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**.

22327

David. W. Barfield, P.E.

JUN 26 2015
4:10
Chief Engineer
Division of Water Resources
Kansas Dept. of Agriculture

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

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 change the

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

David W. Barfield, P.E.
JUN 28 2015
4:10
Chief Engineer
Division of Water Resources
Kansas Dept. of Agriculture

WATER RESOURCES RECEIVED
JUN 29 2015
8:33
KS DEPT OF AGRICULTURE

File No. 22,327 Circle 21.

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

Address: c/o Foulston Siefkin LLP, 1551 N. Waterfront Parkway, Suite 100

City, State and Zip: Wichita, Kansas 67206

Phone Number: (316) 291-9725 E-mail address: dtraster@foulston.com

What is your relationship to the water right; ☑ owner ☐ tenant ☐ agent ☐ other? If other, please explain. Hays and Russell are co-owners of the authorized place of use on the R9 Ranch in Edwards County.

Name of water use correspondent: City of Hays, Kansas

Address: P. O. Box 490, 1507 Main Street

City, State and Zip: Hays, Kansas 67601

Phone Number: (785) 628-7320 E-mail address: tdougherty@haysusa.com

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

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

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

of 21000- 15053312

SCANNED

DWR 1-120 (Revised 06/16/2014)
22327

Assisted by: _____

6/30/2015 LLM

File No. 22,327

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	
1-T26S-R20W	Lot 1 34	Lot 2 34	34	34													136

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.

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 near the center Quarter of the _____ Quarter of the NE Quarter
of Section 1, Township 26 South, Range 20 (E/W),
in Edwards County, Kansas, 4,062 feet North 1,539 feet West of Southeast corner of section.
Authorized Rate 490 gpm Authorized Quantity 103 a/f
(DWR use only: Computer ID No. _____ GPS _____ feet North _____ feet West)
☐ **This point will not be changed** ☑ **This point will be changed as follows:**

Proposed point of diversion: (Complete only if change is requested)
One in the SE Quarter of the NE Quarter of the NW Quarter
of Section 1, Township 26 South, Range 20 (E/W),
in Edwards County, Kansas, 5,034 feet North 2,790 feet West of Southeast corner of section.
Proposed Rate 950 gpm Proposed Quantity 175.1 a/f
This point is: ☐ Additional Well ☐ Geo Center List other water rights that will use this point 22,325 & 22,326.

9. **Presently authorized point of diversion:**
One in the Lot 2 Quarter of the _____ Quarter of the _____ Quarter
of Section 1, Township 26 South, Range 20 (E/W),
in Edwards County, Kansas, 4,372 feet North 2,154 feet West of Southeast corner of section.
Authorized Rate 475 gpm Authorized Quantity 100 a/f
(DWR use only: Computer ID No. _____ GPS _____ feet North _____ feet West)
☐ **This point will not be changed** ☑ **This point will be changed as follows:**

Proposed point of diversion: (Complete only if change is requested)
One in the SE Quarter of the NE Quarter of the NW Quarter
of Section 1, Township 26 South, Range 20 (E/W),
in Edwards County, Kansas, 5,034 feet North 2,790 feet West of Southeast corner of section.
Proposed Rate 950 gpm Proposed Quantity 175.1 a/f
This point is: ☐ Additional Well ☐ Geo Center List other water rights that will use this point 22,325 & 22,326.

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

File No. 22,327

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

File No. 22,327

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

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

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

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

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

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

(Owner)	(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)
) SS
County of Russell)

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

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
KS DEPT OF AGRICULTURE

File No. 22,327

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)
) SS
County of Russell)

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

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
KS DEPT OF AGRICULTURE

Proposed Rate and Quantity

The Cities are requesting a total of 175.1 acre-feet and 950 gpm from the well associated with this water right, all of which will be diverted from new point of diversion I, as shown on Exhibit K. When combined with existing wells from other water rights, new point of diversion I will have a cumulative total of 587.78 acre-feet and 2,950 gpm.

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

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

That same regulation goes on to allow the change to be based on the net consumptive use actually made during the perfection period allows the conversion of 145.80 acre-feet to municipal use.[1] As discussed below, 135 approved acres irrigated during the perfection multiplied by the Edwards County NIR for corn of 1.08 acre-feet per acre equals 145.80 acre-feet.[2]

That same regulation goes on to allow the change to be based on the net consumptive use actually made during the perfection period.[3]

Quantity authorized and perfected

The permit was issued on March 19, 1976, granting the applicant the right to divert up to 245 acre-feet annually at a rate not to exceed 1,000 gallons per minute for irrigation use[4] on 136 acres in the NE/4 of Section 1-T26S-R20W, or 1.80 acre-feet per acre.[5] The certificate further limited the rate of the wells to 950 gallons per minute when operated simultaneously.[6]

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

DWR's Field Inspection Reports indicate that 243.20 of the 245 acre-feet authorized by the permit were lawfully perfected.

- 169 acre-feet[8] and 164 acre-feet[9] (333 acre-feet) were applied to 135 approved acres in the NE/4 of Section 1-T265S-R20W.

---

[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, HAYS002420, Ex. A.

[5] Application, HAYS002416, Ex. B.

[6] Certificate, HAYS002429, Ex. C.

[7] March 19, 1976, letter (emphasis added), HAYS002419, Ex. D.

[8] FIR, HAYS002398, Ex. E.

[9] FIR, HAYS002406, Ex. F.

- The permit authorized the perfection of 1.80 acre-feet per acre but only 135 acres were irrigated during the perfection period, resulting in perfection of 243.20 acre-feet.[10]

While the certificate limits the total quantity to 203 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.[11]

Since the perfection period has expired, the "authorized quantity" for this water right is the 243.20 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.[12] 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 243.20 acre-feet legally applied during the perfection period percolates back to the aquifer, then 72%, or 175.1 acre-feet, should be available for conversion to municipal use. While this quantity is greater than the quantity set out in the certificate, it is less than the 243.20 perfected acre-feet, the "maximum annual quantity authorized by the water right."

The Applicants request that DWR approve a total of 175.1 acre-feet for municipal use.

[10] FIRs, HAYS002398, Ex. E, and HAYS002406, Ex. F.

[11] Certificate, HAYS002429, Ex. C; Doug Bush Memo dated March 19, 1987, HAYS002424, Ex. G; and *Clawson v. Kansas Dept. of Agriculture, Div. of Water Resources,* 49 Kan. App. 2d 789, 315 P.3d 896 (2013).

[12] 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, Ex. G.

EXHIBIT
22327
A

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. 22,327 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 approximately 375 feet North and 375 feet West of the Southeast corner of Lot 2 (NW¼ NE¼) and one well near the center of the Northeast Quarter (NE¼) of Section 1, Township 26 South, Range 20 West, in Edwards County, Kansas, located substantially as shown on the aerial photograph accompanying the application.

WATER RESOURCES
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JUN 29 2015
KS DEPT OF AGRICULTURE

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 245 acre-feet for any calendar year.

RECEIVED
MAR 29 1976
HAYS002420
FIELD OFFICE
DIVISION OF WATER RESOURCES
STAFFORD

(OVER)

22327

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 1976

Guy E. Gibson

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

DIVISION OF WATER RESOURCES
GUY E. GIBSON
CHIEF ENGINEER
KANSAS STATE BOARD OF AGRICULTURE
22327

EXHIBIT B 22327

c 2

THE STATE OF KANSAS

Well #21

STATE BOARD OF AGRICULTURE
Roy Freeland, *Secretary*

DIVISION OF WATER RESOURCES
Guy E. Gibson, *Chief Engineer*

Rec'd check $50.00 5-2-74

NUMBER 8 22,327

APPLICATION FOR PERMIT TO APPROPRIATE WATER FOR BENEFICIAL USE

[redacted]

(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:

Comes now the applicant (Mr.) (Mrs.) (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~~ 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 ~~XXXXXXXXX 320 acre feet~~ 245 acre feet (acre feet or million gallons) per year, to be diverted at a maximum rate of ~~1100~~ 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 ____ quarter of the ~~SE~~ quarter of the ~~NE~~ quarter of section 1, township ~~South Brown~~ 26S, range ~~20~~ 20 W, in Edwards County, Kansas. (Section 1 is more than a mile long) 3-8-76 [illegible] ~~1-27-74~~

1 well ~~approx. 1600'N & 1300'E of the center of~~ Sec 1 ~~SE¼ SW¼ NE¼~~ NR. CTR. ~~of E½~~ NE4
1 well ~~approx 1400' N & 1700' E of the center of Sect~~ APPROX 375' N. & 375' W. OF SE CORNER LOT 2 (NW4, NE4)

3. The water is intended to be appropriated for:

			Amount
(a)	Domestic use	( )	
(b)	Municipal use	( )	
(c)	Irrigation use	(X)	~~320~~ 245 acre ft./yr. - ~~1100~~ gals./min.
(d)	Industrial use	( )	
(e)	Recreational use	( )	
(f)	Water Power use	( )	

(check intended use or uses and show intended quantity for each use)

DIVISION OF WATER RESOURCES RECEIVED MAY 02 1974 9:07 a.m. STATE BOARD OF AGRICULTURE

DIVISION OF WATER RESOURCES RECEIVED MAY 09 1975 STATE BOARD OF AGRICULTURE

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

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

MICROFILMED

RECEIVED

FIELD OFFICE DIVISION OF WATER RESOURCES STAFFORD

WATER RESOURCES RECEIVED JUN 29 2015 KS DEPT OF AGRICULTURE

22327

HAYS002415

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	NE¼				NW¼				SW¼				SE¼ ~~of NE~~				Total
			NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	
			part of Lot 1	part of Lot 2															
1	26	20	~~34~~ 34	~~35~~ 34	~~33~~ 34	34									~~34~~ ~~40~~	~~34~~ ~~40~~	~~40~~	~~40~~	~~136~~ ~~160~~ 136

Owner of Land—NAME:

ADDRESS:

Sec.	Twp.	Range	NE¼				NW¼				SW¼				SE¼				Total
			NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	

Owner of Land—NAME:

ADDRESS:

Sec.	Twp.	Range	NE¼				NW¼				SW¼				SE¼				Total
			NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	

7. The works for diversion of water will consist of 2 ~~one~~ well with 2 ~~one~~ pump for one circle sprinkl irrigation system (2 ~~One~~ Motor)
(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
X 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, 19 74

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

NOTE:
1 cubic foot per second = 448.8 gallons per minute = 646,317 gallons per day = 1.98 acre feet per day.
1 million gallons per day = 1.547 cubic feet per second = 3.07 acre feet per day.
1 acre foot = 43,560 cubic feet = 325,851 gallons.

M1-838 S-72-10M SETS

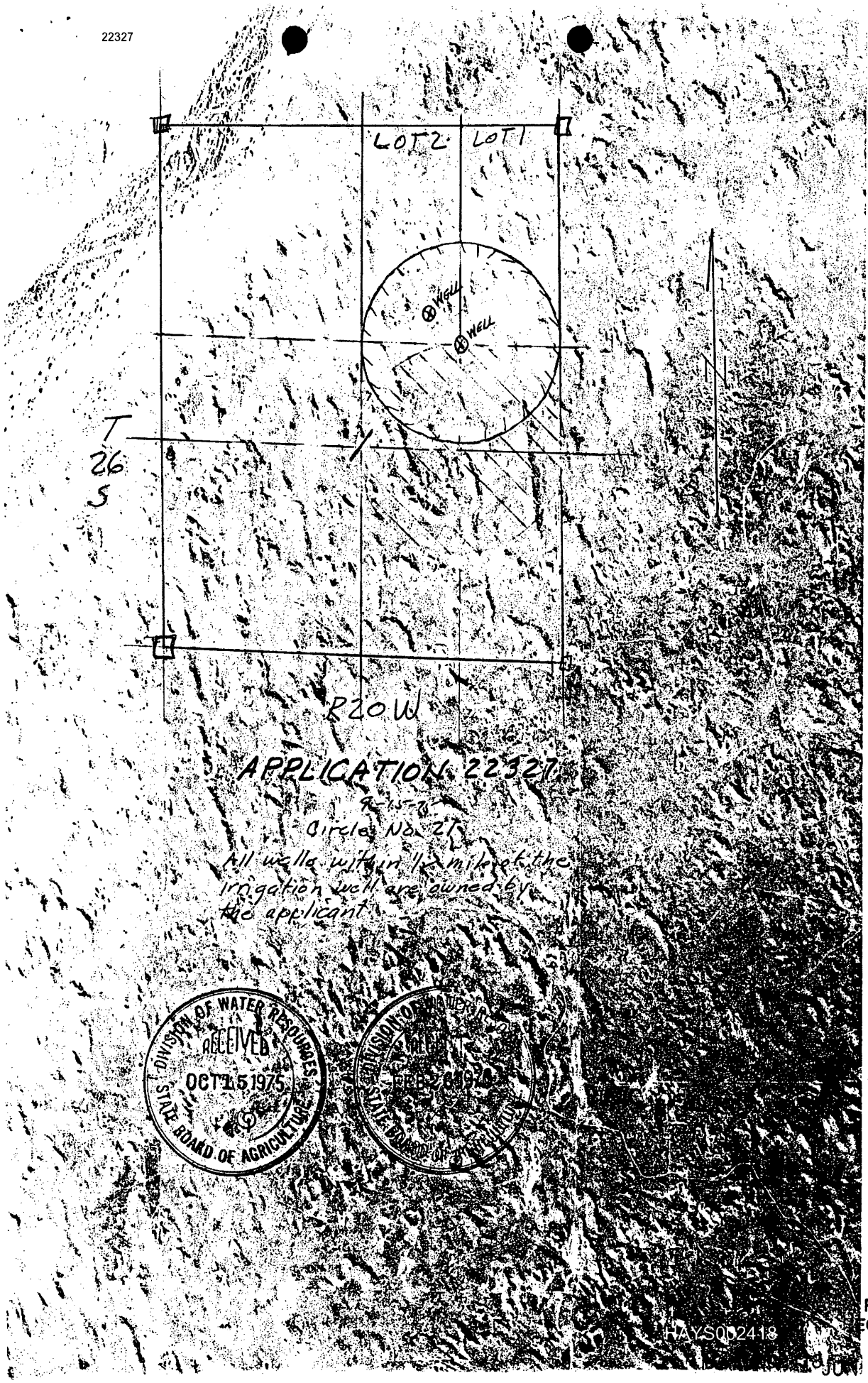

EXHIBIT 22927
C

THE STATE OF KANSAS

STATE BOARD OF AGRICULTURE
Sam Brownback, *Secretary*

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

CERTIFICATE OF APPROPRIATION FOR BENEFICIAL USE OF WATER

WATER RIGHT, File No. 22,327
PRIORITY DATE May 2, 1974

WHEREAS, It has been determined by the undersigned that construction of the appropriation diversion works has been completed, that water has been used for beneficial purposes and that the appropriation right has been perfected, all in conformity with the conditions of approval of the application pursuant to the water right referred to above and in conformity with the laws of the State of Kansas,

NOW, THEREFORE, Be It Known that DAVID L. POPE, the duly appointed, qualified and acting Chief Engineer of the Division of Water Resources of the Kansas State Board of Agriculture, by authority of the laws of the State of Kansas, and particularly K.S.A. 82a-714, does hereby certify that, subject to vested rights and prior appropriation rights, the appropriator is entitled to make use of groundwater in the drainage basin of the Arkansas River to be withdrawn by means of two (2) wells: one (1) well located near the center of the Northeast Quarter (NE¼) of Section 1, more particularly described as being near a point 4,062 feet North and 1,539 feet West of the Southeast corner of said section, at a diversion rate not in excess of 490 gallons per minute (1.09 c.f.s.) and in a quantity not to exceed 103 acre-feet per calendar year; and one (1) well located in Lot 2 of Section 1, more particularly described as being near a point 4,372 feet North and 2,154 feet West of the Southeast corner of said section, at a diversion rate not in excess of 475 gallons per minute (1.06 c.f.s.) and in a quantity not to exceed 100 acre-feet per calendar year; both in Township 26 South, Range 20 West, Edwards County, Kansas, for irrigation use on the following described property:

34 acres in Lot 1 (E½ NE¼)
34 acres in Lot 2 (W½ NE¼)
34 acres in the Southwest Quarter of the Northeast Quarter (SW¼ NE¼)
34 acres in the Southeast Quarter of the Northeast Quarter (SE¼ NE¼)

a total of 136 acres in Section 1, Township 26 South, Range 20 West, Edwards County, Kansas.

This appropriation right is further limited to a diversion rate which when the wells operate simultaneously will provide a diversion rate not in excess of 950 gallons per minute (2.12 c.f.s.) for irrigation use on the property described herein.

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

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

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

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

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

IN WITNESS WHEREOF, I have hereunto set my hand at my office at Topeka, Kansas, this 17th day of June, 1987.

DIVISION OF WATER RESOURCES
DAVID L. POPE
CHIEF ENGINEER
KANSAS STATE BOARD of AGRICULTURE

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 17th day of June, 1987 by David L. Pope, P.E., Chief Engineer, Division of Water Resources, Kansas State Board of Agriculture.

DENISE J. WATERS
NOTARY PUBLIC
STATE OF KANSAS

Signature: Denise J. Waters
Denise J. Waters, Notary Public

My appointment expires March 1, 1990

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

WATER APPROPRIATION CERTIFICATE

No. 16,162

STATE OF KANSAS

Water Right, File No. 22,327

22327

STATE OF KANSAS, _____ COUNTY, ss.

Filed for record this _____ day of _____, 19__

at _____ o'clock ___m. and

recorded in Book _____ Page _____

Fee $_____

_____ Register of Deeds.

EXHIBIT
22327
D

2

E-N

March 19, 1976

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

ATTENTION: Mr. Johnny Carson, Manager

Re: Appropriation of Water
Application No. 22,327

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

RMD:GEE:eel

Encs.

EXHIBIT
E 22327

DIVISION OF WATER RESOURCES—KANSAS STATE BOARD OF AGRICULTURE

FIELD INSPECTION REPORT

☐ Partial
☒ Full
☐ Re-Test

Test 1 of 2 Diversion points

Application No. 22327 Date 10/2/86 Firm/Field Office Pumping Plant Testing, Inc. Inspector Ebert/Klassen

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

Current Landowner Connecticut General Life Insurance c/o Agri. Affiliates

Address Box 1162 North Platte, NE 69103 Attn. Jerry Weaver

☐ Additional landowners and addresses identified in remarks section.

Water Use Classification: 1. Domestic ( ) 2. Industrial ( ) 3. Irrigation ☒
4. Municipal ( ) 5. Recreation ( ) 6. Stockwatering ( ) 7. Water Power ( )

Groundwater ☒ Drainage Basin Arkansas River

Surface Water ( ) Stream

DIVISION OF WATER RESOURCES RECEIVED JAN 21 1987 KS DEPT OF AGRICULTURE

Authorized Point of Diversion: NC NE¼ Sec. 1, T. 26, R. 20
Approximately ft. North and ft. West of SE corner of Sec.

Actual Point of Diversion: NC NE¼ Sec. 1, T. 26, R. 20.
Approximately 4062 ft. North and 1539 ft. West of SE corner of Sec. 1
How were distances determined? Scaled from ASCS photo

"Approved" Quantity 245 AF "Approved" Diversion Rate 1000 g.p.m. (2.23 c.f.s.)

Priority Date May 2, 1974 Approval of Application Date March 19, 1976

Perfection Date Dec. 31, 1981

Other applications covering land and/or point of diversion None
(include discussion of overlapping files in remarks section)

LAND TO BE INCLUDED ON CERTIFICATE:

S	T	R	NE¼				NW¼				SW¼				SE¼				TOTAL ACRES
			NE Lot 1	NW Lot 2	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
1	26	20	34	34	34	34													136

LAND IRRIGATED—YEAR OF RECORD 1985 – SEE ATTACHED SHEET

S	T	R	NE¼				NW¼				SW¼				SE¼				TOTAL ACRES
			NE Lot 1	NW Lot 2	SW	SE	NE Lot 3	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
1	26	20	30	41.5	34.5	33.5	3.5			2									135

APPLICATION OF WATER: – SEE ATTACHED SHEET
Year of Record 1985 Hours Pumped 1900 or Quantity 332.4 AF
Normal Operating G.P.M. (combined) 950 Equiv. c.f.s. 2.12
Maximum Operating G.P.M. (individual) 488 Equiv. c.f.s. 1.09

FOR D.W.R. USE ONLY

Year of Record 1985 Extension of time requested: Yes ___ No ✓

Total No. of Hours on land covered by this application 1,900

Ac. Ft. Applied = 1,900 hrs. × 488 g.p.m. × 4.419 / (24 × 1000) = 169 AF

RECEIVED JUL 06 1987 DIVISION OF WATER RESOURCES

Acres of "Approved" Land irrigated 135

Ac. Ft. on "Approved" Land 169 (1.24 Ac. Ft./Ac.)

Ac. Ft. Used on "Approved" Land at "Approved" Rate or Less 169

Proration Calculations 488 gpm + 474 g.p.m. = 962 gpm 488 gpm ÷ 962 gpm = 0.507
0.507 × 203 A.F. (Maximum allowable) = 103 A.F.

Perfected Rate 490 g.p.m. Perfected Quantity 103 AF

Completed by Douglas E. Bush 3-19-87

WATER RESOURCES RECEIVED
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HAYS002398

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22327

GENERAL INFORMATION ON IRRIGATION SYSTEM:

☒ Center Pivot ☐ High Pressure ☒ Low Pressure

Manufacturer Zimmatic Model 310 Serial No. 3153

Drive Electric Length of Pivot Arm 1282

Design Pressure-Pivot ____ p.s.i. Operating Pressure-Pivot 48 (both wells) p.s.i.

End Gun? yes End Gun Rating ____ g.p.m. 2 Rain Bird 85's

Is end gun operating during test? yes

☐ Gravity Irrigation (show test set on sketch)

Number of gates open ____ Normal Pipe Size ____

Pressure at pump ____ p.s.i.

☐ Other Type ____

Manufacturer ____ Model ____ Serial No. ____

Unusual Conditions/Other Info.

POWER UNIT INFORMATION:

Manufacturer Ford Model No. 300 HP —

Serial No. — Fuel Natural Gas Rated RPM —

PUMP INFORMATION:

Manufacturer Fairbanks Morse Model No. 10 MA Rated RPM ____

Serial No. N2W2355X Type Vertical Turbine No. stages 5

GEAR HEAD INFORMATION:

Manufacturer U.S. Motors ~~Model No.~~ ID# R-9556-00-H-410

Serial No. 05001525 Drive Right Angle Ratio 6:5

WELL INFORMATION:

Date Drilled 8-29-74 Original Depth 44 ft. Static Water Level When Drilled 13 ft.

Tape Down Possible? yes Water Level Measurement Tube? no

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

ADDITIONAL REQUIREMENTS:

Meter Required? no Make of Meter —

Meter Model No. — Serial No. — Size —

Is Meter Installed Properly? —

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

Vacuum Breaker? yes Are these anti-pollution devices installed properly? yes

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

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HAYS002399

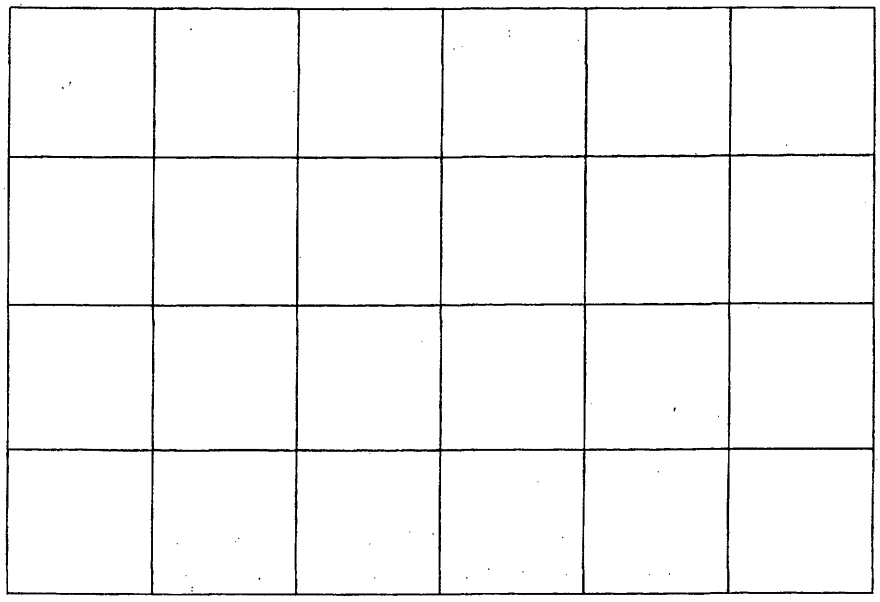
SCANNED

22327

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

N

Scale
1" = ____ ft.



TEST OF DIVERSION RATE:

Length of time well has been operating prior to test 0
Location of test In vertical pipe inside pivot stand
Pipe Diameter (I.D.) 7 1/16 inches

Test No. 1—Normal Conditions – NONE/A NONE

R.P.M. POWER UNIT 1830
R.P.M. PUMP UNIT 1525
Pressure at Pump 23 psi

Test No. 2—Maximum Conditions – Both Wells Pumped Simultaneously

R.P.M. POWER UNIT 2116
R.P.M. PUMP UNIT 1763
Pressure at Pump 51 psi

☐ **Jacuzzi Meter Test** Meter Identification No. _____

Area Constant K = 2.45 × 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.		
Total			Total		
Avg.			Avg.		
G.P.M.			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

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HAYS002400

☒ **Other Flow Meter** Use Supplemental Sheet (include meter identification, data and calculations).

FUEL RECORDS:

☐ **Electricity** Supplier _____

Meter Manufacturer _____ Type _____ Serial No. _____

K _____ watt/rev r _____ revolutions t _____ seconds

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

☒ **Other Fuels** Type Natural Gas Supplier Kansas - Nebraska

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

How was the test volume determined? Not Determined, One Meter is used for many wells.

TABULATION OF WATER USE:

Year	Hours Pumped (hr)	Tested Pumping Rate (gpm)	Water Used (AF)	Acres Irrigated
1975	1800	1000		130
1976				
1977	986	1000		130
1978				
1979	336	900		127
1980				
1981	840	900		127
1982				
1983	unused due to PIK program ⁷			
1984	1800 ⁷	550 ⁷		135 ⁷
* 1985	1900 ⁷	488 *		135 ⁷
1986		488 *		
	⁷ DATA SUPPLIED BY AGRI-AFFILIATES			
	* RESULTS OF 10/2/86 TEST			

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

Crops Irrigated: this year Alfalfa Year of record wheat

REMARKS:

Person present at test Kent Naber (name) Irrigation Manager (relationship)

Water Use Correspondent Lyle Kolbeck (name) Spearville, Ks. 67876 (address) 316-385-2803 (phone number)

Conducted by Greg Ebert (signature) Date 10/9/86

Approved by [signature], P.E. (signature) (title) Date 12/29/86

APPLICATION NO: 22327 NAME: Connecticut General Life Ins.

POINTS OF DIVERSIONSION AND SECTION CORNERS

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

PUMPING PLANT TESTING, INC.

Reviewed by: [signature]

Professional Engineer

APPLICATION NO: 22327 NAME: Connecticut General Life Insurance

COLLINS METER TEST Well NC NE¼ Pumping Alone

Collins Meter No. 1-85 Meter Calibration Factor .9826

Pipe Inside Diameter (inches) 7 1/16 Flow Rate Factor 143.0

Test Pressure (psi) 23 Test RPM, Pump 1525

Description of Test Location In vertical pipe inside pivot stand

TEST DATA: ℄ Check, Initial 3.30 Reversed 3.31

Meter Setting From Center of Pipe	Velocity Left Side of Pipe (or Front Side if Vertical Test)		Velocity Right Side of Pipe (or Back Side if Vertical Test)	
1 9/16	3.55	3.50	3.59	3.64
2 3/4	3.32	3.29	3.55	3.51
3 1/2	3.33	3.40	3.60	3.42

Average Velocity of Water = Sum of Vel. ÷ 12 = 3.475

Corrected Ave. Vel. = (Ave. Vel.) x (Calibration Factor) =
3.475 x .9826 = 3.415

Flow Rate = (Corrected Ave. Vel.) x (Flow Rate Factor) =
3.415 x 143 = 488 GPM

PUMPING PLANT TESTING, INC.

Reviewed By: Neil J. W[illegible]

Professional Engineer

APPLICATION NO: 22327 NAME: Connecticut General Life Insurance

COLLINS METER TEST Both wells combined

Collins Meter No. 1-85 Meter Calibration Factor .9826

Pipe Inside Diameter (inches) 7 11/16 Flow Rate Factor 143.0

Test Pressure (psi) 51 Test RPM, Pump A 1763 B 1760

Description of Test Location In vertical pipe at pivot

TEST DATA: ☑ Check, Initial 7.05 Reversed 7.05

Meter Setting From Center of Pipe	Velocity Left Side of Pipe (or Front Side if Vertical Test)		Velocity Right Side of Pipe (or Back Side if Vertical Test)	
1 9/16	6.80	6.77	7.04	7.03
2 3/4	6.44	6.41	6.97	6.95
3 1/2	6.33	6.56	7.08	6.67

Average Velocity of Water = Sum of Vel. ÷ 12 = 6.754

Corrected Ave. Vel. = (Ave. Vel.) x (Calibration Factor) = 6.754 x .9826 = 6.64

Flow Rate = (Corrected Ave. Vel.) x (Flow Rate Factor) = 6.64 x 143.0 = 950 GPM

Reviewed By:

PUMPING PLANT TESTING, INC.

Professional Engineer

HAYS002404

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22327

APPLICATION NO: 22,327 NAME: CONNECTICUT GENERAL LIFE INSURANCE CO, INC.

NOTES ON CHOOSING A YEAR OF RECORD

THIS DEVELOPMENT HAS HAD SEVERAL OWNERS SINCE ITS INCEPTION IN 1975, WITH OWNERS FROM EUROPE & 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, AND THE SYSTEMS AND PUMPING PLANT COMPONENTS HAVE BEEN INTERCHANGED OVER THE YEARS.

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

DIVISION OF WATER RESOURCES RECEIVED JAN 21 1987 STATE BOARD OF AGRICULTURE

RECEIVED JUL 06 1987

PUMPING PLANT TESTING, INC.

Reviewed by: [signature] HAYS

Professional Engineer

WATER RESOURCES RECEIVED JUN 29 2015 KS DEPT OF AGRICULTURE

SCANNED

EXHIBIT F 22327

DIVISION OF WATER RESOURCES—KANSAS STATE BOARD OF AGRICULTURE

FIELD INSPECTION REPORT

☐ Partial
☒ Full
☐ Re-Test

Test 2 of 2 Diversion points

Application No. 22327 Date 10/2/86 Firm/Field Office Pumping Plant Testing, Inc.
Inspector Ebert/Klassen

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

Current Landowner Connecticut General Life Insurance

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

Water Use Classification: 1. Domestic ( ) 2. Industrial ( ) 3. Irrigation ☒
4. Municipal ( ) 5. Recreation ( ) 6. Stockwatering ( ) 7. Water Power ( )

Groundwater ☒ Drainage Basin Arkansas River

Surface Water ( ) Stream

DIVISION OF WATER RESOURCES RECEIVED JAN 21 1987 STATE BOARD OF AGRICULTURE

Authorized Point of Diversion: Well 375'N and 375'W of SE corner of Lot 2 Sec. 1, T. 26, R. 20
Approximately ft. North and ft. West of SE corner of Sec.

Actual Point of Diversion: Well NE S¼ of Lot 2 Sec. 1, T. 26, R. 20.
Approximately 4372 ft. North and 2154 ft. West of SE corner of Sec. 1
How were distances determined? Scaled from ASCS photo

"Approved" Quantity 245 AF "Approved" Diversion Rate 1000 g.p.m. (2.23 c.f.s.)

Priority Date May 2, 1974 Approval of Application Date March 19, 1976

Perfection Date Dec. 31, 1981

Other applications covering land and/or point of diversion None
(include discussion of overlapping files in remarks section)

LAND TO BE INCLUDED ON CERTIFICATE:

S	T	R	NE¼				NW¼				SW¼				SE¼				TOTAL ACRES
			NE Lot 1	NW Lot 2	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
1	26	20	34	34	34	34													136

LAND IRRIGATED—YEAR OF RECORD 1985 – SEE ATTACHED SHEET

S	T	R	NE¼				NW¼				SW¼				SE¼				TOTAL ACRES
			NE Lot 1	NW Lot 2	SW	SE	NE Lot 3	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
1	26	20	30	41.5	34.5	23.5	3.5			2									135

APPLICATION OF WATER: – SEE ATTACHED SHEET
Year of Record 1985 Hours Pumped 1900 or Quantity 332.4 AF
Normal Operating G.P.M. combined 950 Equiv. c.f.s. 2.12
Maximum Operating G.P.M. Individual 474 Equiv. c.f.s. 1.06

FOR D.W.R. USE ONLY

Year of Record 1985 Extension of time requested: Yes ___ No ✓

Total No. of Hours on land covered by this application 1,900 RECEIVED

Ac. Ft. Applied = 1900 hrs. × 468 g.p.m. × 4.419 / (24 × 1000) = 164 AF JUL 06 1987

Acres of "Approved" Land irrigated 135

Ac. Ft. on "Approved" Land 164 (1.21 Ac. Ft./Ac.) DIVISION OF WATER RESOURCES

Ac. Ft. Used on "Approved" Land at "Approved" Rate or Less 164

Proration Calculations 474 gpm + 488 gpm = 962 gpm 474 gpm ÷ 962 gpm = 0.493 × 203 A.F. (maximum allowable) = 100 A.F.

Perfected Rate 475 g.p.m. Perfected Quantity 100 AF

DWR-1023 Completed by Douglas E. Bush 3-19-87 Page 26 of 44 Revised March 1986

WATER RESOURCES RECEIVED JUN 29 2015 KS DEPT OF AGRICULTURE

HAYS002406

SCANNED

22327

GENERAL INFORMATION ON IRRIGATION SYSTEM:

☒ Center Pivot ☐ High Pressure ☒ Low Pressure

Manufacturer Zimmatic Model 310 Serial No. 3153

Drive Electric Length of Pivot Arm 1282

Design Pressure-Pivot _____ p.s.i. Operating Pressure-Pivot _____ p.s.i.

End Gun? yes End Gun Rating _____ g.p.m 2 Rain Bird 85's

Is end gun operating during test? yes

☐ Gravity Irrigation (show test set on sketch)

Number of gates open _____ Normal Pipe Size _____

Pressure at pump _____ p.s.i.

☐ Other Type _____

Manufacturer _____ Model _____ Serial No. _____

Unusual Conditions/Other Info. _____

POWER UNIT INFORMATION:

Manufacturer Ford Model No. 300 HP —

Serial No. — Fuel Natural Gas Rated RPM —

PUMP INFORMATION:

Manufacturer Fairbanks Morse Model No. — Rated RPM —

Serial No. N2W24355X Type Vertical Turbine No. stages 5

GEAR HEAD INFORMATION:

Manufacturer U.S. Motors ~~Model No.~~ ID# 0-9473-00-406

Serial No. N-5001195 Drive Right Angle Ratio 1:1

WELL INFORMATION:

Date Drilled 11-22-74 Original Depth 59 ft. Static Water Level When Drilled 21 ft.

Tape Down Possible? yes - 26' Water Level Measurement Tube? no

Measuring Point 1 ft. above or below L.S.D.

ADDITIONAL REQUIREMENTS:

Meter Required? no Make of Meter —

Meter Model No. — Serial No. — Size —

Is Meter Installed Properly? —

Chemical Injection System? yes Check Valve? yes Low Pressure Drain? no

Vacuum Breaker? yes Are these anti-pollution devices installed properly? yes

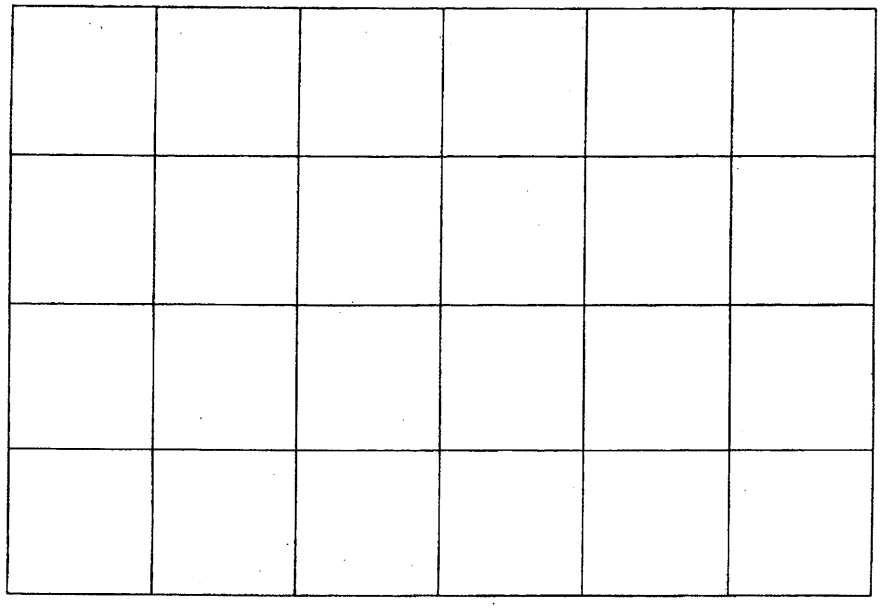
If chemicals are injected into s m, please attach sketch of system.

22327

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

N ↑

Scale
1"=____ ft.



TEST OF DIVERSION RATE:

Length of time well has been operating prior to test 0
Location of test In horizontal pipe between riser and pipe adjoining other well
Pipe Diameter (I.D.) 6 5/6 inches

Test No. 1—Normal Conditions - Well meter

R.P.M. POWER UNIT 1760
R.P.M. PUMP UNIT 1760
Pressure at Pump 12 psi

Test No. 2—Maximum Conditions - Both Wells Pumped Simultaneously

R.P.M. POWER UNIT 1760
R.P.M. PUMP UNIT 1760
Pressure at Pump 51 psi

☐ **Jacuzzi Meter Test** Meter Identification No._____

Area Constant K = 2.45 × I.D.² = _____ Q (gpm) = VK

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

☐ **Propeller Meter Test** Manufacturer_____ Model_____ Serial No._____

Meter Diameter_____ inches

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

☒ **Other Flow Meter** Use Supplemental Sheet (include meter identification, data and calculations).

FUEL RECORDS:

☐ **Electricity** Supplier _____

Meter Manufacturer _____ Type _____ Serial No. _____

K _____ watt/rev r _____ revolutions t _____ seconds

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

☐ **Other Fuels** Type Natural Gas Supplier Kansas-Nebraska

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

How was the test volume determined? Not Determined Because One Meter is used for many engines

TABULATION OF WATER USE:

Year	Hours Pumped (hr)	Tested Pumping Rate (gpm)	Water Used (AF)	Acres Irrigated
1975	1800	1000		130
1976				
1977	986	1000		130
1978				
1979	336	900		127
1980				
1981	840	900		127
1982				
1983	Unused due to PIK program ₸			
1984	1800 ₸	425 ₸		135 ₸
* 1985	1900 ₸	474 *		135 ₸
1986		474 *		

₸ INFORMATION FROM ABCO-REALITIES

* RESULTS OF 10/2/86 TEST

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

Crops Irrigated: this year Alfalfa Year of record wheat

REMARKS: _____

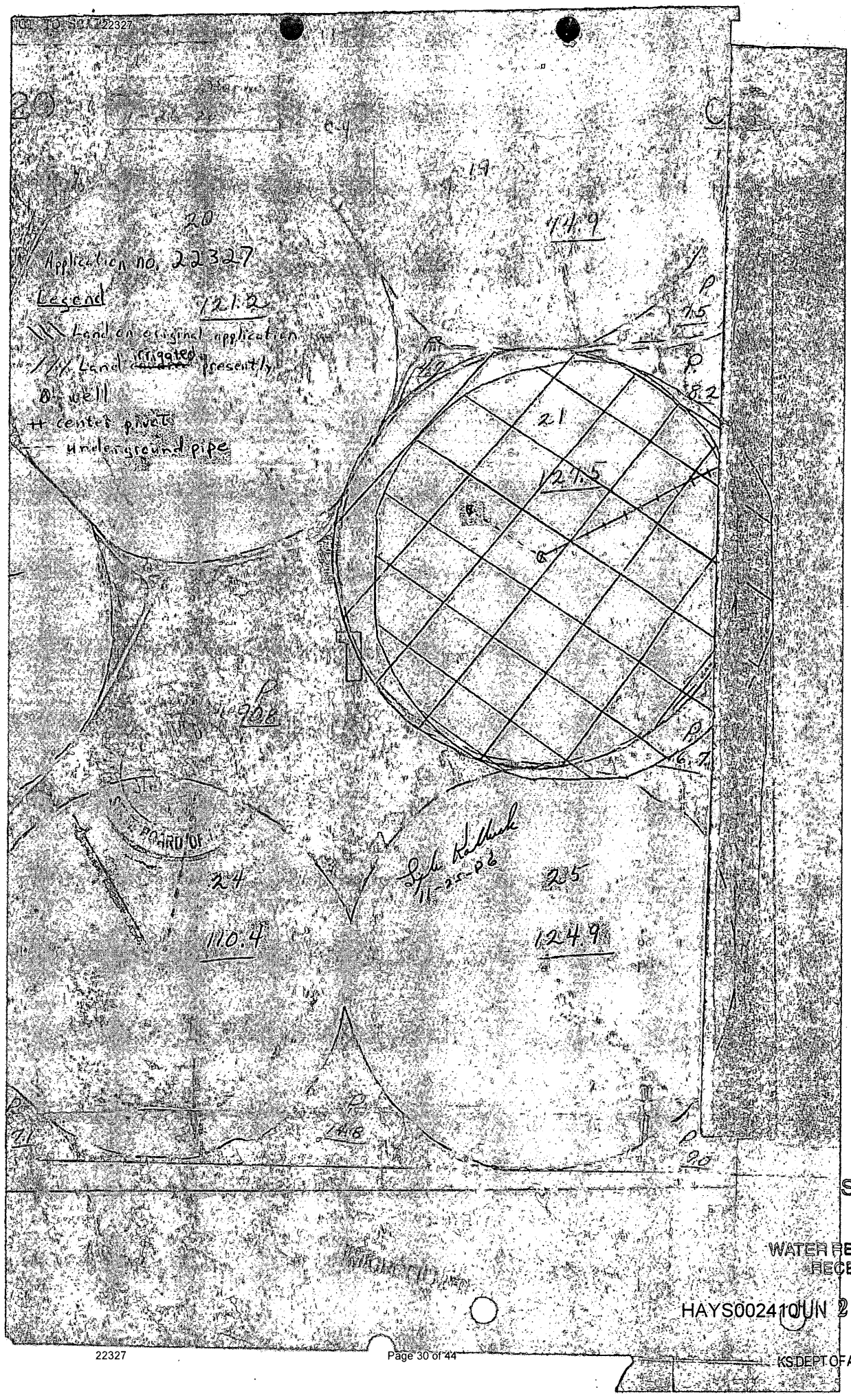
Person present at test Kent Naber (name) Irrigation Manager (relationship)

Water Use Correspondent Lyle Kolbeck (name) Spearville, Ks 67876 (address) 316-385-2803 (phone number)

Conducted by Greg Ehrt (signature) Date 10/9/86

Approved by Kid J. West (signature), P.E. (title) Date 12/29/86

HAYS002409



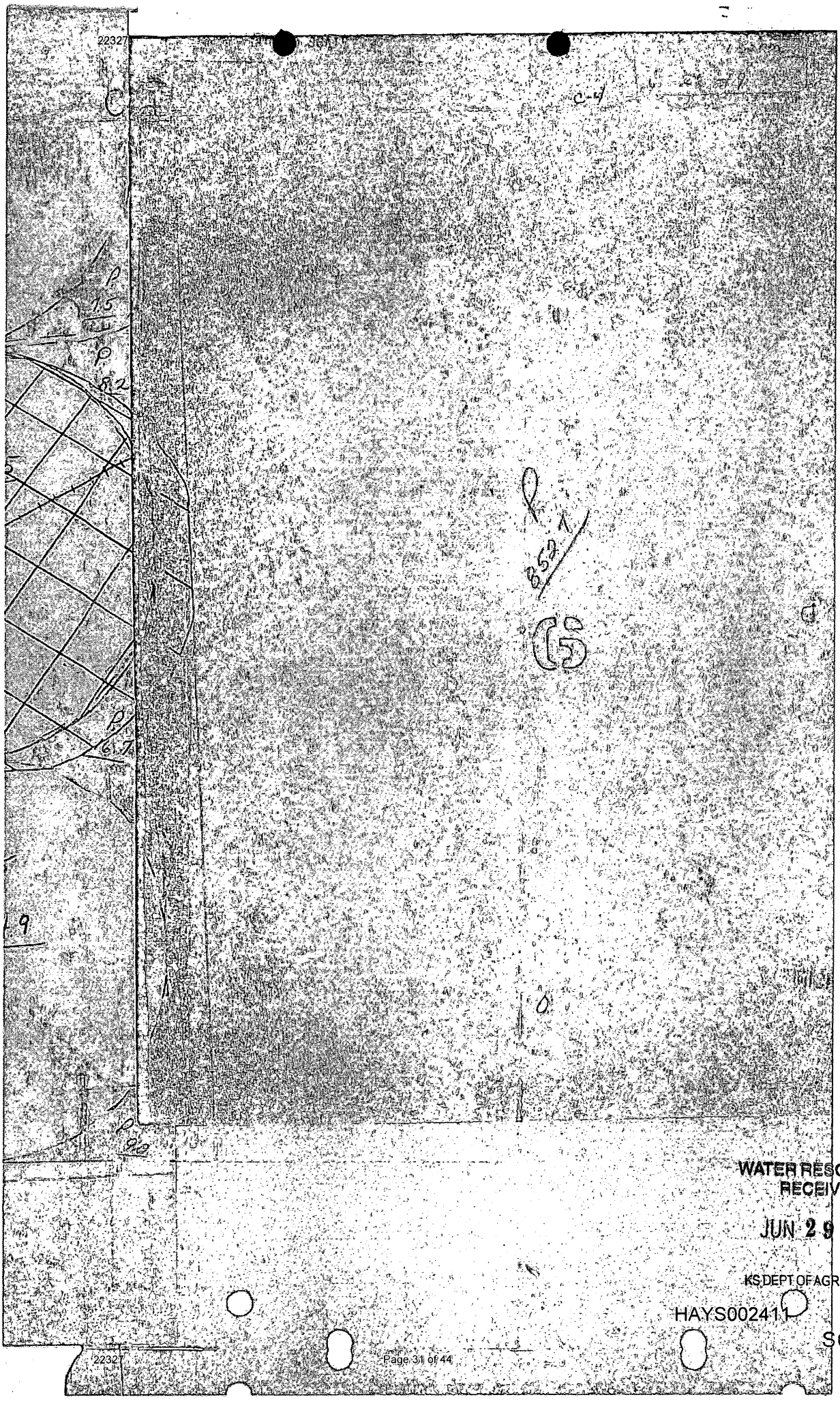


EXHIBIT
22327
G

KANSAS STATE BOARD OF AGRICULTURE

DIVISION OF WATER RESOURCES

M E M O R A N D U M

TO: Files

DATE: March 19, 1987

FROM: Douglas E. Bush

RE: Appropriation of Water
File No. 22,327

No proposed certificate on file. The certificate is based on a field Inspection Report conducted under contract by Pumping Plant Testing Inc.

The land shown to be irrigated was not the same as was approved according to the contract tester. This variation in irrigated land does not agree with the ASCS photo that shows the place of use under the pivot irrigation system. Because of this variation being slight, if there is any at all, no unapproved land was shown to be irrigated and no proration of quantity took place.

The quantities for the wells covered by the above referenced file were calculated by prorating the quantity by rate as such since the total quantity pumped exceeded the maximum allowable of 1.5 acre-feet per acre:

Maximum allowable = 203 acre-feet

Well - near center Northeast Quarter (NE¼) - 203 acre-feet x 50.7% (percent of total rate pumped by well) = 103 acre-feet.

Well - Lot 2 - 203 acre-feet x 49.3% (percent of total rate pumped by well) = 100 acre-feet.

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

A limitation was needed on the combined rate. This limitation limits the combined rate to 950 gallons per minute, the rate when the wells are run simultaneously.

Douglas E. Bush

Douglas E. Bush
Hydrologist

DEB:dmh

EXHIBIT
H 22327

Kansas State Board of Agriculture
Division of Water Resources

ADMINISTRATIVE POLICY
No. 86-8

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

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

Date: November 5, 1986

History: Effective November 5, 1986

Approved by: David L. Pope
Chief Engineer

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

Area, Place of use	Max. Allowable Rate	
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.

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.

EXHIBIT
22327
I

KANSAS STATE BOARD OF AGRICULTURE
Division of Water Resources

M E M O R A N D U M

To: Files

Date: March 27, 1987

From: Douglas E. Bush

Re: Appropriation of Water
File No. 22,326

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

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

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

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

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

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

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

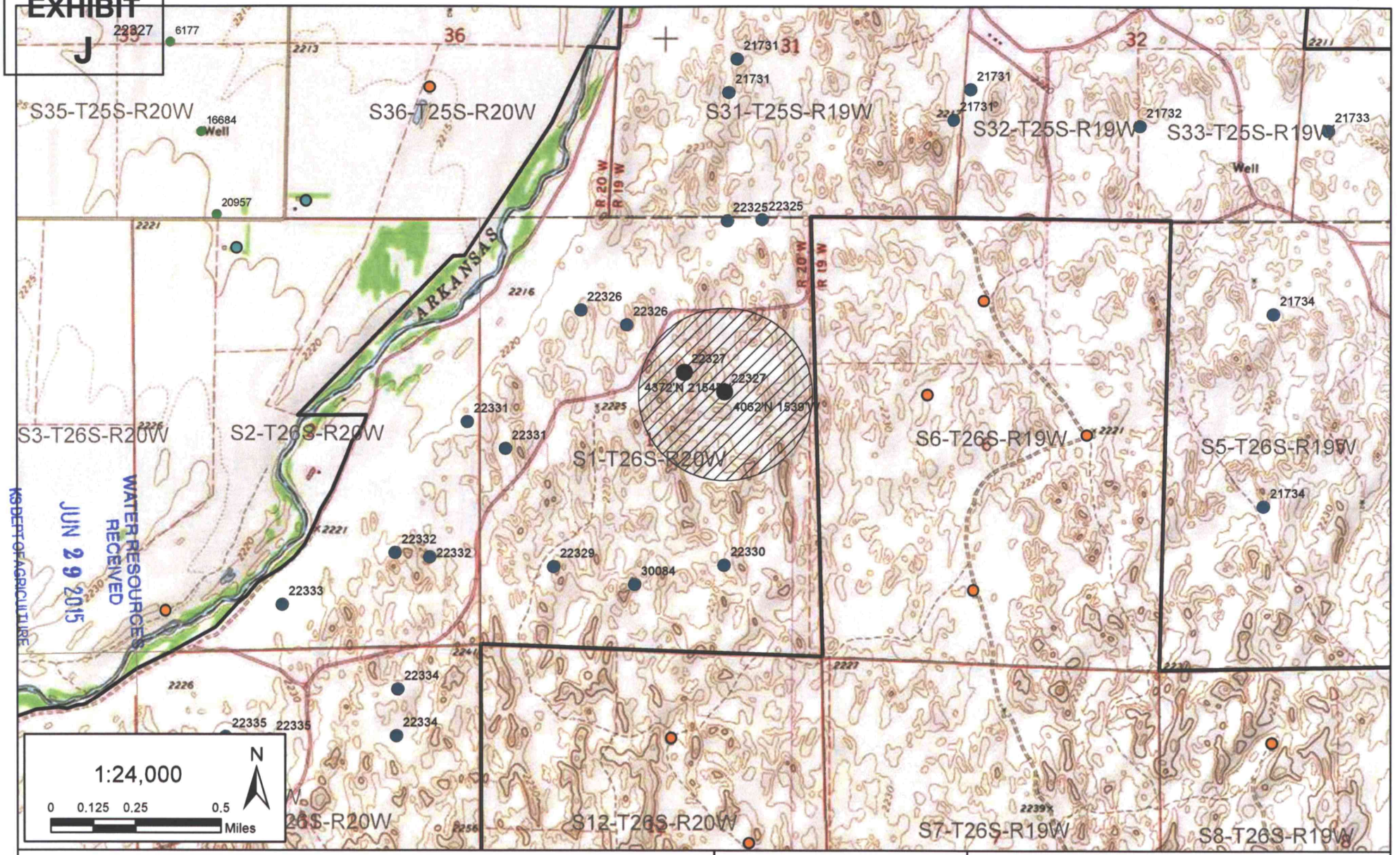
The coordinates for the points of diversion were not changed to the Field Inspection Report's reported distances. When the contractor relocated the section corners he changed the coordinates somewhat which in all likelihood are bogus.

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

Douglas E. Bush
Douglas E. Bush
Hydrologist

DEB:jt

EXHIBIT J



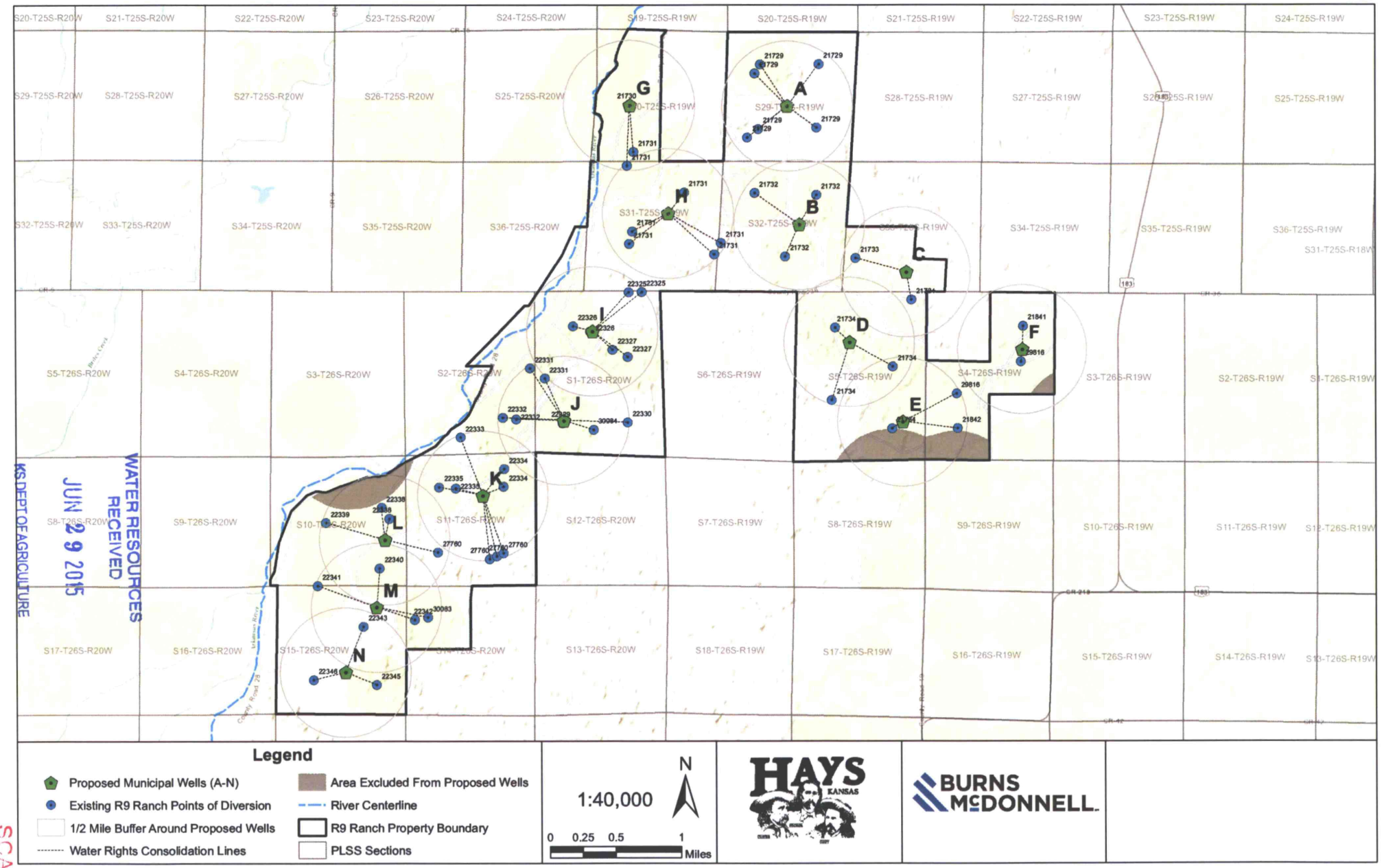
Legend

- 22327 Existing Point(s) of Diversion
- 22327 Existing Place of Use
- R9 Ranch Property Boundary
- PLSS Sections
- 22327
- Irrigation Wells (File No.)
- Stockwater Wells (File No.)
- Domestic Well (Non-Permitted)
- Stock Well (Non-Permitted)
- Existing R9 Ranch Irrigation Wells

BURNS McDONNELL

CHANGE APPLICATION 22327 APPLICATION MAP AUTHORIZED PLACE OF USE & POINTS OF DIVERSION

EXHIBIT
K 22327



EXHIBIT
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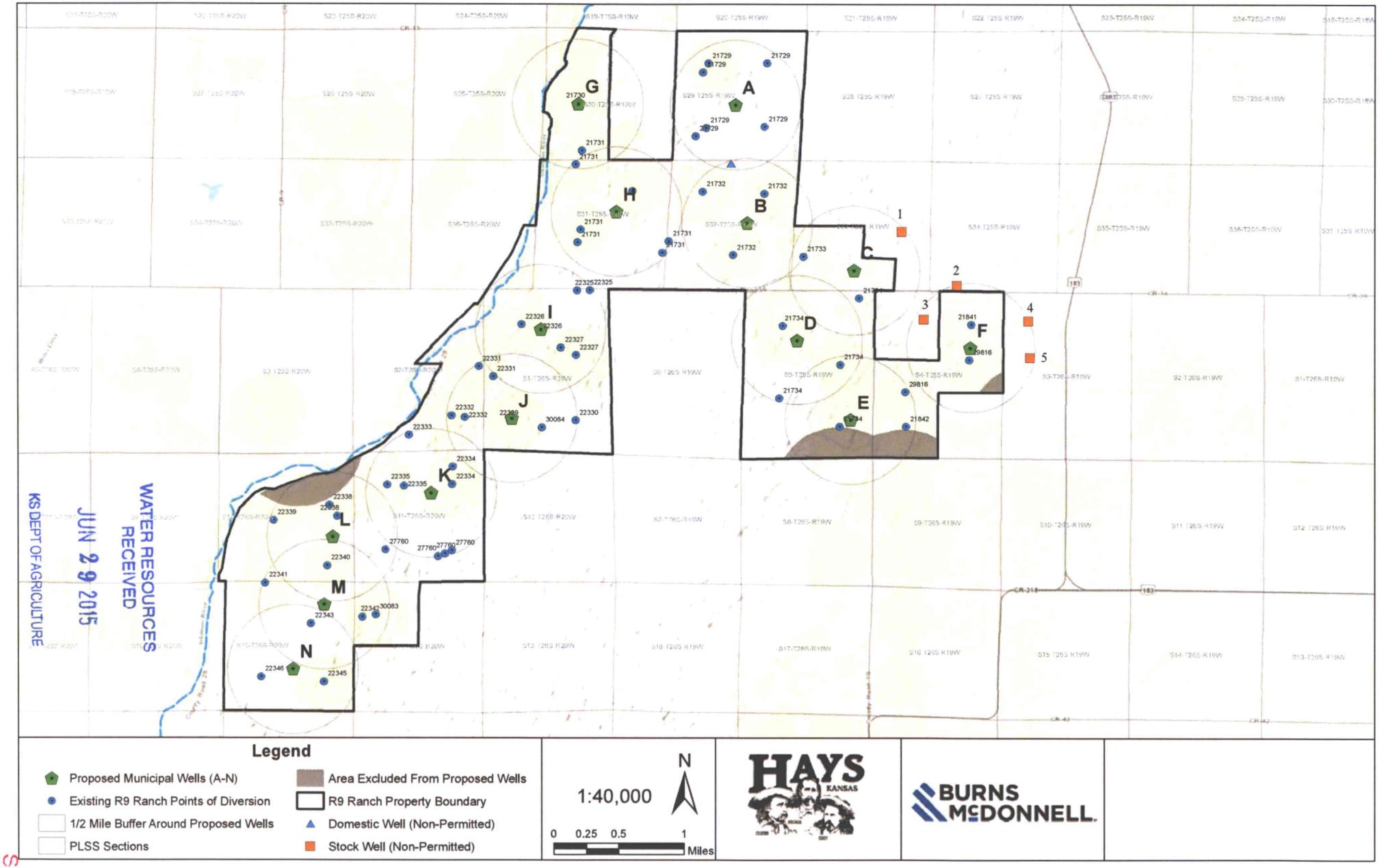

EXHIBIT
22327
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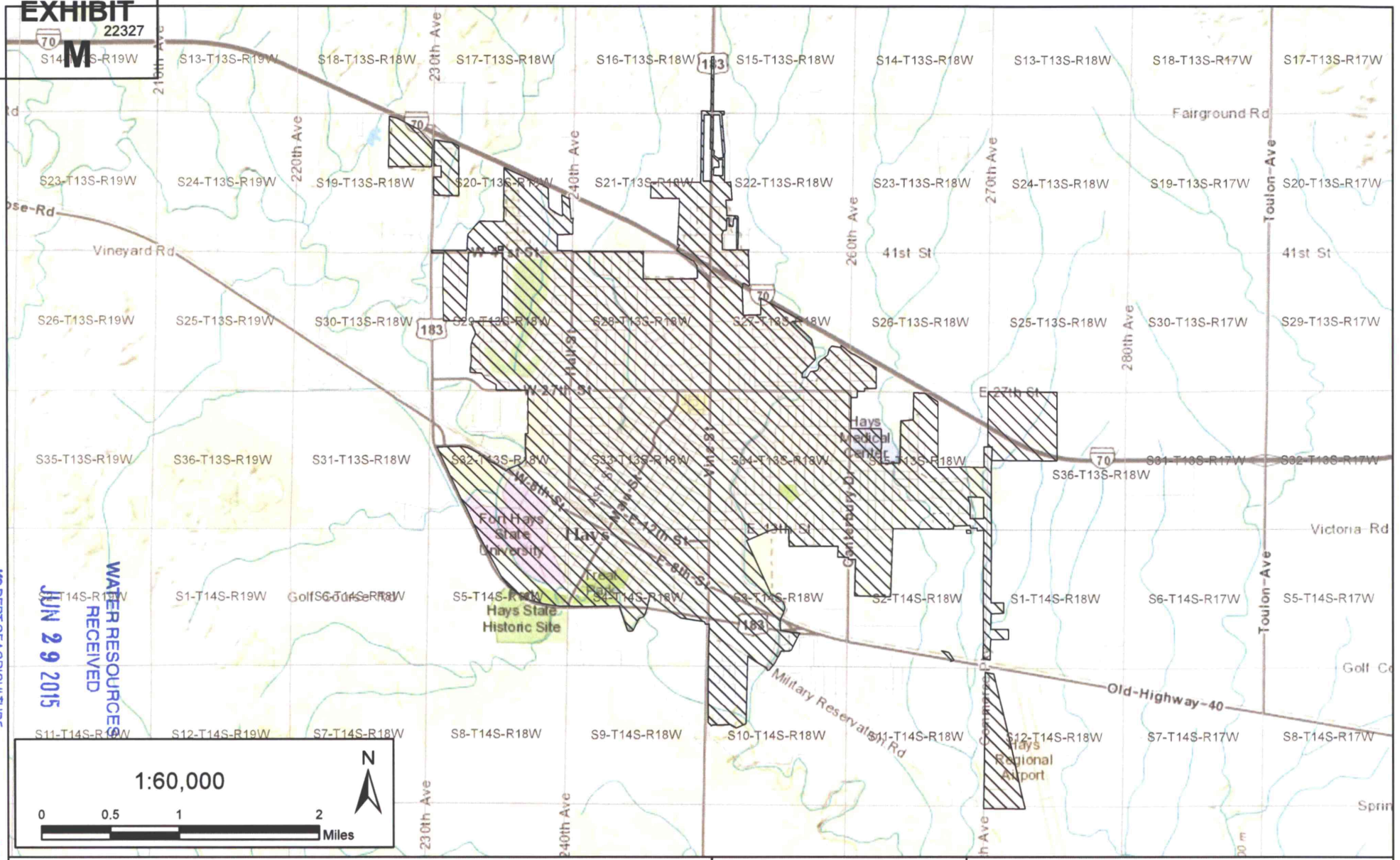


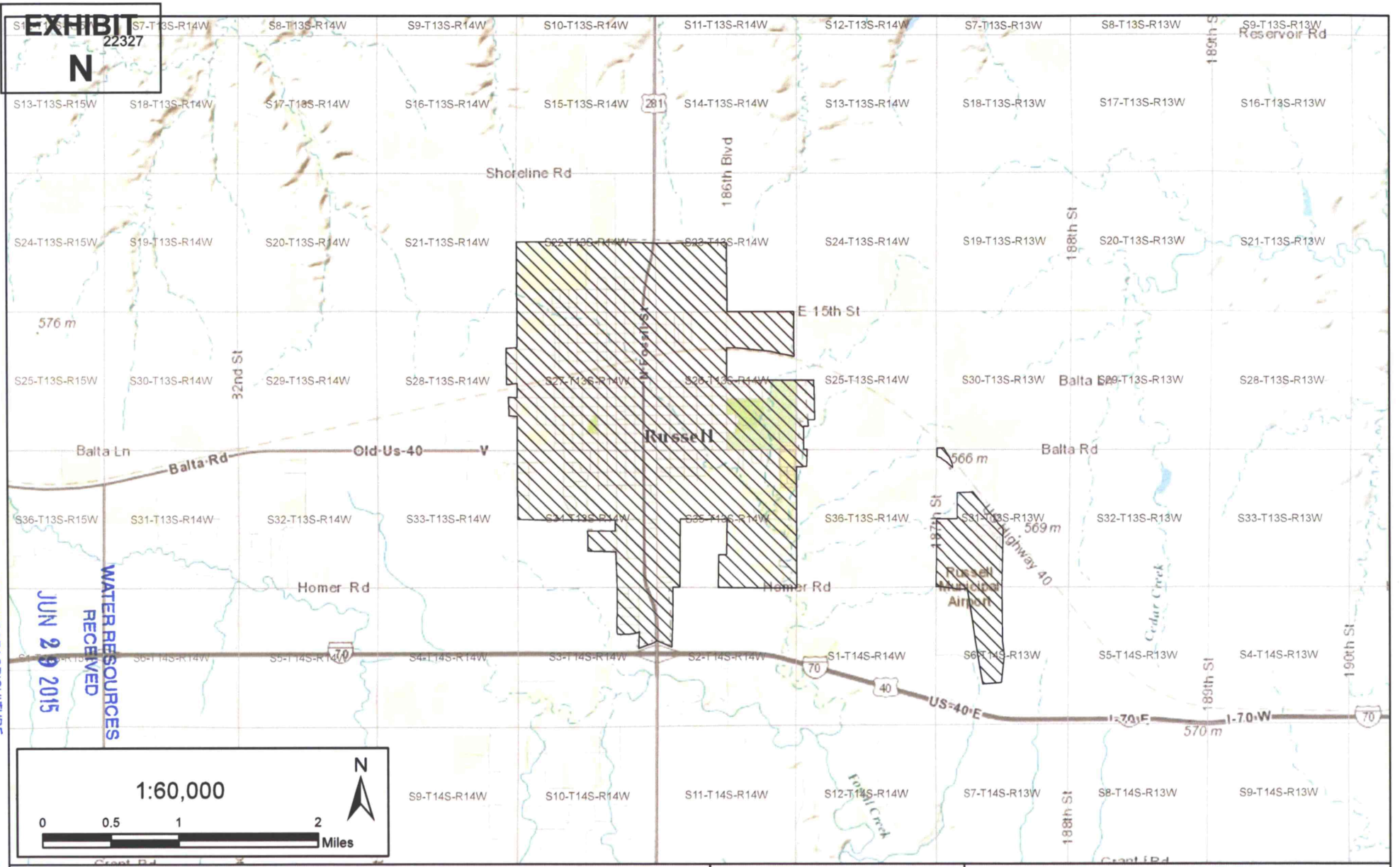
Proposed Place of Use City of Hays

PLSS Sections

BURNS McDONNELL

22327

EXHIBIT
22327



Proposed Place of Use - City of Russell

PLSS Sections

BURNS McDONNELL

22327
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 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 Below Explanation)
684,559,000			10,806,000	595,254,000	16,327,000	62,172,000
TOTAL WATER = Columns 1 + 2		**ACCOUNTED FOR WATER = Columns 3 + 4 + 5 + 6**				**UNACCOUNTED FOR WATER**

UNACCOUNTED FOR WATER = TOTAL WATER - ACCOUNTED FOR WATER

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

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

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

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

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

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

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

UNACCOUNTED FOR WATER

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

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

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

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

EXHIBIT O

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

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

22327

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
	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)

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

673,753,000 (Amount of water in Columns 5, 6, and 7 of Section 1) ÷ 21,038 (Population from Last Year of Section 4) ÷ 365 Days/Year = 88 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.

22327

Applicant's Name City of Russell
(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 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 Below Explanation)
327,288,100	0	0	105,295,000	108,743,000	19,944,000	93,306,100
TOTAL WATER = Columns 1 + 2		ACCOUNTED FOR WATER = Columns 3 + 4 + 5 + 6				UNACCOUNTED FOR WATER

UNACCOUNTED FOR WATER = TOTAL WATER - ACCOUNTED FOR WATER

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

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

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

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

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

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

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

UNACCOUNTED FOR WATER

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

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

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

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

EXHIBIT P

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

	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 Above Explanation)
20 years ago							
15 years ago	373,757,000	0	0	171,928,220	115,864,670	18,687,850	67,276,260
10 years ago	477,486,000	0	0	222,781,000	147,340,000	19,483,000	87,882,000
5 years ago	375,790,000	0	0	144,277,000	123,343,000	18,907,000	89,263,000
	TOTAL WATER = Columns 1 + 2		ACCOUNTED FOR WATER = Columns 3 + 4 + 5 + 6				UNACCOUNTED FOR WATER

22327

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
	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)

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

221,991,000 (Amount of water in Columns 5, 6, and 7 of Section 1) ÷ 4,475 (Population from Last Year of Section 4) ÷ 365 Days/Year = 135.9 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 nature of your request.