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

File No. 22,326

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>NE1/4</th>
<th>NW1/4</th>
<th>SW1/4</th>
<th>SE1/4</th>
<th>TOTAL ACRES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-T26S-R20W</td>
<td>Lot 2</td>
<td>17</td>
<td>Lot 3</td>
<td>72</td>
<td>Lot 4 40</td>
</tr>
</tbody>
</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>NE1/4</th>
<th>NW1/4</th>
<th>SW1/4</th>
<th>SE1/4</th>
<th>TOTAL ACRES</th>
</tr>
</thead>
</table>

Same as above

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**

WATER RESOURCES RECEIVED

JUN 29 2015

KS DEPT OF AGRICULTURE
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:

8. Presently authorized point of diversion:
   One in the Lot 3 Quarter of the _____ Quarter of the _____ SW Quarter of Section 1 Township 26 South, Range 20 (E/W), in Edwards County, Kansas, 5,373 feet North 3,779 feet West of Southeast corner of section.
   Authorized Rate 690 gpm  Authorized Quantity 103 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 SE Quarter of the NE Quarter of the NW Quarter of Section 1 Township 26 South, Range 20 (E/W), in Edwards County, Kansas, 5,034 feet North 2,790 feet West of Southeast corner of section.
   Proposed Rate 1,000 gpm  Proposed Quantity 196.71 a/f
   This point is:  □ Additional Well  □ Geo Center  List other water rights that will use this point 22,325 & 22,327

9. Presently authorized point of diversion:
   One in the Lot 3 Quarter of the _____ Quarter of the _____ Quarter of Section 1 Township 26 South, Range 20 (E/W), in Edwards County, Kansas, 5,128 feet North 3,066 feet West of Southeast corner of section.
   Authorized Rate 565 gpm  Authorized Quantity 85 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 SE Quarter of the NE Quarter of the NW Quarter of Section 1 Township 26 South, Range 20 (E/W), in Edwards County, Kansas, 5,034 feet North 2,790 feet West of Southeast corner of section.
   Proposed Rate 1,000 gpm  Proposed Quantity 196.71 a/f
   This point is:  □ Additional Well  □ Geo Center  List other water rights that will use this point 22,325 & 22,327

10. Presently authorized point of diversion:
    One in the ______ Quarter of the _____ Quarter of the _____ Quarter of Section ______ Quarter of Township __________ South, Range __________ (E/W), in ______ County, Kansas, __________ feet North __________ feet West of Southeast corner of section.
    Authorized Rate ______ Quarter of 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 ______ Quarter of Township __________ South, Range __________ (E/W), in ______ County, Kansas, __________ feet North __________ feet West of Southeast corner of section.
   Proposed Rate ______ Quarter of 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.

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.

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 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 or 15 of this application.

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

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

(Owner)
(Please Print)
(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 23rd day of June 2015.


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 place of use ......................................................................................... $200
(4) 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 landlord 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 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 23rd day of June 2015.

Malinda Morse
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.

22326
Page 6 of 62

WATER RESOURCES RECEIVED
JUN 29 2015
KS DEPT OF AGRICULTURE
Proposed Rate and Quantity

The Cities are requesting a total of 196.71 acre-feet and 1,000 gpm from the wells associated with this water right, all of which will be diverted from new point of diversion I, as shown on Exhibit K. When combined with existing wells from other water rights, new point of diversion I will have a cumulative total of 587.78 acre-feet and 2,950 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 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 203 acre-feet annually at a rate not to exceed 1,000 gallons per minute for irrigation use\(^4\) on 129 acres in Section 1-T26S-R20W.\(^5\) The certificate limited the rate to 1,000 gallons per minute when the two wells were operated simultaneously.

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.”\(^6\)

DWR’s Field Inspection Report indicates that 196.71 of the 203 acre-feet authorized by the permit were lawfully perfected.

- 248 acre-feet\(^7\) and 203 acre-feet (451 acre-feet) were applied to 125 approved acres in the N/2 of Section 1-T26S-R20W.

- The permit authorized the perfection of 203 acre-feet on 129 acres, or 1.57 acre-feet per acre. But only 125 authorized acres were irrigated during the perfection period, resulting in perfection of 196.71 acre-feet.

---

\(^1\) 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, HAYS002322, Ex. A.
\(^5\) Application, HAYS002313, Ex. B.
\(^6\) Mach 19, 1976, letter (emphasis added), HAYS002321, Ex. C.
\(^7\) FIR, HAYS002296, Ex. D, and 2306, Ex. E. It appears that the quantities from the two wells were combined.
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.\(^8\)

Since the perfection period has expired, the "authorized quantity" for this water right is the 196.71 acre-feet actually perfected even though it exceeds the certified quantity.

There are at least two alternative approaches to calculating consumptive use.

\textit{NIR for Alfalfa}

The record indicates that alfalfa was grown on the authorized place of use in at least one year during the perfection period.\(^9\) According to the Kansas Irrigation Guide, the NIR for the 50\% chance rainfall in Edwards County is 13 inches (1.083333 feet) for corn and 20.9 (1.741666 feet) inches for alfalfa.

Since alfalfa was grown on the authorized place of use in at least one year during the perfection period, it is reasonable to use the NIR for alfalfa, which yields a total quantity of 217.71 acre-feet consumed. This quantity is greater than the "maximum annual quantity authorized by the water right"\(^10\) and is therefore in excess of the quantity that can be approved. The quantity should therefore be limited to 196.71 acre-feet.

\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.\(^11\) 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 196.71 acre-feet legally applied during the perfection period percolates back to the aquifer, then 72\%, or 141.63 acre-feet, should be available for conversion to municipal use. This is less than the 196.71 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 196.71 acre-feet for municipal use.

---


\(^9\) FIRs, HAYS002299, Ex. D, and HAYS002309, Ex. E, FSA documents, HAYS004907, Ex. H.


\(^11\) Administrative Policy No. 86-8, dated Nov. 5, 1986, Ex. I, 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 March 27, 1987, Memo, HAYS002325, Ex. G.
APPROVAL OF APPLICATION
and
PERMIT TO PROCEED
(This Is Not a Certificate of Appropriation)

This is to certify that I have examined Application No. 22,326 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 ground water in the drainage basin of the Arkansas River to be withdrawn by means of two (2) wells: one well approximately 1350 feet South and 400 feet East of the Northwest corner of Lot 3 (NE ¼ NW ¼) and one well approximately 1600 feet South and 980 feet East of the Northwest corner of Lot 3 (NE ¼ NW ¼) of Section 1, 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 203 acre-feet for any calendar year.
8. 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.

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

10. 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.

11. 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.

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

13. 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.

14. 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.

15. 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

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

(Mr.) 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

(surface water or 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 350 acre feet per year, to be diverted at a maximum rate of 1000 gallons per minute

(acre foot or million gallons)

2. The location of the proposed wells or other works for diversion of water is in the quarter of the

center quarter of the NW quarter of section 1, township 26S, range 26W, in Edwards County, Kansas. (Section 4 is more than 1 mile square)

(Exact location of well can not be made until after test well is drilled)

3. The water is intended to be appropriated for:

(a) Domestic use

(b) Municipal use

(c) Irrigation use

(d) Industrial use

(e) Recreational use

(f) Other use

WATER RESOURCES RECEIVED

MAY 02 1974
STATE BOARD OF AGRICULTURE

MAY 09 1975
STATE BOARD OF AGRICULTURE

OCT 15 1975
DIVISION OF WATER RESOURCES

FEB 16 1976
DIVISION OF WATER RESOURCES

JUN 29 2015
KS DEPT OF AGRICULTURE

HAYS002313
MICROFILMED
SCANNED
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 |

<table>
<thead>
<tr>
<th>Sec.</th>
<th>Twp.</th>
<th>Range</th>
<th>NE1</th>
<th>NW1</th>
<th>SW1</th>
<th>SE1</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>NE1</td>
<td>NW1</td>
<td>SW1</td>
<td>SE1</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>26</td>
<td>20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>L72</td>
<td>94</td>
<td>10</td>
<td>10</td>
<td>148</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>129</td>
</tr>
</tbody>
</table>

| Owner of Land—NAME: |
| ADDRESS: |

<table>
<thead>
<tr>
<th>Sec.</th>
<th>Twp.</th>
<th>Range</th>
<th>NE1</th>
<th>NW1</th>
<th>SW1</th>
<th>SE1</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>NE1</td>
<td>NW1</td>
<td>SW1</td>
<td>SE1</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Owner of Land—NAME: |
| ADDRESS: |

<table>
<thead>
<tr>
<th>Sec.</th>
<th>Twp.</th>
<th>Range</th>
<th>NE1</th>
<th>NW1</th>
<th>SW1</th>
<th>SE1</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>NE1</td>
<td>NW1</td>
<td>SW1</td>
<td>SE1</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

WATER RESOURCES RECEIVED

JUN 29 2015

KS DEPT OF AGRICULTURE

HAYS002314
7. The works for diversion of water will consist of two wells with two pumps for one circle sprinkler irrigation system (two motors) and will be completed by July of 1974.

8. The first actual application of water for the beneficial use proposed was or is estimated to be 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 is 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

Note:
1 cubic foot per second = 448.8 gallons per minute = 846,317 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.

WATER RESOURCES RECEIVED
JUN 29 2015

RECEIVED
MAR 29 1976 HAYS002315

22326 Page 13 of 62
TOTAL ACRES 798.75
DISTANCES IN CHAINS

SECTION 1, TWP 26 SOUTH, RGE 20 WEST

INFORMATION FROM THE
KANSAS LAND SURVEYS
PREPARED BY: H.T.W. 1/25/74

WATER RESOURCES
RECEIVED
JUN 29 2015
KS DEPT OF AGRICULTURE

RECEIVED MICROFILMED
MAR 29 1976
KS DEPT OF AGRICULTURE

HAYS002317
$SCANNED
March 19, 1976

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

ATTENTION: Mr. Johnny Carson, Manager

Re: Appropriation of Water
Application No. 22,326

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.
Field Inspection Report

Test 1 of 2 Diversion points

Application No. 22326 Date 10/1/86 Firm/Field Office Pumping Plant Testing, Inc.

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

Current Landowner Connecticut General Life Insurance

Address Box 1142, North Platte, NE 69103 Attn: Jerry Weaver

Groundwater Drainage Basin Arkansas River

Surface Water Stream

Authorized Point of Diversion: 13505.2 + W 1/2 +50 ft. South of 443913.7, Sec. 1, T. 26, R. 20
Approximately ft. North and ft. West of SE corner of Sec.

Actual Point of Diversion: 4553.9 + W 1/2 + 50 ft. South of 443913.7, Sec. 1, T. 26, R. 20
Approximately ft. North and ft. West of SE corner of Sec.

How were distances determined? Scaled from ACIS photo

"Approved" Quantity 203 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>S</th>
<th>T</th>
<th>R</th>
<th>NW 1/4</th>
<th>NE 1/4</th>
<th>SW 1/4</th>
<th>SE 1/4</th>
<th>TOTAL ACRES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>26</td>
<td>20</td>
<td>17</td>
<td>72.40</td>
<td>129.7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

LAND IRRIGATED—YEAR OF RECORD 1985

<table>
<thead>
<tr>
<th>S</th>
<th>T</th>
<th>R</th>
<th>NW 1/4</th>
<th>NE 1/4</th>
<th>SW 1/4</th>
<th>SE 1/4</th>
<th>TOTAL ACRES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>26</td>
<td>20</td>
<td>12</td>
<td>70.63</td>
<td>125.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

APPLICATION OF WATER:

Revised January 8, 1985

Year of Record 1985 Hours Pumped 1950 or Quantity 367 AF

Normal Operating G.P.M. 1024

Maximum Operating G.P.M. 1690

FOR D.W.R. USE ONLY

Year of Record 1985 Extension of time requested: Yes No

Total No. of Hours on land covered by this application 1950

Ac. Ft. Applied 1950 hrs. x 689 g.p.m. x 4.419 24.8 AF

Acres of "Approved" Land irrigated 125

Ac. Ft. on "Approved" Land 24.8 (1.94 Ac. Ft./Ac.)

Ac. Ft. Used on "Approved" Land at "Appro" Rate or Less 194

Proration Calculations

Max allowed Rate 1948 g.p.m. Perfect Quantity 103 AF

Perfected Rate 690 g.p.m. Perfect Quantity AF

DWR 101 Revised March 1986

WATER RESOURCES RECEIVED

JUN 29 2015

KS DEPT. OF AGRICULTURE

SCANNED
GENERAL INFORMATION ON IRRIGATION SYSTEM:

- Center Pivot □ High Pressure □ Low Pressure
- Manufacturer: Zimmatic
- Model: 310
- Serial No.: 2974

- 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 Rain Bird 85%

- 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.: 083939 E-2371
- Fuel: Natural Gas
- Rated RPM

PUMP INFORMATION:

- Manufacturer: Fairbanks Morse
- Model No.: 10 m a
- Rated RPM
- Serial No.: 2824473x
- Type: Vertical Turbine
- No. stages: 4

GEAR HEAD INFORMATION:

- Manufacturer: U.S. Motors
- Model No.: 9473-00-06
- Serial No.: N-500196
- Drive: Right Angle
- Ratio: 1:1

WELL INFORMATION:

- Date Drilled: July 1974
- Original Depth: 49 ft.
- Static Water Level When Drilled: 15 ft.
- Tape Down Possible? No
- 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

WATER RESOURCES RECEIVED

JUN 29 2015

KS DEPT OF AGRICULTURE

HAYS002297
### SKETCH OF ACTUAL PLACE OF USE, LOCATION OF DIVERSION WORKS, AND DISTRIBUTION SYSTEM.

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

Scale

1" = ___ ft.

### TEST OF DIVERSION RATE:

Length of time well has been operating prior to test:

- Location of test: In vertical pipe inside pivot stand
- Pipe Diameter (I.D.): 6.3/4 inches

**Test No. 1—Normal Conditions**

<table>
<thead>
<tr>
<th>R.P.M. POWER UNIT</th>
<th>176.4</th>
</tr>
</thead>
<tbody>
<tr>
<td>R.P.M. PUMP UNIT</td>
<td>176.2</td>
</tr>
<tr>
<td>Pressure at Pump</td>
<td>6.0</td>
</tr>
</tbody>
</table>

**Test No. 2—Maximum Conditions**

<table>
<thead>
<tr>
<th>R.P.M. POWER UNIT</th>
<th>176.8</th>
</tr>
</thead>
<tbody>
<tr>
<td>R.P.M. PUMP UNIT</td>
<td>176.8</td>
</tr>
<tr>
<td>Pressure at Pump</td>
<td>2.2</td>
</tr>
</tbody>
</table>

☐ Jacuzzi Meter Test

| Area Constant \( K = 2.45 \times I.D.^3 \) | \( Q \text{ (gpm)} = VK \) |

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

☐ Propeller Meter Test

<table>
<thead>
<tr>
<th>Meter Diameter</th>
<th>inches</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ending</td>
<td>gal</td>
</tr>
<tr>
<td>Beginning</td>
<td>gal</td>
</tr>
<tr>
<td>Difference</td>
<td>gal</td>
</tr>
<tr>
<td>Time</td>
<td>min</td>
</tr>
<tr>
<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.
  - Kw/rev
  - revolutions
  - seconds
  - Rate = $K_t \times 3.6 = \frac{\text{kwhr}}{t}$
  - Hours = $\text{kwhr} \times \text{rate}

- Other Fuels
  - Type: Natural Gas
  - Supplier: Kansas - Nebraska
  - Rate = $\frac{\text{Volume (test)}}{\text{time}}$
  - How was the test volume determined? Not Determined
  - Engine not on individual meter

### 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>1716</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>1001</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>121</td>
</tr>
<tr>
<td>1980</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1981</td>
<td>480</td>
<td>800</td>
<td></td>
<td>121</td>
</tr>
<tr>
<td>1982</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1983</td>
<td>Unused due to pump problems*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1984</td>
<td>1800**</td>
<td>580**</td>
<td></td>
<td>125**</td>
</tr>
<tr>
<td>1985</td>
<td>1950</td>
<td>**</td>
<td></td>
<td>125**</td>
</tr>
<tr>
<td>1986</td>
<td>689</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Kneaded Seam test on 10/29/86
- Obtained from WTR record of Kent Nabor

Indicate Year of Record with (*): Source of Information: Staff Field Files
Crops Irrigated: this year A15a/jo Year of record A15a/jo

REMARKS:

WATER RESOURCES RECEIVED

JUN 29 2015

Person present at test: Kent Nabor
Water Use Correspondent: Lyle Kolbeek

Conducted by: [Signature] Date: 10/29/86
Approved by: [Signature] Date: 11/24/86

HAYS002299

SCANNED
TOTAL ACRES 798.75
DISTANCES IN CHAINS

SECTION 1, TWP 26 SOUTH, RGE 20 WEST

APPLICATION 22, 328

WATER RESOURCES RECEIVED
JUN 29 2015
KS DEPT OF AGRICULTURE

INFORMATION FROM THE KANSAS LAND SURVEYS
PREPARED BY: H.T.W. 11/25/74
HAYS002302

RECEIVED JAN 21 1997
22326 DIVISION OF WATER RESOURCES
JUN 29 1997
SCANNED
APPLICATION NO: 22326  NAME: Connecticut General Life Insurance

combined flow rate

COLLINS METER TEST

Collins Meter No. 1-85  Meter Calibration Factor .9826
Pipe Inside Diameter (inches) 7.34  Flow Rate Factor 145.4
Test Pressure (psi) 60  Test RPM, Pump A 1764

Description of Test Location  In vertical pipe inside firest and

----------------------------------

TEST DATA: Q  Check, Initial  7.84  Reversed  7.82
Velocity
Meter Setting From
Center of Pipe
Left Side of Pipe
(or Front Side if
Vertical Test)
Right Side of Pipe
(or Back Side if
Vertical Test)

<table>
<thead>
<tr>
<th>Meter Setting From Center of Pipe</th>
<th>Velocity Left Side of Pipe</th>
<th>Reversed</th>
<th>Average Velocity of Water = Sum of Vel. ÷ 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.75</td>
<td>7.92</td>
<td>7.36</td>
<td>7.16</td>
</tr>
<tr>
<td>2.75</td>
<td>6.76</td>
<td>6.82</td>
<td>7.59</td>
</tr>
<tr>
<td>3.75</td>
<td>6.43</td>
<td>6.20</td>
<td>6.97</td>
</tr>
</tbody>
</table>

Average Velocity of Water = Sum of Vel. ÷ 12 = 7.16

Corrected Ave. Vel. = (Ave. Vel.) x (Calibration Factor) =
7.16  x  .9826 = 7.039

Flow Rate = (Corrected Ave. Vel.) x (Flow Rate Factor) =
7.039  x  145.4 = 1023 GPM

PUMPING PLANT TESTING, INC.

Reviewed By: [Signature]
Professional Engineer

WATER RESOURCES HAYS002303
RECEIVED
JUN 29 2015
SCANNED
KS DEPT OF AGRICULTURE
APPLICATION NO: 22326  NAME: Connecticut General Life Insurance

COLLINS METER TEST  Flow from well NC W\frac{1}{2}, W\frac{1}{2} at Lot 3 pumping alone

Collins Meter No. 1-85  Meter Calibration Factor 9826
Pipe Inside Diameter (inches) 7\frac{3}{4}  Flow Rate Factor 145.4
Test Pressure (psi) 22  Test RPM, Pump 1768
Description of Test Location  In vertical pipe inside pivot stand

---

TEST DATA:  \( q \)  Check, Initial Checked Previous Test

<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\frac{3}{4}</td>
<td>4.83  4.96  5.38  5.35</td>
<td></td>
</tr>
<tr>
<td>2\frac{7}{8}</td>
<td>4.61  4.59  5.17  5.13</td>
<td></td>
</tr>
<tr>
<td>3\frac{3}{4}</td>
<td>4.20  4.08  4.17  4.87</td>
<td></td>
</tr>
</tbody>
</table>

Average Velocity of Water = Sum of Vel. \(\div\) 12 = \( 4.82 \)

Corrected Ave. Vel. = (Ave. Vel.) \(\times\) (Calibration Factor) = \( 4.82 \) \(\times\) \( 9826 \) = \( 4.736 \)

Flow Rate = (Corrected Ave. Vel.) \(\times\) (Flow Rate Factor) = \( 4.736 \) \(\times\) \( 145.4 \) = \( 689 \) GPM

---

PUMPING PLANT TESTING, INC.

Reviewed By:  
Professional Engineer

WATER RESOURCES RECEIVED  HAYSO02304

Page 25 of 62  JUN 29 2015

KS DEPT OF AGRICULTURE SCANNED
NOTES ON CHOOSING A YEAR OF RECORD

THIS DEVELOPMENT WAS UNTIL SEVERAL OWNERS SINCE ITS INCEPTION IN 1975, WITH OWNERS FROM EUROPE TO 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. INTO THE SYSTEMS AND PUMPING PLANT COMPONENTS HAVE BEEN INTEGRATED AND OVER THE YEARS.

SINCE LATE 1983, CONNECTICUT GENERAL HAS MADE A DILIGENT EFFORT TO KEEP GOOD RECORDS. THEREFORE, IT WOULD SEEM REASONABLE TO USE THE YEARS SINCE 1983 IN CHOOSING A YEAR OF RECORD.
Test 2 of 2 Diversion points

Application No. 22326 Date 10/1/86 Inspector Elbert Klassen

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

Current Landowner Connecticut (General Life Insurance) % Agricultural

Address Box 142 North Platte, NE 69103 Attn. Jerry Weaver

Water Use Classification: 1. Domestic ( ) 2. Industrial ( ) 3. Irrigation (x)

Groundwater (x) Drainage Basin Arkansas River

Surface Water ( ) Stream

Authorized Point of Diversion: North 260 ft of NE 1/4 of NW
Approximately N 26 R 20 E 1/4 Sec. 1 T 26 R 20

Actual Point of Division: NE 1/4 of Sec. 3 T 26 R 20

How were distances determined? Measured from ASCS photo

"Approved" Quantity 203 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>S</th>
<th>T</th>
<th>R</th>
<th>NE ¼</th>
<th>NW ¼</th>
<th>SW ¼</th>
<th>SE ¼</th>
<th>TOTAL ACRES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>26</td>
<td>20</td>
<td>17</td>
<td>72</td>
<td>129</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

LAND IRRIGATED—YEAR OF RECORD 1985 - 166 ATTACHMENT SHEET

<table>
<thead>
<tr>
<th>S</th>
<th>T</th>
<th>R</th>
<th>NE ¼</th>
<th>NW ¼</th>
<th>SW ¼</th>
<th>SE ¼</th>
<th>TOTAL ACRES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>26</td>
<td>20</td>
<td>2</td>
<td>305</td>
<td>307</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

APPLICATION OF WATER: 367 AF @ 1023 GPM

Year of Record 1985 Hours Pumped 1950 or Quantity 367 AF @ 1023 GPM

Normal Operating G.P.M. 565

Maximum Operating G.P.M. 565

FOR D.W.R. USE ONLY

Year of Record 1985 Extensions time requested: Yes

Total No. of Hours on land covered by this application 1950

Ac. Ft. Applied = 1950 hrs. x 565 g.p.m. x 4.419 203 AF

Acres of "Approved" Land irrigated 125

Ac. Ft. on "Approved" Land 203 1.6 2

Ac. Ft. used on "Approved" Land at "Approved" Rate or Less 162

Proprion Calculations

| Max allowed = 15 x 15 A.F. = 15 x 1023 g.p.m. x 1000 = 153450 A.F. |
| 203 A.F. | 15.6 A. | 75.9 A. | 1023 A. | 153450 A. |

Perfection Rate 2.65 A.F. x 2.65 A.F. 8.5 A.F.

Authors (Printed) Douglas E. Smith, Jan. 21, 1994

Water Resources

WATER RESOURCES RECORDED

JUN 29 2015

KS DEPT. OF AGRICULTURE

MICROFILMED

Revised March 1996
GENERAL INFORMATION ON IRRIGATION SYSTEM:

- Center Pivot  [] High Pressure  [x] Low Pressure
- Manufacturer: [ ] sprinkler  Model: 310  Serial No.: 2977
- 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 Rain Bird 85
- 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.: 08945 E-23-T6  Fuel: Not Gas  Rated RPM: [ ]

PUMP INFORMATION:

- Manufacturer: Fairbanks Morse  Model No.: 10 MA  Rated RPM: [ ]
- Serial No.: N242447X  Type: Vertical Turbine  No. stages: 5

GEAR HEAD INFORMATION:

- Manufacturer: Randolph  Model No.: 60  Serial No.: 62057  Drive: Right Angle  Ratio: 6:5

WELL INFORMATION:

- 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 flush through system.
SKETCH OF ACTUAL PLACE OF E, LOCATION OF DIVERSION WORK AND DISTRIBUTION SYSTEM.
(Indicate distribution system layout at time of field test).

<table>
<thead>
<tr>
<th>N</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scale</td>
<td>1&quot; = 10 ft.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

TEST OF DIVERSION RATE:

Length of time well has been operating prior to test 0
Location of test: In horizontal pipe at point before the two wells come together.
Pipe Diameter (I.D.): 6-11/16 inches

Test No. 1—Normal Conditions

<table>
<thead>
<tr>
<th>R.P.M. POWER UNIT</th>
<th>212</th>
<th>R.P.M. POWER UNIT</th>
<th>212</th>
</tr>
</thead>
<tbody>
<tr>
<td>R.P.M. PUMP UNIT</td>
<td>1760</td>
<td>R.P.M. PUMP UNIT</td>
<td>1760</td>
</tr>
<tr>
<td>Pressure at Pump</td>
<td>60</td>
<td>Pressure at Pump</td>
<td>10</td>
</tr>
</tbody>
</table>

Test No. 2—Maximum Conditions

<table>
<thead>
<tr>
<th>R.P.M. POWER UNIT</th>
<th>212</th>
</tr>
</thead>
<tbody>
<tr>
<td>R.P.M. PUMP UNIT</td>
<td>1760</td>
</tr>
<tr>
<td>Pressure at Pump</td>
<td>10</td>
</tr>
</tbody>
</table>

☐ Jacuzzi Meter Test

Meter Identification No.

Area Constant \( K = 2.45 \times I.D. \)^1 = __________ Q (gpm) = VK

<table>
<thead>
<tr>
<th>Velocity (fps)</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avg.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G.P.M.</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>

☐ Propeller Meter Test

Manufacturer __________________ Model __________________ Serial No. __________________

WATER RESOURCES RECEIVED

JUN 29 2015
KS DEPT OF AGRICULTURE

☐ Other Flow Meter

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

HAYS002308

22326 Page 29 of 62

SCANNED
<table>
<thead>
<tr>
<th>Year</th>
<th>Water Use (gal)</th>
<th>Rate (K)</th>
<th>Net Delivered (gal)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1975</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1976</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1977</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1978</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1979</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Remarks:**
- Source of Information: Statistical File
- Net Delivered (gal): obtained from test
- Water Use (gal): unused due to plant problems
- Rate (K): calculated
- Net Delivered (gal): 125 gal
- Water Use (gal): 121 gal
POINTS OF DIVERSIONSION AND SECTION CORNERS

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.
APPLICATION NO: 22326  NAME: Connecticut General Life Insurance

COLLINS METER TEST  Flow from well NE 1/4 of 5 1/2 at Lot 3 pumping alone

Collins Meter No. 1-84  Meter Calibration Factor 0.9735
Pipe Inside Diameter (inches) 6.5/4  Flow Rate Factor 95.35
Test Pressure (psi) 10  Test RPM, Pump 1760

Description of Test Location  In horizontal pipe at first base the two wells come together

---

TEST DATA:  Q Check, Initial 6.50  Reversed 6.49

<table>
<thead>
<tr>
<th>Meter Setting</th>
<th>Initial Vel.</th>
<th>Reversed Vel.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Left Side</td>
<td>6.32</td>
<td>6.39</td>
</tr>
<tr>
<td>Right Side</td>
<td>6.23</td>
<td>6.40</td>
</tr>
</tbody>
</table>

Average Velocity of Water = Sum of Vel. / 12 = 6.15

Corrected Ave. Vel. = \((\text{Ave. Vel.}) \times (\text{Calibration Factor})\) = \(6.15 \times 0.9635 = 5.93\)

Flow Rate = \((\text{Corrected Ave. Vel.}) \times (\text{Flow Rate Factor})\) = \(5.93 \times 95.35 = 565\) GPM

---
CERTIFICATE OF APPROPRIATION
FOR BENEFICIAL USE OF WATER

WATER RIGHT, File No. 22,326
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 in Lot 3 of Section 1, more particularly described as being near a point 5,373 feet North and 3,779 feet West of the Southeast corner of said section, at a diversion rate not in excess of 690 gallons per minute (1.54 c.f.s.) and in a quantity not to exceed 103 acre-feet per calendar year; and one (1) well also located in Lot 3 of Section 1, more particularly described as being near a point 5,128 feet North and 3,066 feet West of the Southeast corner of said section, at a diversion rate not in excess of 565 gallons per minute (1.26 c.f.s.) and in a quantity not to exceed 85 acre-feet per calendar year; both in Township 26 South, Range 20 West, Edwards County, Kansas, for irrigation use on the following described property:

17 acres in Lot 2 (W½ NE¼),
72 acres in Lot 3 (E½ N½),
40 acres in Lot 4 (W½ NW¼),

a total of 129 acres in Section 1, 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 1,000 gallons per minute (2.23 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.

[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 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. Waters, Notary Public

Filed for record this day of _, 19_, m. and _______ o'clock a.m. and recorded in Book _______ Page _______.

Register of Deeds

WATER RESOURCES RECEIVED

JUN 29 2015

KS DEPT OF AGRICULTURE

HAYSO02331

SCANNED
KANSAS STATE BOARD OF AGRICULTURE
Division of Water Resources

MEMORANDUM

To: Files
From: Douglas E. Bush
Date: March 27, 1987
Re: Appropriation of Water
File No. 22,326

No proposed certificate on file. The certificate is based on a field inspection report conducted under contract by Pumping Plant Testing, Inc.

The quantity per well reflected has been prorated proportionate to that actually diverted, so that the total authorization will not exceed a reasonable quantity for the land irrigated under File No. 22,326. The quantities were prorated as such:

Maximum approved rate = 1,000 gallons per minute
Maximum approved quantity = 188 acre-feet for irrigating 125 acres at 1.5 acre-feet per acre

Well (5,374 feet North and 3,509 feet West of southeast corner) 689 gallons per minute + 565 gallons per minute = 1,254 gallons per minute. 689 gallons per minute divided by 1,254 gallons per minute = 0.55 x 1,000 gallons per minute = 550 gallons per minute x 1,950 hours x 0.0001841 = 197 acre-feet. 0.55 x 188 acre-feet (maximum allowable) = 103 acre-feet.

Well (5,128 feet North and 3,066 feet West of southeast corner) 565 gallons per minute + 689 gallons per minute = 1,254 gallons per minute. 565 gallons per minute divided by 1,254 gallons per minute = 0.45 x 1,000 gallons per minute = 450 gallons per minute x 1,950 hours = 161 acre-feet. 0.45 x 188 acre-feet (maximum allowable) = 85 acre-feet.

A limitation was needed on the rate, limiting the rate when the wells are run simultaneously, to the maximum approved rate of 1,000 gallons per minute.

The place of use shown on the aerial photo supplied with the Field Inspection Report is not valid. The contractor has shown the place of use as he thinks it should be in regards to section corners. The actual land irrigated is the same land that was originally approved and shown to be irrigated on the aerial photograph.

The coordinates for the points of diversion were not changed to the Field Inspection Report's reported distances. When the contractor relocated the section corners he changed the coordinates somewhat which in all likelihood are bogus.

The WUC shown on the Field Inspection Report was changed to show Agri Affiliates as correspondent. This information was obtained in a March 25, 1987 phone call from Larry Sheets, Division of Water Resources, to Jerry Weaver of Agri Affiliates.

Received: JUN 29 1987
Douglas E. Bush
Hydrologist

HC 3 Box 61
Leavenworth, KS 66048

JUN 29 2015 SCANNED
# REPORT OF ACREAGE

**KEY**

<table>
<thead>
<tr>
<th>Farm No.</th>
<th>474</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name and Address</td>
<td>CONNECTICUT GENERAL 1420 1430</td>
</tr>
<tr>
<td></td>
<td>910 STEMMONS TOWER 1430</td>
</tr>
<tr>
<td></td>
<td>DALLAS TEXAS 75207</td>
</tr>
</tbody>
</table>

**OPERATOR**

<table>
<thead>
<tr>
<th>Operator Name</th>
<th>B.469</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address</td>
<td>E.413 6001 W. 7TH</td>
</tr>
<tr>
<td>Owner</td>
<td>7X</td>
</tr>
</tbody>
</table>

**PROGRAM YEAR**

<table>
<thead>
<tr>
<th>Program Year</th>
<th>1985</th>
</tr>
</thead>
</table>

**SECTION 1 - FARM FIELD REPORT**

**NOTE:** Grey shaded area to be filled in by Reporter ONLY.

<table>
<thead>
<tr>
<th>TRACT</th>
<th>FIELD</th>
<th>CROP OR LAND USE</th>
<th>CROP OR LAND USE SUMMARY</th>
<th>KEY SHARE</th>
<th>DISPOSITION</th>
<th>METHOD</th>
<th>GROSS ACRES</th>
<th>SEDUCTIONS</th>
<th>IDENT./MEAS.</th>
<th>NET ACRES</th>
</tr>
</thead>
<tbody>
<tr>
<td>21</td>
<td>21A</td>
<td>Alfalfa</td>
<td>121.5</td>
<td>5</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>1B</td>
<td>Alfalfa</td>
<td>121.2</td>
<td>5</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>2A</td>
<td>Alfalfa</td>
<td>118.9</td>
<td>5</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>2B</td>
<td>Alfalfa</td>
<td>121.4</td>
<td>5</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>39</td>
<td>3L</td>
<td>Alfalfa</td>
<td>33.7</td>
<td>5</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>35</td>
<td>5B</td>
<td>Alfalfa</td>
<td>185.9</td>
<td>5</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>5A</td>
<td>Alfalfa</td>
<td>185.9</td>
<td>5</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>5A</td>
<td>Alfalfa</td>
<td>185.9</td>
<td>5</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>5A</td>
<td>Alfalfa</td>
<td>185.9</td>
<td>5</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>5A</td>
<td>Alfalfa</td>
<td>185.9</td>
<td>5</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>5A</td>
<td>Alfalfa</td>
<td>185.9</td>
<td>5</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>5A</td>
<td>Alfalfa</td>
<td>185.9</td>
<td>5</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL OPERATOR REPORT**

| 1303 | 4878 |

**TOTAL REPORTER'S REPORT**

| 2133 | 20675 | 8112 |

**SECTION II - OPERATOR'S CERTIFICATION**

I certify to the best of my knowledge and belief that the acreages of crops and land use listed herein are true and correct. Further, my signature constitutes authority for ASCS personnel to enter my farm for making any program determinations.

**Signed by.Operator**: Kim Schneck
**Date**: 7-8-15
**Operator's Signature**: HAY004907

**Date of Receipt**: 6-29-15
**Receiver**: M. J. R. O. A. N. I. C. N. L. A. Y.
<table>
<thead>
<tr>
<th>TRACT NO.</th>
<th>FIELD NO.</th>
<th>CROP OR LAND USE</th>
<th>ACRE OR LAND USE SUMMARY</th>
<th>KEY</th>
<th>SHARE</th>
<th>DISPOSITION</th>
<th>METHOD</th>
<th>GROSS ACRES</th>
<th>REDUCTIONS</th>
<th>KEY ACRES</th>
<th>INITIAL DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>129</td>
<td></td>
<td>T/C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10A</td>
<td></td>
<td>Wheat-Grain</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28</td>
<td></td>
<td>T/C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10B</td>
<td></td>
<td>Wheat-Grain</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td></td>
<td>T/C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10C</td>
<td></td>
<td>Alfalfa</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31</td>
<td></td>
<td>T/C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10D</td>
<td></td>
<td>Wheat-Grain</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>36</td>
<td></td>
<td>T/C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11A</td>
<td></td>
<td>Wheat-Grain</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>37</td>
<td></td>
<td>T/C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11B</td>
<td></td>
<td>Wheat-Grain</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td></td>
<td>T/C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td>Alfalfa</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>T/C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

LAND DESIGNATED FOR ACR MEETS 2-YEAR CROPPING REQUIREMENT OR OTHER ELIGIBILITY REQUIREMENTS AS APPLICABLE.  

[Signature: P.A. 8-6-85]
## REPORT OF ACREAGE

**FARM NO.** 1
**NAME AND ADDRESS** Connecticut General

### SECTION I - FARM FIELD REPORT

<table>
<thead>
<tr>
<th>TRACT NO.</th>
<th>FIELD NO.</th>
<th>CROP OR LAND USE</th>
<th>CROP OR LAND USE SUMMARY</th>
<th>KEY SH-ARE</th>
<th>DISPOSITION</th>
<th>GROSS ACRES</th>
<th>DEDUCTIONS</th>
<th>NET ACRES</th>
<th>INIT. DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>In Alfalfa</td>
<td></td>
<td></td>
<td></td>
<td>20.10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>In Alfalfa</td>
<td></td>
<td></td>
<td></td>
<td>12.1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>In Alfalfa</td>
<td></td>
<td></td>
<td></td>
<td>10.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>In Alfalfa</td>
<td></td>
<td></td>
<td></td>
<td>12.05</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>In Alfalfa</td>
<td></td>
<td></td>
<td></td>
<td>12.9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>6</td>
<td>In Alfalfa</td>
<td></td>
<td></td>
<td></td>
<td>12.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>7</td>
<td>In Alfalfa</td>
<td></td>
<td></td>
<td></td>
<td>12.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>8</td>
<td>In Alfalfa</td>
<td></td>
<td></td>
<td></td>
<td>12.5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**WATER RESOURCES**

**13. TOTAL OPERATOR REPORT**

**14. TOTAL DETERMINED ACREAGE**

**A. OPERATOR'S SIGNATURE**

**D. OPERATOR'S SIGNATURE**

**NOTE:** Section 374 of the Agricultural Adjustment Act of 1938, as amended, authorizes collection of the following data. The data will be used to determine eligibility for assistance. Furnishing this data is voluntary; however, without it assistance cannot be provided. The data may be furnished to any agency responsible for enforcing the Act.

---

**SECTION II - OPERATOR'S CERTIFICATION**

I certify to the best of my knowledge and belief that the acreages of crops and land uses listed herein are true and correct. I understand that an inaccurate acreage report could result in a payment reduction or loss of program benefits and/or reduction in future allotments and quotas when applicable.

**HAY V004909**
<table>
<thead>
<tr>
<th>TRACT NO.</th>
<th>FIELD NO.</th>
<th>CROP OR LAND USE SUMMARY</th>
<th>CROP OR LAND USE</th>
<th>KEY</th>
<th>SHARE</th>
<th>DISPOSITION</th>
<th>GROSS ACRES</th>
<th>DEDUCTIONS</th>
<th>IDENT./MEAS.</th>
<th>ACRES</th>
<th>NET ACRES</th>
<th>INIT. DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>2</td>
<td>Alfalfa</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td></td>
<td>Corn-GRAIN</td>
<td>10.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td></td>
<td>Corn-GRAIN</td>
<td>12.9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26</td>
<td></td>
<td>Corn-GRAIN</td>
<td>13.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32</td>
<td></td>
<td>Corn-GRAIN</td>
<td>18.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33</td>
<td></td>
<td>Corn-GRAIN</td>
<td>18.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td></td>
<td>Wheat, C.H.</td>
<td>21.9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28</td>
<td></td>
<td>Alfalfa</td>
<td>55.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Report of Acreage

**USDA-SCS**

**NOTE:** Section 374 of the Agricultural Adjustment Act of 1938, as amended, authorizes collection of the following data. The data will be used to determine eligibility for assistance. Furnishing this data is voluntary; however, without it assistance cannot be provided. The data may be furnished to any agency responsible for enforcing the Act.

**SECTION I - FARM FIELD REPORT**

<table>
<thead>
<tr>
<th>TRACT NO.</th>
<th>FIELD NO.</th>
<th>CROP OR LAND USE</th>
<th>CROP OR LAND USE SUMMARY</th>
<th>KEY</th>
<th>SHARE</th>
<th>DISPOSITION</th>
<th>GROSS ACRES</th>
<th>DEDUCTIONS</th>
<th>NET ACRES</th>
<th>INIT. DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>IW Mils</td>
<td></td>
<td>1</td>
<td>2.04</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14A</td>
<td>2</td>
<td>IW Mils</td>
<td></td>
<td>1</td>
<td>1.32</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>156A</td>
<td>2</td>
<td>IW Mils</td>
<td></td>
<td>1</td>
<td>1.60</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>158B</td>
<td>2</td>
<td>IW Mils DuP AC1C</td>
<td></td>
<td>1</td>
<td>4.46</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>158B</td>
<td>2</td>
<td>IW Mils DuP ACR</td>
<td></td>
<td>1</td>
<td>4.16</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Comment:**

To be revised.

**WATER RECEIVED**

| JUN 29 1975 | 14A | 1A    |

**SCANNED**

**SECTION II - OPERATOR'S CERTIFICATION**

I certify to the best of my knowledge and belief that the acreages of crops and land uses listed herein are true and correct. I understand that an inaccurate acreage report could result in a payment reduction or loss of program benefits and/or reduction in future allotments and quotas when applicable.

**C. OPERATOR'S SIGNATURE**

22326

**DATE**

**HAYS004911**
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;

\[
10 \text{ acres} = 450 \text{ g.p.m.} \\
(+) 40 \text{ acres (10 + 30)} = 450 \text{ g.p.m.} \\
(+3) 43 \text{ acres @ 8 g.p.m./acre} = 344 \text{ g.p.m.} \\
1,244 \text{ (allow 1,245 g.p.m.)}
\]

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.

WATER RESOURCES  
RECEIVED

JUN 29 2015
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.
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: 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 Below Explanation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>684,559,000</td>
<td>10,806,000</td>
<td>596,254,000</td>
<td>16,327,000</td>
<td></td>
<td>62,172,000</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:
Percent Unaccounted = \( \frac{\text{Unaccounted For Water}}{\text{Total Water (Columns 1.2)}} \times 100 \)

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>20 years ago</td>
<td>592,323,000</td>
<td>6,029,000</td>
<td>549,314,000</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>10,819,000</td>
<td>587,985,000</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

DWR 1-209-04 (Revised 08/15/2002)
### 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 (columns 1 + 2)</th>
<th>Water Purchased From All Sources (columns 1)</th>
<th>Water Sold to Other Public Water Suppliers (columns 2)</th>
<th>Water Sold to Your Industrial, Stock, and Bulk Customers (columns 3)</th>
<th>Water Sold to Your Residential and Commercial Customers (columns 4)</th>
<th>Other Metered Water (columns 5)</th>
<th>Remaining Water Used (See Explanation on other side) (columns 7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 5</td>
<td>763,014,900</td>
<td>11,886,600</td>
<td>654,779,400</td>
<td>17,659,700</td>
<td>68,389,200</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 10</td>
<td>826,216,300</td>
<td>13,075,260</td>
<td>720,257,340</td>
<td>19,755,670</td>
<td>76,228,120</td>
<td></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>
<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>23,904,361</td>
<td>91,026,025</td>
<td></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>30,802</td>
</tr>
</tbody>
</table>

Provide number of current active service connections:

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

### 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

\[
\text{Gallons per Person per Day} = \frac{\text{Amount of water in Columns 5, 6, and 7 of Section 1} + \text{Population from Last Year of Section 4} + 365 \text{ Days/Year}}{\text{Population from Last Year of Section 4}}
\]

\[
\text{Gallons per Person per Day} = \frac{673,753,000 + 21,038 + 365 \text{ Days/Year}}{88}
\]

### 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.
### 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>108,743,000</td>
<td>19,944,000</td>
<td>93,306,100</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:

1. 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.

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

   \[
   \text{Percent Unaccounted For Water} = \left( \frac{\text{Unaccounted For Water}}{\text{Total Water (Columns 1.2)}} \right) \times 100
   \]

   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 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>115,884,670</td>
<td>18,887,850</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>376,790,000</td>
<td>0</td>
<td>0</td>
<td>144,277,000</td>
<td>123,343,000</td>
<td>18,907,000</td>
</tr>
<tr>
<td>5 years ago</td>
<td>376,790,000</td>
<td>0</td>
<td>0</td>
<td>144,277,000</td>
<td>123,343,000</td>
<td>18,907,000</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>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>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>
</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>
</tr>
<tr>
<td>Year 15</td>
<td>426,310,852</td>
<td>0</td>
<td>0</td>
<td>196,102,992</td>
<td>132,156,364</td>
<td>17,052,434</td>
</tr>
<tr>
<td>Year 20</td>
<td>443,848,022</td>
<td>0</td>
<td>0</td>
<td>204,170,090</td>
<td>137,592,887</td>
<td>17,753,921</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>

Provide number of current active service connections:

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

\[
\frac{221,991,000}{4,475} + \frac{365 \text{ Days/Year}}{\text{Population from Last Year of Section 4}} = 135.9 \text{ GALLONS PER PERSON PER DAY.}
\]

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 Pfeiffer 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 include additional information you believe will assist in informing the Division of the needs of your request.