

WATER PERMIT NO. 7789-3

Name of Applicant: **Jerome Hult**

Address: **45958 Hwy 18, Davis SD 57021** Phone: **605 366-3134**

Amount of Water Claimed: **3.68 cfs** Total Acres: **150**

Source of Water Supply: **groundwater (one well)**

Water to be used for: **irrigation** County: **Turner**

Type of Waste Disposal System:

Location: **1/2 mile west of Davis**

PRIORITY Date Received: **3-12-13** Application/License Fee: **\$ 1050**

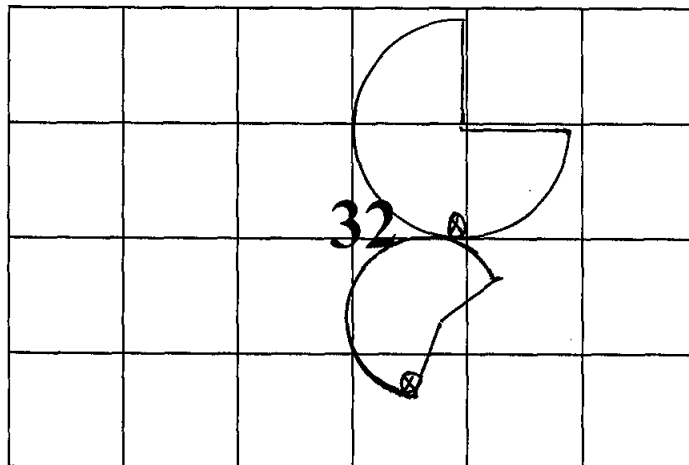
Corrected Application Received: Period of Annual Use: **April 1 – October 31**

Remarks: **Applicant is requesting diversion rate greater than statutory limit**

Diversion Point: **SW 1/4 NE 1/4 & SW 1/4 SE 1/4**

Sec 32-T98N-R52W

Land to be Irrigated: **W 1/2 NE 1/4, SE 1/4 NE 1/4**
& N 1/2 SE 1/4, SW 1/4 SE 1/4 Sec 32-T98N-
R52W



Depth of Well: **50 feet deep**

Well Driller:

Remarks:

Type of Map: **aerial**

Prepared by

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

By: **Karen Schlaak**

Notice of Hearing - date to intervene: _____

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

No. 7789-3 (office use only)
Hydrologic Unit 10170102
Basin Vermillion River 605-766-7827
Newspaper Viborg Ent/Hurley Leader PO Box H
605-331-2200 Centerville 57014
Argus Leader Box 5034 Falls 57117

RECEIVED
MAR 12 2013
WATER RIGHTS
PROGRAM

Application For Permit To Appropriate Water For Irrigation

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

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

applying for acres under deferred Application No. 7452-3 for the Parker Centerville Aquifer as the water source. Adding some additional acres in the W 1/2 SE 1/4 Section 32 to previous UVM application

1. Name to Appear on Irrigation Permit Jerome Hult

(check one) ☒ Owner ☐ Tenant/lessee ☐ Owner's Legal Agent

(name and complete address if different than above name)

Mailing Address 45958 Hwy 18 Davis SD 57021
(Address) (City) (State) (Zip Code)

Home Phone 605 366-3134 Cell 336 3134 Email _____

2. Amount of water claimed 3.68 *CFS or 1,650 **GPM ***AF Total Acreage 150
(*Cubic Feet per Second) (**Gallons per Minute) (***)Acre Feet - storage capacity of dam/dugout or annual use if applicable)

3. Source of water supply Parker Centerville Aquifer

4. Location of point of diversion two wells - SW 1/4 NE 1/4 Section 32, T98N, R52W & SW 1/4 SE 1/4 Section
(example - 3 wells in SW 1/4 NE 1/4 section 12-T104N-R53W)
32, T98N, R52W County Turner

5. County or counties where water will be used Turner

6. Annual period during which water is to be used April 1 - October 31

7. List below each forty acre division, or lot, or fraction thereof and show number of acres to be irrigated in each.
(Attach sheet if more space is needed)

Land Description	Acres	Land Description	Acres
NW 1/4 NE 1/4 Section 32, T98N, R52W	35	NE 1/4 SE 1/4 Section 32, T98N, R52W	3
SW 1/4 NE 1/4 Section 32, T98N, R52W	35	SW 1/4 SE 1/4 Section 32, T98N, R52W	7
SE 1/4 NE 1/4 Section 32, T98N, R52W	36		
NW 1/4 SE 1/4 Section 32, T98N, R52W	36		

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

Develop center pivot irrigation from two well completed into the Parker Centerville Aquifer. Requesting greater than the statutory limit due to the fact there are two pivots. One will make 3/4 rotation and the other just over a 1/2 rotation. The pivots require 800 - 850 gpm to operate.

I, Jerome Hult, 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. 7789-3

Date of first receipt of application March 12, 2013.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 7789-3 to Jerome Hult, 45958 Hwy 18, Davis SD 57021 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. 7789-3 appropriates 3.68 cubic feet of water per second (cfs) from two wells to be completed into the Parker Centerville Aquifer (50 feet deep) located in the SW 1/4 NE 1/4 and SW 1/4 SE 1/4 Section 32 for irrigation of 150 acres located in the W 1/2 NE 1/4, SE 1/4 NE 1/4 and the N 1/2 SE 1/4, SW 1/4 SE 1/4 Section 32; all in T98N-R52W.
2. The amount of the appropriation may not exceed 2 acre feet annually for each acre of land to which water is actually and beneficially applied for irrigation. The water is to be used during the following described annual period: April 1 – October 31.
3. The date from which applicant may claim right is March 12, 2013.
4. The date of approval of Permit No. 7789-3 is May 28, 2013.
5. One-fifth of the construction is to be completed on or before November 28, 2015.
6. All construction is to be completed on or before May 28, 2018.
7. Water is to be put to beneficial use on or before May 28, 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 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 this Permit shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28.
3. Pursuant to SDCL 46-5-6 which allows a greater diversion rate if the method of irrigation, time constraints, or type of soils so requires, Permit No. 7789-3 authorizes a maximum diversion rate of 3.68 cfs for the irrigation of 150 acres with an annual volume not to exceed 2 acre feet of water per acre per year.
4. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

WATER MANAGEMENT BOARD

By: Jeanne Goodman

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

JUN 24 2013

date



Supplemental Information

(type or print)

1. Well Information (check one or both as applicable) ☒ Drilling new well(s) ☐ Using existing well(s)

- a) If new wells, how many ____ Have test holes been drilled ☐ Yes ☒ No Drilled by _____
(if yes, please provide copies of logs)
- b) If existing wells, how many ____ Provide copy of log(s), if available. Drilled by _____
- c) Well Depth 50 Depth to Top of Water Bearing Material _____ Depth to Water from Surface _____
- d) Distance to nearest existing domestic well:
- On applicant's property 80ft well 200ft south On property owned by others 1,320 feet north

2. Wastewater Disposal System Information

- a) Type of System (i.e. septic tank, drain field) _____
- b) System Capacity (gallons) _____ Year Constructed _____
- c) Connected to the City of _____ Sanitary System

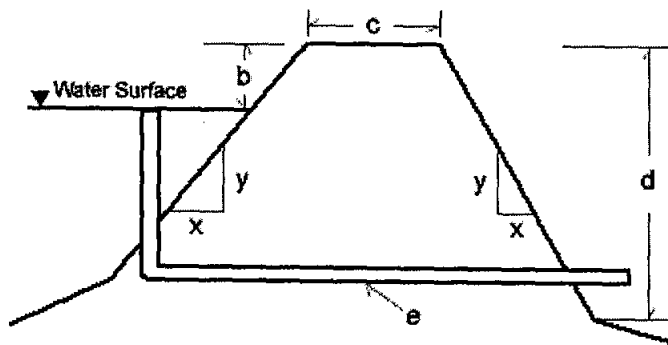
3. Dugout Information

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

4. Water Storage Dams

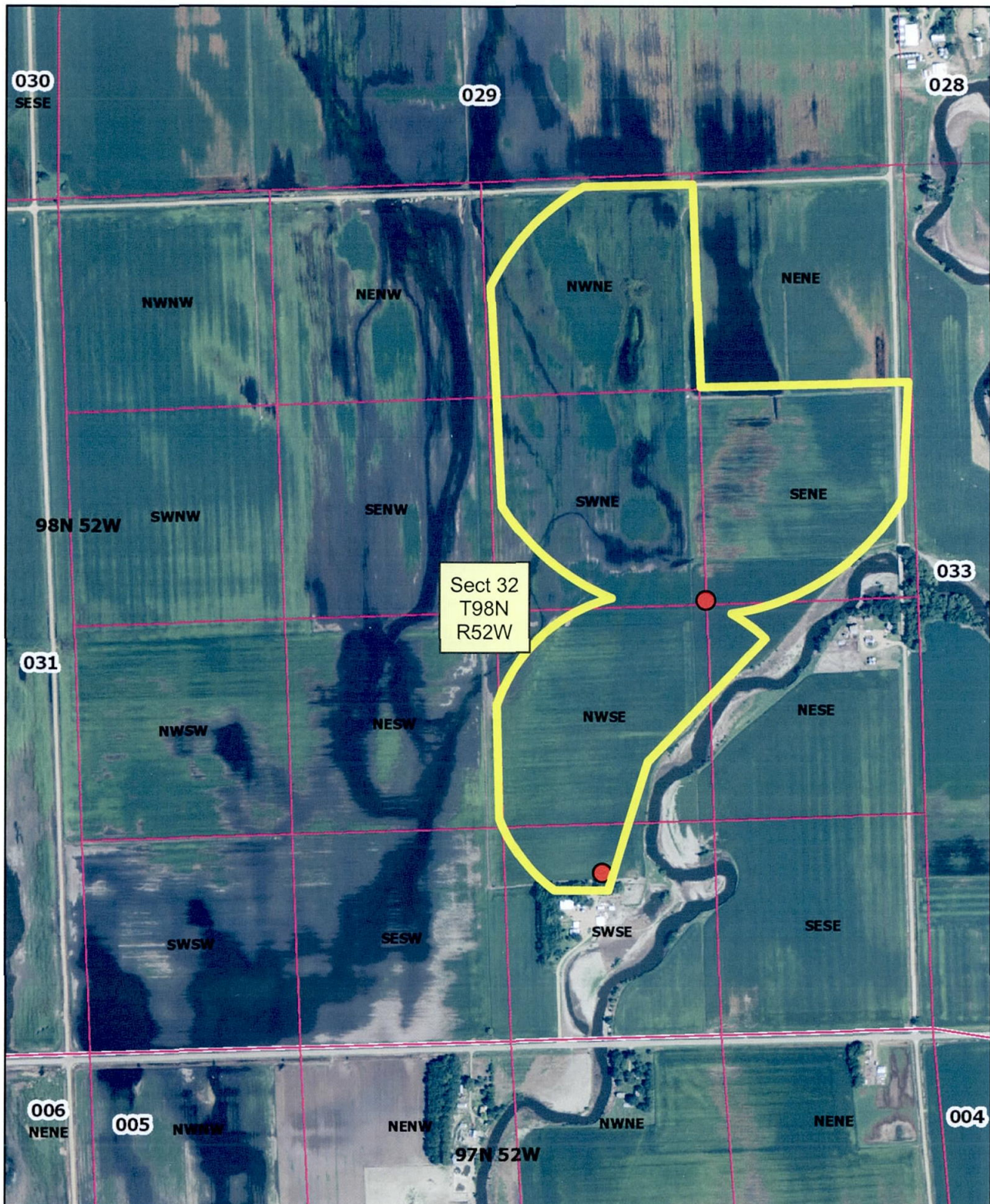
If the proposed water use system contains one or more storage dams, please furnish the information requested below for each dam. The locations of the dams need to be shown on the map submitted with the application.

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



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

Jerome Hult Water Permit Application from the Parker Centerville Aquifer



1,600 800 0 1,600 Feet

RECEIVED
MAR 12 2013
WATER RIGHTS
PROGRAM

Eric Gronlund
Eric Gronlund
Water Rights Program, DENR
March 12, 2013
as represented by Mr. Hult



RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date 3/12, 20 13

RECEIVED OF Jerome Hult 45958 US Hwy 18 Davis Sd 57021

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

Fee for Application for Permit No. <u>7789-3</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>7789-3</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. 06230

By

David E. Hult
Chief Engineer



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

denr.sd.gov

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 7789-3, Jerome Hult**

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. 7789-3, Jerome Hult, 45958 Hwy 18, Davis SD 57021.

The Chief Engineer is recommending APPROVAL of Application No. 7789-3 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 this Permit shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28.
3. Pursuant to SDCL 46-5-6 which allows a greater diversion rate if the method of irrigation, time constraints, or type of soils so requires, Permit No. 7789-3 authorizes a maximum diversion rate of 3.68 cfs for the irrigation of 150 acres with an annual volume not to exceed 2 acre feet of water per acre per year.
4. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

See report on application for additional information.

Jeanne Goodman, Chief Engineer
May 9, 2013

REPORT TO THE CHIEF ENGINEER
ON
WATER PERMIT APPLICATION NO. 7789-3
JEROME HULT
APRIL 3, 2013

Water Permit Application No. 7789-3 proposes to appropriate water from two wells to be completed into the Parker Centerville aquifer at a maximum combined diversion rate of 3.68 cubic feet of water per second (cfs). The wells will be located in the SW $\frac{1}{4}$ NE $\frac{1}{4}$ and SW $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 32, T98N-R52W, Turner County, and are expected to be approximately 50 feet deep. This application proposes to irrigate 150 acres located in the W $\frac{1}{2}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ NE $\frac{1}{4}$, N $\frac{1}{2}$ SE $\frac{1}{4}$, and SW $\frac{1}{4}$ SE $\frac{1}{4}$ of the same Section 32. The applicant is requesting a diversion rate greater than the statutory limit.

AQUIFER: Parker Centerville (PAC)

GEOLOGY AND AQUIFER CHARACTERISTICS:

The Parker Centerville aquifer is a surficial aquifer composed fine to coarse sand and fine to coarse gravel (Niehus, 1997). The top of the aquifer is at the ground surface in the Vermillion River valley but can be as much as 50 feet below ground surface in the southeastern extent of the aquifer (Lindgren and Hansen, 1990). The aquifer generally lies below the flood plain of the Vermillion River (Lindgren and Hansen, 1990) but also extends northeast into Lincoln County (Niehus, 1994). The aquifer is hydraulically connected at its northern boundary to the East and West Fork Vermillion aquifers and is also hydraulically connected to the Vermillion River (Lindgren and Hansen, 1990). The Parker Centerville aquifer underlies approximately 47,360 acres of Turner County (Lindgren and Hansen, 1990), 16,000 acres of Lincoln County (Niehus, 1997), and 3,700 acres of Clay County (Hedges and others, 1982). Average aquifer thickness is 34 feet in Turner County (Lindgren and Hansen, 1993) and 35 feet in Lincoln County (Niehus, 1997). The aquifer is generally under unconfined (water-table) conditions and is under water-table conditions in the area of this application.

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 Parker Centerville aquifer.

WATER AVAILABILITY:

This application proposes to appropriate water from the Parker Centerville aquifer. If this application is approved, it is likely that the actual water use will be less than 300 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." 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 withdrawal/recharge issue must be considered.

Recharge versus Discharge:

Recharge:

Recharge to the Parker Centerville aquifer in Lincoln County occurs through infiltration of precipitation (Niehus, 1997). Recharge in Turner County occurs from infiltration of precipitation, from the East Fork Vermillion aquifer, the West Fork Vermillion aquifer, and seepage from the Vermillion River during times of high flow (Lindgren and Hansen, 1990). The average annual recharge rate to the Parker Centerville aquifer is estimated to be 4.9 inches per year based on observation well analysis (Hedges and others, 1985). Given the area of the management unit in Clay, Lincoln, and Turner Counties of 67,060 acres, average annual recharge to the aquifer is estimated to be 27,380 ac-ft/yr. Recharge in Turner County alone is estimated to be 19,330 ac-ft/yr.

Discharge:

Discharge from the Parker Centerville aquifer is by evapotranspiration, leakage to the underlying Upper Vermillion-Missouri aquifer, discharge to the Vermillion River during low flow, withdrawal from wells, and subsurface outflow (Lindgren and Hansen, 1990). There are a number of completion reports on file with the SD DENR-Water Rights Program for domestic use wells completed into the Parker Centerville aquifer (Water Rights, 2013b), and there are currently 127 water rights/permits appropriating water from the Parker Centerville aquifer of which 116 are in Turner County alone (Water Rights, 2013c). The distribution of these appropriations for the entire aquifer and their types are shown in Table 1.

Water Rights/Permits	Number
Irrigation	125
Municipal	2

Table 1. Water Rights from the Parker Centerville 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.

The expected water use for non-irrigation purposes from the Parker Centerville aquifer is less than 339 ac-ft/yr based on current water appropriations. Turner County water rights account for all of this use.

The annual reported water use from the Parker Centerville aquifer for irrigation purposes in Turner County is displayed in Table 2. The average irrigation pumpage reported over the 1979 to 2011 period of record for the entire aquifer is less than 9,780 ac-ft/yr.

YEAR	NO. OF PERMITS	APPROPRIATION (AC-FT/YR)	PUMPAGE REPORTED (AC-FT/YR)
1979	107	43,438.00	7,370.00
1980	103	43,678.00	7,518.00
1981	114	46,540.00	9,262.00
1982	105	45,944.80	6,328.53
1983	104	45,104.80	5,509.15
1984	104	45,096.80	5,152.00
1985	105	45,106.80	6,410.50
1986	106	45,636.80	6,037.00
1987	105	45,516.80	8,522.90
1988	102	44,112.80	13,174.05
1989	103	44,020.80	13,703.30
1990	103	42,979.80	11,851.50
1991	103	42,979.80	10,902.30
1992	104	42,900.80	3,841.50
1993	103	41,325.80	1,918.50
1994	101	40,674.50	10,097.34
1995	101	40,674.50	8,840.44
1996	99	38,792.50	10,800.16
1997	102	39,428.50	11,360.00
1998	101	39,491.50	9,974.33
1999	104	40,025.30	10,963.24
2000	104	40,025.30	12,790.11
2001	105	40,319.30	12,146.38
2002	106	40,257.30	13,630.28
2003	107	40,337.30	12,246.82
2004	108	40,361.30	14,219.78
2005	109	40,731.30	13,059.99
2006	111	41,346.30	14,700.98
2007	110	41,022.30	11,630.52
2008	112	41,176.30	13,067.24
2009	114	41,286.98	7,138.05
2010	112	40,834.98	391.48
2011	112	40,834.98	11,230.43
MIN	99	38,792.5	391.5
MAX	114	46,540.0	14,701.0
AVE	105.7	42,181.9	9,569.4

Table 2. Irrigation from the Parker Centerville aquifer in Turner County (Water Rights, 1980-2012).

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 to the aquifer”.

The DENR-Water Rights Program monitors 23 observation wells completed into the Parker Centerville aquifer with two of these observation wells located within one mile of a well site

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

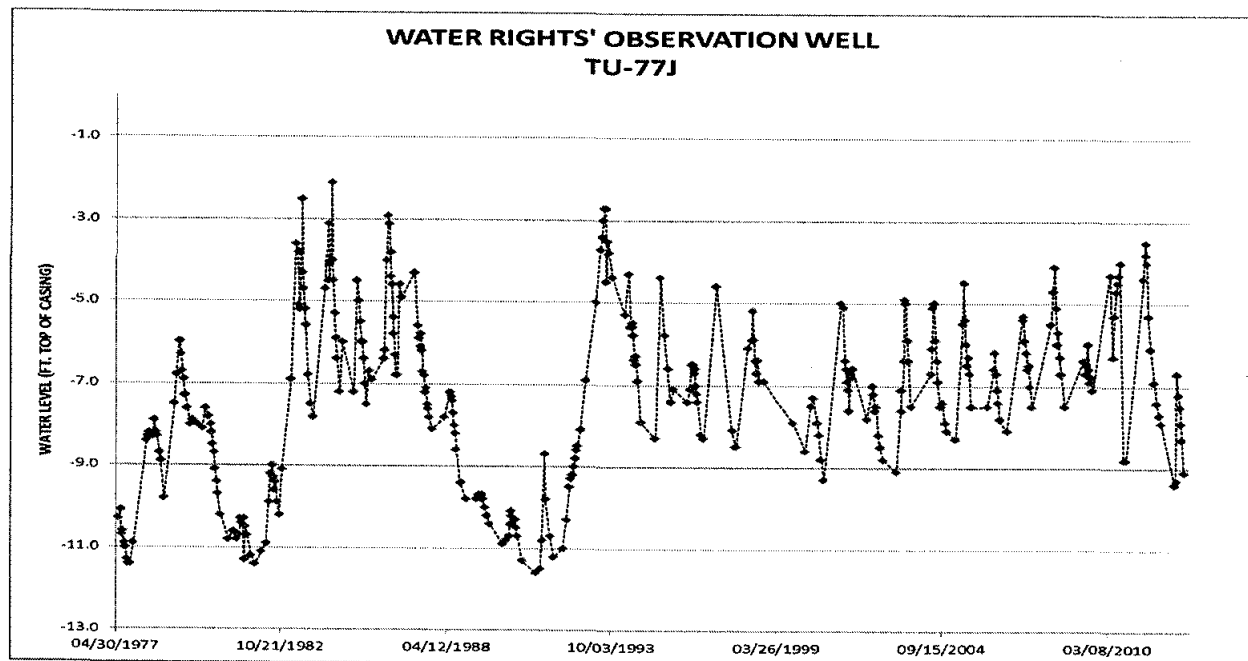


Figure 1. Hydrograph for DENR-Water Rights Observation Well TU-77J completed into the Parker Centerville aquifer approximately 0.9 miles northwest of the north well site proposed by Application No. 7789-3 (Water Rights, 2013b).

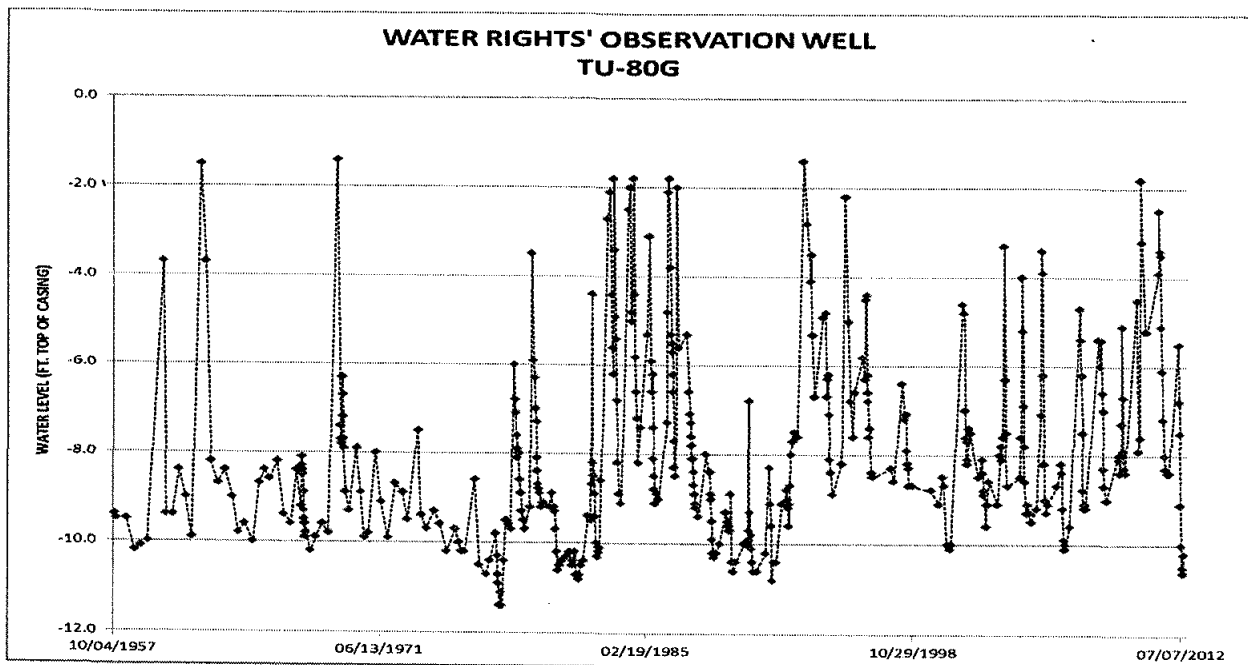


Figure 2. Hydrograph for DENR- Water Rights Observation Well TU-80G completed into the Parker Centerville aquifer approximately 0.9 miles south-southeast of the south well site proposed by Application No. 7789-3 (Water Rights, 2013b).

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. Increases in water levels during the spring are most evident in the data for well TU-80G, which appears to be in a poorly drained field (Water Rights, 2013d).

EXISTING WATER RIGHTS:

The well sites proposed by this application are located less than 500 feet west of the Vermillion River and about one mile from the western edge of the Parker Centerville aquifer in a portion of the aquifer that is three to four miles wide. There are six water rights authorizing wells within about one and one half miles of the proposed well sites (Water Rights, 2013a and 2013b). These are listed in Table 3.

Permit No.	Name	Status	Type	CFS	Acres
568-3	Deborah J Jorgensen	LC	IRR	1.67	132
968-3	Gary/Rodney Knock	LC	IRR	0.56	40
2051-3	L & L Feeders Inc	LC	IRR	1.29	137
4648-3	Reuben & Steven Nicolai	LC	IRR	3.67	305
5617-3	Arlan & Jonathan Hagena	LC	IRR	1.66	124
6562-3	David Smit	LC	IRR	1.45	100
LC = Water Right, PE = Water Permit, IRR = Irrigation					

Table 3. Water rights / permits located within one and one half miles of the well sites proposed by Water Permit No. 7789-3 (Water Rights, 2013c).

To place water to maximum beneficial use a certain amount of drawdown may occur. The water table conditions of the aquifer in this area dictate that drawdown due to pumping would not be significant far from the proposed well site. However, the close proximity and concentration of high capacity wells pumping from this relatively thin aquifer could lead to water level declines being compounded and magnified. Drawdown cannot be precisely quantified without aquifer testing in the area.

While the withdrawals would not exceed recharge of the aquifer as a whole, this cumulative impact of withdrawals could lead to a reduction of water levels to the extent that local water rights/permits can no longer pump at their developed, or “historically established,” diversion rates. If approved, the water permit should include the qualification that the well owner should control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights. 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.”

Depending on the characteristics of the Parker Centerville aquifer at the proposed well site, some existing well owners may need to lower their pumps to accommodate lower water levels. When

considering SDCL 46-6-6.1 and ARSD 74:02:04:20(7) in combination with observation well measurements, the proposed increase in diversion rate is not likely to lead to significant interference or adversely affect existing wells.

SDCL 46-5-6

Pursuant to SDCL 46-5-6, the diversion rate for an irrigation appropriation cannot be in excess of one cubic foot of water per second for every seventy acres, or "the equivalent thereof." The statute provides that the Water Management Board may allow a greater diversion if the method of irrigation so requires. The applicant has shown on the submitted application that there are two operating systems that make less than a full rotation and each pivot requires 1.78 to 1.89 cfs to operate.

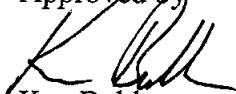
CONCLUSIONS:

1. This application proposes to appropriate water at a maximum diversion rate of 3.68 cfs for irrigation from the Parker Centerville aquifer.
2. The applicant is seeking a diversion rate that would be in excess of the statutory limit of 1.0 cfs per 70 acres.
3. There is a reasonable probability that unappropriated water is available from the Parker Centerville aquifer to supply this proposed appropriation.
4. The Parker Centerville 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.
5. 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.
- 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
- Lindgren, Richard J., Hansen, Donald S., 1990, Water Resources of Hutchinson and Turner Counties, South Dakota; U.S. Geological Survey, Huron, SD.
- Niehus, C.A., 1997, Major Aquifers in Lincoln and Union Counties, South Dakota, U.S. Geological Survey Information Pamphlet 49, prepared in cooperation with the S.D. Geological Survey and Lincoln and Union Counties.
- 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.
- Water Rights, 2013d, Water Right GIS files, 2010 Statewide FSA Imagery, SD DENR-Water Rights Program, Joe Foss Bldg, Pierre, SD.

RECEIVED

JUN - 4 2013

WATER RIGHTS
PROGRAM

AFFIDAVIT OF PUBLICATION

STATE OF SOUTH DAKOTA)

:SS

COUNTY OF TURNER)

Allyson M. Hill, being first duly sworn, on oath says the VIBORG ENTERPRISE is a WEEKLY newspaper published in VIBORG in said county of TURNER, State of South Dakota; and that she is authorized to and does make this affidavit on behalf of said VIBORG ENTERPRISE; that affiant has personal knowledge of all facts stated in this affidavit; that said newspaper is a legal newspaper as defined by SDCL 17-2-2.1 through 17-2-2.4 inclusive as amended, has a bona fide circulation of at least two hundred copies WEEKLY, has been published in the English language within said county and has been admitted to the United States mail under the second class mailing privilege, for at least one year continuously 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 said notice, a printed copy of which taken from the paper in which the same was published is hereto attached and is made part of this affidavit, was published in said newspaper

1 time(s) as follows: that the first publication of said

notice in said newspaper aforesaid was on Thursday

the 16 day of May, 2013,

and that the succeeding publications were severally

on Thursday, the ____ day of _____, 2013;

on Thursday, the ____ day of _____, 2013;

on Thursday, the ____ day of _____, 2013;

on Thursday, the ____ day of _____, 2013;

Affiant further says that the full amount of the fees charged for the publication of said notice inures to the benefit of the publishers of said newspaper; that no agreement of understanding for the division thereof has been made with any other person, that no part thereof has been agreed to be paid to any person whomsoever; and that the fees charged for the publication thereof are:

DOLLARS (\$) 2139

(x) Allyson M. Hill, Allyson M. Hill

Subscribed and sworn to before me this 3 day of

June, 2013

Notary Public

My commission expires 11/14/2018

SHANE HILL



NOTICE OF APPLICATION NO. 7789-3 to Appropriate Water

Notice is given that Jerome Hult, 45958 Hwy 18, Davis SD 57021 has filed an application for a water permit to appropriate 3.68 cubic feet of water per second from two wells to be completed into the Parker Centerville Aquifer (50 feet deep) located in the SW 1/4 NE 1/4 and SW 1/4 SE 1/4 Section 32 for irrigation of 150 acres located in the W 1/2 NE 1/4, SE 1/4 NE 1/4 and the N 1/2 SE 1/4, SW 1/4 SE 1/4 Section 32; all in T98N-R52W. The applicant is requesting a diversion rate greater than the statutory limit.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 7789-3 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 May 28, 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.
Published once at the approximate

CUSTOMER NUMBER:	078200	Argus Leader P.O. Box 677349, Dallas, TX 75267-7349	
AD ORDER NUMBER:	1415240		
	5/16, 2013		\$64.97pd

Jerome Hult
45958 Hwy 18
Davis, SD 57021

RECEIVED
MAY 20 2013
WATER RIGHTS
PROGRAM

DETACH THIS STUB AND RETURN WITH PAYMENT

PAYMENT DUE UPON RECEIPT

AFFIDAVIT OF PUBLICATION-

Customer Number: 078200
Invoice Number: 1415240

Argus Leader
AFFIDAVIT OF PUBLICATION

STATE OF SOUTH DAKOTA

COUNTY OF MINNEHAHA } ss

Linda Schulte being duly sworn, says: That The Argus Leader is, and during all the times hereinafter mentioned was, a daily legal newspaper as defined by SDCL 17-2-21, as amended published at Sioux Falls, Minnehaha County, South Dakota; that affiant is and during all of said times, was an employee of the publisher of such newspaper and has personal knowledge of the facts stated in this affidavit; that the notice, order or advertisement, a printed copy of which is hereto attached, was published in said newspaper upon

Thursday the 16 day of May 2013 ,
the day of 2013 ,
the day of 2013 ,
the day of 2013 ,
the day of 2013 ,
the day of 2013 ,
the day of 2013 ,

and that \$64.97pd was charged for publishing the same

Linda Schulte

Subscribed and sworn to before me 5/16/2013

[Signature]

Notary Public, South Dakota

My Commission expires December 22, 2015

NOTICE OF APPLICATION
NO. 7789-3 to Appropriate Water

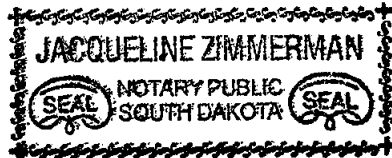
Notice is given that Jerome Hult, 45958 Hwy 18, Davis SD 57021 has filed an application for a water permit to appropriate 3.68 cubic feet of water per second from two wells to be completed into the Parker Centerville Aquifer (50 feet deep) located in the SW 1/4 NE 1/4 and SW 1/4 SE 1/4 Section 32 for irrigation of 150 acres located in the W 1/2 NE 1/4, SE 1/4 NE 1/4 and the N 1/2 SE 1/4, SW 1/4 SE 1/4 Section 32; all in T98N-R52W. The applicant is requesting a diversion rate greater than the statutory limit.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 7789-3 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 May 28, 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.

Published once at the total approximate cost of \$64.97.
1415240 May 16, 2013





DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

denr.sd.gov

May 9, 2013

Viborg Enterprise/Hurley Leader
PO Box H
Centerville SD 57014

ATTENTION: Legal Public Notice

Enclosed is a Notice on Application No. 7789-3 to Appropriate Water. Please publish the notice once on May 16, 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 Jerome Hult, 45958 Hwy 18, Davis SD 57021 (Ph # 605-366-3134).

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

May 9, 2013

Argus Leader
PO Box 5034
Sioux Falls SD 57117

ATTENTION: Legal Public Notice

Enclosed is a Notice on Application No. 7789-3 to Appropriate Water. Please publish the notice once on May 16, 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 Jerome Hult, 45958 Hwy 18, Davis SD 57021 (Ph # 605-366-3134).

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

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

Sincerely,

Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosures



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

denr.sd.gov

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

May 9, 2013

Jerome Hult
45958 Hwy 18
Davis SD 57021

Dear Mr. Hult:

Water Permit Application No. 7789-3 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 Viborg Enterprise/Hurley Leader printed at Centerville SD (Ph # 605-766-7827) and the Argus Leader printed at Sioux Falls SD (Ph # 605-331-2200). You will need to contact the newspaper(s) and authorize publication of this notice. For your information, a copy of the notice, the recommendation of the Chief Engineer and report on the application are enclosed. Please review the notice prior to publication and notify this office, if you have any corrections or questions.

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

Sincerely,


Eric Gronlund
Natural Resources Engineer
(605) 773-3352

enclosures

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

Instruction to Newspaper - Publish the Notice on May 16, 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. 7789-3 to Appropriate Water

Notice is given that Jerome Hult, 45958 Hwy 18, Davis SD 57021 has filed an application for a water permit to appropriate 3.68 cubic feet of water per second from two wells to be completed into the Parker Centerville Aquifer (50 feet deep) located in the SW 1/4 NE 1/4 and SW 1/4 SE 1/4 Section 32 for irrigation of 150 acres located in the W 1/2 NE 1/4, SE 1/4 NE 1/4 and the N 1/2 SE 1/4, SW 1/4 SE 1/4 Section 32; all in T98N-R52W. The applicant is requesting a diversion rate greater than the statutory limit.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 7789-3 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 May 28, 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.

Published once at the total approximate cost of _____.



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

denr.sd.gov

JUN 24 2013

Jerome Hult
45958 Hwy 18
Davis SD 57021

Dear Mr. Hult:

Enclosed is Water Permit No. 7789-3 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
PMB 2020
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3182
www.state.sd.us/denr

January 24, 2014

NOTICE

TO: JEROME HULT, 45958 HWY 18, DAVIS, SD 57021

FROM: Ron Duvall, Natural Resources Engineer
for Garland Erbele, Chief Engineer
Water Rights Program

SUBJECT: Reporting Requirement for 2013 Irrigation Questionnaire(s)

Our records indicate that the 2013 Irrigation Questionnaire(s) has not been submitted for Permit No(s) 7789-3. The request for the Questionnaire was dated October 18, 2013. The Water Management Board has directed that owners of water permits who have not submitted the 2013 Irrigation Questionnaire(s) be given notice of permit violation and a hearing to be held by the Board. The hearing is to determine what action is to be taken for violation of Water Permit No(s) 7789-3 qualification:

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

The hearing will be held at **9:00 am, March 6, 2014** in the Floyd Matthew Training Center, Joe Foss Building, 523 E Capitol Avenue, Pierre, SD and will be conducted pursuant to SDCL 46-1-12, 46-1-14, 46-2-9, 46-2-11 and 46-2-17. These are contested case hearings pursuant to Chapter 1-26. According to SDCL 46-1-12, the Board may suspend a permit for a period of up to one year for the first violation of a permit qualification or up to three years for a second violation, or cancel a permit for a third violation. Following the hearing, the Water Management Board can:

1. Suspend or cancel Permit No(s) 7789-3 in accordance with applicable provisions of SDCL 46-1-12;
2. Postpone any action; or
3. Take no action.

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

If the questionnaire(s) is (are) received in this office on/or before **March 3, 2014**, you will no longer be in violation of your permit and your name will be removed from the Board agenda. Enclosed are additional questionnaire(s) for your use. If you have questions or need assistance, please contact Genny McMath at (605) 773-3352 or email at genny.mcmath@state.sd.us. If you prefer, you can complete the questionnaire online at the following link: <http://denr.sd.gov/iq.aspx>

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



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
PMB 2020
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3182
www.denr.sd.gov

January 30, 2014

7789-3

Jerome Hult
45958 Hwy 18
Davis SD 57021

Dear Mr. Hult:

I am writing to acknowledge receipt of your 2013 irrigation questionnaire.

You may disregard the January 24, 2014, "Notice" concerning reporting requirements for Water Permit No. 7789-3. The information was received in our office prior to the Water Management Board meeting and your name has been deleted from the agenda.

If you have any questions, please contact me.

Sincerely,

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

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



**DEPARTMENT OF ENVIRONMENT
and NATURAL RESOURCES**

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



October 27, 2014

7789-3

Jerome Hult
45967 US Hwy 18
Davis SD 57021-6503

Dear Mr. Hult:

Enclosed is a "Notice" dated October 17, 2014 concerning the 2014 irrigation questionnaire.

The notice was originally mailed to 45958 Hwy 18, Davis SD. 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.

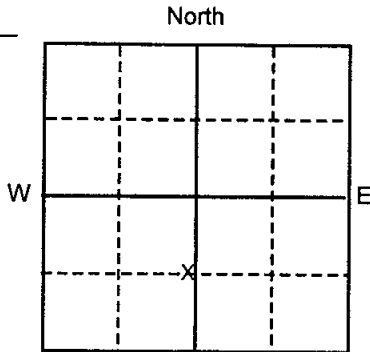
Sincerely,

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 NE 1/4 Sec 32 Twp 98N Rg 52WCounty TURNERPlease mark well
location with an "X"

Well Completion Date

December 7, 2014

Distance to nearest potential pollution source (septic tank, abandoned well, feed lot, etc.)?
1,000.0 ft. from SEPTIC (identify source)

PROPOSED USE:

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

METHOD OF DRILLING:

REVERSE ROTARY

CASING DATA:

☐ Steel ☒ Plastic ☐ Other

If other describe

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
160.0 LB/FT	16.00 IN	0.0 FT	20.0 FT	28.00 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	20	9.4 Lb/gal	0.0 Ft	20.0 Ft
		Lb/gal	Ft	Ft

Describe grouting procedure

TREMIE PIPE AND GROUT PUMP

SCREEN:

☒ Perforated pipe ☐ Manufactured
 Diameter 16.00 Inches Length 30.0 Feet
Material PVCSlot Size 85 Set From 20.0 Feet to 50.0 Feet

Other information

WAS A PACKER OR SEAL USED?

☐ Yes ☒ No

If so, what material?

Describe packer(s) and location

DISINFECTION: Was well disinfected upon completion?

☒ Yes, How? CHLORINE TABLETS

 Lab to which water
quality sample sent for analysis
Well Owner: JEROME HULT

Business Name:

Address: 45958 US HWY 18City, State, Zip: DAVIS SD 57021

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
TOP SOIL	0	4
CLAY	4	11
SAND/GRAVEL	11	47
CLAY	47	50

STATIC WATER LEVEL 14.0 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: TURBINE PUMP AND MOTOR
☐ Bailed
☐ Other

Pumping Level Below Land Surface

24.0 Ft. After 3.0 Hrs. pumped 800.0 GPM

_____ Ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate: _____ GPM

REMARKS

RECEIVED

FEB 17 2015

WATER RIGHTS
PROGRAMThis well was drilled under license # 805 and this report is true and accurate.Drilling firm: SAM HEINE WELL CO.,LLC

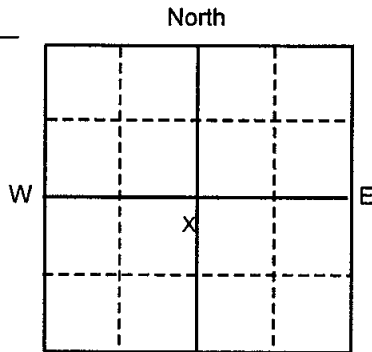
Signature of License Representative:

Signature of Well Owner or Equitable Property Holder:

Date: _____

SOUTH DAKOTA WATER WELL COMPLETION REPORT

11-02

Location SW 1/4 NE 1/4 Sec 32 Twp 98N Rg 52WCounty TURNERPlease mark well
location with an "X"

Well Completion Date

December 7, 2014

Distance to nearest potential pollution source (septic tank, abandoned well, feed lot, etc.)?
1,000.0 ft. from SEPTIC (identify source)

PROPOSED USE:

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

METHOD OF DRILLING:

REVERSE ROTARY

CASING DATA:

☐ Steel ☒ Plastic ☐ Other

If other describe _____

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
160.0 LB/FT	16.00 IN	0.0 FT	20.0 FT	28.00 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	20	9.4 Lb/gal	0.0 Ft	20.0 Ft
		Lb/gal	Ft	Ft

Describe grouting procedure

TREMIE PIPE AND GROUT PUMP

SCREEN:

☒ Perforated pipe ☐ Manufactured
Diameter 16.00 Inches Length 30.0 FeetMaterial PVCSlot Size 85 Set From 20.0 Feet to 50.0 Feet

Other information _____

WAS A PACKER OR SEAL USED?

☐ Yes ☒ No

If so, what material? _____

Describe packer(s) and location _____

DISINFECTION: Was well disinfected upon completion?

☒ Yes, How? CHLORINE TABLETS
☐ No, Why Not? _____
Lab to which water
quality sample sent for analysisWell Owner: JEROME HULT

Business Name: _____

Address: 45958 US HWY 18City, State, Zip: DAVIS SD 57021

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
TOP SOIL	0	6
SAND/GRAVEL	6	45
CLAY	45	50

STATIC WATER LEVEL 13.0 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: TURBINE PUMP AND MOTOR
☐ Bailed
☐ Other

Pumping Level Below Land Surface

28.0 Ft. After 3.0 Hrs. pumped 800.0 GPM

_____ Ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate: _____ GPM

REMARKS

RECEIVED

FEB 17 2015

WATER RIGHTS

PROGRAM

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

Drilling firm: SAM HEINE WELL CO.,LLC

Signature of License Representative: _____

Signature of Well Owner or Equitable Property Holder: _____

Date: _____

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

RECEIVED
NOV 16 2015
WATER RIGHTS
PROGRAM

Date 11-10-15

TO: Water Rights Program, DENR
523 E. Capitol
Pierre, SD 57501-3181

FROM:

Jerome Hult
(name)

45967 US Hwy 18
(address)

Davis SD 57021
(city, state, zip)

605 366 3134
(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. 7789-3 states that the water use system is to be constructed by

May 28 2018
(date)

, and water is to be put to beneficial use by

May 28 2022
(date)

The water use system was completed on

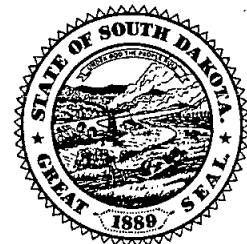
June 1 2015
(date)

Applying the water to beneficial use was completed on

July 3 2015
(date)

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

Jerome Hult
(signature)





**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

November 17, 2015

7789-3

Jerome Hult
45967 US Hwy 18
Davis SD 57021

Dear Mr. Hult:

Thank you for the prompt return of your 2015 irrigation questionnaire and also the "Notice of Completion of Works" form.

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

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

Sincerely,

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

Water Rights Program - DENR
Conversation File Documentation

NAME OF PERSON OR FILE: Jerome Hult

ADDRESS: 45967 US Hwy 18 Davis, SD 57021 **COUNTY:** Turner

DATE: January 20, 2021 **TELEPHONE:** 605-366-3134

Eric Gronlund and Nakaila Steen called Jerome Hult on January 20, 2021 to verify the operating system under Water Permit No. 7789-3 and the plans for Water Permit Application No. 8461-3 upon approval.

Water Permit No. 7789-3 is authorized a pump rate of 3.68 cfs from two wells (north well and south well) completed into the Parker-Centerville aquifer. The north well (Jerome indicated this well is no longer producing) supplied a pivot that was authorized to irrigate $\frac{3}{4}$ of the NE $\frac{1}{4}$ of Sec 32-T98N-R52W.

Upon approval of Water Permit Application No. 8461-3, the Upper Vermillion Missouri: North aquifer well will be authorized for 1.78 cfs to irrigate the entire NE $\frac{1}{4}$ of Sec 32-T98N-R52W and thus, allow the pivot to make a full rotation.

The south Parker-Centerville aquifer well provides water to irrigate the NW $\frac{1}{4}$ SE $\frac{1}{4}$ and some of the NE $\frac{1}{4}$ SE $\frac{1}{4}$ of Sec 32-T98N-R52W. It was noted to Jerome that upon a licensing investigation, the diversion rate authority and acreage authorized under Water Permit No. 7789-3 would be reduced to what the system is producing.

The phone conversation concluded with Mr. Hult inquiring on a time frame to expect the recommendation on Water Permit Application No. 8461-3 to update his well driller. An overview on the 60-day limit to review and provide a recommendation a water permit application, and the public notice process was covered with Mr. Hult.

Nakaila Steen

Report of Examination of Works and/or Application of Water to Beneficial Use
For Permit No. 7789-3

I have this day, October 23, 2024, made a thorough examination of the water use systems owned by Jerome Hult, 45958 US Hwy 18, Davis, SD 57021, holder of Permit No. 7789-3, bearing the priority date of March 12, 2013. This permit authorizes the diversion of 3.68 cu. ft. per second of the waters of groundwater (Parker-Centerville Aquifer) authorizing the irrigation of 150 acres located in Turner County.

Inspection contacts: Jerome Hult

A. Works used to divert the water:

Well Information

- 1) Well Drilling Firm: Sam Heine Well Co., LLC
- 2) No. of Wells: 1
- 3) Depth(s): 50 feet
- 4) Well log is available: Yes

Casing:

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

Screen:

- 1) Diameter: 16 inches
- 2) Length: 30 feet
- 3) Type: PVC
- 4) Static water level: 14 feet

Pump:

- 1) Make: Preferred Pump
- 2) Model: 12IS
- 3) Capacity: 700 gpm

Motor:

- 1) Make: US Motors
- 2) Model No.: A326UP
- 3) Horsepower rating: 30 hp

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

- 1) Type: Aluminum Size: 8 inches Length: 10 feet

C. Works used to apply water to beneficial use:

Center Pivot:

- 1) Make: Zimmatic
- 2) Overall length: 934 feet
- 3) Number of towers: 5
- 4) End gun: Yes Range: 70 feet
- 5) Capacity: 700 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
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:
The well is 1,900 feet north and 1,550 feet west of the southeast corner of Section 32-T98N-R52W. (Latitude 43.26271, Longitude -97.00970– NW1/4 of the SE1/4).
2) The works are capable of diverting and conveying to the places of use 1.56 cu. ft. per second of water from the well which is to be used for irrigation purposes. Water has been put to beneficial use to the maximum extent as follows: All in

<u>Section 32-T98N-R52W</u>	
<u>SW1/4NE1/4</u>	<u>4 acres</u>
<u>SE1/4NE1/4</u>	<u>2 acres</u>
<u>NW1/4SE1/4</u>	<u>32 acres</u>
<u>NE1/4SE1/4</u>	<u>5 acres</u>
<u>SW1/4SE1/4</u>	<u>4 acres</u>

comprising a total of 47 acres of land and the license should be issued for 1.56 cfs.

- 3) All structures, wells and lands on map: Yes

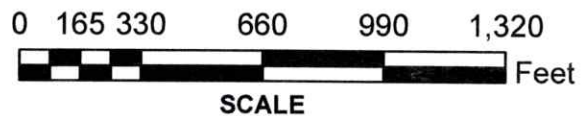
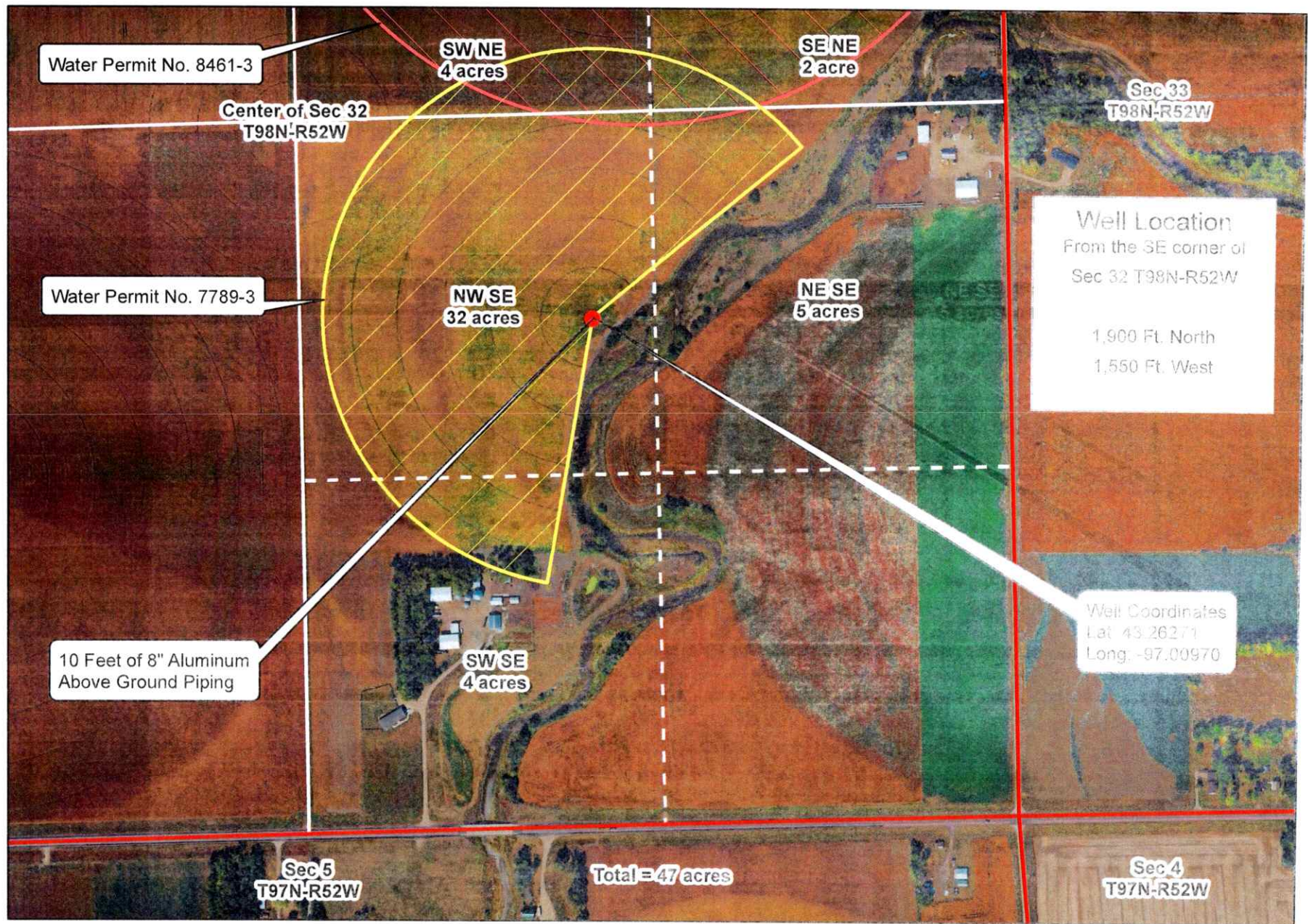
F. Comments or other permit(s) associated with the project: This permit originally included irrigation of three-fourths of the NE1/4 of Section 32 along with another well in the NE1/4. The well in the NE1/4 did not produce enough water, so Water Permit No. 8461-3 was obtained for a new well into another aquifer. The irrigated area for the new permit overlaps the irrigated area of this permit. I included the overlap area in both permits since the water comes from different aquifers. The flow rate of the pump was obtained from Sam Heine Well Co. LLC.

Keith DeJong

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

Date report completed: October 31, 2024

Water Permit No. 7789-3



Keith DeJong
Keith DeJong, PE Ret.
Staff Engineer
October 23, 2024

Approval of Location Change and/or Additional Diversion Point(s)NAME: Jerome HultCOUNTY: TurnerADDRESS: 45967 US Hwy 18, Davis, SD 57021DATE: April 4, 2025**GENERAL DESCRIPTION OF AUTHORIZED PROJECT:**

The permit holder is authorized to construct two wells into the Parker Centerville Aquifer in the SW $\frac{1}{4}$ NE $\frac{1}{4}$ and SW $\frac{1}{4}$ SE $\frac{1}{4}$ to divert 3.68 cubic feet of water per second (cfs) for the irrigation of 150 acres located in the W $\frac{1}{2}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ NE $\frac{1}{4}$, and the N $\frac{1}{2}$ SE $\frac{1}{4}$, SW $\frac{1}{4}$ SE $\frac{1}{4}$ Section 32; all in T98N, R52W.

AUTHORITY:

Pursuant to SDCL 46-5-13.1, the location of a diversion point may be changed, or additional diversion points may be added, 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 permit holder completed the well into the Parker Centerville Aquifer, located in the NW $\frac{1}{4}$ SE $\frac{1}{4}$ Section 32, T98N, R52W. The permit holder only developed 1.56 of the 3.68 originally authorized cfs.

If irrigation, no new land is irrigated

The permit holder only developed 47 of the 150 originally authorized acres.

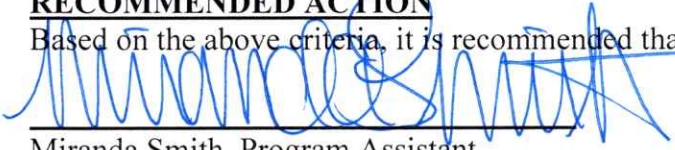
Review of Existing Diversions

There are sixteen existing water permits/rights located within approximately 2 miles of where the well was developed, also authorizing diversion from the Parker Centerville Aquifer. The nearest of which being 8441-3 (Smit Family Farms LLC), located approximately 0.6 miles northwest of the well site in question. It was determined in the review of 8441-3 that there was reasonable probability any well interference due to pumping of the original well would not adversely or unlawfully impair existing rights. The same would be expected for the well constructed in the new location for Water Right No. 7789-3.

The closest domestic well is approximately 0.92 miles to the northeast, located in the SW $\frac{1}{4}$ SW $\frac{1}{4}$ Section 28, T98N, R52W, on property owned by Dave Smit, according to the Regrid. The next nearest domestic well is approximately 1.85 miles to the southwest, located in the SW $\frac{1}{4}$ SW $\frac{1}{4}$ Section 20, T98N, R52W, on property owned by Gared Hagena, according to Regrid. The location of the domestic wells in the well completion report database maintained by the Water Rights Program is based on the location listed by the driller on the well completion report.

RECOMMENDED ACTION

Based on the above criteria, it is recommended that the change in diversion point location be approved.


Miranda Smith, Program Assistant
Water Rights Program

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

This change in location and/or additional diversion point(s) does not increase the potential for adverse effects to existing diversions.


Mark Mayer, PE
Director of Office of Water



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

APR 28 2025

Jerome Hult
45967 US Hwy 18
Davis, SD 57021

No. 7789-3

Dear Mr. Hult:

Enclosed is Water License No. 7789-3. 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,

Mark Mayer, PE
Director of Office of Water
(605) 773-3352

Note: (The number of acres authorized for irrigation under Water Right No. 7789-3 has been reduced to 47, based on the system as constructed.)

Note: (The maximum diversion rate authorized for irrigation under Water Right No. 7789-3 has been reduced to 1.56 cfs, based on the system as constructed.)

enclosures

**STATE OF SOUTH DAKOTA
WATER LICENSE NO. 7789-3**

(1) Jerome Hult, 45967 US Hwy 18, Davis, SD 57021, made Application No. 7789-3, March 12, 2013, for a water permit to divert 3.68 cubic feet of water per second from groundwater, two wells (Parker Centerville Aquifer), Turner County, South Dakota for irrigation purposes. Permit No. 7789-3, with a priority date of March 12, 2013, was approved May 28, 2013, and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before May 28, 2018, and for the application to beneficial use of water on or before May 28, 2022.

An investigation conducted for licensing purposes found the diversion point developed outside of the permitted area. Pursuant to SDCL 46-5-13.1 and ARSD 74:02:01:14.01, the Chief Engineer made a finding that the change in the diversion point location did not increase the potential for adverse effects to existing diversions.

(2) It is certified that the permit holder has complied with the provisions of South Dakota State Law relating to completion of the construction of the water supply system and is entitled to divert 1.56 cubic feet of water per second for beneficial use. The location of the diversion point is:

- 1,900 feet N and 1,550 feet W from the SE corner of Section 32, T98N, R52W (NW $\frac{1}{4}$ SE $\frac{1}{4}$)
(Latitude 43.26271 and Longitude -97.00970)

(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 32, T98N, R52W
SW $\frac{1}{4}$ NE $\frac{1}{4}$ - 4 acres
SE $\frac{1}{4}$ NE $\frac{1}{4}$ - 2 acres
NE $\frac{1}{4}$ SE $\frac{1}{4}$ - 5 acres
NW $\frac{1}{4}$ SE $\frac{1}{4}$ - 32 acres
SW $\frac{1}{4}$ SE $\frac{1}{4}$ - 4 acres
Total – 47 acres

(5) Pursuant to South Dakota Water Law 46-5-30.1 Jerome Hult, the holder and/or owner of Water Right No. 7789-3 is issued a license to appropriate water, the right to use 1.56 cubic feet of water per second from groundwater, one well (Parker Centerville Aquifer), with a priority date of March 12, 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. 7789-3 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 his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.

continued

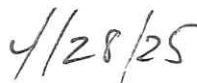
2. The wells authorized by this Permit shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28. *(The well was drilled in 2014 by Sam Heine Well Co LLC. A copy of the well completion report is on file with the Water Rights Program.)*

3. Pursuant to SDCL 46-5-6 which allows a greater diversion rate if the method of irrigation, time constraints, or type of soils so requires, Permit No. 7789-3 authorizes a maximum diversion rate of 3.68 cfs for the irrigation of 150 acres with an annual volume not to exceed 2 acre feet of water per acre per year. *(The diversion rate was reduced from 3.68 cfs to 1.56 cfs, based on the system as constructed. The number of acres authorized for irrigation under Water Right 7789-3 was reduced to 47, based on the system as constructed.)*

4. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.



Mark Mayer, PE
Director of Office of Water



date

