

Water Right Number 2588-3

1. Considered March 17, 19 76
2. Name of Applicant Harold Tieerdsma
3. Post Office Address Avon, S.D.
4. Amount of water claimed 1.85
5. Source of water supply ground water (230' WELL)
6. Water to be used for irrigation
Acres to be irrigated 130
7. Water to be diverted and used in Bon Homme County
about 25 Miles of SPRINGFIELD
8. Proof of Publication
Received 3-17-76
Not received _____
9. Application
Approved _____
Subject to _____
Not approved _____
Action deferred _____
10. Remarks:

No. 2583-3Map No. 1956-3 Water Division No. 3 MISSOURI RIVER District
(Blanks to be Filled by the Engineer for the W. R. C.)

APPLICATION FOR PERMIT

839

To Appropriate Water within the State of South Dakota

(NOTE-Draw a line through items not applicable)

1. Name of Applicant Harold Tjeerdsma
Postoffice address Avon, State South Dakota 57315
If a corporation show date and place of incorporation no
2. Method of accomplishing work (contract, employment of others, or by direct labor) employment of others
3. Name of diversion work Harold Tjeerdsma Irrigation Project #1
4. Amount of water claimed (cubic feet per second) 1.9
5. Source of water supply well
6. Location of point of diversion approximate center for quarter - sec 3-23-61
- County Bon Homme
7. Annual period or periods during which water is to be used April thru November
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 130

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>3/4 section 3-23-61</u>	<u>130</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 2 years.
11. Choice of newspaper for Notice of Intent to Appropriate Water publication Avon Clarion
12. Principal Features of the Proposed Water Supply System.

A. Works proposed to divert water from its natural source.

Pump from well.

B. Works proposed to transport water to place of use.

Pipeline

C. Works proposed to apply water to beneficial use.

Sprinkler, center pivot

Estimated Total Cost \$ 50,000.00Attachments: 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 BON HOMMEI, HAROLD TJEERDSMA 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

Harold TjeerdsmaSubscribed and sworn to before me this 19THday of DECEMBER 1975Wesley Meece
Notary Public (or other qualified officer)

WATER RIGHT APPLICATION APPROVAL

The Water Resources Commission hereby approves Water Right Application No. 2588-3

HAROLD TJEERDSMA
(Applicant)

AVON
(Post Office Address)

SOUTH DAKOTA 57315 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.

Date of first receipt of application DECEMBER 22 1975
Date of return to applicant for correction, amendments or changes required — 19—
Date of receipt of corrected application FEBRUARY 27 1976
Approved MARCH 18 1976, Recorded in Book 15 Page 13

WATER RIGHT PERMIT NO. 2588-3

The Water Resources Commission hereby grants and issues this Water Right Permit No. 2588-3 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 to the following limitations and conditions:

1. The date from which applicant may claim right is FEBRUARY 27 1976
2. The equivalent of at least one-fifth of the work above specified is to be completed on or before SEPTEMBER 18 1978
3. The whole of said work is to be completed on or before MARCH 18 1981
4. The limit of time from proof of beneficial use of water appropriated in accordance herewith is MARCH 18 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 1.9 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 MARCH 18 1983; said water to be used during the following described annual period: APRIL - NOVEMBER

Witness my hand this 24TH day of MARCH 1976

WATER RESOURCES COMMISSION

By:

John H. Smith
Chief Engineer Executive Officer

Certificate of Construction Issued MAY 9 1980

Water License Issued MAY 9 1980

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

(1) Drill Hole, Diameter 1 1/2 in., Depth 230 ft.

(2) Casing, Type concrete Diameter 16 Thickness 1
(wood, concrete, steel, etc)

(3) Perforated Screen.

Type steel, Diameter 16, Length 20 ft.

(4) Gravel Pack. Thickness 7, Length of gravel pack 230 ft.

(1) Surface dimensions _____, Depth _____

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

Character of Water bearing materials sand and gravel

Depth to top of water bearing material 190

Depth to bottom of water bearing material 230

Thickness of water bearing material 1.0

Depth to water (ground surface to water level) 70

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

On same owner's property 75 rds. On property owned by others 125 rds.

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.

Herald Leiden
Signature of Applicant

February 24, 1976



Mr. Harold Tjeerdsma
Aven, SD 57315

Dear Mr. Tjeerdsma:

We received today the completed WI-1 form pertaining to your application for a water permit in section 3, 93-61.

I am enclosing herewith a copy of AES publication #13 with the approximate designation of this water quality for irrigation uses by means of a red cross in the chart on the outside back cover. You will see that it is in the high salinity, low sodium category. I am also including the original copy of the report of analysis for this water sample (#76-070); you should keep this report in a safe place.

Although the water is in the high salinity category, the soils that you propose to irrigate are moderately well drained and so you should have fair success in irrigating this land if you take care not to irrigate in frequent, light applications and not to raise the water table. This means that if you use a center pivot system, you should be irrigating so that you wet the complete root zone every time you irrigate, but not put on applications like 1 or 1 1/2 inches at a time and allow this to be used from the surface foot or foot and a half of soil. Under such conditions, all of the salt that is in the water will be concentrated in the upper part of the root zone and you will be in trouble in a few years. This precaution may be difficult to follow, but it is paramount to the longevity of your soil and its long-time productivity.

A copy of this letter, and of the water analysis, and your WI-1 form are being sent 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

Steve Auch, County Extension Agent

Conservation
Commission
Form WI 21

STA

FOR APPROPRI-
ATE

(This Form Requires)

CONSERVATION COMMISSION
OBTAINING INFORMATION
OF GROUND WATER IN ACCORDANCE
S.D.A. 46-6-1 AS AMENDED
: Proposed Well Irrigation Only)

FOR COMMISSION USE OF

Irrigation System: _____

Water Quality: _____

Soils Capability: _____

Approved: H. J. [Signature]

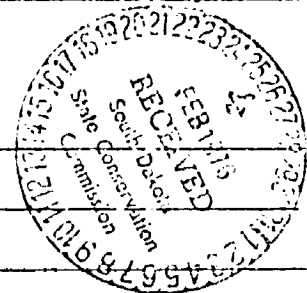
Disapproved: _____

NAME: HARRIS

ADDRESS: AL

COUNTY: _____

TEERDSMA
SOUTH DAKOTA
HOMER



LEGAL DESCRIPTION

1. WELL LOCATION: SW 1/4 3-93-61
2. AREA TO BE IRRIGATED: SW 1/4 3-93-61

TYPE OF IRRIGATION

3. GRAVITY SPRINKLER (Indicate Type): SPRINKLER (center pivot)
4. CROPS TO BE IRRIGATED: CORN AND ALFALFA

LAND CAPABILITY FOR IRRIGATION

5. PERCENTAGE OF SLOPE: 2-4 %
6. PHYSICAL SOILS CLASSIFICATION FOR IRRIGATION: CALHUN - CLAY Silt
LOAM

WATER QUALITY (TO BE COMPLETED BY COMMISSION)

7. SAMPLE NO.: 76-070
8. SALINITY: EC = 1699 μ mhos/cm (high)
9. SODIUM: SA = 1.29 (low)

Sail Concentration Loose

Harold T. Linden

19th day of Feb 1976.

Wang Kuei-San

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

Submitted by: Harold Tjeerdema
 Address: Avon, SD 57315

Date Rec'd February 4, 1976
 Sample No. 76-070
 Identification 611-200
DEC, Dec. 3, T 93W, R 61

WATER ANALYSIS

Calcium (Ca)	310	ppm*	15.50	me/l**
Magnesium (Mg)	55	ppm	4.51	me/l
Sodium (Na)	93	ppm	4.05	me/l
Potassium (K)	33	ppm	0.86	me/l
Sulfate (SO ₄)	690	ppm	14.35	me/l
Nitrate (as N)		ppm		me/l
Chloride (Cl)	8	ppm	0.22	me/l
Bicarbonate (HCO ₃)	400	ppm	6.56	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)	328	ppm (as CaCO ₃)		
Alkalinity (Phenolphthalein)	0	ppm (as CaCO ₃)		
Electrical Conductivity	1699	micromhos per cm at 25° C.		
Sodium Adsorption Ratio	1.20			
Sodium	16.25	% of cations		
Residual sodium carbonate	0.00	me/l		
pH	7.04			
Others:				

*ppm=parts per million

**me/l=millequivalents per liter

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



COMMENTS: Total cations 24.92 me/l
 Total anions 21.13 me/l

By: Shirley Nittan

Service Performed

Amount Due

Irrigation analysis

\$8.00

Make checks payable to: Water Quality Laboratory

Cut along dotted line and return the lower portion with payment

Sample No. 76-070

Amount Enclosed \$

Signed

STATE OF SOUTH DAKOTA

WATER LICENSE NO. 2588-3

(1) WHEREAS, On the 27th day of February A. D. 19 76
Harold Tjeerdsma

made Water Right Application No. 2588-3 for a permit to use 1.9 cubic feet per second of the waters
of ground water (one well)

County of Bon Homme, State of South Dakota, for Irrigation

(2) WHEREAS, On the 18th day of March A. D. 19 76
Permit No. 2588-3 with a date of priority of February 27, 1976

was issued to said applicant for the diversion of said water, and provided for the completion of construction of the water
supply system therein described on or before the 18th day of March A. D. 19 81 and for the
application to beneficial use of said water on or before the 18th day of March A. D. 19 83

and:

(3) WHEREAS, It is hereby certified that the applicant has complied with the provisions of the laws of the State of South Dakota
relating to completion of the construction of the water supply system and is entitled to divert 1.77 cubic feet
per second of water for beneficial use and,

(4) WHEREAS, It is hereby certified that the applicant has complied with the provisions of the laws of the State of South Dakota
relating to the application of water to beneficial use of the following extent,

for irrigating the following land in Section 3, T93N, R61W

NW $\frac{1}{4}$ SW $\frac{1}{4}$ 28 acres

NE $\frac{1}{4}$ SW $\frac{1}{4}$ 33 "

SW $\frac{1}{4}$ SW $\frac{1}{4}$ 30 "

SE $\frac{1}{4}$ SW $\frac{1}{4}$ 33 "

TOTAL 124 acres

(5) NOW, THEREFORE, By the virtue of the authority vested in us by the laws of the State of South Dakota, We hereby grant and confirm to Harold T. Jærdsma

_____ of Avon, SD
the holder _____ and owner _____ of said permit No. 2588-3 water right, dating from February 27, 1976
_____ to use of 1.77 cubic feet per second of the waters
of ground water (one well)
in the County of Bon Homme and State of South Dakota, or so much thereof as may be necessary for the
purposes hereinafter mentioned, to be diverted at a point 1300'N and 550'E of the SE corner
of Section 3, T93N, R61W

and conduct to and upon portions of land in Section 3, T93N, R61W more fully described on the
face of this License

for the purpose of Irrigation

Subject to any limitations listed in Water Right Permit No. 2588-3 and subject to the laws of the State of South Dakota.

WITNESS, My hand and seal of our office at Pierre, South Dakota
this 9th day of May A. D.
Nineteen Hundred and Eighty

Board of Water Management

By:

John Hatch
Chief Engineer

JOHN HATCH

Permit No. 2588-3

Water Diversion No. 3 Missouri River Water District

CERTIFICATE OF CONSTRUCTION

This is to Certify, That Harold Tjeerdsma

_____ the holder _____ of
Permit No. 2588-3, issued upon Application No. 2588-3, bearing date of priority of _____
February 27, 1976 authorizing the diversion of 1.9 cu. ft. per second of the waters of _____
groundwater (one well) County of Don Horn, State of South Dakota at _____
a point 1300'N and 550'E of the SW corner, Section 3, T93N, R61W

_____ for Irrigation

_____ has _____ complied with the provisions of the laws of the State of South Dakota relating to proof of
completion of the works of diversion set out and described in said Permit, that said works are found in satisfactory
condition for diverting and conveying to the place of intended use 1.78 cu. ft. per second of water

Date Ma 9, 1980


JOHN HATCH, Chief Engineer
Water Rights, WMD

Form 6 - Notice of Intent to Appropriate Water

No. 2558-3

Publish first publication, on or before March 4, 1976

NOTICE
INTENT TO APPROPRIATE WATER

Pierre, South Dakota 57501

March 1, 1976

Notice is hereby given that Harold Tjaerdsma
whose post office address is Aven, 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

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

Harold Tjaerdsma, the point of diversion of which is to be located in the _____

_____ Center of the SW
of Section 3, Twp. 93N, Range 61E. Said water to be used for the purpose
of providing irrigation on ^{portions of} the following described land:

SW 1/4 Sec. 3, T93N, R61E

This application No. 2588-3 will be considered by the Water Rights Commission at their office at
Pierre upon the 17th day of March, 1976, at 1:00 P.M. All interested
persons may appear and be heard.

WATER RESOURCES COMMISSION

By:

BURTON F. JONES
Water Rights Specialist

BFJ/bw

cc: Harold Tjaerdsma
Aven, SD 57315

No. 2588-3

PROOF OF PUBLICATION

STATE OF SOUTH DAKOTA)
County Ben Hur ss.

I, Clair R. Redden hereby

certify that the annexed printed copy of Notice of Intent to Appropriate
Water was taken from the Avon Observer

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 Avon

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

March 4, 1976

March 4, 1976

Clair R. Redden
(Signature)

Publisher
(Title)

March 12, 1976
(Date Signed)

Public Notice

NOTICE
Intent to Appropriate Water

Notice is hereby given that
Harold Tjeerdsma, whose post
office address is Avon, South Da-
kota, has made an application in
accordance with the provisions
of the water laws of South Da-
kota for a permit to appropriate
for beneficial use 1.85 cubic feet
of water per second of time from
the ground water through the
Harold Tjeerdsma property, the
point of diversion of which is to
be located in the center of the
SW $\frac{1}{4}$ of Section 3, Twp. 93N,
Range 61W. Said water to be
used for the purpose of provid-
ing irrigation on portions of the
described land:

SW $\frac{1}{4}$ Sec. 3, T93N, R61W.
This application No. 2588-3
will be considered by the Water
Rights Commission at their of-
fice at Pierre upon the 17th day
of March, 1976, at 1:00 p.m. All
interested persons may appear
and be heard.

WATER RESOURCES
COMMISSION
Burton F. Jones
Water Rights Specialist

75567 North Yardline

9-14-77 C.P. Beam Model 107P,

Lot # 14235. Plot 170

Engine John Deere 6 cyl Diesel

Type 6434 TR-30 Li #00171K

Pump Holman. Ser # 577870

~~Engine~~ Motor N261-8-

Lot # 144 Plot 160/17

Engine 500 Motor 800
Pump 1000

Prop at 10 ft.

Permit No. 2588-3Water Division 3 Missouri River Water DistrictREPORT OF EXAMINATION OF WORKS
AND/OR APPLICATION OF WATER TO BENEFICIAL USE

TO: WATER RIGHTS, WATER MANAGEMENT BOARD / FOSS BLDG., PIERRE, SOUTH DAKOTA 57501

I have this day made a thorough examination of the water use system constructed by HaroldTjeerdsma of Avon, South Dakota. 57315 holderof Permit No. 2588-3, hearing date of priority of February 27, 1976authorizing the diversion of 1.7 cu. ft. per second of the waters of One Wellfor Irrigation purposes, in Ben Hur County.

I have to report on the condition of the same as follows:

The Water Use System consists of,

A. Works used to divert the water:

Engine - John Deere 6 Cyl. Diesel; Type 6404TR-50, Ser # 061711R

Pump: National Model N 260-8.

Pumping 500 gpm.

B. Works used to transport water to place of use,

750 ft 8" PVC Pipe

C. Works used to apply water to beneficial use.

Olson Center Pivot, Model 103P, Ser # 41736.

The system is in the following condition: GoodThe point of diversion is located 1300 ft N and 530 ft E of the SW Cor
of Sec. 3, T93 N R61 WThe works are capable of diverting and conveying to the place of use 1.78cu. ft. per second of water which is to be used for Irrigation.Water has been put to beneficial use to the maximum extent as follows: All in Sec. 3 T93 N R61 WNW 1/4 SW 1/4 - 28 AC. NE 1/4 SW 1/4 - 33 AC. SW 1/4 SW 1/4 - 20 AC.
SE 1/4 SW 1/4 - 33 AC.comprising a total of 124 acres of land.

Well Data:

Depth 245 ft.Static 160 ftCapacity Over 500 gpmPumping 800 gpm

Date

September 19, 1979Leroy J. Menard
(Signature)

RECEIPT

WATER RIGHTS COMMISSION

State of South Dakota

No 4 7321

PIERRE, February 15, 1980

RECEIVED OF Harold Tjeerdema, Avon SD 57315

the following amount in fees for services rendered as provided for by law:

Fee for Application for Permit to Appropriate Water No. (examination, processing, recording and filing)		
Fee for Inspecting Construction, and issuing Cert. of Construction No. 2508-3)	50	00
Fee for Inspecting Beneficial Use, and issuing Water License No. 2568-3)		
Fee for issuing Location Certificate-Dry Draw, No.		
Fee for filing		
Fee for certified copy of		
Fee for Print copy of map		
Fee for Certifying		
Fee for		
(any other work as provided by law)		
TOTAL	50	00

WATER RIGHTS COMMISSION

By John Hatch
Chief Engineer, Executive Officer
JOHN HATCH KW

Harold Tjeerdema Farm

MAP NO 1956-3 APRIL 25 1988-3

19.0

30.0

Floyd D Watson
District Conservationist

75.2

3-98

74.8

72.0

16.5

3

26.0

48.0

NW $\frac{1}{4}$ SW $\frac{1}{4}$
28 AC.

NE $\frac{1}{4}$ SW $\frac{1}{4}$
33 AC.

LAND TO BE
IRRIGATED
OUTLINED IN RED

POINT OF
DIVERSION

11.3

33.0
8" PVC PIPE

SW $\frac{1}{4}$ SW $\frac{1}{4}$
30

SE $\frac{1}{4}$ SW $\frac{1}{4}$
33 AC.

93-61

550'

146.3

3-98

150.0