

WATER PERMIT NO. 6310-3

Name of Applicant: Nels J Sorenson

Address: 2903 S Dakota St, Vermillion SD 57069

Phone: 605 624-4535

Amount of Water Claimed: 1.78 cfs

Total Acres: 112

Source of Water Supply: groundwater

Water to be used for: irrigation

County: Clay

Type of Waste Disposal System:

Location: 1 mile east of Vermillion

PRIORITY Date Received: 3-1-02

Fee: \$225

Corrected Application Received: 3-7-02

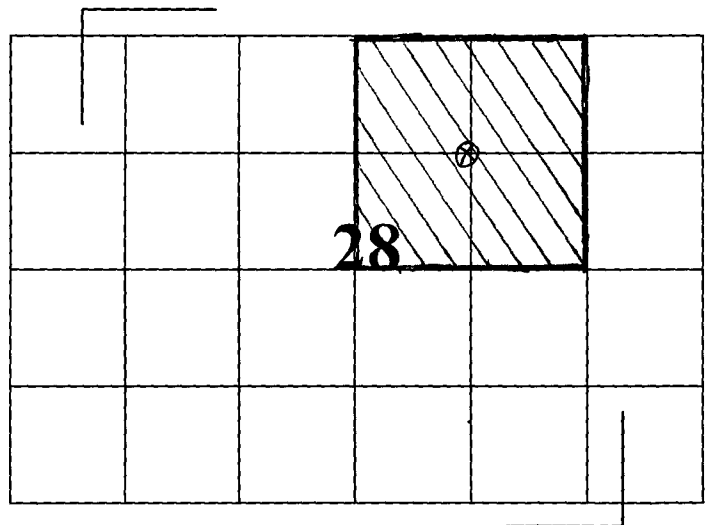
Period of Annual Use: May 1 – September 30

Remarks:

Diversion Point: approximate center

NE ¼ Sec 28-T92N-R51W

Land to be Irrigated: NE ¼ Sec 28-T92N-R51W



Depth of Well: 116 feet deep

Well Driller: :

Remarks:

Type of Map: Topo

Prepared by: Sarah Chadime, Geological Survey

Reviewed and the Number Assigned on: 2-7-02

By: **Karen Schlaak**

Notice of Hearing - date to intervene: _____

**SOUTH DAKOTA
WATER PERMIT NO. 6310-3**

Date of first receipt of application March 1, 2002.

Date of return to applicant for corrections, amendments or changes March 1, 2002.

Date of receipt of corrected application March 7, 2002.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 6310-3 to Nels J. Sorensen, 2903 S Dakota St, 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. 6310-3 appropriates 1.78 cubic feet of water per second from one well (Missouri Elk Point Aquifer) 116 feet deep located in the approximate center of the NE ¼ Section 28 to irrigate 112 acres located in the NE ¼ Section 28; T92N-R51W.
2. The amount of the appropriation may not exceed 2 acre feet annually for each acre of land to which water is actually and beneficially applied for irrigation. The water is to be used during the following described annual period: May 1 – September 30.
3. The date from which applicant may claim right is March 1, 2002.
4. The date of approval of Permit No. 6310-3 is May 27, 2002.
5. One-fifth of the construction is to be completed on or before November 27, 2004.
6. All construction is to be completed on or before May 27, 2007.
7. Water is to be put to beneficial use on or before May 27, 2011.
8. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

QUALIFICATIONS

1. The well approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. The well authorized by Permit No. 6310-3 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) from the producing formation to the surface pursuant to Section 74:02:04:28.
3. Pursuant to SDCL 46-5-6 which allows a greater diversion rate if the method of irrigation, time constraints, or type of soils so requires, Permit No. 6310-3 authorizes a maximum diversion rate of 1.78 cfs for the irrigation of 112 acres with an annual volume not to exceed 2 acre feet of water per acre per year.
4. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

WATER MANAGEMENT BOARD

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

JUN 13 2002

date



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

Mail to: Water Rights Program Joe Foss Building 523 E. Capitol Pierre, SD 57501-3181 (605) 773-3352	No. <u>6310-3</u>	(office use only) Hydrologic Unit <u>10170101</u>
	Basin <u>Vermillion River</u>	
	Newspaper <u>Vermillion Plain Talk</u> <u>Vermillion</u>	

RECEIVED
MAR - 1 2002
WATER RIGHTS
PROGRAM

Application For Permit To Appropriate Water For Irrigation

Type of Application: X New Vested Right Amendment/Correction to Permit No.
(Use predates Mar 2, 1955)

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

- Name of Applicant Nels J. Sorenson Phone 605-624-4535
(check one) X Owner Tenant/lessee
Mailing Address 2903 S. Dakota St Vermillion, SD State S.D. 57069
(Street, RR, or Box and City) (Zip Code)
- Amount of water claimed 1.78 *CFS or 800 **GPM ***AF Total Acreage 112
(*Cubic Feet per Second) (**Gallons per Minute) (***)Acre Feet - storage capacity of dam/dugout or annual use if applicable
- Source of water supply Lower Missouri Aquifer - (GRAVEL)
- Location of point of diversion (example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W) 1 well in
T 92N S1W Sec 28 NE NE (approximate center)
County CLAY
- County or counties where water will be used CLAY
- Annual period during which water is to be used May 1th - September 30
- List below each forty acre division, or lot, or fraction thereof and show number of acres to be irrigated in each.
(Attach sheet if more space is needed)

Land Description	Acres	Land Description	Acres
<u>T 92N S1W Sec 28 NE NE</u>	<u>112</u>		

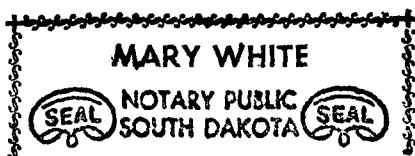
- Give a description of the project. (Attach sheet if more space is needed)
Digging a new well for a center irrigation system.

STATE OF SOUTH DAKOTA) SS
County of CLAY

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

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

Applicant's signature Nels J. Sorenson
Subscribed and sworn to before me this 27th day of February 20 02



Mary White
Notary Public

Supplemental Information

(type or print in ink)

1. Well Information - Proposed Construction

- a) Drill Hole Diameter 24" Depth 116'
- b) Casing Type PVC Diameter 16" Thickness 1/2"
- c) Screen Type PVC-Slotted Diameter 16 Thickness 1/2"
- d) Gravel Pack 1/4" x 1/8" Length of Gravel Pack 45'
- e) Depth to Top of Water Bearing Material 74'
- f) Depth to Water (ground surface to water level) 20'
- g) Distance to nearest existing domestic well:
- On applicants property None On property owned by others 1,000'

2. Wastewater Disposal System Information

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

3. Dugout Information

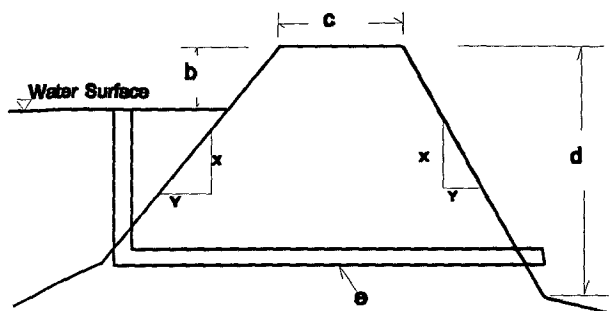
- a) Surface Dimensions NA Depth _____
- b) Depth to water (ground surface to water level) _____

4. Water Storage Dams

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

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

NA



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

SOUTH DAKOTA WATER WELL COMPLETION REPORT

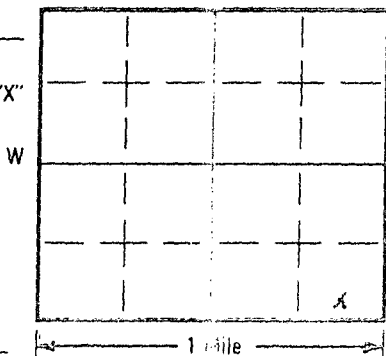
6310-3

07-92

Location SE 1/4 SE 1/4 Sec 20 Twp 92N Rg 51W

County Clay

North



Please mark well location with an "X"

Well Completion Date

4-12-02

LOCATION:

Distance from nearest potential pollution source (septic tank, abandoned well, feed lot, etc.)? 1800 ft. from Septic System (identify source).

PROPOSED USE:

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

METHOD OF DRILLING:

Rotary

casing DATA: ☐ Steel ☒ Plastic ☐ Other

Other describe _____

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
<u>sch 40 LB/FT</u>	<u>16 IN</u>	<u>0 FT</u>	<u>60 FT</u>	<u>22 IN</u>
_____ LB/FT	_____ IN	_____ FT	_____ FT	_____ IN
_____ LB/FT	_____ IN	_____ FT	_____ FT	_____ IN

GROUTING DATA

Grout Type	No. of Sacks	Grout Weight	From	To
<u>Bent Grout</u>	<u>27</u>	<u>710 lb./gal</u>	<u>20 ft</u>	<u>60 ft</u>
<u>Neat Cement</u>	<u>18</u>	<u>714 lb./gal</u>	<u>0 ft</u>	<u>20 ft</u>

Describe grouting procedure Tremie

SCREEN: ☐ Perforated pipe ☒ Manufactured

Diameter 16 IN Length 60 FEET

Material PVC

Lot Size .060 Set From 60 Feet to 120 Feet

Other information _____

WAS A PACKER OR SEAL USED? ☐ YES ☒ NO

so, what material? _____

Describe packer(s) and location? _____

SANITIZATION: Was well disinfected upon completion?

☒ YES, How: HTH

Laboratory sent to for water

quality analysis

Well Owner: Nels Soransen

Business Name: _____

Address: 2903 So Dakota St
Vermillion SD 57069

WELL LOG:

DEPTH

FORMATION	FROM	TO
<u>SILT, GRAY-BROWN, clayey</u>	<u>0</u>	<u>18</u>
<u>SAND, V. fine</u>	<u>18</u>	<u>23</u>
<u>SILT, BROWN, clayey</u>	<u>23</u>	<u>57</u>
<u>GRAVEL, FINE, sandy</u>	<u>57</u>	<u>85</u>
<u>Boulders</u>	<u>85</u>	<u>89</u>
<u>SAND, MPD-COARSE</u>	<u>89</u>	<u>124</u>
<u>CLAYSTONE, DK GRAY</u>	<u>124</u>	<u>144</u>
<u>Few sandstone pits</u>		

STATIC WATER LEVEL 23

If flowing: closed in pressure _____

GPM flow _____ through _____

Controlled by ☐ Valve ☐ Reducers ☐ Other _____

Reduced Flowrate _____

Can well be completely shut in? _____

WELL TEST DATA:

☒ Pumped

Describe: _____

☐ Bailed

☐ Other

Pumping Level Below Land Surface

37 ft. After 12 Hrs. pumped 1100

_____ ft. After _____ Hrs. pumped _____

If pump installed, pump rate 800

REMARKS

This well was drilled under license # 666

And this report is true and accurate.

Drilling firm HARMON-DRILLING

Signature of License Representative: [Signature]

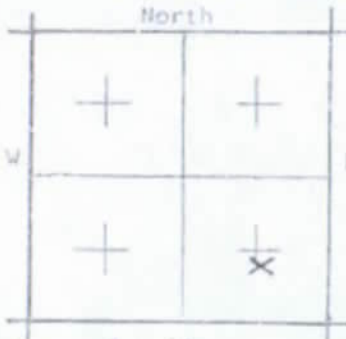
Signature of Well Owner or Equitable Property Holder: _____

RECEIVED
JAN 30 2003
WATER RIGHTS PROGRAM

WELL DRILLERS REPORT
SOUTH DAKOTA WATER RIGHTS COMMISSION

4-78

Well Owner: Svobda
Name: Berwyn Svobda
Address: Burbank, SD

Well Location: 
Mark location with an "X"

County: Clay
Sec. 28 Twp. 92 Rg. 51

Proposed Use:
☐ Domestic ☐ Municipal ☐ Test Holes
☒ Irrigation ☐ Industrial ☐ Stock

Method of Drilling:
☒ Forward Rotary ☐ Bored ☐ Jetted
☐ Reverse Rotary ☐ Cable ☐ Other

Well Construction:

Diameter of Hole 20"
Depth 116
Casing ☐ Steel ☐ Concrete
15" ☒ Plastic ☐ Other
If other, specify _____

Was casing end left open No
Was a well screen installed No
Describe Well Screen
Diameter slots Material PVC
Slot size 100 # 40'
Was well gravel packed yes
Was well grouted No
Was water sample taken No

Remarks:



Water Level Information:
Static water level 18 below land surface
If flowing: closed in pressure _____ PSI
rate of flow _____ GPM
Controlled by:
☐ Valve ☐ Reducers ☒ Other
If other, specify _____

Well Test Data:

☒ Pumping _____
☐ Bailed Describe: _____
☐ Other _____
Pumping Level Below Land Surface
73 ft. After 4 hrs. pumped 1500 GPM
_____ " " " " " " " " " " " "

Well Log:

Formation	Depth	
	From	To
<u>top soil</u>	<u>0</u>	<u>2</u>
<u>clay</u>	<u>2</u>	<u>21</u>
<u>fine sand</u>	<u>21</u>	<u>45</u>
<u>coarse sand</u>	<u>45</u>	<u>120</u>

(Use Back if Necessary)

Date Completed: 3-8-78

Driller: Wetmore Drilling 341
Driller's or Firm's Name License NO.

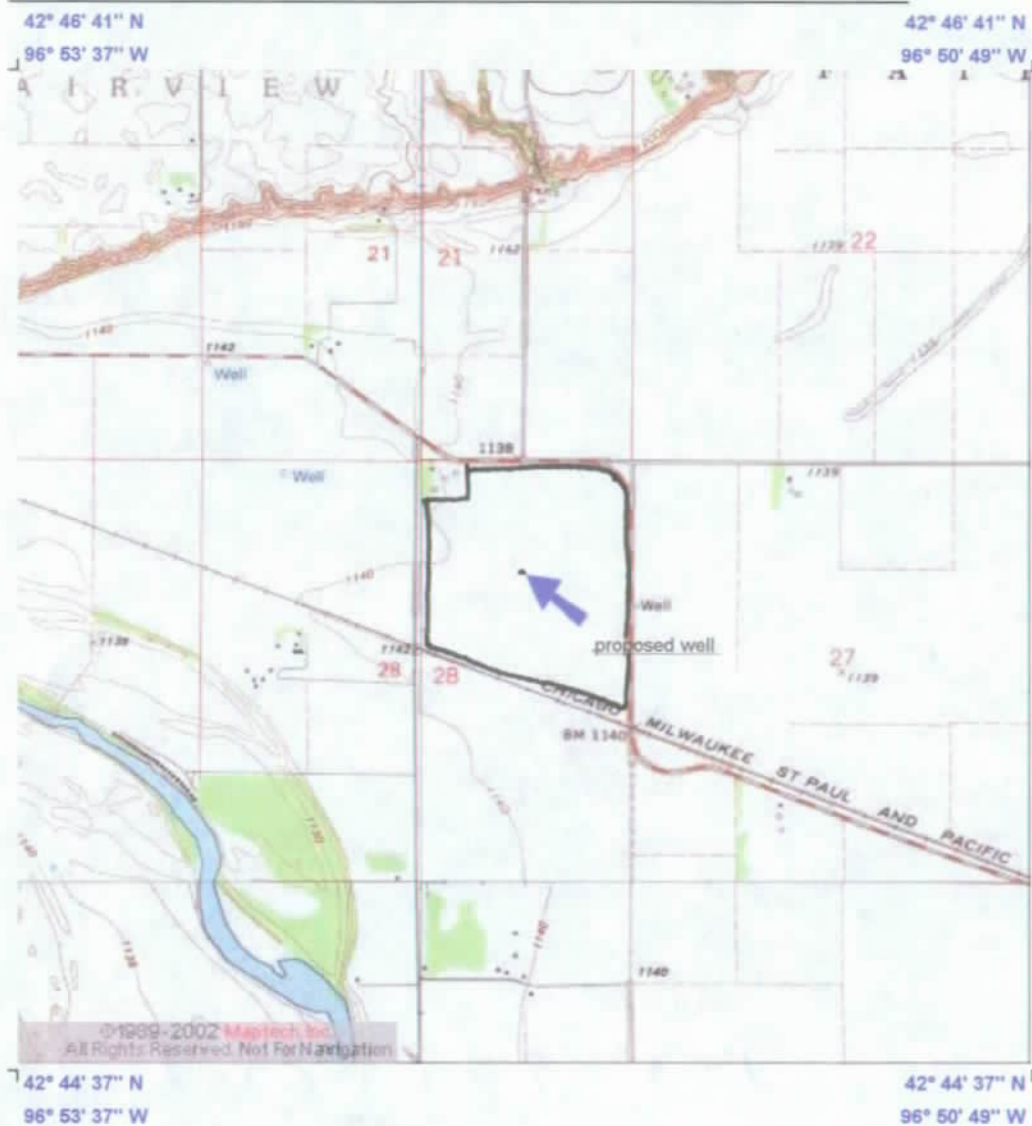
Box 577 Elk Point, SD
Address 57021

James Wetmore 12-5-78
Signed By Date

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Sarah Chadime
SD Geological Survey
2-26-02

RECEIPT

Water Rights Program

South Dakota Department of Environment and Natural Resources

417105

Pierre, March 1, 20 02

RECEIVED OF Nels Sorensen, 2903 S. Dakota St., Vermillion, SD 57069
the following amount in fees for services rendered as provided for by law:

Fee for Application for Permit No. <u>6310-3</u> to Appropriate Water, to construct 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 _____		

(Any Other Work Provided by Law)	Total	225 00

By

Darland Erbele
Chief Engineer *gm*

RECEIPT

Water Rights Program

South Dakota Department of Environment and Natural Resources

417113

Pierre, March 7, 2002

RECEIVED OF Nels J. Sorensen, 2903 S Dakota St., 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
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. 6310-3

Fee for Filing Transfer Form _____

Fee for Filing Extension Request _____

Fee for _____

(Any Other Work Provided by Law)

Total

50 00

50 00

By

Darlene Ebele

Chief Engineer

gm



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

March 1, 2002

Nels J. Sorenson
2903 S Dakota St
Vermillion SD 57069

Dear Mr. Sorenson:

Thank you for submitting the *Application for a Permit to Appropriate Water* for irrigation.

We have received the \$225 application filing fee. In addition to the application filing fee, the Water Rights Program now collects the \$50 licensing fee at the time of filing. Please submit \$50 for the licensing of the water permit.

The application states the well will be located in the NE ¼ NE ¼ Section 28 and the irrigated land will be located in the NE ¼ NE ¼ Section 28. The well location, as marked on the map, would be the approximate center of the NE ¼ Section 28. The irrigated land, as outlined on the map, appears to be located in the NE ¼ Section 28. Please let me know if you disagree with these changes on the application.

If you have any questions, please contact me.

Sincerely,

Karen Schlaak
Water Rights Program
605 773-3352

REPORT ON WATER PERMIT APPLICATION NO. 6310-3
For Nels J. Sorenson
April 8, 2002

Application No. 6310-3 proposes to appropriate 1.78 cfs (800 gpm) from one well approximately 116 feet deep located in the approximate center of the NE ¼ of section 28 to irrigate 112 acres located in the NE ¼ of section 28; T92N R51W in Clay County.

AQUIFER – MISSOURI ELK POINT (M-EP)

The Missouri Elk Point is an alluvium-mantled outwash (sand and gravel) that is predominantly under water table conditions but may be under slight artesian conditions at this site. The aquifer underlies 74,500 acres and contains an estimated 1.117 million acre-feet of recoverable water in storage (Hedges, 1982). The aquifer extends into Union County to the east, Yankton County to the west and blends into the Lower Vermillion Missouri aquifer to the north. The aquifer is hydraulically connected to the Vermillion River and to the Missouri River. Ground water levels indicate that water from the aquifer generally discharges into the rivers (Christensen, 1967).

No test well information was filed with the application. The nearby observation well log and irrigation wells in the area along with information from the Clay County Study are sufficient to evaluate this application. The saturated thickness map from the county study indicates the aquifer should be 100 to 125 feet in this area. An irrigation well in the area was capable of producing 1500 gpm and the historical observation well data indicates very little impact on water levels by pumping in the area.

The Water Rights Program monitors two observation wells located within three miles of this application. These are observation wells, CL-80D and CL-80E. Well CL-80D is located within one-half mile of the proposed well for this application. Water levels for these observation wells fluctuate in response to climatic conditions. The record mirrors the wet and dry cycles of the last forty years. Hydrographs for these two wells are included with this report. In general, the water level record indicates that the aquifer is capable of sustaining additional withdrawals (Water Rights, 2002).

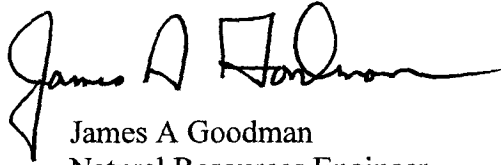
REVIEW OF EXISTING WATER PERMITS/RIGHTS

There are two existing irrigation wells that are located within one-half mile of the well for this application. These existing wells are for Water Right Nos. 671-3 and 1006-3. Interference is not a concern. Drawdown created by pumping is not expected to be adverse. This is shown by the observation well records for the aquifer and the history of pumping in the area.

CONCLUSIONS

1. Water is available from the Missouri Elk Point aquifer.

2. The aquifer is under predominantly water table conditions in this area and drawdown created by pumping does not appear to be significant. Interference is not a concern. The existing wells have been in use for many years with no apparent problems.
3. The well authorized by this application if approved must be constructed in accordance with SD Well Construction Standards.



James A Goodman
Natural Resources Engineer

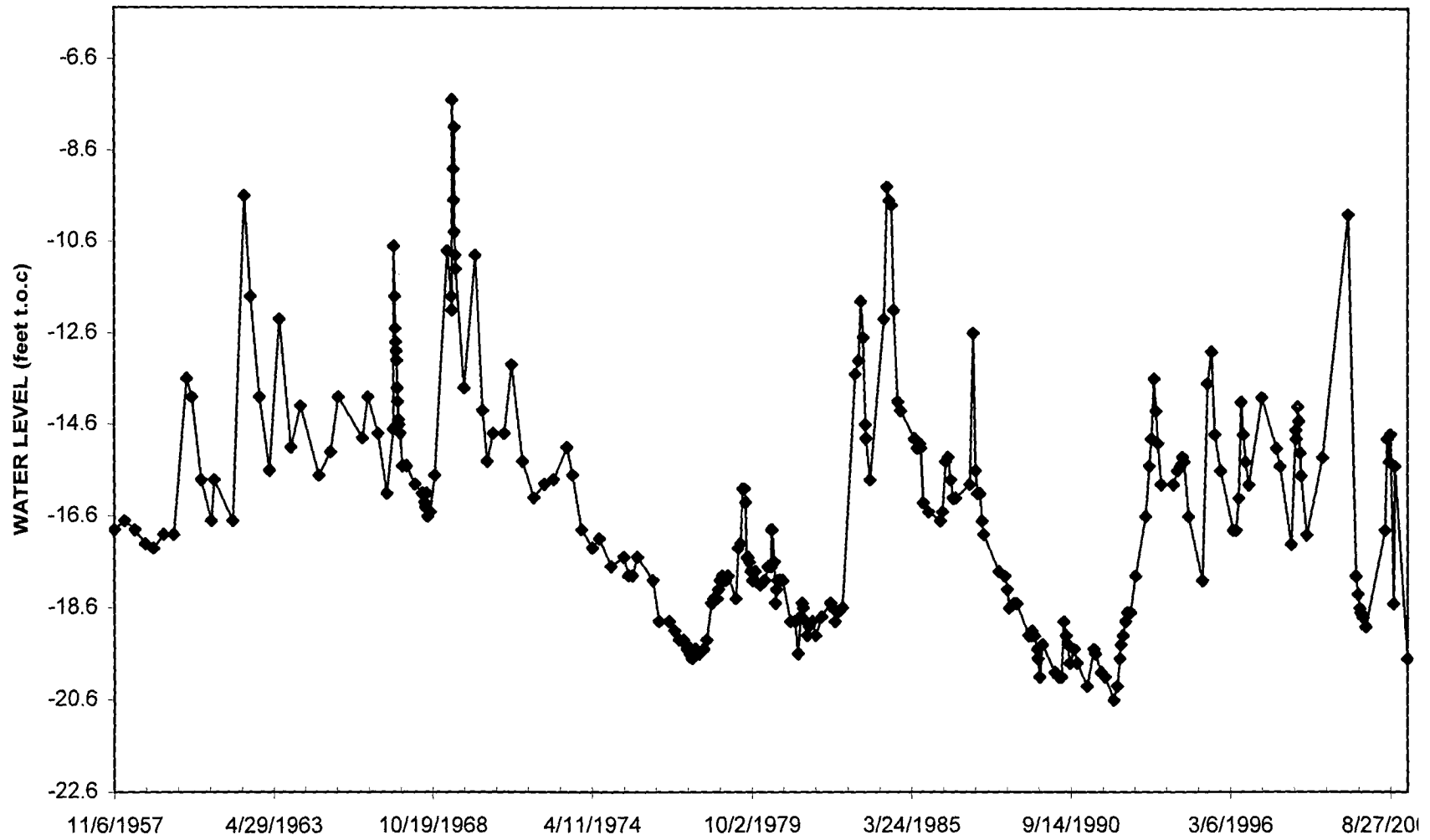
BIBLIOGRAPHY

Christensen, C.M., J.C. Stephens, 1967, Geology and Hydrology of Clay County South Dakota, Part II Water Resources, Bulletin 19, SD DENR, SDGS, Vermillion, SD, 57069.

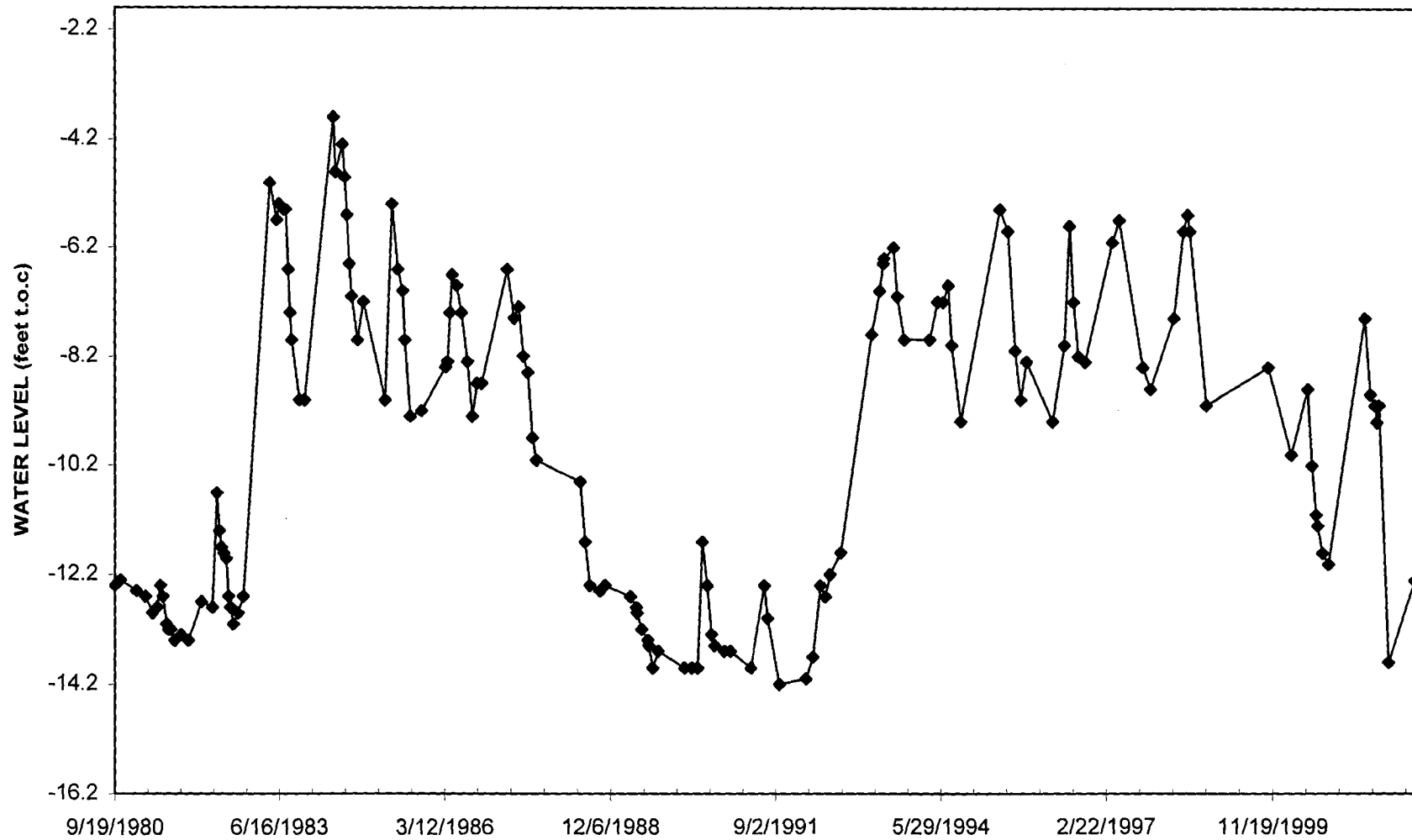
Hedges, L.S., 1982, Evaluation of Ground-Water Resources Eastern SD and Upper Big Sioux River, SD and Iowa, for US Army Corps of Engineers, SD DENR, SDGS, Vermillion, SD, 57069.

Water Rights, 2002, Unpublished Observation Well Data for Clay County, SD DENR, DES, Water Rights Program, Pierre, SD, 57501.

**WATER RIGHTS' OBSERVATION WELL
CL-80D**



**WATER RIGHTS' OBSERVATION WELL
CL-80E**





**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
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PIERRE, SOUTH DAKOTA 57501-3182
www.state.sd.us/denr

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 6310-3, Nels J. Sorenson**

Pursuant to SDCL 46-2A-2, the following is the recommendation of the Chief Engineer, Water Rights Program, Department of Environment and Natural Resources concerning Water Permit Application No. 6310-3, Nels J. Sorenson, 2903 S. Dakota Street, Vermillion SD 57069.

The Chief Engineer is recommending APPROVAL of Application No. 6310-3 because 1) there is reasonable probability that there is unappropriated water available for the applicant's proposed use, 2) the proposed diversion can be developed without unlawful impairment of existing rights, 3) the proposed use is a beneficial use and 4) it is in the public interest with the following qualifications:

1. The well approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. The well authorized by Permit No. 6310-3 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) from the producing formation to the surface pursuant to Section 74:02:04:28.
3. Pursuant to SDCL 46-5-6 which allows a greater diversion rate if the method of irrigation, time constraints, or type of soils so requires, Permit No. 6310-3 authorizes a maximum diversion rate of 1.78 cfs for the irrigation of 112 acres with an annual volume not to exceed 2 acre feet of water per acre per year.
4. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

See report on application for additional information.

Garland Erbele, Chief Engineer
April 16, 2002

AFFIDAVIT OF PUBLICATION

State of South Dakota, County of Clay, ss.

Candi Jensen

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 Application No. 6310-3 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 2 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 in said newspaper as aforesaid

was on Friday, the 10 day of May, 20 02, and that the succeeding publications were severally

on Friday, the 17 day of May, 20 02,

on Friday, the 24 day of May, 20 02,

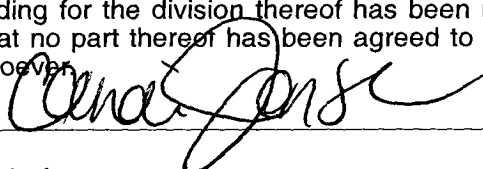
on Friday, the _____ day of _____, 20 _____,

on Friday, the _____ day of _____, 20 _____,

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

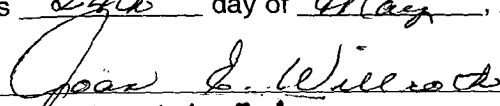
Fifty three dollars and 82 cents

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.



Subscribed and sworn to before me

this 14th day of May, 20 02



My Commission Expires
April 17, 2005

Notary Public

NOTICE OF APPLICATION NO. 6310-3 to Appropriate Water

Notice is given that Nels J. Sorenson, 2903 S. Dakota St., Vermillion, SD 57069 has filed an application for a water permit to appropriate 1.78 cubic feet of water per second from one well (Missouri Elk Point Aquifer) 116 feet deep located in the approximate center of the NE 1/4 Section 28 to irrigate 112 acres located in the NE 1/4 Section 28; T92N-R51W.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 6310-3 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. In accordance with SDCL 46-2A-23, the Chief Engineer will act on the application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the Chief Engineer's recommendation. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled and the Water Management Board will consider the application. Notice of the hearing will be given to the applicant and any person filing a petition.

Any person interested in opposing or supporting this application or recommendation must file a written petition with BOTH the applicant and Chief Engineer. The applicant must file a petition if contesting the Chief Engineer's recommendation. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E. Capitol, Pierre, SD 57501, (605-773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by May 27, 2002.

The petition may be informal, but must include a statement describing the petitioner's interest in the application, the petitioner's reasons for opposing or supporting the application, and the signature and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained. Contact Eric Gronlund at the above Water Rights Program address to request copies of information pertaining to this application. Steven M. Pirner, Secretary, Department of Environment and Natural Resources.

Publish: May 10, 17 & 24, 2002

RECEIVED

JUN 03 2002

WATER RIGHTS
PROGRAM

Instruction to Newspaper - Publish first Notice on May 10, 2002 with the second publication 7 days later. The applicant is responsible for payment.

NOTICE OF APPLICATION NO. 6310-3 to Appropriate Water

Notice is given that Nels J Sorenson, 2903 S Dakota St, Vermillion SD 57069 has filed an application for a water permit to appropriate 1.78 cubic feet of water per second from one well (Missouri Elk Point Aquifer) 116 feet deep located in the approximate center of the NE ¼ Section 28 to irrigate 112 acres located in the NE ¼ Section 28; T92N-R51W.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 6310-3 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. In accordance with SDCL 46-2A-23, the Chief Engineer will act on the application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the Chief Engineer's recommendation. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled and the Water Management Board will consider the application. Notice of the hearing will be given to the applicant and any person filing a petition.

Any person interested in opposing or supporting this application or recommendation must file a written petition with BOTH the applicant and Chief Engineer. The applicant must file a petition if contesting the Chief Engineer's recommendation. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by May 27, 2002.

The petition may be informal, but must include a statement describing the petitioner's interest in the application, the petitioner's reasons for opposing or supporting the application, and the signature and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained. Contact Eric Gronlund at the above Water Rights Program address to request copies of information pertaining to this application. Steven M. Pirner, Secretary, Department of Environment and Natural Resources.



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

May 3, 2002

Vermillion Plain Talk
PO Box 256
Vermillion, SD 57069

ATTENTION: Legal Public Notice

Enclosed is a Notice of Hearing on Application No. 6310-3 to Appropriate Water to be published twice. Please publish the first notice on May 10, 2002 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, 2903 S. Dakota St., Vermillion, SD 57069 (Ph # 605-624-4535).

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

After the second publication, **please send us an affidavit or use the enclosed Proof of Publication form.** The applicant pays the cost of publication, but the Water Rights Program records require an affidavit or Proof of Publication. Delays in receiving the affidavit can be costly to the applicant.

Sincerely,


Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosures

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

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

No. 6310-3

Date _____

We are in receipt of your letter of May 3, 2002 enclosing Notice of Hearing to Appropriate Water by Application No. 6310-3 which was first published in our issue of _____. **ENCLOSED IS A COPY OF THIS FIRST PUBLICATION.**

Name

Newspaper



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

April 17, 2002

Vermillion Plain Talk
PO Box 256
Vermillion, SD 57069

ATTENTION: Legal Public Notice

Enclosed is a Notice of Hearing on Application No. 6310-3 to Appropriate Water to be published twice. Please publish the first notice on April 26, 2002 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, 2903 S. Dakota St., Vermillion, SD 57069 (Ph # 605-624-4535).

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

After the second publication, **please send us an affidavit or use the enclosed Proof of Publication form.** The applicant pays the cost of publication, but the Water Rights Program records require an affidavit or Proof of Publication. Delays in receiving the affidavit can be costly to the applicant.

Sincerely,


Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosures

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

No. 6310-3

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

Date _____

We are in receipt of your letter of April 17, 2002 enclosing Notice of Hearing to Appropriate Water by Application No. 6310-3 which was first published in our issue of _____. **ENCLOSED IS A COPY OF THIS FIRST PUBLICATION.**

Name

Newspaper



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

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

April 17, 2002

Nels J. Sorensen
2903 S. Dakota St.
Vermillion, SD 57069

Dear Mr. Sorensen:

Water Permit Application No. 6310-3 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 (Ph # 605-624-2695). You will need to contact the newspaper and authorize publication of this notice. For your information, a copy of the notice, the recommendation of the Chief Engineer and 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 Hearing and to arrange for payment. Early contact with the paper can eliminate delays. Upon receiving authorization, the publisher has been instructed to publish your notice once each week for two consecutive weeks with the last publication to occur twenty days before the board meeting. The newspaper has also been instructed to send us the Proof of Publication. We must receive Proof of Publication before action can be taken on the application.

Sincerely,

Eric Gronlund
Natural Resources Engineer
(605) 773-3352

enclosures

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



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

May 3, 2002

Nels J. Sorensen
2903 S. Dakota St.
Vermillion, SD 57069

Dear Mr. Sorensen:

A copy of the revised Notice of Hearing has been faxed to the Vermillion Plain Talk. Please be sure to contact the Vermillion Plain Talk to authorize publication of your Notice of Hearing and to arrange for payment.

Sincerely,

A handwritten signature in black ink, which appears to read 'Eric Gronlund', is written above the printed name.

Eric Gronlund
Natural Resources Engineer
(605) 773-3352



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

JUN 13 2002

Nels J. Sorensen
2903 S. Dakota St.
Vermillion, SD 57069

Dear Mr. Sorensen:

Enclosed is Water Permit No. 6310-3 authorizing construction of your water diversion system and beneficial use of the water, not exceeding the limits as specified in the Water Permit.

Form 10, *Notice of Completion of Works and Application of Water to Beneficial Use*, is enclosed. Please return this completed form after you have finished the system and have put the water to beneficial use. An investigation can then be scheduled so the water license may be issued, thus completing the acquisition of a water right.

An informational sheet *Common Water Right Questions?* is also enclosed. This sheet is intended to answer some of the questions associated with obtaining and keeping a water right.

Sincerely,

A handwritten signature in black ink, appearing to read 'Garland Erbele', written in a cursive style.

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

enclosures

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

Date July 14 - 2002

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

RECEIVED
JUL 19 2002
WATER RIGHTS
PROGRAM

FROM: Nels J. Sorenson
(name)
2903 So Dakota Str.
(address)
Vermillion S.D. 57069 605-624-4535
(city, state, zip) (phone)

I have completed the construction of the water use system and I have put the water to beneficial use to the maximum extent it is going to be used.

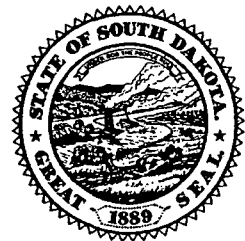
Water Permit No. 6310-3 states that the water use system is to be constructed by May 27 - 2007, and water is to be put to beneficial use by May 27 - 2011.
(date) (date)

The water use system was completed on May 1 2002.
(date)

Applying the water to beneficial use was completed on June 2 - 2002.
(date)

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

Nels J. Sorenson
(signature)



Permit No. 6310-3
Missouri River - Water District

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

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

I have this day, **August 24, 2005**, made a thorough examination of the water use system constructed by **Nels Sorensen** of **2903 S Dakota Street, Vermillion SD 57069** holder of Permit No. **6310-3**, bearing the priority of **March 1, 2002** authorizing the diversion of **1.78** cu. ft. per second of the waters of **Missouri:Elk Point Aquifer** 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:

A well constructed into the Missouri:Elk Point Aquifer equipped with a 30 horsepower US Electric motors and a Western Land Roller pump.

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

Well is located at the pivot point

C. Works used to apply water to beneficial use:

An 7 tower Lindsey Zimmatic center pivot capable of making full rotation

The system is in the following condition **good**. The point of diversion is located **in the approximate center of the NE ¼ of Section 28, T92N, R51W (lat/lon N 42.76097 W-096.87030)**. The works are capable of diverting and conveying to the place of use **1.78** cu. ft. per second of water 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 28, T92N, R51W**

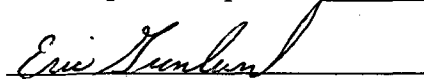
NW ¼ NE 1/4	25 acres	NE ¼ NE ¼	31 acres
SW ¼ NE ¼	25 acres	SE ¼ NE ¼	31 acres

comprising a total of **112 acres** of land and the license should be issued for **1.78** cfs.

Applicable permit qualifications have been complied with: Yes **X**

Exceptions to compliance are: **none**

Date Report Completed: **February 9, 2005**



Eric Gronlund
 Natural Resources Engineer
 DENR, Water Rights Program

FIELD INVESTIGATION REPORT FOR PERMIT NO. 6310-3

DATE OF INVESTIGATION:	August 24, 2004
NAME & ADDRESS OF INVESTIGATION CONTACT/ RELATIONSHIP TO PERMIT HOLDER, IF APPLICABLE	Nels Sorensen 2903 S Dakota Street Vermillion SD 57069
DIVERSION POINT LEGAL LOCATION	<u>the approximate center of the NE ¼ of Section 28, T92N, R51W (lat/lon N 42.76097 W- 096.87030)</u>

Other permit(s) associated with the project:

WELL INFORMATION:

- 1) Well Drilling Firm: Hammond - Wetmore
- 2) No. of Wells 1
- 3) Depth(s) 120 feet
- 4) Well log is available Yes *
- 5) Comment:

Casing:

- 1) Diameter 16 inches
- 2) Length 60 feet
- 3) Type Plastic

Screen:

- 1) Type PVC manufactured
- 2) Length 16 feet
- 3) Static water level 23 feet

Pump:

- 1) Make Western Land Roller (Flow Serve)
- 2) Model 1ZKS
- 3) Size
- 4) Capacity 800 GPM

Motor:

- 1) Make US Electric
- 2) Model No. F405
- 3) Horsepower rating 30 hp

SYSTEM TYPE:

Center pivot:

- 1) Make Lindsey - Zimmatic
- 2) Overall length 1250 feet
- 3) Number of towers 7
- 4) Distance between towers approx. 150 feet
- 5) End gun Yes
- 6) High or low pressure Low
- 7) Capacity 800 GPM

CHEMIGATION EQUIPMENT:

- 1) Does NOT chemigate
- 2) Comments

PERMIT QUALIFICATIONS:

- 1) Special qualifications to permit being abided by Yes
- 2) All structures, wells and lands on map Yes
- 3) Irrigation Questionnaires checked to determine if permit owner started irrigation by the end of construction period Yes – records indicate irrigation has in 2002, 2003 and 2004

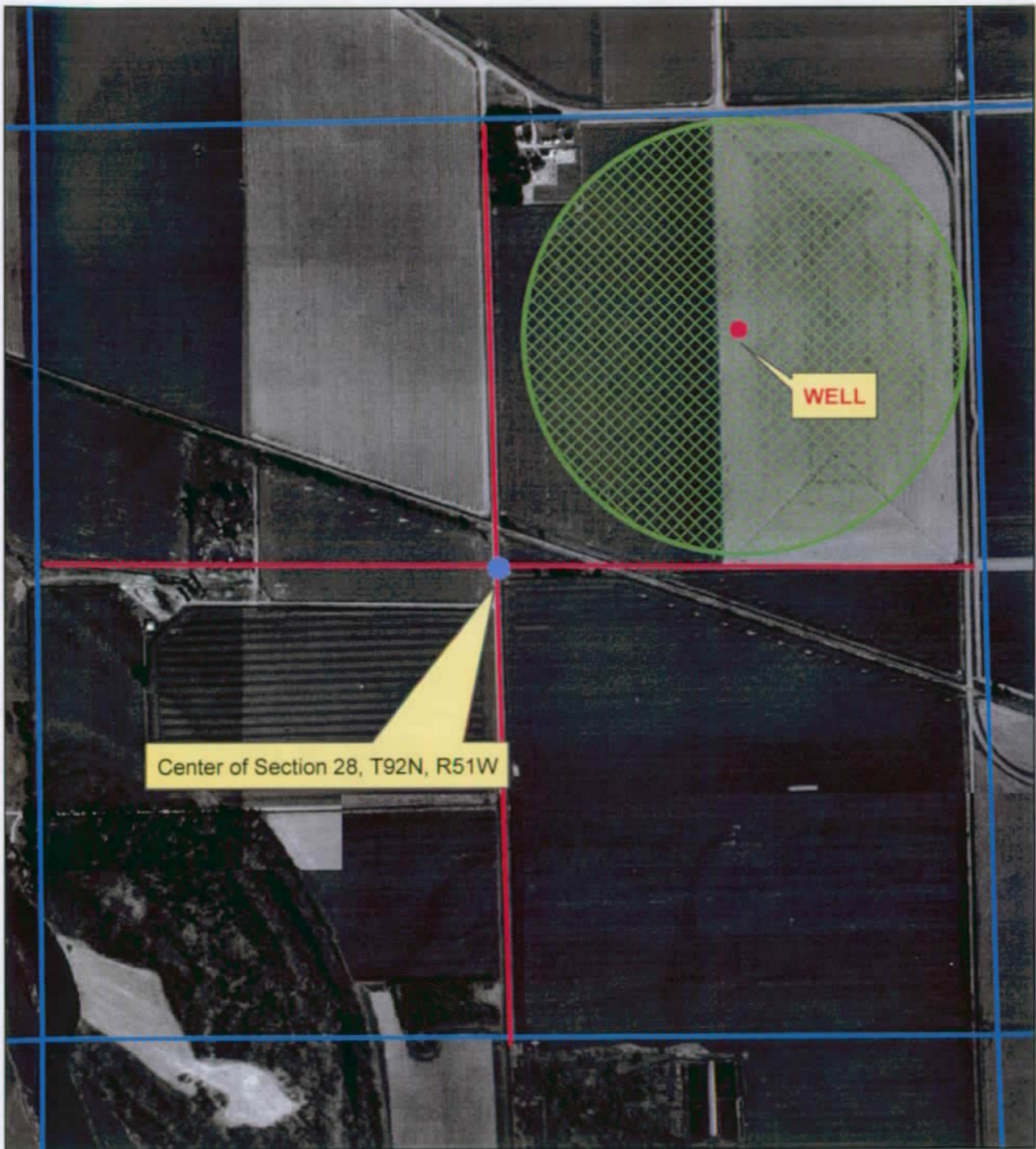
The well completion report on file indicates the well is located in the SE ¼ SE ¼ of Section 20, T92N, R51W. To the best of my knowledge this well report represents the well that was authorized by Permit No. 6310-3 and is located near the center of the NE ¼ of Section 28, T92N, R51W.

Water Permit No. 6310-3, Nels Sorensen



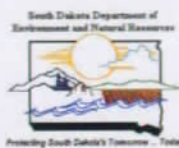
Well and Pivot point for Water Permit No. 6310-3
located in the NE $\frac{1}{4}$ Section 28, T92N, R51W

WATER PERMIT No. 6310-3, Nels Sorensen



0 375 750 1,500 2,250 3,000 Feet

Well located in the approximate center of Section 28, T92N, R51W
Lat/Lon -- N 42.76092 W- 096.87030



Eric Gronlund
Eric Gronlund
Water Rights Program, DENR
Licensing Investigation - August 24, 2004

STATE OF SOUTH DAKOTA

WATER LICENSE NO. 6310-3

(1) Nels Sorensen, 2903 S Dakota St, Vermillion SD 57069 made Application No. 6310-3, March 1, 2002 for a water permit to divert 1.78 cubic feet of water per second from groundwater (one well), Clay County, South Dakota for irrigation purposes. Permit No. 6310-3, with a priority date of March 1, 2002 was approved May 27, 2002 and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before May 27, 2007 and for the application to beneficial use of water on or before May 27, 2011.

(2) The water supply system has been completed and water applied to beneficial use in accordance with South Dakota State Law. Pursuant to South Dakota Codified Law 46-5-30.1, the holder and/or owner of Water Right No. 6310-3 is issued a license, bearing a priority date of March 1, 2002 to appropriate 1.78 cubic feet of water per second from groundwater(one well) to irrigate 112 acres.

The diversion point is located: in the approximate center of the NE ¼ Section 28-T92N-R51W. The acres authorized for irrigation are as follows:

Section 28-T92N-R51W	NW ¼ NE ¼	25 acres
	SW ¼ NE ¼	25 acres
	NE ¼ NE ¼	31 acres
	SE ¼ NE ¼	31 acres
Total 112 acres		

(3) This license is subject to South Dakota Water Law, any limitations or conditions listed in Water Permit No. 6310-3 including the following now applicable qualifications:

- The well approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
- The well authorized by Permit No. 6310-3 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) from the producing formation to the surface pursuant to Section 74:02:04:28.
- Pursuant to SDCL 46-5-6 which allows a greater diversion rate if the method of irrigation, time constraints, or type of soils so requires, Permit No. 6310-3 authorizes a maximum diversion rate of 1.78 cfs for the irrigation of 112 acres with an annual volume not to exceed 2 acre feet of water per acre per year.
- This Permit is approved subject to the irrigation water use questionnaire being submitted each year.



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

APR 19 2005

date





**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

APR 19 2005

6310-3

Nels Sorenson
2903 S Dakota St
Vermillion SD 57069

Dear Mr. Sorenson:

Enclosed is Water License No. 6310-3. This is the final water right document completing your process of obtaining a Water Right.

As long as you use the water beneficially, as stated in the Water License, State Water Laws provide that you have a continuing right to use the water.

Sincerely,

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

enclosures

6310-3



**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

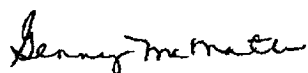
Dear Mr. Sorensen:

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

6310-3



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, appearing to read "Genny McMath".

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