

1. Considered May 22 19 80
2. Name of Applicant Roger Saathoff
3. Post Office Address Bruce, SD.
4. Amount of Water Claimed 5.0
5. Source of Water Supply 80' well
6. Water to be used for IRR.
7. Acres to be irrigated 458 maximum acre feet
8. Water to be diverted and used in Brookings County about 5 N, 6 miles West of Bruce
9. PROOF OF PUBLICATION Received 5-4-77

Not Received _____

APPLICATION

Approved 5-22-80 - first well approved 77
deferred well approved 80
 Subject to WT & I.R.

Not Approved _____

Action deferred /

Priority

Date

Received July 21, 1976 Application Complete (yes) no FEE 8.00

Remarks first well app. in 77 other deferred for Forest
was app. in May/80.

Date information and/or

fee or corrected Application received _____

Period of Annual use April thru OctoberWATER
QUALITYReceived (yes) July 29, 1976 (APPROVED/CONDITIONAL) (Circle one)WI-1 Description same as application (yes) (no) Remarks _____

Slight difference S.C.E. knows the Chgo. ~~at that time~~
Disapproved

Returned _____

Diversion Point _____

7					
	x				

quarters of NW⁴ & SE⁴
18-112-51

Lands to be irrigated _____

W 1/2 & SE⁴ 18-112-51

WELL
LOG

Remarks _____

Driller Form 2A - Driller Unknown licensed yes noDepth 80'

MAP Map No. 2178-3 Map located in Water Right X Map file _____

Type of Map Drawn Prepared by John W. Keenan

+++++

REVIEWED This Application was reviewed within 30 days of date received, accepted as complete, Number assigned and written up for advertisement before the Board on May 26, 1977.
J. W. Keenan
(Signed)

+++++

PROTESTS Letters/Petitions in File - yes _____ no _____ Remarks _____

REMARKS Date
F.F. & C Final Decision, including F.F. & C of Law were adopted _____
OF LAW, Date
FINAL Final Decision mailed to parties and/or parties notified that Final Decision
DECISIONS was adopted _____
ETC. _____
Remarks _____

Map No. 3178-3 Water Division No. 3 Big Sioux River District 1
(Blank's to be Filled by the Engineer for the W. R. C.)



APPLICATION FOR PERMIT

To Appropriate Water within the State of South Dakota 9:26am

(NOTE - Draw a line through items not applicable)

- Name of Applicant Reggie Sauthoff
Postoffice address Beaure, State South Dakota
If a corporation show date and place of incorporation _____
- Method of accomplishing work (contract, employment of others, or by direct labor) Contract & Direct Labor
- Name of diversion work Reggie Sauthoff Irrigation Project #1
- Amount of water claimed (cubic feet per second) 5.0'
- Source of water supply Two Wells
- Location of point of diversion Point #1 - 1860' N 135° E of NW corner Sec 18 - 112 - 51
Point #2 - 1860' N 45° W of SE corner Sec 18 - 112 - 51
County Brookings
- Annual period or periods during which water is to be used April through October
- Use to be made of water, (irrigation, industrial, municipal, commercial, recreation, etc.) Irrigation
- For irrigation use, Total number of acres to be irrigated 458

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 18 - 112 - 51	38	SE 1/4 SW 1/4 Sec 18 - 112 - 51	36
SW 1/4 " " " " " "	39	NW 1/4 SE 1/4 Sec 18 - 112 - 51	40
SE 1/4 " " " " " "	40	NE 1/4 " " " " " "	39
NW 1/4 SW 1/4 Sec 18 - 112 - 51	39	SW 1/4 " " " " " "	38
NE 1/4 " " " " " "	38	Attach if more space needed	
SW 1/4 " " " " " "	38		

- 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.
- Choice of newspaper for Notice of Intent to Appropriate Water publication Volga Tribune
- Principal Features of the Proposed Water Supply System.

- Works proposed to divert water from its natural source. 2 wells with electrically driven deep well turbines.
- Works proposed to transport water to place of use. closed conduit.
- Works proposed to apply water to beneficial use. center pivot irrigation machines

Estimated Total Cost \$ 90,000

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 Brookings

I, Reggie Sauthoff, the applicant, verify 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 Reggie Sauthoff

Subscribed and sworn to before me this 14 day of July, 1976

John S. Loomis
Notary Public (or other qualified officer)
P.E. 13 1976

WATER RIGHT APPLICATION APPROVAL

The Water Rights Commission hereby approves Water Right Application No. 2842-3

ROGER SAATHOFF
(Applicant)

BRUCE
(Post Office Address)

SOUTH DAKOTA 57020 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 domestic wells or in irrigation wells having prior water rights.

APPROVAL OF THIS PERMIT
WITH A DIVERSION RATE
THE REMAINDER
OF THE
EFFECTS

SUPERSEDED BY PERMIT ISSUED MAY 22, 1980
- GFS. THE SECOND WELL AND
WATER REQUESTED IS DEFERRED UNTIL
IT CAN BE MONITORED.

CONSTRUCTION OF ONE WELL
- GFS. THE SECOND WELL AND
WATER REQUESTED IS DEFERRED UNTIL
IT CAN BE MONITORED.

Date of first receipt of application JULY 21, 19 76

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

Date of receipt of corrected application AUGUST 5, 19 76

Approved MAY 26, 19 77, Recorded in Book 18 Page 107

WATER RIGHT PERMIT NO. 2842-3

The Water Rights Commission hereby grants and issues this Water Right Permit No. 2842-3 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 21, 19 76
2. The equivalent of at least one-fifth of the work above specified is to be completed on or before NOVEMBER 26, 19 79
3. The whole of said work is to be completed on or before MAY 26, 19 82
4. The limit of time from proof of beneficial use of water appropriated in accordance herewith is MAY 26, 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 2.23 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 26, 19 85; said water to be used during the following described annual period: APRIL THRU OCTOBER

Witness my hand this 8TH day of JUNE, 19 77

WATER RIGHTS COMMISSION

By:

John Hatch
Chief Engineer, Executive Officer

Certificate of Construction Issued _____, 19 _____

Water License Issued _____, 19 _____

WATER RIGHT APPLICATION APPROVAL

The Board of Water Management hereby approves Water Right Application No. 2842-3

ROGER SAATHOFF BRUCE
(Applicant) (Post Office Address)
SOUTH DAKOTA 57820 With the following qualifications.
(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.

This Permit is issued and supersedes the Permit issued under the date of JUNE 8, 1977.

Date of first receipt of application JULY 21, 19 76
Date of return to applicant for correction, amendments or changes required _____, 19 ____
Date of receipt of corrected application AUGUST 5, 19 76
Approved MAY 22, 19 80, Recorded in Book 18 Page 167A

WATER RIGHT PERMIT NO. 2842-3

The Board of Water Management hereby grants and issues this Water Right Permit No. 2842-3 authorizing the construction of the water use system and the putting of water to beneficial use as stated in the Application and as qualified 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 21, 19 76.
2. The equivalent of at least one-fifth of the work above specified is to be completed on or before NOVEMBER 22, 19 82.
3. The whole of said work is to be completed on or before MAY 22, 19 85.
4. The limit of time from proof of beneficial use of water appropriated in accordance herewith is MAY 22, 19 88.
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 5.0 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 irrigation purposes said appropriation must be limited to not more than 2 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 22, 19 88; said water to be used during the following described annual period: APRIL THRU OCTOBER

Witness my hand this 28th day of MAY, 19 80

THE BOARD OF WATER MANAGEMENT

By: John H. H. H.
Chief Engineer, Water Rights

Certificate of Construction Issued _____, 19 ____

Water License Issued _____, 19 ____

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

D. Well Information or Estimate

(1) Drill Hole Diameter 5 1/2" Depth 86'
 (2) Casing Type Steel Diameter 4 1/2" Thickness 7/16"
 (3) Perforated Screen
 Type Open End Diameter 5 1/2" Length 20'
 (4) Gravel Pack Thickness 6' Length of gravel pack 30'

E. Dugout Information or Estimate

(1) Surface and Bottom Depth

F. Fill out for Surface Well or Dugout

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

Character of Water bearing materials: 1' to 3' clay sand, 3' to 5' clay
clay, 5' to 8' sand, 1' to 2' gravel, 1' to 2' sand
clay

Depth to top of water bearing material 57'
 Depth to bottom of water bearing material 86'
 Thickness of water bearing material 28'
 Depth to water (ground surface to water level) 50'

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

On same owner's property 27 - 200 ft. On property owned by others 200 ft

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.

Gene Smith
 Signature of Applicant

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

D. Well Information or Estimates

(1) Drill Hole, Diameter 30", Depth 80'
 (2) Casing, Type Steel Diameter 14" Thickness 3/16"
 (wood, concrete, steel, etc.)
 (3) Perforated Screen
 Type Concentric Slot Diameter 14" 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 52' yellow
clay, 52' to 80' sand + gravel, over 80' is
clay.

Depth to top of water bearing material 52'

Depth to bottom of water bearing material 80'

Thickness of water bearing material 28'

Depth to water (ground surface to water level) 50'

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

On same owner's property #1 - 240 rds. On property owned by others over 300 rds. from any well

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.

Roger Statkeff
 Signature of Applicant

July 28, 1976

Mr. Roger Saathoff
Bruce, SD 57020

Dear Mr. Saathoff:

We have completed the analysis of your water sample (76-803) submitted here July 14. The original copy of the report is enclosed for your keeping. I am also enclosing a copy of AES publication #13. On the outside back cover of this you will find that I have plotted the approximate quality of your water for irrigation uses by means of the red cross in the diagram. It is in the high salinity, low sodium category. Accordingly, this water is fairly well suited to irrigation use. Although it carries about .8 of a ton of salt per acre foot, this should work satisfactorily in this climatic zone.

The complicating factor of this project is that many of the soils are very poorly suited for irrigation. The Waubay soils have an intermittent high water table in the spring of most years and this water table comes up to about 3 feet from the surface. The Oldham silty clay loam soil has very slow drainage and also has occasional water table problems. The marshland in the SW corner, of course, is unsuited for irrigation as well as other areas of low wet spots in the northwest quarter. There are at least 6 of these marked in the soil survey map in the NW quarter. These, as you know, would not perform satisfactorily under irrigation.

Accordingly, I recommend strongly that you consider some other method of application of water besides the center pivot because you cannot avoid these small wet spots with a center pivot system. There will be miring problems, water table rise problems, ponding of water and generally very unsatisfactory performance of crops. I think you will be quite disappointed if you choose this method of application.

I am sending a copy of this letter, along with your application materials, 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

LOF:ckb

Enclosures

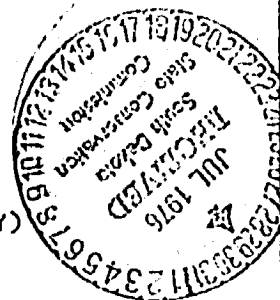
cc: State Conservation Commission

D. Paal

Don Boone, County Extension Agent



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 Roger Saathoff
ADDRESS Brace
COUNTY Brookings

LEGAL DESCRIPTION

1. WELL LOCATION Center of NW⁴ & Center of SE⁴ of Sec 18 - 112 - 51
2. LOCATION OF AREA TO BE IRRIGATED S² & W² of NW⁴ or SE⁴ of NW⁴ of
Sec 18 - 112 - 51

TYPE OF IRRIGATION

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

WATER QUALITY

5. SAMPLE NUMBER 76-803
6. SALINITY (EC X 10⁶) 937 (moderately high)
7. SODIUM (SAR) 0.17 (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 _____ 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.

Roger Saathoff
APPLICANT'S SIGNATURE

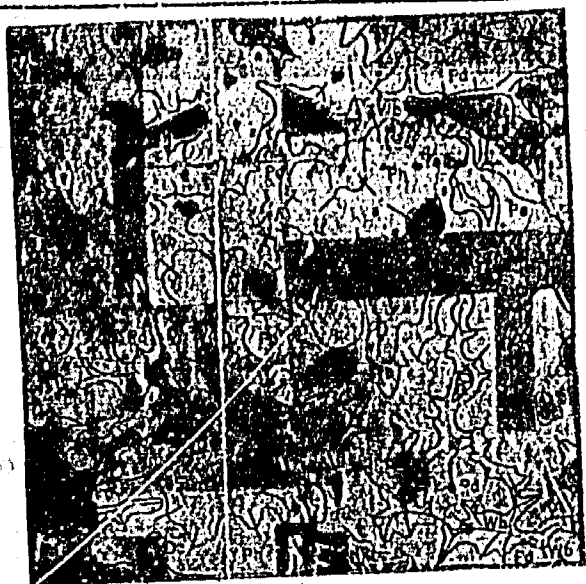
SUBSCRIBED AND SWORN BEFORE ME THIS
11 DAY OF July 19 76.

John S. Williams
(TITLE OR SEAL)

Albert J. J. J. J.
APPROVED/DISAPPROVED

(SOILS INFORMATION ON REVERSE SIDE)

MAP



scale 1:20000

NARRATIVE

P_n - Poinsett silt loam - nearly level

O_c - Oldham silty clay loam

W_b - Waubesa silty clay loam

P_e - Poinsett silt loam - undulating

P_d - Poinsett silt loam - slightly undulating

M_c - Marsh

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

Submitted by: Roger Baathoff
 Address: Princeton, SD 57220

Date Rec'd: July 14, 1976
 Sample No.: 76-303
 Identification: Well-301
Site, Sec. 19, T. 112, R. 51E

WATER ANALYSIS

Calcium (Ca)	156	ppm*	7.30	me/l**
Magnesium (Mg)	41	ppm	2.36	me/l
Sodium (Na)	9	ppm	0.39	me/l
Potassium (K)	3	ppm	0.08	me/l
Sulfate (SO ₄)	174	ppm	3.62	me/l
Nitrate (as N)		ppm		me/l
Chloride (Cl)	4	ppm	0.11	me/l
Bicarbonate (HCO ₃)	420	ppm	6.83	me/l
Carbonate (CO ₃)		ppm		me/l
Iron (Fe)		ppm		me/l
Fluoride (F)		ppm		g.p.g.***
Hardness (EDTA as CaCO ₃)		ppm		
Alkalinity (Methyl Orange)	344	ppm (as CaCO ₃)		
Alkalinity (Phenolphthalein)	0	ppm (as CaCO ₃)		
Electrical Conductivity	937	micromhos per cm at 25° C.		
Sodium Adsorption Ratio	0.17			
Sodium	3.35	% of cations		
Residual sodium carbonate	0.00	me/l		
pH	7.16			
Others:				

*ppm=parts per million
 **me/l=millequivalents per liter
 ***g.p.g.=grains per gallon



COMMENTS: Total cations 11.63 me/l
 Total anions 10.61 me/l

By: Shirley Hittan

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. 76-803

Amount Enclosed \$

Signed

Form 6 - Notice of Intent to Appropriate Water

No. 2842-3

Publish first publication, on or before May 12, 1977

**NOTICE
INTENT TO APPROPRIATE WATER**

Pierre, South Dakota 57501

March 28, 1977

Notice is hereby given that Roger Saathoff

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

5.0 cubic feet of water per second of time from the ground water through the

Roger Saathoff Irr. Project # 1, the point of diversion of which is to be located in the

centers of the NW $\frac{1}{4}$ and SE $\frac{1}{4}$

of Section 18, Twp. 112N, Range 51W. Said water to be used for the purpose of providing irrigation on the following described land:

W $\frac{1}{4}$, SE $\frac{1}{4}$, Section 18, T112N, R51W

This application No. 2842-3 will be considered by the Water Rights Commission at their office at Pierre upon the 26th day of May, 1977, at 11:00 A.M. All interested persons may appear and be heard.

WATER RIGHTS COMMISSION

By:

JAMES WINTERTON
Water Rights Specialist

BFJ/bw

cc: Roger Saathoff, Bruce, SD 57020

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

No. 2842-3

PROOF OF PUBLICATION

STATE OF SOUTH DAKOTA)
County Brookings) ss.

I, Thomas G. Reynolds hereby
certify that the annexed printed copy of Notice of Intent to Appropriate
Water was taken from the Volcan Tribune

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 Volcan

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

April 7, 1977

April 14, 1977

Thomas G. Reynolds
(Signature)

Publisher

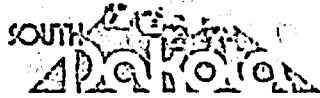
(Title)

April 14, 1977

(Date Signed)

NOTICE OF
INTENT TO APPROPRIATE
WATER
Notice is hereby given that
Roger Saathoff 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
5.0 cubic feet of water per
second of time from ground
water through the Roger
Saathoff Irr. Project #1, the
point of diversion of which is to
be located in the centers of the
NW 1/4 and SE 1/4 of Section 18,
Twp. 112N, Range 51W. Said
water to be used for the purpose
of providing irrigation on
portions of the following
described land: W 1/2, SE 1/4,
Section 18, T112N, R51W.
This application No. 2842-3
will be considered by the Water
Rights Commission at their
office at Pierre upon the 26th
day of May, 1977, at 11:00 a.m.
All interested persons may
appear and be heard.
WATER RIGHTS COMM.
-s-James Winteron
Water Rights Specialist





Department of Natural Resource Development

WATER RIGHTS COMMISSION

Joe Foss Building, . Pierre, South Dakota 57501

Phone 605/224-3151

August 12, 1976

Roger Saathoff
Bruce
South Dakota 57020

Dear Mr. Saathoff:

This will acknowledge receipt of your application to irrigate 458 acres from a 80 foot deep well.

The Commission is not acting on applications from the Sioux River area and areas of concentrated irrigation in Brookings and Hamlin Counties at the present time until effects of existing irrigation development can be monitored.

The application will be placed in a deferred status, retaining the priority, until the Commission starts considering applications in this area. You will be notified of further developments.

Sincerely,

BURTON F. JONES
Water Rights Specialist

BFJ/bw

cc and Receipt to John L. Wiersma, R.R. #2, Brookings, SD 57006

July 5, 1978

Roger Saathoff
Bruce,
SD 57020

Dear Mr. Saathoff:

On June 14, 1978, Mr. LeRoy Harnaugh contacted you regarding your Water Right No. 2842-3.

This is to inform you that, at the May 25-26, 1977 Commission meeting, your Permit was approved for only one well and only one quarter of land. The remaining acreage is deferred until effects of the pumping can be monitored.

If you have any further questions please feel free to contact this office.

Sincerely,

Deety Westlund
Water Rights Specialist I

EW:plh

2842-3

August 29, 1979

Mr. Roger Saathoff
Bruce, SD 57020

Dear Mr. Saathoff:

Enclosed are application forms and instructions for you to apply for the additional diversion on the well in the SW $\frac{1}{4}$ SE $\frac{1}{4}$ Section 18-T112N-R51W, which is not covered under your permit no. 2842-3. It will not be necessary to send another map; the one we have will be sufficient. It will be necessary to submit another water sample; see No.5 on enclosed instruction Sheet.

Regarding the well in the NW $\frac{1}{4}$ Section 19, which was deferred; the effects of the pumping of this irrigation season and the completion of the computer model study will determine when it will be brought up again before the Board of Water Management. When the studies have been completed you will be notified.

If you have any questions, feel free to contact this office.

Sincerely,

BETTY WESTLUND
Water Rights Specialist I

BW/bt

cc: Dave Ihnen
Box 29
Brookings, SD 57006



Department of Water & Natural Resources

Joe Foss Building
Pierre, South Dakota 57501

Water Rights, Water Management Division
(605) 773-3352

May 8, 1980

TO: Persons Interested in Deferred Applications in Brookings County

FROM: John Hatch, Chief Engineer, Water Rights

SUBJECT: Deferred Water Right Applications

The Water Management Board will reconsider deferred water right applications No. 2812-3 & 4467-3 Roger Saathoff, 2843-3 William Moe, 3203-3 Rita Ann Lamoureux, 3506-3 Cecil Hall, 3762-3 Steven D. Goodfellow, 3338-3 Gary D. Hanson, and 4403-3 Stots, Inc. in Brookings County at 3:00 pm, May 22, 1980, Civil Defense Meeting Room, State Capitol Building, Pierre 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 Board Rules ARSE 52:01:01:01 thru 52:01:01:13.

These applications were previously deferred by the Water Rights Commission, (Water Management Board) pending staff investigation.

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

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 Board may be appealed to the Courts as provided by law.

Any handicapped person wishing to attend this hearing can contact the Water Rights Division, DWRN, Joe Foss Building, Pierre SD, prior to the hearing date for assistance to assure access to the hearing.

Very truly yours,

A handwritten signature in black ink that reads "John Hatch". The signature is written in a cursive, flowing style.

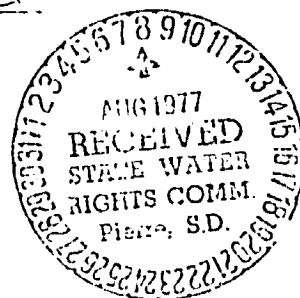
JOHN HATCH, Chief Engineer
Water Rights, WMD

JH:kw

Equal Opportunity Employer

Form 10.

No. 2842-3



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

Post Office Brice SD
Date Aug 4 - 1977

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. 2842-3

Water Right Permit No. 2842-3 states that the diversion system is to be constructed by May 26, 1982 and that the water is to be put to beneficial use by May 26, 1985.

The diversion system was completed on July 27, 1977.
Applying the water to beneficial use was completed on July 28, 1977.

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.

D. J. S. S. S. S. S.
(Signature)

NORTHERN BROOKINGS COUNTY
Applications No. 2842-3, 2843-3, 3203-3, 3506-3, 3762-3 & 4467-3
April 28, 1980

The Water Management Board (formerly the Water Rights Commission) deferred action on all or parts of six applications in Hamlin and Brookings Counties.

The applications are located (see map) in an area of artesian head pressure and where a number of water permit applications have been approved. The Commission deferred action on the applications to obtain further information about the aquifer.

AQUIFER INFORMATION

The deferred applications are in an area of the Big Sioux Aquifer which changes from a water table to an artesian head pressure system. The aquifer material consists of sand and gravel and varies in saturated thickness from less than ten feet to sixty feet. The hydraulic gradient (direction of water movement) is from the northwest to the southeast into the Big Sioux River (see cross-section).

The Office of Water Rights presently has 12 observation wells (see map) located throughout the area. Hydrographs for six of the wells are attached (only the wells with the longest period of record were plotted). Short term records are the same as the other wells. The hydrographs show an upward trend in the water levels reflecting the relatively wet years of 1977 and 1978 occurring after the drought of 1975-76, which created historically low water levels. The hydrographs also show the effects of pumping on the artesian head. As the irrigation wells are pumped the water level will decline to the top of the aquifer and then recover when pumping ceases. This is a typical and predictable phenomenon.

The area covered by this report has a surface area of 44 square miles (see map page 5). Using an average saturated thickness of 40 feet (based on test drilling information) and a storage coefficient of 0.1 (from Report 102, Assad Barari, "Hydrology of Lake Poinsett") the estimated storage would be:

$$\begin{aligned}\text{storage} &= (44\text{mi}^2) (5280 \text{ ft/mile})^2 (40 \text{ ft}) (0.1) / 43560 \frac{\text{ft}^3}{\text{ac.ft.}} \\ &= 112,640 \text{ ac.ft. (conservative)}\end{aligned}$$

The present approved applications pumping continuously for 90 days at approved diversion rate would need the following:

$$\begin{aligned}\text{Volume (ac.ft.)} &= \frac{(60.36 \text{ cfs}) (60 \text{ sec/min}) (60 \text{ min/hr}) (24 \text{ hr/day}) (90 \text{ days})}{43560 \text{ ft}^3/\text{ac.ft.}} \\ &= 10,775 \text{ ac.ft.}\end{aligned}$$

$$\% \text{ of storage appropriated: } 10,775/112,640 = 10\%$$

The above storage values and percent appropriated show that water is available for appropriation.

DEFERRED APPLICATIONS

	<u>Priority Date</u>	<u>Legal Description</u>
2842-3 Roger Saathoff	July 21, 1976	NW $\frac{1}{4}$ & SE $\frac{1}{4}$ & NE $\frac{1}{4}$ Sec 18, T112N, R51W 1 well and 2.82 cfs deferred
2843-3 William L. Moe	June 21, 1976	NW $\frac{1}{4}$ & SW $\frac{1}{4}$ Sec 19, T112N, R51W 1 well and 2.0 cfs deferred
3203-3 Rita Ann Lamoreaux	Aug 26, 1976	NE $\frac{1}{4}$ & SW $\frac{1}{4}$ & SE $\frac{1}{4}$ of SE $\frac{1}{4}$ Sec. 2, T112N, R51W 1.7 cfs, 1 well, and acreage deferred
3506-3 Cecil Hall	Dec 28, 1976	NW $\frac{1}{4}$ Sec 8, T112N, R51W 2.2 cfs, 1 well, and acreage deferred
3762-3 Steven D. Goodfellow	Feb 22, 1976	S $\frac{1}{2}$, NW $\frac{1}{4}$, NE $\frac{1}{4}$, SW $\frac{1}{4}$ Sec 30, T112N, R51W 1 well deferred
4467-3 Roger Saathoff	Dec 31, 1979	NE $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 18, T112N, R51W adds acreage and 2 wells to 2842-3

CONCLUSIONS

Considering the amount of water in storage, observation well hydrographs and amount of water appropriated; unappropriated water is available.

RECOMMENDATIONS

1. The Staff recommends approval of the deferred portion of Permit No. 2842-3 for Roger Saathoff with the following qualifications:

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.

2. The Staff recommends approval of the deferred portion of Permit No. 2843-3 for William L. Moe with the well interference qualification and the submittal of the irrigation questionnaire.
3. The Staff recommends approval of Application No. 3203-3 for Rita Ann Lamoreaux for 1.7 cfs, 1 well and 120 acres, with the well interference qualification and the submittal of the irrigation questionnaire.
4. The Staff recommends approval of Application No. 3506-3 for Cecil Hall for the NW $\frac{1}{4}$, Sec. 8, T112N, R51W for one point of diversion with withdrawal rate of 1.7 cfs of water with the well interference qualification and the submittal of the irrigation questionnaire.

5. The Staff recommends approval of the deferred portion of Permit No. 3762-3, Steven D. Goodfellow with the well interference qualification and the submittal of the irrigation questionnaire.
6. The Staff recommends approval of Application No. 4467-3, Roger Saathoff, for lands described as the NE $\frac{1}{4}$ of NW $\frac{1}{4}$ of Sec. 18, T112N, R51W. The Staff also recommends approval for two points of diversion with the well interference clause, which will have the priority date assigned to Permit No. 2842-3 as prescribed by the multiple well policy adopted by the Water Rights Commission.

Gale N. Selken
GALE N. SELKEN
Hydrologist III

STATE OF SOUTH DAKOTA)
COUNTY OF HUGHES) SS

Swore to, before me, this 21st day of May, 1980

Lois L. Ries
Notary Public

LOIS L. RIES, Notary Public
My Commission Expires
February 3, 1983



Department of Water & Natural Resources

Joe Foss Building
523 East Capitol
Pierre, South Dakota 57501-3161

March 23, 1987

ROGER SAATHOFF
RR #1 BOX 21
BRUCE, SD 57220

NOTICE

Re: Violation of Water Permit(s). 4467-3 and 1986 Irrigation
Questionnaire Requirements.

Our records indicate that the 1986 Irrigation Questionnaire has not been submitted for Permit No(s). 4467-3. The request for the questionnaire was dated November 3, 1986. The Water Management Board has directed that owners of water permits who have not submitted 1986 Irrigation Questionnaires be given notice of permit violation and of hearing(s) before the Board. The hearing(s) will be held to determine action to be taken by the Board for violation of Water Permit No(s). 4467-3 qualification:

"This permit is approved subject to the Irrigation Water Use Questionnaire being submitted each year."

The hearing will also be to determine if Permit No(s). 2842-3 and 2496-3 should be amended with the qualification to require the Questionnaire to be submitted each year.

The hearing(s) will be at 2:00 pm, May 6, 1987, in Room 216, Joe Foss Building, 523 E Capitol, Pierre SD.

The hearing(s) will be conducted pursuant to the provisions of SDCL 46-1-12, 46-1-14, 46-2-9, 46-2-11, and 46-2-17. These are contested case hearings pursuant to procedures contained in SDCL 1-26.

Following the hearings(s), the Water Management Board can:

1. Suspend Permit No(s). 4467-3 until either the 1986 Questionnaire is submitted or for the period of up to one year;
2. Amend Permit No(s). 2842-3 and 2496-3 to require the Irrigation Water Use Questionnaire to be submitted each year;
3. Postpone any action;
4. Take no action.

The hearing(s) is an adversary proceeding. The permit owner 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. Decisions of the Board may be appealed to the Circuit Court and the State Supreme Court as provided by law.



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

NOTE: If the questionnaire(s) are received in this office before the hearing date, you will no longer be in violation of your permit(s) and your name will be deleted from the agenda pertaining to these hearings.

South Dakota
Department of
Water & Natural Resources

Joe Foss Building
523 East Capitol
Pierre, South Dakota 57501-3101

April 15, 1987

2496-3
2842-3
4467-3

Roger Saathoff
RR #1 Box 21
Bruce, SD 57220

Dear Mr. Saathoff:

This will acknowledge receipt of and thank you for the return of your 1986 Irrigation Questionnaires. A notice was sent to you March 23, 1987 regarding the Irrigation Questionnaire submittal violation of Water Permit Nos. 2496-3, 2842-3 and 4467-3 and the date hearings were to be held before the Water Management Board to determine any action to be taken concerning the violation.

Please disregard the notice sent to you dated March 23, 1987. Your name has been deleted from the agenda pertaining to these hearings.

If you have any questions, please contact us.

Very truly yours,



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



Department of Water & Natural Resources

Joe Foss Building
523 East Capitol
Pierre, South Dakota 57501-3181

4467-3

FEB 14 1989

Roger Saathoff
RR 2, Box 59
Bruce, South Dakota 57220

Dear Mr. Saathoff:

Enclosed is Water License No. 4467-3. This is the final water right document completing your process of obtaining a Water Right.

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. 4467-3, 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, Chief Engineer
Water Rights Division
605 773-3352

enclosures

NOTE: Applicable portions of Water Permit No. 2842-3 have been incorporated into this Water License No. 4467-3



ROGER SAATHOFF

Irrigation Project #1
Bruce S. Dakota

Acres Irrigated - 458

Water Claimed - 5.0 cfs

Points of Diversion:

Point #1 - 1860' N 135° E of NW corner

Point #2 - 1860' N 45° W of SE corner
of Section 18-112-51

Surveyor's Certificate

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

Roger Saathoff

Bruce

South Dakota

Brookings County

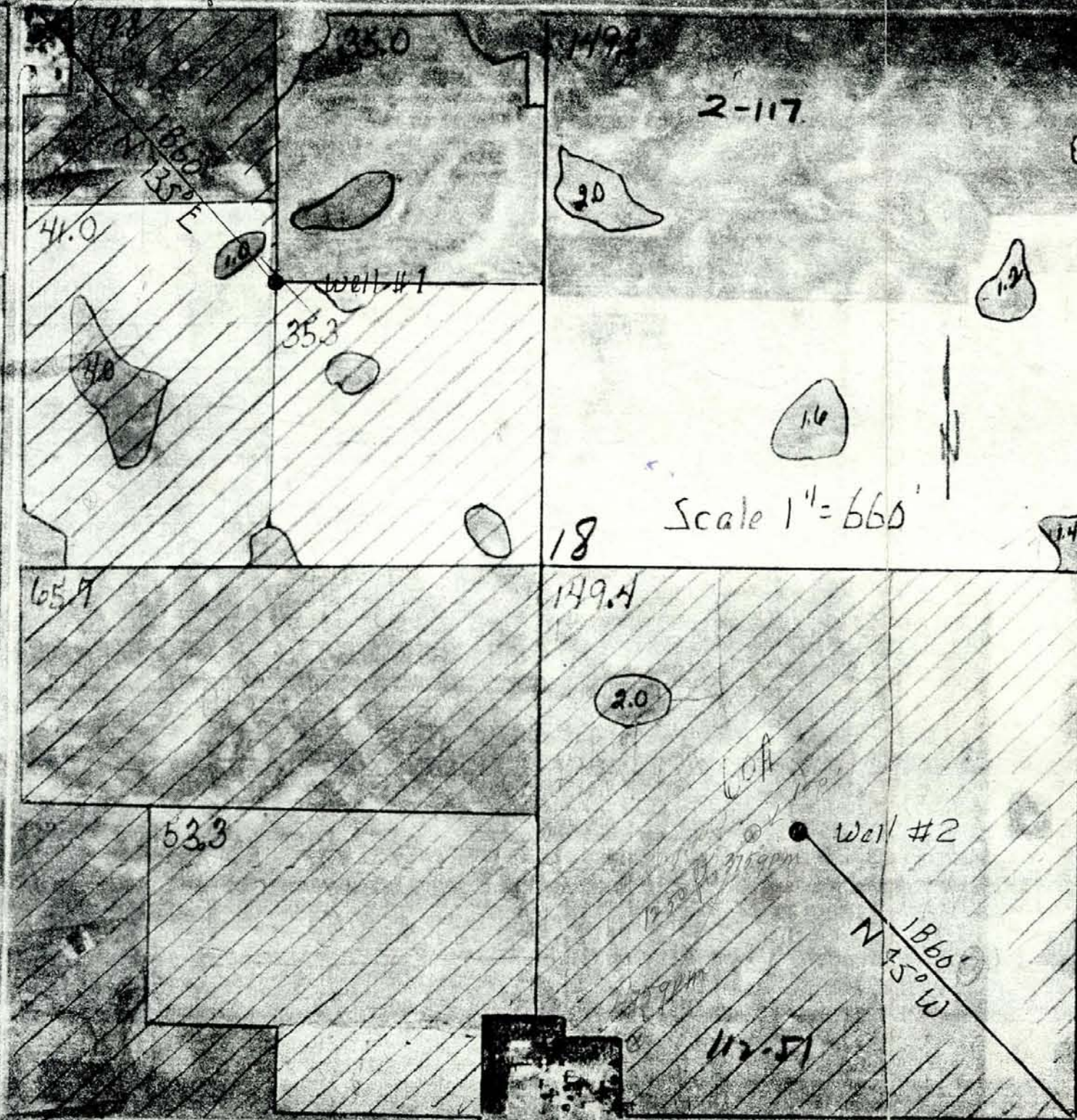
7-14-76

Drawn by: J. L. Wiersma

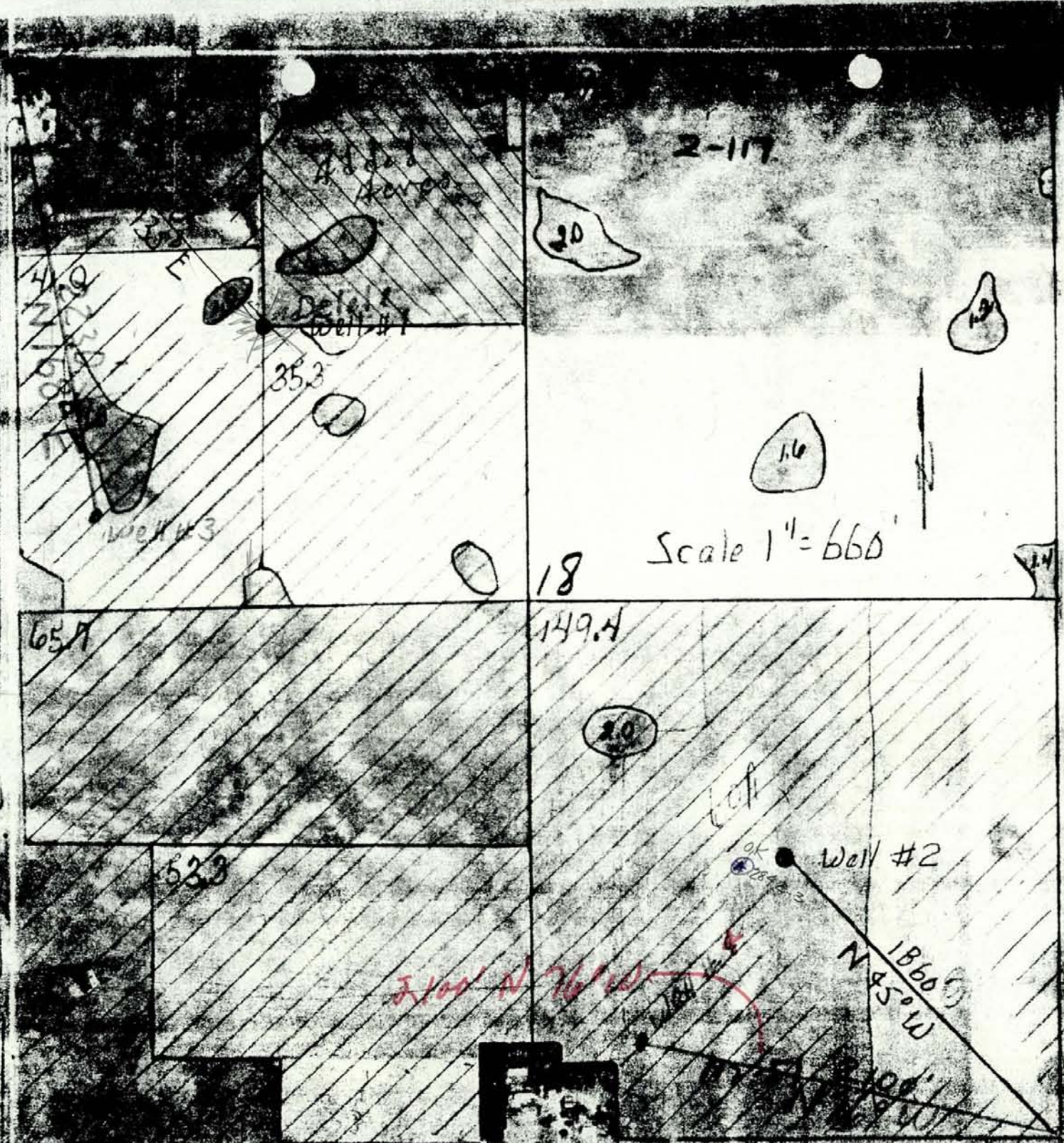
R. E. H. 1416

John L. Wiersma

Brookings Co.



~~Map~~ 2178-3



ROGER SAATHOFF

Irrigation Project #1
Bruce S. Dakota

Acres Irrigated - 458

Water Chlorine - 5.0 cts

Points of Discussion:

Point #1 - 1860' N 135° E of NW corner

Point #2 - 1860' N 95° W of SE corner
of section 18-112-51

Revised - 12-24-79

Added NE⁴ of NW⁴ sec 18

Added well # 3 & 4

Well # 314
Surveyor's Certificate

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

Roger Saathoff

Bruff

Brookings County

Durham N.Y. 31st

South Dakota

7-14 -76,

10, E 12 14

Book 11