KANSAS DEPARTMENT OF AGRICULTURE
DIVISION OF WATER RESOURCES
MEMORANDUM

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

On Friday, June 26th, 2015, The Administrative Assistant for Kansas Department of Agriculture, on the first floor signed for the certified mail containing the following Applications. I, Amber Herring, did not receive the documents until Monday, June 29th, 2015. Thus, the June 29th date is the correct date and time received by the Division of Water Resources.
4. The presently authorized place of use is:

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

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

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

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 GMD 5 Meets K.A.R. 5-5-1 (YES / NO) Use IRR Source AG S County ED By KAP Date 05/15
Code C-3 Fee $700 TR # Receipt Date 05/15 Check # 058527

of 21000- 15053309

DWR 1-120 (Revised 06/16/2014) 22331

Page 1 of 49

Assisted by: ____________________________

SCANNED 03/2015
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 __________ Quarter of the __________ Quarter of the __________ Quarter of Section 1, Township 26, South, Range 20 (E/W),  
   in Edwards County, Kansas, 3,240 feet North 4,875 feet West of Southeast corner of section.  
   Authorized Rate __________ gpm  
   Authorized Quantity __________ a/f  
   (DWR use only: Computer ID No. __________ GPS __________ feet North __________ feet West)  
   □ This point will not be changed  ✔ This point will be changed as follows:

**Proposed point of diversion: (Complete only if change is requested)**  
   One in the __________ Quarter of the __________ Quarter of the __________ Quarter of Section 1, Township 26, South, Range 20 (E/W),  
   in Edwards County, Kansas, 1,341 feet North 4,056 feet West of Southeast corner of section.  
   Proposed Rate __________ gpm  
   Proposed Quantity __________ a/f  
   This point is: □ Additional Well  □ Geo Center  List other water rights that will use this point __________

9. **Presently authorized point of diversion:**  
   One in the Lot 9 __________ Quarter of the __________ Quarter of the __________ Quarter of Section 2, Township 26, South, Range 20 (E/W),  
   in Edwards County, Kansas, 3,460 feet North 235 feet West of Southeast corner of section.  
   Authorized Rate __________ gpm  
   Authorized Quantity __________ a/f  
   (DWR use only: Computer ID No. __________ GPS __________ feet North __________ feet West)  
   □ This point will not be changed  ✔ This point will be changed as follows:

**Proposed point of diversion: (Complete only if change is requested)**  
   One in the __________ Quarter of the __________ Quarter of the __________ Quarter of Section 1, Township 26, South, Range 20 (E/W),  
   in Edwards County, Kansas, 1,341 feet North 4,056 feet West of Southeast corner of section.  
   Proposed Rate __________ gpm  
   Proposed Quantity __________ a/f  
   This point is: □ Additional Well  □ Geo Center  List other water rights that will use this point __________

10. **Presently authorized point of diversion:**  
   One in the __________ Quarter of the __________ Quarter of the __________ Quarter of Section __________, Township __________, South, Range __________ (E/W),  
   in __________ County, Kansas, __________ feet North __________ feet West of Southeast corner of section.  
   Authorized Rate __________ gpm  
   Authorized Quantity __________ a/f  
   (DWR use only: Computer ID No. __________ GPS __________ feet North __________ feet West)  
   □ This point will not be changed  □ This point will be changed as follows:

**Proposed point of diversion: (Complete only if change is requested)**  
   One in the __________ Quarter of the __________ Quarter of the __________ Quarter of Section __________, Township __________, South, Range __________ (E/W),  
   in __________ County, Kansas, __________ feet North __________ feet West of Southeast corner of section.  
   Proposed Rate __________ gpm  
   Proposed Quantity __________ a/f  
   This point is: □ Additional Well  □ Geo Center  List other water rights that will use this point __________

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

**IF MORE SPACE IS NEEDED, ATTACH ADDITIONAL SHEETS AS NECESSARY.**
12. The presently authorized use of water is for __irrigation____ purposes.
   It is proposed that the use be changed to __municipal____ purposes.

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

(Please show any calculations here.)

14. It is requested that the maximum annual quantity of water be reduced to __not applicable____ (acre-feet or million gallons).

15. It is requested that the maximum rate of diversion of water be reduced to __not applicable____ gallons per minute (____ c.f.s.).

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

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

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

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

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

________________________________________

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

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

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

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

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

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

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

(Owner)

(Please Print)

(Spouse)

(Please Print)

(Spouse)

(Please Print)

(Spouse)

(Please Print)

State of Kansas

County of Russell

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

Notary Public

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 not be less than $100 nor more than $1,000 per violation. In the case of a continuing violation, each day such violation continues may be deemed a separate violation. In addition to these penalties the right water may be modified or suspended. K.S.A. 82a-737, as amended.

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

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

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

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

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

(Owner)

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

(Spouse)

(Owner)

(Spouse)

(Please Print)

(Please Print)

(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.

My Commission Expires 6/15/18

Malinda Morse
Notary Public

FEE SCHEDULE

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

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

Make check payable to Kansas Department of Agriculture.

WATER RESOURCES RECEIVED

JUN 29 2015

KS DEPT OF AGRICULTURE
Proposed Rate and Quantity

The Cities are requesting a total of 209 acre-feet and 1,000 gpm from the well associated with this water right, all of which will be diverted from new point of diversion J, as shown on Exhibit K. When combined with existing wells from other water rights, new point of diversion J will have a cumulative total of 678.44 acre-feet and 3,170 gpm.

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

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

DWR Regulation, K.A.R. 5-5-9(a), provides that the default calculation used to address the consumptive use issue allows the conversion of 130 acre-feet for municipal use. As discussed below, 120 approved acres irrigated during the perfection period multiplied by the Edwards County NIR for corn of 1.08 acre-feet per acre equals 130 acre-feet.

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

Quantity authorized and perfected

The permit was issued on March 19, 1976, granting the applicant the right to divert up to 214 acre-feet annually at a rate of up to 1,000 gallons per minute for irrigation use, on 120 acres in Sections 1 and 2-T26S-R20W, or 1.78 acre-feet per acre. The certificate limited the rate to 1,000 gallons per minute when the two wells were operated simultaneously.

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

DWR’s Field Inspection Reports indicate that all of the 214 acre-feet authorized by the permit were lawfully perfected.

- 201 acre-feet and 202 acre-feet (403 acre-feet) were applied to 120 approved acres in Sections 1 and 2-T26S-R20W.

While the certificate limits the total quantity to 180 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.

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1 K.A.R. 5-5-9(a) and (a)(1).
2 K.A.R. 5-5-12, NIR Requirements.
3 K.A.R. 5-5-9(b).
4 Permit, HAYS002691, Ex. A.
5 Application, HAYS002681, Ex. B.
6 March 19, 1976, letter (emphasis added), HAYS002690, Ex. C.
7 FIR, HAYS002663, Ex. D.
8 FIR, HAYS002672, Ex. E.
Thus, since the perfection period has expired, the “authorized quantity” for this water right is the 214 acre-feet actually perfected even though it exceeds the certified quantity.

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

**NIR for Alfalfa**

The Field Inspection Reports state that alfalfa was grown on each of these circles during the year of record. According to the Kansas Irrigation Guide, the NIR for the 50% chance rainfall in Edwards County is 13 inches (1.083333 feet) for corn and 20.9 (1.741666 feet) inches for alfalfa.

Since alfalfa was grown on the authorized place of use in at least one year during the perfection period, it is reasonable to use the NIR for alfalfa, which yields a total quantity of 209.00 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.”

**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. 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 214 acre-feet legally applied during the perfection period percolates back to the aquifer, then 72%, or 154.08 acre-feet, should be available for conversion to municipal use. This is less than the 214 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 209.00 acre-feet for municipal use.
STATE BOARD OF AGRICULTURE
Roy Freeeland, Secretary

DIVISION OF WATER RESOURCES
Coy 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. 22,331 of the applicant

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

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

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

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

3. That the source from which the appropriation is made shall be from ground water in the drainage basin of the Arkansas River to be withdrawn by means of two (2) wells: one well near the center of the Southwest Quarter of the Northwest Quarter (SW\4 NW\4) of Section 1 and one well near the center of the East side of Lot 9 (SE\5 NE\5) of Section 2, Township 26 South, Range 20 West, in Edwards County, Kansas, located substantially as shown on the aerial photograph accompanying the application.

4. That the appropriation sought shall be limited to a maximum diversion rate not in excess of 1000 gallons per minute (2.23 c.f.s.) and to a quantity of not to exceed 214 acre-feet for any calendar year.

WATER RESOURCES RECEIVED
JUN 29 2015
KS DEPT OF AGRICULTURE

RECEIVED
MAR 24 1976 002691
FIELD OFFICE DIVISION OF WATER RESOURCES STAFFORD
3. That installation of works for diversion of water shall be completed on or before December 31, 1977. The applicant shall notify the Chief Engineer of the Division of Water Resources when construction of the works has been completed.

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

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

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

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

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

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

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

Dated this 19th day of March 1976

GUY E. GIBSON
CHIEF ENGINEER
KANSAS STATE BOARD OF AGRICULTURE

WATER RESOURCES
RECEIVED
JUN 29 2015

GUY E. GIBSON, Chief Engineer
Division of Water Resources
Kansas State Board of Agriculture

HAYS002692

SCANNED
APPLICATION FOR PERMIT TO APPROPRIATE WATER FOR BENEFICIAL USE

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

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

(Mr.) Midwest Land and Cattle Co., whose post office address is Box 208 Kinley, Kansas 67547

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

1. The quantity of water desired is in the amount of 2 1/4 acre feet per year, to be diverted at a maximum rate of 1000 gallons per minute

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


Quarter well not to be exactly located until test well is drilled.

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

Water resources received

WATER RESOURCES RECEIVED

JUN 29 2015

KS DEPT OF AGRICULTURE

(c) check intended water use and show intended quantity for each use)

WATER RESOURCES RECEIVED

MAR 2 9 1976

FIELD OFFICE

DIVISION OF WATER RESOURCES

HAYS 0023080

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:

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

JUN 29 2015
KS DEPT OF AGRICULTURE

HAYS002681
7. The works for diversion of water will consist of two wells with two pumps 
irrigation system (two motors)
and will be completed by July of 1974
8. The first actual application of water for the beneficial use proposed was or is estimated to be 
July of 1974
9. The application must be accompanied either by a detailed plat prepared from an actual survey or by 
an aerial photograph of the area.
The plat or aerial photograph should show
(a) Location of the proposed point or points of diversion
(b) Location of the pipe lines, canals, reservoirs or other facilities for conveying water from the 
point of diversion to the place of use
(c) If for irrigation, show the location of the land proposed to be irrigated
(d) If for industrial or other use, show the location of the land where water will be used.
10. List and describe other applications filed or vested rights held by applicant:
Irrigation wells and land is in the process of being bought from a 
company known as the Kinsley Joint Venture (Wheatheart Land Co.)
Applications for water rights have been filed
11. The relation of the subscriber to this application is that of agent
(Owner, agent or otherwise)
and he is authorized to make this application in behalf of the interest affected.
Dated at Kinsley, Kansas, this 22nd day of April 1974

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

NOTE:
1 cubic foot per second = 448.8 gallons per minute = 846,317 gallons per day = 1.96 acre feet per day.
1 million gallons per day = 1,547 cubic feet per second = 3.07 acre feet per day.
1 acre foot = 33,560 cubic feet = 325,851 gallons.
APPLICATION 22331
9-15-75
All wells within 4 miles of the irrigation well are owned by applicant.

WATER RESOURCES RECEIVED
JUN 29 2015
KS DEPT OF AGRICULTURE

HAYS002683
March 19, 1976

Midwest Land and Cattle Co.
Box 108
Kinsley, Kansas 67547

ATTENTION: Mr. Johnny Carson, Manager

Re: Appropriation of Water
Application No. 22,331

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
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MAR 26, 1976
HAYS 002690
MICROFORMED
FIELD OFFICE
DIVISION OF WATER RESOURCES
STAFFORD

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Encs.
DIVISION OF WATER RESOURCES—KANSAS STATE BOARD OF AGRICULTURE
FIELD INSPECTION REPORT

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

Test 1 of 2 diversion points. County Edwards
A well

Application No. 22331 Date 12/12/10 Firm/Field Office Farmer's Pride Testing Inc.

Current Landowner 4094 90150 ABKUSA KANSAS CITY KAN. 64144
Address 4094 90150 ABKUSA KANSAS CITY KAN. 64144

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

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

Authorized Point of Diversion: Sec. 2, T. 26, R. 20, ID No. 01
Approximately NE 1/4, Sec. 2, T. 26, R. 20

Actual Point of Diversion: NE 1/4, Sec. 2, T. 26, R. 20
Approximately 2460 ft. North and 235 ft. West of SE corner of Sec. 2

How were distances determined? Scaled on map

"Approved" Quantity 214 AF "Approved" Diversion Rate 1000 g.p.m. (2.25 c.f.s.)

Priority Date 5/23/14 Approval Date 3/19/16 Perfection Date 12/29/11

Other applications covering land and/or point of diversion None

IN LAND TO BE INCLUDED ON CERTIFICATE:

<table>
<thead>
<tr>
<th>S</th>
<th>T</th>
<th>R</th>
<th>NE 1/4</th>
<th>NW 1/4</th>
<th>SW 1/4</th>
<th>SE 1/4</th>
<th>TOTAL ACRES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>26</td>
<td>20</td>
<td>19 31</td>
<td>20</td>
<td>20</td>
<td>19 31</td>
<td>58</td>
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<tr>
<td>2</td>
<td>26</td>
<td>17</td>
<td>21</td>
<td>19</td>
<td>31</td>
<td>2</td>
<td>63</td>
</tr>
</tbody>
</table>

IN LAND IRRIGATED—YEAR OF RECORD 1984

<table>
<thead>
<tr>
<th>S</th>
<th>T</th>
<th>R</th>
<th>NE 1/4</th>
<th>NW 1/4</th>
<th>SW 1/4</th>
<th>SE 1/4</th>
<th>TOTAL ACRES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>26</td>
<td>20</td>
<td>251</td>
<td>155</td>
<td>59</td>
<td>15</td>
<td>40</td>
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<tr>
<td>2</td>
<td>26</td>
<td>25</td>
<td>1</td>
<td>45</td>
<td>19</td>
<td>5</td>
<td>72</td>
</tr>
</tbody>
</table>

TESTED DIVERSION RATES

well pumping alone

Maximum G.P.M. 1005 c.f.s. 2.25 c.f.s.

Both wells pumping together

Microfilm

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Year of Record 1984

Ac. Ft. Applied

"Approved" Land irrigated 120 acres, with 201 AF = 1.68 AF/acre

Total AF (including overlapping Files) 315 AF 2.63 AF/acre

120 acres x 15 A.F., per acre = 1800 A.F.

1800 A.F. x 0.5 Cone-half quantity per well = 900 A.F.

Perfected Rate 640 g.p.m. (143 c.f.s.)

Perfected Quantity 900 A.F.
GENERAL INFORMATION ON IRRIGATION SYSTEM:

☐ Center Pivot

Manufacturer: Zimmatic Model: 310 Serial No: 3029

Drive: ☑ Water ☑ Electric Length of Pivot Arm Acres Irr. 120

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: ☑ Rainbird Gating g.p.m.

☐ 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: ☑ Low Angle Serminger Sprinklers on Center Pivot

unusual conditions/other information

POWER UNIT INFORMATION:

Manufacturer Ford Model No. 300 HP

Serial No. Fuel: Natural Gas Rated RPM

PUMP INFORMATION:

Manufacturer Fairbanks Morse Model No. 101/4 Rated RPM

Serial No. N29224231X Type: Vertical Turbine No. stages 5

GEAR HEAD INFORMATION:

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

Serial No. R-9556-004-272 Drive: Right Angle Ratio 6:1

WELL INFORMATION:

Date Drilled 7/24/24 Original Depth 58 ft. Static Water Level When Drilled 8 ft.

Length of time well has () operated () rested prior to measurement 150 days () hrs

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

Depth to water not possible ft. below LSD.

ADDITIONAL REQUIREMENTS:

Is a flow meter required? ☑ yes ( ) no Make of flow meter

Flow Meter Model No. —— Serial No. —— Size ——

Is the meter installed properly? ☑ yes ( ) no Flow meter conversion factor: ——

Flow meter units: ( ) Acre Feet ( ) Acre inches ( ) Gallons ( ) Other ——

Is check valve present? ☑ yes ( ) no

Is low pressure drain present? ☑ yes ( ) no Is vacuum breaker present? ☑ yes ( ) no

Is injection port present: ☑ yes ( ) no Is injection system being operated ——

Was a Plant Health Chemigation Report completed? ☑ yes ( ) no

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HAYSO03664

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

![Diagram of distribution system layout](image)

**Scale**

1" = ____ ft.

**TEST OF DIVERSION RATE:**

Location of test: **Horizontal pipe between pump and pivot**

Pipe Diameter (I.D.) ____ inches

<table>
<thead>
<tr>
<th>Test No. 1—Normal Conditions</th>
<th>Test No. 2—Maximum Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>R.P.M. POWER UNIT 2130</td>
<td>R.P.M. POWER UNIT 2100</td>
</tr>
<tr>
<td>R.P.M. PUMP UNIT 1762</td>
<td>R.P.M. PUMP UNIT 1750</td>
</tr>
<tr>
<td>Pressure at Pump 68 psi</td>
<td>Pressure at Pump 30 psi</td>
</tr>
</tbody>
</table>

- **Jacuzzi Meter Test**
  - Meter Identification No.____
  - Area Constant \( K = 2.45 \times \text{I.D.}^4 = ____ \)
  - Total \( Q \text{ (gpm)} = VK \)

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

<table>
<thead>
<tr>
<th>Total</th>
<th>Avg.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Velocity</td>
<td>Avg. Velocity</td>
</tr>
</tbody>
</table>

- **Propeller Meter Test**
  - Manufacturer____
  - Model____
  - Serial No.____
  - WATER RESOURCES RECEIVED
  - JUN 29 2015
  - KS DEPT OF AGRICULTURE
  - HAYS002665

  - Meter Diameter ____ inches
  - Ending ____ gal.
  - Beginning ____ gal.
  - Difference ____ gal.
  - Time ____ min.
  - Rate ____ gpm

  - Other Flow Meter
  - Use Supplemental Sheet (include meter identification, data and calculations).
TABULATION OF WATER USE DETERMINED AT THE TIME OF THIS REPORT:

<table>
<thead>
<tr>
<th>Year</th>
<th>Hours Pumped (hr)</th>
<th>Reported Pumping Rate (gpm)</th>
<th>Water Used (AF)</th>
<th>Acres Irrigated</th>
</tr>
</thead>
<tbody>
<tr>
<td>1976</td>
<td>1740</td>
<td></td>
<td></td>
<td>124</td>
</tr>
<tr>
<td>1976</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1977</td>
<td>893</td>
<td></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>950</td>
<td></td>
<td>118</td>
</tr>
<tr>
<td>1980</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1981</td>
<td>840</td>
<td>950</td>
<td></td>
<td>118</td>
</tr>
<tr>
<td>1982</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1983</td>
<td>0 (PIF)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1984</td>
<td>1200</td>
<td>1005**</td>
<td></td>
<td>120</td>
</tr>
<tr>
<td>1985</td>
<td>1400</td>
<td>400</td>
<td></td>
<td>120</td>
</tr>
<tr>
<td>1986</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1987</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1988</td>
<td>400</td>
<td></td>
<td></td>
<td>119</td>
</tr>
<tr>
<td>1989</td>
<td>801</td>
<td>1005**</td>
<td></td>
<td>120</td>
</tr>
</tbody>
</table>

* Obtained from Test (with well operating)
** Obtained from total sod side acres

Source of Information: Stack & Files

Crops Irrigated: this year soybeans, alfalfa
Year of record: 1974

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

- Electricity
  - Meter Manufacturer: 
  - Supplier: 
  - Type: 
  - Serial No.: 
  - K: ___________ watt/rev 
  - r: ___________ revolutions 
  - t: ___________ seconds 
  - Rate = \( \frac{K \times 3.6}{t} \) = ___________ kw/hr 
  - Hours = ___________ kw-hr = ___________ rate

- Other Fuels
  - Type: 
  - Supplier: 
  - Rate = \( \frac{\text{Volume (test)}}{\text{time}} \) = ___________ 

How was the test volume determined?

REMARKS: This irrigated circle is known to the owner & farm management as "CIRCLE NO. 2D."

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Person present at test: Kent Weber

Water Use Correspondent: Don Goldman (see owner)

Conducted by: ____________________ Date: 6/26/80

Approved by: ____________________ Date: 7/6/80

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SCANNED
APPLICATION NO: 22331

NAME: Don Gellman
Eagle Ridge Equities, Inc.

POINTS OF DIVERSION AND SECTION CORNERS

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

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

Reviewed by: [Signature]
Professional Engineer

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FEB 21 1995

[Stamp: SCANNED]
NOTES ON CHOOSING A YEAR OF RECORD

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

Since 1983, Connecticut General Life Insurance made a diligent effort to keep good records. In 1989 the property was purchased by Eagle Ridge Equities, Inc. and they too are trying to keep accurate up to date records. Therefore, it would seem reasonable to use the years since 1983 in choosing a Year of Record.

Reviewed by: [Signature]
Professional Engineer

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DEPT OF AGRICULTURE

DIVISION OF WATER RESOURCES STAFFORD

SCANNED MICROFILMED
APPLICATION NO: 22331  NAME: Don Goldman

COLLINS METER TEST  A well pumping alone

Collins Meter No. 1-89  Meter Calibration Factor 1.9428
Pipe Inside Diameter (inches) 734  Flow Rate Factor 145.4
Test Pressure (psi) 30  Test RPM, Pump 1750
Description of Test Location Horizontal pipe between pump and pivot

TEST DATA:  Check, Initial  Reversed

<table>
<thead>
<tr>
<th>Meter Setting From</th>
<th>Left Side of Pipe</th>
<th>Right Side of Pipe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Center of Pipe</td>
<td>(or Front Side if</td>
<td>(or Back Side if</td>
</tr>
<tr>
<td></td>
<td>Vertical Test)</td>
<td>Vertical Test)</td>
</tr>
<tr>
<td>1 7/16</td>
<td>4.71</td>
<td>4.75</td>
</tr>
<tr>
<td></td>
<td>4.78</td>
<td>4.70</td>
</tr>
<tr>
<td>2 3/4</td>
<td>4.73</td>
<td>4.71</td>
</tr>
<tr>
<td></td>
<td>4.69</td>
<td>4.64</td>
</tr>
<tr>
<td>3 9/16</td>
<td>4.63</td>
<td>4.62</td>
</tr>
<tr>
<td></td>
<td>4.53</td>
<td>4.52</td>
</tr>
</tbody>
</table>

Average Velocity of Water = Sum of Vel. ÷ 12 = 4.67

Corrected Ave. Vel. = (Ave. Vel.) x (Calibration Factor) = 4.67 x 1.9428 = 4.40

Flow Rate = (Corrected Ave. Vel.) x (Flow Rate Factor) = 4.40 x 145.4 = 640 GPM

WATER RESOURCES RECEIVED

PUMPING PLANT TESTING, INC.

RECEIVED

FEB 21 1995

Received by Professional Engineer

REVIEWED

JUN 29 2015

DEPARTMENT OF AGRICULTURE

FIELD OFFICE
DIVISION OF WATER RESOURCES
STAFFORD Page 24 of 49

MICROFILMED

SCANNED
**APPLICATION NO:** 22331  
**NAME:** Don Goldman

**COLLINS METER TEST**  Both wells pumping Together

Collins Meter No. _8_ Meter Calibration Factor 0.9428
Pipe Inside Diameter (inches) 7.74 Flow Rate Factor 145.4
Test Pressure (psi) 129 Test RPM, Pump 8well 1255

Description of Test Location: Horizontal pipe between pump and pivot

---

**TEST DATA:** Q Check, Initial 7.78 Reversed 7.80

<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>1/2</td>
<td>7.49 7.47</td>
<td>7.83 7.89</td>
</tr>
<tr>
<td>2 3/4</td>
<td>7.16 7.08</td>
<td>7.68 7.65</td>
</tr>
<tr>
<td>3 7/16</td>
<td>6.53 6.51</td>
<td>7.39 7.29</td>
</tr>
</tbody>
</table>

Average Velocity of Water = Sum of Vel. ÷ 12 = 7.33

Corrected Ave. Vel. = (Ave. Vel.) x (Calibration Factor) = 7.33 x 0.9428 = 6.91

Flow Rate = (Corrected Ave. Vel.) x (Flow Rate Factor) = 6.91 x 145.4 = 1005 GPM

---

WATER RESOURCES RECEIVED

PUMPING PLANT TESTING, INC. JUN 29 2015

Reviewed By: [Signature]

PROFESSIONAL ENGINEER

FEB 2-1 1995
**FIELD INSPECTION REPORT**

- **Field Office No.:** 2
- **G.M.D. No.:** 5
- **Inspection Date:** 2/2/74
- **Application No.:** 22331
- **Current Landowner:** Olen Goldman
- **Phone No.:** (416) 841-9262
- **Address:** Route 3, King City, Ontario, Canada, LOGIKO
- **Water Use Classification:**
  - Domestic
  - Industrial
  - Irrigation
  - Municipal
  - Recreation
  - Stockwatering
  - Water Power
- **Source:**
  - Groundwater
  - Surface Water
- **Authorized Point of Diversion:** NE 32Y, NW 4
- **Actual Point of Diversion:** NW 32Y, NW 4
- **Approved Quantity:** 214 AF
- **Approved Diversion Rate:** 1000 g.p.m. (22.3 c.f.s.)
- **Priority Date:** 5/17/74
- **Approval Date:** 3/19/76
- **Perfection Date:** 12/21/76
- **Other Applications:** None
- **LAND TO BE INCLUDED ON CERTIFICATE:**
  - | S | T | R | NE | NW | SW | SE | NE | NW | SW | SE | NE | NW | SW | SE | TOTAL ACRES |
  - | 1 | 26 | 20 | 19 | 34 | 5 | | 58 |
  - | 2 | 26 | 20 | 17 | 37 | | 6 | 63 |
  - **LAND IRRIGATED—YEAR OF RECORD: 1984**
  - | S | T | R | NE | NW | SW | SE | NE | NW | SW | SE | NE | NW | SW | SE | TOTAL ACRES |
  - | 1 | 26 | 20 | 65 | 29 | 1 | 4 | 96 |
  - | 2 | 26 | 20 | 35 | 45 | 35 | | 120 |
- **TESTED DIVERSION RATES RECEIVED:**
  - **Maximum G.P.M.:** 642 (c.f.s.)
  - **Normal G.P.M.:** 1005 (c.f.s.)
  - **FOR D.W.R. USE ONLY**
  - **Year of Record:** 1984
  - **Extenstion of time needed:** Yes ( ) No ( )
  - **Ac. Ft. Applied:** 700 hrs. x 643 g.p.m. x 4.419 / 24 x 1000 = 202 AF
  - **"Approved" Land irrigated:** 120 acres, with 202 AF = 1.68 AF/acre
  - **Total AF (including overlapping Files):** 315 AF
  - **120 acres x 1.5 AF per acre = 180 AF**
  - **140 AF x 0.5 (one-half quantity per well):** 90 AF
  - **Perfected Rate:** 645 g.p.m. (1.44 c.f.s.)
  - **Perfected Quantity:** 9

**Microfilmed**

**WATER RESOURCES RECEIVED**

**JUN 29 2015**

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**SCANNED**
GENERAL INFORMATION ON IRRIGATION SYSTEM:

□ Center Pivot

Manufacturer: Biomatic  
Model: 310  
Serial No: 3079

Drive:  □ Water  □ Electric  
Length of Pivot Arm:  
Acres Irr:  120

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: Fairchild  
Rating:  
g.p.m.

□ 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

Manufacturer:  
Model:  
Serial No:  

unusual condition/other information

POWER UNIT INFORMATION:

Manufacturer: Ford  
Model No: 300  
HP:  
Serial No: 34830  
Fuel: F-184  
Nat.Gas  
Rated RPM:  

PUMP INFORMATION:

Manufacturer: Fairbanks Morse  
Model No: 10MA  
Rated RPM: 
Serial No: N242V637X  
Type: Vertical Turbine  
No. stages: 5

GEAR HEAD INFORMATION:

Manufacturer: Randolph  
Model No: F-80  
Serial No: 82497  
Drive: Right Angle  
Ratio: 6.5

WELL INFORMATION:

Date Drilled: 11/19/74  
Original Depth: 524  
Static Water Level When Drilled: 15  
ft.

Length of time well has ( ) operated (☐) rested prior to measurement 150  
days ( ) hrs

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

Depth to water: 17’  
ft. below LSD.

ADDITIONAL REQUIREMENTS:

Is a flow meter required? ( ) yes (☐) no  
Make of flow meter: 

Flow Meter Model No:  
Serial No:  
Size:  

Is the meter installed properly? ( ) yes  ( ) no  
Flow meter conversion factor:  

Flow meter units: ( ) Acre Feet  
( ) Acre inches  
( ) Gallons  
( ) Other:  

Is check valve present? ( ) yes  ( ) no

Is low pressure drain present? ( ) yes  (☐) no  
Is vacuum breaker present? ( ) yes  (☐) no

Is injection port present? ( ) yes  (☐) no  
Is injection system being operated: ( ) yes  (☐) no

Was a Plant Health Chemigation Report completed? ( ) yes  (☐) no

22331  
Page 28 of 49
SKETCH OF ACTUAL PLACE  SE, LOCATION OF DIVERSION WORK AND DISTRIBUTION SYSTEM.
(Indicate distribution system layout at time of field test).

N

↑

Scale
1" = ____ ft.

TEST OF DIVERSION RATE:

Location of test  Horizontal pipe between collection pot and pipe from A-well
Pipe Diameter (I.D.)  ____/8" inches

Test No. 1—Normal Conditions
Both wells pumping together
R.P.M. POWER UNIT  2106
R.P.M. PUMP UNIT  1755
Pressure at Pump  68 psi

Test No. 2—Maximum Conditions
Well pumping alone
R.P.M. POWER UNIT  2112
R.P.M. PUMP UNIT  1760
Pressure at Pump  18 psi

☐ Jacuzzi Meter Test

Meter Identification No.

Area Constant K = 2.45 × I.D. = ______

Q (gpm) = VK


Total ______ Avg. ______

G.P.M. ______

☐ Propeller Meter Test

Manufacturer ______ Model ______ Serial No. ______

Jun 29 2015

KS DEPT OF AGRICULTURE

☐ Other Flow Meter

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

HAYS002674

SCANNED
# Tabulation of Water Use Determined at the Time of This Report

<table>
<thead>
<tr>
<th>Year</th>
<th>Hours Pumped (hr)</th>
<th>Reported Pumping Rate (gpm)</th>
<th>Water Used (AF)</th>
<th>Acres Irrigated</th>
</tr>
</thead>
<tbody>
<tr>
<td>1975</td>
<td>1740</td>
<td>1000</td>
<td></td>
<td>180</td>
</tr>
<tr>
<td>1976</td>
<td>243</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>1977</td>
<td>336</td>
<td>850</td>
<td></td>
<td>118</td>
</tr>
<tr>
<td>1978</td>
<td>840</td>
<td>850</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1979</td>
<td>1700</td>
<td>1005**</td>
<td></td>
<td>120</td>
</tr>
<tr>
<td>1980</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1981</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1982</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1983</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1984</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1985</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1986</td>
<td>1600</td>
<td>1000</td>
<td></td>
<td>120</td>
</tr>
<tr>
<td>1987</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1988</td>
<td></td>
<td></td>
<td></td>
<td>119</td>
</tr>
<tr>
<td>1989</td>
<td></td>
<td></td>
<td></td>
<td>120</td>
</tr>
<tr>
<td>1990</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note: obtained from test (both wells operating)*

Source of Information: Steward Files

Crops Irrigated: This year **soybeans & wheat**

Year of record: 1975

**Fuel Records**: (Complete only if water use information is not available)

- **Electricity**
  - Meter Manufacturer: 
  - Supplier: 
  - Type: 
  - Serial No.:
  - K: watt/rev
  - r: revolutions
  - t: seconds
  - Rate = Kr x 3.6
  - Hours = kw-hr
  - Rate

- **Other Fuels**
  - Type: 
  - Supplier: 
  - Rate = Volume (test)
  - How was the test volume determined?

**Remarks**: This irrigated circle is known by the owner as **Circle # 22**

**Water Resources Received**

**Operator**: Kent Naber
**Date**: 6/29/2015

**Water Use Correspondent**: Don Goldman
**Date**: 6/29/2015

**Conducted by**: Kent Naber
**Date**: 6/29/2015

**Approved by**: P.E.
**Date**: 6/29/2015

22331 (Signature)  Page 30 of 49

---

**KS Dept of Agriculture**

---

**Scanned**
APPLICATION NO: 22331  NAME: Don Goldman

COLLINS METER TEST  B well pumping alone

Collins Meter No. 1-64  Meter Calibration Factor .9428
Pipe Inside Diameter (inches) 6/8  Flow Rate Factor 89.5
Test Pressure (psi) 18  Test RPM, Pump 1760
Description of Test Location  Horizontal pipe between collectors  
pot and pipe from A well

TEST DATA:  Q Check, Initial 8.09  Reversed 8.10

<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 1/4</td>
<td>7.78</td>
<td>7.95</td>
</tr>
<tr>
<td>2 3/16</td>
<td>7.92</td>
<td>8.13</td>
</tr>
<tr>
<td>2 13/16</td>
<td>6.25</td>
<td>7.67</td>
</tr>
</tbody>
</table>

Average Velocity of Water = Sum of Vel. ÷ 12 = 7.62
Corrected Ave. Vel. = (Ave. Vel.) x (Calibration Factor) = 7.62 x .9428 = 7.19

Flow Rate = (Corrected Ave. Vel.) x (Flow Rate Factor) = 7.19 x 89.5 = 643 GPM

WATER RESOURCES
RECEIVED

PUMPING PLANT TESTING INC.
JUN 29 2015

RECEIVED

FEB 21 1995

Reviewed By:
Professional Engineer

HAYS002676
SCANNED
APPLICATION NO: 22331   NAME: Don Goldman

COLLINS METER TEST Both wells pumping Together

Collins Meter No.   1-84   Meter Calibration Factor .9428
Pipe Inside Diameter (inches)  2 3/4   Flow Rate Factor 145.4
Test Pressure (psi)  68   Test RPM, Pump 1 well 1767

Description of Test Location Horizontal pipe between pump and pivot

 TEST DATA: Q Check, Initial 7.78 Reversed 7.80

<table>
<thead>
<tr>
<th>Meter Setting From</th>
<th>Left Side of Pipe</th>
<th>Right Side of Pipe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Center of Pipe</td>
<td>(or Front Side if</td>
<td>(or Back Side if</td>
</tr>
<tr>
<td></td>
<td>Vertical Test)</td>
<td>Vertical Test)</td>
</tr>
<tr>
<td>1 1/6</td>
<td>7.49</td>
<td>7.83</td>
</tr>
<tr>
<td>2 3/4</td>
<td>7.16</td>
<td>7.68</td>
</tr>
<tr>
<td>3 1/2</td>
<td>6.53</td>
<td>7.39</td>
</tr>
</tbody>
</table>

Average Velocity of Water = Sum of Vel. ÷ 12 = 7.33

Corrected Ave. Vel. = (Ave. Vel.) x (Calibration Factor) = 7.33 x .9428 = 6.91

Flow Rate = (Corrected Ave. Vel.) x (Flow Rate Factor) = 6.91 x 145.4 = 1005 GPM
NOTES ON CHOOSING A YEAR OF RECORD

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

Since 1983, Connecticut General Life Insurance made a diligent effort to keep good records. In 1989 the property was purchased by Eagle Ridge Equities, Inc. and they too are trying to keep accurate up to date records. Therefore, it would seem reasonable to use the years since 1983 in choosing a Year of Record.
POINTS OF DIVERSION AND SECTION CORNERS

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

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

Reviewed by: ____________________________

Professional Engineer

WATER RESOURCES RECEIVED

JUN 29 2015

KS DEPT OF AGRICULTURE

RECEIVED

FEB 21 1955

HAYS002679
CERTIFICATE OF APPROPRIATION
FOR BENEFICIAL USE OF WATER

WATER RIGHT, File No.  22,331
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, the undersigned do hereby certify that, subject to vested rights and prior appropriation rights, the appropriator is entitled to make use of groundwater in the drainage basin of the Arkansas River to be withdrawn by means of two (2) wells:

one (1) well located near the center of the Southwest Quarter of the Northwest Quarter (SW_3 NW_1) of Section 1, more particularly described as being near a point 3,240 feet North and 4,875 feet West of the Southeast corner of said section, at a diversion rate not in excess of 645 gallons per minute (1.44 c.f.s.) and a quantity not to exceed 90 acre-feet of water per calendar year, and

one (1) well located in Lot 9 of Section 2, more particularly described as being near a point 3,460 feet North and 235 feet West of the Southeast corner of said section, at a diversion rate not in excess of 640 gallons per minute (1.43 c.f.s.) and a quantity not to exceed 90 acre-feet of water per calendar year,

for irrigation use on the following described property:

19 acres in Lot 4 (W_3 NW_1),
34 acres in the Southwest Quarter of the Northwest Quarter (SW_3 NW_1),
5 acres in the Northwest Quarter of the Southwest Quarter (NW_3 SW_1),

a total of 58 acres in Section 1,

17 acres in the Northeast Quarter of the Northeast Quarter (NE_3 NE_1),
39 acres in the Southeast Quarter of the Northeast Quarter (SE_3 NE_1),
6 acres in the Northeast Quarter of the Southeast Quarter (NE_3 SE_1),

a total of 62 acres in Section 2,

all in Township 26 South, Range 20 West, Edwards County, Kansas.
This appropriation right is further limited to a diversion rate which when the wells operate simultaneously will provide a diversion rate not in excess of 1,000 gallons per minute (2.23 c.f.s.) for irrigation use on the property described herein.

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 in my office in Topeka, Kansas, this day of Dec., 19...,

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 day of Dec., 19..., by David L. Pope, P.E., Chief Engineer, Division of Water Resources, Kansas State Board of Agriculture.

Denise J. Ralph
Notary Public

WATER RESOURCES RECEIVED
JUN 29 2013
KS DEPT OF AGRICULTURE
HAYS002703

SCANNED
KANSAS STATE BOARD OF AGRICULTURE
Division of Water Resources

MEMORANDUM

TO: Files
FROM: Douglas E. Bush

DATE: August 29, 1994
RE: Appropriation of Water
    File No. 22,331

The wells for the above referenced file were tested separately. The combined rate for the two wells exceeded the approved rate of 1,000 gpm. However, the wells are usually run together at a rate of 1,000 gpm. A limitation was therefore needed on the rate limiting the rate of 1,000 gpm when the wells are operated simultaneously.

The quantity per well was prorated by rate. As each well was tested at almost the same rate, 640 gpm and 643 gpm, the perfected quantity was divided by 2 as such: 120 acres x 1.5 = 180 x 0.5 (one-half quantity pumped by each well) = 90 AF per well.

The FIR reveals that there may have been some ambiguity as to the location of the authorized place or use and points of diversion. This information was reviewed and was discussed with Bruce Falk, Water Commissioner Stafford Field Office on August 26, 1994. The Certificate of Appropriation was drafted using the original approved place of use and points of diversion as the area is located in the sandhills South of the Arkansas River and section corners are ambiguous. Best information at this time would indicate the authorized place of use and points of diversion are located substantially correct. By using the original permitted descriptions, the points of diversion and place of use are compatible with other files permitted in the area.

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

Douglas E. Bush
Environmental Scientist

DEB:jt

WATER RESOURCES RECEIVED

JUN 29 2015
KS DEPT OF AGRICULTURE
HAYS002695

SCANNED
KANSAS STATE BOARD OF AGRICULTURE
DIVISION OF WATER RESOURCES
David L. Pope, Chief Engineer-Director
901 S. Kansas Avenue, Second Floor
Topeka, Kansas 66612-1283
(913) 296-3717 Fax (913) 296-1176

September 27, 1994

R 9 RANCH A KANSAS PARTNERSHIP
C/O JERRY BRYANT - PARTNER
518 GUM STREET
YUMA CO 80759

Re: Appropriation of Water
File No. 22,331

Dear Sir:

During a September 23, 1994, telephone conversation between Greg Ebert of R 9 Ranch and myself, it was learned errors may have occurred on the draft Certificate of Appropriation issued September 15, 1994. The errors have now been corrected to show the quantity per well as being 90 acre-feet per calendar year for each well. The original draft Certificate was drafted for 67 acre-feet per calendar year per well.

There is enclosed for your consideration and comment a revised draft Certificate of Appropriation. Please note the aforementioned revisions and review the document again as explained by our September 15, 1994, letter. If there are any corrections needed, please note them on the draft Certificate of Appropriation and submit it with comments for our review.

If we do not hear from you before October 27, 1994, we will issue the certificate as enclosed. If the proposed certificate is acceptable and you wish to expedite its issuance, you may notify this office in writing prior to the end of the normal thirty (30) day waiting period. Should you have any questions, please feel free to contact this office either by telephone or in writing. Please identify the file number when communicating with this office.

Sincerely,

Larry M. Sheets
Environmental Scientist
Water Rights Section

LMS:jt
Enc.
pc: Stafford Field Office
Groundwater Management District No. 9 1 1995
R 9 Ranch Bet Farms
ADMINISTRATIVE POLICY
No. 86-8

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

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

Date: November 5, 1986

History: Effective November 5, 1986

Approved by: David L. Pope
Chief Engineer

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

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

EXAMPLES:

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

B. 83 acres requested;

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

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.
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>684,559,000</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 farmsteads using at least 200,000 gallons of water per year.

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

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

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

UNACCOUNTED FOR WATER

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

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

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

SECTION 2: Past Water Use

Complete the following table from your past water use records.

<table>
<thead>
<tr>
<th>Column 1</th>
<th>Column 2</th>
<th>Column 3</th>
<th>Column 4</th>
<th>Column 5</th>
<th>Column 6</th>
<th>Column 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw Water Diverted Under Your Rights</td>
<td>Water Purchased From All Sources</td>
<td>Water Sold to Other Public Water Suppliers</td>
<td>Water Sold to Your 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>592,323,000</td>
<td>5,029,000</td>
<td>469,314,000</td>
<td>5,155,000</td>
<td>112,625,000</td>
<td></td>
</tr>
<tr>
<td>15 years ago</td>
<td>780,527,000</td>
<td>10,819,000</td>
<td>587,985,000</td>
<td>10,470,000</td>
<td>171,473,000</td>
<td></td>
</tr>
<tr>
<td>10 years ago</td>
<td>706,926,000</td>
<td>7,103,000</td>
<td>639,222,000</td>
<td>20,861,000</td>
<td>39,740,000</td>
<td></td>
</tr>
<tr>
<td>5 years ago</td>
<td>693,866,000</td>
<td>13,537,000</td>
<td>581,900,000</td>
<td>19,362,000</td>
<td>114,383,000</td>
<td></td>
</tr>
</tbody>
</table>

TOTAL WATER = Columns 1 + 2
ACCOUNTED FOR WATER = Columns 3 + 4 + 5 + 6
UNACCOUNTED FOR WATER
SECTION 3: PROJECTED FUTURE WATER NEEDS

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

<table>
<thead>
<tr>
<th>Year</th>
<th>Raw Water Diverted Under Your Rights</th>
<th>Water Purchased From All Sources</th>
<th>Water Sold to Other Public Water Suppliers</th>
<th>Water Sold to Your Industrial, Stock, and Bulk Customers</th>
<th>Water Sold to Your Residential and Commercial Customers</th>
<th>Other Metered Water</th>
<th>Remaining Water Used (See Explanation on other side)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>753,014,302</td>
<td></td>
<td>11,886,600</td>
<td>654,779,400</td>
<td>17,859,700</td>
<td>68,389,200</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>828,316,290</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>15</td>
<td>911,148,029</td>
<td></td>
<td>14,382,786</td>
<td>792,283,074</td>
<td>21,731,237</td>
<td>82,780,932</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>1,002,262,832</td>
<td></td>
<td>15,821,065</td>
<td>871,511,381</td>
<td>23,804,361</td>
<td>91,026,025</td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL WATER** = Columns 1 + 2

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

**UNACCOUNTED FOR WATER**

SECTION 4: POPULATION AND SERVICE CONNECTIONS

ESTIMATE THE NUMBER OF PERSONS DIRECTLY SERVED BY YOUR WATER DISTRIBUTION SYSTEM

**PAST POPULATION - PROVIDE INFORMATION BELOW:**

(CENSUS BUREAU INFORMATION)

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

Provide number of current active service connections:

- Residential: 6,624
- Industrial: 2
- Commercial: 1,256
- Pasture/Stockwater/Feedlot: 8,082

Total: 8,082

SECTION 5: PRESENT GALLONS PER PERSON PER DAY

CALCULATE YOUR GALLONS PER PERSON PER DAY

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

\[
\frac{623,753,000 + 21,038 + 365 \text{ Days/Year}}{\text{Population from Last Year of Section 4}} = 88 \quad \text{GALLONS PER PERSON PER DAY.}
\]

SECTION 6: AREA TO BE SERVED

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

City of Hays, KS Municipal Water Supply

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

You may attach additional information you believe will assist in informing the Division of the need for your request.
SECTION 1: PRESENT WATER USE SUMMARY

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</td>
<td>Water Purchased From</td>
<td>Water Sold to Other Public</td>
<td>Water Sold to Your Industrial,</td>
<td>Other Metered Water</td>
<td>Remaining Water Used</td>
<td></td>
</tr>
<tr>
<td>Your Rights</td>
<td>All Sources</td>
<td>Water Suppliers</td>
<td>Stock, and Bulk Customers</td>
<td>Residential and Commercial Customers</td>
<td>(See Below Explanation)</td>
<td></td>
</tr>
<tr>
<td>327,288,100</td>
<td>0</td>
<td>0</td>
<td>105,295,000</td>
<td>108,743,000</td>
<td>19,944,000</td>
<td>93,308,100</td>
</tr>
<tr>
<td>TOTAL WATER = Columns 1 + 2</td>
<td>ACCOUNTED FOR WATER = Columns 3 + 4 + 5 + 6</td>
<td>UNACCOUNTED FOR WATER = TOTAL WATER - ACCOUNTED FOR WATER</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

UNACCOUNTED FOR WATER = TOTAL WATER - ACCOUNTED FOR WATER

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

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

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

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

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

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

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

UNACCOUNTED FOR WATER

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

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

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

Percent Unaccounted For Water = Unaccounted For Water x 100

Total Water (Columns 1, 2)

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</td>
<td>Water Purchased From All</td>
<td>Water Sold to Other Public</td>
<td>Water Sold to Your Industrial,</td>
<td>Other Metered Water</td>
<td>Remaining Water Used</td>
<td></td>
</tr>
<tr>
<td>Your Rights</td>
<td>Sources</td>
<td>Water Suppliers</td>
<td>Stock, and Bulk Customers</td>
<td>Residential and Commercial Customers</td>
<td>(See Above Explanation)</td>
<td></td>
</tr>
<tr>
<td>20 years ago</td>
<td>373,757,000</td>
<td>0</td>
<td>171,928,220</td>
<td>115,864,670</td>
<td>18,687,850</td>
<td>67,276,260</td>
</tr>
<tr>
<td>15 years ago</td>
<td>477,486,000</td>
<td>0</td>
<td>222,781,000</td>
<td>147,340,000</td>
<td>19,483,000</td>
<td>87,882,000</td>
</tr>
<tr>
<td>10 years ago</td>
<td>477,486,000</td>
<td>0</td>
<td>144,277,000</td>
<td>123,343,000</td>
<td>18,907,000</td>
<td>89,263,000</td>
</tr>
<tr>
<td>5 years ago</td>
<td>373,790,000</td>
<td>0</td>
<td>171,928,220</td>
<td>115,864,670</td>
<td>18,687,850</td>
<td>67,276,260</td>
</tr>
<tr>
<td>TOTAL WATER = Columns 1 + 2</td>
<td>ACCOUNTED FOR WATER = Columns 3 + 4 + 5 + 6</td>
<td>UNACCOUNTED FOR WATER = TOTAL WATER - ACCOUNTED FOR WATER</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### SECTION 3: PROJECTED FUTURE WATER NEEDS

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

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 5</td>
<td>386,346,512</td>
<td>0</td>
<td>0</td>
<td>119,767,419</td>
<td>15,453,861</td>
<td>73,405,836</td>
<td></td>
</tr>
<tr>
<td>Year 10</td>
<td>405,513,682</td>
<td>0</td>
<td>0</td>
<td>186,536,377</td>
<td>125,709,241</td>
<td>16,220,547</td>
<td>77,047,517</td>
</tr>
<tr>
<td>Year 15</td>
<td>426,310,852</td>
<td>0</td>
<td>0</td>
<td>196,102,982</td>
<td>132,156,364</td>
<td>17,052,434</td>
<td>80,999,062</td>
</tr>
<tr>
<td>Year 20</td>
<td>443,849,022</td>
<td>0</td>
<td>0</td>
<td>204,170,090</td>
<td>137,592,887</td>
<td>17,753,921</td>
<td>84,331,124</td>
</tr>
</tbody>
</table>

**TOTAL WATER = Columns 1 + 2**

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

**UNACCOUNTED FOR WATER**

### SECTION 4: POPULATION AND SERVICE CONNECTIONS

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

#### PAST POPULATION - PROVIDE INFORMATION BELOW:

**CENSUS BUREAU INFORMATION**

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

Provide number of current active service connections:

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

### 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**

  - **Amount of water in Columns 5, 6, and 7:** 211,991,000
  - **Population from Last Year of Section 4:** 4,475
  - **365 Days/Year:**
  - **GALLONS PER PERSON PER DAY:** 135.9

### 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 Pfieffer 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 this request.