

2728-3

1. Considered MAY 27, 1976
2. Name of Applicant RALPH SCHWARTZ
3. Post Office Address BRUCE
4. Amount of water claimed 4.8
5. Source of water supply 2-68' WELLS
6. Water to be used for IRRIGATION
Acres to be irrigated 340
7. Water to be diverted and used in HAMLIN county
about 8N, 3W miles of BRUCE
8. Proof of Publication
Received 5-19-76
Not Received _____
9. Application
Approved _____
Subject to _____
Not Approved _____
Action deferred _____
10. Remarks:

No. 2728-3Map No. 2087-3 Water Division No. 3 Big Sioux River 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 Ralph Schwartz
Postoffice address Brook 57220 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 Ralph Schwartz Irrigation Project #1
4. Amount of water claimed (cubic feet per second) 4.8
5. Source of water supply 2 wells
6. Location of point of diversion Well #1 - 1860' N 95° 10' at SE corner Sec 33 - 113° 5'
Well #2 - 1470' N 26° E at SW corner Sec 34 - 113° 5'
- County Hamlin
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 340

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.

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 Estelline Journal
12. Principal Features of the Proposed Water Supply System.
- A. Works proposed to divert water from its natural source. 2 wells with electrically driven deep well turbines.
- B. Works proposed to transport water to place of use. closed conduit
- C. Works proposed to apply water to beneficial use. center pivot irrigation machines

Estimated Total Cost \$ 26,000Attachments: 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, Ralph Schwartz, 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

Ralph Schwartz

Subscribed and sworn to before me this

23

day of

April1976

Notary Public (or other qualified officer)

P. E. H. 1916

WATER RIGHT APPLICATION APPROVAL

The Water Rights Commission hereby approves Water Right Application No. 2728-3

RALPH SCHWARTZ
(Applicant)

BRUCE
(Post Office Address)

SOUTH DAKOTA 57220
(State)

With the following modifications:

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 APRIL 30, 1976

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

Date of receipt of corrected application —, 19—

Approved MAY 20, 1976 Recorded in Book 15 Page ~~1258~~ 169

WATER RIGHT PERMIT NO. 2728-3

The Water Rights Commission hereby grants and issues this Water Right Permit No. 2728-3 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 APRIL 30, 1976
2. The equivalent of at least one-fifth of the work above specified is to be completed on or before NOVEMBER 20, 1976
3. The whole of said work is to be completed on or before MAY 20, 1981
4. The limit of time from proof of beneficial use of water appropriated in accordance herewith is MAY 20, 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 4.8 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 20, 1984; said water to be used during the following described annual period: APRIL THRU OCTOBER

Witness my hand this 9TH day of JUNE, 1976

WATER RIGHTS COMMISSION

By:

John Hatch
Chief Engineer, Executive Officer

Certificate of Construction Issued —, 19—

Water License Issued —, 19—

Area to be Irrigated	
Land Description	No Acres Irrigated
NW ¹ of SE ¹ sec 33-113-51	40
NE ¹ " " " " "	41
SW ¹ " " " " "	39
SE ¹ " " " " "	38
NW ¹ of SW ¹ sec 34-113-51	40
NE ¹ " " " " "	40
SW ¹ " " " " "	42
SE ¹ " " " " "	39
NW ¹ of SE ¹ sec 34-113-51	40
SW ¹ of SE ¹ sec 34-113-51	39
Total	340

2 nearby identical wells

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 30", Depth 68'
(2) Casing Type Steel Diameter 14" Thickness 3/16"
(wood, concrete, steel, etc.)
(3) Perforated Screen
Type Cent. Slot Diameter 14" Length 15'
(4) Gravel Pack Thickness 7" Length of gravel pack 20'

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 2' top soil, 2' to 5' silt & clay,
8' to 29' sand, 29' to 40' clay, 40' to 68' gravel
over 68' is clay

Depth to top of water bearing material 8'

Depth to bottom of water bearing material 68'

Thickness of water bearing material 49'

Depth to water (ground surface to water level) 8'

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

* On same owner's property _____ rds. On property owned by others _____ 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.

	owner's property	other's property
* Well # 1	80 rds	90 rds
Well # 2	60 rds	160 rds

Ralph Schuartz
Signature of Applicant

2728-3

April 29, 1976

Mr. Ralph Schwartz
R.R. #2, Box 57
Bruce, SD 57220

Dear Mr. Schwartz:

I am enclosing herewith the original copy of the report of analysis of water sample #76-410 submitted by you about a week ago. Also enclosed is a copy of AES publication #13 with the quality of this water for irrigation purposes plotted approximately by means of the red cross in the chart on the outside back cover. As you note, it is in the medium salinity, low sodium category.

Consequently, this water has practically no hazard for chemical changes or salt build-up in soils on which it is used, and there should be no difficulty in irrigating any normally well-drained soil with it.

I am sending a copy of this letter, and of the water analysis, plus the WI-1 form 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

D. Pahl

Harold Campbell, County Extension Agent



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 Ralph Schwartz
ADDRESS Bruce South Dakota RR 2 Box 57220
COUNTY Hamlin

LEGAL DESCRIPTION

1. WELL LOCATION 1/2 center of SE 1/4 of 33 and 1/2 NW 1/4 of SW 1/4 of 34
2. LOCATION OF AREA TO BE IRRIGATED Parts of SE 1/4 of 33 - NW 1/4 of SW 1/4 of 34
part of the NW 1/4 of the SE 1/4 of 34

TYPE OF IRRIGATION

3. GRAVITY _____ TOWLINE _____ CENTER PIVOT ☒ GUN _____
4. CROPS TO BE IRRIGATED Corn and alfalfa

WATER QUALITY

5. SAMPLE NUMBER 76-410
6. SALINITY (EC X 10⁶) 579 (medium)
7. SODIUM (SAR) 0.16 (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 Hamlin 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.

Ralph Schwartz
APPLICANT'S SIGNATURE

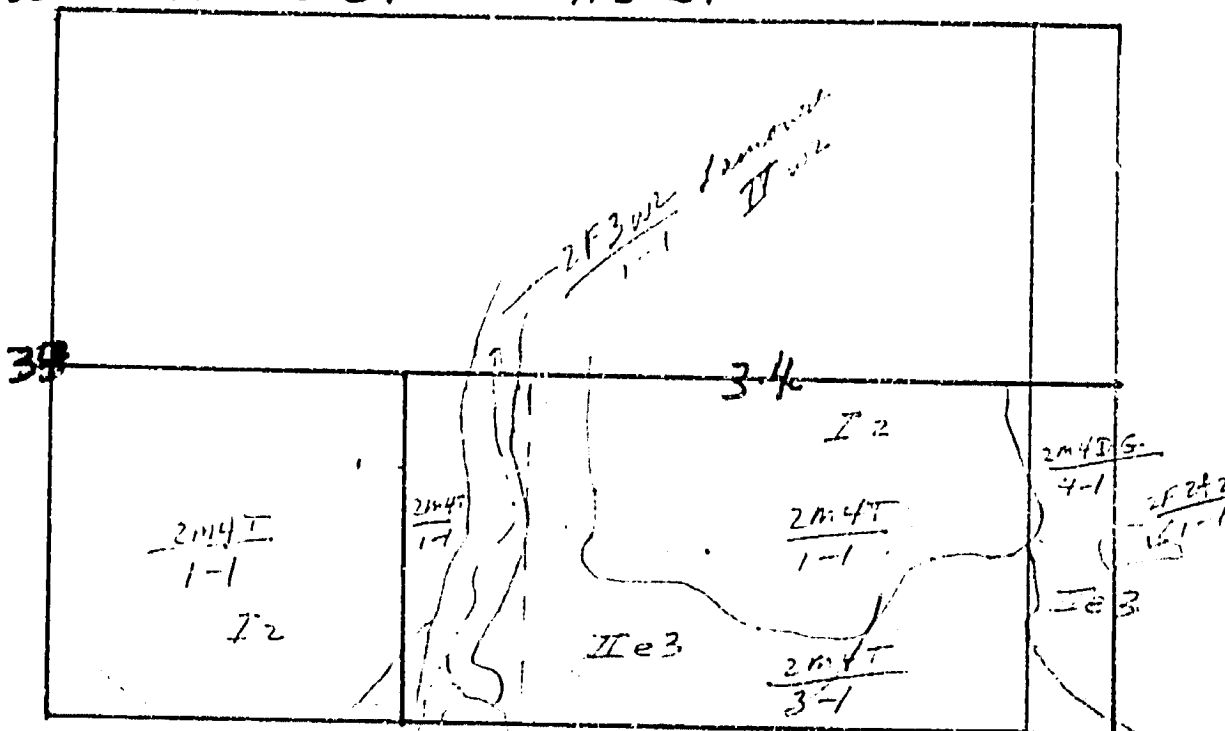
SUBSCRIBED AND SWORN BEFORE ME THIS
23 DAY OF April 1976.

Rose Bludorn
(TITLE OR SEAL)

Hamlin Co. REGISTER OF DEEDS
So. Dak.

Alfred J. Haffelt
APPROVED/

(SOILS INFORMATION ON REVERSE SIDE)

SE⁴ SEC. 33 & 34 -MAP 113-51¹

TAKEN FROM
A CONSERVATION
SOIL SURVEY

2M4T
3-1

NARRATIVE

4 INCHES/MILE

<u>2M4T</u> 1-1	I-2	Deep, loamy, well drained soils on nearly level uplands. They are fertile with few or no limitations in use. Poinsett Sil	0.5" per hr. Intake Rate
<u>2M4T</u> 3-1	IIe3	Deep, loamy, well drained soils on gently undulating and sloping (2 to 6 percent) glacial uplands. The high percentage of silt and very fine sand in the soil make them moderately susceptible to both wind and water erosion. Poinsett Sil	0.5" per hr. Intake Rate
<u>2M4DG</u> 4-1	IIe3	(Same description as immediately above) Kransburg Loam	0.3" per hr. Intake Rate
<u>2F3w2</u> 1-1	IVw2	Deep, loamy to clayey, poorly drained soils in depressions and on bottom lands. An intermittent water table, occasional flooding, and salinity cause low crop yields and limited choice of crops. Tillage operations are often delayed and shorten growing season. Drainage, crop selection, and improvement of fertility is necessary. Lamoure	

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

Submitted by: Ralph Bohmert
 Address: Platte, SD 57220

Date Rec'd: April 20, 1976
 Sample No.: 76-410
 Identification: 012

WATER ANALYSIS

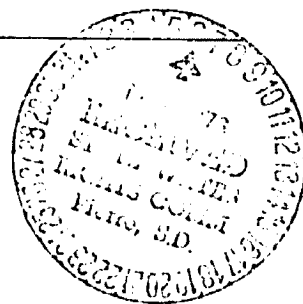
Calcium (Ca)	75	ppm*	3.25	me/l**
Magnesium (Mg)	32	ppm	2.60	me/l
Sodium (Na)	7	ppm	0.29	me/l
Potassium (K)	3	ppm	0.03	me/l
Sulfate (SO ₄)	63	ppm	1.42	me/l
Nitrate (as N)		ppm		me/l
Chloride (Cl)	4	ppm	0.09	me/l
Bicarbonate (HCO ₃)	293	ppm	4.88	me/l
Carbonate (CO ₃)		ppm		me/l
Iron (Fe)		ppm		me/l
Fluoride (F)		ppm		me/l
Hardness (EDTA as CaCO ₃)		ppm		g.p.g.***
Alkalinity (Methyl Orange)	244	ppm (as CaCO ₃)		
Alkalinity (Phenolphthalein)	0	ppm (as CaCO ₃)		
Electrical Conductivity	579	micromhos per cm at 25° C.		
Sodium Adsorption Ratio	0.16			
Sodium	4.30	% of cations		
Residual sodium carbonate	0.00	me/l		
pH	7.34			
Others:				

*ppm=parts per million

**me/l=millequivalents per liter

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

COMMENTS: Total cations 6.74 me/l
 Total anions 6.38 me/l



By: Shirley Kilton

Service Performed	Amount Due
Irrigation analysis	\$2.00 PAID

Make checks payable to: Water Quality Laboratory

Cut along dotted line and return the lower portion with payment

Sample No. 76-410

Amount Enclosed \$

Signed

No. 2723-3

Publish first publication, on or before May 10, 1976

**NOTICE
INTENT TO APPROPRIATE WATER**

Pierre, South Dakota 57501

May 3, 1976

Notice is hereby given that Ralph Schwartz
whose post office address is Pierre, 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
4.3 cubic feet of water per second of time from the ground water through the
Schwartz Project #1, the point of diversion of which is to be located in the

Center of the SE $\frac{1}{4}$, Section 33 and in the NW $\frac{1}{4}$ SW $\frac{1}{4}$

of Section 34, Twp. 113N, Range 51W. Said water to be used for the purpose
of providing irrigation on ^{portions of} the following described land:

SE $\frac{1}{4}$, Section 33; SW $\frac{1}{4}$, W $\frac{1}{2}$ SE $\frac{1}{4}$, Section 34, T113N, R51W

This application No. 2723-3 will be considered by the Water Rights Commission at their office at
Pierre upon the 20th day of May, 1976, at 1:00 P. M. All interested
persons may appear and be heard.

WATER RIGHTS COMMISSION

By:

BURTON F. JONES
Water Rights Specialist

BFJ/bw
cc:

Ralph Schwartz, Pierre, S.D. 57120

No. 2728-3

PROOF OF PUBLICATION

STATE OF SOUTH DAKOTA)
County Brookings) ss.

I, Dennis D. Koenders hereby
certify that the annexed printed copy of Notice of Intent to Appropriate
Water was taken from the Brookings Daily Register

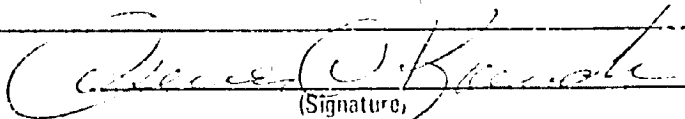
A newspaper which during the whole time of publication of said notice
herein after stated, has been and is printed and published in the _____

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:

May 10, 1976

May 17, 1976


(Signature)

Advertising Manager
(Title)

5-17-76

(Date Signed)

Legal No. 235 -- May 10 & 17
NOTICE
INTENT TO APPROPRIATE WATER
Pierre, South Dakota 57501
May 3, 1976
Notice is hereby given that Ralph
Schwartz 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 4.8 cubic feet of water per
second of time from ground water
through the Schwartz Project No. 1, the
points of diversion of which are to be
located in the Center of the SE $\frac{1}{4}$, Section
33 and in the NW $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 34,
TWP, 112N, Range 51W. Said water to be
used for the purpose of providing
irrigation on portions of the following
described land: SE $\frac{1}{4}$, Section 33; SW $\frac{1}{4}$,
W $\frac{1}{2}$ SE $\frac{1}{4}$, Section 34, T112N, R51W
This application No. 2728-3 will be
considered by the Water Rights
Commission at their office at Pierre
upon the 20th day of May, 1976, at 1:00
P.M. All interested persons may appear
and be heard.
WATER RIGHTS COMMISSION
By: BURTON F. JONES
Water Rights Specialist



273-2415

Water Rights Commission

November 8, 1978

Dear Sirs;

In regard to my water permit no. 2723-3. I have recently completed one of the wells on the S.W. 1/4 of Sec. 33 Twp. 113 range 51.

The well was dug and developed by Grimshaw Drilling Co. of Sioux Falls.

I have also purchased a center pivot system.

My concern is if this percentage of completion is sufficient to keep my permit valid until I dig the other well on the S.E. 1/4 of Sec. 33 Twp. 113 range 51.

If so would you please advise me.

Sincerely,

Ralph Schwartz

Called 9-17-78

THIS IS SUFFICIENT
WORK TO KEEP
PERMIT ACTIVE



April 1, 1987

Ralph Schwartz
Bruce S.D. 57220

Re: Permit No. 2728-3

Dear Mr. Schwartz:

On August 27, 1986, Water Permit No. 2728-3 was inspected to license the permit. In this inspection it was found that the location of the proposed irrigation well in Section 34, T113N-R51W was changed.

Pursuant to SDCL 46-5-31, enclosed you will find the application forms to apply for the change of the diversion point. Please read the applications carefully, sign and notarize them and return them to this office. The application fee is \$50.

If you have any questions, please contact this office.

Sincerely,

RA

Rasool Ahadi
Natural Resources Engineer
(605) 773-3352

enclosure

NOT TO SCALE

3568-3 NW

2728-3 5/2

113-51

40.0
40.0

19.0 88.1
19.0 88.1

32.2
32.2

479-210-L

95.9
95.9

34

265.8
265.8

38.5

19.6

NRAd
Nak. Res. Eng.

6/17/87

2230

6.8

38

1320

20.0

130

113-51

Appl. No. 2728A-3

NOT TO SCALE

2728-3
2594-3 -sw
4511-3

143.2

2.1

3.2

133.8

479-211-L

1.2

10.9

33

98.3

48.8

147.6

113-51