

er Right Number 3076-3

1. Considered 2-23, 19 77
2. Name of Applicant GEORGE BROER
3. Post Office Address HURON
4. Amount of Water claimed 2.85
5. Source of Water supply 110' WELL
6. Water to be used for IRRIGATION
- Acres to be irrigated 200
7. Water to be diverted and used in BEADLE County
about 10 miles 5 of HURON
8. Proof of Publication Received 2-22-77
Not Received _____
9. Application Approved _____
Subject to _____
Not Approved _____
Action Deferred _____
10. Remarks:

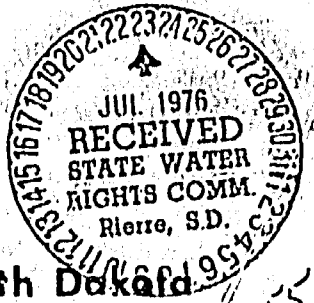
W. J. [illegible]
W. J. [illegible]
W. J. [illegible]
W. J. [illegible]

Map No. 12400-3 Water Division No. 3 JAMES RIVER District _____
 (Blanks to be filled by the Engineer for the W. R. C.)

APPLICATION FOR PERMIT

To Appropriative Water within the State of South Dakota

(NOTE--Draw a line through items not applicable)



8:55 am

1. Name of Applicant George G. Broer
 Postoffice address R.R. #4, Box 95, Huron, State South Dakota 57359
 If a corporation show date and place of incorporation _____
2. Method of accomplishing work (contract, employment of others, or by direct labor) Direct Labor
3. Name of diversion work George G. Broer, Unit #2
4. Amount of water claimed (cubic feet per second) 2.95
5. Source of water supply Ground Water
6. Location of point of diversion A POINT IN THE NE 1/4 NW 1/4, SECTION 36, T109N, R62W OR FROM EXISTING WELL IN THE SW 1/4 SW 1/4 SECTION 25, T109N, R62W County Beadle
7. Annual period or period during which water is to be used March - November
8. Use to be made of water, (irrigation, industrial, municipal, commercial, recreational, etc.) Irrigation
9. For irrigation use, _____ Total number of acres to be irrigated 200

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.
W. 1/2 of N.E. 36-109-62	80		
E. 1/2 of N.W. 36-109-62	80		
N.W. 40 of N.W. 36-109-62	40		

Attach sheet if more space is needed

10. Time required to complete construction of water supply system 5 years. Additional time required to complete application of water to the proposed beneficial use 2 yrs.
11. Choice of newspaper for Notice of Intent to Appropriative Water publication Wolsey News, Wolsey, South Dakota
12. Principal Features of the Proposed Water Supply System.

A. Works proposed to divert water from its natural source.

Pump Bowl

B. Works proposed to transport water to place of use.

Main Line

C. Works proposed to apply water to beneficial use.

Center Pivot

Estimated Total Cost \$ _____

Attachments: 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 Beadle) ss.

I, George G. Broer the applicant, certify that I have read the foregoing application and have examined the attached map and the matters therein stated are true and that I intend, and am able to complete the necessary construction.

Signed George G. BroerSubscribed and sworn to before me this 9 day of March 19 76

Notary Public (or other qualified officer)

11-6-76

WATER RIGHT APPLICATION APPROVAL

The Water Rights Commission hereby approves Water Right Application No. 3076-3
GEORGE G. BROER R.R#4, Box 95, HURON
 (Applicant) (Post Office Address)
SOUTH DAKOTA 57350 With the following modifications:
 (State)

The irrigation well 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.

This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

Date of first receipt of application JULY 23 1976
 Date of return to applicant for correction, amendments or changes required _____ 19____
 Date of receipt of corrected application NO AUGUST 6 1976
 Approved MAY 24 1979 Recorded in Book 21 Page 27

WATER RIGHT PERMIT NO. 3076-3

The Water Rights Commission hereby grants and issues this Water Right Permit No. 3076-3 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 JULY 23 1976
2. The equivalent of at least one-fifth of the work above specified is to be completed on or before NOVEMBER 24 1981
3. The whole of said work is to be completed on or before MAY 24 1984
4. The limit of time from proof of beneficial use of water appropriated in accordance herewith is MAY 24 1986
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 2.85 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 MAY 24 1986; said water to be used during the following described annual period: MARCH - NOVEMBER

Witness my hand this 13th day of JUNE 1979

WATER RIGHTS COMMISSION

By:

John H. Hild
 Chief Engineer, Executive Officer

Certificate of Construction Issued _____ 19____
 Water License Issued _____ 19____

HURON DRILLING INC. DRILLERS LOG

PAGE NO.

[illegible]

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

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

D. Well Information or Estimates

- (1) Drill Hole, Diameter _____, Depth _____
- (2) Casing, Type _____ Diameter _____ Thickness _____
(wood, concrete, steel, etc)
- (3) Perforated Screen.
Type _____, Diameter _____, Length _____
- (4) Gravel Pack, Thickness _____, Length of gravel pack _____

E. Dugout Information or Estimates.

- (1) Surface dimensions _____, Depth _____

F. Fill out for Either a Well or a Dugout. *Log will be furnished by driller

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

Character of Water bearing materials _____

Depth to top of water bearing material _____

Depth to bottom of water bearing material _____

Thickness of water bearing material _____

Depth to water (ground surface to water level) _____

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

On same owner's property 80 rds. On property owned by others 175 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.

George S. Beale
Signature of Applicant

July 19, 1976

Mr. George G. Broer
R.R. #4, Box 95
Huron, SD 57350

Dear Mr. Broer:

The analysis of the water sample submitted here on June 30 by the Huron Drilling Co. has now been completed. There was no possible way we could get it completed in time for the deadline date of July 2 in Pierre. Thus, this explains the question you had when I saw you Wednesday evening about what had happened to this particular application. The application materials, along with your check dated March 9, are now being sent to the State Conservation Commission for their action.

I am enclosing a copy of the publication on water and soil, and again, I have charted the quality of this water for irrigation purposes by means of the red cross in the outside back cover. As you see, it is in the high salt, low sodium category.

The soils which you propose to irrigate are satisfactory in general in that the west half of the NE quarter, and the east half of the NW quarter represent the best part of this half section of land. I feel that you should have no difficulty with the water as far as causing serious changes are concerned. However, you should observe the recommendation that is common for high salt water, that is, use the water as infrequently as possible during the warm part of the year and in large quantities. You should endeavor to completely refill the root zone every time you irrigate. This means that you will need to become acquainted with the water carrying characteristics of your soil and make application of the water so as to refill it to field capacity.

The Houdek-Prosper soils and some other soils have small pockets of depressions in them as you are aware. It would be a distinct advantage to you in getting uniform performance and preventing ponding of water if you could by some means drag enough soil into the depression so as to prevent long-time ponding of water after an irrigation.

You should be hearing from the Conservation Commission as to their decision very soon.

Sincerely yours,

L. O. Fine
L. O. Fine
Water Quality Lab
LOF:ckb

cc: State Conservation Commission, D. Pahl, Dick Fadgen, Houske, Huron Drilling
Encl.

CONSERVATION
COMMISSION
FORM WI #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 George G. Broer

ADDRESS RR #4, Box 95, Huron, South Dakota 57350

COUNTY Beadle

LEGAL DESCRIPTION

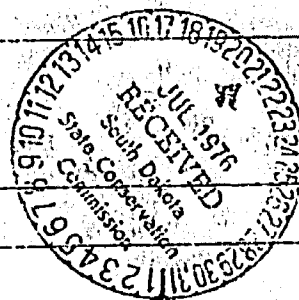
1. WELL LOCATION N.E. 1/4 of N.W. Quarter of 36-109-62
2. LOCATION OF AREA TO BE IRRIGATED W. 1/2 of N.E. Quarter, E 1/2 of N.W. Quarter, N.W. 40 of N.W. Quarter 36-109-62

TYPE OF IRRIGATION

3. GRAVITY _____ TOWLINE _____ CENTER PIVOT X GUN _____
4. CROPS TO BE IRRIGATED Corn, Alfalfa, Small Grain

WATER QUALITY

5. SAMPLE NUMBER 11-6-723
6. SALINITY (EC X 10⁶) 1481 (high)
7. SODIUM (SAR) 3.20 (low)
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 Beadle 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.

x George G. Broer
APPLICANT'S SIGNATURE

SUBSCRIBED AND SWORN BEFORE ME THIS
9 DAY OF March 1976.

James A. Elsborg
(TITLE OR SEAL)

(SOILS INFORMATION ON REVERSE SIDE)

102B Houdek-Prosper loams, 2 to 6 percent slopes

This unit consists of deep well and moderately well drained loamy soils with calcareous substrata. The subsoils contain 30 to 35% clay. Depth to the calcareous clay loam substratum ranges from 18 to 30 inches. Permeability is moderately slow. Included within these areas are small enclosed depressions and small areas of soil with claypan subsoils which contain salts. Drainage or fill of these included areas may become desirable to prevent ponding and excessive wetness.

103A Hand-Bonilla loams, 0 to 3 percent slopes

The Hand are deep, well drained fine loamy soils formed in loamy glacial drift. They have loam surface layers and loam to light clay loam subsoils which grade to calcareous loamy glacial drift at about 22 inch depths. Permeability is moderate in the solum and moderate to moderately slow in the substrata. The Bonilla are deep, dark colored, moderately well drained fine loamy soils. They have loam surface layers about 12 inches thick and moderately permeable light clay loam or loam subsoils underlain by calcareous loamy glacial drift at about 36 inches. Permeability in the subsoil is moderate to moderately slow.

103B Hand-Bonilla loams, 3 to 6 percent slopes

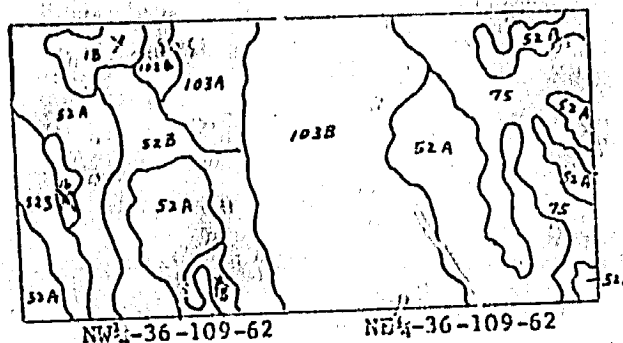
The Hand and Bonilla soils are described in the 103A mapping unit above. This unit differs primarily in the degree of slope.

George Broer unit

Soil Conservation Service
Peadle County//



SOILS MAP



SOILS LEGEND

- 16 Hoven silt loam
This unit consists of poorly drained soils in enclosed depressions. Permeability is very slow and surface drainage is lacking. Dense compact subsoils with a high level of salts and ponding generally limit these soils for irrigation.
- 18 Tetonka-Hoven silt loams
This unit consists of poorly drained soils in enclosed depressions. Permeability is very slow and surface drainage is lacking. Dense compact subsoils and ponding generally limit these soils for irrigation. Drainage of these soils is desirable under irrigation.
- 52A Carthage fine sandy loam, 0 to 3 percent slopes
This unit consists of moderately well drained soils on nearly level to gently undulating uplands. The soils have sandy loam surfaces and subsoils which grade to clay loam till at 20 to 40 inch depths. Permeability is moderately rapid in the sandy loam upper part and moderate in the underlying clay loam materials. Surface runoff is medium.
- 52B Carthage fine sandy loam, 3 to 6 percent slopes
This unit has soils as described above in the 52A mapping unit. It differs in the degree of slope.
- 75 Loup loamy fine sand, loamy substrata
This unit consists of somewhat poorly drained and poorly drained soils in swales and depressed areas. These soils have 20 to 40 inches of sandy materials overlying clay loam glacial till. Permeability is rapid in the sandy materials and moderate in the underlying clay loam materials. Surface runoff is slow to ponded.

George Broer unit



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

Submitted by: George G. Prober
 Address: Rt. 4, Box 95
Huron, SD 57350
 Co: Huron Drilling, Inc.
Huron, SD 57350

Date Rec'd: June 30, 1976
 Sample No. 76-723
 Identification 22 Well
NE 1/4 Sec. 36, T 109N. R 62W

WATER ANALYSIS

Calcium (Ca)	120	ppm*	6.00	me/l**
Magnesium (Mg)	42	ppm	3.44	me/l
Sodium (Na)	160	ppm	6.96	me/l
Potassium (K)	14	ppm	0.36	me/l
Sulfate (SO ₄)	405	ppm	8.42	me/l
Nitrate (as N)		ppm		me/l
Chloride (Cl)	9	ppm	0.25	me/l
Bicarbonate (HCO ₃)	478	ppm	7.84	me/l
Carbonate (CO ₃)		ppm		me/l
Iron (Fe)		ppm		me/l
Fluoride (F)		ppm		me/l
Hardness (EDTA as CaCO ₃)		ppm		g.p.g.***
Alkalinity (Methyl Orange)	392	ppm (as CaCO ₃)		
Alkalinity (Phenolphthalein)	0	ppm (as CaCO ₃)		
Electrical Conductivity	1481	microhmhos per cm at 25° C.		
Sodium Adsorption Ratio	3.20			
Sodium	41.50	% of cations		
Residual sodium carbonate	0.10	me/l		
pH	7.20			

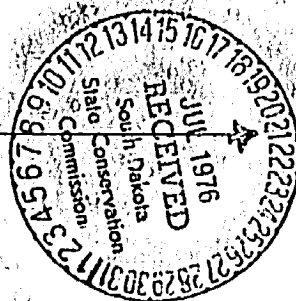
Others:

*ppm=parts per million

**me/l=millequivalents per liter

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

COMMENTS: Total cations 16.77 me/l
 Total anions 16.51 me/l



By: Shirley Kitten

Service Performed

Amount Due

Irrigation analysis

18.00 PAID

Make checks payable to: Water Quality Laboratory

Cut along dotted line and return the lower portion with payment

Sample No. 76-723

Amount Enclosed \$

Signed

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

No. 3076-3

PROOF OF PUBLICATION

STATE OF SOUTH DAKOTA)
) ss.
County _____)

I, Brenda Haukett hereby
certify that the annexed printed copy of Notice of Intent to Appropriate
Water was taken from the Huron Daily Plainsman

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 Huron of _____

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

2-14-77

2-21-77

Brenda Haukett
(Signature)

Bookkeeper

(Title)

2-21-77

(Date Signed)

F.P. 2-14-77, 2-21-77 L.P. 2-21-77
NOTICE INTENT TO
APPROPRIATE WATER
Pierre, South Dakota 57501
February 8, 1977
Notice is hereby given that
George Broer, whose post office
address is Huron, South Dakota,
has made an application in ac-
cordance with the provisions of the
water laws of South Dakota for a
permit to appropriate for
beneficial use 2.85 cubic feet of
water per second (or) time from
ground water through the Broer
No. 22, the point of diversion of
which is to be located in the NE 1/4
NW 1/4 Section 34, T6R, from an
existing well in the SW 1/4 of
Section 25, T6R, R6W, Range 62W.
Said water is to be used for the
purpose of providing irrigation on
portions of the following described
land: NW 1/4 NE 1/4 E 1/4 NW 1/4 NW 1/4
NW 1/4 Section 34, T6R, R6W, S63.
This application No. 3076-3 will
be considered by the Water Rights
Commission at their office at
Pierre, upon the 23rd day of
February, 1977, at 10:00 A.M. All
interested persons may appear
and be heard.
WATER RIGHTS COMMISSION
By: BURTON F. JONES
Water Rights Specialist
No. 119 (e.v.)



Form 6 - Notice of Intent to Appropriate Water

Publish first publication, on or before February 1, 1977

NOTICE
INTENT TO APPROPRIATE WATER

Pierre, South Dakota 57501

Notice is hereby given that George Broer
whose post office address is Broer # 2, 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

2.65 cubic feet of water per second of time from the Broer # 2 through the
Broer # 2, the point of diversion of which is to be located in the

NE 1/4 NW 1/4, Section 35, or from an existing well in the SW 1/4 SW 1/4

of Section 25, Twp. 20N, Range 30E. Said water to be used for the purpose
of providing irrigation on the following described land:

W 1/2 NE 1/4, E 1/2 NE 1/4, NW 1/4 NE 1/4, Section 35, T20N, R30E

This application No. 2076-2 will be considered by the Water Rights Commission at their office at
Pierre upon the 22nd day of February, 19 77, 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: George Broer, P.O. # 2, Broer, SD 57500

3076-3

June 6, 1977

George G. Broer
R.R. 4, Box 95
Huron, S.D. 57350

Dear Mr. Broer:

The Water Rights Commission, February 23, 1977, authorized irrigation of land in the W $\frac{1}{2}$ NE $\frac{1}{4}$, E $\frac{1}{2}$ NW $\frac{1}{4}$, NW $\frac{1}{4}$ NW $\frac{1}{4}$, Section 36, T109N, R62W requested by Application No. 3076-3 from existing irrigation wells, but deferred one 110 foot deep well requested until more information on water availability is known.

As such time that the well is approved, the permit will be issued. Until such time, you may use this letter as your authorization to irrigate the land described above.

Very truly yours,

JOHN HATCH, Chief Engineer
Water Rights Commission

JH/bw



Department of Natural Resource Development

WATER RIGHTS COMMISSION
Joe Foss Building, Pierre, South Dakota 57501
Phone 605/773-3151

May 9, 1979

TO: Persons Concerned with Deferred Applications in Beadle County

FROM: John Hatch, Chief Engineer, Water Rights Commission

SUBJECT: Reconsideration of Deferred Applications

The Water Rights Commission will reconsider deferred water right applications in Beadle County at 1:30 p.m., May 24, 1979 at the Lincoln Room, Howard Johnson Motel, 2211 Lacrosse, Rapid City SD.

This reconsideration hearing will be conducted in accordance with the provisions of SDCL 46-1-1 thru 46-1-9; 46-1-14; 46-2-9 thru 46-2-11; 46-2-13; 46-5-1 thru 46-5-8; 46-5-10 thru 46-5-22; 46-5-41; 46-6-3; 46-6-5; 46-6-6.1; 46-6-10; 46-6-3.1; 46-6-14 and Commission Rules ARSD 52:01:01:01 thru 52:01:01:13.

These applications were previously deferred by the Water Rights Commission, pending staff investigation.

After reconsideration of the deferred applications the Commission can approve, conditionally approve, defer, or deny all or part of the Application.

This hearing is an adversary proceeding. Any person has the right to be present or to be represented by a lawyer. These and other due process rights will be forfeited if they are not exercised at the hearing. Decisions of the Commission may be appealed to the Courts as provided by law.

Very truly yours,

A handwritten signature in cursive script, appearing to read "John Hatch".

JOHN HATCH, Chief Engineer
Water Rights Commission

JH:kjw

No. 4348-3

**South Dakota Department of
Water & Natural Resources**

Joe Foss Building
523 East Capitol
Pierre, South Dakota 57501

WATER RIGHTS DIVISION
Phone (605) 773-3352

NOV 2 1987

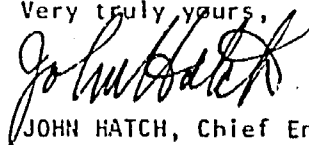
George Broer
RR 4, Box 95
Huron, South Dakota 57350

Dear Mr. Broer:

Enclosed herewith is, Water License No. 4348-3. 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, the State Water Laws provide that you have a continuing right to use the water.

Very truly yours,



JOHN HATCH, Chief Engineer
Water Rights Division

JH:ms

Enclosures

The applicable portions of Water Permit Nos. 2501-3 and (3076-3) have been incorporated into this Water License No. 4348-3.

WNR-817 3/83

Transmittal of Water License