

2659-3

1. Considered MAY 20, 1976
2. Name of Applicant ORLYN NIELSON
3. Post Office Address TULARE
4. Amount of water claimed 2.27
5. Source of water supply GROUND WATER (100' WELL)
6. Water to be used for IRRIGATION

Acres to be irrigated 160

7. Water to be diverted and used in SPINK county
about 1W, 1S miles 0 of TULARE

8. Proof of Publication Received 6-16-76

Not received _____

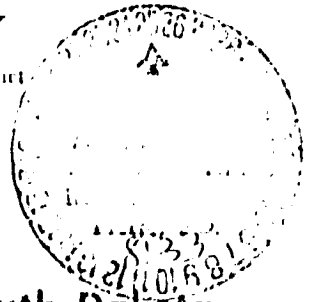
9. Application Approved _____

Subject to _____

Not Approved _____

Action deferred _____

10. Remarks:

No. 2659-3Map No. 2025-3 Water Division No. 3 JAMES 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 Orlwyn Nielsen
 Post-office address Tulare, State A. Leek
 If a corporation show date and place of incorporation NO
2. Method of accomplishing work (contract, employment of others, or by direct labor) direct labor
3. Name of diversion work Nielsen #3
4. Amount of water claimed (cubic feet per second) 1000 Gallons per minute
5. Source of water supply well
6. Location of point of diversion Madley SW 1/4 - 34 - 115 - 64
7. Annual period or periods during which water is to be used May to Nov. County Spirit
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 160

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>SW 1/4 - 34 - 115 - 64</u>	<u>160</u>		

Attach sheet if more space is 3

10. Time required to complete construction of water supply system 3 years. Additional time required to complete application of water to the proposed beneficial use 1 year.
11. Choice of newspaper for Notice of Intent to Appropriate Water publication Redford Press
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.

Estimated Total Cost \$ 40,000.--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 Spirit)I, Orlwyn Nielsen, 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 Orlwyn NielsenSubscribed and sworn to before me this 24 day of February, 1976

Notary Public (or other qualified officer)

WATER RIGHT APPLICATION APPROVAL

The Water Rights Commission hereby approves Water Right Application No. 2659-3ORLYN NIELSEN

(Applicant)

TULARE

(Post Office Address)

SOUTH DAKOTA 57476

(State)

With the following modifications:

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.

Date of first receipt of application FEBRUARY 25, 1976

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

Date of receipt of corrected application MARCH 22, 1976Approved MAY 20, 1976, Recorded in Book 15, Page 201WATER RIGHT PERMIT NO. 2659-3

The Water Rights Commission hereby grants and issues this Water Right Permit No. 2659-3 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 FEBRUARY 25, 1976
2. The equivalent of at least one-fifth of the work above specified is to be completed on or before NOVEMBER 20, 1978
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, 1982
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.

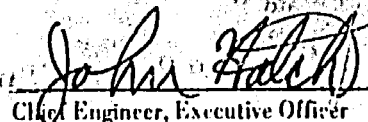
7. The amount of the appropriation herein granted shall not exceed 2.22 cubic feet per second; neither shall it exceed the capacity of the above described water supply system, nor shall it exceed the amount of water needed for beneficial uses served, and if for the irrigation purposes said appropriation 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, 1982; said water to be used during the following described annual period: MAY TO NOVEMBER

Witness my hand this 16TH day of JUNE, 1976

WATER RIGHTS COMMISSION

By:



Chief Engineer, Executive Officer

Certificate of Construction Issued _____, 19____

Water License Issued _____, 19____

WELL DRILLERS REPORT
SOUTH DAKOTA WATER RIGHTS COMMISSION

4-78

Well Owner:
Name Orcyn Nelson
Address Frankfort S.D.

Well Location: North

	+	+	
W			E
	+	+	

Mark location with an "X"

County Spink 1 mile

County Spink
1/4 SW 1/4 Sec. 33 Twp. 113 Rg. 64

Proposed Use:
☐ Domestic ☐ Municipal ☐ Test Holes
☒ Irrigation ☐ Industrial ☐ Stock

Method of Drilling:
☒ Forward Rotary ☐ Bored ☐ Jetted
☒ Reverse Rotary ☐ Cable ☐ Other

Well Construction:
Diameter of Hole 32
Depth 62
Casing ☐ Steel ☐ Concrete
☐ Plastic ☐ Other
If other, specify Fiberglass
Was casing end left open NO
Was a well screen installed YES
Describe Well Screen
Diameter 16 Material Fiberglass
Slot size 50 mesh
Was well gravel packed YES
Was well grouted NO
Was water sample taken NO

Remarks:

Water Level Information:
Static water level 12 ft below land surface
If flowing: closed in pressure PSI
rate of low GPM
Controlled by:
☐ Valve ☐ Reducers ☐ Other
If other; specify

Well Test Data:
☒ Pumped Describe:
☐ Bailed Describe:
☐ Other Describe:
Pumping Level Below Land Surface
30 ft. After Hrs. pumped 250 GPM
35 " " " " 250 " "
36 1/2 " " " " 250 " "

Well Log:

Formation	Depth	
	From	To
Shale	0	2
Clay	2	18
Shale	18	35
Med. Sand	35	57
Coal	57	58
Shale	58	59
Coal	59	62
Shale	62	63
Coal	63	65
Clay	65	67

(Use Back if Necessary)

Date Completed: 3/14/8

Driller: Frankfort S.D.
Driller's or Firm's Name Frankfort S.D. License No.
Address
Signed By Date 3/14/8

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

D. Well Information or Estimates

(1) Drill Hole, Diameter 30 inches, Depth 100 ft
 (2) Casing, Type concrete, Diameter 16, Thickness 2 inches
 (wood, concrete, steel, etc.)
 (3) Perforated Screen, Type concrete, Diameter 16", Length 60'
 (4) Gravel Pack, Thickness 5 inch, Length of gravel pack 60'

E. Dugout Information or Estimates

(1) Surface dimensions N/A (well), Depth N/A (well)

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 soft

Depth to top of water bearing material 50 ft

Depth to bottom of water bearing material 95 ft

Thickness of water bearing material 45 ft

Depth to water (ground surface to water level) 24 ft

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

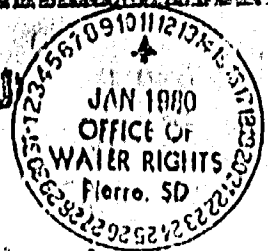
On same owner's property 380 yds. On property owned by others 100 yds.

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.

Orlyn Nielson
 Signature of Applicant

SOIL/WATER COMPATIBILITY APPLICATION FORM
STATE CONSERVATION COMMISSION
SOUTH DAKOTA DEPARTMENT OF AGRICULTURE



OWNERS NAME: Orlino Nielsen OWNERS ADDRESS: Tulare
COUNTY LAND LOCATED IN: Spink PHONE: 596 4364
TENANT'S NAME AND ADDRESS (if Other Than Owner): _____

In accordance with State Law SDCL 46-5-6.5, if a water right is granted with a conditional permit (Water Compatibility), a copy of such conditional permit must be filed with the County Register of Deeds.
Action must be taken by the holder of a water right within 6 months of receipt of such water right.

LEGAL DESCRIPTION: (Show Legal Description to Nearest 10 Acres.)

1. WELL LOCATION OR DIVERSION POINT: NW 1/4 of SW 1/4 of Sec 24-115-64 WS 11/9/80
[From location shown on map]

2. SURFACE WATER SOURCE: Stream

3. LOCATION OF AREA TO BE IRRIGATED: 24-115-64

4. INDICATE NON-IRRIGATED AREAS AND (APPROX.) ACRES ON MAP: (Farmstead, shelterbelts, wetlands, etc.)

5. TYPE OF IRRIGATION: (Show approximate acres under each type of system)

GRAVITY _____ TOWLINE _____ CENTER PIVOT X GUN _____ OTHER (Specify) _____

6. CROPS TO BE IRRIGATED: Corn, Alfalfa

7. SHOW ANY PORTION OF LAND THAT PRESENTLY HOLDS AN IRRIGATION PERMIT: YEAR OBTAINED: 1976

LAND: 24-115-64

IN WHAT NAME: Orlino Nielsen

8. WATER QUALITY: (TO BE COMPLETED BY SDSU WATER QUALITY LABORATORY)

9. SAMPLE NUMBER: _____

10. SALINITY (EC X 10⁶) _____

11. SODIUM (SAR) _____ ADJUSTED (SAR) 1.68

I hereby certify that I personally obtained or that I personally observed the water sample of the water to be used in irrigating the above-described land. I also hereby certify that the required procedures for the taking of the sample (see back) were followed, and that the sample was taken at 11:00 A.M. / P.M., on 11-27, 1979, at the following location: Orlino Nielsen

(Individual who took sample if other than applicant). I also hereby certify that the water sample taken has NOT been adulterated or tampered with in any manner, and is TRULY REPRESENTATIVE of the water which will be used in irrigating the above-described land.

I also hereby certify that a chemical analysis of the irrigation 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 further, that the legal description for the location of the well and land to be irrigated is true and correct.

I understand that the Division of Conservation or agents thereof may obtain another water sample for the purpose of validating the water sample analysis taken at the time of application (SDCL 46-5-6.4).

SUBSCRIBED AND SWORN BEFORE ME THIS
17 DAY OF November, 1979

Lyndon Wiess
(NOTARY PUBLIC)

Orlino Nielsen
APPLICANT'S SIGNATURE
Keith H. Larson
Director, Division of Conservation

APPROVED

DISAPPROVED

X CONDITIONALLY APPROVED

IMPORTANT

Approval by the Department of Agriculture or the State Conservation Commission is not the final action on any application.

Conditional

SOUTH DAKOTA DEPARTMENT OF AGRICULTURE
DIVISION OF CONSERVATION

NAME OF APPLICANT Orlyn Nielson, Tulare, South Dakota

SOIL RESTRICTIONS:

THE SOIL(S) LISTED BELOW CANNOT BE IRRIGATED:



RECOMMENDED MANAGEMENT:

1. Water should not be applied more than 3-4 times during the irrigation season.
2. Each uninterrupted application (one rotation of center pivot) should be of at least 2-3 inches of water.
3. ☒ Yes ☐ No Surface drainage suggested every 1/2 in N.W. 30 acre area.
4. ☐ Yes ☐ No Subsurface drainage suggested on _____
5. ☒ Deep tillage (for the purpose of aiding movement of water through dense subsoils.

COMMENTS: See below.

6. ☐ Heavy fall application of irrigation water.
7. Type of irrigation system recommended for use on this application center pivot.

GENERAL COMMENTS:

Even though your soils are sandy, you have two problem areas. An area in the E. 40 has columnar soil structure from the 15 to 20 inch depth that defies water penetration in its natural formation. This layer needs to be broken up for both water movement and salt leaching processes. An area in the NW 30 acres is extremely flat, subject to water accumulation and a high water table. I would suggest that an excavated area, one-half acre or more in size, and located just off the pivot circle would contain much of natural water accumulation. The excavated dirt could be used to slope the adjacent flat area and improve productivity. Accumulated waters could be pumped from the pit through your system to lower the water table whenever necessary.

Copy to applicant
Copy to Water Rights
Copy on File

Department of Agriculture

DIVISION OF CONSERVATION

Anderson Building, Room 322 0 Pierre, South Dakota 57501
Phone 605/773-3258

IRRIGATION PROGRAM: 773-3259

Date: January 11, 1980

Orlye Nielson
Tulare, South Dakota 57476



Dear Mr. Nielson:

This is in reference to your WI#1 Soil/Water Compatibility Application Form for the SW#-34-115-84

At this time we have conditionally approved your WI#1 Form. Your application is conditional as your water and soils are marginal in nature and there does exist a possibility of land damage. However, with a high level of water and land management, the risks are minimal.

Your conditionally approved application is now being forwarded to the Water Rights Commission for their action. Please be advised that the Water Rights Commission will make the final determination on your water right application.

The following conditions have been added to your application. If these limits of salt and sodium build-up in the soil are exceeded, or soil restrictions are not followed, the State Conservation Commission may request suspension of your water right. However, the primary purpose of imposing these conditions upon your application is to call your attention to the necessity of avoiding salt and sodium build-up beyond these levels. As you reach or exceed these levels land and crop damage begins to occur. We urge you to begin a system of monitoring the salt and sodium conditions in your soil so that you may take action on your own if the build-up approaches these levels. In relation to the overall cost of installing and maintaining an irrigation system, the cost of monitoring soil conditions will be insignificant.

If you desire assistance in establishing a monitoring system, you may obtain assistance from a variety of places including this office, the Water Quality Laboratory at South Dakota State University, your Extension Agent or your local Conservation District.

CONDITIONS:

SALT: Maximum allowable salt build-up in soil profile: 3000 micromhos/cm
SODIUM: Maximum allowable sodium build-up in soil profile: 8% sodium saturation.
SOIL RESTRICTIONS: As noted on management form.

Sincerely,

Keith Harner, Director
Division of Conservation
d

Enclosure: Management Form

Water Quality Laboratory
Water Resources Research Institute
South Dakota State University
Brookings, South Dakota 57007

Submitted by: Orlyn Nielson
Address: Tulare, SD 57476

Date Rec'd: December 11, 1979
Sample No.: 79-744
Identification: Well
S. 1, Sec. 34, T. 115N, R. 64E

WATER ANALYSIS

Calcium (Ca)	248	ppm*	12.40	me/l**
Magnesium (Mg)	62	ppm	5.12	me/l
Sodium (Na)	55	ppm	2.39	me/l
Potassium (K)	13	ppm	0.34	me/l
Sulfate (SO ₄)	462	ppm	9.61	me/l
Nitrate (as N)		ppm		me/l
Chloride (Cl)	16	ppm	0.46	me/l
Bicarbonate (HCO ₃)	571	ppm	9.36	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)	463	ppm (as CaCO ₃)		
Alkalinity (Phenolphthalein)	0	ppm (as CaCO ₃)		
Electrical Conductivity	1422	micromhos per cm at 25° C.		
Sodium Adsorption Ratio	0.80	Adjusted SAR	2.40	1.48
Sodium	11.80	% of cations		
Residual sodium carbonate	0.00	me/l		
pH	7.22			

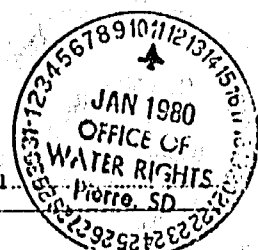
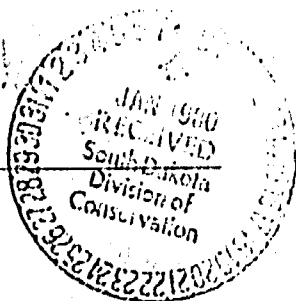
Others:

*ppm=parts per million

**me/l=millequivalents per liter

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

COMMENTS: Total cations 20.25 me/l
Total anions 19.43 me/l



By: Shirley Kistan

Service Performed

Amount Due

Irrigation Analysis

\$15.00

Make checks payable to: Water Quality Laboratory

Cut along dotted line and return the lower portion with payment

Sample No. 79-744

Amount Enclosed \$

Signed

Enclosure

March 9, 1976



Mr. Orlyn Nielsen
Tulare, SD 57476

Dear Mr. Nielsen:

Your WI-1 form has been received and the water analysis from the southwest quarter of section 34 has been completed. The original copy of the report of analysis is enclosed herewith for your keeping.

I have plotted the approximate quality of this water for irrigation purposes by means of a red cross in the diagram on the outside back cover of AES publication #13 also enclosed for your use. You will see that it is in the high salinity, low sodium category.

This classification means that the water has a very low content of sodium relative to other cations and thus there should be no hazard of sodium-caused dispersion of soil aggregates and loss of the structural features which it presently has. However, there is a considerable salt load in this water and it may cause accumulation of salts which will be detrimental to crop growth if improper irrigation practices are followed. Improper irrigation practices in this context means frequent, light application of waters with no periods of substantial rainfall or irrigation to leach the salts down and out of the root zone. In addition to that, there is a small area of soil designated as #26 on the Spink County map in the southwest corner of this quarter which is Bonilla and may have considerable salt in it within the top 5 feet of the soil surface. Any irrigation practice which raises the water level sufficiently so that these salts can come to the surface will, of course, result in very disappointing performance of that area. Furthermore, the fertility of all of these soils is apt to be somewhat low so that you would have to be careful to fertilize adequately but yet not to the point that your fertility is leached out in the event of over-irrigation or heavy precipitation. However, as indicated above, there should not be any substantial problem with chemical difficulties as a direct result of the water if good irrigation management is used. The management which I would suggest is no more than 3 irrigations in any one growing season and irrigating in sufficient quantity each time to thoroughly wet the soil profile to the full depth of rooting of whatever crop is growing.

A copy of this letter, and 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

LOF:ckb

cc: State Conservation Commission, D. Pahl, Robert Sampson (Co. Ext. Ag.)

CONSERVATION
COMMISSION
WI #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 WELL IRRIGATION ONLY)

FOR COMMISSION USE ONLY

IRRIGATION SYSTEM _____

WATER QUALITY _____

SOILS CAPABILITY _____

APPROVED _____

DISAPPROVED _____

NAME

ADDRESS

COUNTY

LEGAL DESCRIPTION

1. WELL LOCATION

2. AREA TO BE IRRIGATED

TYPE OF IRRIGATION

3. GRAVITY

SPRINKLER (INDICATE TYPE)

4. CROPS TO BE IRRIGATED

LAND CAPABILITY FOR IRRIGATION

5. PERCENTAGE OF SLOPE

6. PHYSICAL SOILS CLASSIFICATION FOR IRRIGATION

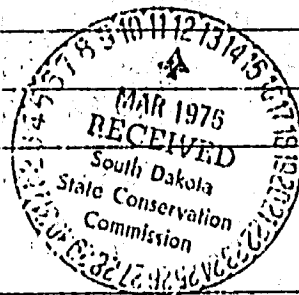
WATER QUALITY

(TO BE COMPLETED BY COMMISSION)

7. SAMPLE NUMBER

8. SALINITY

9. SODIUM



Hecla & Acker
Hecla Loamy Sand Series - 0-2' + Sandy loam - 0-2'
Hecla Loam + Hecla Siltstone - Good for Sprinkler Irrigation
Robert S. Thompson
State Conservation Agent
Repaired Hecla
57469

I DO HEREBY CERTIFY THAT A CHEMICAL ANALYSIS OF THE GROUND WATER TO BE
ACQUIRED FOR IRRIGATION FROM SOUTH DAKOTA STATE UNIVERSITY AND:

THE LAND CAPABILITY FOR IRRIGATION INFORMATION HAS BEEN ACQUIRED FROM

AND:

THAT THE LEGAL DESCRIPTION FOR THE LOCATION OF THE WELL AND LAND TO BE
IRRIGATED IS TRUE AND CORRECT.

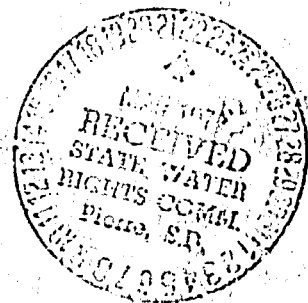
Robert Simpson, Agricul. Agent
Elwood, D. Dak.
51469

Oliver Nelson

SUBSCRIBED AND SWORN BEFORE ME THIS

21 DAY OF February 1976.
Elwood, S. Dak.

Notary Public
(TITLE)



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

Submitted by: Orlyn Nielsen
 Address: Tulare, SD 57476

Date Rec'd: February 26, 1976
 Sample No. 76-158
 Identification Well:
SW 1/4, Sec. 34, T 115N, R 64W

WATER ANALYSIS

Calcium (Ca)	180	ppm*	9.00	me/l**
Magnesium (Mg)	52	ppm	4.26	me/l
Sodium (Na)	108	ppm	4.70	me/l
Potassium (K)	16	ppm	0.42	me/l
Sulfate (SO ₄)	310	ppm	6.45	me/l
Nitrate (as N)		ppm		me/l
Chloride (Cl)	30	ppm	0.85	me/l
Bicarbonate (HCO ₃)	544	ppm	3.92	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)	446	ppm (as CaCO ₃)		
Alkalinity (Phenolphthalein)	0	ppm (as CaCO ₃)		
Electrical Conductivity	1432	micromhos per cm at 25° C.		
Sodium Adsorption Ratio	1.83			
Sodium	25.57%	of cations		
Residual sodium carbonate	0.00	me/l		
pH	7.08			

Others:

*ppm=parts per million

**me/l=millequivalents per liter

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



COMMENTS: Total cations 18.38 me/l
 Total anions 16.22 me/l

By: Shirley Hittan

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. 76-158

Amount Enclosed \$

Signed

Form 6 - Notice of Intent to Appropriate Water

2659-3

Publish first publication, on or before May 6, 1976

**NOTICE
INTENT TO APPROPRIATE WATER**

Pierre, South Dakota 57501

April 12, 1976

Notice is hereby given that Orlyn Nielson
whose post office address is Tulare, 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
ground water
2.22 cubic feet of water per second of time from the through the

Nielson #3, the point of diversion of which is to be located in the _____

Center of the SW 1/4

of Section 34, Twp. 115N Range 64W. Said water to be used for the purpose
of providing irrigation on ^{portions of} the following described land:
SW 1/4, Section 34, T115N, R64W

2659-3

This application No. 20th will be considered by the Water Rights Commission at their office at
May 76 1:00 P.
Pierre upon the _____ day of _____, 1976, at _____ M. All interested
persons may appear and be heard.

WATER RESOURCES COMMISSION

By:

BURTON F. JONES
Water Rights Specialist

BFJ/bw
cc:

Orlyn Nielson, Tulare, S.D. 57476

PROOF OF PUBLICATION

STATE OF SOUTH DAKOTA)
County Spink) ss.

I, Harold D. Jones, hereby
certify that the annexed printed copy of Notice of Intent to Appropriate
Water was taken from the Redfield Press

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

April 22, 1976

April 29, 1976

Harold D. Jones
(Signature)

Editor
(Title)

April 29, 1976
(Date Signed)

No. 78

No. 2659-3
NOTICE INTENT TO
APPROPRIATE WATER
Pierre, South Dakota 57501
April 12, 1976

Notice is hereby given that
Orlyn Nielson whose post office
address is Tulare, South Dakota,
has made an application in ac-
cordance with the provisions of
the water laws of South Dakota
for a permit to appropriate for
beneficial use 2.22 cubic feet of
water per second of time from
ground water through the Nielson
No. 3, the point of diversion of
which is to be located in the
Center of the SW 1/4 of Section 34,
Twp. 116N, Range 64W. Said
water to be used for the purpose
of providing irrigation on por-
tions of the following described
land: SW 1/4, Section 34, T116N, R64W.
This application No. 2659-3 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 in-
terested persons may appear and
be heard.

WATER RESOURCES
COMMISSION
DIVISION
BURTON F. JONES
Water Rights
Pierre, S.D.



Permit No. 2659-3Water Division 3 JAMES 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 ORLYN
NIELSON of TULARE holder
 of Permit No. 2659-3, bearing date of priority of FEBRUARY 25, 1976
 authorizing the diversion of 2.22 cu. ft. per second of the waters of GROUNDWATER
 for IRRIGATION purposes, in SPINK 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:

68' DEEP WELL WITH 16" FIBREGLAS CASING - 30' FIBREGLAS SCREEN
WESTERN LAND ROLLER 8" PUMP - (NO TAG) POWERED
BY 60 HP US ELECTRIC MOTOR AT 1750 RPM

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

590' OF 8" BURIED PVC TO CENTER OF PIVOT

C. Works used to apply water to beneficial use.

T & L 7 TOWER CENTER PIVOT WITH NELSON #100 END GUN

The system is in the following condition: GOOD

The point of diversion is located 1750' N & 900' E OF THE SW CORNER,
SECTION 34, T115N, R64W

The works are capable of diverting and conveying to the place of use 1.78 CFS (80 GPM)
 cu. 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:

FOR IRRIGATING A 132 ACRE CIRCLE IN THE
SW⁴, SECTION 34, T115N, R64W

comprising a total of 132 acres of land.

Date

JULY 1, 1987
[Signature]
 (Signature)



Water & Natural Resources

Joe Foss Building Water Rights Division
Pierre, South Dakota 57501

(605) 773-3352

July 15, 1982

Orlyn Nielson
Tulare,
South Dakota 57476

Dear Mr. Nielson:

The inspection of your water use system and inspection of the extent of your application of water to beneficial use, as developed under your Water Right No. 2659-3 has been completed. Your final water right document, the Water License, can now be issued.

Statutes require that we charge a \$50.00 fee for the inspection and issuing of the Water License. Upon receipt of the \$50.00 fee from you, your Water License will be sent to you.

You will also receive the Certificate of Construction as required by statute.

Sincerely,

KAREN SCHLAACK
Administrative Secretary

NOTE: On form of payment, please include the number of the water permit.
This insures proper handling of the fee.

Permit No. 2659-3

Water Diversion No. 3 James River Water District

10160006

CERTIFICATE OF CONSTRUCTION

This is to Certify, That _____ Orlyn Nielson _____

_____ the holder _____ of
Permit No. 2659-3, issued upon Application No. 2659-3, bearing date of priority of _____

February 25, 1976 authorizing the diversion of 2.22 cu. ft. per second of the waters of _____
groundwater (one well) County of Spink, State of South Dakota at _____
a point 1750'N and 900'E of the SW corner, Section 34, T115N, R64W (CB)

_____ for for irrigation _____

purposes, has 5 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 July 22, 1982 _____

John Hatch
JOHN HATCH, Chief Engineer
Water Rights Division

WATER LICENSE NO. 2659-3

(1) WHEREAS, On the 25th day of February A. D. 19 76
Orlyn Nelson

made Water Right Application No. 2659-3 for a permit to use 2.22 cubic feet per second of the waters of groundwater (one well)

County of Spink, State of South Dakota, for February 25, 1976

_____ purposes; and

(2) WHEREAS, On the 20th day of May A. D. 19 76
Permit No. 2659-3, with a date of priority of February 25, 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 20th day of May A. D. 19 81 and for the application to beneficial use of said water on or before the 20th day of May A. D. 19 82

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 1.78 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,

to irrigate a 132 acre circle in the SW $\frac{1}{4}$ of Section 34, T115N, R64W

(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 Orlyn Nielson

_____ of Tulare, South Dakota

the holder _____ and owner _____ of said permit No. 2659-3 a water right, dating from February 25, 1976

_____ to use of 1.78 cubic feet per second of the waters

of groundwater (one well)

in the County of Spink and State of South Dakota, or so much thereof as may be necessary for the

purposes hereinbelow mentioned, to be diverted at a point 1750'N and 900'E of the SW Corner,

Section 34, T115N, R64W (CB)

and conducted to and upon a 132 acre circle in the SW 1/4 of Section 34, T115N, R64W.

for the purpose of Irrigation

Subject to any limitations listed in Water Right Permit No. 2659-3 and subject to the laws of the State of South Dakota.

WITNESS, My hand and seal of our office at Pierre, South Dakota
this 22nd day of July A. D.

Nineteen Hundred and Eighty-Two

WATER MANAGEMENT BOARD

By:

John Hatch
Chief Engineer, Executive Officer
JOHN HATCH

RECEIPT

WATER RIGHTS COMMISSION

No 4 8903

State of South Dakota

PIERRE, July 21, 1982

RECEIVED OF Orlyn Nielson, Pierre, South Dakota 57476
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. <u>2688-3</u>	50	00
Fee for inspecting Beneficial Use, and issuing Water License No. <u>2688-3</u>		
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 D. L. Hest
Chief Engineer, Executive Officer



Department of Water & Natural Resources

Joe Foss Building
523 East Capitol
Pierre, South Dakota 57501

Division of Water Rights
605 773-3352

2659-3

No. 108-3

1708-3

December 13, 1983

Larry Nielson
RR#1, Box 26
Tulare, South Dakota 57476

Dear Mr. Nielson:

Please find enclosed a copy of a Notice of Transfer of Water Permit form. This form must be signed by the owner before a notary and returned to this office with a filing fee of \$2.50 **for each, total of \$7.50.**

Upon receipt of the enclosed forms and the \$2.50 filing fee **for each** the permit will be transferred to the proper name. South Dakota Water Law 46-5-30.3 requires Notice of any sale, grant, lease, conveyance or other transfer of a Water Permit or Water Right to appropriate water to be filed with this office within ninety days.

Please advise if you have any questions.

Sincerely,

Maxine Stirling
Staff Assistant

ms/
Enc.

DWNR-820A-8/83

**South Dakota Department of
Water & Natural Resources**

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

Water Rights Division
605 773-3352

March 14, 1984

SECOND NOTICE
Permit Nos. 108-3

1708-3

2659-3

Larry Nielson
RR 1 Box 26
Tulare SD 57476

Dear Mr. Neilson

On December 13, 1983 notice was sent to you concerning the transfer of Water Permit Nos. 108-3, 1708-3 and 2659-3 in the name of Orlyn Nielson. To date, we have not heard from you on this matter.

Transfer forms were previously sent to you, enclosed please find additional forms. Please sign, have notarized and return the form to this office with the required filing fee of \$2.50 each (\$7.50 total). The permits can then be transferred to your name. If you are not the present owner of the land covered under these Permits, please notify this office. It is very important that ownership records be kept current. The first notice was sent to you made reference to South Dakota Water Law 46-5-30.3 which requires Notice of any sale, grant, lease, conveyance or other transfer of a Water Permit or Water Right to appropriate water to be filed with this office within ninety days.

If you have any questions, please contact us.

Very truly yours,

JOHN HATCH, Chief Engineer
Water Rights Division

ks

enclosures

Equal Opportunity Employer



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

Water Rights Division
605 773-3352

Department of Water & Natural Resources

April 9, 1984

108-3

1708-3

2659-3

Larry Nielson
RR #1, Box 26
Tulare SD 57476

Dear Mr. Nielson:

Enclosed is receipt Nos. 4 9633 thru 4 9635 in the amount of \$2.50 each which you paid for transfer of Water Right Nos. 108-3, 1708-3 and 2659-3.

Our records now show you as the owner of these Water Rights.

Sincerely,

KAREN SCHLAAK
Administrative Aide

enclosure

Equal Opportunity Employer

RECEIPT

Division of Water Rights

No 4 9635

South Dakota Department of Water and Natural Resources

Pierre, April 6, 1934

RECEIVED OF Larry Nielsen, RR#1, Box 26, Tulare, SD 57476

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

Fee for Application for Permit No. _____ to Appropriate Water, to construct works and to put water to beneficial use _____		
Fee for Application for Permit No. _____ to Appropriate Water for Future Use _____		
Fee to retain Future Use Permit No. _____ after period of seven years.		
Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. _____		
Fee for Filing Transfer Form 2659-3 _____	2	50
Fee for Filing Extension Request _____		
Fee for Certified Copy of _____		
Fee for Print Copy of Map _____		
Fee for Certifying _____		
Fee for _____		
(Any Other Work Provided by Law)	Total	2 50

By John Hatch
Chief Engineer JOHN HATCH *ms*

NOTICE OF TRANSFER OF WATER PERMIT

TO: Water Rights
Foss Building
Pierre, SD 57501

Date: 1/17/84

This is to notify you that the title to the lands described as follows:

132 acres - SW 1/4 Section 34, T115N, R64W

formerly owned by Orlyn Nielson

has been transferred to Larry Nielson, RR#1, Box 26, Tulare, SD 57476

(please include complete mailing address)

together with any rights to the beneficial use of water thereon as evidenced by

Water Right Permit No. 2659-3 as provided for in SDCL 46-5-32 and 46-5-33.

You are therefore hereby requested to file this "Notice of Transfer of Water Permit" in its appropriate file at the Div. of Water Rights, Water Management Board as evidence of the change of ownership.

A fee of Two Dollars and Fifty Cents (\$2.50) is hereto attached to cover filing fees as required under SDCL 46-2-13.

STATE OF SOUTH DAKOTA)
County of Spink) ss.

I, Larry Nielson being first duly sworn on my oath depose and say: That my relation to the above described undertaking is that of Owner, that I have read the above foregoing statement, and I know of my own personal knowledge that the information herein stated is true.

Larry Nielson
(Signed)

Subscribed and sworn to before me this 17th Day of January, 1984.

Elmer DeBor
(Notary Public)



1975

 **Department of
Water & Natural Resources**

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

4108-3
#1708-3
#2654-3
#4435-3

February 17, 1989

Larry Nielson
RR 1, Box 26
Tulare, SD 57476

Dear Mr. Nielson:

On October 6, 1988, the Water Management Board adopted rules to implement a 1988 law for application of chemicals through irrigation systems. The rules establish equipment standards, performance standards and installation requirements for irrigation systems that apply chemicals (fertilizers, insecticides, or herbicides) with irrigation water.

You have indicated on your 1988 Water Management Board Irrigation Questionnaire that you do apply chemicals with irrigation water. A copy of the new rules for chemigation are enclosed for your information.

The new standards include:

- * a check valve between the irrigation pump and the point of chemical injection;
- * a vacuum relief valve on top of the pipeline between the irrigation pump and the irrigation pipeline check valve;
- * a low-pressure drain on the bottom of the pipeline between the irrigation pump and the irrigation pipeline check valve;
- * a chemical injection line check valve between the chemical injection pump and the point at which the chemical is injected into the irrigation line; a second check valve is required if the chemical injection pump is not a positive displacement pump;
- * an interlock system which ensures that the chemical injection pump will stop whenever the irrigation pump stops;
- * an inspection port between the irrigation pump and the check valve on the irrigation line;

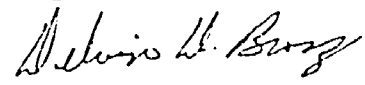


Each of these equipment requirements are discussed more thoroughly in Sections 74:02:09:05 through 74:02:09:10 of the enclosed rules. Appendix A contains diagrams of the arrangements of these anti-pollution devices.

The equipment must be installed according to the manufacturer's specifications, calibrated, and maintained in good working condition. All chemical product labels must be followed and warning signs must be posted. These rules also require reporting of all spills, accidents, and system malfunctions. A 24-hour telephone number is provided.

The chemigation rules contain notification and record keeping requirements. Prior to using chemigation, notification must be given to the Chief Engineer on the enclosed Form 1C. Information that must be provided in this notification includes the water permit or right number, the name, address, and telephone number of the water permit or right holder and of the system operator, and the legal description of the lands on which the system is located. A record of the name, quantity, dates and hours of each chemical applied must be provided to the Chief Engineer on Form 2C. A copy of this form is also enclosed for your information. It will be mailed with the annual irrigation questionnaire and must be returned with the questionnaire by the date specified. If you have any questions regarding these rules or need additional copies of the forms, please contact Susan Bowar, Water Rights Engineer (605-773-3352).

Very truly yours,

for 
JOHN HATCH, Chief Engineer
Water Rights Division



Robert Sampson
Special Agent
Redfield, 57469

well

MAP RE-2015-3 APPC NO-2659-B

TULARE T115N R64W 534

NOT TO SCALE

2659-3

Orlin Hulson

115-64

62.1

579-874

69.0

87

10.0

69.0

66.4

34

83

102

NC

NC

NC

39.7

900'

132.5

Taken from '80 slides

WELL

500'
8" PVC

1750'

34.8

115-64

NC

NC

NC

WR# 2659-3

map # 2025-3