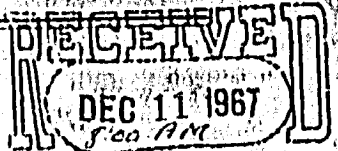


No. 14-67-3

Water Division No. 3 JAMES RIVER District
(Blanks to be Filled by the Engineer for the W. R. C.)STATE WATER RESOURCES COM. A.
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 Ervin Eckmann
 Postoffice address Cavour, County Boadle, 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 _____

(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 Eckmann Irrigation Project No. 13. Amount of water claimed 2.85 MAXIMUM ALLOWABLE cubic feet per second4. Source of water supply shallow well5. Location of point of diversion 1320' S and 20' West of NE Corner Sect. 10, 110, 60 W

_____ on _____ bank _____ County.

6. Annual period or periods during which water is to be used April 1 thru Oct.

7. To be used for:

1. Irrigation or domestic use: Gravity, overhead sprinkling or combination system?

(a) Number of acres to be irrigated 200 acres.(b) Legal subdivisions to be irrigated NE 1/4 and the N 1/4 Acres of the S.E. 1/4, Sect. 10, 110, 60 W

(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 N21066-3

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 ----- years.

11. Time required for complete application of water to the proposed beneficial use ----- years.

12. Choice of newspaper for publication of notice of intention to appropriate -----

The Daily Plainsman

STATE OF SOUTH DAKOTA

County of -----

Erwin Eokmann

I, Erwin Eokmann, 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

Erwin Eokmann

Subscribed and sworn to before me this

74

day of

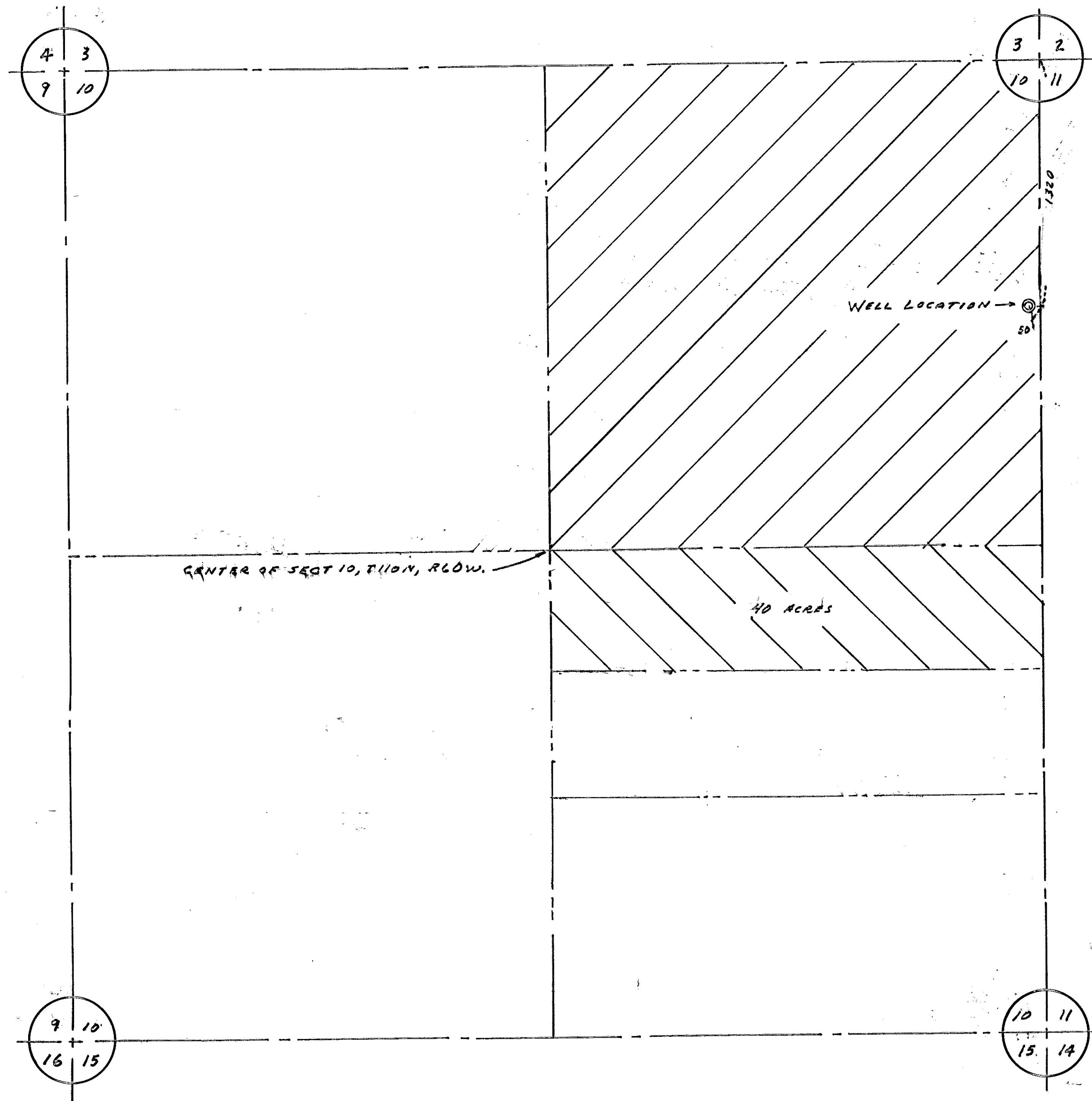
March 1962

1962

Corrine Johnson

Notary Public (or other qualified officer.)

*Each diversion must have a headgate or measuring device.



AREA BY LEGAL SUBDIVISION
 40 AC: N $\frac{1}{2}$, N $\frac{1}{2}$ OF SE $\frac{1}{4}$, SECT 10, T.110N., R.10W., 5TH PM.
 160 AC: NE $\frac{1}{4}$ OF SECT 10, T.110N., R.10W., 5TH PM.
 200 AC TOTAL

SURVEYOR'S CERTIFICATE

STATE OF SOUTH DAKOTA)
 COUNTY OF BEADLE) SS
 I, HARLAN W. MEYER, A REGISTERED LAND SURVEYOR
 IN AND FOR THE STATE OF SOUTH DAKOTA, DO HEREBY
 CERTIFY THAT AT THE REQUEST OF ERVIN ECKMANN,
 SOLE OWNER, I HAVE SHOWN THE LANDS PROPOSED TO BE IRRIGATED
 WITHIN HIS OWNERSHIP BOUNDARIES ON DEC 1, 1967 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 1ST DAY OF DEC 1967

Harlan W. Meyer

REG. LAND SURVEYOR

STATE OF SOUTH DAKOTA)
 COUNTY OF BEADLE) SS

SUBSCRIBED AND SWORN TO BEFORE ME THIS 1ST DAY
 OF DEC. 1967

Corinne Johnson

NOTARY PUBLIC

MY COMMISSION EXPIRES March 10, 1972



SCALE 1"=400'

ERVIN ECKMANN IRRIGATION PROJECT NO 1
 SHOWING AREA & WELL LOCATION WHERE WATER
 WILL BE DIVERTED FOR PERMIT TO APPROPRIATE WATER

OWNER ERVIN ECKMANN

SURVEYOR HARLAN W. MEYER
 DEC 1967

MAP NO 1066-3 (APPL NO 1462-3)

Remarks by State Water Resources Commission:

This well is located near domestic wells which may obtain water from the same aquifer. If the well covered by this Permit to appropriate water depletes the domestic water supply, restrictions, to the extent necessary, of the capacity of this well or periods of operation or other arrangements will be required to protect the domestic water supply.

STATE OF SOUTH DAKOTA

County of

HUGHES

ss.

Pierre, South Dakota,

APRIL 2

1968

This is to certify that the foregoing application was received by the Commission at 8:00 o'clock

a.m. upon the 11th day of DECEMBER 11, 1967.

State Water Resources Commission

By:

Austin Jones
for Chief Engineer, Executive Officer

Number of permit 1462-3

Date of first receipt of application

DECEMBER 11, 1967

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

DECEMBER 11, 1967

Approved

MARCH 20, 1968

Recorded in Book

10

Page

142

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 20, 1970

2nd. The whole of said work is to be completed on or before

MARCH 20, 1973

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

SEPTEMBER 20, 1973

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 2.85 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 SEPTEMBER 20, 1973, said water to be used during the following described annual period:

APRIL THRU OCTOBER

Witness my hand this

2nd

day of

APRIL

1968

State Water Resources Commission

By:

Joe C. Baines

Chief Engineer, Executive Officer

Certificate of Construction issued

APRIL 17, 1973

Water License issued

APRIL 17, 1973

D. (Continued)

III. Well Specifications

(a) Hole and casing

Size of drill hole or excavation 32", Depth 50'Type of casing STEEL
(wood, concrete, steel, etc.)Size of casing 16", Thickness of casing 1/4"Length of casing 50' If collection gallery, length, size and depth of gallery

(b) Screens

Type of perforated screen JOHNSON IRRIGATORSize of perforated screen 3/4" (diameter), 20' (length)Thickness of gravel pack 8", length of gravel pack 50'

(c) Water Bearing Materials

Distance to water 12' Character of water bearing materialsSand & Gravel
50' to 60' 12' to 45' to 50'

Thickness of water bearing material

(d) Pump and Motor

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

Name of pump, size

Kind of motor L. P. Gas
(gasoline, electric, diesel, etc.)

Horsepower, Name of Motor

(e) Complete well

Capacity at drawdown of Estimated cost

(f) Owner of land upon which well is located

Name

Address

(g) Distance to nearest existing wells

On same owner's property 40 rods. On property owned by others 120 rods

Permit No. 1462-3Water Diversion No. 3 James River Water District

CERTIFICATE OF CONSTRUCTION

This is to Certify, That Ervin J. Eckmann

the holder of

Permit No. 1462-3, issued upon Application No. 1462-3, bearing date of priority of December 11,
1967 authorizing the diversion of 2.85 cu. ft. per second of the waters ofground water County of Beadle, State of South Dakota ata point 7320 feet South and 50 feet West of the NE Corner, Section 10,
T110N, R60W, for irrigation

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 1.3 cu. ft. per second of water.

Date April 17, 1973

WATER RESOURCES COMMISSION

By:

J.W. GRIMES, Executive Officer

WATER LICENSE NO. 1462-3

(1) WHEREAS, On the 11th day of December A. D. 1967
Ervin J. Eckmann

made Water Right Application No. 1462-3 for a permit to use 2.85 cubic feet per second of the waters of ground water

County of Beadle, State of South Dakota, for irrigation

(2) WHEREAS, On the 2nd day of April, A. D. 1968
Permit No. 1462-3, with a date of priority of December 11, 1967

was issued to said applicant 11 for the diversion of said water, and provided for the completion of construction of the water supply system therein described on or before the 20th day of March A. D. 19 73 and for the application to beneficial use of said water on or before the 20th day of March A. D. 19 73

acid:

(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 1.3 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,

for irrigating the following land in Section 10, T110N, R60W

	Acres
NE $\frac{1}{4}$	140
N $\frac{1}{2}$ N $\frac{1}{2}$ SE $\frac{1}{4}$	<u>40</u>
Total	180

(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 Ervin J. Eckmann

of Cavour, S.D.

the holder _____ and owner _____ of said permit No. 1462-3 a water right, dating from December 11, 1967
to use of 1.3 cubic feet per second of the waters
of ground water

in the County of Beadle and State of South Dakota, or so much thereof as may be necessary for the
purposes hereinbelow mentioned, to be diverted at a point 1320 feet South and 50 feet West of the
NE Corner, Section 10, T110N, R60W

and conduct to and upon 180 acres in the E $\frac{1}{2}$, Section 10, T110N, R60W, more fully
described on the face of this license

for the purpose of irrigation

Subject to any limitations listed in Water Right Permit No. 1462-3 and subject to the laws of the State of South Dakota.

WITNESS, My hand and seal of our office at Pierre, South Dakota
this 17th day of April A. D.
Nineteen Hundred and Seventy-three

WATER RESOURCES COMMISSION

By:

Chief Engineer, Executive Officer J.W. GRIMES

SOUTH DAKOTA STATE DEPARTMENT OF HEALTH
 Division of Sanitary Engineering
 Pierre, South Dakota

CHEMICAL WATER ANALYSIS REPORT

City or Town Cavour, South Dakota Date Received.....
 Sample Collector's Name..... Lester Meyer (owner) Lab. Number.....
 Date Collected..... Date Reported.....
 Results Reported To: Copies To:

Donald Driscoll
Water Resources Commission
Pierre, South Dakota

FIELD DATA

Name of Public Water Supply..... Lester Meyer
 Well Source Sampled: Name..... Depth..... 170' Diameter..... Date Built.....
 Other Source Sampled: Name Date Built.....
 Legal Description of Source Site..... SW 1/4 Section 16, T. 110N, R. 60W
 Raw or Treated Sample Treatment Processes
 Additional Information, Remarks
 Source (pumped hours) (flows) at..... gallons per minute
 Field Tests: Temperature °C..... Iron..... pH.....
 Turbidity Alkalinity, P..... M..... Hardness.....

LABORATORY ANALYSIS RESULTS

(Results in parts per million unless otherwise stated)

Specific Conductance at 24 °C..... 1920 micromhos per centimeter
 Total Solids Dissolved Solids Iron as Fe.....
 Alkalinity as CaCO₃ P..... 0 T or M 240 pH.....
 Potassium as K Nitrate as N
 Sodium as Na 460 ppm Fluoride as F
 Calcium as Ca Chloride as Cl 320 ppm
 Magnesium as Mg Sulfate as SO₄ 450 ppm
 Manganese as Mn Bicarbonate as HCO₃
 Calculated Hardness as CaCO₃ 150 ppm 8.8 gpg

Analyst Reported by [Signature]

On or before December 16, 1967.
(First Publication)

APPROPRIATION OF WATER

Office of State Water Resources Commission,

Pierre, S. Dak., December 11, 1967

Notice is hereby given that Ervin J. Eckmann whose postoffice

address is Cavour 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 2.85

cubic feet of water per second of time from the ground water through the

Eckmann Irrigation Project #1, the point of diversion of which is to be located on the

~~NE 1/4 of Section 10~~ in the NE 1/4 of the NE 1/4 of Section 10

Twp. 110N Range 60W Said water to be used for the purpose of providing irrigation on the following described land:

NE 1/4, N 1/2 SE 1/4, Section 10, T110N, R60W

~~XXXXXX~~ XXXXXX

This application will be taken up by the State Water Resources Commission at their office at Pierre for consideration upon the 10th day of January, 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.

cc: Ervin J. Eckmann, Cavour, S.D. State Water Resources Commission

By:

~~XXXXXXXXXXXXXXXXXXXX~~
BURTON F. JONES
Water Rights Specialist

PRINTER'S AFFIDAVIT

STATE OF SOUTH DAKOTA,
COUNTY OF BEADLE

SS.

I, JEANNETTE C. LUSK

being duly sworn on oath, say that THE DAILY PLAINSMAN is a daily paper published at Huron, Beadle County, South Dakota, and that said newspaper has a bonafide circulation of at least 250 copies daily; that said newspaper has been published within said county for fifty-two consecutive weeks immediately prior to this date; that said newspaper is printed in whole or in part, in an office maintained at said place of publication; that I am publisher

of said newspaper and know the facts herein stated. The annexed notice headed APPROPRIATION OF WATER.

was published for 4 successive WEEKS once each week, the same day each week, in said newspaper, and not in any supplement of the said newspaper, the first publication on the 15 day of DEC., 19 67, and the last publication on the 19 day of JAN., 19 67. That the full amount of the fee charged for publishing the same, to-wit:

TWENTY-ONE & 00/100

Dollars insures to the benefit of the publisher of said newspaper; that no agreement or understanding for the division thereof has been made with any other person, and that no part thereof has been agreed to be paid to any person whomsoever.

Jeannette C. Lusk

Subscribed and sworn to before me this 5 day of JAN., 19 67.

a. J. [Signature]
Notary Public, South Dakota

My term expires 9-21-75

AFFIDAVIT OF AGENT OR ATTORNEY

STATE OF SOUTH DAKOTA,
COUNTY OF

SS.

I, _____ being duly sworn on oath, say that I am the authorized attorney for the party foreclosing the mortgage described in the annexed notice; that no agreement or understanding for any division of the fees therefore has been made with any person whomsoever, and that no part thereof has been refunded or rebated by the party publishing this notice.

Subscribed and sworn to before me this _____ day of _____, 19 _____.

FP 11-15-67
APPROPRIATION OF WATER
Office of State Water Resources
Commission
Pierre, S. D. 57501
December 11, 1967
Notice is hereby given that Ervin J. Eckmann (whose postoffice address is Cavour, S. Dak.) has made an application in accordance with the provisions of the Water Law of South Dakota, for a permit to appropriate for beneficial use 2.25 cubic feet of water per second of time from ground water through the Eckmann Irrigation Project No. 1, the point of diversion of which is to be located in the NE 1/4 of the NW 1/4 of Section 10, Twp. 11N, Range 60W. Said water is to be used for the purpose of providing irrigation on the following described land:
NE 1/4, NW 1/4, Section 10, T11N, R60W, S. D.
This application will be taken up by the State Water Resources Commission at their office at Pierre for consideration upon the 10th day of January, 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.
By: Burton E. Jones,
State Water Resources Commission
Water Rights Specialist
(R) 12/1/67 No. 127 (adv.)

IRRIGATION & DRILLING COMPANY

Ph. 352-4587

1944

Ph. 352-4587

1952

March 19, 1968

Water Resources Commission
Pierre, South Dakota

RE: Ervin J. Eckmann - Water Right
Application 1462-3

Gentlemen:

We the undersigned hereby object to the approval of Water Right Application Number 1462-3 to Ervin J. Eckmann. In your communication of March 12th you set forth that shallow well number 2 and 3 under drought conditions would no longer produce water. The fact is that shallow well number 2 produced water all during the "dirty thirties" which of course were extremely dry conditions. It should also be pointed out that if, because of the issuance of the irrigation permit, such well would go dry it would be absolutely necessary in order to use the pasture to drill another well, and, in fact, the depth of this well seems to be the only suitable location to get water in this locale.

With reference to shallow well number 3, this has been in use for four or five years and has supplied adequate water for our domestic use.

We feel that our domestic use should not be subjected to being replaced at our cost and expense, and perhaps being unable to find adequate water for domestic use, all because of the issuance of an irrigation permit.

We therefore respectfully request that the permit be denied.

Sincerely,

Clarence Meyer
James Rudy
Lester Meyer

~~The report~~

Paper by Clarence Meyer for Eckmann
Reconsideration
Mar. 20, 1908

Gentlemen

The Report received on the proposed irrigation well indicates, sand and gravel between 12 and 45 ft. depths.

Shallow wells 1, 2, 3, and 4, in reference to the same report, all have water bearing sand and gravel, starting at about 15 ft. and to the depth of the well, which varies in each different well.

The defect, which is well "not" being 25 ft.

It would seem very likely, that if they were connected in any way, with the proposed irrigation well of 45 ft. depth, said irrigation well would lower or even drain all 4 of these shallow wells.

The 4 shallow wells are located about 2 to 2 1/2 miles, in a direct line, from proposed irrigation well site.

There are 2 artesian wells on my farm that have been abandoned over a period of many years and a 4th artesian well, still in use, which is about 25 years old, but getting very slow.

Also a shallow type well was made, at about 170 ft depth, but when completed, was found to not produce enough water for more than house hold use. This well is approx. 15 years old.

Judging from the fact that the 4th artesian well is no longer doing its job properly and that the 170 ft depth well would not, even when new, provide livestock water, the obvious conclusion seems to be the only source of water for livestock are these shallow wells, at the approx.

20 to 25 ft depth, as they have served very well at all times in the past.

This is my great concern in this situation.

The possible loss of this water supply would surely mean a reduction in livestock production, and maybe the complete elimination of it.

I therefore respectfully request that the permit be denied.

Thank you

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES DIVISION

WATER LEVEL MEASUREMENTS (Field) Measured by _____

Location of Project B-6E-B 110-60-10 dda

[illegible]

9-191
November 1913

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES DIVISION

WATER LEVEL MEASUREMENTS (Field)

Location of Project B-19-C 110-60-15 h.c. by school

[illegible]

Ervin Eckman

Irrigation well drilled about April 15, 1968

Measured 5-3-68

Drill hole 29" dia

12" steel casing

Total depth 93'

Depth of screen 15'

Depth to water from top of well 16.5'

Test pump-1 about April 15, 1968

pump-1 1 1/2 hrs 955 gpm

Returned to 10' in 1 minute

Flow to pump about 500 gpm

21 sprinklers @ 3 1/2 gpm

pump well hole about 150 gpm

well located .8 foot N of SE corner

Permit No. 1462-3Water Division 3 JAMES RIVER Water DistrictREPORT OF EXAMINATION OF WORKS
AND/OR APPLICATION OF WATER TO BENEFICIAL USE

TO: Water Resources Commission, State Office Building No. 2, Pierre, South Dakota 57501

I have this day made a thorough examination of the water use system constructed by ERVIN J. ECKMANN of CANOUR holder of Permit No. 1462-3 bearing date of priority of DECEMBER 11, 1967 authorizing the diversion of 2.85 cu. ft. per second of the waters of GROUND WATER for IRRIGATION purposes, in BEADLE 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;

43' DEEP WELL WITH 12" STEEL CASING
LAYNE-BOWLER VERTILINE 6" PUMP, POWERED BY CHRYSLER
INDUSTRIAL #318 PROPANE ENGINE

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

2460' OF 6" MAINLINE

C. Works used to apply water to beneficial use.

2 - 1/4 MILE 4" TOWLINES WITH RAINBIRD #14600
& #30 (ABOUT HALF OF EACH) SPRINKLER HEADS WITH
5/32 ORIFICE @ 40' SPACING

The system is in the following condition: GOOD

The point of diversion is located 1320' S & 50' W OF THE NE CORNER,
SECTION 10, T110N, R60W

The works are capable of diverting and conveying to the place of use 1.3cu. ft. per second of water which is to be used for IRRIGATIONWater has been put to beneficial use to the maximum extent as follows: ALL IN SECTION 10, T110N, R60W

NE 1/4 140 ACRES
N 1/2 N 1/2 SE 1/4 40 ACRES

comprising a total of 180 acres of land.Date APRIL 11, 1973

Burton J. Jones
 (Signature)

WATER RIGHT SPECIALIST
 WATER RESOURCES COMMISSION

Water Right Application 1462-3

Ervin J. Eckmann

At its January, 1968 meeting, the Commission considered the water right application of Ervin J. Eckmann to drill a 50 foot deep irrigation well and pump up to 2.85 cubic feet per second of water to irrigate up to 200 acres of land. Several neighboring well owners appeared to express their concern that the proposed irrigation could seriously affect their existing wells. The Commission deferred further consideration pending investigation by the staff.

The location of the proposed irrigation well is 10 miles east of Huron. A test hole has been drilled very near the proposed site. The test hole log indicates a yellow clay to a depth of 12 feet, with sands and gravels existing between the 12 and 45 foot depths. The test hole was drilled on November 16, 1967 and on that date the log records a 15 foot depth to the water surface. An existing irrigation well is located about 1/2 mile east of the proposed irrigation well. The existing irrigation well has a reported depth of 129 feet, with a depth to the water surface of about 30 feet.

Shallow wells of two neighbors were checked. Each of these neighbors had two shallow wells. The first location is approximately one mile west and two miles south of the proposed irrigation well location.

Shallow Well No. 1

Main livestock watering well. Well is about 15 years old, 28 feet deep with 24 inch diameter casing. There was an eleven foot depth of water in the well.

Shallow Well No. 2

A very old well, 22 feet deep with 24 inch diameter casing. The well had a one foot, ten inch depth of water. This well has always been able to furnish water for 50 head of cattle on summer pasture.

The second location is about 1 1/2 miles west and 1 3/4 miles south of the proposed irrigation well location.

Shallow Well No. 3

A home drilled well constructed four years ago. Total depth, 17.1 feet of which 6 feet is a concrete pit and the remainder is a 7 inch casing. The depth of water in the well was one foot, eight inches. The pit was heated and the well has an automatic pump hook-up. A rock prevented deeper well construction, but the well has furnished all water needed for livestock water, although the pump does suck air when the well is pumped for a period of time.

Shallow Well No. 4

This well was drilled about 1927 and is not now being used. The well was 21.8 feet deep and had a 9 inch casing. There was about a 5 foot depth of water in the well.

A 170 foot deep well furnished water for household use at this second location. This well was drilled in 1926. The depth to water is about 45 feet. The owner reports the water is soft in the winter and hard in the summer. He believes the changes correspond with the operation of the existing irrigation well.

The test hole log indicates that a 50 foot deep well at the proposed irrigation well site would not tap water under artesian pressure. Under such conditions it would not be expected that the drawdown cone would extend over two miles to the nearest shallow wells, and the overall lowering of the water table should have little or no affect at such a distance. However, we have very little information about the aquifer the proposed well would tap and if there is artesian pressure, or if the aquifer is very narrow, running mainly between the proposed irrigation wells and the shallow wells, the effect would be greater.

This is one of those many instances where you cannot safely predict prior to the irrigation pumping what effect will be caused by such pumping. The applicant has been advised that he is responsible for any needed reduction in domestic water supply that his irrigation withdrawal would cause, and that he should keep this in mind as his irrigation system is developed, if his application is approved.

Effects caused by drought conditions should not be blamed on irrigation withdrawals. Ground water levels are decidedly low now and are lowering at a rate greater than usual because of the current dry period. If the drought conditions existing at the time of the writing of this report continue until July, the Commission staff would expect that checked shallow wells No. 2 and No. 3 would no longer produce water, even with no irrigation withdrawals in the area.

The recommendation of the Commission staff is that water right application No. 1462-3 be approved containing the following qualifications:

"This well is located near domestic wells which may obtain water from the same aquifer. If the well covered by this Permit to Appropriate Water depletes the domestic water supply, restrictions, to the extent necessary, of the capacity of this well or periods of operation or other arrangements will be required to protect the domestic water supply."

1462-3
ERVIN J ECKMANN
CAVDUR
SD 57324

BD/JR

6

This is the Water Management Board data
sheet for recording 1980 GROUNDWATER
source irrigation estimates.
Please fill out and return at once.

No. Acres irrigated with Groundwater 60
If you did not irrigate during 1980 check this box ☐ No system ☐

November 1980
For Dept. use only

2

Type of Power	No. acres irrigated	Total Energy used-1980
1. Electric		kwh
2. Gravity		gal
3. Gasoline		cf
4. Nat. Gas pipeline		gal
5. Diesel	<u>80</u>	<u>7</u> gal
6. Propane		gal
7. Other		
Type of System:		
1. Hand Moved Sprinklers		
2. Portable booms		
3. Center pivots (# of)	<u>18</u>	
4. Gated pipes		
5. Sidewheel		
6. Towlines		
7. Gun type		
8. Hydromatic		
9. Siphons		
10. Flood		
11. Other		

Owner or address change, if any:

Please complete front and back.

Month	# days pumped	Average # hours per day	Average pump rate (gpm)	Acres of Crop Irrigated and Estimated Water Use		Acres		Water	
April				Crop	Acres	Water	Acres	Crop	Acres
May				Crop	Acres	Water	Acres	Crop	Acres
June	<u>25</u>	<u>33</u>	<u>450</u>	Crop	<u>40</u>	<u>23.82</u>			
July	<u>25</u>	<u>33</u>	<u>450</u>	Crop	<u>40</u>	<u>23.82</u>			
August	<u>25</u>	<u>33</u>	<u>450</u>	Crop	<u>40</u>	<u>23.82</u>			
Sept.									
Oct.									
Other Month									

Season Static Water Level: beginning 7 and 7
Complete and return to: WATER MANAGEMENT BOARD
Water Rights Division
Joe Foss Building
Pierre, SD 57501

Comments:



The South Dakota Office of Energy has requested your cooperation in completing the following:

1979

Type of Power	No. Acres Irrigated	Total Energy Used
1. Electric	_____	_____ kwh
2. Gravity	_____	_____
3. Gasoline	_____	_____ gal
4. Nat. Gas pipeline	_____	_____ cf
5. Diesel	<u>50</u>	<u>?</u> gal
6. Propane	_____	_____ gal
7. Other	_____	_____

1978

Type of Power	No. Acres Irrigated	Total Energy Used
1. Electric	_____	_____ kwh
2. Gravity	_____	_____
3. Gasoline	_____	_____ gal
4. Nat. Gas pipeline	_____	_____ cf
5. Diesel	<u>80</u>	<u>?</u> gal
6. Propane	_____	_____ gal
7. Other	_____	_____ gal

- What is your on-farm storage capacity for gasoline 500 gallons
diesel 850 gallons
- What are your present plans for acres under irrigation for 1981?
 _____ an increase in acres
☒ irrigate same acres
 _____ a decrease in acres
- A. Has your regular fuel supplier been able to meet your fuel needs for irrigation this past year?
☒ yes
 _____ no
 B. If no, were you able to buy from other sources?
 _____ yes
 _____ no
- Would you continue irrigating the same number of acres in 1981 if the price of fuel increased-

10% yes _____	20% yes _____
no _____	no _____
15% yes ☒	over 20% yes ☒
no _____	no _____
- At what price for fuel would you cut back on irrigation activities? 1.60
- What is your best estimate of your fuel needs for irrigation in 1981, if we experience a
 Dry summer: 2800 gallons.
 Wet summer: 500 gallons.

1462-3

1462-3



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
PMB 2020
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3182
<http://denr.sd.gov>

October 23, 2013

1462-3
2495-3

Ervin J Eckmann
2079 Meadowlark Ln
Huron SD 57350 6805

Dear Mr. Eckmann:

Enclosed is a "Notice" dated October 18, 2013 concerning the 2013 irrigation questionnaires.

The notice was originally mailed to 20907 410th Ave, Cavour SD. The post office notified us that your address has changed and I will update our records accordingly.

If you have any questions, please contact me.

Sincerely,

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

enclosures



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 E. CAPITOL AVE
PIERRE SD 57501-3182
danr.sd.gov

October 21, 2025

1462-3

2495-3

Ervin Eckmann
1714 Ohio Ave NW, Apt 118
Huron SD 57350

Dear Mr. Eckmann:

Enclosed is a "Notice" dated October 8, 2025, concerning the 2025 Irrigation Questionnaire.

The notice was originally mailed to you at 2079 Meadowlark Ln, Huron SD 57350. The post office notified our office that your address has changed, and your records have been updated accordingly.

This is a time sensitive matter. Please complete and return the enclosed questionnaire or submit your report online at <https://danr.sd.gov/iq/> using this password **QPPOKJ**.

If this change of address is in-correct, please contact our office immediately to update your contact information.

Sincerely,

Amanda Dewell
Permitting Administrator
Water Rights Program
605 773-3352
Amanda.Dewell@state.sd.us

enclosures

581 MFB 114142510010/14/25
RETURN TO SENDER
ECKMANN
1714 OHIO AVE NW APT 118
HURON SD 57350-2056
RETURN TO SENDER