

WATER PERMIT NO. 7897-3

Name of Applicant: **Jon Vaske**

Address: **21215 485th Ave, Elkton SD 57026** Phone: **605 695-1511**

Amount of Water Claimed: **3.56 cfs** Total Acres: **300**

Source of Water Supply: **groundwater (3 – 4 wells)**

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

Type of Waste Disposal System:

Location: **1 mile south of Elkton**

PRIORITY Date Received: **1-24-13**

Application/License Fee: **\$ 1250**

Corrected Application Received: **9-10-13**

Period of Annual Use: **May 1 – Sept 30**

Remarks:

Diversion Point: **W 1/2 Sec 28-T109N-R47W**

Land to be Irrigated: **W 1/2 Sec 28-T109N-R47W**

Depth of Well: **40- 50 feet deep**

Well Driller: **Thein Well Drilling**

Remarks:

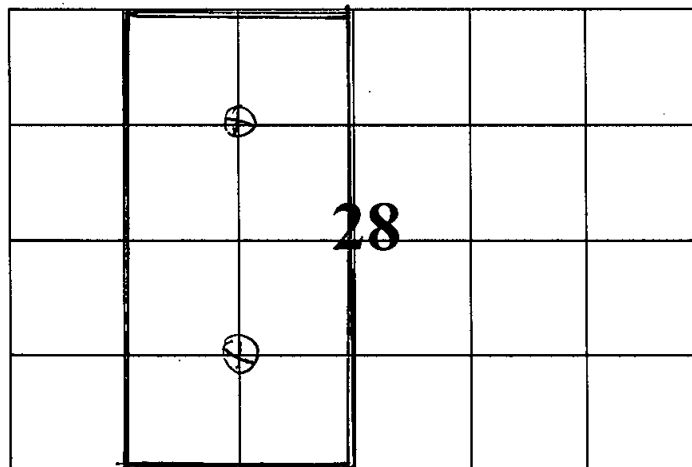
Type of Map: **aerial**

Prepared by:

Reviewed and the Number Assigned on: **9-10-13**

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. 7897-3 Hydrologic Unit 10170202
Basin Sioux River
Newspaper Brookings Register Box 177
Brookings SD 57006

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JAN 24 2013

WATER RIGHTS
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Application For Permit To Appropriate Water For Irrigation

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

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

1. Name to Appear on Irrigation Permit Jon Vaske
(check one) ☒ Owner ☐ Tenant/lessee ☐ Owner's Legal Agent _____
(name and complete address if different than above name)

Mailing Address 21215 485th Ave Elkton SD 57026
(Address) (City) (State) (Zip Code)

Home Phone 605 695-1511 Cell _____ Email _____

2. Amount of water claimed 3.56 *CFS or 1600 **GPM ***AF Total Acreage 300
(*Cubic Feet per Second) (**Gallons per Minute) (***) Acre Feet - storage capacity of dam/dugout or annual use if applicable)

3. Source of water supply Wells

4. Location of point of diversion test logs will be sent later
(example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W)

3-4 wells - located in W1/2 Sec 28 - T109N-R47W County Brookings

5. County or counties where water will be used Brookings

6. Annual period during which water is to be used May 1 - 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
NW 1/4 of the NW 1/4 Sec 28 T109 R47	38	SW 1/4 of the SW 1/4 Sec 28 T109 R47	38
SW 1/4 of the NW 1/4 Sec 28 T109 R47	38	NW 1/4 of the SW 1/4 Sec 28 T109 R47	38
NE 1/4 of the NW 1/4 Sec 28 T109 R47	37	NE 1/4 of the SW 1/4 Sec 28 T109 R47	37
SE 1/4 of the NW 1/4 Sec 28 T109 R47	37	SE 1/4 of the SW 1/4 Sec 28 T109 R47	37

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

I, Jon Vaske, 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. 7897-3**

Date of first receipt of application January 24, 2013.

Date of return to applicant for corrections, amendments or changes January 24, 2013.

Date of receipt of corrected application September 10, 2013.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 7897-3 to Jon Vaske, 21215 485th Ave, Elkton SD 57026 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. 7897-3 appropriates 3.56 cubic feet of water per second from three to four wells to be completed into the Big Sioux: Aurora Aquifer (40-50 feet deep) located in the W 1/2 Section 28 for irrigation of 300 acres located in the W 1/2 Section 28; all in T109N-R47W.
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 – September 30.
3. The date from which applicant may claim right is September 10, 2013.
4. The date of approval of Permit No. 7897-3 is November 4, 2013.
5. One-fifth of the construction is to be completed on or before May 4, 2016.
6. All construction is to be completed on or before November 4, 2018.
7. Water is to be put to beneficial use on or before November 4, 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

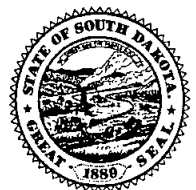
1. The wells approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. The wells authorized by Permit No. 7897-3 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28.
3. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

WATER MANAGEMENT BOARD

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

NOV 21 2013

date



Supplemental Information

(type or print)

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

a) If new wells, how many 2-4 Have test holes been drilled ☒ Yes ☐ No Drilled by Ther's 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 40-50' Depth to Top of Water Bearing Material 30-40' Depth to Water from Surface 35 to 50'

d) Distance to nearest existing domestic well:

On applicant's property On property owned by others 1/2 mile

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)

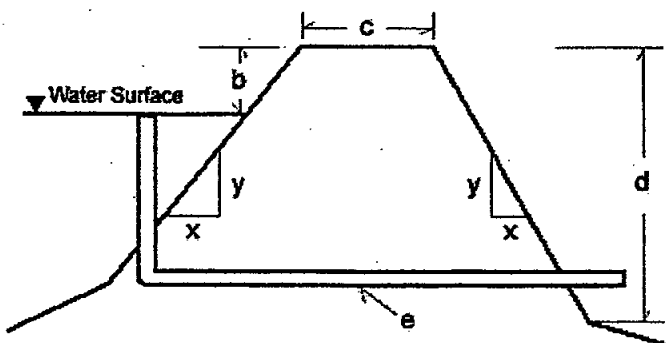
Upstream

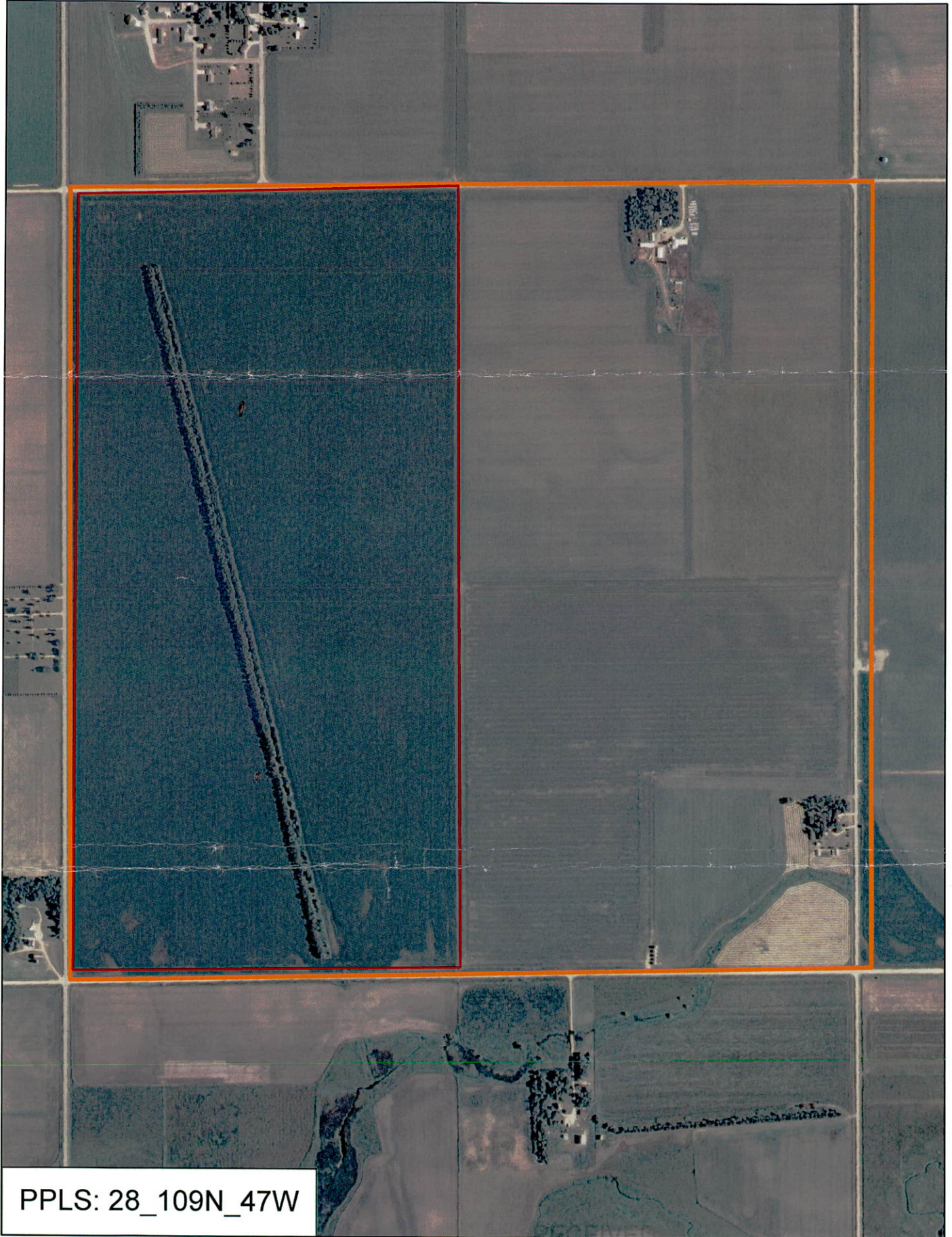
Downstream

h) Surface Area of Impoundment

i) Storage Acre Feet

j) Drainage Area Above Dam Acres





PPLS: 28_109N_47W

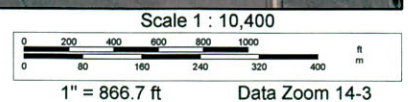
Data use subject to license.

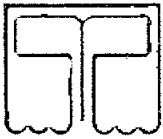
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THEIN WELL

P.O. BOX 778, 11355 HWY. 71 NE (ACROSS FROM RINGO LAKE)
SPICER, MINNESOTA 56288 • (320) 796-2111
www.theinwell.com • E-mail: theinwell@tds.net

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SALES ~ SERVICE

Since 1893

Well Log for John Vaske

Date: 01/18/13

Well Size: TH 3

Casing Length:

Screen Length:

Total Well Depth:

SWL:

Geological Material	Color	Hardness or Formation	From	To
Sandy, silty clay	Black/brown	Medium/hard	0	8
Silty sandy, gravel	Brown	Hard	8	21
Wet sand	Brown	Fine	21	25.5
Wet sand/gravel	Brown	Fine	25.5	28
Wet gravel	Brown	Coarse	28	30.5
Wet sand	Brown/gray	Fine	30.5	48
Sandy clay, till	Gray	Medium	48	50

CLARA CITY, MN 56222 (320) 847-3207 • MONTICELLO, MN 55362 (763) 271-4200 • ROCHESTER, MN 55906 (507) 288-5554

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Well Log for John Vaske

Date: 01/29/13

Well Size: TH 6

Casing Length:

Screen Length:

Total Well Depth:

SWL:

Geological Material	Color	Hardness or Formation	From	To
Top soil			0	2
Clay	Brown		2	4
Gravel			4	24
Clay	Yellow		24	25
Clay	Blue		25	80

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SWL:

MEMBER
AWWA

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date 1/24, 20 13

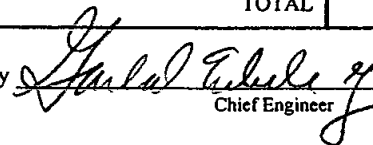
RECEIVED OF Jon Vaske Barm 21215 485th Ave Elkton SD 57026

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

Fee for Application for Permit No. <u>7897-3</u> to Appropriate Water, to construct and to put water to beneficial use	1050	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>7897-3</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	1250 00

No. 0601

By


Chief Engineer



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

January 24, 2013

Jon Vaske
21215 485th Ave
Elkton SD 57026

Dear Mr. Vaske:

Thank you for submitting the *Application for a Permit to Appropriate Water* for irrigation in Brookings County. In order to complete the application, the following is required.

- Enclosed is the Form 2A, Supplemental Information. Please complete Item No. 1 regarding the Well Information. At the very least, we need the proposed depth of the well(s). Your well driller should be able to give you an estimate depth for your proposed well locations.
- Are the wells to be located in the approximate centers of the NW 1/4 and SW 1/4 Section 28-T109N-R47W?

If you have any questions, please contact me.

Sincerely,

Karen Schlaak

Karen Schlaak
Water Rights Program
605 773-3352
karen.schlaak@state.sd.us

enclosure



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

denr.sd.gov

July 30, 2013

Jon Vaske
21215 485th Ave
Elkton SD 57026

Dear Mr. Vaske:

On January 24, 2013, you submitted an *Application for Permit to Appropriate Water Within the State of South Dakota for Irrigation*. You were notified what additional information was required to complete the application. A copy of that letter is enclosed. To date, we have not received the required information.

Obtaining a water permit that accurately reflects your water use ultimately benefits you by protecting your right to use water. Except for domestic use, any water user without a water right is not entitled to receive protection in the event of interference by a new or future user who has a water right.

Pursuant to South Dakota Codified Laws 46-1-15, 46-5-9, 46-5-10 and 46-2-18, you must have a water permit prior to using water.

If you have any questions, please contact me.

Sincerely,

Karen Schlaak
Water Rights Program
Phone: (605) 773-3352
karen.schlaak@state.sd.us

enclosure

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SEP 10 2013

WATER RIGHTS
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Sept 9th, 2013

DENR - Water Rights
Attn: Karen Schlaak
523 East Capital Ave
Pierre, SD 57501-3182

Dear Karen:

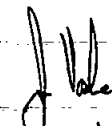
Please see the enclosed information including Form 2A, Supplemental Information.

I have enclosed data from seven (7) Test Holes drilled on this property. After harvest is completed this fall, my plan is to have more Test Holes drilled.

After these holes have been drilled, I will determine the best location for Irrigation Wells on this site.

Due to the nature of this site, I may have three (3) to four (4) wells total.

Please Contact me with any questions.


Jon Vaske
(605) 695-1511

Water Rights Program - File Documentation

NAME: Jon Vaske

ADDRESS: Elkton SD 57026

DATE: 9-10-13 **COUNTY:** Brookings **TELEPHONE:** 605 695-1511

RE: Pending Application

COMMENTS:

Jon Vaske clarified that the 3 to 4 wells will be located within the W 1/2 Sec 28-T109N-R47W. He does not own any of the adjacent land.

From the test well information he has right now, it appears the production wells will probably be located more in the NW 1/4. The actual locations won't be determined until further test holes are drilled this fall



Karen Schlaak
Water Rights Program



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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denr.sd.gov

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 7897-3, Jon Vaske**

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. 7897-3, Jon Vaske, 485th Avenue, Elkton SD 57026.

The Chief Engineer is recommending APPROVAL of Application No. 7897-3 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. 7897-3 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28.
3. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

See report on application for additional information.

Jeanne Goodman, Chief Engineer
October 17, 2013

REPORT TO THE CHIEF ENGINEER

WATER PERMIT APPLICATION NO. 7897-3

Jon Vaske

September 24, 2013

Water Permit Application No. 7897-3 proposes to appropriate water at a maximum diversion rate of 3.56 cubic feet per second (cfs) from three to four wells to be completed into the Aurora management unit of the Big Sioux aquifer. The wells are expected to be approximately 40 to 50 feet deep, located in the W½ of Section 28, T109N-R47W in Brookings County. Water will be used to irrigate 300 acres located in the W½ of Section 28, T109N-R47W.

AQUIFER: Aurora management unit of the Big Sioux aquifer (BS: A)

HYDROGEOLOGY:

The Big Sioux aquifer is an alluvium mantled outwash consisting of silt and fine to coarse sand and gravel that is generally under unconfined conditions near the Big Sioux River and can be confined elsewhere. The aquifer is hydraulically connected to the Big Sioux River and water in the aquifer generally moves from north to south and locally towards the Big Sioux River (Hamilton, 1989). The Aurora management unit of the Big Sioux aquifer underlies approximately 83,000 acres in Brookings and Moody Counties in South Dakota and Lincoln and Pipestone Counties in Minnesota. In the center of T109N-R47W, groundwater flow in the aquifer divides: flowing west-northwest in the southern portion and flowing southwest in the southern portion, essentially creating subunits of the Aurora management unit. The southern subunit, where the proposed well sites are located, underlies approximately 20,000 acres all in Brookings County (Buhler, 2012).

In Brookings and Kingsbury Counties, the top of the Big Sioux: Aurora aquifer is encountered from ground surface to 212 feet below ground surface, the aquifer is 30 feet thick on average, and depth to water in the aquifer ranges from ground surface to 120 feet below ground surface. In the area of the proposed well sites, the aquifer is expected to be encountered from just below ground surface to approximately 50 feet below ground surface (Hamilton, 1989). From the seven test hole logs submitted with the application, sand and gravel was found from two to 48 feet below ground surface in the area of the proposed well sites. The aquifer materials in this area are often 20 to 30 feet thick. The static water in this area of the aquifer is often 20 feet below ground surface (Water Rights, 2013a).

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. Therefore, the withdrawal/recharge issue must be considered.

Hydrologic Budget:*Recharge:*

Recharge to the Big Sioux: Aurora aquifer occurs through infiltration of precipitation in areas where the aquifer is at or near land surface, seepage through till, lake deposits, and underlying aquifers, and inflow from the Big Sioux River during wet years (Hamilton, 1989).

Hedges and others (1985) determined the average recharge to the entire Big Sioux aquifer system by base flow analysis to be 6.5 inches per year (in/yr). Koch (1980) estimated average recharge to the Big Sioux aquifer in Brookings, Deuel, and Hamlin Counties by modeling to be 6.57 in/yr to the unconfined portions. Hansen (1988) estimated recharge to the Big Sioux aquifer in Moody County by modeling to be on average 4.85 in/yr. Hedges and others (1985) estimated recharge specifically of the Aurora management unit by observation well analysis to be 5.0 in/yr; this is considered the best data available due to its emphasis on the management unit.

Koch (1980) indicates that even more water could be pumped than the estimated average recharge based on the concept of induced recharge from surface waters due to pumpage and capture of water to pumpage prior to evapotranspiration or natural outflow.

Applying the recharge rate of the Aurora management unit of 5.0 in/yr and the area of the subunit of 20,000 acres, recharge to the southern subunit of the Big Sioux: Aurora aquifer is estimated to be 8,300 ac-ft/yr.

Discharge:

Discharge from the Big Sioux: Aurora aquifer occurs through evapotranspiration in areas where the aquifer is at or near land surface, outflow to streams during dry years, and well withdrawals. There are a total of 11 water rights, nine water permits appropriating water, and one future use permit reserving water from the southern subunit of the Big Sioux: Aurora aquifer (Water Rights, 2013b).

Lincoln Pipestone Rural Water System (RWS) has one water permit, No. 7392-3, appropriating 614 ac-ft/yr and one future use permit, No. 7393-3, reserving 614 ac-ft/yr. The City of Elkton is now connected to a rural water system, and the water right, No. 4038-3, is maintained as a standby source (Water Rights, 2013b).

In Minnesota the Lincoln Pipestone RWS is the only user of the southern subunit of the Big Sioux: Aurora other than domestic wells. While this withdrawal is not within the State of South

Dakota, the withdrawal is still from the aquifer and must be accounted for. In Minnesota the Lincoln Pipestone RWS is authorized a combined withdrawal of 683 million gallons per year, the equivalent of 2,096 ac-ft/yr (Buhler, 2012).

The amount of water that can be expected to be withdrawn by non-irrigation use water rights/permits and future use permits at the current appropriation/reservation amount can be estimated by assuming:

- 1) water rights/permits limited by an annual volume will pump the entire volume appropriated annually,
- 2) future use permits can be fully developed, and
- 3) water rights/permits authorized to municipalities using rural water systems as a primary source will not be used.

Considering these water use expectations, 1,228 ac-ft/yr is estimated to be withdrawn from the southern subunit of the Big Sioux: Aurora aquifer due to non-irrigation water rights/permits and the future use permit (Water Rights, 2013b).

While there are numerous domestic wells on file, many are no longer used as primary sources since rural water systems have been introduced in the area. Considering this, and the relatively small withdrawal ability and authorization of a domestic well, the annual quantity of water withdrawn due to domestic wells is not significant to the hydrologic budget of the Big Sioux: Brookings aquifer (Water Rights, 2013c).

The irrigation development of the southern subunit of the Big Sioux: Aurora aquifer over the period of record, 1979 to 2012, has remained fairly constant. However, in recent years, development has increased slightly. The annual withdrawal from the Big Sioux: Aurora aquifer fluctuates, as shown in Figure 1. Over the period of record, the average annual pumpage is 640 ac-ft/yr, but varies from a minimum of 132 ac-ft/yr to a maximum of 1,611 ac-ft/yr. This wide range of annual irrigation pumpage can be attributed to several unpredictable factors, namely economic and climatic conditions (Water Rights, 1980-2013). The expected use of irrigation water rights/permits is estimated to be the average pumpage reported over the entire period of record. Since 2012, 744 additional acres have been permitted for irrigation, so average annual use could increase (Water Rights, 2013b).

Hydrologic Budget:

The average annual withdrawal is estimated to be 3,964 ac-ft/yr, which is much less than the estimated annual recharge of 8,300 ac-ft/yr. Therefore, unappropriated water is available from the southern subunit of the Big Sioux: Aurora aquifer to support the proposed appropriation.

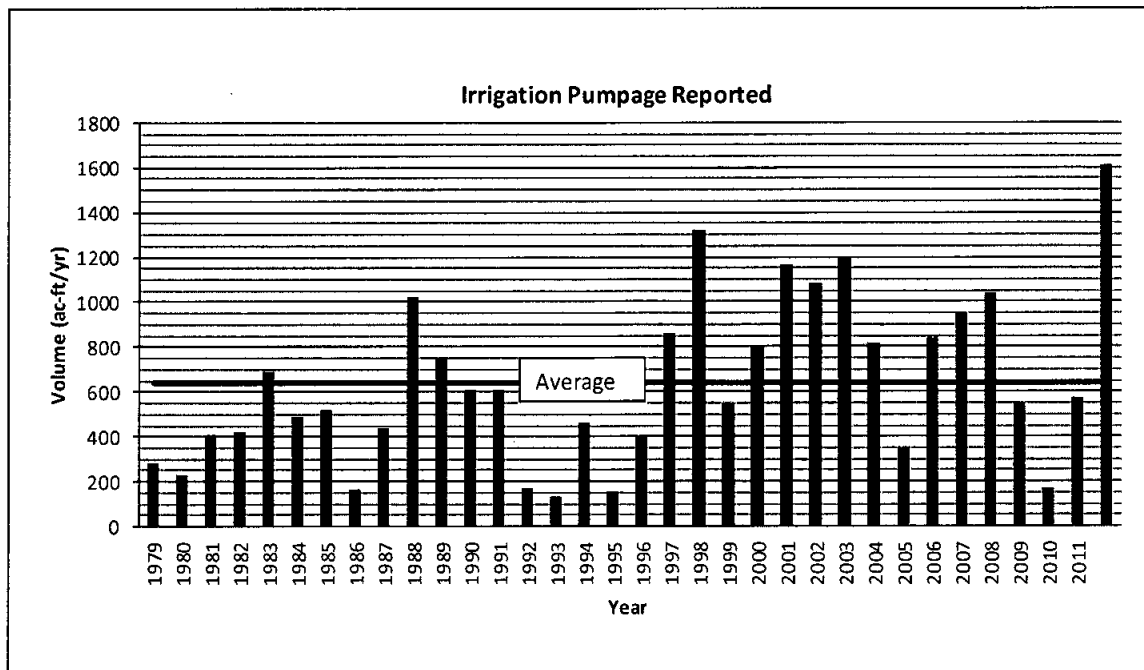


Figure 1: Historic irrigation water use from the southern subunit of the Big Sioux: Aurora aquifer (Water Rights, 1980-2013)

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 one observation well completed into the southern subunit of the Big Sioux: Aurora aquifer. This observation well, BG-78H, is located approximately two miles south of the proposed well sites. The hydrograph of this well is shown in Figure 2 (Water Rights, 2013a).

Water levels in this observation well display cyclic conditions, recharging during wet years and declining during dry years. The data documents that at the current level of development temporal well withdrawal is masked by climatic conditions and recharge to and natural discharge from the aquifer exceeds well withdrawal. Therefore, unappropriated water is available from the southern subunit of the Big Sioux: Aurora aquifer to support the proposed appropriation.

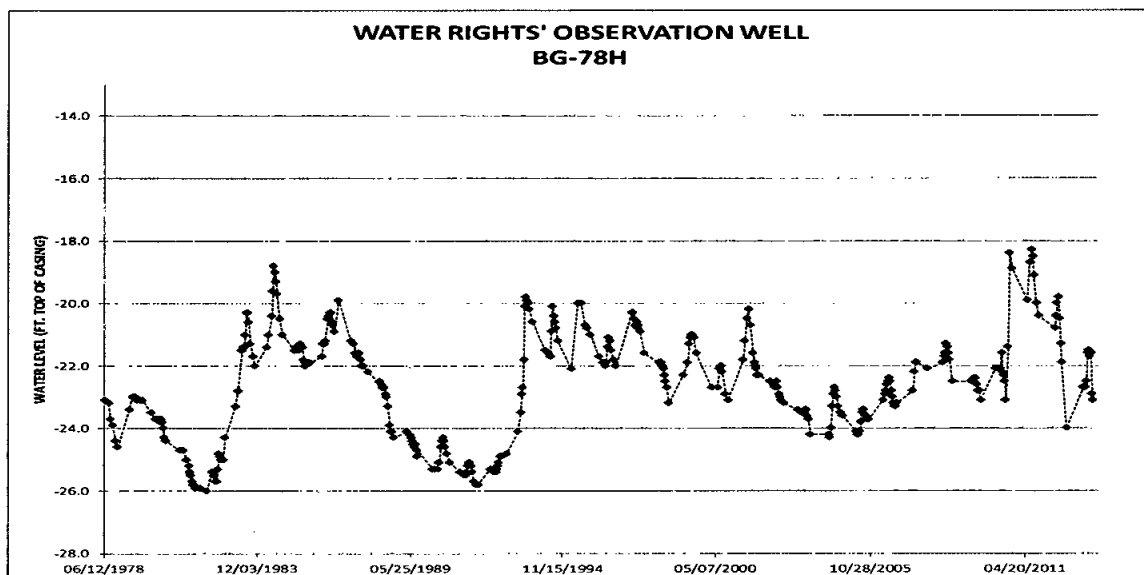


Figure 2: Hydrograph for observation well BG-78H (Water Rights, 2013a)

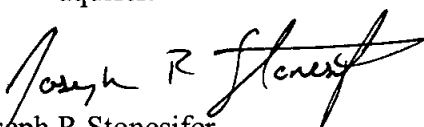
EXISTING WATER RIGHTS:

There are several wells completed into the Big Sioux: Aurora aquifer in the area of the proposed well sites. Because the exact locations of the proposed well sites are not yet determined, many wells in the area could potentially be located within one mile of a proposed well (Water Rights, 2013b; Water Rights, 2013c).

The water table conditions of the aquifer in this area dictate that drawdown due to pumping would probably not extend far from the proposed well sites. The Water Management Board has consistently recognized that to place water to maximum beneficial use a certain amount of drawdown may occur. Therefore, nearby adequate wells are not expected to be adversely or unlawfully impaired by the proposed diversions. However, if approved, the water permit holder should be required to control withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.

CONCLUSIONS:

1. This water permit application proposes to appropriate water at a maximum diversion rate of 3.56 cfs from three to four wells to be completed into the Big Sioux: Aurora aquifer for irrigation use. The wells are expected to be approximately 40 to 50 feet deep, located in Brookings County.
2. Unappropriated water is available from the southern subunit of the Big Sioux: Aurora aquifer to supply the proposed appropriation.
3. The proposed diversions at the proposed well locations are not expected to adversely or unlawfully impair existing nearby adequate wells completed into Big Sioux: Aurora aquifer.


 Joseph R Stonesifer
 SD DENR-Water Rights Program

Approved by



Ken Buhler
SD DENR-Water Rights Program

REFERENCES:

- Buhler, K. 2012. Report on Water Permit Application Nos. 7392-3 and 7393-3 for Lincoln Pipestone Rural Water: SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.
- Hamilton, L.J. 1989, Water Resources of Brookings and Kingsbury Counties, South Dakota: U.S. Geological Survey Water-Resources Investigations Report 88-4185, 82 p.
- Hansen, H.S. 1988. Appraisal of the Water Resources of the Big Sioux Aquifer, Moody County, South Dakota. Water-Resources Investigations Report 87-4057. USGS, Huron, South Dakota.
- 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. U.S. Army Corps of Engineers Contract DACW 45-80-C-0185.
- Koch, N.C., 1980, Appraisal of the Water Resources of the Big Sioux Aquifer, Brookings, Deuel, and Hamlin Counties, South Dakota: U.S. Geological Survey Water-Resources Investigations 80-100, 46 p.
- Water Rights. 1980-2013. "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.

OCT 30 2013

WATER RIGHTS
PROGRAM

Affidavit of Publication

State of South Dakota

ss

County of Brookings

Jennifer Milligan of said county, first duly sworn, on oath, says: That she is the office clerk of THE BROOKINGS REGISTER, a daily newspaper, printed and published in the City of Brookings, in said County of Brookings, and State of South Dakota; that she has full and personal knowledge of the facts herein stated; that said newspaper is a legal newspaper and has a bona fide circulation of at least two hundred copies of each issue daily; that said newspaper has been published within the said County of Brookings and State of South Dakota, for more than one year prior to the first publication of Exhibit "A," hereto attached and herein mentioned, and was and is printed that the

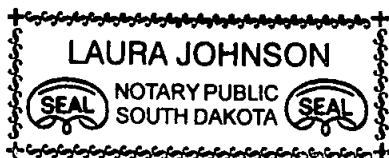
Leg#685 Notice on App#7897-3- Vaske

same was published, is hereto attached marked Exhibit said newspaper for _____ 1 times, to-wit:

October 24, 2013

said Exhibit "A" inures to the sole benefit for the publishers of said newspaper; that no agreement or understanding for the division thereof has been made with any other person, and that no part thereof has been agreed to be paid to any person whomsoever; that the fees charged for the publication thereof are:

twenty-four dollars and eighteen cents \$24.18



25th day of

October

2013

Notary Public in and for the County of Brookings, South Dakota
My Commission expires August 3, 2017.

10/

Legal 685, 1x, 10/24
NOTICE OF APPLICA-
TION NO. 7897-3 to
Appropriate Water
Notice is given that Jon
Vaske, 21215 485th
Ave, Elkton SD 57026
has filed
an application for a
water permit to appro-
priate 3.56 cubic feet of
water
per second from three
to four wells to be com-
pleted into the Big
Sioux:Aurora Aquifer
(40-50 feet deep) locat-
ed in the W 1/2 Section
28 for
irrigation of 300 acres
located in the W 1/2
Section 28; all in
T109N-R47W.
Pursuant to SDCL 46-
2A-2, the Chief
Engineer recommends
APPROVAL of
Application No. 7897-3
because 1) unappropri-
ated 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 recom-
mended,
unless a petition is filed
opposing the applica-
tion or the applicant files
a
petition contesting the
Chief Engineer's recom-
mendation. If a petition
opposing the applica-
tion or contesting the
recommendation is
filed, then a
hearing will be sched-
uled 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 support-
ing 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 recommen-
dation. The Chief
Engineer's address is
"Water Rights
Program, Foss Building,
523 E Capitol, Pierre
SD 57501 (605 773-
3352)" and
the applicant's mailing
address is given above.
A petition filed by either
an interested person or
the applicant must be
filed by November 4,
2013.

The petition may be
informal, but must
include a statement
describing the
petitioner's interest in
the application, the peti-
tioner'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 infor-
mation pertaining to this
application. Steven M.
Pirner, Secretary,
Department of
Environment and
Natural Resources.
Published once at the
total approximate cost
of \$24.18.



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

denr.sd.gov

October 17, 2013

Brookings Register
PO Box 177
Brookings SD 57006

ATTENTION: Legal Public Notice

Enclosed is a Notice on Application No. 7897-3 to Appropriate Water. Please publish the notice once on October 24, 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 Jon Vaske, 21215 485th Ave, Elkton SD 57026 (Ph # 605-695-1511).

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.

October 17, 2013

Jon Vaske
21215 485th Ave
Elkton SD 57026

Dear Mr. Vaske:

Water Permit Application No. 7897-3 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 Brookings Register printed at Brookings SD (Ph # 605-692-6271). 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 October 24, 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. 7897-3 to Appropriate Water

Notice is given that Jon Vaske, 21215 485th Ave, Elkton SD 57026 has filed an application for a water permit to appropriate 3.56 cubic feet of water per second from three to four wells to be completed into the Big Sioux:Aurora Aquifer (40-50 feet deep) located in the W 1/2 Section 28 for irrigation of 300 acres located in the W 1/2 Section 28; all in T109N-R47W.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 7897-3 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. In accordance with SDCL 46-2A-23, the Chief Engineer will act on this application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the Chief Engineer's recommendation. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled and the Water Management Board will consider this application. Notice of the hearing will be given to the applicant and any person filing a petition.

Any person interested in opposing or supporting this application or recommendation must file a written petition with BOTH the applicant and Chief Engineer. The applicant must file a petition if contesting the Chief Engineer's recommendation. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by November 4, 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

NOV 21 2013

Jon Vaske
21215 485th Ave
Elkton SD 57026

Dear Mr. Vaske:

Enclosed is Water Permit No. 7897-3 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

7897-3



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

December 17, 2013

7560-3
7897-3

Jon Vaske
21215 485th Ave
Elkton SD 57026

Dear Mr. Vaske:

Thank you for calling with the water use information for your water permits and for the two you operate for Witte Ag Partnership.

I completed irrigation questionnaires for you based on our phone conversation. I have enclosed copies for your records and also an extra copy for you to send to Witte Ag Partnership.

The completion of works form you requested is also included with this correspondence. If you have any questions concerning your permits or any of the enclosed copies, please give us a call.

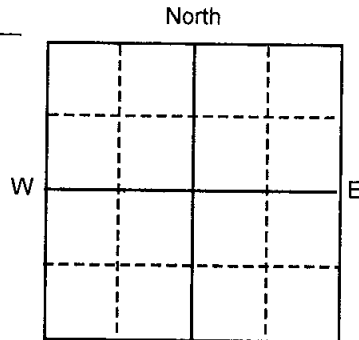
Sincerely,

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

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

SOUTH DAKOTA WATER WELL COMPLETION REPORT

11-02

Location NW ¼ NW ¼ Sec 28 Twp 109N Rg 47WCounty BrookingsPlease mark well
location with an "X"

Well Completion Date

April 16, 2015

1 Mile

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

PROPOSED USE:

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

METHOD OF DRILLING:

Rotary

CASING DATA:

☐ Steel ☒ Plastic ☐ Other

If other describe

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
LB/FT	<u>12.00</u> IN	<u>0.0</u> FT	<u>35.0</u> FT	<u>17.50</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>16</u>	Lb/gal	<u>0.0</u> Ft	<u>31.0</u> Ft
		Lb/gal	Ft	Ft

Describe grouting procedure
tremie piped

SCREEN:

☐ Perforated pipe ☒ Manufactured
 Diameter 12.00 Inches Length 10.0 Feet
Material stainless steelSlot Size .050 Set From 35.0 Feet to 45.0 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? chlorinated
☐ No, Why Not?
Lab to which water
quality sample sent for analysis

n/a

Well Owner: Jon Vaske

Business Name:

Address: 21215 485th AveCity, State, Zip: Elkton SD 57026

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
Top soil	0	2
Brown clay	2	7
Gravel	7	45
Gray clay	45	49

STATIC WATER LEVEL 15.5 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

30.3 Ft. After 6.0 Hrs. pumped 298.0 GPM

_____ Ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate: _____ GPM

REMARKS

Well #2

GPS: N 44 13 30.44

W 96 28 55.47

RECEIVED

FEB 01 2016

WATER RIGHTS
PROGRAM

Brg Sioux: AURORA NR

This well was drilled under license # 475 and this
report is true and accurate.Drilling firm: Thein Well Co., Inc.

Signature of License Representative:

Signature of Well Owner or Equitable Property Holder:

Date:

7897-3

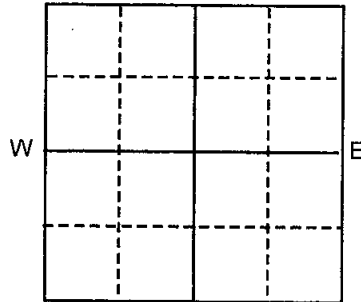
SD EForm - 1621LD V1

SOUTH DAKOTA WATER WELL COMPLETION REPORT

11-02

Location NE 1/4 NW 1/4 Sec 28 Twp 109N Rg 47WWell Owner: Jon VaskeCounty Brookings

North

Please mark well
location with an "X"

Well Completion Date

March 24, 2015

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

PROPOSED USE:

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

METHOD OF DRILLING:

Rotary

CASING DATA:

☐ Steel ☒ Plastic ☐ Other

If other describe

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
LB/FT	12.00 IN	0.0 FT	34.0 FT	17.50 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	18	Lb/gal	0.0 Ft	30.0 Ft
		Lb/gal	Ft	Ft

Describe grouting procedure
tremie piped

SCREEN:

☐ Perforated pipe ☒ Manufactured
Diameter 12.00 Inches Length 10.0 FeetMaterial stainless steelSlot Size .070 Set From 34.0 Feet to 44.0 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? chlorinated
Lab to which water
quality sample sent for analysis

n/a

Business Name:

Address: 21215 485th AveCity, State, Zip: Elkton SD 57026

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
Top soil	0	8
Coarse sand & gravel	8	44
Blue Clay	44	44

STATIC WATER LEVEL 17.3 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

30.3 Ft. After 6.0 Hrs. pumped 140.0 GPM

_____ Ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate: _____ GPM

REMARKS

Well #1

GPS: N 44 13.341

W 96 28.555

RECEIVED

FEB 01 2016

WATER RIGHTS
PROGRAM

Big Sioux: Aurora RB

This well was drilled under license # 475 and this
report is true and accurate.Drilling firm: Thein Well Co., Inc.

Signature of License Representative:

Signature of Well Owner or Equitable Property Holder:

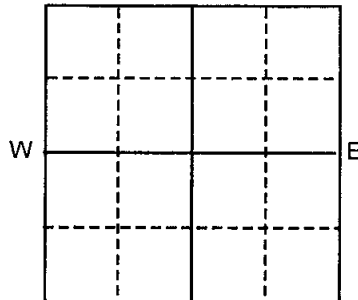
Date:

SOUTH DAKOTA WATER WELL COMPLETION REPORT

11-02

Location SE 1/4 SW 1/4 Sec 28 Twp 109N Rg 47WWell Owner: Jon VaskeCounty Brookings

North

Please mark well
location with an "X"

Business Name: _____

Address: 21215 485th AveCity, State, Zip: Elkton SD 57026

WELL LOG:

DEPTH

FORMATION	FROM	TO
Top soil	0	5
Gravel	5	42

Well Completion Date

October 13, 2015

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

75.0 ft. from septic (identify source)

PROPOSED USE:

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

METHOD OF DRILLING:

Rotary

CASING DATA:

☒ Steel ☐ Plastic ☐ Other

If other describe _____

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
LB/FT	<u>12.00</u> IN	<u>0.0</u> FT	<u>32.0</u> FT	<u>17.50</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>15</u>	<u>Lb/gal</u>	<u>0.0</u> Ft.	<u>30.0</u> Ft
		<u>Lb/gal</u>	<u> </u> Ft	<u> </u> Ft

Describe grouting procedure
tremie piped

SCREEN:

☐ Perforated pipe ☒ Manufactured
 Diameter 12.00 Inches Length 10.0 Feet
Material stainless steelSlot Size .050 Set From 32.0 Feet to 42.0 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? chlorinated☐ No, Why Not? _____Lab to which water
quality sample sent for analysisn/a

STATIC WATER LEVEL

15.0 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

24.5 Ft. After 6.0 Hrs. pumped 260.0 GPM

_____ Ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate: _____ GPM

REMARKS

Well #3

GPS: N 44 12.745

W 96 28.559

RECEIVED

FEB 01 2016

WATER RIGHTS
PROGRAMBig Sioux: Aurora 103This well was drilled under license # 475 and this
report is true and accurate.Drilling firm: Thein Well Co., Inc.

Signature of License Representative: _____

Signature of Well Owner or Equitable Property Holder: _____

Date: _____

Report of Examination of Works and/or Application of Water to Beneficial Use For Permit No. 7897-3

I have this day, June 9, 2021, made a thorough examination of the water use system constructed by Jon Vaske 21215 485th Ave, Elkton, SD 57026 of Permit No. 7897-3, bearing the priority of September 10, 2013 authorizing the diversion of 3.56 cu. ft. per second of the waters of the Big Sioux: Aurora Aquifer for irrigation purposes, in Brookings County.

A. Works used to divert the water:

Well Information:

- 1) Well Drilling Firm: Thein Well Co, Inc
- 2) No. of Wells 3
- 3) Depth(s) 44, 45 & 42 feet
- 4) Well log is available Y

Casing:

- 1) Diameter 12 inches
- 2) Length 34, 35 & 30 feet
- 3) Type Plastic, Plastic & steel

Screen:

- 1) Type stainless steel
- 2) Length 10 feet
- 3) Static water level 17, 15 & 15 feet

Pump:

- 1) Make NA
- 2) Model Submersible
- 3) Size NA
- 4) Capacity 150, 250 & 300

GPM

Motor:

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

B. Works used to transport water to place of use: 5,200 plus feet of buried main line plastic pipe

C. Works used to apply water to beneficial use: See Section F

Chemigation Equipment:

- 1) Does chemigate Y (See section F)

D. Compliance with Permit Requirements:

- 1) Permit qualifications being abided by Y
- 2) Irrigation Questionnaires checked to determine if permit owner started irrigation by the end of construction period Y
- 3) Exceptions to compliance are: None

E. Condition and Location:

1. The system is in **excellent** condition with the point(s) of diversion located as follows: **From NW corner of Sec 28 T109N-R47W – (WELL 1) 20 ft S & 900 ft E, Lat 44.22519 Long -96.48242 (NW ¼ NW ¼) (WELL 2) 2020 ft S & 2600 ft E, Lat 44.21979 Long -96.47602 (SE ¼ NW ¼) From SW corner of Sec 28 T109N R47W – (WELL 3) 530 ft N & 2600 ft E, Lat 44.212245 Long -96.47581 (SE ¼ SW ¼).**
2. The works are capable of diverting and conveying to the place of use **1.56** cu. ft. per second of water which is to be used for **irrigation**. Water has been put to beneficial use to the maximum extent as follows:

All land in Sec 28-T109N-R47W

NW1/4 NW 1/4 - 38 ac
NE 1/4 NW 1/4 - 37 ac
SE 1/4 NW 1/4 - 37 ac
SW 1/4 NW 1/4 - 38 ac

NW1/4 SW 1/4 - 38 ac
NE 1/4 SW 1/4 - 37 ac
SE 1/4 SW 1/4 - 37 ac
SW 1/4 SW 1/4 - 38 ac

comprising a total of **300** acres of land and the license should be issued for **1.56** cfs (the 3 wells are only capable of 700 gpm or 1.56 cfs)

3. All structures, wells and lands on map Y

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

This is unique NETAFIM irrigation system for South Dakota in that water is applied through a buried subsurface drip irrigation system where the drip lines are at a 12-inch depth and are spaced 60 inches apart. The individual drip emitters are at a 30-inch spacing along the driplines. There are 18 water management zones in the 300-acre field. This irrigation system has an extensive, commercial chemigation capability which is being used and has ground water pollution prevention equipment in place. Fertilizer has been and will continue to be applied through the system.

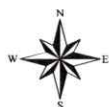
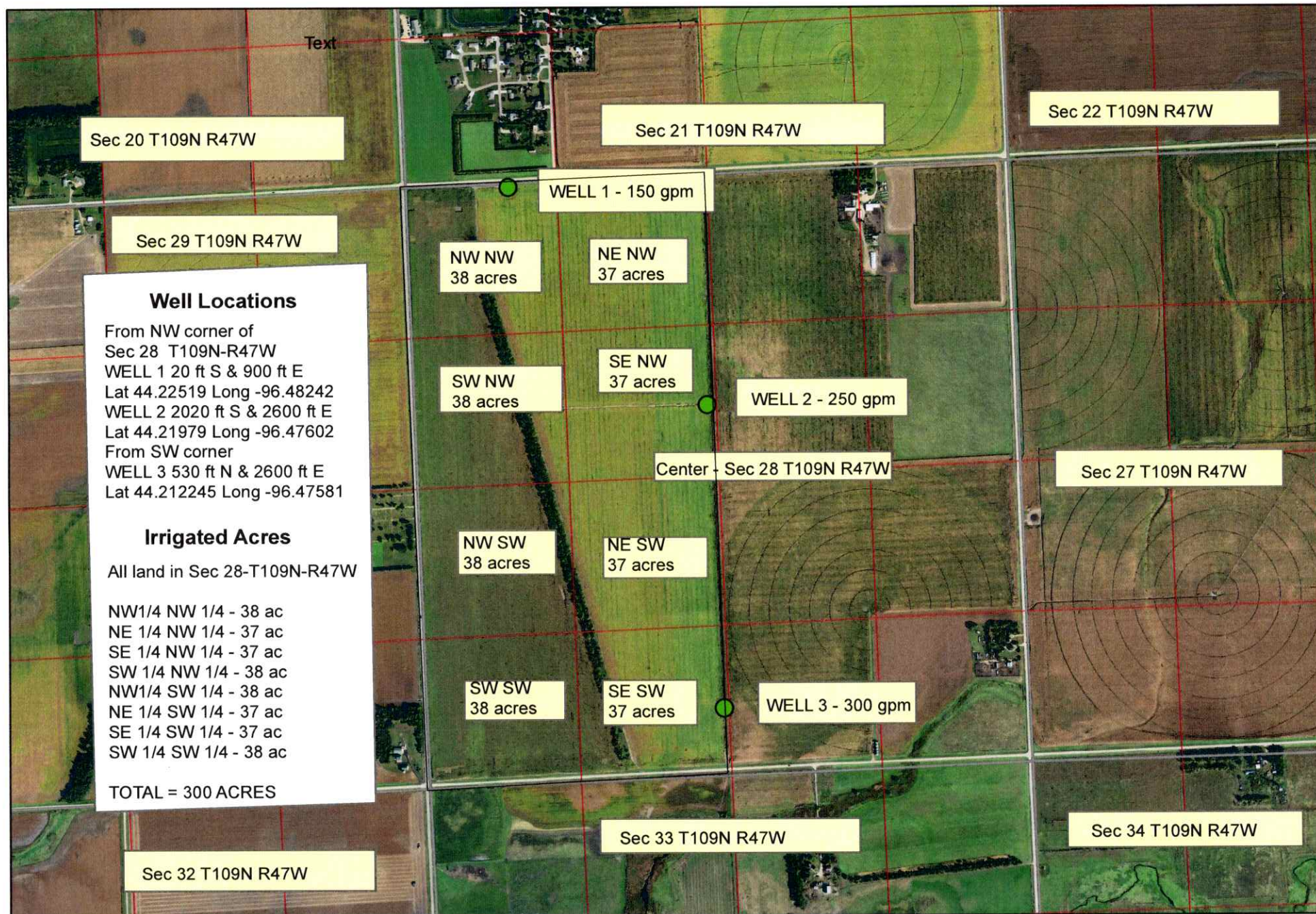
Jon Vaske is the Permit holder and can be contacted at 605/695-1511 as shown on Permit documentation.

The irrigated acreage has a tree belt running diagonally across the field which decreases the available area for irrigation. Irrigated acreage values were determined by using FSA maps and ArcMAPS software.



Darrell W DeBoer
Water Rights Inspector
DANR, Water Rights Program

Date report completed: **June 10, 2021**



0 0.15 0.3 0.6 0.9 1.2 Miles



Darrell DeBoer
Water Right Inspector
DANR-Water Rights Program



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**
JOE FOSS BUILDING
523 E. CAPITOL AVE
PIERRE SD 57501-3182
danr.sd.gov

7897-3

JUN 17 2021

Jon Vaske
21215 485th Ave
Elkton SD 57026

Dear Mr. Vaske:

Enclosed is Water License No. 7897-3. 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, State Water Laws provide that you have a continuing right to use the water. If you have any questions, please contact our office.

Sincerely,

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

enclosures

STATE OF SOUTH DAKOTA

WATER LICENSE NO. 7897-3

(1) Jon Vaske, 21215 485th Ave., Elkton SD 57026 made Application No. 7897-3, January 24, 2013 for a water permit to divert 3.56 cubic feet of water per second from ground water, up to 4 wells (Big Sioux Aurora Aquifer), Brookings County, South Dakota for irrigation purposes. Permit No. 7897-3, with a priority date of September 10, 2013 was approved November 4, 2013 and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before November 4, 2018 and for the application to beneficial use of water on or before November 4, 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 1.56 cubic feet of water per second for beneficial use. The location of the three wells developed for irrigation are as follows:

Well #1: 20'S and 900'E of the NW corner of Section 28, T109N, R47W (NW ¼ NW ¼)
Latitude 44.22519 Longitude -96.48242

Well #2: 2,020'S and 2,600'E of the NW corner of Section 28, T109N, R47W (SE ¼ NW ¼)
Latitude 44.21979 Longitude -96.47602

Well #3: 530'N and 2,600'E of the SW corner Section 28, T109N, R47W (SE ¼ SW ¼)
Latitude 44.212245 Longitude -96.47581

(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:

T109N, R47W Section 28	NW ¼ NW ¼	38 acres	NW ¼ SW ¼	38 acres
	NE ¼ NW ¼	37 acres	NE ¼ SW ¼	37 acres
	SE ¼ NW ¼	37 acres	SE ¼ SW ¼	37 acres
	SW ¼ NW ¼	38 acres	SW ¼ SW ¼	38 acres
		300 acres		

(4) Pursuant to South Dakota Water Law 46-5-30.1 Jon Vaske, 21215 485th Ave., Elkton SD 57026 the holder and/or owner of Water Right No. 7897-3 is issued a license to appropriate water, the right to use 1.56 cubic feet of water per second from ground water, three wells (Big Sioux Aurora Aquifer) with a priority date of September 10, 2013 from the locations 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. 7897-3 and subject to the following qualifications:

- The wells 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 water right 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.

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- The wells authorized by Permit No. 7897-3 shall be constructed by a licensed well driller and construction of the wells and installation of the pumps 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 three wells were drilled in 2015 by Thein Well Company Inc. Copies of the well completion reports are on file with the Water Rights Program.***
- This Water Right is approved subject to the irrigation water use questionnaire being submitted each year.

Eric Gronlund

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

JUN 17 2021

date

