

Considered: _____

WATER PERMIT NO. 5200-3

HAP No. Same 624-4535

Name of Applicant Nels J Sorensen

Post Office Address RR3, Box 23, Vermillion SD 57069

Amount of Water Claimed 0.94 Total Acres 66

Source of Water Supply ground water, 1 well

Water to be used for irrigation County Clay

About 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 May 4, 1988 Fee \$225⁰⁰ Remarks _____

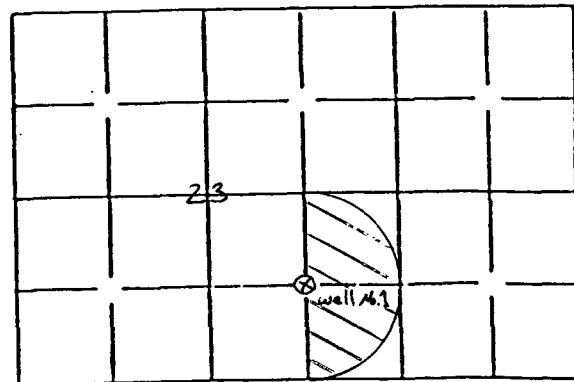
Corrected Application Received May 17, 1988 Period of Annual Use May 1-Sept 30

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

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

Diversion Point well: near center of the
SE 1/4 section 23-T92N-R52W

Land to be Irrigated E 1/2 SE 1/4 section 23-
T92N-R52W



Well Log: Driller Wetmore Drilling Licensed YES ☒ NO ☐

Depth of Well 100 feet REMARKS _____

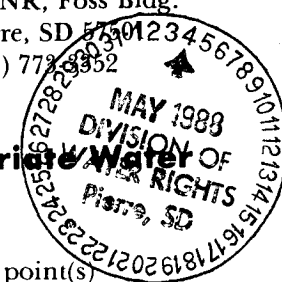
Type of Map aerial photo PREPARED BY Gerald Pilker Reviewed and the Number
assigned on June 22, 1988 By Ken Duwall



FORM 2: Application for Irrigation (type or print)

No. 5200-3 Hydrologic Unit 10170101
Basin Missouri River
Newspaper Vermillion Plain Talk
Box 256 (Rural)

Mail to: Water Rights Div.
DWNR, Foss Bldg.
Pierre, SD 57501
(605) 779-3352



Application For Soil/Water Compatibility Permit and Permit To Appropriative 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 _____

1. Name of Applicant Nels J. Sorenson Phone No. 605-624-4535

Post Office Address RR 3 Box 23 Vermillion State So. Dak Zip Code 57069
(Street, RR or Box) (City)

2. Amount of water claimed (c.f.s) #1 0.94 cfs Total acres irrigated 66

3. Source of Water supply 1 well ground water

4. Location of point of diversion #1 North 45° 30' W
near center of the SE 1/4 Section 23 T92N R52W L 1848'

County Clay

5. Counties where water will be used Clay

6. Annual period during which water is to be used May - 1 Sept 30

7. 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.
<u>NE 1/4 of SE 1/4</u>	<u>33.30 ac</u>
<u>SE 1/4 of SE 1/4</u>	<u>33.30 ac</u>

Land Description	No. Acres Irr.

Attach sheet if more space is needed

8. Type of Irrigation: Gravity: _____ Towline: _____ Center Pivot: X Gun: _____ Other: _____
(Specify) _____

9. Crops to be Irrigated: Corn, Beans, Alfalfa

10. Give a description of proposed project. (Attach sheet if more space is needed)

use attached map

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. Sorenson, 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. Sorenson

Subscribed and sworn to before me this 16 day of MAY 19 88

Oppe C. Hanson
Notary Public

4-11-94

**SOUTH DAKOTA
WATER PERMIT FOR IRRIGATION**

Date of first receipt of application May 4, 1988

Date Soil/Water Compatibility Permit received July 11, 1988

Date of return to applicant for correction, amendments or changes required May 5, 1988

Date of receipt of corrected application May 17, 1988

The Water Management Board approved Water Permit Application No. 5200-3

on July 27, 1988 for Nels J. Sorensen
(Applicant)

RR 3, Box 23 Vermillion, South Dakota 57069
(Street, RR or Box) (City) (State) (Zip Code)

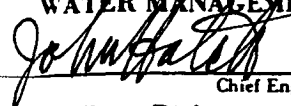
authorizing the construction of the water use system and the placing of water to beneficial use subject to the following limitations, conditions and qualifications:

1. Water Permit No. 5200-3 appropriates 0.94 cubic feet of water per second from 1 well
(Missouri-Elk Point Aquifer) 100 feet deep to irrigate 66 acres. The well is to be
located near the center of the SE $\frac{1}{4}$ and the land to be irrigated is in the E $\frac{1}{2}$ SE $\frac{1}{4}$;
all located in Section 23, T92N, R52W.
2. The amount of the appropriation may not exceed 2 acre feet per acre per year or one-seventieth (1/70) cubic feet of
water per second 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 the right is May 4, 1988
4. One-fifth of the construction is to be completed on or before January 27, 1991
5. All construction is to be completed on or before July 27, 1993
6. Water is to be put to beneficial use on or before July 27, 1997
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 wells 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.

WATER MANAGEMENT BOARD

By: 
Chief Engineer

DEC 1 1988

Division of Water Rights
Dept. of Water and Natural Resources

Supplemental Information

(type or print in ink)

#1

1. Well Information - Proposed construction

- a) Drill Hole Diameter 20" Depth 100 ft
- b) Casing Type PVC Diameter 16" Thickness $\frac{3}{4}$ "
- c) Screen Type Slotted PVC Diameter 16" Thickness $\frac{3}{4}$ "
- d) Gravel Pack Thickness 2" on each side Length of Gravel Pack 30 ft.
- e) Depth to Top of Water Bearing Material 96 ft.
- f) Depth to Water (ground surface to water level) 21 ft
- g) Distance to nearest existing domestic well:
- On applicants property 2 miles 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) Primary Outlet Capacity _____
 If Pipe, diameter _____

f) Secondary Spillway Capacity _____
 Spillway width _____

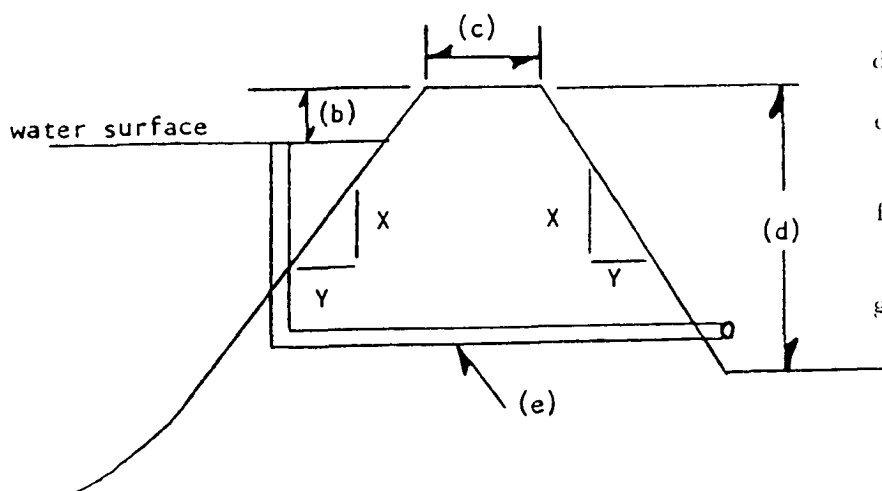
g) X & Y Slope
 Upstream _____

Downstream _____

Surface Area of Impoundment _____

Storage _____ acre feet

Drainage area above dam _____



Signature of Applicant

SOUTH DAKOTA WATER WELL COMPLETION REPORT

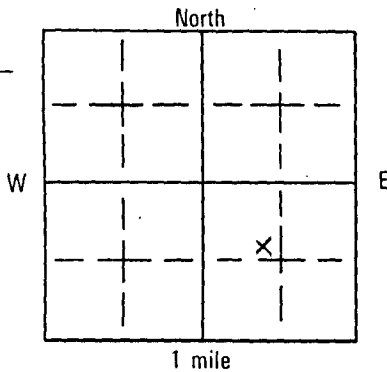
10-85

Location N 1/4 SW 1/4 Sec 25 Twp 91-22 Rg 51-52 W

County

Clay

Please mark well location with an "X"

Well Completion Date 5-2-88

PROPOSED USE:

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

Method of Drilling:

Rotary

CASING DATA:

- ☐ Steel ☒ Plastic ☐ Other

If other describe _____

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
_____ LB/FT	<u>16</u> IN	<u>0</u> FT	<u>100</u> FT	<u>20</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? cementIf cement, number of sacks? 14Describe grouting procedure tremie pipe pumpedWhat was grout weight? 15.5 LB/GALSCREEN: ☐ Perforated pipe ☒ ManufacturedDiameter 16 IN Length 20 FEETMaterial PVC slottedSlot Size 100 Set From 20 Feet To 100 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 chlorinated 200 PPMBacteriological analysis ☐ YES ☒ NO

Laboratory sent to _____

Well Owner:

Name NELS SorensonRT 3 Box 23Address VERMILLION SD 57069

Well Log:

Depth

Formation

From

To

<u>top soil</u>	<u>0</u>	<u>2</u>
<u>fine sand</u>	<u>2</u>	<u>76</u>
<u>coarse sand & gravel</u>	<u>76</u>	<u>100</u>
<u>shale</u>	<u>100</u>	<u>107</u>

STATIC WATER LEVEL 21 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☐ BailedDescribe: Line shaft turbine☐ Otherpump used

Pumping Level Below Land Surface

41 ft. After 2 Hrs. pumped 1100 GPM

_____ ft. After _____ Hrs. pumped _____ GPM

_____ ft. After _____ Hrs. pumped _____ GPM

REMARKS:

This well was drilled under license # 341

And this report is true and accurate.

Drilling firm Watson Drilling

Signature of License Representative:

James Watson

Signature of Well Owner:

Date _____

RECEIPT

Division of Water Rights

South Dakota Department of Water and Natural Resources

411252

Pierre, May 18, 1988

RECEIVED OF Nels/Linda 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>5200-3</u> to Appropriate Water, to construct works and to put water to beneficial use _____	225	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	225 00

By

John Hatch

Chief Engineer

JOHN HATCH

ms

Department of Agriculture
WI#1
5/87

SOIL/WATER COMPATIBILITY PERMIT
Division of Conservation

Office Use Only

4261

WR#

OWNERS NAME: Wale Sorenson

OWNERS ADDRESS: RR 3 Box 23

Vermillion, SD 57069

COUNTY LAND LOCATED IN: Clay

PHONE: 634-4535

LEGAL DESCRIPTION:

☒ Well

☐ Surface

1. LOCATION: N 45° 30'W

Depth: _____

Legal Description	Acres	Legal Description	Acres
<u>NE4 of SE4</u>	<u>30</u>		
<u>SE4 of SE4</u>	<u>30</u>		
<u>23-92-52</u>			

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

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

WATER QUALITY:

4. WATER SAMPLE NUMBER: 88-0131

7. ADJUSTED (SAR): 3.32

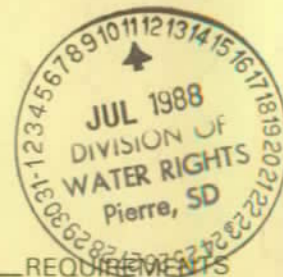
5. SALINITY (EC X 10⁶): 900

8. PERCENT SODIUM: 23.36

6. SODIUM (SAR): 1.30

Requirements:

The area mapped as Onawa silty clay, 0-1% slope, has fluctuating water table which may become perched under irrigation and adversely effect the crops and soil. To address this problem a form of artificial drainage may be necessary at tile drains, to be installed as necessary. Please be advised that we do not consider the Swampbuster provision in our recommendations.



☒ APPROVED
☐ DISAPPROVED
☐ WAIVER

☒ REQUIREMENTS

Ruth L. Harner
Director, Division of Conservation

7/8/1988
Date

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

MANAGEMENT FORM

4261

APPROVED with requirements

NAME OF APPLICANT: Nels Sorensen

LEGAL DESCRIPTION: E1/2 SE1/4 23-T92N-R52W

REQUIREMENTS:

The area mapped as Onawa silty clay, 0-1% slope, has a fluctuating water table which may become perched under irrigation and adversely effect the crops and soil. To address this problem a form of artificial drainage may be necessary ei. tile drains, to be installed as necessary. Please be advised that we do not consider the Swampbuster provision in our recommendations.

MANAGEMENT RECOMMENDATIONS:

We recommend the use of a form of conservation tillage of conserve soil moisture and control erosion. We also recommend that the potential water table problem be investigate and that a water management plan be developed to defer the installation of an artificial drainage system.

7/8/88
DATE

James L. Smith
SIGNATURE





Department of Water & Natural Resources

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

May 5, 1988

Nels J Sorensen
RR 3, Box 23
Vermillion SD 57069

Dear Mr. Sorensen:

This letter is in response to the water permit applications submitted on May 4, 1988. Enclosed are the applications and attachments. The following information is needed to complete the applications:

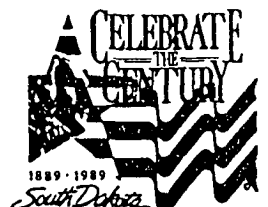
- 1) I contacted Gerald Pilker, Soil Conservation Service, regarding the enclosed maps. Mr. Pilker informed me that after the maps were completed a determination was made that the scale was 7 inches to the mile instead of the usual 8 inches to the mile. The number of acres in each 40 acre area will be in error due to the scale change. Therefore, the legal descriptions of the lands and wells need to be revised to be accurate.
- 2) The application fee submitted with the application is also not correct. The fee for 200 acres is \$275.00 and the fee for 78 acres is \$225.00 for a total fee of \$500.00.
- 3) I also need to know if the proposed pivots in section 36 and section 23 are going to make full circles or if the pivots are going to stop at the perimeter of the existing pivots. If the pivots make a full circle, then the total acreage irrigated by the pivots will need to be included on the applications.
- 4) Assuming the 3 wells are all drilled, I will need a copy of the well logs.

Enclosed are blank application forms for use in revising the enclosed applications as needed. The revised applications will also need to be signed and notarized. Complete the above questions and return the revised applications, maps and fee to begin processing of the applications. Please contact me if you have any questions.

Sincerely,

Ron Duvall
Natural Resources Engineer
605 773-3352

enc.



Monday

Div:

1. Section 36 and 23 will stop at the perimeter of the existing pivots.
2. None of the pivots will make a full circle.
3. New maps are included. They were revised by Gerald Pilker.
4. Check for \$500 is enclosed also.
5. Well logs were sent in early by Jim Wetmore.
6. Water samples were sent to Brookings for the wells earlier.



REPORT ON APPLICATION NOS. 5199-3 AND 5200-3

Nels J. Sorensen

June 23, 1988

Application Nos. 5199-3 proposes to appropriate 3.05 cfs from two wells, 118 feet and 123 feet deep, to irrigate 214 acres. The wells are to be located in the NE 1/4 SE 1/4 of Section 35; SE 1/4 NW 1/4 of Section 36; and the lands to be irrigation in the W 1/2 NE 1/4, NW 1/4 SW 1/4, S 1/2 NW 1/4, NE 1/4 NW 1/4 of Section 36; S 1/2 NE 1/4, N 1/2 SE 1/4 Section 35; all located in T92N-R52W in Clay County.

Application No. 5200-3 proposes to appropriate 0.94 cfs from one well 100 feet deep to irrigate 66 acres. The well is located near the center of the SE 1/4 and the land to be irrigated is in the E 1/2 SE 1/4; all located in Section 23, T92N-R52W in Clay County.

Aquifer - Missouri-Elk Point (M-EP)

The Missouri-Elk Point is an alluvium mantled Pliestocene age outwash (sand and gravel) which is under water table conditions in this area. The aquifer is approximately 100 feet thick in this area and well capacities range from 50-100 gpm/ft of drawdown (Wetmore, 1988). These high yields are typical for this aquifer. The M-EP underlies 74,500 acres in Clay County and contains 1.1 million acre-feet of recoverable water (Hedges, 1982). The M-EP Aquifer is hydraulically connected to the Upper Vermillion Missouri Aquifer in Clay county and the M-EP in Union and Yankton County. Also the Missouri River and the Vermillion River are hydraulically connected to the aquifer. These applications are within 2 miles of the Missouri River and the Vermillion River.

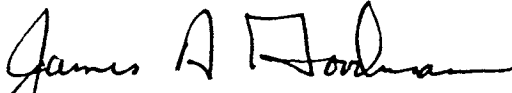
The Division of Water Rights has a monitoring well CL-80C which is located in the immediate area. Water levels for this well are available from 1957 to present (Water Rights Division, 1988). The hydrograph shows very little fluctuation due to pumping and only slight changes due to climatic conditions.

Review of Existing Water Permits

The applicant has 3 other permits, Nos. 4983-3, 5041-3 and 5042-3 which allow 3 wells for irrigation purposes. These wells are within a 1 mile radius of the diversion points proposed under the two new applications. Interference is not expected to be a problem. The production wells have a high specific capacity and the aquifer is under water table conditions. Significant drawdowns will not extend very far from the production well and this is illustrated by the hydrograph for CL-80C.

Conclusions

1. Water is available from the M-EP Aquifer.
2. The aquifer is under water table conditions, has a high specific capacity and drawdowns will not be significant. Interference between wells will not be a problem.
3. The applications do not have soil water compatibility approval, however, the Department of Agriculture has advised verbally that the Department will approve the required Soil-Water Permit. These applications will not be considered July 27, 1988 by the Water Management Board unless the required Soil-Water Permits are received prior to the July 27 meeting.
4. Completed production well logs and yield are available for these diversion points. The wells are excellent producers.


JAMES GOODMAN
Hydrologist

Bibliography

Hedges, L.S. Etal, 1982, Evaluation of Ground-Water Resources Eastern SD and Upper Big Sioux River, South Dakota and Iowa, For US Army Corps of Engineer, DWNr, SDGS, Vermillion SD 57069.

Water Rights, 1988, Observation Well Records for CL-80C, DWNr, Division of Water Rights, Joe Foss Building, Pierre SD 57501.

Wetmore, 1988, Logs of Wells #1, #2, #3 in Permit Files for 5199-3 and 5200-3, Wetmore Drilling, DWNr, Division of Water Rights, Joe Foss Building, Pierre SD 57501.

OBS	LOCATION	SAS OBS_WELL	DATE	NEG	READING			
1	092N-52W-36AACA 2	CL-80C	11/06/57	X	-17.8			
2	092N-52W-36AACA 2	CL-80C	03/12/58	X	-18.8			
3	092N-52W-36AACA 2	CL-80C	07/23/58	X	-17.8			
4	092N-52W-36AACA 2	CL-80C	11/28/58	X	-18.3			
5	092N-52W-36AACA 2	CL-80C	03/13/59	X	-18.5			
6	092N-52W-36AACA 2	CL-80C	07/15/59	X	-17.7			
7	092N-52W-36AACA 2	CL-80C	11/19/59	X	-19.0			
8	092N-52W-36AACA 2	CL-80C	05/05/60	X	-17.4			
9	092N-52W-36AACA 2	CL-80C	07/07/60	X	-17.1			
X-18.56092N-52W-36AACA 2CL-80C07/15/59X			10	092N-52W-36AACA 2	CL-80C	11/02/60	X	
-17.3								
11	092N-52W-36AACA 2	CL-80C	03/07/61	X	-19.0			
12	092N-52W-36AACA 2	CL-80C	07/12/61	X	-17.7			
13	092N-52W-36AACA 2	CL-80C	11/28/61	X	-18.6			
14	092N-52W-36AACA 2	CL-80C	04/26/62	X	-16.9			
15	092N-52W-36AACA 2	CL-80C	07/11/62	X	-16.3			
16	092N-52W-36AACA 2	CL-80C	10/31/62	X	-17.1			
17	092N-52W-36AACA 2	CL-80C	03/06/63	X	-17.9			
18	092N-52W-36AACA 2	CL-80C	07/09/63	X	-16.8			
19	092N-52W-36AACA 2	CL-80C	12/02/63	X	-19.7			
20	092N-52W-36AACA 2	CL-80C	04/06/64	X	-17.8			
21	092N-52W-36AACA 2	CL-80C	07/21/64	X	-17.9			
22	092N-52W-36AACA 2	CL-80C	11/10/64	X	-17.0			
-17.77092N-52W-36AACA 2CL-80C11/19/59X-19.0			23	092N-52W-36AACA 2	CL-80C	04/14/65	X	
-16.7								
24	092N-52W-36AACA 2	CL-80C	07/20/65	X	-16.3			
25	092N-52W-36AACA 2	CL-80C	05/20/66	X	-16.6			
26	092N-52W-36AACA 2	CL-80C	07/27/66	X	-16.1			
27	092N-52W-36AACA 2	CL-80C	11/30/66	X	-16.8			
28	092N-52W-36AACA 2	CL-80C	03/22/67	X	-19.1			
29	092N-52W-36AACA 2	CL-80C	06/14/67	X	-17.7			
30	092N-52W-36AACA 2	CL-80C	06/21/67	X	-17.4			
31	092N-52W-36AACA 2	CL-80C	06/28/67	X	-17.4			
32	092N-52W-36AACA 2	CL-80C	07/07/67	X	-17.3			
33	092N-52W-36AACA 2	CL-80C	07/12/67	X	-17.3			
34	092N-52W-36AACA 2	CL-80C	07/19/67	X	-17.3			
35	092N-52W-36AACA 2	CL-80C	07/26/67	X	-17.1			
CL-80C 08/02/67 X -17.4						36	092N-52W-36AACA 2	
37	092N-52W-36AACA 2	CL-80C	08/09/67	X	-17.5			
38	092N-52W-36AACA 2	CL-80C	08/18/67	X	-17.3			
39	092N-52W-36AACA 2	CL-80C	08/23/67	X	-17.7			
40	092N-52W-36AACA 2	CL-80C	09/08/67	X	-17.6			
41	092N-52W-36AACA 2	CL-80C	10/04/67	X	-17.8			
42	092N-52W-36AACA 2	CL-80C	11/28/67	X	-17.8			
43	092N-52W-36AACA 2	CL-80C	03/14/68	X	-17.9			
44	092N-52W-36AACA 2	CL-80C	06/12/68	X	-17.8			
45	092N-52W-36AACA 2	CL-80C	06/26/68	X	-17.8			
46	092N-52W-36AACA 2	CL-80C	07/10/68	X	-17.9			
47	092N-52W-36AACA 2	CL-80C	07/24/68	X	-18.0			
48	092N-52W-36AACA 2	CL-80C	08/07/68	X	-17.9			
-----OP=S CL=ALL IN=ALL JB=UWNRBEJ ,J.5091 DS=5 SI=SO LR=1 LL=133 PP=0 DC=RL=99						49	092N-52W	
-36AACA 2 CL-80C 08/21/68 X -17.9								
50	092N-52W-36AACA 2	CL-80C	09/18/68	X	-18.1			
51	092N-52W-36AACA 2	CL-80C	11/14/68	X	-17.7			
52	092N-52W-36AACA 2	CL-80C	04/25/69	X	-15.9			
53	092N-52W-36AACA 2	CL-80C	06/13/69	X	-16.1			
54	092N-52W-36AACA 2	CL-80C	06/19/69	X	-16.2			
55	092N-52W-36AACA 2	CL-80C	06/26/69	X	-15.6			

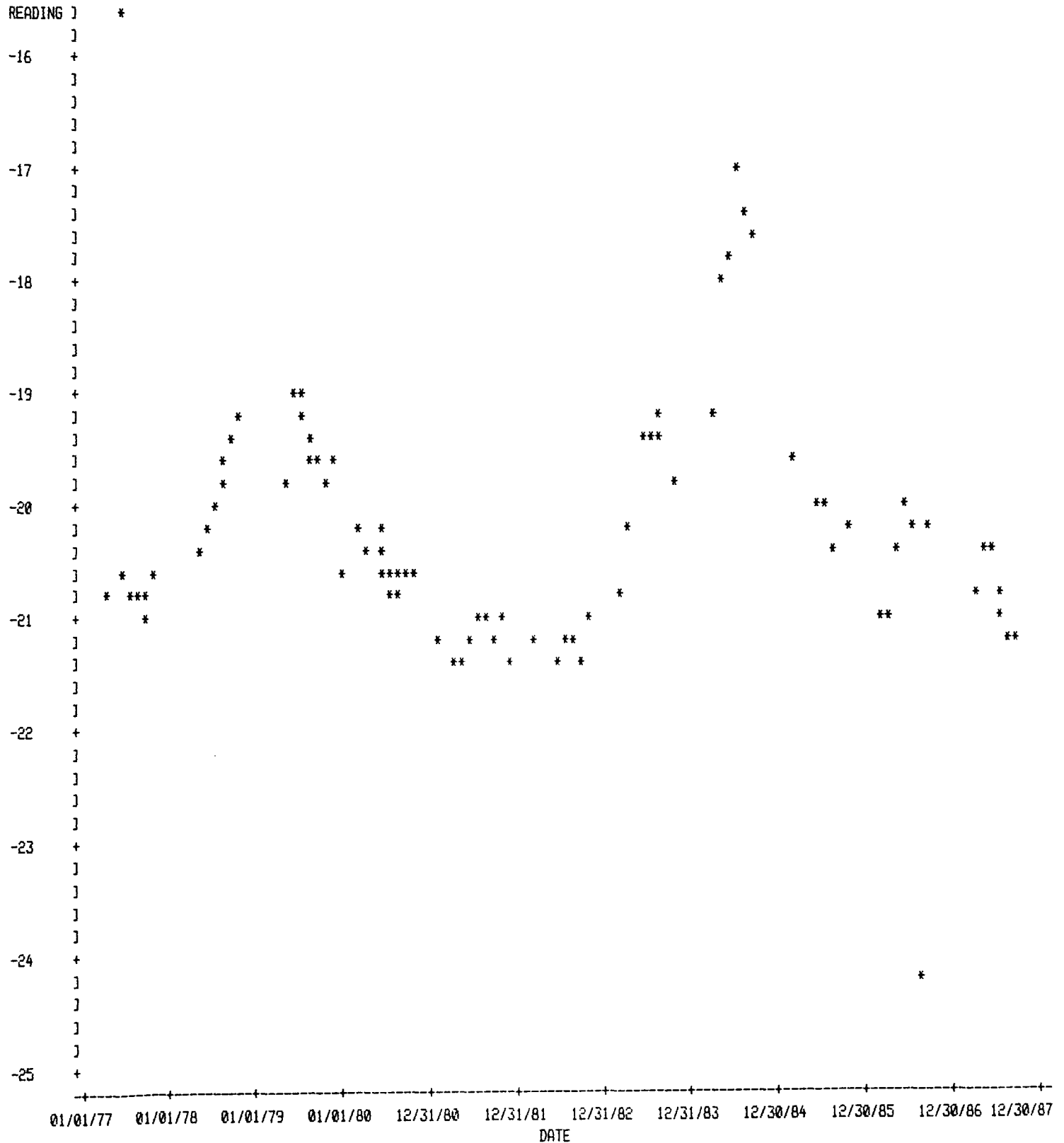
OBS	LOCATION	SAS OBS_WELL	DATE	NEG	READING
56	092N-52W-36AACA 2	CL-80C	07/03/69	X	-15.5
57	092N-52W-36AACA 2	CL-80C	07/10/69	X	-15.6
9999 AD=J DE= SC= PT= SQ= RR=06/23/88, 13:44:46					
			58	092N-52W-36AACA 2	CL-80C 07/17/69
X	-15.8				
59	092N-52W-36AACA 2	CL-80C	07/24/69	X	-15.5
60	092N-52W-36AACA 2	CL-80C	07/31/69	X	-15.6
61	092N-52W-36AACA 2	CL-80C	08/06/69	X	-15.5
62	092N-52W-36AACA 2	CL-80C	11/20/69	X	-16.1
63	092N-52W-36AACA 2	CL-80C	04/10/70	X	-17.7
64	092N-52W-36AACA 2	CL-80C	07/07/70	X	-17.6
65	092N-52W-36AACA 2	CL-80C	09/04/70	X	-17.7
66	092N-52W-36AACA 2	CL-80C	11/19/70	X	-17.3
67	092N-52W-36AACA 2	CL-80C	04/07/71	X	-16.4
68	092N-52W-36AACA 2	CL-80C	07/09/71	X	-17.1
69	092N-52W-36AACA 2	CL-80C	11/23/71	X	-17.0
70	092N-52W-36AACA 2	CL-80C	04/12/72	X	-18.2
	71 092N-52W-36AACA 2	CL-80C	08/23/72	X	-17.8
72	092N-52W-36AACA 2	CL-80C	12/14/72	X	-18.0
73	092N-52W-36AACA 2	CL-80C	05/30/73	X	-19.2
74	092N-52W-36AACA 2	CL-80C	08/07/73	X	-19.4
75	092N-52W-36AACA 2	CL-80C	11/29/73	X	-17.5
76	092N-52W-36AACA 2	CL-80C	04/17/74	X	-19.7
77	092N-52W-36AACA 2	CL-80C	07/10/74	X	-20.0
78	092N-52W-36AACA 2	CL-80C	12/04/74	X	-19.8
79	092N-52W-36AACA 2	CL-80C	05/15/75	X	-19.9
80	092N-52W-36AACA 2	CL-80C	07/10/75	X	-19.6
81	092N-52W-36AACA 2	CL-80C	08/28/75	X	-18.5
82	092N-52W-36AACA 2	CL-80C	10/30/75	X	-18.1
83	092N-52W-36AACA 2	CL-80C	05/12/76	X	-19.3
84	092N-52W-36AACA 2	CL-80C	07/24/76	X	-19.7
85	092N-52W-36AACA 2	CL-80C	12/02/76	X	-19.9
86	092N-52W-36AACA 2	CL-80C	04/06/77	X	-20.8
87	092N-52W-36AACA 2	CL-80C	06/01/77	X	-15.6
88	092N-52W-36AACA 2	CL-80C	06/29/77	X	-20.7
89	092N-52W-36AACA 2	CL-80C	07/15/77	X	-20.8
90	092N-52W-36AACA 2	CL-80C	07/27/77	X	-20.9
91	092N-52W-36AACA 2	CL-80C	08/11/77	X	-20.9
92	092N-52W-36AACA 2	CL-80C	09/14/77	X	-21.0
93	092N-52W-36AACA 2	CL-80C	09/28/77	X	-20.8
94	092N-52W-36AACA 2	CL-80C	10/26/77	X	-20.7
95	092N-52W-36AACA 2	CL-80C	05/09/78	X	-20.4
96	092N-52W-36AACA 2	CL-80C	05/22/78	X	-20.5
97	092N-52W-36AACA 2	CL-80C	06/07/78	X	-20.3
98	092N-52W-36AACA 2	CL-80C	06/20/78	X	-20.2
99	092N-52W-36AACA 2	CL-80C	07/07/78	X	-20.1
100	092N-52W-36AACA 2	CL-80C	07/21/78	X	-20.0
101	092N-52W-36AACA 2	CL-80C	08/08/78	X	-19.8
102	092N-52W-36AACA 2	CL-80C	08/30/78	X	-19.7
103	092N-52W-36AACA 2	CL-80C	09/22/78	X	-19.4
104	092N-52W-36AACA 2	CL-80C	11/02/78	X	-19.2
105	092N-52W-36AACA 2	CL-80C	05/10/79	X	-19.8
106	092N-52W-36AACA 2	CL-80C	06/06/79	X	-19.1
107	092N-52W-36AACA 2	CL-80C	06/20/79	X	-19.0
108	092N-52W-36AACA 2	CL-80C	07/03/79	X	-19.0
109	092N-52W-36AACA 2	CL-80C	07/17/79	X	-19.3
110	092N-52W-36AACA 2	CL-80C	07/31/79	X	-19.3

OBS	LOCATION	SAS OBS_WELL	DATE	NEG	READING
111	092N-52W-36AACA 2	CL-80C	08/14/79	X	-19.4
112	092N-52W-36AACA 2	CL-80C	08/30/79	X	-19.6
113	092N-52W-36AACA 2	CL-80C	09/18/79	X	-19.6
114	092N-52W-36AACA 2	CL-80C	10/19/79	X	-19.8
115	092N-52W-36AACA 2	CL-80C	11/15/79	X	-19.7
116	092N-52W-36AACA 2	CL-80C	01/16/80	X	-20.6
117	092N-52W-36AACA 2	CL-80C	03/11/80	X	-20.3
118	092N-52W-36AACA 2	CL-80C	04/22/80	X	-20.4
119	092N-52W-36AACA 2	CL-80C	05/30/80	X	-20.6
120	092N-52W-36AACA 2	CL-80C	06/05/80	X	-20.3
121	092N-52W-36AACA 2	CL-80C	06/11/80	X	-20.4
122	092N-52W-36AACA 2	CL-80C	07/09/80	X	-20.7
123	092N-52W-36AACA 2	CL-80C	07/23/80	X	-20.8
124	092N-52W-36AACA 2	CL-80C	08/06/80	X	-20.8
125	092N-52W-36AACA 2	CL-80C	08/21/80	X	-20.7
126	092N-52W-36AACA 2	CL-80C	09/03/80	X	-20.6
127	092N-52W-36AACA 2	CL-80C	09/16/80	X	-20.7
128	092N-52W-36AACA 2	CL-80C	10/21/80	X	-20.6
129	092N-52W-36AACA 2	CL-80C	01/28/81	X	-21.3
130	092N-52W-36AACA 2	CL-80C	03/24/81	X	-21.5
131	092N-52W-36AACA 2	CL-80C	05/05/81	X	-21.5
132	092N-52W-36AACA 2	CL-80C	06/03/81	X	-21.2
133	092N-52W-36AACA 2	CL-80C	06/23/81	X	-21.2
134	092N-52W-36AACA 2	CL-80C	07/07/81	X	-21.1
135	092N-52W-36AACA 2	CL-80C	08/11/81	X	-21.0
136	092N-52W-36AACA 2	CL-80C	08/25/81	X	-21.1
137	092N-52W-36AACA 2	CL-80C	09/16/81	X	-21.2
138	092N-52W-36AACA 2	CL-80C	10/28/81	X	-21.0
139	092N-52W-36AACA 2	CL-80C	12/10/81	X	-21.5
140	092N-52W-36AACA 2	CL-80C	02/26/82	X	-21.2
141	092N-52W-36AACA 2	CL-80C	06/15/82	X	-21.4
142	092N-52W-36AACA 2	CL-80C	07/13/82	X	-21.3
143	092N-52W-36AACA 2	CL-80C	08/10/82	X	-21.2
144	092N-52W-36AACA 2	CL-80C	09/09/82	X	-21.4
145	092N-52W-36AACA 2	CL-80C	11/08/82	X	-21.0
146	092N-52W-36AACA 2	CL-80C	03/02/83	X	-20.9
147	092N-52W-36AACA 2	CL-80C	04/19/83	X	-20.2
148	092N-52W-36AACA 2	CL-80C	05/31/83	X	-19.4
149	092N-52W-36AACA 2	CL-80C	06/27/83	X	-19.5
150	092N-52W-36AACA 2	CL-80C	07/25/83	X	-19.4
151	092N-52W-36AACA 2	CL-80C	08/21/83	X	-19.3
152	092N-52W-36AACA 2	CL-80C	08/29/83	X	-19.4
153	092N-52W-36AACA 2	CL-80C	10/17/83	X	-19.8
154	092N-52W-36AACA 2	CL-80C	04/12/84	X	-19.3
155	092N-52W-36AACA 2	CL-80C	05/22/84	X	-18.1
156	092N-52W-36AACA 2	CL-80C	06/18/84	X	-17.9
157	092N-52W-36AACA 2	CL-80C	07/17/84	X	-17.1
158	092N-52W-36AACA 2	CL-80C	08/13/84	X	-17.4
159	092N-52W-36AACA 2	CL-80C	10/02/84	X	-17.7
160	092N-52W-36AACA 2	CL-80C	03/19/85	X	-19.7
161	092N-52W-36AACA 2	CL-80C	06/04/85	X	-20.0
162	092N-52W-36AACA 2	CL-80C	07/03/85	X	-20.0
163	092N-52W-36AACA 2	CL-80C	08/18/85	X	-20.4
164	092N-52W-36AACA 2	CL-80C	10/24/85	X	-20.3
165	092N-52W-36AACA 2	CL-80C	03/20/86	X	-21.0

OBS	LOCATION	SAS OBS_WELL	DATE	NEG	READING
166	092N-52W-36AACA 2	CL-80C	04/15/86	X	-21.1
167	092N-52W-36AACA 2	CL-80C	05/26/86	X	-20.5
168	092N-52W-36AACA 2	CL-80C	06/24/86	X	-20.1
169	092N-52W-36AACA 2	CL-80C	07/29/86	X	-20.3
170	092N-52W-36AACA 2	CL-80C	08/27/86	X	-24.3
171	092N-52W-36AACA 2	CL-80C	09/25/86	X	-20.2
172	092N-52W-36AACA 2	CL-80C	03/26/87	X	-20.8
173	092N-52W-36AACA 2	CL-80C	05/06/87	X	-20.5
174	092N-52W-36AACA 2	CL-80C	06/03/87	X	-20.5
175	092N-52W-36AACA 2	CL-80C	07/01/87	X	-20.8
176	092N-52W-36AACA 2	CL-80C	07/29/87	X	-21.0
177	092N-52W-36AACA 2	CL-80C	08/25/87	X	-21.2
178	092N-52W-36AACA 2	CL-80C	09/16/87	X	-21.2

N= 178

PLOT OF READING*DATE SYMBOL USED IS *



NOTE: 85 OBS HAD MISSING VALUES OR WERE OUT OF RANGE 10 OBS HIDDEN

UQ50009 - END OF DATA SET

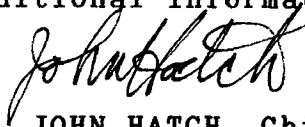
RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 5200-3, Nels J Sorensen

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. 5200-3, Nels J Sorensen, RR 3, Box 23, Vermillion SD 57069.

The Chief Engineer is recommending APPROVAL of Application No. 5200-3 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 wells 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.

See the attached report for additional information.



JOHN HATCH, Chief Engineer
June 23, 1988

NOTE: This recommendation was prepared prior to receiving formal approval of a Soil-Water Compatibility Application (SWCA) to avoid delaying Water Permit Application No. 5200-3 until the October 5 and 6, 1988 Water Management Board Meeting. The Department of Agriculture has advised verbally that the Department will approve the required SWCA pursuant to SDCL 46-5-6.5. However, until the approval is reviewed by the Conservation Commission at its regular July 7, 1988 meeting based upon Commission policy to review all Department disapprovals or approvals of SWCA pursuant to SDCL 46-5-6.6, the Soil-Water Compatibility Permit will not be issued. If the Conservation Commission does not concur with the Department's approval, Application No. 5200-3 will be deleted from the July 27 agenda.

 **Department of
Water & Natural Resources**

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

June 23, 1988

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

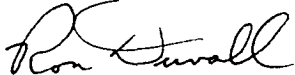
Nels J Sorensen
RR 3, Box 23
Vermillion SD 57069

Dear Mr. Sorensen:

Your Application Nos. 5199-1 and 5200-3 for permits to appropriate water for irrigation use have been examined and found to comply with the South Dakota Water Laws and applicable rules. Notice of your intent to appropriate water has been sent to the Publisher of the Vermillion Plain Talk printed at Vermillion SD. For your information, a copy of the notice, the recommendation of the Chief Engineer and a report on the application are enclosed. Please review the notice prior to publication and notify this office, if you have any corrections or questions.

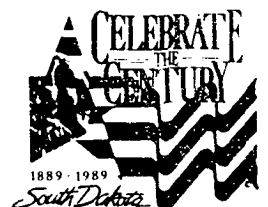
Be sure to contact the above newspaper to authorize publication of your Notice of Intent to Appropriate Water and to arrange for payment. Early contact with the paper can eliminate delays. The publisher has been instructed to publish your notice once each week for two consecutive weeks with the last 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,



Ron Duvall
Natural Resources Engineer
605 773-3352

enclosures





Department of Water & Natural Resources

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

June 23, 1988

Vermillion Plaintalk
Box 256
Vermillion SD 57069

Dear Sir:

Enclosed is a Notice of Hearing on Application Nos. 5199-3 and 5200-3 to be published twice. Please publish the first notice on or before June 30, 1988 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,

Ron Duvall
Natural Resources Engineer
605 773-3352

enclosures

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

FIRST TRANSMITTAL NOTICE

No. _____

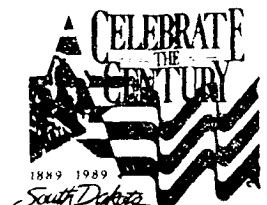
TO: Water Rights Division
Joe Foss Building
Pierre SD 57501-3181

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



Instruction to Newspaper - Publish first Notice on or before June 30, 1988 with 2nd publication 7 days later. The applicant is responsible for payment.

NOTICE OF HEARINGS on Application Nos. 5199-3 and 5200-3 to Appropriate Water

Notice is given that Nels J Sorensen, RR 3, Box 23, Vermillion SD 57069 has filed Application Nos. 5199-3 and 5200-3 for water permits. Application No. 5199-3 is to appropriate 3.05 cubic feet of water per second from two wells (Missouri-Elk Point Aquifer) 118 feet and 123 feet deep to irrigate 214 acres. The wells are to be located in the NE 1/4 SE 1/4 Section 35; SE 1/4 NW 1/4 Section 36; and the land to be irrigated is in the W 1/2 NE 1/4, NW 1/4 SW 1/4, S 1/2 NW 1/4, NE 1/4 NW 1/4 Section 36; S 1/2 NE 1/4, N 1/2 SE 1/4, Section 35; all located in T92N, R52W according to the South Dakota Survey.

Application No. 5200-3 is to appropriate 0.94 cubic feet of water per second from one well (Missouri-Elk Point Aquifer) 100 feet deep to irrigate 66 acres. The well is to be located near the center of the SE 1/4 and the land to be irrigated is in the E 1/2 SE 1/4; all located in Section 23, T92N, R52W according to the South Dakota Survey.

Pursuant to SDCL 46-2A-2, the Chief Engineer of the Water Rights Division recommends APPROVAL of Application Nos. 5199-3 and 5200-3 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. These applications will be considered by the Water Management Board in Room 216, Joe Foss Building, 523 E Capitol, Pierre SD on July 27, 1988 at 10:00 am. The Chief Engineer's recommendations are not final or binding upon the Board. The Board is authorized to 1) approve, 2) approve with qualifications, 3) defer or 4) deny these applications based on the facts presented at the public hearing.

Any interested person that intends to participate in hearings 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 July 15, 1988. 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 an application, the petitioner's reasons for opposing or supporting an 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 these applications or to assure access to the hearing by the handicapped.

These hearings are adversary proceedings. 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 July 15, 1988.

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.

No. _____

PROOF OF PUBLICATION

STATE OF SOUTH DAKOTA)
County Clay) ss.

I, Jacque Manning hereby

certify that the annexed printed copy of Notice of Intent to Appropriate

Water was taken from the Plain Talk

A newspaper which during the whole time of publication of said notice
herein after stated, has been and is printed and published in the _____

Plain Talk of Vermillion

County of Clay and State of South Dakota;
that the said notice was published in said newspaper on the following
two dates:

June 30, 1988 and July 7, 1988



Jacque Manning
(Signature)

Secretary/Bookkeeper
(Title)

July 7, 1988

(Date Signed)

Cost of Printing: \$ 22.48 - June 30
and prob - 17 98 - July 7
\$ 40.46

NOTICE OF HEARINGS on
Application Nos. 5199-3 and 5200-3 to
Appropriate Water

Notice is given that Nels J. Sorensen, RR 3, Box 23, Vermillion, SD 57069 has filed Application Nos. 5199-3 and 5200-3 for water permits. Application No. 5199-3 is to appropriate 3.05 cubic feet of water per second from two wells (Missouri-Elk Point Aquifer) 118 feet and 123 feet deep to irrigate 214 acres. The wells are to be located in the NE 1/4 SE 1/4 Section 35; SE 1/4 NW 1/4 Section 36; and the land is to be irrigated in the W 1/2 NE 1/4, NW 1/4 SW 1/4, S 1/2 NW 1/4, NE 1/4 NW 1/4 Section 36; S 1/2 NE 1/4, N 1/2 SE 1/4, Section 35; all located in T92N, R52W according to the South Dakota Survey.

Application NO. 5200-3 is to appropriate 0.94 cubic feet of water per second from one well (Missouri-Elk Point Aquifer) 100 feet deep to irrigate 66 acres. The well is to be located near the center of the SE 1/4 and the land to be irrigated is in the E 1/2 SE 1/4; all located in Section 23, T92N, R52W according to the South Dakota Survey.

Pursuant to SDCL 46-2A-2, the Chief Engineer of the Water Rights Division recommends APPROVAL of Application Nos. 5199-3 and 5200-3 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. These applications will be considered by the Water Management Board in Room 216, Joe Foss Building, 523 E. Capitol, Pierre, SD on July 27, 1988 at 10:00 a.m. The Chief Engineer's recommendations are not final or binding upon the Board. The Board is authorized to 1) approve, 2) approve with qualifica-

tions, 3) defer or 4) deny these applications based on the facts presented at the public hearing.

Any interested person that intends to participate in hearings 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 July 15, 1988. 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 an application, the petitioner's reasons for opposing or supporting an application and the signature and mailing address of the petitioner or legal counsel is obtained. The applicant need not file a petition. Contact the Water Rights Division to request information on these applications or to assure access to the hearing by the handicapped.

These hearings are adversary proceedings. 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 July 15, 1988.

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, 46-6-10, 46-6-12, 46-6-14.



Department of Water & Natural Resources

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

DEC 1 1988

Nels J. Sorensen
RR 3, Box 23
Vermillion, South Dakota 57069

Dear Mr. Sorensen:

Enclosed is Water Permit No. 5200-3 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 Water Permit No. 5200-3.

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, reading "John Hatch". The signature is written in dark ink and is positioned above the typed name.

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

JH:

enclosure

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 Jan 19 1989

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

FROM: Nels J. Sorenson RR 3 Box 23 Vermillion SD
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. 5200-3.

Water Permit No. 5200-3 states that the diversion system is to be constructed by July 27, 1993, and that the water it put to beneficial use by July 27, 1997.

The diversion system was completed on Aug 10 1988.
Applying the water to beneficial use was completed on Aug 15 1988

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

Nels J. Sorenson
signature

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. 5200-3, bearing the priority of May 4, 1988 authorizing the diversion of 0.94 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:

General Electric motor - Model No. 5K6237XM501C, 40 HP, Serial No. BNJ223467, 1750 FL RPM

Fairbanks Morse pump - size 10M, 4 stage turbine, Serial No. 61801290, Figure 7000, 800 GPM

one well - 100 feet total depth, 16 inch PVC pipe with 20 feet of manufactured PVC screen

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

290 feet of 8 inch aluminum pipe

C. Works used to apply water to beneficial use:

Zimmatic center pivot - 8 towers with end gun, Type 9, Model 307 410, Serial No. L13412

The system is in the following condition good. The point of diversion is located at a point 1,330 feet east and 1,032 feet south of the center of section 23, 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 Section 23, T92N R52W

31 acres in the NE1/4 SE1/4

31 acres in the SE1/4 SE1/4

comprising a total of 62 acres of land and the license should be issued for 0.89 cfs.

Application permit qualifications have been complied with X Yes No

Exceptions to compliance are: none Date September 28, 1990

Note: The Chief Engineer indicates that a maximum of 124 acre feet of water annually (equivalent to 0.89 cfs) can be used for irrigation purposes. However, a diversion rate of 1.78 cfs is authorized since the center pivot system requires 1.78 cfs in order to function properly.



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

LICENSE FOR PERMIT NUMBER 5200-3

1. Legal location of wells: at a point 1,330 feet east and 1,032 feet south of the center of Section 23, T92N R52W

Dams and Structures none

2. Well Information: Well Drilling Firm Wetmore Drilling, Elk Point

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

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

b) length 80 feet b) length 20 feet

c) type PVC SCH 1120 Static Water Level 21 feet

Pump a) make Fairbanks Morse Motor a) make General Electric

b) model Serial No. G1801290 b) model no. 5K6237XM501C

c) size 10M, Figure 7000 c) horsepower rating 40

d) capacity 800 GPM d) serial no. BNJ223467

e) turbine pump - no. of stages 4 1750 FL RPM

f) operating PSI

3. Distribution lines or canals

a) size 8 inches

b) type Aluminum

c) length 294 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: Serial No. L13412

- 1) make Zimmatic
- 2) number of towers 8
- 3) distance between towers 171/141'
- 4) overall length 1,150 feet
- 5) end gun (Y/N) Yes
- 6) high or low pressure high
- 7) make and size of nozzles
- 8) capacity (GPM)
Type 9, Model 307 410

g) siphons:

- 1) size inches
- 2) number

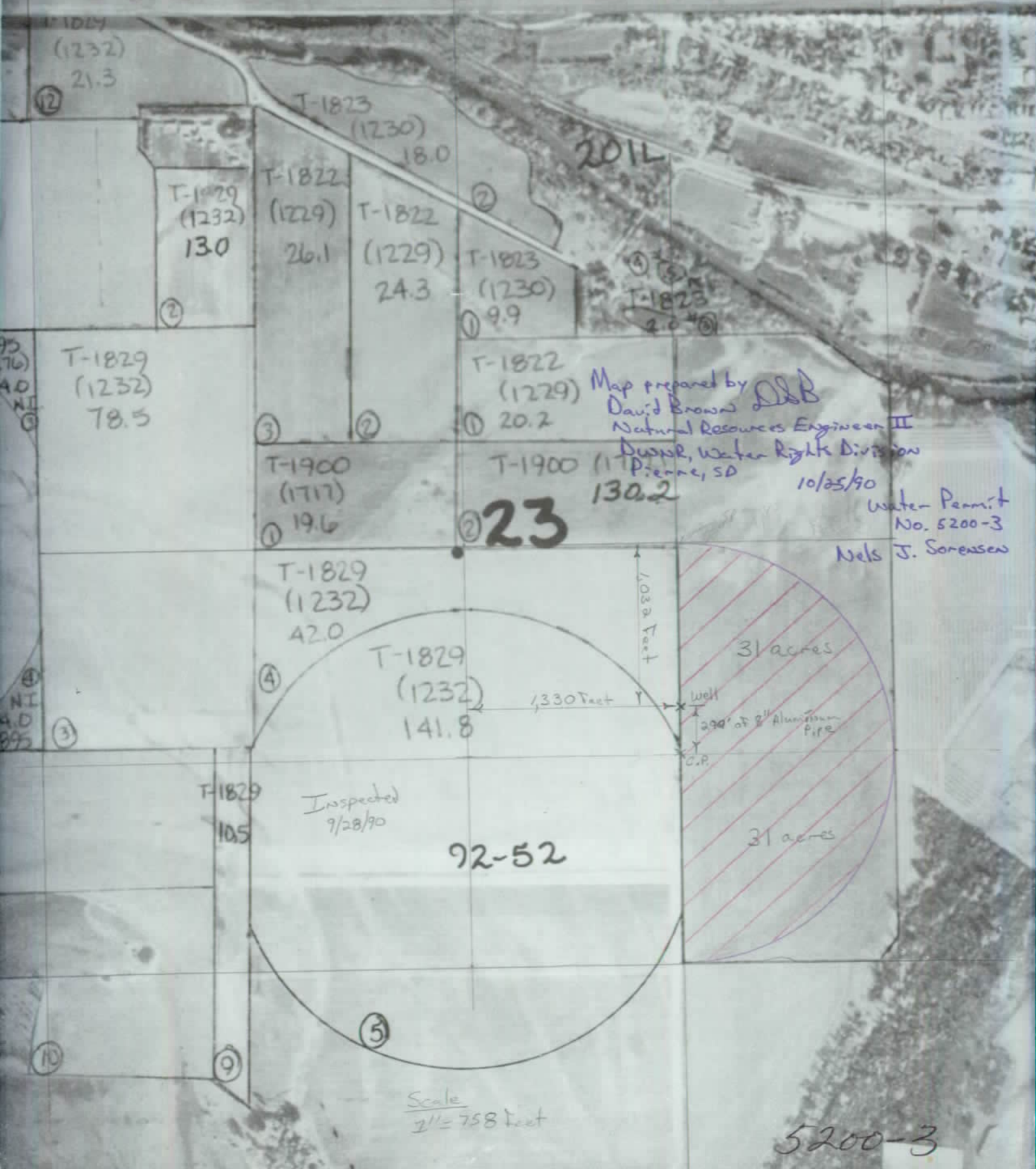
NOTE: For Permits with additional wells or changes in well locations, record the following for each well: pumping capacity, date constructed, well driller and if a well log is available.

Indicate any other permit(s) which are associated with project

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: License Water Permit No. 5200-3

NOT TO SCALE





Department of Water & Natural Resources

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

October 26, 1990

5200-3

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. 5200-3, 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,

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

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

412403

Pierre, October 31, 19 90

RECEIVED OF Nels J. Sorenson, 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>5200-3</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 *John Hatch*
Chief Engineer

STATE OF SOUTH DAKOTA
WATER LICENSE NO. 5200-3

(1) Nels J. Sorensen of RR #3 Box 23, Vermillion SD 57069 made Application No. 5200-3, May 4, 1988 for a water permit to appropriate 0.94 cubic feet of water per second from groundwater (one well), Clay County, South Dakota for irrigation purposes. Permit No. 5200-3 with a priority date of May 4, 1988 was approved July 27, 1988 and issued to applicant(s) for diversion of water with construction of the described water supply system to be completed on or before July 27, 1993 and for the application to beneficial use of said water on or before July 27, 1997.

(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 a maximum of 124 acre feet annually which is equivalent to 0.89* cubic feet of water per second for beneficial use. The location of the diversion point is: at a point 1,330 feet east and 1,032 feet south of the center of section 23, T92N, R52W.

* Although the license is issued for 124 acre feet annually (equivalent of 0.89 cfs), a diversion rate of 1.78 cfs is authorized since the method of application is thru a center pivot which irrigates half of the 124 acre circle.

(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 23 NE1/4 SE1/4	31 acres
SE1/4 SE1/4	31 "
Total	62 acres

(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. 5200-3 is issued a license to appropriate water, the right to divert 124 acre feet of water annually (equivalent of 0.89 cubic feet of water per second) from groundwater (one well) with a priority date of May 4, 1988 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. 5200-3 and subject to South Dakota State Law.


DEC 19 1990
JOHN HATCH, Chief Engineer
Water Rights Division
Department of Water and Natural
Resources



Department of Water & Natural Resources

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

DEC 19 1990

5200-3

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

Dear Mr. Sorensen:

Enclosed is Water License No. 5200-3. This is the final water right document completing your process of obtaining a Water Right. Enclosed is Receipt No. 412403 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. 5200-3, 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,

A handwritten signature in black ink, appearing to read "John Hatch". The signature is written in a cursive, flowing style.

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

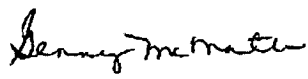
Dear Mr. Sorensen:

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.

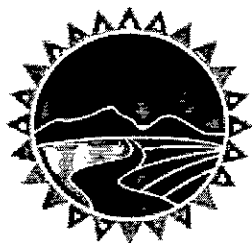
If you have any questions, please contact me.

Sincerely,


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

enclosures

5200-3



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