

WATER PERMIT NO. 7160-3

Name of Applicant: **Mark Rust**

Address: **46106 192nd St, Estelline SD 57234**

Phone: **605 690-5662**

Amount of Water Claimed: **1.22 cfs**

Total Acres: **80 acres**

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

Water to be used for: **irrigation**

County: **Hamlin**

Type of Waste Disposal System:

Location: **3 miles northwest of Estelline**

PRIORITY Date Received: **9-22-09**

Application/License Fee: **\$950**

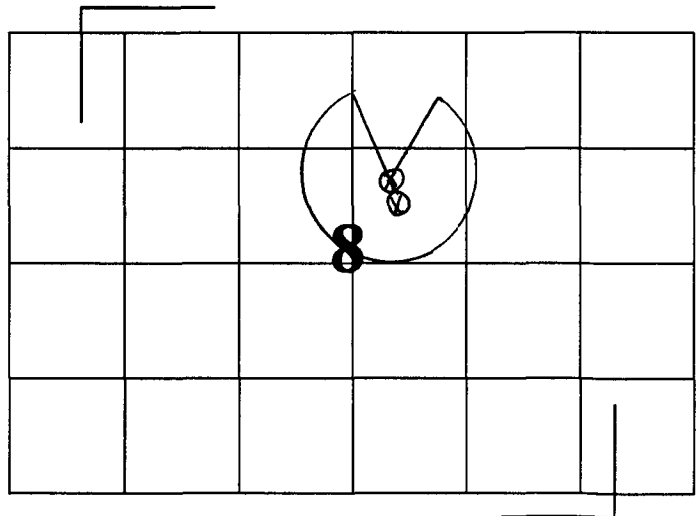
Corrected Application Received:

Period of Annual Use: **June 1 – August 31**

Remarks: **Requesting diversion rate greater than 1 cfs per 70 acres.**

Diversion Point: **SW ¼ NE ¼ Sec 8-T113N-R51W**

Land to be Irrigated: **NE ¼, E ½ NW ¼ Sec 8-T113N-R51W**



Depth of Well: **20 feet deep**

Well Driller:

Remarks:

Type of Map: **aerial**

Prepared by: **Jessica Michellson, Hamlin Co NRCS**

Reviewed and the Number Assigned on: **9-22-09**

By: **Karen Schlaak**

Notice of Hearing - date to intervene: _____

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

Mail to: Water Rights Program Joe Foss Building 523 E. Capitol Pierre, SD 57501-3181 (605) 773-3352	No. <u>7160-3</u> (office use only)	Hydrologic Unit <u>10170202</u>
	Basin <u>Sioux River</u>	
	Newspaper <u>Estelline Journal P.O. Box 159</u>	
	<u>605-873-2475</u>	<u>57234</u>

RECEIVED
SEP 22 2009
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 Mark Rust Phone 605 690 5662
(check one) ☒ Owner ☐ Tenant/lessee
- Mailing Address 46106 192nd St Estelline State SD 57234
(Street, RR, or Box and City) (Zip Code)
2. Amount of water claimed 1.22*CFS or 550**GPM ***AF Total Acreage 80
(*Cubic Feet per Second) (**Gallons per Minute) (***)Acre Feet - storage capacity of dam/dugout or annual use if applicable)
3. Source of water supply 2 wells
4. Location of point of diversion (example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W) County Hamlin
2 wells NE 1/4 & NW 1/4 Section 8 T113N R51W
SW 1/4 NE 1/4
5. County or counties where water will be used Hamlin
6. Annual period during which water is to be used Summer June - August 31
7. List below each forty acre division, or lot, or fraction thereof and show number of acres to be irrigated in each.
All Twn 113 N51 W8 (Attach sheet if more space is needed)

Land Description	Acres	Land Description	Acres
<u>East of NE 1/4 Section 8</u>	<u>60</u>		
<u>East 1/2 of NW 1/4 Section 8</u>	<u>20</u>		

8. Give a description of the project. (Attach sheet if more space is needed)
80 Acre center pivot Between 2 quarters to irrigate crops

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, Mark Rust, 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 Mark Rust

Subscribed and sworn to before me this 10 day of September 20 09

Kim Lilla
Notary Public signature

My Commission Expires
March 26, 2015

**SOUTH DAKOTA
WATER PERMIT NO. 7160-3**

Date of first receipt of application September 22, 2009.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 7160-3 to Mark Rust, 46106 192nd St, Estelline SD 57234 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. 7160-3 appropriates 1.22 cubic feet of water per second (cfs) from two wells to be completed into the Big Sioux:Brookings Aquifer (approximately 20 feet deep) located in SW 1/4 NE 1/4 Section 8 to irrigate 80 acres located in the NE 1/4, E 1/2 NW 1/4 Section 8; all in T113N-R51W.
2. The amount of the appropriation may not exceed 2 acre feet annually for each acre of land to which water is actually and beneficially applied for irrigation. The water is to be used during the following described annual period: June 1 – August 31.
3. The date from which applicant may claim right is September 22, 2009.
4. The date of approval of Permit No. 7160-3 is October 26, 2009.
5. One-fifth of the construction is to be completed on or before April 26, 2012.
6. All construction is to be completed on or before October 26, 2014.
7. Water is to be put to beneficial use on or before October 26, 2018.
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 shall be a minimum of 1,320 feet from the Big Sioux River.
2. 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.
3. The wells authorized by Permit Nos. 7160-3 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.
4. Pursuant to SDCL 46-5-6 which allows a greater diversion rate if the method of irrigation, time constraints, or type of soils so requires, Permit No. 7160-3 authorizes a maximum diversion rate of 1.22 cfs for the irrigation of 80 acres with an annual volume not to exceed 2 acre feet of water per acre per year.
5. 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

JAN 18 2010

date



(type or print in ink)

1. Well Information - Proposed Construction

- a) Drill Hole Diameter 20" Depth 20'
- b) Casing Type 12" PVC Diameter 12" Thickness 1/2"
- c) Screen Type PVC .080 Diameter 12" Thickness 1/2"
- d) Gravel Pack pearrock/sand Length of Gravel Pack 15'
- e) Depth to Top of Water Bearing Material 5'
- f) Depth to Water (ground surface to water level) 5'
- g) Distance to nearest existing domestic well:
- On applicants property 1 mile On property owned by others 3/4 mile

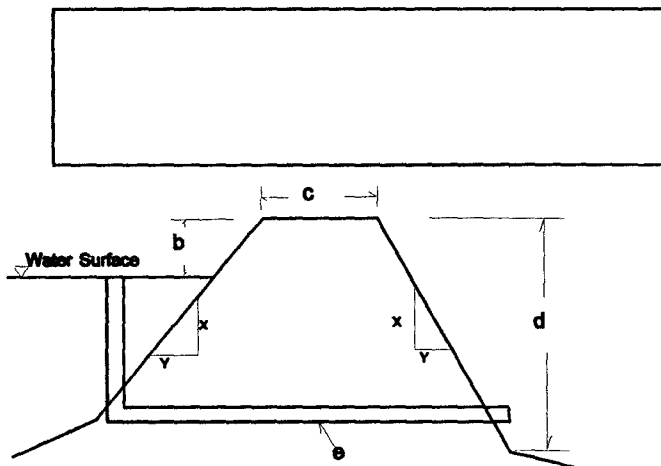
FCStone

*I will send the
Well Drillers log
ASAP
Mark Rust*

Year Constructed _____
y System _____
Depth _____

ge dams, please furnish the information requested below
n the map submitted with the application.

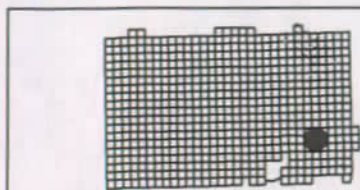
as involved in the design of this dam, please give their



- 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



USDA U.S. Dept. of Agriculture
 Farm Service Agency



RECEIVED

SEP 22 2009

WATER RIGHTS PROGRAM

Hamlin County

8-113N-51W

Legend

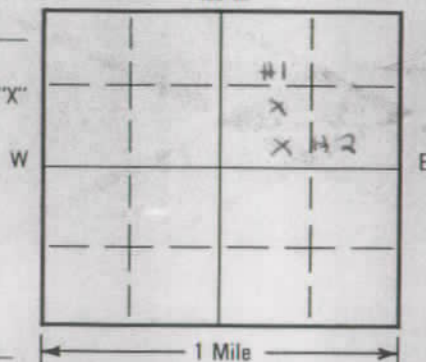
- Tract Boundaries
- Section-Township-Range
- CRP
- Easements
- Wetlands
- Common Land Units
- Rangeland

SOUTH DAKOTA WATER WELL COMPLETION REPORT

7160-3 07-92

Location SW 1/4 NE 1/4 Sec 8 Twp 113-0 Rg 51W
County Hamlin North

Please mark well location with an "X"



Well-Completion Date

8-17-09

LOCATION:

Distance from nearest potential pollution source (septic tank, abandoned well, feed lot, etc.)? 1/4 mile ft. from FARM YARD (identify source).

PROPOSED USE:

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

METHOD OF DRILLING:

Bucket- False Casing

CASING DATA: ☐ Steel ☒ Plastic ☐ Other

If other describe _____

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
20 LB/FT	12 IN	+1 FT	11'6" FT	20 IN
20 LB/FT	12 IN	+1'6" FT	11'6" FT	20 IN

GROUTING DATA

Grout Type	No. of Sacks	Grout Weight	From	To
Bestmix Cement		lb./gal	0 ft	6 ft

Describe grouting procedure TremieSCREEN: ☐ Perforated pipe ☒ ManufacturedDiameter 12 IN Length #110 #29 FEETMaterial PVCSlot Size 1080 Set From 11'6" Feet to 20'6" FeetOther information #2 11'6" 18'3"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? _____

Chlorine Pellet

Laboratory sent to for water quality analysis _____

Well Owner: Larry Rust & Mark Rust

Business Name: _____

Address: 46105 192nd St.Estelline, S.D. 57234

WELL LOG:

#1	FORMATION	DEPTH	
		FROM	TO
0-1	SAND	0	1
1-20'6"	Gravel	1	13
	SAND		
	Coarse Sand	13	18'3"

STATIC WATER LEVEL #1 - 5' #2 - 7'12 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:

☒ Pumped Describe: _____☐ Bailed _____☐ Other _____

Pumping Level Below Land Surface

#1 7'12 ft. After 2 Hrs. pumped 200 GPM

#2 13 ft. After 2 Hrs. pumped 300 GPM

If pump installed, pump rate _____ GPM

REMARKS

RECEIVED

NOV 12 2009

WATER RIGHTS PROGRAM

This well was drilled under license # 111

And this report is true and accurate.

Drilling firm Lacey Well Drilling Inc.

Signature of License Representative: _____

Signature of Well Owner or Equitable Property Holder: _____

Signature of Well Owner or Equitable Property Holder: Larry Rust

Date: _____

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date 5/22, 20 09

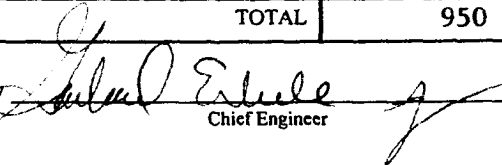
RECEIVED OF Rust Farm Account 46105 192nd St Estelline SD 57234

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

Fee for Application for Permit No. <u>7160-3</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>7160-3</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. 04215

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

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 7160-3, Mark Rust**

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. 7160-3, Mark Rust, 46106 192nd Street, Estelline SD 57234.

The Chief Engineer is recommending APPROVAL of Application No. 7160-3 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 shall be a minimum of 1,320 feet from the Big Sioux River.
2. 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.
3. The wells authorized by Permit Nos. 7160-3 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.
4. Pursuant to SDCL 46-5-6 which allows a greater diversion rate if the method of irrigation, time constraints, or type of soils so requires, Permit No. 7160-3 authorizes a maximum diversion rate of 1.22 cfs for the irrigation of 80 acres with an annual volume not to exceed 2 acre feet of water per acre per year.
5. 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
September 30, 2009

REPORT ON WATER PERMIT APPLICATION NO. 7160-3
For Mark Rust
September 25, 2009

Application No. 7160-3 proposes to appropriate 1.22 cfs (550 gpm) from two wells approximately 20 feet deep located in the SW $\frac{1}{4}$ NE $\frac{1}{4}$ of section 8 to irrigate 80 acres located in the NE $\frac{1}{4}$, E $\frac{1}{2}$ NW $\frac{1}{4}$ of section 8; all in T113N R51W in Hamlin County. The application is requesting a diversion rate greater than the statutory limit of one cfs per 70 acres.

AQUIFER – BIG SIOUX BROOKINGS (BS-B)

The Big Sioux Brookings is a predominantly surficial outwash (sand and gravel) that is largely under water table conditions in Hamlin County. 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 blends into the Big Sioux North aquifer to the north and extends into Brooking County to the south and into Deuel County to the east. Ground water movement appears to be from northwest to southeast in the area of this application (Kume, 1985). Kume mapped the entire aquifer in Hamlin County which he called the Big Sioux aquifer (did not use the management units which are used in this report) and estimated the aquifer to underlie 113,920 acres and contain an estimated 480,000 acre feet of water in storage. If the Big Sioux North management unit estimate by Hedges is included, the two different estimates are reasonably close. The aquifer is hydraulically connected to the Big Sioux River and some area lakes and streams. Generally ground water movement is toward these surface water bodies which act as discharge zones for the ground water, however under some hydrologic conditions the surface water does recharge the ground water system. Recharge has been estimated to average about 6.57 inches per year to the aquifer (Koch, 1980).

No test well log was filed with the application. The Hamlin County study would indicate a potential thickness of 20 to 40 feet for the Big Sioux aquifer in the area (Kume, 1985).

The Water Rights Program monitors five observation wells within three miles of this application. HN-57B is located about two miles northwest, HN-75A is located about two miles southeast, HN-77J is located about three miles southeast, HN-77E is located about two and one-half miles north, and HN-77F is located about three miles northeast, all from this application. Water levels for these wells show good response to climatic conditions. Water levels rise during wet periods (recharge) and gradually decline during dry years. Hydrographs for these observation wells are included with this report (Water Rights, 2009). There appears to be very little response to pumping in the water level record. Also note that over the period of record water levels have changed from 7 to 12 feet from the absolute highest to lowest in these observation wells. The magnitude of fluctuation appears to be related to the distance from the Big Sioux River with somewhat less fluctuation nearer to the river.

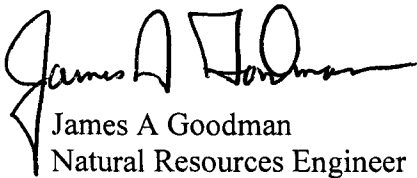
REVIEW OF EXISTING WATER PERMITS/RIGHTS

The closest permitted irrigation well is for Water Right No. 4418-3 (1.33 cfs, irrigation of 134 acres) located about one mile north of this proposed well. At this distance, interference is not expected to be a concern. Drawdown will be created by pumping but will not be significant at the distance between wells. Also note that the Big Sioux River is located directly between

these permits. The observation well record reinforces this conclusion. Note that only observation well HN-57B is located on the same side of the Big Sioux River as this application.

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. Interference is not a concern.
3. The well authorized by this application must be constructed in accordance with SD Well Construction Standards.
4. These wells should not be located within 1,320 feet of the Big Sioux River. Even though this appears to be the case with this application this spacing should still be a condition on the permit. The purpose of this condition is to minimize any potential effects on flows in the river.
5. The applicant did not provide justification for using more than one cfs per 70 acres.



James A Goodman
Natural Resources Engineer

BIBLIOGRAPHY

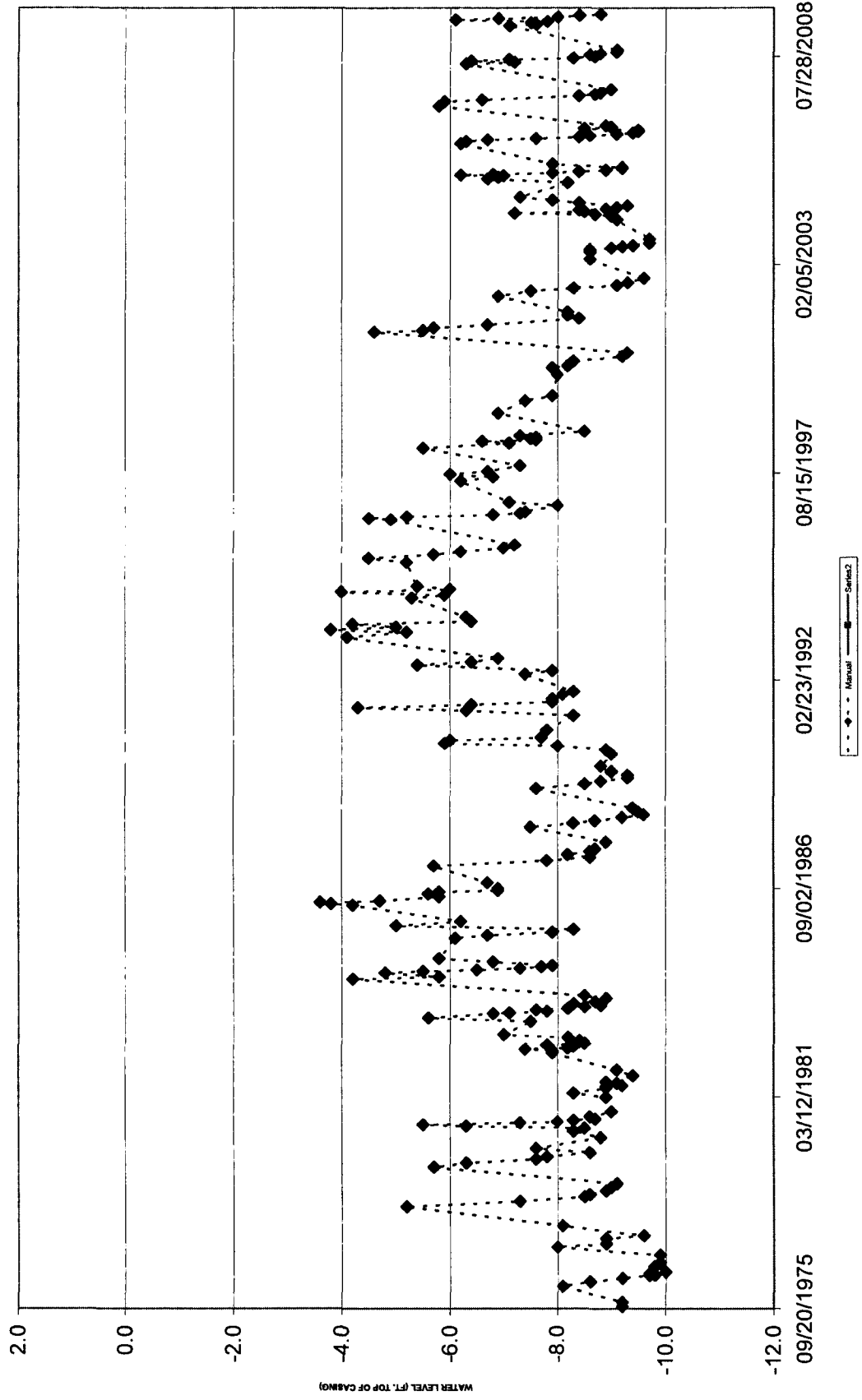
Hedges, L.S., and others, 1982, Evaluation of Ground-Water Resources Eastern South Dakota and Upper Big Sioux River South Dakota and Iowa, for US Army Corps of Engineers, SD DENR, SDGS, Vermillion, SD, 57069.

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

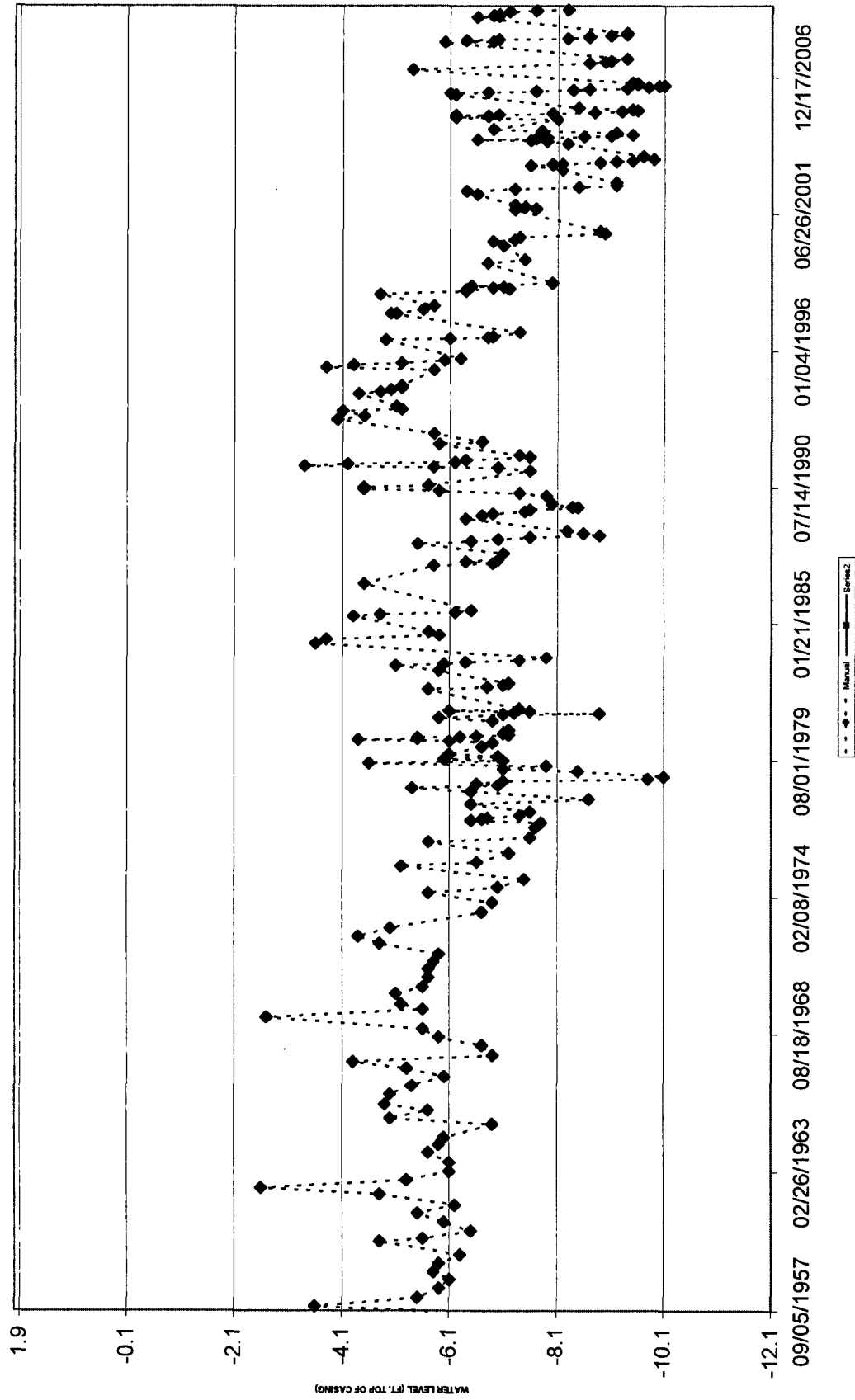
Kume, J., 1985, Water Resources of Deuel and Hamlin Counties, South Dakota, Water-Resources Investigation Report 84-4069, USGS, Huron, SD, 57350.

Water Rights, 2009, Unpublished Observation Well Data for Hamlin County, SD DENR, DES, Water Rights Program, Pierre, SD, 57501.

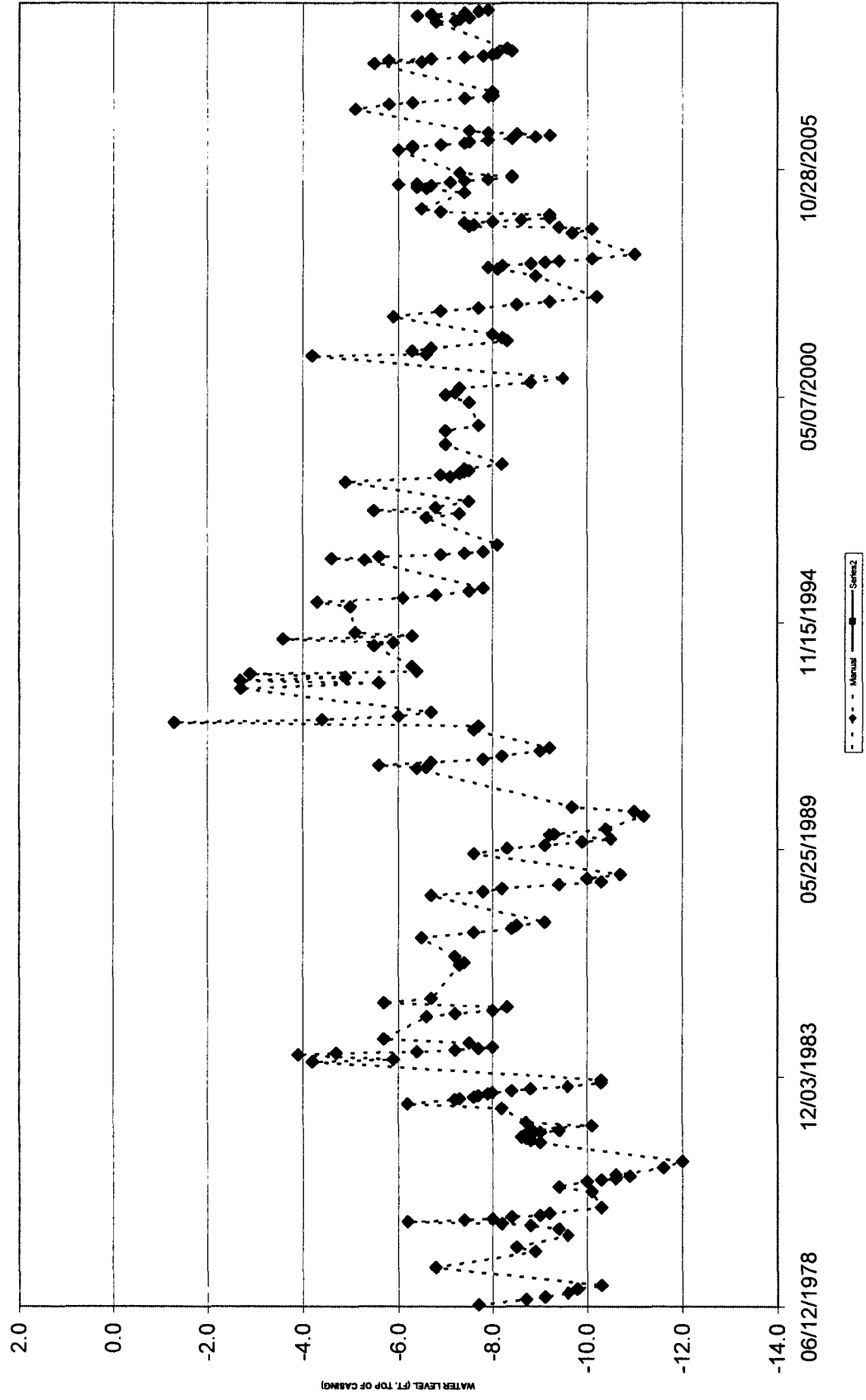
**WATER RIGHTS' OBSERVATION WELL
HN-75A**



WATER RIGHTS' OBSERVATION WELL
HN-57B



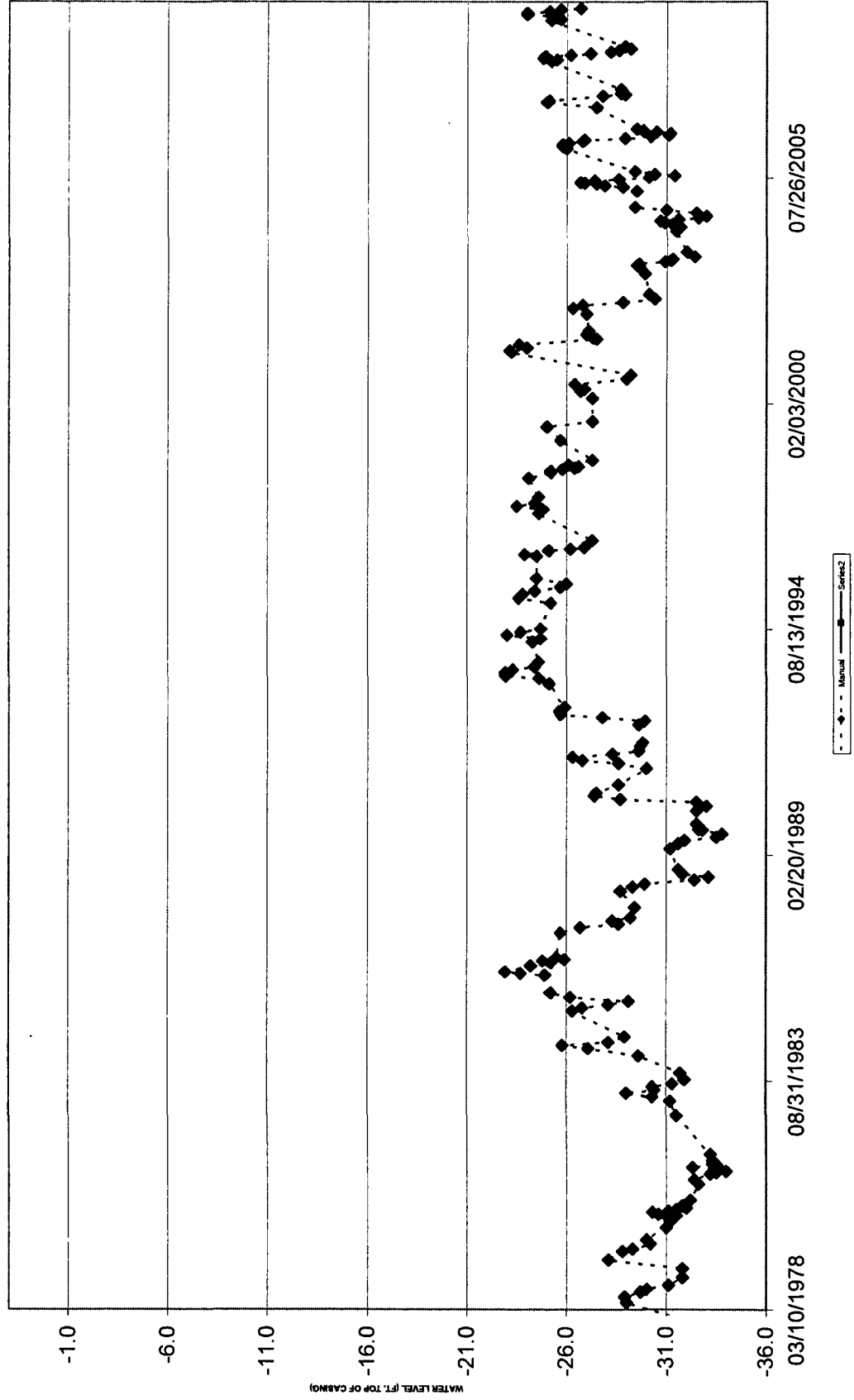
WATER RIGHTS' OBSERVATION WELL
HN-77J



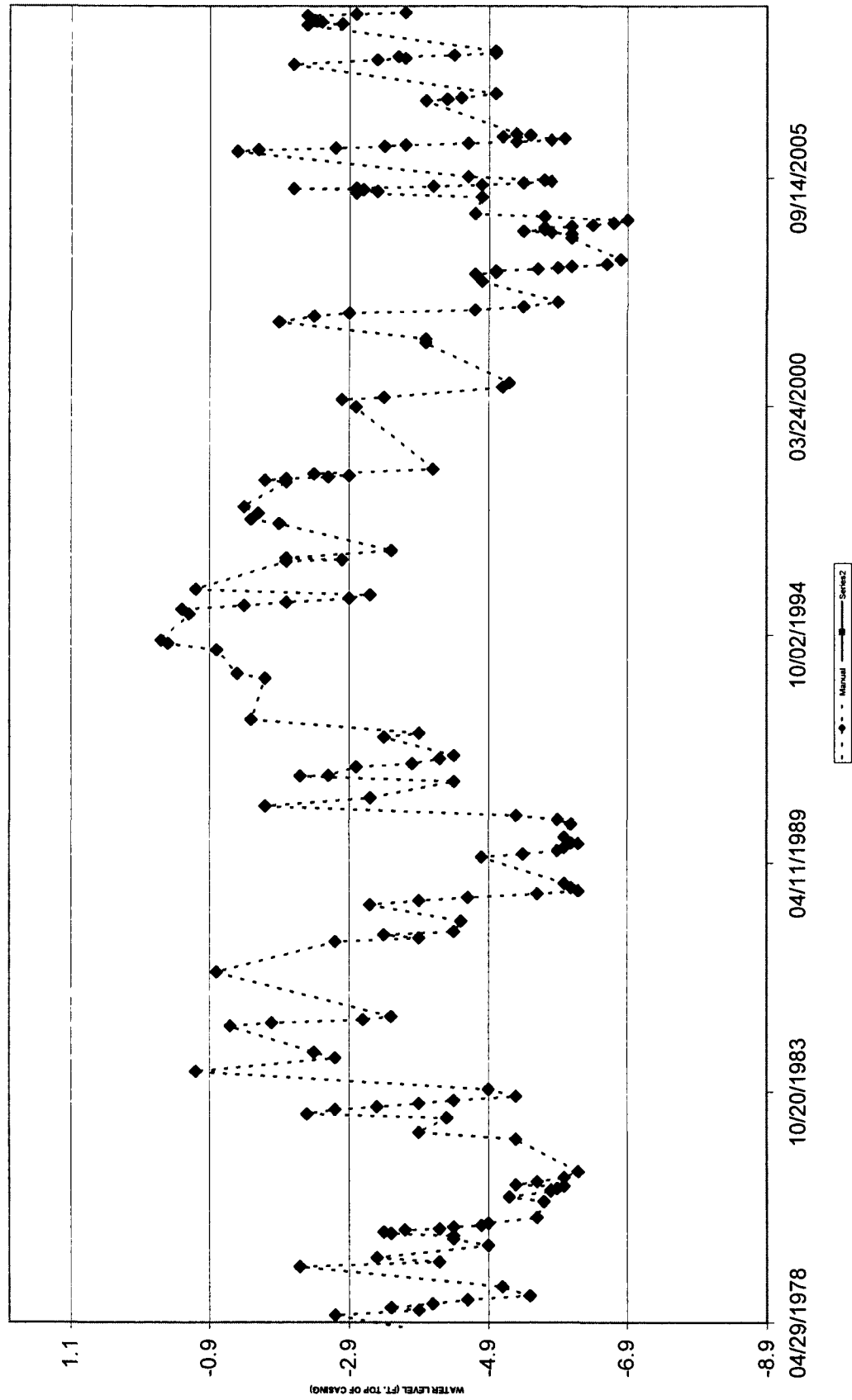
WATER LEVEL, (FT. TOP OF CASKEY)

03/10/1978 08/31/1983 02/20/1989 08/13/1994 02/03/2000 07/26/2005

Legend: Manual Series2



WATER RIGHTS' OBSERVATION WELL
HN-77E



RECEIVED

OCT 19 2009

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:

Oct. 7, 2009

Oct. 14, 2009

Cost of Printing \$41.58

Lee Anne Archer
(Signature)

Owner
(Title)

10-14-09
(Date Signed)

**NOTICE OF APPLICATION NO.
7160-3 TO APPROPRIATE WATER**

Notice is given that Mark Rust, 46106 192nd St, Estelline SD 57234 has filed an application for a water permit to appropriate 1.22 cubic feet of water per second (cfs) from two wells to be completed into the Big Sioux-Brookings Aquifer (approximately 20 feet deep) located in SW 1/4 NE 1/4 Section 8 to irrigate 80 acres located in the NE 1/4, E 1/2 NW 1/4 Section 8; all in T113N-R51W. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 7160-3 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 October 26, 2009.

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 Oct. 7 and 14, 2009, at total cost of \$41.58.



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

October 1, 2009

Estelline Journal
PO Box 159
Estelline SD 57234

ATTENTION: Legal Public Notice

Enclosed is a Notice on Application No. 7160-3 to Appropriate Water to be published twice. Please publish the first notice on October 7, 2009 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 Mark Rust, 46106 192nd St., Estelline SD 57234 (Ph # 605-690-5662).

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. 7160-3

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

Date _____

We are in receipt of your letter of October 1, 2009 enclosing Notice to Appropriate Water by Application No. 7160-3 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
denr.sd.gov

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

October 1, 2009

Mark Rust
46106 192nd St
Estelline SD 57234

Dear Mr. Rust:

Water Permit Application No. 7160-3 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 # 605-873-2475). You will need to contact the newspaper and authorize publication of this notice. For your information, a copy of the notice, the recommendations of the Chief Engineer and reports on the applications 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 applications.

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 first Notice on October 7, 2009 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. 7160-3 to Appropriate Water

Notice is given that Mark Rust, 46106 192nd St, Estelline SD 57234 has filed an application for a water permit to appropriate 1.22 cubic feet of water per second (cfs) from two wells to be completed into the Big Sioux:Brookings Aquifer (approximately 20 feet deep) located in SW ¼ NE ¼ Section 8 to irrigate 80 acres located in the NE ¼, E ½ NW ¼ Section 8; all in T113N-R51W. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 7160-3 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 October 26, 2009.

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 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
denr.sd.gov

JAN 13 2013

Mark Rust
46160 192nd St
Estelline SD 57234

Dear Mr. Rust:

Enclosed is Water Permit No. 7160-3 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

Report of Examination of Works and/or Application of Water to Beneficial Use For Permit No. 7160-3

I have this day, March 30, 2015, made a thorough examination of the water use system constructed by Mark Rust, 46106 192nd St, Estelline SD 57234 regarding Permit No. 7160-3, bearing the priority of September 22, 2009 authorizing the diversion of 1.22 cu. ft. per second of the waters of Big Sioux Brookings aquifer for irrigation purposes, in Hamlin County.

Inspection contact & relationship to permit holder, if applicable: **Mark Rust, owner**

A. Works used to divert the water:

Well Information:

- 1) Well Drilling Firm: Lacey Well Drilling
- 2) No. of Wells 2
- 3) Depth(s) 20.5 & 18 feet
- 4) Well log is available Yes

Casing:

- 1) Diameter 12 inches
- 2) Length 11.5 feet
- 3) Type Plastic

Screen:

- 1) Type PVC
- 2) Length 10 & 9 feet
- 3) Static water level 5 & 7 feet

Pumps:

- 1) Make Grundfos submersible
- 2) Size 10 hp
- 3) Capacity each 275 GPM

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

- 1) Type PVC
- 2) Size 6 inches
- 3) Length 270 feet

Comments: **xx**

C. Works used to apply water to beneficial use:

Center pivot:

- 1) Make Valley
- 2) Number of towers 6
- 3) End gun Yes
- 4) Capacity 550 GPM

Chemigation Equipment:

- 1) Does chemigate No

D. Compliance with Permit Requirements:

- 1) Permit qualifications being abided by Yes
- 2) Irrigation Questionnaires checked to determine if permit owner started irrigation by the end of construction period Yes
- 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 (pivot center) -- 1,570 feet south and 2,315 feet west from NE corner of section 8 located in SW1/4NE1/4 (Latitude 44.61190, Longitude -96.97491); South well -- 1,825 feet south and 2,230 feet west from NE corner section 8 located in SW1/4NE1/4 (Latitude 44.61119, Longitude -96.97464) all in section 8-113N-51W.
2. The works are capable of diverting and conveying to the place of use 1.22 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 in section 8-113N-51W

NE1/4	NE1/4	1 acre	NE1/4	NW1/4	10 acres
NW1/4	NE1/4	10 acres	SE1/4	NW1/4	17 acres
SW1/4	NE1/4	38 acres			
SE1/4	NE1/4	4 acres			

comprising a total of 80 acres of land and the license should be issued for 1.22 cfs.

3. All structures, wells and lands on map Yes

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

None.



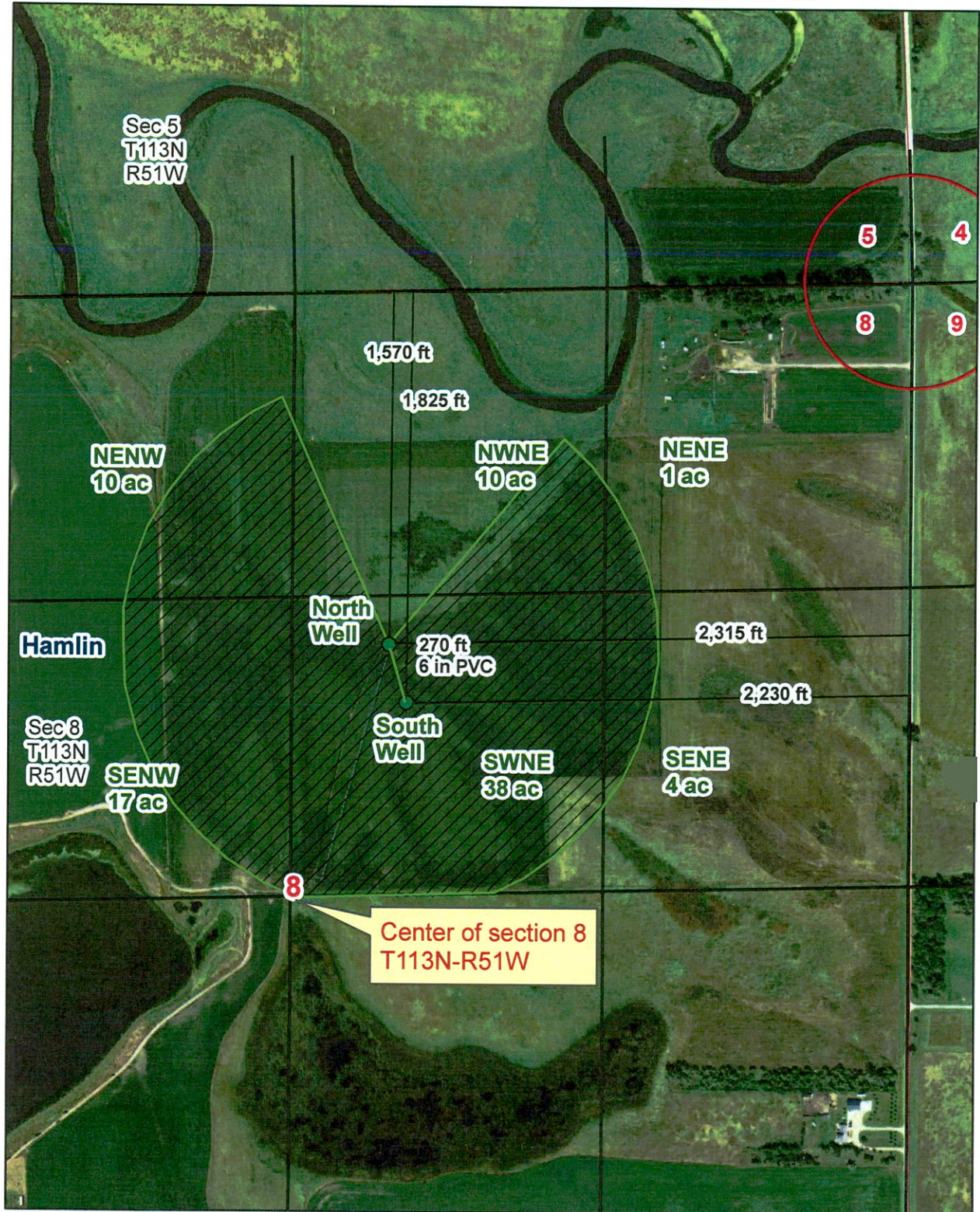
Ron Duvall
Water Rights Permitting Administrator
DENR, Water Rights Program

Date report completed: March 31, 2016

Scale: 1 inch = 660 feet

925

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: March 9, 2016

Water Right No. 7160-3

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

Date

3/30/15

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

FROM:

Mark Rust
(name)46105 192nd St
(address)Estelline SD 57234
(city, state, zip)690-5662
(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. 7160-3 states that the water use system is to be constructed by

Oct 26, 2014
(date)

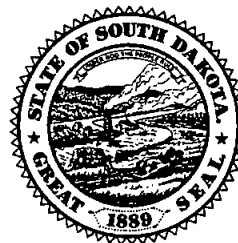
, and water is to be put to beneficial use by Oct 26, 2018
(date)

The water use system was completed on 2011
(date)

Applying the water to beneficial use was completed on 2011
(date)

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

Mark Rust
(signature)





DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

MAY 03 2016

7160-3

Mark Rust
46106 192nd St
Estelline SD 57234

Dear Mr. Rust:

Enclosed is Water License No. 7160-3. 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. 7160-3, 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. 7160-3**

(1) Mark Rust, 46106 192nd St, Estelline SD 57234 made Application No. 7160-3, September 22, 2009 for a water permit to divert 1.22 cubic feet of water per second from ground water, two wells (Big Sioux Brookings Aquifer), Hamlin County, South Dakota for irrigation purposes. Permit No. 7160-3, with a priority date of September 22, 2009 was approved October 26, 2009 and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before October 26, 2014 and for the application to beneficial use of said water on or before October 26, 2018.

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

- **north well:** 1,570'S and 2,315'W of the NE corner of Section 8, T113N, R51W (SW $\frac{1}{4}$ NE $\frac{1}{4}$);
- **south well:** 1,825'S and 2,230'W of the NE corner of Section 8, T113N, R51W (SW $\frac{1}{4}$ NE $\frac{1}{4}$);

(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:

T113N, R51W Section 8	NE $\frac{1}{4}$ NE $\frac{1}{4}$	1 acre	NE $\frac{1}{4}$ NW $\frac{1}{4}$	10 acres
	NW $\frac{1}{4}$ NE $\frac{1}{4}$	10 acres	SE $\frac{1}{4}$ NW $\frac{1}{4}$	17 acres
	SW $\frac{1}{4}$ NE $\frac{1}{4}$	38 acres		
	SE $\frac{1}{4}$ NE $\frac{1}{4}$	4 acres	Total	80 acres

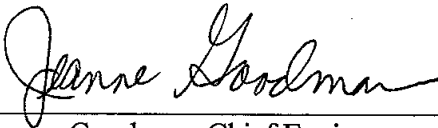
(4) Pursuant to South Dakota Water Law 46-5-30.1 Mark Rust, 46106 192nd St, Estelline SD 57234 the holder and/or owner of Water Right No. 7160-3 is issued a license to appropriate water, the right to use 1.22 cubic feet of water per second from ground water, two wells (Big Sioux Brookings Aquifer) with a priority date of September 22, 2009 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. 7160-3 and subject to the following qualifications:

- The wells shall be a minimum of 1,320 feet from the Big Sioux River.
- The wells approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
- The wells authorized by Permit No. 7160-3 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.

continued

- Pursuant to SDCL 46-5-6 which allows a greater diversion rate if the method of irrigation, time constraints or type of soils so requires, Permit No. 7160-3 authorizes a maximum diversion rate of 1.22 cfs for the irrigation of 80 acres with an annual volume not to exceed 2 acre feet of water per acre per year.
- 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

MAY 03 2016

date

