

WATER PERMIT NO. 7978-3

Name of Applicant: Rita or Chad Svatos

Address: 38115 295th St, Lake Andes SD 57356 Phone: 605 491-7451

Amount of Water Claimed: 2.0 cfs Total Acres: 140

Source of Water Supply: groundwater (one well)

Water to be used for: irrigation County: Charles Mix

Type of Waste Disposal System:

Location: 6 miles east of Lake Andes

PRIORITY Date Received: 2-28-2014 Application/License Fee: \$ 1050

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

Remarks:

Diversion Point: NE 1/4 NW 1/4 Sec 4-T96N-
R64W

Land to be Irrigated: W 1/2 NW 1/4, E 1/2 NE 1/4
Sec 4-T96N-R64W

Depth of Well: 290

Well Driller: Heine Electric & Irrigation

Remarks:

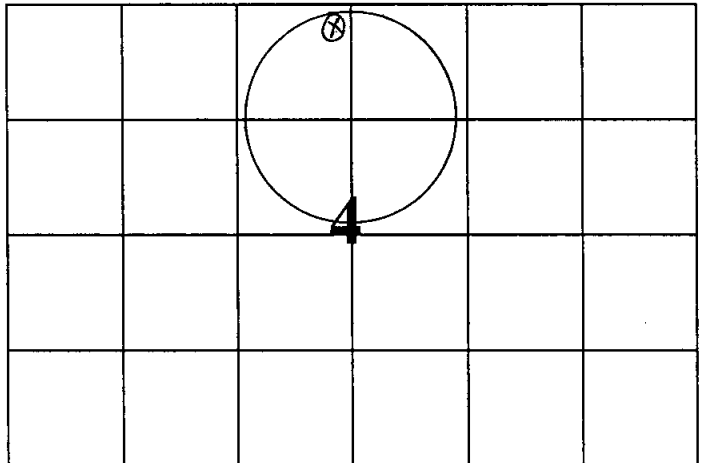
Type of Map: aerial

Prepared by:

Reviewed and the Number Assigned on: 3-3-2014

By: Karen Schlaak

Notice of Hearing - date to intervene: _____



FORM 2: Application for irrigation in South Dakota

(type or print)

Mail to: PMB 2020 DENR - Water Rights 523 E Capitol Ave Pierre, SD 57501-3182 ph. (605) 773-3352	No. <u>7978-3</u> (office use only) Hydrologic Unit <u>10140101</u>
	Basin <u>Missouri River</u> <u>605-384-5616</u>
	Newspaper <u>Wagner Post Box 187 Wagner SD 57380</u> <u>605-996-5514</u>
	<u>Daily Republic Box 1288 Mitchell SD 57301</u>

RECEIVED

FEB 28 2014

WATER RIGHTS
PROGRAM

Application For Permit To Appropriate Water For Irrigation

Type of Application: ☒ New ☐ Vested Right ☐ Amendment/Correction to Permit No. _____

(Use predates Mar 2, 1955)

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

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

Mailing Address 38115 295th St Lake Andes SD 57356
 (Address) (City) (State) (Zip Code)

Home Phone 487-7222 Cell 491-7451 Email _____

2. Amount of water claimed 2.0 *CFS or 900 ~~GPM~~ **GPM _____ ***AF Total Acreage 140
 (*Cubic Feet per Second) (**Gallons per Minute) (***) Acre Feet - storage capacity of dam/dugout or annual use if applicable)

3. Source of water supply Well

4. Location of point of diversion Well in NE 1/4 of NW 1/4 Sec 4
 (example - 3 wells in SW 1/4 NE 1/4 section 12-T104N-R53W)
T-96-N R-64-W County Charles mix

5. County or counties where water will be used Charles mix

6. Annual period during which water is to be used June - September April - October

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>Sec 4 - T96N-R64W</u>		<u>NE 1/4 of NW 1/4</u>	<u>35</u>
		<u>SE 1/4 of NW 1/4</u>	<u>35</u>
		<u>NW 1/4 of NE 1/4</u>	<u>35</u>
		<u>SW 1/4 of NE 1/4</u>	<u>35</u>

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

Drill a well for the use of water for irrigation on
140 acres of land for agricultural use to raise crops

I, Chad Svatos, 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. 7978-3**

Date of first receipt of application February 28, 2014.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 7978-3 to Rita or Chad Svatos, 38115 295th St, Lake Andes SD 57356 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. 7978-3 appropriates 2.0 cubic feet of water per second from one well to be completed into the Codell Aquifer (290 feet deep) located in the NE 1/4 NW 1/4 Section 4 for irrigation of 140 acres located in the E 1/2 NW 1/4, W 1/2 NE 1/4 Section 4; all in T96N-R64W.
2. The amount of the appropriation may not exceed 2 acre feet annually for each acre of land to which water is actually and beneficially applied for irrigation. The water is to be used during the following described annual period: April 1 – October 31.
3. The date from which applicant may claim right is February 28, 2014.
4. The date of approval of Permit No. 7978-3 is May 19, 2014.
5. One-fifth of the construction is to be completed on or before November 19, 2016.
6. All construction is to be completed on or before May 19, 2019.
7. Water is to be put to beneficial use on or before May 19, 2023.
8. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

QUALIFICATIONS

1. The well approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. The well authorized by Permit No. 7978-3 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

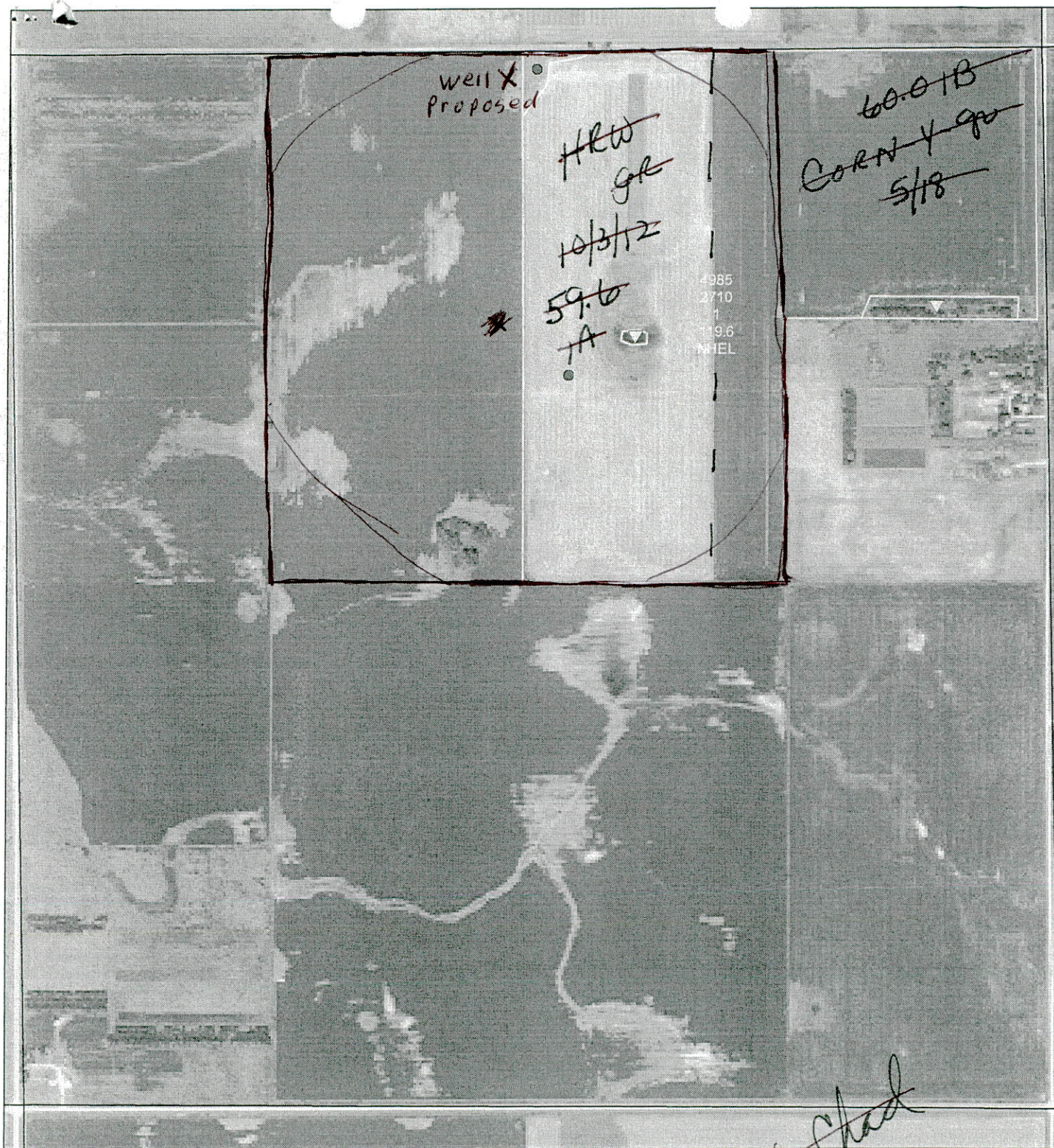
By: 

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

MAY 29 2014

date





United States Department of Agriculture
Farm Service Agency

PLSS: 4_96N_64W
Farm: 4985

Charles Mix County, SD

1:8,296

March 10, 2011

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

Wetland Determination Identifiers

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

Common Land Units

//// Non Cropland



2010 Ortho-Photography - Not to Scale

2013 CROP YEAR

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date March 3, 20 14

RECEIVED OF Chad Svatos, 29227 381st Ave, Lake Andes SD 57356

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

Fee for Application for Permit No. <u>7978-3</u> to Appropriate Water, to construct and to put water to beneficial use	850	00
Fee for Application for Permit No. _____ to Appropriate Water for Future use		
Fee to retain Future Use Permit No. _____ after period of seven years.		
Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. <u>7978-3</u>	200	00
Fee for Filing Transfer Form _____		
Fee for _____		
Fee for Issuing New Well Driller's License No. _____ for C.Y. _____		
Fee for Renewal of Well Driller's License No. _____ for C.Y. _____		
Fee for Issuing Well Pump Installer's License No. _____ for C.Y. _____		
Fee for Renewal of Well Pump Installer's License No. _____ for C.Y. _____		
(Any Other Work Provided by Law)	TOTAL	1050.00

No. 06767

By Jeanne Godman
Chief Engineer

(LS)



**DEPARTMENT OF ENVIRONMENT
and NATURAL RESOURCES**

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



**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 7978-3, Rita or Chad Svatos**

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. 7978-3, Rita or Chad Svatos, 38115 295th Street, Lake Andes SD 57356.

The Chief Engineer is recommending APPROVAL of Application No. 7978-3 because 1) there is reasonable probability that there is unappropriated water available for the applicant's proposed use, 2) the proposed diversion can be developed without unlawful impairment of existing rights, 3) the proposed use is a beneficial use and 4) it is in the public interest with the following qualifications:

1. The well approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. The well authorized by Permit No. 7978-3 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
April 29, 2014

REPORT TO THE CHIEF ENGINEER

WATER PERMIT APPLICATION NO. 7978-3

Rita or Chad Svatos

April 25, 2014

Water Permit Application No. 7978-3 proposes to appropriate groundwater at a maximum diversion rate of 2.0 cubic feet of water per second (cfs) from one well to be completed into the Codell aquifer. The well is expected to be 290 feet deep and located in the NE¼ NW¼ of Section 4, T96N-R64W. Water will be used to irrigate 140 acres located in the E½ NW¼, W½ NE¼ of Section 4, T96N-R64W in Charles Mix County.

AQUIFER: Codell aquifer (CDLL)

HYDROGEOLOGY:

A 'test hole well log supplement' was submitted with this application; the lithologic log is shown in Table 1. The aquifers in these intervals were determined considering cross sectional diagrams constructed using area lithologic logs. Where present, the Choteau: West aquifer overlays the Niobrara aquifer, which overlays the Codell aquifer. Often shale lies between these water bearing units, but in some cases these aquifers directly overlay each other. The Choteau: West aquifer consists of sand and gravel outwash and western derived stream deposits. The Niobrara Formation consists of marl, also known as "chalk." And the Codell Sandstone Member of the Carlile Shale consists of sandstone.

Table 1: Lithologic log modified from the 'test hole well log supplement' submitted.

Depth (ft)		Material	Aquifer/Formation
From	To		
0	2	top soil	
2	26	brown silty clay	
26	42	gray chalk	Niobrara
42	107	sandy gray chalk	
107	108	rock	
108	112	sandy gray chalk	
112	115	broken rock	
115	174	soft sandy gray chalk	
174	215	sand, fine to medium	Choteau: West
215	224	sandy gray chalk	Niobrara
224	227	sand	
227	232	sandy gray chalk	
232	254	sandy gray chalk	
254	263	sand and gravel	Codell
263	265	cemented sandstone	
265	295	sand and gravel	

There are several lithologic logs in this area that record unexpected stratigraphy. This could be due to this area being at the edge of several glacial advances as well as locations of some ancient stream channels. The upper section of the Niobrara Formation recorded in this log is a unique instance and appears to be an isolated block that could have been cleaved from the formation during glaciation.

The Niobrara Formation is expected to occur at approximately 220 feet below ground surface in this area (Tomhave and Schulz, 2004). Because sand, gravel, and sandstone below the Niobrara Formation is expected to be the Codell Sandstone Member, the applicant is pursuing the Codell aquifer. The production well authorized by this water permit, if approved, must be completed into the Codell aquifer.

The Codell 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 aquifer is underlain by impermeable shale and found under confined conditions. While shale is expected to overlay the Codell Member, in many cases in this area the Niobrara and Codell are in direct contact. Water levels are expected to be approximately 100 feet below ground surface in the Codell aquifer at the proposed well site. The thickness of the aquifer is variable but is often 20 to 40 feet thick in Charles Mix and Douglas Counties. The Codell aquifer is hydraulically connected to the Niobrara and several glacial aquifers, including the Choteau: West, and also the alluvium beneath Missouri River (Kume, 1977).

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 from the aquifer and the potential for impairment of existing rights.

WATER AVAILABILITY:

The probability of unappropriated water available from an aquifer can be evaluated by considering SDCL 46-6-3.1, which requires it is probable according to the best information reasonably available the quantity of water withdraw annually from a groundwater source will not exceed the quantity of average estimated annual recharge of water to the groundwater source. If the source of the groundwater is older or lower than the Greenhorn formation and will be used for a public water system, recharge and withdrawal does not need to be considered.

Here, a public water system is not involved and the aquifer is above the Greenhorn formation. So, recharge and withdrawal must be considered. This will be considered by two methods: a hydrologic budget considering quantified values of recharge and withdrawal and an observation well analysis considering water levels.

Hydrologic Budget:

Recently, courts have ruled that if average annual recharge is considered, average annual withdrawals should also be considered to determine if unappropriated water is available. Also, data must be presented to show that it is probable that the average annual recharge exceeds the average annual discharge by at least the amount requested by the water permit application being considered (Memorandum Decision, April 29, 2005; Memorandum Decision, April 11, 2012).

Recharge to the Codell aquifer is from subsurface inflow and leakage from glacial aquifers. 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 (Kume, 1977). In addition to domestic wells, there are 39 water rights/permits appropriating water from the Codell aquifer (Water Rights, 2014b).

While there are many 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 of a domestic well, the annual quantity of water withdrawn due to domestic wells is not significant to the hydrologic budget of the aquifer (Water Rights, 2014c).

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, are no longer expected to withdraw from this aquifer. Consequently, non-irrigation appropriations, excluding these municipal water rights/permits, are expected to use less than 2,072 ac-ft/yr (Water Rights, 2014b).

The irrigation development of the Codell aquifer over the period of record has remained at the same general level until recently. The annual withdrawal from the aquifer fluctuates, which seems to be mostly dependent on annual growing season climatic conditions. Over the period of record the average pumpage reported is approximately 27 ac-ft/yr (Water Rights, 1980-2013). Because several irrigation water permits have recently been authorized for this aquifer, average irrigation use will likely increase (Water Rights, 2014b).

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.”

Since 1985, development of the Codell aquifer has not been increased substantially. Due to the relatively small development of this large resource, unappropriated water is available from the Codell aquifer for the proposed appropriation.

Observation Well Data:

Administrative Rule of South Dakota (ARSD) 74:02:05:07 states the Board will rely on the record of observation well measurements to determine that the annual withdrawals from the aquifer does not exceed the estimated average annual recharge.

The SD DENR-Water Rights Program monitors 21 observation wells completed into the Codell aquifer. The nearest observation well, DG-80F, is located approximately 14 miles northeast of the proposed well site. The hydrograph is shown in Figure 1 (Water Rights, 2014a). Due to the distance from of the observation well to the proposed well site 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 suggest climatic conditions dominate the hydrologic budget for the aquifer. At the current level of development, temporal well withdrawal is masked by climatic conditions. Recharge to and natural discharge from the aquifer greatly exceeds pumping. Withdrawals are accommodated by capturing groundwater before natural discharge. In conclusion, unappropriated water is available from the Codell aquifer to support the proposed appropriation.

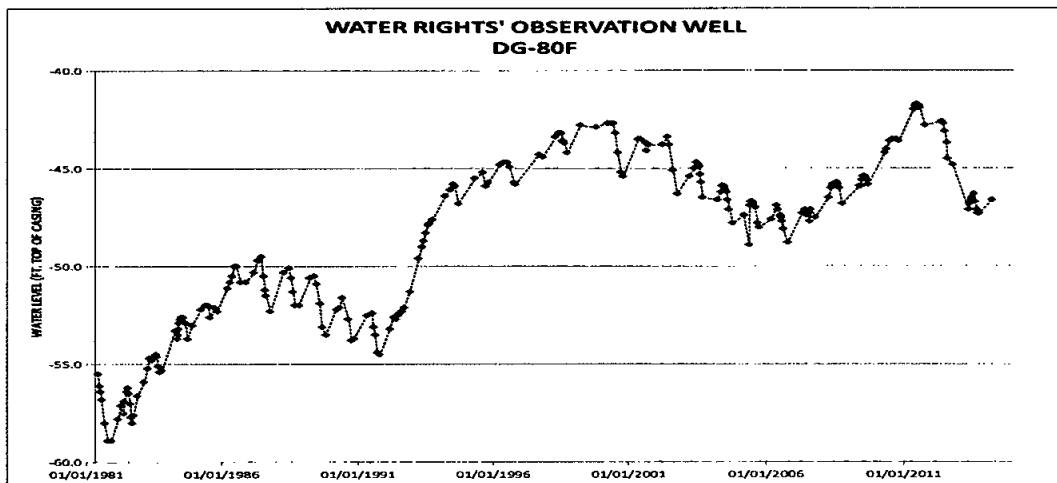


Figure 1: Hydrograph for observation well DG-80F (Water Rights, 2014a)

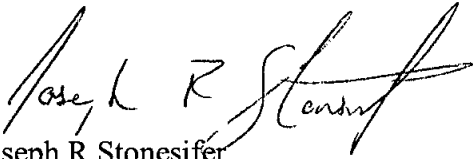
EXISTING WATER RIGHTS:

If approved, the proposed well 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 two miles from the proposed well site (Water Rights, 2014b; Water Rights, 2014c).

The Codell aquifer is under artesian conditions at the proposed well site; therefore, some 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. Depending on the characteristics of the Codell aquifer at the proposed well site, some existing well owners may need to lower their pumps to accommodate possible reduction of head pressure. However, considering the relatively small diversion rate and distances between wells, interference is not expected.

CONCLUSIONS:

1. This application proposes to divert groundwater at a maximum rate of 2.0 cfs from one well to be completed into the Codell aquifer for irrigation use.
2. Unappropriated water is available from the Codell aquifer to supply the proposed appropriation.
3. The proposed well will not adversely or unlawfully impair existing nearby adequate wells.



Joseph R Stonesifer
SD DENR-Water Rights Program

Approved by



Ken Buhler
SD DENR-Water Rights Program

REFERENCES:

- Hedges, L.S., Burch, S.L., Iles, D.L., Barari, R.A., and Schoon, R.A. 1982. Evaluation of Ground-Water Resources Eastern South Dakota and Upper Big Sioux River, South Dakota and Iowa, Task 1: Bedrock Topography and Distribution, Task 2: Extent of Aquifers, Task 3: Ground-Water Storage, Task 4: Computerized Data Base, Final Report. U.S. Army Corps of Engineers Contract DACW 45-80-C-0185.
- Hedges, L.S., Allen, J., and Holly, D.E. 1985. Evaluation of Ground-Water Resources Eastern South Dakota and Upper Big Sioux River, South Dakota and Iowa. Task 7: Ground Water Recharge, Final Report. U.S. Army Corps of Engineers Contract DACW 45-80-C-0185.
- Kume, J. 1977. Geology and Water Resources of Charles Mix and Douglas Counties, South Dakota; Part II: Water Resources. S.D. Geological Survey Bulletin 22. SD DENR-Geological Survey, Vermillion, South Dakota.
- In the Matter of Water Permit Application No. 7239-3, by Hanson County Dairy v. Robert Bender and Stace Nelson, South Dakota First Judicial Court Civ. No. 11-54 (Memorandum Decision, April 29, 2005)
- In the Matter of Water Permit Application No. 6431-3, by Phillip W. Hines v. SD Department of Environment and Natural Resources, South Dakota Sixth Judicial Court Civ. No. HU04-37 (Memorandum Decision, April 11, 2012)
- SD Geological Survey. 2014. Lithologic Logs Database, South Dakota Department of Environment & Natural Resources Geological Survey, Vermillion, South Dakota.
- Tomhave, D.W. and Shulz, L.D. 2004. Geologic Map Showing Configuration of the Bedrock Surface in South Dakota East of the Missouri River. SD DENR-Geological Survey, Vermillion, South Dakota.

Water Rights, 1980-2013. "Irrigation Report Summaries." SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.

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

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

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

Affidavit of Publication

STATE OF SOUTH DAKOTA)

)SS

COUNTY OF CHARLES MIX)

Kristina Hajek, of said County and State being first duly sworn on her oath says: That **The Lake Andes Wave** is a legal newspaper of general circulation, printed and published in Wagner, in said County and State, by Kristina Hajek, and has been such newspaper during the time herein mentioned; and that I, Kristina Hajek, the undersigned, of said newspaper in charge of the advertising department thereof, and have personal knowledge of all the facts stated in this affidavit; a printed copy of which is hereunto attached, was printed and published in the regular and entire issue of said newspaper and not in supplement, once each week for 1 successive weeks.

1st publication made on 7th day of May, 2014
2nd publication made on _____ day of _____, 2014
3rd publication made on _____ day of _____, 2014
4th publication made on _____ day of _____, 2014
5th publication made on _____ day of _____, 2014

That said newspaper is a legal newspaper, and has a bonafide circulation of more than two hundred copies weekly, and has been published within the County of Charles Mix for more than fifty-two successive weeks prior to the first publication of said notice, and is printed in an office maintained in Wagner, South Dakota, the place of publication of said newspaper. That the full amount of the fee for the publication of the annexed notice is

\$ 22.33

Kristina Hajek

Subscribed and sworn before me this 7th day of May, 2014

Bruce Buring

Notary Public

My commission expires 10/22/16

PUBLIC NOTICE

NOTICE OF APPLICATION NO. 7978-3 TO APPROPRIATE WATER

Notice is given that Rita or Chad Svatos, 38115 295th St, Lake Andes SD 57356 has filed an application for a water permit to appropriate 2.0 cubic feet of water per second from one well to be completed into the Codell Aquifer (290 feet deep) located in the NE 1/4 NW 1/4 Section 4 for irrigation of 140 acres located in the E 1/2 NW 1/4, W 1/2 NE 1/4 Section 4; all in T96N-R64W.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 7978-3 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

CONTINUED ON NEXT PAGE

Wednesday, May 7, 2014

PUBLIC NOTICES PUBLIC NOTICES CONTINUED

person or the applicant must be filed by May 19, 2014.

The petition may be informal, but must include a statement describing the petitioner's interest in the application, the petitioner's reasons for opposing or supporting

the application, and the signature and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained. 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: \$22.33.

Pub: May 7, 2014

RECEIVED

MAY - 9 2014

WATER RIGHTS
PROGRAM

RECEIVED

MAY 12 2014

WATER RIGHTS
PROGRAM

NOTICE OF
APPLICATION NO.
7978-3
to Appropriate Water

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Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 7978-3 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. In accordance with SDCL 46-2A-23, the Chief Engineer will act on this application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the Chief Engineer's recommendation. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled and the Water Management Board will consider this application. Notice of the hearing will be given to the applicant and any person filing a petition.

Any person interested in opposing or supporting this application or recommendation must file a written petition with BOTH the applicant and Chief Engineer. The applicant must file a petition if contesting the Chief Engineer's recommendation. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by May 19, 2014.

The petition may be informal, but must include a statement describing the petitioner's interest in the application, the petitioner's reasons for opposing or supporting the application, and the signature and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained. 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 \$58.10

AFFIDAVIT OF PUBLICATION

STATE OF SOUTH DAKOTA)
) SS
COUNTY OF DAVISON)

Penny Hohbach of said county, being, first duly sworn, on oath, says; that he/she is the publisher or an employee of the publisher of The Daily Republic, a daily newspaper, published in the City of Mitchell, in said County of Davison, and State of South Dakota; that he/she has full and personal knowledge of the facts herein stated; that said newspaper is a legal newspaper as defined in SDCL 17-2-2.1 through 17-2-2.4 inclusive; that said newspaper has been published within the said County of Davison and State of South Dakota, for at least one year next prior to the first publication of the attached public notice, and that the notice, order or advertisement, a printed copy of which, taken from the paper in which the same was published, and which is hereto attached and made a part of this affidavit, was published in said newspaper for 1 issues(s), to wit:

Wednesday, May 7, 2014

That the full amount of the fee charged for the publication of the attached public notice insures to the sole benefit of the publisher or publishers; 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: \$58.10

Signed: Penny Hohbach

Subscribed and sworn to before me this 9th day of May, 2014.

Deb Townsend

Notary Public
County of Davison

My Commission Expires: 9-21-18

Prepared by: The Daily Republic, P.O. Box 1288, Mitchell S.D. 57301 605-996-5515

DEB TOWNSEND
Notary Public
SEAL
South Dakota



DEPARTMENT OF ENVIRONMENT
and NATURAL RESOURCES

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



April 29, 2014

Wagner Post
PO Box 187
Wagner SD 57380

ATTENTION: Legal Public Notice

Enclosed is a Notice on Application No. 7978-3 to Appropriate Water. Please publish the notice once on May 7, 2014. The text of the notice can be e-mailed to your paper by contacting Karen Schlaak at (605) 773-3352.

The applicant must verify to you that the notice is to be published and arrange for payment. **Please BILL the APPLICANT for the cost of publication.** The APPLICANT is Rita or Chad Svatos, 38115 295th St, Lake Andes SD 57356 (Ph # 605-487-7222).

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

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



April 29, 2014

Daily Republic
PO Box 1288
Mitchell SD 57301

ATTENTION: Legal Public Notice

Enclosed is a Notice on Application No. 7978-3 to Appropriate Water. Please publish the notice once on May 7, 2014. The text of the notice can be e-mailed to your paper by contacting Karen Schlaak at (605) 773-3352.

The applicant must verify to you that the notice is to be published and arrange for payment. **Please BILL the APPLICANT for the cost of publication.** The APPLICANT is Rita or Chad Svatos, 38115 295th St, Lake Andes SD 57356 (Ph # 605-487-7222).

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605 773-3352

enclosures



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



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

April 29, 2014

Rita or Chad Svatos
38115 295th St
Lake Andes SD 57356

Dear Sir or Ma'am:

Water Permit Application No. 7978-3 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 Wagner Post printed at Wagner SD (Ph # 605-384-5676) and the Daily Republic printed at Mitchell SD (Ph # 605-996-5514). You will need to contact the newspaper(s) and authorize publication of this notice. For your information, a copy of the notice, the recommendation of the Chief Engineer and report on the application are enclosed. Please review the notice prior to publication and notify this office, if you have any corrections or questions.

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

Sincerely,

Eric Gronlund
Natural Resources Engineer
(605) 773-3352
enclosures

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

Instruction to Newspaper - Publish the Notice on May 7, 2014. The applicant is responsible for payment. The text of the notice can be e-mailed to your paper by contacting Karen Schlaak at (605) 773-3352 or email: Karen.schlaak@state.sd.us.

NOTICE OF APPLICATION NO. 7978-3 to Appropriate Water

Notice is given that Rita or Chad Svatos, 38115 295th St, Lake Andes SD 57356 has filed an application for a water permit to appropriate 2.0 cubic feet of water per second from one well to be completed into the Codell Aquifer (290 feet deep) located in the NE 1/4 NW 1/4 Section 4 for irrigation of 140 acres located in the E 1/2 NW 1/4, W 1/2 NE 1/4 Section 4; all in T96N-R64W.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 7978-3 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. In accordance with SDCL 46-2A-23, the Chief Engineer will act on this application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the Chief Engineer's recommendation. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled and the Water Management Board will consider this application. Notice of the hearing will be given to the applicant and any person filing a petition.

Any person interested in opposing or supporting this application or recommendation must file a written petition with BOTH the applicant and Chief Engineer. The applicant must file a petition if contesting the Chief Engineer's recommendation. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by May 19, 2014.

The petition may be informal, but must include a statement describing the petitioner's interest in the application, the petitioner's reasons for opposing or supporting the application, and the signature and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained. 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
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denr.sd.gov



MAY 29 2014

Rita or Chad Svatos
38115 295th St
Lake Andes SD 57356

Dear Ma'am or Sir:

Enclosed is Water Permit No. 7978-3 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

RECEIVED

AUG - 6 2014

WATER RIGHTS
PROGRAMNOTICE OF COMPLETION OF WORKS AND
APPLICATION OF WATER TO BENEFICIAL USEDate 8/5/14

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

FROM: Chad Svatos
(name)

29227 381st ave
(address)

Lake Andes SD 57356
(city, state, zip)

(605) 491-7451
(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. 7978-3 states that the water use system is to be constructed by

_____, and water is to be put to beneficial use by _____
(date) (date)

The water use system was completed on 7/23/14
(date)

Applying the water to beneficial use was completed on 7/23/14
(date)

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

Chad Svatos
(signature)





**DEPARTMENT OF ENVIRONMENT
and NATURAL RESOURCES**

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



August 6, 2014

7978-3

Chad Svatos
29227 381st Ave
Lake Andes SD 57356

Dear Mr. Svatos:

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,

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

7978-3

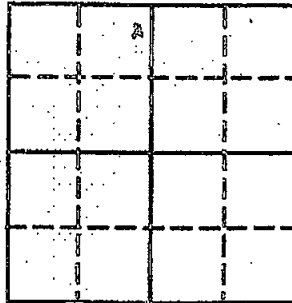
SOUTH DAKOTA WATER WELL COMPLETION REPORT

11-02

Location NE ¼ NW ¼ Sec 4 Twp 96 Rg 64

County
Charles Mix

North

Please mark well
location with an "X"

Well Completion Date

6/23/2014

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

? ft from (Identify source)

PROPOSED USE:

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

METHOD OF DRILLING:

Reverse Rotary

CASING DATA:

☐ Steel ☒ Plastic ☐ Other

If other describe

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
37.0 LB/FT	16.00 IN	0.0 FT	180.0 FT	30.00 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		14.0 Lb/gal	20.0 Ft	180.0 Ft
		Lb/gal	Ft	Ft

Describe grouting procedure

Tremmie

SCREEN:

☒ Perforated pipe ☐ Manufactured

Diameter 16.00 inches Length 100.0 Feet

Material 26 SDR PVC

Slot Size .085 Set From 180.0 Feet to 280.0 Feet

Other information

Gravel

WAS A PACKER OR SEAL USED?

☒ Yes ☐ No

If so, what material? Concrete

Describe packer(s) and location

20' to surface

DISINFECTION: Was well disinfected upon completion?

☒ Yes, How? FTH
Lab sample sent to for
water quality analysis
☐ No, Why Not?

Well Owner: Chad Svatos

Business Name:

Address: 29227 381 Ave.

City, State, Zip: Lake Andes SD 57356

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
0 - 2 top soil		
2 - 26 brown silty clay		
26 - 42 gray chalk		
42 - 107 sandy gray chalk		
107 - 108 rock		
108 - 112 sandy gray chalk		
112 - 115 broken rock		
115 - 164 soft sandy gray chalk		
164 - 205 gray clay		
205 - 295 fine tight sand		
295 - 300 shale		

STATIC WATER LEVEL 84.0 FEET

If flowing: closed in pressure PSI

GPM flow 800.0 through 8.62 Inch pipe

Controlled by ☐ Valve ☐ Reducers ☒ Other Sprinkler System

Reduced flow rate GPM

Can well be completely shut in?

WELL TEST DATA:

☒ Pumped Describe:

☐ Bailed

☐ Other

Pumping Level Below Land Surface

104.0 Ft. After 1.0 Hrs. pumped 800.0 GPM

128.0 Ft. After 1.0 Hrs. pumped 1,400.0 GPM

If pump installed, pump rate: 800.0 GPM

REMARKS

RECEIVED

JUN 17 2015

WATER RIGHTS
PROGRAM

This well was drilled under license #

And this report is true and accurate.

Drilling firm: Sargent Irrigation Co.

Signature of License Representative:

Sargent Irrigation Co. B. & Jole Schick

Signature of Well Owner or Equitable Property Holder:

Date:

Permit No. 7978-3
Missouri River Water District

Report Of Examination Of Works And/Or Application Of Water To Beneficial Use

TO: Chief Engineer, Water Rights Program, DENR, Foss Bldg., Pierre, SD 57501

I have this day, December 1, 2015, made a thorough examination of the water use system constructed by Rita or Chad Svatos of 38115 295th St, Lake Andes, SD holder of Permit No. 7978-3, bearing the priority of February 28, 2014 authorizing the diversion of 2.0 cu. ft. per second of the waters of the Codell aquifer for irrigation purposes, in Charles Mix County.

I have to report on the conditions of the same as follows:

A. Works used to divert the water:

- A Chevy 350 V8 engine converted to run on propane powering a Sargent 8 inch turbine line-shaft pump set to 800 gpm and 35 psi.

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

- 1,220 ft of underground 8 in. PVC pipe connects the well to the pivot point.

C. Works used to apply water to beneficial use:

- Valley 8 tower center pivot, 1,318 feet length with an end gun. The pivot is capable of 800 gpm at 34 psi.

The system is in the following condition: good. The point of diversion is located: 100 feet south and 2,630 ft. east of the NW corner Sec. 4-T96N-R64W; NE 1/4 NW 1/4 Sec. 4-T96N-R64W; 43.16901°, -98.41701°. The works are capable of diverting and conveying to the place of use 1.78 cu. ft. per sec. of water which is used for irrigation. Water has been put to beneficial use to the maximum extent as follows:

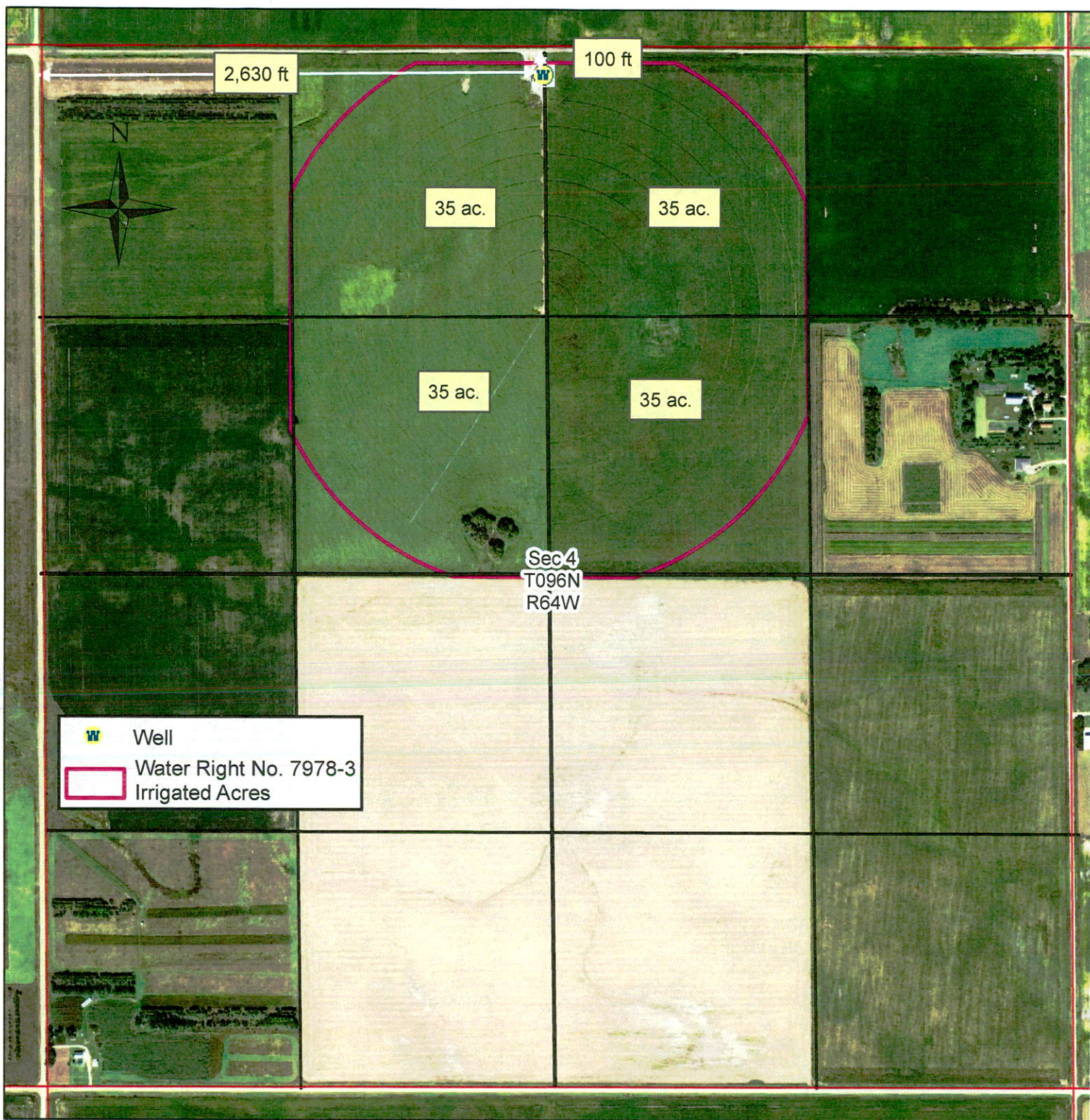
Sec 4-T96N-R64W	Acres
NW 1/4 NE 1/4	35
SW 1/4 Ne 1/4	35
NE 1/4 NW 1/4	35
SE 1/4 NW 1/4	35
Total	140

comprising a total of 140 acres of land and the license should be issued for 1.78 cu. ft. sec. Applicable permit qualifications have been complied with: Yes. Exceptions to compliance are: None

Date: January 14, 2016



(Signature)



0 0.1 0.2 0.4 Miles

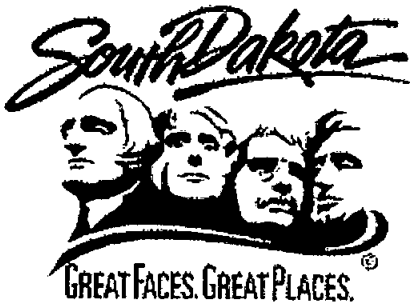
Water Right No. 7978-3 and
Chad or Rita Svatos

Adam Mathiowetz

Adam Mathiowetz
Natural Resources Engineer
DENR-Water Rights Program

January 14, 2016





DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

FEB 23 2016

7978-3

Dan or Rita Svatos
38115 295th St
Lake Andes SD 57356

Dear Mr. & Mrs. Svatos:

Enclosed is Water License No. 7978-3. 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 the owner of an existing well, such as the well authorized by Water Right No. 7978-3, 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. 7978-3**

(1) Chad or Rita Svatos, 38115 295th St, Lake Andes SD 57356 made Application No. 7978-3, February 28, 2014 for a water permit to divert 2.00 cubic feet of water per second from ground water, one well (Codell Aquifer), Charles Mix County, South Dakota for irrigation purposes. Permit No. 7978-3, with a priority date of February 28, 2014 was approved May 19, 2014 and issued to the applicants for diversion of water with construction of the described water supply system to be completed on or before May 19, 2019 and for the application to beneficial use of said water on or before May 19, 2023.

(2) It is certified that the permit holders have complied with the provisions of South Dakota State Law relating to completion of the construction of the water supply system and are entitled to divert 1.78 cubic feet of water per second for beneficial use. The location of the diversion point is 100 feet south and 2,630 feet east of the NW corner of Section 4, T96N, R64W (NE ¼ NW ¼).

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

T96N, R64W Section 4	NW ¼ NE ¼	35 acres
	SW ¼ NE ¼	35 acres
	NE ¼ NW ¼	35 acres
	SE ¼ NW ¼	35 acres
Total		140 acres

(4) Pursuant to South Dakota Water Law 46-5-30.1 Chad or Rita Svatos, 38115 295th St, Lake Andes SD 57356 the holders and/or owners of Water Right No. 7978-3 are issued a license to appropriate water, the right to use 1.78 cubic feet of water per second from ground water, one well (Codell Aquifer) with a priority date of February 28, 2014 from the location specified in (2) of this license for irrigation purposes.

This license is subject to South Dakota Water Law, any limitations or conditions listed in Water Right No. 7978-3 and subject to the following qualifications:

- The well approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
- The well authorized by Permit No. 7978-3 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with the Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28. *The well was completed in June, 2014 by Sargent Irrigation Company. A copy of the well log is on file with the Water Rights Program.*
- This Permit 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 23 2016

date





7978-3
DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

denr.sd.gov

December 28, 2016

336-3
7978-3

Chad Svatos
38115 295th St
Lake Andes SD 57356

Dear Mr. Svatos:

I am writing in follow up to our phone conversation of December 27th. Enclosed as we discussed is a 2016 irrigation questionnaire for Water Right No. 7978-3.

Also enclosed is a partially completed Notice of Transfer of Ownership form for filing an ownership change with Water Right No. 336-3. Please review the form and make any necessary corrections. Upon completion, please sign the form and return it to our office with a required filing fee of \$50.00. The check or money order for the fee can be made payable to the Water Rights Program.

I have included a postage paid envelope for your convenience. If I can answer any questions for you, please let me know.

Sincerely,

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

enclosures