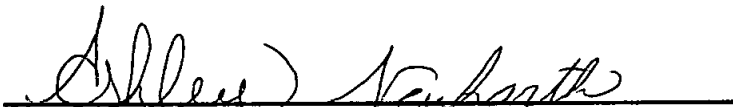
I, ELDON JACOBS, being duly sworn on oath say that the PLAINSMAN is a daily paper published at Huron, Beadle County, South Dakota, and that said newspaper has a bona fide circulation of at least 250 copies daily; that said newspaper has been published within said county for fifty-two consecutive weeks immediately prior to this date, that said newspaper is printed in whole or in part, in an office maintained at said place of publication; that I am Legal Advertising Coordinator of said newspaper and know the facts herein state. The annexed notice headed:

SD ENVIRONMENTAL & NATURAL –
WATER RIGHTS - BENSON

was published for one day, in said newspaper, and not in any supplement of the said newspaper, the publication was of the 12TH day NOV 2014. That the full amount of the fee charged for publishing is: THIRTY-FOUR & 12/00 dollars insures to the benefit of the publisher of 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 person whom so ever.



Subscribed and sworn to me before this 12TH Day
of NOV 2014.


Notary Public, South Dakota

My term expires 10/25/2017
Legal #1507

F.P. 11-12-14

**NOTICE OF
APPLICATION
NO. 8050-3**

to Appropriate Water

Notice is given that Ronald W Benson, 1492 Heights Blvd, Winona MN 55987 has filed an application for a water permit to appropriate 2.22 cubic feet of water per second from two wells to be completed into the Vermillion: East Fork Aquifer (35 feet deep) located in the SW 1/4 SW 1/4 Section 2 for irrigation of 172 acres located in the W 1/2 NW 1/4, NE 1/4 NW 1/4 and the SW 1/4 Section 2; all in T110N-R56W in Kingsbury County.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8050-3 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. In accordance with SDCL 46-2A-23, the Chief Engineer will act on this application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the Chief Engineer's recommendation. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled and the Water Management Board will consider this application. Notice of the hearing will be given to the applicant and any person filing a petition.

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"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. Information concerning this application is available at <http://denr.sd.gov/public>. Contact Eric Gronlund at the above Water Rights Program address to request copies of information pertaining to this application.

Steven M. Pimer,
Secretary, Department
of Environment and
Natural Resources.
No. 1507 (adv.)

Published once at the
total approximate cost of
\$34.12.



DEPARTMENT OF ENVIRONMENT
and NATURAL RESOURCES

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



November 7, 2014

DeSmet News
PO Box 69
DeSmet SD 57231

ATTENTION: Legal Public Notice

Enclosed is a Notice on Application No. 8050-3 to Appropriate Water. Please publish the notice once on November 12, 2014. 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 Ronald W Benson, 1492 Heights Blvd, Winona MN 55987 (Ph # 507-429-9406).

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

Schlaak, Karen

From: Schlaak, Karen
Sent: Friday, November 07, 2014 9:51 AM
To: mail@desmetnews.com
Subject: Application No. 8050-3, Ronald W Benson
Attachments: 8050-3public.short.docx

Attached is a Notice of Application No. 8050-3 to Appropriate Water for Ronald W Benson, 1492 Heights Blvd, Winona MN 55987 to be published on November 12, 2014. Mr. Benson has been contacted to authorize publication and arrange for payment.

This information is being mailed to your paper today. Please acknowledge receipt of this.

Please send the affidavit to this office ASAP.

Thanks,

Karen Schlaak
Water Rights Program
523 E Capitol Ave
Pierre SD 57501
Phone: 605 773-3352



DEPARTMENT OF ENVIRONMENT
and NATURAL RESOURCES

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



November 7, 2014

Plainsman
PO Box 1278
Huron SD 57350

ATTENTION: Legal Public Notice

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Sincerely,

Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosures

Schlaak, Karen

From: Schlaak, Karen
Sent: Friday, November 07, 2014 9:49 AM
To: Ruby Crandall (rnewman.plainsman@midconetwork.com)
Subject: Application No. 8050-3, Ronald W Benson
Attachments: 8050-3public.short.docx

Attached is a Notice of Application No. 8050-3 to Appropriate Water for Ronald W Benson, 1492 Heights Blvd, Winona MN 55987 to be published on November 12, 2014. Mr. Benson has been contacted to authorize publication and arrange for payment.

Please send the affidavit to this office ASAP.
Thanks,

Karen Schlaak
Water Rights Program
523 E Capitol Ave
Pierre SD 57501
Phone: 605 773-3352



DEPARTMENT OF ENVIRONMENT
and NATURAL RESOURCES

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



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

November 7, 2014

Ronald W Benson
1492 Heights Blvd
Winona MN 55987

Dear Mr. Benson:

Water Permit Application No. 8050-3 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 DeSmet News printed at DeSmet SD (Ph # 605-854-3331) and the Plainsman printed at Huron SD (Ph # 605-353-7401). 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 November 12, 2014. 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. 8050-3 to Appropriate Water

Notice is given that Ronald W Benson, 1492 Heights Blvd, Winona MN 55987 has filed an application for a water permit to appropriate 2.22 cubic feet of water per second from two wells to be completed into the Vermillion:East Fork Aquifer (35 feet deep) located in the SW 1/4 SW 1/4 Section 2 for irrigation of 172 acres located in the W 1/2 NW 1/4, NE 1/4 NW 1/4 and the SW 1/4 Section 2; all in T110N-R56W in Kingsbury County.

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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. Information concerning this application is available at <http://denr.sd.gov/public>. 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.

Published once at the total approximate cost of _____.



DEPARTMENT OF ENVIRONMENT
and NATURAL RESOURCES

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



DEC 22 2014

Ronald W Benson
1492 Heights Blvd
Winona MN 55987

Dear Mr. Benson:

Enclosed is Water Permit No. 8050-3 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
<http://denr.sd.gov>

October 28, 2015

8050-3

Ronald Benson
4404 S Hypointe Circle
Sioux Falls SD 57105 7051

Dear Mr. Benson:

Enclosed is a "Notice" dated October 23, 2015 concerning the 2015 irrigation questionnaire.

The notice was originally mailed to 1492 Heights Blvd., Winona MN. The post office notified us that your address has changed and I will update our records accordingly.

If you have any questions, please contact me.

Sincerely,

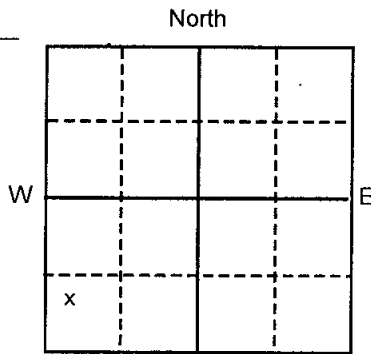
A handwritten signature in black ink that reads "Genny McMath". The signature is written in a cursive, flowing style.

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

enclosures

SOUTH DAKOTA WATER WELL COMPLETION REPORT

11-02

Location SW 1/4 SW 1/4 Sec 2 Twp 110n Rg 56wCounty KingsburyPlease mark well
location with an "X"

Well Completion Date

October 5, 2015

Distance to nearest potential pollution source (septic tank, abandoned well, feed lot, etc.)?
3,000.0 ft. from septic tank (identify source)

PROPOSED USE:

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

METHOD OF DRILLING:

Bucket

CASING DATA:

☐ Steel ☒ Plastic ☐ Other

If other describe

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
LB/FT	<u>16.00</u> IN	<u>0.0</u> FT	<u>16.0</u> FT	<u>24.00</u> IN
LB/FT	IN	FT	FT	IN
LB/FT	IN	FT	FT	IN

GROUTING DATA:

Grout Type	No. of Sacks	Grout Weight	From	To
<u>bent grout</u>	<u>10</u>	<u>9.4</u> Lb/gal	<u>0.0</u> Ft	<u>12.0</u> Ft
		Lb/gal	Ft	Ft

Describe grouting procedure
tremie

SCREEN:

☐ Perforated pipe ☒ Manufactured
Diameter 16.00 Inches Length 20.0 FeetMaterial pvcSlot Size .085 Set From 16.0 Feet to 36.0 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?Lab to which water
quality sample sent for analysisWell Owner: Ron Benson

Business Name:

Address: 40404 So. Circle HypointeCity, State, Zip: Sioux Falls SD 57105

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
Topsoil, dk brown	0	2
Gravel, medium to coarse	2	8
sand, gray, silty	8	35
clay, gray	35	36

STATIC WATER LEVEL 10.0 FEET

If flowing: closed in pressure _____ PSI

GPM flow _____ through _____ Inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other _____

Reduced flow rate _____ GPM

Can well be completely shut in?

WELL TEST DATA:

☒ Pumped Describe:☐ Bailed☐ Other

Pumping Level Below Land Surface

22.0 Ft. After 5.0 Hrs. pumped 300.0 GPM

_____ Ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate: 250.0 GPM

REMARKS

VERMILLION : EAST FORK KRThis well was drilled under license # 810 and this report is true and accurate.Drilling firm: Heine Electric & Irrigation, Inc.

Signature of License Representative:

Signature of Well Owner or Equitable Property Holder:

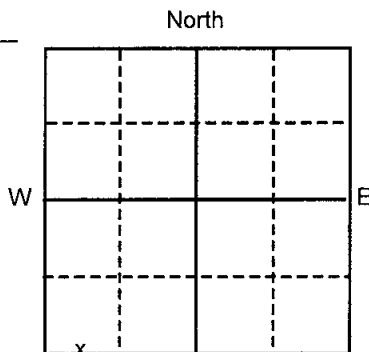
RECEIVED
JAN 29 2016

Date:

WATER RIGHTS
PROGRAM

SOUTH DAKOTA WATER WELL COMPLETION REPORT

11-02

Location SW 1/4 SW 1/4 Sec 2 Twp 110n Rg 56wCounty KingsburyPlease mark well
location with an "X"

Well Completion Date

October 6, 2015

1 Mile

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

3,000.0 ft. from septic tank (identify source)

PROPOSED USE:

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

METHOD OF DRILLING:

Bucket

CASING DATA:

☒ Steel ☐ Plastic ☐ Other

If other describe

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
LB/FT	<u>16.00</u> IN	<u>0.0</u> FT	<u>14.0</u> FT	<u>24.00</u> IN
LB/FT	IN	FT	FT	IN
LB/FT	IN	FT	FT	IN

GROUTING DATA:

Grout Type	No. of Sacks	Grout Weight	From	To
<u>bent grout</u>	<u>10</u>	<u>9.4</u> Lb/gal	<u>0.0</u> Ft	<u>11.0</u> Ft
		Lb/gal	Ft	Ft

Describe grouting procedure
tremie

SCREEN:

☐ Perforated pipe ☒ Manufactured
Diameter 16.00 Inches Length 20.0 FeetMaterial pvcSlot Size .085 Set From 14.0 Feet to 34.0 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?Lab to which water
quality sample sent for analysisWell Owner: Ron Benson

Business Name:

Address: 40404 So. Circle HypointeCity, State, Zip: Sioux Falls SD 57105

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
Topsoil, dk brown	0	2
Gravel, medium to coarse	2	10
sand, gray, silty	10	23
gravel, fine, sandy	23	28
sand, fine, gray	28	32
clay, silty, gray	32	35

STATIC WATER LEVEL 8.0 FEET

If flowing: closed in pressure _____ PSI

GPM flow _____ through _____ Inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other

Reduced flow rate _____ GPM

Can well be completely shut in?

WELL TEST DATA:

☒ Pumped Describe:☐ Bailed☐ Other

Pumping Level Below Land Surface

21.0 Ft. After 5.0 Hrs. pumped 300.0 GPM

_____ Ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate: 250.0 GPM

REMARKS

RECEIVED

JAN 29 2016

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

Signature of License Representative:

Signature of Well Owner or Equitable Property Holder:

Date:

8050-3

RECEIVED

APR 10 2017

WATER RIGHTS
PROGRAM

ERIC GRONLUND

WATER RIGHTS PROGRAM

STATE OF SOUTH DAKOTA

DEAR MR. GRONLUND

I CURRENTLY OWN PERMIT # 8050-3 FOR IRRIGATION OF MY FARM LOCATED IN KINGSBURY COUNTY. I PRESENTLY HAVE TWO (2) WELLS LOCATED IN THE SW 1/4 OF SW 1/4 OF SECTION 2, T110N, R56W. THE LOCATION OF THE PRESENT WELLS ARE DEPICTED ON THE ATTACHED MAP. THE NORTHERLY MOST WELL DID NOT PERFORM AS WELL AS WAS EXPECTED IN 2016. IT IS MY DESIRE TO ADD A THIRD WELL IN THE SW 1/4 OF SW 1/4 IN ORDER TO INCREASE THE OUTPUT TO A LEVEL CLOSER TO THE FLOW FOR WHICH I AM PERMITTED.

THE DEPTH OF THE PROPOSED WELL SHOULD BE CONSISTENT WITH THE DEPTH OF THE TWO EXISTING WELLS. THEY ARE CURRENTLY OPERATING AT A DEPTH OF APPROXIMATELY THIRTY FIVE (35) FEET. THE EXACT DEPTH OF THE PROPOSED WELL WILL BE ESTABLISHED UPON COMPLETION OF TESTING. IT IS MY INTENTION THAT THE PROPOSED WELL WILL DRAW FROM THE SAME WATER SOURCE AS THE TWO (2) EXISTING WELLS.

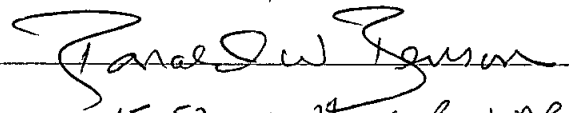
I HAVE DEPICTED THE APPROXIMATE LOCATION OF THE PROPOSED THIRD WELL ON THE ATTACHED MAP. THE ULTIMATE LOCATION WILL BE DETERMINED AFTER TEST HOLES ARE DUG.

I AM NEITHER REQUESTING TO INCREASE THE AMOUNT OF CFS NOR AN INCREASE IN THE AMOUNT OF ACRES TO BE IRRIGATED IN EXCESS OF THE AMOUNTS FOR WHICH I AM CURRENTLY PERMITTED.

IT IS MY UNDERSTANDING THAT THERE IS NO FEE FOR THIS REQUEST. HOPEFULLY, I HAVE INCLUDED

ALL OF THE INFORMATION REQUIRED FOR YOU
TO ACT ON THIS REQUEST. IF YOU NEED ANY
FURTHER INFORMATION, PLEASE CONTACT ME AT
(507) 429-9406. IT IS ALSO MY UNDERSTANDING
THAT YOU WILL BE ABLE TO RESPOND TO THIS
REQUEST WITHIN TWO (2) WEEKS OF YOUR RECEIPT
OF THIS REQUEST. I WOULD LIKE TO THANK
YOU FOR ASSISTANCE AND COOPERATION IN
ADDRESSING THIS REQUEST.

SINCERELY

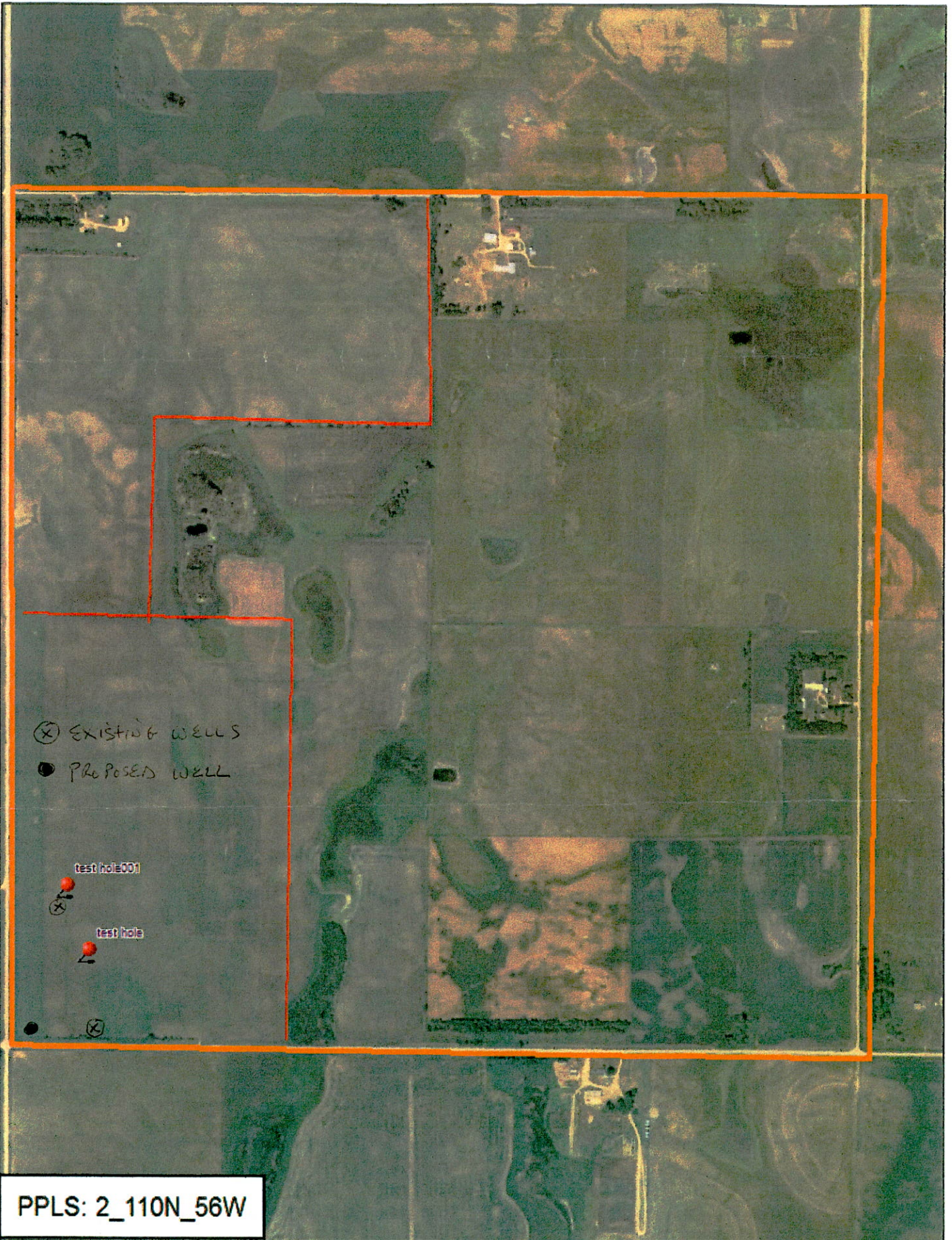


15052 W. HOME RUN DR.

SURPRISE AZ, 85374

(507) 429-9406 - CELL

(623) 251-5626 - HOME



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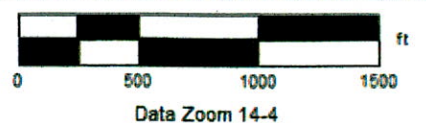
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APR 10 2017

WATER RIGHTS
PROGRAM



Request for an Additional Diversion Point

NAME: Ronald Benson

ADDRESS: 15052 W. Home Run Dr. Surprise, AZ 85374

DATE: April 12, 2017

COUNTY: Kingsbury

TELEPHONE: (507) 429-9406 (cell)

BACKGROUND:

Water Permit No. 8050-3 appropriates 2.22 cubic feet of water per second (cfs) from two wells completed in the Vermillion East Fork aquifer located in the SW $\frac{1}{4}$ SW $\frac{1}{4}$ Section 2 for the irrigation of 172 acres located in the W $\frac{1}{2}$ NW $\frac{1}{4}$, NE $\frac{1}{4}$ NW $\frac{1}{4}$, and the SW $\frac{1}{4}$ Section 2; all in T110N-R56W.

Mr. Benson submitted a letter to the South Dakota DENR Water Rights Program requesting the addition of one well to Water Permit No. 8050-3. This well would be used in addition to the existing two wells. The original diversion consists of 2 16" wells, both having a 20 foot screened interval and completed to a depth of 34 and 36 feet. The location of the proposed additional diversion is south of the northern well and west of the eastern well in SW $\frac{1}{4}$ SW $\frac{1}{4}$ Section 2 T110N-R56W. Final location within the SW $\frac{1}{4}$ SW $\frac{1}{4}$ will depend upon test hole results.

AUTHORITY:

Pursuant to SDCL 46-5-13.1, the location of a diversion point may be changed or additional diversion points may be licensed provided the following conditions are met and the potential for interference with other existing diversions is not increased:

- **Developed water source same as permitted source and no additional water appropriated**

The water source authorized by Water Right No. 8050-3 is the Vermillion East Fork aquifer. The proposed well is expected to be completed to a depth of approximately 35 feet, which is similar to the two existing wells. Given the proximity and depth of the proposed well, the water source is the same.

No additional appropriation of water is requested. This request is to add an additional diversion point. Water Right No. 8050-3 appropriates 2.22 cfs (996 gpm) for irrigation from two wells (35 feet deep). Information indicated on the well completion reports show that the driller expected to be able to pump at a rate of 250 gpm from each of the two wells.

- **No new land for irrigation**

The request states that the water will be used to irrigate the currently permitted acreage. The water permit states that the water will be used to irrigate 172 acres. No new land is being irrigated.

Review of Existing Diversions

The well completion report and water rights databases were reviewed for the nearest domestic wells and water rights/permits on file. The nearest domestic well on file completed into this aquifer is approximately 0.6 miles east of the diversion. The nearest water right completed into this aquifer is located approximately

0.6 miles southeast of the diversion points. Based on no change in distance from other users in the Vermillion East Fork aquifer, interference is not expected to be a concern.

Observation Well Data

The Water Rights Program has eight observation wells completed into this area of the Vermillion East Fork aquifer. The closest observation well completed into this aquifer (KG-77F) is located approximately one mile to the south of the well sites. This well has been in place since 1977 and shows static water level fluctuations of 10.6 to 24.2 feet below the top of the casing. Historic water levels in KG-77F do show the seasonal effects of pumping but the overall trend appears to be predominately controlled by climatic conditions.

CONCLUSION

- The additional diversion point does not propose to appropriate additional water.
- The water source continues to be Vermillion East Fork aquifer.
- Unlawful impairment of existing water rights/permits and domestic wells is not expected to occur.

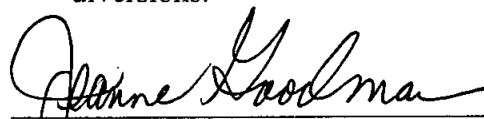
RECOMMENDED ACTION

Based on the above criteria, it is recommended that the additional diversion point locations under Water Permit No. 8050-3 should be approved.


for John Farmer
Water Rights Program

The Chief Engineer makes a finding pursuant SDCL 46-5-13.1 and ARSD 74:02:01:14.01 that:

The additional diversion point locations do not increase the potential for adverse effects to existing diversions.


Jeanne Goodman, Chief Engineer
Water Rights Program



8050-3

DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

denr.sd.gov

April 17, 2017

Ronald Benson
15052 W. Home Run Dr.
Surprise, AZ 85374

Ronald Benson
4404 S Hypointe Cl
Sioux Falls SD 57105

Dear Mr. Benson:

Water Permit No. 8050-3 appropriates 2.22 cubic feet of water per second (cfs) from two wells completed in the Vermillion East Fork aquifer (35 feet deep) located in the SW $\frac{1}{4}$ SW $\frac{1}{4}$ Section 2 for the irrigation of 172 acres located in the W $\frac{1}{2}$ NW $\frac{1}{4}$, NE $\frac{1}{4}$ NW $\frac{1}{4}$, and the SW $\frac{1}{4}$ Section 2; all in T110N-R56W.

You requested authorization to add an additional well located in the SW $\frac{1}{4}$ SW $\frac{1}{4}$ of Sec 2, T110N-R56W to supplement the flow of water from the existing wells. The basis for this request was an inadequate flow of water from the existing wells associated with Water Permit No. 8050-3.

Upon review of the request and pursuant to SDCL 46-5-13.1, the additional diversion location is authorized without application or publication of a notice of hearing pursuant to SDCL 45-2A-4. No increase in the authorized diversion rate of 2.22 cfs or the number of irrigated acres (172 acres) under Water Permit No. 8050-3 has been requested or approved. If the total diversion rate or the number of acres irrigated increases, a new water permit will need to be obtained from the SD DENR Water Rights Program.

If you have any questions, please contact John Farmer at (605) 773-3352.

Sincerely,


Jeanne Goodman, Chief Engineer
Water Rights Program

8050-3

RECEIVED

DEC 08 2017

WATER RIGHTS
PROGRAM

ERIC GRONLUND

WATER RIGHTS PROGRAM

STATE OF SOUTH DAKOTA

DEAR MR GRONLUND

RE: PERMIT # 8050-3

EARLIER THIS YEAR, I REQUESTED APPROVAL OF MY REQUEST TO ADD A THIRD WELL TO MY FARM LOCATED IN KINGSBURY COUNTY. BY LETTER DATED APRIL 17, 2017 FROM JEANNE GOODMAN, CHIEF ENGINEER, MY REQUEST WAS APPROVED. I PROCEEDED TO CONSTRUCT THE THIRD WELL BUT IT WAS NOT COMPLETED IN TIME TO PLACE IN SERVICE THIS YEAR.

I AM CONSIDERING OPTIONS RELATED TO THE PROBLEMATIC NORTH WELL REFERENCED IN MY PREVIOUS REQUEST FOR A THIRD WELL. ONE OPTION IS TO CONSTRUCT A FOURTH WELL. IT IS POSSIBLE THAT THE PROBLEMATIC WELL WOULD BE SEALED OR MODIFIED TO USE A PUMP THAT DOES DRAW AS MANY GALLONS PER MINUTE AS THE CURRENT PUMP.

THE SITE OF THE FOURTH WELL IS YET TO BE DETERMINED. THE POSSIBLE SITE WOULD BE BETWEEN THE SOUTH WELL AND THE NEW THIRD WELL. THAT LOCATION WOULD BE IN THE SW¹/₄ OF SW¹/₄ OF SECTION 2, T110N, R56W. HOWEVER, IT IS POSSIBLE THAT WE MAY EXPLORE PLACING THE NEW WELL IN THE SE¹/₄ OF SW¹/₄ OR THE NORTH HALF OF THE SW¹/₄. THIS CAN ONLY BE DETERMINED AFTER SOME ADDITIONAL TEST HOLES ARE COMPLETED.

THE DEPTH OF ANY ADDITIONAL WELL SHOULD BE CONSISTENT WITH THE EXISTING WELLS.

THEY ARE CURRENTLY OPERATING AT A DEPTH OF 35-40 FEET. IT IS MY INTENTION THAT ANY ADDITIONAL WELL WILL DRAW FROM THE SAME WATER SOURCE AS THE THREE (3) EXISTING WELLS.

I AM AGAIN NEITHER REQUESTING TO INCREASE THE AMOUNT OF CF'S WORK TO INCREASE THE AMOUNT OF ACRES TO BE IRRIGATED IN EXCESS OF THE AMOUNTS FOR WHICH I AM CURRENTLY PERMITTED.

IT IS MY UNDERSTANDING THAT THERE IS NO FEE FOR THIS REQUEST. IF YOU NEED ANY ADDITIONAL INFORMATION IN ORDER TO PROCESS THIS REQUEST, PLEASE CONTACT ME AT (507) 429-9406. IT IS MY UNDERSTANDING THAT YOU WILL BE ABLE TO RESPOND TO THIS REQUEST WITHIN APPROXIMATELY ONE WEEK FROM THE TIME YOU RECEIVE THIS REQUEST. I WOULD AGAIN LIKE TO THANK YOU FOR ASSISTANCE AND PROMPT RESPONSE TO MY REQUESTS SET FORTH HEREIN.

SINCERELY
Ronald W. Jensen
4404 S. HYPOHITE CIRCLE
SIoux FALLS, SD 57105
(507) 429-9406 - CELL
(605) 271-6476 - HOME

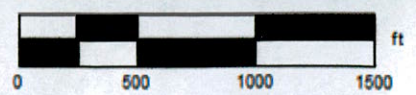
PS I HAVE ENCLOSED A MAP THAT SHOWS LOCATION OF EXISTING WELLS (●) AND POSSIBLE SITES OF THE REQUESTED FOURTH WELL. (X)



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www.delorme.com



Data Zoom 14-4

Additional Diversion Point Request

NAME: Water Permit No. 8050-3, Ronald Benson

ADDRESS: 4404 S Hypointe Circle, Sioux Falls SD 57105

DATE: December 13, 2017 **COUNTY:** Kingsbury **TELEPHONE:**

BACKGROUND:

Water Permit No. 8050-3 originally appropriated 2.22 cubic feet of water per second from two wells completed in the Vermillion East Fork aquifer located in the SW $\frac{1}{4}$ SW $\frac{1}{4}$ Section 2 for the irrigation of 172 acres located in the W $\frac{1}{2}$ NW $\frac{1}{4}$, NE $\frac{1}{4}$ NW $\frac{1}{4}$, and the SW $\frac{1}{4}$ Section 2- T110N-R56W.

In April 2017, authorization was granted for an additional third well located in the SW $\frac{1}{4}$ SW $\frac{1}{4}$ Section 2- T110N-R56W to supplement the flow of water from the existing two wells.

Mr. Benson has filed a request to drill a fourth well due to a “problematic” north well. Mr. Benson indicated he is weighing his option to construct a fourth well and that it is possible the north well will be sealed or modified to a pump that will not draw as many gallons per minute as the current pump in that well.

Mr. Benson wants the fourth well to be in the SW $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 2. Although the site of the fourth well has not been definitely determined. Depending on test drilling it is possible the well may be located in the SE $\frac{1}{4}$ SW $\frac{1}{4}$ or N $\frac{1}{2}$ SW $\frac{1}{4}$ of Section 2. The map accompanying the request shows the three potential locations of the well.

AUTHORITY:

Pursuant to SDCL 46-5-13.1, the location of a diversion point may be changed or additional diversion points may be licensed provided the following conditions are met and the potential for interference with other existing diversions is not increased.

Developed water source same as permitted source and no additional water appropriated

The water source authorized by Water Permit No. 8050-3 is the Vermillion East Fork aquifer. The proposed fourth well is expected to be completed to a depth consistent with the other wells which are 35 feet deep. Based on the proximity and depth of the intended well, the water source will be the Vermillion East Fork aquifer.

No additional appropriation of water is requested. The water permit is limited to a diversion rate of 2.22 cfs which equates to 996 gallons per minute. The request for the additional well locations does not request greater diversion rate authority.

Review of Existing Diversions

DENR's water rights databases were reviewed for the nearest domestic wells and water rights on file.

The nearest domestic wells completed into the Vermillion East Fork aquifer on file are located just over a mile to the southeast, 0.8 miles to northeast and two wells approximately 1.2 miles to the west of the Benson wells.

The nearest existing water right for wells completed into the Vermillion East Fork aquifer is approximately 0.5 miles to the south of the Benson well. There is second water right about 0.6 miles to the northwest. However this water right is enrolled in the Conservation Reserve Program until 2023 according the annual irrigation questionnaire.

The Water Rights Program has eight observation wells completed into this area of the Vermillion East Fork aquifer. The closest observation well completed into this aquifer is KG-77F which is located approximately one quarter mile to the south of Benson's existing wells. This observation well is within one quarter mile of an irrigation well. The well has been in existence since 1977 and has shown minor seasonal fluctuations due to effects of pumping with highest to lowest records varying 13.6 feet. Overall the observation well has shown an increasing trend over the period of record. The hydrograph for this observation well is found in Figure 1.

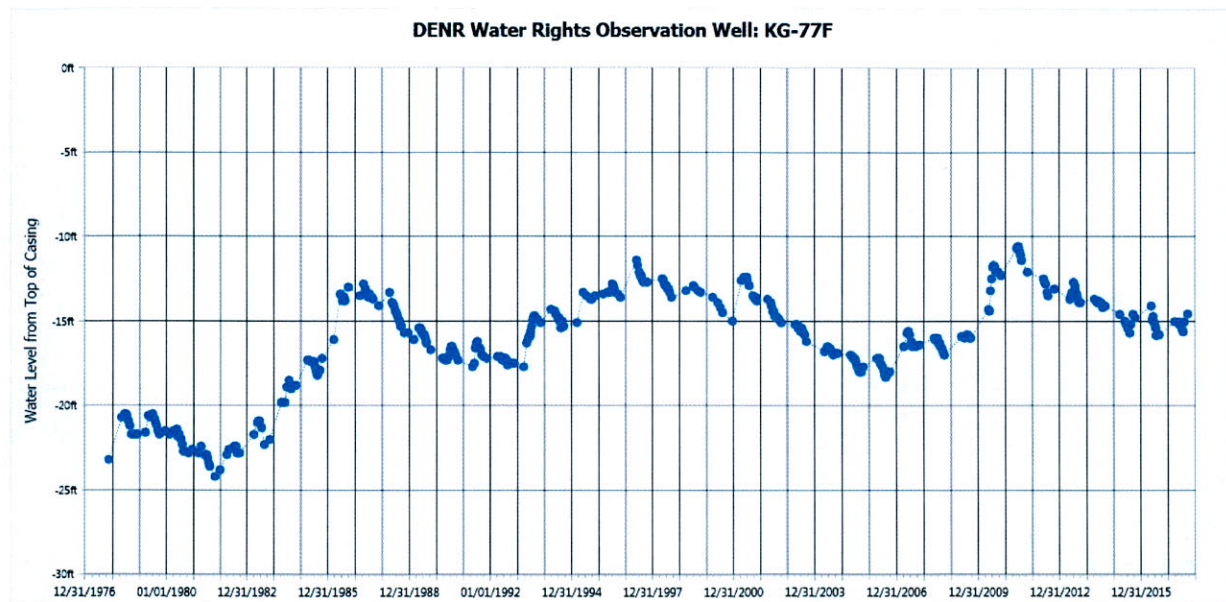


Figure 1 – Hydrograph for Observation Well KG-77F

The next closest observation well completed into this aquifer is KG-57B which is located approximately 1.4 mile northwest of Benson's existing wells. This observation well is a little over one quarter mile from an irrigation well. The well has been in existence since 1957 and has shown minor seasonal fluctuations due to effects of pumping and highest to lowest records varying 7.7 feet. Again, overall the observation well has shown an increasing trend over the period of record. The hydrograph for this observation well is found in Figure 2.

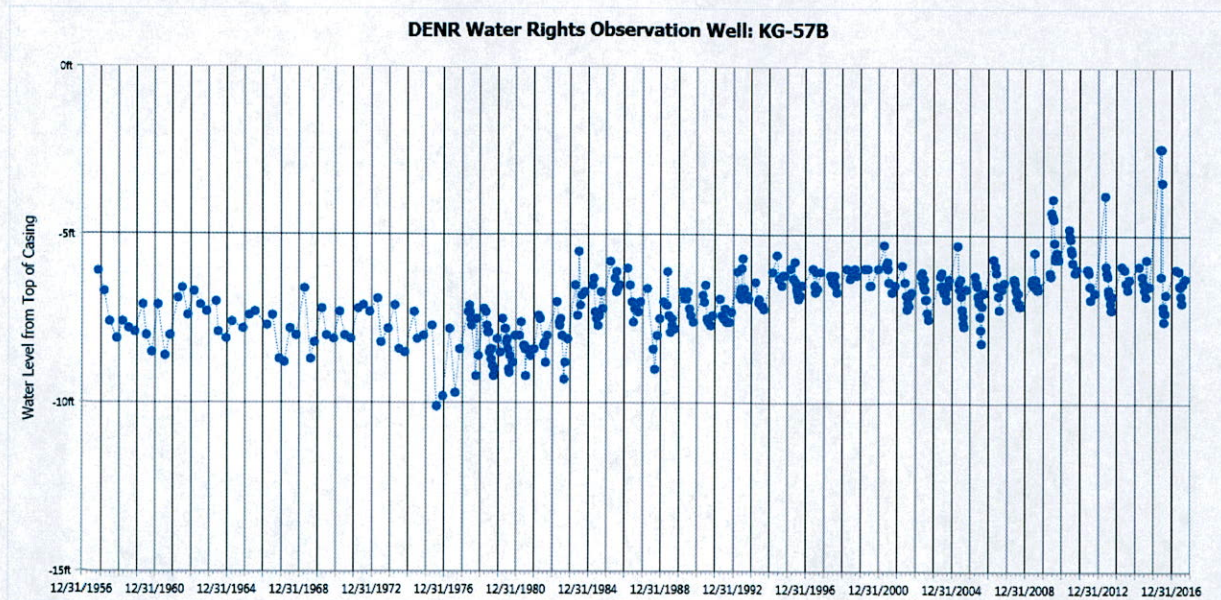


Figure 2 – Hydrograph for Observation well KG-57B

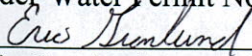
Depending on the precise location of Benson's fourth well it could be slightly closer or farther away from one of the domestic wells. Based on the historic water levels there is seasonal effects of pumping but the overall trend appears to be predominately controlled by climatic conditions. Therefore, authorizing the fourth well within the SW $\frac{1}{4}$ of Section 2-T110N-R56W does not significantly increase the potential for interference with other existing diversions.

CONCLUSION

- The additional well location does not seek to appropriate additional water.
- The well will be completed into the Vermillion East Fork aquifer.
- No additional acres are requested to be irrigated.
- Given the distance from domestic wells and water rights, the additional well does not increase the potential for adverse interference with existing diversions.
- The fourth well shall be located in the SW $\frac{1}{4}$ Section 2-T110N-R56W.
- If the well described in the request as the problematic well is abandoned it must be plugged in accordance with South Dakota well construction standards.

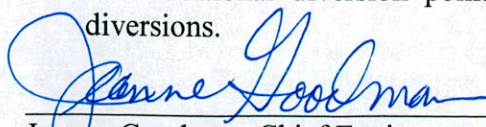
RECOMMENDED ACTION

Based on the above criteria, it is recommended that the additional diversion point locations be authorized under Water Permit No. 8050-3.


 Eric Gronlund
 Water Rights Program

The Chief Engineer makes a finding pursuant SDCL 46-5-13.1 and ARSD 74:02:01:14.01 that:

The additional diversion point does not increase the potential for adverse effects to existing diversions.


 Jeanne Goodman, Chief Engineer
 Water Rights Program



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

denr.sd.gov

December 18, 2017

Ronald Benson
4404 S Hypointe Circle
Sioux Falls SD 57105

Dear Mr. Benson:

Water Permit No. 8050-3 appropriates 2.22 cubic feet of water per second from three wells completed in the Vermillion East Fork aquifer located in the SW $\frac{1}{4}$ SW $\frac{1}{4}$ Section 2 for the irrigation of 172 acres located in the W $\frac{1}{2}$ NW $\frac{1}{4}$, NE $\frac{1}{4}$ NW $\frac{1}{4}$, and the SW $\frac{1}{4}$ Section 2- T110N-R56W.

You have filed a request for authorization for an additional fourth well to Water Permit No. 8050-3. The request is to supplement the existing wells to bring production to the permitted amount which was not achieved with the three wells. The north well is described as problematic in your request for a fourth well. You are assessing whether to seal or modify the pump in that well.

Upon review of the request and pursuant to SDCL 46-5-13.1, the additional fourth well location is authorized without application or publication of a notice of hearing pursuant to SDCL 46-2A-4. In granting this request you are being given flexibility to complete this well within the SW $\frac{1}{4}$ Section 2-T110N-R56W once the most suitable site is found.

If any of the wells are abandoned they must be plugged in accordance with South Dakota well construction standards.

If you have any questions, please contact Eric Gronlund at (605) 773-3352.

Sincerely,


Jeanne Goodman, Chief Engineer
Water Rights Program

8050-3

SD EForm - 1621LD V1

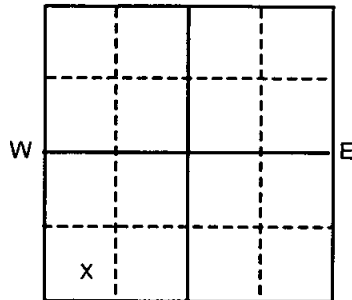
SOUTH DAKOTA WATER WELL COMPLETION REPORT

11-02

Location SW ¼ SW ¼ Sec 2 Twp 110N Rg 56WCounty Kingsbury

North

Please mark well location with an "X"



Well Completion Date

22 June 2017

1 Mile

Distance to nearest potential pollution source (septic tank, abandoned well, feed lot, etc.)?
3,000.0 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	<u>12.00</u> IN	<u>0.0</u> FT	<u>18.0</u> FT	<u>18.00</u> IN
LB/FT	IN	FT	FT	IN
LB/FT	IN	FT	FT	IN

GROUTING DATA:

Grout Type	No. of Sacks	Grout Weight	From	To
<u>Bentonite</u>	<u>10</u>	<u>9.5</u> Lb/gal	<u>0.0</u> Ft	<u>10.0</u> Ft
		Lb/gal	Ft	Ft

Describe grouting procedure
Tremie Method

SCREEN:

☐ Perforated pipe ☐ Manufactured
Diameter 12.00 Inches Length 20.0 FeetMaterial Stainless SteelSlot Size .050 Set From 18.0 Feet to 38.0 Feet

Other information

WAS A PACKER OR SEAL USED? ☐ Yes ☒ No

If so, what material?

Describe packer(s) and location

DISINFECTION: Was well disinfected upon completion?

☒ Yes, How? HTH tabletsLab to which water quality sample sent for analysis ☐ No, Why Not?Well Owner: Ron Benson

Business Name:

Address: 40404 S Circle Hypinto w/nCity, State, Zip: Sioux Falls SD 57105

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
Top soil	0	2
Gravel	2	9
Fine silty sand with pebbles	9	16
Fine gray silty sand	16	35
Gray clay	35	38

STATIC WATER LEVEL 9.0 FEET

If flowing: closed in pressure _____ PSI

GPM flow _____ through _____ Inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other _____

Reduced flow rate _____ GPM

Can well be completely shut in?

WELL TEST DATA:

☒ Pumped Describe:☐ Bailed☐ Other

Pumping Level Below Land Surface

26.5 Ft. After 26.4 Hrs. pumped 220.0 GPM

_____ Ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate: _____ GPM

REMARKS

Elevation: 1747'44° 21' 20" N-97° 31' 45" WVermillion East Fork w/nThis well was drilled under license # 810 and this report is true and accurate.Drilling firm: Heine Electric & Irrigation

Signature of License Representative:

Signature of Well Owner or Equitable Property Holder:

RECEIVED**NOV 02 2017**Date: 10-27-17**WATER RIGHTS PROGRAM**

12"x38" steel
12"x15"x45 slot

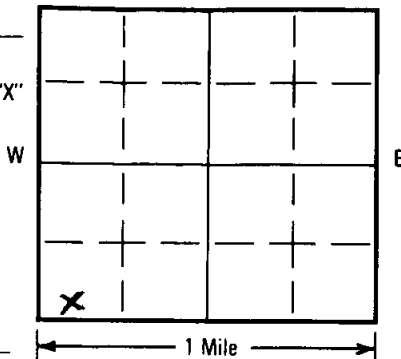
SOUTH DAKOTA WATER WELL COMPLETION REPORT

8050-3

07-92

Location SW 1/4 SW 1/4 Sec 2 Twp 110 Rg 62
County Kingsbury North

Please mark well location with an "X"



Well Completion Date

1-18-18

LOCATION:

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

PROPOSED USE:

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

METHOD OF DRILLING:

Rotary

CASING DATA:

☒ Steel ☐ Plastic ☐ Other

If other describe _____

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
_____ LB/FT	<u>12</u> IN	<u>0</u> FT	<u>23</u> FT	<u>17</u> IN
_____ LB/FT	_____ IN	_____ FT	_____ FT	_____ IN
_____ LB/FT	_____ IN	_____ FT	_____ FT	_____ IN

GROUTING DATA

Grout Type	No. of Sacks	Grout Weight	From	To
<u>Bentonite</u>	<u>4</u>	_____ lb./gal	<u>0</u> ft	<u>20</u> ft
		_____ lb./gal	_____ ft	_____ ft

Describe grouting procedure _____

SCREEN: ☐ Perforated pipe ☒ Manufactured

Diameter 12 IN Length 15 FEET

Material Stainless Steel

Slot Size 45 Set From 23 Feet to 38 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

Laboratory sent to for water quality analysis _____

NO, Why Not? _____

Well Owner: Ron Benson

Business Name: _____

Address: 15152 W Homerun Dr
Surprise, AZ 85374

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
Sand & Rock	0	10
Fine Sand	10	19
Sand & Rock	19	38
Clay	38	45

STATIC WATER LEVEL 4 Feet

If flowing: closed in pressure _____ PSI

GPM flow _____ through _____ inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other _____

Reduced Flowrate _____ GPM

Can well be completely shut in? _____

WELL TEST DATA:

☐ Pumped

Describe: Air developed well

☐ Bailed

Estimated

☐ Other _____

Pumping Level Below Land Surface

_____ ft. After 2 Hrs. pumped 200+ GPM

_____ ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate _____ GPM

REMARKS

Vermillion East fork AM

This well was drilled under license # 365

And this report is true and accurate.

Drilling firm Steven M Traut Wells Inc

Signature of License Representative: _____

RECEIVED

Signature of Well Owner or Equitable Property Holder: _____

JAN 23 2018

WATER RIGHTS PROGRAM

Date: 1-18-18

Report of Examination of Works and/or Application of Water to Beneficial Use For Permit No. 8050-3

I have this day, August 12, 2024, made a thorough examination of the water use system constructed by Ronald Benson 4404 S Hypointe Cir, Sioux Falls, SD 57105 of Permit No. 8050-3, bearing the priority of September 19, 2014 authorizing the diversion of 2.22 cu. ft. per second of the waters of the Vermillion East Fork Aquifer for irrigation purposes, in Kingsbury County.

A. Works used to divert the water:

Well Information:

- 1) Well Drilling Firm: Heine Electric
- 2) No. of Wells 4 (all similar)
- 3) Depth(s) 35 - 45 feet
- 4) Well log is available Y

Casing:

- 1) Diameter 16 inches
- 2) Length 14 feet
- 3) Type Steel & Plastic

Screen:

- 1) Type PVC
- 2) Length 20 feet
- 3) Static water level 8 - 10 feet

Pump:

- 1) Make Submersibles
- 2) Model Unknown
- 3) Size Unknown
- 4) Capacity 650 total GPM

Motor:

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

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

- 1) Type Buried PVC
- 2) Size 8 inches
- 3) Length 5000 feet

C. Works used to apply water to beneficial use:

Center pivot:

- 1) Make 2 - Valleys
- 2) Overall length 1300 feet
- 3) Number of towers 7
- 4) End gun Y
- 5) Capacity 650 each GPM

Chemigation Equipment:

- 1) Does chemigate Y Comments: Uses commercially available equipment

D. Compliance with Permit Requirements:

- 1) Permit qualifications being abided by Y
- 2) Irrigation Questionnaires checked to determine if permit owner started irrigation by the end of construction period Y
- 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: WELL LOCATIONS
From the SW corner Sec 2 T110N R56W WELL #1: 70 ft N & 820 ft E, Lat 44.35448 Long -97.52840
WELL #2: 90 ft N & 535 ft E, Lat 44.35459 Long -97.52946 WELL #3: 450 ft N & 570 ft E, Lat
44.35554 Long -97.52927 WELL #4: 580 ft N & 95 ft E, Lat 44.35592 Long -97.53110 All (SW 1/4 SW
1/4).

2. The works are capable of diverting and conveying to the place of use 1.45 cu. ft. per second of water which is to be used for irrigation. Water has been put to beneficial use to the maximum extent as follows:

legal description/acreage

All land in Sec 2 T110N R56W

NW1/4 NW 1/4 - 26 acres

NE 1/4 NW 1/4 - 29 acres

SE 1/4 NW 1/4 - 4 acres

SW 1/4 NW 1/4 - 23 acres

NW 1/4 SW 1/4 - 38 acres

NE 1/4 SW 1/4 - 5 acres

SE 1/4 SW 1/4 - 2 acres

SW 1/4 SW 1/4 - 35 acres

comprising a total of 162 acres of land and the license should be issued for 1.45 cfs

3. All structures, wells and lands on map Y

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

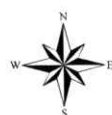
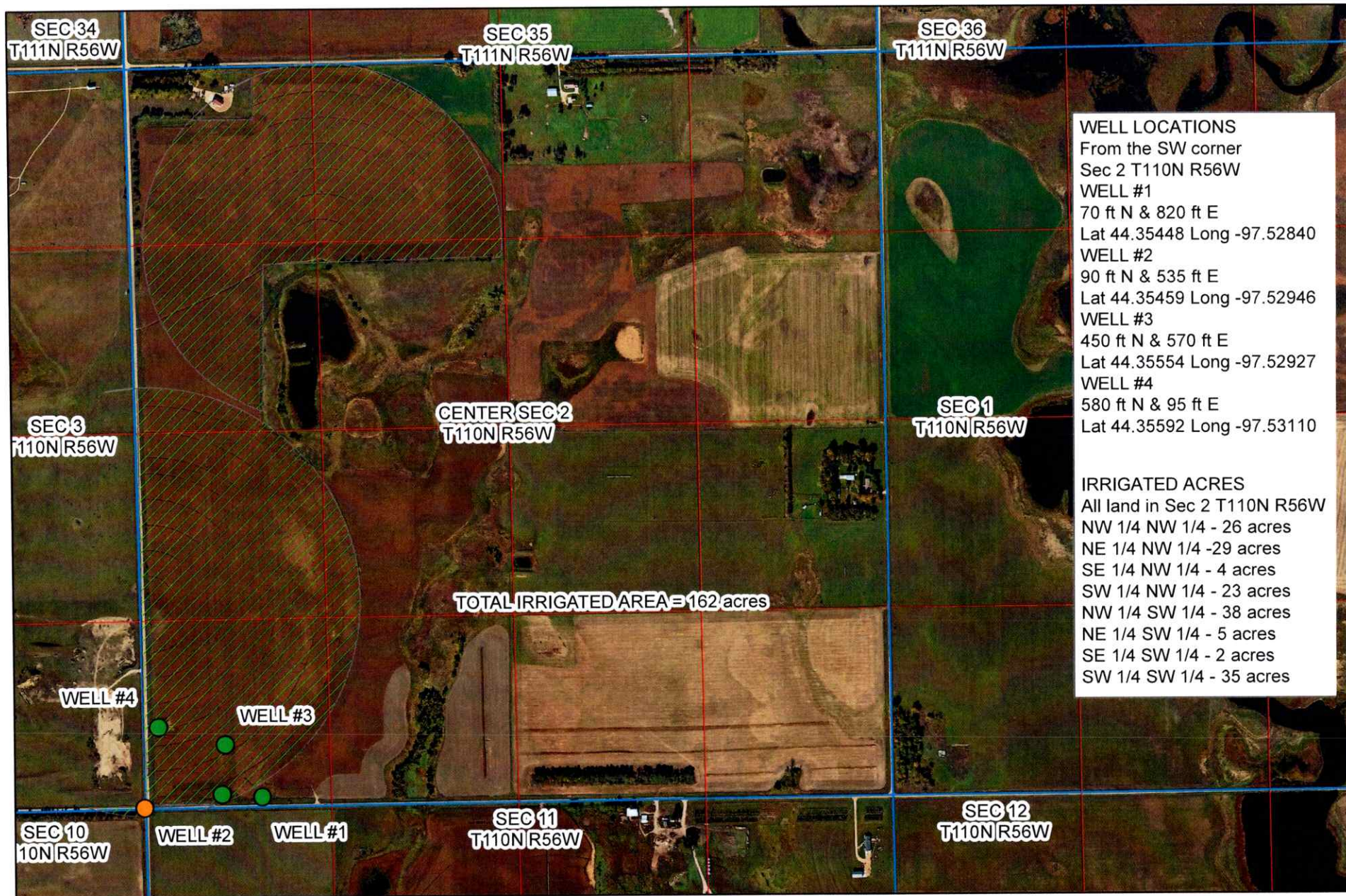
FSA maps and the ArcGIS program were used to construct the attached well location and estimated irrigated area map.

System flow rate was reported in 2023 Irrigation Questionnaire.



Darrell DeBoer
Water Rights Inspector
DENR, Water Rights Program

Date report completed: August 13, 2024



0 750 1,500 3,000 4,500 6,000 Feet

Licensing of Acreage Outside of Permitted Area

NAME: Ronald W Benson

ADDRESS: 4404 S Hyponite Circle, Sioux Falls SD 57105

DATE: September 4, 2024 COUNTY: Kingsbury

AUTHORITY

Pursuant to SDCL 46-5-30.5, acreage developed for irrigation outside of the area described on the permit may be licensed provided the following conditions are met:

NO INCREASE IN PERMITTED ACREAGE OR WATER APPROPRIATED:

The acreage developed for irrigation is 162 acres as compared to 172 acres authorized by the permit.

UNPERMITTED ACREAGE:

- **Contiguous to Permitted Acreage**

The permit holder relocated 4 acres into the SE ¼ NW ¼ Section 2, immediately adjacent to permitted acres in the NE ¼ NW ¼ Section 2; all in T110N-R56W

- **Owned by Same Property Owner**

All the property involved is listed under Ronald W & Judith A Benson, according to the Kingsbury County Regrid.

- **Developed Prior to Expiration of Construction Period**

The construction completion date was to be completed by November 24, 2019. According to annual irrigation questionnaire submissions, irrigation began in 2016.

RECOMMENDED ACTION

Based on the above criteria, it is recommended that the 4 acre area be included in the water license.



Amanda M Dewell, Permitting Administrator
Water Rights Program

The Chief Engineer makes a finding pursuant to SDCL 46-5-30.5 that:

This acreage change does not impair existing water rights and the overall project, as developed, is consistent with the original application. Licensing of the unpermitted acreage may occur without application or publication pursuant to SDCL 46-2A-4.



Eric Gronlund, Chief Engineer
Water Rights Program



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

SEP 09 2024

8050-3

Ronald W Benson
4404 S Hypointe Cir
Sioux Falls SD 57105

Dear Mr. Benson:

Enclosed is Water License No. 8050-3. This is the final water right document completing your process of obtaining a Water Right. Included with your license is a map prepared by the staff engineer who conducted the field investigation.

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

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

Sincerely,

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

enclosures

STATE OF SOUTH DAKOTA
WATER LICENSE NO. 8050-3

(1) Ronald W Benson, 4404 S Hypointe Cir, Sioux Falls SD 57105, made Application No. 8050-3, September 19, 2014, for a water permit to divert 2.22 cubic feet of water per second from groundwater, two wells (Vermillion East Fork Aquifer), Kingsbury County, South Dakota for irrigation purposes. Permit No. 8050-3, with a priority date of September 19, 2014, was approved November 24, 2014, and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before November 24, 2019, and for the application to beneficial use of water on or before November 24, 2023.

In 2017 the Water Rights Program received requests submitted by the permit holder for two additional wells to be completed into the Vermillion East Fork Aquifer, located in the SW ¼ SW ¼ Section 2, T110N, R56W. The requests were reviewed, and the determination was made that the wells could be added to Permit No. 8050-3 without significant increase in potential for interference with other existing wells. Granting of the requests, pursuant to SDCL 46-5-13.1, did not increase the number of irrigated acres or the rate of diversion authorized under Permit No. 8050-3.

An investigation conducted for licensing purposes found acreage developed outside of the permitted area. Pursuant to SDCL 46-5-30.5 and ARSD 74:02:01:14.01, the Chief Engineer made a finding that the change in acreage did not impair existing water rights and the overall project, as developed, is consistent with the original application.

(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 1.45 cubic feet of water per second for beneficial use. The locations of the diversion points are:

- Well #1: 70 ft N & 820 ft E of the SW corner Section 2, T110N, R56W (SW ¼ SW ¼)
(Latitude 44.35448 & Longitude -97.52840)
- Well #2: 90 ft N & 535 ft E of the SW corner Section 2, T110N, R56W (SW ¼ SW ¼)
(Latitude 44.35459 & Longitude -97.52946)
- Well #3: 450 ft N & 570 ft E of the SW corner Section 2, T110N, R56W (SW ¼ SW ¼)
(Latitude 44.35554 & Longitude -97.52927)
- Well #4: 580 ft N & 95 ft E of the SW corner Section 2, T110N, R56W (SW ¼ SW ¼)
(Latitude 44.35592 & Longitude -97.53110)

(3) The amount of appropriation may not exceed 2 acre-feet annually for each acre of land to which water is actually and beneficially applied for irrigation. The water is to be used during the following described annual period: April 1 – October 31.

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

Section 2, T110N, R56W			
NE ¼ NW ¼	29 acres	NE ¼ SW ¼	5 acres
NW ¼ NW ¼	26 acres	NW ¼ SW ¼	38 acres
SW ¼ NW ¼	23 acres	SW ¼ SW ¼	35 acres
SE ¼ NW ¼	4 acres	SE ¼ SW ¼	2 acres
TOTAL: 162 acres			

continued

(5) Pursuant to South Dakota Water Law 46-5-30.1 Ronald W Benson, the holder and/or owner of Water Right No. 8050-3 is issued a license to appropriate water, the right to use 1.45 cubic feet of water per second from groundwater, four wells (Vermillion East Fork Aquifer), with a priority date of September 19, 2014, 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. 8050-3 and subject to the following qualifications:

1. The wells approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this permit shall control their 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 wells authorized by Permit No. 8050-3 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. *(The wells were drilled in 2015, 2017, and 2019 by Heine Electric & Irrigation Inc. and Steven M Traut Wells Inc. Copies of all four well completion reports are on file with the Water Rights Program.)*
3. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.



Eric Gronlund, Chief Engineer
Water Rights Program
Department of Agriculture and Natural Resources

SEP 09 2024

date

