

1. Considered 7-21, 1976 2803-3

2. Name of Applicant CARL P. FLOEKE

3. Post Office Address CLEAR LAKE

4. Amount of water claimed 4.4

5. Source of water supply 2- 72' DEEP WELLS

6. Water to be used for IRRIGATION

Acres to be irrigated 312

7. Water to be diverted and used in DEUEL county
about 1S, 4E miles of CLEAR LAKE

8. Proof of Publication Received 7-19-76

Not Received (P)

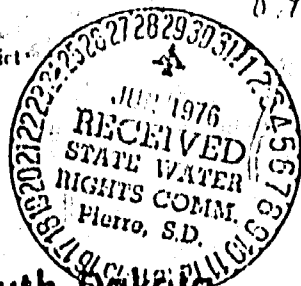
9. Application Approved

Subject to

Not Approved

Action deferred

10. Remarks:

No. 2805-3Map No. 2154-3 Water Division No. 3 WHETSTONE CREEK District
(Blanks 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 Carl P. Boeke
Postoffice address Cleav Lake, State South Dakota
If a corporation show date and place of incorporation _____
2. Method of accomplishing work (contract, employment of others, or by direct labor) Contract & Direct Labor
3. Name of diversion work Carl P. Boeke Irrigation Project #1
4. Amount of water claimed (cubic feet per second) 4.4
5. Source of water supply 2 wells
6. Location of point of diversion Well #1 - 3400' N 58° W; Well #2 - 3235' N 60° W
of SE corner section 20 - 115 - 48
County Deuel
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 312

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 of SW ¹ Sec. 20 - 115 - 48	39	NW ¹ of SE ¹ Sec. 20 - 115 - 48	40
NE ¹ " " " "	40	NE ¹ " " " "	39
SW ¹ " " " "	38	SW ¹ " " " "	39
SE ¹ " " " "	39	SE ¹ " " " "	38

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 thre years. Brookings Register
11. Choice of newspaper for Notice of Intent to Appropriate Water publication Cleav Lake
12. Principal Features of the Proposed Water Supply System.

A. Works proposed to divert water from its natural source. 2 wells with dug well turbinesB. Works proposed to transport water to place of use. closed conduitC. Works proposed to apply water to beneficial use. corner center pivot irrigation machineEstimated Total Cost \$ 60 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 BrookingsI, Carl P. Boeke, 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 construction.Signed Carl P. BoekeSubscribed and sworn to before me this 4 day of June, 1976John Salasman
Notary Public (or other qualified officer)
P.E.H. 1976

WATER RIGHT APPLICATION APPROVAL

The Water Rights Commission hereby approves Water Right Application No. 2803-3

CARL P. BOEKE
(Applicant)

CLEAR LAKE
(Post Office Address)

SOUTH DAKOTA 57226 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 existing domestic wells or in irrigation wells having prior water rights.

Date of first receipt of application JUNE 29, 1976
Date of return to applicant for correction, amendments or changes required , 19
Date of receipt of corrected application JUNE 30, 1976
Approved JULY 22, 1976, Recorded in Book 15, Page 268

WATER RIGHT PERMIT NO. 2803-3

The Water Rights Commission hereby grants and issues this Water Right Permit No. 2803-3 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 JUNE 29, 1976
2. The equivalent of at least one-fifth of the work above specified is to be completed on or before JANUARY 22, 1979
3. The whole of said work is to be completed on or before JULY 22, 1981
4. The limit of time from proof of beneficial use of water appropriated in accordance herewith is JULY 22, 1984
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 4.4 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 JULY 22, 1984; said water to be used during the following described annual period: APRIL THRU OCTOBER

Witness my hand this 2ND day of August, 19 76

WATER RIGHTS COMMISSION

By:

John Hatch
Chief Engineer, Executive Officer

Certificate of Construction Issued , 19

Water License Issued , 19

two identical wells

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

D. Well Information or Estimates

- (1) Drill Hole, Diameter 28", Depth 72'
- (2) Casing, Type Steel (wood, concrete, steel, etc), Diameter 16", Thickness 3/16"
- (3) Perforated Screen.
Type Continuous slot, Diameter 16", Length 20'
- (4) Gravel Pack, Thickness 6", Length of gravel pack 30'

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 12' Sandy clay;
12' to 72' mixed sand and gravel

Depth to top of water bearing material 12'

Depth to bottom of water bearing material 72'

Thickness of water bearing material 60'

Depth to water (ground surface to water level) 14'

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

On same owner's property 50 rds. On property owned by others 280 rds.

G. Water Storage Dams.

If the proposed water supply 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.

Carl D. Becker
Signature of Applicant

2803-3

June 22, 1976

Mr. Carl Boeke
Clear Lake, SD 57226

Dear Mr. Boeke:

We have completed the analysis of your water sample (#76-619) and the original copy of the report of analysis is enclosed herewith for your keeping. I am also enclosing a copy of AES publication #13 with the quality of this water designated approximately by means of the red cross on the outside back cover. You will see that it is in the medium salinity, low sodium category.

Accordingly, this water has no particular hazard for use on any normal soil. If the drainage is as good as indicated by the designation of Fordville as the soil series which you have, there should be no difficulty arising from the use of this water. However, any low spots may have a water table problem which you will encounter after irrigating for a time. These will have to be drained or avoided in your irrigation.

A copy of this letter is accompanying your WI-1 form and a copy of the water analysis to the State Conservation Commission for their action.

Sincerely yours,

L. O. Fine

L. O. Fine
Water Quality Lab

LOP:ckb

Enclosures

cc: State Conservation Commission

D. Fahl

Dale Wistala, County Extension Agent



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 Well Irrigation Only)

FOR COMMISSION USE ONLY

Irrigation System: _____

Water Quality: _____

Soils Capability: _____

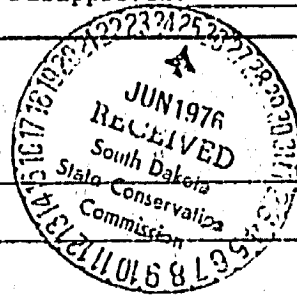
Approved: *[Signature]*

Disapproved: _____

NAME: Carl Boeke

ADDRESS: Clear Lake, South Dakota

COUNTY: Deuel



LEGAL DESCRIPTION

1. WELL LOCATION: NE^{1/4} of SE^{1/4} of Sec 20 - 115 - 18
2. AREA TO BE IRRIGATED: S² of Sec 20 - 115 - 18

TYPE OF IRRIGATION

3. GRAVITY SPRINKLER (Indicate Type): Cent. Pivot
4. CROPS TO BE IRRIGATED: Corn & alfalfa

LAND CAPABILITY FOR IRRIGATION

5. PERCENTAGE OF SLOPE: Slightly Rolling to Flat (level)
6. PHYSICAL SOILS CLASSIFICATION FOR IRRIGATION: Fertile

WATER QUALITY (TO BE COMPLETED BY COMMISSION)

7. SAMPLE NO.: 76-619
8. SALINITY: 622 μ mhos/cm (medium)
9. SODIUM: SAR = 0.25 (low)

I do hereby certify that a chemical analysis of the ground water to be
acquired for irrigation from South Dakota State University and:
the land capability for irrigation information has been acquired from

_____.

and:

that the legal description for the location of the well and land to be
irrigated is true and correct.

Carl D. Boeke ✓

Subscribed and sworn before me this

11 day of June 1976.

John E. Anderson

P. E. H. 1916

(Title)

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

Submitted by: Carl Roake
 Address: Olean Lake, SD 57226

Date Rec'd June 11, 1976
 Sample No. 76-619
 Identification Well 72
SE1, Sec. 20, T 115N, R 48W

WATER ANALYSIS

Calcium (Ca)	110	ppm*	5.50	me/l**
Magnesium (Mg)	29	ppm	2.38	me/l
Sodium (Na)	11	ppm	0.50	me/l
Potassium (K)	4	ppm	0.10	me/l
Sulfate (SO ₄)	70	ppm	1.46	me/l
Nitrate (as N)		ppm		me/l
Chloride (Cl)	9	ppm	0.26	me/l
Bicarbonate (HCO ₃)	312	ppm	5.12	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)	256	ppm (as CaCO ₃)		
Alkalinity (Phenolphthalein)	0	ppm (as CaCO ₃)		
Electrical Conductivity	622	micromhos per cm at 25° C.		
Sodium Adsorption Ratio	0.25			
Sodium	5.89	% of cations		
Residual sodium carbonate	0.00	me/l		
pH	7.70			

*ppm=parts per million

**me/l=millequivalents per liter

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

COMMENTS: Total cations 8.48 me/l
 Total anions 6.84 me/l



By: Shirley Witten

Service Performed	Amount Due
Irrigation analysis	\$8.00 PAID

Make checks payable to: Water Quality Laboratory

Cut along dotted line and return the lower portion with payment

Sample No. 76-619

Amount Enclosed \$

Signed

No. 2803-3

Publish first publication, on or before
July 8, 1976

NOTICE OF INTENT TO APPROPRIATE WATER

Pierre, South Dakota 57501

July 1, 1976

Notice is hereby given that Carl P. Boeke

whose post office address is Clear Lake, 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 4.4 cubic feet of water per

second of time from ~~the~~ ground water through the

Boeke Project #1, the point of diversion of which ~~is~~ ^{are}

be located in the _____

NE 1/4 SW 1/4

of Section 20, Twp. 115N, Range 48W. Said water to be used for the purpose of providing irrigation on ~~the following~~ ^{portions of} described land:

S 1/2, Section 20, T115N, R48W

This application No. 2803-3 will be considered by the Water Rights Commission at the Court House at Winner, S.D.

upon the 21st day of July - 1976 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:

Carl P. Boeke, Clear Lake, S.D. 57226

PROOF OF PUBLICATION

STATE OF SOUTH DAKOTA)
County Brookings) ss.

I, James M. McLehlan Jr. hereby
certify that the annexed printed copy of Notice of Intent to Appropriate
Water was taken from the Brookings Daily Register

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 Brookings

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

July 8, 1976

July 15, 1976

James M. McLehlan Jr.
(Signature)

Editor-General Manager
(Title)

7-15-76

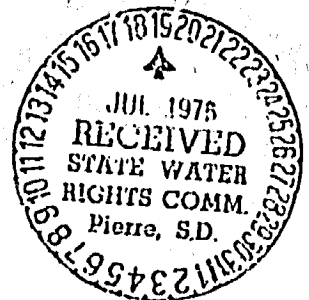
(Date Signed)

Legal No. 433 - July 8 & 15, 1976
NOTICE OF INTENT TO
APPROPRIATE WATER

Notice is hereby given that Carl P. Boeke whose post office address is Clear Lake, 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 4.1 cubic feet of water per second of time from ground water through the Boeke Project No. 1, the points of diversion of which are to be located in the NE 1/4 of Section 20, Twp. 116N, Range 48W. Said water to be used for the purpose of providing irrigation on the following described land: SW 1/4 Section 20, T116N, R48W.

This application No. 2803-3 will be considered by the Water Rights Commission at the Court House at Winner, S.D. upon the 21st day of July, 1976, at 10:00 A.M. All interested persons may appear and be heard.

By:
WATER RIGHTS COMMISSION
BURTON F. JONES
Water Rights Specialist



Form 10.

No. 2803-3



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

Post Office Clear Lake S.Dak

Date March 7th

TO: Water Rights Commission
Joe Foss Building
Pierre, South Dakota 57501

Dear Sirs:

This is to inform you that I have completed the construction of the water diversion system and/or that I have put the water to beneficial use to the maximum extent it is going to be used, not exceeding the amounts as specified in Water Right Permit No. 2803-3.

Water Right Permit No. 2803-3 states that the diversion system is to be constructed by June, 1979 and that the water is to be put to beneficial use by June, 1979.

The diversion system was completed on Aug 14, 1976.
Applying the water to beneficial use was completed on Aug 14, 1976.

You may schedule an inspection so that the Certificate of Construction and/or the Water License may be issued, thus completing my acquisition of a water right.

Carl D. Bender
(Signature)

South Dakota

GREAT FACES. GREAT PLACES.

2803-3

DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3181

NOV 23 1992

5460-3

Carl P. Boeke
RR 1, Box 171
Clear Lake, SD 57226

Dear Mr. Boeke:

Enclosed is Water License No. 5460-3. This is the final water right document completing your process of obtaining a Water Right. Enclosed is Receipt No. 413268 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. 5460-3, constructs a replacement well and does not plan to use the old well, the old well is considered abandoned and must be plugged. Also, any well that is being used or is not considered abandoned must be valved and controlled, if flowing, or sealed and capped so that no leaking occurs either underground or at the surface.

As long as you use the water beneficially, as stated in the Water License, the State Water Laws provide that you have a continuing right to use the water. If you have any questions, please contact our office.

Very truly yours,

John Hatch

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

enclosures

NOTE: The applicable portions of Water Permit Nos. (2803-3) and 4504-3 are incorporated into this Water License No. 5460-3.

Acres Irrigated - 312
water claimed - 4.4 cfs

CARL P. BOEKE

Irrigation Project # 1

Clear Lake

Deuel

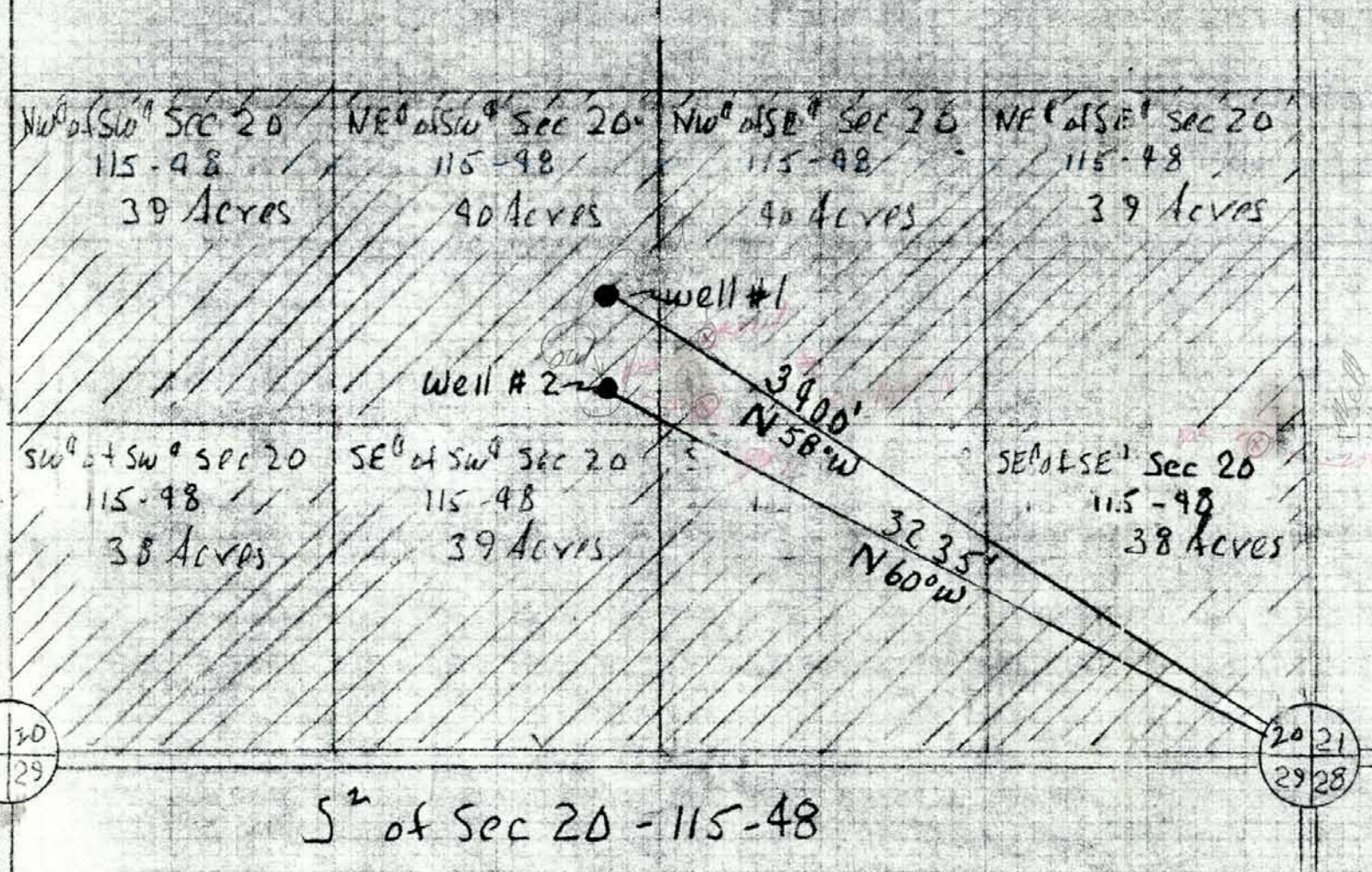
County

Points of Diversion

well # 1 - 3400' N 58° W

well # 2 - 3235' N 60° W

of SE corner sec 20 - 115-48



Surveyor's Certificate

I, John L. Wiersma, do hereby certify that
this map identifies a reasonably accurate
record of the land of.

Carl P. Boeke

Clear Lake

Deuel County, S.D.

South Dakota

6-4-76

P.E. # 1916

13 rockings

S.D.

John L. Wiersma

Scale - 1" = 660'

MAP # 21573 APR 02 2803-3