KANSAS DEPARTMENT OF AGRICULTURE
DIVISION OF WATER RESOURCES
MEMORANDUM

TO: File
DATE: May 1, 2018
FROM: Amber Herring
SUBJECT: Date Stamping Mail

On Friday, June 26th, 2015, The Administrative Assistant for Kansas Department of Agriculture, on the first floor signed for the certified mail containing the following Applications. I, Amber Herring, did not receive the documents until Monday, June 29th, 2015. Thus, the June 29th date is the correct date and time received by the Division of Water Resources.
APPLICATION FOR APPROVAL TO CHANGE THE PLACE OF USE, THE POINT OF DIVERSION OR THE USE MADE OF THE WATER UNDER AN EXISTING WATER RIGHT

Filing Fee Must Accompany the Application

(please refer to fee schedule on signature page of application form.)

Paragraph Nos. 1, 2, 3, 4 & 8 must be completed. Complete all other applicable portions. A topographic map or detailed plat showing the authorized and proposed points(s) of diversion and /or place of use must accompany this application.

1. Application is hereby made for approval of the Chief Engineer to change the
   □ Place of Use
   □ Point of Diversion
   □ Use Made of Water

   (check one or more)

   David W. Barfield, P.E. WATER RESOURCES RECEIVED
   JUN 28 2015
   4:14
   Chief Engineer
   Division of Water Resources
   Kansas Dept. of Agriculture
   KS DEPT OF AGRICULTURE

   File No. 22,332 Circle 23.

2. Name of applicant: City of Hays, Kansas and City of Russell, Kansas (See paragraph 2 of the cover letter.)

   Address: c/o Foulston Siefkin LLP, 1551 N. Waterfront Parkway, Suite 100

   City, State and Zip: Wichita, Kansas 67206

   Phone Number: (316) 291-9725 E-mail address: dtraster@foulston.com

   What is your relationship to the water right; □ owner □ tenant □ agent □ other? If other, please explain. Hays and Russell are co-owners of the authorized place of use on the R9 Ranch in Edwards County.

   Name of water use correspondent: City of Hays, Kansas

   Address: P. O. Box 490, 1507 Main Street

   City, State and Zip: Hays, Kansas 67601

   Phone Number: (785) 628-7320 E-mail address: tdougherty@haysusa.com

3. The change(s) proposed herein are desired for the following reasons (please be specific):

   See Paragraph 3 of the cover letter filed concurrently with this application. The cover letter is incorporated herein by reference.

   The change(s) (was) (will be) completed by See Paragraph 3 of the cover letter

   (Date)
4. The presently authorized place of use is:

Owner of Land — NAME: City of Hays, Kansas

ADDRESS: P.O. Box 490, 1507 Main Street, Hays, Kansas 67601

<table>
<thead>
<tr>
<th>Sec. Twp. Range</th>
<th>NE 1/4</th>
<th>NW 1/4</th>
<th>SW 1/4</th>
<th>SE 1/4</th>
<th>TOTAL ACRES</th>
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</table>

List any other water rights that cover this place of use: None

Owner of Land — NAME: City of Russell, Kansas

ADDRESS: 133 W. 8th Street, Russell, Kansas 67665

<table>
<thead>
<tr>
<th>Sec. Twp. Range</th>
<th>NE 1/4</th>
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<th>SE 1/4</th>
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</table>

List any other water rights that cover this place of use: None

(If there are more than two landowners, attach additional sheets as necessary.)

5. It is proposed that the place of use be changed to:

Owner of Land — NAME: City of Hays, Kansas

ADDRESS: P.O. Box 490, 1507 Main Street, Hays, Kansas 67601

<table>
<thead>
<tr>
<th>Sec. Twp. Range</th>
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</table>

The City of Hays, Kansas and its immediate vicinity and other locations as more fully described in paragraph 5 of the cover letter.

List any other water rights that cover this place of use: See paragraph 5 of the cover letter.

Owner of Land — NAME: City of Russell, Kansas

ADDRESS: 133 W. 8th Street, Russell, Kansas 67665

<table>
<thead>
<tr>
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</table>

The City of Russell, Kansas and its immediate vicinity and other locations as more fully described in paragraph 5 of the cover letter.

List any other water rights that cover this place of use: See paragraph 5 of the cover letter.

IF MORE SPACE IS NEEDED, ATTACH ADDITIONAL SHEETS AS NECESSARY.
6. The presently authorized point(s) of diversion (is) (are) irrigation well(s) described in paragraph 8, infra. (Provide description and number of points)

7. The proposed point(s) of diversion (is) (are) one or more municipal wells; see paragraph 7 of the cover letter. (Provide description and number of points)

List all presently authorized point(s) of diversion:

<table>
<thead>
<tr>
<th>Presently authorized point of diversion:</th>
<th>Proposed point of diversion: (Complete only if change is requested)</th>
</tr>
</thead>
<tbody>
<tr>
<td>One in the <em>near the center</em> Quarter of the <em>1</em> Quarter of the <em>SE</em> Quarter of Section 2 Township 26 South, Range 20 (E/W), in <em>Edwards</em> County, Kansas, 1,407 feet North 1,330 feet West of Southeast corner of section. Authorized Rate 655 gpm Authorized Quantity 111 a/f (DWR use only: Computer ID No. GPS _feet North _feet West) □ This point will not be changed ☑ This point will be changed as follows:</td>
<td></td>
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<tr>
<td>Proposed Rate 980 gpm Proposed Quantity 166.32 a/f</td>
<td></td>
</tr>
</tbody>
</table>

This point is: □ Additional Well □ Geo Center List other water rights that will use this point 22,329-32; 30,084

9. Presently authorized point of diversion:

One in the _near the center_ Quarter of the _E/2_ Quarter of the _SE_ Quarter of Section 1 Township 26 South, Range 20 (E/W), in _Edwards_ County, Kansas, 1,342 feet North 797 feet West of Southeast corner of section. Authorized Rate 460 gpm Authorized Quantity 77 a/f (DWR use only: Computer ID No. GPS _feet North _feet West) □ This point will not be changed ☑ This point will be changed as follows:

Proposed point of diversion: (Complete only if change is requested)

One in the _NE_ Quarter of the _SW_ Quarter of the _SW_ Quarter of Section 2 Township 26 South, Range 20 (E/W), in _Edwards_ County, Kansas, 1,341 feet North 4,056 feet West of Southeast corner of section. Proposed Rate 980 gpm Proposed Quantity 166.32 a/f

This point is: □ Additional Well □ Geo Center List other water rights that will use this point 22,329-32; 30,084

10. Presently authorized point of diversion:

One in the _near the center_ Quarter of the _Quarter of the_ Quarter of the _Quarter of Section_ Township South, Range (E/W), in _County, Kansas, _feet North _feet West of Southeast corner of section. Authorized Rate Authorized Quantity (DWR use only: Computer ID No. GPS _feet North _feet West) □ This point will not be changed ☑ This point will be changed as follows:

Proposed point of diversion: (Complete only if change is requested)

One in the _Quarter of the_ Quarter of the _Quarter of Section_ Township South, Range (E/W), in _County, Kansas, _feet North _feet West of Southeast corner of section. Proposed Rate Proposed Quantity This point is: □ Additional Well □ Geo Center List other water rights that will use this point

11. Describe the current condition of and future plans for any point(s) of diversion which will no longer be used. See paragraph 11 of the cover letter.
12. The presently authorized use of water is for irrigation purposes. It is proposed that the use be changed to municipal purposes.

13. If changing the place of use and/or use made of water, describe how the consumptive use will not be increased. See the attached discussion regarding the quantity of water to be changed to municipal use and paragraph 13 of the cover letter.

(Please show any calculations here.)

14. It is requested that the maximum annual quantity of water be reduced to not applicable (acre-feet or million gallons).

15. It is requested that the maximum rate of diversion of water be reduced to not applicable gallons per minute (___ c.f.s.).

16. The application must include either a topographic map or detailed plat. A U.S. Geological Survey Topographic Map, scale 1:24,000, is available through the Kansas Geological Survey, 1930 Constant Avenue, University of Kansas, Lawrence, Kansas 66047-3726 (www.usgs.gov). The map shall show the location of the presently authorized point(s) of diversion. Distances North and West of the Southeast corner of the section must be shown. The presently authorized place of use shall also be shown. Identify the center of the section, the section lines and the section corners and show the appropriate section, township, and range numbers on the map. In addition the following information must also be shown on the map.

a. If a change in the location of the point(s) of diversion is proposed, show:
   1) The location of the proposed point(s) of diversion. Distances North and West of the Southeast corner of the section must be shown. Please be certain that the information shown on the map agrees with the information shown in Paragraph Nos. 9, 10 and 11 of the application.
   2) If the source of supply is groundwater, please show the location of existing water wells of any kind, including domestic wells, within ½ mile of the proposed well or wells. Identify each well as to its use and furnish name and mailing address of the property owner or owners. If there are no wells within ½ mile, please indicate so on the map.
   3) If the source of supply is surface water, the names and mailing addresses of all landowner(s) ½ mile downstream and ½ mile upstream from your property lines must be shown.

b. If a change in the place of use is desired, show the proposed place of use by crosshatching on the map. Please be certain that the information shown on the map agrees with the information shown in Paragraph No. 5 of the application.

17. Attach documentation to show the change(s) proposed herein will not impair existing water rights and relates to the same local source of supply as to which the water right relates. This information may include statements, plats, geology reports, well logs, test hole logs, and other information as necessary information to show the above. Additional comments may be made below. See paragraph 17 of the cover letter.

18. If the proposed change(s) does not meet all applicable rules and regulations of the Kansas Water Appropriation Act, please identify the rules and regulations for which you request a waiver. State the reason why a waiver is needed and why the request should be granted. Attach documentation showing that granting the request will not impair existing water rights and will not prejudicially and unreasonably affect the public interest. See paragraph 7 of the cover letter.

IF MORE SPACE IS NEEDED, ATTACH ADDITIONAL SHEETS AS NECESSARY.
Any use of water that is not as authorized by the water right or permit to authorize water before the chief engineer approves this application is a violation of the Kansas Water Appropriation Act for which criminal or civil penalties may be assessed. Such violation is a class C misdemeanor, punishable by a fine not to exceed $500 and/or a term of confinement not to exceed one month in the county jail. K.S.A. 82a-728(b). Civil penalties shall be not less than $100 nor more than $1,000 per violation. In the case of a continuing violation, each day such violation continues may be deemed a separate violation. In addition to these penalties the water right may be modified or suspended. K.S.A. 82a-737, as amended.

The application must be signed by all owners of the place of use authorized under the water right and his or her spouse, if married. Please indicate if there is no spouse. If land is being purchased under contract, the seller must sign as landowner until such time as the contract is completed.

In the event that all applicants cannot appear before one notary public, they may as necessary sign separate copies of the application before any notary public conveniently available to them. All copies signed in this manner shall be considered to be valid parts of the application.

If the request is signed on behalf of any Owner by someone with legal authority to do so (for example, an agent, one who has power of attorney, or an executor, executrix, conservator), it will be necessary to attach proper documents showing such authority.

I declare that I am an owner of the currently authorized place of use as identified herein, or that I represent all such owners and am authorized to make this application on their behalf, and declare further that the statements contained herein are true, correct, and complete. By filing this application I authorize the chief engineer to permanently reduce the quantity of water and/or rate of diversion as specified in sections 14 and 15 of this application.

Dated at Russell, Russell County, Kansas, this 23rd day of June 2015

(Owner)

City of Hays, Kansas, by Toby Dougherty, City Manager

(Please Print)

(Owner)

(Please Print)

(Owner)

(Please Print)

(Please Print)

(Please Print)

State of Kansas

County of Russell

SS

I hereby certify that the foregoing application was signed in my presence and sworn to before me this 23rd day of June 2015.

Malinda Morse

Notary Public

FEE SCHEDULE

Each application to change the place of use, the point of diversion or the use made of the water under this section shall be accompanied by the application fee set forth in the schedule below:

1. Application to change a point of diversion 300 feet or less
   $100

2. Application to change a point of diversion more than 300 feet
   $200

3. Application to change the point of diversion
   $200

4. Application to change the use made of the water
   $300

Make check payable to Kansas Department of Agriculture.

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JUN 29 2015
Any use of water that is not as authorized by the water right or permit to authorize water before the chief engineer approves this application is a violation of the Kansas Water Appropriation Act for which criminal or civil penalties may be assessed. Such violation is a class C misdemeanor, punishable by a fine not to exceed $500 and/or a term of confinement not to exceed one month in the county jail. K.S.A. 82a-728(b). Civil penalties shall not be less than $100 nor more than $1,000 per violation. In the case of a continuing violation, each day such violation continues may be deemed a separate violation. In addition to these penalties the water right may be modified or suspended. K.S.A. 82a-737, as amended.

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If the request is signed on behalf of any Owner by someone with legal authority to do so (for example, an agent, one who has power of attorney, or an executor, executrix, conservator), it will be necessary to attach proper documents showing such authority.

I declare that I am an owner of the currently authorized place of use as identified herein, or that I represent all such owners and am authorized to make this application on their behalf, and declare further that the statements contained herein are true, correct, and complete. By filing this application I authorize the chief engineer to permanently reduce the quantity of water and/or rate of diversion as specified in sections 14 and 15 of this application.

Dated at Russell, Russell County, Kansas, this 23rd day of June, 2015.

________________________
(Owner)

City of Russell, Kansas, by Jon Quinday, City Manager

(Please Print)

________________________
(Owner)

________________________
(Spouse)

(Please Print)

________________________
(Spouse)

(Please Print)

________________________
(Spouse)

(Please Print)

State of Kansas

County of Russell

I hereby certify that the foregoing application was signed in my presence and sworn to before me this 23 day of June, 2015.

________________________
Notary Public

My Commission Expires 6/15/18

FEE SCHEDULE

Each application to change the place of use, the point of diversion or the use made of the water under this section shall be accompanied by the application fee set forth in the schedule below:

1. Application to change a point of diversion 300 feet or less .............................................................. $100
2. Application to change a point of diversion more than 300 feet .............................................................. $200
3. Application to change the place of use ........................................................................................................ $200
4. Application to change the use made of the water ............................................................... $300

Make check payable to Kansas Department of Agriculture.
Proposed Rate and Quantity

The Cities are requesting a total of 166.32 acre-feet and 980 gpm from the well associated with this water right, all of which will be diverted from new point of diversion J, as shown on Exhibit J. When combined with existing wells from other water rights, new point of diversion J will have a cumulative total of 678.44 acre-feet and 3,170 gpm.

13. If changing the place of use and the use made of water, describe how the consumptive use will not be increased:

The following discussion is subject to paragraph 13 of the cover letter regarding consumptive use.

DWR Regulation, K.A.R. 5-5-9(a), provides that the default calculation used to address the consumptive use issue allows the conversion of 135.00 acre-feet for municipal use.1 As discussed below, 125 approved acres irrigated during the perfection period multiplied by the Edwards County NIR for corn of 1.08 acre-feet per acre equals 135.00 acre-feet.2

That same regulation goes on to allow the change to be based on the net consumptive use actually made during the perfection period.3

Quantity authorized and perfected

The permit, issued on March 19, 1976, granted the right to divert up to 231 acre-feet annually at a rate not to exceed 1,000 gallons per minute for irrigation use4 on 125 acres in the SE/4 of Section 2-T26S-R20W, or 1.85 acre-feet per acre.5 The certificate further limited the rate of the wells to 980 gallons per minute when operated simultaneously.6

In the cover letter transmitting the permit, DWR made findings of fact stating that “the proposed use is for a beneficial purpose and is within reasonable limitations. If priorities are observed and respected, the proposed use will neither impair any use under existing water rights nor prejudicially and unreasonably affect the public interest.”7

The Field Inspection Reports indicate that all of the 231 acre-feet authorized by the permit were lawfully perfected.

- 205 acre-feet8 and 144 acre-feet9 (349 acre-feet) were applied to 125 approved acres in the SE/4 of Section 2-T26S-R20W.

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1 K.A.R. 5-5-9(a) and (a)(1).
2 K.A.R. 5-5-12, NIR Requirements.
3 K.A.R. 5-5-9(b).
4 Permit, HAYS002782, Ex. A.
5 Application, HAYS002775, Ex. B.
6 Certificate, HAYS002790, Ex. C.
7 March 19, 1976, letter (emphasis added), HAYS002781, Ex. D.
8 FIR, HAYS002759, Ex. E.
9 FIR, HAYS002768, Ex. F.
While the certificate limits the total quantity to 188 acre-feet based on DWR's after-the-fact determination that 1.5 acre-feet per acre was a reasonable quantity for irrigation use, DWR did not have jurisdiction to make this reduction.10

Since the perfection period has expired, the "authorized quantity" for this water right is the 231 acre-feet actually perfected even though it exceeds the certified quantity.

An alternative approach

DWR's use of the NIR of 1.08 feet of water for corn is based on its maximum gross irrigation requirement of 1.5 acre-feet per acre.11 The regulation allows the conversion of 72% of the maximum quantity to a new use; in other words, it assumes that 28% of the quantity diverted returns to the aquifer.

If 28% of the 231 acre-feet legally applied during the perfection period percolates back to the aquifer, then 72%, or 166.32 acre-feet, should be available for conversion to municipal use. This is less than the 231 acre-feet authorized so the limitation in K.A.R. 5-5-9(a)(4) is not implicated.

The Applicants request that DWR approve a total of 166.32 acre-feet for municipal use.

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11 Administrative Policy No. 86-8, dated Nov. 5, 1986, Ex. H, stating that: "In that area of Kansas located between the Range 5 East/Range 6 East Line and the Range 20 West/Range 21 West line, the maximum allowable quantity shall not exceed an average of 1.50 acre-feet per acre irrigated." See also, K.A.R. 5-3-24 and Doug Bush April 10, 1987, Memo, HAYS002785, Ex. G.
THE STATE OF KANSAS

STATE BOARD OF AGRICULTURE
Roy Freeland, Secretary

DIVISION OF WATER RESOURCES
Guy E. Gibson, Chief Engineer

APPROVAL OF APPLICATION
and
PERMIT TO PROCEED
(This Is Not a Certificate of Appropriation)

This is to certify that I have examined Application No. 22,332 of the applicant

Midwest Land and Cattle Co.
Box 208
Kinsley, Kansas 67547

for a permit to appropriate water to beneficial use, together with the maps, plans and other submitted data, and that the application is hereby approved and the applicant is hereby authorized, subject to vested rights and prior appropriations, to proceed with the construction of the proposed diversion works and to proceed with all steps necessary for the application of the water to the approved and proposed beneficial use and otherwise perfect the proposed appropriation subject to the following terms, conditions and limitations:

1. That the priority date assigned to such application is May 2, 1974.

2. That the water sought to be appropriated shall be used for irrigation on the land described in the application.

3. That the source from which the appropriation is made shall be from ground water in the drainage basin of the Arkansas River to be withdrawn by means of two (2) wells: one well near the center of the Southeast Quarter (SE¼) and one well in the Northwest Quarter of the Southeast Quarter of the Southeast Quarter (NW¼ SE¼ SE¼) of Section 2, Township 26 South, Range 20 West, in Edwards County, Kansas, located substantially as shown on the aerial photograph accompanying the application.

4. That the appropriation sought shall be limited to a maximum diversion rate not in excess of 1000 gallons per minute (2.23 c.f.s.) and to a quantity of not to exceed 231 acre-feet for any calendar year.

WATER RESOURCES RECEIVED
JUN 29 2015
KS DEPT OF AGRICULTURE
RECEIVED
MAR 29 1976
FIELD OFFICE
STAFFORD
5. That installation of works for diversion of water shall be completed on or before December 31, 1977. The applicant shall notify the Chief Engineer of the Division of Water Resources when construction of the works has been completed.

6. That the proposed appropriation shall be perfected by the actual application of water to the proposed beneficial use on or before December 31, 1981.

7. That the applicant shall maintain records from which the quantity of water actually diverted during each calendar year may be readily determined. Such records shall be furnished to the Chief Engineer as soon as practicable after the close of each calendar year.

8. That the applicant shall not be deemed to have acquired a water appropriation for a quantity in excess of the amount approved herein nor in excess of the amount found by the Chief Engineer to have been actually used for the approved purpose during one calendar year subsequent to approval of the application and within the time specified or any authorized extension thereof.

9. That the use of water herein authorized shall not impair any use under existing water rights nor prejudicially and unreasonably affect the public interest.

10. That the right of the appropriator shall relate to a specific quantity of water and such right must allow for a reasonable raising or lowering of the static water level and for the reasonable increase or decrease of the streamflow at the appropriator's point of diversion.

11. That this permit does not constitute authority under K. S. A. 82a-301 to 305 to construct any dam or other obstruction; it does not give any right-of-way, or authorize any injury to, or trespass upon, public or private property; it does not obviate the necessity of obtaining assent from Federal or Local Governmental authorities when necessary.

12. That failure without cause to comply with provisions of the permit and its terms, conditions and limitations will result in the forfeiture of the priority date, revocation of the permit and dismissal of the application.

Dated this 19th day of March 1976

Guy W. Gibson, Chief Engineer
Division of Water Resources
Kansas State Board of Agriculture

WATER RESOURCES RECEIVED

JUN 29 2015

KS DEPT OF AGRICULTURE

HAYS002783

SCANNED
APPLICATION FOR PERMIT TO APPROPRIATE WATER FOR BENEFICIAL USE

(The Statutory Filing Fee of $50.00 Must Accompany the Application)

To the Chief Engineer of the Division of Water Resources, Kansas State Board of Agriculture:

(Mr.)
(Mrs.)

Comes now the applicant (Miss) Midwest Land and Cattle Co., whose post office address is Box 208 Kinsley, Kansas 67547

and makes application to the Chief Engineer of the Division of Water Resources, Kansas State Board of Agriculture, for a permit to appropriate for beneficial use such unappropriated groundwater as may be available in the Arkansas River basin in the county of Edwards, state of Kansas, to the extent and in accordance with the particulars hereinafter described:

1. The quantity of water desired is in the amount of 2,314 acre feet per year, to be diverted at a maximum rate of 1,000 gallons per minute (gallons per minute or cubic feet per second)

2. The location of the proposed wells or other works for diversion of water is in the _____ quarter of the _____ quarter of section 2, township South, range 820 W, in Edwards County, Kansas.

Location of second well can not be determined until test well is drilled

3. The water is intended to be appropriated for:

(a) Domestic use ( )
(b) Municipal use ( )
(c) Irrigation use (X) 2,314 acre ft./yr. = 1000 gals./min.
(d) Industrial use ( )
(e) Recreational use ( )
(f) Water Power use ( )

Choose extended use or uses and show in each blank the rate of such use

WATER RESOURCES RECEIVED
JUN 29 2015
KS DEPT OF AGRICULTURE

MAR 29 1976
HAYS002774
4. If for municipal use, attach tables or curves showing past, present and estimated future population and water requirements of the city.

5. If for industrial use, attach tables or curves showing past, present and estimated future water requirements.

6. If for irrigation use list below or attach name and address of each landowner and the legal description of the lands to be irrigated by designating the actual number of acres to be irrigated in each forty acre tract or fractional portion thereof:

<p>| Owner of Land—NAME: Midwest Land &amp; Cattle Co. |
| ADDRESS: P.O. Box 208 Kimball, Kansas 67547 |</p>
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<thead>
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<th>Sec. Twp. Range</th>
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<p>| Owner of Land—NAME: |
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WATER RESOURCES RECEIVED
JUN 29 2015
KS DEPT OF AGRICULTURE
HAYS002775 SCANNED
7. The works for diversion of water will consist of two wells with two pumps for one circle sprinkle irrigation system (two motors) and will be completed by July of 1974 (Date).

8. The first actual application of water for the beneficial use proposed was or is estimated to be July of 1974 (Date).

9. The application must be accompanied either by a detailed plat prepared from an actual survey or by an aerial photograph of the area.

   The plat or aerial photograph should show:
   (a) Location of the proposed point or points of diversion
   (b) Location of the pipe lines, canals, reservoirs or other facilities for conveying water from the point of diversion to the place of use
   (c) If for irrigation, show the location of the land proposed to be irrigated
   (d) If for industrial or other use, show the location of the land where water will be used.

10. List and describe other applications filed or vested rights held by applicant: Irrigation wells and land is in the process of being bought by a company known as the Kinley Joint Venture (Wheatheart Land CO.) Applications for water rights have been filed.

11. The relation of the subscriber to this application is that of agent (Owner, agent or otherwise) and he is authorized to make this application in behalf of the interest affected.

   Dated at Kinsley, Kansas, this 22 day of April, 1974.

   Midwest Land & Cattle Co.
   (Applicant)
   By: (Agent or Officer)

   Note:
   1 cubic foot per second = 448.8 gallons per minute = 648,317 gallons per day = 1.98 acre feet per day.
   1 million gallons per day = 1,547 cubic feet per second = 5.07 acre feet per day.
   1 acre foot = 1,000 cubic feet = 325,851 gallons.

   WATER RESOURCES RECEIVED

   JUN 29 2015
   KS DEPT OF AGRICULTURE

   RECEIVED

   MAR 29 1976
   KS DEPT OF AGRICULTURE

   SCANNED
Appl. 22332

All wells within 1/2 mile of subject wells belong to applicant.
CERTIFICATE OF APPROPRIATION
FOR BENEFICIAL USE OF WATER

WATER RIGHT, File No. 22,332
PRIORITY DATE May 2, 1974

WHEREAS. It has been determined by the undersigned that construction of the appropriation diversion works has been completed, that water has been used for beneficial purposes and that the appropriation right has been perfected, all in conformity with the conditions of approval of the application pursuant to the water right referred to above and in conformity with the laws of the State of Kansas,

NOW, THEREFORE, Be It Known that DAVID L. POPE, the duly appointed, qualified and acting Chief Engineer of the Division of Water Resources of the Kansas State Board of Agriculture, by authority of the laws of the State of Kansas, and particularly K.S.A. 82a-714, does hereby certify that, subject to vested rights and prior appropriation rights, the appropriator is entitled to make use of groundwater in the drainage basin of the Arkansas River to be withdrawn by means of two (2) wells: one (1) well located near the center of the Southeast Quarter (SE\(\text{k}\)) of Section 2, more particularly described as being near a point 1,407 feet North and 1,330 feet West of the Southeast corner of said section, at a diversion rate not in excess of 655 gallons per minute (1.46 c.f.s.) and in a quantity not to exceed 111 acre-feet per calendar year; and one (1) well located near the center of the East Half of the Southeast Quarter (SE\(\text{k}\)) of Section 2, more particularly described as being near a point 1,342 feet North and 797 feet West of the Southeast corner of said section, at a diversion rate not in excess of 460 gallons per minute (1.02 c.f.s.) and in a quantity not to exceed 77 acre-feet per calendar year; both in Township 26 South, Range 20 West, Edwards County, Kansas, for irrigation use on the following described property:

- 30 acres in the Northeast Quarter of the Southeast Quarter (NE\(\text{k}\) SE\(\text{k}\)),
- 32 acres in Lot 8 (NW\(\text{k}\) SE\(\text{k}\)),
- 32 acres in the Southwest Quarter of the Southeast Quarter (SW\(\text{k}\) SE\(\text{k}\)),
- 31 acres in the Northeast Quarter of the Southwest Quarter (NE\(\text{k}\) SW\(\text{k}\)),

a total of 125 acres in Section 2, Township 26 South, Range 20 West, Edwards County, Kansas.

This appropriation right is further limited to a diversion rate which when the wells operate simultaneously will provide a diversion rate not in excess of 980 gallons per minute (2.18 c.f.s.) for irrigation use on the property described herein.
The appropriator shall maintain in an operating condition, satisfactory to the Chief Engineer, all check valves installed for preventing chemical or other foreign substance pollution of the water supply.

The appropriator shall maintain records from which the quantity of water actually diverted during each calendar year may be readily determined. Such records shall be furnished to the Chief Engineer within 30 days of receipt of the annual water use report form.

The appropriation right as perfected is appurtenant to and severable from the land herein described.

The appropriation right shall be deemed abandoned and shall terminate when without due and sufficient cause no lawful beneficial use is made of water under this appropriation for three (3) successive years.

The right of the appropriator shall relate to a specific quantity of water and such right must allow for a reasonable raising or lowering of the static water level and for the reasonable increase or decrease of the stream flow at the appropriator's point of diversion.

In Witness Whereof, I have hereunto set my hand at my office at Topeka, Kansas, this 11th day of June, 1987.

David L. Pope, P.E.
Chief Engineer
Division of Water Resources
Kansas State Board of Agriculture

STATE OF KANSAS, Shawnee COUNTY, ss.

The foregoing instrument was acknowledged before me this 11th day of June, 1987 by David L. Pope, P.E., Chief Engineer, Division of Water Resources, Kansas State Board of Agriculture.

Signature: Denise J. Watts, Notary Public
March 1, 1990
March 19, 1976

Midwest Land and Cattle Co.
Box 208
Kinsley, Kansas 67547

ATTENTION: Mr. Johnny Carson, Manager

Re: Appropriation of Water
Application No. 22,332

Gentlemen:

Your application has been examined and is found to be in proper form. Further, we find that the proposed use is for a beneficial purpose and is within reasonable limitations. If priorities are observed and respected, the proposed use will neither impair any use under existing water rights nor prejudicially and unreasonably affect the public interest. It is presumed that the application is made in good faith, and that you are ready to proceed with the proposed diversion works and the application of water to the proposed use. The application has, therefore, been approved.

There is enclosed the approval of the application authorizing you to proceed with construction of the proposed diversion works, to divert such unappropriated water as may be available from the source and at the location specified in the approval of application, and to use it for the purpose and at the location described in the application.

There is also enclosed a memorandum setting forth the procedure to obtain a certificate of appropriation which will establish the extent of your water rights.

Should you have any questions or if we can be of any assistance to you, please feel free to write or call us.

Very truly yours,

Riley M. Dixon
Hydrologist

RMD:GEE:ee1

Encs.
EXHIBIT 22332

DIVISION OF WATER RESOURCES—KANSAS STATE BOARD OF AGRICULTURE

FIELD INSPECTION REPORT

Test 1 of 2 Diversion points

Application No. 22332 Date 7/10/76 Firm/Field Office Pumping Plant Testing, Inc.
Inspectorretty Nissen

Field Area No. 2 G.M.D. No. 5 County. Edwards


Address J Box 1162 North Platte, NE 69103 Phone Jerry Weaver


Groundwater (X) Drainage Basin (X) Arkansas River

Surface Water ( ) Stream

 Authorized Point of Diversion: (wells) NC SE¼ Sec. 2 T. 26 R. 20
Approximately 5 ft. North and 5 ft. West of SE corner of Sec.

Actual Point of Diversion: (wells) NC SE¼ Sec. 2 T. 26 R. 20
Approximately 1407 ft. North and 1330 ft. West of SE corner of Sec.

How were distances determined? ti°*n for h
c photo

"Approved" Quantity: 231 AF "Approved" Diversion Rate: 1000 g.p.m. (2.23 c.f.s.)

Priority Date May 2, 1974 Approval of Application Date March 19, 1976

Perfection Date Dec. 31, 1981

Other applications covering land and/or point of diversion None
(include discussion of overlapping files in remarks section)

LAND TO BE INCLUDED ON CERTIFICATE:

<table>
<thead>
<tr>
<th></th>
<th>T</th>
<th>H</th>
<th>NW¼</th>
<th>NW¼</th>
<th>SW¼</th>
<th>SW¼</th>
<th>TOTAL ACRES</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>NE</td>
<td>NW</td>
<td>SW</td>
<td>SE</td>
<td></td>
</tr>
<tr>
<td>2 26 20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>30 32 32 31</td>
</tr>
</tbody>
</table>

LAND IRRIGATED—YEAR OF RECORD 1984 SEE ATTACHED SHEET

<table>
<thead>
<tr>
<th></th>
<th>T</th>
<th>H</th>
<th>NW¼</th>
<th>NW¼</th>
<th>SW¼</th>
<th>SW¼</th>
<th>TOTAL ACRES</th>
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</thead>
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<td></td>
<td></td>
<td></td>
<td>NE</td>
<td>NW</td>
<td>SW</td>
<td>SE</td>
<td></td>
</tr>
<tr>
<td>2 26 20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>34 34 28 38</td>
</tr>
</tbody>
</table>

APPLICATION OF WATER: SEE ATTACHED SHEET

Year of Record 1984 Hours Pumped 1700 or Quantity 3056 AF (2.17 G.P.M.)

Normal Operating G.P.M. 239 1987 Equiv. c.f.s. 2.17

Maximum Operating G.P.M. 653 1987 Equiv. c.f.s. 1.45

FOR D.W.R. USE ONLY

Year of Record 1984 Extension of time requested: Yes No

Total No. of Hours on land covered by this application 1700

Ac. Ft. Applied = 1700 hrs. X 653 g.p.m. X 4.419 = 205 AF

Acres of "Approved" Land irrigated 125

Ac. Ft. on "Approved" Land 205 (653 g.p.m. X 1111 A.F./Ac.)

Ac. Ft. Used on "Approved" Land at "Approved" Rate or Less 205

Piration Calculations: 653 X 0.30 = 196 g.p.m. 0.30 X 653 = 196 g.p.m.

Perfected Rate: 653 g.p.m. Perfected Quantity: 111 A.F.

Completed by Douglas T. Bush

WATER RESOURCES RECEIVED

JUN 2 9 2015

DEPT OF AGRICULTURE

HAYS 002759

SCANNED
GENERAL INFORMATION ON IRRIGATION SYSTEM:

- **Center Pivot**
- **Low Pressure**

Manufacturer: **Pivmatic**
Model: **310**
Serial No.: **3068**

Drive: **Electric**
Length of Pivot Arm:

Design Pressure - Pivot: ___________ p.s.i.
Operating Pressure - Pivot: ___________ p.s.i.
End Gun? **YES**
End Gun Rating: ___________ g.p.m. **Rain Bird 853**

Is end gun operating during test? **YES**

- **Gravity Irrigation (show test set on sketch)**

Number of gates open: ___________
Normal Pipe Size: ___________
Pressure at pump: ___________ p.s.i.

- **Other**
Type: ___________

Manufacturer: ___________
Model: ___________
Serial No.: ___________

Unusual Conditions/Others Info.:

POWER UNIT INFORMATION:

Manufacturer: **Ford**
Model No.: **300 G**
HP: ___________
Serial No.: ___________
Fuel: propane
Rated RPM: ___________

PUMP INFORMATION:

Manufacturer: **Fairbanks Morse**
Model No.: **10MA**
Rated RPM: ___________
Serial No.: **N2W24231X**
Type: **Vertical Turbine**
No. stages: 5

GEAR HEAD INFORMATION:

Manufacturer: **Randolph**
Model No.: **F60**
Serial No.: **62056**
Drive: **Right Angle**
Ratio: **6:1**

WELL INFORMATION:

Date Drilled: **8-27-74**
Original Depth: **45** ft.
Static Water Level When Drilled: **14** ft.
Tape Down Possible? **No**
Water Level Measurement Tube? **No**
Measuring Point: ___________ ft. above or below L.S.D.

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JUN 29 2015

ADDITIONAL REQUIREMENTS:

- **Meter Required?** **NO**
- **Make of Meter**: ___________

Meter Model No.: ___________
Serial No.: ___________
Size: ___________
**KS DEPT OF AGRICULTURE**

Is Meter Installed Properly? ___________
Chemical Injection System? **YES**
Check Valve? **YES**
Low Pressure Drain? **NO**
Vacuum Breaker? **YES**
Are these anti-pollution devices installed properly? **YES**

If chemicals are injected into system, please attach sketch of system.
TEST OF DIVERSION RATE:

Length of time well has been operating prior to test: 0
Location of test: In horizontal pipe before pump and pivot
Pipe Diameter (I.D.) 8 3\(\frac{3}{8}\) inches

<table>
<thead>
<tr>
<th>Test No. 1—Normal Conditions</th>
<th>Test No. 2—Maximum Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>R.P.M. POWER UNIT 2134</td>
<td>R.P.M. POWER UNIT 2102</td>
</tr>
<tr>
<td>R.P.M. PUMP UNIT 1780</td>
<td>R.P.M. PUMP UNIT 1752</td>
</tr>
<tr>
<td>Pressure at Pump 68 psi</td>
<td>Pressure at Pump 26 psi</td>
</tr>
</tbody>
</table>

☐ Jaruzzi Meter Test

Meter Identification No.__________

Area Constant \(K = 2.45 \times \text{I.D.}^4\) = ________

\[ Q \text{ (gpm)} = VK \]

<table>
<thead>
<tr>
<th>Velocity (fps)</th>
<th>Velocity (fps)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
</tr>
</tbody>
</table>

Total ________ Avg. ________
G.P.M. ________

☐ Propeller Meter Test

Manufacturer__________Model__________Serial No.__________

<table>
<thead>
<tr>
<th>Diameter, inches</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ending gal.</td>
</tr>
<tr>
<td>Beginning gal.</td>
</tr>
<tr>
<td>Difference gal.</td>
</tr>
<tr>
<td>Time min.</td>
</tr>
<tr>
<td>Rate gpm</td>
</tr>
</tbody>
</table>

☐ Other Flow Meter

Use Supplemental Sheet (include meter identification, data and calculations):

WATER RESOURCES RECEIVED

JUN 29 2015

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HAYS002761
**FUEL RECORDS:**

- Electricity: 
  - Supplier: 
  - Meter Manufacturer: 
  - Type: 
  - Serial No.: 
  - Rate: $\frac{K \text{ watt/rev}}{r \text{ revolutions}} \times \frac{1 \text{ second}}{l}$
  - Hours: 
  - Rate: 
  - Fuel: 
    - Type: Propane
    - Supplier: Mid-Continent
  - Rate: $\frac{\text{Volume (test)}}{\text{time}}$

**TABULATION OF WATER USE:**

<table>
<thead>
<tr>
<th>Year</th>
<th>Hours Pumped (hr)</th>
<th>Tested Pumping Rate (gpm)</th>
<th>Water Used (AF)</th>
<th>Acres Irrigated</th>
</tr>
</thead>
<tbody>
<tr>
<td>1975</td>
<td>1668</td>
<td>1000</td>
<td></td>
<td>130</td>
</tr>
<tr>
<td>1976</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1977</td>
<td>798</td>
<td>1000</td>
<td></td>
<td>130</td>
</tr>
<tr>
<td>1978</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1979</td>
<td>336</td>
<td>800</td>
<td></td>
<td>122</td>
</tr>
<tr>
<td>1980</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1981</td>
<td>840</td>
<td>800</td>
<td></td>
<td>122</td>
</tr>
<tr>
<td>1982</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1983</td>
<td>unused due to PIK program**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*1984</td>
<td>1700**</td>
<td>6.53**</td>
<td></td>
<td>125**</td>
</tr>
<tr>
<td>1985</td>
<td>1600**</td>
<td>7.00**</td>
<td></td>
<td>125**</td>
</tr>
<tr>
<td>1986</td>
<td></td>
<td>6.53**</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note: obtained from test on 9/20/86

**Note: obtained from WR, sent to us from Jerry Weaver

Indicate Year of Record with (*)

Source of Information: Staffed Files

Crops Irrigated: this year **Corn**
Year of record

**REMARKS:**

______________________________________________________________

**WATER RESOURCES RECEIVED**

JUN 29 2015

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Person present at test: Clint Jones

Water Use Correspondent: Agri. Asssociate Inc., Box 1163, North Platte, NE 69103

Conducted by: 

Approved by: 

HAYS002762

Page 21 of 43

SCANNED
NOTES ON CHANGING A YEAR OF RECORD

This development was used by several owners since its inception in 1975, with owners from Europe and around the U.S. At various times, a state of confusion has existed in the crop production report. All or the water use and equipment records have been either destroyed or lost, and the systems and pumping plant components have been interchanged over the years.

Since late 1983, Connecticut General has made a diligent effort to keep good records. There will, it would seem reasonable to use the years since 1983 in choosing a year of record.
APPLICATION NO: 22332  NAME: Connecticut General Life Insurance

COLLINS METER TEST  BOTH WELLS COMBINED

Collins Meter No.  1-83  Meter Calibration Factor  1.6559
Pipe Inside Diameter (inches)  8 3/8  Flow Rate Factor  170.5
Test Pressure (psi)  68  Test RPM, Pump  1847 (NHE, SEH, SEH)
Description of Test Location  Vertical pipe between pump and pivot

TEST DATA:  Q  Check, Initial  6.54  Reversed  6.55

<table>
<thead>
<tr>
<th>Meter Setting from Center of Pipe</th>
<th>Velocity From Left Side of Pipe (or Front Side if Vertical Test)</th>
<th>Velocity From Right Side of Pipe (or Back Side if Vertical Test)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 3/16</td>
<td>6.56  6.57</td>
<td>6.31  6.19</td>
</tr>
<tr>
<td>2 15/16</td>
<td>6.36  6.32</td>
<td>5.79  5.84</td>
</tr>
<tr>
<td>3 13/16</td>
<td>5.81  5.83</td>
<td>5.18  5.14</td>
</tr>
</tbody>
</table>

Average Velocity of Water = Sum of Vel. ÷ 12 = 5.99
Corrected Ave. Vel. = (Ave. Vel.) x (Calibration Factor) = 5.99 x 1.6559 = 5.23
Flow Rate = (Corrected Ave. Vel.) x (Flow Rate Factor) = 5.73 x 170.5 = 977 GPM

PUMPING PLANT TESTING, INC.

Reviewed By:  
Professional Engineer

WATER RESOURCES RECEIVED  HAYS002765
JUN 29 2015  MICROFILMED
SCANNED
**APPLICATION NO:** 22332  **NAME:** Connecticut General Life Insurance

**COLLINS METER TEST**  **WELL NO SE ¼**

Collins Meter No. **1-83**  **Meter Calibration Factor** 0.9559
Pipe Inside Diameter (inches) **8 3/8**  **Flow Rate Factor** 170.5
Test Pressure (psi) **26**  **Test RPM, Pump** 1752

Description of Test Location: **In horizontal pipe between pump and pivot**

**TEST DATA:**  **Q**  **Check, Initial**  **4.45**  **Reversed**  **4.45**  **Velocity**

<table>
<thead>
<tr>
<th>Meter Setting From Center of Pipe</th>
<th>Left Side of Pipe (or Front Side if Vertical Test)</th>
<th>Right Side of Pipe (or Back Side if Vertical Test)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 1/4</td>
<td>4.56  4.58</td>
<td>4.12  4.11</td>
</tr>
<tr>
<td>2 1/4</td>
<td>4.39  4.44</td>
<td>3.67  3.69</td>
</tr>
<tr>
<td>3 1/4</td>
<td>3.97  3.82</td>
<td>3.48  3.21</td>
</tr>
</tbody>
</table>

Average Velocity of Water = Sum of Vel. ÷ 12 = **4.003**

Corrected Ave. Vel. = (Ave. Vel.) x (Calibration Factor) =

\[
\frac{4.003}{1.9559} = 3.83
\]

Flow Rate = (Corrected Ave. Vel.) x (Flow Rate Factor) =

\[
3.83 \times 170.5 = 653 \text{ GPM}
\]

Reviewed By: [Signature]

Professional Engineer

PUMPING PLANT TESTING, INC.

WATER RESOURCES RECEIVED  HAYS002766

JUN 29 2015  MICROFILMED

KS DEPT OF AGRICULTURE
The actual section corners of the land applied for and the land irrigated have never been clearly marked. (If it was marked at some time, we, nor the present owners and managers could find any marks or records.) It appears the land described on the applications was based on visible marks, but we don't know for sure. It might have been surveyed and be more accurate than our method of identifying section corners. Our procedure of finding the section corners consisted of several steps. First, we used copies of the original survey plats to find the dimension of each section. Second, we laid out each section on the large small-scale photos in the ASCS office. For this, we used not only survey plat dimensions, but also by drawing lines across several miles from identifiable boundaries. However, sometimes these points made a section so "out-of-square" that we shifted the boundaries until they were reasonably tolerable. Because some of these marks were based on our judgement, we can not be sure they would be the same if the land was surveyed. These points were then transferred to the large-scale photos included.

The point of diversion location on the photo is correct. The photos were taken at a time when the diversion points were visible. The problem is in our ability to correctly describe the diversion points in relation to section corners.

PUMPING PLANT TESTING, INC.
Test 2 of 2 Diversion points
Application No. 22332 Date 9-30-86 Inspector
Firm/Field Office Pumping Plant Testing, Inc.
Field Area No. 2 G.M.D. No. 5 County, Edwards
Current Landowner: Connecticut General Life Insurance Co. Affiliates
Address Box 1162 North Platte, NE 69103 Atlas Dairy Weaver
Water Use Classification: 1. Domestic ( ) 2. Industrial ( ) 3. Irrigation (X)
Groundwater (X) Drainage Basin Arkansas River
Surface Water ( ) Stream
Authorized Point of Diversion: 1 Water NW4, SE4, SE6 Sec. 2, T. 26, R. 20
Approximately __ ft. North and __ ft. West of SE corner of Sec. __
Actual Point of Diversion: NW4, SE4 Sec. 2, T. 26, R. 20
Approximately __ ft. North and __ ft. West of SE corner of Sec. __
How were distances determined? [ ] Measured [ ] Reckoned from HECSC photo
"Approved" Quantity 231 AF "Approved" Diversion Rate 1000 g.p.m. (2.13 c.f.s.)
Priority Date May 2, 1974 Approval of Application Date March 19, 1976
Perfection Date Dec. 31, 1981
Other applications covering land and/or point of diversion None
(including discussion of overlapping files in remarks section)

LAND TO BE INCLUDED ON CERTIFICATE:

<table>
<thead>
<tr>
<th>S</th>
<th>T</th>
<th>R</th>
<th>NEW</th>
<th>NW4</th>
<th>SW4</th>
<th>SE4</th>
<th>SEW</th>
<th>NW5</th>
<th>SW5</th>
<th>SE5</th>
<th>SEW</th>
<th>TOTAL ACRES</th>
</tr>
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<tbody>
<tr>
<td>2</td>
<td>26</td>
<td>20</td>
<td>30</td>
<td>32</td>
<td>32</td>
<td>31</td>
<td>125</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

LAND IRRIGATED—YEAR OF RECORD 1984 SEE ATTACHED SHEET

<table>
<thead>
<tr>
<th>S</th>
<th>T</th>
<th>R</th>
<th>NEW</th>
<th>NW4</th>
<th>SW4</th>
<th>SE4</th>
<th>SEW</th>
<th>NW5</th>
<th>SW5</th>
<th>SE5</th>
<th>SEW</th>
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<td>26</td>
<td>20</td>
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<td>31</td>
<td>125</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

APPLICATION OF WATER SEE ATTACHED SHEET

Year of Record 1984 Hours Applied 2300 or Quantity 3058 AF (977 G.A.M.)

<table>
<thead>
<tr>
<th>OPERATING</th>
<th>Normal Operating G.P.M. 977</th>
<th>Individual Maximum Operating G.P.M. 4980 1987</th>
</tr>
</thead>
</table>

FOR D.W.R. USE ONLY

Year of Record 1984 Extension of time requested Yes No

Total No. of Hours on land covered by this application 2300

Ac. Ft. Applied = 2300 hrs. x 459 g.p.m. x 4.419 144 AF

Acres of "Approved" Land irrigated 125

Ac. Ft. on "Approved" Land 144 1.15 Ac. Ft./Ac.

Ac. Ft. Used on "Approved" Land at "Approved" Rate or Less 144

Piration Calculations 0.41 X 1025 acres = 115.19 Q = 0.49

Perfected Rate 460 g.p.m. Perfected Quantity 22 AF

Completed by [Signature] 4-10-92

WATER RESOURCES RECEIVED JUN 29 2015

KS DEPT OF AGRICULTURE
GENERAL INFORMATION ON IRRIGATION SYSTEM:

☒ Center Pivot  □ High Pressure  ☒ Low Pressure

Manufacturer: Pimmatic  Model: 310  Serial No: 3068

Drive: Electric  Length of Pivot Arm

Design Pressure-Pivot: ___ p.s.i.  Operating Pressure-Pivot: ___ p.s.i.

End Gun: YES  End Gun Rating: ___ g.p.m.  2 Rainbird 853

Is end gun operating during test? YES

□ Gravity Irrigation (show test set on sketch)

Number of gates open: ___  Normal Pipe Size: ___

Pressure at pump: ___ p.s.i.

□ Other  Type: ___

Manufacturer: ___  Model: ___  Serial No: ___

Unusual Conditions/Other Info.

POWER UNIT INFORMATION:

Manufacturer: Ford  Model No: 3COG  HP: ___

Serial No: 34842-F-13-HK  Fuel: Propane  Rated RPM: ___

PUMP INFORMATION:

Manufacturer: Fairbanks Morse  Model No: 10 MA  Rated RPM: ___

Serial No: N2W24847X  Type: Vertical Turbine  No. stages: 5

GEAR HEAD INFORMATION:

Manufacturer: U.S. Motors  Model No: Type GP

Serial No: Q-9773-00-406  Drive: Right Angle  Ratio: 1:1

WELL INFORMATION:

Date Drilled: 11-18-74  Original Depth: 50 ft.  Static Water Level When Drilled: 21 ft.

Tape Down Possible? YES  Water Level Measurement Tube? NO

Measuring Point: ___ ft. above or below L.S.D.

WATER RESOURCES RECEIVED

JUN 29 2015

KS DEPT OF AGRICULTURE

ADDITIONAL REQUIREMENTS:

Meter Required: NO  Make of Meter: ___

Meter Model No: ___  Serial No: ___  Size: ___

Is Meter Installed Properly? ___

Chemical Injection System? YES  Check Valve? NO  Low Pressure Drain? NO

Vacuum Breaker? NO  Are these anti-pollution devices installed properly? ___

If chemicals are injected into system, please attach detail of system.
TEST OF DIVERSION RATE:

Length of time well has been operating prior to test ______
Location of test ______
Pipe Diameter (I.D.) ______ inches

Test No. 1—Normal Conditions
R.P.M. POWER UNIT ______
R.P.M. PUMP UNIT ______
Pressure at Pump ______ psi

Test No. 2—Maximum Condition
R.P.M. POWER UNIT ______
R.P.M. PUMP UNIT ______
Pressure at Pump ______ psi

☐ Jacuzzi Meter Test

Area Constant K = 2.45 × I.D.² = ______ Q (gpm) = VK

Velocity (fps)
1. ______
2. ______
3. ______
4. ______
5. ______
6. ______
7. ______
8. ______
9. ______
10. ______

Total ______
Avg. ______
G.P.M. ______

☐ Propeller Meter Test

Manufacturer ______
Model ______
Serial No. ______

Meter Diameter ______ inches

Ending ______ gal.
Beginning ______ gal.
Difference ______ gal.

Time ______ min.
Rate ______ gpm

☐ Other Flow Meter

Use Supplemental Sheet (include meter identification, data and calculations).

22332
Page 29 of 43
FUEL RECORDS:

☐ Electricity

Meter Manufacturer __________________________ Type __________________________ Serial No. __________________________

\[ \frac{K \times 3.6}{r} \] revolutions \[ \frac{t}{\text{seconds}} \]

Rate = \[ \frac{K \times 3.6}{r} \] kwhr Hours = \[ \frac{K \times 3.6}{r} \] kw-hr

☒ Other Fuels

Type: propane

Supplier: Mid-Continent

Rate = \[ \frac{\text{Volume (test)}}{\text{time}} \]

How was the test volume determined? Not Determined

TABULATION OF WATER USE:

<table>
<thead>
<tr>
<th>Year</th>
<th>Hours Pumped (hr)</th>
<th>Tested Pumping Rate (gpm)</th>
<th>Water Used (AF)</th>
<th>Acres Irrigated</th>
</tr>
</thead>
<tbody>
<tr>
<td>1975</td>
<td>1668</td>
<td>1000</td>
<td></td>
<td>130</td>
</tr>
<tr>
<td>1976</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1977</td>
<td>798</td>
<td>1000</td>
<td></td>
<td>130</td>
</tr>
<tr>
<td>1978</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1979</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1980</td>
<td>2100</td>
<td>225</td>
<td></td>
<td>130</td>
</tr>
<tr>
<td>1981</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1982</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1983</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*1984</td>
<td>1700**</td>
<td>458**</td>
<td>125**</td>
<td></td>
</tr>
<tr>
<td>1985</td>
<td>1600**</td>
<td>475**</td>
<td>125**</td>
<td></td>
</tr>
<tr>
<td>1986</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\* Obtained from test on 7/30/86
\** Obtained from WUR sent to us from Jerry Weaver

Indicate Year of Record with (*)

Source of Information: Stackord Files

Crops Irrigated: this year: corn

Year of record: __________________________

REMARKS:

____________________________________

WATER RESOURCES RECEIVED

JUN 29 2015

KS DEPT OF AGRICULTURE

Person present at test: Clint Jones

Water Use Correspondent: Alee, Associates, Inc., Box 162, North Platte, NE 69103 308-534-9210

Conducted by: L. Reg, Ebet

Approved by: W. H. Wat

Date: 10/22/86

Date: 12/29/86

HAYS002771

SCANNED
APPLICATION NO: 22332 NAME: Connecticut General Life Insurance

COLLINS METER TEST WELL NW SE SE

Collins Meter No. 1-83 Meter Calibration Factor 195.9
Pipe Inside Diameter (inches) 6 5/16 Flow Rate Factor 95.35
Test Pressure (psi) 10 Test RPM, Pump 1800

Description of Test Location In horizontal pipe between pump and pivot

TEST DATA:

<table>
<thead>
<tr>
<th>Check, Initial</th>
<th>Reversed</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.41</td>
<td>5.40</td>
</tr>
</tbody>
</table>

Velocity

<table>
<thead>
<tr>
<th>Meter Setting From Center of Pipe</th>
<th>Left Side of Pipe (or Front Side if Vertical Test)</th>
<th>Right Side of Pipe (or Back Side if Vertical Test)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 1/4</td>
<td>5.120 5.12</td>
<td>5.40 5.40</td>
</tr>
<tr>
<td>2 1/4</td>
<td>4.89 4.85</td>
<td>5.19 5.17</td>
</tr>
<tr>
<td>2 7/8</td>
<td>4.76 4.28</td>
<td>4.90 5.10</td>
</tr>
</tbody>
</table>

Average Velocity of Water = Sum of Vel. ÷ 12 = 5.02

Corrected Ave. Vel. = (Ave. Vel.) x (Calibration Factor) = 5.02 x 195.9 = 4.80

Flow Rate = (Corrected Ave. Vel.) x (Flow Rate Factor) = 4.80 x 95.35 = 458 GPM

WATER RESOURCES RECEIVED

PUMPING PLANT TESTING, INC JUN 29 2015

Reviewed By: RECEIVED

Professional Engineer

KS DEPT OF AGRICULTURE

HAYS002772

SCANNED
TO: Files

DATE: April 10, 1987

FROM: Douglas E. Bush

RE: Appropriation of Water
File No. 22,332

No proposed certificate on file. The certificate is based on a Field Inspection Report conducted under contract by Pumping Plant Testing Inc.

The quantities for the wells were prorated by rate so they would not exceed the maximum quantity for irrigating 125 acres or 188 A.F.

The wells were prorated as such:

Well (NC SE¼) 653 g.p.m. + 458 g.p.m. = 1,111 g.p.m. 653 g.p.m. ÷ 1,111 g.p.m. = 0.59 x (125 acres x 1.5 A.F. per acre) = 77 A.F.

Well (NC E¼ SE¼) 458 g.p.m. + 653 g.p.m. = 1,111 g.p.m. 458 g.p.m. ÷ 1,111 g.p.m. = 0.41 x (125 acres x 1.5 A.F. per acre) = 77 A.F.

The rates shown on the certificate are those of when the wells were tested individually. A limitation was needed on the combined rate since the combined rate exceeded the total rate of the two wells when ran simultaneously.

The Field Inspection Report (F.I.R.) showed the possibility of un-approved land being irrigated. Because of this land being in an area where section corners are hard to locate, making the actual place of use hard to pinpoint, no action is being taken.

The F.I.R. shows one well possibly to be located in an unapproved location. By adjusting the coordinates, because of the sections not being square, the actual location of this well is less than 300 feet from where it was approved. The description for this well was changed to better describe this well. The description was changed from the NW¼ SE¼ SE¼ of said section to near the center of the E¼ SE¼ of said section. The latter description better describes a well with coordinates of 1,342 feet North and 797 feet West of the Southeast corner of said section.
Kansas State Board of Agriculture  
Division of Water Resources  

ADMINISTRATIVE POLICY  
No. 86-8  

Subject: Allowable Rates of Diversion and Maximum Annual Quantities for Irrigation Use - Permits and Approvals  
Reference: K.S.A. 82a-708a and K.A.R. 5-3-1  
Date: November 5, 1986  
History: Effective November 5, 1986  
Approved by: David L. Pope  
Chief Engineer  

During the review of an APPLICATION FOR PERMIT TO APPROPRIATE WATER FOR BENEFICIAL USE for irrigation purposes the following guidelines shall be considered in determining the maximum reasonable rate of diversion to be allowed under any APPROVAL OF APPLICATION AND PERMIT TO PROCEED:  

<table>
<thead>
<tr>
<th>Area, Place of use</th>
<th>Max. Allowable Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>up to 10 acres</td>
<td>450 g.p.m.</td>
</tr>
<tr>
<td>10 - 40 acres</td>
<td>450 g.p.m. (+)</td>
</tr>
<tr>
<td>40 - 120 acres</td>
<td>8 g.p.m./acre (+)</td>
</tr>
<tr>
<td>more than 120 acres</td>
<td>7 g.p.m./acre (+)</td>
</tr>
</tbody>
</table>

EXAMPLES:  

A. 37 acres requested; since this area is less than 40 acres, a rate of up to 900  

B. 83 acres requested;  

\[ 10 \text{ acres} + 40 \text{ acres (10 + 30)} + 43 \text{ acres @ 8 g.p.m./acre} = 450 \text{ g.p.m.} + 450 \text{ g.p.m.} + 344 \text{ g.p.m.} = 1,244 \text{ g.p.m. (allow 1,245 g.p.m.)} \]  

A further limiting factor of this procedure is the availability of water from the proposed source of supply. In those instances whereby the source of supply is incapable of yielding a reasonably, sustainable (computed) rate, then the source becomes a further limiting factor.  

A further limiting factor is well design and equipment, which shall be reasonable to divert the requested rate.
Further, the rate authorized should not impair senior water rights in the area, including domestic rights.

In reviewing an APPLICATION FOR PERMIT TO APPROPRIATE WATER FOR BENEFICIAL USE for irrigation purposes, the following guidelines shall be considered when determining a maximum allowable annual quantity of water request:

In that area of Kansas located between the Kansas/Missouri border and the Range 5 East/Range 6 East line, the maximum allowable quantity shall not exceed an average of 1.00 acre-foot per acre to be irrigated.

In that area of Kansas located between the Range 5 East/Range 6 East Line and the Range 20 West/Range 21 West line, the maximum allowable quantity shall not exceed an average of 1.50 acre-feet per acre irrigated.

In that area of Kansas located between the Range 20 West/Range 21 West line and the Kansas/Colorado border, the maximum allowable quantity shall not exceed an average of 2.00 acre-feet per acre irrigated.

A further limiting factor to maximum allowable quantity is the availability of water from the proposed source of supply. If the source of supply is incapable of yielding a reasonably, sustainable (computed) quantity during the irrigation season in that area of the state, then the source becomes a further limiting factor.

That if an applicant can show that his or her system design is reasonable for the use intended and approval of the proposed rate and/or maximum annual quantity will not impair any senior water right or prejudicially and unreasonably affect the public interest, the Chief Engineer may waive the above guidelines. Documentation shall be placed in the file clearly demonstrating any exceptions to the above policy.
## SECTION 1: PRESENT WATER USE SUMMARY (IF NO PREVIOUS MUNICIPAL WATER USE HAS BEEN UTILIZED, PROCEED TO SECTION 3)

**NOTE:** WORKSHEET FOR WATER PUMPED, PURCHASED, AND SOLD BY YOUR WATER DISTRIBUTION SYSTEM.

<table>
<thead>
<tr>
<th>Column 1</th>
<th>Column 2</th>
<th>Column 3</th>
<th>Column 4</th>
<th>Column 5</th>
<th>Column 6</th>
<th>Column 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw Water Diverted Under Your Rights</td>
<td>Water Purchased From All Sources</td>
<td>Water Sold to Other Public Water Suppliers</td>
<td>Water Sold to Your Industrial, Stock, and Bulk Customers</td>
<td>Water Sold to Your Residential and Commercial Customers</td>
<td>Other Metered Water</td>
<td>Remaining Water Used (See Below Explanation)</td>
</tr>
<tr>
<td>694,559,000</td>
<td>10,806,000</td>
<td>595,254,000</td>
<td>18,327,000</td>
<td>62,172,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

TOTAL WATER = Columns 1 + 2

ACCOUNTED FOR WATER = Columns 3 + 4 + 5 + 6

UNACCOUNTED FOR WATER = TOTAL WATER - ACCOUNTED FOR WATER

---

**Column 1:** The amount of raw water diverted from all of your points of diversion.

**Column 2:** The amount of water purchased wholesale from all other public water supply systems or the Kansas Water Office.

**Column 3:** The amount of water sold wholesale to all other public water supply systems.

**Column 4:** The amount of water sold retail to all industrial, pasture, stockwater, feedlot, and bulk water service connections. Include the amount of water sold to all farmsteads using at least 200,000 gallons of water per year.

**Column 5:** The amount of water sold retail to your residential and commercial customers and to industries and farmsteads using less than 200,000 gallons of water per year.

**Column 6:** The amount of water used that is metered at individual service connections and supplied free, such as for public service, treatment processes, and connections receiving free water.

**Column 7:** The amount of remaining water used. The gallons reported in this column are found by adding the numbers in Columns 1 and 2 and subtracting the numbers in Columns 3, 4, 5, and 6.

### UNACCOUNTED FOR WATER

Use the following to calculate your distribution system's Unaccounted For Water:

Start with the amount in Column 1 and add the amount in Column 2, then subtract the amounts in Columns 3, 4, 5, and 6 leaving an amount of water representing your unaccounted for water to enter in Column 7.

Use the following to calculate the percent Unaccounted For Water versus the Total Water of your system:

\[
\text{Percent Unaccounted For Water} = \frac{\text{Unaccounted For Water}}{\text{Total Water (Columns 1, 2)}} \times 100
\]

If this number exceeds 20%, please explain the large amount of unaccounted for water and describe any steps being taken to reduce it.

### SECTION 2: PAST WATER USE

COMPLETE THE FOLLOWING TABLE FROM YOUR PAST WATER USE RECORDS.

<table>
<thead>
<tr>
<th>Raw Water Diverted Under Your Rights</th>
<th>Water Purchased From All Sources</th>
<th>Water Sold to Other Public Water Suppliers</th>
<th>Water Sold to Your Industrial, Stock, and Bulk Customers</th>
<th>Water Sold to Your Residential and Commercial Customers</th>
<th>Other Metered Water</th>
<th>Remaining Water Used (See Above Explanation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 years ago</td>
<td>592,323,000</td>
<td>5,028,000</td>
<td>469,314,000</td>
<td>5,155,000</td>
<td>112,825,000</td>
<td></td>
</tr>
<tr>
<td>15 years ago</td>
<td>780,527,000</td>
<td>10,619,000</td>
<td>587,965,000</td>
<td>10,470,000</td>
<td>171,473,000</td>
<td></td>
</tr>
<tr>
<td>10 years ago</td>
<td>706,926,000</td>
<td>7,103,000</td>
<td>639,222,000</td>
<td>20,861,000</td>
<td>39,740,000</td>
<td></td>
</tr>
<tr>
<td>5 years ago</td>
<td>693,966,000</td>
<td>13,537,000</td>
<td>581,900,000</td>
<td>19,362,000</td>
<td>114,383,000</td>
<td></td>
</tr>
</tbody>
</table>

TOTAL WATER = Columns 1 + 2

ACCOUNTED FOR WATER = Columns 3 + 4 + 5 + 6

UNACCOUNTED FOR WATER
### SECTION 3: PROJECTED FUTURE WATER NEEDS

Please complete the following table showing your future water requirements for the next 20 years:

<table>
<thead>
<tr>
<th>Year</th>
<th>Raw Water Diverted Under Your Rights</th>
<th>Water Purchased From All Sources</th>
<th>Water Sold to Other Industrial, Stock, and Bulk Customers</th>
<th>Water Sold to Your Residential and Commercial Customers</th>
<th>Other Metered Water</th>
<th>Remaining Water Used (See Explanation on other side)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 5</td>
<td>753,014,900</td>
<td></td>
<td>11,886,800</td>
<td>654,779,400</td>
<td>17,959,700</td>
<td>68,389,200</td>
</tr>
<tr>
<td>Year 10</td>
<td>828,316,390</td>
<td></td>
<td>13,075,260</td>
<td>720,257,340</td>
<td>19,755,670</td>
<td>76,228,120</td>
</tr>
<tr>
<td>Year 15</td>
<td>911,148,029</td>
<td></td>
<td>14,382,786</td>
<td>762,283,074</td>
<td>21,731,237</td>
<td>82,750,932</td>
</tr>
<tr>
<td>Year 20</td>
<td>1,002,262,832</td>
<td></td>
<td>15,821,055</td>
<td>871,511,381</td>
<td>23,904,361</td>
<td>91,026,025</td>
</tr>
<tr>
<td>TOTAL WATER = Columns 1 + 2</td>
<td>ACCOUNTED FOR WATER = Columns 3 + 4 + 5 + 6</td>
<td>UNACCOUNTED FOR WATER</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### SECTION 4: POPULATION AND SERVICE CONNECTIONS

Estimate the number of persons directly served by your water distribution system.

**Past Population - Provide Information Below:**

(Census Bureau Information)

<table>
<thead>
<tr>
<th>Last 20 Years</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 years ago</td>
<td>17,636</td>
</tr>
<tr>
<td>15 years ago</td>
<td>18,750</td>
</tr>
<tr>
<td>10 years ago</td>
<td>20,013</td>
</tr>
<tr>
<td>5 years ago</td>
<td>20,106</td>
</tr>
<tr>
<td>Last Year</td>
<td>21,038</td>
</tr>
</tbody>
</table>

Provide number of current active service connections:

- Residential: 6,824
- Commercial: 1,256
- Industrial: 2
- Pasture/Stockwater/Feedlot: 8,082

### SECTION 5: PRESENT GALLONS PER PERSON PER DAY

Calculate your gallons per person per day.

Water in Columns 5, 6, and 7 + Population + 365 Days/Year = Gallons per Person per Day

\[
\frac{673,753,000}{6} + \frac{21,038}{7} + 365 = \text{GALLONS PER PERSON PER DAY.}
\]

### SECTION 6: AREA TO BE SERVED

Describe the area to be served or provide the legal description of the location where the water is to be used including any other city of water supply system (i.e. Rural Water District):

City of Hays, KS Municipal Water Supply

2013 is year one and 2033 will be year twenty. 2 percent growth is used for estimate. Hays had a reasonable 9.1 percent unaccounted water in 2013.

You may attach additional information you believe will assist in informing the Division of the need for your request.
### MUNICIPAL (PUBLIC WATER SUPPLY) APPLICATION SUPPLEMENTAL INFORMATION SHEET

**SECTION 1: PRESENT WATER USE SUMMARY (IF NO PREVIOUS MUNICIPAL WATER USE HAS BEEN UTILIZED, PROCEED TO SECTION 3)**

**NOTE:** WORSHEET FOR WATER PUMPED, PURCHASED, AND SOLD BY YOUR WATER DISTRIBUTION SYSTEM.

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<th>Column 6</th>
<th>Column 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw Water Diverted</td>
<td>Water Purchased</td>
<td>Water Sold to Other</td>
<td>Water Sold to Your</td>
<td>Water Sold to Your</td>
<td>Other</td>
<td>Remaining Water Used</td>
</tr>
<tr>
<td>Under Your Rights</td>
<td>From All Sources</td>
<td>Public Water Suppliers</td>
<td>Industrial, Stock, and</td>
<td>Residential and</td>
<td>Metered Water</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Bulk Customers</td>
<td>Commercial Customers</td>
<td></td>
<td>(See Below Explanation)</td>
</tr>
<tr>
<td>327,288,100</td>
<td>0</td>
<td>0</td>
<td>105,295,000</td>
<td>108,743,000</td>
<td>19,944,000</td>
<td>93,308,100</td>
</tr>
<tr>
<td><strong>TOTAL WATER</strong></td>
<td><strong>ACCOUNTED FOR WATER</strong></td>
<td><strong>UNACCOUNTED FOR WATER</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**UNACCOUNTED FOR WATER = TOTAL WATER - ACCOUNTED FOR WATER**

**COLUMN 1:** The amount of raw water diverted from all of your points of diversion.

**COLUMN 2:** The amount of water purchased wholesale from all other public water supply systems or the Kansas Water Office.

**COLUMN 3:** The amount of water sold wholesale to all other public water supply systems.

**COLUMN 4:** The amount of water sold retail to all industrial, pasture, stockwater, feedlots, and bulk water service connections. Include the amount of water sold to all farmsteads using at least 200,000 gallons of water per year.

**COLUMN 5:** The amount of water sold retail to your residential and commercial customers and to industries and farmsteads using less than 200,000 gallons of water per year.

**COLUMN 6:** The amount of water used that is metered at individual service connections and supplied free, such as for public service, treatment processes, and connections receiving free water.

**COLUMN 7:** The amount of remaining water used. The gallons reported in this column are found by adding the numbers in Columns 1 and 2 and subtracting the numbers in Columns 3, 4, 5, and 6.

**UNACCOUNTED FOR WATER**

Use the following to calculate your distribution system's Unaccounted For Water:

\[
\text{Percent Unaccounted} = \frac{\text{Unaccounted For Water}}{\text{Total Water (Columns 1,2)}} \times 100
\]

Use the following to calculate the percent Unaccounted For Water versus the Total Water of your system:

\[
\text{For Water} = \frac{\text{Unaccounted For Water}}{\text{Total Water (Columns 1,2)}} \times 100
\]

If this number exceeds 20%, please explain the large amount of unaccounted for water and describe any steps being taken to reduce it.

**SECTION 2: PAST WATER USE**

**COMPLETE THE FOLLOWING TABLE FROM YOUR PAST WATER USE RECORDS.**

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<th>Column 5</th>
<th>Column 6</th>
<th>Column 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw Water Diverted</td>
<td>Water Purchased</td>
<td>Water Sold to Other</td>
<td>Water Sold to Your</td>
<td>Water Sold to Your</td>
<td>Other</td>
<td>Remaining Water Used</td>
</tr>
<tr>
<td>Under Your Rights</td>
<td>From All Sources</td>
<td>Public Water Suppliers</td>
<td>Industrial, Stock, and</td>
<td>Residential and</td>
<td>Metered Water</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Bulk Customers</td>
<td>Commercial Customers</td>
<td></td>
<td>(See Below Explanation)</td>
</tr>
<tr>
<td>20 years ago</td>
<td>373,757,000</td>
<td>0</td>
<td>171,928,220</td>
<td>115,864,870</td>
<td>18,887,850</td>
<td>67,276,260</td>
</tr>
<tr>
<td>15 years ago</td>
<td>477,486,000</td>
<td>0</td>
<td>222,781,000</td>
<td>147,340,000</td>
<td>19,483,000</td>
<td>87,882,000</td>
</tr>
<tr>
<td>10 years ago</td>
<td>375,790,000</td>
<td>0</td>
<td>144,277,000</td>
<td>123,343,000</td>
<td>18,907,000</td>
<td>89,263,000</td>
</tr>
<tr>
<td>5 years ago</td>
<td>375,790,000</td>
<td>0</td>
<td>144,277,000</td>
<td>123,343,000</td>
<td>18,907,000</td>
<td>89,263,000</td>
</tr>
<tr>
<td><strong>TOTAL WATER</strong></td>
<td><strong>ACCOUNTED FOR WATER</strong></td>
<td><strong>UNACCOUNTED FOR WATER</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

DWR 1-99 (Revised 08/15/2002)

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SECTION 3: PROJECTED FUTURE WATER NEEDS

Please complete the following table showing your future water requirements for the next 20 years:

<table>
<thead>
<tr>
<th>Year</th>
<th>Column 1: Raw Water Diverted Under Your Rights</th>
<th>Column 2: Water Purchased From All Sources</th>
<th>Column 3: Water Sold to Other Public Water Suppliers</th>
<th>Column 4: Water Sold to Your Industrial, Stock, and Bulk Customers</th>
<th>Column 5: Other Metered Water</th>
<th>Column 6: Water Sold to Your Residential and Commercial Customers</th>
<th>Column 7: Remaining Water Used (See Explanation on Other Side)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 5</td>
<td>386,346,512</td>
<td>0</td>
<td>0</td>
<td>177,719,396</td>
<td>119,767,419</td>
<td>15,453,861</td>
<td>73,405,836</td>
</tr>
<tr>
<td>Year 10</td>
<td>405,513,682</td>
<td>0</td>
<td>0</td>
<td>186,536,377</td>
<td>125,709,241</td>
<td>16,220,547</td>
<td>77,047,517</td>
</tr>
<tr>
<td>Year 15</td>
<td>426,310,852</td>
<td>0</td>
<td>0</td>
<td>196,102,952</td>
<td>132,156,364</td>
<td>17,052,434</td>
<td>80,999,062</td>
</tr>
<tr>
<td>Year 20</td>
<td>443,848,022</td>
<td>0</td>
<td>0</td>
<td>204,170,080</td>
<td>137,592,887</td>
<td>17,753,921</td>
<td>84,331,124</td>
</tr>
</tbody>
</table>

TOTAL WATER = Columns 1 + 2
ACCOUNTED FOR WATER = Columns 3 + 4 + 5 + 6
UNACCOUNTED FOR WATER

SECTION 4: POPULATION AND SERVICE CONNECTIONS

Estimate the number of persons directly served by your water distribution system:

Past Population - Provide information below:
(Census Bureau information)

<table>
<thead>
<tr>
<th>Last 20 Years</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 years ago</td>
<td>4,710</td>
</tr>
<tr>
<td>15 years ago</td>
<td>4,696</td>
</tr>
<tr>
<td>10 years ago</td>
<td>4,696</td>
</tr>
<tr>
<td>5 years ago</td>
<td>4,506</td>
</tr>
<tr>
<td>Last Year</td>
<td>4,475</td>
</tr>
</tbody>
</table>

Provide number of current active service connections:

2,049          Residential
360            Commercial
9              Industrial
0              Pasture/Stockwater/Feedlot
30              Other (specify) Free Service
2448           Total

SECTION 5: PRESENT GALLONS PER PERSON PER DAY

Calculate your gallons per person per day:

Water in Columns 5, 6, and 7 = Population + 365 Days/Year = Gallons per Person per Day

\[
\frac{221,991,000 + 4,475 + 365 \text{ Days/Year}}{\text{Population from Last Year of Section 4}} = 135.9 \text{ Gallons per Person per Day.}
\]

SECTION 6: AREA TO BE SERVED

Describe the area to be served or provide the legal description of the location where the water is to be used including any other city of water supply system (i.e. Rural Water District): **City of Russell**

Note that the actual quantity of "Unaccounted for Water" is lower than shown here. Large quantities diverted from the Pfeifer Wells are returned to the aquifer in the "Collector Well." See detailed explanation in the cover letter accompanying this application. Projected future water needs include losses in the collector well but when repaired or replaced, total raw water diversion will be reduced.

Please attach additional information you believe will assist in informing the Division of the good of your request.