# MEMORANDUM

TO:

File

DATE:

May 1, 2018

FROM:

**Amber Herring** 

SUBJECT:

**Date Stamping Mail** 

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

22331		
		File No. <u>22,331</u>
4. The presently authorized place of us	se is:	
		-
22331		David. W. Barfield, P.E.
	,	JUN 2 6 2015
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	Chief Engineer Water Resources Wansas Ppt. of Agriculture State of Kansas
(Please	Filing Fee Must Accompany the Application refer to Fee Schedule on signature page of application fo	rm.)
	completed. Complete all other applicable portions. A osed points(s) of diversion and /or place of use mus	
	oval of the Chief Engineer to change the David. W. B. of Use	arfield, DE. WATER RESOURCES RECEIVED
,	of Diversion  JUN 2  Jun 2  Anief E	JUN 29 2015  13  Ider Resources KS DEPT OF AGRICULTURE
	Kansas Dept. File No. 22,331 Circle 22	of Agriculture
2. Name of applicant: City of Hays	s, Kansas and City of Russell, Kansas (See pa	aragraph 2 of the cover letter.)
Address: c/o Foulston Siefkin L	LP, 1551 N. Waterfront Parkway, Suite 100	
City, State and Zip: Wichita, Kan	sas 67206	
Phone Number: ( 316 ) 291-9725	E-mail address: dtraster@fou	lston.com
	er right; ☑ owner ☐ tenant ☐ agent ☐ other? uthorized place of use on the R9 Ranch in Ed	
Name of water use correspondent: _	City of Hays, Kansas	
Address: P. O. Box 490, 1507 M		

For Office Use Only: F.O. Q GMD 5 Code C-3	_Meets K.A.R. 5-5-1 (YES / NO) Use <u>  R</u> Fee \$ <u>7</u> 80 TR#	Receipt Date 6 22 15	By KAB Date 6/29/15 Check # 058328
	( 2,220=		

of 21000-

The change(s) proposed herein are desired for the following reasons (please be specific):

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

See Paragraph 3 of the cover letter filed concurrently with this application. The cover letter is

1505 3309

E-mail address: tdougherty@haysusa.com

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

City, State and Zip: <u>Hays, Kansas 67601</u>

Phone Number: ( 785 ) 628-7320

incorporated herein by reference

Page 1 of 49

Assisted by:

6. The presently authorized point(s) of diversion (is) (are) <u>irrigation</u> 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: Presently authorized point of diversion: One in the <u>near the center</u> Quarter of the <u>SW</u> Quarter of the <u>NW</u> Quarter South, Range 20 (K/W), of Section \_\_\_\_\_, Township \_\_\_\_ in \_\_\_\_\_Edwards \_\_\_\_County, Kansas, \_\_3,240 \_\_feet North \_\_4,875 \_\_feet West of Southeast corner of section. Authorized Rate <u>645 gpm</u> Authorized Quantity <u>90 a/f</u> (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 \_\_\_\_\_ NE \_\_\_ Quarter of the \_\_\_\_ SW \_\_\_ Quarter of the \_\_\_\_ SW of Section \_\_\_\_\_\_1 \_\_\_\_, Township \_\_\_\_\_\_26 \_\_\_\_South, Range \_\_\_\_\_20 \_\_\_\_ $\chi_{K/W}$ , in \_\_\_\_ Edwards County, Kansas, 1,341 feet North 4,056 feet West of Southeast corner of section. Proposed Rate \_\_\_1,000 gpm Proposed Quantity 209 a/f This point is: Additional Well Geo Center List other water rights that will use this point 22,329-32; 30,084 Presently authorized point of diversion: One in the \_\_\_\_\_ Lot 9 \_\_\_\_ Quarter of the \_\_\_ \_\_\_\_ Quarter of the \_\_\_\_ of Section \_\_\_\_\_\_2 \_\_\_\_, Township \_\_\_\_\_\_26 \_\_\_\_South, Range 20 (**K**/W), in Edwards County, Kansas, 3,460 feet North 235 feet West of Southeast corner of section. Authorized Rate <u>640 gpm</u> Authorized Quantity <u>90 a/f</u> (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 \_\_\_\_\_ NE \_\_\_\_ Quarter of the \_\_\_\_ SW \_\_\_\_ Quarter of the \_\_\_\_ SW of Section \_\_\_\_\_\_1 \_\_\_\_, Township \_\_\_\_\_\_26 \_\_\_\_\_South, Range \_\_\_\_\_20 in Edwards County, Kansas, 1,341 feet North 4,056 feet West of Southeast corner of section. Proposed Rate \_\_\_\_1,000 gpm \_\_\_ Proposed Quantity \_\_\_\_\_ 209 a/f This point is: Additional Well Geo Center List other water rights that will use this point 22,329-32; 30,084 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 \_\_\_\_\_ 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 NECESSARE CEIVED

		223	331	File No	22,331
12.			esently authorized use of water is for <u>irrigation</u> posed that the use be changed to <u>municipal</u>	_ purposes. purposes.	
13.	Sec	e the	ging the place of use and/or use made of water, describe how the consumpti e attached discussion regarding the quantity of water to be changed the cover letter.		
	(Ple	ease	show any calculations here.)		
14.	It is	s req	quested that the maximum annual quantity of water be reduced to <u>not app</u>	olicable (acre-feet	or million gallons).
15.	It is	s req	quested that the maximum rate of diversion of water be reduced to $rac{\mathrm{not}\;\mathrm{appl}}{}$	icable gallons per mi	nute ( c.f.s.).
16.	1:2 Kar Dis	4,00 nsas tand ould	oplication must include either a topographic map or detailed plat. A U.S. Ge 20, is available through the Kansas Geological Survey, 1930 Constant Avas 66047-3726 ( <a href="www.usgs.gov">www.usgs.gov</a> ). The map should show the location of the poses North and West of the Southeast corner of the section must be shown also be shown. Identify the center of the section, the section lines and the sand township, and range numbers on the map. In addition the following information.	venue, University of K vresently authorized po The presently autho section corners and sho	ansas, Lawrence, int(s) of diversion. rized place of use ow the appropriate
	a.		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 We must be shown. Please be certain that the information shown on the mapper Paragraph Nos. 9, 10 and 11 of the application.		
		2)	If the source of supply is groundwater, please show the location of exidomestic wells, within $\frac{1}{2}$ mile of the proposed well or wells. Identify each mailing address of the property owner or owners. If there are no wells within	well as to its use and	furnish name and
		3)	If the source of supply is surface water, the names and mailing addresses and $\frac{1}{2}$ mile upstream from your property lines must be shown.	s of all landowner(s) ½	mile downstream
	b.	If a	a change in the place of use is desired, show the proposed place of use by rtain that the information shown on the map agrees with the information show	y crosshatching on the n in Paragraph No. 5 o	e map. Please be of the application.
17.	loc: wel	al so Il log	documentation to show the change(s) proposed herein will not impair exist ource of supply as to which the water right relates. This information may income the logs, and other information as necessary information to show the below.	clude statements, plats	s, geology reports,
	Se	e pa	aragraph 17 of the cover letter.		
18.			roposed change(s) does not meet all applicable rules and regulations of the	Kansas Water Approp	
	req will	uest not	the rules and regulations for which you request a waiver. State the reason should be granted. Attach documentation showing that granting the request prejudicially and unreasonably affect the public interest.		
	Se	e pa	aragraph 7 of the cover letter.		

18.	identify the rules and regulatio	not meet all applicable rules and regulations of the K ns for which you request a waiver. State the reason ach documentation showing that granting the request	why a waiver is needed and why the
		onably affect the public interest.	, ,
	See paragraph 7 of the cov	er letter.	
	1 0 1		
	IF MORE SPACE	IS NEEDED, ATTACH ADDITIONAL SHEET	RECEIVED
	. 22331	Page 4 of 49	HIN 9 0 2015

File No. 22,	331
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Any use of water that is not as authorized by the water right or permit to authorize water <u>before</u> 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 authorized to make this application on their behalf, and declare fur complete. By filing this application I authorize the chief engineer to as specified in sections 14 and 15 of this application.	ther that the statements contained herein are true, correct, and
Dated at Russell, Russell County , Kansas, thi	s <u>23rd</u> day of <u>June</u> , 20 <u>15</u> .
(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	PUBLIC - State of Kansas MALINDA MORSE  pt. Expires 415 18  presence and sworn to before me this 23rd day of
My Commission Expires 4/15/18	Malinder Moise Notary Public
FEE SCHEI	DULE
Each application to change the place of use, the point of diversion or the us application fee set forth in the schedule below:	se made of the water under this section shall be accompanied by the
<ul> <li>(1) Application to change a point of diversion 300 feet or less</li> <li>(2) Application to change a point of diversion more than 300 feet</li> <li>(3) Application to change the place of use</li> <li>(4) Application to change the use made of the water</li> </ul>	\$200
Make check navable to Kansas Department of Agriculture	

WATER RESOURCES RECEIVED

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File No	22,331

Any use of water that is not as authorized by the water right or permit to authorize water <u>before</u> 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.

Dated at Russell, Russell County	_, Kansas, this _	23rd	_ day of	June	, 20 <u>_1</u> 5	5
(Oyuler)				(Spouse)		
City of Russell, Kansas, by Jon Quinday, City M	lanager					
(Please Print)				(Please Print)		
(Owner)				(Spouse)		•
(Please Print)				(Please Print)		<del></del>
(Owner)				(Spouse)		
(Please Print)				(Please Print)		
State of Kansas ) SS	A NOTA		- State of Ka			
County of Russell	My	Appt. Expire	<i>[2الت</i> ]	1 <u>8</u>	60.0	
I hereby certify that the foregoing application was s	igned in my pr	esence a	nd sworn t	to before me this C	231d	day o
	_		alex	Notary Public	Orse	
My Commission Expires	_	- Ρ		Notary Public		
	FEE SCHEDU	LE				
Each application to change the place of use, the point of dive			e water und	er this section shall be	accompanied	i by the
application fee set forth in the schedule below:	•				·	•
<ul> <li>(1) Application to change a point of diversion 300 fe</li> <li>(2) Application to change a point of diversion more</li> <li>(3) Application to change the place of use</li> <li>(4) Application to change the use made of the wate</li> </ul>	than 300 feet				\$200	) )

WATER RESOURCES RECEIVED

JUN 29 2015

### **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.<sup>3</sup>

### 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<sup>4</sup>, on 120 acres in Sections 1 and 2-T26S-R20W, or 1.78 acre-feet per acre.<sup>5</sup> The certificate limited the rate to 1,000 gallons per minute when the two wells were operated simultaneously.

In the cover letter transmitting the permit, DWR made findings of fact stating that "the proposed use is for a beneficial purpose and is *within reasonable limitations*. If priorities are observed and respected, the proposed use will neither impair any use under existing water rights nor prejudicially and unreasonably affect the public interest." 6

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

• 201 acre-feet<sup>7</sup> and 202 acre-feet<sup>8</sup> (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.<sup>9</sup>

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

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

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

<sup>&</sup>lt;sup>4</sup> Permit, HAYS002691, Ex. A.

<sup>&</sup>lt;sup>5</sup> Application, HAYS002681, Ex. B.

<sup>&</sup>lt;sup>6</sup> March 19, 1976, letter (emphasis added), HAYS002690, Ex. C.

<sup>&</sup>lt;sup>7</sup> FIR. HAYS002663, Ex. D.

<sup>&</sup>lt;sup>8</sup> 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. 10 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." <sup>11</sup>

### 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 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.

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<sup>&</sup>lt;sup>9</sup> Certificate, HAYS002702, Ex. F; Doug Bush August 29, 1994, Memo, HAYS002695, Ex. G; Larry Sheets September 27, 1994 letter, HAYS002699, Ex. H; and Clawson v. Kansas Dept. of Agriculture, Div. of Water Resources, 49 Kan. App. 2d 789, 315 P.3d 896 (2013).

<sup>&</sup>lt;sup>10</sup> FIRs, HAYS002666, Ex. D, and 2675, Ex. E.

<sup>&</sup>lt;sup>11</sup> See K.A.R. 5-5-9(a)(4).

<sup>&</sup>lt;sup>12</sup> Administrative Policy No. 86-8, dated Nov. 5, 1986, Ex. I, stating that: "In that area of Kansas located between the Range 5 East/Range 6 East Line and the Range 20 West/Range 21 West line, the maximum allowable quantity shall not exceed an average of 1.50 acre-feet per acre irrigated." See also, K.A.R. 5-3-24 and Doug Bush Memo dated August 29, 1994, Ex. G.





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. 22,331

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 $_{\rm S}$  NW $_{\rm S}$ ) of Section 1 and one well near the center of the East side of Lot 9 (SE $_{\rm S}$  NE $_{\rm S}$ ) of Section 2, Township 26 South, Range 20 West, in Edwards County, Kansas, located substantially as shown on the aerial photograph accompanying the application.

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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.)

JUN 2 9 2015

KS DEPT OF AGRICULTURE

and to a quantity of not to exceed

214 acre-feet

for any calendar year.

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MAR 219 A97600269122

22331 That installation of works for the ersion of water shall be completed on or before cember 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, 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

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.

> WATER RESOURCES **RECEIVED**

Dated this 19th day of March

19 76

JUN **2 9** 2015

KS DEPT OF AGRICULTURE

HAYS002692

22331

### THE STATE



### OF KANSAS



STATE BOARD OF AGRICULTURE
Roy Freeland, Secretary

DIVISION OF WATER RESOURCES

Guy E. Gibson, Chief Engineer

22331

### APPLICATION FOR PERMIT TO APPROPRIATE WATER FOR BENEFICIAL USE

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

To the Chief Engineer of the Division of Water Resources, Kansas State Board of Agriculture:
(Mr.) (Mrs.) 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 Agri-
culture, for a permit to appropriate for beneficial use such unappropriated groundwater
as may be available in the Arkansas River basin in the county of Edwards  (name of stream or drainage basin)
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 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
diverted at a maximum rate of 1000 gallons per minute (gallons per minute or cubic feet per second)
2. The location of the proposed wells or other works for diversion of water is in the quarter of the
quarter of the quarter of section & township Brown 26, range \$20W, in
Edwards County, Kansas.
Second well can not be exactly logated until test hele is drilled  of War are is intended to be appropriated for:  # / well near the center of the East
All IVAN TEE I Swill of
MAY 02 10- (a) Domestic use ( ) the NH 1/4 of Section!
(b) Municipal use () 2/4
(c) Irrigation use (X)320 % acre ft./yr 1000 gals./min.WATER RESOURCE
RECEIVED
(d) Industrial use  (MICROFIL MED)  (E) Recreational use  (FOR WATER RECEIVED)  (D) RECEIVED  (E) Recreational use  (E) RECEIVED  (E) RECEIVED  (E) RECEIVED  (E) RECREATION OF WATER RECR
(I) RECEIVED JUN 2 9 2015  (1) Walter over use  (1) RECEIVED KS DEPT OF AGRICULTURE  (2) MAR 2 9 1976  (3) Walter over use  (4) Walter over use  (5) Walter over use (7) Walter over use (8) Walter over use (9) UN 2 9 2015

WATCH RESOURCES CLEEN CHARLES QUE 680 STAFFORD DIVISION OF WATCH A KESOURCES CLEEN CHARLES QUE 680

- 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			ME:_ ESS:_						sle;			as 6	7547	,				15		
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Sec. Twp. Range	NE	NW1	sw:	SE	NE:	NW I	sw:	SE:	NE	NW!	sw:	SE:	NE	NW:	swi	SE				
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Owner of	Land-	-NAI	ME:_																	
•	AI	DRE	ESS:_					<del></del>												
g		NE <del>l</del>			NW1					8	Wł			8	Εţ		Total			
Sec. Twp. Range	NE:	NW	swi	SE	NE	NW	sw <sub>1</sub>	SE	NE	NW	sw <sub>1</sub>	SE	NE	NW}	8Wł	SE	1000			
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Owner of			ME:_																	
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Sec. Twp. Range	NE}	NW	swł	SE	NE	NW	sw:	SE:	NE	NWI	sw:	SE	NE	NW	swi	SE!		JUN <b>2 9</b> 2015		
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																		KS DEPT OF AGRICULTUR		

HAYS002681

7. The works for diversion of water will consist of XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	<sub>le</sub> spr
irrigation system (two motors)	
(wells, pumps, etc.)	,
and will be completed by July of 1974	
(Date)	
8. The first actual application of water for the beneficial use proposed was or is estimated to	o be
July of 1974	
(Date)	
9. The application must be accompanied either by a detailed plat prepared from an actual survey of	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	
TITEBUOTOR HOLLD WAN AUGUS TO STATE OF THE S	
company known as the Kinsley Joint Venture (Wheatheart Land Co.)	
Applications for water rightd 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 19	<del>74</del>
Midwest Land & Cattle Co.	
(Applicant)	
By Johnny annin MC	3 R
$\mathcal{O}$	

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.

WATER RESOURCES RECEIVED

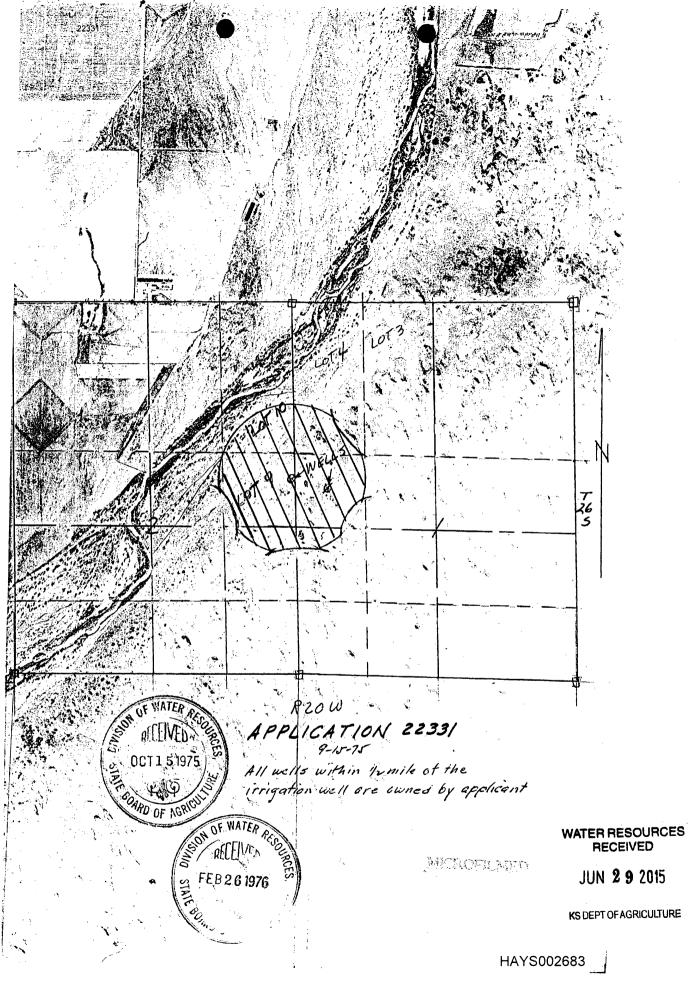
JUN 2 9 2015

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22331		the parties and the commence and the parties and the second	Page 10	ŝ of 49	
22331			Rage 1		

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 Application No.

#### Gentlemen:

Your application has been examined and is found to be in proper form. Further, we find that the proposed use is for a beneficial purpose and is within reasonable limitations. If priorities are observed and respected, the proposed use will neither impair any use under existing water rights nor prejudicially and unreasonably affect the public interest. It is presumed that the application is made in good faith, and that you are ready to proceed with the proposed diversion works and the application of water to the proposed use. The application has, therefore, been approved.

There is enclosed the approval of the application authorizing you to proceed with construction of the proposed diversion works, to divert such unappropriated water as may be available from the source and at the location specified in the approval of application, and to use it for the purpose and at the location described in the application.

There is also enclosed a memorandum setting forth the procedure to obtain a certificate of appropriation which will establish the extent of your water rights.

Should you have any questions or if we can be of any assistance to you, please feel free to write or call us.

Very truly yours,

WATER RESOURCES RECEIVED

JUN **2 9** 2015

Riley M. Dixon Hydrologist

KS DEPT OF AGRICULTURE

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MICROFILMED OFFICE DIVISION OF WATER RESOURCES STAFFORD

<b>EXHIBIT</b>						
D 22331	DIVISION		ANSAS STATE BOARD OF	CATCA SAL		
Field Office	] N. <b>2</b> -	FIELD INSPE	CTION REPORT			
G.M.D. No.	vo. <u>Z</u>			- MALLINEO / SA	□ N & P □ Full	
,	_		1 1 2 1	PR 1 1 1990 2	☐ Partial	
		its. County Fdwa	J. 62.		_	
Awel	22221	Inspection Date 2/12/90	THE CONTRACTOR OF THE CONTRACT	DO Plant Testi	Ebert/Hirsh	
Application N	0. <u>~~~</u>	Date 2/12/90	Firm/Field Office 1 M	PHONE 1851	cg, dec	•
and the second second		omen % KING VA			- 9262	
Address_£0	VT€3 KING ,C ☐ Additional landowners	and addresses identified in rem	prop _ LOG	·IKO	an is cannot be a	
Water Use Cl	assification: ( ) Don ( ) Rec	`	* , ,	) Municipal ower		
Source: ( >>- Groundw	ater ( ) Surface	Water Basin/Stream	Ackasas Ri	ver		
		NC Fostside of Lot			ID No. O/	
Approximately	ft.	North and	ft. West of SE	corner of Sec.	, 1D No. <u>97</u>	
Actual Point of	of Diversion:	<i>NEX</i> , S <i>EX</i> , <i>N</i> North and235	<i>E 1/4</i> Sec	2 , T. <u>26</u> , R. <u>20</u>		
Approximately How were dis	tances determined?	North and 235 Scaled Scales	ft. West of SE	corner of Sec		
	uantity		roved" Diversion Rate	1000 anm (	2.25 cfs)	
		Approval Date				
	•			rection Date		
		nd/or point of diversion _ files in remarks section)	None			
	INCLUDED ON C	•				
	NEV4	NW4	SW¼	SE¼	TOTAL	
STF	NE NW SW	SE NE NW SW SE	NE NW SW SE	NE NW SW SE	ACRES	
1 26 2		39 /9 34	5	6	58	
				6	/120	
LAND IPPIC	ATED VEADORY	RECORD 1984		<del>                                     </del>	L	
LAND IRRIG	ATED—YEAR OF F	NW%	SW/4	SE¼		
STF	· <del> </del>	SE NE NW SW SE	NE NW SW SE	NE NW SW SE	TOTAL ACRES	
1 26 2		15.5 29	1.5		46	
2 26 2	0 25 1 4.53	7,5		4	/120	
TESTED DIV well Maximum G.F	ERSION RATES	ELKED.	both walls Normal G.P.M.	pumping together	r . <u>2.24</u> )	
		2 1 1995 FOR D.W.R	<u>.</u>	MICROF	IMFN	
		Extension of time nee			( ) no (4)	
	•	merago 4 () g.p.m.	7		W	ATER RESOURCES RECEIVED
"Approved" La	nd irrigated	20 acres, w	ith 20/ AF =	= $\frac{1.68}{1.68}$ AF/acre		JUN <b>2 9</b> 2015
Total AF (incl	iding overlapping Fil	les) 315 A.	<u> </u>	(2.65) AF/acre)		
120 a	cres X	1.5 A.F.	per ac	re = 19	10 A.F.	KS DEPT OF AGRICULTURE
180 A	F, X, O,	5 Conc-halt	augntity	per well	7 =	KS DEPT OF AGRICULTURE
90A,	F.		•	·		
	641)	,143		91	HAYS00266	3
Periected Rate	CAME	s.p.m. (11)	Douglas E.	Quantity	Ar	
DWR-101 22331	Comp	s.p.m. (1,43 pleted by Pag	9-29-94	Rev	ised September 1987	SCANNED

### **GENERAL INFORMATION ON IRRIGATION SYSTEM:**

☑ Center Pivot	
Manufacturer Zimmatic Model 3/0 Serial No. 3079	_
Drive: Water Electric Length of Pivot Arm Acres Irr. /20	_
Design Pressure-Pivotp.s.i. Operating Pressure-Pivotp.s.i	i.
Is there an end gun? (×) yes () no Is end gun operating during test? (×) yes () no	
End Gun Model 2 Rainhird 85 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 wa	us .
tested, 5) test location and 6) hydrant location.	
Description	_
·	_
Other Type	
Manufacturer Model Serial No.	-
Low Progle Seminger Sprinklers on Contar Pivot unusual condition/other information	_
unusual condition/other information	<del>-</del>
POWER UNIT INFORMATION:	_
Manufacturer Ford Model No. 300 HP	
Serial No Fuel Natural Gas Rated RPM	
PUMP INFORMATION:	_
Manufacturer <u>Fait backs Motse</u> Model No. <u>IOMA</u> Rated RPM	
Serial No. N242423/X Type Vertical Turbine No. stages 5	
	_
GEAR HEAD INFORMATION:	
Manufacturer U.S. Motors Model No. GP	
Serial No. R-9556-00-4-472 Drive Right Angle Ratio 6:5	-
WELL INFORMATION:	
Date Drilled 7/24/74 Original Depth 58 ft. Static Water Level When Drilled 8 ft	
Length of time well has ( ) operated 🚧 rested prior to measurement 😾 days ( ) hrs	i
Is measurement tube required? ( yes ( ) no Is measurement tube present ( ) yes ( ) no	
Depth to water Not Possible ft. below LSD.	
	ATER RESOURCES
Is a flow meter required? ( ) yes (	RECEIVED
Flow Meter Model No Serial No Size	JUN <b>2 9</b> 2015
Is the meter installed properly? ( ) yes ( ) no Flow meter conversion factor:	KS DEPT OF AGRICULTURE
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: (A yes ( ) no Is injection system being operated AYS,002,6640	
Was a Plant Health Chemigation Report completed? 22331 on 196749 yes ( ) no	SCANNED

		 	1-	
ft.				

#### TEST OF DIVERSION RATE:

n pump and pivot
Test No. 2—Maximum Conditions  Uell pumping alone  R.P.M. POWER UNIT
Pressure at Pump

☐ Jacuzzi Meter Test	Meter Identification No	
Area Constant $K = 2.45 \times I.D.^2 =$	Q (gpm) = V	K
Velocity (fps)	Velocity (fps)	
1	I	
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	Manufacture	er	Model	Serial No	WATER RESOURCES RECEIVED
Meter Diameter	inches				JUN <b>2 9</b> 2015
Ending	gal.	Ending	gal.		JOIN 2 9 2013
Beginning	gal.	Beginning	gal.		
Difference	gal.	Difference	gal.		KS DEPT OF AGRICULTURE
Time	min.	Time	min.		
Rate	gpm	Rate	gpm		

Other Flow Meter

HAYS002665
Use Supplemental Sheet (include meter identification, data and calculations).

Page 20 of 49

Year	Hours Pumped	Reported Pumping Rate	Water Used	Acres Irrigated	
1975	( hr ) 	( gpm )	( AF )	/2 V	
1976					
	893			130	
1979					
	336	850		//8	
1980			,		
1981	840	850		//8	
1982				-	
	0 (PIK)				
* 1984	1700	1005++		120	
1985	1600	400		120	
1786	_0*				
1987	0*				
1988	_400			119	
1989	801	1005**		120	
1770 Indicate Year of Record with	poblained from to	st (both wells op Source of Information	etating) Fobtain	ed from tenant sotaste	le acres
Crops Irrigated: this year					
FUEL RECORDS: (Complete					
☐ Electricity	Supplier				
Meter Manufacture		Туре_		Serial No	·
Kwatt/re		revolutions	tsecond		
$Rate = \frac{Kr \times 3.6}{t}$		kw/hr Ho	$urs = \frac{kw}{rate}$	<u>hr</u> =	
Other Fuels	Туре	Suppl	ier		
	-, [-	FF			
$Rate = \frac{Volume (t)}{time}$	<u>test)</u> =	····			
How was the test	volume determined?	·	1 H.	0	
REMARKS: This is	"O LACL	NO. 22"	nun to the	Owner & Tave	
Muncy emony ac	S CINCE	= 100, ad			
J ,					
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J .					WATER RESOURCES
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				ace Suta C	
	at Naber			eperator (relationship)	RECEIVED
Water Use Correspondent	at Naber Don Goldman		(sddress)	(phone number)	RECEIVED JUN <b>2 9</b> 2015 
	at Naber Don Goldman	P. E.	(sddress)	eowner)	RECEIVED JUN <b>2 9</b> 2015 

APPLICATION NO:

22331

NAME: Eagle

### 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 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. 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. 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.

PUMPING PLANT TESTING, INC.

Reviewed by:

Professional Engineer

WATER RESOURCES RECEIVED

JUN **2 9** 2015

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FEB 2 1 1995

DIMISION OF WATER RESOURGES MICROFILMED



APPLICATION NO: 22331

NAME:

Equities.

### 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 A state of confusion has existed in the crop production effort. All of the water use and equipment records have been either destroyed the systems and pumping plant or lost, 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 Fagle Ridge Equities, Inc. and they too are trying to keep accurate up to date records. reasonable to use the years since 1983 in choosing a Year of Record.

and they too are trying: Therefore, it would seem

PUMPING PLANT TESTING. INC.

Reviewed by:

Professional Engineer

WATER RESOURCES RECEIVED

JUN 2 9 2015

RECEIVED

FEB 2 1 1995

FIELD CONTROL OF WATER RESOURCES STAFFORD



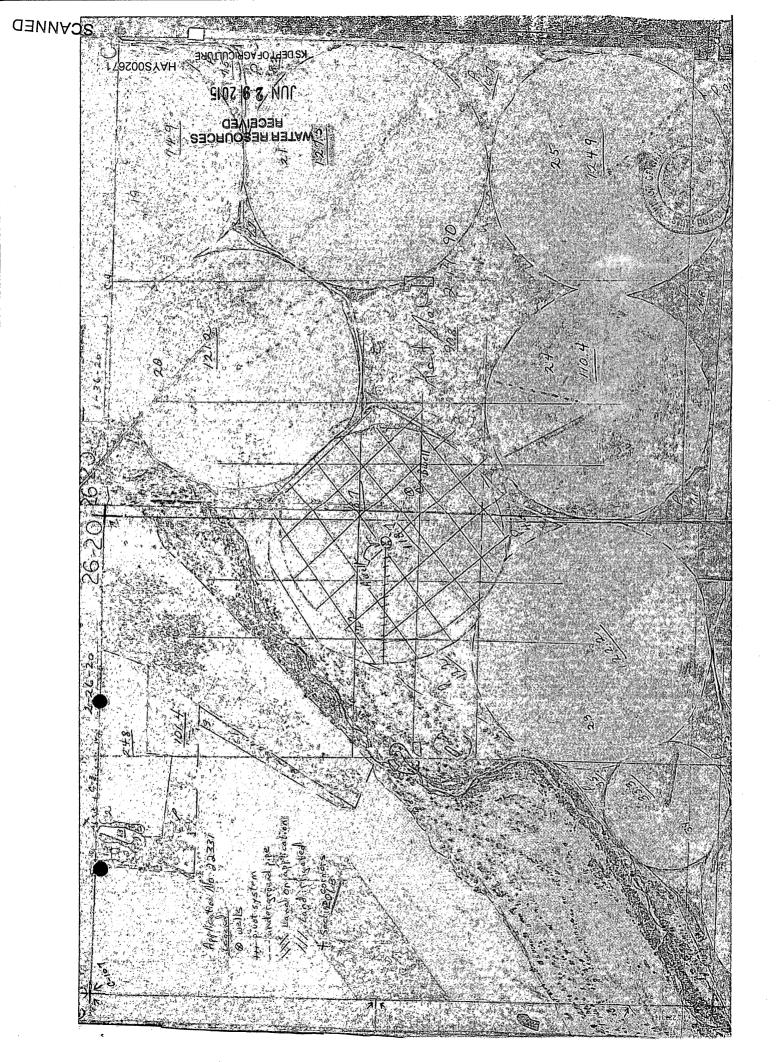
22331

APPLICATION NO: 223	3/NAME:	Don Go	/tmane	\$\psi \text{0.5} \text{0.5} \text{0.5}	
COLLINS METER TEST A W	iell brubing ale	0NE			
Collins Meter No.	1-84 Me	eter Calibr	ation Fact	or 19428	
Pipe Inside Diamete	er (inches)	7 <i>3/y</i> Flow	Rate Fact	or <u>145,4</u>	
Test Pressure (psi)	30 Te	est RPM, Pu	mp <u>  1750</u>		
Description of Test	Location Ho	pivet	pe betwee	r pump	
######################################				<b></b>	
TEST DATA: (L Check, )	Initial 4,	78 Rev	ersed 4	1,76	
Meter Setting From	Velocit	y of Pine	Veloc Right Side	ity of Pine	
Center of Pipe	(or Front 8	Side if	(or Back Vertica	Side if	
	AGLTICAL	1625	ABLTICA	·	
1%	4.7/	4.70	4.75	4.7A	•
23/4	4,73				:
	4,63				
Average Velocity of					
Corrected Ave. Vel.	. = (Ave. Vel. <u>4.67</u>		ration Fac 1 <u>728                                    </u>		
Flow Rate = (Corre	ted Ave. Vel.	) x (Flow	Rate Facto	r) =	
•	<u> 4.40</u> ×	145.4	= <i>6</i> 40	2 GPM WATER RESC	URCES
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	Pi	JMPING PLAN	IT TESTING.	INC. JUN 29	2015
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DIVISION O	F WATER RELIGITORS STAFFORD Page 24 of 49	ROFILMEI			
		UNLITIME		SCA	NNED

APPLICATION NO: 223	3/ NAME	E: Don G	dman		
COLLINS METER TEST Both	wells pump	ina Togeth	.er		
Collins Meter No				or 19428	
Pipe Inside Diameter			ow Rate Fact	or 145,4	
Test Pressure (psi)	_		A well	ノフムフ	
Description of Test	Location	<u>-</u>	pipe hetwe		
			·		
TEST DATA: Q_ Check, In  Meter Setting From  Center of Pipe	Veloc	ity of Pipe Side if	Veloc	ity of Pipe Side if	
1%6	7,49	7,47	7, 8.3	7.89	;
23/4	7.16	7.08	7,68	7.65	
39/16	6,53	6,51	7.39	7,29	
Average Velocity of	Water = Su	m of Vel	÷ 12 =	7.33	
Corrected Ave. Vel.			ibration Fac		
Flow Rate = (Correct	ed Ave. Ve	1.) x (Flow x <u>145</u> ,	• •	or) =	
				WATER RES	
Revis	wed By:	ied j.	Wet Sting,	Sold Com	2015 RICULTURE
FB 21	1995			AHAYSOOJ67	<b>À</b>

Page 25 of 49 OFLATE

22331



FIELD INSPECTION REPORTS  G.M.D. No			7		٠																
FIELD INSPECTION REPORTS  FIELD INSPECTION REPORTS    Pull	٠.																				
Field Office No.   Z   G.M.D. No.   Sec.   T. Zd.   R. Zd.   Description	E	22331			DI	ISIO	$lue{}$								- T		ULTUI ».	RE			
Test 2 of 2 diversion points. County Edulards.    Guell   Inspection	Field	l om	ا∟ ممالام	2	_			1151	ו עב	1071	LC	110	AN ID J		ا زوا ال استار		3.7			□N&	· p
Test 2 of 2 diversion points. County Edulards 3 APR1 1 1800   Partial Education South	G.M	.D. N	0.	· <u>-                                   </u>	=											Dia)					
Application No. 2231 Date 2/1/272 Firm/Field Office Research Plant Teating, Inc.  Current Landowner Den Geldman % KING VBLCH OWEL-William (A) 841-9262  Address CONTE 3 KING CITY ONTAKIO, CATARON LOGIKO  Address Conte 3 KING CITY ONTAKIO, CATARON LOGIKO  Mater Use Classification: () Domestic () Industrial (*) Irrigation () Municipal () Recreation () Stockwatering () Water Power  Source: (*) Groundwater () Surface Water Basin/Stream Arkanas Rivet  Authorized Point of Diversion: Ne Swy, Nwy, Sec. I. T. 21, R. 20, ID No. 13  Approximately R. North and Y825 R. West of SE corner of Sec. Approximately R. North and Y825 R. West of SE corner of Sec. Approximately Scaled of Sec. Actual Point of Diversion: North and Y825 R. West of SE corner of Sec. Approximately Scaled of Sec. Actual Point of Diversion: North and Y825 R. West of SE corner of Sec. Approximately Scaled of Sec. Actual Point of Diversion Rate 1000 g.p.m. (2.23 c.f.s.)  Priority Date \$12/74 Approved Diversion Rate 1000 g.p.m. (2.23 c.f.s.)  Priority Date \$12/74 Approved Diversion Rate 1000 g.p.m. (2.23 c.f.s.)  Priority Date \$12/74 Approved Diversion Nane (include discussion of overlapping files in remarks section)  LAND TO BE INCLUDED ON CERTIFICATE:  S T R NEW SW SE NE NW SW SE NE														. ∫ AP	R1 -	1 190	n ] [				
Application No. 2231 Date 2/1/272 Firm/Field Office Research Plant Teating, Inc.  Current Landowner Den Geldman % KING VBLCH OWEL-William (A) 841-9262  Address CONTE 3 KING CITY ONTAKIO, CATARON LOGIKO  Address Conte 3 KING CITY ONTAKIO, CATARON LOGIKO  Mater Use Classification: () Domestic () Industrial (*) Irrigation () Municipal () Recreation () Stockwatering () Water Power  Source: (*) Groundwater () Surface Water Basin/Stream Arkanas Rivet  Authorized Point of Diversion: Ne Swy, Nwy, Sec. I. T. 21, R. 20, ID No. 13  Approximately R. North and Y825 R. West of SE corner of Sec. Approximately R. North and Y825 R. West of SE corner of Sec. Approximately Scaled of Sec. Actual Point of Diversion: North and Y825 R. West of SE corner of Sec. Approximately Scaled of Sec. Actual Point of Diversion: North and Y825 R. West of SE corner of Sec. Approximately Scaled of Sec. Actual Point of Diversion Rate 1000 g.p.m. (2.23 c.f.s.)  Priority Date \$12/74 Approved Diversion Rate 1000 g.p.m. (2.23 c.f.s.)  Priority Date \$12/74 Approved Diversion Rate 1000 g.p.m. (2.23 c.f.s.)  Priority Date \$12/74 Approved Diversion Nane (include discussion of overlapping files in remarks section)  LAND TO BE INCLUDED ON CERTIFICATE:  S T R NEW SW SE NE NW SW SE NE	Test	2	of	<u>2</u> di	iversi	on po	ints.	Co	unty_	Eo	Mat	ds_				- 100	Ja	. 1		_	
Current Landowner Series Color		16	well	۱ <u>.</u>			Ins	spection	on _				1	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\			/ 	٠.,	Ebert/H	icsh
Address COVIC 3 KING CITY ONTAKIO CHARGO LOGIKO    Additional landowners and addresses identified in remarks section.    Water Use Classification: ( ) Domestic ( ) Industrial ( ) Irrigation ( ) Municipal ( ) Recreation ( ) Stockwatering ( ) Water Power    Source: ( ) Corondwater ( ) Surface Water Basin/Stream	Appl	ication	No.	72	33,	<u></u>	Da	te	1/12/	190	F	irm/F	ield C	ffice'.	484	7 . 13	.Y/4r	<u> </u>	<u>es T [</u>	M , LACI	<b>L</b> .
Water Use Classification: ( ) Domestic ( ) Industrial ( ) A Irrigation ( ) Municipal ( ) Recreation ( ) Stockwatering ( ) Water Power  Source: ( ) Groundwater ( ) Surface Water Basin/Stream Atkacks River  Authorized Point of Diversion: Ne Source ( ) R. North and R. West of SE corner of Sec. ( ) T. 24, R. 20, ID No. 13  Approximately R. North and R. West of SE corner of Sec. ( ) T. 24, R. 20  Approximately R. North and R. West of SE corner of Sec. ( ) T. 24, R. 20  Approximately R. West of SE corner of Sec. ( ) T. 24, R. 20  Approximately R. West of SE corner of Sec. ( ) T. 24, R. 20  Approximately R. West of SE corner of Sec. ( ) T. 24, R. 20  Approximately R. West of SE corner of Sec. ( ) T. 24, R. 20  Approximately R. West of SE corner of Sec. ( ) T. 24, R. 20  Approximately R. West of SE corner of Sec. ( ) T. 24, R. 20  Approximately R. West of SE corner of Sec. ( ) T. 24, R. 20  Approximately R. West of SE corner of Sec. ( ) T. 24, R. 20  Actual Point of Diversion: R. West of SE corner of Sec. ( ) T. 24, R. 20  Approximately R. West of SE corner of Sec. ( ) T. 24, R. 20  Actual Point of Diversion Rate Research Resea																					
Water Use Classification: ( ) Domestic ( ) Industrial ( ) A Irrigation ( ) Municipal ( ) Recreation ( ) Stockwatering ( ) Water Power  Source: ( ) Groundwater ( ) Surface Water Basin/Stream Arkanan River  Authorized Point of Diversion: Ne Suly, NWY, Sec. J. T. 24, R. 20, ID No. 13  Approximately. R. North and R. West of SE corner of Sec. Approximately. R. North and WBY R. West of SE corner of Sec. J. T. 24, R. 20  Approximately. 3280 R. North and WBY R. West of SE corner of Sec. J. T. 24, R. 20  Approximately. 3280 R. North and WBY R. West of SE corner of Sec. J. T. 24, R. 20  Approximately. 3280 R. North and WBY R. West of SE corner of Sec. J. T. 24, R. 20  Approximately. 3280 R. North and WBY R. West of SE corner of Sec. J. T. 24, R. 20  Approximately. 3280 R. North and WBY R. West of SE corner of Sec. J. T. 24, R. 20  Approximately. 3280 R. North and WBY R. West of SE corner of Sec. J. T. 24, R. 20  Actual Point of Diversion: R. West of SE corner of Sec. J. T. 24, R. 20  Approximately. 3280 R. North and WBY R. West of SE corner of Sec. J. T. 24, R. 20  Actual Point of Diversion: R. West of SE corner of Sec. J. T. 24, R. 20  Actual Point of Diversion: R. West of SE corner of Sec. J. T. 24, R. 20  Actual Point of Diversion: R. West of SE corner of Sec. J. T. 24, R. 20  Actual Point of SE corner of Sec. J. T. 24, R. 20  Actual Point of SE corner of Sec. J. T. 24, R. 20  Actual Point of SE corner of Sec. J. T. 24, R. 20  Actual Point of SE corner of Sec. J. T. 24, R. 20  Actual Point of SE corner of Sec. J. T. 24, R. 20  Actual Point of SE corner of Sec. J. T. 24, R. 20  Actual Point of SE corner of Sec. J. T. 24, R. 20  Actual Point of SE corner of Sec. J. T. 24, R. 20  Actual Point of SE corner of Sec. J. T. 24, R. 20  Actual Point of SE corner of Sec. J. T. 24, R. 20  Actual Point of SE corner of Sec. J. T. 24, R. 20  Actual Point of SE corner of Sec. J. T. 24, R. 20  Actual Point of SE corner of Sec. J. T. 24, R. 20  Actual Point of Sec. J. T. 24, R. 20  Actual Point of Sec. J. T. 24, R. 20  Actual Point of	Addr	ess_ <u>f</u>	তৈন	(E )	3/_	Ķ	ING	CI	74	0	27	AK	10	ر , <u>ر</u>	AN	AOA	<u>-</u>	40	GI H	<b>&lt;</b> 0	
( ) Recreation ( ) Stockwatering ( ) Water Power  Source: (SW Groundwater ( ) Surface Water Basin/Stream Arkacas River  Authorized Point of Diversion: NC SWY, NWY Sec. J. T. 24, R. 20, ID No. 13  Approximately. 5240 ft. North and ft. West of SE corner of Sec. J. T. 24, R. 20  Approximately 5240 ft. North and 4825 ft. West of SE corner of Sec. J. T. 24, R. 20  Approximately 5240 ft. North and 4825 ft. West of SE corner of Sec. J. T. 24, R. 20  Approximately 5240 ft. North and 4825 ft. West of SE corner of Sec. J. T. 24, R. 20  Approximately 5240 ft. North and 4825 ft. West of SE corner of Sec. J. T. 24, R. 20  Approximately 5240 ft. North and 4825 ft. West of SE corner of Sec. J. T. 24, R. 20  Approximately 5240 ft. North and 4825 ft. West of SE corner of Sec. J. T. 24, R. 20  Approximately 5240 ft. North and 4825 ft. West of SE corner of Sec. J. T. 24, R. 20  Approximately 5240 ft. North and 4825 ft. West of SE corner of Sec. J. T. 24, R. 20  Approximately 5240 ft. North and 4825 ft. West of SE corner of Sec. J. T. 24, R. 20  Approximately 5240 ft. North and 4825 ft. West of SE corner of Sec. J. T. 24, R. 20  Approximately 5240 ft. West of SE corner of Sec. J. T. 24, R. 20  Approximately 5240 ft. North and 4825 ft. West of SE corner of Sec. J. T. 24, R. 20  Approximately 5240 ft. North and 4825 ft. West of SE corner of Sec. J. T. 24, R. 20  Approximately 5240 ft. West of SE corner of Sec. J. T. 24, R. 20  Approximately 5240 ft. West of SE corner of Sec. J. T. 24, R. 20  Approximately 5240 ft. West of SE corner of Sec. J. T. 24, R. 20  Approximately 5240 ft. West of SE corner of Sec. J. T. 24, R. 20  Approximately 5240 ft. West of SE corner of Sec. J. T. 24, R. 20  Approximately 5240 ft. West of SE corner of Sec. J. T. 24, R. 20  Approximately 5240 ft. West of SE corner of Sec. J. T. 24, R. 20  Approximately 5240 ft. West of SE corner of Sec. J. T. 24, R. 20  Approximately 5240 ft. West of SE corner of Sec. J. T. 24, R. 20  Approximately 5240 ft. West of SE corner of Sec. J. T. 24, R. 20  Approximately 5240 ft.			Ц	Additio	JIIAI IAII	Idowile	ers and	aucress	es men	tineu ii	ı rema	rks sect	ion.								
Source:  (A) Groundwater () Surface Water Basin/Stream Arkanaa River  Authorized Point of Diversion: NC SWY, NWY Sec. 1, T. 24, R. 20, ID No. 13 Approximately. R. North and R. West of SE corner of Sec.  Approximately 3240 ft. North and 4825 ft. West of SE corner of Sec. 1  Approximately 3240 ft. North and 4825 ft. West of SE corner of Sec. 1  Approximately 3240 ft. North and 4825 ft. West of SE corner of Sec. 1  Approved Boundary Approved Diversion Rate 1000 g.p.m. (223 c.f.s.)  Priority Date 5/2/74 Approved Diversion Rate 1000 g.p.m. (223 c.f.s.)  Priority Date 5/2/74 Approved Diversion Rate 1000 g.p.m. (223 c.f.s.)  Priority Date 5/2/74 Approved Diversion Rate 1000 g.p.m. (223 c.f.s.)  Priority Date 5/2/74 Approved Diversion Rate 1000 g.p.m. (223 c.f.s.)  Priority Date 5/2/74 Approved Diversion Rate 1000 g.p.m. (223 c.f.s.)  Priority Date 5/2/74 Approved Diversion Rate 1000 g.p.m. (223 c.f.s.)  Priority Date 5/2/74 Approved Diversion Rate 1000 g.p.m. (223 c.f.s.)  Priority Date 5/2/74 Approved Diversion Rate 1000 g.p.m. (223 c.f.s.)  Priority Date 5/2/74 Approved Diversion Rate 1000 g.p.m. (223 c.f.s.)  Priority Date 5/2/74 Approved Diversion Rate 1000 g.p.m. (223 c.f.s.)  Priority Date 5/2/74 Approved Diversion Rate 1000 g.p.m. (223 c.f.s.)  Priority Date 5/2/74 Approved Diversion Rate 1000 g.p.m. (223 c.f.s.)  Priority Date 5/2/74 Approved Diversion Rate 1000 g.p.m. (223 c.f.s.)  Priority Date 5/2/74 Approved Diversion Rate 1000 g.p.m. (223 c.f.s.)  Priority Date 5/2/74 Approved Diversion Rate 1000 g.p.m. (223 c.f.s.)  Priority Date 5/2/74 Approved Diversion Rate 1000 g.p.m. (223 c.f.s.)  Priority Date 5/2/74 Approved Diversion Rate 1000 g.p.m. (223 c.f.s.)  Priority Date 5/2/74 Approved Diversion Rate 1000 g.p.m. (223 c.f.s.)  Priority Date 5/2/74 Approved Diversion Rate 1000 g.p.m. (223 c.f.s.)  Priority Date 5/2/74 Approved Diversion Rate 1000 g.p.m. (223 c.f.s.)  Priority Date 5/2/74 Approved Diversion Rate 1000 g.p.m. (223 c.f.s.)  Priority Date 6/2/74 Approved Diversion Rate 1000 g.p.m. (223 c.f.s.)	Wate	er Use	Class	ificati													unicip	al			
Authorized Point of Diversion:	•				,	, 10	-CI Eal	1011	( )	JUCI	wate	. mg	(	, ** 41	10	1	•				
Authorized Point of Diversion: NC SWY, NWW Sec, T. ZL, R. ZO, ID No	Source (	ce: Groun	dwate	er	( ):	Surfac	ce Wa	ter	Basin	n/Stre	am _	A	r ka.	SAS	R:	ver					<del></del>
Actual Point of Diversion:  Approximately 3200 ft. North and 4827 ft. West of SE corner of Sec. // Approximately 3200 ft. North and 4827 ft. West of SE corner of Sec. // Approved" Quantity AF "Approved" Diversion Rate 1000 g.p.m. (223 c.f.s.)  Priority Date 5/2/74 Approval Date 3/19/74 Perfection Date 12/3/8/ Other applications covering land and/or point of diversion (include discussion of overlapping files in remarks section)  LAND TO BE INCLUDED ON CERTIFICATE:  S T R NEW SW SE NE NW SW SE N																	26	, R	20	, ID No. 13	<u>3</u>
"Approved" Quantity																					
"Approved" Quantity	Actua	al Poir	nt of I	Divers	ion: _			/wx,	5W1/4,	NW.	<b>½</b>			s	ec	<u></u>	26	, R. <u>-</u>	20	-	
"Approved" Quantity	Appr How	oxima were	tely_ distar	nces d	eterm	fi inedi	Nor	th and		48 <b>C</b> E	75 ae	لمن	_ft. \ _ <b>p</b> \	West	of SE	corne	r of S	ec	<u>/</u>	•	
Priority Date \$\frac{5}{2}/7\frac{7}{7}\$ Approval Date \$\frac{3}{19/76}\$ Perfection Date \$\frac{12}{3}/81\$  Other applications covering land and/or point of diversion \(\text{Money of the diversion}\)  LAND TO BE INCLUDED ON CERTIFICATE:  \$ T R NEW NWW SW SE NE NW SW SE													-								s )
Other applications covering land and/or point of diversion (include discussion of overlapping files in remarks section)  LAND TO BE INCLUDED ON CERTIFICATE:  S T R NEW NWW SW SE NE NW SW			-	-																_	
(include discussion of overlapping files in remarks section)  LAND TO BE INCLUDED ON CERTIFICATE:  S T R NEW NW SW SE NE NW SW				•	-						•					rfectio	n Dat	е	14/	5//8/	
LAND TO BE INCLUDED ON CERTIFICATE:  S T R NEW NW SW SE NE NW SW S	Othe	r appl	icatio	ns cov	ering	land	and/o	r poin	t of di	versio	on	No	ne								
S T R NEW NWW SW SE NE NW SW S							_				11/			•							
S T R NE NW SW SE NE NW SE NE NW SW SE NE													S۱	N 1/4			SI	E14		TOTAL	
LAND IRRIGATED—YEAR OF RECORD 1984  S T R NEW NWW SW SE NE NW SW S	S	T	R	NE	NW	sw	SE	NE	NW	sw	SE	NE	NW	sw	SE	NE	NW	sw	SE		
S   T   R   NEW   NWW   SWW   SEW   TOTAL ACRES	1							ļ	19	34		ļ	5		<b> </b>	,				-	
S T R NEW NWW SW SE NE NW SW S		46	20	17			37													H	<del></del>
S T R NEW NWW SW SE NE NW SW S		بــــــا			L		L		لــــا			1	L	L	L		<u> </u>	<u> </u>	<u> </u>		_
T   R   NE   NW   SW   SE   NW   SE   NW   SW   SE   NW   SW   SE   NW   SW   SE   N	LAN	D IRE	IGAT	ED-			REC	ORD.								11				11	<del></del>
1	s	т	R	ļ			Т	<b></b>	т			ļ		1		-			T	TOTAL ACRES	
TESTED DIVERSION RATES FOR EVED both wells pumping together  Well pumping alone  Maximum G.P.M. 643 (c.f.s. 1/43) Normal G.P.M. 1005 (c.f.s. 2/24)  FOR D.W.R. USE ONLY  FOR D.W.R. USE ONLY  FOR D.W.R. USE ONLY  Extension of time needed: Yes ( 4 No ( ) Attached? yes ( ) no ( 4)  Ac. Ft. Applied = 1700 hrs. × 643 g.p.m. × 4.419 / 24 × 1000 WATER RESOURCES  WATER RESOURCES		21	26	NE	NW	sw	SE	NE			SE	NE	┵	sw	SE	NE	NW	sw	SE		
Water of Record 1984 brs. × 643 g.p.m. × 4.419 = 202 AF  WATER RESOURCES				25	1	4.5	39,5		2,5	~7			7,3			4				74/	
Water of Record 1984 brs. × 643 g.p.m. × 4.419 = 202 AF  WATER RESOURCES			-		<u> </u>	<del> </del>	-					-	-			-	-			1120	<u> </u>
Water of Record 1984 birs. × 643 g.p.m. × 4.419 g.p.m. × 4.419 g.p.m. × 4.419 g.p.m. × WATER RESOURCES  Water Resould a series of the series o							george, no	n	BMD = -		<del></del>	<i>3</i> }		•	·						<del></del>
Water of Record 1984 brs. × 643 g.p.m. × 4.419 = 202 AF  WATER RESOURCES	TEST	ED I	)IVE	HSIO! سوا	N RA' \ pur	TES	∄ څځ روام و	ie.	E I \	E	D	Ÿ	Þ°₹	እ ወቀ	lls pu	mpin	s to	eth	7ء		
FOR D.W.R. USE ONLY  FORD D.W.R. USE ONLY  Year of Record $\frac{1984}{1984}$ Extension of time needed: Yes ( $\frac{1}{2}$ No ( ) Attached? Yes ( ) no ( $\frac{1}{2}$ Ac. Ft. Applied = $\frac{1700}{19}$ hrs. $\times \frac{643}{19}$ g.p.m. $\times \frac{4.419}{24 \times 1000} = \frac{202}{1984}$ AF  WATER RESOUR	Maxii	mum (	G.P.M	1	6	4.3	(c	.f.s	1.4	3	.)	ľ	Vorma	d G.P	.М		<u> </u>		(c.f.s	. <u>2.24</u>	_)
Year of Record $\frac{1984}{\text{Extension of time needed: Yes ( } \text{No ( )} \text{ Attached? yes ( ) no ( } \text{Attached? yes ( )} \text{ no ( } \text{Attached? yes ( )} \text{ No ( )} \text{ Attached? yes ( )} \text{ No ( )} \text{ Attached? yes ( )} \text{ no ( } \text{Attached? yes ( )} $												USE	ONI	Y			W	IC	ruf	ILMCD	<del></del>
Ac. Ft. Applied = $\frac{1700}{1}$ hrs. $\times \frac{643}{1}$ g.p.m. $\times \frac{4.419}{24 \times 1000} = \frac{202}{1000}$ AF  WATER RESOUR					- 4	, ts:	V21 (8.1523)	TALE OF W	าดสีค่าดี สารเกา	iii saa	DOCE.	- C-113	~14E	•							
WAIER RESOUR				, ,	1 ()	1 1								_							
WATER RESOUR																		ched?	yes	( ) no ( 4	4
'Approved" Land irrigated $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$ acres, with $\frac{2}{2}$ $\frac{1}{2}$ $\frac{1}{2}$ AF = $\frac{1}{2}$ AF/acre																		ched?	yes		
	Ac. F	t. App	olied	= 1	10	<u>/</u> ) hrs	. ×_	64	3_	_ g. p.	m. ×	24	1.419 × 100	<u></u> =	20	) 2	AF				WATER RESOU

c. Ft. Applied =  $\frac{1700}{1700}$  hrs.  $\times \frac{643}{24 \times 1000}$  g.p.m.  $\times \frac{4.419}{24 \times 1000}$  =  $\frac{202}{24 \times 1000}$  WATER RESOURCES RECEIVED

Approved" Land irrigated  $\frac{120}{1200}$  acres, with  $\frac{202}{1200}$  AF =  $\frac{1.68}{1600}$  AF/acre

Otal AF (including overlapping Files)  $\frac{3.15}{1600}$  AF,  $\frac{3.15}{1600}$  AF/acre  $\frac{120}{1200}$  AF,  $\frac{3.15}{1600}$  AF,  $\frac{3.15$ 

5 Center Pivot	
Manufacturer Eimmtic Model 3/0 Serial No. 3079	_
Drive: Water Electric Length of Pivot Arm Acres Irr. /20	<u>.                                    </u>
Design Pressure-Pivotp.s.i. Operating Pressure-Pivotp.s.	i.
Is there an end gun? (>) yes ( ) no Is end gun operating during test? (>) yes ( ) no	
End Gun Model 2 Rein hird 85 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 w	ras
tested, 5) test location and 6) hydrant location.	1
Description	<u> </u>
	<del></del>
Other Type	
ManufacturerModelSerial No	
unusual condition/other information	<del></del>
	_
POWER UNIT INFORMATION:	
Manufacturer Ford Model No. 300 HP ——	
Serial No. 3 4830 F-13-HK Fuel Nat. Gas Rated RPM	
PUMP INFORMATION:	
Manufacturer Fair banks Morse Model No. 10 m A Rated RPM	- <del>-</del>
Serial No. N2 W24647X Type Vertical Turbine No. stages 5	<del></del>
GEAR HEAD INFORMATION:	
Manufacturer Randolph Model No. F-80	
Serial No. 82494 Drive Right Angle Ratio 6:5	_
WELL INFORMATION:	
Date Drilled 11/19/79 Original Depth 524. Static Water Level When Drilled 15	તે.
Length of time well has ( ) operated (+) rested prior to measurement	rs
Is measurement tube required? ( ) yes ( > no Is measurement tube present ( ) yes ( > no	
Depth to waterft. below LSD.	•
ADDITIONAL REQUIREMENTS:	
Is a flow meter required? ( ) yes ( no Make of flow meter	
Flow Meter Model No Serial No Size	-WATER RESOURCES
Is the meter installed properly? ( ) yes ( ) no Flow meter conversion factor:	RECEIVED
Flow meter units: ( ) Acre Feet ( ) Acre inches ( ) Gallons ( ) Other	_ JUN <b>2 9</b> 2015
Is check valve present? (>) yes ( ) no	MODERN OF A SECURITY
Is low pressure drain present? ( 'yes ( no ls vacuum breaker present? ( ) yes ( no	KS DEPT OF AGRICULTURE
Is injection port present: (x) yes () no  Is injection system being operated: () yes ()4n  HAYS002	00 0672
Was a Plant Health Chamigation Panent completed? (A use ( ) po	.0/3

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22331

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

			••	
N A	·			
Scale "=ft.				

TEST OF DIVERSION RATE:	
TEST OF BIVERSION RAILE.	

f of diversion rate:	
Location of test Horizontal pipe between Pipe Diameter (I.D.) 6 78 inches	n collection pot and pipe from A-well
Test No. 1—Normal Conditions both wells purpling together R.P.M. POWER UNIT	Test No. 2—Maximum Conditions  Well Pumping alone  R.P.M. POWER UNIT  R.P.M. PUMP UNIT  Pressure at Pump  18  psi
cuzzi Meter Test Met	er Identification No
Area Constant K = 2.45 × I.D. <sup>2</sup> =	Q (gpm) = VK
Velocity (fps) 1 2	Velocity (fps) 1 2

☐ Jacuzzi Meter Test	Meter Identification No			
Area Constant K = 2.45 × I.D.* =	· · · · · · · · · · · · · · · · · · ·	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	<del>_</del>		
Avg	Avg			
G.P.M	G. P. M			

**WATER RESOURCES** RECEIVED

Propeller Meter Test	Manufactur	rer	Model	Serial No	JUN <b>2 9</b> 2015
Meter Diameter	inches				KS DEPT OF AGRICULTURE
Ending	gal.	Ending	gal.		
Beginning	gal.	Beginning	gal.	BALINES CAP'S	# Red to Pa
Difference	gal.	Difference	gal.	MICKOFI	
Time	min.	Time	min.		
Rate	gpm	Rate	gpm	•	
				HVACU	12674

Other Flow Meter

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

Year	Hours Pumped ( hr ) /740	Reported Pumping Rate ( gpm )	Water Used ( AF )	Acres Irrigated 12 <b>Y</b>	
<u>1974</u> 1977 <u>1</u> 978	893	1000		130	
1979	336	850			
1980					
1981	840	850			
1982		-			
1983	O (PIK)				
¥ 1984	1700	1005**		/20	
1985	1600	400		120	
1986	_0*				
1987	0*				
	400				
1989	901				
1990	* + obtained	1005 ## From test (bot) n terant set asia	wells opera	tira	
☐ Electricity  Meter Manufact  Kwatt  Rate = Kr × 3 t  ☐ Other Fuels  Rate = Volume time	t/rev r	Typerevolutions _kw/hr Ho	tse  surs =rate	•	
	it volume determinedi rrighted co		now by	He Owner as	
					WATER RESOURCES RECEIVED
					JUN <b>2 9</b> 2015
Person present at testK	ent Naber (name)		on Goldman (address)	Operator (relationship) (See owner) (phone number	KS DEPT OF AGRICULTURE
Conducted by	4 Hest			Date	, 02675
pproved by (signature)	J. Went	P-E,		Date	<u>ʊ</u>
22331		Page 30 of 49	2.3	,	SCANNED

APPLICATION (	NO: 2233/ NA	AME: Dow	Goldman		
COLLINS METER TE	ST Bwell pumping	alone			
Collins Met	er No. 1-84	Meter Calib	ration Fact	or 19428	
Pipe Inside	Diameter (inches)	6/8 F1c	w Rate Fact	or 89.5	
Test Pressu	re (psi) <u>18</u>	Test RPM, P	ump <u>1761</u>	2	
Description	of Test Location	Hocizpatal p	ipe between	<u>collection</u>	
		,			
	g From Left Sid Pipe (or Fro	ocitv	Veloc Right Side	ity of Pipe Side if	`
1/4	7.78	7,73	7,95	8,10	
23/16		7,73			•
213/18	6.25	-6.20	7,67	7,85	
Average Vel	ocity of Water = 1	Bum of Vel	12 =	7,62	
•	ve. Vel. = (Ave. '		bration Fac		•
Flow Rate =	(Corrected Ave. 7.19	Vel.) x (Flow x <u>89.4</u>		C3 GPM	
				WATER RESC RECEIV	DURCES ED
	Reviewed By: RECEIVED	PUMPING PLA		JUN 2 9	2015 RICULTURE

22331

FRANCE OFFICE DIVISION OF YEATER REBENGALOW 49
STAFFORD

FEB 2 1 1995

SCANNED MICROFILMED

APPLICATION NO: 223	33/ NAMI	- Λ <sub>00</sub>	Coldman	
LINS METER TEST Both	wells pump	ing Toget	ler	
Collins Meter No	1-84	Meter Cali	bration Fact	tor <u>.9428</u>
Pipe Inside Diamete	r (inches)	<i>7¾</i> F1	ow Rate Fact A well	tor <u>145,4</u>
Test Pressure (psi)	68	Test RPM,	Pump Bwell	. 1767 <u>. 1755</u>
Description of Test		Hocizontal	pipe betw	eer pump
	<b></b>			
T`DATA: ( <u>L</u> Check, I Meter Setting From Center of Pipe	Veloc Left Side (or Front	itv	Velo	city e of Pipe Side if
	787333555			
13/6	7,49	7.47	7,83	7.89
23/4	7.16	7.08	7.68	7,65
39/1b	6,53	6,51	7.39	7,29
Average Velocity of	Water = Su	m of Vel.	÷ 12 =	7,33
Corrected Ave. Vel.			ibration Fa	
Flow Rate = (Correc	ted Ave. Ve	1.) x (Flo x <u>/45</u>	w Rate Fact	or) = 205 GPM
				 WATER RES
· · · · · · · · · · · · · · · · · · ·				RECEIV
Revi	ewed By:	FUMPING PL	ANT TESTING	JUN 29
: 742 ₹ Δ	1900 com	Profession	al Engineer	KS BEPTOFAGE
	A See See See	Lib Alabaral	al Engineer	
	- FIG 21	Here d	[ F4	HAY\$00267

APPLICATION NO: 22331

NAME:

Don Goldman Eagle Ridge Equities: Inc

### 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 diligent effort to keep good records. purchased by Eagle Kidge Equities, Inc. to keep accurate up to date records. reasonable to use the years since 1983 Record.

Life Insurance made a In 1989 the property was and they too are trying Therefore, it would seem in choosing a Year of

PUMPING PLANT TESTING, INC.

Reviewed by:

Professional Engineer

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FIELD OFFICE

DIVISION OF WATER RESOURATE

PAGE 39 F6 49 MUROFILME

HAY\$002678

APPLICATION NO:

22331

NAME: Eagle Ridge

### 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. 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. 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.

PUMPING PLANT TESTING, INC.

Reviewed by:

Professional Engineer

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HAYS002679

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STATE BOARD OF AGRICULTURE Phillip A. Fishburn, Acting Secretary

DIVISION OF WATER RESOURCES David L. Pope, Chief Engineer

CERTIFICATE OF APPROPRIATION

FOR BENEFICIAL USE OF WATER

**DUPLICATE COPY** 

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, 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 Southwest Quarter of the Northwest Quarter ( $SW_4 \ NW_4$ ) 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,

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

for irrigation use on the following described property:

19 acres in Lot 4 (Wigh NWigh),

34 acres in the Southwest Quarter of the Northwest Quarter (SW1 NW1),

5 acres in the Northwest Quarter of the Southwest Quarter (NW\ SW\),

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a total of 58 acres in Section 1,

JUN 2 9 2015

17 acres in the Northeast Quarter of the Northeast Quarter (NE½ NE½), 39 acres in the Southeast Quarter of the Northeast Quarter (SE½ NE½),

By acres in the Southeast Quarter of the Northeast Quarter (SE2 NE3), 6 acres in the Northeast Quarter of the Southeast Quarter (NE3 SE3),

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a total of 62 acres in Section 2.

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all in Township 26 South, Range 20 West, Edwards County Kansas.

HAYS002702

DWR 1-400, (Rev. 05/02/94)

P80853 of 49

MCDFIMED

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 akmy office as DAVID L. POPE CHIEF ENGINEER Chief Engineer Division of Water Resources Kansas State Board of Agriculture STATE OF KANSAS, Shawnee COUNTY, ss. QV, by David L. Pope, P.E., Chief Engineer, Division of Water The foregoing instrument was acknowledged before me this Resources, Kansas State Board of Agriculture. (Record in the Office of Register of Deeds in the county counties wherein the point of diversion is located) WATER RESOURCES RECEIVED WATER APPROPRIATION STATE OF KANSAS JUN **2 9** 2018 CERTIFICATE KS DEPT OF AGRICULTURE STATE OF KANSAS, HAYS002703 record this recorded in Book 22331 Page **25**6 of 49 Filed SCANNED

## KANSAS STATE BOARD OF AGRICULTURE Division of Water Resources

# MEMORANDUM

TO: Files

**DATE:** August 29, 1994

FROM:

Douglas E. Bush

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:  $120 \text{ acres } \times 1.5 = 180 \times 0.5$  (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

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Phillip A. Fishburn Acting Secretary 913 296-3558

# 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

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LMS: jt

Enc.

Stafford Field Office

Groundwater Management District No. 5 1 1995

R 9 Ranch Bet Farms

FISHER OF HOE DIVISION OF WATER RESOURCES Page 38 of 49 Office Services 296-2658 296-2933 Technical Services 296-6081 Water Structures

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Water Appropriation Permits and Changes

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296-2709

## 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 ac	res
10 -	40 acr	es
40 -	120 ac	res
more	than 1	20 acres

450 g.p.m. 450 (+) 450 g.p.m. 900 (+) 8 g.p.m./acre 550 + 8X (+) 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;

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  $\chi$  becomes a further limiting factor.

A further limiting factor is well design and equipment, which shall be reasonable to divert the requested rate.

WATER RESOURCES RECEIVED

JUN 2 9 2015

Administrative Policy No. 86-8 Page 2

Further, the rate authorized should not impair senior water rights in the area, including domestic rights.

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

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

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

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

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

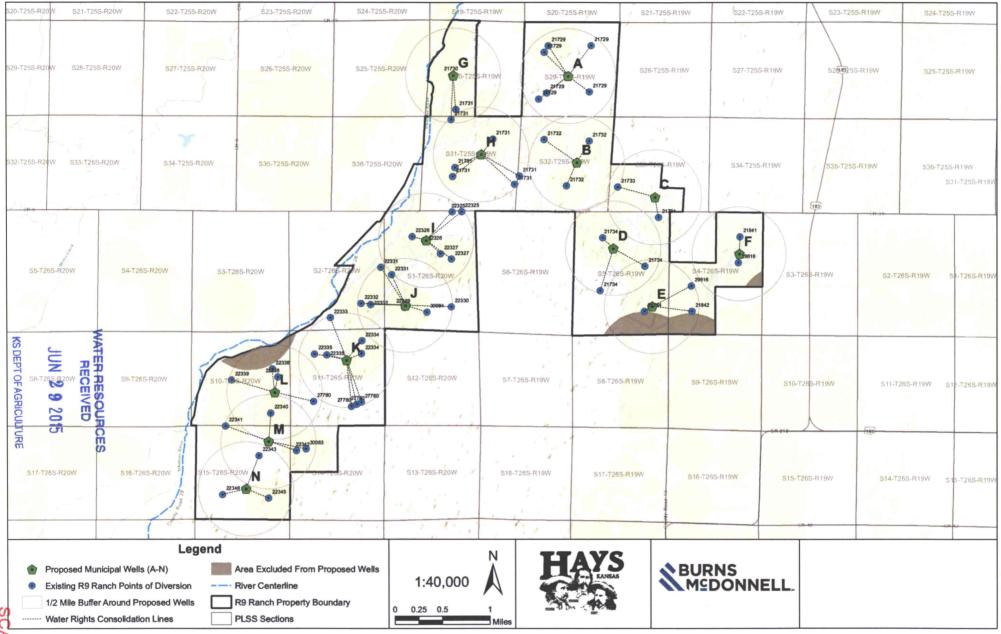
That if an applicant can show that his or her system design is reasonable for the use intended and approval of the proposed rate and/or maximum annual quantity will not impair any senior water right or prejudicially and unreasonably affect the public interest, the Chief Engineer may waive the above guidelines.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

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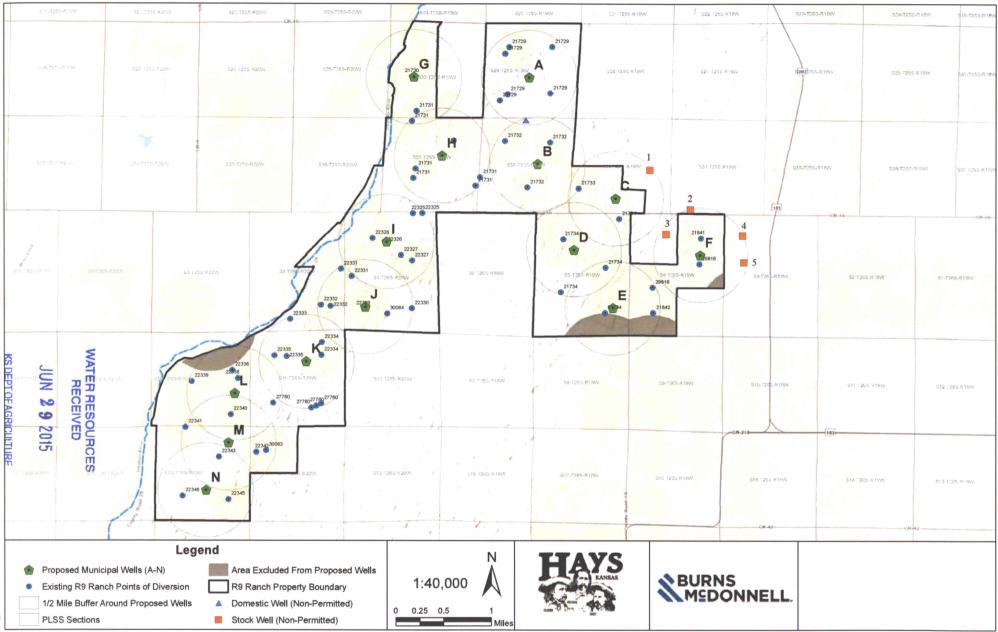
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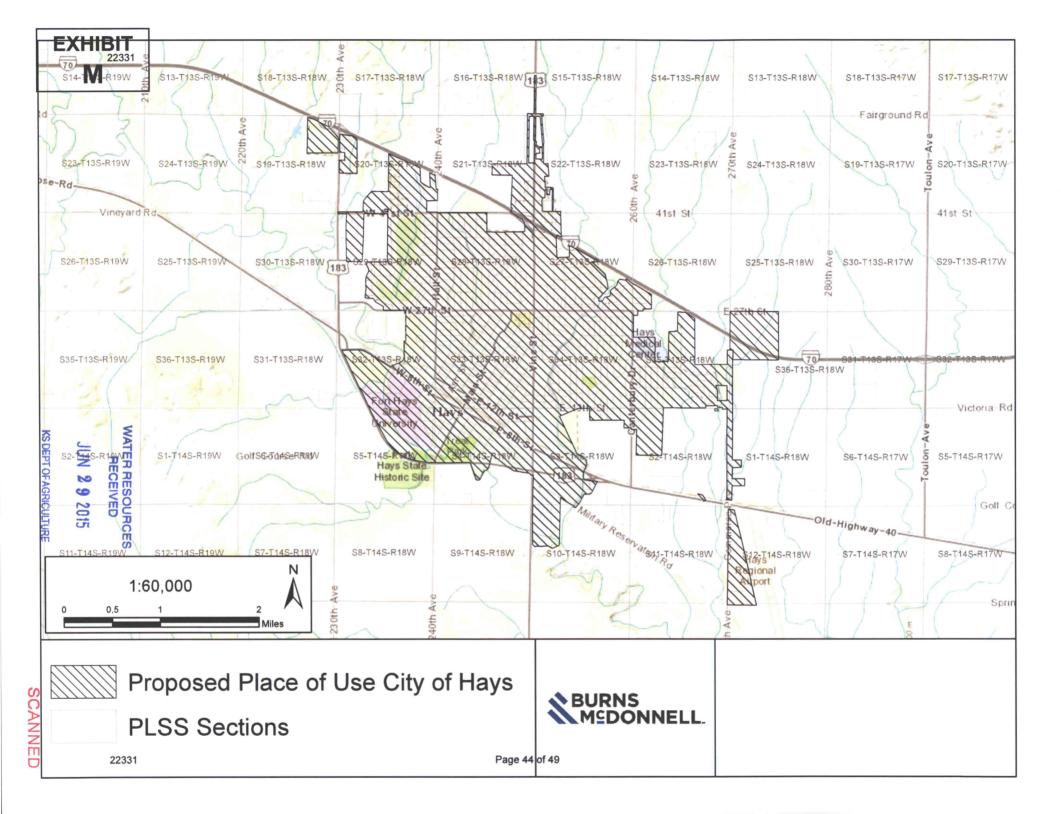


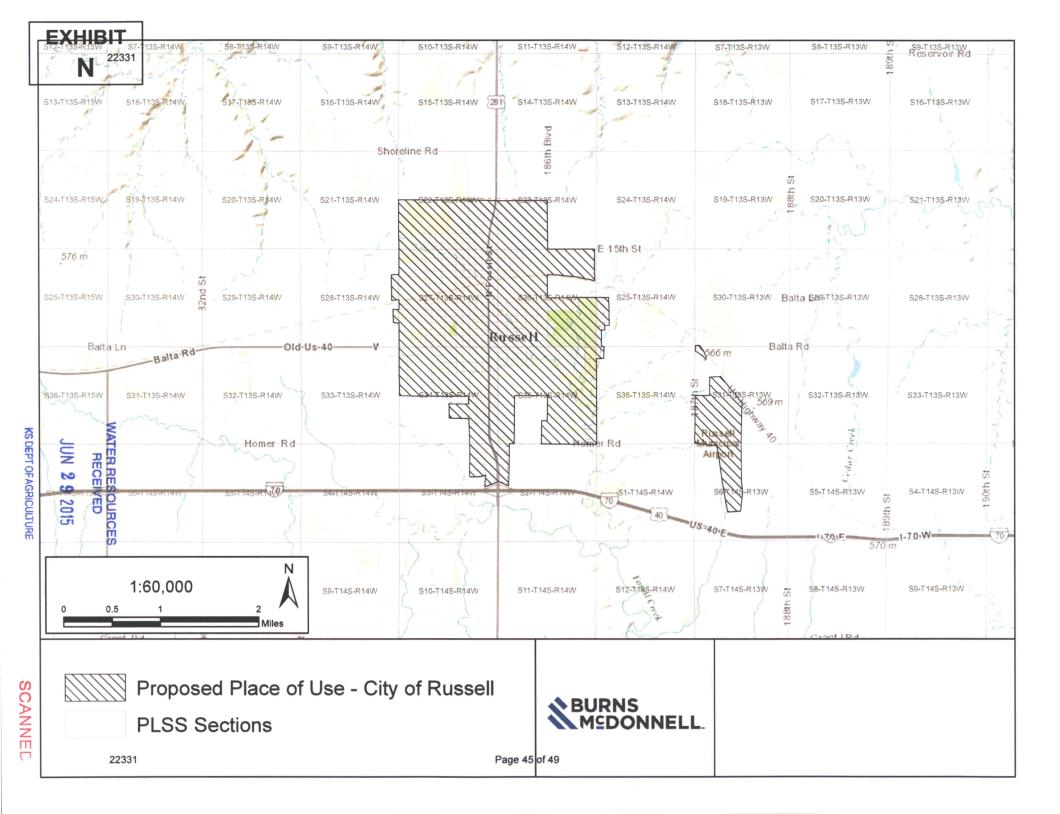
Water Rights Consolidation Lines PL





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22331 Applicant's Name	City Of Hays KS	
	(Please Print)	

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

Application	File	Number	
(assigned	l by I	OWR)	

### SECTION 1: PRESENT WATER USE SUMMARY (IF NO PREVIOUS MUNICIPAL WATER USE HAS BEEN UTILIZED, PROCEED TO SECTION 3) NOTE: WORKSHEET FOR WATER PUMPED, PURCHASED, AND SOLD BY YOUR WATER DISTRIBUTION SYSTEM.

Column 1	Column 2	Column 3	Column 4 Water Sold to Your	Column 5 Water Sold to Your	Column 6	Column 7	
Raw Water Diverted Under Your Rights	Water Purchased From All Sources			Water Sold to Other Public Water Suppliers	Water Sold to Other Industrial, Stock, and	Residential and Other Commercial Customers Metered Water	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.

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.

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 Column 4:

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.

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 Column 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 = <u>Unaccounted For Water</u> x 100

For Water 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.

**EXHIBIT** 

### SECTION: PAST WATER USE

#### COMPLETE THE FOLLOWING TABLE FROM YOUR PAST WATER USE RECORDS

10	O TO THE POLLOWING TABLE FROM TOUR FAST WATER DSE RECORDS.							
9 2	ESOL	Column 1	Column 2	Column 3	Column 4 Water Sold to Your	Column 5 Water Sold to Your	Column 6	Column 7
2015	JRC	Raw Water Diverted Under Your Rights	Water Purchased From All Sources	Water Sold to Other Public Water Suppliers	Industrial, Stock, and Bulk Customers	Residential and Commercial Customers	Other Metered Water	Remaining Water Used (See Above Explanation)
20	years ago	592,323,000			5,029,000	469,314,000	5,155,000	112,825,000
15	years ago	780,527,000			10,619,000	587,965,000	10,470,000	171,473,000
10	years ago	706,926,000			7,103,000	639,222,000	20,861,000	39,740,000
5	years ago	693,966,000			13,537,000	581,900,000	19,362,000	114,383,000
TOTAL WATER = Columns 1 + 2			A	CCOUNTED FOR WATER	= Columns 3 + 4 + 5 + 6		UNACCOUNTED FOR WATER	

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<b>SECTION 3:</b>	PROJECTED	<b>FUTURE</b>	WATER	NEEDS

	FLEASE COMPLETE THE POLLOWING TABLE SHOWING TOOK PUTUKE WATER REQUIREMENTS FOR THE NEXT 20 TEARS:						
	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7
	1			Water Sold to Your	Water Sold to Your		
	Raw Water Diverted	Water Purchased	Water Sold to Other	Industrial, Stock, and	Residential and	Other	Remaining Water Used
	Under Your Rights	From All Sources	Public Water Suppliers	Bulk Customers	Commercial Customers	Metered Water	(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	AC	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/	8,082	Total
			Feedlot		

### SECTIONS: PRESENT GALLONS PER PERSON PER DAY

CALCULATE YOUR GALLONS PER PERSON PER DAY

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

Year of Section 4

623,753,000 Amount of water in

÷ 21,038

Population from Last

÷ 365 Days/Year = 88

GALLONS PER PERSON PER DAY.

**SECTION 6: AREA TO BE SERVED** 

Columns 5, 6, and 7

of Section 1

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.

22331

, ipplicative traine	(Please Print)	
Applicant's Name	City of Russell	
22331		

# MUNICIPAL (PUBLIC WATER SUPPLY) APPLICATION SUPPLEMENTAL INFORMATION SHEET

Application	File	Numbe	r
(assigned	d bas f	DIAMEN	

**EXHIBIT** 

SECTION 1: PRESENT WATER USE SUMMARY (IF NO PREVIOUS MUNICIPAL WATER USE HAS BEEN UTILIZED, PROCEED TO SECTION 3)
NOTE: WORKSHEET FOR WATER PUMPED, PURCHASED, AND SOLD BY YOUR WATER DISTRIBUTION SYSTEM.

Column 1	Column 1 Column 2		Column 1 Column 2		Column 4 Water Sold to Your	Column 5 Water Sold to Your	Column 6	Column 7
Raw Water Diverted Under Your Rights	Water Purchased From All Sources	Water Sold to Other Public Water Suppliers	Industrial, Stock, and Bulk Customers	Residential and Commercial Customers	Other Metered Water	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:

Percent Unaccounted = <u>Unaccounted For Water</u> x 100

For Water Total Water (Columns 1,2) If his number exceeds 20%, please explain the large amount of unaccounted for water and describe any steps being taken to reduce it.

HON2: PAST WATER USE

COMPLETE THE FOLLOWING TABLE FROM YOUR PAST WATER USE RECORDS.

2	$O_{\overline{A}}$	COMPLETE THE POLLO	MPLETE THE POLLOWING TABLE PROM TOUR PAST WATER USE REGURDS.					
9 20	ESOU	Column 1	Column 2	Column 3	Column 4 Water Sold to Your	Column 5 Water Sold to Your	Column 6	Column 7
8	<u> </u>	Raw Water Diverted	Water Purchased	Water Sold to Other Public	Industrial, Stock, and Bulk	Residential and Commercial	Other	Remaining Water Used
5	Õ	Under Your Rights	From All Sources	Water Suppliers	Customers	Customers	Metered Water	(See Above Explanation)
2	0 years ago							
1	5 years ago	373,757,000	0	0	171,928,220	115,864,670	18,687,850	67,276,260
1	0 years ago	477,486,000	0	0	222,781,000	147,340,000	19.483,000	87,882,000
	years ago	375,790,000	0	0	144,277,000	123,343,000	18,907,000	89,263,000
TOTAL WATER = Columns 1 + 2				A	CCOUNTED FOR WATER	= Columns 3 + 4 + 5 + 6		UNACCOUNTED FOR WATER

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SECTION 3:	PROJECTED	<b>FUTURE</b>	WATER	NEEDS

	EASE COMPLETE THE FOLLOWING TABLE SHOWING YOUR FUTURE WATER REQUIREMENTS FOR THE NEXT 20 YEARS:						
	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7
				Water Sold to Your	Water Sold to Your		
	Raw Water Diverted	Water Purchased	Water Sold to Other	Industrial, Stock, and	Residential and	Other	Remaining Water Used
	Under Your Rights	From All Sources	Public Water Suppliers	Bulk Customers	Commercial Customers	Metered Water	(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/	2448	Total	
			Stockwater/			
			Feedlot			

SECTION 5: PRESENT GALLONS PER PERSON PER DAY CALCULATE YOUR GALLONS PER PERSON PER DAY S N Water in Columns 5, 6, and 7 + Population + 365 Days/Year = Gallons per Person per Day 365 Days/Year = 135.9GALLONS PER PERSON PER DAY. Amount of water in Population from Last Columns 5, 6, and 7 Year of Section 4

### **SECTION 6: AREA TO BE SERVED**

of Section 1

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.