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
   (Check one or more)
   ☑ Point of Diversion
   ☑ Use Made of Water

   File No. 22,334 Circle 27.

   David. W. Barfield, PE.

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)

For Office Use Only:
F.O. GMD 5 Meets K.A.R. 5-5-1 (YES/NO) Use IRR Source G/S County ED By LAB Date
Code C-3 Fee $ TR # Receipt Date Check #

of 21000 15053309

DWR 1-120 (Revised 06/16/2014) 22334 Page 1 of 44 Assisted by:

01/26/2015 UM
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

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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

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<td>Same as above</td>
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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

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

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.

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

List all presently authorized point(s) of diversion:

8. **Presently authorized point of diversion:**
   One in the __________ near the center __________ Quarter of the __________ N/2 Quarter of the __________ NE Quarter of Section __________ Township __________ 26 South, Range __________ 20 (E/W), in __________ Edwards __________ County, Kansas, __________ feet North __________ feet West of Southeast corner of section.
   Authorized Rate __________ gpm  Authorized Quantity __________ 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 __________ NW Quarter of the __________ SW Quarter of the __________ NE Quarter of Section __________ Township __________ 26 South, Range __________ 20 (E/W), in __________ Edwards __________ County, Kansas, __________ feet North __________ feet West of Southeast corner of section.
   Proposed Rate __________ gpm  Proposed Quantity __________ a/f
   This point is:  □ Additional Well  □ Geo Center  List other water rights that will use this point __________

9. **Presently authorized point of diversion:**
   One in the __________ near the center __________ Quarter of the __________ __________ Quarter of the __________ NE Quarter of Section __________ Township __________ 26 South, Range __________ 20 (E/W), in __________ Edwards __________ County, Kansas, __________ feet North __________ feet West of Southeast corner of section.
   Authorized Rate __________ gpm  Authorized Quantity __________ 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 __________ NW Quarter of the __________ SW Quarter of the __________ NE Quarter of Section __________ Township __________ 26 South, Range __________ 20 (E/W), in __________ Edwards __________ County, Kansas, __________ feet North __________ feet West of Southeast corner of section.
   Proposed Rate __________ gpm  Proposed Quantity __________ a/f
   This point is:  □ Additional Well  □ Geo Center  List other water rights that will use this point __________

10. **Presently authorized point of diversion:**
    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.
    Authorized Rate __________ gpm  Authorized Quantity __________ 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 __________ 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 __________ gpm  Proposed Quantity __________ a/f
   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.

**IF MORE SPACE IS NEEDED, ATTACH ADDITIONAL SHEETS AS NECESSARY.**
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 should 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 should 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.
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 ________, Kansas, this ________ day of ________, 2015.

________________________
(Owner)
________________________
(Spouse)

City of Hays, Kansas, by Toby Dougherty, City Manager
(Please Print)

________________________
(Owner)
________________________
(Spouse)

________________________
(Please Print)
________________________
(Please Print)

________________________
(Owner)
________________________
(Spouse)

________________________
(Please Print)
________________________
(Please Print)

State of Kansas
County of ________, SS

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

________________________
Notary Public
My Commission Expires ________

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 use made of the water $300

Make check payable to Kansas Department of Agriculture.
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

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

(Owner)

(Spouse)

(Please Print)

(Please Print)

(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

My Commission Expires 6/15/18

Notary Public

NOTARY PUBLIC - State of Kansas
MALINDA MORSE
My Appt. 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.

WATER RESOURCES RECEIVED

JUN 29 2015

KS DEPT. OF AGRICULTURE
Proposed Rate and Quantity

The Cities are requesting a total of 162.88 acre-feet and 890 gpm from the well associated with this water right, all of which will be diverted from new point of diversion K, as shown on Exhibit K. When combined with existing wells from other water rights, new point of diversion K will have a cumulative total of 533.2 acre-feet and 3,380 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 up to 136.08 acre-feet for municipal use.\(^1\) As discussed below, 126 approved acres irrigated during the perfection period multiplied by the Edwards County NIR for corn of 1.08 acre-feet per acre equals 136.08 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 237 acre-feet annually at a rate of up to 1,000 gallons per minute for irrigation use\(^4\) on 132 acres in Section 11-T26S-R20W.\(^5\) The permit allowed the perfection of 1.80 acre-feet per acre. The certificate further limited the rate of the wells to 890 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 226.23 of the 237 acre-feet authorized by the permit were lawfully perfected.

- 277 acre-feet\(^8\) were applied to 126 approved acres in the NE/4 of Section 11-T26S-R20W.

- The permit authorized the perfection of 237 acre-feet on 132 acres, or 1.80 acre-feet per acre, but only 126 authorized acres were irrigated during the perfection period, resulting in the perfection of 226.23 acre-feet.\(^9\)

\(^1\) 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, HAYS003041, Ex. A.
\(^5\) Application, HAYS003031, Ex. B.
\(^6\) Certificate, HAYS003048, Ex. C.
\(^7\) March 19, 1976, letter (emphasis added), HAYS003040, Ex. D.
\(^8\) FIR, HAYS002937, Ex. E.
While the certificate limits the total quantity to 190 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.\textsuperscript{10}

Since the perfection period has expired, the "authorized quantity" for this water right is the 226.23 acre-feet actually perfected even though it exceeds the certified quantity.

\textit{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.\textsuperscript{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 226.23 acre-feet legally applied during the perfection period percolates back to the aquifer, then 72\%, or 162.88 acre-feet, should be available for conversion to municipal use. This is less than the 226.23 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 162.88 acre-feet for municipal use.

\textsuperscript{9} FIRs HAYS003017, Ex. F, and HAYS003021, Ex. G.
\textsuperscript{11} Administrative Policy No. 86-8, dated Nov. 5, 1986, Ex. 1, 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 Larry Sheets March 19, 1987, Memo, HAYS003044, Ex. H.
THE STATE OF KANSAS

STATE BOARD OF AGRICULTURE
Brox 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. 22,334 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 North Half of the Northeast Quarter (NE¼) and one well near the center of the Northeast Quarter (NE¼) of Section 11, 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 237 acre-feet for any calendar year.

WATER RESOURCES RECEIVED
JUN 29 2015

DEPT OF AGRICULTURE

RECEIVED
MAR 29, 1976

FIELD OFFICE
STAFFORD

HAYSO003041

SCANNED
22. That installation of works for diversion of water shall be completed
by 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.
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, Kinley, 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 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 acre feet per year, to be diverted at a maximum rate of gallons per minute.

2. The location of the proposed wells or other works for diversion of water is in the quarter of the quarter of the township, range, in Edwards County, Kansas:

3. The water is intended to be appropriated for:

   (a) Domestic use
   (b) Municipal use
   (c) Irrigation use
   (d) Industrial use
   (e) Recreational use

   Amount

   (x) acre ft./yr. - 1000 gals./min.

   RECEIVED

   JUN 29 2015

   KS DEPT OF AGRICULTURE

   HAYSO03031
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:

| Owner of Land—NAME: Midwest Land & Cattle Co. |
| ADDRESS: P.O. Box 208 Kinsley, Kansas 67547 |

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| ADDRESS: |

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<td></td>
</tr>
</tbody>
</table>

WATER RESOURCES RECEIVED

JUN 29 2015
KS DEPT OF AGRICULTURE

HAYS003032 SCANNED
7. The works for diversion of water will consist of \( \text{two wells with two pumps for one circlesprinkler} \) irrigation system \( \text{(two motors)} \)

and will be completed by \( \text{July of 1974} \)

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

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 in the process of being bought from a company known as the Kinsley 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.

By Johnny Carson

Note:

1 cubic foot per second = 448.8 gallons per minute = 646,317 gallons per day = 1.98 acre feet per day.
1 million gallons per day = 1,547 cubic feet per second = 3.07 acre feet per day.
1 acre foot = 43,560 cubic feet = 325,851 gallons.
THE STATE OF KANSAS

STATE BOARD OF AGRICULTURE
Sam Brownback, Secretary

DIVISION OF WATER RESOURCES
David L. Pope, Chief Engineer

CERTIFICATE OF APPROPRIATION
FOR BENEFICIAL USE OF WATER

WATER RIGHT, File No. 22,334
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 North Half of the Northeast Quarter (NE¼ NE¼) of Section 11, more particularly described as being near a point 4,680 feet North and 1,320 feet West of the Southeast corner of said section, at a diversion rate not in excess of 630 gallons per minute (1.40 c.f.s.) and in a quantity not to exceed 95 acre-feet per calendar year; and one (1) well located near the center of the Northeast Quarter (NE¼) of Section 11, more particularly described as being near a point 3,960 feet North and 1,335 feet West of the Southeast corner of said section, at a diversion rate not in excess of 639 gallons per minute (1.40 c.f.s.) and in a quantity not to exceed 95 acre-feet per calendar year; both in Township 26 South, Range 20 West, Edwards County, Kansas, for irrigation use on the following described property:

33 acres in the Northeast Quarter of the Northeast Quarter (NE¼ NE¼),
33 acres in the Northwest Quarter of the Northeast Quarter (NW¼ NE¼),
33 acres in the Southwest Quarter of the Northeast Quarter (SW¼ NE¼),
33 acres in the Southeast Quarter of the Northeast Quarter (SE¼ NE¼),
a total of 132 acres in Section 11, 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 890 gallons per minute (1.98 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 21st day of May, 1987.

[Signature]
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 21st day of May, 1987 by David L. Pope, P.E., Chief Engineer, Division of Water Resources, Kansas State Board of Agriculture.

[Signature]
Denise J. Waters, Notary Public

My appointment expires March 1, 1990

WATER RESOURCES RECEIVED
JUN 29 2015
KS DEPT OF AGRICULTURE
SCANNED
March 19, 1976

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

ATTENTION: Mr. Johnny Carson, Manager

Re: Appropriation of Water
Application No. 22,334

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

Encs.

RMD:GEE:ee1
Test of _1_ Diversion points

Application No. _2233_ Date _10-3-86_
Firm/Field Office: Pumping Plant Testing, Inc.
Inspector: Festo Kessen

Field Area No. _2_ G.M.D. No. _5_ County: Edwards

Address: Box 1163, North Platte, NE 69103


Groundwater (X) Drainage Basin: Arkansas River

Surface Water ( ) Stream

Authorized Point of Diversion: 1 well in the SE 1/4 SW 1/4 Sec. 2 T. 26 N. R. 20
Approximately __________ ft. North and __________ ft. West of SE corner of Sec. 2

Actual Point of Diversion: 1 well in the SE 1/4 SW 1/4 Sec. 2 T. 26 N. R. 20
Approximately __________ ft. North and __________ ft. West of SE corner of Sec. 2

How were distances determined? By Scaling on Large Scale Aerial Photo

"Approved" Quantity: 63 AF "Approved" Diversion Rate: 840 g.p.m. (187 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>NW%</th>
<th>SW%</th>
<th>SE%</th>
<th>TOTAL ACRES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td>NE</td>
<td>NW</td>
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<td>26</td>
<td>20</td>
<td>21</td>
<td>8</td>
<td>74</td>
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<tr>
<td>11</td>
<td>26</td>
<td>20</td>
<td>1</td>
<td>32</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

LAND IRRIGATED—YEAR OF RECORD: 1984

<table>
<thead>
<tr>
<th>S</th>
<th>T</th>
<th>R</th>
<th>NW%</th>
<th>SW%</th>
<th>SE%</th>
<th>TOTAL ACRES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>NE</td>
<td>NW</td>
<td>SW</td>
<td>SE</td>
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<tr>
<td>26</td>
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<td>11</td>
<td>26</td>
<td>20</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

APPLICATION OF WATER:

Year of Record: 1984 Hours Pumped: 1750 or Quantity: 16746 ft.

Normal Operating G.P.M.: 519 Equiv. c.f.s.: 116


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: 1400

Ac. Ft. Applied = 1400 hrs. x 519 g.p.m. x 4.419 = 133 AF 4.09 ac-ft per ac.

Acres of "Approved" Land irrigated: 33

Ac. Ft. on "Approved" Land: 133 (_________ Ac. Ft./Ac.)

Ac. Ft. Used on "Approved" Land at "Approved" Rate or Less: 63 in excess of 1.5 ac-ft per acre for 35 acre

Perfection Calculations: Limited by approval in 60 ac-ft.

Perfected Rate: 520 g.p.m. Perfected Quantity: 63 AF

HAY 002937

JUN 29 2015

SCANNED

DEPT OF AGRICULTURE

HAY 002937

REVISED MARCH 1985

MICROFILMED
GENERAL INFORMATION ON IRRIGATION SYSTEM:

□ Center Pivot  □ High Pressure  ☑ Low Pressure
Manufacturer: Olson  Model: 103 P  Serial No: 4019

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.
Is end gun operating during test? Yes

□ Gravity Irrigation (show test set on sketch)
Number of gates open: Normal Pipe Size:
Pressure at pump:

□ Other
Type:
Manufacturer:  Model:  Serial No:
Unusual Conditions/Other Info:

POWER UNIT INFORMATION:

Manufacturer: Ford  Model No: 300  HP:
Serial No: 11836  K-29-TG  Fuel: Propane  Rated RPM:

PUMP INFORMATION:

Manufacturer: Fairbanks Morse  Model No: 10 MA  Rated RPM:
Serial No: N8X 2804994X  Type: Vertical Turbine  No. stages:

GEAR HEAD INFORMATION:

Manufacturer: U.S.  Model No: 6003146 T
Serial No: 955600-D-571  Drive: Right Angle  Ratio: 6.5

WELL INFORMATION:

Date Drilled: 2-14-75  Original Depth: 40 ft.  Static Water Level When Drilled: 9 ft.
Tape Down Possible? Yes  Water Level Measurement Tube? No
Measuring Point: ft. above or below L.S.D.

ADDITIONAL REQUIREMENTS:

Meter Required? No  Make of Meter:
Meter Model No:  Serial No:  Size:
Is Meter Installed Properly? 
Chemical Injection System? Yes  Check Valve? Yes  Low Pressure Drain? No
Vacuum Breaker? No  Are these anti-pollution devices installed properly? Yes
If chemicals are injected into system, please attach sheet of system.
**SKETCH OF ACTUAL PLACE OF USE, LOCATION OF DIVERSION WORKS, AND DISTRIBUTION SYSTEM.**

(Indicate distribution system layout at time of field test).

![Sketch of actual place of use](image)

**TEST OF DIVERSION RATE:**

- Length of time well has been operating prior to test: ____________
- Location of test: ________
- Pipe Diameter (I.D.): _______ 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: 2118</td>
<td>R.P.M. POWER UNIT: __________</td>
</tr>
<tr>
<td>R.P.M. PUMP UNIT: 1765</td>
<td>R.P.M. PUMP UNIT: __________</td>
</tr>
<tr>
<td>Pressure at Pump: 42 psi</td>
<td>Pressure at Pump: __________ psi</td>
</tr>
</tbody>
</table>

- **Jacuzzi Meter Test**
  - Meter Identification No.: _______
  - Area Constant $K = 2.45 \times \text{I.D.} = _______
  - 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).

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MAY 18 1987

FIELD OFFICE
DIVISION OF WATER RESOURCES
STAFFORD

WATER RESOURCES RECEIVED

JUN 29 2015

KS DEPT. OF AGRICULTURE

HAYS002939 SCANNED
FUEL RECORDS:

Electricity

Supplier

Meter Manufacturer

Type

Serial No.

K = watt/rev

r = revolutions

t = seconds

Rate = \( \frac{K \times 3.6}{t} \) = kw/hr

Hours = \( \frac{K \times 3.6}{r} \) = kw-hr

Other Fuels

Type: Propane

Supplier: Mid-Continent

Rate = Volume (test) = time

How was the test volume determined? Not determined. Representative didn't know rate either

TABULATION OF WATER USE:

<table>
<thead>
<tr>
<th>Year</th>
<th>Hours Pumped (hr)</th>
<th>Tested Pumping (gpm)</th>
<th>Water Used (AF)</th>
<th>Acres Irrigated</th>
</tr>
</thead>
<tbody>
<tr>
<td>1975</td>
<td>552</td>
<td>700</td>
<td></td>
<td>40</td>
</tr>
<tr>
<td>1976</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>1977</td>
<td>55</td>
<td>700</td>
<td></td>
<td>36</td>
</tr>
<tr>
<td>1978</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1979</td>
<td>336</td>
<td>450</td>
<td>33</td>
<td></td>
</tr>
<tr>
<td>1980</td>
<td>720</td>
<td>450</td>
<td>33</td>
<td></td>
</tr>
<tr>
<td>1981</td>
<td>1080</td>
<td>450</td>
<td>33</td>
<td></td>
</tr>
<tr>
<td>1982</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1983</td>
<td>1400*</td>
<td>800</td>
<td>33</td>
<td></td>
</tr>
<tr>
<td>1984</td>
<td>1750*</td>
<td>519*</td>
<td>167*</td>
<td>36*</td>
</tr>
<tr>
<td>1985</td>
<td>1700*</td>
<td>600*</td>
<td></td>
<td>36*</td>
</tr>
<tr>
<td>1986</td>
<td>519*</td>
<td></td>
<td>33 (from Kent Naber)</td>
<td></td>
</tr>
</tbody>
</table>

* From data collected during test
+ Obtained from water resources report sent to use from Jerry Weaver

Indicate Year of Record with (*)

Source of Information: Projected Files

Crops irrigated: this year Alfalfa

Year of record: Alfalfa

REMARKS: This development has had several owners since its inception in 1975. All of the records have been either destroyed or lost, and the systems & pumping plants have been changed over the years. Connecticut Canal, since 1983, has made a good effort to keep good records & therefore, it would seem reasonable to use the terms since 1983 in computing a year of record.
APPLICATION NO: 22333  NAME: Connecticut General Life Insurance

COLLINS METER TEST

Collins Meter No. 1-84  Meter Calibration Factor 9635
Pipe Inside Diameter (inches) 7 7/8  Flow Rate Factor 14.28
Test Pressure (psi) 42  Test RPM, Pump 1765
Description of Test Location: In vertical pipe, inside pivot stand

TEST DATA:  Q Check, Initial 3.82  Reversed 3.81

<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%</td>
<td>4.27 4.35 3.38 3.35</td>
<td></td>
</tr>
<tr>
<td>234</td>
<td>4.38 4.35 3.10 3.28</td>
<td></td>
</tr>
<tr>
<td>396</td>
<td>3.96 3.90 2.32 2.83</td>
<td></td>
</tr>
</tbody>
</table>

Average Velocity of Water = Sum of Vel. ÷ 12 = 3.65

Corrected Ave. Vel, = (Ave. Vel, x (Calibration Factor) = 3.65 x 9635 = 3511

Flow Rate = (Corrected Ave. Vel.) x (Flow Rate Factor) = 3511 x 14.28 = 519 GPM
DIVISION OF WATER RESOURCES—KANSAS STATE BOARD OF AGRICULTURE

FIELD INSPECTION REPORT

Test 1 of 2 Diversion points

Application No. 22374 Date 10/3/86 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 Agri. Affiliates

Address Box 1162 North Platt NE 49103 Ano. Jerry Weaver


Groundwater (X) Drainage Basin Arkansas River

Surface Water ( ) Stream

Authorized Point of Diversion: l well NC NE 4 Sec 11 T. 26 R. 20
Approximately ______ ft. North and ______ ft. West of SE corner of Sec.

Actual Point of Diversion: 1 well NC NE 4 Sec 11 T. 26 R. 20
Approximately ______ ft. North and ______ ft. West of SE corner of Sec.

How were distances determined? By scaling off aerial photo (small scale 1:48,000)

"Approved" Quantity 237 AF "Approved" Diversion Rate 1000 g.p.m. (2.23 c.f.s.)

Priority Date May 2, 1974 Approval of Application Date March 17, 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>S</th>
<th>T</th>
<th>R</th>
<th>NE %</th>
<th>NW %</th>
<th>SW %</th>
<th>SE %</th>
<th>TOTAL ACRES</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>26</td>
<td>20</td>
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<td>33</td>
<td>33</td>
<td>33</td>
<td>132</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>NE %</th>
<th>NW %</th>
<th>SW %</th>
<th>SE %</th>
<th>TOTAL ACRES</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>26</td>
<td>20</td>
<td>33</td>
<td>32</td>
<td>30</td>
<td>31</td>
<td>126</td>
</tr>
</tbody>
</table>

APPLICATION OF WATER: SEE ATTACHED SHEET

Year of Record 1984 Hours Pumped 1700 or Quantity 200

Beck Wells Pumped Together (combined)
Normal Operating G.P.M. 887 Equiv. c.f.s. 1.98

Individual Flowrate
Maximum Operating G.P.M. 639 Equiv. c.f.s. 1.42

Received FOR D.W.R. USE ONLY

Year of Record 1984 Extension of time requested: Yes (X) No

Total No. of Hours land covered by this application 1700

Ac. Ft. Applied = 1700 hrs. X 887 g.p.m. X 4.192 = 277 AF
4 x 1000

Acres of "Approved" Land irrigated 126 ( 12.20 ac/acre)

Ac. Ft. on "Approved" Land ( ) ( ) Ac./Ac.

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

Proration Calculations 126 X 1.5 = 189 .2 = 95

Perfected Rate 330 g.p.m. Perfected Quantity 95 AF

WR-10-236

Completed by Larry M. Miskowiec J-17-97

Revised March 1986

Water Resources

Received

JUN 29 2015

KS DEPT. OF AGRICULTURE

MICROFILMED

SCANNED
GENERAL INFORMATION ON IRRIGATION SYSTEM:

- Center Pivot [X] High Pressure [ ] Low Pressure
  Manufacturer: Zimmatic
  Model: 310
  Serial No: 3165

- Drive: Electric
- Length of Pivot Arm
- Design Pressure-Pivot: p.s.i.
- Operating Pressure-Pivot: p.s.i.
- End Gun? [X] End Gun Rating: g.p.m.
- Is end gun operating during test? [X]

- 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: 300
  Horsepower: 1

- Serial No
  Fuel: Propane
  Rated RPM

PUMP INFORMATION:

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

- Serial No: N8X2804996X
  Type: Vertical Turbine
  No. of stages: 5

GEAR HEAD INFORMATION:

- Manufacturer: Amaxillo
  Model No: 540 B

- Serial No: 89109
  Drive: Right Angle
  Ratio: 1:1

WELL INFORMATION:

- Date Drilled: Feb 1975
- Original Depth: 72 ft
- Static Water Level When Drilled: ft.
- Tape Down Possible? [X]
- Water Level Measurement Tube? [X]

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

ADDITIONAL REQUIREMENTS:

- Meter Required? [X]
  Make of Meter
  Model No:
  Serial No:
  Size:
- Is Meter Installed Properly?
- Chemical Injection System? [X]
  Check Valve? [X]
  Low Pressure Drain? [X]
- Vacuum Breaker? [X]
  Are these anti-pollution devices installed properly? [X]

If chemicals are injected into system, please attach schedule of system.
**SKETCH OF ACTUAL PLACE OF USE, LOCATION OF DIVERSION WORKS, AND DISTRIBUTION SYSTEM.**
(Indicate distribution system layout at time of field test).

![Diagram](image)

**TEST OF DIVERSION RATE:**

Length of time well has been operating prior to test: 0
Location of test: Vertical pipe adjacent stand + horizontal pipe leading to 2nd well
Pipe Diameter (I.D.): 7" x 6.4" inches

<table>
<thead>
<tr>
<th>Test No. 1 — Normal Conditions</th>
<th>Test No. 2 — Maximum Conditions — Both wells together</th>
</tr>
</thead>
<tbody>
<tr>
<td>R.P.M. POWER UNIT 1745</td>
<td>R.P.M. POWER UNIT 1745</td>
</tr>
<tr>
<td>R.P.M. PUMP UNIT 1745</td>
<td>R.P.M. PUMP UNIT 1745</td>
</tr>
<tr>
<td>Pressure at Pump 14 psi</td>
<td>Pressure at Pump 71 psi</td>
</tr>
</tbody>
</table>

☐ Jacuzzi Meter Test

Area Constant $K = 2.45 \times \text{I.D.}^4 = \text{Area Constant}$

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

Total |

Avg. |

G.P.M. |

**RECEIVED**

JUN 01 1987

☐ Propeller Meter Test

Manufacturer: [Manufacturer]
Model: [Model]
Serial No.: [Serial No.]

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

☐ Other Flow Meter

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

- Electricity
  - Supplier:_________________________
  - Meter Manufacturer:________________ Type:________________ Serial No:________________
  - K__________ watt/rev  r________ revolutions  t________ seconds
  - Rate = $\frac{K \times 3.6}{t} = \text{kwh/hr}$  Hours = $\text{kwh} \times \text{hr} = \text{rate}$

- Other Fuels
  - Type:________________ Supplier:________________
  - 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 (AP)</th>
<th>Acres Irrigated</th>
</tr>
</thead>
<tbody>
<tr>
<td>1974</td>
<td>1230</td>
<td>1000</td>
<td></td>
<td>136</td>
</tr>
<tr>
<td>1976</td>
<td>638</td>
<td>1000</td>
<td></td>
<td>130</td>
</tr>
<tr>
<td>1978</td>
<td></td>
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<tr>
<td>1979</td>
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<tr>
<td>1980</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>1981</td>
<td>940</td>
<td>900</td>
<td></td>
<td>125</td>
</tr>
<tr>
<td>1982</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1983</td>
<td>Unused due to PK program</td>
<td>126 (from Irrigation Manager)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1984</td>
<td>1700*</td>
<td>639*</td>
<td>126</td>
<td></td>
</tr>
<tr>
<td>1985</td>
<td>1600*</td>
<td>400*</td>
<td>126</td>
<td></td>
</tr>
<tr>
<td>1986</td>
<td></td>
<td>639*</td>
<td>126</td>
<td></td>
</tr>
</tbody>
</table>

* obtained from test on 10/3/86
From test on WIR sent to us from Jerry Weaver

Indicate Year of Record with (*)
Source of Information: Stafford Files

Crops Irrigated: this year Soybeans
Year of record

REMARKS: When checking the flow rate of this well, we had to take two tests because the check valve at the other well wasn't sealing and permitted some of the water to flow back into the other well. We were not able to test in a location before the pipe from the other well joined because of the numerous obstructions. Also, the only location we could test the flow rate back to the other well in wasn't very good, as is shown in the variations of our test readings.

Person present at test: Kent Naber
Irrigation Manager

Water Use Correspondent: Lyle Kolbeck
Sparta, KS 67876 316-385-2803

Conducted by: K. E. Date: 10/29/86
HAYS003020

Approved by: R. C. Date: 12/24/86

WATER RESOURCES RECEIVED
JUN 29 2015
KS DEPT OF AGRICULTURE
SCANNED
EXHIBIT G
DIVISION OF WATER RESOURCES—KANSAS STATE BOARD OF AGRICULTURE
FIELD INSPECTION REPORT

Test 2 of 2 Diversion points
Application No. 22334 Date 10/3/96 Firm/Field Office Piping Plant Testing, Inc.
Inspector Edith/Her/Shea

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

Current Landowner Connecticut General Life Insurance Co Agris, Affiliates
Address Box 162 North Platte NE 69103 Attn: Terry Weaver

Additional landowners and addresses identified in remarks section.


Groundwater ( ), Drainage Basin: Arkansas River

Surface Water ( ), Stream

Authorized Point of Diversion:
Well NE NW NE
Sec 11 T 26 R 20
Approximately ft. North and ft. West of SE corner of Sec.

Actual Point of Diversion:
Well NE NW NE
Sec 11 T 26 R 20
Approximately 4880 ft. North and 1320 ft. West of SE corner of Sec.

Other applications covering land and/or point of diversion: None

How were distances determined? By scaling of actual photo (small scale, AEC photo)

"Approved" Quantity 237 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

LAND TO BE INCLUDED ON CERTIFICATE:

<table>
<thead>
<tr>
<th>S</th>
<th>T</th>
<th>R</th>
<th>NW</th>
<th>SW</th>
<th>SE</th>
<th>NW</th>
<th>SW</th>
<th>SE</th>
<th>NW</th>
<th>SW</th>
<th>SE</th>
<th>NW</th>
<th>SW</th>
<th>SE</th>
<th>TOTAL ACRES</th>
</tr>
</thead>
<tbody>
<tr>
<td>11 26 30</td>
<td>33 33 35 35</td>
<td>132</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<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>NW</th>
<th>SW</th>
<th>SE</th>
<th>NW</th>
<th>SW</th>
<th>SE</th>
<th>NW</th>
<th>SW</th>
<th>SE</th>
<th>NW</th>
<th>SW</th>
<th>SE</th>
<th>TOTAL ACRES</th>
</tr>
</thead>
<tbody>
<tr>
<td>11 26 30</td>
<td>33 33 30 31</td>
<td>126</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

APPLICATION OF WATER:

Year of Record 1984 Hours Pumped 1700 or Quantity 277

Maximum Operating G.P.M. 630 EQUIV. C.F.S. 1.40

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 887 g.p.m. x 4.419 = 277 AF

Acres of "Approved" Land irrigated 126 (2.20 c.f.s. per acre)

Ac. Ft. on "Approved" Land ( ) ( ) Ac. Ft./Ac.

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

Purification Calculations: 126 x 15 = 189 4 2 = 95

Perfected Rate 630 g.p.m. Perfected Quantity 95 AF

DWR-102230 Completed by Larry M. Shope 3-14-87

Revised March 1986
GENERAL INFORMATION ON IRRIGATION SYSTEM:

☑ Center Pivot  ☐ High Pressure  ☑ Low Pressure

Manufacturer: Zimmatic  Model: 310  Serial No: 3165

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.

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: 300  HP: ________

Serial No: ________  Fuel: propane  Rated RPM: ________

PUMP INFORMATION:

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

Serial No: N2X2804946X  Type: Vertical Turbine  No. stages: 5

GEAR HEAD INFORMATION:

Manufacturer: Randolph  Model No: F60

Serial No: 61961  Drive: Right Angle  Ratio: 6:1

WELL INFORMATION:

Date Drilled: Feb. 1975  Original Depth: 72 ft.
Static Water Level When Drilled: ________ ft.

Tape Down Possible? Yes  Water Level Measurement Tube? No

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

ADDITIONAL REQUIREMENTS:

Meter Required? No  Make of Meter: ________

Meter Model No: ________  Serial No: ________  Size: ________

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.
**SKETCH OF ACTUAL PLACE OF USE, LOCATION OF DIVERSION WORKS, AND DISTRIBUTION SYSTEM.**

(Indicate distribution system layout at time of field test.)

![Diagram of sketch]

**TEST OF DIVERSION RATE:**

Length of time well has been operating prior to test: 0
Location of test: In horizontal pipe between riser and pipe adjoining other well
Pipe Diameter (I.D.): \( \frac{6}{8} \) 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: 211</td>
<td>R.P.M. POWER UNIT: 211</td>
</tr>
<tr>
<td>R.P.M. PUMP UNIT: 1/6</td>
<td>R.P.M. PUMP UNIT: 1/6</td>
</tr>
<tr>
<td>Pressure at Pump: 1</td>
<td>Pressure at Pump: 1</td>
</tr>
<tr>
<td>7</td>
<td>13</td>
</tr>
<tr>
<td>psi</td>
<td>psi</td>
</tr>
</tbody>
</table>

☐ Jacuzzi Meter Test

<table>
<thead>
<tr>
<th>Meter Identification No.</th>
<th>Area Constant ( K = 2.45 \times \text{I.D.}^2 ) =</th>
<th>Velocity (fps)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.</td>
</tr>
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<td></td>
<td>3.</td>
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<td></td>
<td>4.</td>
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<td></td>
<td></td>
<td>5.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9.</td>
</tr>
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<td></td>
<td></td>
<td>10.</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>Total</td>
</tr>
<tr>
<td>Avg.</td>
<td></td>
<td>Avg.</td>
</tr>
<tr>
<td>G.P.M.</td>
<td></td>
<td>G.P.M.</td>
</tr>
</tbody>
</table>

☐ Propeller Meter Test

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Model</th>
<th>Serial No.</th>
<th>WATER RESOURCES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>RECEIVED</td>
</tr>
<tr>
<td>Meter Diameter</td>
<td>inches</td>
<td></td>
<td>JUN 29 2015</td>
</tr>
<tr>
<td>Ending</td>
<td>gal.</td>
<td>Ending</td>
<td>gal.</td>
</tr>
<tr>
<td>Beginning</td>
<td>gal.</td>
<td>Beginning</td>
<td>gal.</td>
</tr>
<tr>
<td>Difference</td>
<td>gal.</td>
<td>Difference</td>
<td>gal.</td>
</tr>
<tr>
<td>Time</td>
<td>min.</td>
<td>Time</td>
<td>min.</td>
</tr>
<tr>
<td>Rate</td>
<td>gpm</td>
<td>Rate</td>
<td>gpm</td>
</tr>
</tbody>
</table>

☐ Other Flow Meter

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

- Electricity
- Supplier
- Meter Manufacturer
- Type
- Serial No.
- K
- watt/rev
- r
- revolutions
- t
- seconds
- Rate = \( \frac{Kr \times 3.6}{t} \)
- kwh/hr
- Hours
- kw-hr
- rate
- Other Fuels
- Type: propane
- Supplier: Mid-Continent
- Rate = Volume (test) / time
- How was the test volume determined? Not determined; representative didn't know

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</th>
<th>Irrigated</th>
</tr>
</thead>
<tbody>
<tr>
<td>1978</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1974</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>136</td>
</tr>
<tr>
<td>1975</td>
<td>12.30</td>
<td>1000</td>
<td></td>
<td></td>
<td>130</td>
</tr>
<tr>
<td>1976</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1977</td>
<td>638</td>
<td>1000</td>
<td></td>
<td></td>
<td>130</td>
</tr>
<tr>
<td>1978</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1979</td>
<td></td>
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<tr>
<td>1980</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>1981</td>
<td>840</td>
<td>900</td>
<td></td>
<td></td>
<td>125</td>
</tr>
<tr>
<td>1982</td>
<td></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>
<td></td>
</tr>
<tr>
<td>1984</td>
<td>1700†</td>
<td>630†</td>
<td>126 (from Irrigation Manager)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1985</td>
<td>1600†</td>
<td>600†</td>
<td>130†</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1986</td>
<td></td>
<td>126 (from Irrigation Manager)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* obtained from test on 10/9/84
† obtained from WUR sent to us from Jerry Weaver

Indicate Year of Record with (*)

Source of Information: Stafford Files

Crops Irrigated: this year Soybeans

Year of record

REMARKS: When this test was done on the individual well the check valve to prevent the water from flowing back into the other wells was not working. Therefore it was pumping against very little head as opposed to if it had been pumping through the pivot. Therefore, high flowrate could be expected.

WATER RESOURCES RECEIVED

JUN 29 2015

Person present at test: Kent Naber

Irrigation Manager

KS DEPT OF AGRICULTURE

Water Use Correspondent: Lyle Kolbeck

Spearville, KS 67876

316-385-2803

Conducted by: Larry Weck

Date: 10/9/84

Approved by: W. J. Yarbrough

Date: 12/24/84

HAYS003024

SCANNED
KANSAS STATE BOARD OF AGRICULTURE  
Division of Water Resources  

MEMORANDUM  

To: Files  
From: Larry M. Sheets  
Date: March 19, 1987  
Re: Appropriation of Water  
File No. 22,334  

The Field Inspection Report for the above referenced file, conducted under contract by Pumping Plant Testing, has been reviewed. It meets the requirements specified in the Scope of Work.  

Two wells are utilized to provide water to a pivot system which irrigates 126 acres. Because of the way the wells were connected to the pivot system a pumping rate for one well was difficult to determine. It appears the wells pump at about the same rate (630 g.p.m.). Reported use for 1984 and 1985, based on a pumping rate of 887 g.p.m. for both wells pumping into the pivot, exceeded a reasonable quantity for 126 acres irrigated.  

The certificate of appropriation has been drafted for two wells with a rate of 630 g.p.m. for each well and limited to 890 g.p.m. when the wells pump simultaneously. The reasonable quantity of 189 acre-feet (126 x 1.5 was divided between the wells and the fractional quantity rounded up to 95 acre-feet.  

Larry M. Sheets  
Hydrologist  

LMS:jt
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 acres
- (+) 40 acres (10 + 30)
- (+) 43 acres @ 8 g.p.m./acre

\[
\begin{align*}
\text{Max. Allowable Rate} & = 450 \text{ g.p.m.} \\
\text{10 acres} & = 450 \text{ g.p.m.} \\
\text{40 acres (+ 30)} & = 450 \text{ g.p.m.} \\
\text{43 acres @ 8 g.p.m./acre} & = 344 \text{ g.p.m.} \\
\text{Total} & = 1,244 \text{ (allow 1,245 g.p.m.)}
\end{align*}
\]

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.
Proposed Place of Use City of Hays

PLSS Sections
### 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>684,559,000</td>
<td>10,806,000</td>
<td>595,254,000</td>
<td>16,327,000</td>
<td>8,172,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL WATER</strong> = Columns 1 + 2</td>
<td><strong>ACCOUNTED FOR WATER</strong> = Columns 3 + 4 + 5 + 6</td>
<td><strong>UNACCOUNTED FOR WATER</strong> = TOTAL WATER - ACCOUNTED FOR WATER</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### 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:

- **Unaccounted For Water** = **Total Water (Columns 1, 2)** - **Accounted For Water (Columns 3, 4, 5, and 6)**

Use the following to calculate the percent unaccounted for water versus the total water of your system:

- **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>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 Residential and Commercial Customers</td>
<td>Water Sold to Your Industrial, Stock, and Bulk Customers</td>
<td>Other Metered Water</td>
<td>Remaining Water Used (See Above Explanation)</td>
</tr>
<tr>
<td>20 years ago</td>
<td>592,323,000</td>
<td>5,029,000</td>
<td>469,314,000</td>
<td>5,155,000</td>
<td>112,823,000</td>
<td></td>
</tr>
<tr>
<td>15 years ago</td>
<td>780,527,000</td>
<td>10,819,000</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>708,928,000</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>683,966,000</td>
<td>13,837,000</td>
<td>581,900,000</td>
<td>19,362,000</td>
<td>114,383,000</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL WATER</strong> = Columns 1 + 2</td>
<td><strong>ACCOUNTED FOR WATER</strong> = Columns 3 + 4 + 5 + 6</td>
<td><strong>UNACCOUNTED FOR WATER</strong> = TOTAL WATER - ACCOUNTED FOR WATER</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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>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 Explanation on other side)</td>
</tr>
<tr>
<td>Year 5</td>
<td>753,014,800</td>
<td>11,866,800</td>
<td>854,779,400</td>
<td>17,859,700</td>
<td>66,389,200</td>
<td></td>
</tr>
<tr>
<td>Year 10</td>
<td>828,316,390</td>
<td>13,075,260</td>
<td>720,257,340</td>
<td>19,755,670</td>
<td>76,228,120</td>
<td></td>
</tr>
<tr>
<td>Year 15</td>
<td>911,148,029</td>
<td>14,382,786</td>
<td>792,283,074</td>
<td>21,731,237</td>
<td>82,750,932</td>
<td></td>
</tr>
<tr>
<td>Year 20</td>
<td>1,002,262,832</td>
<td>15,821,065</td>
<td>871,511,381</td>
<td>23,804,361</td>
<td>91,026,025</td>
<td></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>17,836</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>

PROJECTED FUTURE POPULATION
ESTIMATE FUTURE POPULATION AND SUBSTANTIATE NUMBERS ON SEPARATE ATTACHMENTS

<table>
<thead>
<tr>
<th>NEXT 20 YEARS</th>
<th>POPULATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 5</td>
<td>23,142</td>
</tr>
<tr>
<td>Year 10</td>
<td>25,456</td>
</tr>
<tr>
<td>Year 15</td>
<td>28,002</td>
</tr>
<tr>
<td>Year 20</td>
<td>30,602</td>
</tr>
</tbody>
</table>

Provide number of current active service connections:

- Residential: 6,624
- Commercial: 1,256
- Industrial: 2

Total: 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

\[
\frac{473,753,000}{21,038} + 365 \text{ Days/Year} = 88 \text{ GALLONS PER PERSON PER DAY.}
\]

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 or 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: 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>327,286,100</td>
<td>0</td>
<td>0</td>
<td>105,295,000</td>
<td>106,743,000</td>
<td>19,944,000</td>
<td>93,308,100</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>

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:

Percent Unaccounted = (Unaccounted For Water / Total Water) x 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>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 Above Explanation)</td>
</tr>
<tr>
<td>20 years ago</td>
<td>373,757,000</td>
<td>0</td>
<td>0</td>
<td>171,928,220</td>
<td>115,864,670</td>
<td>18,857,850</td>
</tr>
<tr>
<td>15 years ago</td>
<td>477,486,000</td>
<td>0</td>
<td>0</td>
<td>222,781,000</td>
<td>147,340,000</td>
<td>19,483,000</td>
</tr>
<tr>
<td>10 years ago</td>
<td>375,790,000</td>
<td>0</td>
<td>0</td>
<td>144,277,000</td>
<td>123,343,000</td>
<td>18,807,000</td>
</tr>
<tr>
<td>5 years ago</td>
<td>375,790,000</td>
<td>0</td>
<td>0</td>
<td>144,277,000</td>
<td>123,343,000</td>
<td>18,807,000</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 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 Water Sold to Your Residential and Commercial Customers</th>
<th>Column 6 Other Metered Water</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>4,506</td>
</tr>
<tr>
<td>5 years ago</td>
<td>4,475</td>
</tr>
<tr>
<td>Last Year</td>
<td>4,475</td>
</tr>
</tbody>
</table>

PROJECTED FUTURE POPULATION

Estimate future population and substantiate numbers on separate attachments.

<table>
<thead>
<tr>
<th>NEXT 20 YEARS</th>
<th>POPULATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 5</td>
<td>4,566</td>
</tr>
<tr>
<td>Year 10</td>
<td>4,605</td>
</tr>
<tr>
<td>Year 15</td>
<td>4,651</td>
</tr>
<tr>
<td>Year 20</td>
<td>4,698</td>
</tr>
</tbody>
</table>

Provide number of current active service connections:

<table>
<thead>
<tr>
<th>Residential</th>
<th>2,049</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial</td>
<td>360</td>
</tr>
<tr>
<td>Industrial</td>
<td>9</td>
</tr>
<tr>
<td>Pasture/Stockwater/Feedlot</td>
<td>0</td>
</tr>
<tr>
<td>Other (specify) Free Service</td>
<td>30</td>
</tr>
<tr>
<td>Total</td>
<td>2448</td>
</tr>
</tbody>
</table>

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

\[
\frac{221,991,000}{4,475} \div 365 \text{ Days/Year} = 135.9 \quad \text{GALLONS PER PERSON PER DAY.}
\]

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 Pelefer 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.

You may attach additional information you believe will assist in informing the Division of your request.