

**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 26<sup>th</sup>, 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 29<sup>th</sup>, 2015**. Thus, the June 29<sup>th</sup> date is the correct date and time received by the **Division of Water Resources**.

David. W. Barfield, P.E.

Submit To: CHIEF ENGINEER  
Division of Water Resources  
Kansas Department of Agriculture  
1320 Research Park Drive  
Manhattan, Kansas 66502  
http://agriculture.ks.gov/dwr

**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**

JUN 26 2015  
4:18  
Chief Engineer  
Division of Water Resources  
Kansas Dept. of Agriculture  
  
State of Kansas

**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 ~~David W. Barfield, P.E.~~
- (Check one or more)  Place of Use  
 Point of Diversion  
 Use Made of Water

JUN 28 2015  
4:18  
Chief Engineer  
Division of Water Resources  
Kansas Dept. of Agriculture

~~WATER RESOURCES  
RECEIVED  
JUN 29 2015  
8:21  
KS DEPT OF AGRICULTURE~~

File No. 22,338 Circle 28.

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.	<u>2</u>	GMD	<u>5</u>	Meets K.A.R. 5-5-1	( <u>YES</u> / NO) Use	<u>IRR</u>	Source
Code	<u>C-3</u>	Fee \$	<u>700</u>	TR #		Receipt Date	<u>6/22/15</u>
						By	<u>KAB</u> Date <u>6/29/15</u>
						Check #	<u>058328</u>

of 21000-

15053309

SCANNED

6/30/2015 UCM

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

Sec.	Twp.	Range	NE¼				NW¼				SW¼				SE¼				TOTAL ACRES		
			NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼			
10-T26S-R20W			Lot 7 46	Lot 6 32													19	10			107
11-T26S-R20W								2													2

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

Sec.	Twp.	Range	NE¼				NW¼				SW¼				SE¼				TOTAL ACRES		
			NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼			
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

Sec.	Twp.	Range	NE¼				NW¼				SW¼				SE¼				TOTAL ACRES
			NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	
			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

Sec.	Twp.	Range	NE¼				NW¼				SW¼				SE¼				TOTAL ACRES
			NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	
			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

- 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 7 Quarter of the \_\_\_\_\_ Quarter of the \_\_\_\_\_ Quarter  
 of Section 10, Township 26 South, Range 20 (~~E~~/W),  
 in Edwards County, Kansas, 3,152 feet North 1,043 feet West of Southeast corner of section.  
 Authorized Rate 950 gpm Authorized Quantity 89 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 SW Quarter of the NE Quarter of the SE Quarter  
 of Section 10, Township 26 South, Range 20 (~~E~~/W),  
 in Edwards County, Kansas, 1,863 feet North 883 feet West of Southeast corner of section.  
 Proposed Rate 950 gpm Proposed Quantity 141.12 a/f  
 This point is:  Additional Well  Geo Center List other water rights that will use this point 22,339; 27,760

9. **Presently authorized point of diversion:**  
 One in the Lot 7 Quarter of the \_\_\_\_\_ Quarter of the \_\_\_\_\_ Quarter  
 of Section 10, Township 26 South, Range 20 (~~E~~/W),  
 in Edwards County, Kansas, 2,705 feet North 703 feet West of Southeast corner of section.  
 Authorized Rate 785 gpm Authorized Quantity 73 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 SW Quarter of the NE Quarter of the SE Quarter  
 of Section 10, Township 26 South, Range 20 (~~E~~/W),  
 in Edwards County, Kansas, 1,863 feet North 883 feet West of Southeast corner of section.  
 Proposed Rate 950 gpm Proposed Quantity 141.12 a/f  
 This point is:  Additional Well  Geo Center List other water rights that will use this point 22,339; 27,760

10. **Presently authorized point of diversion:**  
 One in the \_\_\_\_\_ Quarter of the \_\_\_\_\_ Quarter of the \_\_\_\_\_ Quarter  
 of Section \_\_\_\_\_, Township \_\_\_\_\_ South, Range \_\_\_\_\_ (~~E~~/W),  
 in \_\_\_\_\_ County, Kansas, \_\_\_\_\_ feet North \_\_\_\_\_ feet West of Southeast corner of section.  
 Authorized Rate \_\_\_\_\_ Authorized Quantity \_\_\_\_\_  
 (DWR use only: Computer ID No. \_\_\_\_\_ GPS \_\_\_\_\_ feet North \_\_\_\_\_ feet West)  
 This point will not be changed  This point will be changed as follows:  
**Proposed point of diversion: (Complete only if change is requested)**  
 One in the \_\_\_\_\_ Quarter of the \_\_\_\_\_ Quarter of the \_\_\_\_\_ Quarter  
 of Section \_\_\_\_\_, Township \_\_\_\_\_ South, Range \_\_\_\_\_ (E/W),  
 in \_\_\_\_\_ County, Kansas, \_\_\_\_\_ feet North \_\_\_\_\_ feet West of Southeast corner of section.  
 Proposed Rate \_\_\_\_\_ Proposed Quantity \_\_\_\_\_  
 This point is:  Additional Well  Geo Center List other water rights that will use this point \_\_\_\_\_

- 11. Describe the current condition of and future plans for any point(s) of diversion which will no longer be used. \_\_\_\_\_  
 See paragraph 11 of the cover letter.

IF MORE SPACE IS NEEDED, ATTACH ADDITIONAL SHEETS AS NECESSARY

WATER RESOURCES RECEIVED

JUN 29 2015

- 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](http://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 1/2 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 1/2 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) 1/2 mile downstream and 1/2 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.

WATER RESOURCES RECEIVED

JUN 29 2015

IF MORE SPACE IS NEEDED, ATTACH ADDITIONAL SHEETS AS NECESSARY

KS DEPT 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, 20 15.

[Signature]  
\_\_\_\_\_  
(Owner)

\_\_\_\_\_  
(Spouse)

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

\_\_\_\_\_  
(Please Print)

\_\_\_\_\_  
(Owner)

\_\_\_\_\_  
(Spouse)

\_\_\_\_\_  
(Please Print)

\_\_\_\_\_  
(Please Print)

\_\_\_\_\_  
(Owner)

\_\_\_\_\_  
(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.

**WATER RESOURCES  
RECEIVED**

**JUN 29 2015**

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

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

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

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

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

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

\_\_\_\_\_  
(Owner)

\_\_\_\_\_  
(Spouse)

City of Russell, Kansas, by Jon Quinday, City Manager  
(Please Print)

\_\_\_\_\_  
(Please Print)

\_\_\_\_\_  
(Owner)

\_\_\_\_\_  
(Spouse)

\_\_\_\_\_  
(Please Print)

\_\_\_\_\_  
(Please Print)

\_\_\_\_\_  
(Owner)

\_\_\_\_\_  
(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, 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.

**WATER RESOURCES  
RECEIVED**

**JUN 29 2015**

### Proposed Rate and Quantity

The Cities are requesting a total of 141.12 acre-feet and 950 gpm from the wells associated with this water right, all of which will be diverted from new point of diversion L, as shown on Exhibit J. When combined with existing wells from other water rights, new point of diversion L will have a cumulative total of 426.24 acre-feet and 2,430 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 116.64 acre-feet to municipal use.<sup>1</sup> As discussed below, 108 approved acres irrigated during the perfection multiplied by the Edwards County NIR for corn of 1.08 acre-feet per acre equals 116.64 acre-feet.<sup>2</sup>

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

#### *Quantity authorized and perfected*

The permit was issued on March 19, 1976, granting the applicant the right to divert up to 196 acre-feet annually at a rate not to exceed 1,000 gallons per minute for irrigation use<sup>4</sup> on 108 acres in Sections 10 and 11-T26S-R20W.<sup>5</sup> The certificate further limited the wells to a rate of 950 gallons per minute when operated simultaneously.<sup>6</sup>

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.”<sup>7</sup>

The Field Inspection Reports indicate that all of the 196 acre-feet authorized by the permit were lawfully perfected.

- 167 acre-feet<sup>8</sup> and 113.2 acre-feet<sup>9</sup> (280.2 acre-feet) were applied to 108 approved acres in Sections 10 and 11-T26S-R20W.

<sup>1</sup> K.A.R. 5-5-9(a) and (a)(1).

<sup>2</sup> K.A.R. 5-5-12, NIR Requirements.

<sup>3</sup> K.A.R. 5-5-9(b).

<sup>4</sup> Permit, HAYS003231, Ex. A.

<sup>5</sup> Application, HAYS003222, Ex. B.

<sup>6</sup> Certificate, HAYS003242, Ex. C.

<sup>7</sup> March 19, 1976, letter (emphasis added), HAYS003230, Ex. D.

<sup>8</sup> FIR, HAYS003207, Ex. E.

<sup>9</sup> FIR, HAYS003213, Ex. F.

WATER RESOURCES  
RECEIVED

JUN 29 2015



While the certificate limits the total quantity to 162 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.<sup>10</sup>

Since the perfection period has expired, the "authorized quantity" for this water right is the 196 acre-feet actually perfected even though it exceeds the certified quantity.

*An alternative approach*

DWR's use of the NIR of 1.08 feet of water for corn is based on its maximum gross irrigation requirement of 1.5 acre-feet per acre.<sup>11</sup> 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 acre-feet legally applied during the perfection period percolates back to the aquifer, then 72%, or 141.12 acre-feet, should be available for conversion to municipal use. This is less than the 196 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 141.12 acre-feet for municipal use.

---

<sup>10</sup> Certificate, HAYS003242, Ex. C; Doug Bush Memo dated August 19, 1994, HAYS003234, Ex. G; and *Clawson v. Kansas Dept. of Agriculture, Div. of Water Resources*, 49 Kan. App. 2d 789, 315 P.3d 896 (2013).

<sup>11</sup> Administrative Policy No. 86-8, dated Nov. 5, 1986, Ex. H, stating that: "In that area of Kansas located between the Range 5 East/Range 6 East Line and the Range 20 West/Range 21 West line, the maximum allowable quantity shall not exceed an average of 1.50 acre-feet per acre irrigated." See also, K.A.R. 5-3-24 and Doug Bush Memo dated August 19, 1994, HAYS003234, Ex. G.

THE STATE



OF KANSAS

STATE BOARD OF AGRICULTURE  
Roy Freeland, Secretary

DIVISION OF WATER RESOURCES  
Guy E. Gibson, Chief Engineer

**APPROVAL OF APPLICATION  
and  
PERMIT TO PROCEED**

(This Is Not a Certificate of Appropriation)

This is to certify that I have examined Application No. 22,338 of the applicant

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

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

1. That the priority date assigned to such application is May 2, 1974.
2. That the water sought to be appropriated shall be used for irrigation on the land described in the application.

3. That the source from which the appropriation is made shall be from ground water in the drainage basin of the Arkansas River to be withdrawn by means of two (2) wells: one well in the Southwest Quarter of the Southeast Quarter of the Northeast Quarter (SW $\frac{1}{4}$  SE $\frac{1}{4}$  NE $\frac{1}{4}$ ) and one well in the Southeast Quarter of the Southeast Quarter of the Northeast Quarter (SE $\frac{1}{4}$  SE $\frac{1}{4}$  NE $\frac{1}{4}$ ) of Section 10, 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  
196 acre-feet

for any calendar year.

WATER RESOURCES  
RECEIVED

JUN 29 2015

KS DEPT OF AGRICULTURE

RECEIVED

(OVER)

MAR 29 1976

MICROFILMED

HAYS003231

FIELD OFFICE  
DIVISION OF WATER RESOURCES  
STAFFORD

22338

5. That installation of works for diversion of water shall be completed on or before December 31, 19 77. 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, 19 81.

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 19 76

WATER RESOURCES RECEIVED

JUN 29 2015

KS DEPT OF AGRICULTURE



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

HAYS003232



2



THE STATE OF KANSAS

STATE BOARD OF AGRICULTURE  
Roy Freeland, Secretary

DIVISION OF WATER RESOURCES  
Guy E. Gibson, Chief Engineer

*Handwritten notes:*  
22338  
sa

22,338

#28

NUMBER 19

APPLICATION FOR PERMIT TO  
APPROPRIATE WATER FOR BENEFICIAL USE

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

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

(Mr.)

(Mrs.)

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

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

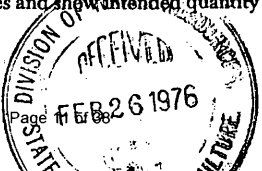
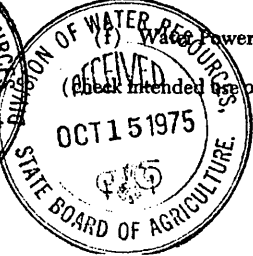
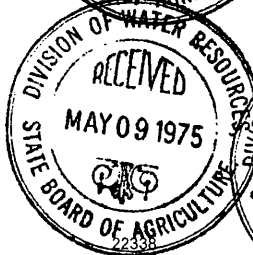
1. The quantity of water desired is in the amount of ~~XXXXXXXXXX~~ <sup>196</sup> ~~320~~ 320 acre feet per year, to be diverted at a maximum rate of 1000 gallons per minute (gallons per minute or cubic feet per second)

2. The location of the proposed wells or other works for diversion of water is in the center quarter of the ~~SW~~ quarter of section 10, township South Brown 26, range 2620W, in Edwards County, Kansas.

~~Location of second well can not be determined until test well is drilled~~  
3. The water is intended to be appropriated for:

*Handwritten:*  
1 well in the SW SE NE  
1 well in the SE SE NE  
Amount

- (a) Domestic use ( ) \_\_\_\_\_
- (b) Municipal use ( ) \_\_\_\_\_
- (c) Irrigation use (X) <sup>196</sup> ~~320~~ acre ft./yr. - 1000 gals./min.
- (d) Industrial use ( ) \_\_\_\_\_
- (e) Recreational use ( ) \_\_\_\_\_
- (f) Water Power use ( ) \_\_\_\_\_



MICROFILMED

RECEIVED

MAR 20 1976

WATER RESOURCES RECEIVED

JUN 29 2015

KS DEPT OF AGRICULTURE

DIVISION OF WATER RESOURCES HAYS0032215 STAFFORD

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

Sec. Twp. Range	NE $\frac{1}{4}$				NW $\frac{1}{4}$				SW $\frac{1}{4}$				SE $\frac{1}{4}$				Total
	NE $\frac{1}{4}$	NW $\frac{1}{4}$	SW $\frac{1}{4}$	SE $\frac{1}{4}$	NE $\frac{1}{4}$	NW $\frac{1}{4}$	SW $\frac{1}{4}$	SE $\frac{1}{4}$	NE $\frac{1}{4}$	NW $\frac{1}{4}$	SW $\frac{1}{4}$	SE $\frac{1}{4}$	NE $\frac{1}{4}$	NW $\frac{1}{4}$	SW $\frac{1}{4}$	SE $\frac{1}{4}$	
10 26 20	<del>40</del>	<del>40</del>	<del>40</del>	<del>40</del>													160
	<i>Lot 7</i>	<i>Lot 8</i>															
10 26 20	7	5	27	39									19	10			106
11 26 20							2										2
<b>108</b>																	

Owner of Land—NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

Sec. Twp. Range	NE $\frac{1}{4}$				NW $\frac{1}{4}$				SW $\frac{1}{4}$				SE $\frac{1}{4}$				Total
	NE $\frac{1}{4}$	NW $\frac{1}{4}$	SW $\frac{1}{4}$	SE $\frac{1}{4}$	NE $\frac{1}{4}$	NW $\frac{1}{4}$	SW $\frac{1}{4}$	SE $\frac{1}{4}$	NE $\frac{1}{4}$	NW $\frac{1}{4}$	SW $\frac{1}{4}$	SE $\frac{1}{4}$	NE $\frac{1}{4}$	NW $\frac{1}{4}$	SW $\frac{1}{4}$	SE $\frac{1}{4}$	

WATER RESOURCES RECEIVED

Owner of Land—NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

JUN 29 2015

Sec. Twp. Range	NE $\frac{1}{4}$				NW $\frac{1}{4}$				SW $\frac{1}{4}$				SE $\frac{1}{4}$				Total
	NE $\frac{1}{4}$	NW $\frac{1}{4}$	SW $\frac{1}{4}$	SE $\frac{1}{4}$	NE $\frac{1}{4}$	NW $\frac{1}{4}$	SW $\frac{1}{4}$	SE $\frac{1}{4}$	NE $\frac{1}{4}$	NW $\frac{1}{4}$	SW $\frac{1}{4}$	SE $\frac{1}{4}$	NE $\frac{1}{4}$	NW $\frac{1}{4}$	SW $\frac{1}{4}$	SE $\frac{1}{4}$	

KS DEPT OF AGRICULTURE

HAYS003222

7. The works for diversion of water will consist of two wells with two pumps  
~~one well with one pump~~ for one circle sprinkle  
irrigation system (two motors)

(wells, pumps, etc.)  
and will be completed by July of 1974  
(Date)

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

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

The plat or aerial photograph should show

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

10. List and describe other applications filed or vested rights held by applicant:

Irrigation wells and land is in the process of being bought 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.

(Applicant)

By Johnny Carson MGR.  
(Agent or Officer)

MICROFILMED

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.

M1-539



2-72-10M SETS

WATER RESOURCES  
RECEIVED

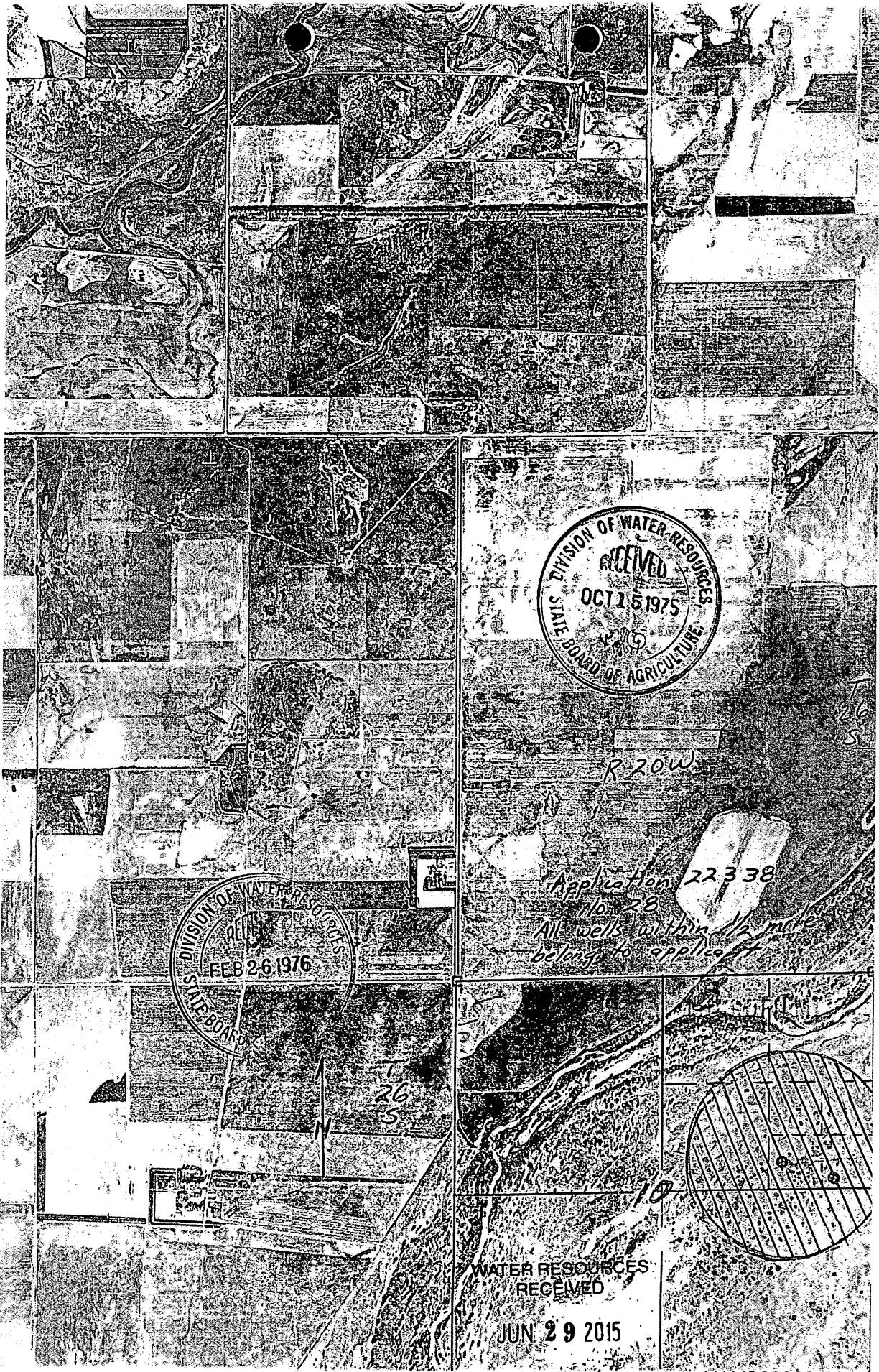
JUN 29 2015

KS DEPT OF AGRICULTURE

RECEIVED

MAR 29 1976

HAYS003223



DIVISION OF WATER RESOURCES  
RECEIVED  
OCT 15 1975  
STATE BOARD OF AGRICULTURE

DIVISION OF WATER RESOURCES  
RECEIVED  
FEB 26 1976  
STATE BOARD OF AGRICULTURE

R-20W

Application 22338  
No. 28  
All wells within 1/2 mile  
belong to applicant

26  
5

10

WATER RESOURCES  
RECEIVED

JUN 29 2015

KS DEPT OF AGRICULTURE

HAYS003224

THE STATE



OF KANSAS

STATE BOARD OF AGRICULTURE  
Phillip A. Fishburn, *Acting Secretary*

DIVISION OF WATER RESOURCES  
David L. Pope, *Chief Engineer*

DUPLICATE COPY

CERTIFICATE OF APPROPRIATION

FOR BENEFICIAL USE OF WATER

WATER RIGHT, File No. 22,338

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 7 of Section 10, more particularly described as being near a point 3,152 feet North and 1,043 feet West of the Southeast corner of said section, at a diversion rate not in excess of 950 gallons per minute (2.11 c.f.s.) and a quantity not to exceed 89 acre-feet of water per calendar year, and

one (2) well located in Lot 7 of Section 10, more particularly described as being near a point 2,705 feet North and 730 feet West of the Southeast corner of said section, at a diversion rate not in excess of 785 gallons per minute (1.74 c.f.s.) and a quantity not to exceed 73 acre-feet of water per calendar year,

both in Township 26 South, Range 20 West, Edwards County, Kansas,

for irrigation use on the following described property:

- 46 acres in Lot 7 (E $\frac{1}{2}$  NE $\frac{1}{4}$ ),
- 32 acres in Lot 6 (W $\frac{1}{2}$  NE $\frac{1}{4}$ ),
- 19 acres in the Northeast Quarter of the Southeast Quarter (NE $\frac{1}{4}$  SE $\frac{1}{4}$ ),
- 10 acres in the Northwest Quarter of the Southeast Quarter (NW $\frac{1}{4}$  SE $\frac{1}{4}$ ),

a total of 107 acres in Section 10,

- 02 acres in the Southwest Quarter of the Northwest Quarter (SW $\frac{1}{4}$  NW $\frac{1}{4}$ ) of Section 11,
- all in Township 26 South, Range 20 West, Edwards County, Kansas.

WATER RESOURCES  
RECEIVED

JUN 29 2015

KS DEPT OF AGRICULTURE

RECEIVED

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 950 gallons per minute (2.11 c.f.s.) for irrigation use on the property described herein.

HAYS003242  
SCANNED



DUPLICATE COPY

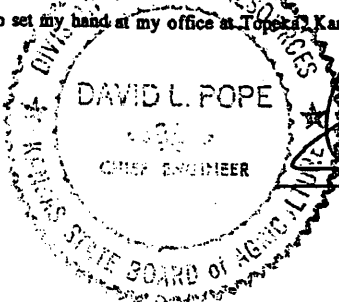
The appropriator shall maintain in an operating condition, satisfactory to the Chief Engineer, all check valves installed for preventing chemical or other foreign substance likely to cause pollution of the water supply.

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 by March 1 following the end of the previous calendar year.

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 1st day of Nov., 1994.

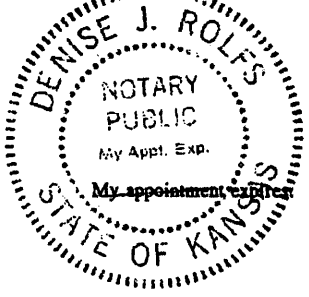


Handwritten signature of David L. Pope, P.E.

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 1st day of Nov., 1994 by David L. Pope, P.E., Chief Engineer, Division of Water Resources, Kansas State Board of Agriculture.



Signature: Denise J. Roles  
Notary Public

3-1-98

(Record in the Office of Register of Deeds in the county or counties wherein the point of diversion is located)

WATER APPROPRIATION CERTIFICATE

No. 21835

STATE OF KANSAS

Water Right, File No. 22,338

STATE OF KANSAS,

\_\_\_\_\_ COUNTY, ss.

Filed for record this \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_

Page 10 of 38

at \_\_\_\_\_ o'clock \_\_\_\_\_ m. and \_\_\_\_\_

recorded in Book \_\_\_\_\_ Page \_\_\_\_\_

Fee \$ \_\_\_\_\_

Register of Deeds.

WATER RESOURCES RECEIVED

JUN 29 2015

KS DEPT OF AGRICULTURE

HAYS003243

SCANNED

**EXHIBIT**

22338

**D**

E-N<sup>2</sup>

March 19, 1976

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

ATTENTION: Mr. Johnny Carson, Manager

Re: Appropriation of Water  
Application No. 22,338

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,

WATER RESOURCES  
RECEIVED

JUN 29 2015

Riley M. Dixon  
Hydrologist

KS DEPT OF AGRICULTURE

RMD:GEE:ee1

Encs.

RECEIVED MICROFILMED  
HAYS003230

MAR 29 1976

**EXHIBIT**  
22338  
**E**

DIVISION OF WATER RESOURCES—KANSAS STATE BOARD OF AGRICULTURE  
**FIELD INSPECTION**



- Partial
- Full
- Re-Test

Field Office No. 2  
G.M.D. No. 5

Test 1 of 2 Diversion points County Edward

Application No. 22338 Inspection Date 10/15/87 Firm/Field Office Pumping Plant Testing, Inc (Ebert Klassen)

Current Landowner Connecticut General Life Ins. Co Agri. Associates Phone No. (308) 534-9240

Address Box 1162, North Platte, NE 69103 Attn: Jerry Weaver  
 Additional landowners and addresses identified in remarks section.

Water Use Classification: ( ) Domestic ( ) Industrial (X) Irrigation ( ) Municipal  
( ) Recreation ( ) Stockwatering ( ) Water Power

Source:  
(X) Groundwater ( ) Surface Water Basin/Stream Arkansas River

Authorized Point of Diversion: SW 1/4, SE 1/4, NE 1/4 Sec. 10, T. 26, R. 20, ID No. 4  
Approximately \_\_\_\_\_ ft. North and \_\_\_\_\_ ft. West of SE corner of Sec. \_\_\_\_\_

Actual Point of Diversion: SW 1/4, SE 1/4, NE 1/4 Sec. 10, T. 26, R. 20  
Approximately 3152 ft. North and 1043 ft. West of SE corner of Sec. 10  
How were distances determined? Scaled off aerial photo (well #1)

"Approved" Quantity 196 AF "Approved" Diversion Rate 1000 g.p.m. (2.23 c.f.s.)

Priority Date May 2, 1974 Approval 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:**

S	T	R	NE 1/4				NW 1/4				SW 1/4				SE 1/4				TOTAL ACRES		
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE			
10	26	20	7	5	27	39											19	10			107
11	26	20								2											3
																					109

**LAND IRRIGATED—YEAR OF RECORD 1977**

S	T	R	NE 1/4				NW 1/4				SW 1/4				SE 1/4				TOTAL ACRES		
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE			
10	26	20	7.5	4.5	27	39											16	9			105
11	26	20								3											3
																					108

FEB 10 1995

**TESTED DIVERSION RATES**

Maximum C.P.M. \_\_\_\_\_ (c.f.s. \_\_\_\_\_) FIELD OFFICE 947 (c.f.s. 2.11)  
DIVISION OF WATER RESOURCES STAFFORD

**FOR D.W.R. USE ONLY**

Year of Record 1984 Extension of time needed: Yes ( ) No ( ) Attached? yes ( ) no ( )

Ac. Ft. Applied =  $962.5 \text{ hrs.} \times 947 \text{ g.p.m.} \times \frac{4.419}{24 \times 1000} = 161 \text{ AF}$

"Approved" Land irrigated 1.08 acres, with 161 AF = 1.54 AF/acre

Total AF (including overlapping Files) \_\_\_\_\_ (\_\_\_\_\_ AF/acre)

$1.5 \text{ AF} \div 2 \times 108 = 162 \text{ acres-feet}$

Pro-rate by rate:  $947 \text{ gpm.} + 791 \text{ gpm.} = 1728 \text{ gpm.}$   $947 \text{ gpm.} \div 1728 \text{ gpm.} = 55\%$

$55\% \times 162 \text{ A.F.} = 89 \text{ A.F.}$

Perfected Rate 950 g.p.m. (2.11 c.f.s.) Perfected Quantity 89 AF

Completed by D.F.B. 8-19-94

**WATER RESOURCES RECEIVED**  
**JUN 29 2015**

KS DEPT OF AGRICULTURE

22338  
GENERAL INFORMATION ON IRRIGATION SYSTEM:

Center Pivot

Manufacturer Zimmatic Model 307 Serial No. 4782

Drive:  Water  Electric Length of Pivot Arm \_\_\_\_\_ acres irr. \_\_\_\_\_

Design Pressure-Pivot \_\_\_\_\_ p.s.i. Operating Pressure-Pivot \_\_\_\_\_ p.s.i.

Is there an End Gun?  yes ( ) no Is end gun operating during Test  yes ( ) no

End Gun Model Bain Bird 85 Rating \_\_\_\_\_ g.p.m. Orifice size \_\_\_\_\_

Gravity Irrigation

Items to be shown on sketch of system: 1) Layout of pipe, 2) sizes of pipe, 3) type of pipe, 4) set which was tested, 5) test location and 6) hydrant location.

Description \_\_\_\_\_

Other Type \_\_\_\_\_

Manufacturer \_\_\_\_\_ Model \_\_\_\_\_ Serial No. \_\_\_\_\_

unusual condition/other information \_\_\_\_\_

POWER UNIT INFORMATION:

Manufacturer Ford Model No. 428 HP \_\_\_\_\_

Serial No. \_\_\_\_\_ Fuel propane Rated RPM \_\_\_\_\_

PUMP INFORMATION:

Manufacturer Fairbanks Morse Model No. 12M Rated RPM \_\_\_\_\_

Serial No. N2W24400X Type Vertical Turbine No. stages 5

GEAR HEAD INFORMATION:

Manufacturer W.S. Motors Model No. 60 HP

Serial No. Q-9556-00-11-A20 Drive Right Angle Ratio 6:5

WELL INFORMATION:

Date Drilled Aug 1974 Original Depth 41 ft. Static Water Level When Drilled \_\_\_\_\_ ft.

Length of time well has ( ) operated  rested prior to measurement 14  days ( ) hrs

Is measurement tube required? ( ) yes  no Is measurement tube present ( ) yes  no

Depth to water \_\_\_\_\_ ft. below LSD.

ADDITIONAL REQUIREMENTS:

Is a meter required? ( ) yes  no Make of Meter \_\_\_\_\_

Meter Model No. \_\_\_\_\_ Serial No. \_\_\_\_\_ Size \_\_\_\_\_ KS DEPT OF AGRICULTURE

Is the meter installed properly? ( ) yes ( ) no Check Valve Present?  yes ( ) no

Injection port present?  yes ( ) no Operating an injection system? ( ) yes  no

Low Pressure Drain?  yes ( ) no Vacuum Breaker?  yes ( ) no

Plant Health Chemigation Report completed?  yes ( ) no

WATER RESOURCES RECEIVED

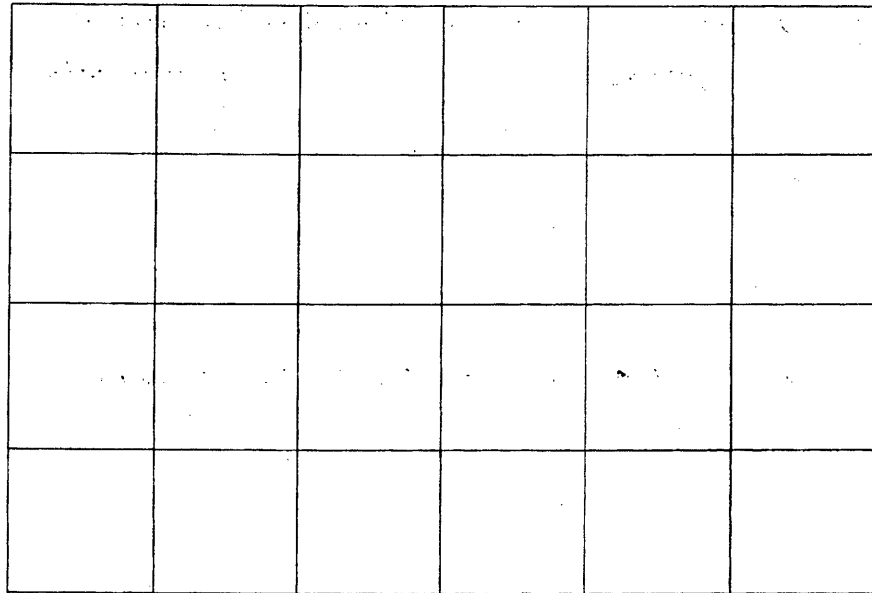
JUN 29 2015

SCANNED

HAYS003208

22338  
**SKETCH OF ACTUAL PLACE OF USE, LOCATION OF DIVERSION WORK, AND DISTRIBUTION SYSTEM.**  
 (Indicate distribution system layout and time of field test).

N  
 ↑  
 Scale  
 1" = \_\_\_\_\_ ft.



**TEST OF DIVERSION RATE:**

Location of test Horizontal pipe before pivot stand  
 Pipe Diameter (I.D.) 8 3/4 inches

**Test No. 1—Normal Conditions**

R.P.M. POWER UNIT 2036  
 R.P.M. PUMP UNIT 1697  
 Pressure at Pump 68 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  $K = 2.45 \times I.D.^2 =$  \_\_\_\_\_  $Q \text{ (gpm)} = VK$

Velocity (fps)	Velocity (fps)
1. _____	1. _____
2. _____	2. _____
3. _____	3. _____
4. _____	4. _____
5. _____	5. _____
6. _____	6. _____
7. _____	7. _____
8. _____	8. _____
9. _____	9. _____
10. _____	10. _____
Total _____	Total _____
Avg. _____	Avg. _____
G.P.M. _____	G.P.M. _____

**RECEIVED**  
 FEB 10 1995  
 FIELD SERVICE  
 DIVISION OF WATER SOURCES  
 STAFF OFFICE

**Propeller Meter Test**

Manufacturer \_\_\_\_\_ Model \_\_\_\_\_ Serial No. \_\_\_\_\_

Meter Diameter \_\_\_\_\_ inches

Ending _____ gal.	Ending _____ gal.
Beginning _____ gal.	Beginning _____ gal.
Difference _____ gal.	Difference _____ gal.
Time _____ min.	Time _____ min.
Rate _____ gpm	Rate _____ gpm

**WATER RESOURCES  
 RECEIVED**

**JUN 29 2015**

**SCANNED**

**KS DEPT OF AGRICULTURE**

**Other Flow Meter**

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

HAYS 0033208  
 MICROFILM

TABULATION OF WATER USE:

Year	Hours Pumped (hr)	Reported Pumping Rate (gpm)	Water Used (AF)	Acres Irrigated
1975	1512	1000		125
1976				
1977	1262	1000		108
1978				
1979				
1980	580	700		130
1981				
1982				
1983	PIK			
* 1984	1750*	947**		107*
1985	1600*	675*		107*
1986				
1987				
** obtained from test data				

Indicate Year of Record with (\*) Source of Information Stafford Files  
 Crops Irrigated: this year soybeans Year of record ?

FUEL RECORDS: (Complete only if water use information is not available)

Electricity Supplier \_\_\_\_\_  
 Meter Manufacturer \_\_\_\_\_ Type \_\_\_\_\_ Serial No. \_\_\_\_\_  
 K \_\_\_\_\_ watt/rev r \_\_\_\_\_ revolutions t \_\_\_\_\_ seconds  
 Rate =  $\frac{Kr \times 3.6}{t}$  = \_\_\_\_\_ kw/hr Hours =  $\frac{\text{kw-hr}}{\text{rate}}$  = \_\_\_\_\_

Other Fuels Type \_\_\_\_\_ Supplier \_\_\_\_\_  
 Rate =  $\frac{\text{Volume (test)}}{\text{time}}$  = \_\_\_\_\_  
 How was the test volume determined? \_\_\_\_\_

REMARKS: S&E ATTACHED SHEET "NOTES ON CHOOSING A YEAR OF RECORD"

WATER RESOURCES RECEIVED

JUN 29 2015

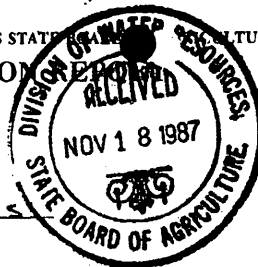
KS DEPT OF AGRICULTURE

Person present at test Lyle Kolbeck (name) tenant (relationship)  
 Water Use Correspondent Lyle Kolbeck Spearsville, KS 67876 (address) 316-385-2803 (phone number)  
 Conducted by Greg Ebert Date 10/15/87 HAYS003210  
 Approved by W.J. W. [Signature], P.E. Date 11/15/87

SCANNED

**EXHIBIT**  
22338  
**F**

DIVISION OF WATER RESOURCES - KANSAS STATE DEPARTMENT OF AGRICULTURE  
**FIELD INSPECTION**



- Partial
- Full
- Re-Test

Field Office No. 2  
G.M.D. No. 5

Test 2 of 2 Diversion points County Edwards

Application No. 22338 Inspection Date 10/15/87 Firm/Field Office Pumping Plant Testing Inc (Ebert Klassen)

Current Landowner Connecticut General Life Ins Co Agri Associates Phone No. (308) 534-9240

Address Box 1162 North Platte, NE 69103 Attn Jerry Weaver  
 Additional landowners and addresses identified in remarks section.

Water Use Classification: ( ) Domestic ( ) Industrial ( Irrigation) ( ) Municipal  
( ) Recreation ( ) Stockwatering ( ) Water Power

Source:  
( Groundwater) ( ) Surface Water Basin/Stream Arkansas River

Authorized Point of Diversion: SE 1/4, SE 1/4, NE 1/4 Sec. 10, T. 26, R. 20, ID No. 1  
Approximately \_\_\_\_\_ ft. North and \_\_\_\_\_ ft. West of SE corner of Sec. \_\_\_\_\_

Actual Point of Diversion: SW 1/4 SE 1/4 NE 1/4 (see additional sheet) Sec. 10, T. 26, R. 20  
Approximately 2705 ft. North and 730 ft. West of SE corner of Sec. 10

How were distances determined? Scaled off aerial photo (see additional sheet on points of diversion and section corners) (Wen #2)

"Approved" Quantity 176 AF "Approved" Diversion Rate 1000 g.p.m. (2.23 c.f.s.)

Priority Date May 2, 1974 Approval 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:**

S	T	R	NE 1/4				NW 1/4				SW 1/4				SE 1/4				TOTAL ACRES	
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE		
10	26	20	7	5	27	39										19	10			107
11	26	20							2											2
																				109

**LAND IRRIGATED—YEAR OF RECORD** 1984 (SEE ATTACHED SHEET)

S	T	R	NE 1/4				NW 1/4				SW 1/4				SE 1/4				TOTAL ACRES	
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE		
10	26	20	9.5	4.5	27	39										16	8			104
11	26	20							3											3
																				107

**RECEIVED**

**TESTED DIVERSION RATES**

FEB 10 1995

Maximum G.P.M. \_\_\_\_\_ (c.f.s. \_\_\_\_\_) FIELD OFFICE Normal G.P.M. 781 (c.f.s. 174)

DIVISION OF WATER RESOURCES  
STAFFORD  
FOR D.W.R. USE ONLY \*

Year of Record 1984 Extension of time needed: Yes ( ) No ( ) Attached? yes ( ) no ( )

Ac. Ft. Applied =  $787.5 \text{ hrs.} \times 781 \text{ g.p.m.} \times \frac{4.419}{24 \times 1000} = 113.2 \text{ AF}$

"Approved" Land irrigated 108 acres, with 114 AF = 1.05 AF/acre

Total AF (including overlapping files) \_\_\_\_\_ ( \_\_\_\_\_ AF/acre)

$1.5 \text{ A.F./ac} \times 108 \text{ acres} = 162 \text{ A.F.} \text{ plus } 108 \text{ acres} \times 947 \text{ g.p.m.} + 781 \text{ g.p.m.} = 1,728 \text{ g.p.m.} \text{ } 781 \text{ g.p.m.} \div 1,728 \text{ g.p.m.} = 45\% \times 162 \text{ A.F.} = 73 \text{ A.F.}$

Perfected Rate 785 g.p.m. (1.14 c.f.s.) Perfected Quantity 735003213 AF

DWR-102338 completed by BEF Page 22 of 38. 8-19-94 **MICROFILMED**

**WATER RESOURCES RECEIVED**  
**JUN 29 2015**

KS DEPT OF AGRICULTURE

SCANNED

22338  
GENERAL INFORMATION ON IRRIGATION SYSTEM:

Center Pivot

Manufacturer Zimmatic Model 307 Serial No. 4782

Drive:  Water  Electric Length of Pivot Arm \_\_\_\_\_ acres irr. 108

Design Pressure-Pivot \_\_\_\_\_ p.s.i. Operating Pressure-Pivot \_\_\_\_\_ p.s.i.

Is there an End Gun?  yes ( ) no Is end gun operating during Test  yes ( ) no

End Gun Model Rain Bird 85 Rating \_\_\_\_\_ g.p.m. Orifice size \_\_\_\_\_

Gravity Irrigation

Items to be shown on sketch of system: 1) Layout of pipe, 2) sizes of pipe, 3) type of pipe, 4) set which was tested, 5) test location and 6) hydrant location.

Description \_\_\_\_\_  
\_\_\_\_\_

Other Type \_\_\_\_\_

Manufacturer \_\_\_\_\_ Model \_\_\_\_\_ Serial No. \_\_\_\_\_

unusual condition/other information  
\_\_\_\_\_  
\_\_\_\_\_

POWER UNIT INFORMATION:

Manufacturer Ford Model No. 300 HP \_\_\_\_\_

Serial No. 08941 E-23-74 Fuel propane Rated RPM \_\_\_\_\_

PUMP INFORMATION:

Manufacturer Johnston Model No. \_\_\_\_\_ Rated RPM \_\_\_\_\_

Serial No. CF21225 Type Vertical Turbine No. stages \_\_\_\_\_

GEAR HEAD INFORMATION:

Manufacturer Randolph Model No. 70 B

Serial No. 73931 Drive Right Angle Ratio 1:1

WELL INFORMATION:

Date Drilled Nov 1974 Original Depth 37 ft. Static Water Level When Drilled \_\_\_\_\_ ft.

Length of time well has ( ) operated  rested prior to measurement 90 (X) days ( ) hrs

Is measurement tube required? ( ) yes  no Is measurement tube present ( ) yes  no

Depth to water 8 ft. below LSD.

ADDITIONAL REQUIREMENTS:

Is a meter required? ( ) yes  no Make of Meter \_\_\_\_\_

Meter Model No. \_\_\_\_\_ Serial No. \_\_\_\_\_ Size \_\_\_\_\_

Is the meter installed properly? ( ) yes ( ) no Check Valve Present?  yes ( ) no

Injection port present? ( ) yes ( ) no Operating an injection system? ( ) yes  no

Low Pressure Drain?  yes ( ) no Vacuum Breaker?  yes ( ) no

Plant Health Chemigation Report completed?  yes ( ) no

WATER RESOURCES  
RECEIVED

JUN 29 2015

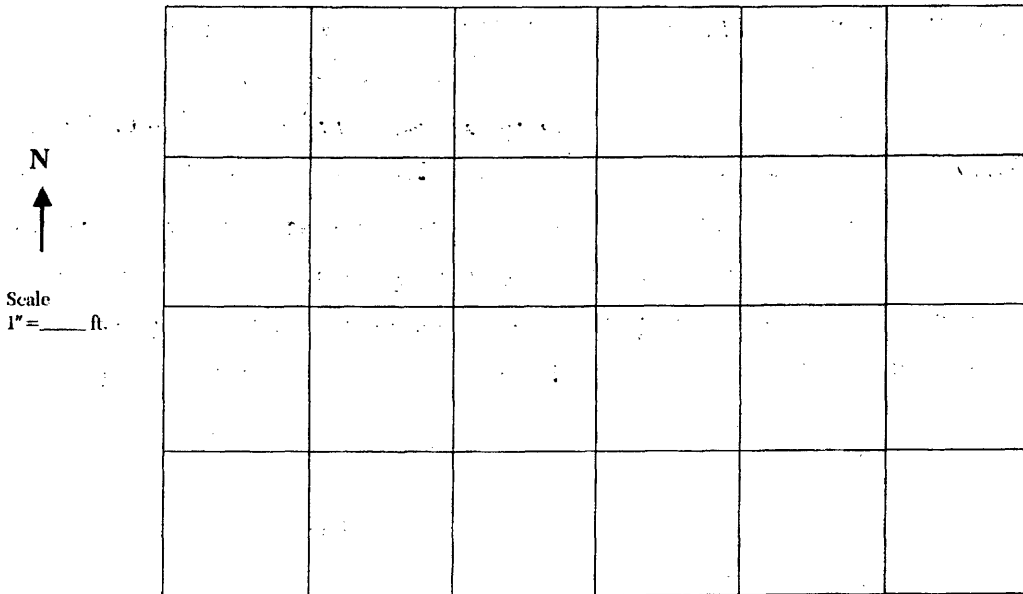
KS DEPT OF AGRICULTURE

SCANNED

HAYS003214



22338  
**SKETCH OF ACTUAL PLACEMENT, USE, LOCATION OF DIVERSION WORK, AND DISTRIBUTION SYSTEM.**  
 (Indicate distribution system layout at time of field test).



**TEST OF DIVERSION RATE:**

Location of test Horizontal Pipe at Center Pivot  
 Pipe Diameter (I. D.) 8 1/4 inches

Test No. 1—Normal Conditions

Test No. 2—Maximum Conditions

R.P.M. POWER UNIT 1135  
 R.P.M. PUMP UNIT 1135  
 Pressure at Pump 20 psi

R.P.M. POWER UNIT \_\_\_\_\_  
 R.P.M. PUMP UNIT \_\_\_\_\_  
 Pressure at Pump \_\_\_\_\_ psi

Jacuzzi Meter Test

Meter Identification No. \_\_\_\_\_

Area Constant  $K = 2.45 \times I.D.^2 =$  \_\_\_\_\_  $Q (gpm) = VK$

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

**RECEIVED**

FEB 10 1995

Total \_\_\_\_\_ Avg. \_\_\_\_\_ G.P.M. \_\_\_\_\_

DIVISION OF WATER RESOURCES  
STAFFORD

Total \_\_\_\_\_ Avg. \_\_\_\_\_ G.P.M. \_\_\_\_\_

Propeller Meter Test

Manufacturer \_\_\_\_\_ Model \_\_\_\_\_ Serial No. \_\_\_\_\_

Meter Diameter \_\_\_\_\_ inches

Ending _____ gal.	Ending _____ gal.
Beginning _____ gal.	Beginning _____ gal.
Difference _____ gal.	Difference _____ gal.
Time _____ min.	Time _____ min.
Rate _____ gpm	Rate _____ gpm

**WATER RESOURCES RECEIVED**

**JUN 29 2015**

KS DEPT OF AGRICULTURE

**SCANNED**

Other Flow Meter

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

HAYS003215

TABULATION OF WATER USE:

Year	Hours Pumped (hr)	Reported Pumping Rate (gpm)	Water Used (AF)	Acres Irrigated
1975	1512			125
‡ 1976				
1977	1262			108
‡ 1978				
‡ 1979				
‡ 1980				
‡ 1981				
‡ 1982				
1983	PIK			
* 1984	1750	* 781		107
1985	1600			107
1986				
1987		* 781		107 (from tenant)
‡ See Additional Sheet				
* From Test				

Indicate Year of Record with (\*) Source of Information Stafford Files  
 Crops Irrigated: this year soybeans Year of record ?

FUEL RECORDS: (Complete only if water use information is not available)

Electricity Supplier \_\_\_\_\_  
 Meter Manufacturer \_\_\_\_\_ Type \_\_\_\_\_ Serial No. \_\_\_\_\_  
 K \_\_\_\_\_ watt/rev r \_\_\_\_\_ revolutions t \_\_\_\_\_ seconds

Rate =  $\frac{Kr \times 3.6}{t}$  = \_\_\_\_\_ kw/hr Hours =  $\frac{kw-hr}{rate}$  = \_\_\_\_\_

Other Fuels Type Propane Supplier \_\_\_\_\_

Rate =  $\frac{Volume (test)}{time}$  = \_\_\_\_\_

How was the test volume determined? \_\_\_\_\_

REMARKS: Although this well is connected with the other well on this application, the two wells are not run at the same time. This is basically a standby well and is used in periods of drought or if the other well is having problems. The present tenant does not know if this well was used in the year of record, since he only has been the tenant for 2 years. According to the pumping records, it was used.

Person present at test Lyle Kolbeck (name) Tenant (relationship)  
 Water Use Correspondent Lyle Kolbeck (name) Sparrville, KS 67876 (address) (316) 385-2903 (phone number)  
 Conducted by Daniel Klassen Date 10-19-87 HAYS003216  
 Approved by (illegible signature), P.E. (signature) Date 11/15/87

WATER RESOURCES RECEIVED

JUN 29 2015

KS DEPT OF AGRICULTURE

SCANNED

MS DEPT OF AGRICULTURE  
HAYS 009217

WATER RESOURCES  
RECEIVED  
JUN 29 2015



34  
11-26-20  
2620



Application No. 22338  
as well as  
the water system  
to be used by applicant  
in the water system

2 Farms  
10-26-20

KANSAS STATE BOARD OF AGRICULTURE  
Division of Water Resources

MEMORANDUM

TO: Files

DATE: August 19, 1994

FROM: Douglas E. Bush

RE: Appropriation of Water  
File No. 22,338

The quantity for the Certificate of Appropriation was calculating by prorating the quantity by tested rates. The wells are now used together to run a pivot irrigation system. The quantity per each well was thus determined by that method. It appears from information obtained from Greg Ebert on August 18, 1994, who manages and has managed the ranch for the last several years, the wells are run together and that particular pivot is nozzled for 950 gpm. By prorating the quantity per well, the need for a limitation on quantity was eliminated. A limitation on rate was needed as the wells are used together at a combined tested rate of 950 gpm. The quantities were calculated as such:

Combined rate of both wells = 1,728 gpm

North well: 947 gpm divided by 1,728 gpm = 55% x 162 AF (maximum allowable for the irrigation of 108 acres x 1.5 AF per acre) = 89 AF.

South well: 781 gpm divided by 1,728 gpm = 45% x 162 AF (maximum allowable for the irrigation of 108 acres x 1.5 AF per acre) = 73 AF.

It appears some unauthorized land may be irrigated. The place of use associated with File No. 22,338 is located in some sand hills South of the Arkansas River. Section corners are almost impossible to locate. If any unauthorized land has been irrigated it would be hard to determine. The aerial photo supplied with the original application and the aerial photo supplied with the F.I.R. appear to be almost identical. Therefore no reduction of quantity took place or unauthorized land being noted on the draft certificate letter.

Water use was reviewed and water use shows in the recent past, therefore the water right appears to be active.

*Douglas E. Bush*

Douglas E. Bush  
Environmental Scientist

DEB:jt

RECEIVED

WATER RESOURCES  
RECEIVED

HAYS003234

JUN 29 2015

MICROFILMED

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 *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:

<u>Area, Place of use</u>	<u>Max. Allowable Rate</u>	
up to 10 acres	450 g.p.m.	450
10 - 40 acres	(+) 450 g.p.m.	900
40 - 120 acres	(+) 8 g.p.m./acre	580 + 8X
more than 120 acres	(+) 7 g.p.m./acre	700 + 7X

EXAMPLES:

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

B. 83 acres requested;

10 acres	=	450 g.p.m.	} 900 g.p.m.
(+) 40 acres (10 + 30)	=	450 g.p.m.	
(+) 43 acres @ 8 g.p.m./acre	=	344 g.p.m.	
		1,244 (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

**Administrative Policy No.86-8  
Page 2**

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.

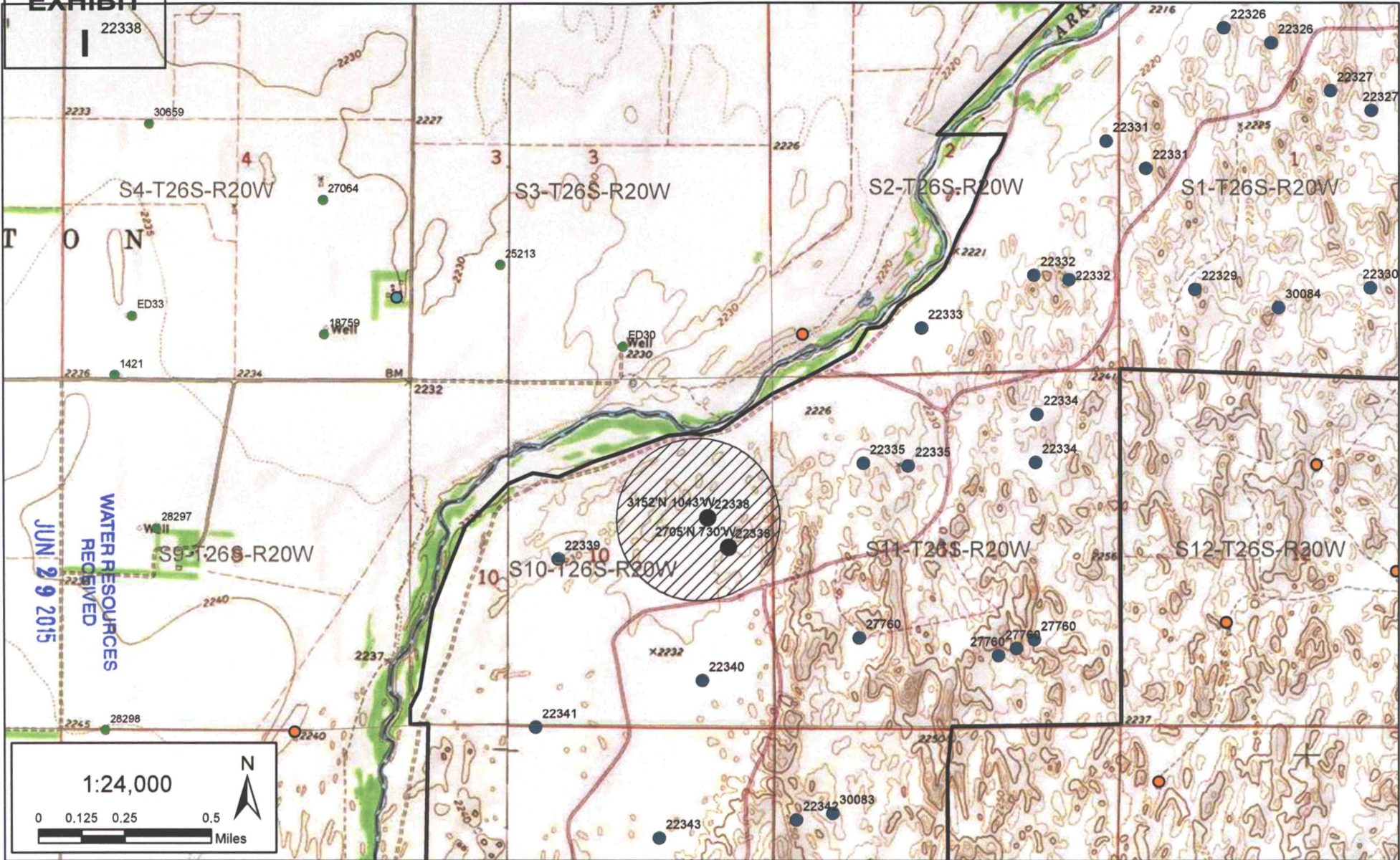
WATER RESOURCES  
RECEIVED

JUN 29 2015

KS DEPT OF AGRICULTURE

**EXHIBIT**

22338



KS DEPT. OF AGRICULTURE

WATER RESOURCES  
RECEIVED  
JUN 29 2015

**Legend**

- 22338 Existing Point(s) of Diversion
- 22338 Existing Place of Use
- ▭ R9 Ranch Property Boundary
- PLSS Sections 22338
- Irrigation Wells (File No.)
- Stockwater Wells (File No.)
- Domestic Well (Non-Permitted)
- Stock Well (Non-Permitted)
- Existing R9 Ranch Irrigation Wells



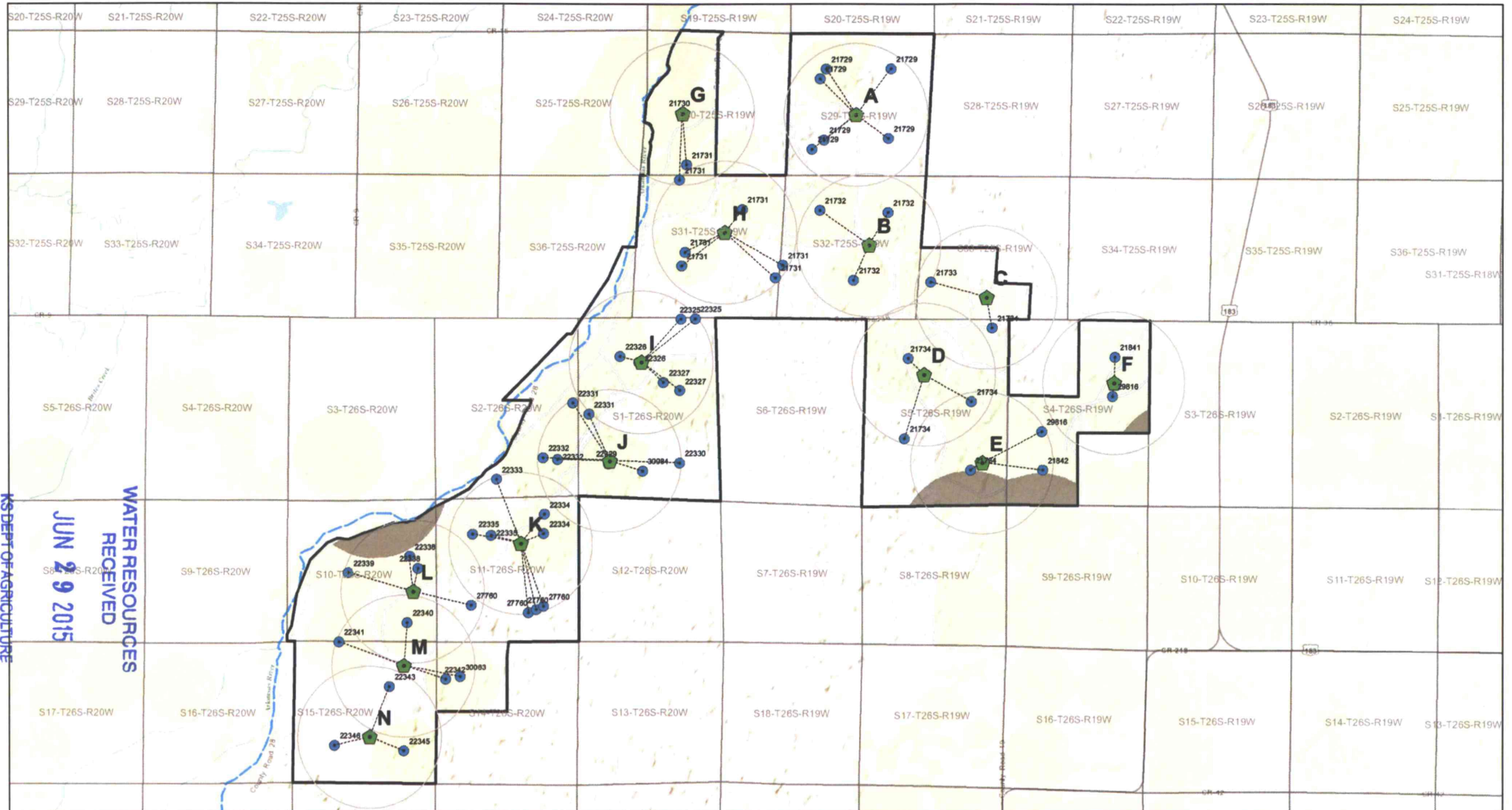
**CHANGE APPLICATION 22338  
APPLICATION MAP  
AUTHORIZED PLACE OF USE &  
POINTS OF DIVERSION**

SCANNED

# EXHIBIT

22338

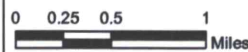
# J



### Legend

- Proposed Municipal Wells (A-N)
- Existing R9 Ranch Points of Diversion
- 1/2 Mile Buffer Around Proposed Wells
- Water Rights Consolidation Lines
- Area Excluded From Proposed Wells
- River Centerline
- R9 Ranch Property Boundary
- PLSS Sections

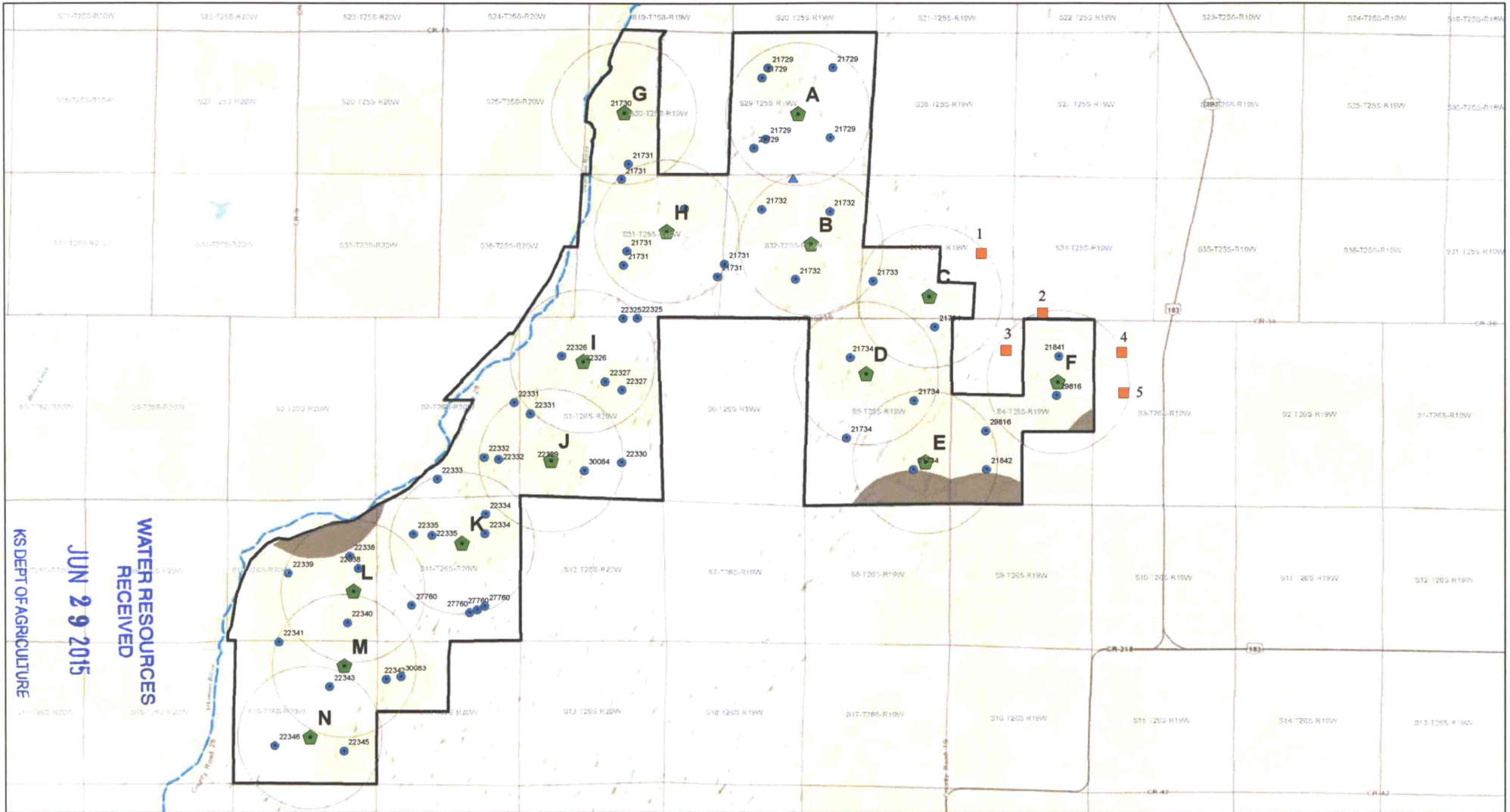
1:40,000



**BURNS  
MCDONNELL**



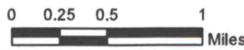
**EXHIBIT**  
22338  
**K**



**Legend**

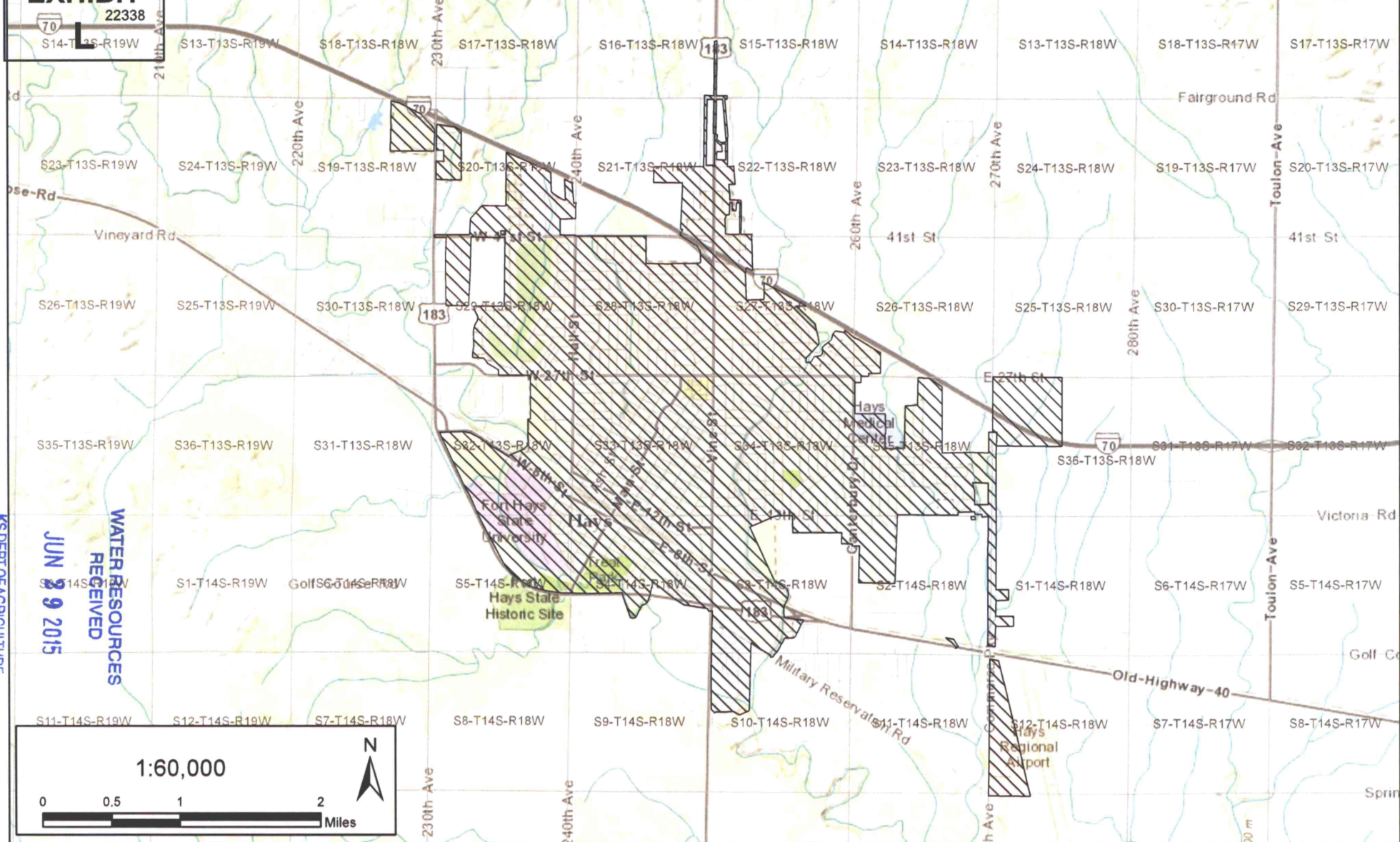
- Proposed Municipal Wells (A-N)
- Existing R9 Ranch Points of Diversion
- 1/2 Mile Buffer Around Proposed Wells
- PLSS Sections
- Area Excluded From Proposed Wells
- R9 Ranch Property Boundary
- Domestic Well (Non-Permitted)
- Stock Well (Non-Permitted)

1:40,000



**EXHIBIT**

22338



**Proposed Place of Use City of Hays**



**PLSS Sections**



SCANNED

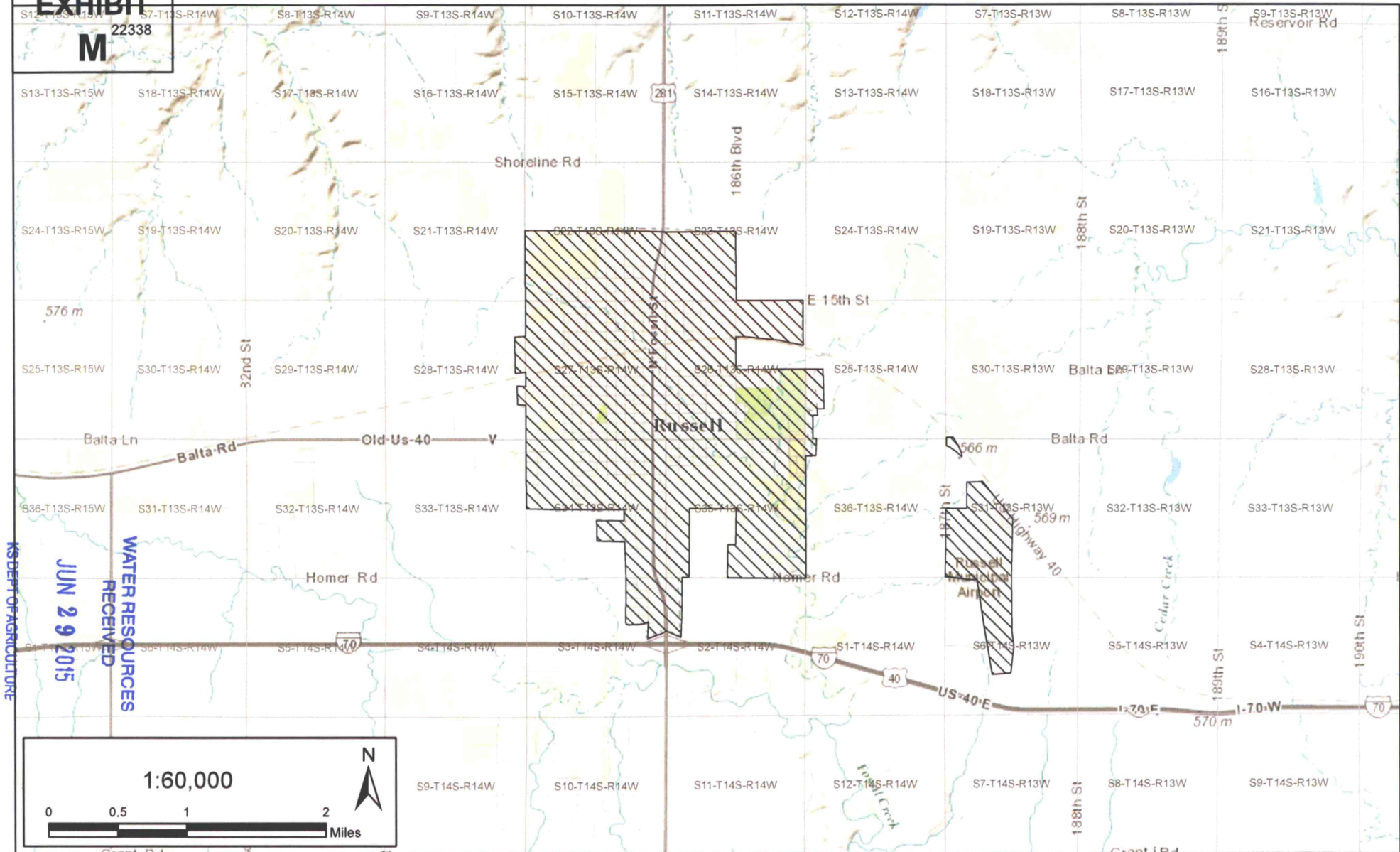
KS DEPT OF AGRICULTURE

JUN 29 2015

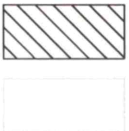
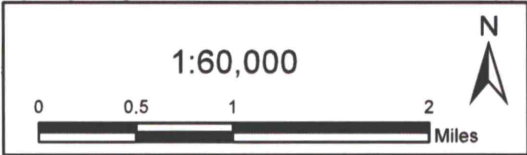
WATER RESOURCES RECEIVED

**EXHIBIT  
M**

22338



KS DEPT OF AGRICULTURE  
JUN 29 2015  
WATER RESOURCES RECEIVED



Proposed Place of Use - City of Russell

PLSS Sections



SCANNED

22338  
 Applicant's Name City Of Hays KS  
 (Please Print)

**MUNICIPAL (PUBLIC WATER SUPPLY) APPLICATION  
 SUPPLEMENTAL INFORMATION SHEET**

Application File Number  
 \_\_\_\_\_  
 (assigned by DWR)

**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.**

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7
Raw Water Diverted Under Your Rights	Water Purchased From All Sources	Water Sold to Other Public Water Suppliers	Water Sold to Your Industrial, Stock, and Bulk Customers	Water Sold to Your Residential and Commercial Customers	Other Metered Water	Remaining Water Used (See Below Explanation)
684,559,000			10,806,000	595,254,000	16,327,000	62,172,000
<b>TOTAL WATER = Columns 1 + 2</b>		<b>ACCOUNTED FOR WATER = Columns 3 + 4 + 5 + 6</b>			<b>UNACCOUNTED FOR WATER</b>	

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

- Column 1: The amount of raw water diverted from all of your points of diversion.
- Column 2: The amount of water purchased wholesale from all other public water supply systems or the Kansas Water Office.
- Column 3: The amount of water sold wholesale to all other public water supply systems.
- Column 4: The amount of water sold retail to all industrial, pasture, stockwater, feedlot, and bulk water service connections. Include the amount of water sold to all farmsteads using at least 200,000 gallons of water per year.
- Column 5: The amount of water sold retail to your residential and commercial customers and to industries and farmsteads using less than 200,000 gallons of water per year.
- Column 6: The amount of water used that is metered at individual service connections and supplied free, such as for public service, treatment processes, and connections receiving free water.
- Column 7: The amount of remaining water used. The gallons reported in this column are found by adding the numbers in Columns 1 and 2 and subtracting the numbers in Columns 3, 4, 5, and 6.

**UNACCOUNTED FOR WATER**

Use the following to calculate your distribution system's Unaccounted For Water:  
 Start with the amount in Column 1 and add the amount in Column 2, then subtract the amounts in Columns 3, 4, 5, and 6 leaving an amount of water representing your unaccounted for water to enter in Column 7.

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

$$\text{Percent Unaccounted For Water} = \frac{\text{Unaccounted For Water}}{\text{Total Water (Columns 1,2)}} \times 100$$
 If this number exceeds 20%, please explain the large amount of unaccounted for water and describe any steps being taken to reduce it.

**EXHIBIT  
 N**

**SECTION 2: PAST WATER USE  
 COMPLETE THE FOLLOWING TABLE FROM YOUR PAST WATER USE RECORDS.**

	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7
	Raw Water Diverted Under Your Rights	Water Purchased From All Sources	Water Sold to Other Public Water Suppliers	Water Sold to Your Industrial, Stock, and Bulk Customers	Water Sold to Your Residential and Commercial Customers	Other Metered Water	Remaining Water Used (See Above Explanation)
20 years ago	592,323,000			5,029,000	469,314,000	5,155,000	112,825,000
15 years ago	780,527,000			10,619,000	587,965,000	10,470,000	171,473,000
10 years ago	706,926,000			7,103,000	639,222,000	20,861,000	39,740,000
5 years ago	693,966,000			13,537,000	581,900,000	19,362,000	114,383,000
	<b>TOTAL WATER = Columns 1 + 2</b>		<b>ACCOUNTED FOR WATER = Columns 3 + 4 + 5 + 6</b>			<b>UNACCOUNTED FOR WATER</b>	

KS DEPT. OF AGRICULTURE

JUN 29 2015

WATER RESOURCES RECEIVED

SCANNED

22338  
**SECTION 3: PROJECTED FUTURE WATER NEEDS**

PLEASE COMPLETE THE FOLLOWING TABLE SHOWING YOUR FUTURE WATER REQUIREMENTS FOR THE NEXT 20 YEARS:

	Column 1 Raw Water Diverted Under Your Rights	Column 2 Water Purchased From All Sources	Column 3 Water Sold to Other Public Water Suppliers	Column 4 Water Sold to Your Industrial, Stock, and Bulk Customers	Column 5 Water Sold to Your Residential and Commercial Customers	Column 6 Other Metered Water	Column 7 Remaining Water Used (See Explanation on other side)
Year 5	753,014,900			11,886,600	654,779,400	17,959,700	68,389,200
Year 10	828,316,390			13,075,260	720,257,340	19,755,670	75,228,120
Year 15	911,148,029			14,382,786	792,283,074	21,731,237	82,750,932
Year 20	1,002,262,832			15,821,065	871,511,381	23,904,361	91,026,025
	<b>TOTAL WATER = Columns 1 + 2</b>		<b>ACCOUNTED FOR WATER = Columns 3 + 4 + 5 + 6</b>				<b>UNACCOUNTED FOR WATER</b>

**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)

LAST 20 YEARS	POPULATION
20 years ago	17,636
15 years ago	18,750
10 years ago	20,013
5 years ago	20,106
Last Year	21,038

PROJECTED FUTURE POPULATION

ESTIMATE FUTURE POPULATION AND SUBSTANTIATE NUMBERS ON SEPARATE ATTACHMENTS

NEXT 20 YEARS	POPULATION
Year 5	23,142
Year 10	25,456
Year 15	28,002
Year 20	30,802

Provide number of current active service connections:

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

623,753,000 ÷ 21,038 ÷ 365 Days/Year = 88 GALLONS PER PERSON PER DAY.  
 Amount of water in Columns 5, 6, and 7 of Section 1      Population from Last Year of Section 4

**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.



22338  
SECTION 3: PROJECTED FUTURE WATER NEEDS

PLEASE COMPLETE THE FOLLOWING TABLE SHOWING YOUR FUTURE WATER REQUIREMENTS FOR THE NEXT 20 YEARS:

	Column 1 Raw Water Diverted Under Your Rights	Column 2 Water Purchased From All Sources	Column 3 Water Sold to Other Public Water Suppliers	Column 4 Water Sold to Your Industrial, Stock, and Bulk Customers	Column 5 Water Sold to Your Residential and Commercial Customers	Column 6 Other Metered Water	Column 7 Remaining Water Used (See Explanation on other side)
Year 5	386,346,512	0	0	177,719,396	119,767,419	15,453,861	73,405,836
Year 10	405,513,682	0	0	186,536,377	125,709,241	16,220,547	77,047,517
Year 15	426,310,852	0	0	196,102,992	132,156,364	17,052,434	80,999,062
Year 20	443,848,022	0	0	204,170,090	137,592,887	17,753,921	84,331,124
	<b>TOTAL WATER = Columns 1 + 2</b>		<b>ACCOUNTED FOR WATER = Columns 3 + 4 + 5 + 6</b>			<b>UNACCOUNTED FOR WATER</b>	

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)

LAST 20 YEARS	POPULATION
20 years ago	
15 years ago	4,710
10 years ago	4,696
5 years ago	4,506
Last Year	4,475

PROJECTED FUTURE POPULATION

ESTIMATE FUTURE POPULATION AND SUBSTANTIATE NUMBERS ON SEPARATE ATTACHMENTS

NEXT 20 YEARS	POPULATION
Year 5	4,596
Year 10	4,605
Year 15	4,651
Year 20	4,698

Provide number of current active service connections:

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

$$\frac{221,991,000}{\text{Amount of water in Columns 5, 6, and 7 of Section 1}} \div \frac{4,475}{\text{Population from Last Year of Section 4}} \div 365 \text{ Days/Year} = 135.9 \text{ GALLONS PER PERSON PER DAY.}$$

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 Pfeifer Wells are returned to the aquifer in the "Collector Well." See detailed explanation in the cover letter accompanying this application. Projected future water needs include losses in the collector well but when repaired or replaced, total raw water diversion will be reduced.

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

WATER RESOURCES RECEIVED  
 JUN 29 2015  
 KS DEPT OF AGRICULTURE

SCANNED