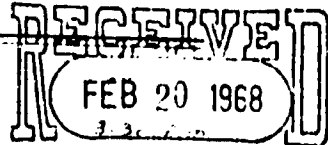


No. **1524-3**Water Division No. **3** **JAMES RIVER** District
(Blanks to be filled by the Engineer for the W. R. C.)STATE WATER RESOURCES COMMISSION
PIERRE, SOUTH DAKOTA

APPLICATION FOR PERMIT To Appropriate Water within the State of South Dakota

(NOTE—Draw a line through items not applicable.)

1. Name of applicant DONALD E. SCHMIDT
Postoffice address WILLOW LAKE, County CLARK State SOUTH DAKOTA

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 _____

Cancelled
5/24/79
WRC

See 4414-3

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

2. Name of diversion work DONALD E. SCHMIDT IRRIGATION PROJECT #1
3. Amount of water claimed 3.3 cubic feet per second

4. Source of water supply WELLS

5. Location of point of diversion WELL #1 - 1320' E, 1320' N - SW Corner Sec 2, 4, 112, 57
WELL #2 - 1320' E, 1320' N of SE Corner, Sec 4, 112, 57 on _____ bank CLARK County.

6. Annual period or periods during which water is to be used Apr. thru Oct.

7. To be used for:

- I. Irrigation or domestic use: Gravity, overhead sprinkling or combination system? Overhead Sprinkling

- (a) Number of acres to be irrigated 240 acres.

- (b) Legal subdivisions to be irrigated W 1/2, SW 1/4, SE 1/4, 112, 57, SE 1/4 - Sec 4, 112, 57
(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.) _____

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

- (a) Nature of use _____

Name any of the above uses claimed

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

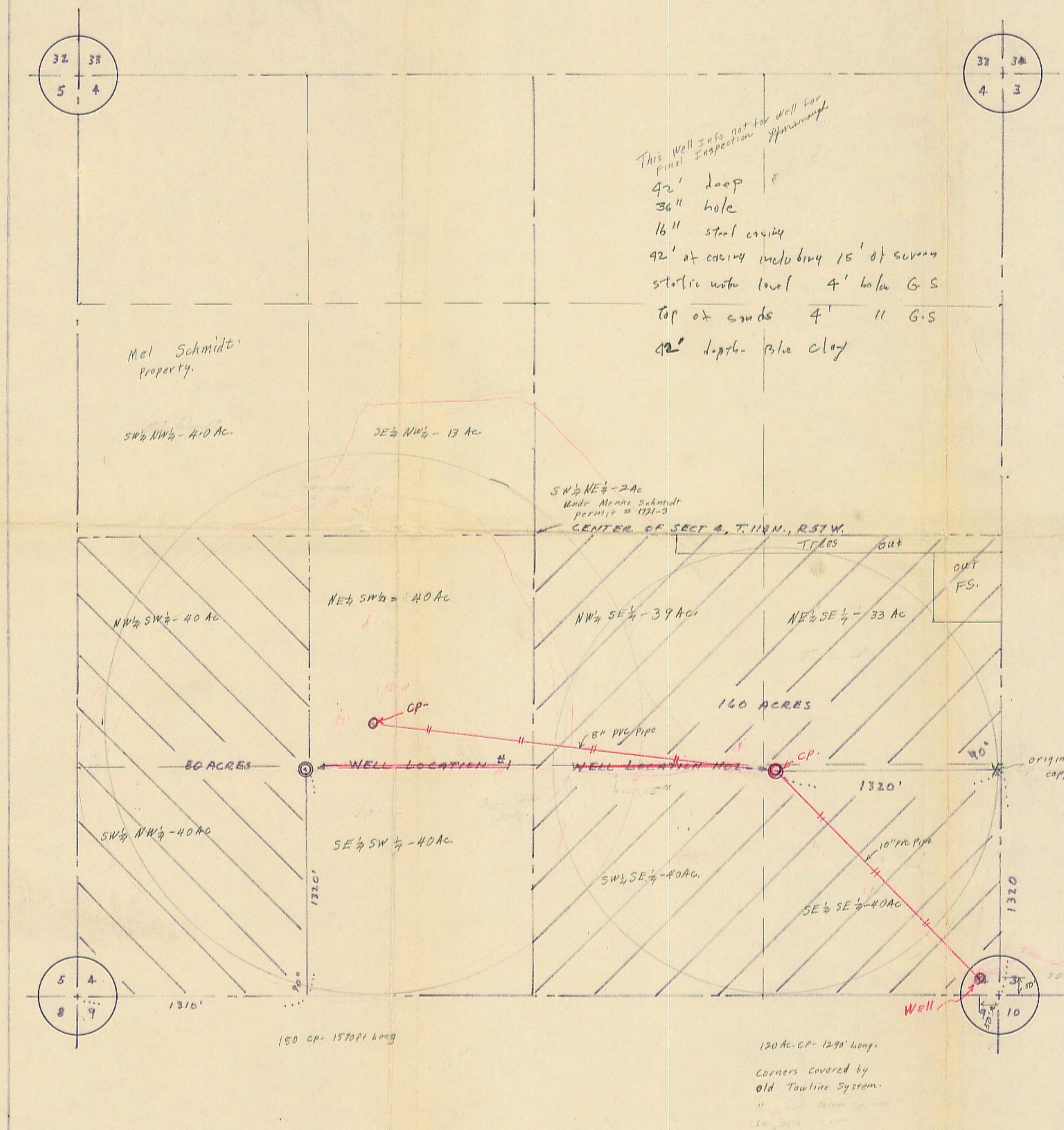
Amount claimed for engine cooling _____

- (c) Location of plant _____

- (d) Method of developing power _____

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

MAP NO 1109-3



AREAS BY LEGAL SUBDIVISION

160 ACRES: SE 1/4 OF SECTION 4, T. 113 N., R. 57 W.

80 ACRES: W 1/2, SW 1/4 OF SECTION 4, T.113N., R.57W

240 ACRES TOTAL

SURVEYOR'S CERTIFICATE

STATE OF SOUTH DAKOTA)

COUNTY OF BEADLE)

I, HARLAN W. MEYER, A REGISTERED LAND SURVEYOR
IN AND FOR THE STATE OF SOUTH DAKOTA, DO HEREBY
CERTIFY THAT AT THE REQUEST OF DONALD E. SCHMIDT,
SOLE OWNER, I HAVE SHOWN THE LANDS PROPOSED TO BE IRRIGATED
WITHIN HIS OWNERSHIP BOUNDARIES ON FEB 9, 1968 FOR WHICH APPLICATION
FOR APPROPRIATIVE WATER RIGHT IS MADE AND THAT THIS MAP
IS A TRUE REPRESENTATION THERE OF.
WITNESS MY HAND AND SEAL THIS 9TH DAY OF FEB 1968.

Harlan H. Meyer
REG. LAND SURVEYOR #495

STATE OF SOUTH DAKOTA)

COUNTY OF BEADLE)^S

SUBSCRIBED AND SWORN TO BEFORE ME THIS 9TH DAY
OF FEB 1968

Corinne Johnson
NOTARY PUBLIC

MY COMMISSION EXPIRES MARCH 10, 1972

DONALD E. SCHMIDT IRRIGATION PROJECT NO 1
SHOWS AREAS & WELL LOCATIONS WHERE WATER
WILL BE DIVERTED-FOR PERMIT TO APPROPRIATE WATER

OWNER

DONALD E SCHMIOT

SURVEYOR

HARLAN W. MEYER

FEB 1968

MAP NO 11093 APPL NO 1524-3

APPL NO 1524-3

Remarks by State Water Resources Commission:

"The State Water Resources Commission has received an application for a permit to appropriate water of the State of South Dakota for the purpose of irrigation. The application was received by the Commission at 3:30 p.m. upon the 20th day of February, 1968. The application was approved by the Commission on the 24th day of January, 1969. The Commission has granted the permit subject to the following limitations and conditions: 1. The equivalent of at least one-fifth of the work above specified is to be completed on or before June 4, 1971. 2. The whole of said work is to be completed on or before December 4, 1973. 3. The limit of time for proof of beneficial use of water appropriated in accordance herewith is December 4, 1974. 4. The water appropriated shall be used for the purpose of irrigation. 5. 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. 6. The amount of the appropriation herein granted shall not exceed 3.3 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-seventieth (1/70) of one cubic foot of water per second of time for each acre of land to which water is actually and beneficially applied for irrigation on or before December 4, 1974, said water to be used during the following described annual period: April thru October. Witness my hand this 24th day of January, 1969.

STATE OF SOUTH DAKOTA
County of HUGHES ss.

Pierre, South Dakota, JANUARY 24, 1969

This is to certify that the foregoing application was received by the Commission at 3:30 o'clock P.m. upon the 20th day of FEBRUARY, 1968

State Water Resources Commission

By: Forrest J. Jones

Chief Engineer, Executive Officer

Number of permit 1524-3

Date of first receipt of application FEBRUARY 20, 1968

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

Date of receipt of corrected application _____, 19____

Date from which applicant may claim right FEBRUARY 20, 1968

Approved DECEMBER 4, 1968 Recorded in Book 10 Page 307

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 JUNE 4, 1971

2nd. The whole of said work is to be completed on or before DECEMBER 4, 1973

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

DECEMBER 4, 1974

4th. The water appropriated shall be used for the purpose of IRRIGATION

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 3.3 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-seventieth (1/70) of one cubic foot of water per second of time for each acre of land to which water is actually

and beneficially applied for irrigation on or before DECEMBER 4, 1974, said water to be used during the following described annual period:

APRIL THRU OCTOBER

Witness my hand this 24th day of JANUARY, 1969

State Water Resources Commission

By: Forrest J. Jones

Chief Engineer, Executive Officer

Certificate of Construction Issued _____, 19____

Water License Issued _____, 19____

8. Estimated cost of work:

(a) Head Gates, \$..... (b) Pumping plant, \$.....
 (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.)

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	FEET	ACRE-Feet CAPACITY

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

LOCATION BELOW 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 ⁵.....years.
 11. Time required for complete application of water to the proposed beneficial use ¹..... years.
 12. Choice of newspaper for publication of notice of intention to appropriate
CLARK SCURLER - CLARK & S. DAK.

STATE OF SOUTH DAKOTA } ss.
 County of Wichita

I, DANIEL F. SCHMIDT, 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 [Signature]

Subscribed and sworn to before me this 12 day of February 1968

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

*Each diversion must have a headgate or measuring device.

on or before
(First Publication April 25, 1968.)

APPROPRIATION OF WATER

Office of State Water Resources Commission,

Pierre, S. Dak., April 8, 1968.

Notice is hereby given that Donald E. Schmidt whose postoffice address is Willow Lake S. Dak., has made an application in accordance with the provisions of the water laws of South Dakota for a permit to appropriate for beneficial use 3.3 cubic feet of water per second of time from the ground water through the Schmidt Irrigation Project, the point of diversion of which is to be located at points in the center SW $\frac{1}{4}$, and ~~back of said stream~~ in the center ~~SE~~ of the SE $\frac{1}{4}$ of Section 4 Twp. 113N Range 57W. Said water to be used for the purpose of providing irrigation on the following described land:

SW $\frac{1}{4}$, SE $\frac{1}{4}$, Section 4, T113N, R57W

~~xxxx~~

~~xxxxxx~~

This application will be taken up by the State Water Resources Commission at their office at Pierre for consideration upon the 22nd day of May, 1968, at 2:00 P.M. All interested persons may appear and be heard.

Appropriate action will be taken by the Water Resources Commission after suitable time has elapsed for the consideration of any or all information presented.

State Water Resources Commission

By:

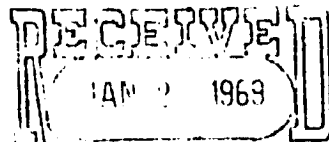
cc: Donald E. Schmidt
Willow, Lake, S.D.

~~Chief Engineer, Executive Officer~~
~~XXXXXXXXXXXXXXXXXXXX~~

BURTON F. JONES
Water Rights Specialist

PROOF OF PUBLICATION

STATE OF SOUTH DAKOTA }
 County Clark } ss.



STATE WATER RESOURCES COMMISSION

Bert Moritz being duly sworn, deposes and says the annexed printed copy of Notice of Intention to Appropriate Water was taken from the _____

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

xxxxxx1968x April 11, 1968
April 18, 1968
April 25, 1968
May 2, 1968

in each and every issue of the full number thereof, the first publication being made on the 11th day of April

1968, and the last publication on the 2nd day of

May 1968, upon which days or times of publication aforesaid the newspaper was regularly published, and that during the whole time of said publication he

was Publisher ~~the xxxxxxxx xxxxxxxx~~ of the said newspaper.

Bert Moritz

Subscribed and sworn to before me this 9th day of January A. D. 1969

Notary Public _____ County, S. D.

No. 1524-3
 APPROPRIATION OF WATER
 Office of State Water Resources
 Commission,
 Pierre, S. Dak., April 8, 1968.
 Notice is hereby given that Donald
 E. Schmidt whose postoffice address
 is Willow Lake, S. Dak. has made an
 application in accordance with the pro-
 visions of the water laws of South Da-
 kota for a permit to appropriate for
 beneficial use 3.3 cubic feet of water
 per second of time from ground water
 through the Schmidt Irrigation Pro-
 ject, the point of diversion of which
 is to be located at points in the center
 SW 1/4, and in the center of the SE 1/4
 of Section 4, Twp. 113N, Range 57W.
 Said water to be used for the purpose
 of providing irrigation on the following
 described land:
 W 1/2 SW 1/4, SE 1/4, Section 4, T113N,
 R57W.
 This application will be taken up by
 the State Water Resources Commission
 at their office at Pierre for considera-
 tion upon the 22nd day of May, 1968,
 at 2:00 p. m. All interested persons
 may appear and be heard.
 Appropriate action will be taken by
 the Water Resources Commission after
 suitable time has elapsed for the con-
 sideration of any or all information
 presented.
 State Water Resources Com-
 mission
 By Burton F. Jones
 Water Rights Specialist
 ss: Donald E. Schmidt
 Willow Lake, S. D.

4-11-4t

OBSERVATION WELL

LOG AND INSPECTION SHEET

Well No. _____, Section NE 1/4, Township 113 N., Range 57 W.Well Driller Robert PrehmanDate drilled 6-21-60 Dia. of Hole 3 3/8, Dia. of Casing 1 1/2

LOG

Layers, Top to Top in feet	Description of Layer	Sampled
0	LOAM	
3	Gravel	
6	Coarse sand	
14	fine gravel	
23	Blue clay	
25	Coarse sand	
41	Coarse sand bottom of hole	

Depth to saturated material _____ feet

Depth to static water level 11.4 feet at 2.00 PMTotal depth of drill hole 41 feetTotal length of casing installed 32 feet

CHECK LIST

Well Point 1' plasticWaste Mounded ✓Casing Packed ✓

Air Hole _____

Bentonite Placed ✓

Padlocked _____

Well Tested ✓

Donald Quisell
Signed

Use back of sheet for remarks.

Located on plat. 1/4 mile south of NE corner of section 4, T. 113 N., R. 57 W., west side of gravel road.

Date	Time	City-Well	Chs Well
6-13-68	10:45 AM	15.7 P	
6-14-68	8:00 A.M.	15.9 P	
6-15-68	8:15 A.M.	15.7 P	
6-16-68	8:10 A.M.	14.2 NP	
6-17-68	8:00 A.M.	15.2 P	
6-18-68	8:00 A.M.	13.4 NP	
6-19-68	8:05 A.M.	3.3 NP	
6-20-68	8:15 A.M.	15.7 P	
6-21-68	2:00 P.M.	15.8 P	1.3
6-22-68	7:45 A.M.	13.2 NP	13.5
6-23-68	8:05 A.M.	13.2 NP	13.5
6-24-68	8:00 A.M.	13.1 NP	13.6
6-25-68	8:30 A.M.	12.5 NP	13.5
6-26-68	8:00 A.M.	13.2 NP	13.5
6-27-68	8:05 A.M.	15.6 P	13.5
6-28-68	8:00 A.M.	15.7 P	13.4
6-29-68	8:00 A.M.	15.6 P	13.5
6-30-68	8:00 A.M.	13.4 NP	13.5

Date	Time	City	Wind	Obs. in 4
7-1-68	5:15 AM	15.1	P	13.6
7-2-68	8:00 AM	13.2	NP	13.6
7-3-68	9:30 AM	15.6	P	13.5
7-4-68	8:05 AM	15.5	P	13.1
7-5-68	8:00 AM	15	P	13.6
7-6-68	8:30 AM	13	NP	13.6
7-7-68	8:00 AM	13.1	NP	13.5
7-8-68	8:15 AM	15.2	P	13.5
7-9-68	8:30 AM	13.4	NP	13.5
7-10-68	8:25 AM	13.1	NP	13.6
7-11-68	8:15 AM	13.2	NP	13.5
7-12-68	8:10 AM	15.6	P	13.5
7-13-68	8:20 AM	16	P	13.5
7-14-68	8:00 AM	13.2	NP	13.5
7-15-68	8:10 AM	13.1	NP	13.6
7-16-68	8:10 AM	13.1	P	13.6
7-17-68	8:00 AM	16.1	P	13.5
7-18-68	8:10 AM	13.1	NP	13.6
7-19-68	8:00 AM	13.2	NP	13.6
7-20-68	7:45 AM	12.1	NP	13.6
7-21-68	8:15 AM	13.2	NP	13.6
7-22-68	8:00 AM	13.3	NP	13.5
8-23-68	8:05 AM	13.2	NP	13.6
8-24-68	8:15 AM	13.3	NP	13.6
8-25-68	8:00 AM	15.6	P	13.8
8-26-68	8:15 AM	15.5	P	13.8
8-27-68	8:30 AM	13.2	NP	13.8

DATE	TIME	C, 11/11.12	058112
7-28-68	8:32 AM	13.2 NP	13.8
7-29-68	800 AM	15.9 P	13.8
7-30-68	800 AM	15.8 P	13.8
7-31-68	715 AM	13.3 NP	13.8
8-1-68	800 AM	13.4 NP	13.8
8-2-68	810 AM	15.8 P	13.8
8-3-68	745 AM	13.5 NP	13.8
8-4-68	805 AM	13.4 NP	13.7
8-5-68	745 AM	15.9 P	13.7
8-6-68	815 AM	16.2 P	13.8
8-7-68	805 AM	16.4 P	13.8
8-12-68	800 AM	15.8 P	13.8
8-19-68	750 AM	13.6 NP	13.7
8-26-68	12:15 AM	13.6 NP	13.7
9-1-68	800 AM	15.8 P	14.3
9-9-68	755 AM	13.5 NP	14.1
9-16-68	800 AM	13.9 NP	14.3
9-23-68	810 AM	13.6 NP	14.4
9-30-68	800 AM	13.6 NP	

June 17, 1968

Mr. Donald E. Schmidt
Willow Lake
South Dakota 57278

Dear Mr. Schmidt:

This is to confirm our arrangements on June 13, 1968 for experimental pumping of your irrigation well located near the east boundary of the SW $\frac{1}{4}$, Section 4, T113N, R57W.

1. No pumping to be started until after June 16, 1968.
2. When pumping is commenced, the pumping will not take place for more than 10 hours of each 24 hour day of the first week.
3. No specified pumping hours after the first week of pumping. However you should control your pumping so it does not adversely affect the water supply of the City of Willow Lake or needed supplies of nearby domestic wells.
4. You will keep a record of your pumping hours and the approximate pumping rate.

As discussed, as soon as possible we will attempt to drill an observation well about 1/2 mile north of your irrigation well. If a satisfactory observation well is drilled, arrangements have been made for the City of Willow Lake to take daily measurements of the observation well water levels.

Sincerely,

DONALD DRISCOLL
Deputy Chief Engineer

DD/lw

cc: H.C. Meester, Mayor, City of Willow Lake, Willow Lake, S.D.

Water Right Application 1524-3

Donald E. Schmidt

At its May 1968 hearing, the Commission considered Water Right Application 1524-3 of Donald E. Schmidt to divert up to 3.3 cubic feet per second of water from a well to irrigate up to 240 acres of land.

A letter from Herman C. Meester, Mayor of the City of Willow Lake was read expressing the concern of the city inasmuch as the irrigation well was located $\frac{3}{4}$ of a mile from the municipal well. The Commission deferred further consideration of Water Right Application 1524-3 pending investigation.

The city of Willow Lake municipal well is located about 2 miles west of the town. The diameter of the well is four feet and the well depth is about 18 feet. The well pumping rate appears to be around 150 g.p.m.

When checked, on June 12, 1968, it was noted that the proposed irrigation well had already been drilled. The well location is $\frac{3}{4}$ mile south of the municipal well. The irrigation well is 42 feet deep and is cased with a 16" diameter steel casing. Reportedly, the well depth is mostly through medium sand. A two foot clay layer was reported at about $\frac{1}{2}$ the well depth and clay of unknown depth started at the bottom of the well.

A Water Resources Commission observation well was drilled at a location $\frac{1}{4}$ mile south of the municipal well on June 21, 1968. The well hole was drilled 41 feet deep, all in medium sand except for a two foot clay layer at the 23 foot depth. The well was cased with 32 feet of $1\frac{1}{2}$ " diameter casing. Arrangements were made to have the depth to water measured at the municipal well and at the observation well on a daily basis by the Willow Lake Water Superintendent. Later in August after the water level trend had become apparent, the measurements were made on a weekly rather than on a daily basis.

Following are some typical, depth to water level, measurements:

Date	City Well (Not pumping)	City Well (Pumping)	Observation Well
6/22/68	13.2'	15.3'	13.8'
6/29/68	13.1'	15.6'	13.6'
7/ 6/68	13.0'	15.2'	13.5'
7/13/68	13.2'	16.0'	13.5'
7/20/68	13.1'		13.6'
7/27/68	13.2'	15.9'	13.8'
8/ 3/68	13.3'	15.8'	13.8'
8/12/68		16.4'	13.8'
8/19/68	13.6'		13.7'
8/26/68	13.6'	15.8'	14.4'
9/ 9/68	13.5'		14.1'
9/16/68	13.4'		14.3'
9/30/68	13.4'		14.3'
10/29/68			14.2'

Mr. Donald Schmidt, the Water Right Applicant, reports that he irrigated in July and August as follows:

July, 12 days @ 11 3/4 hrs. per day @ 1200 g.p.m. = 31 ac.ft.
August, 12 days @ 13 2/3 hrs. per day @ 1200 g.p.m. = 36 ac.ft.

The well measurements made do not show any positive indication that either the city well, or observation well, water levels were lowered to any degree by the irrigation withdrawals. The slight lowering is much less than the usual seasonal lowering of water levels. However, rainfall last summer was above average and the irrigation withdrawals were relatively light. Under such circumstances the favorable well water level readings are not conclusive proof that withdrawals from the irrigation well cannot adversely affect the existing municipal well.

The approximately two foot depth of water left in the city well during pumping periods shows that this well is producing near its maximum capacity. The Commission Staff believes a drought period, or increase in city water use could cause the water supply from the city well to become inadequate.

The recommendation of the Commission Staff is that Water Right Application 1524-3 be approved containing the following qualification, " The irrigation well approved under this Permit is located near domestic wells and the City of Willow Lake municipal well which may obtain water from the same aquifer. The irrigation well owner, under this Permit, shall control his irrigation withdrawals so there is not a reduction of needed water supplies in existing domestic wells or in the City of Willow Lake Municipal Well."