

2823-3

1. Considered 7-21, 1976
2. Name of Applicant PETERSON FARMS, INC.
3. Post Office Address BRISTOL
4. Amount of water claimed 3.0
5. Source of water supply 75' DEEP WELL
6. Water to be used for IRRIGATION
- Acres to be irrigated 307
7. Water to be diverted and used in DAY county
about 2S, 3E miles of ANDOVER.
8. Proof of Publication Received 1st
Not received _____
9. Application Approved _____
Subject to _____
Not Approved _____
Action deferred _____

10. Remarks:

Cancelled 1-26-79

See Permit 3932-3

Map No. 2161-3 Water Division No. 3 JAMES RIVER
 (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 Peterson Farms, Inc. - Jerald W. Peterson
 Postoffice address P.O. Box 427, Bristol, State South Dakota 57213
 If a corporation show date and place of incorporation November 10, 1969 - Andover, South Dakota
2. Method of accomplishing work (contract, employment of others, or by direct labor) direct labor
3. Name of diversion work Peterson Farms, Inc. - Jerald W. Peterson - Unit #2
4. Amount of water claimed (cubic feet per second) 3.0
5. Source of water supply Ground Water
6. Location of point of diversion A POINT IN THE N.W. 1/4 SEC 13,
T.122N, R.59W
 County Day
7. Annual period or periods during which water is to be used March - November
8. Use to be made of water, (irrigation, industrial, municipal, commercial, recreation, etc.) Irrigation
9. For irrigation use, diversion Total number of acres to be irrigated 307
 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.
N.W. of 13-122-59	160		
N.E. of 13-122-59	75		
S.E. of 13-122-59	72		

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 years.
11. Choice of newspaper for Notice of Intent to Appropriate Water publication Aberdeen American News, Aberdeen, S.D.
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 Day
 I, Peterson Farms, Inc. 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 Jerald W. PetersonSubscribed and sworn to before me this 23 day of June, 1976

Notary Public (or other qualified officer)

WATER RIGHT APPLICATION APPROVAL

The Water Rights Commission hereby approves Water Right Application No. 2823-3

PETERSON FARMS, INC.
(Applicant)

Box 427, Bristol
(Post Office Address)

SOUTH DAKOTA 57219 With the following modifications:
(State)

The irrigation well approved under this Permit is located near domestic 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.

CANCELLED
BY ACTION OF W.R.C.
DATE 1-26-79
BY Staff
See Permit 3932-3

Date of first receipt of application JULY 2, 1976

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

Date of receipt of corrected application —, 19 —

Approved JULY 22, 1976, Recorded in Book 15 Page 274

WATER RIGHT PERMIT NO. 2823-3

The Water Rights Commission hereby grants and issues this Water Right Permit No. 2823-3 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 2, 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, 1983
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 3.0 cubic feet per second; neither shall it exceed the capacity of the above described water supply system, nor shall it exceed the amount of water needed for beneficial uses served, and if for the irrigation purposes said appropriation must be limited to not more than 3 acre feet per acre per year and be limited to not more than one-seventieth (1/70) of one cubic foot of water per second of time for each acre of land to which water is actually and beneficially applied for irrigation on or before JULY 22, 1983; said water to be used during the following described annual period: MARCH - NOVEMBER

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 —



1-4-77

John Hatch
Chief Engineer
Bureau

Are we up to date with
our paper work on this permit
2456-3. I've got some other
papers here says log will be
furnished by driller there is the
wells being used on this system.

We started out with one well +
decided we needed more water dug
another well same size about 350 ft.
to the SE of 1st well.

On permit No. 2823-3 the
construction is ^{just} about done there is
2 wells on this system. Here the
driller furnished a log. Aaron Drilling
has done all our work.

Respectfully
John W. Peterson

Sp. 11

Permit 3932-3

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 _____

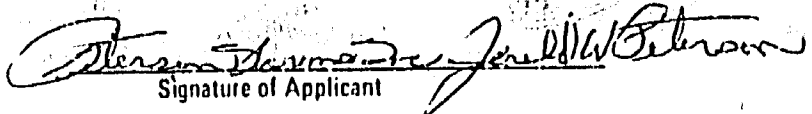
Depth to water (ground surface to water level) _____

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

On same owner's property 320 rds. On property owned by others 320 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.


Signature of Applicant

July 1, 1976



Peterson Farms, Inc.
c/o Jerald W. Peterson
P.O. Box 427
Bristol, SD 57219

Dear Sir:

Enclosed please find the original copy of the report of analysis on your water sample (#76-704) submitted by you a few days ago. Also enclosed you will find a copy of AES publication #13 with the quality of this water plotted approximately for irrigation uses by means of the red cross in the chart on the outside back cover. As you see, it is in the high salinity, low sodium category.

This water has a hazard for irrigation on any soil which is not well drained. Accordingly, the soils marked 2W3 in the SW portion of the NW quarter of section 13 should not be irrigated. Likewise, soils which are marked 2W1 on your soil map or G25 should not be irrigated. The reason is either severe erosion or wetness and the response to irrigation water will not be satisfactory on these soils. The salinity which is carried by this water amounts to about 1.3 tons of salt for each acre foot of water you pump on the land. Therefore, you should use this water in a fashion so as to distribute the salt quite uniformly through the soil profile or occasionally actually leach the soil profile. Natural leaching can occur as a result of precipitation which we sometimes get in the fall or early spring, if the soil profile is first filled with water from irrigation. This filling with irrigation water distributes the salt uniformly. Any rainfall which is effective in leaching thus displaces the salt downward and gives fresh water in the rooting zone of crops. This water will have to be managed in such a fashion so as to promote this kind of leaching. The use of frequent, light applications of water, such as 1 1/2 inches or less, should be absolutely avoided.

I am sending a copy of this letter to accompany the water analysis and your soils information, and the WI-1 form to the State Conservation Commission for their action.

Sincerely yours,

K O F mcl

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

cc: State Conservation Commission, D. Pahl, Huxon Drilling Co., Denver
Parks County Extension Agent



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

Submitted by: Peterson Farms, Inc.
 Address: Jerald A. Peterson
Bristol, SD 57219
cc: Huron Drilling, Inc.
Huron, SD 57350

Date Rec'd June 28, 1976
 Sample No. 76-704
 Identification Well: #2
Lat. Sec. 13, T. 122N, R. 59E

WATER ANALYSIS

Calcium (Ca)	190	ppm*	9.50	me/l**
Magnesium (Mg)	74	ppm	6.07	me/l
Sodium (Na)	102	ppm	4.44	me/l
Potassium (K)	10	ppm	0.25	me/l
Sulfate (SO ₄)	570	ppm	11.86	me/l
Nitrate (as N)		ppm		me/l
Chloride (Cl)	5	ppm	0.14	me/l
Bicarbonate (HCO ₃)	376	ppm	6.16	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)	308	ppm (as CaCO ₃)		
Alkalinity (Phenolphthalein)	0	ppm (as CaCO ₃)		
Electrical Conductivity	11	micromhos per cm at 25° C.		
Sodium Adsorption Ratio	1.59			
Sodium	21.91	% of cations		
Residual sodium carbonate	0.00	me/l		
pH	7.42			

*ppm=parts per million

**me/l=millequivalents per liter

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

COMMENTS: Total cations 20.26 me/l
 Total anions 18.16 me/l

By: Shirley Hitten

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. 76-704

Amount Enclosed \$

Signed

Publish first publication, on or before
July 12, 1976

NOTICE OF INTENT TO APPROPRIATE WATER

Pierre, South Dakota 57501
July 7, 1976

Notice is hereby given that Peterson Farms, Inc.
whose post office address is Bristol, 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 3.0 cubic feet of water per
second of time from the ground water through the
Peterson Farms #2, the point of diversion of which is to
be located in the NW1 NW1

of Section 13, Twp. 111N, Range 59W. Said water to be used
for the purpose of providing irrigation on the following described land:
portions of
NW1, NE1, Section 13; SE1, Section 12, T122N, R10W

This application No. 2823-3 will be considered by the Water Rights
Commission at the Court House in 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:

Peterson Farms, Inc., Box 427, Bristol, S.D. 57210

2823-3

PROOF OF PUBLICATION

STATE OF SOUTH DAKOTA)
County Brown) ss.

I, Dianne Brenden hereby
certify that the annexed printed copy of Notice of Intent to Appropriate
Water was taken from the Aberdeen American News

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 Aberdeen of Brown

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

July 12, 1976

July 19, 1976

Dianne Brenden
(Signature)

Principal Clerk
(Title)

July 19, 1976
(Date Signed)

IN NO 531 - July 12, 1976 - 21
NOTICE OF INTENT
TO APPROPRIATE WATER
July 7, 1976
Notice is hereby given that Peterson
Farms, Inc. whose post office address is
Bristol, 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 30 cubic feet of water per
second of time from ground water
through the Peterson Farms No. 2, the
point of diversion of which is to be
located in the NW 1/4 NW 1/4 of Section 13,
Twp. 111N, Range 59W. Said water to be
used for the purpose of providing
irrigation on portions of the following
described land: NW 1/4 NE 1/4, Section 13,
S 1/4, Section 13, T112N, R59W.
This application No. 2823-3 will be
considered by the Water Rights Com-
mission at the Court House in 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 P. Jones, Water Rights
Specialist



HURON DRILLING INC.
WELL LOCATION MAP

NAME Peterson Farms, Inc. - Jerald W. Peterson

DATE June 23 1976

WELL NO. #2

N.W.

QUARTER, SECTION 13

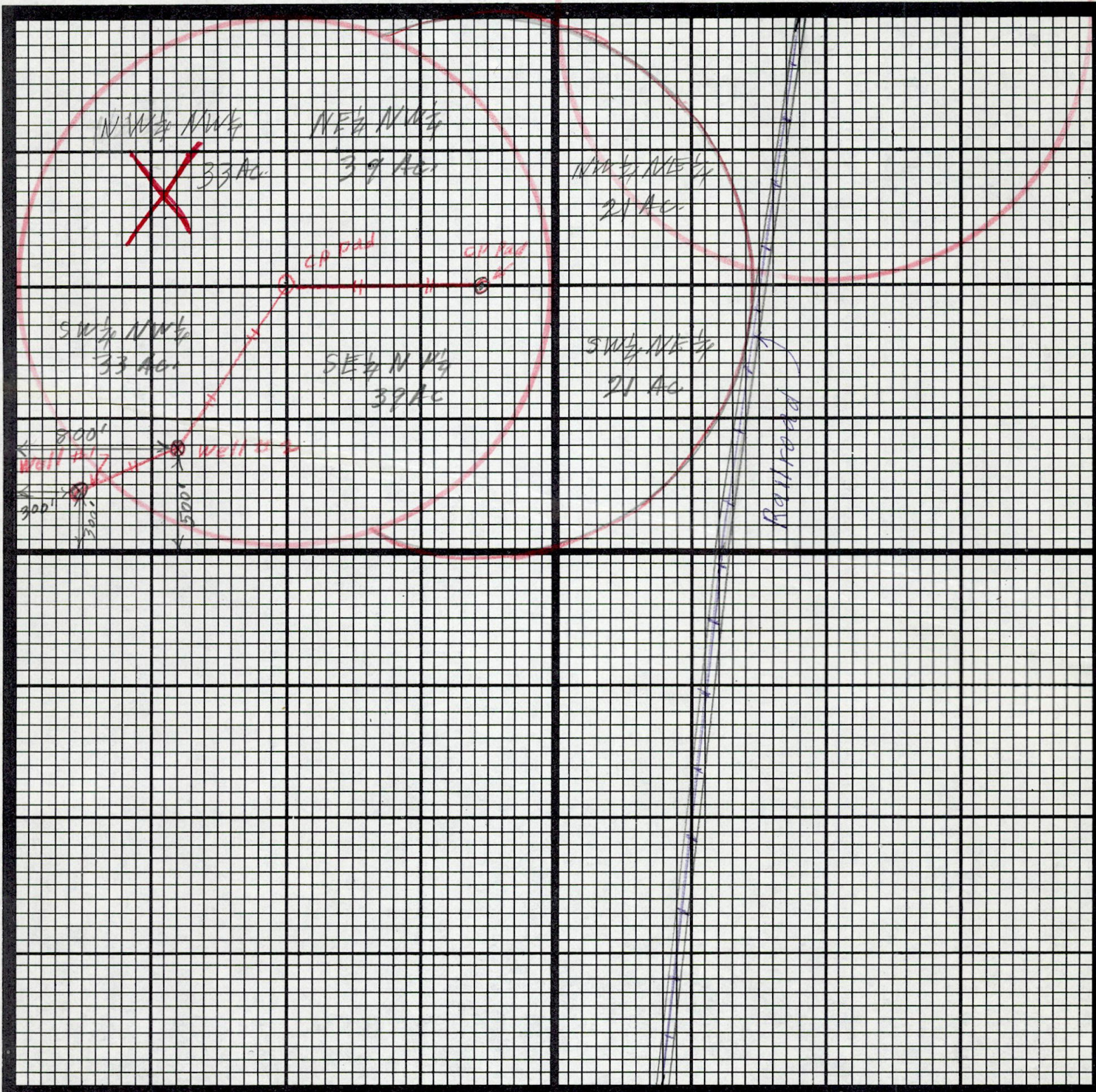
TWP. 122

RANGE 59

IN

Day

COUNTY



X — PROPOSED LOCATION

Prepared By

Dick Fadgen

Dick Fadgen

Beadle County Extension Agent