

Water Right Number 3155-3

1. Considered 11-17, 1976
2. Name of Applicant HECKATHORN FARMS
3. Post Office Address ELK POINT
4. Amount of water claimed 1.14
5. Source of water supply 100' DEEP WELL
6. Water to be used for IRRIGATION
Acres to be irrigated 80
7. Water to be diverted and used in UNION County
about 5N Miles of ELK POINT
8. Proof of Publication Received 11-15-76
Not received _____
9. Application Approved _____
Subject to _____
Not approved _____
Action deferred _____

10. Remarks:

Incorporated into 4534-3

Map No. 2496-3 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 Heckathorn Farms - Wayne Heckathorn
Postoffice address Elk Point, State South Dakota 57025
If a corporation show date and place of incorporation NA
2. Method of accomplishing work (contract, employment of others, or by direct labor) Contract
3. Name of diversion work Heckathorn Irrigation Project
4. Amount of water claimed (cubic feet per second) 1.14 2.7 of a MAXIMUM ALLOWABLE
5. Source of water supply Well
6. Location of point of diversion 1980' South and 1320' East of NW Corner of
Section 25, T4N R50W
72 County Union
7. Annual period or periods during which water is to be used June through September
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 80

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.
<u>S2 NW4 Sec. 25, T4N R50W</u> <u>72</u>	<u>80</u>		

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 5 years.
11. Choice of newspaper for Notice of Intent to Appropriate Water publication Leader-Courier, Elk Point, S. D.
12. Principal Features of the Proposed Water Supply System.
- A. Works proposed to divert water from its natural source.
- B. Works proposed to transport water to place of use.
- C. Works proposed to apply water to beneficial use.

Center Pivot

Estimated Total Cost \$ 10,000.00

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 UNION

I, WAYNE HECKATHORN the applicant, certify that I have read the foregoing application and have examined the attached map and that the facts therein stated are true and that I intend, and am able to complete the necessary construction.

Signed Wayne HeckathornSubscribed and sworn to before me this 12 day of JULY 19 76

Notary Public (or other qualified officer)

John G. M. Moberg
My Commission Expires
2-17-78

WATER RIGHT APPLICATION APPROVAL

The Water Rights Commission hereby approves Water Right Application No. 3155-3
HECKATHORN FARMS of WAYNE HECKATHORN, ELK POINT
 (Applicant) (Post Office Address)
SOUTH DAKOTA 57025 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 existing domestic wells or in irrigation wells having prior water rights.

INCORPORATED INTO
WATER LICENSE NO. 4534-3
 3/19/81

Date of first receipt of application OCTOBER 29, 1976
 Date of return to applicant for correction, amendments or changes required — 19 —
 Date of receipt of corrected application — 19 —
 Approved NOVEMBER 18, 1976, Recorded in Book 16 Page 227

WATER RIGHT PERMIT NO. 3155-3

The Water Rights Commission hereby grants and issues this Water Right Permit No. 3155-3 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 OCTOBER 29, 1976
2. The equivalent of at least one-fifth of the work above specified is to be completed on or before MAY 13, 1979
3. The whole of said work is to be completed on or before NOVEMBER 18, 1981
4. The limit of time from or of of beneficial use of water appropriated in accordance herewith is NOVEMBER 18, 1981
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 1.14 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 NOVEMBER 18, 1981; said water to be used during the following described annual period: JUNE THRU SEPTEMBER

Witness my hand this 27th day of DECEMBER 19 76

WATER RIGHTS COMMISSION

By:

John Hatch
 Chief Engineer, Executive Officer

Certificate of Construction Issued — 19 —

Water License Issued — 19 —

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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 X / 10/10/00
DISAPPROVED _____

Approval does not imply that this project can be carried out successfully in all circumstances. Individual management will, to a large degree, determine the relative success of this venture.

NAME Wesley Hechathorn

ADDRESS PO 580 Elk Point S.D. 57025

COUNTY Union

LEGAL DESCRIPTION

1. WELL LOCATION S2 NW 1/4 Sec. 25, T92N R50W
2. AREA TO BE IRRIGATED S2 NW 1/4 Sec. 25, T92N R50W + NE 1/4 Sec. 26, T92N R50W

TYPE OF IRRIGATION

3. GRAVITY _____ SPECIFIED (INDICATE TYPE) Center Pivot
4. CROPS TO BE IRRIGATED Corn + Soybeans

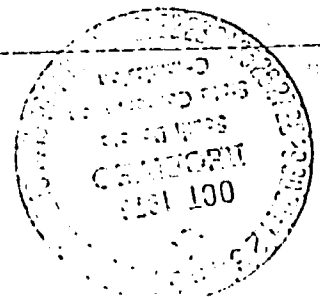
LAND CAPABILITY FOR IRRIGATION

5. PERCENTAGE OF SLOPE _____
6. PHYSICAL SOILS CLASSIFICATION FOR IRRIGATION _____
Sand, gravel, well sorted

WATER QUALITY (TO BE COMPLETED BY COMMISSION)

7. SAMPLE NUMBER 76-1323
8. SALINITY EC = 1041
9. SODIUM SAR = 1.10

RSR = 5.53



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

Submitted by: Wayne Hockathorn
 Address: L.O. Box 50
Elk Point, SD 57025

Date Rec'd: September 13, 1976
 Sample No.: 76-1375
 Identification: Well -
K 1, Sec. 25, T 92N, R 50E

WATER ANALYSIS

Calcium (Ca)	86	ppm*	4.30	me/l**
Magnesium (Mg)	39	ppm	3.20	me/l
Sodium (Na)	49	ppm	2.13	me/l
Potassium (K)	12	ppm	0.31	me/l
Sulfate (SO ₄)	198	ppm	4.11	me/l
Nitrate (as N)		ppm		me/l
Chloride (Cl)	5	ppm	0.24	me/l
Bicarbonate (HCO ₃)	493	ppm	8.63	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)	404	ppm (as CaCO ₃)		
Alkalinity (Phenolphthalein)	0	ppm (as CaCO ₃)		
Electrical Conductivity	1041	micro mhos per cm at 25° C.		
Sodium Adsorption Ratio	1.10			
Sodium	21.42	% of cations		
Residual sodium carbonate	0.58	me/l		
pH	7.24			

*ppm=parts per million

**me/l=millequivalents per liter

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

COMMENTS: Total cations 9.84 me/l
 Total anions 12.83 me/l

By: Shirley Litten

Service Performed	Amount Due
Iron analysis	2.00

Make checks payable to: Water Quality Laboratory

Cut along dotted line and return the lower portion with payment

Sample No. 76-1375

Amount Enclosed

Signed

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 inches, Depth 100 feet
- (2) Casing, Type Transite, Diameter 16" I.D., Thickness 3/4 inch
(wood, concrete, steel, etc)
- (3) Perforated Screen
Type 1/8 inch slotted, Diameter 16" I.D., Length 20 feet
- (4) Gravel Pack, Thickness 6-9 inches, Length of gravel pack 20+ feet

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 Waterbearing Gravels and Rock

Depth to top of water bearing material 20 feet

Depth to bottom of water bearing material 100 feet

Thickness of water bearing material 80 feet

Depth to water (ground surface to water level) 14 foot drawdown

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

On same owner's property 40 rds. On property owned by others 90 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.

Walter Robertson
Signature of Applicant



October 1, 1976

Mr. Wayne Heckathorn
P.O. Box 580
Elk Point, SD 57025

Dear Mr. Heckathorn:

Your water sample (Lab. No. 76-1325) has been analyzed and the results are reported on the accompanying sheet, which is your copy to keep.

I am also enclosing a copy of AES pamphlet #13 for your use. The quality of your water for irrigation use is plotted approximately by means of the red cross in the chart on the outside back cover.

Your water, as indicated by this analysis, is satisfactory for use on the soils you indicate will be irrigated. If a salt problem or a water table problem should develop, contact extension personnel for assistance.

The WI-1, soils information, and a copy of the water analysis are being forwarded 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

Form 6. - Notice Intent to Appropriate Water

No. 3155-3

Publish first publication, on or before

November 4, 1976

NOTICE OF INTENT TO APPROPRIATE WATER

Pierre, South Dakota 57501

October 29, 1976

Notice is hereby given that Heckathorn Farms

whose post office address is Elk Point, 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 1.74 cubic feet of water per

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

Heckathorn # 2, the point of diversion of which is to be located in the center of the E 1/4 NW 1/4

of Section 25, Twp. 42N, Range 50W. Said water to be used for the purpose of providing irrigation on the following described land:

S 1/4 NW 1/4, Section 25, T92N, R30W

This application No. 3155-3 will be considered by the Water Rights Commission at the Marvin Hughitt Hotel in Huron, South Dakota upon the 17th day of November, 1976 at 10:00 A.M. All interested persons may appear and be heard.

WATER RIGHTS COMMISSION

By:

BURTON F. JONES, Water Rights Specialist

BFIJ/bw

cc: Heckathorn Farms, % Wayne Heckathorn, Elk Point, SD 57025

No. 315513

PROOF OF PUBLICATION

STATE OF SOUTH DAKOTA)
) ss.
County Union)

I, Lester E. Emerson hereby
certify that the annexed printed copy of Notice of Intent to Appropriate
Water was taken from the The Leader Courier

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 Elk Point

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

November 4, 1976

November 11, 1976

(Signature)

Publisher:
(Title)

November 11, 1973
(Date Signed)

NOTICE OF INTENT TO
APPROPRIATE WATER
Pierre, South Dakota 57501
October 29, 1976

Notice is hereby given that Heckathorn Farms whose post office address is Elk Point, 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 1.14 cubic feet of water per second of time from ground water through the Heckathorn # 2, the point of diversion of which is to be located in the center of the S $\frac{1}{2}$ NW $\frac{1}{4}$ of Section 25, Twp. 92N, Range 50W. Said water to be used for the purpose of providing irrigation on the following described land:

S $\frac{1}{2}$ NW $\frac{1}{4}$, Section 25, T32N,
R50W

This application No. 3155-3 will be considered by the Water Rights Commission at the Marvin Hughton Hotel in Huron, South Dakota upon the 17th day of November, 1976, at 10:00 A.M. All interested persons may appear and be heard.

WATER RIGHTS COMMISSION
By: Burton E. Jones

By: Burton F. Jones
Water Rights

Water Rights Specialist

Publish: November 4, 11.

