

Water Right Number 4133-3

1. Considered 10-6, 1 17
2. Name of Applicant CHARLES V. ALVERSON
3. Post Office Address CHESTER
4. Amount of water claimed 1.14
5. Source of water supply 70' DEEP WELL
6. Water to be used for IRRIGATION
- Acres to be irrigated 80
7. Water to be diverted and used in LAKE County
about 1/2 W Miles 1 of CHESTER
8. Proof of Publication
Received 9-29-77
Not received _____
9. Application
Approved _____
Subject to _____
Not approved _____
Action deferred _____

10. Remarks:

Map No. 3364-3 Water Division No. 3 BIG SIOUX RIVER District 4133-3
(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 Charles V. Alverson
Postoffice address Chester 57016 State South Dakota
If a corporation show date and place of incorporation _____
2. Method of accomplishing work (contract, employment of others, or by direct labor) Contract & Direct Labor
3. Name of diversion work Charles Alverson Irrigation Project #2
4. Amount of water claimed (cubic feet per second) 1.14
5. Source of water supply well
6. Location of point of diversion 2-680' N 105° E of NW corner Sec. 15-105-51
County Lake
7. Annual period or periods during which water is to be used April through October
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 81

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.
SW ^{1/4} of NW ^{1/4} Sec. 15-105-51	40		
SE ^{1/4} of NW ^{1/4} Sec. 15-105-51	40		

Attach sheet if more space is needed

10. 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.
11. Choice of newspaper for Notice of Intent to Appropriate Water publication Hudson Daily Leader
12. Principal Features of the Proposed Water Supply System.

A. Works proposed to divert water from its natural source. well with deep well turbineB. Works proposed to transport water to place of use closed conduitC. Works proposed to apply water to beneficial use. center pivot irrigation machineEstimated Total Cost \$30,000

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 Beakmire

I, Charles V. Alverson 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 Charles AlversonSubscribed and sworn to before me this 15 day of Aug 1977

John J. [Signature]
Notary Public (or other qualified officer)

WATER RIGHT APPLICATION APPROVAL

The Water Resources Commission hereby approves Water Right Application No. 4133-3

CHARLES V. ALVERSON
(Applicant)

CHESTER
(Post Office Address)

SOUTH DAKOTA 57016
(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 adequate domestic wells or in irrigation wells having prior water rights.

Date of first receipt of application AUGUST 26 19 77

Date of return to applicant for correction, amendments or changes required AUGUST 26 19 77

Date of receipt of corrected application SEPTEMBER 15 19 77

Approved OCTOBER 7 19 77, Recorded in Book 19 Page 137

WATER RIGHT PERMIT NO. 4133-3

The Water Resources Commission hereby grants and issues this Water Right Permit No. 4133-3 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 AUGUST 26 19 77
2. The equivalent of at least one-fifth of the work above specified is to be completed on or before APRIL 7 19 80
3. The whole of said work is to be completed on or before OCTOBER 7 19 82
4. The limit of time from proof of beneficial use of water appropriated in accordance herewith is OCTOBER 7 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 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 use 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 OCTOBER 7 19 85; said water to be used during the following described annual period: APRIL THRU OCTOBER

Witness my hand this 3RD day of NOVEMBER 19 77

WATER RESOURCES COMMISSION

By

John Hatch
Chief Engineer, Executive Officer

Certificate of Construction Issued _____ 19 ____

Water License Issued _____ 19 ____

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 2.4", Depth 70'
- (2) Casing, Type steel (wood, concrete, steel, etc), Diameter 16" Thickness 1/4"
- (3) Perforated Screen.
Type Cent. slot, Diameter 16", Length 10'
- (4) Gravel Pack, Thickness 4", Length of gravel pack Full length

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 30' mixed
silt & clay, 30' to 70' mixed sand & gravel,
70' + clay

Depth to top of water bearing material 30'

Depth to bottom of water bearing material 70'

Thickness of water bearing material 40'

Depth to water (ground surface to water level) 30'

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

On same owner's property 150 rds. On property owned by others 90 rds.

G. Water Storage Dams.

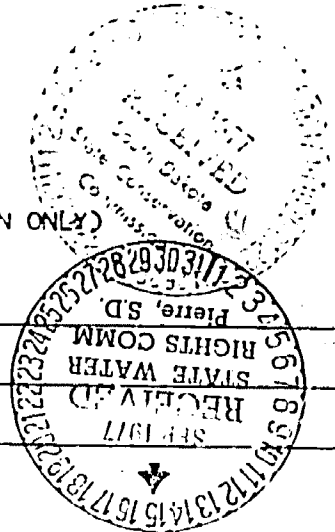
If the proposed water use system contains one or more water storage dams, please show in the space below, the height, maximum water depth, surface area and storage capacity of each storage dam. The location of each water storage dam should be shown on the water right map.

Shaula Olson
Signature of Applicant

SION
#1 #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 GROUND WATER IRRIGATION ONLY)

NAME Charles V. Alverson
ADDRESS Chaslev S Dak 57016
COUNTY Lake



LEGAL DESCRIPTION

1. WELL LOCATION SW¹ of NW¹ Sec 15-105-51
2. LOCATION OF AREA TO BE IRRIGATED SW¹ of NW¹ Sec 15-105-51

TYPE OF IRRIGATION

3. GRAVITY _____ TOWLINE _____ CENTER PIVOT ☒ GUN _____
4. CROPS TO BE IRRIGATED corn & alfalfa

WATER QUALITY

5. SAMPLE NUMBER 77-1309
6. SALINITY (EC X 10⁶) 1216 (high)
7. SODIUM (SAR) 0.49 (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.

Charles V. Alverson
APPLICANT'S SIGNATURE

SUBSCRIBED AND SWORN BEFORE ME THIS
12 DAY OF Aug 19 77.

[Signature]
(TITLE OR SEAL)

Albert J. Hoff
APPROVED/DISAPPROVED

(SOILS INFORMATION ON REVERSE SIDE)

SOUTH DAKOTA DEPARTMENT OF AGRICULTURE
DIVISION OF CONSERVATION

(RECOMMENDED MANAGEMENT)

NAME OF APPLICANT Charles Alverson, Chester, South Dakota

RECOMMENDED MANAGEMENT:

1. Water should not be applied more than 1, 2, 3, 4, 5, times during the irrigation season.
2. Each uninterrupted application (one rotation of center pivot) should be of at least 1, 2, 3, 4, inches of water.
3. ☒ Yes ☐ No Surface drainage suggested-Any area that ponds water.
4. ☐ Yes ☐ No Subsurface drainage suggested
5. ☐ Yes ☐ No Specific land areas that should be avoided

Your silty clay loam spots that are apt to pond water are rather small and
are inclusions along with your better irrigable soils. Wheel tracking should
be avoided by modifying the actual trading pattern.

6. ☐ Deep tillage (For the purpose of aiding movement of water through dense subsoils)
7. ☐ Heavy full application of irrigation water

Actual EC	1216
Permissible EC	1500

Experience with deep chiseling will enable you to determine to what extent and depth will work best for you.

Copy to Applicant - 1
Copies to Water Rights - 2
Copy to File - 1

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

Submitted by: Charles Alverson
 Address: Chester, SD 57016

Date Rec'd: August 23, 1977
 Sample No. 77-1309
 Identification Wall-

WATER ANALYSIS

Calcium (Ca)	186	ppm*	9.30	me/l**
Magnesium (Mg)	62	ppm	5.08	me/l
Sodium (Na)	30	ppm	1.31	me/l
Potassium (K)	7	ppm	0.18	me/l
Sulfate (SO ₄)	260	ppm	5.41	me/l
Nitrate (as N)		ppm		me/l
Chloride (Cl)	30	ppm	0.84	me/l
Bicarbonate (HCO ₃)	407	ppm	6.68	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)	334	ppm (as CaCO ₃)		
Alkalinity (Phenolphthalein)	0	ppm (as CaCO ₃)		
Electrical Conductivity	1216	micromhos per cm at 25° C.		
Sodium Adsorption Ratio	0.49			
Sodium	8.25	% of cations		
Residual sodium carbonate	0.00	me/l		
pH	7.11			

*ppm=parts per million

**me/l=millequivalents per liter

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

COMMENTS: Total cations 15.87 me/l
 Total anions 12.93 me/l

By: Shirley Witten

Service Performed

Amount Due

Irrigation analysis

\$15.00

Make checks payable to: Water Quality Laboratory

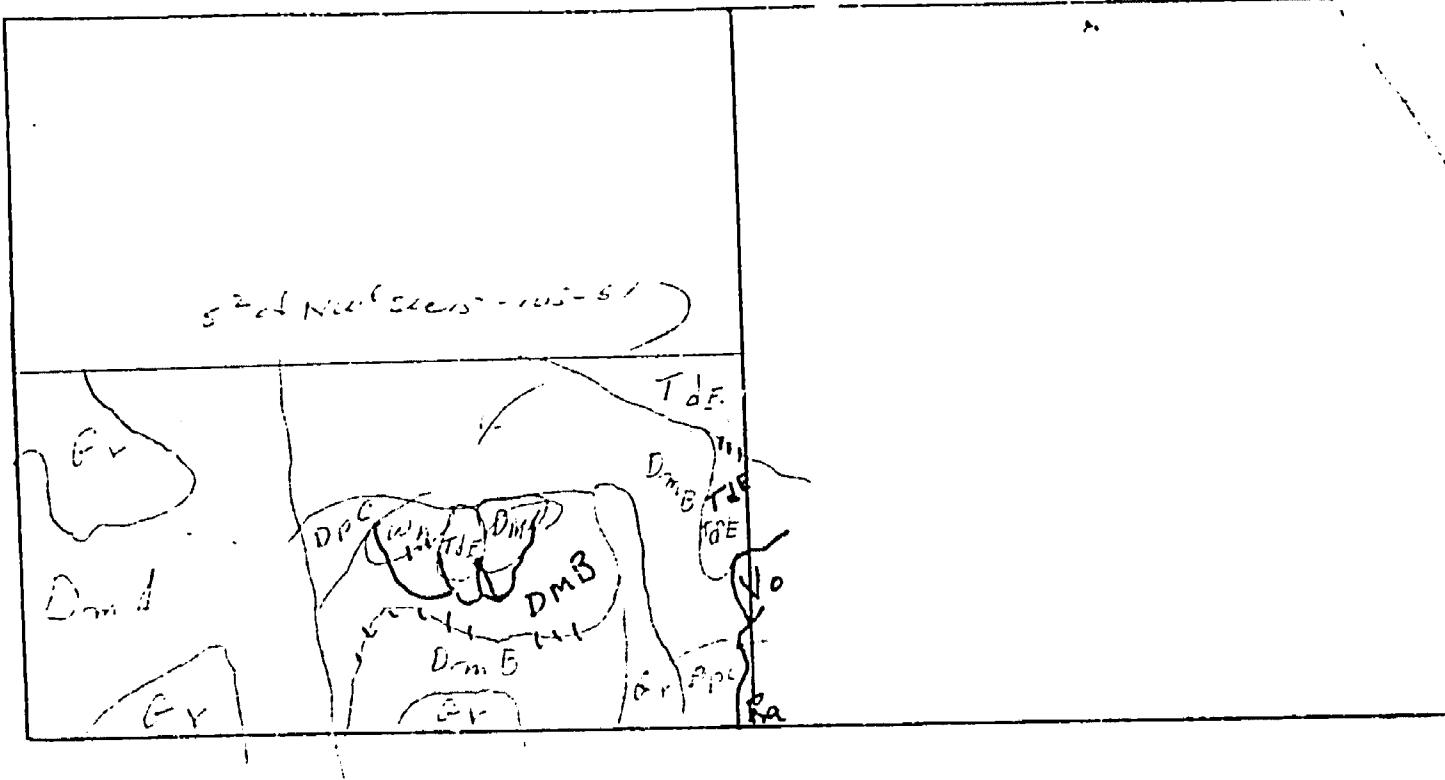
Cut along dotted line and return the lower portion with payment

Sample No. 77-1309

Amount Enclosed \$

Signed

MAP



NARRATIVE

- Gr - Graceville silty clay loam
- Dm A - Dampston silt loam - 0 to 4% slope
- Dm B - Dampston silt loam 2 to 4% slope
- T d E - Tolmie - Delmont loam
- Wh - Whiskey Creek silty clay loam
- ~~Wh~~
- Dm C - Dampston - Delmont complex 6 to 24% slope
- Ra - Rauville silt loam
- Vo - Volge silt loam

Publish first publication, on or before September 22, 1977

NOTICE OF HEARING ON
APPLICATION TO APPROPRIATE WATER

Pierre, South Dakota 57501

September 16, 1977

Notice is hereby given that Charles V. Alverson whose post office

address is Chester, South Dakota, has made an application in accordance with the provisions of SDCL 46-1-1 thru 46-1-8; 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, 46-6-14 and Commission Rules ARSD 52:01:01:01 thru 52:01:01:13, for a permit to appropriate for beneficial use 1.14 cubic feet of water per second of time from ground water

through the Alverson #2, the point of diversion of which is to be located in the _____

SW 1/4 NW 1/4

of Section 15, Twp. 105N Range 51W. Said water to be used for the purpose of providing irrigation on portions of the following described land:

S 1/2 NW 1/4, Section 15, T105N, R51W

This Application No. 4133-3 will be considered by the Water Rights Commission at the Holiday Inn, Spearfish, S.D. upon the 6th day of October, 1977 at 10 A.M. The Commission is authorized to make a determination on this application at the hearing. All interested persons may appear and be heard. Any person who may be affected by a Commission decision who desires to present evidence or cross-examine witnesses according to SDCL 1-26 may notify the Commission in writing prior to the hearing or orally at the hearing.

WATER RIGHTS COMMISSION

BURTON E. JONES
Water Rights Specialist

cc: Charles V. Alverson, Chester, S.D. 57016

NOTE: THE FINAL PROOF OF PUBLICATION MUST BE RECEIVED BEFORE THE HEARING DATE FOR THE COMMISSION TO TAKE ACTION.

*big 500
go
lake*

**NOTICE OF HEARING ON
APPLICATION TO
APPROPRIATE WATER**

3 Oct. 1977

Dear Sirs:

Would like to have attended the hearing to appropriate water on the 6th of Oct. but will be unable to be there.

Have not heard any talk against my application so I doubt if there will be anyone here to object it.

I have a permit in the other corner of Sec. 15. This well has been used since 1968 without any problems. In the last two years I have checked the level of water at different times during the summer and it has always held very steady. Never have I ever pumped any air drawing 800 gal. per minute. There is very little irrigation in this area and we certainly seem to have an abundant aquifer.

Am hoping that you will approve my request.

Sincerely
Charles Olson



Department of Water & Natural Resources

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

#1328-3

11-4133-3

February 17, 1989

Charles Alverson
Rt. 1, Box 45
Chester, SD 57016

Dear Mr. Alverson:

On October 5, 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;

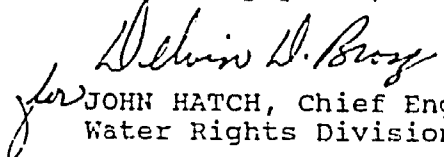


Each of these equipment requirements are discussed more thoroughly in Sections 74:02:09:05 through 74:02:09:10 of the enclosed rules. Appendix A contains diagrams of the arrangements of these anti-pollution devices.

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,


JOHN HATCH, Chief Engineer
Water Rights Division

South Dakota

4133-3

GREAT PLACES GREAT PLACES.

NOV 23 1992

DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3131

4133A-3

Charles Alverson
RR 1, Box 45
Chester, SD 57016

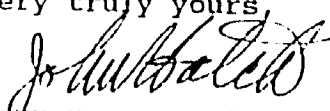
Dear Mr. Alverson:

Enclosed is Water License No. 4133A-3. This is the final water right document completing your process of obtaining a Water Right. Enclosed is Receipt No. 413372 in the amount of \$50.00 which you paid for the inspection and issuance of the Water License.

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. 4133A-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.

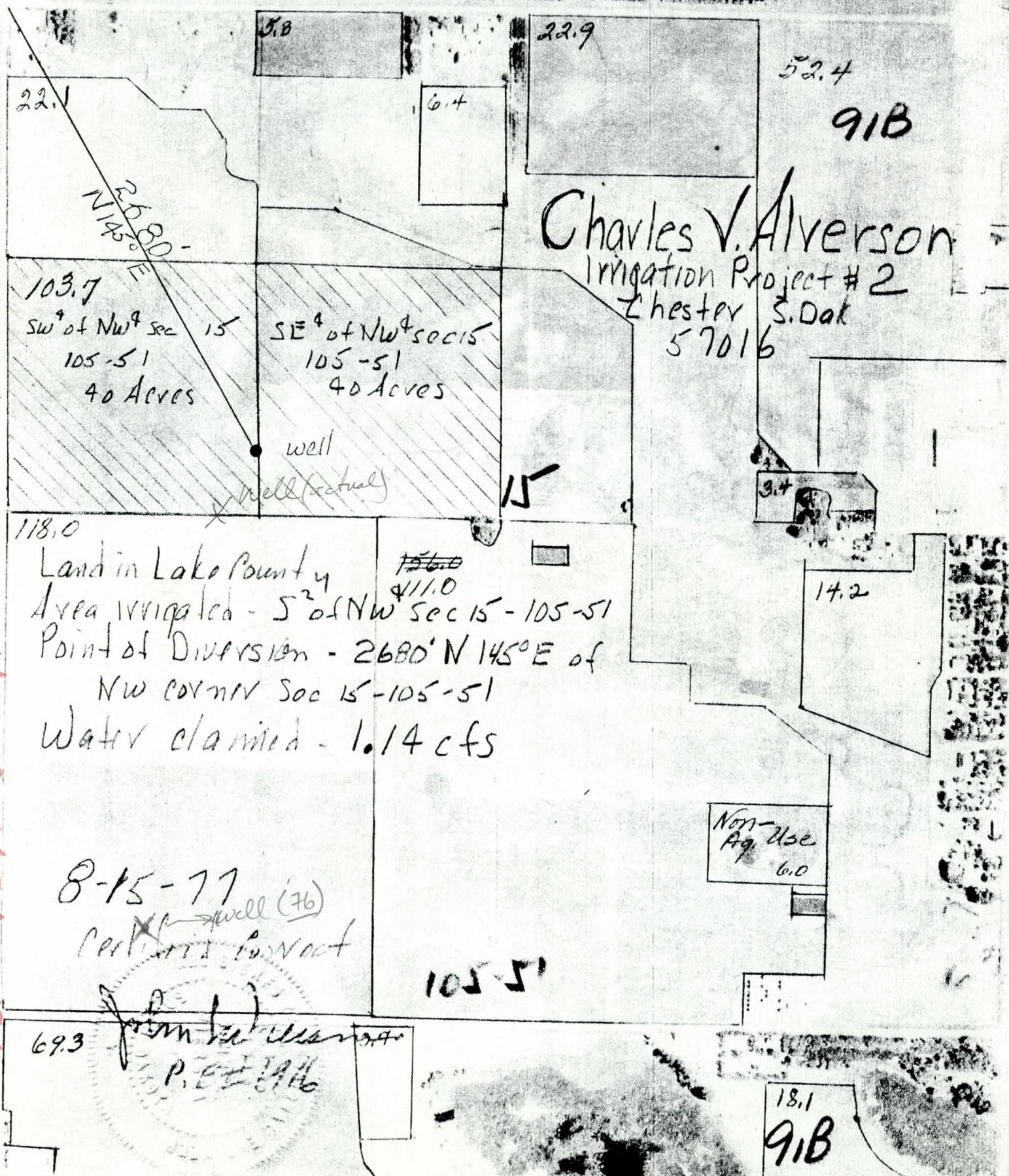
Very truly yours,

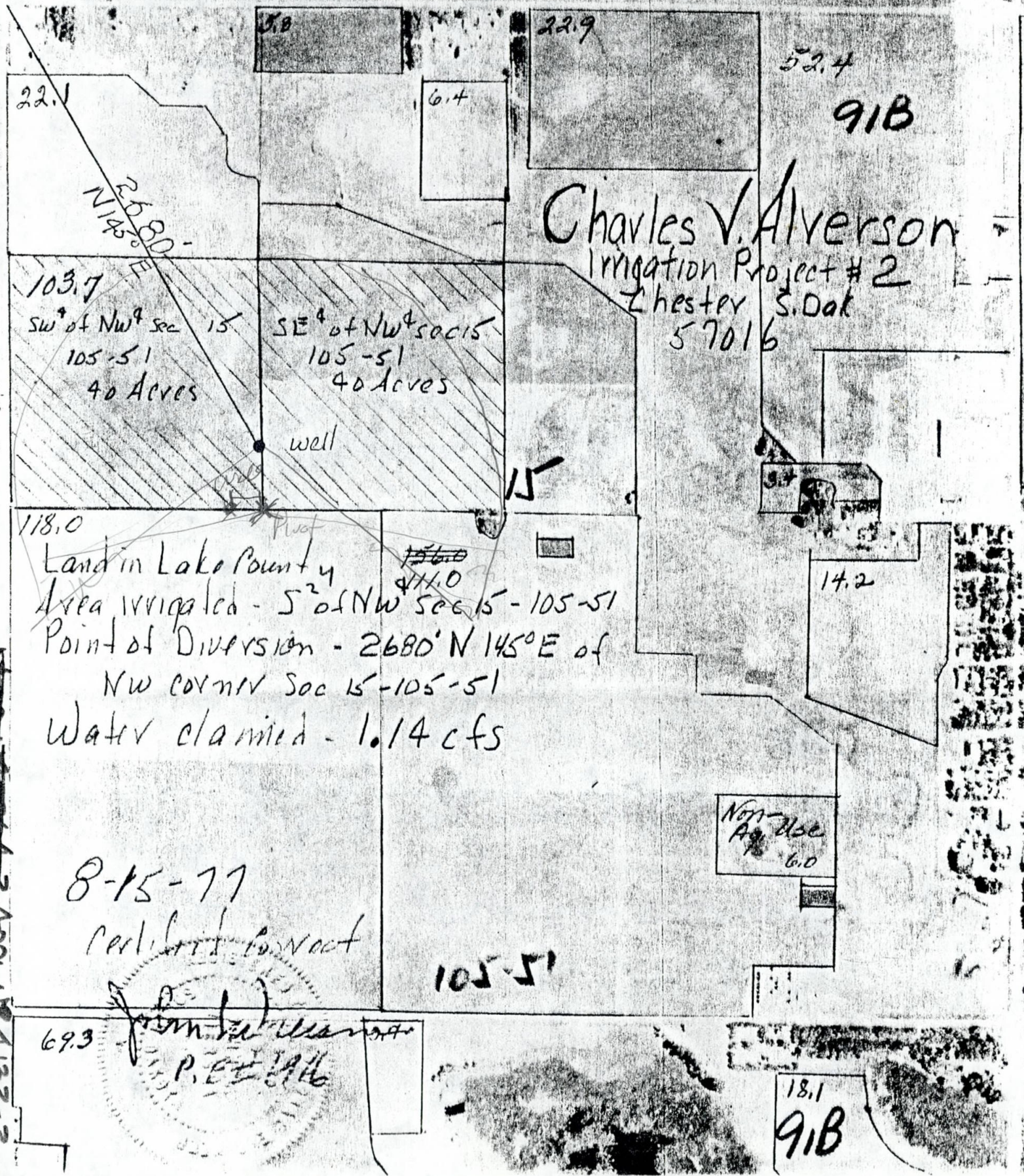

JOHN HATCH, Chief Engineer
Water Rights Division
(605) 773-3352

enclosures

NOTE: The applicable portions of Water Permit No. 4133-3 have been incorporated into this Water License No. 4133A-3.

4133-3





Charles V. Alverson
Irrigation Project # 2
Chester S. Oak
57016

Land in Lake County
Area irrigated - SW 1/4 of NW sec 15-105-51
Point of Diversion - 2680' N 145° E of
NW corner Sec 15-105-51
Water claimed - 1.14 cfs

8-15-77
cert. filed to erect

from the above
P. E. 1946

3 APR 1978 4133-3