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  

David W. Barfield, P.E. 

WATER RESOURCES  
RECEIVED  

JUN 26 2015  
4:24 
Chief Engineer  
Division of Water Resources  
Kansas Dept. of Agriculture  

JUN 26 2015  
8:16 
DEPT OF AGRICULTURE 

File No. 22,345 Circle 38. 

2. Name of applicant: City of Hays, Kansas and City of Russell, Kansas (See paragraph 2 of the cover letter.) 
Address: c/o Foulston Siefkin LLP, 1551 N. Waterfront Parkway, Suite 100 
City, State and Zip: Wichita, Kansas 67206 
Phone Number: (316) 291-9725 E-mail address: dtraster@foulston.com 
What is your relationship to the water right; ☑ owner ☐ tenant ☐ agent ☐ other? If other, please explain. Hays and Russell are co-owners of the authorized place of use on the R9 Ranch in Edwards County. 

Name of water use correspondent: City of Hays, Kansas 
Address: P. O. Box 490, 1507 Main Street 
City, State and Zip: Hays, Kansas 67601 
Phone Number: (785) 628-7320 E-mail address: tdougherty@haysusa.com 

3. The change(s) proposed herein are desired for the following reasons (please be specific):  
See Paragraph 3 of the cover letter filed concurrently with this application. The cover letter is incorporated herein by reference.  

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

For Office Use Only: 
F.O. 2 GMAD 5 Meets K.A.R. 5-5-1 (YES / NO) Use 1R Source S/S County ED By KAB Date 6/29/15 
Code C-3 Fee $700 TR # 
Receipt Date 6/22/15 Check # 058328 

of 21000 15053305 

Eff 07/15/15 

DWR 1-120 (Revised 06/16/2014) 
22345 

22345 

Page 1 of 35 

Assisted by: 

6/30/2015 ELM
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>NE1/4</th>
<th>NW1/4</th>
<th>SW1/4</th>
<th>SE1/4</th>
<th>TOTAL ACRES</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-T26S-R20W</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>22</td>
<td>24</td>
<td>31</td>
<td>30</td>
<td>107</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>NE1/4</th>
<th>NW1/4</th>
<th>SW1/4</th>
<th>SE1/4</th>
<th>TOTAL ACRES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Same as above</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

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

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

Owner of Land — NAME: City of Hays, Kansas

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

<table>
<thead>
<tr>
<th>Sec. Twp. Range</th>
<th>NE1/4</th>
<th>NW1/4</th>
<th>SW1/4</th>
<th>SE1/4</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></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

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

Owner of Land — NAME: City of Russell, Kansas

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

<table>
<thead>
<tr>
<th>Sec. Twp. Range</th>
<th>NE1/4</th>
<th>NW1/4</th>
<th>SW1/4</th>
<th>SE1/4</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></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

List any other water rights that cover this place of use: See paragraph 5 of the cover letter.
6. The presently authorized point(s) of diversion (is) (are) irrigation well(s) described in paragraph 8, infra. (Provide description and number of points)

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

**List all presently authorized point(s) of diversion:**

<table>
<thead>
<tr>
<th>Presently authorized point of diversion:</th>
</tr>
</thead>
<tbody>
<tr>
<td>One in the ______ near the center ______ Quarter of the ______ Quarter of the ______ SE ______ Quarter of Section ______ Townships ______ Township ______ South, Range ______ (E/W), in ______ Edwards County, Kansas ______ feet North ______ feet West.</td>
</tr>
<tr>
<td>Authorized Rate 820 gpm Authorized Quantity 159 a/f</td>
</tr>
<tr>
<td>(DWR use only: Computer ID No. ______ GPS ______ feet North ______ feet West)</td>
</tr>
<tr>
<td>□ This point will not be changed □ This point will be changed as follows:</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Proposed point of diversion: (Complete only if change is requested)</th>
</tr>
</thead>
<tbody>
<tr>
<td>One in the ______ near the center ______ Quarter of the ______ Quarter of the ______ SW ______ Quarter of Section ______ Townships ______ Township ______ South, Range ______ (E/W), in ______ Edwards County, Kansas ______ feet North ______ feet West.</td>
</tr>
<tr>
<td>Proposed Rate 820 gpm Proposed Quantity 184.62 a/f</td>
</tr>
<tr>
<td>This point is: □ Additional Well □ Geo Center List other water rights that will use this point 22,343; 22,346</td>
</tr>
</tbody>
</table>

9. **Presently authorized point of diversion:**

<table>
<thead>
<tr>
<th>Presently authorized point of diversion:</th>
</tr>
</thead>
<tbody>
<tr>
<td>One in the ______ near the center ______ Quarter of the ______ Quarter of the ______ Quarter of Section ______ Township ______ Township ______ South, Range ______ (E/W), in ______ Edwards County, Kansas ______ feet North ______ feet West.</td>
</tr>
<tr>
<td>Authorized Rate ______ Authorized Quantity ______</td>
</tr>
<tr>
<td>(DWR use only: Computer ID No. ______ GPS ______ feet North ______ feet West)</td>
</tr>
<tr>
<td>□ This point will not be changed □ This point will be changed as follows:</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Proposed point of diversion: (Complete only if change is requested)</th>
</tr>
</thead>
<tbody>
<tr>
<td>One in the ______ near the center ______ Quarter of the ______ Quarter of the ______ Quarter of Section ______ Township ______ Township ______ South, Range ______ (E/W), in ______ Edwards County, Kansas ______ feet North ______ feet West.</td>
</tr>
<tr>
<td>Proposed Rate ______ Proposed Quantity ______</td>
</tr>
<tr>
<td>This point is: □ Additional Well □ Geo Center List other water rights that will use this point</td>
</tr>
</tbody>
</table>

10. **Presently authorized point of diversion:**

<table>
<thead>
<tr>
<th>Presently authorized point of diversion:</th>
</tr>
</thead>
<tbody>
<tr>
<td>One in the ______ near the center ______ Quarter of the ______ Quarter of the ______ Quarter of Section ______ Township ______ Township ______ South, Range ______ (E/W), in ______ Edwards County, Kansas ______ feet North ______ feet West.</td>
</tr>
<tr>
<td>Authorized Rate ______ Authorized Quantity ______</td>
</tr>
<tr>
<td>(DWR use only: Computer ID No. ______ GPS ______ feet North ______ feet West)</td>
</tr>
<tr>
<td>□ This point will not be changed □ This point will be changed as follows:</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Proposed point of diversion: (Complete only if change is requested)</th>
</tr>
</thead>
<tbody>
<tr>
<td>One in the ______ near the center ______ Quarter of the ______ Quarter of the ______ Quarter of Section ______ Township ______ Township ______ South, Range ______ (E/W), in ______ Edwards County, Kansas ______ feet North ______ feet West.</td>
</tr>
<tr>
<td>Proposed Rate ______ Proposed Quantity ______</td>
</tr>
<tr>
<td>This point is: □ Additional Well □ Geo Center List other water rights that will use this point</td>
</tr>
</tbody>
</table>

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.

---

**WATER RESOURCES PLANNING COMMITTEE**

**SCANNED**

**JUN 29 2015**

**KS DEPT OF AGRICULTURE**
12. The presently authorized use of water is for **irrigation** purposes.
   It is proposed that the use be changed to **municipal** purposes.

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

(Please show any calculations here.)

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

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

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

   a. If a change in the location of the point(s) of diversion is proposed, show:
   
      1) The location of the proposed point(s) of diversion. Distances North and West of the Southeast corner of the section must be shown. Please be certain that the information shown on the map agrees with the information shown in Paragraph Nos. 9, 10 and 11 of the application.
   
      2) If the source of supply is groundwater, please show the location of existing water wells of any kind, including domestic wells, within ½ mile of the proposed well or wells. Identify each well as to its use and furnish name and mailing address of the property owner or owners. If there are no wells within ½ mile, please indicate so on the map.
   
      3) If the source of supply is surface water, the names and mailing addresses of all landowner(s) ½ mile downstream and ½ mile upstream from your property lines must be shown.
   
   b. If a change in the place of use is desired, show the proposed place of use by crosshatching on the map. Please be certain that the information shown on the map agrees with the information shown in Paragraph No. 5 of the application.

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

   See paragraph 17 of the cover letter.

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

   See paragraph 7 of the cover letter.
Any use of water that is not as authorized by the water right or permit to authorize water before the chief engineer approves this application is a violation of the Kansas Water Appropriation Act for which criminal or civil penalties may be assessed. Such violation is a class C misdemeanor, punishable by a fine not to exceed $500 and/or a term of confinement not to exceed one month in the county jail. K.S.A. 82a-728(b). Civil penalties shall be not less than $100 nor more than $1,000 per violation. In the case of a continuing violation, each day such violation continues may be deemed a separate violation. In addition to these penalties the water right may be modified or suspended. K.S.A. 82a-737, as amended.

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

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

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

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

Dated at Russell, Russell County, Kansas, this 23rd day of June 20 15

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

State of Kansas
County of Russell SS

I hereby certify that the foregoing application was signed in my presence and sworn to before me this 23rd day of June 20 15.

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

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

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

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

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

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

[Signature]

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

(Please Print)

[Signature]

(Please Print)

[Signature]

(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.

[Signature]

My Commission Expires 6/15/18

NOTARY PUBLIC - State of Kansas
MALINDA MORSE
My Appt. Expires 6/15/18

FEESCHEDULE

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 ......................................................................................... $300

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

The Cities are requesting a total of 184.62 acre-feet and 820 gpm from the well associated with this water right, all of which will be diverted from new point of diversion N, as shown on Exhibit I. When combined with existing wells from other water rights, new point of diversion N will have a cumulative total of 476.87 acre-feet and 2,230 gpm.

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

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

DWR Regulation, K.A.R. 5-5-9(a), provides that the default calculation used to address the consumptive use issue allows the conversion of 114.48 acre-feet to municipal use.\(^1\) 106 approved acres irrigated during the perfection multiplied by the Edwards County NIR for corn of 1.08 acre-feet per acre equals 114.48 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 was issued on March 19, 1976, granting the applicant the right to divert up to 209 acre-feet annually at a rate not to exceed 1,000 gallons per minute for irrigation use\(^4\) on 107 acres in Section 15-T26S-R20W.\(^5\) The certificate further limited the rate to 820 gallons per minute.\(^6\)

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

The Field Inspection Reports indicate that 207.05 of the 209 acre-feet authorized by the permit were lawfully perfected.

- 270 acre-feet were applied to 106 approved acres in the SE/4 of Section 15-T26S-R20W.\(^8\)
- The permit authorized the perfection of 209 acre-feet per acre on 107 acres or 1.95 acre-feet per acre, but only 106 authorized acres were irrigated during the perfection period resulting in the perfection of 207.05 acre-feet.\(^9\)

---

\(^1\) K.A.R. 5-5-9(a) and (a)(1).
\(^2\) K.A.R. 5-5-12, NIR Requirements.
\(^3\) K.A.R. 5-5-9(b).
\(^4\) Permit, HAYS003882, Ex. A.
\(^5\) Application, HAYS003875, Ex. B.
\(^6\) Certificate, HAYS003890, Ex. C.
\(^7\) March 19, 1976, letter (emphasis added), HAYS003881, Ex. D.
\(^8\) FIR, HAYS003868, Ex. E.
While the certificate limits the total quantity to 159 acre-feet based on DWR's after-the-fact determination that 1.5 acre-feet per acre was a reasonable quantity for irrigation use, DWR did not have jurisdiction to make this reduction.\textsuperscript{10}

Since the perfection period has expired, the "authorized quantity" for this water right is the 207.05 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 FIR states that alfalfa was grown on this circle during the year of record.\textsuperscript{11} 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. It is reasonable to use the NIR for alfalfa, which yields a total quantity of 184.62 acre-feet consumed. While this quantity is greater than the quantity set out in the certificate, it is less than the "maximum annual quantity authorized by the water right."\textsuperscript{12}

\textit{An alternative approach}

DWR's use of the NIR of 1.08 feet of water for corn is based on its maximum gross irrigation requirement of 1.5 acre-feet per acre.\textsuperscript{13} 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 207.05 acre-feet legally applied during the perfection period percolates back to the aquifer, then 72%, or 149.07 acre-feet, should be available for conversion to municipal use. This is less than the 207.05 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 184.62 acre-feet for municipal use.

\textsuperscript{9} FIR, HAYS003868, Ex. E.
\textsuperscript{11} FIRs, HAYS003868, Ex. E.
\textsuperscript{12} See K.A.R. 5-5-9(a)(4).
\textsuperscript{13} Administrative Policy No. 86-8, dated Nov. 5, 1986, Ex. G, stating that: "In that area of Kansas located between the Range 5 East/Range 6 East Line and the Range 20 West/Range 21 West line, the maximum allowable quantity shall not exceed an average of 1.50 acre-feet per acre irrigated." See also, K.A.R. 5-3-24 and Larry Sheets Memo dated March 27, 1987, HAYS003885, Ex. F.
THE STATE OF KANSAS

STATE BOARD OF AGRICULTURE
Roy Freeland, Secretary

DIVISION OF WATER RESOURCES
Gary E. Gibson, Chief Engineer

APPROVAL OF APPLICATION
and
PERMIT TO PROCEED

(This Is Not a Certificate of Appropriation)

This is to certify that I have examined Application No. 22,345 of the applicant

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

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

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

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

3. That the source from which the appropriation is made shall be from ground water in the drainage basin of the Arkansas River to be withdrawn by means of one (1) well near the center of the Southeast Quarter (SE) of Section 15, Township 26 South, Range 20 West, in Edwards County, Kansas, located substantially as shown on the aerial photograph accompanying the application.

WATER RESOURCES RECEIVED

JUN 29 2015

KS DEPT OF AGRICULTURE RECEIVED

MAR 29 1976 HAYS003882 SCANNED

22345 Page 9 of 35

209 acre-feet

(OVER)
3. That installation of works for transmission of water shall be completed on or before December 31, 1977. The applicant shall notify the Chief Engineer of the Division of Water Resources when construction of the works has been completed.

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

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

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

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

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

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

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

Dated this 19th day of March, 1975

[Signature]

WATER RESOURCES RECEIVED
JUN 29 2015
KS DEPT OF AGRICULTURE
SCANNED
HAYS003883

DIVISION OF WATER RESOURCES
CHIEF ENGINEER
KANSAS STATE BOARD OF AGRICULTURE
APPLICATION FOR PERMIT TO APPROPRIATE WATER FOR BENEFICIAL USE

The Statutory Filing Fee of $50.00 Must Accompany the Application

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

(Mr.)
(Mrs.)

Comes now the applicant (Mr. or Mrs.) Midwest Land and Cattle Co., whose post office address is Box 288 Kinzey, Kansas 67547 and makes application to the Chief Engineer of the Division of Water Resources, Kansas State Board of Agriculture, for a permit to appropriate for beneficial use such unappropriated groundwater as may be available in the Arkansas River basin in the county of Edwards, state of Kansas, to the extent and in accordance with the particulars hereinafter described:

1. The quantity of water desired is in the amount of 300 acre feet per year, to be diverted at a maximum rate of 1000 gallons per minute (gallons per minute or cubic feet per second).

2. The location of the proposed wells or other works for diversion of water is in the near the center quarter of the quarter of the section 15, township 26, range 20 W, in Edwards County, Kansas.

3. The water is intended to be appropriated for:

<table>
<thead>
<tr>
<th>Amount</th>
<th>MICROFILMED</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Domestic use</td>
<td>( )</td>
</tr>
<tr>
<td>(b) Municipal use</td>
<td>( )</td>
</tr>
<tr>
<td>(c) Irrigation use</td>
<td>( )</td>
</tr>
<tr>
<td>(d) Industrial use</td>
<td>( )</td>
</tr>
<tr>
<td>(e) Recreational use</td>
<td>( )</td>
</tr>
<tr>
<td>(f) Water power use</td>
<td>( )</td>
</tr>
</tbody>
</table>

   (Check indicated use and indicate proposed quantity for each use.)

   300 acre ft./yr. = 1000 gals./min.
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:

<table>
<thead>
<tr>
<th>Owner of Land—NAME: Midwest Land &amp; Cattle Co.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADDRESS: P.O. Box 208 Kinsley, Kansas 67547</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sec. Twp. Range</th>
<th>NE1</th>
<th>NW1</th>
<th>SW1</th>
<th>SE1</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 26 20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>67</td>
</tr>
<tr>
<td></td>
<td>40</td>
<td>40</td>
<td>40</td>
<td>160</td>
<td></td>
</tr>
<tr>
<td></td>
<td>34</td>
<td>45</td>
<td>54</td>
<td>133</td>
<td>222</td>
</tr>
<tr>
<td></td>
<td>24</td>
<td>41</td>
<td>30</td>
<td>107</td>
<td>108</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Owner of Land—NAME:</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADDRESS:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sec. Twp. 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></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Owner of Land—NAME:</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADDRESS:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sec. Twp. 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></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Owner of Land—NAME:</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADDRESS:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sec. Twp. 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></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Larry Kennedy is authorized by Lloyd Hansen to make Orb. Shns to this application*
7. The works for diversion of water will consist of one well with one pump for one circle sprinkler irrigation system (one motor) and will be completed by July 1974.

8. The first actual application of water for the beneficial use proposed was or is estimated to be July 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, and he is authorized to make this application in behalf of the interest affected.

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

    Midwest Land & Cattle Co.  
    (Applicant)

    By John Doe  
    (Agent or Officer)

Note:
1 cubic foot per second = 448.8 gallons per minute = 648,317 gallons per day = 1.98 acre feet per day.
1 million gallons per day = 1,547 cubic feet per second = 3.07 acre feet per day.
1 acre foot = 43,560 cubic feet = 325,851 gallons.
THE STATE OF KANSAS

STATE BOARD OF AGRICULTURE
Sam Brownback, Secretary

DIVISION OF WATER RESOURCES
David L. Pope, Chief Engineer

CERTIFICATE OF APPROPRIATION
FOR BENEFICIAL USE OF WATER

WATER RIGHT, File No. 22,345
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 a well located near the center of the Southeast Quarter (SE¼) of Section 15, more particularly described as being near a point 1,175 feet North and 1,205 feet West of the Southeast corner of said section, in Township 26 South, Range 20 West, Edwards County, Kansas, at a diversion rate not in excess of 820 gallons per minute (1.83 c.f.s.) and in a quantity not to exceed 159 acre-feet per calendar year for irrigation use on the following described property:

22 acres in the Northeast Quarter of the Southeast Quarter (NE½ SE¼),
24 acres in the Northwest Quarter of the Southeast Quarter (NW½ SE¼),
31 acres in the Southwest Quarter of the Southeast Quarter (SW½ SE¼),
30 acres in the Southeast Quarter of the Southeast Quarter (SE½ SE¼),

a total of 107 acres in Section 15, Township 26 South, Range 20 West, Edwards County, Kansas.
The appropriator shall maintain in an operating condition, satisfactory to the Chief Engineer, all check valves installed for preventing chemical or other foreign substance pollution of the water supply.

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

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

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

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

In Witness Whereof, I have hereunto set my hand at my office at Topeka, Kansas, this 21st day of May, 1987.

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

STATE OF KANSAS, Shawnee COUNTY, ss.

The foregoing instrument was acknowledged before me this 21st day of May, 1987 by David L. Pope, P.E., Chief Engineer, Division of Water Resources, Kansas State Board of Agriculture.

Signature:
Denise J. Wetzel, Notary Public
March 1, 1990

WATER RESOURCES RECEIVED

JUN 29 2015
KDEPT OF AGRICULTURE

SCANNED
March 19, 1976

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

ATTENTION: Mr. Johnny Carson, Manager

Re: Appropriation of Water
Application No. 22,345

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

WATER RESOURCES
RECEIVED
JUN 29 2015
KS DEPT OF AGRICULTURE

RECEIVED
MAR 29 1976
HAYS003881
MICROFILMED

Encs.

22345
Test 1 of 1 Diversion points
Application No. 223245 Date 10-3-86 Inspector Fubert Klussen
Field Area No. 2 G.M.D. No. 5 County Edwards
Address: Box 1162, North Platte, Nebraska 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: Well NC SE 1/4 Sec 15 T. 26 R. 20
Approximately _ ft. North and _ ft. West of SE corner of Sec._

Actual Point of Diversion: Well NW 1/4 SE 1/4 SE 1/4 Sec 15 T. 26 R. 20
Approximately _ ft. North and _ ft. West of SE corner of Sec._

How were distances determined? By using 6/16 scale from original survey plots

"Approved" Quantity 209 ac-ft "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</th>
<th>NW</th>
<th>SW</th>
<th>SE</th>
<th>NE</th>
<th>NW</th>
<th>SW</th>
<th>SE</th>
<th>TOTAL ACRES</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>26</td>
<td>20</td>
<td>22.24</td>
<td>31.30</td>
<td>107</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

LAND IRRIGATED—YEAR OF RECORD 1985—SEE REMARKS

<table>
<thead>
<tr>
<th>S</th>
<th>T</th>
<th>R</th>
<th>NE</th>
<th>NW</th>
<th>SW</th>
<th>SE</th>
<th>NE</th>
<th>NW</th>
<th>SW</th>
<th>SE</th>
<th>TOTAL ACRES</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
<td>26</td>
<td>20</td>
<td>24</td>
<td>20</td>
<td>28</td>
<td>32</td>
<td>106</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

APPLICATION OF WATER: See Remarks
Year of Record 1985 Application Number 1900 or Quantity 2358 ac-ft

Normal Operating G.P.M. 317 Equiv. c.f.s. 1.82
Maximum Operating G.P.M. JUN 01 1985 Equiv. c.f.s.

Year of Record 1984 Extension of time requested: Yes No

Total No. of Hours on land covered by this application 1800
Ac. Ft. Applied 1800 hrs. x 817 g.p.m. x 4.419 = 270 AF

Acre of "Approved" Land irrigated 106 2.55 ac ft per acre

Ac. Ft. on "Approved" Land 106 Ac. Ft./Ac.

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

Proration Calculations 106 x 1.5 = 159

Perfected Rate 820 g.p.m. Perfected Quantity 159 AF

DWH-101 22345 completed by Larry M. Sheets 3-27-87
Revised March 1986
GENERAL INFORMATION ON IRRIGATION SYSTEM:

☑ Center Pivot  ☐ High Pressure  ☑ Low Pressure

Manufacturer: Zimmatic  Model: 310  Serial No: 3192

Drive: Electric  Length of Pivot Arm: 

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

End Gun? Yes  End Gun Rating: ___ g.p.m.  Rain Bird 855

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: 460  HP: 

Serial No: 13139 H-22-Tc  Fuel: propane  Rated RPM: 

PUMP INFORMATION:

Manufacturer: Sveci  Model No: N8CT-703  Rated RPM: 

Serial No: 467-22148  Type: Vertical Turbine  No. stages: 4

GEAR HEAD INFORMATION:

Manufacturer: Randolph  Model No: F60  

Serial No: 62604  Drive: Right Angle  Ratio: 6:1

WELL INFORMATION:

Date Drilled: 1-24-75  Original Depth: 126 ft.  Static Water Level When Drilled: 30 ft.

Tape Down Possible? Yes  Water Level Measurement Tube? No

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

ADDITIONAL REQUIREMENTS:

Meter Required? No  Make of Meter: 

Meter Model No:  Serial No:  Size: 

Is Meter Installed Properly? 

Chemical Injection System? Yes  Check Valve? Yes  Low Pressure Drain? Yes

Vacuum Breaker? Yes  Are these anti-pollution devices installed properly? Yes HAYS003869

If chemicals are injected into system, please attach sketch of system.  

WATER RESOURCES RECEIVED  

JUN 29 2015  

KS DEPT OF AGRICULTURE
SKETCH OF ACTUAL PLACE OF USE, LOCATION OF DIVERSION WORKS, AND DISTRIBUTION SYSTEM.
(Indicate distribution system layout at time of field test).

N

Scale
1" = ___ ft.

TEST OF DIVERSION RATE:

Length of time well has been operating prior to test: 0
Location of test: In vertical pipe at pivot
Pipe Diameter (I.D.): ___

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

Test No. 2—Maximum Conditions
R.P.M. POWER UNIT: ___
R.P.M. PUMP UNIT: ___
Pressure at Pump: ___ psi

☐ Jacuzzi Meter Test

Meter Identification No.: ___

Area Constant K = 2.45 x I.D. = ___

<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></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Avg.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>G.P.M.</td>
</tr>
</tbody>
</table>

Q (gpm) = VK

☐ Propeller Meter Test

Manufacturer: ___
Model: ___
Serial No.: ___

Meter Diameter: ___ inches

Ending: ___ gal.
Beginning: ___ gal.
Difference: ___ gal.
Time: ___ min.
Rate: ___ gpm

Ending: ___ gal.
Beginning: ___ gal.
Difference: ___ gal.
Time: ___ min.
Rate: ___ gpm

☐ Other Flow Meter

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

☐ Electricity

Supplier

Meter Manufacturer

Type

Serial No.

K watt/rev

r revolutions

t seconds

Rate = \frac{Kr \times 3.6}{t} = \text{kw/hr}

Hours = \frac{\text{kw-hr}}{\text{rate}}

☐ Other Fuels

Type: propane

Supplier: Mid-Continent

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

How was the test volume determined? Not determined

TABULATION OF WATER USE:

<table>
<thead>
<tr>
<th>Year</th>
<th>Hours Pumped (hr)</th>
<th>Tested Pumping Rate (gpm)</th>
<th>Water Used (AF)</th>
<th>Acres Irrigated</th>
</tr>
</thead>
<tbody>
<tr>
<td>1975</td>
<td>139.2</td>
<td>1000</td>
<td></td>
<td>125</td>
</tr>
<tr>
<td>1976</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1977</td>
<td>90.2</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>836</td>
<td></td>
<td>103</td>
</tr>
<tr>
<td>1980</td>
<td>720</td>
<td>836</td>
<td></td>
<td>110</td>
</tr>
<tr>
<td>1981</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1982</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1983</td>
<td>2200*</td>
<td>900*</td>
<td>103*</td>
<td></td>
</tr>
<tr>
<td>1984</td>
<td>1800*</td>
<td>775*</td>
<td>104*</td>
<td></td>
</tr>
<tr>
<td>1985</td>
<td>1900*</td>
<td>817*</td>
<td>106*</td>
<td></td>
</tr>
<tr>
<td>1986</td>
<td></td>
<td>817*</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* From test on 10/3/86

From WUE until 6/5/85 from Jerry Weaver @ Agri-Affiliates

Indicate Year of Record with (*)

Source of Information: Staggord Files

Crops Irrigated: this year alfalfa Year of record alfalfa

REMARKS: This development has had several owners since its inception. In 1975, all of the records have been either destroyed or lost and the systems have been updated and/or changed over the years. Connecticut Sawyers' entry as owner in 1983 has resulted in the records shown being much with system reworking to even consist.

Irrigated pasture. Therefore, it would seem reasonable to change A.E. of Hays from 1983 to the present.

Person present at test: Kent Naber

Irrigation Manager

Water Use Correspondent: Lyle Kibble

Spearville, KS 67870 (316) 835-2580

Conducted by: Robert Shick

Date: 10/4/86

Approved by: N. W. F. P.E.

Date: 12/21/86
COLLINS METER TEST

Collins Meter No. 1-85  Meter Calibration Factor 982.6
Pipe Inside Diameter (inches) 7.34  Flow Rate Factor 145.4
Test Pressure (psi) 59  Test RPM, Pump 1653
Description of Test Location In vertical pipe at pivot

TEST DATA: QL Check, Initial 6.18  Reversed 6.17

<table>
<thead>
<tr>
<th>Meter Setting From Center of Pipe</th>
<th>Velocity Left Side of Pipe (or Front Side if Vertical Test)</th>
<th>Velocity Right Side of Pipe (or Back Side if Vertical Test)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 1/6</td>
<td>5.99 5.94</td>
<td>5.93 6.02</td>
</tr>
<tr>
<td>2 3/4</td>
<td>5.63 5.66</td>
<td>5.73 6.00</td>
</tr>
<tr>
<td>3 9/6</td>
<td>5.50 5.06</td>
<td>5.49 5.63</td>
</tr>
</tbody>
</table>

Average Velocity of Water = Sum of Vel. ÷ 12 = 5.715

Corrected Ave. Vel. = (Ave. Vel.) x (Calibration Factor) = 5.715 x 0.9826 = 5.62

Flow Rate = (Corrected Ave. Vel.) x (Flow Rate Factor) = 5.62 x 145.4 = 817 GPM

WATER RESOURCES
RECEIVED
Received By: JUN 01 1987

PUMPING PLANT TESTING, INC.

Professional Engineer

KS DEPT OF AGRICULTURE HAYS003872

JUN 29 2015

Page 22 of 35
KANSAS STATE BOARD OF AGRICULTURE  
Division of Water Resources  

MEMORANDUM

To: Files  

From: Larry M. Sheets  

Date: March 27, 1987  

Re: Appropriation of Water  
File No. 22,345

The Field Inspection Report for the above referenced file, conducted under contract by Pumping Plant Testing, has been reviewed. It meets the requirements specified in the Scope of Work. Based on the 1984 Water Use Report, 1,800 hours of pumping the well near the center of the Southeast Quarter (SE¼) of Section 15, Township 26 South, Range 20 West, Edwards County, Kansas, provided 270 acre-feet of water for irrigating 106 acres or 2.55 acre-feet per acre. The certificate of appropriation has been drafted for the pumping rate rounded up to 820 gallons per minute and a reasonable quantity for the acres irrigated (106 x 1.5 = 159).

Larry M. Sheets  
Hydrologist

LMS:jt
Kansas State Board of Agriculture  
Division of Water Resources  

ADMINISTRATIVE POLICY  
No. 86-8

Subject: Allowable Rates of Diversion and Maximum Annual Quantities for Irrigation Use - Permits and Approvals

Reference: K.S.A. 82a-708a and K.A.R. 5-3-1

Date: November 5, 1986

History: Effective November 5, 1986

Approved by: David L. Pope  
Chief Engineer

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

<table>
<thead>
<tr>
<th>Area, Place of use</th>
<th>Max. Allowable Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>up to 10 acres</td>
<td>450 g.p.m. 450°F</td>
</tr>
<tr>
<td>10 - 40 acres</td>
<td>(+) 450 g.p.m. 550°F</td>
</tr>
<tr>
<td>40 - 120 acres</td>
<td>(+) 8 g.p.m./acre 700°F</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;

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

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

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

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

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

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

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

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

That if an applicant can show that his or her system design is reasonable for the use intended and approval of the proposed rate and/or maximum annual quantity will not impair any senior water right or prejudicially and unreasonably affect the public interest, the Chief Engineer may waive the above guidelines. Documentation shall be placed in the file clearly demonstrating any exceptions to the above policy.
Proposed Place of Use - City of Russell

PLSS Sections

EXHIBIT L
### MUNICIPAL (PUBLIC WATER SUPPLY) APPLICATION SUPPLEMENTAL INFORMATION SHEET

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

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

<table>
<thead>
<tr>
<th>Column 1</th>
<th>Column 2</th>
<th>Column 3</th>
<th>Column 4</th>
<th>Column 5</th>
<th>Column 6</th>
<th>Column 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw Water Diverted Under Your Rights</td>
<td>Water Purchased From All Sources</td>
<td>Water Sold to Other Public Water Suppliers</td>
<td>Water Sold to Your Industrial, Stock, and Bulk Customers</td>
<td>Water Sold to Your Residential and Commercial Customers</td>
<td>Other Water</td>
<td>Remaining Water Used (See Below Explanation)</td>
</tr>
<tr>
<td>684,599,000</td>
<td>10,806,000</td>
<td>595,254,000</td>
<td>16,327,000</td>
<td>62,172,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL WATER = Columns 1 + 2**

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

**UNACCOUNTED FOR WATER**

---

**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 farms using at least 200,000 gallons of water per year.

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

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

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

---

**UNACCOUNTED FOR WATER**

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

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

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 Water</td>
<td>Remaining Water Used (See Above Explanation)</td>
</tr>
<tr>
<td>20 years ago</td>
<td>592,323,000</td>
<td>5,029,000</td>
<td>469,314,000</td>
<td>5,155,000</td>
<td>112,825,000</td>
<td></td>
</tr>
<tr>
<td>15 years ago</td>
<td>780,527,000</td>
<td>10,619,000</td>
<td>587,965,000</td>
<td>10,470,000</td>
<td>171,473,000</td>
<td></td>
</tr>
<tr>
<td>10 years ago</td>
<td>708,926,000</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>693,600,000</td>
<td>13,537,000</td>
<td>581,900,000</td>
<td>19,362,000</td>
<td>114,383,000</td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL WATER = Columns 1 + 2**

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

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

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

<table>
<thead>
<tr>
<th>Year 5</th>
<th>Column 1 Raw Water Diverted Under Your Rights</th>
<th>Column 2 Water Purchased From All Sources</th>
<th>Column 3 Water Sold to Other Public Water Suppliers</th>
<th>Column 4 Water Sold to Your Industrial, Stock, and Bulk Customers</th>
<th>Column 5 Water Sold to Your Residential and Commercial Customers</th>
<th>Column 6 Other Metered Water</th>
<th>Remaining Water Used (See Explanation on other side) Column 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>753,014,900</td>
<td></td>
<td></td>
<td>11,886,600</td>
<td>854,779,400</td>
<td>17,959,700</td>
<td>68,389,200</td>
<td></td>
</tr>
<tr>
<td>828,316,300</td>
<td></td>
<td></td>
<td>13,075,260</td>
<td>720,257,340</td>
<td>19,755,670</td>
<td>75,228,120</td>
<td></td>
</tr>
<tr>
<td>911,148,029</td>
<td></td>
<td></td>
<td>14,382,786</td>
<td>792,283,074</td>
<td>21,731,237</td>
<td>82,750,932</td>
<td></td>
</tr>
<tr>
<td>1,002,262,832</td>
<td></td>
<td></td>
<td>15,821,055</td>
<td>871,511,381</td>
<td>23,804,361</td>
<td>91,028,025</td>
<td></td>
</tr>
</tbody>
</table>

TOTAL WATER = Columns 1 + 2

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

UNACCOUNTED FOR WATER

### SECTION 4: POPULATION AND SERVICE CONNECTIONS

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

**Past Population - Provide Information Below:**

(Census Bureau Information)

<table>
<thead>
<tr>
<th>Last 20 Years</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 years ago</td>
<td>17,836</td>
</tr>
<tr>
<td>15 years ago</td>
<td>18,750</td>
</tr>
<tr>
<td>10 years ago</td>
<td>20,013</td>
</tr>
<tr>
<td>5 years ago</td>
<td>20,106</td>
</tr>
<tr>
<td>Last Year</td>
<td>21,038</td>
</tr>
</tbody>
</table>

Provide number of current active service connections:

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

\[
\text{Amount of water in Columns 5, 6, and 7} + 21,038 + 365 \text{ Days/Year} = \frac{873,753,000}{88} \text{ GALLONS PER PERSON PER DAY.}
\]

### SECTION 6: AREA TO BE SERVED

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

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

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

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

**NOTE:** 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>327,288,100</td>
<td>0</td>
<td>0</td>
<td>105,296,000</td>
<td>108,743,000</td>
<td>19,944,000</td>
<td>83,306,100</td>
</tr>
</tbody>
</table>

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

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

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

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

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

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

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

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

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

**UNACCOUNTED FOR WATER**

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

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

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

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

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

### 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></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15 years ago</td>
<td>373,767,000</td>
<td>0</td>
<td>0</td>
<td>171,928,220</td>
<td>115,864,670</td>
<td>18,687,850</td>
</tr>
<tr>
<td>10 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>5 years ago</td>
<td>375,790,000</td>
<td>0</td>
<td>0</td>
<td>144,277,000</td>
<td>123,343,000</td>
<td>18,807,000</td>
</tr>
</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</td>
<td>Water Purchased</td>
<td>Water Sold to</td>
<td>Water Sold to Your</td>
<td>Water Sold to Your</td>
<td>Other Metered Water</td>
<td>Remaining Water Used</td>
</tr>
<tr>
<td>Under Your Rights</td>
<td>From All Sources</td>
<td>Other Public Water</td>
<td>Industrial, Stock, and</td>
<td>Residential and</td>
<td>(See Explanation on other side)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Suppliers</td>
<td>Bulk Customers</td>
<td>Commercial Customers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 5</td>
<td>366,346,512</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>196,102,092</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>204,170,080</td>
<td>137,582,887</td>
<td>17,753,921</td>
</tr>
<tr>
<td><strong>TOTAL WATER = Columns 1 + 2</strong></td>
<td><strong>ACCOUNTED FOR WATER = Columns 3 + 4 + 5 + 6</strong></td>
<td><strong>UNACCOUNTED FOR WATER</strong></td>
<td><strong>(See Explanation on other side)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### SECTION 4: POPULATION AND SERVICE CONNECTIONS

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

**Past Population - Provide Information Below:**

(Census Bureau Information)

<table>
<thead>
<tr>
<th>LAST 20 YEARS</th>
<th>POPULATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 years ago</td>
<td>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:

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

**Total: 2,448**

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

Calculate your gallons per person per day.

\[
\text{Water in Columns 5, 6, and 7} \times \text{Population} + 365 \text{ Days/Year} = \text{Gallons per Person per Day}
\]

\[
\frac{1,991,000}{4,475} \div 365 \text{ Days/Year} = 135.9 \text{ GALLONS PER PERSON PER DAY.}
\]

### 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 submit such additional information you believe will assist in informing the Division of Water Resources of your request.