

Considered: _____

WATER PERMIT NO. 5467-3

Phone: 688-5121

Name of Applicant: Dept of Plant Science - SDSU

Post Office Address: Box 2207A, Brookings, SD 57007

Amount of Water Claimed: 1.5 cfs Total Acres: 123

Source of Water Supply: Groundwater

Water to be used for: irrigation County: Brookings

About 1 miles North of Aurora

PROOF OF PUBLICATION: Received _____ Not Received _____

APPLICATION: Approved _____ Subject to _____

F.F. & C/.L. Adopted _____ Not Approved _____ Deferred _____

PRIORITY Date Received: 8/21/90 Fee: no fee Remarks state

institution

Corrected Application Received _____ Period of Annual Use April 1 - Oct. 31

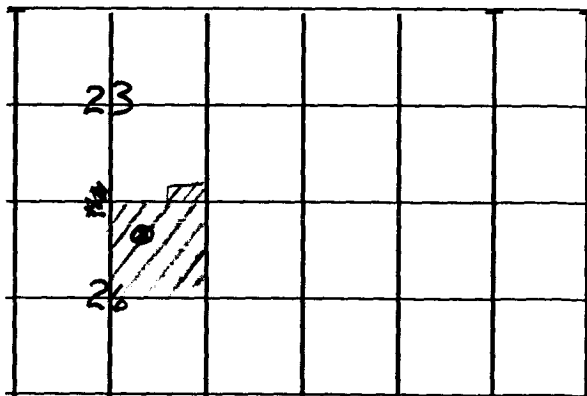
WATER QUALITY APPROVAL RECEIVED _____ APPROVED/CONDITIONAL (Circle one)

WI-1 Description same as Application YES _____ NO _____ REMARKS _____

Diversion Point: NW1/4 NE1/4 Sect. 26 T110N-R49W

Land to be Irrigated: NE1/4 Sect. 26 T110N-R49W

SE1/4 SE1/4 Sect. 23 T110N-R49W



Well Log: Driller: Grinshaw Licensed YES _____ NO X

Depth of Well: 65' REMARKS at time well log was drafted driller

was licensed

Type of Map: plat PREPARED BY: Al Bender Reviewed and the

Assigned on 8/21/90 By Eric Gronlund

**SOUTH DAKOTA
WATER PERMIT No. 5467-3 FOR IRRIGATION**

Date of first receipt of application August 21, 1990.

Date Soil/Water Compatibility Permit received July 26, 1979 and
September 21, 1990.

The Water Management Board approved Water Permit Application No. 5467-3 on October 3, 1990 for the Department of Plant Science, South Dakota State University, Box 2207A, Brookings, SD 57007 authorizing the construction of the water use system and the placing of water to beneficial use subject to the following limitations, conditions and qualifications:

1. Water Permit No. 5467-3 appropriates 1.5 cubic feet of water per second from one well (Big Sioux Aurora Aquifer) 65 feet deep located in the NE1/4 NE1/4 Section 26 T110N-R49W. The land to be irrigated is located in the NE1/4 Section 26, SE1/4 SE1/4 Section 23; all in T110N-R49W.
2. The amount of the appropriation may not exceed 2 acre feet annually for each acre of land to which water is actually and beneficially applied for irrigation. The water is to be used during the following described annual period: April 1 -- October 31.
3. The date from which applicant may claim right is August 21, 1990.
4. One-fifth of the construction is to be completed on or before April 3, 1993.
5. All construction is to be completed on or before October 3, 1995.
6. Water is to be put to beneficial use on or before October 3, 1999.
7. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

QUALIFICATIONS

1. The well authorized pursuant to this permit shall be constructed by a licensed well driller and construction shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04.
2. The well approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.

(continued)

Water Permit No. 5467-3

Page 2

3. This permit is approved subject to the irrigation water use questionnaire being submitted each year.

WATER MANAGEMENT BOARD

By: _____

John H. H. H.
Chief Engineer, Water Rights Division
Department of Water and Natural Resources

DEC 19 1990

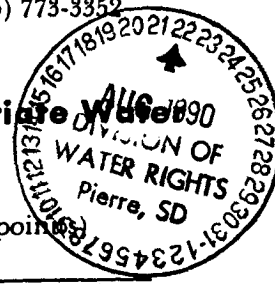
(date)

ESG

Mail to: Water Rights Div.
523 E. Capitol
Pierre, SD 57501
(605) 773-3352

(See instructions)

No. _____ Hydrologic Unit Medary Creek
Basin Big Sioux
Newspaper Brookings Register, Brookings, SD



Application For Soil/Water Compatibility Permit and Permit To Appropriation

Type of Application: ☒ New ☐ Vested Right ☐ Amend Permit No. _____
☐ Change Acreage ☐ Change diversion point(s) ☐ Add diversion point(s)
☐ Add Acreage ☐ Increase diversion rate ☐ Other _____

1. Name of Applicant Department of Plant Science-South Dakota State Univ. Phone No. (605)688-5121

Post Office Address Box 2207 A Brookings, State SD Zip Code 57007
(Street, RR or Box) (City)

2. Amount of water claimed (c.f.s) 1.5 Total acres irrigated 123

3. Source of Water supply Well

4. Location of point of diversion 470 ft. South and 970 ft. West of the NE corner of Section
26 - T 110 N - R 49 W

County Brookings

5. Counties where water will be used Brookings

6. Annual period during which water is to be used April through October

7. 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.
NW $\frac{1}{4}$ of NE $\frac{1}{4}$ Sec. 26-110-49	17
NE $\frac{1}{4}$ of NE $\frac{1}{4}$ Sec. 26-110-49	38
SW $\frac{1}{4}$ of NE $\frac{1}{4}$ Sec. 26-110-49	20
SE $\frac{1}{4}$ of NE $\frac{1}{4}$ Sec. 26-110-49	39

Attach sheet if more space is needed

Land Description	No. Acres Irr.
SE $\frac{1}{4}$ of SE $\frac{1}{4}$ Sec. 23-R-110-49	9

(Drip Lines, Solid Set, Hand Move, Other: Linear Move)

8. Type of Irrigation: Gravity: _____ Towline: _____ Center Pivot: _____ Gun: _____ (Specify) _____

9. Crops to be Irrigated: Corn, Soybeans, Wheat and other crops grown in research plots.

10. Give a description of proposed project. (Attach sheet if more space is needed)

See attachment.

Attachments: Attach Form 2A if diversion from a well or dugout, or if storage of water, is proposed. Attach maps, soils information and any other technical information.

STATE OF SOUTH DAKOTA)

County of Brookings) ss

I, Plant Science Dept. by Maurice L. Horton, Head, the applicant, certify that I have read this application and examined the attached maps, that the water sample, if needed, has been taken by the required procedures and has not been adulterated or tampered with and is truly representative of the water to be used, and that the matters stated in this application are true and correct.

Signed Maurice L. Horton

Subscribed and sworn to before me this 20th day of August 19 90

Pelda A. Campbell

Notary Public
Commission Expires May 26, 1998

ATTACHMENT:

- 10) The 114 acre block forms the Crop Improvement Farm which is a research station. The land is owned by the S.D. Crop Improvement Association and the research is conducted by South Dakota State University. The Department of Plant Science manages the research farm. Attached is a layout of the farm which includes a laboratory/storage building, roads and research plots.

The nine additional acres joins the research farm across the road (Highway 14) to the north and is owned by Mr. Terry Hill. The land will be leased for five or more years for a water quality research project. At the end of the lease period, the use of the land would revert to Mr. Hill.

Supplemental Information

(type or print in ink)



1. Well Information - Proposed construction

- a) Drill Hole Diameter 16 in. Depth 55 ft.
- b) Casing Type Steel Diameter 14 in. Thickness 1/8 in.
- c) Screen Type Stainless Steel Diameter 14 in. Thickness 1/8 in.
- d) Gravel Pack Thickness 3 in. Length of Gravel Pack 20 ft.
- e) Depth to Top of Water Bearing Material 6 ft.
- f) Depth to Water (ground surface to water level) 20 ft.
- g) Distance to nearest existing domestic well:
- On applicants property 740 ft. On property owned by others 640 ft.

2. Dugout Information Estimates NA

- a) Surface Dimensions _____ Depth _____
- b) Depth to water (ground surface to water level) _____

3. Water Storage Dams

NA

If the proposed water use system contains one or more storage dams, please furnish the information requested below. The locations of each dam should be shown on the map submitted with the application.

- a) If a private engineering firm or government agency was involved in the design of this dam please give their name and address

b) Freeboard _____

c) Crest Width _____

Crest Length _____

d) Height _____

e) Primary Outlet Capacity _____
 If Pipe, diameter _____

f) Secondary Spillway Capacity _____
 Spillway width _____

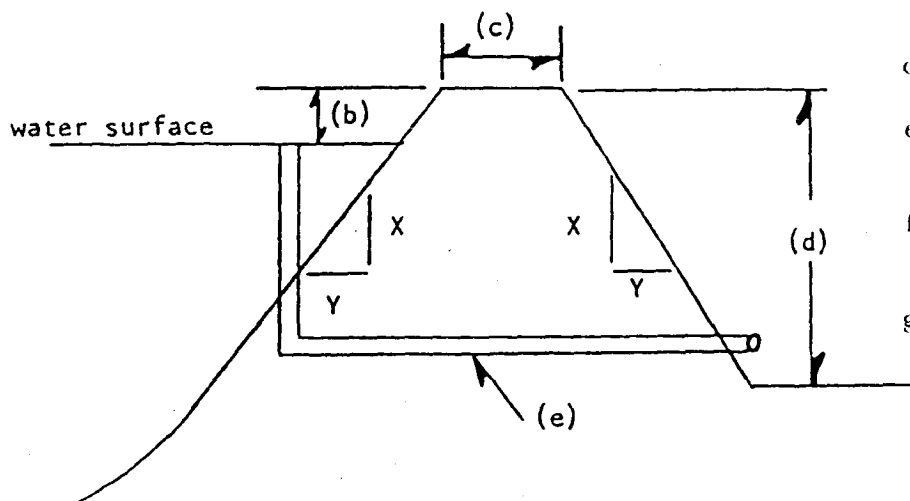
g) X & Y Slope
 Upstream _____

Downstream _____

Surface Area of Impoundment _____

Storage _____ acre feet

Drainage area above dam _____



Maurice L. Horton for Plant Science Dept
 (Signature of Applicant)

GRIMSHAW DRILLING CO.

DRILLING LOG

924 South Melrose
Sioux Falls, S.D. 57106
Phone 605-332-6974

Name Duane Thompson Date 7-6-79

Address % Farmer's Imp. Brookings

County Brookings Sec. 26 Twp. 110 Range 49

NE 120 Aurora Township

NO. FT.	DIA.	RATE	CASING	TOTAL
65'	4 3/4"	\$3.00	—	\$195.00

BALANCE DUE:

0 ft. to 2 ft. Topsoil _____ ft. to _____ ft.

2 ft. to 5 ft. Brown clay _____ ft. to _____ ft.

5 ft. to 18 ft. Red sand + gravel _____ ft. to _____ ft.

18 ft. to 63 ft. Brown sand uniform + clean _____ ft. to _____ ft.

63 ft. to 65 ft. Blue clay _____ ft. to _____ ft.

_____ ft. to _____ ft. _____ ft. to _____ ft.

_____ ft. to _____ ft. _____ ft. to _____ ft.

_____ ft. to _____ ft. _____ ft. to _____ ft.

_____ ft. to _____ ft. _____ ft. to _____ ft.

_____ ft. to _____ ft. _____ ft. to _____ ft.

_____ ft. to _____ ft. _____ ft. to _____ ft.

STATIC WATER LEVEL _____ ft.

Larry M. Wald
DRILLER

REMARKS: Suggest 15' of .080" slot screen
looks similar to Hemert or Degroets

Department of Agriculture
WI#1
5/87

SOIL/WATER COMPATIBILITY PERMIT
Division of Conservation

Office Use Only

4527

WR#

OWNERS NAME: DEPARTMENT OF PLANT SCIENCE-SDSU OWNERS ADDRESS: Box 2207 A
Brookings, SD 57007

COUNTY LAND LOCATED IN: BROOKINGS PHONE: 688-5121

LEGAL DESCRIPTION: ☒ Well ☐ Surface

1. LOCATION 470' South & 970' West of the NE Corner of 26-T110N-R49W
Depth _____

Legal Description	Acres	Legal Description	Acres
NE $\frac{1}{4}$ NE $\frac{1}{4}$ 26-T110N-R49W	17	SE $\frac{1}{4}$ SE $\frac{1}{4}$ 23-R110N-R49W	9
NE $\frac{1}{4}$ NE $\frac{1}{4}$ 26-T110N-R49W	38		
SW $\frac{1}{4}$ NE $\frac{1}{4}$ 26-T110N-R49W	20		
SE $\frac{1}{4}$ NE $\frac{1}{4}$ 26-T110N-R49W	39		

2. TYPE OF IRRIGATION: GRAVITY: _____ TOWLINE: _____ CENTER PIVOT: _____ GUN: _____ (Specify) OTHER: Drip Lines, Solid Set, Hand Move, Linear Move.
3. CROPS TO BE IRRIGATED: Corn, Soybeans, Wheat & other crops grown in research plots.

WATER QUALITY:

4. WATER SAMPLE NUMBER: 79-441 7. ADJUSTED (SAR): 1.35
5. SALINITY (EC X 10⁶): 1292 8. PERCENT SODIUM 7.25
6. SODIUM (SAR): 0.45

Requirements:



[Signature]
Director, Division of Conservation

XXX APPROVED _____ REQUIREMENTS
____ DISAPPROVED
____ WAIVER

September 20, 1990
Date

Soil/water permits will be recorded by the Department of Agriculture, with the County Register of Deeds.

E $\frac{1}{2}$ of NE $\frac{1}{4}$ & E $\frac{1}{2}$ of W $\frac{1}{2}$ of NE $\frac{1}{4}$
 Except N 485' of W 270' of E $\frac{1}{2}$ of W $\frac{1}{2}$ of NE $\frac{1}{4}$
 Section 26 - T 110N - R 49W, 5th PM, BROOKINGS CO, SD

SECTION
CORNER,

SECTION LINE - Q HIGHWAY #14

1702'

23/24

1669'

26 | 25

50' R.O.W.

33' —
R.O.W.

29.

435'

270

117[±] Acres including all R.O.W.

113⁶⁰ Acres w/o P.O.W.

~~2600~~

10	6
----	---

SECTION LINE

EXISTING FENCE

1/4 LIN

1/4 LINE

1955'

1988

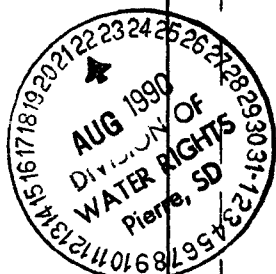
FENCE POST
CENTER SECTION
L # 26

EXISTING
FENCE POST
(CORNER)

- Iron Pipe
- x Nails

Alex R Bender

22-141 50 SHEETS
22-142 100 SHEETS
22-144 200 SHEETS





Alan R Bender

TO SCALE

1140'

9 ACRES
TERRY HILL - OWNER
840'

ROADSIDE
PARK

Highway 14

STORAGE/LAB BUILDING

114.5 ACRES

T 1101 SOUTH DAKOTA CROP IMPROVEMENT
ASSOCIATION -- OWNER

DIVERSION
Point

970'

D12

COUNTY ROAD

PLANT SCIENCE
CROP IMPROVEMENT FARM
SOUTH DAKOTA STATE UNIVERSITY

29.8

NHEL

NHEL

154.8

Fig 4. Depth to fine sand layer at the Aurora Research Farm.

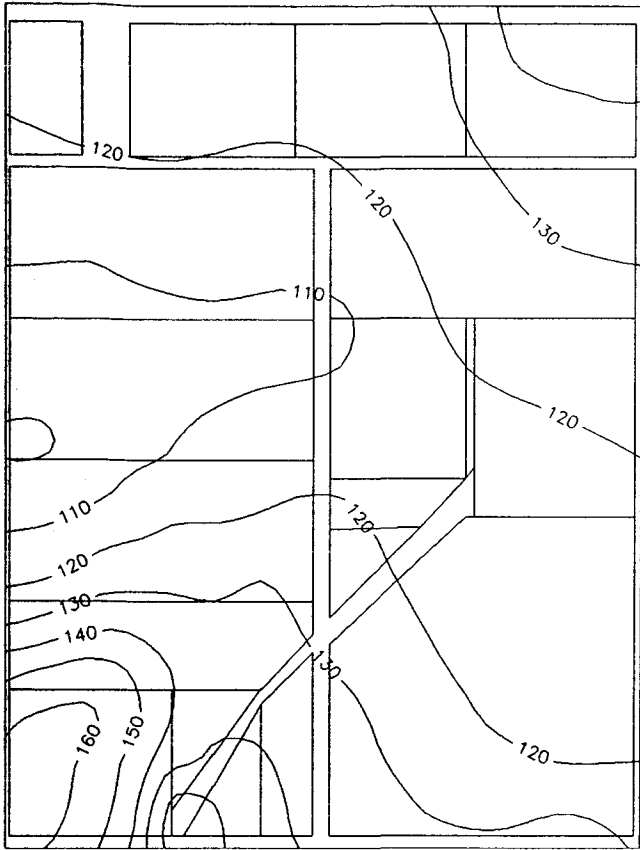
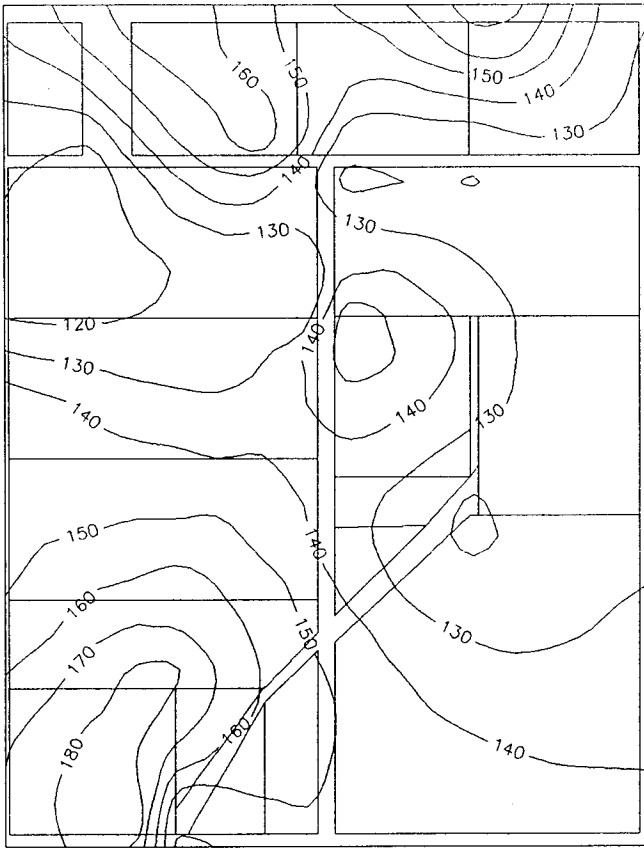


Fig 5. Depth to sand and gravel at the Aurora Research Farm.



TB 93

Aurora Research Farm: Soil Resources

Gary Lemme, associate professor of pedology,
B. Khakural, visiting professor of pedology,
G. Simonds, graduate research assistant, and
P. Maris, graduate research assistant
Plant Science Department

The Crop Improvement Association (CIA)
Aurora Research Farm consists of 117 acres in
the NE 1/4 of Section 26, T.110N, R.49W, 5th
principal meridian in Aurora Township of
Brookings County, South Dakota.

The farm is located on a loess covered outwash
plain developed from Cary substage (late
Wisconsin) fluvial sediments. The outwash
sediments originated from the Bemis end
moraine in the northeastern portion of
Brookings County.

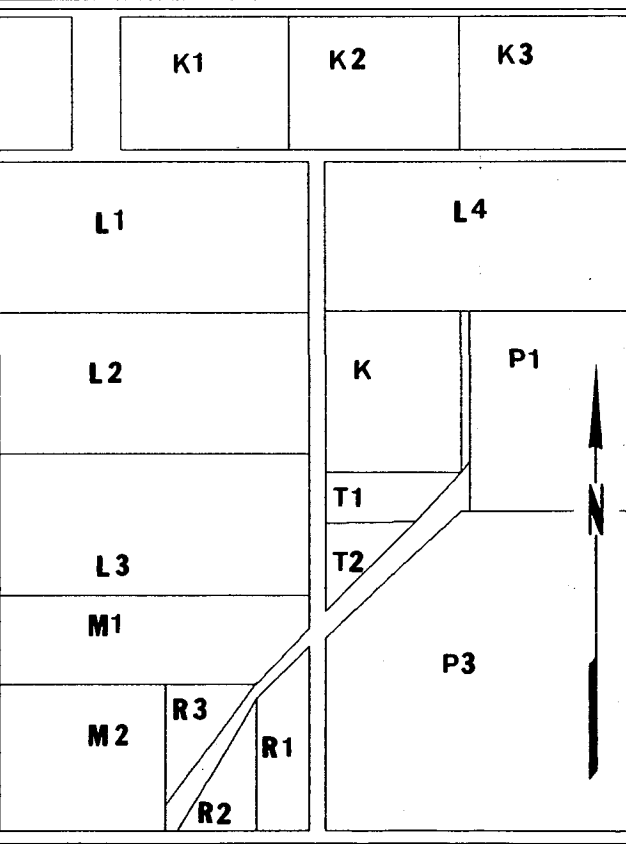
0-1 feet	topsoil, black, clayey
1-8 feet	clay, brown, sandy, pebbly
8-46 feet	sand, medium to gravel, angular
46-55 feet	clay, brown, sand, pebbly
55-60 feet	clay, gray, sandy, silty

The plot layout of the research farm (1989) is
shown in Fig 1. An 8-foot elevational
difference occurs across the farm (Fig 2). The
reference elevation (0 feet) is approximately
1,650 feet above sea level.

A shallow drainageway in the southeastern
portion of the farm is the most pronounced
topographic feature. The drainageway is
entrenched 8 feet and drains to the southwest
where it eventually joins Medary Creek.

Over 40 soil observations were made on the
farm to a depth of 2 meters (Table 1). All soils

Fig 1. Plot layout of the Aurora Research Farm.



References

Carter, Kelly. 1979. Observation wells in the vicinity of
Brookings, SD. SD Geologic Survey open-file report #31-UR.

Lee, K. 1958. Geology and shallow ground water resources of
the Brookings area, Brookings County, SD. SD Geologic survey
report of investigations #84.

USDA-SCS. 1986. Estelline established series sheet.

Published in accordance with an act passed in 1881 by the 14th Legislative
Assembly, Dakota Territory, establishing the Dakota Agricultural College and
with the act of re-organization passed in 1887 by the 17th Legislative
Assembly, which established the Agricultural Experiment Station at South
Dakota State University.

Aurora Research Farm: Soil Resources

TB 93

The outwash plain was built as a series of
fluvial fans which coalesced and migrated
toward the Bemis end moraine. Lee (1958)
found the outwash gravels to be 52%
limestone and dolomite, 33% igneous and
metamorphic rocks, and 15% sandstone and
clay-ironstone. Quartz makes up
approximately 90% of the silt sized particles.

The Aurora-Bushnell outwash is composed of
725,000,000 cubic yards of sand and gravel
with a water storage capacity of 138,000 acre-
feet. In 1957, the outwash contained 42,000
acre-feet of water. Depth to the water table in
the area of the research farm ranged from 5 to
13 feet below the surface during the summer of
1957.

A geologic drill log prepared from a location
less than a mile to the west of the Aurora
Research Farm (test hole Bk-13-79 by Carter,
1979) indicates that the gravelly sand aquifer
material is confined by underlying glacial till:

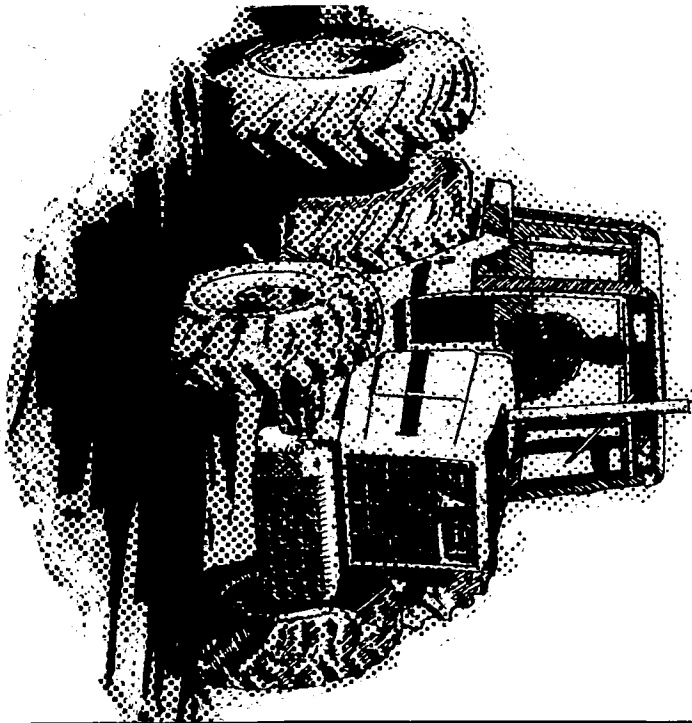


Table 1. Soil properties of CIA Aurora Research Farm.

Plot #	Observation #	Depth of Mollic Epipedon (cm)	Depth to fine sand (cm)	Depth to sand & gravel (cm)	Surface Texture	Subsoil Texture
K ₁	1	52	--	143	SiL	SiL
	2	50	130	167	SiL	SiL
	3	53	127	153	SiL	SiL
	4	51	--	142	SiL	SiL
	5	48	120	170	SiL	SiL
K ₃	1	58	--	130	SiL	SiL
	2	53	146	175	SiL	SiL
	3	57	130	176	SiL	SiL
	4	42	--	120	SiL	SiL
K ₄	1	46	107	162	SiL	SiL
L ₁	1	42	--	130	SiL	SiL
	2	35	--	112	SiL	SiL
	3	50	--	120	SiL	SiL
	4	33	--	120	SiL	SiL
	5	45	--	115	SiL	SiL
L ₂	6	56	--	112	SiL	SiL
	1	34	--	115	SiL	SiL
	2	52	--	151	SiL	SiL
L ₃	1	50	97	146	SiL	SiL
L ₄	1	37	--	127	SiL	SiL
	2	50	--	112	SiL	SiL
	3	50	--	140	SiL	SiL
	4	42	--	120	SiL	SiL
M ₁ M ₂	1	40	123	150	SiL	SiL
	1	36	142	186	SiL	SiL
	2	42	163	181	SiL	SiL
	3	46	157	164	SiL	SiL
	4	45	165	173	SiL	SiL
	5	34	146	200	SiL	SiL
R ₁ R ₂	6	41	106	123	SiL	SiL
	1	40	130	150	SiL	SiL
T ₂	1	40	--	137	SiL	SiL
	1	35	124	134	SiL	SiL
P ₂ P ₃	1	40	125	136	SiL	SiL
	1	40	--	130	SiL	SiL
	2	40	112	115	SiL	SiL
	3	40	133	150	SiL	SiL
	4	49	132	149	SiL	SiL
	5	50	133	147	SiL	SiL
	6	35	110	133	SiL	SiL

Fig 2. Relative topography of the Aurora Research Farm.

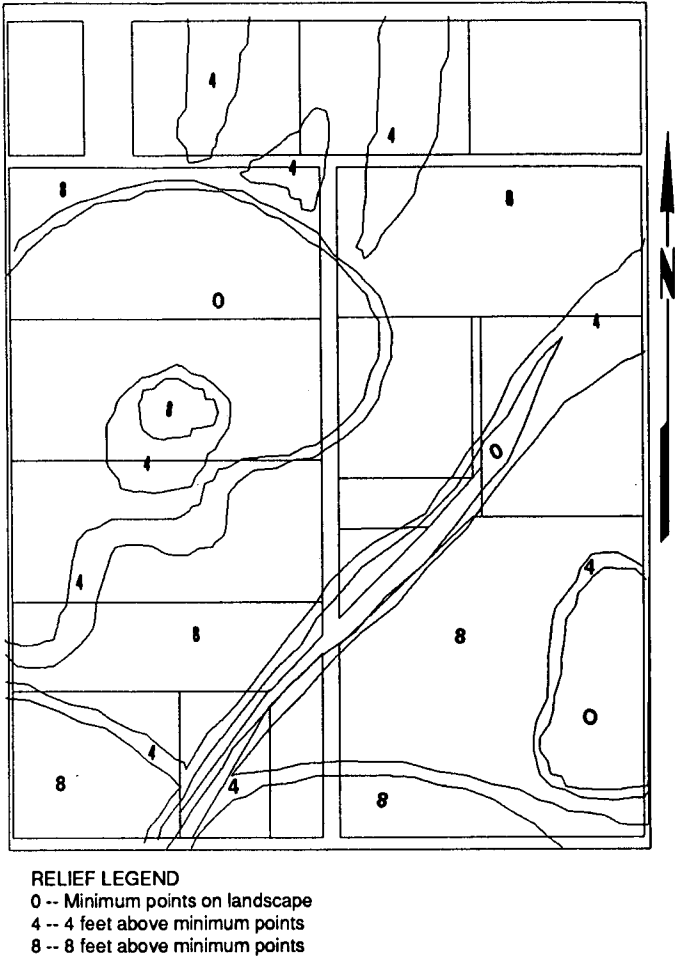


Table 2.1. Particle size distribution of the Estelline series.

HORIZON	COARSE FRAGMENTS	SAND	SILT	CLAY

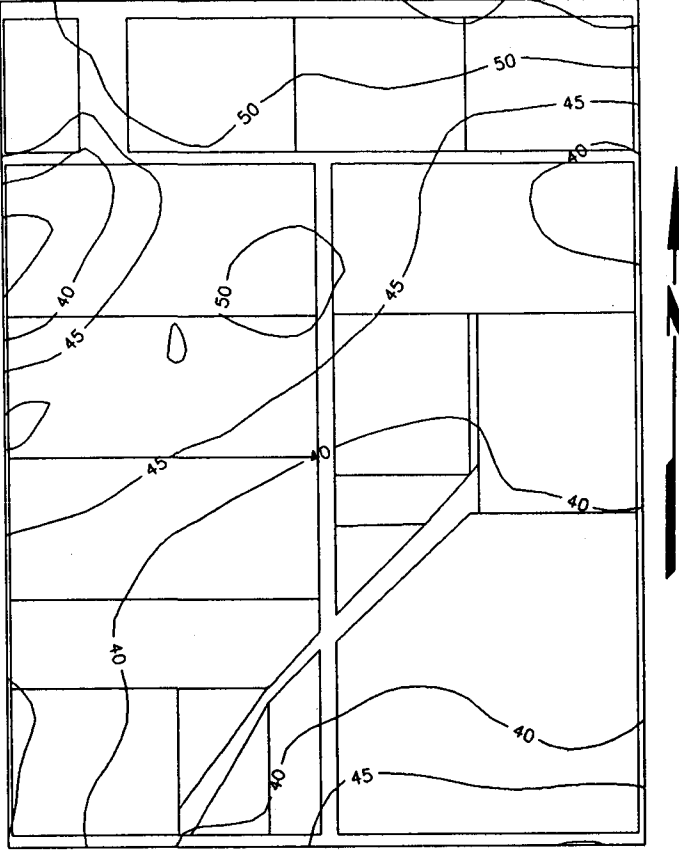
Ap	0	16.5	56.2	27.3
Bw1	0	24.9	49.7	25.4
Bw2	0	19.1	55.3	25.6
Bw3	0	20.4	54.0	25.5
2C	5.3	66.5	20.3	13.2
3C	53.2	84.7	8.6	6.7

Table 2.2. Sand size distribution of the Estelline series.

HORIZON	VERY COARSE	COARSE	MEDIUM	FINE	VERY FINE

Ap	0.2	2.2	4.4	7.0	2.7
Bw1	0.7	4.4	9.0	8.4	2.5
Bw2	0.5	2.9	5.8	7.7	2.2
Bw3	0.7	3.2	6.2	7.5	2.8
2C	1.9	9.5	20.8	24.9	7.9
3C	18.9	36.5	28.4	4.9	1.1

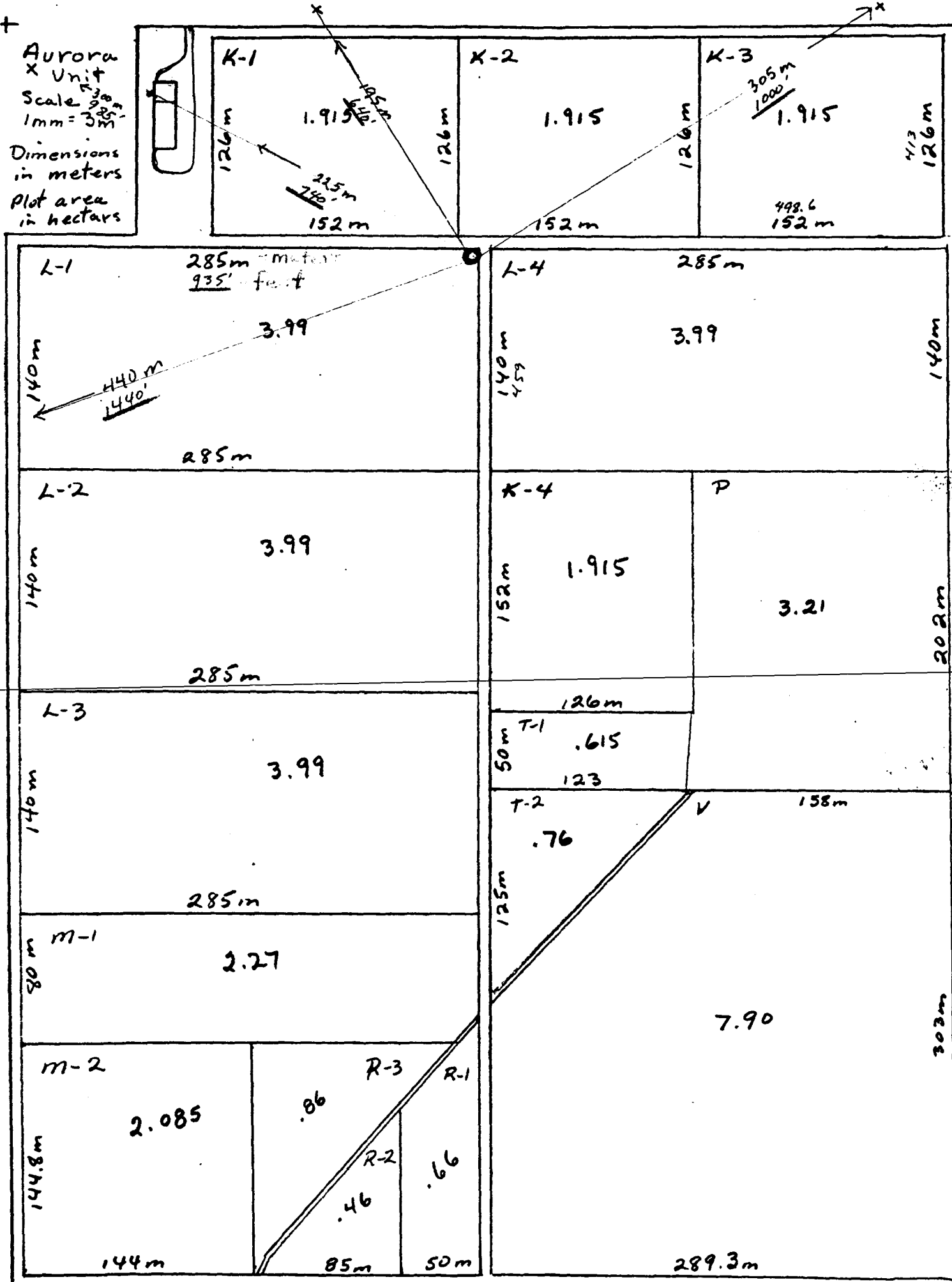
Fig 3. Thickness of the mollic epipedon on the Aurora Research Farm.



were within the Estelline soil series (fine-silty over sandy or sandy-skeletal, mixed Pachic Udic Haploborolls). The thickness of the organic enriched topsoil (mollic epipedon) varied from 40 to 50 cm (Fig 3). Depth to the fine sand discontinuity varied from 100 to 160 cm (Fig 4). Gravelly sand was found below the sand. The thickness of material overlying the gravelly sand varied from 120 to 180 cm (Fig 5).

A typical particle size distribution of the Estelline series is shown in Table 2.1 and 2.2. The high silt content of the solum (Ap - Bw3) indicates that the fluvial deposits have been blanketed with eolian silts. These silts most likely originated from the floodplains of Deer Creek and Medary Creek. Northwest winds transported silts from Deer Creek across the outwash plain. Lesser amounts of sediments would have originated from the valley of Medary Creek to the east of the research farm because of the prevailing northwesterly winds.

+
 Aurora
 X Unit
 Scale $\frac{30m}{1mm} = 3m$
 Dimensions
 in meters
 Plot area
 in hectares





South Dakota State University
Brookings, South Dakota 57007

Department of Plant Science
Field Crops—Plant Pathology—Soils—Weeds
Main Office, 219 Agricultural Hall, Box 2207-A
605/688-5121
Plant Science Building, Box 2109
605/688-5156
College of Agriculture and Biological
Sciences



DATE August 21, 1990

TO: Water Rights Division
523 E. Capitol
Pierre, SD 57501
(605) 773-3352

ATTENTION: Mr. Eric Gronlund
Original Application to Follow by Mail.

FROM: Dr. Maurice L. Horton, Head
Department of Plant Science
South Dakota State University

FAX: 605-773-6035



South Dakota State University
Brookings, South Dakota 57007

Department of Plant Science
Field Crops—Plant Pathology—Soils—Weeds
Main Office, 219 Agricultural Hall, Box 2207-A
605/688-5121
Plant Science Building, Box 2109
605/688-5156
College of Agriculture and Biological
Sciences

August 21, 1990

Mr. Eric Gronlund
Water Rights Division DWNR
Joe Foss Building
Pierre, SD 57501



Dear Mr. Gronlund:

As per earlier phone conversation and FAX copy, attached is the application for a water permit for the Plant Science Research Farm. The land was originally permitted in 1980 to Mr. Duane Thompson under Permit #4516-3; however, Mr. Thompson did not develop the irrigation.

It is my understanding that Statute 46-2-13 exempts collection of fees for a permit to a state agency; however, all advertising costs, etc. will be paid. Please send request for advance payment or any bills to me.

I have included with the application a copy of the "SOIL RESOURCES" and plot layout for the Research Farm.

Let me know if you need additional information.

Thanks for your assistance.

Sincerely,

Dr. Maurice L. Horton, Head
Department of Plant Science

Enclosure

MLH/ek

Report on
Water Permit Application No. 5467-3
SDSU Plant Science
August 23, 1990

Application No. 5467-3 proposes to irrigate 123 acres of land with 1.5 cubic feet of water per second (cfs). the application proposes to withdraw the water from one well (65 feet deep) located 470 feet south and 970 feet west of the northeast corner of Section 26-T110N-R49W and irrigate 114 acres in the NE1/4 Section 26 T110N-R49 and 9 acres in the SE1/4 SE1/4 Section 23 T110N-R49W.

AQUIFER - Big Sioux Aurora (BS:A)

The Big Sioux Aurora aquifer is a Pliestocene alluvium sand and gravel outwash. The majority of the aquifer is under water table conditions.

The Big Sioux Aurora aquifer in Brookings county underlies approximately 39,300 acres and contains an estimated 165,000 acre feet of recoverable water.

The BS:A aquifer is recharged by direct infiltration of precipitation. Recharge to the BS:A aquifer is estimated at 5.0 inches per year. This would yield a minimum of 16,375 acre feet annually. (Hedges, 1983).

Water use for 1989 was reported to be 3756 acre feet (1989 Irrigation Report). This would show that annual recharge is only 23% of the estimated yearly recharge. The amount appropriated from BS:A is 23,568 acre feet. This amount exceeds the minimum estimated recharge.

The Division of Water Rights monitors 13 observation wells completed into the BS:A aquifer. typical water levels fluctuate 1 to 5 feet per year with a maximum fluctuation from highest to lowest of 10 feet for the period of record.

COMMENTS:

There are several water permits surrounding the proposed application. There has not been a problem with interference because of the water table conditions and the recharge potential. No interference is expected from the proposed well.

Water permit 4516-3 which was issued for the same lands has been cancelled for non-construction.

CONCLUSIONS

1. Water is available from the Big Sioux Aurora Aquifer for Water Permit Application No. 5467-3.
2. There should be no interference between the proposed well and existing wells because of the water table conditions of the aquifer.
3. The well authorized by the application must be constructed in accordance with SD Well Construction Standards.



GALE N. SELKEN P.E.
Natural Resources Engineer IV

BIBLIOGRAPHY

- Hedges, L.S., Burch, S.L., Iles, D.L., Barari, R.A., and Schoon, R.A., 1982, Evaluation of Ground-Water Resources Eastern South Dakota and Upper Big Sioux River, South Dakota and Iowa, Prepared for US Army Corps of Engineers Planning Division by DWNr Geological Survey, Vermillion SD.
- Hedges, L.S., Allen, J., and Holly, D.E., 1983, Evaluation of Ground-water Resources Eastern South Dakota and Upper Big Sioux River South Dakota and Iowa, prepared for the US Army Corps of Engineers Planning Division by DWNr Geological Survey, Vermillion SD.
- Water Rights Division, 1990 "Drillers logs, Observation Well Files, and Water Permit files", DWNr Joe Foss Building, Pierre SD.

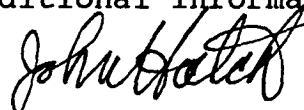
RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 5467-3, Department of Plant Science, SDSU

Pursuant to SDCL 46-2A-2, the following is the recommendation of the Chief Engineer, Water Rights Division, Department of Water and Natural Resources concerning Water Permit Application No. 5467-3, Department of Plant Science, South Dakota State University, Box 2207A, Brookings SD

The Chief Engineer is recommending APPROVAL of Application No. 5467-3 because 1) there is reasonable probability that there is unappropriated water available for the applicant's proposed use, 2) the proposed diversion can be developed without unlawful impairment of existing rights, 3) the proposed use is a beneficial use and 4) in the public interest with the following qualifications:

1. The well authorized pursuant to this permit shall be constructed by a licensed well driller and construction shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04.
2. The well approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of ~~needed water supplies in adequate domestic wells~~ or in adequate wells having prior water rights.
3. This permit is approved subject to the irrigation water use questionnaire being submitted each year.

See report on application for additional information.



JOHN HATCH, Chief Engineer
August 30, 1990



Department of Water & Natural Resources

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

August 30, 1990

NOTE: TO BE SURE OF PUBLICATION ON
THE CORRECT DATES, CONTACT
THE NEWSPAPER RIGHT AWAY.

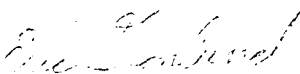
Maurice L. Horton
Dept. of Plant Science
SDSU - Box 2207A
Brookings SD 57007

Dear Mr. Horton:

Water Permit Application No. 5467-3 for irrigation use has been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice of hearing has been sent to the Publisher of the Register printed at Brookings SD. For your information, a copy of the notice is enclosed. Copies of the report and the Chief Engineer's recommendation are also enclosed. Please review the notice prior to publication and notify this office, if you have any corrections or questions.

Be sure to contact the above newspaper to authorize publication of your Notice of Intent to Appropriate Water and to arrange for payment. Early contact with the paper can eliminate delays. The publisher has been instructed to publish your notice once each week for two consecutive weeks with the last publication to occur twenty days before the board meeting. We must receive Proof of Publication before the application can be considered by the Water Management Board.

Sincerely,


Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosures



Department of Water & Natural Resources

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

August 30, 1990

Brookings Register
Drawer 6
Brookings SD 57006

ATTN: Legal Publications:

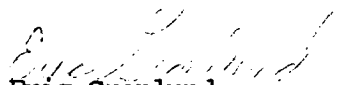
Enclosed is a Notice of Hearing on Application No. 5467-3 to be published twice. Please publish the first notice on or before September 6, 1990 with the second publication 7 days later.

The APPLICANT MUST VERIFY TO YOU THAT THE NOTICE IS TO BE PUBLISHED, before you make the first publication. Please BILL the APPLICANT for the cost of publication. The APPLICANT is Department of Plant Science, SDSU Box 2207A, Brookings SD 57007.

A copy of BOTH publications must be SENT to the WATER RIGHTS DIVISION. IMMEDIATELY return the FIRST publication with the FIRST Transmittal form on the bottom of this page. The first copy is needed to check the publication for errors so any corrections can be made in the second publication. Publication errors can invalidate the public notice and cause the applicant costly delays.

Please be sure the SECOND publication is returned IMMEDIATELY with the enclosed Proof of Publication form. DO NOT WAIT until the end of the month or the billing cycle. The permit application cannot be considered by the Water Management Board until proof of publication has been received.

Sincerely,


Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosures

-----CUT HERE-----

FIRST TRANSMITTAL NOTICE

TO: Eric Gronlund
Water Rights Division
Joe Foss Building
Pierre SD 57501-3181

No. _____

Date _____

We are in receipt of your letter of _____ enclosing Notice of Hearing to
Appropriate Water by Application No. _____ which was first published in our issue
of _____. ENCLOSED IS A COPY OF THIS FIRST PUBLICATION.

Name

Newspaper

Instruction to Newspaper - Publish first Notice on or before September 6, 1990 with 2nd publication 7 days later. The applicant is responsible for payment.

NOTICE OF HEARING on Application No. 5467-3 to Appropriate Water

Notice is given that Department of Plant Science, South Dakota State University, Box 2207A, Brookings, SD 57006 has filed an application for a water permit to appropriate 1.5 cubic feet of water per second from one well (Big Sioux Aurora Aquifer) 65 feet deep located in the NE1/4 NE1/4 Section 26 T110N-R49W. The land to be irrigated is located in the NE1/4, Section 26, SE1/4 SE1/4 Section 23, all in T110N-R49W.

Pursuant to SDCL 46-2A-2, the Chief Engineer of the Water Rights Division recommends APPROVAL of Application No. 5467-3 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water and 4) it is in the public interest. This application will be considered by the Water Management Board in the Community Room, Brule Co. Courthouse, 300 S. Courtland, Chamberlain, SD on October 3, 1990 at 10:00 am. The Chief Engineer's recommendation is not final or binding upon the Board. The Board is authorized to 1) approve, 2) approve with qualifications, 3) defer or 4) deny this application based on the facts presented at the public hearing.

Any interested person that intends to participate in the hearing before the Board by presenting evidence or cross-examining witnesses according to SDCL 1-26, must file a written petition with BOTH the applicant and Chief Engineer by September 21, 1990. The Chief Engineer's address is "Water Rights Division, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)". The petition may be informal, but must include a statement describing the petitioner's interest in the application, the petitioner's reasons for opposing or supporting the application and the signature and mailing address of the petitioner or legal counsel if legal counsel is obtained. The applicant need not file a petition. Contact the Water Rights Division to request information on this application or to assure access to the hearing by the handicapped.

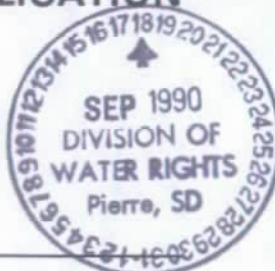
This hearing is an adversary proceeding. Any person filing a petition and/or the applicant have the right to be represented by a lawyer. These and other due process rights will be forfeited if not exercised. Decisions of the Board may be appealed to the Circuit Court and State Supreme Court as provided by law. The time of the hearing will also be automatically delayed for at least twenty days upon written request to the Chief Engineer from the applicant or a petitioner. The request for a delay must be received by September 21, 1990.

This application is made pursuant to SDCL 46-1-1 thru 46-1-9, 46-1-12 thru 46-1-15; 46-2-3.1, 46-2-9, 46-2-11, 46-2-13, 46-2-17; 46-2A-1 thru 46-2A-10, 46-2A-12, 46-2A-14, 46-2A-15; 46-5-1 thru 46-5-11, 46-5-13 thru 46-5-15, 46-5-24, 46-5-25, 46-5-30.2, 46-5-30.4, 46-5-31; 46-6-3, 46-6-3.1, 46-6-6.1, 46-6-10, 46-6-13, 46-6-14; and Board Rules ARSD 74:02:01:01 thru 74:02:01:15.

OK

PROOF OF PUBLICATION

STATE OF SOUTH DAKOTA)
 County Brookings) ss.



I, Rob James

certify that the attached printed Notice was taken
 from the The Brookings Daily Register

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 Brookings

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

September 6, 1990

September 13, 1990

(Signature)

Publisher
 (Title)

9/6/90

(Date Signed)

Cost of Printing: \$37.26

exercised. Decisions of the Board may be appealed to the Circuit Court and State Supreme Court as provided by law. The time of the hearing will also be automatically delayed for at least twenty days upon written request to the Chief Engineer from the applicant or a petitioner. The request for a delay must be received by September 21, 1990.

This application is made pursuant to SDCL 46-1-1 thru 46-1-9, 46-1-12 thru 46-1-15; 46-2-3.1, 46-2-9, 46-2-11, 46-2-13, 46-1-17; 46-2A-1 thru 46-2A-10, 46-2A-12, 46-2A-14, 46-2A-15; 46-5-1 thru 46-5-11, 46-5-13 thru 46-5-15, 46-5-24, 46-5-25, 46-5-30.2, 46-5-30.4, 46-5-31; 46-6-3, 46-6-3.1, 46-6-6.1, 46-6-10, 46-6-13, 46-6-14; and Board Rules ARSD 74:02:01:01 thru 74:02:01:15.

Legal 449, 2x, Sept 6, 13

NOTICE OF HEARING

on Application No. 5467-3 to
 Appropriate Water

Notice is given that Department of Plant Science, South Dakota State University, Box 2207A, Brookings, SD 57006 has filed an application for a water permit to appropriate 1.5 cubic feet of water per second from one well (Big Sioux Aurora Aquifer) 65 feet deep located in the NE 1/4 NE 1/4 Section 26 T110N-R49W. The land to be irrigated is located in the NE 1/4, Section 26, SE 1/4 SE 1/4 Section 23, all in T110N-R49W.

Pursuant to SDCL 46-2A-2, the Chief Engineer of the Water Rights Division recommends APPROVAL of Application No. 5467-3 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water and 4) it is in the public interest. This application will be considered by the Water Management Board in the Community Room, Brule Co. Courthouse, 300 S. Courtland, Chamberlain, SD on October 3, 1990 at 10:00 a.m. The Chief Engineer's recommendation is not final or binding upon the Board. The Board is authorized to 1) approve, 2) approve with qualifications 3) defer

or 4) deny this application based on the facts presented at the public hearing.

Any interest person that intends to participate in the hearing before the Board by presenting evidence or cross-examining witnesses according to SDCL 1-26, must file a written petition with BOTH the applicant and Chief Engineer by September 21, 1990. The Chief Engineer's address is "Water Rights Division, Foss Building, 523 E Capitol Pierre, SD 57501 (605 773-3352)". The petition may be informal, but must include a statement describing the petitioner's interest in the application, the petitioner's reasons for opposing or supporting the application and the signature and mailing address of the petitioner or legal counsel if legal counsel is obtained. The applicant need not file a petition. Contact the Water Rights Division to request information on this application or to assure access to the hearing by the handicapped.

This hearing is an adversary proceeding. Any person filing a petition and/or the applicant have the right to be represented by a lawyer. These and other due process rights will be forfeited if not



Department of Water & Natural Resources

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

DEC 19 1990

Dr. Maurice L. Horton, Head
Department of Plant Science
South Dakota State University
Box 2207A
Brookings, South Dakota 57007

Dear Dr. Horton:

Enclosed is Water Permit No. 5467-3 as approved by the Water Management Board authorizing you to construct your water diversion system and put the water to beneficial use, not exceeding the limits as specified in the Water Permit.

Also enclosed is Form 10, Notice of Completion of Works and Application of Water to Beneficial Use, which you are to complete and submit to the Chief Engineer when you have completed the system and/or have put the water to beneficial use. An inspection can then be scheduled so that the Water License may be issued, thus completing your acquisition of a Water Right.

Very truly yours,

A handwritten signature in dark ink, appearing to read "John Hatch".

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

enclosures

PLEASE NOTE: Certain changes can be made in your permit within the five year construction period, usually without affecting the priority date provided an application to amend your permit is made within the five year period - i.e. changes in location or number of diversion points (wells) or location of land to be irrigated. Well locations for wells into the same aquifer can be moved up to 660 feet without application.

Applications to amend a permit after the five year construction period will be assigned a new priority date. Applications to change water sources, to add lands or increase original diversion rates, if approved will usually receive the date of the new application as a priority date regardless of the five year construction period.



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3181

DEPT OF PLANT SCIENCE/SDSU
BOX 2207A
BROOKINGS SD 57007

NOTICE

RE: Violation of Water Permit No(s) 5467-3

Our records indicate that the 1993 Irrigation Questionnaire has not been submitted for Permit No(s) 5467-3. The request for the Questionnaire was dated October 18, 1993. The Water Management Board has directed that owners of water permits who have not submitted the 1993 Irrigation Questionnaire be given notice of permit violation and a hearing to be held by the Board. The hearing held by the Board will determine the action to be taken for violation of Water Permit No(s) 5467-3 qualification:

"This permit is approved subject to the Irrigation Water Use Questionnaire being submitted each year."

The hearing will be held at 8:45 am, April 6, 1994, at the Golden Hills Resort, 900 Miners Ave, Lead, SD, and will be conducted pursuant to SDCL 46-1-12, 46-1-14, 46-2-9, 46-2-11 and 46-2-17. These are contested case hearings pursuant to SDCL 1-26. According to SDCL 46-1-12, the Board may suspend a permit for a period of up to one year for the first violation of a permit qualification or up to three years for a second violation, or cancel a permit for a third violation. Following the hearing, the Water Management Board can:

1. Suspend or cancel Permit No(s) 5467-3 in accordance with applicable provisions of SDCL 46-1-12;
2. Postpone any action; or
3. Take no action.

The hearing is an adversary proceeding. The permit owner has the right to be present or to be represented by a lawyer. These and other due process rights will be forfeited if they are not exercised. Decisions of the Board may be appealed to the Circuit Court and the State Supreme Court as provided by law.

If the questionnaire(s) is(are) received in this office on/or before April 1, 1994, you will no longer be in violation of your permit and your name will be deleted from the Board agenda.

Very truly yours,

Ron Duvall, Natural Resources Engineer IV
Water Rights Division
605 773-3352

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

3. Article Addressed to:

DEPT OF PLANT SCIENCE/SDSU
BOX 2207A
BROOKINGS SD 57007

4a. Article Number

P837 692 603

4b. Service Type

- ☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Delivery

FEB 18 1994

5. Signature (Addressee)

PLANT SCIENCE

6. Signature (Agent)

S. L. Kruze

8. Addressee's Address (Only if requested and fee is paid)

I also wish to receive the following services (for an extra fee):

1. ☒ Addressee's Address

2. ☐ Restricted Delivery
Consult postmaster for fee.

Thank you for using Return Receipt Service.

PS Form 3811, December 1991 * U.S.G.P.O. : 1992-307-550

DOMESTIC RETURN RECEIPT



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3181

February 28, 1994

5467-3

Bob Kohl
Dept of Plant Science
SDSU
Box 2207A
Brookings, SD 57007

Dear Mr. Kohl:

I am writing to acknowledge receipt of your 1993 irrigation questionnaire. You may disregard the February 16, 1994, **Notice of Violation of Water Permit No. 5467-3.**

The questionnaire was received in our office prior to the Water Management Board meeting and your name has been deleted from the agenda.

If you have any questions, please contact me.

Sincerely,

Genny McMath
Environmental Scientist
Water Rights Division
(605) 773-3352

Permit No. 5467-3
Big Sioux River - Water District

**Report Of Examination Of Works And/Or Application of Water To
Beneficial Use**

TO: Chief Engineer, Water Rights Program, DENR, Foss Bldg., Pierre, SD 57501

On, January 14, 1998, I made a thorough examination of the water use system constructed by Department of Plant Sciences, SDSU of Box 2207A, Brookings SD 57007 holder of Permit No. 5467-3, bearing the priority of August 21, 1990 authorizing the diversion of 1.5 cu. ft. per second of the waters of Groundwater for Irrigation purposes, in Brookings County.

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

A. Works used to divert the water:

15hp Submersible pump, 65' well

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

100 yard grid of 6" steel risers

600' 6" aluminum pipe

C. Works used to apply water to beneficial use:

Linear Valley System

40' solid set risers

The system is in the following condition Good. The point of diversion is located approximately 2000' south and 950' west of the NE corner of Section 26 T110N-R49W. The works are capable of diverting and conveying to the place of use 0.67 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:

T110N-R49W Section 26

NW1/4 NE1/4 15 ac.

NE1/4 NE1/4 40 ac.

SW1/4 NE1/4 20 ac.

SE1/4 NE1/4 40 ac.

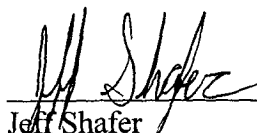
Section 23

SE1/4 SE1/4 9ac.

comprising a total of 124 acres of land and the license should be issued for 0.67 cfs.

Applicable permit qualifications have been complied with: Yes

Exceptions to compliance are: Yes



Jeff Shafer

Natural Resources Engineer
DENR, Water Rights Program

3-23-98

Date

REPORT ON INSPECTION OF PERMIT NO. 5467-3

DATE OF INSPECTION: 1/14/98

Other permit(s) associated with the project: none

Contact Person & Address: Cheryl Reese, Department of Plant Science, SDSU, Ag Hall Box 2207A, Brookings SD 57007

DIVERSION POINT LEGAL LOCATION: SE1/4 NE1/4 Section 26 T110N-R49W

WATER SUPPLY Source: Groundwater

Well Information:

- 1) Well Drilling Firm: Grimshaw Drilling Co. 2) No. of Wells 1
3) Depth(s) 65 feet 4) Well log is available Yes

Casing:

- 1) Diameter 14 inches 2) Length 55 feet
3) Type Steel

Screen:

- 1) Type Stainless Steel 2) Length Unknown feet
3) Static water level 20 feet

Pump:

- 1) Make Unknown Submersible 2) Model Unknown
3) Size Unknown 4) Capacity 300 GPM

Motor:

- 1) Make Unknown 2) Model No. Unknown
3) Horsepower rating 15 hp

DISTRIBUTION LINES OR CANALS:

- 1) Type Steel 2) Size 6 inches 3) Length 300 feet between grid of risers

SYSTEM TYPE:

Linear:

- 1) Make Valley 2) Overall length 200 feet
3) Number of towers 3 4) End gun NA

5) High or low pressure Varies

6) Capacity Unknown GPM

Solid Stem Risers:

1) Length 40 feet

2) Diameter 4 inches

3) Spacing of sprinklers 40 feet

PERMIT QUALIFICATIONS AND REGULATIONS:

1) Special qualifications to permit being abided by Yes

2) All structures, wells and lands on map Yes

3) Irrigation Questionnaires checked to determine if permit owner started irrigation by the end of construction period Yes

5467-3

Approval of Location Change and/or Additional Diversion Point(s)

NAME: Department of Plant Sciences, SDSU

ADDRESS: Box 2207A, Brookings SD 57007

DATE: March 26, 1998 **COUNTY:** Brookings **TELEPHONE:** 605 – 688-5121

AUTHORITY:

Pursuant to SDCL 46-5-13.1, the location of a diversion point may be changed or additional diversion points may be licensed provided the following conditions are met and the potential for interference with other existing diversions is not increased:

- **Developed water source same as permitted source and no additional water appropriated**

Yes, no additional water is approved.

- **If irrigation, no new land is irrigated**

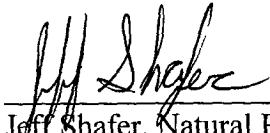
No new land is irrigated.

- **Review of Existing Diversions**

The proposed well location was in the NE1/4 NE1/4 of Section 26 T110N-R49W. The well was actually developed in the SE1/4 NE1/4 of Section 26 T110N-R49W. As a result of the move there is no change in irrigated acres and the source (Big Sioux Aurora Aquifer) remains the same.

RECOMMENDED ACTION

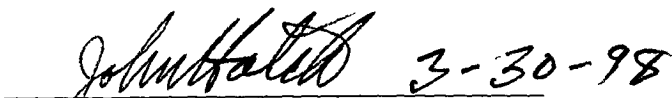
Based on the above criteria, it is recommended that the diversion point(s) be licensed as developed.



Jeff Shafer, Natural Resources Engineer
Water Rights Program

The Chief Engineer makes a finding pursuant SDCL 46-5-13.1 and ARSD 74:02:01:14.01 that:

This change in location and/or additional diversion point(s) does not increase the potential for adverse effects to existing diversions.



John Hatch, Chief Engineer
Water Rights Program

STATE OF SOUTH DAKOTA

WATER LICENSE NO. 5467-3

(1) South Dakota State University, Department of Plant Science, Box 2207A, Brookings SD 57707 made Application No. 5467-3, August 21, 1990 for a water permit to divert 1.5 cubic feet of water per second from groundwater (one well), Brookings County, South Dakota for irrigation purposes. Permit No. 5467-3, with a priority date of August 21, 1990 was approved October 3, 1990 and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before October 3, 1995 and for the application to beneficial use of said water on or before October 3, 1999.

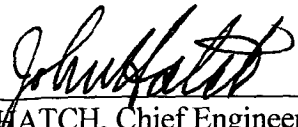
An investigation conducted for licensing purposes found the well under Water Permit No. 5467-3 was not in the location authorized by the permit. Pursuant to SDCL 46-5-13.1, the Chief Engineer makes a finding that the change in location of diversion point does not increase the potential for interference with existing water rights.

(2) It is certified that the applicant has complied with the provisions of South Dakota State Law relating to completion of the construction of the water supply system and is entitled to divert 0.67 cubic feet of water per second for beneficial use. The location of the diversion point is 2,000 feet south and 950 feet west of the northeast corner of Section 26-T110N-R49W (SE 1/4 NE 1/4).

(3) The applicant has complied with the provisions of South Dakota State Law relating to the application of water to beneficial use to irrigate the following land:

Section 26-T110N-R49W	NW 1/4 NE 1/4	15 acres
	NE 1/4 NE 1/4	40 acres
	SW 1/4 NE 1/4	20 acres
	SE 1/4 NE 1/4	40 acres
Section 23-T110N-R49W	SE 1/4 SE 1/4	9 acres
Total - 124 acres		

(4) Pursuant to South Dakota Water Law 46-5-30.1 South Dakota State University, Department of Plant Sciences, Box 2207A, Brookings SD 57007 the holder and/or owner of Water Permit No. 5467-3 is issued a license to appropriate water, the right to use 0.67 cubic feet of water per second from groundwater (one well) with a priority date of August 21, 1990 from the location specified in (2) of this license. The water to be conducted to and upon lands specified in (3) of this license for the purpose of irrigation. This license is subject to any limitations or qualifications listed in Water Permit No. 5467-3 and subject to South Dakota State Law.


JOHN HATCH, Chief Engineer
Water Rights Program
Department of Environment and Natural Resources

APR 23 1998
date





**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3181

APR 23 1998

5467-3

South Dakota State University
ATTN: CHERYL REESE
Department of Plant Sciences
Box 2207A
Brookings, SD 57007

Dear Ms. Reese:

Enclosed is Water License No. 5467-3. This is the final water right document completing your process of obtaining a Water Right.

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. 5467-3, 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 Program
(605) 773-3352

ks
enclosures

**DIVISION OF NO. 5467-3
INTO 5467A-3 AND 5467B-3**

The water right is being divided and reissued to reflect separate ownership.

- **No. 5467A-3 – South Dakota State University:** authorizing diversion of 0.67 cubic feet of water per second to irrigate 115 acres in the NE ¼ Section 26-T110N-R49W;
- **No. 5467B-3 – Terrance Hill,** 47670 US Hwy 14, Aurora SD 57002 – authorizing irrigation of 9 acres in the SE ¼ SE ¼ Section 23-T110N-R49W. Issuance of No. 5467B-3 is being withheld until a determination is made by the Water Management Board on whether or not the water right has been abandoned and/or forfeited and subject to cancellation.



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
www.state.sd.us/denr

September 8, 2003

5467-3

Terry Hill
47670 US Hwy 14
Aurora SD 57002

Dear Mr. Hill:

I am contacting you in regard to Water Right No. 5467-3, held by SDSU in Brookings. When the college obtained the water right they included a small piece of acreage they were leasing from you. Last year when returning their 2002 irrigation questionnaire, they made a notation which indicated they no longer farm that piece of ground.

The water right authorizes irrigation of 124 acres in the NE ¼ Section 26 and the SE ¼ SE ¼ Section 23, T110N, R49W. It is my understanding that the 9 acre piece of land in Section 23 is the portion you own. I have enclosed a map of the area and a copy of the water license.

In order to ensure the water right accurately reflects what is taking place, we need to find out from you if you will be continuing to irrigate the land in Section 23. If you are irrigating the land, we can go through the steps to divide and reissue the water right to reflect separate ownership.

If the 9-acre piece of land is no longer going to be irrigated, please send us a letter to that affect and will modify the water right accordingly.

Thank you in advance for your help. I am enclosing a postage paid envelope for your reply.

Sincerely,

Genny McMath
Environmental Scientist
Water Rights Program
(605) 773-3352
email: genny.mcmath@state.sd.us

enclosures

NOT TO SCALE

SE 1/4 SE 1/4 Section 23
T10N, R49W

1A 131.8

1B NHCL

2 2.3 NHCL

1 9.8 NHCL

950'

T2170

T1101

T2147

L9 2000'

14.7

40

19.6

40

DP

1 152.4

NHCL

3 33.5

1 109.8

NHCL

3.5
1 NHCL

T2100

3 4.0
NHCL

T2124

113

26

Shaper

Natural Resources
Engineer

110-49

2 139.4

NHCL

4 3.5
NHCL

1 154.8

NHCL

511.7.2

5467B-3

9-9-03

Attn: Genny McMath

Regarding Section 23
of T110N, R49W, the 9
acre parcel which I own
was never irrigated. SOSU
had intentions of doing a long
term irrigation project on my
9 acres, but they changed
their mind. There is no
well or anything.

Is that permit transferable?
Terrance A. Hill

Sincerely, Terrance Hill
e-mail thill@srtv.com

Terrance A. Hill
47670 U.S. Hwy 14
Aurora, SD 57002

RECEIVED
SEP 15 2003
WATER RIGHTS
PROGRAM



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
www.state.sd.us/denr

September ¹⁹~~8~~, 2003

5467-3

Terry Hill
47670 US Hwy 14
Aurora SD 57002

Dear Mr. Hill:

Thank you for writing about the portion of land you own that is described on Water Right No. 5467-3, held by SDSU in Brookings.

In your letter, you indicated that the 9 acre piece of land in the SE ¼ SE ¼ Section 23, T110N, R49W was never irrigated by the college. In South Dakota, water must be placed to beneficial use for the purpose it was appropriated at least once every three years in order to maintain a water permit or right. If legal excuse does not exist for the non-use of water, the water right is considered abandoned or forfeited (see enclosed excerpts of Water Laws and Water Management Board Rules)

A water right that has been abandoned or forfeited is not transferable. That portion of the water right will be scheduled for cancellation consideration at the December Water Management Board meeting. You will be notified of the time, date and place of the hearing once it is scheduled. If you disagree with our position on the water right and feel legal excuse exists for the non-use of water, you have the opportunity to appear before Board and discuss these issues. At the hearing, the Board will review all the evidence and make a determination on the status of the water right.

If I can answer any questions for you, please contact me.

Sincerely,

Genny McMath
Environmental Scientist
Water Rights Program
(605) 773-3352
email: genny.mcmath@state.sd.us

enclosure



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
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PIERRE, SOUTH DAKOTA 57501-3182
www.state.sd.us/denr

January 15, 2004

NOTICE OF CANCELLATION

TO: Terrance A Hill, 47670 US Hwy 14, Aurora SD 57002

FROM: Ron Duvall, Natural Resources Engineer
for Garland Erbele, Chief Engineer
Water Rights Program

SUBJECT: Cancellation of Water Right No. 5467B-3

Water Right No. 5467-3 was originally issued to the South Dakota State University in Brookings for irrigation of the NE ¼ Section 26 and the SE ¼ SE ¼ Section 23, T110N, R49W. The water right was divided and reissued into No. 5467A-3 and 5467B-3 to reflect separate ownership. In September, 2003, a letter was received from you confirming the 9-acre parcel you own in the SE ¼ SE ¼ Section 23 is not being irrigated and a well does not exist on that land for irrigating. The Chief Engineer of the Water Rights Program is recommending cancellation of Water Right No. 5467B-3 due to abandonment and/or forfeiture.

The Water Management Board will consider cancellation of Water Right No. 5467B-3 at 10:00 am, March 3, 2004, in the Floyd Matthew Training Center, Joe Foss Building, 523 E Capitol, Pierre, SD.

The recommendation of the Chief Engineer is not final or binding upon the Board. The Board is authorized to 1) cancel, 2) cancel portions of, 3) delay action on, or 4) take no action on Water Right No. 5467B-3 based upon facts presented at the public hearing. Our records show you to be the owner of property covered by this water right. If you wish to oppose the cancellation and if you intend to participate in the hearing before the Board and present evidence or cross-examine witnesses according to SDCL 1-26, you must file a written petition with the Chief Engineer by February 20, 2004. The petition may be informal, but it must include a statement describing the reasons for your opposition to the cancellation, and your signature and mailing address or your legal counsel if legal counsel is obtained. The Board may consider any abandoned or forfeited water to be available for appropriation subject to the provisions of SDCL 46-1, 46-2, 46-2A and 46-5.

The hearing(s) will be conducted pursuant to the provisions of SDCL 46-1-1 thru 46-1-10, 46-1-14 thru 46-1-15; 46-2-3.1, 46-2-9, 46-2-11, 46-2-17; 46-5-36, 46-5-37, 46-5-37.1; 46-2A-1 thru 46-2A-7; and Board Rules ARSD 74:02:01:36 thru 74:02:01:41. These are contested cases pursuant to procedures contained in SDCL 1-26.

January 15, 2004

Terrance A Hill

Page 2

These hearings may be adversarial proceedings. Any party has the right to be present or to be represented by a lawyer. These and other due process rights will be forfeited if they are not exercised. Decisions of the Board may be appealed to the Circuit Court and State Supreme Court as provided by law.

The time of the hearing will be automatically extended for at least twenty days upon your written request to the Chief Engineer after a petition has been filed to oppose the cancellation. If an extension is requested, the hearing on the cancellation will be continued until the next regular Board Meeting. Any request for extension must be filed with the Chief Engineer by February 20, 2004.

Prior to February 20, 2004, contact the Water Rights Program, Joe Foss Building, 523 E Capitol, Pierre, SD (605-773-3352) if assistance is needed with the following: 1) further information on the proposed cancellation; 2) to assure access to the meeting room for the handicapped; or 3) to obtain an interpreter for the hearing impaired.

Please note:

According to SDCL 1-26-18.3, parties to a contested case may use the Office of Hearing Examiners to conduct a hearing if either a property right is being terminated or the dollar amount in controversy exceeds \$2,500.00. If you choose to use the Office of Hearing Examiners rather than the hearing procedure described above, then you need to notify the Chief Engineer (Water Rights Program, 523 E. Capitol Avenue, Pierre SD) by February 20, 2004.



**DEPARTMENT of ENVIRONMENT
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RECOMMENDATION OF CHIEF ENGINEER

FOR WATER RIGHT NO. 5467B-3, TERRANCE A HILL

Pursuant to SDCL 46-2A-2 and 46-5-37.1, the following is the recommendation of the Chief Engineer, Water Rights Program, Department of Environment and Natural Resources concerning Water Right No. 5467B-3.

The Chief Engineer is recommending cancellation of the above Water Right due to abandonment and/or forfeiture. South Dakota State University in Brookings leased the land from Terrance Hill when Water Permit No. 5467-3 was obtained. No. 5467-3 has been divided and reissued to reflect separate ownership. Mr. Hill has confirmed that the land now under Water Right No. 5467B-3 is not irrigated.

RON DUVALL, Natural Resources Engineer
for Garland Erbele, Chief Engineer
January 15, 2004

Note:

Cancellation consideration of Water Right No. 5467B-3 (SE ¼ SE ¼ Section 23, T110N, R49W) does not pertain to Water Right No. 2677-3 held by Terrance Hill (S ½ Section 22, T110N, R49W).

CERTIFICATION

I hereby certify that on January 15, 2004, I have personally deposited with the United States mail at Pierre, South Dakota, first class postage, prepaid envelopes containing a Notice dated January 15, 2004 regarding Notice of Cancellation of Water Permit Nos. 1649-1, 1634-1 and Water Permit Nos. 1336-3, 5467B-3, 5969B-3 addressed as stated below:

1336-3
Charles Olson
1421 Wisconsin
Brookings SD 57006

5467B-3
Terrance A Hill
47670 US Hwy 14
Aurora SD 57002

1634-1
Cris D & Dianne Miller
10164 W Hwy 14
Spearfish SD 57783

1649-1
Greg Dittman
Black Hills Spring Water
19682 Fish Lake
Spearfish SD 57783

2995-3
Roland Kleinschmidt
20841 318th Ave
Harrold SD 57536

2995-3
Lee Kleinschmidt
20831 318th Avenue
Harrold SD 57536

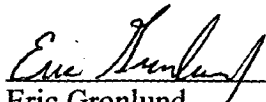
5969B-3

~~4968B-3~~

Hand carried to John Cooper, Secretary SD Dept of Game Fish & Parks, Foss Building, Pierre

Hand carried to Leslie Petersen, SD Dept of Game Fish & Parks, Foss Building, Pierre

Hand carried to John Kirk, SD Dept of Game Fish & Parks, Foss Building, Pierre



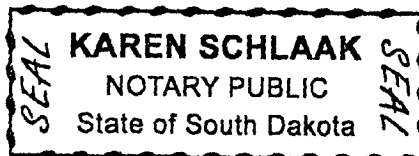
Eric Gronlund
Natural Resource Engineer
Water Rights

STATE OF SOUTH DAKOTA)
) SS
COUNTY OF HUGHES)

Sworn to, before me, this 16th day of January, 2004.



Karen Schlaak
Notary Public
My Commission expires April 1, 2007





**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
www.state.sd.us/denr

March 8, 2004

5467B-3

NOTICE

Terrance A Hill
47670 US Hwy 14
Aurora SD 57002

Dear Mr. Hill:

This will notify you that the Water Management Board cancelled Water Right No. 5467B-3 on March 3, 2004. Water Right No. 5467-3 was divided and reissued into No. 5467A-3 and 5467B-3 to reflect separate ownership. In September, 2003, a letter was received from you confirming the 9-acre parcel you own in the SE ¼ SE ¼ Section 23 is not being irrigated and a well does not exist on that land for irrigating.

The action to cancel the water right was taken under the conditions outlined in our notice to you dated January 15, 2004. If you have any questions concerning the Board action, please contact Genny McMath, with our program, at (605) 773-3352.

Sincerely,

Garland Erbele, Chief Engineer
Water Rights Program

CERTIFICATION

5467B-3

I hereby certify that on March 8, 2004, I have personally deposited with the United States mail at Pierre, South Dakota, first class postage, prepaid envelopes containing a Notice dated March 8, 2004 regarding Notice of Cancelled Water Permit # 1634-1, 1616-1, 1649-1, 2193-2, 2430-2, 987-2, Water Right # 731-2, 92-3, 93-3, 94-3, 1028-3, 1336-3, 1439-3, 2542-3, 2737-3, 4724-3, 4931-3, 5467B-3, 5575-3, 5969B-3, 92-2 addressed as stated below:

1634-1
Cris D & Dianne Miller
10164 W Hwy 14
Spearfish SD 57783

2193-2
Steve Van Tassel
Golden Willow Seeds
21400 Ottumwa Rd
Midland SD 57552

92-3, 93-3, 94-3
Dennis Ellwein
Ellwein Company
25045 410th Ave
Mitchell SD 57301

1439-3
Helen Zoss
40360 235th St
Forestburg SD 57314

4724-3
Randy Eden
21821 398th Ave
Alpena SD 57312

5575-3
Blaine Martian
Big Sioux Nursery Inc.
16613 Sioux Conifer Rd
Watertown SD 57201

1616-1
Alan Crago
One Diamond Inc
PO Box 943
Spearfish SD 57783-0943
2430-2
Reclining G Game Farm
% Sam Zimiga
1719 W Main St
Rapid City SD 57702-2564

1028-3
John C Smith
For William M Smith Estate
2204 Valley Rd
Yankton SD 57078

2542-3
Darrel Jongeling
18877 461st Ave
Castlewood SD 57223

4931-3
Bill Makens
Makens Oak Tree Lodge
RR 3 Box 87
Clark SD 57225

92-2 & 987-2
Courtney R Clayborne
Johnson Eisland Law Firm
PO Box 6900
Rapid City SD 57709-6900

1649-1
Greg Dittman
Black Hills Spring Water
19682 Fish Lake
Spearfish SD 57783
731-2
Dave Sletnikofs
US Forest Service
803 Soo San Dr
Rapid City SD 57702

1336-3
Charles Olson
1421 Wisconsin
Brookings SD 57006

2737-3
Richard Strasburg
Strasburg Inc
18150 366th Ave
Rockham SD 57470

5467B-3
Terrance A Hill
47670 US Hwy 14
Aurora SD 57002

92-2 & 987-2
Bob Akers
Akers Hospitality
625 E Disk Dr
Rapid City SD 57701

5969B-3 was sent Inter-office to:

John Cooper, Secretary SD Dept of Game Fish & Parks, 523 E Capitol, Pierre
Leslie Petersen, SD Dept of Game Fish & Parks, 523 E Capitol, Pierre
John Kirk, SD Dept of Game, Fish & Parks, 523 E Capitol, Pierre


Eric Gronlund
Natural Resource Engineer
Water Rights

STATE OF SOUTH DAKOTA)
) SS
COUNTY OF HUGHES)

Sworn to, before me, this 9th day of March, 2004.


Karen Schlaak
Notary Public
My Commission expires April 1, 2007

