

WATER PERMIT NO. 7830-3

Name of Applicant: **Tom Bares**

Address: **30736 416th Ave, Tyndall SD 57066** Phone: **605 464-1190**

Amount of Water Claimed: **1.78 cfs** Total Acres: **96 acres**

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

Water to be used for: **irrigation** County: **Bon Homme**

Type of Waste Disposal System:

Location: **4 miles south of Tyndall**

PRIORITY Date Received: **4-15-13** Application/License Fee: **\$ 950**

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

Remarks: **Requesting diversion rate greater than statutory limit**

Diversion Point: **N 1/2 NW 1/4 Sec 30-T94N-R59W**

Land to be Irrigated: **NW 1/4 Sec 30-T94N-R59W**

Depth of Well: **280 feet deep**

Well Driller: **Quality Well Drilling**

Remarks:

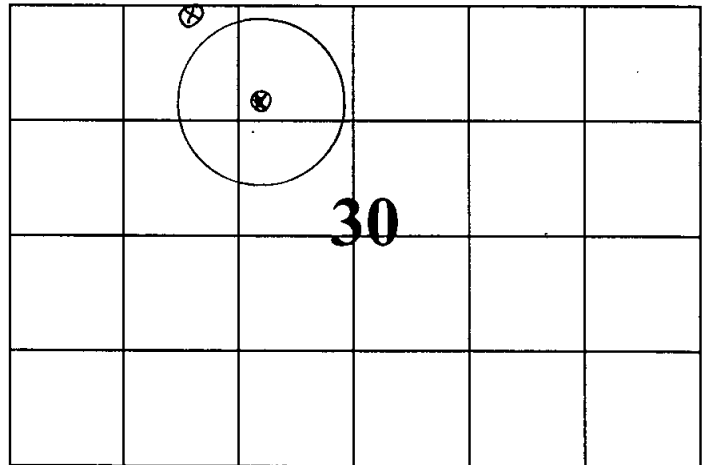
Type of Map: **aerial**

Prepared by:

Reviewed and the Number Assigned on: **4-15-13**

By: **Karen Schlaak**

Notice of Hearing - date to intervene: _____



FORM 2: Application for irrigation in South Dakota

(type or print)

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

(office use only)
No. 7830-3 Hydrologic Unit 10170101
Basin Missouri River 605-589-3242
Newspaper Tyndall Tribune Box 520 57066
Press & Dakota 319 Walnut Yankton 57078
605-665-7811

RECEIVED

APR 15 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 Bares(check one) ☒ Owner ☐ Tenant/lessee ☐ Owner's Legal Agent

(name and complete address if different than above name)

Mailing Address 30736 416 H Avenue Tyndall SD 57066

(Address)

(City)

(State)

(Zip Code)

Home Phone _____ Cell 605-464-1182 Email _____2. Amount of water claimed 1.78*CFS or 800**GPM ***AF Total Acreage 96

(*Cubic Feet per Second)

(**Gallons per Minute)

(***Acre Feet - storage capacity of dam/dugout or annual use if applicable)

3. Source of water supply ground4. Location of point of diversion NW 1/4 Sect 30 T94-N R-59 W
(example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W)
(N 1/2 NW 1/4) County Bon Homme5. County or counties where water will be used Bon Homme6. Annual period during which water is to be used May 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
<u>NW 1/4 of NW 1/4 Sect 30 T94N R59W</u>	<u>24</u>		
<u>NE 1/4 of NW 1/4 Sect 30 N R59W</u>	<u>24</u>		
<u>SW 1/4 of NW 1/4 Sect 30 N R59W</u>	<u>24</u>		
<u>SE 1/4 of NW 1/4 Sect 30 N R59W</u>	<u>24</u>		

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

Requesting diversion greater than statutory limitI, Tom C Bares, 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. 7830-3

Date of first receipt of application April 15, 2013.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 7830-3 to Tom Bares, 30736 416th Ave, Tyndall SD 57066 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. 7830-3 appropriates 1.78 cubic feet of water per second from two wells to be completed into the Codell Aquifer (280 feet deep) located in the N 1/2 NW 1/4 Section 30 for irrigation of 96 acres located in the NW 1/4 Section 30; all in T94N-R59W.
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: May 1 – October 31.
3. The date from which applicant may claim right is April 15, 2013.
4. The date of approval of Permit No. 7830-3 is July 1, 2013.
5. One-fifth of the construction is to be completed on or before January 1, 2016.
6. All construction is to be completed on or before July 1, 2018.
7. Water is to be put to beneficial use on or before July 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 wells approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. The wells authorized by Permit No. 7830-3 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. 7830-3 authorizes a maximum diversion rate of 1.78 cfs for the irrigation of 96 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.

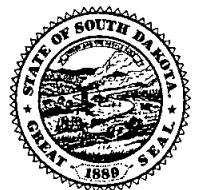
WATER MANAGEMENT BOARD

By: _____

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

JUL 08 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 Quality Well
(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 280 Depth to Top of Water Bearing Material 184 Depth to Water from Surface 90

d) Distance to nearest existing domestic well:

On applicant's property 1400' On property owned by others

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)

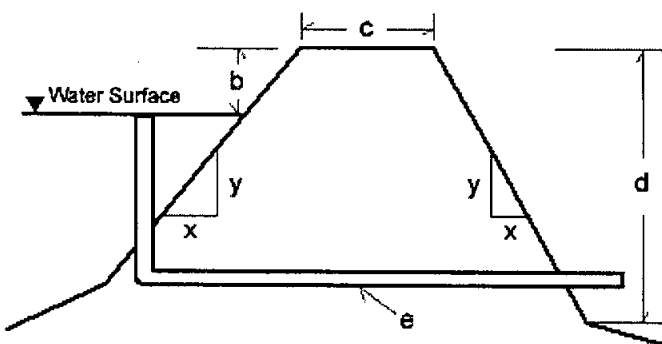
Upstream

Downstream

h) Surface Area of Impoundment

i) Storage Acre Feet

j) Drainage Area Above Dam Acres





The Leader in Precision Irrigation

Prepared By: **Heine Electric and Irrigation, Inc.**
 For: **Tom Bares Short Machine**

Questions or concerns? Please call us at 402-640-1999!

Pivot center at **42.934326, -97.866065**

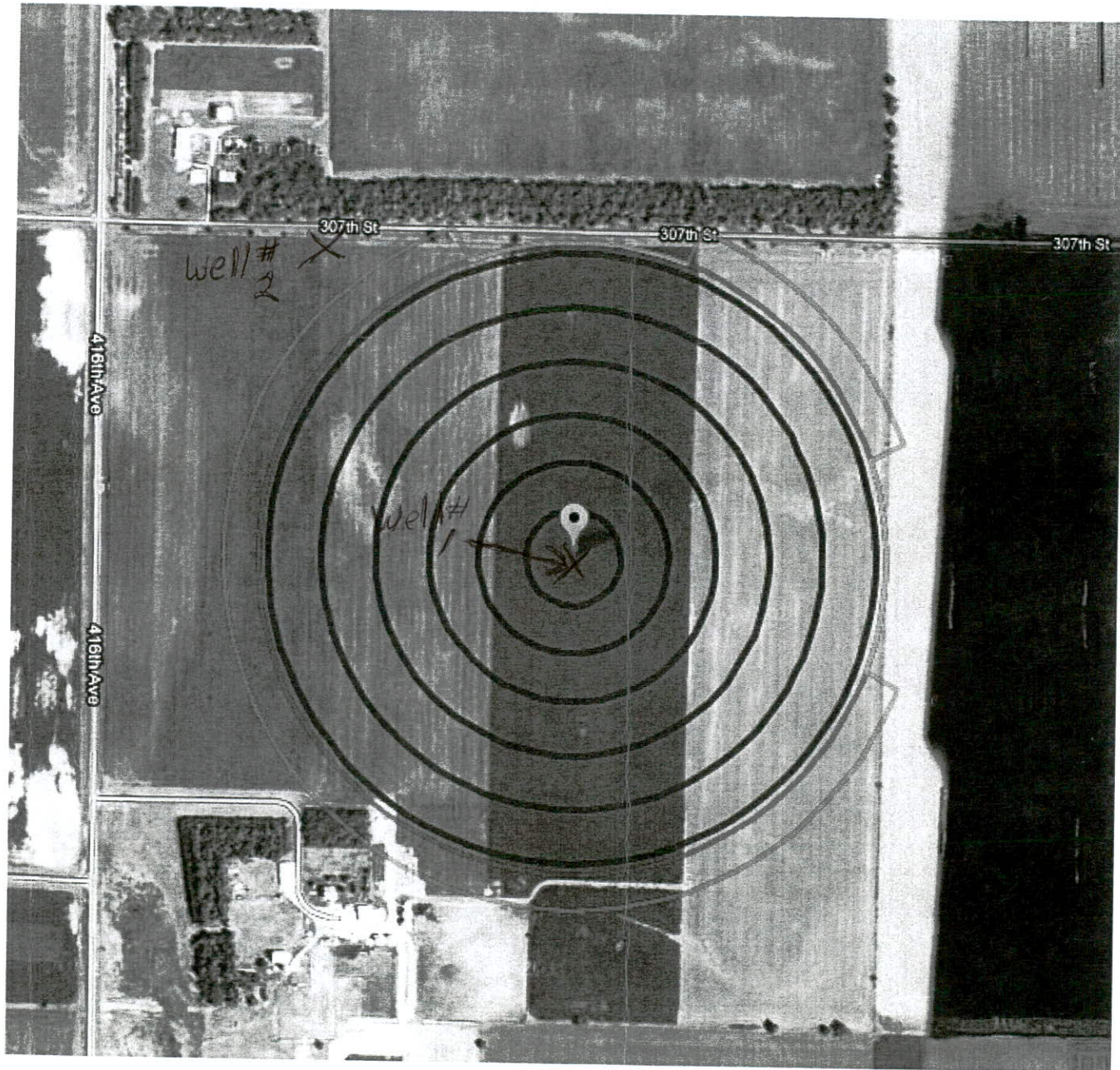
[N] Spray off at 340°, on at 20°.

[E] Spray off at 70°, on at 110°.

- 1 160 ft. Total: 160 ft.
Acreage: 1.85. Total: 1.85 acres.
- 2 160 ft. Total: 320 ft.
Acreage: 5.55. Total: 7.4 acres.
- 3 160 ft. Total: 480 ft.
Acreage: 9.25. Total: 16.65 acres.
- 4 180 ft. Total: 660 ft.
Acreage: 14.83. Total: 31.48 acres.
- 5 180 ft. Total: 840 ft.
Acreage: 19.51. Total: 51 acres.
- 6 180 ft. Total: 1020 ft.
Acreage: 24.19. Total: 75.19 acres.
- Overhang** 36 ft. Total: 1056 ft.
Acreage: 5.4. Total: 80.6 acres.
- Spray** 120 ft. Total: 1176 ft.
Acreage: 14.99. Total: **95.59 acres.**

RECEIVED

APR 15 2013

WATER RIGHTS
PROGRAM



United States Department of Agriculture
Farm Service Agency

January 12, 2012

PLSS: 30_94N_59W
Farm: 5795

Bon Homme County
1:7,982



RECEIVED
APR 15 2013

Wetland Determination Identifiers

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

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

WATER RIGHTS
PROGRAM

Common Land Units

Non Cropland

2010 Ortho Photography Not to Scale

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date 4/15, 20 13

RECEIVED OF Thomas C Bares 30736 416th Ave Tyndall SD 57066

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

Fee for Application for Permit No. <u>7830-3</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>7830-3</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. **06304**

By Jeanne Goodman
Chief Engineer



7830-3
**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

October 15, 2012

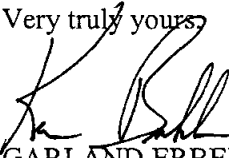
Tom Bares
30736 416th Avenue
Tyndall, SD 57066

Dear Mr. Bares:

As requested, pursuant to South Dakota Well Construction Standard 74:02:04:21, you are authorized to construct a test well in the NW¼ Section 30, T94N-R59W, prior to approval of a water permit. The test well must be constructed in accordance with the SD Well Construction Standards. Any test holes that are abandoned must be plugged pursuant to the SD Well Construction Standards.

Authorization must be obtained before water from the well can be used. Approval of this test well does not assure issuance of a water permit. Following review of a Water Permit Application; and assessing the availability of water, the potential impacts to existing users, the beneficial use, and the public interest of a permit, the Chief Engineer will make a recommendation to the Water Management Board regarding the application. The recommendation to approve, deny, or defer the application will be publicly noticed and an opportunity afforded for the public to intervene. A public hearing may be required to consider the water permit.

Very truly yours,


m GARLAND ERBELE, Chief Engineer
Water Rights Program
(605) 773-3352



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

denr.sd.gov

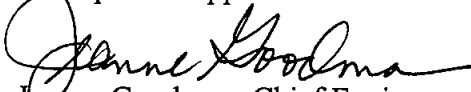
**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 7830-3, Tom Bares**

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. 7830-3, Tom Bares, 30736 416th Avenue, Tyndall SD 57066.

The Chief Engineer is recommending APPROVAL of Application No. 7830-3 because 1) there is reasonable probability that there is unappropriated water available for the applicant's proposed use, 2) the proposed diversion can be developed without unlawful impairment of existing rights, 3) the proposed use is a beneficial use and 4) it is in the public interest with the following qualifications:

1. The wells approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. The wells authorized by Permit No. 7830-3 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. 7830-3 authorizes a maximum diversion rate of 1.78 cfs for the irrigation of 96 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
June 13, 2013

REPORT TO THE CHIEF ENGINEER

WATER PERMIT APPLICATION NO. 7830-3

Tom Bares

May 14, 2013

Water Permit Application No. 7830-3 proposes to divert groundwater at a maximum diversion rate of 1.78 cubic feet of water per second (cfs) from two wells to be completed into the Codell aquifer. The wells are expected to be approximately 280 feet deep and located in the N½ NW¼ of Section 30, T94N-R59W. Water will be used to irrigate 96 acres located in the NW¼ of Section 30, T94N-R59W in Bon Homme County. The application is requesting a diversion rate in excess of the statutory limit.

AQUIFER: Codell aquifer (CDLL)

GEOLOGY AND AQUIFER CHARACTERISTICS:

The test hole log submitted with the application documents water bearing sandstone layers from 204 to 264 feet below ground surface, totaling 55 feet of aquifer materials. In the area of the proposed well sites, the top of the Codell Sandstone Member of the Carlile Shale is expected to occur at approximately 200 feet below ground surface. The Niobrara Formation often overlies the Carlile Shale in this area. The Tyndall management unit of the Choteau aquifer is also expected to occur at these depths in this area, but not in this specific location (Jorgensen, 1971).

The Codell aquifer is a siltstone to fine-grained sandstone (Jorgensen, 1971). The aquifer underlies approximately 7,750 square miles and contains an estimated 9,895,700 acre-feet of recoverable water in storage in South Dakota (Hedges and others, 1982). The Codell is generally overlain and underlain by impermeable shale and found under confined conditions. In Bon Homme County, the Codell is on average 25 feet thick, but ranges from 0 to 100 feet thick. In the county, the aquifer can be encountered between 100 and 900 feet below grade. The static water level is approximately 70 feet below ground surface in this area. The U.S. Geological Survey conducted an 8-hour aquifer test on the municipal well at the town of Avon, South Dakota and identified an aquifer transmissivity of 400 gallons per day per foot and an approximate storage coefficient of 0.001 (Jorgensen, 1971).

SDCL 46-2A-9

Pursuant to SDCL 46-2A-9, a permit to appropriate water may be issued only if there is a 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 that are pertinent to this application.

WATER AVAILABILITY:

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 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.

Hydrologic Budget:

Recharge to the Codell aquifer is from subsurface inflow and leakage from glacial aquifers, such as the Choteau: Tyndall (Jorgensen, 1971). Discharge from the Codell aquifer is through well pumpage and subsurface outflow to the Missouri River. Some subsurface outflow may occur to the connected outwash aquifers. There are 37 water rights/permits appropriating water from the Codell aquifer (Water Rights, 2013b). There are also many completion reports on file with the SD DENR-Water Rights Program for domestic wells that appear to be completed into the Codell aquifer (Water Rights, 2013c). However, domestic use is not considered significant to the hydrologic budget. Consider also that most of the area is served by a rural water source, so many of these wells may no longer be in use.

The amount of water that can be expected to be withdrawn by non-irrigation use water rights/permits can be estimated by assuming water rights/permits limited only by diversion rate will pump at the maximum permitted diversion rate 60 percent of the time. Most of the towns with municipal water rights/permits have connected to a rural water system, and therefore, the associated water rights are no longer expected to withdraw from the aquifer (Water Rights, 2013b). Therefore, non-irrigation appropriations, excluding municipal water rights/permits that are used as a backup to rural water, are expected to use less than 2,072 ac-ft/yr (Water Rights, 2013b).

The irrigation development of the Codell aquifer over the period of record, 1979 to 2011, has remained at the same general level. The annual withdrawal from the aquifer fluctuates. This is probably mostly dependent on annual growing season climatic conditions. Over the period of record, the average pumpage reported is approximately 26 ac-ft/yr (Water Rights, 1980-2012). Because two irrigation water permits have been authorized for the Codell aquifer since 2011, water use will likely increase (Water Rights, 2013b).

Water Balance:

According to Hedges and others (1985):

“The Niobrara Formation, Codell Sandstone, Inyan Kara Group, and Madison Group have such high storage and low use that it is unlikely that use is approaching or exceeding recharge. Furthermore, there is no evidence of significant head loss in any of these aquifers over the years that would suggest that use is exceeding recharge.”

Due to the relatively small development of this large resource, there is a reasonable probability that unappropriated water is available from the Codell aquifer for the proposed appropriation.

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 SD DENR-Water Rights Program monitors 21 observation wells in the Codell aquifer. The nearest observation well, HT-83E, is located approximately 17 miles north of the proposed well sites. The hydrograph is shown in Figure 2 (Water Rights, 2013a). Due to the distance from the observation well to the proposed well sites, this observation well cannot indicate the local characteristics of the aquifer or possible effects of nearby pumping in the area of the proposed well site. However, this observation well data can provide representative general characteristics of the Codell aquifer and the groundwater available.

The observation well data documents cyclic conditions of water levels, recharging during wet years and declining during dry years. This data documents that, at the current level of development, temporal well withdrawal is masked by climatic conditions. Therefore, recharge to and natural discharge from the aquifer exceeds pumping. In conclusion, unappropriated water is available from the Codell aquifer to support the proposed appropriation.

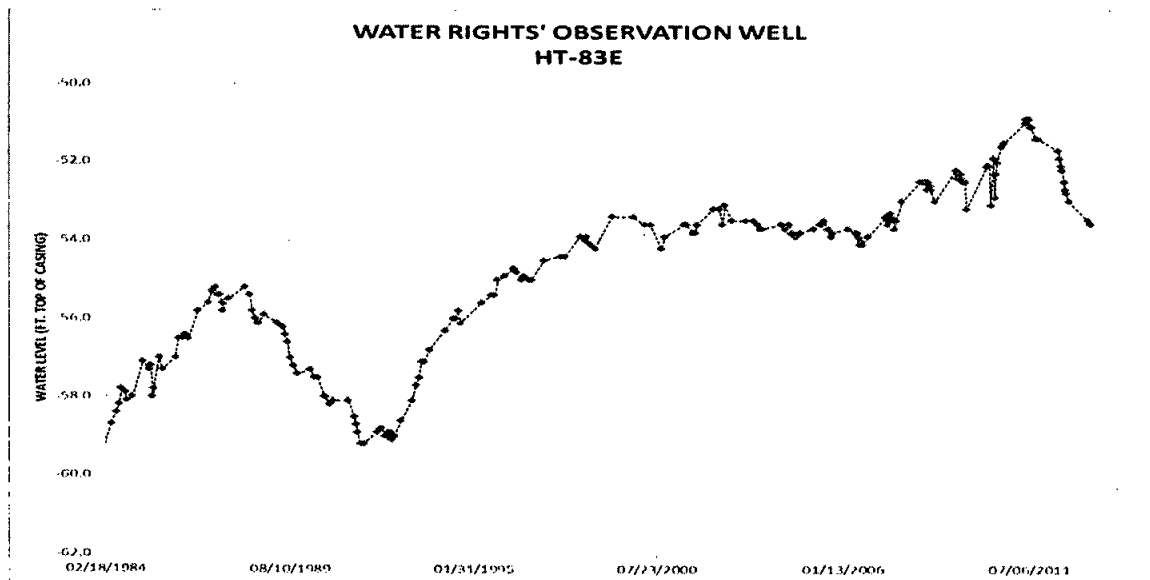


Figure 2: Hydrograph for observation well HT-83E (Water Rights, 2013a)

EXISTING WATER RIGHTS:

If approved, the proposed wells will be located near other wells that obtain water from the same aquifer. In addition to domestic wells, there are several water rights/permits completed into the Codell aquifer in the general area. However, the nearest water right/permit is further than three miles from the proposed well sites (Water Rights, 2013b; Water Rights, 2013c).

The Codell aquifer is under artesian conditions at the proposed well sites; therefore, drawdown due to pumping is expected. However, precise drawdown cannot be quantified without aquifer testing. The Water Management Board has consistently recognized that to place water to maximum beneficial use a certain amount of drawdown may occur. SDCL 46-6-6.1 does not require protection of artesian head pressure as a means of groundwater delivery. However, reasonable domestic use must be assured before irrigation use is allowed. Therefore, when

considering irrigation projects, the Water Management Board must give consideration to maintaining artesian head pressure as a method of delivery for domestic wells. To balance interests between irrigation use and delivery of groundwater by artesian pressure, ARSD 74:02:04:20(7) defines an adversely impacted domestic well as:

“a well in which the pump intake was set at least 20 feet below the top of the aquifer at the time of construction or, if the aquifer is less than 20 feet thick, is as near to the bottom of the aquifer as is practical and the water level of the aquifer has declined to a level that the pump will no longer deliver sufficient water for the well owner’s needs”

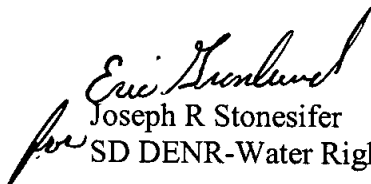
Depending on the characteristics of the Codell aquifer at the proposed well sites, some existing well owners may need to lower their pumps to accommodate possible reduction of head pressure.

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 70 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. This application proposes to divert water at a maximum rate of 1.78 cfs per 96 acres, equaling 1.30 cfs per 70 acres. The applicant has not justified this request.

CONCLUSIONS:

1. This application proposes to divert groundwater at a maximum rate of 1.78 cfs from two wells to be completed into the Codell aquifer to irrigate 96 acres in Bon Homme County.
2. There is a reasonable probability that unappropriated water is available from the Codell aquifer to supply the proposed appropriation.
3. There is a reasonable probability that these proposed wells will not adversely or unlawfully impair existing nearby wells.
4. This application has requested an additional diversion rate in excess of one cfs per 70 acres, but has not provided justification.


Joseph R Stonesifer
for SD DENR-Water Rights Program

Approved by


Ken Buhler
SD DENR-Water Rights Program

REFERENCES:

- 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.
- Hedges, L.S., Allen, J., and Holly, D.E. 1985. Evaluation of Ground-Water Resources Eastern South Dakota and Upper Big Sioux River, South Dakota and Iowa. Task 7: Ground Water Recharge. South Dakota DENR-Geological Survey, Vermillion, South Dakota.
- Jorgensen, D.G. 1971. Geology and Water Resources of Bon Homme County South Dakota: Part II; Water Resources. South Dakota Geological Survey Bulletin 21. SD DENR- Geological Survey, Vermillion, South Dakota.
- Water Rights. 1980-2012. "Annual Irrigation Summary by Aquifer": SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.
- Water Rights. 2013a. Observation Well Files, SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.
- Water Rights. 2013b. Water Right/Permit Files, SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.
- Water Rights. 2013c. Water Well Completion Reports, SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.

Affidavit of Publication

State of South Dakota }
County of Bon Homme } SS

Rebecca Tycz Being first duly sworn says that the **Tyndall Tribune & Register** is a legal weekly newspaper for publication of legal and other official notices as required by Chapter 298 of the Session Laws of South Dakota, 1939; that it has bona fide paid circulation of more than two hundred copies weekly; that it is published in English language in the City of Tyndall, Bon Homme County, South Dakota, and has been admitted to the United States mail under second class mailing privilege for more than one year prior to the first publication of the notice herein mentioned, and that it is printed in an office maintained at the place of publication at Tyndall, South Dakota, and that deponent is the publisher in charge of the advertising department of said newspaper; that the advertisement headed

Notice on Application
No. 7830-3

a printed copy of which is hereto attached, was printed and published in said newspaper for one successive weeks, upon the following dates:

June 19 2013 20.....
..... 20..... 20.....
..... 20..... 20.....
..... 20..... 20.....

That the full amount of the fee charged for the publication of said notice, 24.56, inures to the benefit of the publisher of said newspaper, that no agreement or understanding for the division thereof has been made with any other person, and that no part has been agreed to be paid to any person whomsoever.

Rebecca Tycz

Subscribed and sworn to before me this

19th day of June 2013.

Legg Achilsh
Notary Public, South Dakota

My commission expires: Oct 24, 2015

RECEIVED

JUN 24 2013

WATER RIGHTS
PROGRAM

NOTICE OF APPLICATION

NO. 7830-3 to Appropriate Water

Notice is given that Tom Bares, 30736 416th Ave, Tyndall SD 57066 has filed an application for a water permit to appropriate 1.78 cubic feet of water per second from two wells to be completed into the Codell Aquifer (280 feet deep) located in the N 1/2 NW 1/4 Section 30 for irriga-

tion of 96 acres located in the NW 1/4 Section 30; all in T94N-R52W. The applicant is requesting a diversion rate greater than the statutory limit.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 7830-3 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 July 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 \$24.56

(June 19)

RECEIVED

JUN 24 2013

WATER RIGHTS
PROGRAM

AFFIDAVIT OF PUBLICATION

YANKTON DAILY PRESS AND DAKOTAN

6+19

NOTICE OF APPLICATION
NO. 7830-3 to Appropriate Water

Notice is given that Tom Bares, 30736 416th Ave, Tyndall SD 57066 has filed an application for a water permit to appropriate 1.78 cubic feet of water per second from two wells to be completed into the Codell Aquifer (280 feet deep) located in the N 1/2 NW 1/4 Section 30 for irrigation of 96 acres located in the NW 1/4 Section 30; all in T94N-R59W. 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. 7830-3 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 July 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. Pimer, Secretary, Department of Environment and Natural Resources.

Published once at the total approximate cost of \$26.15.

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. 7830-3

TAKEN FROM THE PAPER, IN WHICH IT WAS LAST PUBLISHED IN THE NEWSPAPER ON THE 19th DAY OF June 2013 THAT THE FULL AMOUNT OF THE FEE CHARGED FOR THE PUBLICATION OF SAID NOTICE TO WIT \$26.15 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: 6/19/2013

FILED ON: 6/19/2013

SUBSCRIBED AND SWORN TO BEFORE ME THIS 19th DAY OF June 2013

NOTARY PUBLIC, SOUTH DAKOTA

MY COMMISSION EXPIRES

8/19/2015

2013



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

denr.sd.gov

June 14, 2013

Tyndall Tribune & Register
PO Box 520
Tyndall SD 57066

ATTENTION: Legal Public Notice

Enclosed is a Notice on Application No. 7830-3 to Appropriate Water. Please publish the notice once on June 19, 2013. The text of the notice has been e-mailed to your paper.

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 Bares, 30763 416th Ave, Tyndall SD 57066 (Ph # 605-464-1180).

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

June 14, 2013

Press & Dakotan
319 Walnut
Yankton SD 57078

ATTENTION: Legal Public Notice

Enclosed is a Notice on Application No. 7830-3 to Appropriate Water. Please publish the notice once on June 19, 2013. The text of the notice has been e-mailed to your paper.

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 Bares, 30763 416th Ave, Tyndall SD 57066 (Ph # 605-464-1180).

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 DATES, CONTACT
THE NEWSPAPER RIGHT AWAY.**

June 14, 2013

Tom Bares
30763 416th Ave
Tyndall SD 57066

Dear Mr. Bares:

Water Permit Application No. 7830-3 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 Tyndall Tribune & Register printed at Tyndall SD (Ph # 605-589-3242) 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 June 19, 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. 7830-3 to Appropriate Water

Notice is given that Tom Bares, 30736 416th Ave, Tyndall SD 57066 has filed an application for a water permit to appropriate 1.78 cubic feet of water per second from two wells to be completed into the Codell Aquifer (280 feet deep) located in the N 1/2 NW 1/4 Section 30 for irrigation of 96 acres located in the NW 1/4 Section 30; all in T94N-R59W. 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. 7830-3 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 July 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 _____.



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

denr.sd.gov

JUL 08 2013

Tom Bares
30736 416th Ave
Tyndall SD 57066

Dear Mr. Bares:

Enclosed is Water Permit No. 7830-3 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,

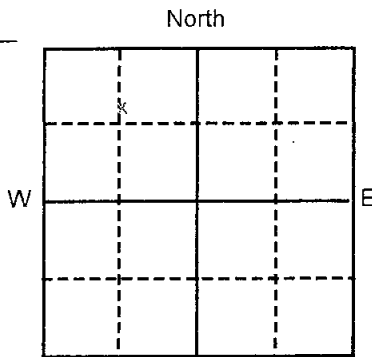
Jeanne Goodman, Chief Engineer
Water Rights Program
(605) 773-3352

enclosures

7830-3

SOUTH DAKOTA WATER WELL COMPLETION REPORT

11-02

Location NE 1/4 NW 1/4 Sec 30 Twp 94N Rg 59WCounty Bon HommePlease mark well
location with an "X"

Well Completion Date

December 20, 2012

Distance to nearest potential pollution source (septic tank, abandoned well, feed lot, etc.)?
780.0 ft. from Septic Tank (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
LB/FT	<u>16.00</u> IN	<u>0.0</u> FT	<u>200.0</u> FT	<u>28.00</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>60</u>	<u>9.5</u> Lb/gal	<u>0.0</u> Ft	<u>150.0</u> Ft
		Lb/gal	Ft	Ft

Describe grouting procedure
Tremie Method

SCREEN:

☐ Perforated pipe ☒ Manufactured
Diameter 16.00 Inches Length _____ FeetMaterial PVCSlot Size .50 Set From 200.0 Feet to 260.0 Feet

Other information

WAS A PACKER OR SEAL USED?

☐ Yes ☒ No

If so, what material?

Describe packer(s) and location

DISINFECTION: Was well disinfected upon completion?

☐ Yes, How?

☒ No, Why Not? Not Required
 Lab to which water quality sample sent for analysis
Well Owner: Tom Bares

Business Name:

Address: 30736 416th AveCity, State, Zip: Tyndall SD 57066

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
Top Soil	0	2
Brown Silty Clay	2	24
Blue Shale w/ Soft Sand	24	136
Gray Shale	136	185
Sandy Shale	185	204
Sandstone	204	243
Shale	243	250
Sandstone	250	260

STATIC WATER LEVEL

114.0 FEET

If flowing: closed in pressure _____ PSI

GPM flow _____ through _____ Inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other

Reduced flow rate _____ GPM

Can well be completely shut in?

WELL TEST DATA:

☒ Pumped Describe:☐ Bailed☐ Other

Pumping Level Below Land Surface

238.0 Ft. After 18.0 Hrs. pumped 220.0 GPM

_____ Ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate: _____ GPM

REMARKS

RECEIVED

FEB - 1 2013

WATER RIGHTS
PROGRAMThis well was drilled under license # 666 and this report is true and accurate.Drilling firm: Hammond Wetmore Drilling, LLC

Signature of License Representative:

Signature of Well Owner or Equitable Property Holder:

Date: 1-29-13

7830-3
RECEIVED

SEP 05 2013

WATER RIGHTS
PROGRAMNOTICE OF COMPLETION OF WORKS AND
APPLICATION OF WATER TO BENEFICIAL USEDate 8-30-2013TO: Water Rights Program, DENR
523 E. Capitol
Pierre, SD 57501-3181

FROM:

Tom C. Bares

(name)

30736 416th Ave

(address)

Tyndall, S.D. 57066

(city, state, zip)

605-464-1180

(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. 7830-3 states that the water use system is to be constructed byJuly 1, 2018

(date)

, and water is to be put to beneficial use by July 1, 2022

(date)

The water use system was completed on 8-30-2013

(date)

Applying the water to beneficial use was completed on 8-30-2013

(date)

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

Tom C. Bares

(signature)





**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
PMB 2020
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3182
<http://denr.sd.gov>

September 5, 2013

7830-3

Tom C Bares
30736 416th Ave
Tyndall SD 57066

Dear Mr. Bares:

I am writing to acknowledge receipt of the "Notice of Completion of Works" form that you sent in to let us know that you are completed with your irrigation system.

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,

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

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

**Report of Examination of Works and/or Application of Water to Beneficial Use
For Permit No. 7830-3**

I have this day, January 28, 2020, made a thorough examination of the water use system constructed by Tom Bares, 30736 416th Ave, Tyndall, SD 57066, holder of Permit No. 7830-3, bearing the priority of April 15, 2013 authorizing the diversion of 1.78 cu. ft. per second of the waters of groundwater (Codell Aquifer) for irrigation purposes, in Bon Homme County.

Inspection contact: Tom Bares

A. Works used to divert the water:

North Well Information:

- 1) Well Drilling Firm: Hammond Wetmore Drilling, LLC
- 2) No. of Wells 1
- 3) Depth(s) 269 feet
- 4) Well log is available Yes

Casing:

- 1) Diameter 12 inches
- 2) Length 140 feet
- 3) Type PVC

Screen:

- 1) Diameter 12 inches
- 2) Length 129 feet
- 3) Type PVC
- 4) Static water level Not Recorded

Pump:

- 1) Make Grundfos
- 2) Model 230S-250-8B
- 3) Capacity 230 GPM

Motor:

- 1) Make Grundfos
- 2) Model No. Unknown
- 3) Horsepower rating 30 hp with VFD

South Well Information:

- 1) Well Drilling Firm: Hammond Wetmore Drilling, LLC
- 2) No. of Wells 1
- 3) Depth(s) 260 feet
- 4) Well log is available Yes

Casing:

- 1) Diameter 16 inches
- 2) Length 200 feet
- 3) Type PVC

Screen:

- 1) Diameter 16 inches
- 2) Length 40 feet
- 3) Type PVC
- 4) Static water level 114 feet

Pump:

- 4) Make Grundfos
- 5) Model 230S-250-8B
- 6) Capacity 230 GPM

Motor:

- 4) Make Grundfos
- 5) Model No. Unknown
- 6) Horsepower rating 25 hp with VFD

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

- | | | | |
|--------------------|-----------------|-------------------------|-----------------------------|
| 1) From North Well | Type <u>PVC</u> | 2) Size <u>6</u> inches | 3) Length <u>1,400</u> feet |
| 2) From South Well | Type <u>PVC</u> | 2) Size <u>6</u> inches | 3) Length <u>55</u> feet |

C. Works used to apply water to beneficial use:

Center Pivot:

- 1) Make Valley
- 2) Overall length 1,058 feet
- 3) Number of towers 6
- 4) End gun Yes
- 5) Capacity 450 GPM

Chemigation Equipment:

- 1) Does chemigate Yes
- 2) Main line check valve Yes
- 3) Inspection port/air relief Yes
- 4) Low pressure drain Yes
- 5) Discharge is 20' from source Yes
- 6) Interlock type mechanical
- 7) Injection pump positive displacement
- 8) Injection check valve Yes
- 9) Injection line check valve or positive displacement pump Yes

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 north well is 780 feet east and 60 feet south of the northwest corner of Section 30-T94N-R59W (Latitude 42.93719, Longitude -97.86921 – NW1/4 of the NW1/4).
The south well is 1,630 feet east and 1,160 feet south of the northwest corner of Section 30-T94N-R59W (Latitude 42.93414, Longitude -97.86602 – NE1/4 of the NW1/4).
2. The works are capable of diverting and conveying to the place of use 1.00 cu. ft. per second of water which is to be used for irrigation purposes. Water has been put to beneficial use to the maximum extent as follows: All in Section 30-T94N-R59W:

<u>NW1/4NW1/4</u>	<u>20 acres</u>
<u>NE1/4NW1/4</u>	<u>36 acres</u>
<u>SW1/4NW1/4</u>	<u>12 acres</u>
<u>SE1/4NW1/4</u>	<u>24 acres</u>

comprising a total of 92 acres of land and the license should be issued for 1.00 cfs.

3. All structures, wells and lands on map Yes

F. Comments or other permit(s) associated with the project: I gave Mr. Bares a copy of the chemigation handout.



Keith DeJong
Water Rights Inspector
DENR, Water Rights Program

Date report completed: January 29, 2020

SOUTH DAKOTA WATER WELL COMPLETION REPORT

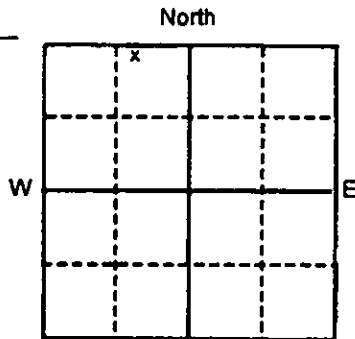
11-02

Location ~~NW~~ 1/4 NW 1/4 Sec 30 Twp 94N Rg 59W

County Bon Homme

Please mark well
location with an "X"

correction by AM



Well Completion Date

June 11, 2013

1 Mile

Distance to nearest potential pollution source (septic tank, abandoned well, feed lot, etc.)?
1,400.0 ft. from Domestic Well (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	12.00 IN	0.0 FT	140.0 FT	22.00 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	9.5 Lb/gal	0.0 Ft	130.0 Ft
		Lb/gal	Ft	Ft

Describe grouting procedure
Tremie Method

SCREEN:

☐ Perforated pipe ☒ Manufactured
Diameter 12.00 Inches Length 119.0 Feet

Material PVC

Slot Size .060 Set From 140.0 Feet to 230.0 Feet

Other information .080 Set From 230.0 Ft to 269.0 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 RequiredLab to which water
quality sample sent for analysis

Well Owner: Tom Bares

Business Name:

Address: 30736 416th Ave

City, State, Zip: Tyndall SD 57066

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
Top Soil	0	1
Clay Silt, Pebbly Till; Brown/Gray	1	138
Gray Chalk	138	198
Gray Shale	198	205
Sandstone	205	260
Gray Shale	260	269

STATIC WATER LEVEL

FEET

If flowing: closed in pressure

PSI

GPM flow

through

Inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other

Reduced flow rate

GPM

Can well be completely shut in?

WELL TEST DATA:

☐ Pumped Describe:
☐ Bailed
☐ Other

Pumping Level Below Land Surface

Ft. After Hrs. pumped GPM

Ft. After Hrs. pumped GPM

If pump installed, pump rate: GPM

REMARKS

RECEIVED

OCT 21 2013

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

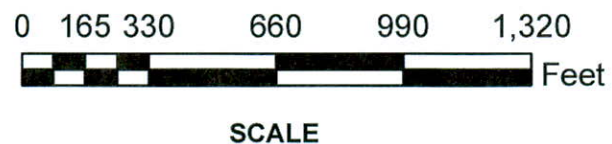
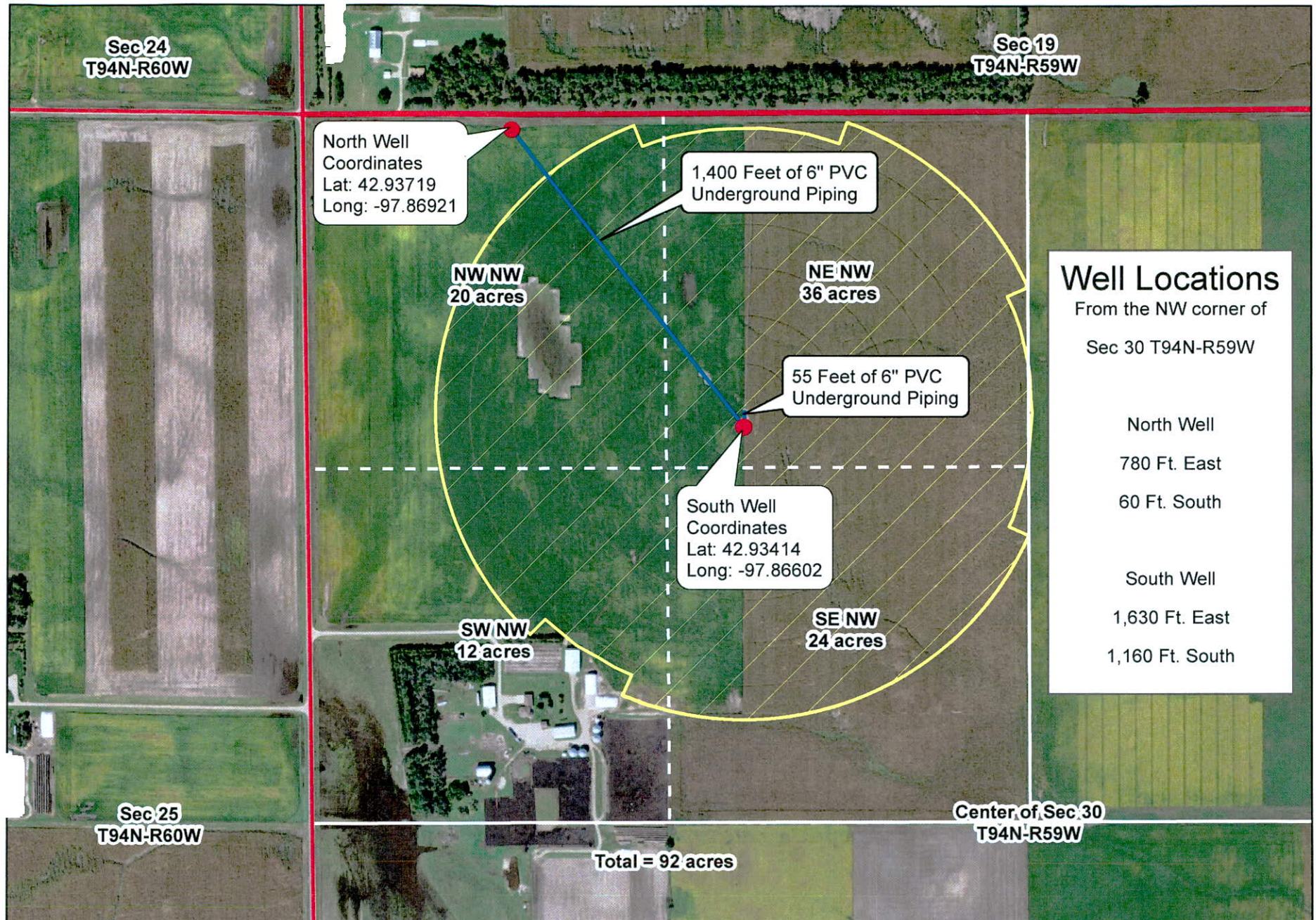
Drilling firm: Hammond-Wetmore Drilling, LLC

Signature of License Representative:

Signature of Well Owner or Equitable Property Holder:

Date: 10/7/13

Water Right No. 7830-3



Keith DeJong
Keith DeJong, PE
Staff Engineer
January 29, 2020



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

FEB 28 2020

7830-3

Tom Bares
30736 416th Ave
Tyndall SD 57066

Dear Mr. Bares:

Enclosed is Water License No. 7830-3. 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. 7830-3**

(1) Tom Bares, 30736 416th Ave., Tyndall SD 57066 made Application No. 7830-3, April 15, 2013 for a water permit to divert 1.78 cubic feet of water per second from ground water, two wells (Codell Aquifer), Bon Homme County, South Dakota for irrigation purposes. Permit No. 7830-3, with a priority date of April 15, 2013 was approved July 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 July 1, 2018 and for the application to beneficial use of water on or before July 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 1.00 cubic feet of water per second for beneficial use. The location of the diversion points are as follows:

- North well: 780'E and 60'S of the NW corner of Section 30, T94N, R59W (NW ¼ NW ¼)
Latitude 42.93719, Longitude -97.86921
- South well: 1,630'E and 1,160'S of the NW corner of Section 30, T94N, R59W (NE ¼ NW ¼)
Latitude 42.93414, Longitude -97.86602

(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, R59W Section 30	NW ¼ NW ¼	20 acres
	NE ¼ NW ¼	36 acres
	SW ¼ NW ¼	12 acres
	SE ¼ NW ¼	24 acres
	Total	92 acres

(4) Pursuant to South Dakota Water Law 46-5-30.1 Tom Bares, 30736 416th Ave., Tyndall SD 57066 the holder and/or owner of Water Right No. 7830-3 is issued a license to appropriate water, the right to use 1.00 cubic feet of water per second from ground water, two wells (Codell Aquifer) with a priority date of April 15, 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. 7830-3 and subject to the following qualifications:

- 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.
- The wells authorized by Permit No. 7830-3 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. ***Both wells were drilled in 2013 by Hammond Wetmore Drilling. Copies of the well completion reports are 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, Permit No. 7830-3 authorized a maximum diversion rate of 1.78 cfs for the irrigation of 96 acres with an annual volume not to exceed 2 acre-feet per acre per year. *The project as developed is capable of 1.00 cubic feet of water per second for irrigation of 92 acres. The license becomes limited to what was developed.*
- 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 28 2020

date

