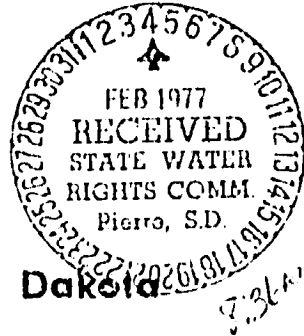


No. 3614-3Map No. 2896-3 Water Division No. 3 BIG SIOUX RIVER District  
(Blank to be filled by the Engineer for the W. R. C.)

## APPLICATION FOR PERMIT

## To Appropriate Water within the State of South Dakota

(NOTE: Draw a line through items not applicable)

1. Name of Applicant Wayne Curtis Mans  
Postoffice address RR 2 Bruce, State So Dak 57220  
If a corporation show date and place of incorporation \_\_\_\_\_
2. Method of accomplishing work (contract, employment of others, or by direct labor) employment of others
3. Name of diversion work Wayne C Mans Irrigation Project #1
4. Amount of water claimed (cubic feet per second) 2.0
5. Source of water supply Wells
6. Location of point of diversion Well #1 1520' N 130° E of NW corner of Sec 11-110-51  
Well #2 1900' N 139° E County Brookings
7. Annual period or periods during which water is to be used April through October
8. Use to be made of water, (irrigation, industrial, municipal, commercial, recreation, etc.) irrigation
9. For irrigation use, Total number of acres to be irrigated 144

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. | Land Description | No. Acres Irr. |
|-----------------------------|----------------|------------------|----------------|
| NW 1/4 NW 1/4 Sec 11-110-51 | 38             |                  |                |
| NE 1/4 " " " "              | 39             |                  |                |
| SE 1/4 " " " "              | 27             |                  |                |
| SW 1/4 " " " "              | 40             |                  |                |

Attach sheet if more space is needed

10. Time required to complete construction of water supply system Five years. Additional time required to complete application of water to the proposed beneficial use three years.
11. Choice of newspaper for Notice of Intent to Appropriate Water publication Volga Tribune
12. Principal Features of the Proposed Water Supply System.
- A. Works proposed to divert water from its natural source. Wells with deep well turbine
- B. Works proposed to transport water to place of use. closed conduit
- C. Works proposed to apply water to beneficial use. center pivot irrigation machine

Estimated Total Cost \$ 45,000Attachments: Attach Form 2A if diversion from a well or dugout, or if storage of water, is proposed. Attach map.  
(See instructions concerning preparation.)

STATE OF SOUTH DAKOTA )

County of Brookings ) ss.I, Wayne C Mans the applicant, certify that I have read the foregoing application and have examined the attached map and that the matters therein stated are true and that I intend, and am able to, complete the necessary constructionSigned Wayne C. MansSubscribed and sworn to before me this 1 day of Feb 1977

Notary Public for other qualified officer

# WATER RIGHT APPLICATION APPROVAL

The Water Rights Commission hereby approves Water Right Application No. 3619-3

WAYNE C. MANS  
(Applicant)

R.R. #2, BRUCE  
(Post Office Address)

SOUTH DAKOTA 57220 With the following modifications:  
(State)

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

THE WELLS APPROVED UNDER THIS PERMIT SHALL BE SPACED SO THAT THERE IS AT LEAST 1660' BETWEEN WELLS

**INCORPORATED INTO**  
**WATER LICENSE NO.**

4338-3  
3/19/81

Date of application FEBRUARY 4 19 77

Date of return to applicant for correction, amendments or changes required --- 19 ---

Date of receipt of corrected application FEBRUARY 18 19 77

Approved MARCH 23 19 77, Recorded in Book 18 Page 133

WATER RIGHT PERMIT NO. 3619-3

The Water Rights Commission hereby grants and issues this Water Right Permit No. 3619-3 authorizing the construction of the water use system and the putting of water to beneficial use as stated in the Application and as modified in the Water Right Application approval subject, however, to the following limitations and conditions.

1. The date from which applicant may claim right is FEBRUARY 4 19 77
2. The equivalent of at least one-fifth of the work above specified is to be completed on or before SEPTEMBER 23 19 79
3. The whole of said work is to be completed on or before MARCH 23 19 82
4. The limit of time from proof of beneficial use of water appropriated in accordance herewith is MARCH 23 19 85
5. The water appropriated shall be used for the purpose of IRRIGATION

6. The prior right of all persons who, by compliance with the laws of the State of South Dakota, have acquired a right to the use of water must not be injuriously affected by this appropriation.

7. The amount of the appropriation herein granted shall not exceed 2.0 cubic feet per second; neither shall it exceed the capacity of the above described water supply system, nor shall it exceed the amount of water needed for beneficial uses served, and if for the irrigation purposes said appropriation must be limited to not more than 3 acre feet per acre per year and be limited to not more than one-seventieth (1/70) of one cubic foot of water per second of time for each acre of land to which water is actually and beneficially applied for irrigation on or before MARCH 23 19 85; said water to be used during the following described annual period: APRIL THRU OCTOBER

Witness my hand this 1ST day of JUNE 19 77

WATER RIGHTS COMMISSION

By:

John Hatch  
Chief Engineer, Executive Officer

Certificate of Construction Issued --- 19 ---

Water License Issued --- 19 ---

Two nearly identical wells

Form 2A - Wells, Dugouts or Water Storage Dams (Supplement to form 2)

1. Principal Features of the Proposed Water Supply System (continued.)

D. Well Information or Estimates

(1) Drill Hole, Diameter 2.2", Depth 45'  
(2) Casing Type Steel, Diameter 1.4", Thickness 1/4"  
(wood, concrete, steel, etc.)  
(3) Perforated Screen.  
Type Cent Slot, Diameter 1.4", Length 10'  
(4) Gravel Pack, Thickness 3", Length of gravel pack 15'

E. Dugout Information or Estimates

(1) Surface dimensions         , Depth         

F. Fill out for Either a Well or a Dugout.

(1) Water Bearing Materials. (Please attach a copy to test well log if available.)

Character of Water bearing materials 0' to 3' top Soil, 3' to 18' yellow  
clay, 18' to 45' water bearing sands with  
3" thin clay lenses

Depth to top of water bearing material 18'  
Depth to bottom of water bearing material 45'  
Thickness of water bearing material 20'  
Depth to water (ground surface to water level) 18'

(2) Distance to nearest existing household or livestock watering wells.

On same owner's property 70 rds. On property owned by others 70 rds.

G. Water Storage Dams.

If the proposed water use system contains one or more water storage dams, please show in the space below, the height, maximum water depth, surface area and storage capacity of each storage dam. The location of each water storage dam should be shown on the water right map.

Wayne C. Miller  
Signature of Applicant

CONSERVATION  
COMMISSION  
FORM W1 #1

STATE CONSERVATION COMMISSION  
SUPPORTING INFORMATION  
FOR APPROPRIATION OF GROUND WATER IN ACCORDANCE  
WITH SDCL 46-6-3 AS AMENDED  
(THIS FORM REQUIRED FOR PROPOSED GROUND WATER IRRIGATION ONLY)



NAME Wayne C. Thomas  
ADDRESS Bruce L. Dah.  
COUNTY Brookings

LEGAL DESCRIPTION

1. WELL LOCATION center of NW 1/4  
2. LOCATION OF AREA TO BE IRRIGATED NW 1/4 sec 11 110-51

TYPE OF IRRIGATION

3. GRAVITY \_\_\_\_\_ TOWLINE \_\_\_\_\_ CENTER PIVOT X GUN \_\_\_\_\_  
4. CROPS TO BE IRRIGATED Corn and alfalfa

WATER QUALITY

5. SAMPLE NUMBER 77-168  
6. SALINITY (EC X 10<sup>6</sup>) 821  
7. SODIUM (SAR) 0.43  
8. RESIDUAL SODIUM CARBONATE (meq/L.) 0

I do hereby certify that a chemical analysis of the ground water representative of that used to irrigate shall be acquired from South Dakota State University and:  
the soils information has been acquired from \_\_\_\_\_ Conservation District,  
County Extension office or Soil Conservation Service.  
and:  
that the legal description for the location of the well and land to be irrigated is true and correct.

Wayne C. Thomas  
APPLICANT'S SIGNATURE

SUBSCRIBED AND SWORN BEFORE ME THIS  
14 DAY OF Oct 1976.

John S. [unclear]  
(TITLE OR SEAL)

Alfred L. [unclear]  
APPROVED/DIST. AGENT

(SOILS INFORMATION ON REVERSE SIDE)

**REPORT OF ANALYSIS**  
**Water Quality Laboratory**  
**Water Resources Research Institute**  
**South Dakota State University**  
**Brookings, South Dakota 57006**

Submitted by: Wayne Hens  
 Address: Prue, SD 57220

Date Rec'd: February 1, 1977  
 Sample No.: 770168  
 Identification: Well 60  
Box 11, Union, SD

**WATER ANALYSIS**

|                                       |      |                             |      |           |
|---------------------------------------|------|-----------------------------|------|-----------|
| Calcium (Ca)                          | 118  | ppm*                        | 5.90 | me/l**    |
| Magnesium (Mg)                        | 39   | ppm                         | 5.20 | me/l      |
| Sodium (Na)                           | 21   | ppm                         | 6.51 | me/l      |
| Potassium (K)                         | 6    | ppm                         | 0.16 | me/l      |
| Sulfate (SO <sub>4</sub> )            | 116  | ppm                         | 2.41 | me/l      |
| Nitrate (as N)                        |      | ppm                         |      | me/l      |
| Chloride (Cl)                         | 14   | ppm                         | 0.38 | me/l      |
| Bicarbonate (HCO <sub>3</sub> )       | 371  | ppm                         | 6.68 | me/l      |
| Carbonate (CO <sub>3</sub> )          |      | ppm                         |      | me/l      |
| Iron (Fe)                             |      | ppm                         |      | me/l      |
| Fluoride (F)                          |      | ppm                         |      | me/l      |
| Hardness (EDTA as CaCO <sub>3</sub> ) |      | ppm                         |      | g.p.g.*** |
| Alkalinity (Methyl Orange)            | 304  | ppm (as CaCO <sub>3</sub> ) |      |           |
| Alkalinity (Phenolphthalein)          | 0    | ppm (as CaCO <sub>3</sub> ) |      |           |
| Electrical Conductivity               | 871  | micromhos per cm at 25° C.  |      |           |
| Sodium Adsorption Ratio               | 0.43 |                             |      |           |
| Sodium                                | 8.9% | % of cations                |      |           |
| Residual sodium carbonate             | 0.60 | me/l                        |      |           |
| pH                                    | 7.51 |                             |      |           |
| Others:                               |      |                             |      |           |

\* ppm = parts per million  
 \*\* me/l = milliequivalents per liter

\*\*\* g.p.g. = grains per gallon

COMMENTS: Total cations 10.17 me/l  
 Total anions 8.88 me/l

By: Shirley Kitten

| Service Performed   | Amount Due   |
|---------------------|--------------|
| Irrigation analysis | \$11.00 PAID |

Make checks payable to: Water Quality Laboratory

Cut along dotted line and return the lower portion with payment

Sample No. 77-168

Amount Enclo \$5

Signed \_\_\_\_\_



February 10, 1977

Mr. Wayne Mans  
Bruce, SD 57220

Dear Mr. Mans:

Your water sample (Lab. No. 77-163) has been analyzed and the results are reported on the accompanying sheet, which is your copy to keep.

I am also enclosing a copy of AES pamphlet #13 for your use. The quality of your water for irrigation use is plotted approximately by means of the red cross in the chart on the outside back cover.

Your water, as indicated by this analysis, is satisfactory for use on the soils you indicate will be irrigated. If a salt problem or a water table problem should develop, contact extension personnel for assistance.

The WI-1, soils information, and a copy of the water analysis are being forwarded to the State Conservation Commission for their action.

Sincerely yours,

*L. O. Fine*

L. O. Fine  
Water Quality Lab

LOF:ckb

Enclosures

cc: State Conservation Commission

P.S. The Atholwold silty clay loam across the northwest part of the land is remarkably slower draining than the other soils you have. I suggest you leave it out of the irrigated area or install a tile drain system.

Form 6 - Notice of Intent to Appropriate Water

No. \_\_\_\_\_

Publish first publication, on or before \_\_\_\_\_, 19\_\_

**NOTICE  
INTENT TO APPROPRIATE WATER**

Pierre, South Dakota 57501

\_\_\_\_\_, 19\_\_

Notice is hereby given that Wayne C. Mans

whose post office address is Bruce, South Dakota, has made an application in accordance with the provisions of the water laws of South Dakota for a permit to appropriate for beneficial use

2.0 cubic feet of water per second of time from the ground water through the Wayne C. Mans Irrig. Proj. # 1, the point of diversion of which is to be located in the \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

of Section 11, Twp. 110N, Range 51W. Said water to be used for the purpose of providing irrigation on the following described land:

NW 1/4, Section 11, T110N, R51W

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

This application No. 3610-1 will be considered by the Water Rights Commission at their office at Pierre upon the 23 day of March, 19\_\_ at 10:00 A.M. All interested persons may appear and be heard.

**WATER RIGHTS COMMISSION**

By:

**BURTON F. JONES  
Water Rights Specialist**

BFJ/bw

cc: Wayne C. Mans, R.R. # 2, Bruce, South Dakota 57220

Form 8 - Proof of Publication - Notice of  
Intent to Appropriate Water

No. \_\_\_\_\_

PROOF OF PUBLICATION

STATE OF SOUTH DAKOTA )  
County Brookings ) ss.

I, Thomas C. Reynolds hereby  
certify that the annexed printed copy of Notice of Intent to Appropriate  
Water was taken from the \_\_\_\_\_

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

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

March 10, 1977

March 17, 1977

Thomas C. Reynolds  
(Signature)

Publisher  
(Title)

March 17, 1977  
(Date Signed)

NOTICE OF INTENT  
TO APPROPRIATE WATER

Notice is hereby given that  
Wayne C. Mans, whose post  
office address is Bruce, South  
Dakota, has made an applica-  
tion in accordance with the  
provisions of the water laws of  
South Dakota for a permit to  
appropriate for beneficial use  
2.0 cubic feet of water per  
second of time from the  
ground water through the  
Wayne C. Mans Irrig. Proj.  
#1, the points of diversion of  
which are to be located in the  
SW $\frac{1}{4}$ NW $\frac{1}{4}$  of Section 11,  
Twp. 110N, Range 51W. Said  
water to be used for the  
purpose of providing irrigation  
on portions of the following  
described land: NW $\frac{1}{4}$ , Section  
11, T110N, R51W.

This application No. 3619-3  
will be considered by the  
Water Rights Commission at  
their office at Pierre upon the  
23rd day of March, 1977, at  
10:00 a.m. All interested  
persons may appear and be  
heard.

WATER RIGHTS COMM.  
-s-Burton F. Jones  
Water Rights Specialist



3, 4, 5

3-11-3 Wayne, Ill.

5-1-76 Will #1 all 400 ft deep - 20 ft 100 ft.

Will #3 140 ft 42 150 ft

#4 - 150 ft 41 100 ft

#5 100 ft

C.P. lot for 7229 ft

Submersible pump on #1 - 5 HP Motor

Booster pump at C.P.

Motor Toshiba Model 20604FF 343

60 H.P. 1750 RPM

Pump Motor Cosalt pump

Centrifugal

Other C.P. Model 103-P

#5 #11097

3" diameter 170 ft deep

(over)

Well #1 = 1550' E & 580' S

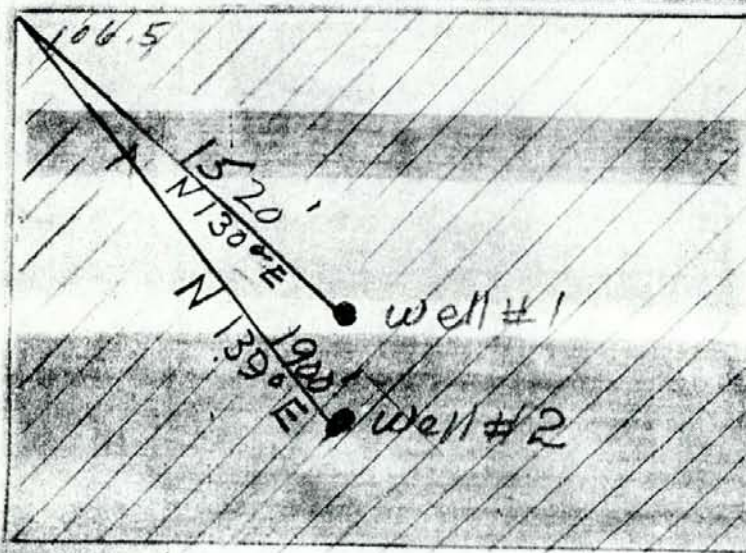
Well #2 = 1550' E & 900' S.

Well #3 = 1100' E & 1050' S

Well #4 = 1360' E & 1050' S

Well #5 = 1710' E & 1050' S.





WAYNE MANS

Irrigation project  
Bruce S.D.

Area Irrigated NW 1/4 sec 11

110-51

Acres Irrigated - 144

35' Water claim - 2000

2-1-77

Certified

John L. L...

Map 100-100-3 April 1936 19-3