

1. Considered MAY 21, 1975
2. Name of Applicant KURCH RANCH
3. Post Office Address HURON
4. Amount of Water claimed 2.0
5. Source of Water supply GROUND WATER 97' WELL
6. Water to be used for IRRIGATION

Acres to be irrigated 14.5

7. Water to be diverted and used in BEADLE County
about 7.5 miles of HURON

8. Proof of Publication

Received 5-19-75

Not Received _____

9. Application

Approved _____

Subject to _____

Not Approved _____

Action Deferred _____

10. Remarks:

Craig, Oregon

Well - 95 ft deep

Flowing 800 gpm, 1000 ft 700 gpm

C.P. Valley

Model 4271; R-N 20620

Motor RLS Elec 1.5 HP - 1775 RPM

ISO # R 6327-03-294; R 2H 6429

Pump Inboard Horse

List # N 3A 280 7377X

Well 575 ft deep, 2 1/2 inch line

1700 Well of water

No. 2253-3Map No. 1645-3Water Division No. 3JAMES RIVERDistrict 8134

(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 Kurch Ranch 2. J.A. Kurch MD
 Postoffice address 1580 Riverside Drive Huron State S. Dak.
 If a corporation show date and place of incorporation _____
2. Method of accomplishing work (contract, employment of others, or by direct labor) contract
3. Name of diversion work Kurch Irrigation Project #1
4. Amount of water claimed (cubic feet per second) 2.0
5. Source of water supply well
6. Location of point of diversion Sec. 18-109-61 SW 1/4 - center

County BEADLE

7. Annual period or periods during which water is to be used April - Nov.
8. Use to be made of water, (irrigation, industrial, municipal, commercial, recreation, etc.) irrigation
9. For irrigation use, _____ Total number of acres to be irrigated 145 acres

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 1/4 SW 1/4 18-109-61	32
N 1/4 SW 1/4 18-109-61	40
SW 1/4 SW 1/4 18-109-61	33
SE 1/4 SW 1/4 18-109-61	40

Land Description	No. Acres Irr.

Attach sheet if more space is needed

10. Time required to complete construction of water supply system 5 years. Additional time required to complete application of water to the proposed beneficial use 3 years.
11. Choice of newspaper for Notice of Intent to Appropriate Water publication Huron Daily Plainsman
12. Principal Features of the Proposed Water Supply System.

A. Works proposed to divert water from its natural source.

well & pump

B. Work proposed to transport water to place of use.

pump & pipe

C. Works proposed to apply water to beneficial use.

center pivotEstimated Total Cost \$ 30,000

Attachments: Attach Form 2A if diversion from a well or dugout, or if storage of water, is proposed. Attach map.
 (See instructions concerning preparation.)

STATE OF SOUTH DAKOTA

County of Beadle

I, Michael A. Kurch the applicant, certify that I have read the foregoing application and have examined the attached map and that the matters therein stated are true and that I intend, and am able to complete the necessary construction.

Signed Michael A. KurchSubscribed and sworn to before me this 7 day of April 1925Wm. E. Walker
Notary Public (or other qualified officer)

The Water Rights Commission hereby approves Water Right Application No. 2253-3KURCH RANCH - CRAIG
(Applicant)7580 RIVERVIEW DR., HURON
RR # 4 (Post Office Address) HuronSOUTH DAKOTA 57.150
(State) With the following modifications:

The irrigation well approved under this Permit is located near domestic wells which may obtain water from the same aquifer. The irrigation well owner, under this Permit, shall control his irrigation withdrawals so there is not a reduction of needed water supplies in existing domestic wells.

See Also
4485.3Date of first receipt of application APRIL 8, 19 75Date of return to applicant for correction, amendments or changes required —, 19 —Date of receipt of corrected application APRIL 10, 19 75Approved MAY 22, 19 75, Recorded in Book 13 Page 297WATER RIGHT PERMIT NO. 2253-3

The Water Rights Commission hereby grants and issues this Water Right Permit No. 2253-3 authorizing the construction of the water use system and the putting of water to beneficial use as stated in the Application and as modified in the Water Right Application approval, subject, however, to the following limitations and conditions:

1. The date from which applicant may claim right is APRIL 8, 19 75
2. The equivalent of at least one-fifth of the work above specified is to be completed on or before NOVEMBER 22, 19 77
3. The whole of said work is to be completed on or before MAY 22, 19 80
4. The limit of time from proof of beneficial use of water appropriated in accordance herewith is MAY 22, 19 83
5. The water appropriated shall be used for the purpose of IRRIGATION

6. The prior right of all persons who, by compliance with the laws of the State of South Dakota, have acquired a right to the use of water must not be injuriously affected by this appropriation.

7. The amount of the appropriation herein granted shall not exceed 2.0 cubic feet per second; neither shall it exceed the capacity of the above described water supply system, nor shall it exceed the amount of water needed for beneficial uses served, and if for the irrigation purposes said appropriation must be limited to not more than 3 acre feet per acre per year and be limited to not more than one-seventieth (1/70) of one cubic foot of water per second of time for each acre of land to which water is actually and beneficially applied for irrigation on or before MAY 22, 19 83; said water to be used during the following described annual period: APRIL TO NOVEMBER

Witness my hand this 28TH day of MAY, 19 75

WATER RIGHTS COMMISSION

By:

Harold W. Butler
Chief Engineer, Executive Officer

Certificate of Construction Issued —, 19 —Water License Issued —, 19 —

NOTICE OF WELL CONSTRUCTION

(1) WELL CONSTRUCTION

Location of well: 1/4 1/4 NW Section 24 Township 109 Range 62
 Well owner Michael Kurek Huron, SD. 57350
 Date well drilling completed 4-1-75 Purpose of well Irrigation
(home) (address) (domestic, irrigation, municipal, industrial, other)

WELL LOG

Layers, top to top in feet	Description of layer
0-2	top soil
2-25	yellow clay
25-50	gray till
50-70	sand
70-80	sand & gravel

Depth to top of water producing aquifer _____ ft.
 Depth to static water level _____ ft.
 Name of producing aquifer (if known) gravel
 Total depth of drill hole 80 ft.
 Depth to bottom of casing 80 ft.

Casing information: In the space below show kind, size, weight, lengths per diameter, etc., for production casing and surface casing, if used.
0-70' 4" Plastic

Screen information: In the space below show length of screen below bottom of casing, diameter and kind of screen or casing perforations.
70-80' 4" Plastic

If a flowing well, flow of completed well _____ G.P.M.

Attach sheet if more space is needed

Empire Irrigation Drilling Co.
 Name of Drilling Contractor Inc

(2) PUMP INSTALLATION

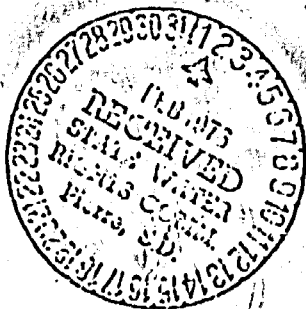
Company name and size of pump Not done by Empire HP _____
 Type of pump _____ Capacity of installed pump _____ G.P.M.
 Depth of pump place _____ ft. Date of pump installation _____

(3) WATER SURFACE MEASURING TUBE

On some wells an air-tight water surface measuring tube is required. See Section 46.408 of Chapter 46.4, MINIMUM WELL CONSTRUCTION STANDARDS.

Show exact vertical length of water surface measuring tube, when installed _____ ft, tube diameter _____, tube material _____.

 Name of Pump Installation Contractor



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

D. Well Information or Estimates

(1) Drill Hole, Diameter 30 in, Depth 97 ft.

(2) Casing, Type fiberglass Diameter 16" I.D. Thickness 3/8"
(Wood, concrete, steel, etc)

(3) Perforated Screen.

Type fiberglass, Diameter 16" I.D., Length 40 ft.

(4) Gravel Pack. Thickness 5 1/2", Length of gravel pack to top of well

E. Dugout Information or Estimates.

(1) Surface dimensions _____, Depth _____

F. Fill out for Either a Well or a Dugout.

(1) Water Bearing Materials. (Please attach a copy to test well log if available.)

Character of Water bearing materials 52 ft. gravel & med. to coarse sand.

Depth to top of water bearing material 45'

Depth to bottom of water bearing material 97'

Thickness of water bearing material 52 ft.

Depth to water (ground surface to water level) 32 ft.

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

On same owner's property 80 rds. On property owned by others 5000 ft. 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.

Julie Ann Kurch M.D.
Michael P. Kurch
Signature of Applicant

April 4, 1975

J. A. Kurch, M. D.
1580 Riverview Drive
Huron, S.D. 57350

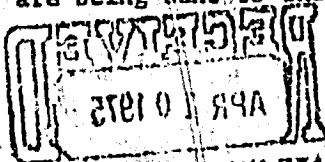
Dear Dr. Kurch:

We received on February 3 a water sample from you which was analyzed and the original report of analysis was sent to you on February 7. We have now received the WI-1 form and soils information in connection with your application to irrigate in Sec 18, T 109N, R 61W.

The water which you have from this source is fairly high in total salt, but moderately low in sodium content. With soils of the nature which you have, you should be successful in the irrigation of corn and alfalfa, provided that alfalfa or alfalfa grass mixtures are used in the rotation about 40% of the time. There is some chance that salt will build up in this soil and under such circumstances, you should either cease irrigation or take steps to cause leaching. Such steps would include late fall irrigation to completely fill the soil profile with water or early spring irrigation to take advantage of anticipated April and May effective precipitation. However, sometimes even in spite of such measures as this, salt accumulations may build up to cause difficulty, especially in soils which have a clay loam parent material underlying, such as the glacial till which underlies these soils. Therefore it might be wise to keep careful watch on the soil and on the behaviour of crops grown to detect at an early stage any developed salinity.

I am enclosing a copy of Extension Circular 654 with the approximate quality of this water for irrigation purposes designated by an uncircled red cross on the outside back cover. Please read this circular carefully.

A copy of this letter, the WI-1 form, and the other application materials are being sent to the State Conservation Commission.



STATE WATER RIGHTS COMMISSION
SOUTH DAKOTA
LOUISIANA

Enclosures

cc: State Conservation Commission
Richard Fadgen, Beadle County Agent
Darrel Pahl

Sincerely yours,

L. O. Fine

L. O. Fine
Water Quality Lab

Irrigation System: _____

Water Quality: _____

Soils Capability: _____

Approved: Albert A. Hoot
4/18/75

Disapproved: _____

STATE CONSERVATION COMMISSION
SUPPORTING INFORMATION
FOR APPROPRIATION OF GROUND WATER IN ACCORDANCE
WITH SECL 46-6-3 AS AMENDED

(This Form Required for Proposed Well Irrigation Only)

NAME: Kurek Ranch to J. A. Kurek M.D.

ADDRESS: 1680 Prairieview Dr. Huron, S. DAK.

COUNTY: BENDE

LEGAL DESCRIPTION

1. WELL LOCATION: Center SW 1/4 Sec 18-109-61

2. AREA TO BE IRRIGATED: SW 1/4 Sec. 18-109-61

TYPE OF IRRIGATION

3. GRAVITY SPRINKLER (Indicate Type): Center pivot

4. CROPS TO BE IRRIGATED: Corn - Alfalfa

LAND CAPABILITY FOR IRRIGATION

5. PERCENTAGE OF SLOPE: Attached sheet

6. PHYSICAL SOILS CLASSIFICATION FOR IRRIGATION: _____

WATER QUALITY (TO BE COMPLETED BY COMMISSION)

7. SAMPLE NO.: 75-062

8. SALINITY: EC = 165 μ mhos/cm (high)

9. SODIUM: SAR = 1.84 (low)

I do hereby certify that a chemical analysis of the ground water to be
acquired for irrigation from South Dakota State University and:
the land capability for irrigation information has been acquired from

SCS Soil Scientist

and:

that the legal description for the location of the well and land to be
irrigated is true and correct.

Michael P. Kurch

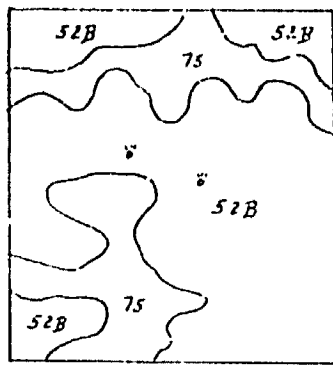
Subscribed and sworn before me this

20th day of February 19 75

Marion H. Brauer

Notary Public

(Title)

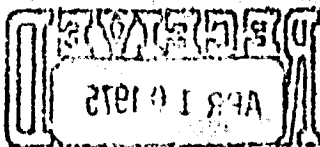


SW 1/4 18 T09, R61

Soils Legend

This quarter consists largely of Carthage sandy loams (52B) on 2 to 6 per cent slopes. These are deep, moderately well drained soils formed in 20 to 40 inches of sandy loam materials over clay loam glacial till. Slopes are short and irregular. Permeability is moderately rapid in the sandy loam materials and moderately slow in the substrata. These soils are well suited to sprinkler irrigation.

Of minor extent are soils with profiles similar to the Carthage except they are somewhat poorly drained (75). These soils are in lower swales and shallow depressions and may become ponded. Surface drainage of these soils is desirable under irrigation. In this quarter these somewhat poorly drained soils have been largely drained through road construction.



MURCH, RICHARD L. M.D.
MURCH, RICHARD L. M.D.

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

Submitted by: Hurch Ranch
 Address: 1700 Silverview Dr.
Inverness, SD 57350

Date Rec'd: February 3, 1971
 Sample No.: 75-062
 Identification: Well-
S&S, Sec. 18, T 109N, R 61E

WATER ANALYSIS

Calcium (Ca)	210	ppm*	10.50	me/l**
Magnesium (Mg)	69	ppm	5.66	me/l
Sodium (Na)	120	ppm	5.22	me/l
Potassium (K)	18	ppm	0.45	me/l
Sulfate (SO ₄)	510	ppm	10.61	me/l
Nitrate (as N)		ppm		me/l
Chloride (Cl)	22	ppm	0.62	me/l
Bicarbonate (HCO ₃)	522	ppm	8.56	me/l
Carbonate (CO ₃)		ppm		me/l
Iron (Fe)		ppm		me/l
Fluoride (F)		ppm		me/l
Hardness (EDTA as CaCO ₃)		ppm		g.p.g.***
Alkalinity (Methyl Orange)	426	ppm (as CaCO ₃)		
Alkalinity (Penolphthalein)	0	ppm (as CaCO ₃)		
Electrical Conductivity	1653	micromhos per cm at 25° C.		
Sodium Adsorption Ratio	1.84			
Sodium	22.90	% of cations		
Residual sodium carbonate	0.00	me/l		
pH	7.19			
Others:				

*ppm==parts per million

**me/l==milliequivalents per liter

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

COMMENTS: Total cations 21.84 me/l
 Total anions 19.79 me/l

By: Shirley Litten

Service Performed

Amount Due

Irrigation analysis

\$6.00

Make checks payable to: Water Quality Laboratory

Cut along dotted line and return the lower portion with payment

Sample No. 75-062

Amount Enclosed \$

Signed

NOTICE OF TRANSFER OF WATER PERMIT

TO: Water Rights Commission
 Foss Building
 Pierre, South Dakota 57501

Date: 2/22/78

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

SW 1/4 Sec. 18-109-61

formerly owned by Kurch Ranch (Michael & J.A. Kurch M.D.)
 has been transferred to Craig Cronin RR #4, Huron
 together with any rights to the beneficial use of water thereon as evidenced by
 Water Right Permit No. 2253-3 as provided for in Section 61.0127 of the 1960
 Supplement to the South Dakota Code of 1939.

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

A fee of Two Dollars and Fifty Cents (\$2.50) is hereto attached to cover
 filing fees as required under Section 61.0159 of the 1960 Supplement to the South
 Dakota Code of 1939..

STATE OF SOUTH DAKOTA)
 County of Beadle) SS.

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

Craig Cronin
 (Signed)

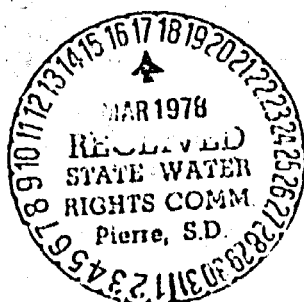
Subscribed and sworn to before me this

22nd day of February

19 78.

Carol Peterson
 (Notary Public)

My Commission Expires 3-30-83



2253-3Publish first publication, on or before May 8, 1975**NOTICE
INTENT TO APPROPRIATE WATER**

Pierre, South Dakota 57501

April 17, 1975, 1975Notice is hereby given that Kurch Ranchwhose post office address is Huron, South Dakota, has made an application in accordance with the provisions of the water laws of South Dakota for a permit to appropriate for beneficial use2.0 cubic feet of water per second of time from the ground water through theKurch Irrigation Project #1, the point of diversion of which is to be located in theCenter of the SW $\frac{1}{4}$ of Section 18, Twp. 109N, Range 61W. Said water to be used for the purpose

of providing irrigation on the following described land:

SW $\frac{1}{4}$, Section 18, T109N, R61W

This application No. 2253-3 will be considered by the Water Resources Commission at their office at Pierre upon the 21st day of May, 1975, at 2:30 P. M. All interested persons may appear and be heard.

WATER RESOURCES COMMISSION

By:

**BURTON F. JOIES
Water Rights Specialist**

BFJ/bw

cc: J.A. Kurch, H.D., 1580 Riverview Drive, Huron, S.D. 57350

No. 2253-3

PROOF OF PUBLICATION

STATE OF SOUTH DAKOTA)
County Beadle) ss.

I, Dorothy Murphey hereby

certify that the annexed printed copy of Notice of Intent to Appropriate

Water was taken from the Huron Daily Plainsman

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 Huron of _____

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

May 2, 1975

May 9, 1975

Dorothy Murphey
(Signature)

Beadle Plainsman
(Title)

May 9, 1975
(Date Signed)

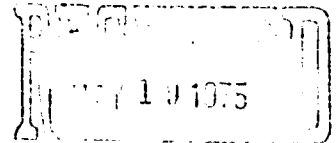
F.P. 5275 L.P. 5275
NOTICE INTENT TO
APPROPRIATE WATER

Notice is hereby given that Kurch
Ranch whose post office address is
Huron, South Dakota, has made an
application in accordance with the
provisions of the water laws of South
Dakota for a permit to appropriate
for beneficial use 2.0 cubic feet of
water per second of time from
ground water through the Kurch
Irrigation Project No. 1, the point of
diversion of which is to be located in
the Center of the SW 1/4 of Section 18,
Twp. 109N, Range 61W. Said water
to be used for the purpose of
providing irrigation on the following
described land: SW 1/4, Section 18,
T109N, R61W.

This application No. 2253-3 will be
considered by the Water Resources
Commission at their office at Pierre
upon the 21st day of May, 1975, at
2:30 P.M. All interested persons
may appear and be heard.

WATER RESOURCES
COMMISSION

Burton F. Jones
Water Rights Specialist
No. 187 (adv.)



STATE WATER RIGHTS COMMISSION
PIERRE, SOUTH DAKOTA

RECEIPT

WATER RIGHTS COMMISSION

State of South Dakota

No 4 6402

PIERRE, March 22, 1978

RECEIVED OF Craig Cronin, RR #4, Haron, SD 57350

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.		
Fee for Inspecting Beneficial Use, and issuing Water License No.		
Fee for Issuing Location Certificate-Dry Draw, No.		
Fee for filing transfer of Water Right Permit # 2252-3	2	50
Fee for certified copy of		
Fee for Print copy of map		
Fee for Certifying		
Fee for (any other work as provided by law)		
TOTAL	2	50

WATER-RIGHTS COMMISSION

By John Hatch
Chief Engineer, Executive Officer
JOHN HATCH

Water Rights Division
605 773-3352

August 7, 1981

Irving Wessel
RR
Huron SD 57350

Dear Mr. Wessel:

This letter is in response to your comments to Bob Neufeld concerning possible illegal pumping by Dennis & Craig Cronin in the NE $\frac{1}{4}$, Section 19 and SE $\frac{1}{4}$, Section 18, T109N, R61W (Clifton township). The Cronin permits only authorize irrigation of 10 acres on the west side of each of these two quarters.

We did check these two quarters August 3 and 5, 1981 and did not see any irrigation equipment. Since it had just rained the previous day (August 2) and alfalfa was being cut August 3, any equipment was probably moved.

If you observe any equipment or irrigation in these two quarters other than the West 10 acres, please let us know so we can make an investigation while any pumping is taking place.

Very truly yours,

JOHN HATCH, Chief Engineer
Water Rights Division

JH:kw

No. 4485-3

SOUTH DAKOTA
Department of
Water & Natural Resources

Joe Foss Building Water Rights Division
Pierre, South Dakota 57501

(605) 773-3352

November 1, 1982

Cronin Dairy
Route 4
Huron SD 57350

Dear Sir:

Enclosed herewith are, Water License No. 4485-3 and Certificate of Construction.

Water License No. 4485-3 is the final water right document completing your process of obtaining a water right.

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.

Very truly yours,

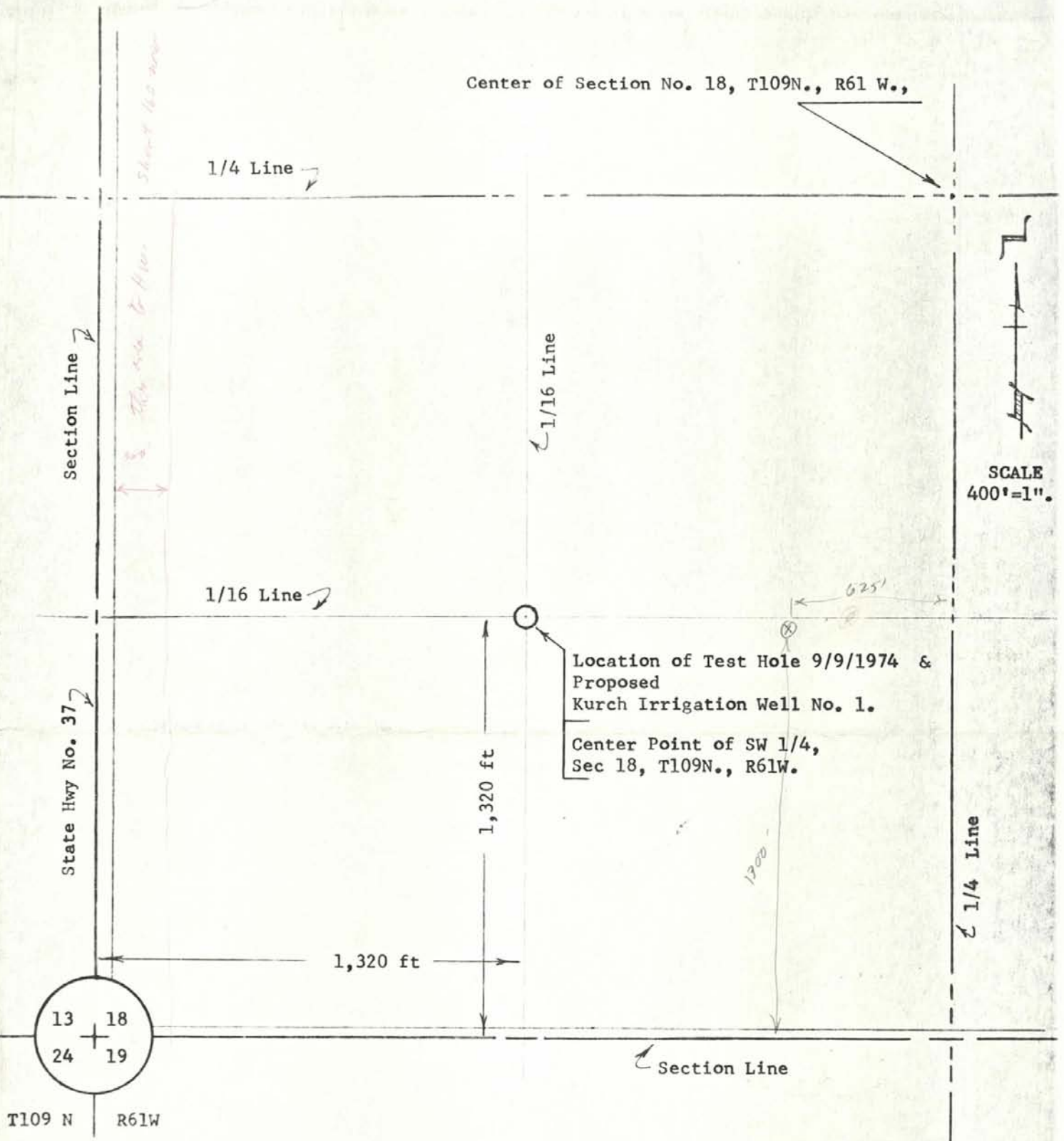
JOHN HATCH, Chief Engineer
Water Rights Division

JH:ks

enclosures

NOTE: Applicable portions of Permit No. 2253-3 have been incorporated into this Water License No. 4485-3

Center of Section No. 18, T109N., R61W.,



I, Emiel E. Belzer, P. E., a Registered Professional Engineer of the State of South Dakota, hereby states that I have prepared the above map in full compliance with all of the facts and data as has been furnished to me by the Owner of the land, Mr. Michel A. Kurch, Huron, South Dakota and Mr. Shell, Partner, Empire Irrigation & Drilling Company, Huron, South Dakota.

My hand and seal affixed this 31st day of March, 1975.

Emiel E. Belzer

SEAL.

