

WATER PERMIT NO. 7642-3

Name of Applicant: Tom Austin

Address: 46081 SD Hwy 46, Centerville SD 57014 Phone: 605 360-7299

Amount of Water Claimed: 1.22 cfs Total Acres: 65 acres

Source of Water Supply: groundwater (one well)

Water to be used for: irrigation County: Clay

Type of Waste Disposal System:

Location: 9 miles north of Vermillion

PRIORITY Date Received: 1-16-13 Application/License Fee: \$ 950

Corrected Application Received: Period of Annual Use: April 1 – Sept 30

Remarks: Requesting diversion rate greater than statutory limit

Diversion Point: S 1/2 SE 1/4 Sec 32-T94N-R51W

Land to be Irrigated: S 1/2 SE 1/4 Sec 32-T94N-R51W

Depth of Well: 180 feet deep

Well Driller:

Remarks:

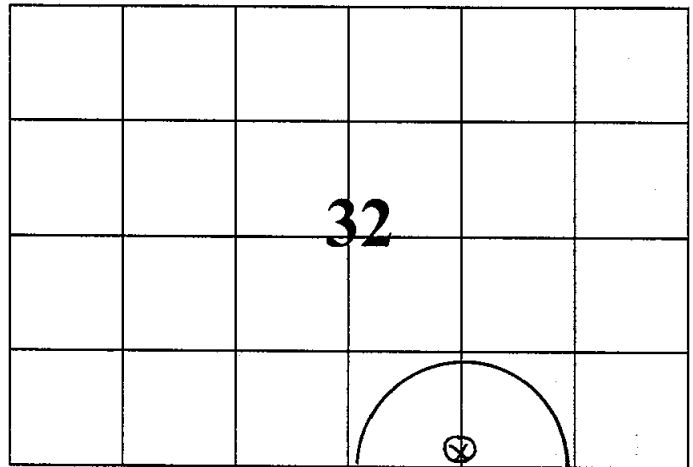
Type of Map: aerial

Prepared by:

Reviewed and the Number Assigned on: 1-16-13

By: Karen Schlaak

Notice of Hearing - date to intervene: _____



FORM 2: Application for irrigation in South Dakota
(type or print)

Mail to: PMB 2020 DENR - Water Rights 523 E Capitol Ave Pierre, SD 57501-3182 ph. (605) 773-3352	No. <u>7642-3</u>	(office use only) Hydrologic Unit <u>10170102</u>
	Basin <u>Vermillion River</u>	<u>605-624-2695</u>
	Newspaper <u>Plain Talk 201 W Cherry St Vermillion 57069</u>	<u>605-665-7811</u>
	<u>Press & Dakotan 319 Walnut Yankton 57028</u>	

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JAN 16 2013
WATER RIGHTS
PROGRAM

Application For Permit To Appropriate Water For Irrigation

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

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

1. Name to Appear on Irrigation Permit Tom Austin
(check one) ☒ Owner ☐ Tenant/lessee ☐ Owner's Legal Agent _____
(name and complete address if different than above name)
Mailing Address 46081 SD. HWY 46 Centerville SD. 57014
(605) (Address) (City) (State) (Zip Code)
Home Phone 563-2953 Cell (605) 360-7299 Email Austinfarm@hotmail.com
2. Amount of water claimed 1.22 *CFS or 550 **GPM ***AF Total Acreage 65
(*Cubic Feet per Second) (**Gallons per Minute) (***)Acre Feet - storage capacity of dam/dugout or annual use if applicable)
3. Source of water supply well
4. Location of point of diversion 1 well in S $\frac{1}{2}$ SE $\frac{1}{4}$ EXC. Rosehill Tract 1 73.86 A.
(example - 3 wells in SW $\frac{1}{4}$ NE $\frac{1}{4}$ section 12-T104N-R53W)
Section 32-094-51 Garfield TWP. County Clay
5. County or counties where water will be used Clay
6. Annual period during which water is to be used Growing season: April 1 to Sept. 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
S $\frac{1}{2}$ SE $\frac{1}{4}$ EXC Rosehill Tract 1	34		
S $\frac{1}{2}$ SE $\frac{1}{4}$ EXC Rosehill Tract 1	32		

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

I plan to dig a new well and install a new center pivot on Section 32-094-51 Clay County South Dakota. This will be a full 7 tower pivot working on a windshield wiper basis covering 64 to 65 acres. This is the reason for needing 550gpm.

I, Tom Austin, 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. 7642-3**

Date of first receipt of application January 16, 2013.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 7642-3 to Tom Austin, 46081 SD Hwy 46, Centerville SD 57014 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. 7642-3 appropriates 1.22 cubic feet of water per second from one well to be completed into the Lower Vermillion:Missouri Aquifer (180 feet deep) located in the S 1/2 SE 1/4 Section 32 for irrigation of 65 acres located in the S 1/2 SE 1/4 Section 32; all in T94N-R51W.
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 – September 30.
3. The date from which applicant may claim right is January 16, 2013.
4. The date of approval of Permit No. 7642-3 is April 1, 2013.
5. One-fifth of the construction is to be completed on or before October 1, 2015.
6. All construction is to be completed on or before April 1, 2018.
7. Water is to be put to beneficial use on or before April 1, 2022.
8. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

QUALIFICATIONS

1. The well approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. The well authorized by Permit No. 7642-3 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28.
3. Pursuant to SDCL 46-5-6 which allows a greater diversion rate if the method of irrigation, time constraints, or type of soils so requires, Permit No. 7642-3 authorizes a maximum diversion rate of 1.22 cfs for the irrigation of 65 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

APR 09 2013

date



Supplemental Information

(type or print)

1. Well Information

(check one or both as applicable)

☒ Drilling new well(s) ☐ Using existing well(s)

a) If new wells, how many 1 Have test holes been drilled ☐ Yes ☒ No Drilled by _____
(if yes, please provide copies of logs)

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

c) Well Depth 180' Depth to Top of Water Bearing Material 90' Depth to Water from Surface 75'

d) Distance to nearest existing domestic well:

On applicant's property 0

On property owned by others about 1/2 mile to nearest farmplace but I don't know if served by rural water or well

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)

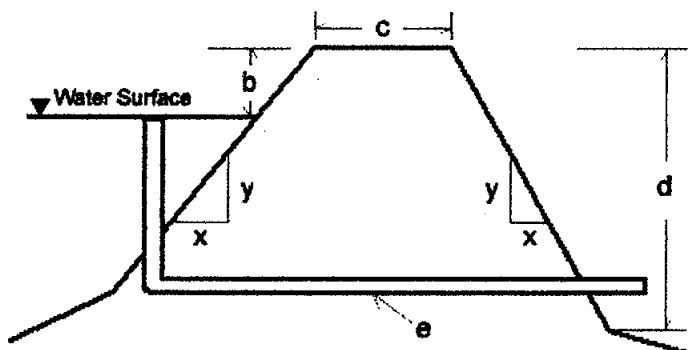
Upstream _____

Downstream _____

h) Surface Area of Impoundment _____

i) Storage _____ Acre Feet

j) Drainage Area Above Dam _____ Acres





United States Department of Agriculture
Farm Service Agency

PLSS: 32_94N_51W
Farm: 3965

Clay County, SD
1:8,386

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March 11, 2010

Sheree Christensen
PT
12-17-12

Wetland Determination Identifiers

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

□ Common Land Units

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

2008 Ortho-Photography - Not to Scale

Lindsay Manufacturing Co.



2707 North 108th Street
Omaha, NE 68164
800 - 829 - 5300 office

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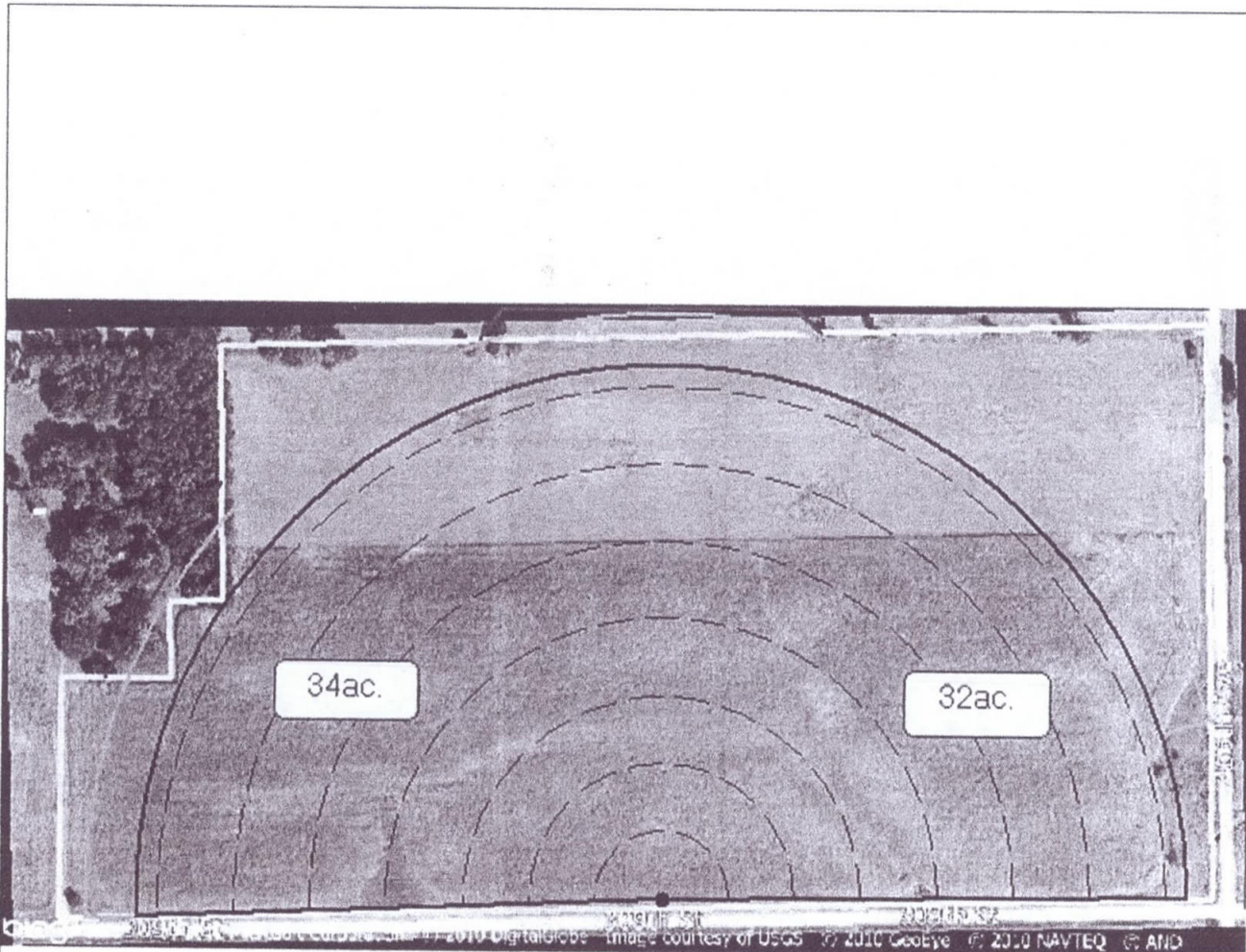
WATER RIGHTS
PROGRAM

Farm: Field1

Grower: Tom Austin

1/11/2013

Systems:	Length	Spans	Total area including endgun
● Pivot 1	1237.92 ft	7 spans + 44 ft o.h.	66.03 acres



Tom & LeAnne Austin
46081 SD HWY 46
Centerville SD 57014
Home: 605-563-2853
Cell: 605-360-7289

Section 32-094-51
Clay County S.D.,
Garfield Twp.

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date 1/16, 20 13

RECEIVED OF Tom Austin 46081 SD Hwy 46

Centerville SD 57014

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

Fee for Application for Permit No. <u>7642-3</u> to Appropriate Water, to construct and to put water to beneficial use	750	00
Fee for Application for Permit No. _____ to Appropriate Water for Future use		
Fee to retain Future Use Permit No. _____ after period of seven years.		
Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. <u>7642-3</u>	200	00
Fee for Filing Transfer Form _____		
Fee for _____		
Fee for Issuing New Well Driller's License No. _____ for C.Y. _____		
Fee for Renewal of Well Driller's License No. _____ for C.Y. _____		
Fee for Issuing Well Pump Installer's License No. _____ for C.Y. _____		
Fee for Renewal of Well Pump Installer's License No. _____ for C.Y. _____		
(Any Other Work Provided by Law)	TOTAL	950 00

No. 05977

By

David E. Miller
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. 7642-3, Tom Austin**

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. 7642-3, Tom Austin, 46081 SD Hwy 46, Centerville SD 57014.

The Chief Engineer is recommending APPROVAL of Application No. 7642-3 because 1) there is reasonable probability that there is unappropriated water available for the applicant's proposed use, 2) the proposed diversion can be developed without unlawful impairment of existing rights, 3) the proposed use is a beneficial use and 4) it is in the public interest with the following qualifications:

1. The well approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. The well authorized by Permit No. 7642-3 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28.
3. Pursuant to SDCL 46-5-6 which allows a greater diversion rate if the method of irrigation, time constraints, or type of soils so requires, Permit No. 7642-3 authorizes a maximum diversion rate of 1.22 cfs for the irrigation of 65 acres with an annual volume not to exceed 2 acre feet of water per acre per year.
4. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

See report on application for additional information.

Garland Erbele, Chief Engineer
March 13, 2013

REPORT ON WATER PERMIT APPLICATION NO. 7642-3

Tom Austin

February 19, 2013

Water Permit Application No. 7642-3 proposes to appropriate 130 acre-feet annually at a maximum diversion rate of 1.22 cubic feet of water per second from one well to be completed into the Lower Vermillion Missouri aquifer (180 feet deep) located in the S 1/2 SE 1/4 Section 32 for irrigation of 65 acres located in the S 1/2 SE 1/4 Section 32; all in T94N-R51W. Applicant is requesting a diversion rate greater than the statutory limit. This project is located approximately 8.5 miles north of the town of Vermillion in Clay County.

AQUIFER: Lower Vermillion Missouri (LVM)

GEOLOGY AND AQUIFER CHARACTERISTICS:

Test hole information was not submitted with this permit application. However, sufficient data is available through well completion reports (Water Rights, 2013c), water right/permit files (Water Rights, 2013b), and SD DENR-Geological Survey test hole logs (SDGS, 2013) to evaluate this application. The Lower Vermillion Missouri aquifer is a buried outwash (sand and gravel) aquifer that is under confined conditions in the area of this application, but also has portions under unconfined conditions (Stephens and Christensen, 1967). The aquifer underlies approximately 125,600 acres and contains an estimated 1.9 million acre-feet of recoverable water in storage in Clay and Union counties (Hedges et al., 1982). The aquifer blends into the Missouri: Elk Point aquifer to the south and into the Upper Vermillion Missouri aquifer to the north. This aquifer is also hydraulically connected to the Vermillion River and the Parker-Centerville aquifer.

SDCL 46-2A-9:

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

WATER AVAILABILITY:

This application proposes to appropriate 130 acre-feet annually from the Lower Vermillion Missouri aquifer. Although the actual water use if this application is approved will most likely be less than 130 acre-feet/year. The probability of unappropriated water available from an aquifer can be evaluated by considering SDCL 46-6-3.1 which requires "No application to appropriate groundwater may be approved if, according to the best information reasonably available, it is probable that the quantity of water withdrawn annually from a groundwater source will exceed the quantity of the average estimated annual recharge of water to the groundwater source.

Observation Well Data:

Administrative Rule of South Dakota Section 74:02:05:07 requires that "the Water Management Board shall rely upon the record of observation well measurements to determine that the quantity

of water withdrawn annually from the aquifer does not exceed the estimated average annual recharge of the aquifer.”

The DENR-Water Rights Program monitors 12 observation wells completed into the Lower Vermillion Missouri aquifer (Water Rights, 2013a). The nearest observation well is CL-80H located 0.25 miles away from the proposed well site. The water levels rise (recharge) during wet years and gradually decline during dry years. The effect of well withdrawals does not appear to be adverse over the period of record. The climatic effects on the water level greatly mask the temporal impacts of well withdrawal. The hydrograph shows that over the period of record water levels have held fairly constant. Therefore, recharge to and natural discharge from the Lower Vermillion Missouri aquifer significantly exceeds pumping. Considering the observation well data, there is a reasonable probability that there is unappropriated water available from the Lower Vermillion Missouri aquifer. Figure 1 is the hydrograph for observation well CL-80H.

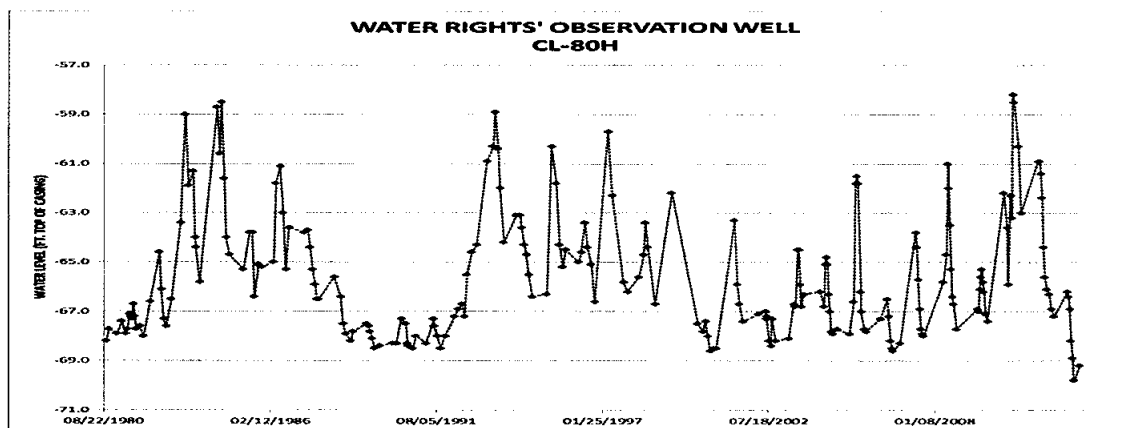


Figure 1- Hydrograph of DENR-Water Rights' observation well CL-80H, located approximately 0.25 miles east of the proposed well location (Water Rights, 2013a)

Recharge versus Withdrawals:

Recharge:

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

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

Discharge:

Discharge from the Lower Vermillion Missouri aquifer occurs due to evapotranspiration in areas where the aquifer is near land surface, outflow to the Missouri: Elk Point aquifer, outflow to the Vermillion River during periods of low flow, outflow to the aquifer to Union County, and well withdrawals from rural water systems, institutional use, and irrigation. Currently there are a total

of 68 water rights/permits appropriating water from the Lower Vermillion Missouri aquifer, with 56 of these in Clay County (Water Rights, 2013b).

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

From the Lower Vermillion Missouri aquifer, water rights/permits for non-irrigation use that are limited only by diversion rate currently appropriate a total of 2.06 cfs. Water rights/permits for non-irrigation use that are limited by an annual volume currently appropriate a total of 307 ac-ft/yr (Water Rights, 2013b). The amount of water that can be expected to be withdrawn by the non-irrigation use water rights/permits at the current appropriation amount can be estimated by assuming water rights/permits limited by an annual volume will pump the entire volume appropriated annually and water rights/permits limited only by diversion rate will pump at the maximum permitted diversion rate 60 percent of the time. Therefore, the total annual withdrawal from the Lower Vermillion Missouri aquifer by non-irrigation use is currently expected to total at maximum 1,203 ac-ft/yr (Water Rights, 2013b). The water withdrawal from the Lower Vermillion Missouri aquifer for irrigation, as reported to the DENR- Water Rights Program through annual irrigation questionnaires, is shown in figure 2.

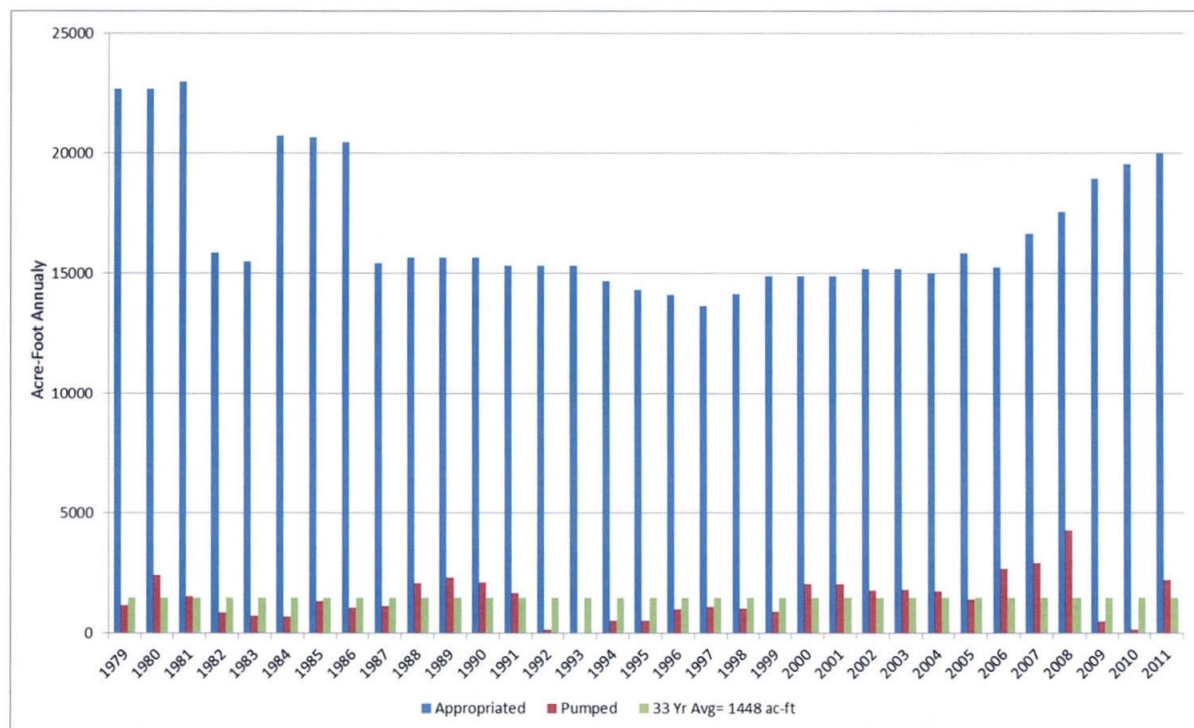


Figure 2- Irrigation water use from the Lower Vermillion Missouri aquifer (Water Rights 1979-2011).

Total estimated average annual withdrawal, including non-irrigation use, is 2,045 acre-feet per year from the Lower Vermillion Missouri aquifer. The observation well hydrograph shows that the water level in the aquifer has remained relatively constant despite changes in annual water

use and appropriations. The recharge required to have annual recharge equal annual withdrawal is 0.25 inches per year. If this application is approved, the additional withdrawal will not significantly increase the recharge required to push it out of the range suggested by Hedges and others (1985). Therefore, there is a reasonable probability that unappropriated water is available from in the Upper Vermillion Missouri aquifer.

EXISTING WATER RIGHTS:

There are four water rights/permits authorizing wells and five domestic wells within two miles of the proposed well site on file with the SD DENR-Water Rights Program (Water Rights, 2013b). Table 2 shows the water rights/permits within two miles of the proposed well site.

PERMIT_NO	NAME	STATUS	USE	CFS	ACRES
3039-3	JOHNSON	LC	IRR	2.000	140.00
6303-3	LIND	LC	IRR	1.780	132.00
7217-3	LIND	PE	IRR	1.780	0.00
7233-3	KRAMER	PE	IRR	1.560	136.00

Table 2- Water rights/permits within two miles of proposed well site (Water Rights, 2013b)

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

SDCL 46-5-6

Pursuant to SDCL 46-5-6, the amount allowed may not be in excess of the rate of one cubic foot of water per second for each seventy acres. The Water Management Board may allow a greater diversion, in volume or rate or both, if the method of irrigation, any time constraints on diversion of water, or the type of soil so requires.

The applicant proposes to utilize a center pivot irrigation system; however the system will only make a partial turn yet still require the larger diversion rate to operate efficiently. If approved the total acreage for this project would be 65 acres at a diversion rate of 1.22 cfs which equates to 1.31 cfs per 70 acres.

CONCLUSIONS:

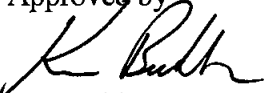
1. This application proposes to appropriate 130 acre-feet annually for the irrigation of 65 acres, but the amount of water that actually will be used is expected to be less than 130 acre-feet annually.

2. There is a reasonable probability that unappropriated water is available from the Lower Vermillion Missouri aquifer to supply this proposed diversion.
3. There is a reasonable probability that the diversion rate requested by this application can be made without adversely affecting existing water rights and domestic use.
4. If approved the total acreage for this project would be 65 acres at a diversion rate of 1.22 cfs.



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

Approved by



Ken Buhler
Natural Resources Engineer
SD DENR-Water Rights Program

REFERENCES:

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

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PLAIN TALK

DENR

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

STATE OF SOUTH DAKOTA
COUNTY OF CLAY

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

TAKEN FROM THE PAPER, IN WHICH IT WAS LAST PUBLISHED IN THE
NEWSPAPER ON THE 22 DAY OF MARCH 2013
THAT THE FULL AMOUNT OF THE FEE CHARGED FOR THE PUBLICATION
OF SAID NOTICE TO WIT \$27.98 ENSURES TO THE
BENEFITS OF THE PUBLISHER OF SAID NEWSPAPER AND THAT NO
AGREEMENT AND UNDERSTANDING FOR THE DIVISION THEREOF HAS
BEEN MADE WITH ANY OTHER PERSON, AND THAT NO PART THEREOF
HAS BEEN AGREED TO BE PAID TO ANY PERSON WHOMSOEVER.

PUBLISHED ON: 3/22/13

FILED ON: 3/22/13

Tera A. Schmide

SUBSCRIBED AND SWORN TO BEFORE ME THIS

26th DAY OF

March

2013

NOTARY PUBLIC, SOUTH DAKOTA

MY COMMISSION EXPIRES

8/19/2015

NOTICE OF APPLICATION
NO. 7642-3 to Appropriate
Water

Notice is given that Tom Austin, 46081 SD Hwy 46, Centerville SD 57014 has filed an application for a water permit to appropriate 1.22 cubic feet of water per second from one well to be completed into the Lower Vermillion-Missouri Aquifer (180 feet deep) located in the S 1/2 SE 1/4 Section 32 for irrigation of 65 acres located in the S 1/2 SE 1/4 Section 32; all in T94N-R51W. 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. 7642-3 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. In accordance with SDCL 46-2A-23, the Chief Engineer will act on this application as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the Chief Engineer's recommendation. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled and the Water Management Board will consider this application. Notice of the hearing will be given to the applicant and any person filing a petition.

Any person interested in opposing or supporting this application or recommendation must file a written petition with BOTH the applicant and Chief Engineer. The applicant must file a petition if contesting the Chief Engineer's recommendation. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by April 1, 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, nonbanned
Published once at the total approximate cost of \$27.98.

Published: March 22, 2013

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MAR 25 2013

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AFFIDAVIT OF PUBLICATION

YANKTON DAILY PRESS AND DAKOTAN

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

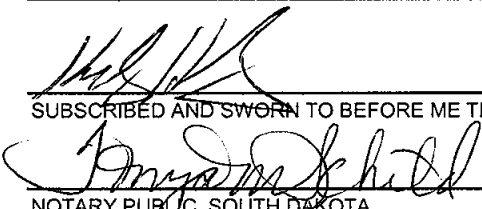
STATE OF SOUTH DAKOTA
COUNTY OF YANKTON

KELLY HERTZ BEING FIRST DULY SWORN ON OATH DEPOSES
AND SAYS THAT HE IS THE **MANAGING EDITOR** OF, YANKTON
MEDIA INC, A CORPORATION, THE PRINTER AND THE PUBLISHER OF THE
YANKTON DAILY PRESS AND DAKOTAN, A LEGAL DAILY NEWSPAPER
PUBLISHED AND CIRCULATED IN THE CITY OF YANKTON, SAID COUNTY
AND STATE, AND ONE OF THE OFFICIAL NEWSPAPERS OF THE SAID
COUNTY OF FACTS STATED IN THIS AFFIDAVIT; THAT THE ANNEXED
Notice of Application No. 7642-3

TAKEN FROM THE PAPER, IN WHICH IT WAS LAST PUBLISHED IN THE
NEWSPAPER ON THE 22nd DAY OF March 2013
THAT THE FULL AMOUNT OF THE FEE CHARGED FOR THE PUBLICATION
OF SAID **NOTICE** TO WIT **\$26.48** ENSURES TO THE
BENEFITS OF THE PUBLISHER OF SAID NEWSPAPER AND THAT NO
AGREEMENT AND UNDERSTANDING FOR THE DIVISION THEREOF HAS
BEEN MADE WITH ANY OTHER PERSON, AND THAT NO PART THEREOF
HAS BEEN AGREED TO BE PAID TO ANY PERSON WHOMSOEVER.

PUBLISHED ON: 3/22/2013

FILED ON: 3/22/2013

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

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

Notice is given that Tom Austin, 46081 SD Hwy 46, Centerville SD 57014 has filed an application for a water permit to appropriate 1.22 cubic feet of water per second from one well to be completed into the Lower Vermillion-Missouri Aquifer (180 feet deep) located in the S 1/2 SE 1/4 Section 32 for irrigation of 65 acres located in the S 1/2 SE 1/4 Section 32; all in T94N-R51W. 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. 7642-3 because 1) unappropriated water is available; 2) existing rights will not be unlawfully impaired; 3) it is a beneficial use of water; and 4) it is in the public interest. In accordance with SDCL 46-2A-23, the Chief Engineer will act on this application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the Chief Engineer's recommendation. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled and the Water Management Board will consider this application. Notice of the hearing will be given to the applicant and any person filing a petition.

Any person interested in opposing or supporting this application or recommendation must file a written petition with BOTH the applicant and Chief Engineer. The applicant must file a petition if contesting the Chief Engineer's recommendation. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by April 1, 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 \$26.48.



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

denr.sd.gov

March 13, 2013

Plain Talk
201 W Cherry St
Vermillion SD 57069

ATTENTION: Legal Public Notice

Enclosed is a Notice on Application No. 7642-3 to Appropriate Water. Please publish the notice once on March 22, 2013. The text of the notice can be e-mailed to your paper by contacting Karen Schlaak at (605) 773-3352.

The applicant must verify to you that the notice is to be published and arrange for payment. **Please BILL the APPLICANT for the cost of publication.** The APPLICANT is Tom Austin, 46081 SD Hwy 46, Centerville SD 57014 (Ph # 605-563-2953).

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

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

denr.sd.gov

March 13, 2013

Press & Dakotan
319 Walnut
Yankton SD 57078

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Natural Resources Engineer
605 773-3352

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**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

denr.sd.gov

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

March 13, 2013

Tom Austin
46081 SD Hwy 46
Centerville SD 57014

Dear Mr. Austin:

Water Permit Application No. 7642-3 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 Plain Talk printed at Vermillion SD (Ph # 605-624-2695) and the Press & Dakotan printed at Yankton SD (Ph # 605-665-7811). You will need to contact the newspaper(s) and authorize publication of this notice. For your information, a copy of the notice, the recommendation of the Chief Engineer and report on the application are enclosed. Please review the notice prior to publication and notify this office, if you have any corrections or questions.

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

Sincerely,

Eric Gronlund
Natural Resources Engineer
(605) 773-3352

enclosures

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

Instruction to Newspaper - Publish the Notice on March 22, 2013. The applicant is responsible for payment. The text of the notice can be e-mailed to your paper by contacting Karen Schlaak at (605) 773-3352 or email: Karen.schlaak@state.sd.us.

NOTICE OF APPLICATION NO. 7642-3 to Appropriate Water

Notice is given that Tom Austin, 46081 SD Hwy 46, Centerville SD 57014 has filed an application for a water permit to appropriate 1.22 cubic feet of water per second from one well to be completed into the Lower Vermillion:Missouri Aquifer (180 feet deep) located in the S 1/2 SE 1/4 Section 32 for irrigation of 65 acres located in the S 1/2 SE 1/4 Section 32; all in T94N-R51W. 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. 7642-3 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. In accordance with SDCL 46-2A-23, the Chief Engineer will act on this application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the Chief Engineer's recommendation. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled and the Water Management Board will consider this application. Notice of the hearing will be given to the applicant and any person filing a petition.

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Published once at the total approximate cost of _____.



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

APR 09 2013

Tom Austin
46081 SD Hwy 46
Centerville SD 57014

Dear Mr. Austin:

Enclosed is Water Permit No. 7642-3 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

Report of Examination of Works and/or Application of Water to Beneficial Use For Permit No. 7642-3

I have this day, November 17, 2017, made a thorough examination of the water use system constructed by Tom Austin, 46081 SD Hwy 46, Centerville SD 57014 of Permit No. 7642-3, bearing the priority of January 16, 2013 authorizing the diversion of 1.22 cu. ft. per second of the waters of Lower Vermillion:Missouri Aquifer for irrigation purposes, of 65 acres, in Clay County.

Inspection contact & relationship **Tom Austin, permit holder**
to permit holder, if applicable:

A. Works used to divert the water:

Well Information:

- 1) Well Drilling Firm: Hammond-Wetmore Drilling, LLC
- 2) No. of Wells 1
- 3) Depth(s) 150 feet
- 4) Well log is available Yes

Casing:

- 1) Diameter 16 inches
- 2) Length 90 feet
- 3) Type PVC

Screen:

- 1) Type PVC Manufactured
- 2) Length 60 feet
- 3) Static water level Unknown feet

Pump:

- 1) Make Unknown
- 2) Model Submersible
- 3) Capacity 550 GPM

Motor:

- 1) Make Unknown
- 2) Model No. Submersible
- 3) Horsepower rating 30 hp

C. Works used to apply water to beneficial use:

Center pivot:

- 1) Make Lindsay
- 2) Overall length 1190 feet
- 3) Number of towers 7
- 4) End gun Yes
- 5) Capacity 550 GPM

Chemigation Equipment:

- 1) Does chemigate No

D. Compliance with Permit Requirements:

- 1) Permit qualifications being abided by Yes
- 2) Irrigation Questionnaires checked to determine if permit owner started irrigation by the end of construction period Yes, began irrigating in 2013.
- 3) Exceptions to compliance are: None

E. Condition and Location:

1. The system is in good condition with the point(s) of diversion located as follows: West 1310', North 60' from SE Corner of Sec 32-T94N-R51W; Lat 42.91011/Long -96.88976; SE ¼ SE ¼ Sec 32-T94N-R51W.
2. The works are capable of diverting and conveying to the place of use 1.22 cfs or 550 gpm of water which is to be used for irrigation. Water has been put to beneficial use to the maximum extent as follows:
All land is located in Sec 32-T94N-R51W.
SW ¼ SE ¼ - 31 ac SE ¼ SE ¼ - 32 ac
comprising a total of 63 acres of land and the license should be issued for 1.22 cfs or 550 gpm.
3. All structures, wells and lands on map Yes

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

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

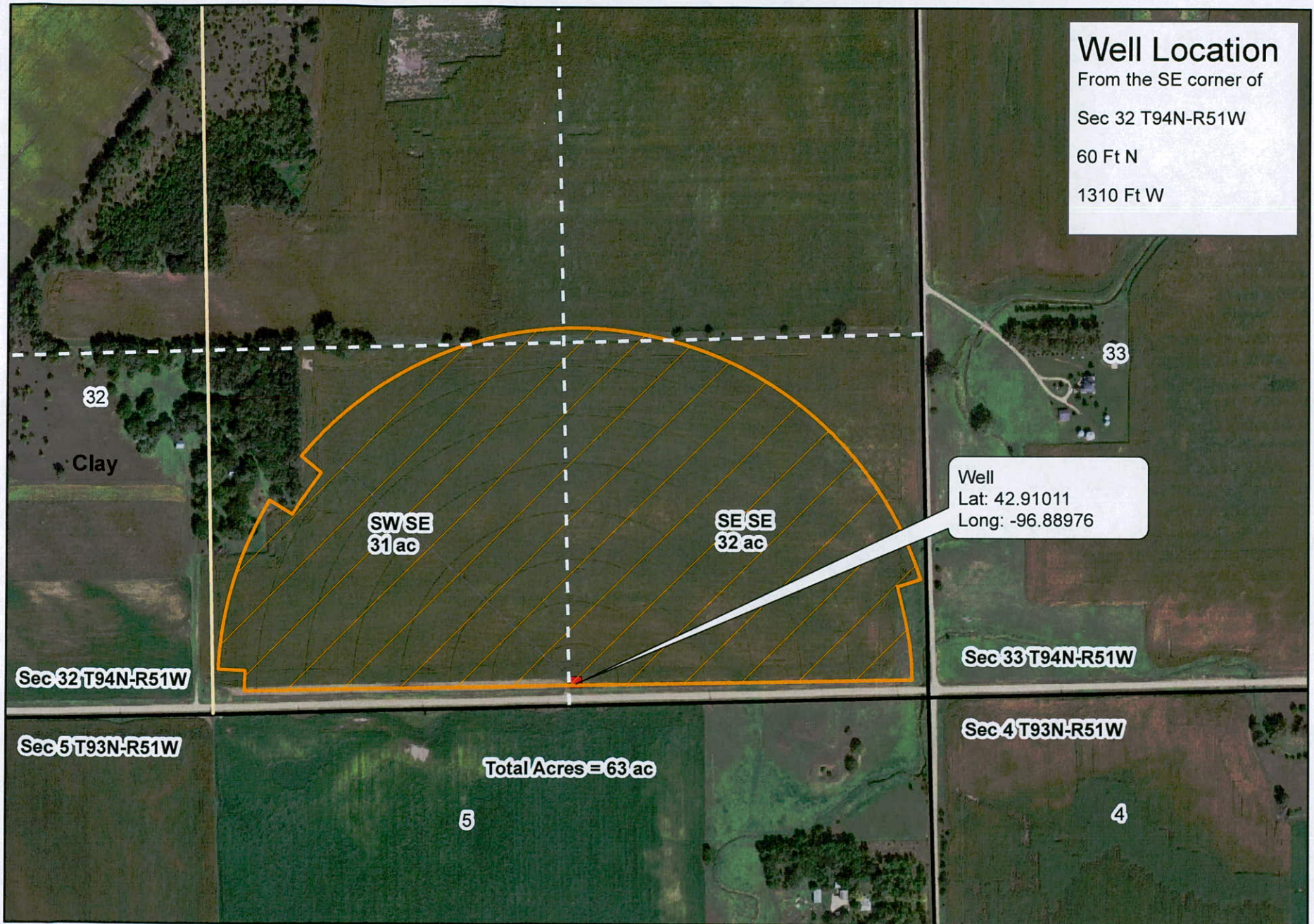
Water Permit No. 7642-3 appropriates a diversion rate greater than the statutory limit of 1 cfs per 70 acres irrigated.



Harold Holoch, PE
Staff Engineer
DENR, Water Rights Program

Date report completed: **October 22, 2019**

7642-3



Harold Holoch
Harold Holoch, PE
Staff Engineer
April 9, 2018

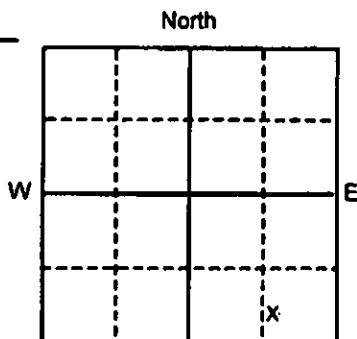
SOUTH DAKOTA WATER WELL COMPLETION REPORT

11-02

Location SE 1/4 SE 1/4 Sec 32 Twp 94N Rg 51W

County Clay

Please mark well location with an "X"



Well Completion Date

August 7, 2013

1 Mile

Distance to nearest potential pollution source (septic tank, abandoned well, feed lot, etc.)?
2,600.0 ft. from Septic Tank (Identify source)

PROPOSED USE:

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

METHOD OF DRILLING:

Direct Rotary

CASING DATA:

If other describe ☐ Steel ☒ Plastic ☐ Other

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
LB/FT	<u>16.00</u> IN	<u>0.0</u> FT	<u>90.0</u> FT	<u>20.00</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>25</u>	<u>9.5</u> Lb/gal	<u>0.0</u> Ft	<u>75.0</u> Ft
		Lb/gal	Ft	Ft

Describe grouting procedure
Tremie

SCREEN:

☐ Perforated pipe ☒ Manufactured
Diameter 16.00 Inches Length 60.0 Feet

Material PVC

Slot Size .085 Set From 90.0 Feet to 110.0 Feet

Other information Slot Size .050 Set from 110.0 ft to 150.0 ft

WAS A PACKER OR SEAL USED?

☐ Yes ☒ No

If so, what material?

Describe packer(s) and location

DISINFECTION: Was well disinfected upon completion?

☐ Yes, How?

☒ No, Why Not? Not Required

Lab to which water quality sample sent for analysis

Well Owner: Tom Austin

Business Name:

Address: 46081 SD Hwy 46

City, State, Zip: Centerville SD 57014

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
Black Top Soil	0	3
Brown Sandy Clay	3	35
Gray Shale	35	87
Gray Coarse Sand	87	145
Pea Size Gravel, Coarse Sand	145	150

STATIC WATER LEVEL 69.1 FEET

If flowing: closed in pressure 5/27/14 PSI

GPM flow through Inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other

Reduced flow rate GPM

Can well be completely shut in?

WELL TEST DATA:

☐ Pumped Describe: !

☐ Bailed

☐ Other

Pumping Level Below Land Surface

 Ft. After Hrs. pumped GPM

 Ft. After Hrs. pumped GPM

If pump installed, pump rate: GPM

REMARKS

RECEIVED

OCT - 4 2013

WATER RIGHTS PROGRAM

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

Drilling firm: Hammond-Wetmore Drilling, LLC

Signature of License Representative:

R. D. Hammond

Signature of Well Owner or Equitable Property Holder:

Date: 9/17/13



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

FEB 27 2020

7642-3

Tom Austin
46081 SD Hwy 46
Centerville SD 57014

Dear Mr. Austin:

Enclosed is Water License No. 7642-3. This is the final water right document completing your process of obtaining a Water Right. Included with your license is a map prepared by the staff engineer who conducted the field investigation.

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

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

Sincerely,

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

enclosures

STATE OF SOUTH DAKOTA
WATER LICENSE NO. 7642-3

(1) Tom Austin, 46081 SD Hwy 46, Centerville SD 57014 made Application No. 7642-3, January 16, 2013 for a water permit to divert 1.22 cubic feet of water per second from ground water, one well (Lower Vermillion Missouri Aquifer), Clay County, South Dakota for irrigation purposes. Permit No. 7642-3, with a priority date of January 16, 2013 was approved April 1, 2013 and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before April 1, 2018 and for the application to beneficial use of water on or before April 1, 2022.

(2) It is certified that the permit holder has complied with the provisions of South Dakota State Law relating to completion of the water supply system and is entitled to divert 1.22 cubic feet of water per second for beneficial use. The location of the diversion point is:

- 1310'W and 60'N of the SE Corner of Sec 32, T94N, R51W (SE ¼ SE ¼)
Latitude 42.91011, Longitude -96.88976

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

T94N, R51W Section 32	SW ¼ SE ¼	31 acres
	SE ¼ SE ¼	32 acres
	Total	63 acres

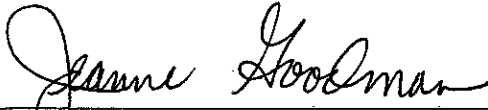
(4) Pursuant to South Dakota Water Law 46-5-30.1 Tom Austin, 46081 SD Hwy 46, Centerville SD 57014 the holder and/or owner of Water Right No. 7642-3 is issued a license to appropriate water, the right to use 1.22 cubic feet of water per second from ground water, one well (Lower Vermillion Missouri Aquifer) with a priority date of January 16, 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. 7642-3 and subject to the following qualifications:

- The well approved under this water right will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
- The well authorized by Permit No. 7642-3 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with the Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28. ***The well was drilled in August, 2013 by Hammond -Wetmore Drilling LLC. A copy of the well completion report is on file with the Water Rights Program.***

Continued

- Pursuant to SDCL 46-5-6 which allows a greater diversion rate if the method of irrigation, time constraints, or type of soils so requires, No. 7642-3 authorizes a maximum diversion of 1.22 cfs for the irrigation of 63 acres with an annual volume not to exceed 2 acre feet of water per acre per year. *The acreage was reduced at the time of licensing from 65 acres to 63 acres based on actual development.*
- This Water Right is approved subject to the irrigation water use questionnaire being submitted each year.



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

FEB 27 2020

date

