

Considered: _____

WATER PERMIT NO. 5412-3

HAP No. _____

Name of Applicant Nels Sorenson

Post Office Address R.R. 3 Box 23 Vermillion SD 57069

Amount of Water Claimed 0.85 cfs Total Acres 60

Source of Water Supply groundwater

Water to be used for irrigation County Clay

About 1 1/2 miles S of Vermillion

PROOF OF PUBLICATION: Received _____ Not Received _____

APPLICATION: Approved _____ Subject to _____

F.F. & C.L. Adopted _____ Not Approved _____ Deferred _____

PRIORITY _____ Date Received 3/21/90 Fee \$150.00 Remarks _____

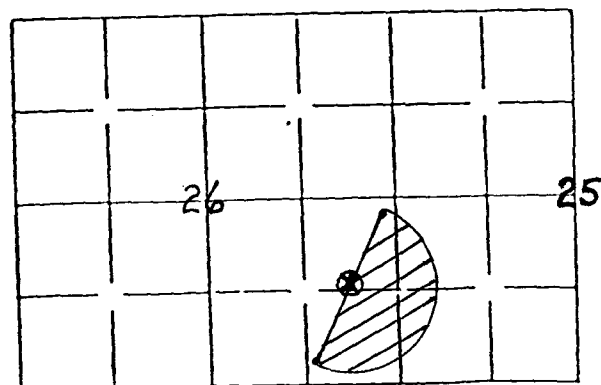
Corrected Application Received _____ Period of Annual Use _____

WATER QUALITY APPROVAL RECEIVED _____ APPROVED/CONDITIONAL (Circle one)

WI-1 Description same as Application YES _____ NO _____ REMARKS _____

Diversion Point N 36° 30' W of SE corner of
Sect 26-T92-R52 1584' from
SE corner

Land to be Irrigated NW 1/4 SW 1/4 Sect 25-T92-R52
SW 1/4 SW 1/4 Sect 25-T92-R52
NE 1/4 SE 1/4 Sect 26-T92-R52
SE 1/4 SE 1/4 Sect 26-T92-R52



Well Log: Driller Christensen No. 444 Licensed YES X NO _____

Depth of Well 100' REMARKS _____

Type of Map Aerial PREPARED BY Gerald Pilke Reviewed and the Number
assigned on 3/22/90 By Eric Hunsland

(See instructions)

No. 5412-3 Hydrologic Unit 1017010
Basin Vermillion River
Newspaper Vermillion Plain Talk Box 256 57069



Application For Soil/Water Compatibility Permit and Permit To Appropriate Water

Type of Application: ☒ New ☐ Vested Right ☐ Amend Permit No. _____
☐ Change Acreage ☐ Change diversion point(s) ☐ Add diversion point(s)
☐ Add Acreage ☐ Increase diversion rate ☐ Other _____

- Name of Applicant Nels J. Sorensen Phone No. 605-624-4535
- Post Office Address R.R. 3 Box 23 Vermillion SD 57069
(Street, RR or Box) (City) State Zip Code
- Amount of water claimed (c.f.s) 0.85 cfs Total acres irrigated 60
- Source of Water supply well
- Location of point of diversion N 36° 30' W of SE Corner Section 26-T92-R52W
1584' From SE Corner to point of diversion.
NE 1/4 SE 1/4 Section 26-T92N-R52W County Clay
- Counties where water will be used Clay
- Annual period during which water is to be used May 1 to September 30
- List below each forty acre subdivision, or lot, or fraction thereof and show number of acres to be irrigated in each.

Land Description	No. Acres Irr.
NW 1/4 SW 1/4 Sec 25-T92-R52	12.3
SW 1/4 SW 1/4 Sec 25-T92-R52	9.32
NE 1/4 SE 1/4 Sec 26-T92-R52	11.5
SE 1/4 SE 1/4 Sec 26-T92-R52	27.0

Land Description	No. Acres Irr.

Attach sheet if more space is needed

- Type of Irrigation: Gravity: _____ Towline: _____ Center Pivot: X Gun: _____ Other: _____ (Specify) _____
- Crops to be Irrigated: corn, beans, alfalfa
- Give a description of proposed project. (Attach sheet if more space is needed)
Center pivot irrigation to raise corn, soybeans and alfalfa.

Attachments: Attach Form 2A if diversion from a well or dugout, or if storage of water, is proposed. Attach maps, soils information and any other technical information.

STATE OF SOUTH DAKOTA)
County of Clay) ss

I, Nels J. Sorensen, the applicant, certify that I have read this application and examined the attached maps, that the water sample, if needed, has been taken by the required procedures and has not been adulterated or tampered with and is truly representative of the water to be used, and that the matters stated in this application are true and correct.

Signed Nels J. Sorensen

Subscribed and sworn to before me this 19th day of March 19 90

My Commission Expires
October 26, 1996

Notary Public

**SOUTH DAKOTA
WATER PERMIT No. 5412-3 FOR IRRIGATION**

Date of first receipt of application March 12, 1990.

Date Soil/Water Compatibility Permit received April 13, 1990.

Date of return to applicant for corrections, amendments or changes March 12, 1990.

Date of receipt of corrected application March 21, 1990.

The Water Management Board approved Water Permit Application No. 5412-3 on May 24, 1990 for Nels J. Sorensen, RR #3, Box 23, Vermillion, SD 57069 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. 5412-3 appropriates 0.85 cubic feet of water per second from one well (Missouri - Elk Point Aquifer) 100 feet deep to irrigate 60 acres. The point of diversion will be located in the NE1/4 SE1/4 of Section 26 T92N-R52W. The land to be irrigated is located in the E1/2 SE1/4 of Section 26 T92N-R52W and the W1/2 SW1/4 of Section 25 T92N-R52W.
2. The amount of the appropriation may not exceed 2 acre feet annually for each acre of land to which water is actually and beneficially applied for irrigation. The water is to be used during the following described annual period: May 1 - September 30.
3. The date from which applicant may claim right is March 12, 1990.
4. One-fifth of the construction is to be completed on or before November 24, 1992.
5. All construction is to be completed on or before May 24, 1995.
6. Water is to be put to beneficial use on or before May 24, 1999.
7. 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 authorized pursuant to this permit shall be constructed by a licensed well driller and construction shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04.
2. 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.
3. This permit is approved subject to the irrigation water use questionnaire being submitted each year.
4. Land authorized by Permit No. 5412-3 is also authorized by Permit No. 4983-3. Combinations of diversions under the two permits shall not exceed the Statutory limit of 1.0 cfs for each 70 acres of land to be irrigated in Section 25, T92N, R52W.

WATER MANAGEMENT BOARD

By: 
Chief Engineer, Water Rights Division
Department of Water and Natural Resources

SEP 12 1990

(date)

Supplemental Information

(type or print in ink)

1. Well Information - Proposed construction

- a) Drill Hole Diameter 26" Depth 100'
- b) Casing Type 15" pvc schule 40 Diameter 15" Thickness Schule 40
- c) Screen Type slotted casing Diameter 15" Thickness Schule 40
- d) Gravel Pack Thickness 10" Length of Gravel Pack 90'
- e) Depth to Top of Water Bearing Material 12'
- f) Depth of Water (ground surface to water level) 12'
- g) Distance to nearest existing domestic well:
- On applicants property _____ On property owned by others 1 mile

2. Dugout Information Estimates

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

3. Water Storage Dams

If the proposed water use system contains one or more storage dams, please furnish the information requested below. The locations of each dam should 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) Outlet Dimensions:
Pipe diameter _____

Spillway width _____

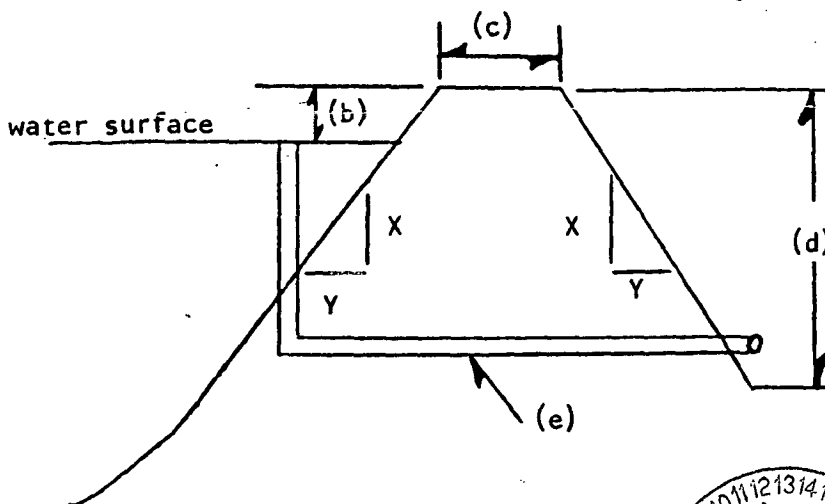
f) X & Y Slope
Upstream _____

Downstream _____

Surface Area of Impoundment _____

Storage _____ acre feet

Drainage area above dam _____



Signature of Applicant



SOUTH Dakota Department of
Water & Natural Resources

Joe Foss Building
523 East Capitol
Pierre, South Dakota 57501-3181

March 12, 1990

Nels Sorensen
R.R. 3, Box 23
Vermillion, SD 57069

Dear Mr. Sorensen:

This letter is in response to your water permit application received on March 12, 1990. The following information is needed in order to process your application.

- 1) The application you submitted was on an outdated form. I have taken the liberty of transferring this information to a new form. Please check this information for accuracy, sign and have properly notarized.
- 2) A well log or driller's test log signed by a South Dakota licensed well driller MUST accompany the application.

The water permit application can not be considered by the Water Management Board until the application is complete and the soil/water compatibility permit is obtained by the Department of Agriculture.

If you have any questions, please contact me.

Sincerely,

Eric Gronlund
Natural Resources Engineer
(605) 773-3352

enc.

RECEIPT

Division of Water Rights

South Dakota Department of Water and Natural Resources

412134

Pierre, March 12, 19 90

RECEIVED OF Nels Sorensen, RR #3 Box 23, Vermillion, SD 57069

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

Fee for Application for Permit No. <u>5412-3</u> to Appropriate Water, to construct works and to put water to beneficial use _____	150	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. _____		
Fee for Filing Transfer Form _____		
Fee for Filing Extension Request _____		
Fee for Certified Copy of _____		
Fee for Print Copy of Map _____		
Fee for Certifying _____		
Fee for _____		
(Any Other Work Provided by Law)	Total	150 00

By John Hatch / m
Chief Engineer

Department of Agriculture
WI#1
5/87

SOIL/WATER COMPATIBILITY PERMIT
Division of Conservation

Office Use Only

4475

WR#

OWNERS NAME: SORENSEN, NELS J. OWNERS ADDRESS: RFD 3, Box 23
Vermillion, SD 57069

COUNTY LAND LOCATED IN: Clay PHONE: 624-4535

LEGAL DESCRIPTION: ☒ Well ☐ Surface

1. LOCATION 26-T92N-R52W
Depth _____

Legal Description	Acres	Legal Description	Acres
<u>NW 1/4 SW 1/4 25-T92N-R52W</u>	<u>12.3</u>		
<u>SW 1/4 SW 1/4 25-T92N-R52W</u>	<u>9.2</u>		
<u>NE 1/4 SE 1/4 26-T92N-R52W</u>	<u>11.5</u>		
<u>SE 1/4 SE 1/4 26-T92N-R52W</u>	<u>27.0</u>		

2. TYPE OF IRRIGATION: GRAVITY: _____ TOWLINE: _____ CENTER PIVOT: XX GUN: _____ OTHER: (Specify) _____

3. CROPS TO BE IRRIGATED: Corn, Beans, Alfalfa

WATER QUALITY:	
4. WATER SAMPLE NUMBER: <u>90-0118</u>	7. ADJUSTED (SAR): <u>3.06</u>
5. SALINITY (EC X 10 ⁶): <u>1050</u>	8. PERCENT SODIUM: <u>20.51</u>
6. SODIUM (SAR): <u>1.15</u>	

Requirements:



Peter Quirk
Director, Division of Conservation

April 4, 1990

Date

☒ APPROVED ☐ REQUIREMENTS
☐ DISAPPROVED
☐ WAIVER

Soil/water permits will be recorded by the Department of Agriculture, with the County Register of Deeds.

NOT TO SCALE

Sec.
26-92-52

T-1820
(1226)

202R

T-1820
(1226)

T-1883
(1273)
20.9

T-1883
(1273) 6.9

T-1883
① 9.6

T-1898
(1717)
302.0
IRR.

.25

1 sq in = 13.06 Ac
7" = 1 mile
1" = 754.3'

By: *David Pelletier*
Civil Engr. Tech.
Soil Cons. Sec.

Division
point
T-1898
(1717)
65.0

92-52

18.6
(1717)
T-1898

T-1884
(1273)
50.0

202R

T-1899
23

T-1899
(1717)
68.4

T-1899
6.2



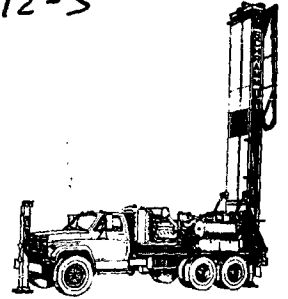
5412-3



CHRISTENSEN WELL CO.

Phone 254-6809

Hartington, Nebr. 68739



Test Log Nels J. Sorensen

0 to 10 top soil & sandy clay
10 to 20 Med Sand
20 to 50 Very Course Sand
50 to 65 Med Sand
65 to 95 Course sand
95 to 100 course gravel & rocks



William J Christensen

William J. Christensen
License # 444

SOUTH Dakota Department of
Water & Natural Resources

Joe Foss Building
523 East Capitol
Pierre, South Dakota 57501-3181

November 29, 1990

5412-3

William Christensen
Christensen Well Co.
RR 1, Box 167A
Hartington, Nebraska 68739

Dear Mr. Christensen:

The Division of Water Rights is in the process of issuing a Water License for irrigation under Water Permit No. 5412-3 held by Nels Sorensen, Clay County, South Dakota. In order to complete our file and before a Water License can be issued to Mr. Sorensen, an "as constructed" well log is needed for the following well:

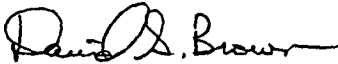
SE1/4 of Section 26, T92N R52W

I have enclosed the test hole information for this well for your reference.

If you still have a copy of the "as constructed" well log for the above well, please forward a copy of the log to our office. The Water License cannot be issued until this information is obtained.

Your prompt attention in this matter will be appreciated. If you have any questions, please contact me.

Sincerely,



David S. Brown
Natural Resources Engineer II
DWNR, Water Rights Division
(605) 773-3352

enclosures

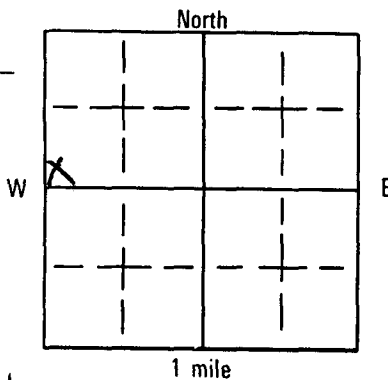
cc: Nels Sorensen, RR 3, Box 23, Vermillion, SD 57069

SOUTH DAKOTA WATER WELL COMPLETION REPORT

10-85

Location S 1/4 SE 1/4 Sec 26 Twp 29N Rg 52WCounty CLAY

Please mark well location with an "X"

Well Completion Date 7/90

PROPOSED USE:

☐ Domestic ☐ Municipal ☐ Test Holes
☒ Irrigation ☐ Industrial ☐ Stock

Method of Drilling: REVERSE ROTARY

CASING DATA:

☐ Steel ☒ Plastic ☐ Other

If other describe _____

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
<u>SC 40 40</u> LB/FT	<u>16</u> IN	<u>0</u> FT	<u>100</u> FT	<u>26</u> IN
_____ LB/FT	_____ IN	_____ FT	_____ FT	_____ IN
_____ LB/FT	_____ IN	_____ FT	_____ FT	_____ IN
_____ LB/FT	_____ IN	_____ FT	_____ FT	_____ IN

GROUT:

Was the well grouted? ☒ YES ☐ NOTo what depth? 0-20 FEETWhat is grouting material? PORTLAND CEMENTIf cement, number of sacks? 12Describe grouting procedure TREMIE POURWhat was grout weight? ~~104~~ 104 LB/GALSCREEN: ☒ Perforated pipe ☐ ManufacturedDiameter 16 IN Length 30 FEETMaterial PVC SC 40 40

Slot Size _____ Set From _____ Feet To _____ Feet

Slot Size _____ Set From _____ Feet To _____ Feet

Slot Size _____ Set From _____ Feet To _____ Feet

Other information _____

Was a packer or seal used? ☐ YES ☒ NO

If so, what material? _____

Describe packer(s) and location? _____

Was well disinfected upon completion? ☒ YES ☐ NOExplain 3 LB HTH CHLORINEBacteriological analysis ☐ YES ☒ NO

Laboratory sent to _____

Well Owner:

Name NELS SORENSENAddress VERMILLION S.D.

Well Log:

Depth

Formation

From

To

<u>TOP SOIL & SANDY CLAY</u>	<u>0</u>	<u>10</u>
<u>MED SAND</u>	<u>10</u>	<u>20</u>
<u>VERY COARSE SAND</u>	<u>20</u>	<u>50</u>
<u>MED SAND</u>	<u>50</u>	<u>65</u>
<u>COURSE SAND</u>	<u>65</u>	<u>95</u>
<u>COURSE GRAVEL & ROCKS</u>	<u>95</u>	<u>100</u>

STATIC WATER LEVEL 16 Feet

If flowing: closed in pressure _____ PSI

GPM flow _____ through _____ inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other

If other; specify _____

Can well be completely shut in? _____

WELL TEST DATA:

☒ Pumped☐ Bailed☐ OtherDescribe: TURBINE LINESHAFT TYPE

Pumping Level Below Land Surface

35 ft. After 1 Hrs. pumped 950 GPM

_____ ft. After _____ Hrs. pumped _____ GPM

_____ ft. After _____ Hrs. pumped _____ GPM

REMARKS:

This well was drilled under license # 444

And this report is true and accurate.

Drilling firm CHRISTENSEN WELL CO.

Signature of License Representative:

William J. Christensen

Signature of Well Owner:

Date 12/19/90

REPORT ON APPLICATION NO. 5412-3
Nels J. Sorensen
March 27, 1990

Application No. 5412-3 proposes to appropriate 0.85 cubic feet of water per second (cfs) from one well (Missouri-Elk Point Aquifer) 100 feet deep to irrigate 60 acres. The point of diversion will be located in the NE1/4 SE1/4 of section 26, T92N, R52W. The land to be irrigated is located in the E1/2 SE1/4, section 26, T92N, R52W and the W1/2 SW1/4, section 25, T92N, R52W.

DISCUSSION

This application, if approved, will use a center pivot system to irrigate 60 acres at a diversion rate of 0.85 cfs. A portion of the land to be irrigated (SW1/4, section 25) is covered under permit no. 4983-3. Therefore, the combined diversion rate for permit no. 4983-3 (3.6 cfs) and this application (0.85 cfs) for the overlapping acreage must be within the statutory limit of 1.0 cfs per 70 acres.

AQUIFER Missouri-Elk Point Aquifer (M-EP)

AQUIFER INFORMATION AND CHARACTERISTICS

The Missouri-Elk Point Aquifer is a glacial outwash deposit that underlies 74,500 acres in Clay County and has more than 1.0 million acre-feet in recoverable storage. The formation has an average thickness of 100 feet and is under water table conditions in this area. According to the well log submitted with the application, the aquifer material grades from medium sand at 10 to 20 feet below ground surface to coarse gravel and rocks at 95 to 100 feet (total thickness of about 90 feet). It is hydraulically connected to the Upper Vermillion-Missouri Aquifer in Clay County and the M-EP in Union and Yankton Counties. In addition, there is a hydraulic connection with the Missouri and Vermillion Rivers. Wells completed in this formation can be expected to yield at least 500 GPM and may yield more than 1000 GPM.

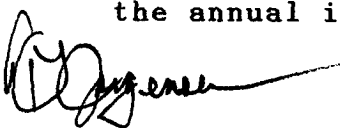
REVIEW OF AREA WATER RIGHTS

According to the 1988 Irrigation Report, there are 35 permits in the Missouri-Elk Point Aquifer with a total appropriation of 19,120.2 acre-feet per year (less than 2% of the recoverable water in storage). The actual irrigation pumpage reported from the formation was 3,780.2 acre-feet in 1988.

The Division of Water Rights maintains an observation well (CL-80C) approximately one mile from the diversion point in this application. The water levels show very little fluctuation due to pumping or seasonal changes. The applicant has Permit Nos. 4983-3, 5041-3, 5199-3, and 5200-3 within a one mile radius of the new well. These and other area water rights are not expected to be affected by the addition of the proposed well in Application No. 5412-3 since water table conditions exist in this area.

CONCLUSIONS

1. Water is available in the Missouri-Elk Point Aquifer for further appropriations.
2. Application No. 5412-3, if approved, would irrigate 60 acres at a proposed diversion rate of 0.85 cfs (380 GPM). The combined diversion for the overlapping acreage in section 25, T92N, R52W covered under Permit No. 4983-3 and this application must not exceed 1.0 cfs per 70 acres.
3. There should not be any well interference problems caused by the addition of the proposed diversion point in application No. 5412-3.
4. Approval of this application is subject to the completion of the annual irrigation questionnaire.



Terry L. Jorgensen
Natural Resources Engineer
Division of Water Rights

Approved by:



Gale N. Selken, P.E.
Natural Resources Engineer IV

REFERENCES

Division of Water Rights, 1990, Observation Well Files, DWNR,
Division of Water Rights, Joe Foss Building, Pierre, SD.

Division of Water Rights, 1988, Irrigation Report by Aquifer,
DWNR, Division of Water Rights, Joe Foss Building, Pierre,
SD.

Bugliosi, Edward F., 1986, Water Resources of Yankton County,
South Dakota, U.S. Geological Survey, Huron, SD.

Hedges, L.S, Burch, S.L., Iles, D.L., Barari, R.A., 1982,
Evaluation of Groundwater Resources in Eastern South Dakota
and Upper Big Sioux River, South Dakota and Iowa, U.S. Army
Corps of Engineers contract No. DACW 45-80-C0185, DWNR,
Office of Geological Survey, Vermillion, SD.

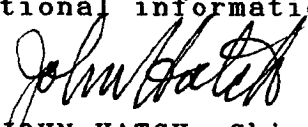
RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 5412-3, Nels J. Sorensen

Pursuant to SDCL 46-2A-2, the following is the recommendation of the Chief Engineer, Water Rights Division, Department of Water and Natural Resources concerning Water Permit Application No. 5412-3, Nels J. Sorensen, RR 3, Box 23, Vermillion SD.

The Chief Engineer is recommending APPROVAL of Application No. 5412-3 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) in the public interest with the following qualifications:

1. The well authorized pursuant to this permit shall be constructed by a licensed well driller and construction shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04.
2. 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.
3. This permit is approved subject to the irrigation water use questionnaire being submitted each year.
4. Land authorized by Permit No. 5412-3 is also authorized by Permit No. 4983-3. Combinations of diversions under the two permits shall not exceed the Statutory limit of 1.0 cfs for each 70 acres of land to be irrigated in Section 25, T92N, R52W.

See the attached report for additional information.


JOHN HATCH, Chief Engineer
March 29, 1990



Department of Water & Natural Resources

Joe Foss Building
523 East Capitol
Pierre, South Dakota 57501-3181

April 4, 1990

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

Nels J. Sorensen
RR #3 Box 23
Vermillion, SD 57069

Dear Mr. Sorensen:

Water Permit Application No. 5412-3 for irrigation use has been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice of hearing has been sent to the Publisher of the Vermillion Plain Talk printed at Vermillion SD. For your information, a copy of the notice is enclosed. Copies of the report and the Chief Engineer's recommendation are also 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 of Intent to Appropriate Water and to arrange for payment. Early contact with the paper can eliminate delays. The publisher has been instructed to publish your notice once each week for two consecutive weeks with the last publication to occur twenty days before the board meeting. We must receive Proof of Publication before the application can be considered by the Water Management Board.

Sincerely,

A handwritten signature in cursive script that reads "Eric Gronlund".

Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosures



Department of Water & Natural Resources

Joe Foss Building
523 East Capitol
Pierre, South Dakota 57501-3181

April 4, 1990

Vermillion Plain Talk
Box 256
Vermillion, SD 57069

ATTN: Legal Publications:

Enclosed is a Notice of Hearing on Application No. 5412-3 to be published twice. Please publish the first notice on or before April 12, 1990 with the second publication 7 days later.

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 Nels J. Sorensen, RR #3 Box 23, Vermillion, SD 57069.

A copy of BOTH publications must be SENT to the WATER RIGHTS DIVISION. IMMEDIATELY return the FIRST publication with the FIRST Transmittal form on the bottom of this page. The first copy is needed to check the publication for errors so any corrections can be made in the second publication. Publication errors can invalidate the public notice and cause the applicant costly delays.

Please be sure the SECOND publication is returned IMMEDIATELY with the enclosed Proof of Publication form. DO NOT WAIT until the end of the month or the billing cycle. The permit application cannot be considered by the Water Management Board until proof of publication has been received.

Sincerely,

Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosures

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

FIRST TRANSMITTAL NOTICE

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

No. _____

Date _____

We are in receipt of your letter of _____ enclosing Notice of Hearing to
Appropriate Water by Application No. _____ which was first published in our issue
of _____. ENCLOSED IS A COPY OF THIS FIRST PUBLICATION.

Name

Newspaper

ruction to Newspaper - Publish first Notice on or before April 12, 1990 with 2nd
ication 7 days later. The applicant is responsible for payment.

NOTICE OF HEARING on Application No. 5412-3 to Appropriate Water

Notice is given that Nels J. Sorensen, RR #3 Box 23, Vermillion, SD 57069 has filed an application for a water permit to appropriate 0.85 cubic feet of water per second (cfs) from one well (Missouri-Elk Point Aquifer) 100 feet deep to irrigate 60 acres. The point diversion will be located in the NE1/4 SE1/4 of Section 26-T92N-R52W. The land to be irrigated is located in the E1/2 SE1/4 of Section 26-T92N-R52W and the W1/2 SW1/4 of Section 25-T92N-R52W. The combined diversion rate authorized by Permit No. 4983-3 and this application, if approved, may not exceed 1.0 cfs per 70 acres for those lands located in Section 25-T92N-R52W.

Pursuant to SDCL 46-2A-2, the Chief Engineer of the Water Rights Division recommends APPROVAL of Application No. 5412-3 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. This application will be considered by the Water Management Board in the Pelican Room, Ramkota Inn, Hwy 212, Watertown, SD on May 23, 1990 at 10:00 am. The Chief Engineer's recommendation is not final or binding upon the Board. The Board is authorized to 1) approve, 2) approve with qualifications, 3) defer or 4) deny this application based on the facts presented at the public hearing.

Any interested person that intends to participate in the hearing before the Board by presenting evidence or cross-examining witnesses according to SDCL 1-26, must file a written petition with BOTH the applicant and Chief Engineer by May 11, 1990. The Chief Engineer's address is "Water Rights Division, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)". 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 legal counsel if legal counsel is obtained. The applicant need not file a petition. Contact the Water Rights Division to request information on this application or to assure access to the hearing by the handicapped.

This hearing is an adversary proceeding. Any person filing a petition and/or the applicant have the right to be represented by a lawyer. These and other due process rights will be forfeited if not exercised. Decisions of the Board may be appealed to the Circuit Court and State Supreme Court as provided by law. The time of the hearing will also be automatically delayed for at least twenty days upon written request to the Chief Engineer from the applicant or a petitioner. The request for a delay must be received by May 11, 1990.

This application is made pursuant to SDCL 46-1-1 thru 46-1-9, 46-1-12 thru 46-1-15; 46-2-3.1, 46-2-9, 46-2-11, 46-2-13, 46-2-17; 46-2A-1 thru 46-2A-10, 46-2A-12, 46-2A-14, 46-2A-15; 46-5-1 thru 46-5-11, 46-5-13 thru 46-5-15, 46-5-24, 46-5-25, 46-5-30.2, 46-5-30.4, 46-5-31; 46-6-3, 46-6-3.1, 46-6-6.1, 46-6-10, 46-6-13, 46-6-14; and Board Rules ARSD 74:02:01:01 thru 74:02:01:15.

AFFIDAVIT OF PUBLICATION

State of South Dakota, County of Clay, ss.

Crystal J. Willroth

Being first duly sworn, deposes and says: That he/she is a resident of the County of Clay and State of South Dakota; that

THE PLAIN TALK

Is a legal newspaper of general circulation, printed and published in Vermillion, in said County and State, by Broadcaster Press, Inc., and is now and has been such newspaper continuously during all the times hereinafter mentioned; that affiant is and was during all the time hereinafter mentioned in charge of the advertising department thereof, and has personal knowledge of all the facts stated in this affidavit: and that the notice and advertisement headed:

Notice of Hearing-on application No. 5412-3

to Appropriate Water

a printed copy of which is hereunto attached and made a part hereof, was printed and published in the said newspaper at least once in each week

for two successive weeks; that said newspaper at the time of the first publication of said notice hereinafter stated, had, and still has, a bona fide circulation of over two hundred paid copies weekly, and had been published in the said county of Clay for more than one year immediately prior to the date of the said publication of said notice, and that said newspaper during said times, was, and is, printed in part in an office maintained at said city of Vermillion, the said place of publication; that the first publication of said notice is said newspaper as

aforsaid was on Thursday, the 12 day of April 1990, and that the succeeding publications were severally

on Thursday, the 19 day of April, 1990

on Thursday, the _____ day of _____, 19____

on Thursday, the _____ day of _____, 19____

on Thursday, the _____ day of _____, 19____

that the fees charged for the printing and publication of the said notice and advertisement in said newspaper as aforesaid were

Thirty-six dollars and 90 cents

and that said fees for the printing and publishing of said notice and advertisement have been fully paid; that the full amount of the fee charged for the publishing of the said attached annexed notice and advertisement inures to the benefit of the publisher of the said newspaper, that no agreement or understanding for the division thereof has been made with any other person and that no part thereof has been agreed to be paid to any other person whomsoever.

Crystal J. Willroth

Subscribed and sworn to before me this 18th

day of April, 1990

Joan J. Willroth
My Commission Expires

Notary Public

NOTICE OF HEARING on Application No. 5412-3 to Appropriate Water

Notice is given that Nels J. Sorensen RR #3, Box 23, Vermillion, SD 57069, has filed an application for a water permit to appropriate 0.85 cubic feet of water per second (cfs) from one well (Missouri-Elk Point Aquifer) 100 feet deep to irrigate 60 acres. The point of diversion will be located in the NE1/4 SE1/4 of Section 26-T92N-R52W. The land to be irrigated is located in the E1/2 SE1/4 of Section 26-T92N-R52W and the W1/2 SW1/4 of Section 25-T92N-R52W. The combined diversion rate authorized by Permit No. 4983-3 and this application, if approved, may not exceed 1.0 cfs per 70 acres for those lands located in Section 25-T92N-R52W.

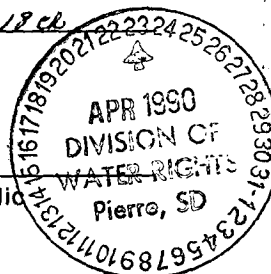
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Any interested person that intends to participate in the hearing before the Board by presenting evidence or cross-examining witnesses according to SDCL 1-26, must file a written petition with BOTH the applicant and Chief Engineer by May 11, 1990. The Chief Engineer's address is "Water Rights Division, Foss Building, 523 E. Capitol, Pierre, SD 57501 (605-773-3352)." 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 legal counsel if legal counsel is obtained. The applicant need not file a petition. Contact the Water Rights Division to request information on this application or to assure access to the hearing by the handicapped.

This hearing is an adversary proceeding. Any person filing a petition and/or the applicant have the right to be represented by a lawyer. These and other due process rights will be forfeited if not exercised. Decisions of the Board may be appealed to the Circuit Court and State Supreme Court as provided by law. The time of the hearing will also be automatically delayed for at least twenty days upon written request to the Chief Engineer from the applicant or a petitioner. The request for a delay must be received by May 11, 1990.

This application is made pursuant to SDCL 46-1-1 thru 46-1-9, 46-1-12 thru 46-1-15; 46-2-3.1, 46-2-9, 46-2-11, 46-2-13, 46-2-17; 46-2A-1 thru 46-2A-10, 46-2A-12, 46-2A-14, 46-2A-15; 46-5-1 thru 46-5-11, 46-5-13 thru 46-5-15, 46-5-24, 46-5-25, 46-5-30.2, 46-5-30.4, 46-5-31; 46-6-3, 46-6-3.1, 46-6-6.1, 46-6-10, 46-6-13, 46-6-14; and Board Rules ARSD 74-02-01 thru 74-02-01:15.

Publish: April 12 & 19, 1990





Department of Water & Natural Resources

Joe Foss Building
523 East Capitol
Pierre, South Dakota 57501-3181

SEP 12 1990

Nels J. Sorensen
RR #3 Box 23
Vermillion SD 57069

Dear Mr. Sorensen:

Enclosed is Water Permit No. 5412-3 as approved by the Water Management Board authorizing you to construct your water diversion system and put the water to beneficial use, not exceeding the limits as specified in the Water Permit.

Also enclosed is Form 10, Notice of Completion of Works and Application of Water to Beneficial Use, which you are to complete and submit to the Chief Engineer when you have completed the system and/or have put the water to beneficial use. An inspection can then be scheduled so that the Water License may be issued, thus completing your acquisition of a Water Right.

Very truly yours,

A handwritten signature in cursive script that reads "John Hatch". The signature is written in dark ink and is positioned above the typed name and title.

JOHN HATCH, Chief Engineer
Water Rights Division
605 773-3352

enclosures

PLEASE NOTE: Certain changes can be made in your permit within the five year construction period, usually without affecting the priority date provided an application to amend your permit is made within the five year period - i.e. changes in location or number of diversion points (wells) or location of land to be irrigated. Well locations for wells into the same aquifer can be moved up to 660 feet without application.

Applications to amend a permit after the five year construction period will be assigned a new priority date. Applications to change water sources, to add lands or increase original diversion rates, if approved will usually receive the date of the new application as a priority date regardless of the five year construction period.



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

Date 9/30/92

TO: Water Rights Division, DWNR
Joe Foss Building
Pierre SD 57501-3181

FROM: Nels J. Sorensen Rt. 3 Box 23 Vermillion
name address city

I have completed the construction of the water diversion system and I have put the water to beneficial use to the maximum extent it is going to be used. I have not exceeded the amounts specified in Water Permit No. 5412-3.

Water Permit No. 5412-3 states that the diversion system is to be constructed by May 24, 1995, and that the water it put to beneficial use by May 24, 1999.

The diversion system was completed on May 1992.
Applying the water to beneficial use was completed on May 1992.

You may schedule an inspection so that the Water License may be issued.

Nels J. Sorensen
signature



DEPARTMENT OF WATER & NATURAL RESOURCES

Joe Foss Building
523 East Capitol
Pierre, South Dakota 57501-3181

January 4, 1991

5412-3

Nels J Sorensen
RR #3 Box 23
Vermillion, SD 57069

Dear Mr. Sorensen:

The inspection of your water use system and the inspection of the extent of application of water to beneficial use, as developed under Water Permit No. 5412-3, has been completed. Your final water right document, the Water License, can now be issued.

Statutes require that we charge a \$50.00 fee for the inspection and issuance of the Water License. Upon receipt of the \$50.00 fee from you, we will begin processing your Water License.

South Dakota Water Law 46-5-30.1 requires that a permit holder may not divert water until the \$50.00 license fee has been paid. Please contact us if you have any questions.

Sincerely,

Genny McMath
Natural Resources Analyst
(605) 773-3352

NOTE: On check or money order, please specify your permit number. This will insure proper handling of the fee.

RECEIPT

Division of Water Rights

South Dakota Department of Water and Natural Resources

412594

Pierre, March 14, 1991

RECEIVED OF Nels J Sorensen, RR 3 Box 23, Vermillion, SD 57069

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

Fee for Application for Permit No. _____ to Appropriate Water, to construct works and to put water to beneficial use _____		
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>5412-3</u>	50	00
Fee for Filing Transfer Form _____		
Fee for Filing Extension Request _____		
Fee for Certified Copy of _____		
Fee for Print Copy of Map _____		
Fee for Certifying _____		
Fee for _____		
(Any Other Work Provided by Law)	Total	50 00

By

Chief Engineer

John Hatch

Vermillion Water District**Report Of Examination Of Works And/Or Application of Water To Beneficial Use**

TO: Chief Engineer, Division of Water Rights, DWNR, Foss Bldg., Pierre, SD 57501

I have this day made a thorough examination of the water use system ~~constructed~~ by Nels J. Sorensen of RR 3, Box 23, Vermillion, SD 57069 holder of Permit No. 5412-3, bearing the priority of March 12, 1990 authorizing the diversion of 0.85 cu. ft. per second of the waters of ground water for irrigation purposes, in Clay County.

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

A. Works used to divert the water:

Well Line pump - pump housing 8WL18, Model MA-5599-89 Layne and Bowler, apprx. 800 GPM
US Electric Uniclosed motor - Id #R-2987-03-513, 30 HP, Design B, 1750 RPM
one well - 100 feet deep, 70 feet of 16 inch PVC casing and 30 feet of perforated 16 inch PVC casing

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

15 feet of 8 inch aluminum pipe

C. Works used to apply water to beneficial use:

Zimmatic Center Pivot, 7 towers, 165 feet between towers with end gun, Serial No. L31918, Model Generation 2

The system is in the following condition good. The point of diversion is located at a point 1,200 feet south and 750 feet west of the E1/4 corner of Section 26, T92N R52W. The works are capable of diverting and conveying to the place of use 1.78 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 T92N R52W

13 acres in the NE1/4 SE1/4 of Section 26

28 acres in the SE1/4 SE1/4 of Section 26

2 acres in the NW1/4 SW1/4 of Section 25 (11 acres overlap, see Water Permit No. 4983-3)

6 acres in the SW1/4 SW1/4 of Section 25 (3 acres overlap, see Water Permit No. 4983-3)

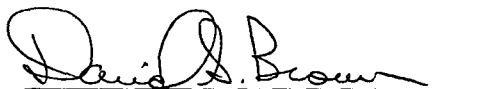
Note: All legal descriptions in this report assume that Sections 25 and 26, T92N R52W exist. The area in question needs to be replatted by the South Dakota-Nebraska boundary commission.

comprising a total of 49 acres of land and the license should be issued for 0.70 cfs.

Application permit qualifications have been complied with X Yes No

Exceptions to compliance are: none

Date September 27, 1990



David S. Brown
Natural Resources Engineer II
DWNR, Water Rights Division

LICENSE FOR PERMIT NUMBER 5412-3

1. Legal location of wells: At a point 1,200 feet south and 750 feet west of the E1/4 corner of Section 26, T92N R52W

Dams and Structures none

2. Well Information: Well Drilling Firm Christensen Well Co. Hartington, Nebr.

Completion Report? Yes X No No. of Wells 1 Depth 100 feet

Casing a) diameter 16 inches Screen a) type perforated PVC

b) length 70 feet b) length 30 feet

c) type PVC Static Water Level 16 feet

Pump a) make Wel Line Motor a) make US Electric, Uniclosed

b) model MA-5599-89 Layne and Bowler b) model no. Id #R-2987-03-513

c) size Pump Housing - 8WL18 c) horsepower rating 30

d) capacity approx. 800 GPM d) serial no.
Design B, 1750 RPM

e) turbine pump - no. of stages

f) operating PSI

3. Distribution lines or canals

a) size 8 inches

b) type Aluminum

c) length 15 feet

4. Dam Information: NA

a) height to crest feet

m) Outlet tubes:

b) height to primary spillway feet 1) diameter inches

c) height to secondary spillway feet 2) type

d) crest width feet 3) valved (Y/N)

e) crest length feet 4) valve type

f) spillway length feet 5) location on structure

g) spillway width feet

h) approx. storage AC-FT n) Category of Dam

i) approx. storage to crest AC-FT

j) date constructed

k) inspection sheet completed? (Y/N)

l) name of contractor

5. System Type

a) sideroll:

- 1) length feet
- 2) diameter of pipe inches
- 3) make, model & number of sprinklers
- 4) spacing of sprinklers feet
- 5) nozzle size

c) gun:

- 1) make
- 2) nozzle size
- 3) capacity (GPM)
- 4) hose size inches
- 5) hose length feet

e) gated pipe:

- 1) length feet
- 2) diameter inches
- 3) spacing of gates inches

f) portable boom:

- 1) make
- 2) nozzle size
- 3) capacity (GPM)

b) towline:

- 1) length feet
- 2) make, model & number of sprinklers
- 3) spacing of sprinklers
- 4) nozzle size

d) center pivot: Model - Generation 2

- 1) make Zimmatic, Serial #L31918
- 2) number of towers 7 with overhang
- 3) distance between towers 165 feet
- 4) overall length 1,240 feet
- 5) end gun (Y/N) yes
- 6) high or low pressure high
- 7) make and size of nozzles
- 8) capacity 800 (GPM)

g) siphons:

- 1) size inches
- 2) number

NOTE: For Permits with additional wells or changes in well locations, record the following for each well: pumping capacity, date constructed, well driller and if a well log is available.

Indicate any other permit(s) which are associated with project 4983-3, overlap of irrigated lands

Yes	No	Check Items
<u>X</u>	<u> </u>	1. Soil and water permit lands agree with lands being irrigated and lands listed on permit?
<u>X</u>	<u> </u>	2. Special qualifications to permit being abided by?
<u>X</u>	<u> </u>	3. All structures, wells and lands on map?
<u>X</u>	<u> </u>	4. Irrigation Questionnaires checked to determine if permit owner started irrigation by end of construction period?
<u> </u>	<u>X</u>	5. Is chemigation used?
<u>NA</u>	<u> </u>	6. If yes, does equipment comply with chemigation rules?

REMARKS: none

* Assume center of Section 25, T92N R52W is located Correctly

NOT TO SCALE

T-1820
(1226) 10/29/90
Map Drawn by DBB
David Brown DBB
Natural Resources Engineer II
Water Rights Division
DWR, Pierre, SD

Water Permit No. 5412-3
Nels J. Sorensen

Sec. 26, T92N R52W
E 1/4 Corner

Inspected
9/27/90

Water Permit No. 4983-3

Water Permit No. 5412-3

10/26/90
Scale
1" = 760 Feet

SE Corner
Section 26
T92N R52W

92-52

T-1884 202R
(1273)
50.0

T-1899
W.R. 5412-3
68.4
T-1899
6.2

T-1899
6.2

18.6
(1717)
T-1898

T-1883
(1273)
20.9

T-1883
(1273) 6.9

T-1883
9.6

T-1898
(1717)
302.0
IRR

13 acres
T-1898
(1717)
65.0

28 acres

6 acres

11 acres

3 acres

2 acres

750 Feet

1,200

2.8

A

1

2

1

1

1

STATE OF SOUTH DAKOTA

WATER LICENSE NO. 5412-3

(1) Nels J. Sorensen of RR 3, Box 23, Vermillion, SD 57069 made Application No. 5412-3, March 12, 1990 for a water permit to appropriate 0.85 cubic feet of water per second from groundwater (one well), Clay County, South Dakota for irrigation purposes. Permit No. 5412-3 with a priority date of March 12, 1990 was approved May 24, 1990 and issued to applicant(s) for diversion of water with construction of the described water supply system to be completed on or before May 24, 1995 and for the application to beneficial use of said water on or before May 24, 1999.

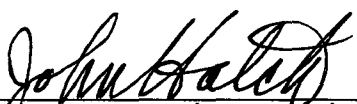
(2) It is certified that the applicant has complied with the provisions of South Dakota State Law relating to completion of the construction of the water supply system and is entitled to divert 0.70 cubic feet of water per second for beneficial use. The location of the diversion point(s) is: at a point 1200 feet South and 750 feet West of the E1/4 corner of Section 26, T92N, R52W (NE 1/4 SE 1/4).

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

T92N, R52W Section 26	NE 1/4 SE 1/4	13 Acres
	SE 1/4 SE 1/4	28 Acres
Section 25	NW 1/4 SW 1/4	2 Acres
	SW 1/4 SW 1/4	6 Acres
	Total -----	49 Acres

The remaining portions of the pivot (NW 1/4 SW 1/4 11 acres and SW 1/4 SW 1/4 3 acres) are also irrigated under Permit No. 4983-3. Combinations of diversions shall not exceed 1.0 cfs for every 70 acres irrigated.

(4) Pursuant to Section 46-5-30.1 Nels J. Sorensen of RR 3, Box 23, Vermillion, SD 57069 the holder(s) and/or owner(s) of Water Permit No. 5412-3 is issued a license to appropriate water, the right to use 0.70 cubic feet of water per second from groundwater (one well) with a priority date of March 12, 1990 from the location specified in (2) of this license. The water is to be conducted to and upon lands specified in (3) of this license for the purpose of irrigation. This license is subject to any limitations or qualifications listed in Water Permit No. 5412-3 and subject to South Dakota State Law.


JOHN HATCH, Chief Engineer
Water Rights Division
Department of Water and Natural
Resources
MAY 27 1991



GREAT FACES. GREAT PLACES.

MAY 27 1991

DEPARTMENT OF WATER & NATURAL RESOURCES

Joe Foss Building
523 East Capitol
Pierre, South Dakota 57501-3181

5412-3

Nels J. Sorensen
RR 3, Box 23
Vermillion, SD 57069

Dear Mr. Sorensen:

Enclosed is Water License No. 5412-3. This is the final water right document completing your process of obtaining a Water Right. Enclosed is Receipt No. 412594 in the amount of \$50.00 which you paid for the inspection and issuance of the Water License.

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. 5412-3, 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.

Very truly yours,

JOHN HATCH, Chief Engineer
Water Rights Division
(605) 773-3352

enclosures



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

October 26, 2009

Nels J Sorensen
15 Muirfield Ct
Vermillion SD 57069-7077

RE: Irrigation Questionnaires for Water Permit or Right Nos. 5200-3, 5412-3, 5538-3, 5539-3, 5540-3, 5541-3, 5579-3, 6310-3 & 6985-3

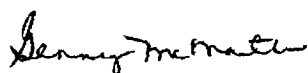
Dear Mr. Sorensen:

Enclosed is a "Notice" dated October 16, 2009 concerning the 2009 irrigation questionnaires.

The notice was originally mailed to 2903 Sorensen Ave, Vermillion SD. The post office notified us that your address has changed and I will update our records accordingly.

If you have any questions, please contact me.

Sincerely,


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

enclosures

5412-3



DENR
SOUTH DAKOTA

**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
denr.sd.gov

November 2, 2020

Nels J Sorensen
200 Mickelson Ave
Vermillion SD 57069

RE: Water Right Nos. 5200-3, 5412-3, 5538-3, 5539-3, 5540-3, 5541-3, 5579-3, 6310-3 & 6985-3

Dear Mr. Sorensen:

Enclosed are the irrigation questionnaires originally sent to 15 Muirfield Court in Vermillion.

I will make the changes to your address in our files. If you have any questions, please let me know.

Sincerely,

A handwritten signature in cursive script, reading "Genny McMath".

Genny McMath
Water Rights Program
605 773-3352
Genny.mcmath@state.sd.us