

WATER PERMIT NO. 7238-3

Name of Applicant: **David Verhoek**

Address: **46418 196th St, Bruce SD 57220** Phone: **605 873-2147**

Amount of Water Claimed: **no add'l** Total Acres: **120**

Source of Water Supply: **groundwater (2 existing wells)**

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

Type of Waste Disposal System: **NA**

Location: **1 ½ miles southwest of Estelline**

PRIORITY Date Received: **3-15-2011** Application/License Fee: **\$950**

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

Remarks: **Utilizing the wells authorized by Water Right No. 6652-3**

Diversion Point: **SE ¼ NE ¼ Sec 34-T113N-R51W**

Land to be Irrigated: **SW ¼ Sec 35-T113N-R51W**

Depth of Well: **60 & 65 feet deep**

Well Driller: **Kaiser Well Drilling**

Remarks:

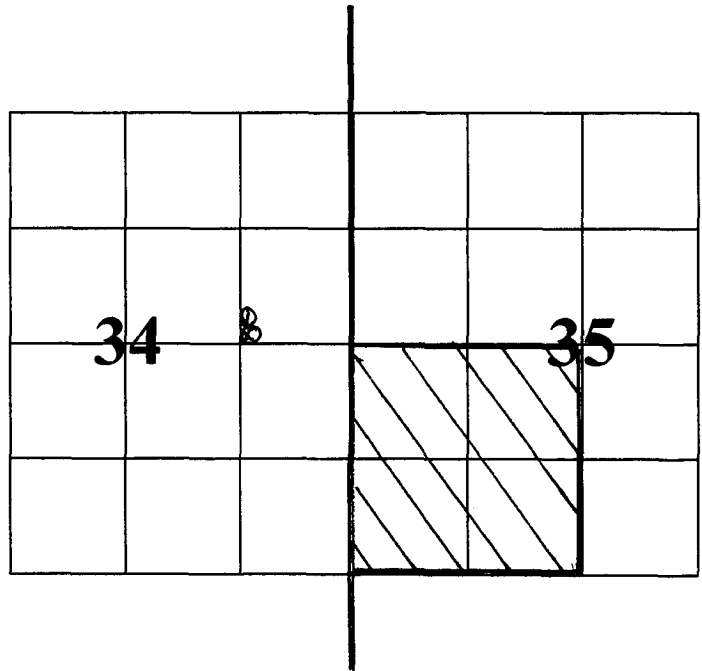
Type of Map: **aerial**

Prepared by: **Damen Stormo, Hamlin Co FSA**

Reviewed and the Number Assigned on: **3-15-2011**

By: **Karen Schlaak**

Notice of Hearing - date to intervene: _____



Mail to: Water Rights Program Joe Foss Building 523 E. Capitol Pierre, SD 57501-3181 (605) 773-3352	No. <u>7238-3</u> (office use only)	<u>10170202</u>
	Basin <u>Sioux River</u>	
	Newspaper <u>Estelline Journal PO Box 159</u>	
	<u>605-793-2475</u>	<u>57234</u>

RECEIVED
MAR 15 2011
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 of Applicant David Verhoek Phone 605-873-2147
(check one) ☒ Owner ☐ Tenant/lessee
Mailing Address 46418 196th St. Bruce SD 57220
(Street, RR, or Box and City) (Zip Code)
2. Amount of water claimed no addl *CFS or 700 **GPM 0 ***AF Total Acreage 120
(*Cubic Feet per Second) (**Gallons per Minute) (***) Acre Feet - storage capacity of dam/dugout or annual use if applicable)
3. Source of water supply existing wells authorized by water right No. 6652-3
4. Location of point of diversion (example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W)
SE 1/4 NE 1/4 Section 34 T113N, R51W
County Hamlin
5. County or counties where water will be used Hamlin
6. Annual period during which water is to be used April 1 - October 31
7. List below each forty acre division, or lot, or fraction thereof and show number of acres to be irrigated in each.
(Attach sheet if more space is needed)

Land Description	Acres	Land Description	Acres
SW 1/4 Section 35 - 113N, 51W	30		
SE } SW 1/4	30		
NW }	30		
NE }	30		

8. Give a description of the project. (Attach sheet if more space is needed)
Will be using existing wells to irrigate additional Acres with a center pivot system.

STATE OF SOUTH DAKOTA) SS
County of Hamlin

Attachments: Attach Form 2A if diversion is from a well or dugout, or if storage of water is proposed. Attach map and any other technical information. (see instructions)

I, David Verhoek, the applicant, certify that I have read this application, have examined the attached map and that the matters stated are true and that I intend, and am able to complete the necessary construction.

Applicant's signature David Verhoek

Subscribed and sworn to before me this 10 day of March 20 11

My Commission Expires
March 26, 2015

Kris Lilla
Notary Public signature

**SOUTH DAKOTA
WATER PERMIT NO. 7238-3**

Date of first receipt of application March 15, 2011.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 7238-3 to David Verhoek, 46418 196th St, Bruce SD 57220 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. 7238-3 authorizes irrigation of 120 additional acres. Water Right No. 6652-3 appropriates 1.56 cubic feet of water per second from two wells completed into the Big Sioux:Brookings Aquifer (60 and 65 feet deep) located in SE 1/4 NE 1/4 Section 34 for irrigation of 81 acres located in the NE 1/4 Section 34; all in T113N-R51W. This permit authorizes irrigation of 120 acres located in the SW 1/4 Section 35-T113N-R51W from the two existing wells. This permit does not authorize any increase in the developed diversion rate.
2. The amount of the appropriation may not exceed 2 acre feet annually for each acre of land to which water is actually and beneficially applied for irrigation. The water is to be used during the following described annual period: April 1 – October 31.
3. The date from which applicant may claim right is March 15, 2011.
4. The date of approval of Permit No. 7238-3 is May 23, 2011.
5. One-fifth of the construction is to be completed on or before November 23, 2013.
6. All construction is to be completed on or before May 23, 2016.
7. Water is to be put to beneficial use on or before May 23, 2020.
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 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. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

WATER MANAGEMENT BOARD

By: Garland Erbele

Garland Erbele, Chief Engineer
Water Rights Program
Department of Environment and Natural Resources

JUL 12 2011
date



Supplemental Information

(type or print in ink)

See well information on WR No.
6652-3

1. Well Information - Proposed Construction

- a) Drill Hole Diameter _____ Depth _____
- b) Casing Type _____ Diameter _____ Thickness _____
- c) Screen Type _____ Diameter _____ Thickness _____
- d) Gravel Pack _____ Length of Gravel Pack _____
- e) Depth to Top of Water Bearing Material _____
- f) Depth to Water (ground surface to water level) _____
- g) Distance to nearest existing domestic well:
On applicants property _____ On property owned by others _____

2. Wastewater Disposal System Information

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

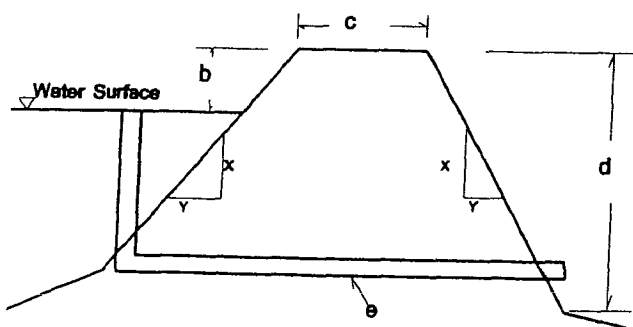
3. Dugout Information

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

4. Water Storage Dams

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

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



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



United States Department of Agriculture
Farm Service Agency

PLSS: 35_113N_51W
Farm: 4635

Hamlin County
1:8,319



April 28, 2010

*Hamlin FSA
Drew Stormo*

Wetland Determination Identifiers

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

Common Land Units

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

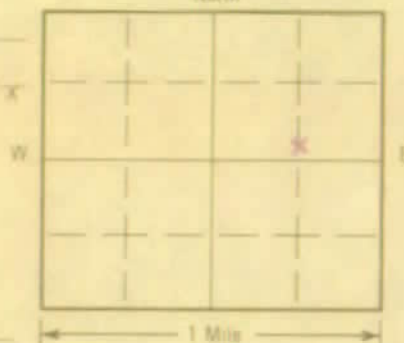
2008 Ortho-Photography - Not to Scale

SOUTH DAKOTA WATER WELL COMPLETION REPORT

07-92

Location NE SE 34 Twp 112 Rg 51
County Huachuca North

Please mark well location with an 'X'



Well Completion Date

3-17-06

LOCATION

Distance from nearest potential pollution source (septic tank, abandoned well, feed lot, etc.) 200' ft. from W-11 (identify source)

PROPOSED USE

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

METHOD OF DRILLING:

Direct RotaryCASING DATA: ☐ Steel ☒ Plastic ☐ Other

If other describe:

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
<u>3.140</u> LB/FT	<u>8</u> IN	<u>20</u> FT	<u>50</u> FT	<u>12.5</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>grout</u>	<u>20</u>	<u>40</u> lb./gal	<u>0</u> ft	<u>40</u> ft
<u>grout</u>		lb./gal	ft	ft

Describe grouting procedure: grout - pull methodSCREEN: ☐ Perforated pipe ☒ ManufacturedDiameter 8 IN Length 10 FEETMaterial Staples steelSlot Size .030 Set From 50 Feet to 60 Feet

Other information:

WAS A PACKER OR SEAL USED? ☐ YES ☐ NO

If so, what material?

Describe packer(s) and location?

DISINFECTION: Was well disinfected upon completion?

YES How

NO, Why Not?

Laboratory sent to for water quality analysis

Well Owner David Verhoek

Business Name:

Address 4675 146th StBox 57220

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
<u>Topsoil</u>	<u>0</u>	<u>1</u>
<u>yellow clay</u>	<u>1</u>	<u>5</u>
<u>yellow gravel 2 links</u>	<u>5</u>	<u>10</u>
<u>yellow clay</u>	<u>10</u>	<u>12</u>
<u>yellow gravel medium 4 links</u>	<u>12</u>	<u>18</u>
<u>yellow clay</u>	<u>18</u>	<u>22</u>
<u>yellow fine to medium 12 links</u>	<u>22</u>	<u>35</u>
<u>Medium to coarse gravel 15 links</u>	<u>35</u>	<u>60</u>
<u>Pine Sand</u>	<u>60</u>	<u>65</u>

STATIC WATER LEVEL

21'0"

Feet

If flowing closed in pressure

PSI

GPM flow through

inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other

Reduced Flowrate

GPM

Can well be completely shut in?

WELL TEST DATA:

☐ PumpedDescribe Suck pump☐ Bailed☐ Other

Pumping Level Below Land Surface

32 ft. After 1 Hrs. pumped 320 GPM20 ft. After 20 Hrs. pumped 320 GPM

If pump installed, pump rate

GPM

REMARKS yellow clay 63-70This well was drilled under license # 657

And this report is true and accurate.

Drilling firm Kaiser Well Drilling

Signature of License Representative

[Signature]

Signature of Well Owner or Equitable Property Holder

David VerhoekDate 4/10/06

RECEIVED

APR 26 2006

WATER RIGHTS PROGRAM

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date 3-15, 20 11

RECEIVED OF David Verboek, 46418 196th St, Bruce SD 57220

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

Fee for Application for Permit No. <u>7238-3</u> to Appropriate Water, to construct and to put water to beneficial use	750	00
Fee for Application for Permit No. _____ to Appropriate Water for Future use		
Fee to retain Future Use Permit No. _____ after period of seven years.		
Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. <u>7238-3</u>	200	00
Fee for Filing Transfer Form _____		
Fee for _____		
Fee for Issuing New Well Driller's License No. _____ for C.Y. _____		
Fee for Renewal of Well Driller's License No. _____ for C.Y. _____		
Fee for Issuing Well Pump Installer's License No. _____ for C.Y. _____		
Fee for Renewal of Well Pump Installer's License No. _____ for C.Y. _____		
(Any Other Work Provided by Law)	TOTAL	950.00

No. D4948

By Marland Erbele
Chief Engineer

RES



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
www.state.sd.us/denr

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 7238-3, David Verhoek**

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. 7238-3, David Verhoek, 46418 196th Street, Bruce SD 57220.

The Chief Engineer is recommending APPROVAL of Application No. 7238-3 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 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. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

See report on application for additional information.

Garland Erbele, Chief Engineer
April 20, 2011

REPORT ON WATER PERMIT APPLICATION NO. 7238-3

For David Verhoek

April 7, 2011

Application No. 7238-3 proposes to irrigate an additional 120 acres. Water Right No. 6652-3 appropriates 1.56 cfs (700 gpm) from two wells approximately 60 and 65 feet deep located in the SE $\frac{1}{4}$ NE $\frac{1}{4}$ of section 34 for irrigation of 81 acres located in the NE $\frac{1}{4}$ of section 34; all in T113N R51W in Hamlin County. This application proposes to irrigate 120 acres located in the SW $\frac{1}{4}$ of section 35, T113N R51W from the two existing wells. This application if approved does not authorize any increase in the developed diversion rate.

AQUIFER – BIG SIOUX BROOKINGS (BS-B)

The Big Sioux Brookings is predominantly surficial outwash (sand and gravel) that is under water table conditions in the area of this application. The aquifer underlies 88,500 acres and contains an estimated 331,880 acre-feet of recoverable water in storage in Hamlin County (Hedges, 1982). The aquifer extends into Brookings County to the south, Deuel County to the east and blends into the Big Sioux North aquifer to the north. A small portion of the Big Sioux North aquifer lies in Hamlin County so the above estimates are not inclusive for the entire county. Ground water movement is from west to east and towards the Big Sioux River in the area of this application (Kume, 1985). Kume mapped the Big Sioux Aquifer for the county study report and estimated the aquifer underlies 113,920 acres and contain an estimated 480,000 acre-feet of water in storage in Hamlin and Deuel Counties (Kume, 1985). The aquifer is hydraulically connected to area lakes, streams and the Big Sioux River. Generally ground water movement is towards these bodies of water which would act as discharge zones for the ground water. Recharge to the Big Sioux Aquifer in this area has been estimated at about 6.57 inches per year (Koch, 1980).

These are existing production wells drilled by Kaiser Drilling. Completion reports for each well (12" and 8") indicate screen depths of 55 and 60 feet respectively. Both had static water levels of 21.5 feet below land surface and were capable of producing 500 and 320 gpm respectively. This test and area irrigation wells and other test wells in the area all indicate good potential for irrigation development. The fact that two wells were drilled at this located in order to obtain the amount of water needed indicates lack of production even though the formation appears to thicker and deeper than other wells in the area.

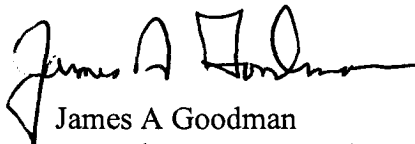
The Water Rights Program monitors two observation wells within one and one-half miles of this application. Observation well BG-76E is located about one and one-half miles to the southwest and observation well HN-77A is located about one-half mile to the west both from these well sites. Water levels for these wells show good response to climatic conditions rising during periods of wet weather (recharge) and declines during droughts. In general the record indicates that the aquifer is capable of sustaining additional withdrawals (Water Rights, 2011). Hydrographs for these two observation wells are included with this report.

REVIEW OF EXISTING WATER PERMITS/RIGHTS

There are two existing irrigation wells in this same section. The well for Water Right No. 2728A-3 (130 acres, 1.78 cfs) is located about 2,285 feet to the southwest and the well for Water Right No. 3565-3 (127 acres, 1.78 cfs) is located about 2,850 feet northwest of these existing wells. Interference is not expected to be a problem. Drawdown created by pumping does not extend very far from a production well and this distance between wells should be sufficient to minimize any potential effects. These wells have been in use for a few years.

CONCLUSIONS

1. Water is available from the Big Sioux Brookings aquifer.
2. The aquifer is under water table conditions in this area. Drawdown created by pumping is not expected to be significant at the distance between high capacity wells. Interference is not adverse or a concern.
3. The well(s) authorized by this permit have been constructed in accordance with SD Well Construction Standards.



James A Goodman
Natural Resources Engineer

BIBLIOGRAPHY

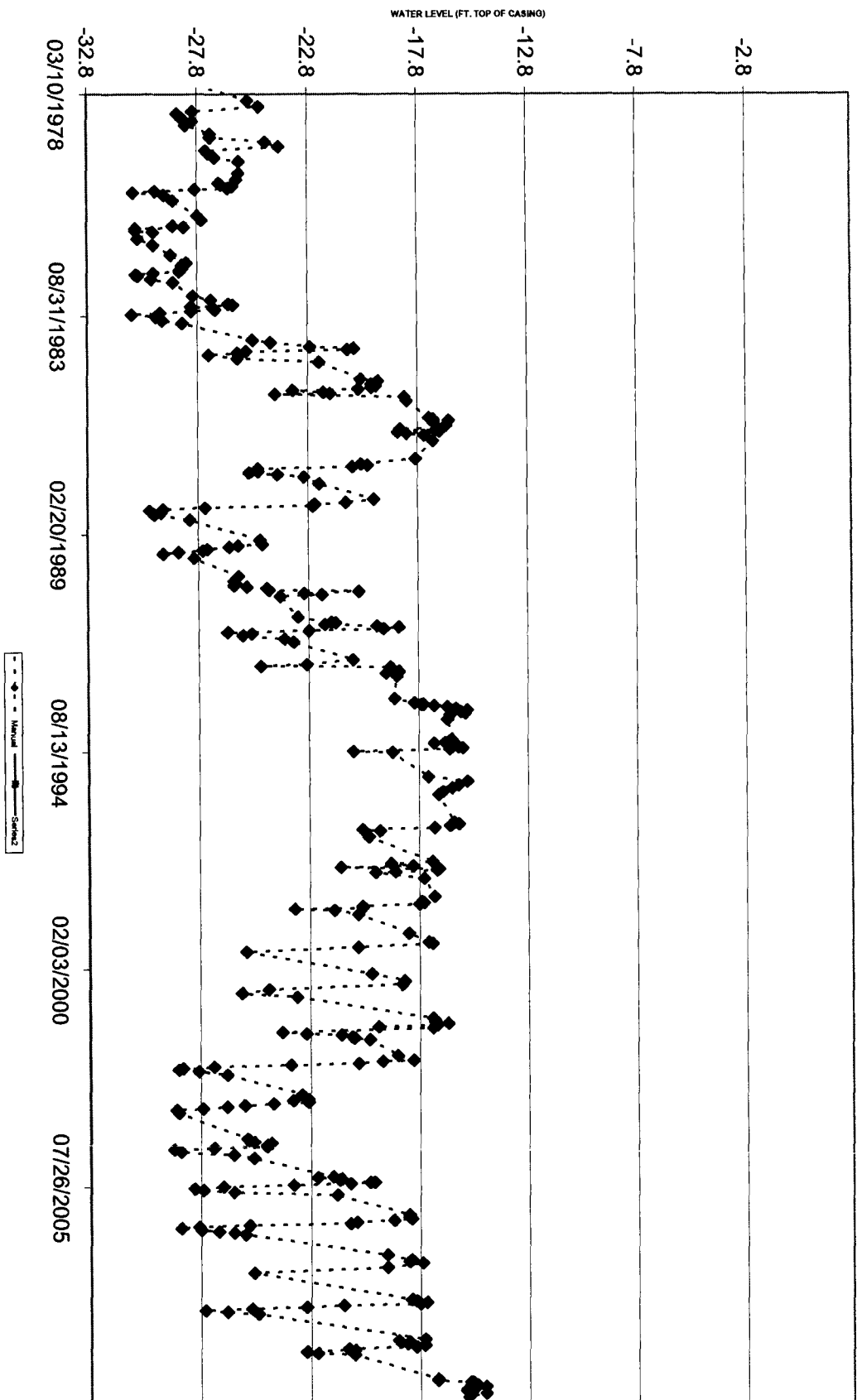
Hedges, L.S., and others, 1982, Evaluation of Ground-Water Resources Eastern South Dakota and Upper Big Sioux River South Dakota and Iowa, for US Army Corps of Engineers, SD DENR, SDGS, Vermillion, SD, 57069.

Koch, N.C., 1980, Appraisal of the Water Resources of the Big Sioux Aquifer, Brookings, Deuel, and Hamlin Counties, South Dakota, Water-Resources Investigations Report 80-100, USGS, Huron, SD, 57350.

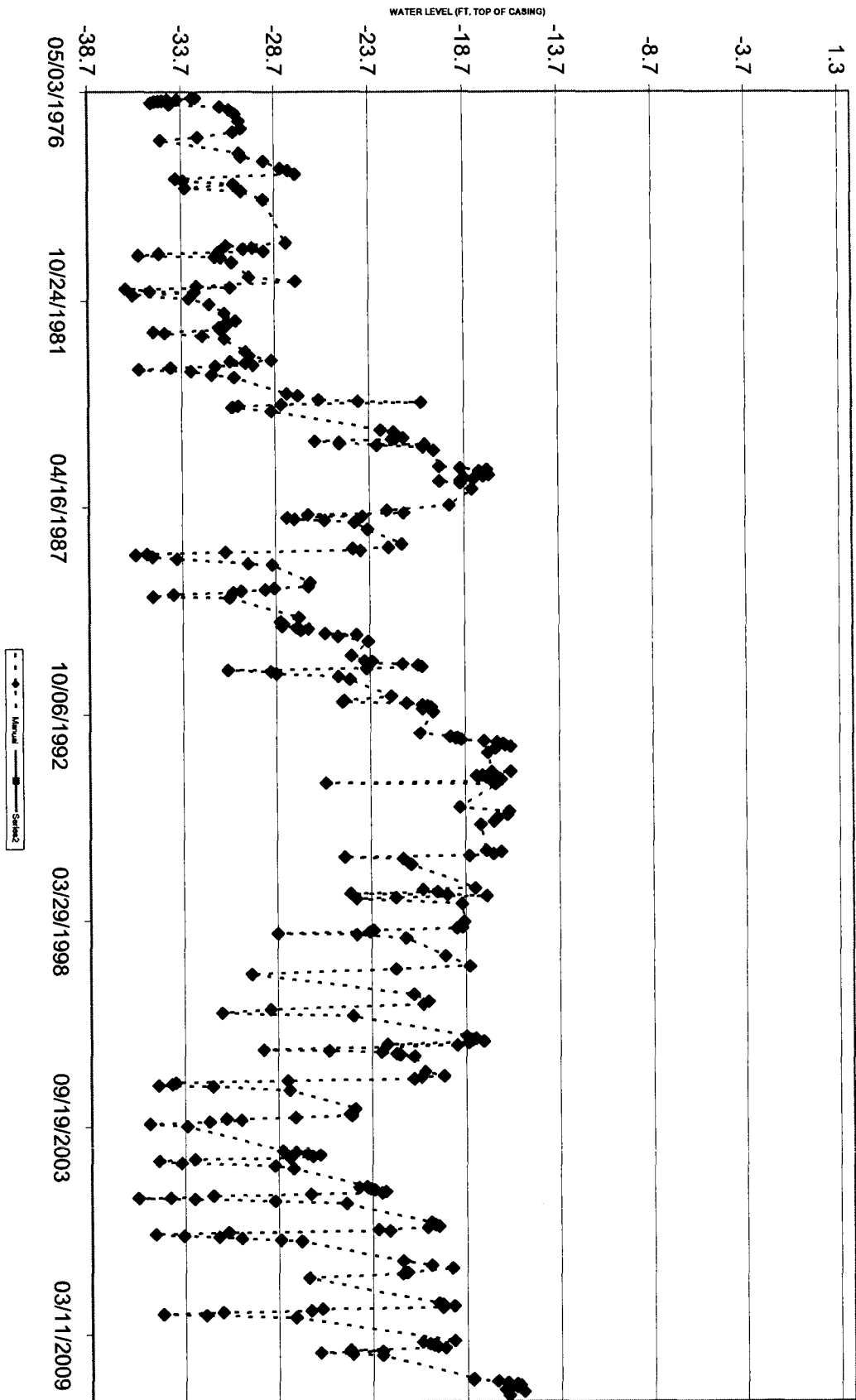
Kume, J., 1985, Water Resources of Deuel and Hamlin Counties, South Dakota, Water-Resources Investigations Report 84-4069, USGS, Huron, SD, 57350.

Water Rights, 2011, Unpublished Observation Well Data for Hamlin and Brookings County, SD DENR, DES, Water Rights Program, Pierre, SD, 57501.

WATER RIGHTS' OBSERVATION WELL
HN-77A



WATER RIGHTS' OBSERVATION WELL
BG-76E



RECEIVED

MAY 13 2011

Form 8

WATER RIGHTS
PROGRAM

PROOF OF PUBLICATION

STATE OF SOUTH DAKOTA)

County of Hamlin) SS

I, Lee Anne Archer

certify that the attached printed Notice was taken

from the The Estelline
Journal

printed and published in Estelline

County of Hamlin and

state of South Dakota. The notice was published

in the newspaper on the following two dates:

May 4, 2011

May 11, 2011

Cost of Printing \$43.96

Lee Anne Archer
(Signature)

President
(Title)

5-12-2011
(Date Signed)

NOTICE OF APPLICATION NO.
7238-3 TO APPROPRIATE WATER

Notice is given that David Verhoek, 46418 196th St, Bruce SD 57220 has filed an application for a water permit to irrigate 120 additional acres. Water Right No. 6652-3 appropriates 1.56 cubic feet of water per second from two wells completed into the Big Sioux: Brookings Aquifer (60 and 65 feet deep) located in SE 1/4 NE 1/4 Section 34 for irrigation of 81 acres located in the NE 1/4 Section 34; all in T113N-R51W. This application proposes to irrigate 120 acres located in the SW 1/4 Section 35-T113N-R51W from the two existing wells. This application, if approved, does not authorize any increase in the developed diversion rate.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 7238-3 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 23, 2011.

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 May 4 and 11, 2011, at total cost of \$43.96.



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
www.state.sd.us/denr

April 25, 2011

Estelline Journal
PO Box 159
Estelline SD 57234

ATTENTION: Legal Public Notice

Enclosed is a Notice on Application No. 7238-3 to Appropriate Water to be published twice. Please publish the first notice on May 4, 2011 with the second publication 7 days later. 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, before you make the first publication. **Please BILL the APPLICANT for the cost of publication.** The APPLICANT is David Verhoek, 46418 196th St., Bruce SD 57220 (Ph # 605-873-2147).

Please send the Water Rights Program the first publication immediately. The publication is checked for accuracy so any corrections can be made in the second publication. You may use the form below or fax a copy of the first publication. Any fax should be sent to the attention of Karen Schlaak at (605) 773-4068. Publication errors can invalidate the public notice.

After the second publication, **please send us an affidavit or use the enclosed Proof of Publication form.** 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

-----CUT HERE-----

No. 7238-3

TO: Eric Gronlund
Water Rights Program
Joe Foss Building
Pierre SD 57501-3181

Date _____

We are in receipt of your letter of April 25, 2011 enclosing Notice to Appropriate Water by Application No. 7238-3 which was first published in our issue of _____. **ENCLOSED IS A COPY OF THIS FIRST PUBLICATION.**

Name

Newspaper



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
www.state.sd.us/denr

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

April 25, 2011

David Verhoek
46418 196th St
Bruce SD 57220

Dear Mr. Verhoek:

Water Permit Application No. 7238-3 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 Publisher of the Estelline Journal printed at Estelline SD (Ph # 605-793-2475). You will need to contact the newspaper 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 to authorize publication of your Notice and to arrange for payment. Early contact with the paper can eliminate delays. Upon receiving authorization, the publisher has been instructed to publish your notice once each week for two consecutive weeks. 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
eric.gronlund@state.sd.us

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 first Notice on May 4, 2011 with the second publication 7 days later. 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. 7238-3 to Appropriate Water

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Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 7238-3 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. In accordance with SDCL 46-2A-23, the Chief Engineer will act on this application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the Chief Engineer's recommendation. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled and the Water Management Board will consider this application. Notice of the hearing will be given to the applicant and any person filing a petition.

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Published twice 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
www.state.sd.us/denr

JUL 12 2011

David Verhoek
46418 196th St
Bruce SD 57220

Dear Mr. Verhoek:

Enclosed is Water Permit No. 7238-3 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,

Garland Erbele, Chief Engineer
Water Rights Program
(605) 773-3352

enclosures

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

Date

5/21/12

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

FROM:

David Verhock

(name)

46418 196th St.

(address)

Bruce, SD 57220

(city, state, zip)

605-873-2147

(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. 7238-3 states that the water use system is to be constructed by

5/23/2016

(date)

, and water is to be put to beneficial use by

5/23/2020

(date)

The water use system was completed on

5/12/12

(date)

Applying the water to beneficial use was completed on

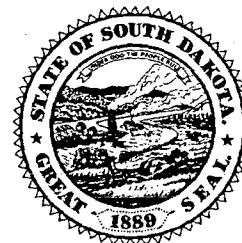
5/12/12

(date)

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

By: David Verhock

(signature)





**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

May 23, 2012

7238-3

David Verhoek
46418 196th St
Bruce SD 57220

Dear Mr. Verhoek:

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

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

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

Sincerely,

A handwritten signature in black ink that reads "Genny McMath". The signature is written in a cursive, flowing style.

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

Report of Examination of Works and/or Application of Water to Beneficial Use For Permit No. 7238-3

I have this day, April 1, 2015, made a thorough examination of the water use system constructed by David Verhoek, 46418 196th St, Bruce SD 57220 Permit No. 7238-3, bearing the priority of March 15, 2011 authorizing the diversion of no add'l (1.56 – No. 6652-3) cu. ft. per second of the waters of Big Sioux Brookings aquifer for irrigation purposes, in Hamlin County.

Inspection contact & relationship **David Verhoek**
to permit holder, if applicable:

A. Works used to divert the water:

Well Information:

- 1) Well Drilling Firm: Kaiser Well Drilling
- 2) No. of Wells 2 wells
- 3) Depth(s) 60 and 55 feet
- 4) Well log is available Yes (2 logs)

Casing:

- 1) Diameter 8 and 12 inches
- 2) Length 50 and 40 feet
- 3) Type both plastic

Screen:

- 1) Type both stainless steel
- 2) Length 10 and 15 feet
- 3) Static water level 21.5 feet

North Motor/Pump:

- 1) Make Submersible
- 2) Capacity 400 GPM

South Motor/Pump:

- 1) Make Submersible
- 2) Capacity 300 GPM

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

- 1) Type PVC
- 2) Size 8 inches
- 3) Length 3,120 feet

C. Works used to apply water to beneficial use:

Center pivot (section 35):

- 1) Make Zimmatic
- 2) Number of towers 6
- 3) End gun Y
- 4) Capacity 700 GPM

Chemigation Equipment:

- 1) Does chemigate Yes
- 2) Main line check valve Yes

- 3) Inspection port/air relief Yes
- 4) Low pressure drain Yes
- 5) Discharge is 20' from source Need hose
- 6) Interlock type electrical
- 7) Injection pump type not on site
- 8) Injection check valve not on site
- 9) Injection line check valve or positive displacement pump not on site

Comments: **The equipment at the site was adequate provided a hose is used on the low pressure drain.**

D. Compliance with Permit Requirements:

- 1) Permit qualifications being abided by Yes
- 2) Irrigation Questionnaires checked to determine if permit owner started irrigation by the end of construction period Construction period expires in 2016
- 3) Exceptions to compliance are: None

E. Condition and Location:

1. The system is in good condition with the point(s) of diversion located as follows: North well: 1,320 feet west and 3,075 feet north (Long. -96.93109, Lat. 44.55212); South well: 1,345 feet west and 2,890 feet north (Long. -96.93118, Lat. 44.55161) both from SE corner section 34-T113N-R51W (S1/2 NE1/4).

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 purposes. Water has been put to beneficial use to the maximum extent as follows: All in section 35-T113N-R51W

NW1/4 SW1/4 37 acres
SW1/4 SW1/4 23 acres

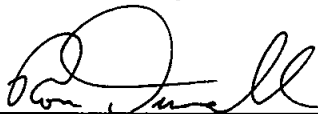
NE1/4 SW1/4 28 acres
SE1/4 SW1/4 16 acres

comprising a total of 104 acres of land and the license should be issued for 1.56 cfs with a notation that combined diversions under this permit and No. 6652-3 may not exceed 1.56 cfs.

3. All structures, wells and lands on map Yes

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

The same wells used for irrigation under this permit are also used to irrigate land covered by Water Right No. 6652-3. Mr. Verhoek indicated a preference that No. 7238-3 and No. 6652-3 not be incorporated together. A document to correct the diversion point location has been prepared.



Ron Duvall
Water Rights Permitting Administrator
DENR, Water Rights Program

Date report completed: June 16, 2015

Scale: 1 inch = 766 feet

1,000

Feet



South Dakota
Department of Environment
& Natural Resources
Water Rights

Completed by:

Ron Duvall, WR Permitting Administrator
Water Rights Program

Diversion point(s) located using a Garmin eTrex 10 GPS

Date: June 4, 2015

Water Right No. 7238-3

Approval of Diversion Point Location Change

NAME: David Verhoek

ADDRESS: 46418 196th St, Bruce SD 57220

DATE: June 16, 2015

COUNTY: Hamlin

TELEPHONE: (605) 873-2147

AUTHORITY:

Pursuant to SDCL 46-5-13.1, the location of a diversion point may be changed or additional diversion points may be licensed provided the following conditions are met and the potential for interference with other existing diversions is not increased:

- **Developed water source same as permitted source and no additional water appropriated**

Two wells are currently being used to irrigate acreage covered by Permit No. 7238-3 and Water Right No. 6652-3. The water source for the wells is the Big Sioux Brookings aquifer as specified on both No. 6652-3 and No. 7238-3 and the combined diversion rate from both wells does not exceed the permitted amount.

- **If irrigation, no new land is irrigated**

The irrigated acreage (81 acres – No. 6652-3 and 104 acres – No. 7238-3) does not exceed the number of authorized acres and the irrigated land is within the areas described on No. 6652-3 and No. 7238-3.

- **Review of Existing Diversions**

Application No. 6652-3 originally specified the S1/2 NE1/4 section 34-T113N-R51W as the diversion point location. The permit holder later requested, and was granted, approval to drill a second well 200 feet south of the original well. The second, south well, is slightly further west than the northern-most well site. Based on the location it appears the southern well may be located in the SW1/4 NE1/4 but the license for No. 6652-3 was issued for only the SE1/4 NE1/4. This legal description was then carried over to No. 7238-3 as the location for both wells. Since both wells are nearly on the line between the quarter quarters expanding the legal description to specify the S1/2 NE1/4 will ensure both wells are covered.

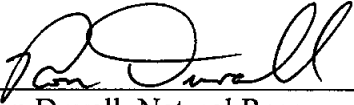
Following is an excerpt for the report completed for during consideration of Application No. 7238-3:

There are two existing irrigation wells in this same section. The well for Water Right No. 2728A-3 (130 acres, 1.78 cfs) is located about 2,285 feet to the southwest and the well for Water Right No. 3565-3 (127 acres, 1.78 cfs) is located about 2,850 feet northwest of these existing wells. Interference is not expected to be a problem. Drawdown created by pumping does not extend very far from a production well and this distance between wells should be sufficient to minimize any potential effects. These wells have been in use for a few years.

There have been no additional permits approved for any location closer to the wells covered by Nos. 6652-3 and 7238-3 than those described in the above report excerpt. Since the location of the southern-most well is only a few feet outside of the permitted location, making it slightly closer to the wells covered by No. 2728A-3 and 3565-3, no increase in the potential for interference is expected. In addition, nothing in the files for any of the permits/rights indicates past interference problems between wells.

RECOMMENDED ACTION

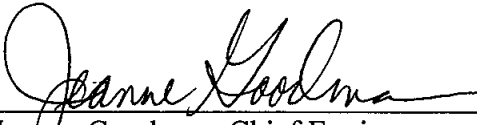
Based on the above criteria, it is recommended that the diversion points be licensed as developed for No. 7238-3 and that the license for No. 6652-3 be reissued to include the expanded legal description (S1/2 NE1/4 section 34-T113N-R51W) for the two wells and to correct the location of the irrigated acreage (see Report of Examination of Works dated June 16, 2015, for more information about the acreage correction).



Ron Duvall, Natural Resources Engineer
Water Rights Program

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

This change in location of the diversion points does not increase the potential for adverse effects to existing diversions.



Jeanne Goodman, Chief Engineer
Water Rights Program



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

JUN 18 2015

6652-3
7238-3

David Verhoek
46418 196th St
Bruce SD 57220

Dear Mr. Verhoek:

Enclosed is Water License No. 7238-3 and Reissued Water License No. 6652-3. Included with the licenses are maps 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 wells authorized by Water Right No. 6652-3 and 7238-3, 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. 7238-3**

(1) David Verhoek, 46416 196th St, Bruce SD 57220 made Application No. 7238-3, March 15, 2011 for a water permit to irrigate an additional 120 acres utilizing two existing wells (Big Sioux Brookings Aquifer), located in Brookings County, South Dakota. Permit No. 7238-3, with a priority date of March 15, 2011 was approved May 23, 2011 and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before May 23, 2016 and for the application to beneficial use of said water on or before May 23, 2020.

Water Right No. 6652-3, with a priority date of August 22, 2005, authorizes diversion of 1.56 cubic feet of water per second (cfs) from ground water (two wells) for irrigation of 81 acres in the NE ¼ Section 34, T113N, R51W. Water Permit No. 7238-3 was obtained to utilize the same two wells to irrigate an additional 120 acres. Permit No. 7238-3 did not authorize any increase in the developed diversion rate.

The investigation of the system developed under Water Permit No. 7238-3 found the location of the existing wells was incorrectly described in Water Right No. 6652-3 and Water Permit No. 7238-3. The Chief Engineer made a finding pursuant to SDCL 46-5-13.1 and ARSD 74:02:01:14.01 that the change in location of the diversion points does not increase the potential for adverse effects to existing diversions.

(2) It is certified that the water right 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 diversion points are both in the S ½ NE ¼ Section 34, T113N, R51W as described below:

- north well: 1,320 feet west and 3,075 feet north of the SE corner of Section 34, T113N, R51W
- south well: 1,345 feet west and 2,890 feet north of the SE corner of Section 34, T113N, R51W

** The wells described above also supply the center pivot located in the NE ¼ Section 34, T113N, R51W authorized under Water Right No. 6652-3. Combinations of diversions cannot exceed the authorized diversion rate of 1.56 cfs.*

(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:

Section 35, T113N, R51W	NW ¼ SW ¼	37.0 acres
	NE ¼ SW ¼	28.0 acres
	SW ¼ SW ¼	23.0 acres
	SE ¼ SW ¼	16.0 acres
Total		104.0 acres

(4) Pursuant to South Dakota Water Law 46-5-30.1 David Verhoek, 46416 196th St, Bruce SD 57220 the holder and/or owner of Water Right No. 7238-3 is issued a license to appropriate water, the right to use 1.56 cubic feet of water per second (**combined rate for Nos. 6652-3 and 7238-3**) from ground water (two wells, Big Sioux Brookings Aquifer) with a priority date of March 15, 2011 from the location specified in (2) of this license for irrigation purposes.

continued

This license is subject to South Dakota Water Law, any limitations or conditions listed in Water Right No. 7238-3 and subject to the following qualifications:

- The wells approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
- 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

JUN 18 2015

date

