

No. 4225-3

MAP #

3446-3Water 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 U.S. Fish and Wildlife Service
 Postoffice address P.O.B. 25486
Denver Federal Center, County Jefferson State Colorado
Denver

- I. If a corporation _____
- (a) Name of same _____
- (b) Date and place of incorporation _____
- (c) Amount of capital stock _____
- (d) Amount paid in _____
- (e) Names and addresses of directors _____

(NOTE--A certified copy of articles of incorporation must accompany the application.)

- II. Method of accomplishing the work and financial resources of the applicant:
- (a) Method of accomplishing work (Whether by contract, employment of others, or by direct labor)
Contract
- (b) Cash on hand, \$ _____
- (c) Treasury stock, \$ _____
- (d) Bonds to be issued, \$ _____
- (e) Other resources, \$ _____

2. Name of diversion work Sand Lake draft well
3. Amount of water claimed two 0.67 cubic feet per second 150 acre feet annually
4. Source of water supply ground water
5. Location of point of diversion SW 1/4 Sec. 16, T126N, R62W
 _____ on _____ bank Blom BROWN County.
6. Annual period or periods during which water is to be used year around
7. To be used for: _____ pressure

- I. Irrigation or domestic use: Gravity, overhead sprinkling or combination system? system
- (a) Number of acres to be irrigated _____ acres.

- (b) Legal subdivisions to be irrigated _____

(NOTE--A list of lands to be irrigated, giving each subdivision and fraction with acreage thereof, should be written here, or may be appended as a part of this application. Same must also be shown on accompanying map.)

- (c) Statement as to domestic use (giving location, etc.) Refuge Hq.

3 residences, office and shop buildings

- II. Stockwatering, mining, milling, power, fish culture, fire protection and public recreation:

- (a) Nature of use Wildlife Refuge uses at Sand Lake N.W.R.
 Name any of the above uses claimed

- (b) Amount of power to be generated _____ horse power

Amount claimed for engine cooling _____

- (c) Location of plant _____

- (d) Method of developing power _____

- (e) Point where water will be returned to stream _____

8. Estimated cost of work:

(a) Head Gates, \$----- (b) Pumping plant, \$28,000
 (c) Fluming, \$----- (d) Canal-earth, \$----- Rock, \$-----
 (e) Other structures ----- \$----- Total, \$-----

9. Description of diversion works:

I. Nature of works: (Reservoir, dam, ditch, flume, pumping plant, etc.)

12" wall 300 feet deep, turbine pump and electric motor-----

II. Dimensions of works.

(a) Dam: Height-----feet; length at bottom-----feet; length at top-----feet; thickness at bottom-----feet; thickness at top-----feet; slope at front water face-----; slope at back face-----
 material used in construction-----
 (b) Reservoir: Capacity when filled-----acre feet. Surface area at highwater mark-----acres.

DEPTH AT OUTLET-Feet	SURFACE AREA AT EACH DEPTH AT OUTLET--ACRES	ACRE-Feet CAPACITY

(c)* Head gate: Width-----feet; height-----feet;
 Material-----
 (d) Canal: Total length-----miles.

LOCATION OF HEADGATE	DEPTH	BOTTOM WIDTH	WIDTH AT WATER-LINE	GRADE PER MILE
At ----- Mile	----- feet	----- feet	----- feet	----- feet
At ----- Mile	----- feet	----- feet	----- feet	----- feet
At ----- Mile	----- feet	----- feet	----- feet	----- feet
At ----- Mile	----- feet	----- feet	----- feet	----- feet
At ----- Mile	----- feet	----- feet	----- feet	----- feet
At ----- Mile	----- feet	----- feet	----- feet	----- feet

(Give dimensions where reductions in size are made.)

10. Time required for completion of work ----- ONE ----- years.
 11. Time required for complete application of water to the proposed beneficial use ----- 2 ----- years.
 12. Choice of newspaper for publication of notice of intention to appropriate -----

STATE OF ~~SOUTH DAKOTA~~ Colorado
 County of Jefferson
 I, Charles E. Lane Jr., 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, examined the map accompanying the same, and that I know of my own personal knowledge that the matters therein stated and shown are true.

Signed Charles E. Lane Jr.
 Acting Regional Director
 Subscribed and sworn to before me this 9 day of February 1928.
Joseph F. Heston
 Notary Public (or other qualified officer)

*Each diversion must have a headgate or measuring device.

My Commission expires Aug 27, 1981

Remarks by State Water Resources Commission:

The ~~1st~~ well approved under this Permit will be located near domestic wells and other ~~domestic~~ wells which may obtain water from the same aquifer. The ~~1st~~ well owner, under this Permit, shall control his ~~1st~~ withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in irrigation wells having prior water rights.

STATE OF SOUTH DAKOTA
County of HUGHES ss.

Pierre, South Dakota, APRIL 6, 1978

This is to certify that the foregoing application was received by the Commission at 9:10 o'clock A.m. upon the 26th day of AUGUST, 1977.

State Water Resources Commission

By:

Betty Westman
Chief Engineer, Executive Officer

Number of permit 4-225-3

Date of first receipt of application AUGUST 26, 1977

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

Date of receipt of corrected application FEBRUARY 2, 1978

Date from which applicant may claim right FEBRUARY 2, 1978

Approved MARCH 28, 1978, Recorded in Book 19 Page 316

This is to certify that we have examined the foregoing application for a permit to appropriate water of the State of South Dakota, and we hereby grant the same as stated herein, subject, however, to the following limitations and conditions:

1st. The equivalent of at least one-fifth of the work above specified is to be completed on or before _____

SEPTEMBER 28, 1978

2nd. The whole of said work is to be completed on or before MARCH 28, 1979

3rd. The limit of time for proof of beneficial use of water appropriated in accordance herewith is

MARCH 28, 1981

4th. The water appropriated shall be used for the purpose of OPERATION OF SAND LAKE

HEADQUARTERS

5th. 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.

6th. The amount of the appropriation herein granted shall not exceed .67 cubic feet per second; neither shall it exceed the capacity of the above described system of diversion works, nor the least amount of water that experience may hereafter indicate as necessary for the production of crops in the exercise of the best husbandry and further, said appropriation must be limited to not more than one acre-foot (1.73) of one cubic foot of water per second of time for each acre of land to which water is actually USED IN OPERATION OF SAND LAKE HEADQUARTERS

and beneficially ~~applied for irrigation~~ on or before MARCH 28, 1981; said water to be used during the following described annual period:

CONTINUOUSLY

Witness my hand this 6th day of APRIL, 1978

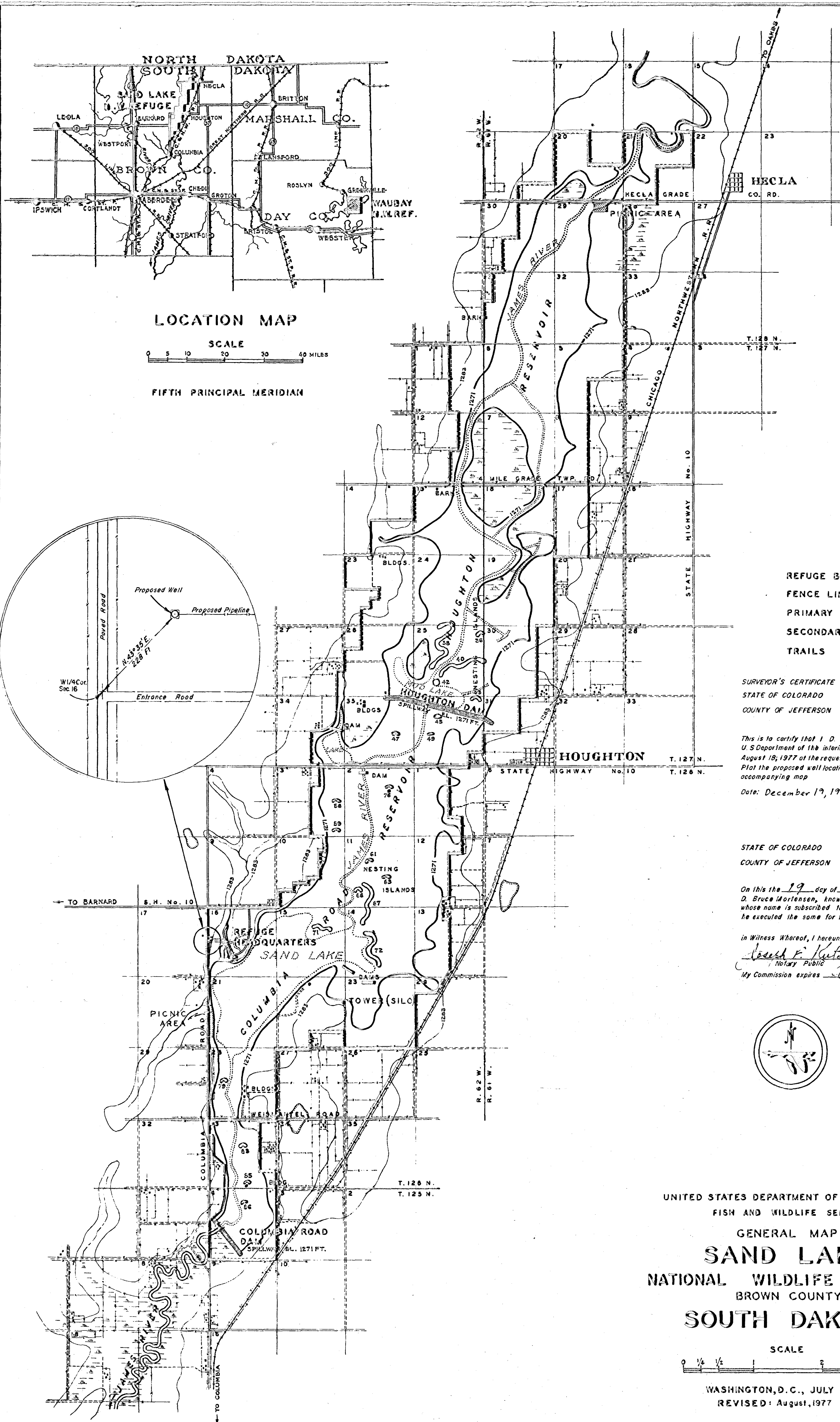
State Water Resources Commission

By:

John Hatch
Chief Engineer, Executive Officer

Certificate of Construction Issued FEBRUARY 23, 1982

Water Licence Issued FEBRUARY 23, 1982



LOCATION MAP

SCALE
0 5 10 20 30 40 MILES

FIFTH PRINCIPAL MERIDIAN

LEGEND

- REFUGE BOUNDARY
- FENCE LINES
- PRIMARY ROADS
- SECONDARY ROADS
- TRAILS

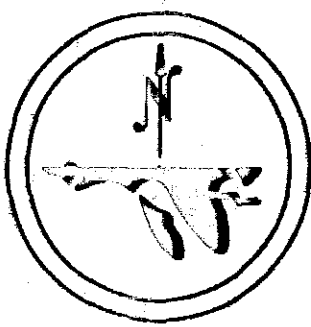
SURVEYOR'S CERTIFICATE
STATE OF COLORADO }
COUNTY OF JEFFERSON }

This is to certify that I D. Bruce Mortensen a Land Surveyor with the U.S. Department of the Interior, Fish and Wildlife Service, did on and before August 18, 1977 at the request of the United States of America, Proprietor, Plot the proposed well location for water rights application as shown on the accompanying map
Date: December 19, 1977

STATE OF COLORADO }
COUNTY OF JEFFERSON }

On this the 19 day of December, 1977, before me appeared D. Bruce Mortensen, known to me or satisfactorily proven to be the person whose name is subscribed to the within instrument and acknowledged that he executed the same for the purposes therein contained.

In Witness Whereof, I hereunto set my hand and official seal
Joseph F. Kitcher
Notary Public
My Commission expires June 29, 1981



FILED:

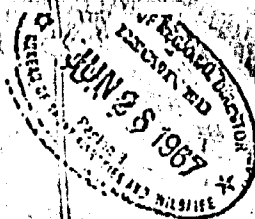
Date: _____
Book _____
Page: _____

UNITED STATES DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
GENERAL MAP
SAND LAKE
NATIONAL WILDLIFE REFUGE
BROWN COUNTY
SOUTH DAKOTA

SCALE
0 1/4 1/2 1 2 3 MILES

WASHINGTON, D.C., JULY 1936
REVISED: August, 1977

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES BRANCH



RECORD OF WELL

1. Location: State South Dakota County Brookings

Nearest P. O. Columbia Direction from P. O. North

Distance from P. O. 17 miles: SW 1/4 sec. 16 T. 26 S. R. 62 E.

If in city, give street and number

Locate well on flat of section.

Bureau of Sport Fisheries and Wildlife

2. Owner: Sand Lake Refuge Address Columbia, South Dakota

Driller: Rehfeld and Seidel Address: Aberdeen, South Dakota

3. Situation: Is well on upland, in valley, or on hillside? Upland

4. Elevation of top of well: 130 ft. above the level of sea
(Above or below) (Sea, desert, lake, or stream)

5. Type of well: bored (Above or below); kind of drilling rig used rotary (See, depth, lake, or str. km)
(Dug, driven, bored, or drilled) (Solid tool, jetting, rotary, etc.)

6. Depth of well: 120 ft.; year in which well was finished March 1967

Does well enter rock? Some; if so, at what depth? 110 ft.; kind of rock layers of shale

7. Diameter: At top 5 1/2" inches; at bottom 5 3/4" inches.

8. Principal water bed: clay

Depth to principal water bed _____ ft.; thickness of bed _____ ft.

If other water supplies were found, give depth to each _____

9. Casings: Kind none; size ; length ft.; between depths of and ft.

Kind _____; size _____; length _____ ft.; between depths of _____ and _____ ft.

Kind _____; size _____; length _____ ft.; between depths of _____ and _____ ft.

Packers (if any): Depth at which packers were used _____; kind _____

Screen or Strainer: Was well finished with screen?; kind of screen

length of screen ft.; diameter inches; size of openings

10. Head: Does well at present overflow without pumping? _____; did it overflow when new? _____

If flowing, give pressure lb. per sq. inch; or height water will rise in a pipe ft. above surface.

original pressure or head _____; if not flowing, give water level in well _____ ft. below surface.

11. Pump: Is the well pumped? _____; kind of pump _____

size or capacity of pump _____; kind of power _____

12. Yield: Natural flow at present (if any) gallons per minute; original flow gallons per minute

well has been pumped at _____ gallons per minute continuously for _____ hours

quantity of water ordinarily obtained from well gallons per day.

18. Use: For what purpose is the water used?

14. Quality of the water: _____; is there an analysis? _____

15. Cost of well, not including pump: _____ Temperature of water _____ ° F

Name of person filling blank Lytle J. Schoonover

Date June 23, 1967 Address Sand Lake Refuge Columbia, S. D.

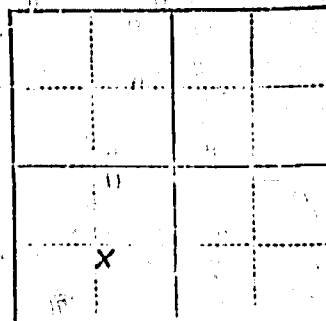
On the back of this sheet give the name of the sugar which the well passes and any other ☐ is not given above.

LOG OF WELL

KIND OF ROCK OR OTHER MATERIAL (Give color and texture whether hard or soft)	DEPTH IN FEET		THICKNESS IN FEET	REMARKS (Especially information as to water found)
	From—	To—		
This was a test hole to be enlarged and developed if sufficient water was found. About a foot of sand and clay was found at 10 feet and a small vein of water bearing sand was found at about 110 feet. Neither vein produced sufficient water to warrant development.				
B Soil	0	2		
Yellow sandy clay	2	17		
Silt sand	17	18		
Fine sand	18	20		
Brown clay	20	30		
Rock	30' 10"			
Rock & silt sand	30	35		
Blue clay	35	45		
Rock & silt sand	45	50		
Blue clay	50	60		
Blue clay	60	70		
Blue clay & Sm rock	70	80		
Blue clay & silt	80	86		
Sandy blue clay	86	90		
Rock	90			
Sm Rock & blue clay	90	100		
Gray clay	105	120		

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES DIVISION

RECORD OF WELL



Locate well on plat of section.

1. Location: State South Dakota County DeWitt
Nearest P. O. Columbia, Direction from P. O. East
Distance from P. O. 7 miles: S. 1 1/4 sec. 15, T. 20 N., R. 62 W.
If in city, give street and number _____
2. Owner: Bureau of Sport Fisheries and Wildlife Address Columbia, South Dakota
Driller: Rehfeld and Seidel Address Aberdeen, South Dakota
3. Situation: Is well on upland, in valley, or on hillside? Upland
4. Elevation of top of well: 1304 ft. Above the level of Sea (Sea, depot, lake, or stream)
5. Type of well: Bored (Dig, driven, bored, or drilled); kind of drilling rig used rotary (Solid tool, jacking, rotary, etc.)
6. Depth of well: 108 ft.; year in which well was finished March 1967
Does well enter rock? No; if so, at what depth? _____ ft.; kind of rock _____
7. Diameter: At top 5 1/8 inches; at bottom 5 1/8 inches.
8. Principal water bed: clay (Gravel, sand, clay, or rock. If rock, state kind)
Depth to principal water bed _____ ft.; thickness of bed _____ ft.
If other water supplies were found, give depth to each _____
9. Casings: Kind none; size _____; length _____ ft.; between depths of _____ and _____ ft.
Kind _____; size _____; length _____ ft.; between depths of _____ and _____ ft.
Kind _____; size _____; length _____ ft.; between depths of _____ and _____ ft.
Packers (if any): Depth at which packers were used _____; kind _____
Screen or Strainer: Was well finished with screen? _____; kind of screen _____
length of screen _____ ft.; diameter _____ inches; size of openings _____
10. Head: Does well at present overflow without pumping? _____; did it overflow when new? _____
if flowing, give pressure _____ lb. per sq. inch; or height water will rise in a pipe _____ ft. above surface;
original pressure or head _____; if not flowing, give water level in well _____ ft. below surface.
11. Pump: Is the well pumped? _____; kind of pump _____
or capacity of pump _____; kind of power _____
12. Yield: Natural flow at present (if any) _____ gallons per minute; original flow _____ gallons per minute;
well has been pumped at _____ gallons per minute continuously for _____ hours;
quantity of water ordinarily obtained from well _____ gallons per day.
13. Use: For what purpose is the water used? _____
14. Quality of the water: _____; is there an analysis? _____
(Hard or soft, fresh or salty, etc.)
15. Cost of well, not including pump: _____ Temperature of water _____ ° F.

Name of person filling blank Lyle J. Schoonover

Date June 23, 1967 Address Sand Lake Refuge Columbia, S. D.

On the back of this sheet give the _____ of the beds through which the well passes and any other _____ not given above.

LOG OF WELL

KIND OF ROCK OR OTHER MATERIAL (Give color and tell whether hard or soft)	DEPTH, IN FEET		THICKNESS, IN FEET	REMARKS (Especially information as to water found)
	From—	To—		
This was a test hole to be enlarged and developed if sufficient water was found. A vein of sand mixed with clay was encountered at about 1 foot. No water bearing material was found below that depth. Insufficient water was found for the development of a well.				
Black dirt	0	2		
Yellow sandy clay	2	18		
Silt sand	18	20		
Brown clay	20	30		
Fine sand	30	32		
Rock & Blue clay	32	40		
Blue clay - rock at 45	45	50		
Blue clay	50	60		
Blue clay	60	70		
Blue clay	70	80		
80-86 silt - fine sand with blue clay	80	90		
Sm rock & Blue clay	90	100		
Gray clay	100	105		

9. (Continued)

III. Well Specifications

(a) Hole and casing

Size of drill hole or excavation 6 inch, Depth 75 to 110 feet deep

Type of casing steel
(wood, concrete, steel, etc.)

Size of casing 6 inch Thickness of casing .280"

Length of casing to be sized If collection gallery, length, size and depth of gallery

(b) Screens

Type of perforated screen stainless steel or bronze

Size of perforated screen 6" dependent on samples
(diameter) (length)

Thickness of gravel pack, length of gravel pack

(c) Water Bearing Materials

Distance to water 16+ feet Character of water bearing materials
glacial till

Thickness of water bearing material 150+ feet of glacial till

(d) Pump and Motor

Type of pump
(centrifugal, propeller, mixed flow, etc.)

Name of pump, size

Kind of motor
(gasoline, electric, diesel, etc.)

Horsepower, Name of Motor

(e) Complete well

Capacity 10 gpm at drawdown of Estimated cost

(f) Owner of land upon which well is located Bureau of Sport Fisheries and Wildlife
1006 West Lake Street Name
Minneapolis, Minnesota (Sand Lake National Wildlife Refuge)
Address

(g) Distance to nearest existing wells

On same owner's property 36 rods. On property owned by others rods

9. (Continued)

III. Well Specifications

(a) Hole and casing

Size of drill hole or excavation 6 inch Depth 75 to 110 feet deep

Type of casing steel
(wood, concrete, steel, etc.)

Size of casing 6 inch Thickness of casing280"

Length of casing to be sized If collection gallery, length, size and depth of
gallery

(b) Screens

Type of perforated screen stainless steel or bronze

Size of perforated screen 6" dependant on samples
(diameter) (length)

Thickness of gravel pack length of gravel pack

(c) Water Bearing Materials

Distance to water 80+ feet Character of water bearing materials
glacial till

Thickness of water bearing material 150+ feet of glacial till

(d) Pump and Motor

Type of pump
(centrifugal, propeller, mixed flow, etc.)

Name of pump size

Kind of motor
(gasoline, electric, diesel, etc.)

Horsepower Name of Motor

(e) Complete well

Capacity 10 gpm at drawdown of Estimated cost

(f) Owner of land upon which well is located Bureau of Sport Fisheries and Wildlife
1006 West Lake Street Name
Minneapolis, Minnesota (Sand Lake National Wildlife Refuge)
Address

(g) Distance to nearest existing wells

On same owner's property 36 rods. On property owned by others rods

RECEIP

WATER RIGHTS COMMISSION

State of South Dakota

No 4 6326

PIERRE, February 2, 1978

RECEIVED OF Donald G. Stewart, 1714 S. Vancouver Ct., Lakewood, Colorado 80223
the following amount in fees for services rendered as provided for by law: FUND 290

U. S. Fish and Wildlife Service		
Fee for Application for Permit to Appropriate Water No. 4225-3 (examination, processing, recording and filing)	150	00
Fee for inspecting Construction, and issuing Cert. of Construction No.		
Fee for inspecting Beneficial Use, and issuing Water License No.		
Fee for issuing Location Certificate-Dry Draw, No.		
Fee for filling		
Fee for certified copy of		
Fee for Print copy of map		
Fee for Certifying		
Fee for (any other work as provided by law)		
TOTAL	150	00

WATER RIGHTS COMMISSION

By John Hatch
Chief Engineer, Executive Officer

JOHN HATCH

kjw

Publish first publication, on or before March 10, 1978

NOTICE OF HEARING ON
APPLICATION TO APPROPRIATE WATER

Pierre, South Dakota 57501

February 21, 1978

Notice is hereby given that US. Fish & Wildlife Service whose post office

address is Denver, CO, ~~XXXXXX~~, 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 .67 cubic feet of water per second of time from ground water (one well)

through the Sand Lake Well, the point of diversion of which is to be located in the SW 1/4

of Section 16, Twp. 120N Range 62W. Said water to be used for ~~XXXXXXXXXXXX~~
~~XXXXXXXXXXXX~~ ~~XXXXXXXXXXXX~~ ~~XXXXXXXXXXXX~~ ~~XXXXXXXXXXXX~~ ~~XXXXXXXXXXXX~~ ~~XXXXXXXXXXXX~~ ~~XXXXXXXXXXXX~~ ~~XXXXXXXXXXXX~~
operation of Sand Lake Headquarters.

This Application No. 4225-3 will be considered by the Water Rights Commission at the Guest House at Watertown, SD upon the 20th day of March, 1978 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 4-26 may notify the Commission in writing prior to the hearing or orally at the hearing.

NOTE: Final Proof of Publication must be received by the hearing date for the WATER RIGHTS COMMISSION Commission to take action.

BETTY WESTLUND
Water Rights Specialist

cc: U.S. Fish & Wildlife Service, Box 23436-Denver Federal Building, Denver CO 80226

No. 4225-3

PROOF OF PUBLICATION

STATE OF SOUTH DAKOTA)
County Brown) ss.

I, Sandy Brand hereby

certify that the annexed printed copy of Notice of Intent to Appropriate
Water was taken from the Aberdeen American News

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 Aberdeen of

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

March 10, 17, 1978

Sandy Brand
(Signature)

Principal Clerk
(Title)

March 17, 1978
(Date Signed)

(No. 165—March 10-17-78)
NOTICE OF HEARING
ON APPLICATION TO
APPROPRIATE WATER
Notice is hereby given that U.S.
Fish & Wildlife Service whose post
office address is Denver, Colo., has
made an application in accordance
with the provisions of SDCL 47-1-1
thru 47-1-8; 47-2-1 thru 47-2-
13; 47-3-1 thru 47-3-3; 47-3-10 thru 47-3-
22; 47-4-1, 47-4-3, 47-4-5, 47-4-6, 47-4-
10, 47-4-14 and Commission Rules
AAEO 51:01:01 thru 51:01:01:13,
for a permit to appropriate for
beneficial use, 67 cubic feet of water
per second of time from ground
water (one well) through the Sand
Lake Well, the point of diversion of
which is to be located in the SW 1/4
NW 1/4 of Section 16, T14P, R22E Range
62W. Said water to be used for
operation of Sand Lake
Headquarters.
This Application No. 4225-3 will be
considered by the Water Rights
Commission at the Court House at
Watertown, SD upon the 27th day of
March, 1978 at 10 A.M. The Com-
mission 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 47-3-
36 may notify the Commission in
writing prior to the hearing or orally
at the hearing.
WATER RIGHTS COMMISSION
BETTY WESTLUND
Water Rights Specialist



Water Right Number 4225-3

1. Considered MARCH 28, 19 78
2. Name of Applicant U.S. FISH & WILDLIFE SERVICE
3. Post Office Address DENVER, CO.
4. Amount of water claimed .67
5. Source of water supply 110' DEEP WELL.
6. Water to be used for OPERATION OF SAND LAKE HEADQUARTERS.

Acres to be irrigated _____

7. Water to be diverted and used in BROWN County
about 19 N. & 8 Miles EAST of ABERDEEN

8. Proof of Publication Received 3-20-78

Not received _____

9. Application Approved _____

Subject to _____

Not approved _____

Action deferred _____

10. Remarks:

Permit No. 4225-3

Water Diversion No. 3 James River Water District

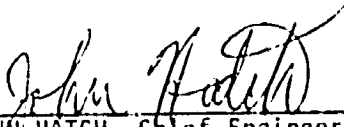
CERTIFICATE OF CONSTRUCTION

This is to Certify, That the U.S. Fish & Wildlife Service

_____ the holder _____ of
Permit No. 4225-3, issued upon Application No. 4225-3, bearing date of priority of February 2
1976 authorizing the diversion of .67 cu. ft. per second of the waters of _____
Groundwater County of Brown, State of South Dakota at _____
a point in the SW $\frac{1}{4}$ NW $\frac{1}{4}$, Section 16, T-126N, R-62W, N 43°35' E, 228 feet from the W $\frac{1}{2}$
corner, Section 16.
_____ for wildlife refuge use

_____ purposes, has _____ complied with the provisions of the laws of the State of South Dakota relating to proof of
completion of the works of diversion set out and described in said Permit; that said works are found in satisfactory
condition for diverting and conveying to the place of intended use .67 cu. ft. per second of water.

Date February 23, 1982


JOHN HATCH, Chief Engineer
Water Rights Division

STATE OF SOUTH DAKOTA

WATER LICENSE NO. 4225-3

(1) WHEREAS, On the 26th day of August A. D. 19 77
the U.S. Fish and Wildlife Service

made Water Right Application No. 4225-3 for a permit to use .67 cubic feet per second of the waters
 of Groundwater

County of Brown, State of South Dakota, for Wildlife Refuge use

_____ purposes; and

(2) WHEREAS, On the 28th day of March A. D. 19 73

Permit No. 4225-3, with a date of priority of February 2, 1978

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 23th day of March A. D. 19 79 and for the

application to beneficial use of said water on or before the 26th day of March A. D. 19 81

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 .67 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,

water is used for wildlife refuge uses

(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 the U.S. Fish & Wildlife Service

of Denver, Colorado

the holder _____ and owner _____ of said permit No. 4225-3 a water right, dating from February 2, 1978

to use of .67 cubic feet per second of the waters

of Groundwater

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

purposes hereinafter mentioned, to be diverted at a point in the SW1/4, Section 16, T-126N, R-62W,

N 43°15'E, 228 feet from the W1/4 corner, Section 16.

through xxxxxxx ~~the wildlife refuge system.~~

for the purpose of wildlife refuge uses

Subject to any limitations listed in Water Right Permit No. 4225-3 and subject to the laws of the State of South Dakota.

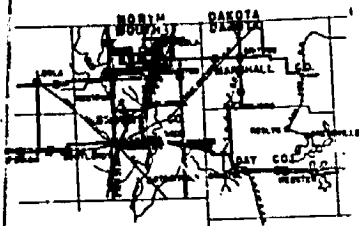
WITNESS, My hand and seal of our office at Pierre, South Dakota
this 23rd day of February A. D.
Nineteen Hundred and Eighty-Two

WATER MANAGEMENT BOARD

By:

John Hatch
Chief Engineer, Executive Officer

JOHN HATCH



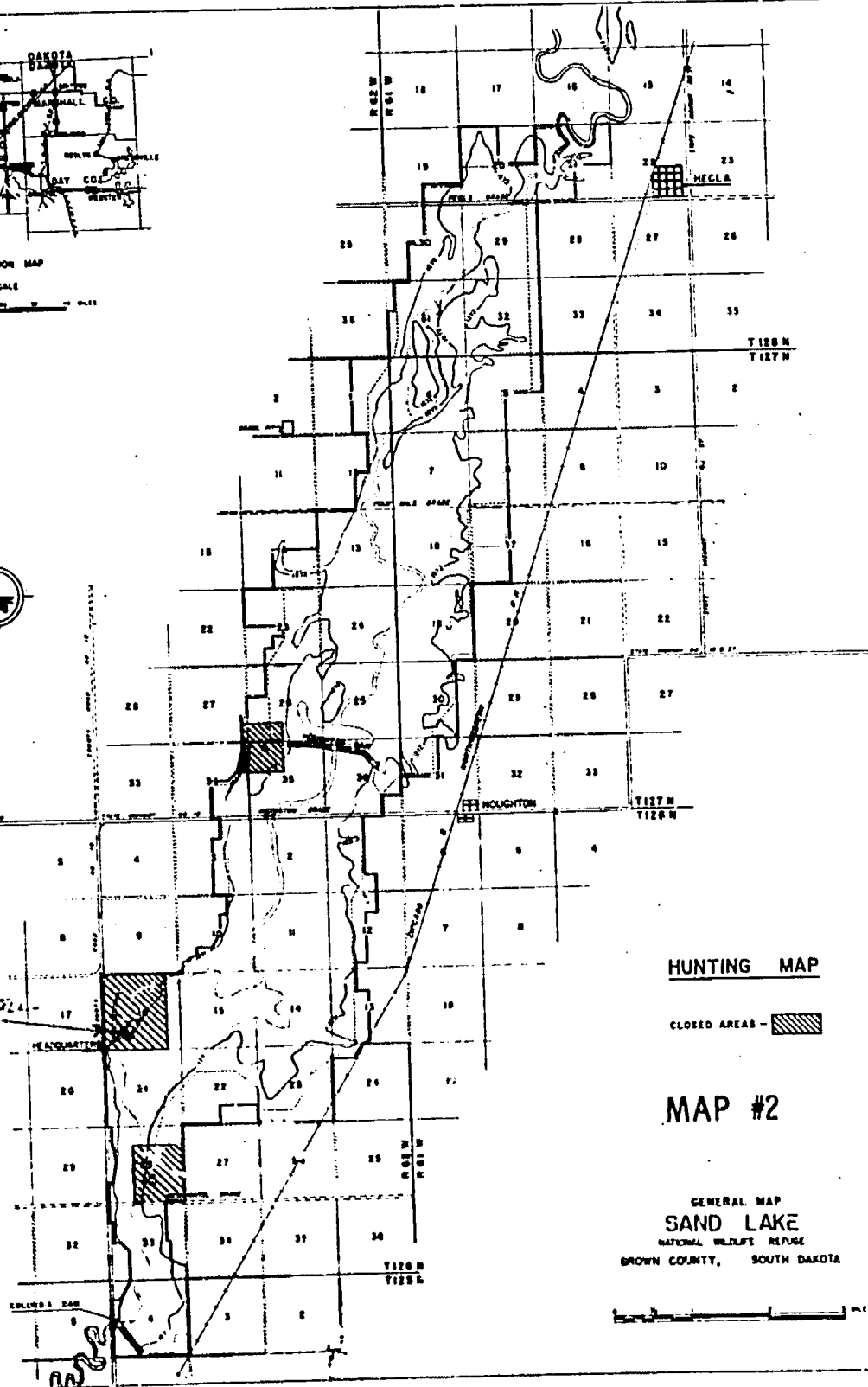
LOCATION MAP

SCALE

0 10 20 30 40 50



Phonetic Code



HUNTING MAP

CLOSED AREAS -

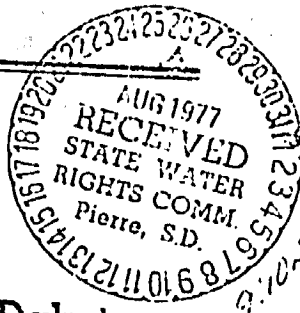
MAP #2

GENERAL MAP
SAND LAKE
NATIONAL WILDLIFE REFUGE
BROWN COUNTY, SOUTH DAKOTA

0 10 20 30 40 50

No. _____

Water Division No. _____ 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 U.S. Fish and Wildlife Service
 Postoffice address P.O.B. 25486
Denver Federal Center, County Jefferson
Denver, State Colorado

I. If a corporation

- (a) Name of same _____
- (b) Date and place of incorporation _____
- (c) Amount of capital stock _____
- (d) Amount paid in _____
- (e) Names and addresses of directors _____

(NOTE—A certified copy of articles of incorporation must accompany the application.)

II. Method of accomplishing the work and financial resources of the applicant;

- (a) Method of accomplishing work (Whether by contract, employment of others, or by direct labor)

- (b) Cash on hand, \$-----
- (c) Treasury stock, \$-----
- (d) Bonds to be issued, \$-----
- (e) Other resources, \$-----

2. Name of diversion work Sand Lake draught well
3. Amount of water claimed 20 two cubic feet per second 1460 acre feet annually
4. Source of water supply ground water
5. Location of point of diversion SW 1/4 Sec. 16, T126N, R62W
- on bar Blown County.

6. Annual period or periods during which water is to be used year around
7. To be used for: _____

7. To be used for:

- I. Irrigation or domestic use: Gravity, overhead sprinkling or combination system? pressure system.....
- (a) Number of acres to be irrigatedacres.

- (b) Legal subdivisions to be irrigated _____
 List of lands to be irrigated, giving each subdivision and fraction with acreage thereof, should be written here, or may be
 appended as a part of this application. Same must also be shown on accompanying map.)

- (c) Statement as to domestic use (giving location, etc.) Refugee Un.

-3 residences, office and shop buildings.....

II. Stockwatering, mining, milling, power, fish culture, fire protection and public recreation:

- (a) Nature of use Wildlife Refuge uses at Sand Lake N.W.R.
Name any of the above uses claimed _____

- (b) Amount of power to be generated -----horse power.

- Amount claimed for engine cooling -----

- (c) Location of plant _____

- (d) Method of developing power _____

- (e) Point where water will be returned to stream NO

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

D. Well Information or Estimates

- (1) Drill Hole, Diameter 26, Depth 300
- (2) Casing, Type steel Diameter 12" Thickness 37
(wood, concrete, steel, etc)
- (3) Perforated Screen,
Type Johnson, Diameter 12", Length 41
- (4) Gravel Pack, Thickness 7", Length of gravel pack 50

E. Dugout Information or Estimates.

- (i) 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 gravel.

South Dakota Geological Survey Test Well.

0-89 clay, 39-96 gravel, 95-246 clay, 246-287 gravel, 287-335 clay

Depth to top of water bearing material 246

Depth to bottom of water bearing material 287

Thickness of water bearing material 41 feet

Depth to water (ground surface to water level) approx. 20 feet

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

On same owner's property 120 rds. On property owned by others _____ 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.

Marcus T. Johnson

Signature of Applicant

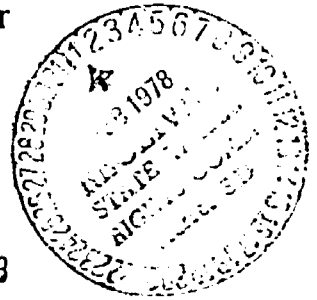


IN REPLY REFER TO:

United States Department of the Interior FISH AND WILDLIFE SERVICE

MAILING ADDRESS:
Post Office Box 23486
Denver Federal Center
Denver, Colorado 80225

STREET LOCATION:
10597 West Sixth Avenue
Lakewood, Colorado
Across From Federal Center



SS/EN SD WR
Sand Lake NWR

JAN 30 1978

Water Rights Commission
Joe Foss Building
Pierre, SD 57501

Dear Sir:

Please find enclosed Mr. Donald Stewart's check in the amount of \$150.00 to cover the necessary filing fee for the Sand Lake National Wildlife Refuge well application.

The Sand Lake application was received by your office on August 26, 1977. The filing apparently was on old forms and new, properly signed and notarized, duplicate application forms were completed and submitted to your office on December 20, 1977.

Mr. Stewart called your office on Monday morning, January 20, 1978, and discussed the Sand Lake well filing with Mr. Jones and Mr. Hatch. The proposed uses was a point in question, and of major concern to your office was our pumping well water into refuge ponds and marsh areas. When the application was filed, the uses were designated as wildlife refuge uses and for the headquarters area. No concern or questions were expressed at that time by your office as to the uses. The well is drilled and equipped and ready to be used as soon as the permit is approved.

The completed well is equipped to pump between 200 and 300 gpm. Possibly the maximum annual diversion will amount to about 200 acre feet of water. The application could be amended to show this on approval of the permit.

The well will be used to supplement water in a small 25 surface acre marsh and later, upon completion of a pipeline, for the headquarters area including three residences.

Sincerely yours,

William A. Godby
William A. Godby
Regional Engineer



Save Energy and You Serve America!



United States Department of the Interior
FISH AND WILDLIFE SERVICE

MAILING ADDRESS:
Post Office Box 25486
Denver Federal Center
Denver, Colorado 80225

STREET LOCATION:
10597 West Sixth Avenue
Lakewood, Colorado
Across From Federal Center

IN REPLY REFER TO:

SS/EN SD WR
Sand Lake NWR

FEB 10 1979

Water Rights Commission
Joe Foss Building
Pierre, SD 57501

Dear Sir:

Enclosed please find unnumbered Application for Permit to drill a well at the Sand Lake National Wildlife Refuge, properly signed and notarized.

Please note that the application has been reduced on its face to 300 gpm or 0.67 cfs, and 150 acre feet of water to be diverted annually.

Sincerely yours,

Michael D. DeF. Jr.
Acting Regional Engineer

Enclosure



Save Energy and You Serve America!



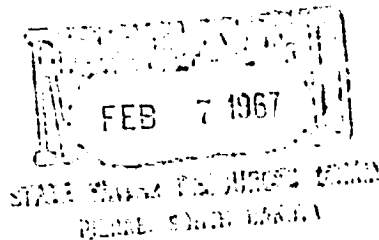


UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
BUREAU OF SPORT FISHERIES AND WILDLIFE
1006 WEST LAKE STREET
MINNEAPOLIS, MINNESOTA 55408

In reply refer to:
EH-R Sand Lake

February 6, 1967

Mr. J. W. Grimes
Chief Engineer
Water Resources Commission
State Office Building
Pierre, South Dakota 57501



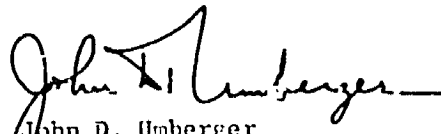
Dear Mr. Grimes:

This office is planning on constructing a shallow well at the Sand Lake Refuge headquarters area in Brown County, South Dakota to provide water for waterfowl propagation purposes. The well is to be constructed on a purchase order contract by a licensed well driller. The well will be located in the NW $\frac{1}{4}$ SW $\frac{1}{4}$ Section 16, T.126N., R.62W., Brown County, South Dakota. The well will be about 1350 feet north and 1300 feet east of the southwest section corner of 16.

The anticipated use from this well will average less than 10 gpm annually and we would like to know whether we need to file for a water right permit for this relatively small use. In the event we need to file, we will require several copies of your application Form 2 to make application.

Attached are a small location map of the refuge and two completed copies of Form 2A - Wells (Supplement to Form 2) that will provide you with additional information on the proposed well.

Sincerely yours,


John D. Umberger
Regional Engineer

Attachments
Site map
Form 2A



United States Department of the Interior
FISH AND WILDLIFE SERVICE

IN REPLY REFER TO:

SS/EN SD WR
Sand Lake NWR

MAILING ADDRESS:
Post Office Box 25446
Denver Federal Center
Denver, Colorado 80225

STREET LOCATION:
10597 West Sixth Avenue
Lakewood, Colorado
Across From Federal Center

RECEIVED

DEC 23 1977

DEPT. OF NATURAL
RESOURCE DEVELOPMENT

DEC 20 1977

Water Rights Commission
Joe Foss Building
Pierre, SD 57501

Dear Sir:

Please refer to our letter of August 23, 1977, enclosing an application for permit to appropriate underground water in the State of South Dakota.

Copies of the necessary map are enclosed.

Sincerely yours,

William A. Godby
Regional Engineer

Enclosure



Save Energy and You Serve America!



IN REPLY REFER TO:

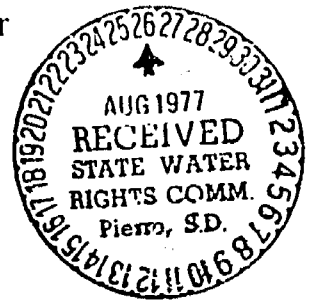
SS/EN SD WR
Sand Lake NWR

United States Department of the Interior
FISH AND WILDLIFE SERVICE

MAILING ADDRESS:
Post Office Box 25486
Denver Federal Center
Denver, Colorado 80225

STREET LOCATION:
10597 West Sixth Avenue
Lakewood, Colorado
Across From Federal Center

AUG 23 1977



Water Rights Commission
Joe Foss Building
Pierre, SD 57501

Dear Sir:

Please find enclosed an application for permit to appropriate underground water in the State of South Dakota. The proposed 12 - inch well is to be used at the Sand Lake National Wildlife Refuge.

The necessary maps are being sent under separate cover.

Sincerely yours,

Marvin F. Duncan
Acting Regional Director

Enclosure



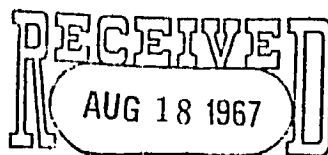


UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
BUREAU OF SPORT FISHERIES AND WILDLIFE
1006 WEST LAKE STREET
MINNEAPOLIS, MINNESOTA 55408

II. Miller General
In reply refer to:
EWR Sand Lake

August 16, 1967

Mr. J. W. Grimes
Chief Engineer
Water Resource Commission
State Office Building
Pierre South Dakota 57501



STATE WATER RESOURCES COMM.
PIERRE, SOUTH DAKOTA

Dear Mr. Grimes:

Attached are copies of well logs for two abandoned test holes on the Sand Lake National Wildlife Refuge, Brown Co., South Dakota. Copies of these logs were requested by you in your letter of February 8, 1967, in reply to our inquiry of February 6, 1967, regarding the need for a water right.

The proposed use of ground water for waterfowl propagation purpose at this location has been abandoned due to our inability to complete a well.

Sincerely yours,

John D. Umberger
John D. Umberger
Regional Engineer

Attachments

II
Wells, general

February 8, 1967

RE: EH-R Sand Lake

19
Mr. John D. Umberger
Regional Engineer
Fish and Wildlife Service
1006 West Lake Street
Minneapolis, Minnesota 55408

Dear Mr. Umberger:

Thank you for the information contained in your letter of February 6, 1967 about the proposed waterfowl propagation well at the Sand Lake Headquarters. A water right permit will not be required for the well.

I would appreciate receiving a copy of the well log after the well is drilled.

Sincerely,

J.W. GRIMES

JWG/DD/bw



United States Department of the Interior
FISH AND WILDLIFE SERVICE

MAILING ADDRESS:
Post Office Box 25486
Denver Federal Center
Denver, Colorado 80225

STREET LOCATION:
134 Union Blvd.
Lakewood, Colorado 80228

IN REPLY REFER TO:

SS/EN WR
SD

APR 13 1979



South Dakota Department of
Natural Resource Development
Water Rights Commission
Joe Foss Building
Pierre, South Dakota 57501

Gentlemen:

Enclosed please find a completed Form 10, Notice of Completion of
Works and/or Application of Water to Beneficial Use, for Water
Right Permit No. 4225-3 at Sand Lake National Wildlife Refuge.

Sincerely,

Acting **JAMES C. GRISMAN**
Regional Director

Enclosure



Save Energy and You Serve America!

NOTICE OF COMPLETION OF WORKS AND/OR
APPLICATION OF WATER TO BENEFICIAL USEPost Office Interior-Black Hills
Box 20100, Pierre, SD 57501
Date APR 13 1979TO: Water Rights Commission
Joe Foss Building
Pierre, South Dakota 57501

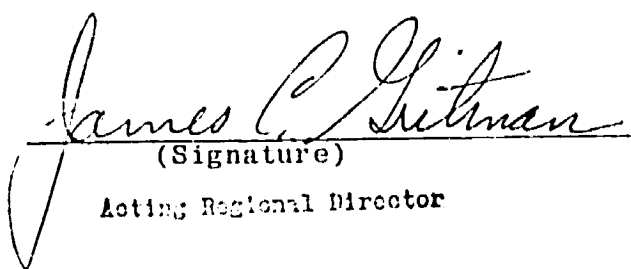
Dear Sirs:

This is to inform you that I have completed the construction of the water diversion system and/or that I have put the water to beneficial use to the maximum extent it is going to be used, not exceeding the amounts as specified in Water Right Permit No. 4225-3.

Water Right Permit No. 4225-3 states that the diversion system is to be constructed by March 28, 1979 and that the water is to be put to beneficial use by March 28, 1981.

The diversion system was completed on January 30, 1978.
Applying the water to beneficial use was completed on March 28, 1978.

You may schedule an inspection so that the Certificate of Construction and/or the Water License may be issued, thus completing my acquisition of a water right.


(Signature)

Acting Regional Director





DEPARTMENT OF THE ARMY
OMAHA DISTRICT, CORPS OF ENGINEERS
6014 U.S. POST OFFICE AND COURTHOUSE
OMAHA, NEBRASKA 68102

MROED-HC

19 June 1979

SUBJECT: Pipestem Reservoir Regulation Order ODP-79-3

Area Engineer, North Dakota Area

1. This confirms the oral instructions given to Mr. Martin of your Pipestem Project office by Mr. Behrens of our Reservoir Regulation Section on 18 June 1979 regarding the regulation of releases from Pipestem Reservoir.
2. Decrease the reservoir release rate from 100 c.f.s. to 30 c.f.s. at 1630 hours CDT 19 June 1979.
3. Increase the reservoir release rate from 50 c.f.s. to 100 c.f.s. at 1600 hours CDT 21 June 1979.
4. This temporary reduction in release rate is made to permit contractors, farmers and people in the local Jamestown area to do construction work and make repairs to their river road crossings. This reduction in releases from Pipestem Reservoir, when combined with a simultaneous, temporary reduction in releases from Jamestown Reservoir, will result in a decrease in the total release rate of from 450 c.f.s. to 100 c.f.s. On 21 June, the total combined release rate will be raised to 300 c.f.s. and kept at this minimum level for about four weeks in an attempt to allow some of the water inundating the lake plain area, between Columbia and Ashton, South Dakota, to drain back into the James River this year. This attempt is made to alleviate the 1970-type spring inundation to this area which was carried over through the winter from the 1969 flood.
5. The Sand Lake Refuge Manager has indicated that the water in Sand Lake Refuge has now lowered to a level that will permit the refuge to lower their outlet gates and releases whereby they now can and will coordinate and assist with this type operation. The long travel time to this area and the high evaporation during July and August are also considered in this attempt.

MROED-HC

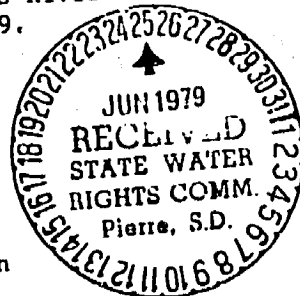
19 June 1979

SUBJECT: Pipestem Reservoir Regulation Order ODP-79-3

6. This operation was planned following an informal request for relief measures from Raymond Braun, President of the James River Flood Control Association in South Dakota, on 14 June 1979.

FOR THE DISTRICT ENGINEER:

R. G. BURNETT
Chief, Engineering Division



Copy furnished:

USB, Billings, MT

USBR, Bismarck, ND

USBR, Huron, SD

State Engr, Bismarck, ND

ND Game & Fish Dept, Bismarck, ND

State Water Res Comm, Pierre, SD

Stutsman County Comm, Jamestown, ND

Jamestown City Engr, Jamestown, ND

Dept. of Nat'l Res. Dev, Pierre, SD

Refuge Mgr, Arrowwood Nat'l Wildlife Refuge, Edmunds, ND

Refuge Mgr, Sand Lake Refuge, Columbia, SD

Pipestem Res. Ofc, Jamestown, ND

Indian Ck. Subofc, Mobridge, SD

Brown County Civil Def, Aberdeen, SD

Oahe Con. Sub-Dist, Aberdeen, SD

James River Flood Control Assoc, Mellette, SD

Permit No. 4225-3Water Division 3 James River Water District

**REPORT 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 the U.S. Fish and Wildlife Service of Denver, Colorado holder

of Permit No. 4225-3 bearing date of priority of February 2, 1978

authorizing the diversion of 0.67 cu. ft. per second of the waters of ground water

for wildlife refuge use purposes, in Brown 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: A well 298 feet deep cased with 12-inch steel pipe including 35 feet of 12-inch "Johnson" screen. Byron Jackson 8 bowl turbine ~~pump~~ with 140 feet of 6-inch steel drop pipe. Well is pumped using an "International" 60 H.P. tractor.

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

Buried 6-inch PVC pipe, 585 feet long.

C. Works used to apply water to beneficial use.

A waterfowl refuge pond at refuge headquarters having a maximum area of 30 acres.

The system is in the following condition. Good

The point of diversion is located in the SW1/4NW1/4 of Section 16, T. 126 N., R. 62 W.

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 wildlife observation and Giant Canadian geese propagation purposes.

Water has been put to beneficial use to the maximum extent as follows: _____

The well has been constructed and has been pumped at a rate of 0.67 CFS as needed for the indicated purposes.

comprising a total of _____ acres of land.

Date February 18, 1982

Donald Driscoll
(Signature)

Donald Driscoll P.E.
License No. 1649

RECEIPT

WATER RIGHTS COMMISSION

State of South Dakota

No 4 8731

PIERRE, February 23, 1982

RECEIVED OF Donald Driscoll
U.S. Fish & Wildlife Service, Pierre Area Office, Federal Building
Pierre, SD 57501
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>4225-2</u>	2	50
Fee for inspecting Beneficial Use, and Issuing Water License No. <u>4225-3</u>	2	50
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	5	00

WATER RIGHTS COMMISSION

By John Hatch
Chief Engineer, Executive Officer
JOHN HATCH (ms)