# 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**.

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

#### APPLICATION FOR APPROVAL TO CHANGE THE PLACE OF USE, THE POINT OF DIVERSION OR THE USE MADE OF THE WATER UNDER AN EXISTING WATER RIGHT



Filing Fee Must Accompany the Application

(Please refer to Fee Schedule on signature page of application form.)

Paragraph Nos. 1, 2, 3, 4 & 8 must be completed. Complete all other applicable portions. A topographic map or detailed plat showing the authorized and proposed points(s) of diversion and /or place of use must accompany this application.

1.	Application is hereby made for approval of the Chief Engineer to characteristics.  Place of Use  (Check one or more)  Point of Diversion  Use Made of Water  File No.  Place of Use  JUN 26 2015  State File No.  WATER RESOURCES RECEIVED  JUN 29 2015  State File No.  WATER RESOURCES RECEIVED  JUN 29 2015  State File No.  Chief Engineer  Division of Water Resources  Kansas Dept. of Agriculture  File No.  Circles 7, 8, 9, & 10.
2.	Name of applicant: City of Hays, Kansas and City of Russell, Kansas (See paragraph 2 of the cover letter.)
	Address: c/o Foulston Siefkin LLP, 1551 N. Waterfront Parkway, Suite 100
	City, State and Zip: Wichita, Kansas 67206
	Phone Number: (316) 291-9725 E-mail address: dtraster@foulston.com
	What is your relationship to the water right;  owner tenant agent other? If other, please explain. Hays and Russell are co-owners of the authorized place of use on the R9 Ranch in Edwards County.
	Name of water use correspondent: City of Hays, Kansas
	Address: P. O. Box 490, 1507 Main Street
	City, State and Zip: Hays, Kansas 67601
	Phone Number: ( 785 ) 628-7320 E-mail address: tdougherty@haysusa.com
3.	The change(s) proposed herein are desired for the following reasons (please be specific):  See Paragraph 3 of the cover letter filed concurrently with this application. The cover letter is
	incorporated herein by reference.
	The change(s) (was) (will be) completed by See Paragraph 3 of the cover letter  (Date)
F.	or Office Use Only:  O. A. GMD 5 Meets K.A.R. 5-5-1 (VES / NO) Use   RR   Source G / S County ED   ByKAB   Date 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	of 21000- 15053312
DW	SCANNED /R 1-120 (Revised 06/16/2014)  Assisted by:

6/30/2015 CCM

File No. <u>21,729</u>

4.	The presently	y authorized	place o	f use is:
----	---------------	--------------	---------	-----------

Owner of Land — NAME: <u>City of Hays, Kansas</u>

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

		NE	1/4			NV	<b>V</b> ¼			SV	V 1/4			SI	E14		TOTAL
Sec. Twp. Range	NE1/4	NW¼	SW1/4	SE¼	NE¼	NW¼	SW1/4	SE¼	NE¼	NW¼	SW¼	SE1/4	NE¼	NW¼	SW1/4	SE¼	ACRES
29-T25S-R19W	31.25	31.25	31.25	31.25	31.25	31.25	31.25	31.25	31.25	31.25	31.25	31.25	31.25	31.25	31.25	31.25	500
		-															

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

Owner of Land — NAME: <u>City of Russell, Kansas</u>

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

			. NE	E 1/4			NW¼			SW¼			SE¼				TOTAL ACRES	
Sec.	Twp. · Range	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW1/4	SE¼	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	
		Same as above																
																		,
			-															

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

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

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

Owner of Land — NAME: <u>City of Hays, Kansas</u>

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

			NE1/4				NW¼			SW¼				SE¼				TOTAL
Sec.	Twp.	Range	NE¼ N	IW¼ SW	SE¼	NE¾	NW¼	SW¼	SE¼	NE1/4	NW¼	SW1/4	SE¼	NE1/4	NW¼	SW1/4	SE¼	ACRES
	The City of Hays, Kansas and its immediate vicinity and other locations as more																	
	fully described in paragraph 5 of the cover letter.																	

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

Owner of Land — NAME: City of Russell, Kansas

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

				NE	1/4			NN	<b>V</b> 1/4		-	.SW	11/4			SE	1/4		TOTAL
Sec.	Twp.	Range	NE1/4	NW¼	SW1/4	SE¼	NE1/4	NW¼	SW¼	SE1/4	NE¼	NW¼	SW¼	SE¼	NE1/4	NW¼	SW¼	SE¼	ACRES
			The C	City o	f Rus	sell,	Kans	as and	d its i	mme	diate	vicini	ty an	d oth	er loc	ation	s as n	nore	
	fully described in paragraph 5 of the cover letter.																		

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

## IF MORE SPACE IS NEEDED, ATTACH ADDITIONAL SHEETS AS NECESSARY OURCES

6.	The presently authorized point(s) of diversion (is) (are)	irrigation we	(Provide description and numb	graph 8, infra	·
7.	The proposed point(s) of diversion (is) (are) one or mo	ore municipal		7 of the cover	letter
	List all presently authorized point(s) of diversion:		(Provide description and numb	er or points)	
8. [	Presently authorized point of diversion:				
	One in the near the center Quarter of the		Quarter of the	NE	Quarter
	of Section 29 , Township	25	South Range	19	( <b>]€</b> /\∧/\
-	in Edwards County, Kansas, 3,968	feet North	1 312 feet West of S	Coutheast corne	r of section
	Authorized Rate 615 gpm Authorized Quantity			outrieast corrie	or section.
١				foot VAI	41
	(DWR use only: Computer ID No GF ☐ This point will not be changed ☐ This point will			teet vv	est)
	Proposed point of diversion: (Complete only if change	_			
ı	One in theNE Quarter of the	NE	Quarter of the	SW	Quarter
-	One in the $\underline{\hspace{1cm}}$ NE Quarter of the $\underline{\hspace{1cm}}$ of Section $\underline{\hspace{1cm}}$ 29 , Township $\underline{\hspace{1cm}}$	25	South, Range	19	
	in Edwards County, Kansas, 2,259	feet North	2,705 feet West of S	outheast corne	er of section.
	Proposed Rate2,900 gpm Proposed Quantity _				
- [	This point is: Additional Well Geo Center List of				
L	Tris politis. Additional Well Geo Center List C	other water rigi	its that will use this point		
). [	Presently authorized point of diversion:		11.10	2777	
۱	One in the near the center Quarter of the		Quarter of the	NW	Quarter
-	of Section 29 , Township	25	South, Range	19	( <b>)€</b> /W),
-	in Edwards County, Kansas, 3,982	_ feet North _	3,603 feet West of S	outheast corne	er of section.
-	Authorized Rate 275 gpm Authorized Quantity	86 a/f			
-	(DWR use only: Computer ID No GF	PS	feet North	feet We	est)
-	☐ This point will not be changed				
1	Proposed point of diversion: (Complete only if change				
1	One in the NE Quarter of the		<del></del>	SW	Quarter
-	of Continue 20	25	Quarter of the	10	Quarter
١	of Section 29 , Township	2.5	South, Range	19	(Æ/VV),
- 1	in <u>Edwards</u> County, Kansas, <u>2,239</u>	_ feet North _	2,703 teet west of S	outneast corne	er of section.
	Proposed Rate 2,900 gpm Proposed Quantity				
Ĺ	This point is: Additional Well Geo Center List of	other water righ	ts that will use this point		
ъ. <b>Г</b>	Presently authorized point of diversion:				•
	One in the NE Quarter of the	sw	Quarter of the	NW	Quarter
	One in the	25	South Range	19	( <b>)</b> E/W),
1	in Edwards County, Kansas, 3,607	feet North	4 167 feet West of S	outheast corns	r of section
	Authorized Rate 325 gpm Authorized Quantity		1,107 leet West Of S	outheast come	i oi section.
ı	(DWR use only: Computer ID No GP		feet North	feet We	est)
	☐ This point will not be changed ☑ This point will				.5.,
-	Proposed point of diversion: (Complete only if change	ae is requeste	d)		
	One in the NE Quarter of the	NE	Ouarter of the	SW	Quarter
	of Section 29 Township	25	South Pange	19	ZE AAA
	One in the NE Quarter of the of Section 29 , Township in Edwards County, Kansas, 2,259	foot No-th	2 705 - foot Most -50	authorst sassa	(AS/VV),
	County, Kansas, 2,239	_ reet North _	2,703 reet west of S	outneast corne	o section.
-	Proposed Rate 2,900 gpm Proposed Quantity				
L	This point is: Additional Well Geo Center List of	ther water righ	ts that will use this point		
1.	Describe the current condition of and future plans for any	point(s) of div	ersion which will no longe	er be used	
	See paragraph 11 of the cover letter.	• •	, and the second		
				WATERRE	SCURCES
	IF MORE SPACE IS NEEDED, ATTAC	CH ADDITIO	NAL SHEETS AS N	<b>LCESSMIRCY</b>	IVED

SCANNED

6.	The presently authorized point(s) of diversion (is) (are) <u>irrigation well(s) described in paragraph 8, infra.</u> (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 lett	er.
1.	(Provide description and number of points)	
	List all presently authorized point(s) of diversion:	
8.		
	One in the <u>near the center</u> Quarter of the <u>Quarter of the SW</u> of Section <u>29</u> , Township <u>25</u> South, Range <u>19</u>	Quarter
	of Section 29 , Township 25 South, Range 19	_ <b>()€</b> ∕VV),
	in <u>Edwards</u> County, Kansas, <u>1,416</u> feet North <u>4,000</u> feet West of Southeast corner of	section.
	Authorized Rate 360 gpm Authorized Quantity 74 a/f	
	(DWR use only: Computer ID No GPS feet North feet West)	
	☐ This point will not be changed	
	Proposed point of diversion: (Complete only if change is requested)	
	One in the     NE     Quarter of the     NE     Quarter of the     SW       of Section     29     , Township     25     South, Range     19	Quarter
	of Section 29 , Township 25 South, Range 19	_( <b>X</b> /W),
	inEdwardsCounty, Kansas,2,259 feet North2,705 feet West of Southeast corner of	section.
	Proposed Rate 2,900 gpm Proposed Quantity 870.83 a/f	
	This point is: Additional Well Geo Center List other water rights that will use this point	·
9.	Presently authorized point of diversion:	
	One in the NE Quarter of the SW Quarter of the SW	Quarter
	of Section, TownshipSouth, Range19	_ <b>(K</b> K/W),
	of Section 29 , Township 25 South, Range 19 in Edwards County, Kansas, 1,043 feet North 4,370 feet West of Southeast corner of section 29 county.	section.
	Authorized Rate635 gpm Authorized Quantity114 a/f	
	(DWR use only: Computer ID No GPS feet North feet West)	
	☐ This point will not be changed  ☑ This point will be changed as follows:	
	Proposed point of diversion: (Complete only if change is requested)	
	One in the NE Quarter of the NE Quarter of the SW	Quarter
	of Section 29 Township 25 South Range 19	_ <b>()</b> E/\\\),
	of Section 29 , Township 25 South, Range 19 in Edwards County, Kansas, 2,259 feet North 2,705 feet West of Southeast corner of	ection
	Proposed Rate 2,900 gpm Proposed Quantity 870.83 a/f	occuon.
	This point is: Additional Well Geo Center List other water rights that will use this point	
١	This point is.   Additional veil   Geo Center List other water rights that will use this point.	
10.	Presently authorized point of diversion:	
١٠.	One in the near the center Quarter of the Quarter of the SE	Quarter
	One in the <u>near the center</u> Quarter of the <u>Quarter of the SE</u> of Section <u>29</u> , Township <u>25</u> South, Range <u>19</u>	_ ( <b>X</b> €/\V),
	in Edwards County, Kansas, 1,377 feet North 1,415 feet West of Southeast corner of	
	Authorized Rate 720 gpm Authorized Quantity 188 a/f	
	(DWR use only: Computer ID No GPS feet North feet West)	
	☐ This point will not be changed ☐ This point will be changed as follows:	
	Proposed point of diversion: (Complete only if change is requested)	
	One in the NE Quarter of the NE Quarter of the SW	Quarter
	of Section 29 , Township 25 South, Range 19	( <b>)</b> E(VV),
	in <u>Edwards</u> County, Kansas, <u>2,259</u> feet North <u>2,705</u> feet West of Southeast corner of	section.
	Proposed Rate 2,900 gpm Proposed Quantity 870.83 a/f	
ı	This point is: Additional Well Geo Center List other water rights that will use this point	·
11.		
11.	Describe the current condition of and future plans for any point(s) of diversion which will no longer be used.	
11.		OURCES

	, 21	729	File No	21,729
12.		resently authorized use of water is for <u>irrigation</u> purposes oposed that the use be changed to <u>municipal</u>	s. _ purposes.	
13.	If char	nging the place of use and/or use made of water, describe how the consumptive use wi he attached discussion regarding the quantity of water to be changed to muni		
	13 of	the cover letter.		
	(Please	show any calculations here.)		
		quested that the maximum annual quantity of water be reduced to <u>not applicable</u>		or million gallons).
15.	It is re	quested that the maximum rate of diversion of water be reduced to $rac{ ext{not applicable}}{ ext{gold}}$	allons per mir	nute ( c.f.s.).
16.	1:24,0 Kansa Distan should	oplication must include either a topographic map or detailed plat. A U.S. Geological S 00, is available through the Kansas Geological Survey, 1930 Constant Avenue, Urs 66047-3726 ( <a href="www.usgs.gov">www.usgs.gov</a> ). The map should show the location of the presently a ces North and West of the Southeast corner of the section must be shown. The presently a laso be shown. Identify the center of the section, the section lines and the section to the township, and range numbers on the map. In addition the following information must	niversity of K authorized po esently author rners and sho	ansas, Lawrence, int(s) of diversion. rized place of use ow the appropriate
	a. If	a change in the location of the point(s) of diversion is proposed, show:		
	1)	The location of the proposed point(s) of diversion. Distances North and West of the must be shown. Please be certain that the information shown on the map agrees Paragraph Nos. 9, 10 and 11 of the application.		
	2)	If the source of supply is groundwater, please show the location of existing water domestic wells, within $\frac{1}{2}$ mile of the proposed well or wells. Identify each well as to mailing address of the property owner or owners. If there are no wells within $\frac{1}{2}$ mile,	its use and	furnish name and
	3)	If the source of supply is surface water, the names and mailing addresses of all lar and $\frac{1}{2}$ mile upstream from your property lines must be shown.	ndowner(s) ½	mile downstream
	b. If	a change in the place of use is desired, show the proposed place of use by crossha ertain that the information shown on the map agrees with the information shown in Para	tching on the graph No. 5 c	map. Please be of the application.
17.	local s	documentation to show the change(s) proposed herein will not impair existing water ource of supply as to which the water right relates. This information may include stat gs, test hole logs, and other information as necessary information to show the above below.	ements, plats	s, geology reports,
	See p	aragraph 17 of the cover letter.	-	
18.	identif	proposed change(s) does not meet all applicable rules and regulations of the Kansas V y the rules and regulations for which you request a waiver. State the reason why a st should be granted. Attach documentation showing that granting the request will not	waiver is nee	eded and why the

WATER RESOURCES

IF MORE SPACE IS NEEDED, ATTACH ADDITIONAL SHEETS AS NECESSARY CEIVED

SCANNED

will not prejudicially and unreasonably affect the public interest.

See paragraph 7 of the cover letter.

File No	21,729
File No	21,120

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 pas specified in sections 14 and 15 of this application.	ther that the	e statement	ts contained herein	are true, co	rrect, and
Dated at Russell, Russell County , Kansas, this	s <u>23rd</u>	day of	June	, 20	15
				`	
(Olyher)			(Spouse)	•	
City of Hays, Kansas, by Toby Dougherty, City Manager (Please Print)			(Please Print)		
(Owner)			(Spouse)		
(Please Print)		<del></del>	(Please Print)		
(Owner)			(Spouse)		
(Please Print)		· · · · · · · · · · · · · · · · · · ·	(Please Print)		
State of Kansas  County of Russell					
My Commission Expires	presence a	nd sworn	to before me this S Mae M Notary Public	23rd Joss	day of
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 th	ie water und	er this section shall be	e accompanie	d 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>				\$20	)O )O
Make check payable to Kansas Department of Agriculture.					

WATER RESOURCES RECEIVED

File No.	21,729
----------	--------

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 p authorized to make this application on their behalf, and complete. By filing this application I authorize the chief er as specified in sections 14 and 15 of this application.	declare furthe	er that the	statement	s contained herein a	re true, correct, and
Dated at Russell, Russell County	Kansas, this _	_23rd	_ day of	June	, 20_15
			_ ,		
(Owner)				(Spouse)	
City of Russell, Kansas, by Jon Quinday, City Mar	nager				
(Please Print)				(Please Print)	
(Owner)	<del></del> _			(Spouse)	
(Please Print)				(Please Print)	
(Owner)				(Spouse)	
(Please Print)		····	******	(Please Print)	
State of Kansas  County of Russell  I hereby certify that the foregoing application was sign	ned in my pr	esence a	nd sworn t	o before me this	<u> 33rd</u> day of
My CONNATARY RURLINGS State of Kansas   5   18	_	/ <b>&gt;</b>	alin	Notary Public	1sl
My Appt. Expires 6/15/18	FEE SCHEDU	<u>LE</u>			
Each application to change the place of use, the point of diversity application fee set forth in the schedule below:	ion or the use i	made of th	e water unde	er this section shall be	accompanied by the
<ul> <li>(1) Application to change a point of diversion 300 feet</li> <li>(2) Application to change a point of diversion more that</li> <li>(3) Application to change the place of use</li> <li>(4) Application to change the use made of the water .</li> </ul>	an 300 feet		<i>.</i>		\$200 \$200
Make check payable to Kansas Department of Agriculture.					

RECEIVED

**WATER RESOURCES** 

#### **Proposed Rate and Quantity**

The Cities are requesting a total of 870.83 acre-feet and 2,900 gallons per minute from the six wells associated with this water right, all of which will be diverted from new point of diversion A, as shown on Exhibit N. New point of diversion A will have a cumulative total of 870.83 acre-feet and 2,900 gallons per minute.

## 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 540 acre-feet for municipal use. As discussed below, 500 approved acres were irrigated during the perfection period; 500 acres multiplied by the Edwards County NIR for corn of 1.08 acre-feet per acre equals 540 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 February 27, 1976, granting the applicant the right to divert up to 1,000 acre-feet annually at a rate of up to 2,900 gallons per minute for irrigation use<sup>4</sup> on 500 acres in Section 29 T25S-R19W,<sup>5</sup> or 2.0 acre-feet per acre. The rate for the points of diversion near the center of the southwest quarter of section 29 was further limited by the certificate to 700 gpm when combined with the well in the northeast quarter of the southwest quarter of the southwest quarter of that same section.<sup>6</sup> There is also an overall rate limitation of 2,900 gallons per minute.

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

The Field Inspection Reports indicate that 897 of the 1,000 acre-feet authorized by the permit were lawfully perfected.

- 209 acre-feet were applied to 125 approved acres.<sup>8</sup>
- 110 acre-feet<sup>9</sup> and 94 acre-feet<sup>10</sup> (204 acre-feet) were applied to 125 approved acres.

WATER RESOURCES RECEIVED

<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. HAYS000671. Ex. A.

<sup>&</sup>lt;sup>5</sup> Application, HAYS000664, Ex. B.

<sup>&</sup>lt;sup>6</sup> Certificate, HAYS000685, Ex. C.

<sup>&</sup>lt;sup>7</sup> February 27, 1976, letter (emphasis added), HAYS000670, Ex. D.

<sup>&</sup>lt;sup>8</sup> FIR, HAYS000654, Ex. E.

- 145 acre-feet<sup>11</sup> and 94 acre-feet<sup>12</sup> (239 acre-feet) were applied to 125 approved acres.
- 245 acre-feet were applied to 125 approved acres. 13

While the certificate limits the total quantity to 752 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. $^{14}$ 

Since the perfection period has expired, the "authorized quantity" for this water right is the 897 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 FIRs state that alfalfa was grown on each of these circles during the year of record. According to the Kansas Irrigation Guide, the NIR for the 50% chance rainfall in Edwards County is 13 inches (1.083333 feet) for corn and 20.9 (1.741666 feet) inches for alfalfa.

Since alfalfa was grown on the authorized place of use in at least one year during the perfection period, it is reasonable to use the NIR for alfalfa, which yields a total quantity of 870.83 acre-feet consumed. While this quantity is greater than the quantity set out in the certificate, it is less than the 897 perfected acre-feet, the "maximum annual quantity authorized by the water right." <sup>16</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.  $^{17}$  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 897 acre-feet legally applied during the perfection period percolates back to the aquifer, then 72%, or 645.84 acre-feet, should be available for conversion to municipal use. While this quantity is greater than the quantity set out in the certificate, it is less than the 897 perfected acre-feet, the "maximum annual quantity authorized by the water right."

WATER RESOURCES
RECEIVED

<sup>&</sup>lt;sup>9</sup> FIR, HAYS000640, Ex. F.

<sup>&</sup>lt;sup>10</sup> FIR, HAYS000647, Ex. G.

<sup>11</sup> FIR, HAYS000618, Ex. H.

<sup>&</sup>lt;sup>12</sup> FIR, HAYS000626, Ex. I.

<sup>&</sup>lt;sup>13</sup> FIR, HAYS000634, Ex. J.

<sup>&</sup>lt;sup>14</sup> Certificate, HAYS000685-687, Ex. C; Doug Bush Memo dated March 17, 1987, HAYS000679-680, Ex. K; 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>15</sup> FIRs, HAYS000621 (Ex. H), 629 (Ex. I), 637 (Ex. J), 643 (Ex. F), 650 (Ex. G), and 657 (Ex. E).

<sup>&</sup>lt;sup>16</sup> See K.A.R. 5-5-9(a)(4).

<sup>&</sup>lt;sup>17</sup> Administrative Policy No. 86-8, dated Nov. 5, 1986, Ex. L, 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 March 17, 1987, HAYS000679-680, Ex. K.

File No. <u>21,729</u>

The Applicants request that DWR approve a total of 870.83 acre-feet for municipal use.

WATER RESOURCES RECEIVED







#### OF KANSAS

STATE BOARD OF AGRICULTURE
Roy Freeland, Secretary

DIVISION OF WATER RESOURCES
Guy E. Gibson, Chief Engineer

# APPROVAL OF APPLICATION and PERMIT TO PROCEED

(This Is Not a Certificate of Appropriation)

This is to certify that I have examined Application No. 21,729 of

9 of the applicant

Midwest Land and Cattle Company c/o John Carson, Manager 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 January 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 six (6) wells: one well near the center of the Northeast Quarter (NE $_4$ ), one well near the center of the Northwest Quarter (NE $_4$ ), one well in the Northeast Quarter of the Southwest Quarter of the Northwest Quarter (NE $_4$  SM $_4$  NM $_5$ ), one well near the center of the Southwest Quarter (SN $_4$ ), one well in the Northeast Quarter of the Southwest Quarter of the Southwest Quarter (NE $_4$  SM $_4$ ) and one well near the center of the Southeast Quarter (SE $_4$ ) of Section 29, Township 25 South, Range 19 West, in Edwards County, Kansas, located substantially as shown on the aerial photograph accompanying the application.

4. That the appropriation sought shall be limited to a maximum diversion rate not in excess of

WATER RESOURCES
RECEIVED

2900 gallons per minute (6.46 c.f.s.)

JUN 2 9 2015

and to a quantity of not to exceed

1000 acre-feet

for any calendar year.

KS DEPT OF AGRICULTURE

(OVER)

RECEIVED MICROFILMED

MAR 8 1976 HAYS000671

DIVISION OF WATER RESOURCES

(OAEW

shall notify the Chief Engineer of the Division of Water Resources when construction of the works has been completed.

- 6. That the proposed appropriation shall be perfected by the actual application of water to the proposed beneficial use on or before December 31, 1981.
- 7. That the applicant shall maintain records from which the quantity of water actually diverted during each calendar year may be readily determined. Such records shall be furnished to the Chief Engineer as soon as practicable after the close of each calendar year.
- 8. That the applicant shall not be deemed to have acquired a water appropriation for a quantity in excess of the amount approved herein nor in excess of the amount found by the Chief Engineer to have been actually used for the approved purpose during one calendar year subsequent to approval of the application and within the time specified or any authorized extension thereof.
- 9. That the use of water herein authorized shall not impair any use under existing water rights nor prejudicially and unreasonably affect the public interest.
- 10. That the right of the appropriator shall relate to a specific quantity of water and such right must allow for a reasonable raising or lowering of the static water level and for the reasonable increase or decrease of the streamflow at the appropriator's point of diversion.
- 11. That this permit does not constitute authority under K. S. A. 82a-301 to 305 to construct any dam or other obstruction; it does not give any right-of-way, or authorize any injury to, or trespass upon, public or private property; it does not obviate the necessity of obtaining assent from Federal or Local Covernmental authorities when necessary.
- 12. That failure without cause to comply with provisions of the permit and its terms, conditions and limitations will result in the forfeiture of the priority date, revocation of the permit and dismissal of the application.

Dated this 27th day of February

1976

WATER RESOURCES RECEIVED

JUN 2 9 2015

KS DEPT OF AGRICULTURE

476-H

HAYS000672

### THE STATE



#### OF KANSAS

STATE BOARD OF AGRICULTURE Roy Freeland, Secretary
Recalcheck \$50 2 1-2-74
Ck from: Wilson & Flame.

DIVISION OF WATER RESOURCES Guy E. Gibson, Chief Engineer

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

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

	To the Chief Engin	eer of the Division of \	Vater Resources, Kansı	as State Board of Agrica	ulture:	_
		45.4	MIDWEST LAN	ND & CATTLE CON	APANY X SEE LETTER	
	•	(Mr.)	C/O JOHN CAR	SON, MANAGER	DATED 8-8-7	3
	Comes non th	(Mrs.) he applicant (Miss)	Kinsle v Joint	Venture	whose post office	
	Comes now to	Camil mandan at		EY, KANSAS 6.75		
	address is c/o	Andrew I. Moore		aw, P.O. Box 58	- Woodward Oktaliona	
					<del>73801</del>	
	and makes applicat	ion to the Chief Engin	eer of the Division of	Water Resources, Ka	nsas State Board of Agri-	
		it to appropriate for be	anafaiol uso such uso	mmonutated error	and water	
	cáicate, for a berm	it to appropriate for be	suenciar dise such dina	ppropriated gran	face water or groundwater)	
	as may be available	in Arkansas Riv	er Basin	in the county of.	Edwards ,	
		(name of stream	or drainage basin)		,	
	state of Kansas, to	the extent and in acco	rdance with the partic	culars hereinafter descr	ibed:	
	• mt			0 d	4- 1	
	1. The quantit	y of water desired is in	the amount ofUU	(agge feet or million gallons)	per year, to be	
	diverted at a maxim	um rate of 2900 g	als per minute			
		(:	gallons per minute or cubic feet			
	2. The location	n of the proposed wells	or other works for div	n quarter section of water is in the	ncq <del>uarter of th</del> e	
٠	quarter	o <del>i-thequart</del> e	r of section 29	, township 25		
	Edwards		ounty, Kansas, Plu	s one well in S		
			of said sect			
	3. The water i	is intended to be appr	opriated for: the s	sw/4 of the NI	U/4 of sec. 29	
	E VIMEN	. V 🔻 🔻	**;	P		ė
	R MINISTER POR	٠.		Amount	OF WATER	
18	STEAL X	(a) Domestic	use ( )		_ SON SCENE	
	1 2 / 22	(2) 20111211	_, ,		- OF WATER AL	2
a/n	EC02/1974	(b) Municipa	luse ( )		_ 10	30
·cal	a man man			1000 acre	fx 0CT 1 5 1975	S
		(c) Irrigation	use (x)	-2700 gal6-		ا نیا
14		(d) Industrial	use ( )	•	- OF AGRICULT	\$ /
*	10 OF PASS	(d) massim	, ușc ( )		OF AGRICULT	SCANNED
		(e) Recreation	nal use ( )			
ıκα	caraconata	WATER			_ mickuriLMi	WATER RESCURCE
1000	16 A 1-3-74/	OF WATER Water Por	veruse ()			RECEIVED
		Collection tentent	e or uses and shoulding	inlied drantity for each	RECEIVED	TILOLITED
ч,	05 a.m.	Ki caldok Bucing all	o or men ima she lare	hilling a production of the contract		JUN 2 9 2015
	dw /~	JUL 2 4 1975 🧬 🖁			MAR 8 197 <b>6</b>	3014 2 3 2013
	VIAIL	/w/	JUL	. 1 5 1974	HAYS000664	
	1 F.	( OMD /2)			* GUYELDEOFICES	KS DEPT OF AGRICULTURE
	21729	TRO OF AGRICULT	Page 13 et 49 og	ELD OFFICE YISTER RESOURCES	DIVISION OF WATER RESOURCE	S *
	21120	OF AGE	- aADIAIRIGE OF		, ,	

SIALLAND

- 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 ley

fractional portion thereof: Kiney Joint Venture is a partnership with the following owners. MIDWEST LAND & CATTLE ( J. D. Hodges, 1921 Broadmoor, Woodward, Oklahoma W. A. MoQuiddy, 1210 S. Fordham, Perryton, Texas 79070% JOHN CARSON Drow-Ellie, 823 S. Indiana, Perryton, Texas BOX 208

John O. Filis Jr., P. O. Box 610, Parryton, Texas H. C. Brillhart Jr., P. O. Box 576, Perryton, Texas Word B. Sherrill, P. O. Box 399, Perryton, Texas

KINSLEY, KANSAS

Owner of Land-NAME: Kinsley

GEE-SEE LETTER DATED 8-8-75

ADDRESS: c/o Andress Moore

Ran	Twn	Range		NE:				SE1				Total							
-29	_	19	NE:	NW Ł	8Wł	SE	NEĮ	NW:	sw <sub>1</sub>	SE3	NE	NW <del>1</del>	8w≱	8E}	NE	NW:	8Wł	SE:	Total
29	25_	19	3114	3114	317	31%	31%	31)	43114	313	3114	.317	31%	31%	3134	31%	-311	4311/4	500
																		. \	
		, .	V			:,					ذ				,			,	

Owner of Land-NAME:

1.00

ADDRESS:

See True Banes	NE <del>l</del>				NWł			8Wf			SE1			Takal			
Sec. Twp. Range	NE	NW!	SW3	SE1	NE	NWI	8Wł	SE:	NE	NW}	swi	SE	NE	NW:	swį	SE	Total
			. ,		V.1		.,.										
	å a	yeiji)	46 Y	t"jvt	iiy≱*.		57.00	1. <sub>36</sub> 18	14. 1. j	**:							-
				., .	1,	1.1.27 1.7.4		,			•						

Owner of Land-NAME:

ADDRESS:

See The Design		NE <del>l</del>			NW1			SW1			SE <del>l</del>							
Sec. Twp. Range	NE	NW1	sw <sub>1</sub>	SE	NE	NW	sw <sub>1</sub>	SE	NE	NW	SW1	8Eł	NE	NW1	SW1	SE <sub>1</sub>	Total	,
						.:												
					2	5.		·*										
		احس								-								

WATER RESCURCES RECEIVED

JUN 2 9 2015

KS DEPT OF AGRICULTURE

'Guy E1/HAYS000665

Privot many it many	ring two wells and pumps & pivot in NW14 having two pump	1
and will be completed by all	eady completed	-
·	(Date)  tion of water for the beneficial use proposed was or is estimated to be	•
٠.	n with 1973 growing season	•
(Date)		_
·	accompanied either by a detailed plat prepared from an actual survey or by	
an aerial photograph of the area.		
The plat or aerial photogra	aph should show	
(a) Location of the p	roposed 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 o	r other use, show the location of the land where water will be used.	•
10. List and describe other a	applications filed or vested rights beld by applicant:	
None		
		•
11. The relation of the subsc	riber to this application is that of <u>Attorney</u>	
	(Owner, agent or otherwise)	
and he is authorized to make this	application in behalf of the interest affected.	3
	application in behalf of the interest affected.	<b>.</b>
and he is authorized to make this	application in behalf of the interest affected.	<b>.</b>
and he is authorized to make this	application in behalf of the interest affected.  Kansas, this 15 day of 20 1973  KINSLEY JOINT VENTURE	<b>3</b>
and he is authorized to make this	application in behalf of the interest affected.  Kansas, this 15 day of Dec. 1973	<b>3</b>
and he is authorized to make this	application in behalf of the interest affected.  Kansas, this 15 day of 20 1973  KINSLEY JOINT VENTURE	<b>,</b>
and he is authorized to make this	(Owner, agent or otherwise) application in behalf of the interest affected.  Kansas, this 15 day of 20 1973  KINSLEY JOINT VENTURE  By D. Allen Frame pular torney  By	3
and he is authorized to make this	(Owner, agent or otherwise) application in behalf of the interest affected.  Kansas, this 15 day of 20 1973  KINSLEY JOINT VENTURE  By D. Allen Frame pular torney  By	<b>,</b>
and he is authorized to make this	(Owner, agent or otherwise) application in behalf of the interest affected.  Kansas, this 15 day of 20 1973  KINSLEY JOINT VENTURE  By D. Allen Frame pular torney  By	
and he is authorized to make this  Dated at <u>Kinsley</u>	application in behalf of the interest affected.  Kansas, this 15 day of 20 1975  KINSLEY JOINT VENTURE  By D. Allen Frame peller to or officer)	
and he is authorized to make this  Dated at <u>Kinsley</u> Note:  1 cubic foot per second =	Agent or Officer)  Application in behalf of the interest affected.  Kansas, this 15 day of 20 1975  KINSLEY JOINT VENTURE  By D. Allen Frame veller torney  By  (Agent or Officer)  448.8 gallons per mimite = 646,317 gallons per day = 1.98 acre feet per day.  1.547 cubic feet per second = 3.07 acre feet per day.	
Note:  1 cubic foot per second = 1 million gallons per day =	Agent or Officer)  Application in behalf of the interest affected.  Kansas, this 15 day of 20 1975  KINSLEY JOINT VENTURE  By D. Allen Frame veller torney  By  (Agent or Officer)  448.8 gallons per mimite = 646,317 gallons per day = 1.98 acre feet per day.  1.547 cubic feet per second = 3.07 acre feet per day.	<b>WATER</b> RESOURCE
Note:  1 cubic foot per second = 1 million gallons per day =	Agent or Officer)  Allen Frame printered  (Agent or Officer)	WATER RESOURG RECEIVED
Note:  1 cubic foot per second = 1 million gallons per day =	At the second of the interest affected.  Kinsley Joint Venture  By D. Allen Frame (Policy)  (Agest or Officer)  448.8 gallons per mimite = 646,317 gallons per day = 1.98 acre feet per day.  1.547 cubic feet per second = 3.07 acre feet per day.  feet = 325,851 gallons.	WATER RESOURG RECEIVED JUN 2 9 2015 KSDEPTOFAGRICULTU
Note:  1 cubic foot per second = 1 million gallons per day =	At the second of the interest affected.  Kinsley Joint Venture  By D. Allen Frame (Policy)  (Agest or Officer)  448.8 gallons per mimite = 646,317 gallons per day = 1.98 acre feet per day.  1.547 cubic feet per second = 3.07 acre feet per day.  feet = 325,851 gallons.	WATER RESOURCE RECEIVED  JUN 2 9 2015
Note:  1 cubic foot per second = 1 million gallons per day =	Application in behalf of the interest affected.  Kansas, this 15 day of 20 1975  KINSLEY JOINT VENTURE  By D. Allen Framework evitorney  By  (Agent or Officer)  448.8 gallons per minute = 646,317 gallons per day = 1.98 acre feet per day.  1.547 cubic feet per second = 3.07 acre feet per day.  feet = 325,851 gallons.  RECEIVED	WATER RESOURG RECEIVED JUN 2 9 2015 KSDEPTOFAGRICULTU
Note:  1 cubic foot per second = 1 million gallons per day =	At the second of the interest affected.  Kinsley Joint Venture  By D. Allen Frame (Policy)  (Agest or Officer)  448.8 gallons per mimite = 646,317 gallons per day = 1.98 acre feet per day.  1.547 cubic feet per second = 3.07 acre feet per day.  feet = 325,851 gallons.	WATER RESOURG RECEIVED JUN 2 9 2015 KSDEPTOFAGRICULTI
Note:  1 cubic foot per second = 1 million gallons per day =	Application in behalf of the interest affected.  Kansas, this 15 day of 20 1975  KINSLEY JOINT VENTURE  By D. Allen Framework evitorney  By  (Agent or Officer)  448.8 gallons per minute = 646,317 gallons per day = 1.98 acre feet per day.  1.547 cubic feet per second = 3.07 acre feet per day.  feet = 325,851 gallons.  RECEIVED	WATER RESOURI RECEIVED JUN <b>2 9</b> 2013 KSDEPTOFAGRICULT

FIELD OFFICE
DIVISION OF WATER BESOURCES
STAFFORD

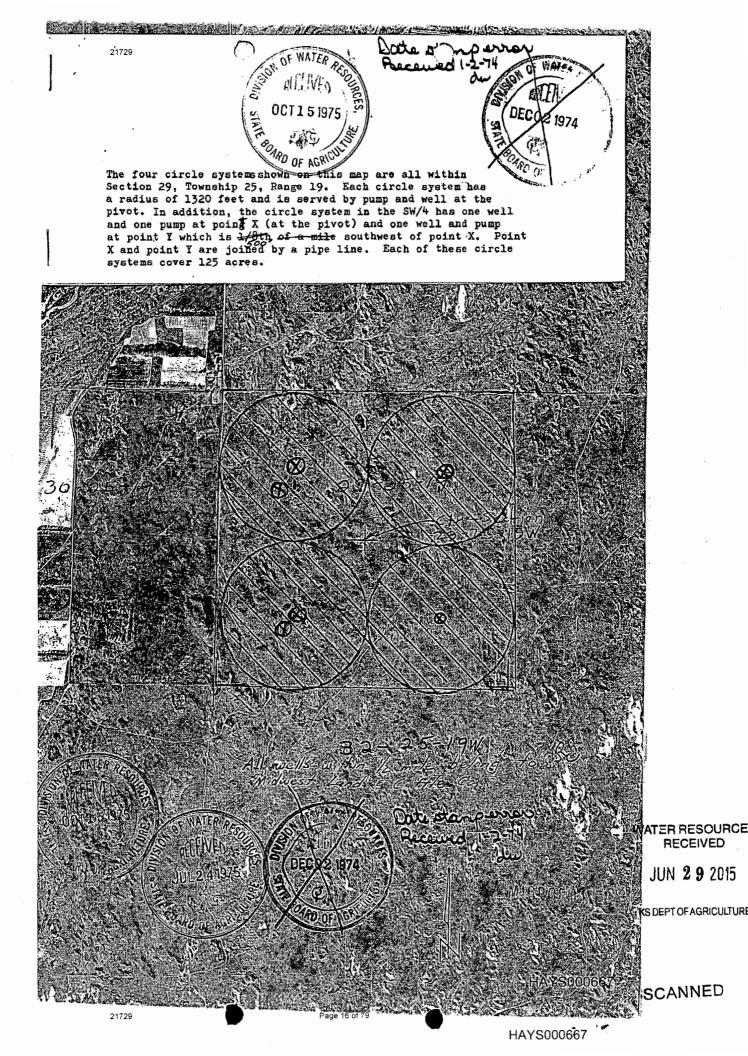


EXHIBIT C

THE STATE



#### OF KANSAS

#### STATE BOARD OF AGRICULTURE

DIVISION OF WATER RESOURCES

David L. Pope, Chief Engineer-Director

Harland F. Priddle Serviors

Sam Brownback, Secretary CERTIFICATE OF APPROPRIATION

FOR BENEFICIAL USE OF WATER WATER RIGHT, File No. 21,729 PRIORITY DATE January 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 six (6) wells: one (1) well located near the center of the Northeast Quarter (NE%) of Section 29, more particularly described as being near a point 3,968 feet North and 1,312 feet West of the Southeast corner of said section, at a diversion rate not in excess of 615 gallons per minute (1.37 c.f.s.) and in a quantity not to exceed 188 acre-feet per calendar year; one (1) well located near the center of the Northwest Quarter (NWk) of Section 29, more particularly described as being near a point 3,982 feet North and 3,603 feet West of the Southeast corner of said section, at a diversion rate not in excess of 275 gallons per minute (0.61 c.f.s.) and in a quantity not to exceed 86 acrefeet per calendar year; one (1) well located in the Northeast Quarter of the Southwest Quarter of the Northwesty Quarter (REL SWL NWL) of Section 29, more

SCANNED WATER RESOURCES RECEIVED

JUN 29 2015

KS DEPT OF AGRICULTURE

DIVISION OF WATER RESOURCES

STAFFORD
Page 17 of 79

Re: File No. 21,729

particularly described as being near a point 3,607 feet North and 4,167 feet West of the Southeast corner of said section, at a diversion rate not in excess of 325 gallons per minute (0.72 c.f.s.) and in a quantity not to exceed 102 acre-feet per calendar year; one (1) well located near the center of the Southwest Quarter (SW%) of Section 29, more particularly described as being near a point 1,416 feet North and 4,000 feet West of the Southeast corner of said section, at a diversion rate not in excess of 360 gallons per minute (0.80 c.f.s.) and in a quantity not to exceed 74 acre-feet per calendar year; one (1) well located in the Northeast Quarter of the Southwest Quarter of the Southwest Quarter (NE% SW% SW%) of Section 29, more particularly described as being near a point 1,043 feet North and 4,370 feet West of the Southeast corner of said section, at a diversion rate not in excess of 635 gallons per minute (1.41 c.f.s.) and in a quantity not to exceed 114 acre-feet per calendar year; and one (1) well located near the center of the Southeast Quarter (SE%) of Section 29. more particularly described as being near a point 1,377 feet North and 1,415 feet West of the Southeast corner of said section, at a diversion rate not in excess of 720 gallons per minute (1.60 c.f.s.) and in a quantity not to exceed 188 acre-feet per calendar year, all in Township 25 South, Range 19 West, Edwards County, Kansas, for irrigation use on the following described property:

```
31.25 acres in the Northeast Quarter of the Northeast Quarter (NE% NE%),
31.25 acres in the Northwest Quarter of the Northeast Quarter
                                                               (NW4 NE4),
31.25 acres in the Southwest Quarter of the Northeast Quarter (SW: NEw),
31.25 acres in the Southeast Quarter of the Northeast Quarter (SE% NE%),
31.25 acres in the Northeast Quarter of the Northwest Quarter
                                                               (NEY NMY)"
31.25 acres in the Northwest Quarter of the Northwest Quarter
                                                               (NW& NW&),
                                                               (SHY NWY),
31.25 acres in the Southwest Quarter of the Northwest Quarter
31.25 acres in the Southeast Quarter of the Northwest Quarter
                                                               (SE% NW%),
31.25 acres in the Northeast Quarter of the Southwest Quarter
                                                                (NE'S SW's),
31.25 acres in the Northwest Quarter of the Southwest Quarter
                                                               (NWW SWW),
31.25 acres in the Southwest Quarter of the Southwest Quarter
                                                                (SW% SW%),
                                                                SE& SW&),
31.25 acres in the Southeast Quarter of the Southwest Quarter
31.25 acres in the Northeast Quarter of the Southeast Quarter
                                                                NEW SEW),
31.25 acres in the Northwest Quarter of the Southeast Quarter
                                                               (NW SEL),
31.25 acres in the Southwest Quarter of the Southeast Quarter
                                                                SM# SE#),
31.25 acres in the Southeast Quarter of the Southeast Quarter (SEk SEk),
```

a total of 500.00 acres in Section 29, Township 25 South, Range 19 West, Edward County, Kansas.

The rate of diversion by means of the well located near the center of the Southwest Quarter (SW4) of Section 29, more particularly described as being near a point 1,416 feet North and 4,000 feet West of the Southeast corner of said section, in Township 25 South, Range 19 West, Edwards County, Kansas, is further limited to that which when combined with the well located in the Northeast Quarter of the Southwest Quarter of the Southwest Quarter (NE4 SW4 SW4) of Section 29, more particularly described as being near a point 1,043 feet North and 4,370 feet West of the Southeast corner of said section, in Township 25 South, Range 19 West, Edwards County, Kansas, will provide a diversion rate not in excess of 700 gallons per minute (1.56 c.f.s.) when the wells are run simultaneously.

WATER RESOURCES RECEIVED

JUN 29 2015

KS DEPT OF AGRICULTURE

**SCANNED** 

LECTRICAL OF WATER LESOURCES Page 18 OF PAFFURD

This appropriation is further limited to a diversion rate which when all wells operate simultaneously will provide a diversion rate not in excess of 2,900 gallons per minute (6.46 c.f.s.) for irrigation use on the property described herein.

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 of each year following.

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

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

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

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

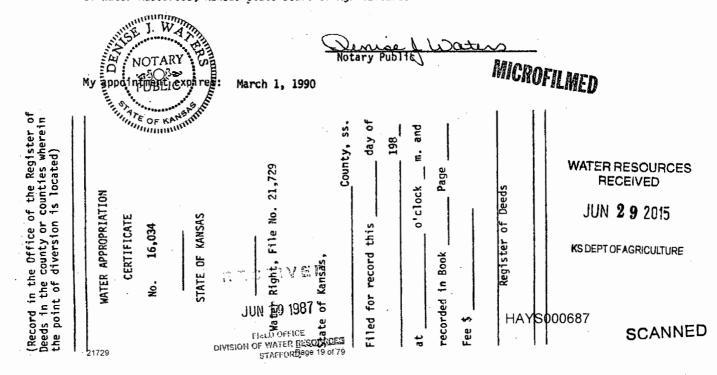
IN WITNESS WHEREOF, I have hereunto set my hand at my office at Topeka, Kansas, this 5th day of June , 1987.

DAVID L. POPE David L. Pope, P.E.
Chief Engineer
CH

State of Kansas

County of Shawnee

The foregoing instrument was acknowledged before me this 5th day of June , 1987, by David L. Pope, P.E., Chief Engineer, Division of Water Resources, Kansas State Board of Agriculture.



E-N

February 27, 1976

Midwest Land and Cattle Company c/o John Carson, Manager Box 203 Kinsley, Kansas 67547

Re: Appropriation of Water Application No. 21,729

ED

Gentlemen:

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

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

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

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

Very truly yours,

Riley M. Dixon

Hydrologist

WATER RESOURCES RECEIVED

JUN 2 9 2015

KO DEDT OF ACDICULTUDE

RECEIVED

KS DEPT OF AGRICULTURE

MAR 8 1976

MICHARAPOREZO

FIELD OFFICE
Page 20 DIVISION OF WATER RESOURCES
STAFFORD

RMD:eel

Encs.



## TER RESOURCES—KANSAS STATE BOARD OF UCULTURE FIELD INSPECTION REPORT

	Fartia
X	Full

Test of Diversion points						0	] Re	-Test	
Application No. 21729 Date 9/30/86  Field Area No. 2 C.M.D. No.	Firm/Fi	ield Offic	ce Pu	meine	Plan	nt 7	esti	g.Inc.	
Field Area No. 2 G.M.D. No.	العام می	<del></del>	<del>DE1 7</del>	<b></b>	hunts	, E	dwa	rols	•
Current Landowner Connecticut General Life									•
Address Box 1162 North Platte NE 69									
Water Use Classification: 1. Domestic ( ) 2. Industrial 4. Municipal ( ) 5. Recreation ( ) 6. Stockwat	( )	3. Irrig	ation 🏷	2					
Groundwater ( Drainage Basin Atkansas Rive	<u>c</u>								
Surface Water ( ) Stream									
Authorized Point of Diversion:   WE   NC NE   North and		_ft. Wes	_Sec. <u>2</u> t of SE	7, T	2 <i>5</i> of Se	, R. <u>1</u>	9		
Actual Point of Diversion: Jwell NC NEX.  Approximately 396 8 ft. North and 1312  How were distances determined? See led See	k) A≤c	_ft. We ≤ ph	_Sec st of SE cto	2 <b>9</b> , T corne	25 r of Se	R	1 <u>9</u> .		
"Approved" Quantity 1000 AF "Approv	∕ed" Di	version l	Rate	900	<del></del>	_g.p.m	n. ( <b>_4</b>	5.46_c.f.s.)	
Priority Date Jan. 2, 1974 Approval of A	Applicat	ion Date	<u>Fe</u>	6.2	7, 19	76	_		
Perfection Date Dec. 31, 1981		+ 4	,						
Other applications covering land and/or point of diversion (include discussion of overlapping files in remarks section)	Non	<u>e</u>				····			
LAND TO BE INCLUDED ON CERTIFICATE:	11								
S T R NE NW SW SE NE NW SW SE	NE	SW14		NE	SE NW	:V4	SE	TOTAL ACRES	
29 25 19 314 314 314 314 314 314 314 314 314 314	_    ·	1		11	1 1	l i	- 11	500.	
			1						
								-	
LAND IRRIGATED—YEAR OF RECORD. 1985		SW <sup>1</sup> / <sub>4</sub>		II.		E14			
S T R NE NW SW SE NE NW SW SE	NE	NW S		NE	NW		SE	TOTAL ACRES	
29 25 19 31/4 31/4 31/4 51/4 (wer in NE								125	
	<u> </u>			<u> </u>		L	ll		
APPLICATION OF WATER: Year of Record 1985 Hours Pumped 1850	Ω	r Ouanti	tv. 2	<b>9</b> 9	AF	ON S	ON	F WATER	
Normal Operating C.P.M. 6/4 Eq					/	• •	PA	[[[]]	1
•	uiv. c.f				ļ	STATE V	AN1	2/11	
FOR D.W.R.				<u> </u>	<u></u>	8	(P)	1987 <u>19</u>	/
Year of Record 1985 Extension of time requested						1360	Or a	GRICULTURE	
Total No. of Hours on land covered by this application	35	0				4	OR BERT	GKIOS W	ATER RESOURCES RECEIVED
Ac. Ft. Applied = $\frac{1850}{5}$ hrs. $\times \frac{614}{5}$ g.p.m.	× <u>4</u>	.419 < 1000	=2	09	ĀF			9	JUN <b>2 9</b> 2015
Acres of "Approved" Land irrigated		$\hat{}$					· .	ing a second of the second of	0011 20 2010
Ac. Ft. on "Approved" Land	), <u>4</u>	<u>J</u>	Ac. Ft	./Ac.)					S DEPT OF AGRICULTURE
Ac. Ft. Used on "Approved" Land at "Approved" Rate or Le	ss	()	4				1		
Proration Calculations Street Value S / / /	gut	ed /	t /:	5 A.	Fi	0-62	<u> 40</u>	02 e = 18	'SA, t
Perfected Rate 6 / 5 g.p.m. Perfected Quantity	19	38		AF			HA`	r SUUU654	
DWN.1947 & Umplated by Doyal	6 79	ř. ,	1305	1 3	- /)	)-G,	) Re	vised March 1985	SCANING
	_								SCANNED

	ON IRRIGATION	

	■ Low Pressure
Manufacturer Olson	Model 103 P Serial No. 3943
Drive Electric	Length of Pivot Arm
Design Pressure-Pivot	_p.s.i. Operating Pressure-Pivotp.s.i.
End Gun? y e s End Gun Rating	g.p.m. Toro
Is end gun operating during test? YES	
Gravity Irrigation (show test set on sketch)	
Number of gates open	Normal Pipe Size
Pressure at pumpp.s.i.	·
Other Type	<u>.</u>
Manufacturer	Serial No
Unusual Conditions/Other Info.	
	· · · · · · · · · · · · · · · · · · ·
· · · · · · · · · · · · · · · · · · ·	
· -	
POWER UNIT INFORMATION:	
·	Model No. 340 HP
	t Gas Rated RPM
Jerus 110.	Asieu III III
PUMP INFORMATION:	
	12 15 24 Rated RPM
	tical Turbine No. stages
,	
GEAR HEAD INFORMATION:	,•
Manufacturer Randolph Model No.	G 60
	gle Ratio 5:4
WELL INFORMATION: Records not available f	from owner's representative.
Date Drilledgries to Jan 1974 Original Depth	
	ater Level Measurement Tube?
Measuring Pointft. above or below L.S.D.	RECEIVED
ADDITIONAL REQUIREMENTS:	JUN <b>2 9</b> 2015
Meter Required? ^O Make of Meter	
Meter Model No Serial No	KS DEPT OF ACRICUITI DE
Is Meter Installed Properly?	
Chemical Injection System?yes Check V	
2Veguum Breaker? Are these anti-pollytion	
If chemicals are injected into system, please attach sketch	of system.

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

· · . · . · . · . · . · . · . · . ·	·	: ':		:		٠ ;	
	. 1						
N							
T	·					!	)
•							·
Scale							1
1"=ft.					,		
• • • •					,		
• • •				, <b>.</b>		*	
	<u> </u>				· · ·		
						,	
•							
mercan core posterio exc	ANT TO A COURT						
TEST OF DIVERSIO							
Length of time v	vell has been operat	ing prior to to	est O	and aire	<del></del>		
Pipe Diameter (	I.D.) 73/4	inches		- Aver - Plan	<del>*************************************</del>		
Test No. 1-No	mal Conditions		Test No. 2	-Maximum Co	nditions		
	UNIT _2206	<u>.</u>		WER UNIT			
R.P.M. PUMP I Pressure at Pum		– – psi	R.P.M. PU Pressure at		psi		
	F	- psi	, , , , , , , , , , , , , , , , , , , ,		p		
☐ Jacuzzi Meter Tes	· · ·	Meter	r Identification N	lo			
	= 2.45 × I.D. <sup>2</sup> =	*	•		(mm-m) UV		
· .	= 2.45 × 1.D =				(gpm) = VK		
Velocity (fps)			Velocity (fp.				
2			2		-		
4			3		<u>.</u>		
5			5		-		
6 7			7		_		
8			8		-		
9			10		-		
Total			Total Avg G.P.M		-	•	WATER RESOURCES RECEIVED
O.1.M.			O.I.M		•		
			7.33	,			JUN <b>2 9</b> 2015
☐ Propeller Meter T			· ·	YLOUEL	Serial No	J	KS DEPT OF AGRICULTURE
Meter Diameter	inches				i i dina		
Ending	gal.				细质	CFn.Mish	
Beginning Difference	gal.		og				
T:							
Rate	min.						

○ Other Flow Meter

Use Supplemental Sheet (include meter identification, data and calculations  $\Upsilon S000656$ 

FUEL RECORDS: .		·			
Electricity	Supplier			· .	
Meter Manufact	urer	Тур	e	Serial No	
Kwat	t/rev r	revolutions	ts	econds	
nata a Kr × 3	6	3 4		In the	
$\text{Mate} = \frac{\lambda t}{t}$	<u>.6</u> =	kw/hr F	Iours =rate	<u>kw-nr</u> =	-
Other Fuels	Type Natur	al Gas Sup	plier Kansas-	Nebraska	
Rate = Volume				•	
tim How was the tes		ed? Not Detern	sined Engi	ne not on an individ	na) meter:
TABULATION OF WATE	R USE:	Tested	Water	•	•
Year	Pumped ( hr )	Pumping Rate ( gpm )	Used ( AF )	Acres Irrigated	·
1975	1164	1000		125	
1976			*		
1977	412	1000	·	130	
1978			<u> </u>		
1979	1224	600		124	
-	1416	600		124	e e e e
Should be 2000 hour-	→ <u>115a</u>	_600		124	
Should be 1046 hrs -	<u> </u>		<del></del>		t i e e
5/www /o /o >	200	800°		125-7	•
1787	1750 F	_ 775 <sup>-‡</sup>		125*	4
* 1985	1850. <sup>‡</sup> ; ;		· · · · · · · · · · · · · · · · · · ·	125-7	
1986		614 *			,
		d from test			
-	+ obtaine	d from wur		tom Jerry Weave	r
Indicate Year of Record with		Source of Informat	ion Saffor	d Files	· 
Crops Irrigated: this year	Soybeans	. , ,	Year of recor		
	attachel s	heet for 1	ogic on ch	coosing a year o	<u>£</u> .
reund.				<u> </u>	WATER RESOURCES
		,			JUN <b>2 9</b> 2015
					KS DEPT OF AGRICULTURE
Person present at test	nt Naber		<u>Ir</u>	rigation Manager (relationship)	
Water Use Correspondent_	Lyle Kolbeck	Speare	ille, Ks 67876 (address)	3/6-385-29 (phone numb	
Conducted by	Greg Ebert	<u> </u>	Date	10/11/86 HAYSO	SCANNE
Approved by Windham	£ , 1	O. E	Date	15/87 77 300	
21729		Page 24 of 79			

FUEL RECORDS:					
☐ Electricity	Supplier	<del></del>		-	
Meter Manufactu	urer	Тур	e	Serial No	
Kwatt	/rev r	revolutions	ts	econds	
n-t- Kr × 3.	6 =		f	bushe .	
Rate =t		kw/nr F	lours =rate	<u>kw-lir</u> =	-
Other Fuels	Type Natura	das Sup	plier Kansas-	Nebraska	
Rate = _Volume	(test) =				
time	•	de Nat Detern	singal Engl	ine not on an individ	land materia
TABULATION OF WATER		u		The state of the s	· ·
	Hours	Tested Pumping	Water	Acres	
Year	Pumped ( br )	Rate	Used (AF)	Irrigated	
1975	1164	(gpm.) 1000 .		125	
1977	412	1000		130	
	<u>-11x</u>	7000	· · · · · · · · · · · · · · · · · · ·		
1978	ليخوا				
1979	1224	_600_		124	* * * * *
1980	1416	600		124	:
1981	1152	600		124	service of the servic
1982	<del></del>		<del></del>		
1983	22007	_800 <sup>∓</sup>			
1984	1750 F	_77 <i>5</i> -‡		125 \$	
* 1985	_ <u>1850</u> <sup>∓</sup>	614*		125 F	
1986		614 ×			
·					•
	* altain	d from test	t on 9/30/86		• •
· .	7 obtaine	1 from WUR	seat to as 1	From Jerry Weave	er.
Indicate Year of Record with	ı (*)	Source of Informat	tion Staffe	rd Files	· ·
Crops Irrigated: this year	Soybeans	٠,	Year of reco	rd Alfalfa	·
· · · · · ·	a Hachel s	heet for 1	,	hoosing a year	o <del>.f</del> _
record.				, ,	
	el 6 2 - 1				WATER RESOURCE
	el loc 2000 honu	~->			WATER RESCURCES RECEIVED
'	10 ha		-	· · · · · · · · · · · · · · · · · · ·	<del></del>
	lbe 1046 hrs.	<del>&gt;</del>			JUN <b>2 9</b> 2015
					KS DEPT OF AGRICULTURE
Person present at test Ke	nt Naber			reigation Manager	
Water Use Correspondent	(name)	Spear	(address)	6 3/6-385-2 (phone num	ber)
Conducted by	Srey Elect		Date	10/11/86 HAYSO	SCANNED
Approved by (sighture)	1	(Inie)	Date/	1/15/87 "1100	
21729	• • • • • • • • • • • • • • • • • • • •	Page 25 of 79			

APPLICATION NO: 2/729	NAME: Connetticut General Life Insurance
NC NEY	

#### COLLINS METER TEST

Collins Meter No. 1-83	Meter Calibration Factor .9559
Pipe Inside Diameter (inches)	734 Flow Rate Factor 145,4
Test Pressure (psi) <u>47</u>	Test RPM, Pump 1765
Description of Test Location_s	In horizontal pipe between ump and pixot

TEST DATA:  Meter S  Cente	etti	ng From	Left (or f	/eloci Side Front	8 ty of Pipe Side if Test)	Right (or	4,4 Velocit Side o Back Si rtical	y f Pipe de if
1%			4,50	 9	4.49	4.5	 /	 452

://6	7/30		_/,3/	
23/4	4.40	4,47	4.50	4.47
3 %	4.38	4.17	4,23	4,30

Average Velocity of Water = Sum of Vel.  $\div$  12 =  $\frac{4.412}{1.412}$ Corrected Ave. Vel. = (Ave. Vel.) × (Calibration Factor) =  $\frac{4.412}{1.412}$  ×  $\frac{4.412}{1.412}$  ×  $\frac{4.412}{1.412}$ 

Flow Rate = (Corrected Ave. Vel.) x (Flow Rate Factor) =  $\frac{4.22}{5.4}$  x  $\frac{145.4}{5.4}$  =  $\frac{6/4}{5.4}$  GPM



ď

PUMPING PLANT TESTING, INC.

Reviewed By:

M) N

Professional Engineer

WATER RESCURCES RECEIVED

HAYS000659

JUN 19 1987

Page 26 of 79-

JUN 2 9 2015

SCANNED

APPLICATION NO: 21, 729

NAME: COUNECTICUT GENERAL LIKE

#### NOTES ON CHOOSING A YEAR OF RECORD

THIS DEVELOPMENT HOTS HOTD SEVERAL UNINELS SINCE ITS
INCEPTION IN 1975, WITH UNINELS FROM EUROPE & ARMIND THE
U.S. AT VEHIOUSTIMES, A STATE OF CONFUSION HOTS EXISTED
IN THE CAPP PLOUTIN REFURIT. ML OF THE WATER USE
IND EQUIPMENT RECORDS HOWE BEEN MITHER DESTROYED
OF LOST, BYO THE SYSTEMS AND PUMPING PLANT UMPONENTS
IFAUR BEEN INTERCUMBERD ONER THE YEARS.

SINCE LATE 1983, CONNECTICUT GENERAL HAS MADE A DILICENT REFERRIT TO KREP GOTO RECEDS. THERE WILL, IT WOULD SEEM REDSONABLE TO USE THE YEARS SINCE 1983 IN CHOOSING A YEAR OF RECIDO.

> WATER RESOURCES RECEIVED

> > JUN 2 9 2015

KS DEPT OF AGRICULTURE

OF AGRICULTURE OF AGR

SCANNED

PUMPING PLANT TESTING, INC.

Reviewed by:

il). W. t

→HAYS000660

Page 27 of 7 Professional Engineer

NAME: Connecticut General Life Ins

### OF DIVERSIONSION AND SECTION CORNERS

The actual section corners of the land applied for and the land irrigated have never been dearly marked. (If it was marked at some time, we, nos the present owners and managers could find any marks or records) It appears the land described on the applications was based on visible marks, but we don't know for sure. It might have been surveyed and be more accurate than our method of identifying section corners. Our procedure of finding the section corners consisted of several steps. First, we used copies of the original survey plats to find the dimension of each section. Second, we laid out each section on the large small-scale photos in the ASCS office. For this, we used not only survey plat dimensions, but also by drawing lines across several miles from identifiable boundaries. However, sometimes these points made a section so "out-of-square" that we shifted the boudaries until they were reasonably tolerable. Because some of these marks were based on our judgement, we can not be sure they would be the same if the land was surveyed. These points were then transfered to the large-scale photos included.

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

Reviewed by:

SCANNED

Professional EngineeHAYS000661

MICROFILMED

WATER RESCURCES RECEIVED

APPLICATION NO: 21,729

NAME: CONNECTIUT GRENEAM.

## SUMMMY SHERT APPLICATION OF WATER

Normal Operating Flow Rate (GPM) 718 Hours of Operation on "Approved" Land 1850 1850 1850 1850 Ac-Ft Applied on "Approved" Land 895.7 204 209 294-6 238.1 Acres of "Approved" Land Irrigated 130 125 510 130 Ac-Ft per Acre Irrigated 1.57 1.96 1.67 1.83 1.76 Ac-Ft Applied at "Approved" Rate or Less 895.7

\* SUBJECT TO LIMITATION OF 1.5 M-FT/ POLICE OF POLE Story

"APPRINED" LOWD IMPLEMED (765 M-KT)

THAT PROPERTY OF WATER

STATE JAN 2 1 1987 ES JAN 1 1987 ES JAN 2 1 1987 ES JA

PUMPING PLANT TESTING, INC.

Reviewed by:

Professional Engineer

RECE

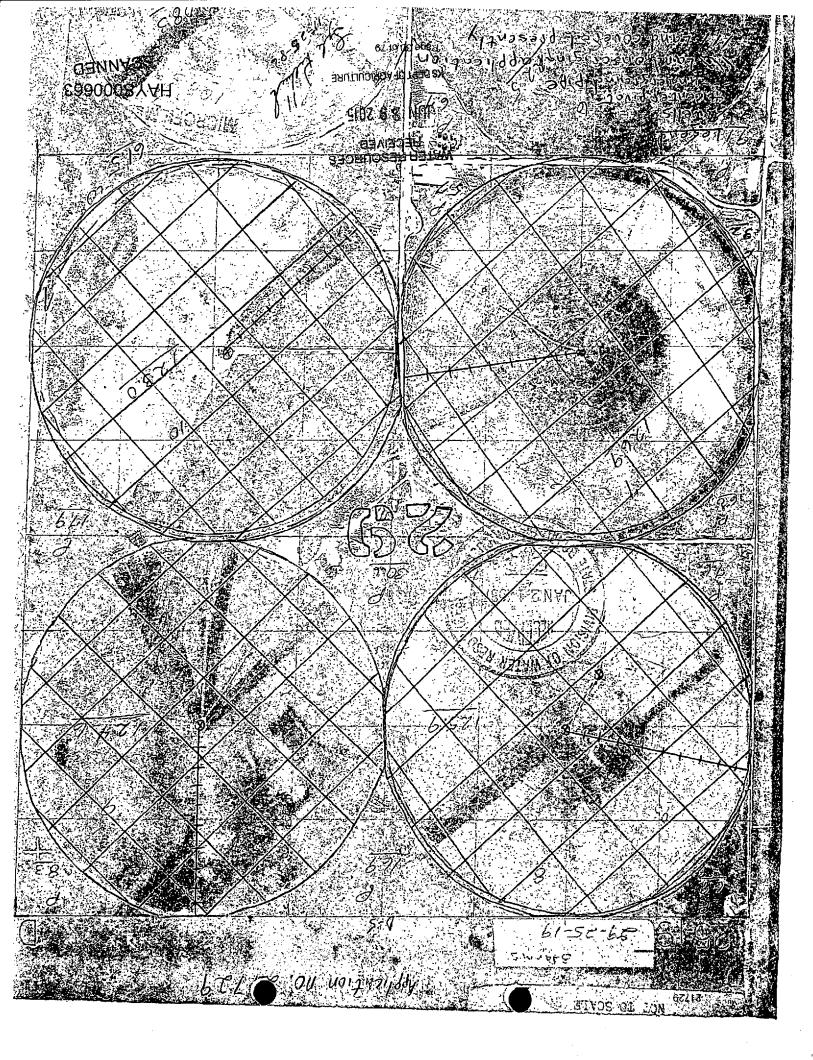
SCANNED

**NUN 19 1937** 

WATER RESOURCES AND RECEIVED

HÀYS000662

DIVISION OF Page 29 of 79



, X Full					
Test 3 of 6 Diversion points					
Test 3 of 6 Diversion points  Application No. 21729  Date 9/30/86  Firm/Field Office Pumping Plant Testing Inc.  Inspector Ebert/Klassen					
Field Area No. 2 G.M.D. No. 5 County Edwards					
Current Landowner Connecticut General Life Insucance 70 Agri. Affiliates					
Address Box 1/62 North Platte NE 69103 Attn. Jerry Weaver					
Water Use Classification; I. Domestic ( ) 2. Industrial ( ) 3. Irrigation ( ) 4. Municipal ( ) 5. Recreation ( ) 6. Stockwatering ( ) 7. Water Power ( )					
Groundwater & Drainage Basin Atkanses River					
Surface Water ( ) Stream					
Authorized Point of Diversion:   we   NE /4, Sw /4, N w /4 Sec. 29, T.25, R. 19  Approximatelyft. North andft. West of SE corner of Sec					
Actual Point of Diversion:					
"Approved" Quantity 1000 AF "Approved" Diversion Rate 2900 g.p.m. (6.46 c.f.s.)					
Priority Date Jan. 2, 1974 Approval of Application Date Feb. 27, 1976					
Perfection Date Dec. 31, 1981					
Other applications covering land and/or point of diversion					
LAND TO BE INCLUDED ON CERTIFICATE:					
S T R NE' NW' SW SE NE NW SW SE NE NE NW SW SE NE NE NW SW SE NE NE NW SW SE					
NE NW SW SE 27 25 19 31 14 31					
LAND IBRIGATED—YEAR OF BECORD 1985					
NEV. NWW. SWV. SEV.					
S T B NE NW SW SE					
29 25 19 32,5 32,5 32,5 32,5 ( NEW NE +SWIFE NUME OF Y) 130					
APPLICATION OF WATER: RECEIVED					
APPLICATION OF WATER: Year of Record 1850 or Quantity 204 AF West Scarbing (1850) or Quantity 204 AF					
Normal Operating G.P.M. 577 WIN 19 190 Equiv. c.f.s. 133					
Maximum Operating C.P.M. 3/3 FIELD OFFICE Equives f.s. 70 WATER RESOURCE	S				
DIVISION OF WARLES ONLY RECEIVED					
Year of Record / 10 Extension of time requested: Yes No JUN 2 9 2015					
Total No. of Hours on land covered by this application $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$ Ac. Ft. Applied = $\frac{1950}{2}$ hrs. $\times \frac{325}{2}$ g.p.m. $\times \frac{4.419}{24 \times 1000} = \frac{100}{2}$ AF KS DEPT OF AGRICULTURE	E				
/ ) 5 24 × 1000					
Acres of "Approved" Land irrigated Ac. Ft. on "Approved" Land Acres of "Approved Land Acres of					
Ac. Ft. on "Approved" Land at "Approved" Rate or Less 10.54 x 5993ph					
26 30 pm + 3/3 9 pm = 5 76 9 pm 3/39 pm - 75 769 pm 3/2990					
Proration Calculations 15 7X 10974, 1. Chax allowed for irrigation 15 acres 1 - 1021, 1. Perfected Rate 3 2 5 g.p.m. Perfected Quantity 10 2 AF  HAYS000640					
Completed his Dayslas E. Bush 3-17-67					

SCANNED

## GENERAL INFORMATION ON IRRIGATION SYSTEM:

X) Center rivot	X Low Fressure	,
Manufacturer Olson	Model 10 3 Serial No. 3808	
Drive Electric	Length of Pivot Arm	
Design Pressure-Pivot	p.s.i. Operating Pressure-Pivot	p.s.j.
End Gun? yes End Gun Rati	ngg.p.m. Valducci	
Is end gun operating during test? yes	<u> </u>	
Gravity Irrigation (show test set on sketch)		•
Number of gates open	Normal Pipe Size	
Pressure at pumpp.s.i.		
Other Type	· · · · · · · · · · · · · · · · · · ·	
Manufacturer	ModelSerial No	
Unusual Conditions/Other Info.		•
· .		*
		·
	•	
OWER UNIT INFORMATION:		
Manufacturer Ford	Model No HP	·
Serial No. 11827 K-29-7C Fu	el Natural Gas Rated RPM	· .
	. "	ŵ.
UMP INFORMATION:		
Manufacturer Western Lund Roller Mc	odel No. 10c m Rated RPM	
Serial No. <b>C78426</b> Ty	pe Vertical Turbine No. stages	
EAR HEAD INFORMATION:	and the second second	
Manufacturer Amacillo Mo	del No. 540 B	
·	ht Angle Ratio 111	
	7	
VELL INFORMATION: No veneral available	le from ormule representative.	
	hft. Static Water Level When Drilledft	
and the second s	Water Level Measurement Tube?10	
		RECEIVED
Measuring Point ft. above or below L.S.D.		JUN <b>2 9</b> 2015
DDITIONAL REQUIREMENTS:		3017 <b>2 0</b> 2010
Meter Required? AtO Make of M		KS DEPT OF AGRICULTURE
Meter Model No Serial No		
Is Meter Installed Properly?		
	Check Valve? yes Low Pressure Drain	
Vacuum Breaker? Yes Are these anti-po	llution devices installed properly? Yes	SCANNED
47/48 emicals are injected into system, please attack	gsR∂tel78f system. ~	

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

			. :		
	,	en jê elî			
N ↑					
Scale 1"=ft.					
1"=ft.		, <u>,</u> .			٠
		<u>.</u>			
				·	

TEST	OF	DIV	ERSI	ON	RATE

TEST OF DIVERSION RA	TE:						
Length of time well ha	s been operating	prior to test	0		_		
Location of test	vertical oi	e inside	pivot stano	ł			
Pipe Diameter (I.D.)_			•				
Test No. 1—Normal C	Conditions		Test No. 2-Maxi	mum Conditio	กร		
R.P.M. POWER UNIT R.P.M. PUMP UNIT Pressure at Pump	1670 1670 40 p	s <b>i</b>	R.P.M. POWER R.P.M. PUMP UI Pressure at Pump	NIT	00	· .	
						•	
☐ Jacuzzi Meter Test		Meter Ide	ntification No				
Area Constant K = 2.	45 × I.D. <sup>2</sup> =			Q (gpm	) = VK		
Velocity (fps)	•		Velocity (fps)				
1	<u>.                                    </u>		1				
2			2				
3			3				
4			4				
5			5				
6			6				
7			7				
8							
			8		.*.		
9			10				
Total		Tota	i				
Avg.			·				
G.P.M.			М			WATER RESOUR RECEIVED	CES
						JUN <b>2 9</b> 201	5
Propeller Meter Test	Manufacturer		Model		Serial No	• • • •	_
Meter Diameter	inches		•	•		KS DEPT OF AGRICUL	TURE
Ending	. gal.	Ending	gal.				
Beginning			gal.			•	
Difference			gal.		2 Mr . 2 10	and the second	
Time			min		MICROFI	ILMED	
Rate			gpm				
	-			-	HAYS	5000642	
Other Flow Meter	Use Supplemen	ntal Sheet (incl	ude meter identific	cation, data an	d calculations).		NIC.

21729

*21729		·		•	
FUEL RECORDS:	F :	1.4. T	<b>4</b>	* *	
☐ Electricity	Supplier		·		
Meter Manufacture		Тур	,	Serial No	· · · · · · · · · · · · · · · · · · ·
Kwatt/re	ev r	revolutions	ts	econds	
$Rate = \frac{Kr \times 3.6}{t}$	_=	_kw/hr I	Iours =rate	kw-hr =	
Other Fuels	Type Natura	6es Sup	plier Kansas -	Nebroska	
Rate = Volume (time	est) =	·			
		17 Nat Petermin	ed Ergin	e not on Individ	Juel moter
TABULATION OF WATER		Tested			
Year	Hours Pumped ( hr )	Pumping Rate ( gpm )	Water Used ( AF )	Acres Irrigated	
1975			·		
1976	·				_
	889	1000	<del></del>	130	_
1978					<del>_</del>
1979				·	<del>_</del>
1980	2100	400	·	130	
1481					and the second second
	:* : ,			•	
1983	2200 F	700 <sup>‡</sup>		1267	· · ·
1984	1750 <sup>‡</sup>	500 <sup>‡</sup>		130 <sup>‡</sup>	
# 1985	1850 <sup>‡</sup>	313 %		130 <sup>‡</sup>	<del></del>
1486		3/3 *			<b>-</b>
					<del>-</del> 
	# 14.	d from tes	+ - 9/20/2	**************************************	<del></del>
	•		•		
		and the second second	,	from Jerry W.	
indicate Year of Record with (	410 10			d Files	
Crops Irrigated: this year				rd Alfalfa	· · · · · · · · · · · · · · · · · · ·
REMARKS: See all	ached She	et for logi	c n choosin	y a year of	record.
				···	WATER RESOURC
	<del></del>			· · · · · · · · · · · · · · · · · · ·	JUN <b>2 9</b> 2015
					KS DEPT OF AGRICULTU
Person present at testKe_	nt Naber		J	rrigation Manae	ger .
Water Use Correspondent 4	(name)		ille, Ks 678;	(relationship)  76 316-3 (phone	

Page 34 of 79

21729

SCANNED

NAME: Connecticut General Life Insurance APPLICATION NO: 2/729 Bethwells NCNWX, & NEX, SWX, NWX,

COLLINS METER TEST

Collins Meter No. 1-83	Meter Calibration Factor 1559
Pipe Inside Diameter (inches)	73/4 Flow Rate Factor 145,4
Test Pressure (psi) 40	1650(NC NWA) Test RPM, Pump 1670(NFX,SWA,NWA)
Description of Test Location_	In vertical pipe inside pixet stand

Meter Setting From Center of Pipe	•		Velocity Right Side of Pipe (or Back Side if	
19/16	4,31	4,21	4,62	4.66
2 3/4	3,99	4.01	4.79	4,75
39/6	3.65	<i>3</i> ,73	4.34	4,63

**WATER RESCURCES** RECEIVED

PUMPING PLANT TESTING, JNG-2 9 2015

RECEIVerofessional Engineer

HAYS000644

SCANNED

MICROFILMED

JUN 19 1987

APPLICATION NO: 21729 NAME: Connecticut General Life Insurance
NE4, SW4, NW4 pumping above

### COLLINS METER TEST

Collins Meter No. 1-83 Me	eter Calibration Factor 19559
Pipe Inside Diameter (inches)	73/4 Flow Rate Factor 145.4
Test Pressure (psi) 10_ Te	est RPM, Pump1700
Description of Test Location <u>In</u>	vertical pipe inside pivot stand

TEST DATA: Q_ Check,	Initial <u>Checked Previously</u> Velocity	Reversed
Meter Setting From	Left Side of Pipe	Right Side of Pipe
Center of Pipe	(or Front Side if Vertical Test)	(or Back Side if Vertical Test)

19/6	2.12	2,20	2.40	<i>2</i> .38
23/4	1.96	2.15	2.48	2,55
3%	1.85	1.90	2,38	2.65
				~ ~ ~ ~

Average Velocity of Water = Sum of Vel.  $\div$  12 =  $\frac{2.25}{2.25}$  Corrected Ave. Vel. = (Ave. Vel.) x (Calibration Factor) =  $\frac{2.25}{2.5}$  x  $\frac{.9559}{.9559}$  =  $\frac{2.15}{2.15}$ 

Flow Rate = (Corrected Ave. Vel.) x (Flow Rate Factor) =

WATER RESOURCES RECEIVED



PUMPING PLANT TESTING, JUNO 9 2015

145.4 = 313

KS DE

Professional Engineer

HAYS000646

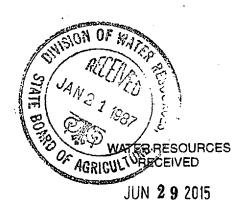
APPLICATION NO: 21,729

NAME: CONNECTICUT GENERAL LIKE

## NOTES ON CHOUSING A YEAR OF RECORD

THIS DEVELOPMENT WITH UNIVERS FROM EUROPE & PROVIND THE INCEPTION IN 1975, WITH UNIVERS FROM EUROPE & PROVIND THE U.S. AT VOLUSTIMES, A STATE OF CONFUSION HOS EXISTED IN THE CROP PROJECTION REFORT. THE OF THE WATER USE 1000 DEQUIPMENT RECORDS HOWE BREN EITHER DESTROYED OR LOST, BYO THE SYSTEMS AND PUMPING PLANT UMPONENTS IHOUR BREN INTERCUMPANCES.

SINCE LATE 1983, CONNECTICUT GENERAL HOS MADRE A DILICENT REFORT TO KERP GOOD RECROS. THERE KAR, IT WOULD SEEM REMOVABLE TO USE THE YEARS SINCE 1983 IN CHOOSING A YEAR OF RECRO.



RECEIVED

PUMPING PLANT TESTING, INCKS DEPT OF AGRICULTURE

Reviewed 10 1987 W. J. W.

HAYS000646

FEED OFFICE Professional Engineer
DIVISION OF WAYER (ACCURAGE)

STPage 37 of 79

MICROFILMED SCANNED

## EXHIBIT G<sup>21729</sup>

# DIVISION OF THE RESOURCES—KANSAS STATE BOARD OF RICULTURE FIELD INSPECTION REPORT

	Partial
X	Ful!
	Re-Test

	Test_	2	_of	<u>6</u> D	)iversi	on po	ints-				10	,	، داد:		O.	<b>.</b>	9/.	.4 7					
	Appli	catio	n No.	21	729		_ Da	te_9	130	186.	Ir	spect	or	Ebe	ct/k	lasse	n ra	<u> </u>	25618	3,416			
	Field	Area	No			<u> </u>			G.M	.D. N	No	_				0	County	E	lwas	g, Inc	_		
	Curre	ent L	andow	mer <u>(</u>	-000	ectic	ut_s	Sene	ra)	<u>Life</u>		ns41	<u> an</u> ce	. 9	6 A3	ri. A	£5:1;	ate	5	! .			
	Wate	r Use	Class	sificati al ( )	on: 1.	Dom	estic (	( ).	2. ]	Indus	tria <b>i</b> (	)	3. Ir	rigatio	on 🔀	)							
	Grou	ndwa	ter 🟷	🗘 Dra	inage	Basin	_ A	r ka	<u> </u>	R	ive	7		_									
	Surfa	ce W	ater (	) Str	eam_		: `				-				···						_		
	Autho	orizec oxima	d Poin stely_	t of D	iversi	on:_/	wel Nort	h and	IC_	NV	U 1/4		_ft. W	S Vest of	ec.∡ SE c	<mark>ኝ,</mark> T. corner	25 of Se	R. <u>1</u>	<u>9</u>				
	Actus Appro How	ıl Poi oxima were	nt of l itely_ distar	Divers 39 nces d	ion: 82 eterm	ft. ined?	ψe . Nort ಽ⁄	h and	VC A	N 31	W //	y     S < S	_ft. \	West of	ec.人 of SE	9, T.							
	"Аррі	roved	" Qua	ntity_	. 10	00	AF			"Ap	prove	d" Di	iversio	n Rat	e_2	900		_g.p.1	n. (6	6.46 c.f.	s.)		
	Priori	ty D	ate	Zan.	۵,	197	4	_	_ App	proval	of Ap	plicat	tion D	ate_	_Fe	<b>b</b>	27,	197	6		_		
	Perfe	ction	Date_	De	در.3	1, 19	81					٠,.			٠				. ~				
	Other	appl	licatio	hs cov	ering	land a	and/or	poin	t of di	iversi	on								··				
	•			on of a							in)												
						244				V1/4			sv	V 1/4		-	SE	14		TOTAL			
	s	Ť	R	H	NW		SE	NE	NW	sw	SE	II	NW	sw	SE	NE	£		SE	ACRES	_		
	29	25	19	31 1/4	3/1/4	31/4	31/4	3)1/4	311/4	31 /4	31/4	3) 1/4	31 /4	311/4	31 /4	3) /4	3/%	3) 1/4	3) /4	500	_		
	-		-		-									-									
	LANI	D IRI	RIGAT	ED-	-YEA	ROF	REC	ORD_		98	5												
	s	т	R		NE	. 44			N	N 1/4			S	W¼			S	E%	$\Box$	TOTAL	_		
	76	20	19	NE	NW	sw	SE	NE	NW	SW	SE	NE		sw	SE	NE	NW	sw	SE				
	Ø7 —	45	17					21.5	32,3	3,7.5	32.5	(1)	eu.	uc 1	νω γ	*/_				130	_		
													-								_		
1	APPL Year			OF W	VATE:		Hours	Pumj	ped	18.	50	0	r Qua	intity_	20	5 <i>4</i>	AF	•	- Walter				
why	toset Norm		om bi Seratin	ined) ig G.F	) P. M	<u>_</u>	-99				_ Equ	ıiv. c.	f. s	1.3	3_			MIS	1014 0	WATER TO	Ġ.		
		-	_	uting C		. 2	3					ıiv. c.	_	.5	9			راد			8		
									FO	R D.	w.R.							<u> </u>		1 199>	328		
	Year o	of Re	cord_	19	8-	رı	Extens	sion o	ftime	requ	ested:	Yes	=	No_		_	¥,	<u>\$</u> /	Q <sub>P</sub>	» Zv	NAT	ER RESCUF	RCES
	Total	No. o	of Hou	irs on	land	сочете	ed by	this a	pplica	tion_	1, E	<u>ر ا</u>	0		R	<b>5</b> ¢	51	V E	D.			RECEIVED	
	Ac. F	t. Ap	plied	=1,8	15 6	hrs.	×=	<u> </u>	7	g.p.	m. ×	24	.419 × 100	<del>-</del> =	9	7_	AF			8 X	J	UN <b>2 9</b> 201	15
	Acres	of "A	рргоч	ed" L	and ir	rigate	ed	11	<u> </u>	<u>&gt;</u>		1 /	a		,	JUN	197	987		• .	KSD	EPT OF AGRICUL	TURE
				roved"			/_	7		(			7	OA	As El	/Ac.)	POPL: As Titl: PFOPE	u Uroti	RCEL				
			263	Appr 390	roved"	2/3	at "A	ppro:	ved" I	Rate	Em.		263	900	7.5	769	Phi	= 0.º	16'X5'	9 9g.pm -	27° Q/	1gcm	
	Prorat	tion (	Calcul	ations_	1/-	<u>-71</u>	2.X		ひひ	/(,/		ax (	4/16V	ved!	TUY	ırrig	ating	/25	<u>аығ</u> НА	YS0006	267 347	1.6.	
	Perfect			pla	e te	d	g.p.n	ı. Per	fected Dひ			5 8 of 79	E.		134	r Γ/ <sub>1</sub>	3	アラ	- E	evised March 198	56	SCANN	ED

## GENERAL INFORMATION ON IRRIGATION SYSTEM:

Center Pivot High Pressure	Low Pressure	,	
Manufacturer_Olsen	Model 103 Serial	No. 3808	- -
Drive Electric	Length of Pivot Arm		
Design Pressure-Pivot	_p.s.i. Operating Pressure-Pivo	tp.s.i	
End Gun? yes End Gun Rating	g.p.m. Valducci		
Is end gun operating during test? yes			
Gravity Irrigation (show test set on sketch)			
Number of gates open	Normal Pipe Size		
Pressure at pumpp.s.i.			
Other Type	·. <del></del>		
Manufacturer	_ModelSerial	No	_
Unusual Conditions/Other Info.			
	· · · · · · · · · · · · · · · · · · ·		_
			_
			_
POWER UNIT INFORMATION:			•
	_ Model No. <u>492</u>		-
Serial No. 13811 T-4-T6 Fuel 1	Vatural Coas Rate	ed RPM	-
PUMP INFORMATION:  Manufacturer Fairbanks Morse Model No.	• •		
Serial No. N2W24647X Type Ve	ertical Turbine No.	stages_5	-
GEAR HEAD INFORMATION:	:		
Manufacturer Randolph Model No			
Serial No. 62055 Drive Right A	Rati	0 6:5	-
		,	
WELL INFORMATION:			
Date Drilled pries to Jan 1974 Original Depth 75	ft, Static Water Level When D	rilled <b>8</b> ft.	
Tape Down Possible? yes 16'	Vater Level Measurement Tube?		_
Measuring Pointft. above or below L.S.D.			WATER RESOURCES RECEIVED
ADDITIONAL REQUIREMENTS:			
Meter Required? Make of Meter			JUN 29 2015
Meter Model No Serial No	Size -		KS DEPT OF AGRICULTURE
Is Meter Installed Properly?			
Chemical Injection System? yes Check			SCANNED
Vacuum Breaker? Are these anti-pollution	devices installed properly?	HAYS00064	18
If chemicals are injected into system, please attach skets			

▼ Other Flow Meter

Use Supplemental Sheet (include meter identification, data and calculation) \\$5000649

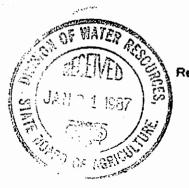
WICROFILMED

Approved by\_ 21729

21720		· .	•		
FUEL RECORDS:					
Electricity	Supplier				
Meter Manufactur	er	Тур	e	Serial No	
Kwatt/re	ev r	revolutions	t	_seconds	
$Rate = \frac{Kr \times 3.6}{t}$	_=	kw/hr I	Hours =	kw-hr =	
Other Fuels	Type Natura	J Gag Sup	plier Kansas	- Nebraska	
			•	·	
Rate = Volume (time				•	
		ed? Not Detern	aind, One Mel	ter is used for Mau	y wells
TABULATION OF WATER	USE: Hours	Tested	Water		
Year	Pumped ( br )	Pumping Rate (gpm )	Used ( AF )	Acres Irrigated	
	1584	1000		125	
1976					
_1977	889	1000		130	
1978					
1979	1224	743		125	
1980	1416	743		125	4.4
1981	1152	743		125	
1982			• .	Way .	
1983	2200 <sup>‡</sup>	700 F		126 <sup>∓</sup>	• • •
1984	1750 F	500 F		130₹	
* 1985	1850F	263*		130 <sup>‡</sup>	
1986		263*			
	مر مر م	ained from to	est on 9/3	0/86	
			,	is from Jerry Wear	ve (
ndicate Year of Record with (*				ford Files	
Crops Irrigated: this year				ord Alfalfa	
_				, .	
REMARKS: See attac	had Sheet	for logic i	n choosing	a year of record	
					WATER RESOURCE RECEIVED
					JUN <b>2 9</b> 2015
. 1	-4 Al 1			T	KS DEPT OF AGRICULTURE
	nt Naber		m. 111 to	Trigation Manage	<del></del>
Vater Use Correspondent L	(mine)	<u> </u>	pensulle, K	S 17876 3/6-383	5-4803 ber)
Conducted by	Ebert (signature)		Date	10 111101	000650

(uile) Page 41 of 79 SCANNED

APPLICATION NO: 2/729 NAME: Connecticut General Life Immurance  NC NW/4 pumping alone									
COLLINS METER TEST				•					
Collins Meter No	1-83	Meter Calibr	ation Fact	or .9559					
Pipe Inside Diameter (inches) 734 Flow Rate Factor 145,4									
Test Pressure (psi)	9	Test RPM, Pu	imp 1690						
Description of Test Location In vertical pipe inside									
· · · · · · · · · · · · · · · · · · ·	•								
		•							
TEST DATA: Q_ Check, I	Velo	city	Velo						
Meter Setting From Center of Pipe	(or Front			Side if					
1%	2.10	2.06	1.98	1.98					
234	2.00	1.90	2.02	1.92					
31/4	1.85	1.72	1,90	1.30					
Average Velocity of	Water = S	um of Vel	- 12 =/	,89					
Corrected Ave. Vel.	= (Ave. V	el.) × (Cali	bration Fa	ctor) = _/8/					
Flow Rate = (Correc	ted Ave. V	el.) x (Flow x <u>145,4</u>	Rate Fact	or) = <u>63</u> GPM					



WATER RESOURCES
PUMPING PLANT TESTING, RECEIVED

Reviewed By: 11) W.

JUN 2 9 2015

R Eprofessional Engineer KS DEPT OF AGRICULTURE

JUN 19 1987

HAYS000651

TO STORING

APPLICATION NO: 2/7.  Bothwells  NO NWY, F. 1  COLLINS METER TEST	29 NAM NE4,5w2,1V4		General Life	Insurance	
Collins Meter No	1-83	Meter Calit	oration Fact	tor 19559	
Pipe Inside Diamete	r (inches)	7 <u>34</u> F10			
Test Pressure (psi)	40	Test RPM, I		650 (NC NWX) 670 (NEX, SWX, NW)	松
Description of Test	Location_1	n vartical	ipe inside q	ivet stand	
TEST DATA: [] Check, I	Veloc Left Side	ity of Pipe	Velo Right Sid	city e of Pipe	
Center of Pipe	Vertica			Side if	
19/16	4.31	4,21	4.62	4,66	
23/4	3.99	4.01	4.79	4,75	
39/16					

Average Velocity of Water = Sum of Vel. - 12 = 4,3075

Corrected Ave. Vel. = (Ave. Vel.) x (Calibration Factor) =

Flow Rate = (Corrected Ave. Vel.) x (Flow Rate Factor) =  $\frac{4}{12}$  x  $\frac{145.4}{19}$  =  $\frac{599}{19}$ 



PUMPING PLANT TESTING,

WATER RESCURCES

JUN 2 9 2015

Professional Engineer KSDEPTOFAGRICULTURE

HAYS000652

MICROFILINES

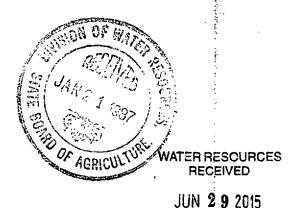
APPLICATION NO: 21,729

NAME: CONNECTICUT GENERAL LIKE

## NOTES ON CHOUSING A YEAR OF RECORD

THIS DEVELOPMENT HOSS HOPO SEVERAL CHANGES SINCE ITS INCEPTION IN 1975, WITH OWNERS FROM EUROPE & AROUND THE U.S. AT VOLUSTIMES, A STATE OF CONFUSION HOSS EXISTED IN THE CAPP PROJECTION REFURET. ML OF THE WATER USE BOND EQUIPMENT RECORDS HOWE BEEN MITHER DESTROYED OR LOST, BYO THE SYSTEMS AND PUMPING PLANT UMPONENTS HOWE BEEN INTERCUMPANCED.

SINCE LATE 1983, CONNEUTICUT GENERAL HOS MADE A DILIGENT REFORT TO KREP GOOD RECORDS. THERE EARL, IT WOULD SEEM REBONABLE TO USE THE YEARS SINCE 1983 IN CIROSING A YEAR OF RECORD.



3011 2 3 2013

RECEIVED PUMPING PLANT TESTING, INC. KS DEPT OF AGRICULTURE

Reviewed 1by 1387 (U), W.

HAYS000653

Professional Engineer

DIVISION OF Page 44 of 79

ΕŹ	KHIB	ΪΤ
		21729
	Н	
		• •

# DIVISION OF RESOURCES—KANSAS STATE BOARD OF FIELD INSPECTION REPORT



						•	. 117.	ו ענו	1101	LC	ΙŲ		;	OKI			·	Par Fu	11	
Test	_6_	of	<u>6</u> r	Diversi	ion po	ints				F	irm/Fi	ield O	)ffice	Pi	lm <i>oi</i>	ne P		] Re		
																			sting Inc	
																		اسم	rds	
Curn	ent La	andow	mer _	500	APC	ticu:	t G	enec	<u>al</u>	2:4€	Ţ,	<u>15.</u>	%	Agr	. A-€	Filiate	29			
Addr	ess	Box	Additio	hal lan	Modowne	rs and s	Plati ddress	e A	<i>)€</i> tified in	<b>4910</b> n rema	rks sect	ion.	АH	n, I	erry	We.	e Ve	<u>-</u>		
														on ເ≪ Vater		( )				
Grou	ndwat	er ⊳	4Dra	únage	Basin	A	٠k٥	<u>NS</u> a	ک	Riv	eC_									
Surfa	ce Wa	ater (	) Str	eam_															•	
Auth Appr	or <b>ized</b> oxima	Poin tely	t of D	iversi	on:ft	we l	h and	IE 1/4	, SW	1/4, 5	sw y	<b>4</b> _€. W	Vest o	Sec2 of SE c	<u>ዓ</u> , ፐ. orner	2 <u>5</u> , of Sec	R. 1	<u>.</u> .	•	
Actua Appr	l Poi	nt of I tely	Diver	ion:_	س <i>ل</i> ft	ell Nort	N h and	E 1/4,	<u> 5 ω</u> 437	0+	sω	<u>/4</u> _ft. \	West	Sec.25 of SE	Ž, T.	25 r of Se	R/	<u>7</u>	,	
												•								
									_										6.46 c.f.s.)	
			-	•					roval	of Ar	plicat	ion D	ate_	Fel	. 2	7, 19	76			
					1,19															
					land :						Noa									
LAN	OT C	BE I	NCL	JDEI	ON	CER	TIFIC	ATE:												
s	т	R	NE		sw	SE	NE	·	sw	SE	NE	1	sw	SE	NE	SE!		SE	TOTAL ACRES	
29	25	19	1	L	1					l	li ·	L	L	i	L :	3/4			500	
			<u> </u>			-						7								•
I.AN	O IRE	L	IL FED	-YEA	R OF	BEC	ORD	1	985	- -	I	L	1	l	I	L;_L		li		
					E14 .				V 1/4			S	W¼	_		SE	1/4		TOTAL	
s 	Т	R.	NE	NW		SE		NW		SE	L		sw		NE	NW	sw	\$E	ACRES	
<u>ል ዓ</u>	25	19		-	146	Sul	SW .	پردند	האלה	/	33	33	32	32					130	
													<u> </u>							
Year	of Rec	ord_		VATE 985		Hours	Pump	ped	185	50		r Qua	ıntity_	15	4,8	AF	Ŕ		N OF WAR	<b>5</b> .
ا Norm	al Op	رون eratin	log G.I	ell w	ith b	1 4 de	25	~· <del>-</del>	<del></del>		iv. c.	f.s		947	_		4 :0		4277	À
				G.P.M			3/			_ Equ	iv. c.	f.s	1,9	106			37	( 4/	V21 12	2. A C
Year	of Rec	ord_	19	8	5,	Extens	sion o			W.R.			Y No			EC	23			alli. M
			ırs on	land	cover					1.8	35	-0			1.5	Ser Land	73.3	STATE OF	a deal	WATER RESOURCES
	t. Apj		,,	85	Ars	. ×_	45	2 _5	_	.m. ×	4	.419	<u> </u>	<u> </u>	5	XPN	19	1987	10	RECEIVED
Acres	of "A	pprov	ed" L	and i	rrigate	d		2 <	)		<u> </u>	. 100	2	.1	DINTRIC	Fig. 1. N OF V	u. A	MCF	OFILMED	JUN <b>2 9</b> 2015
				Land	,	7	<u> </u>		(	U	, 04		A	c. Ft.	/Ac.)	,917	a i Gi			KŞ DEPT OF AGRICULTURE
Ac. Ft. Used on "Approved" Land at "Approved" Rate or Less 4 25gpm + 699gpm = 0.61																				
Prora	Proration Calculations U. b. 1 X 1 D U.T.1. C max allowed for irrigating 125 acres/																			
	cted I		0	25	10	g.p.n	ı. Perl		Quai	ntity	1	7	E	/	AF Bu	ch	3.		- 97 evised March 1986	
DWR-I	01 217	ں ہے	"	N/4	. , ,	-1	10	7		Page 6	Fof 79	,		, ,	- 4	, , ,		"H	evised March 1986	SCANNED

## GENERAL INFORMATION ON IRRIGATION SYSTEM:

	Low Pressure	
Manufacturer Olson	Model no tag Serial No.	
Drive Electric	Length of Pivot Arm	
Design Pressure-Pivot	p.s.i. Operating Pressure-Pivotp.s.i	
End Gun? YES End Gun Rating	g.p.m. / Rain Bird 85	
Is end gun operating during test? Yes		
Gravity Irrigation (show test set on sketch)		
Number of gates open	Normal Pipe Size	
Pressure at pumpp.s.i.		
☐ Other Type	<u>_</u>	
Manufacturer	Model Serial No.	-
Unusual Conditions/Other Info TIHA	LR IS A TAG ON CENTRA PI	Ist,
BUT NO HUMBERS BUE ST	AMPRO ON IT.	-
		_
		· - '
POWER UNIT INFORMATION:		
	Model No. 300 HP	
Serial No. <u>08948                                   </u>	Jatural Gas Rated RPM	-
	oRated RPM	
GEAR HEAD INFORMATION:		
Manufacturer Amatillo Model No	·	
Serial No. 11 5267 Drive Right	Angle Ratio 4:3	-
Date Drilled print to Jan 1974 Original Depth Tape Down Possible? yes 19	ft. Static Water Level When Drilledft.	
Measuring Pointft. above or below L.S.D.		WATER RESCURCES
ADDITIONAL REQUIREMENTS:		RECEIVED
Meter Required? 10 Make of Meter_		JUN 2 9 2015
Meter Model No Serial No	Size	•
Is Meter Installed Properly?	<u>.</u>	KS DEPT OF AGRICULTURE
Chemical Injection System? 10 Check	Valve? Yes Low Pressule A 460 00619	)
Vacuum Breaker? <u>yes</u> Are these anti-pollution 21729 Page 46 of If chemicals are injected into system, please attach sketc		SCANNED

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

,					
					-
N					 
<b></b>					
i		•			,
ale					
=ft.	,				
ì, ·					
				·	
			•		

#### TEST OF DIVERSION RATE:

Length of time well has been operating prior to test Location of test Herizantal gipe at givet Pipe Diameter (I.D.) 7 1/16 inches  Test No. 1—Normal Conditions - Sees affacted	//-
R.P.M. POWER UNIT  R.P.M. PUMP UNIT  Pressure at Pump  1/0 psi	R.P.M. POWER UNIT 2200 R.P.M. PUMP UNIT 1650 Pressure at Pump 10 psi
☐ Jacuzzi Meter Test Meter Id	entification No
Area Constant K = 2.45 × 1.D.* =	Q (gpm) = VK
Velocity (fps)  1	Velocity (fps)  1 2 3 4 5 6 7
Avg Av	8

☐ Propeller Meter Test	Manufactur	er	Model		Serial No	WATER RESCURCES
Meter Diameter	inches	16 De - 1		,		RECEIVED
EndingBeginning	gal.	EndingBeginning	gal.			JUN 2 9 2015
Difference	gal. gal. min.	Difference	gal. gal. min.		MICROFILMED	KS DEPT OF AGRICULTURE
Rate	gpm	Rate	gpm			NO DEL TOT AGRICOLIONE

Other Flow Meter

Use Supplemental Sheet (include meter identification, data and calculation) AYS000620

FП	IFI	R	$\mathbf{FC}$	ΛR	ns.

	Meter Manufac		Туј	pe	Serial N	0	
	Kwat	tt/rev r	revolutions	t	seconds		
	Rate = $Kr \times 3$	3.6	_kw/hr	Hours =	kw-hr =		
Z\$	Other Fuels	Type Watura	J Gas Su	pplier Kan	sas - Nebras	s kq	•
	Rate = Volum	e (test) =					
	How was the te	ne st volume determined	? Not Determ.	ned En.	ne aut an ind	ividual meti	e C
BULA	TION OF WATE		Tested				
	Year	Hours Pumped	Pumping Rate	Water Used	Acr Irrig	res: ated	
	1975	( hur )	(gpm)	( AF )			
	1976						
	1977	936	1090				
	1978						
	1979						
	1980						
	198/						
	1982				.:		
	1983	2200	700 <sup>‡</sup>			7*	
	1984	1750	400 +		. 130	o * .	
	<del>* 1985</del>	1850F	425*		. 130	, #	12.1
	1986	· :	425 24		-		
,		s' .					
		From WUR	sent to us	from Jer	ry Weaver o	S Agri AFS	liates
		* from test on 1					
licate Y	rear of Record wit		Source of Informa	ition5	tofford File	²s	
		Alfalfa		Year of	record AIÇA	159	
		ATTRUKO					
	e of pec	mo.					
							WATER RESOURC
					:		RECEIVED
<u>.</u>							JUN <b>2 9</b> 2015
son pr	esent at test	Vent Naber			Irrigat	tion Manage	<b>r</b> '
-	e Correspondent_	lyle Koldeck		Sportville	(relationship)	3/4-3 85-	. No DEL 1 OL MONTO
iter Us	e correspondent						

Flow fo	rom wall in the	. NE%, SW1/4, S	Why pumping	aline
Collins Meter No	1-85	Mates Calib	estion Eact	9826
Pipe Inside Diamete				
Test Pressure (psi)	<del></del>		·	
Description of Test	Location	7701.601041	pe ve so, o p	TVOU SCANA
Center of Pipe		Side if l Test)	(or Back Vertica	
15%		<b>4.3</b> €	u 10	4 1F
		4,35 4,54		<u> 4.25</u>
2.3/4	4,93	4.54	4,20	3.68
2 3/4 3 1/6	<u>4,93</u> 4,40	4.54 4.45	4,15	3.68 4.40
2.3/4	<u>4,93</u> 4,40	4.54 4.45	4,15	3.68 4.40
2 3/4 3 1/6	4,40 Water = Sur = (Ave. Ve)	4.54 4.45 m of Vel	4,20 4,15 ÷ 12 = 4,	3.68 9.40 35 tor) =

Professional Engineer JUN 19 1987

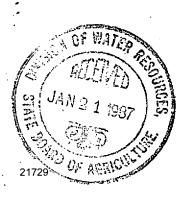
HAYS000622 ICROFILMED

KS DEPT OF AGRICULTURE

Reviewed By:

PUMPING PLANT TESTING, INC. JUN 2 9 2015

. APPLICATION NO:e	21729 NAMI	E: <u>Connect</u>	cut Genera	<u>  life Ins</u>
COLLINS METER TEST	from well in NE 4	,5W ¼,5W¼,	under normal	conditions
Collins Meter No.	1-85	Meter Calib	ration Fac	tor .9826
Pipe Inside Diame	eter (inches)	7/16 F10	w Rate Fac	tor <u>147.</u> 8
Test Pressure (p:	i) <u>110</u>	Test RPM, F	ump 1660	2
Description of Te				
و الله الله الله الله الله الله الله الل				
TEST DATA: Q_ Check,  Meter Setting From Center of Pipe	Veloc Left Side or Front	ity of Pipe	Velo Right Sid (or Back	city e of Pipe Side if
15/8	2,99	2,95	2.95	2.91
234				
3%		•		
Average Velocity				
Corrected Ave. Vo	el. = (Ave. Ve 	l.) x (Cali ×L	bration Fa 9826 =	ctor) = 2,872
Flow Rate = (Cor	rected Ave. Ve	1.) x (Flow x147.8	Rate Fact	or) = 5 GPM



Reviewed By:

PUMPING PLANT TESTING, I

WATER RESOURCES RECEIVED INC. JUN 2 9 2015

A - A / A

KS DEPT OF AGRICULTURE

Professional Engineer JUN 19 1987 MAY

MICHOMISOED623

Page 50 of **DEVISION** OF WATER ASS STAFFORD APPLICATION NO: 21,729

NAME: CONNECTICUT GENERAL LIKE
INSULANCE CO, INC.

## NOTES ON CHOUSING A YEAR OF RECORD

THIS DEVELOPMENT HTTS HTTD SEVERAL UNINERS SINCE ITS
INCEPTION IN 1975, WITH UNINERS FROM EUROPE & AROUND THE
U.S. AT VAHOUSTIMES, A STATE OF CONFUSION HTTS EMISTRA
IN THE CAOP PLOUTION REFURET. ML OF THE WATER USE
BYLD EQUIPMENT RECORDS HOVE BREN MITHER DESTROYED
OF LOST, BYD THE SYSTEMS BYD PUMPING PLANT UMPONENTS
HTTUE BREN INTERCUMBERD ONER THE YEARS.

SINCE LATE 1983, CONNECTICUT GENERAL HOS MADE.

A DILICENT REFFORT TO KEEP GOOD RECROS. THERE HAR,

IT WOULD SEEM RESSONABLE TO USE THE YEARS SINCE

1983 IN CHOOSING A YEAR OF RECRO.

WATER RESOURCES RECEIVED

JUN 29 2015

KS DEPT OF AGRICULTURE

MICROFILME!

CO WILLIAM REV

TE PUMPING PLANT TESTING, INC.

Reviewed by:

il).W.L

HAYS000624

Professional Engineer

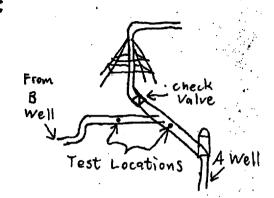
APPLICATION NO: 21729

NAME: Connecticut General Life Ins

Flow test on wells pumping independently:

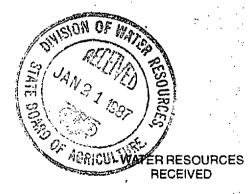
Since there was only one checkvalue for both wells (located downstream of the pipe junction), each of these wells were tested apstream of the pipe junction.

(See diagram) The pressure is low on the individual test because the water is going down the well on the pump that ient running.



Flow test under "normal" conditions:

"Normal" conditions are when both wells are pumping together into the center pivot. We tested the flow from each individually while both were pumping. The total flow into the system would be the combined flow of each well pumping under "normal" conditions, (274 gpm + 425 gpm = 699 gpm)



PUMPING PLANT TESTING, INC.

REREVIEWED BY:

rilj. W.L

KS DEPT OF AGRICULTURE

,

Professional EngineerHAYS000625



# DIVISION OF TER RESOURCES—KANSAS STATE BOARD OF BICULTURE FIELD INSPECTION REPORT

	Partial
Ø	Full

Re-Test
Application No. 21729 Date 11/5/86 Inspector Klassen/ Ebert  Field Area No. 2 County Edwards
Current Landowner Connecticut General Life Ins. 70 Agri. A Kiliates
Address Box 1/62 North Platte, NE 69(03 Attn. Jerry Weaver
Water Use Classification: 1. Domestic ( ). 2. Industrial ( ) 3. Irrigation ( ) 4. Municipal ( ) 5. Recreation ( ) 6. Stockwatering ( ) 7. Water Power ( )
Groundwater (X) Drainage Basin Atkansas River
Surface Water ( ) Stream
Authorized Point of Diversion: iwell NC SW 4 Sec. 29, T. 25, R. 19.  Approximately ft. North and ft. West of SE corner of Sec.
Actual Point of Diversion:
"Approved" Quantity 1000 AF "Approved" Diversion Rate 2900 g.p.m. (6146 c.f.s.)
Priority Date Jan. 2, 1974 Approval of Application Date Feb. 27, 1976
Perfection Date
Other applications covering land and/or point of diversion
(include discussion of overlapping files in remarks section)  LAND TO BE INCLUDED ON CERTIFICATE:
NEW NWW SWW SEW TOTAL
3 1 NE NW SW SE ACRES 2425 19 3143143143143143143143143143143143143144314500
X 7 X 5 17 3 431 4 51 4 51 4 51 4 51 4 51 4 51 4 5
LAND IRRIGATED—YEAR OF RECORD 1985
S T R NE NW SW SE
29 25 19 (Wall NE Sw Honly) 33 33 32 32 130
APPLICATION OF WATER: Year of Record 1985 Hours Pumped 1850 or Quantity 93.3 AF
Slaw translational well with both
Normal Operating C.P.M. Normal Operating C.P.M. Standard Equiv. c.f.s. 16//
Maximum Operating G.P.M. 338 Equiv. c.f.s. 778
Year of Record 1995 Extension of time requested YE ECNO 14ED
Total No. of Hours on land covered by this application / 0 0 WATER RESOURCES RECEIVED
Ac. Ft. Applied = $\frac{7.00}{1000}$ hrs. $\times \frac{2.7}{1000}$ g.p.m. $\times \frac{2.4 \times 1000}{24 \times 1000}$ = $\frac{7.43}{1000}$
Acres of "Approved" Land irrigated Division of Water RECOURCES 7 X JUN 2 9 2015
Ac. Ft. on "Approved" Land 7 ( Ac. Ft./Ac.)  KS DEPT OF AGRICULTURE
Ac. Ft. Used on "Approved" Land at "Approved" Rate or Less 7
Promotion Calculations 274 pm + 423 gpm - 694 apm - 294 pm - 694 apm - 694 a
Perfected Rate 360 g.p.m. Perfected Quantity 7 AF  DWR-10121 129 mpleted by D049 105 F. Bush 3-17-87  SCANNED  SCANNED

	■ Low Pressure
	Model no tag Serial No
	Length of Pivot Arm
	p.s.i. Operating Pressure-Pivotp.s.i.
- '	ing , Rain Bird 85
Is end gun operating during test? yes	
Gravity Irrigation (show test set on sketch)	
Number of gates open	
Pressure at pumpp.s.i.	
Other Type	
Manufacturer	ModelSerial No
Unusual Conditions/Other Info.	
·	
Manufacturer Ford	Model No HP
	Model No. 300 HP HP
Serial No. 11909 K-28-76 Fu	
Serial No. 11909 K-28-TG Fu	nel Natural Gas Rated RPM
Serial No. 11909 K-28-TG Fu  P INFORMATION:  Manufacturer Western Land Rollet Mo	odel No. notas Rated RPM
Serial No. 11909 K-28-TG Fu  P INFORMATION:  Manufacturer Western Land Rollet Mo	nel Natural Gas Rated RPM
Serial No. 11909 K-28-TG Fu  P INFORMATION:  Manufacturer Western Land Rollet Mo	odel No. notas Rated RPM
Serial No. 11909 K-28-TG Fu  P INFORMATION:  Manufacturer Western Land Rollet Mo  Serial No. Type	odel No
Serial No. 11909 K-28-76 Fu  P INFORMATION:  Manufacturer Western Land Roller Mo  Serial No. Type  R HEAD INFORMATION:  Manufacturer Amarillo Mo	odel No
Serial No. 11909 K-28-76 Fu  P INFORMATION:  Manufacturer Western Land Roller Mo  Serial No. Type  R HEAD INFORMATION:  Manufacturer Amarillo Mo	odel No Rated RPM  peVertical Turbine No. stages
Serial No. 11909 k-28-76 Fu  P INFORMATION:  Manufacturer Western Land Roller Mo  Serial No. Typ  R HEAD INFORMATION:  Manufacturer Amasillo Mo  Serial No. OL 36605 Drive Right	odel No Rated RPM  peVertical Turbine No. stages
Serial No. 11909 K-28-TG Fu  P INFORMATION:  Manufacturer Western Land Rollet Mo  Serial No. Typ  R HEAD INFORMATION:  Manufacturer Amasillo Mo  Serial No. OL 36605 Drive Right  L INFORMATION: No records avail	odel No Rated RPM  peVertical Turbine No. stages  odel No  but Angle Ratio
Serial No. 11909 K-28-TG Fu  P INFORMATION:  Manufacturer Western Land Rollet Mo  Serial No. Tyl  R HEAD INFORMATION:  Manufacturer Amarillo Mo  Serial No. OL 36605 Drive Right  L INFORMATION: No records avail  Date Drilled prior to Jan. 1979 Original Dept	pe_Vertical Turbine No. stages  bdel No
Serial No. 11909 K-28-TG Fu  P INFORMATION:  Manufacturer Western Land Rollet Mo  Serial No. Tyl  R HEAD INFORMATION:  Manufacturer Amarillo Mo  Serial No. OL 36605 Drive Right  L INFORMATION: No records avail  Date Drilled prior to Jan. 1979 Original Dept	odel No
Serial No. 11909 K-28-TG Fu  P INFORMATION:  Manufacturer Western Land Rollet Mo  Serial No. Tyl  R HEAD INFORMATION:  Manufacturer Amarillo Mo  Serial No. OL 36605 Drive Right  L INFORMATION: No records avail  Date Drilled prior to Jan. 1979 Original Dept	odel No

Chemical Injection System? <u>hO</u> Check Valve? <u>ye5</u> Low log Vacuum Breaker? <u>yes</u> Are these anti-pollution devices installed properly? <u>yes</u>

Low Pressure Drain? yes\_\_\_

SCANNE

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

N				<u> </u>
<b>†</b>				
l				
Scale 1"=ft.		<del> </del>		
1"=ft.				
•		 		,
	,	 ٠,		
•	,.			

#### TEST OF DIVERSION RATE:

Length of time well has been operating prior to Location of test Herisental pipe as Pipe Diameter (I.D.) 7 16 inches	t pivat
R.P.M. POWER UNIT	R.P.M. POWER UNIT 1771 R.P.M. PUMP UNIT 1771 Pressure at Pump psi
☐ Jacuzzi Meter Test M	eter Identification No
Area Constant K = 2.45 × I.D. =	Q (gpm) = VK
Velocity (fps)	Velocity (fps)
1	l
2.	2
3	3
4	4
5	5,
6	6
7 8	7 8
9	9
10.	10.
Total	Total
Avg	Avg
G.P.M	G.P.M

] Propeller Meter Test	Manufacturer	Model	Serial No	WATER RESOURCES RECEIVED
Meter Diameter	inches	,		JUN 2 9 2015
Ending	gal. Er	ndinggal.	*	
Beginning	gal. Be	eginninggal.		KS DEPT OF AGRICULTURE
Difference	gal. Di	ifferencegal.		KS DEPT OF AGRICULTURE

○ Other Flow Meter

Time\_

min.

Time

\_min.

IEI.		

	Electricity	Supplier		·		
	Meter Manufacti	urer	Туре	e	Serial No	
	Kwatt	/rev r	revolutions	t	.seconds	
	- V- V 2					
	Rate = $\frac{\mathbf{Kr} \times 3}{\mathbf{t}}$	.0 =	_kw/hr H	lours =rai	kw-hr =	
×	Other Fuels	Type Natura	Gas Sup	plier Kansas	- Nebraska	
	Rate = Volume	(test)				
	time	e .	 10 Al + N-4 1	.1 = .	at 100	1 1 4
TABUL	ATION OF WATE	t volume determine R USE:		ned - ngine	nat on individ	MALE C
	Year	Hours Pumped ( hr )	Tosted Pumping Rate ( gpm )	Water Used ( AF )	Acres Irrigated	
	1975	17.64	1000		125	
	1976				•	
	1977	936	1000		130	<u> </u>
	1978		,			Marie Control of the
	1979	1224_	650		126	· 
	1980	1416	650	. '	126	_
4	1981	1152	650		126	· · .
	1982			· · · ·	1	
	1983	2200°	700 <sup>‡</sup>		127*	
	1984	1750°	450*		130 F	· . ·
	* 1985		274 =	·	130 \$	
	1986	. :	274 *			<del></del>
					***************************************	
		\$ From WUR	sent to us	from Jetry	Weaver of Ag	<u>ri</u> Affiliates
	· · · · · · · · · · · · · · · · · · ·	* From tes	t on 11/5/86		<u> </u>	<u>.                                    </u>
Indicate	Year of Record with	ı (*)	Source of Informat	ion <i>St</i> 4	fford Files	·
Crops Ir	rigated: this year	Alfalfa		Year of rec	ord Alfalfa	· · · · · · · · · · · · · · · · · · ·
REMAR	ks: See at	tached she	et for 1	ogic in	choosing a y	ear
_ 01	frecord.			· ·		
						WATER RESOURCES
						RECEIVED
						JUN <b>2 9</b> 2015
.——						
Person p	resent at test	Kent Naber			Intigation (	Manager KS DEPT OF AGRICULTURE
Water U	se Correspondent	(name)	Spen	(euille, Ks 678	3/6	6-385-2803 ne number)
Conducte	ed by Gray	Ebect (signature)		Date	11/11/86	
Approved	d by (signatura)	W. J	P. E.	Date	1/15/87HA	SCANNED
2	1729	,	Page 56 of 79	•		007

	APPLICATION NO: 21	729_ NA	ME: Connecti	cut General	life Ins.	
COLLI	INS METER TEST Flow (	rom well th	icswy pumping	alone		
	Collins Meter No				or .9635	
	Pipe Inside Diameter	,				æ
	Test Pressure (psi)	•				
	Description of Test	Location_	TOUSECTE !	pe pexore	6. VOL 3.(4)4	
	•					
TEST	DATA: OL Check, Ir					
. 1	Meter Setting From	Left Sic	le of Pipe	Veloo Right Side	e of Pipe	
	Center of Pipe		nt Side if (al Test)	(or Back Vertica		
	15/2	2,66	2.67	2.75	2.70	
	234	2.48	2.48	, 2.56	2,60	
	3 %6	2.26	2.30	2.38	2.29	
	Average Velocity of	Water = 8	Sum of Vel	- 12 = <i></i>		
•	Corrected Ave. Vel.		/el.) x (Cali		ctor) = 2,4/9	•
	Flow Rate = (Correct	ted Ave. \			or) =	
		2.419	x <u>147.8</u>	=3		
•	01 1917				WATER RES RECEIV	
			PUMPING PLA	NT TESTING	INC. JUN 29	2015
	JAN 2 DO Revie	ewed By:	plows		KS DEPT OF AG	RICULTURE
			Professiona JUN 1919		HAYS00063	0

FIELD OFFICE
Page 57 MAISION OF WATER RESOURCES
STAFFORD

MICROFILMED SCANNED

APPLICATION NO: 3/729 NAME: Lonnecticut General Life Ins,

COLLINS METER TEST Flow from well NC SW/4 under normal conditions

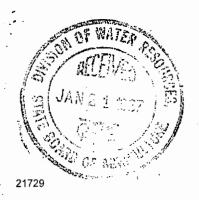
Collins Meter No. 1-84 Meter Calibration Factor 19635

Pipe Inside Diameter (inches) 7/36 Flow Rate Factor 147.8

Test Pressure (psi) 1/0 Test RPM, Pump 1760

Description of Test Location Horizontal pipe before pivot stand

TEST DATA: Q\_ Check, Initial 2.05 Reversed 206 Velocity Velocity Meter Setting From Left Side of Pipe Right Side of Pipe Center of Pipe (or Front Side if (or Back Side if Vertical Test) Vertical Test) 2.04 1,99 2.00 2.00 1.87 1.76 Average Velocity of Water = Sum of Vel.  $\div$  12 = \_\_\_\_\_1.93 Corrected Ave. Vel. = (Ave. Vel.) x (Calibration Factor) = .9635 = 1.856 Flow Rate = (Corrected Ave. Vel.) x (Flow Rate Factor) = 1.856 x 1.47.8 = 274 GPM



WATER RESOURCES : RECEIVED

PUMPING PLANT TESTING, INC. JUN 2 9 2015

Reviewed By: Link N

KS DEPT OF AGRICULTURE

Professional Engineer

HAYS000631

FRIGEISS of 79 . <u>DIVISION OF WATER ALLEG GROUN</u>

**LUN 19** 1887

SCANNED

MICROFILMED

APPLICATION NO: 21, 729

NAME: CONNECTICUT GENERAL LIKE
INSVEMMES CO, IN C.

## NOTES ON CHOOSING A YEAR OF RECORD

THIS DEVELOPMENT HOTS HOTD SEVERAR UNIVERS SINCE ITS
INCEPTION IN 1975, WITH UNIVERS FROM EUROPE & AROUND THE
U.S. AT VEHNOUSTOMES, A STATE OF CONFUSION HOTS EXISTED
IN THE CAOP PLYOUTIN REPORT. THE OF THE WATER USE
1071 OF QUIPMENT RECORDS HOVE BREN ATTURK DESTROYED
OF LOST, BYO THE SYSTEMS AND PUMPING PLANT UMPONENTS
1871 BREN INTERCHONGED WEEK THE YEARS.

SINCE LATE 1983, CONNECTICUT GENERAL HAS MADE A DILICENT REFERET TO KEEP GOOD RECEDS. THERE MAK, IT WOULD SEEM KEBSWABLE TO USE THE YERRS SINCE 1983 IN CHOOSING A YEAR OF RECED.

WATER RESOURCES
RECEIVED

JUN 2 9 2015

REVIEWED.

KS DEPT OF AGRICULTURE

PUMPING PLANT TESTING, INC.

Reviewed by:

). W. SHAYSOO

Professional Engineer

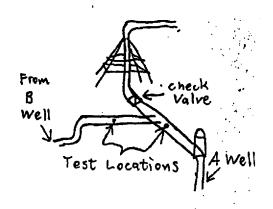
APPLICATION NO: 21729

NAME: Connecticut General Life Ins

Flow test on wells pumping independently:

Since there was only one checkvalue
for both wells (located downstream of the
pipe junction), each of these wells were
tested upstream of the pipe junction.

(See diagram) The pressure is low on
the individual test because the water is
going down the well on the pump that
isn't running.



Flow test under "normal" conditions:

"Normal" conditions are when both wells are pumping together into the center pivot. We tested the flow from each individually while both were pumping. The total flow into the system would be the combined flow of each well pumping under "normal" conditions, (274 gpm +425 gpm = 699 gpm)



WATER RESOURCES RECEIVED

JUN 2 9 2015

RECEIVED

PUMPING PLANT TESTING, INC.

Reviewed by: JUN 19 1987

Professional Engineer

HAYS000633

DNISION OF WATER HESOURCES

STAFFORD

Page 60 of 79

SCANNED

MICROFILMED



# TIELD INSPECTION REPORT

	Partial
$\boxtimes$	Full

Re-Test					
Test 4 of 6 Diversion points  Firm/Field Office fumping Plant Testing, Inc.  Application No. 21729 Date 9/30/66 Inspector Fbert/Klassen  Field Area No. 2 G.M.D. No. 5 County Edwards					
Field Area No. 2 G.M.D. No. 5 County Edwards					
Current Landowner Connecticut General Life Insurance 70 Agri, Affiliates					
Address Box 1/62 North Platte NE 69103 Att n Jerry Weaver					
☐ Additional landowners and addresses identified in remarks section.  Water Use Classification: I. Domestic ( ) 2. Industrial ( ) 3. Irrigation (★)					
4. Municipal ( ) 5. Recreation ( ) 6. Stockwatering ( ) 7. Water Power ( )					
Groundwater (x) Drainage Basin Arkansas River					
Surface Water ( ) Stream					
Authorized Point of Diversion:   Well NC SE'/4   Sec. 29, T.25, R. 19  Approximately ft. North and ft. West of SE corner of Sec.					
Actual Point of Diversion:					
"Approved" Quantity 1000 AF "Approved" Diversion Rate 2900 g.p.m. (6,446 c.f.s.)					
Priority Date Jan 2, 1974 Approval of Application Date Feb. 27, 1976					
Perfection Date Dec. 31, 1981					
Other applications covering land and/or point of diversion None					
(include discussion of overlapping files in remarks section)  LAND TO BE INCLUDED ON CERTIFICATE:					
S T R NEW NWW SWW SEW TOTAL ACRES					
NE NW SW SE NW SW					
LAND IRRIGATED—YEAR OF RECORD					
S T R NE% NW% SW% SE% TOTAL ACRES					
NE NW SW SE NW SW SW SE NW SW SW SE					
APPLICATION OF WATER: Year of Record 1985 Hours Pumped 1850 or Quantity 244,6 AF					
MIN 19 1937					
Sol.					
Maximum Operating G.P.M. payen Of Water Equiv. c.f.s.					
Year of Record 1985 Extension of time requested: Yes No RECEIVED					
Total No. of Hours on land covered by this application 185					
Ac. Ft. Applied = $\frac{1850}{1850}$ hrs. $\times \frac{18}{24}$ g.p.m. $\times \frac{4.419}{24 \times 1000} = \frac{245}{1000}$ AF					
Acres of "Approved" Land irrigated /2 5 KS DEPT OF AGRICULTURE					
Ac. Ft. on "Approved" Land 2 4 5 ( O. 4 9 Ac. Ft./Ac.) MICROFILMED					
Ac. Ft. Used on "Approved" Land at "Approved" Rate or Less 275					
Proration Calculations 12 5 acres irrigated x 1.5 A.F. per acre = 188AF					
Perfected Rate 72 0 g.p.m. Perfected Quantity / 98 AF HAYS000634  DWB-101 COMpte fed by DOUG(45 E. BUSA 3-15-97 Revised March 1856 SCANNED					
DWR-101 COmpleted by Douglas E. Bush 3-18-8 Revised March 1886 SCANNED					

## GENERAL INFORMATION ON IRRIGATION SYSTEM:

☐ Center Pivot ☐ High Pressure ☐ Low Pressure	
Manufacturer Olsan Model 103 PL Serial No. 3999	
Drive Electric Length of Pivot Arm	
Design Pressure-Pivotp.s.i. Operating Pressure-Pivot	p.s.i.
End Gun? Yes End Gun Rating g.p.m. Toto	
Is end gun operating during test?yes	
☐ Gravity Irrigation (show test set on sketch)	
Number of gates open Normal Pipe Size	
Pressure at pumpp.s.i.	•
Other Type	•
ManufacturerModelSerial No	
Unusual Conditions/Other Info.	La Contract
	<del>-</del>
POWER UNIT INFORMATION:	
Manufacturer Ford Model No. 460 HP	
Serial No. 11669 K-26-TG Fuel Natural Gas Rated RPM	
	:
PUMP INFORMATION:	
Manufacturer Johnston Model No. Rated RPM —	
Serial No. CF2/229 Type Vertical Turbine No. stages	
Company of the American State of the Company of the	
GEAR HEAD INFORMATION:	
Manufacturer Amarillo Model No. 580	
Serial No. 87993 Drive Right Angle Ratio 5:4	
WELL INFORMATION:	
Date Drilled prior to San 1974 Original Depth 33 ft. Static Water Level When Drilled 4 ft	•
Tape Down Possible? Wo Water Level Measurement Tube? NO	
Measuring Pointft. above or below L.S.D.	WATER RESCURCES RECEIVED
ADDITIONAL REQUIREMENTS:	•
Mcter Required? Make of Meter ; :	JUN <b>2 9</b> 2015
Meter Model No. Serial No. Size	KS DEPT OF AGRICULTURE
Is Meter Installed Properly?	
Chemical Injection System? Yes Check Valve? 10 Low Pressure Drain	SCANNED
Vacuum Breaker? Are these anti-pollution devices installed properly? HAYS	8000635
If eligmicals are injected into system, please attach sketch of system.	

					1 1		
			.,				Ť
••			•			1 `	
			•			·	
	.						
N							_
							1
. 🕇							
. 1				!	]		
0.1						-	
Scale							-
	·				1		
54 - 1 - 1 - 1	]	-					
							_ ;
				3			
		1	•			-	
	1	1.					1
					İ		
	L					ļ	_
TEST OF DIVERSION	ON RATE:						
			^				
Length of time v	well has been ope	rating prior to test	een Pum	and Rivo	t		
Pipe Diameter (	I.D.) 73/4	inches					
					•		
Test No. 1-No	rmal Conditions		Test No. 2-	-Maximum Con	nditions		
R.P.M. POWEI	R UNIT 22/6 UNIT 176	<u>9                                    </u>	R.P.M. PO R.P.M. PU	WER UNIT _	<del></del>		
Pressure at Pum	ip 5-3	psi	Pressure at		psi		
☐ Jacuzzi Meter Tes	•	Meter T	dentification N	lo.			
			demail-ton 1				
Area Constant K	$C = 2.45 \times I.D.^{\circ}$	=	· · · · · · · · · · · · · · · · · · ·	Q	(gpm) = VK		
Velocity (fps)			Velocity (fp	s) ·	•		
1			1				
2			2				
3 4			3				
5					-		
6	<del></del>						
7 8:				· <del> </del>	•		
9				_			
10		•	10				
Total				<del>-</del>		* • • •	
Avg			vg. .P.M		•		
O.11.00.		J.					
N 100							WATER RESCURCES
☐ Propeller Meter 7	Test Manufa	cturer			Serial N	lo	RECEIVED
Meter Diameter		:	٠,	• •			1 1
							JUN 2 9 2015
Ending	gal.			·	-		
Beginning Difference	gal.				關ICRO	FILMED	VO DERT OF A ORIOUTY TO
Time			· · · · · · · · · · · · · · · · · · ·				KS DEPT OF AGRICULTURE
	gnm	Rate		enm ·			

Other Flow Meter

21729

Use Supplemental Sheet (include meter identification, data and calculations YS000636

**SCANNED** 

Rate = Volume (test)  time  How was the test volume determined? Not Debetaired Figure and an individual modes  TLATION OF WATER USE:  Year   House   Pumped   Pumped   Used   Used   Irrigated	L RECORDS:				-	
Rate = Kr × 3.6	Electricity	Supplier			_	
Rate = Kr × 3.6	Meter Manufactur	er	Ty	pe	Serial No	·
Rate = Volume (test)  Type Natura   Gas   Supplier Kansas - Nebracko  Rate = Volume (test)   Survey   Supplier Kansas - Nebracko  How was the test volume determined? Net   Petermined   Fagine act as individual meter  Travel   Hower Pumping   Used   Access   Impaired	Kwatt/r	ev r	revolutions	ts	seconds	•
Rate = Volume (test)  Type Natural Gas Supplier Kansas - Nebrack  Rate = Volume (test)  Itime  How was the test volume determined? Net Petroniaed Engine act as individual meter  ULATION OF WATER USE:  Year Pumping Used Impaired (hr)  1975 1260 1000 125  1176  11977 701 1000 130  11978  11979 1224 780 123  11981 1152 780 123  11981 1152 780 123  11982 1983 2007 8007 123  11982 1983 1000 8507 1257  11984 17007 8507 1257  11986 7188 1257  11986 7188 1257  11986 7188 1257  11986 7188 1257  11986 7188 1257  11976 1257  Water Function  Staffard Files  Water Resord  Received	Rate = $Kr \times 3.6$	_ =	_kw/hr	Hours =	kw-hr =	
Rate = Volume (test)  time  How was the test volume determined? Not Determined Fagine act as individual motor  ULATION OF WATER USE:  Year Pumped Pumped Rate Used Used Irrigated  (Ar)  1975 1260 1000 125  1976 1277 701 1000 130  1978 1979 1224 780 123  1980 1416 780 123  1981 1152 780 123  1982 1982 1982 1982  1983 2200						
How was the test volume determined? Not Debeniaed Engine and an individual moder  Vest Pumped Pumping Used Used (AF)  1975 1260 1000 125  1976 1977 701 1000 130  1979 1224 780 123  1980 1416 780 123  1981 1152 780 123  1982 1982 1983 2200 \$\frac{7}{800}\$			•			
Tested   Pumping   Pumpi	time	1	12 N.+ A.L.			يد د اد
Year   Hours   Prophing   Nate   Used   Local     1975   1260   1000   125     1976   1977   701   1000   130     1977   701   1000   130     1978   1979   1224   780   123     1980   1416   780   123     1981   1152   780   123     1982   1983   2200			dr 100 pere	CMINE OF C	THE NOT DY ING	signal welet
1975 1260 1000 125  1976  1977 701 1000 130  1978  1979 1224 780 123  1980 1416 780 123  1981 1152 780 123  1982  1983 2200 \$\frac{7}{800} \frac{7}{800} \fr		Hours Pumped	Pumping Rate	Used		
1977 701 1000 130  1978  1979 1224 780 123  1980 1416 780 123  1981 1152 780 123  1982  1982  1983 2200  800  123  1984 1700  850  125  125  125  125  125  125  125  1	1975	1260			125	
1979   1224   780   123     1980   1416   780   123     1981   1152   780   123     1982   1983   1200	1576	:				_
1980 1416 780 123  1980 1416 780 123  1981 1152 780 123  1982 1983 2200	_1977_	701	1000		130	_ ·
1980 1416 780 123  1981 1152 780 123  1982  1983 2200  800  123  1984 1700  850  125  125  125  125  125  125  125  1	1978					
1981   1152   780   123     1982   1983   2200   800   123     1984   1700   850   125     1985   1850   718   125     1986   718   125     1986   718   125     1986   718   125     1986   718   125     1986   718   125     1986   718   125     1986   718   125     1986   718   125     1987   1850   718   125     1988   1850   1850   1850   1850   1850     1982   1850   1850   1850   1850   1850     1982   1850   1850   1850   1850     1983   1850   1850   1850   1850     1983   123   1850   1850   1850     1983   123   1850   1850   1850     1983   123   1850   1850   1850     1983   123   1850   1850   1850     1983   1850   1850   1850   1850     1983   1850   1850   1850   1850     1984   1985   1850   1850   1850     1984   1985   1850   1850   1850     1984   1985   1850   1850   1850     1985   1850   1850   1850   1850     1985   1850   1850   1850   1850     1986   1850   185	1979	1224	780		123	_
1982  1983  2200	1980	1416	780		123	_
1983 2200 \$\frac{7}{800}\$\$  1984 1700 \$\frac{7}{850}\$\$  \$\frac{1985}{1985}\$  \text{1850}\$\$  1986  \text{718}\$\$  1986  \text{718}\$\$  \text{1986}  \text{50mm} \text{War sent to us from Jerry Weaver}  the Year of Record with (*) Source of Information  \text{5tafford File}  \text{1rrigated: this year }  \text{Alfalfa}  \text{Year of record }  Year of record	1981	1152	780		123	
1984 1700 # 850 # 125 #  ** 1985 1850 # 718 * 125 #  1986 718 * 125 #  1986 718 * 125 #  ** 1986 Team test on 9/30/86  #* ## ## ## ## ## ## ## ## ## ## ## ## #	1982		-			_
# 1985 18507 718*  1986  Toltained Frontest on 9/30/86  # obtained From WAR sent to us from Jerry Weaver  the Year of Record with (*)  Source of Information Stafford Files  Irrigated: this year Alfalfa Year of record Alfalfa  ARKS: See attached Sheet for logic in choosing a year  of record.  WATER RESCRIPTION	1983	_2200 Ŧ	800 F		123 <sup>∓</sup>	- · ·
1986  Tobtained From test on 9/30/86  Tobtained From WAR sent to us from Jerry Weaver  the Year of Record with (*)  Source of Information Stafford Files  Irrigated: this year Alfalfa Year of record Alfalfa  ARKS: See attached Sheet for logic in choosing a year  of record.  WATER RESORMED	1984	1700 <sup>∓</sup>	850 F			· · · ·
1986  Tobtained From test on 9/20/86  Tobtained From WAR sent to us from Jerry Weaver  ate Year of Record with (*)  Source of Information Stafford Files  Irrigated: this year Alfalfa Year of record Alfalfa  ARKS: See attached Sheet for logic in choosing a year  of record.  WATER RESC.  RECEIVE	# 1985	1850°	718*	<u> </u>	125#	
# obtained from WAR sent to us from Jerry Weaver  the Year of Record with (*)  Source of Information Stafford Files  Irrigated: this year Alfalfa Year of record Alfalfa  ARKS: See attached Sheet for logic in choosing a year  of record.  WATER RESC.  RECEIVE	1986	:	*			_
# obtained from WAR sent to us from Jerry Weaver  ate Year of Record with (*)  Source of Information Stafford Files  Irrigated: this year Alfalfa Year of record Alfalfa  ARKS: See attached Sheet for logic in choosing a year  of years.  WATER RESC.  RECEIVE		:	•			
Irrigated: this year Alfalfa Year of record Alfalfa  ARKS: See attached Sheet for logic in choosing a year  Of record.  WATER RESCRIPTION		<del>\</del>	ained from	test on 9/2	0/86	-
ARKS: See attached sheet for logic in choosing a year  Of record.  WATER RESCRIPTION		F_obto	ined from u	14R sent to	us from Terry	Weaver
of record.  WATERRESO  RECEIVE	te Year of Record with (	(*)	Source of Informa	ition Staff	iord Files	<u> </u>
of record.  WATERRESO  RECEIVE	Irrigated: this year	Alfalfa		Year of reco	ord Alfalfa	
of record.  WATER RESO		Hachel S			, .	
WATER RESC				)	, l	
11 to 1 A A						WATER RESCUR
JUN <b>2 9</b> 2						

Water Use Correspondent Lyle Kelbeck
Conducted by Sreeg Effect

AYS000637 SCANNED APPLICATION NO: 21729 NAME: Connecticut General Lite Insurance NC SE1/4

COLLI	INS MET	ER TI	EST		7					
	Collin	s Met	er No.		83	Meter	Calibr	ation	Factor	1955
	Pipe I	nside	⊋ Diame	ter (i	nches	73/4	Flow	Rate	Factor	145.4
	Test P	ress	ıre (ps	i) <u>5.</u>	3_	Test	RPM, Pu	mp)	768	
	Descri	ptio	of Te	st Loc	ation	In he	rizenta	pipe	botwe	<u>•n</u>
					-	·				
TEST	DATA:	<b>d</b> L	Check,	Initi	al	5,70	_ Rev	ersed	5.6	8

Meter Setting From Center of Pipe	Left Side (or Front Vertica	Side if	Right Side of Pipe (or Back Side if Vertical Test)		
1%6	5,44	5,52	5,67	5,56	
23/4	5,37	5,30	5.42	5,50	
3%6	4.55	4.59	4.60	4.47	

Velocity

Average Velocity of Water = Sum of Vel.  $\div$  12 = 5.77

Corrected Ave. Vel. = (Ave. Vel.) x (Calibration Factor) = 19559

Flow Rate = (Corrected Ave. Vel.) x (Flow Rate Factor) = 1,94 x 145,4 = 718



PUMPING PLANT TESTING, INC. JUN 2 9 2015

WATER RESOURCES

Reviewed ByE 1 Mith). W. &

KS DEPT OF AGRICULTURE

Professional Engineer JUN 19 1987

SCANNED

Velocity

Page 65 of 79

MICROFILMED

HAYS000638

大方行籍 はなるとはから からしない 人があるなかったださいん

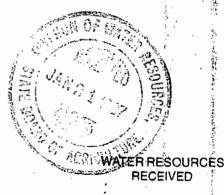
APPLICATION NO: 21,729

NAME: COUNECTICUT GRANKEL LIKE INSVANCE CO, INC.

## NOTES ON CHOOSING

THIS DEVELOPMENT HOPS HOPD SEVERAR UNIVERS SINCE 175 IN CEPTION IN 1975, WITH UNINELS FROM EUROPE & AROUND THE U.S. AT VAHOUS TIMES, A STATE OF CONFUSION HOS EXISTRO IN THE CHOP PLADUCTION RESPORT. ML OF THE WATER USE TOND EQUIPMENT RECORDS HOWE BEEN ENTIREL DESTROYED OR LOST, POWO THE SYSTEMS AND DUMPING PLANT COMPONENTS HOWE BEEN INTERCHONORD ONER THE YEARS.

SINCA LATE 1983, CONNECTICUT GENEVER HOS MADE A DILIGENT PERFORT TO KEEP GOOD RECORDS. THERE HARE, WOULD SERM KERSWARLE TO USE THE YEARS SINCE 1983 IN CHOSING A YEAR OF REURO.



JUN **2 9** 2015

00700

PUMPING PLANT TESTING, INC.

## KANSAS STATE BOARD OF AGRICULTURE Division of Water Resources

## MEMORANDUM

To: Files

Date: March 17, 1987

From: Douglas E. Bush

Re: Appropriation of Water

File No. 21,729

The Field Inspection Report for the above referenced file, conducted under contract by Pumping Plant Testing, Inc. has been reviewed. It meets the requirement specified in the scope of work.

The quantity perfected under the above referenced File No. was fully perfected in accordance to the acres irrigated. That is 500 acres irrigated x 1.5 acre-feet per acre = 750 acre-feet or 752 acre-feet because of the rounding of quantity.

The combined tested rates for the two wells located in the Northwest Quarter ( $NW_4$ ) of Section 29, Township 25 South, Range 19 West, Edwards County, Kansas, did not equal the rate when the wells were tested pumping by themselves and then added together. Pumping Plant Testing was contacted on March 17, 1987. It was learned that because of air being in the system, the rates were lower when tested by themselves. Therefore the rates for the two wells were prorated up to the combined rate as such: 263 gallons per minute + 313 gallons per minute = 576 gallons per minute. 263 gallons per minute divided by 576 gallons per minute  $= 0.46 \times 599$  (combined rate) = 273 gallons per minute [near the center of the Northwest Quarter ( $NW_4$ )]. 313 gallons per minute divided by 576 gallons per minute  $= 0.54 \times 599$  gallons per minute (combined rate) = 325 gallons per minute [in the Northeast Quarter of the Southwest Quarter of the Northwest Quarter ( $NE_4$   $SW_4$   $NW_4$ )].

The quantities for the wells located near the center of the Northwest Quarter (NW $_{3}$ ) and in the Northeast Quarter of the Southwest Quarter of the Northwest Quarter (NE $_{3}$  SW $_{3}$  NW $_{3}$ ) were provated by rate so the total quantity did not exceed a reasonable quantity for the land irrigated. The quantities were provated as such: 263 gallons per minute + 313 gallons per minute = 576 gallons per minute. 263 gallons per minute divided by 576 gallons per minute = 0.46 x 188 acre-feet (maximum allowed for irrigating 125 acres at 1.5 acre-feet per acre) = 86 acre-feet [near the center of the Northwest Quarter (NW $_{3}$ )], 313 gallons per minute divided by 576 gallons per minute = 0.54 x 188 acre-feet (maximum allowed for irrigating 125 acres at 1.5 acre-feet per acre) = 102 acre-feet [Northeast Quarter of the Southwest Quarter of the Northwest Quarter (NE $_{3}$  SW $_{3}$  NW $_{3}$ )].

The quantities for the wells located near the center of the Southwest Quarter (SW4) and in the Northeast Quarter of the Southwest Quarter of the Southwest Quarter (NE4 SW4 SW4) were prorated by rate so the total quantity did not exceed a reasonable quantity for the land irrigated. The quantities were prorated as such: 274 gallons per minute + 425 gallons per minute = 699 gallons per minute. 274 gallons per minute divided by 699 gallons per minute = 0.39 x 188 acre-feet (maximum allowed for irrigating 125 acres at 1.5 acre-feet per HAYSO00679

WATER RESOURCES RECEIVED

MICROFILMED

Memo page two File No. 21,729 March 17, 1987

gallons per minute divided by 699 gallons per minute =  $0.61 \times 188$  acre-feet (maximum allowed for irrigating 125 acres at 1.5 acre-feet per acre) = 114 acrefeet.

The acres shown to be irrigated by some pivots were over the 125 approved acres. The actual acres irrigated under all pivot irrigation systems is probably close to 125 acres as shown by the ASCS aerial photograph. Therefore, no prorating of quantity was done for irrigating unapproved land.

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

A limitation was needed on the combined rate, for the well located in the Southwest Quarter (SW $_{3}$ ) of said section and the well located in the Northeast Quarter of the Southwest Quarter of the Southwest Quarter (NE $_{3}$  SW $_{3}$  SW $_{3}$ ) of said section. This limitation limits the combined rate of these two wells to 700 gallons per minute when the wells are run simultaneously.

A limitation was needed on the total rate when all wells are being run simultaneously. The limitation limits the rate to 2,900 gallons per minute, the maximum appproved rate.

Douglas E. Bush
Hydrologist

DEB:jt

RECEIVED

SCANNED

JUN 19 1987

WATER RESOURCES RECEIVED

MICROFILMED

## Kansas State Board of Agriculture Division of Water Resources

## ADMINISTRATIVE POLICY No. 86-8

Subject:

Allowable Rates of Diversion and Maximum Annual Quantities for

Irrigation Use - Permits and Approvals

Reference:

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

Date:

21729

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 a	cres	3
	40 ac		
	120 a		
more	than	120	acres

450 g.p.m. 450 (+) 450 g.p.m. 900 (+) 8 g.p.m./acre 550+8× (+) 7 g.p.m./acre 700+7×

## **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 RESCURCES 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.

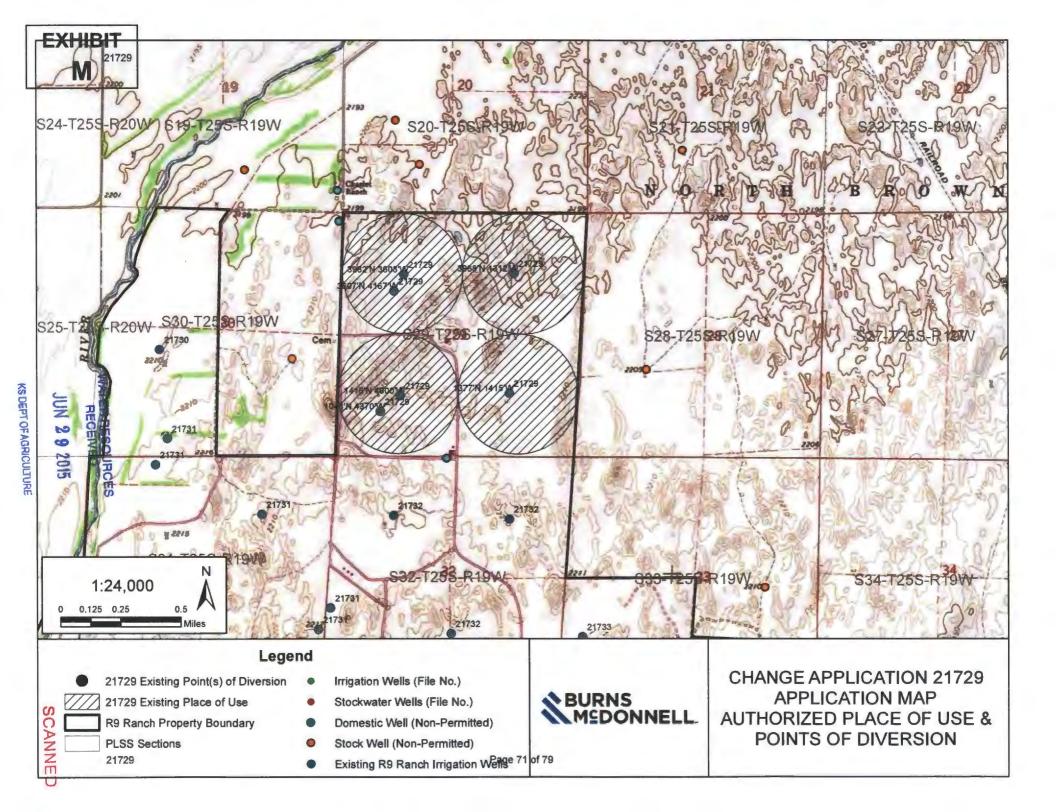
A further limiting factor to maximum allowable quantity is the availability of water from the proposed source of supply. If the source of supply is incapable of yielding a reasonably, sustainable (computed) quantity during the irrigation season in that area of the state, then the source becomes a further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

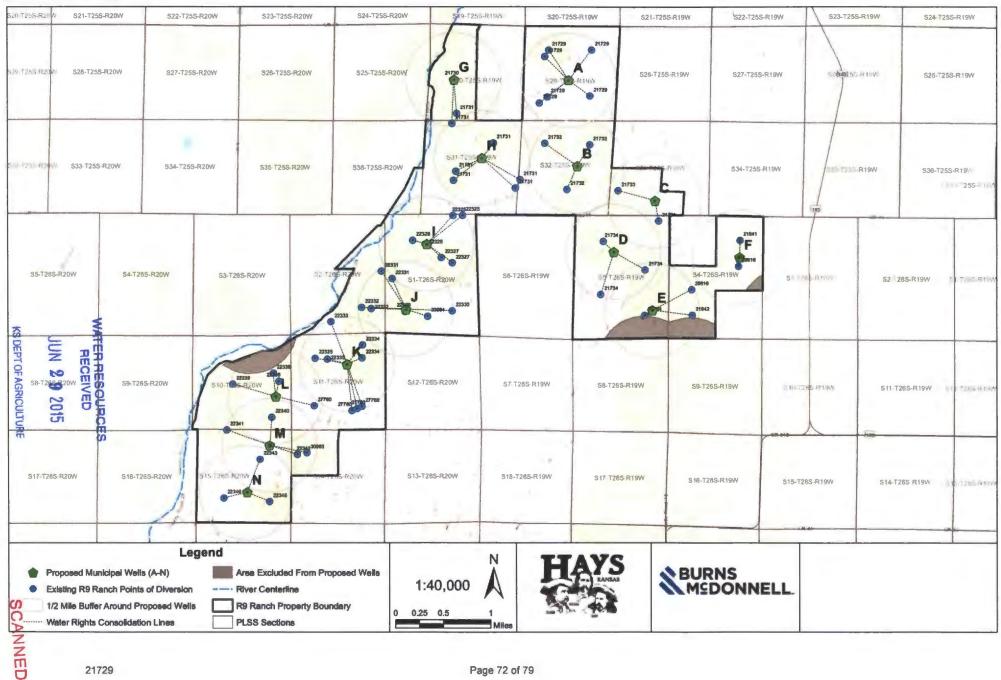
SCANNED

WATER RESOURCES RECEIVED

JUN 2 9 2015

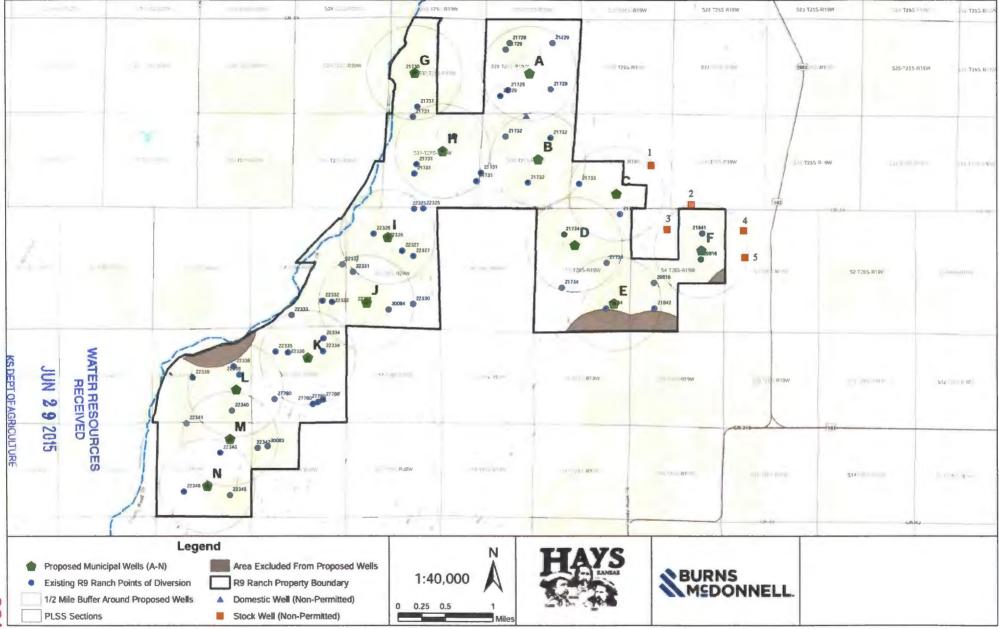


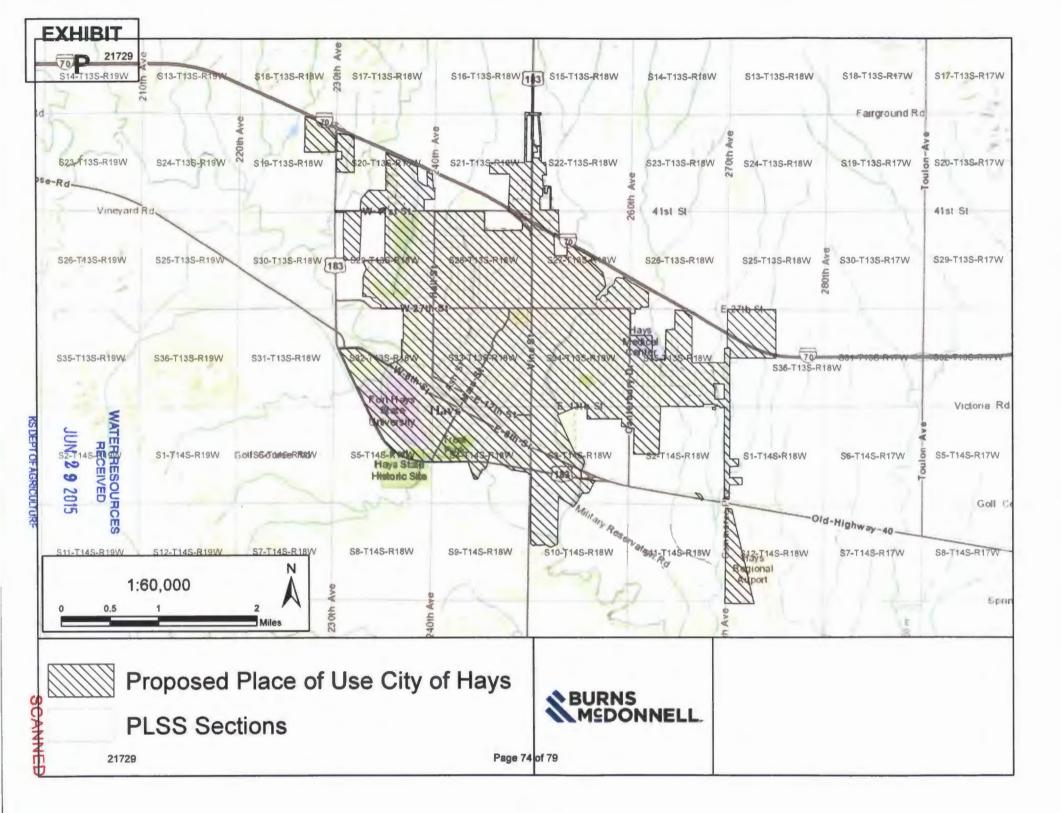


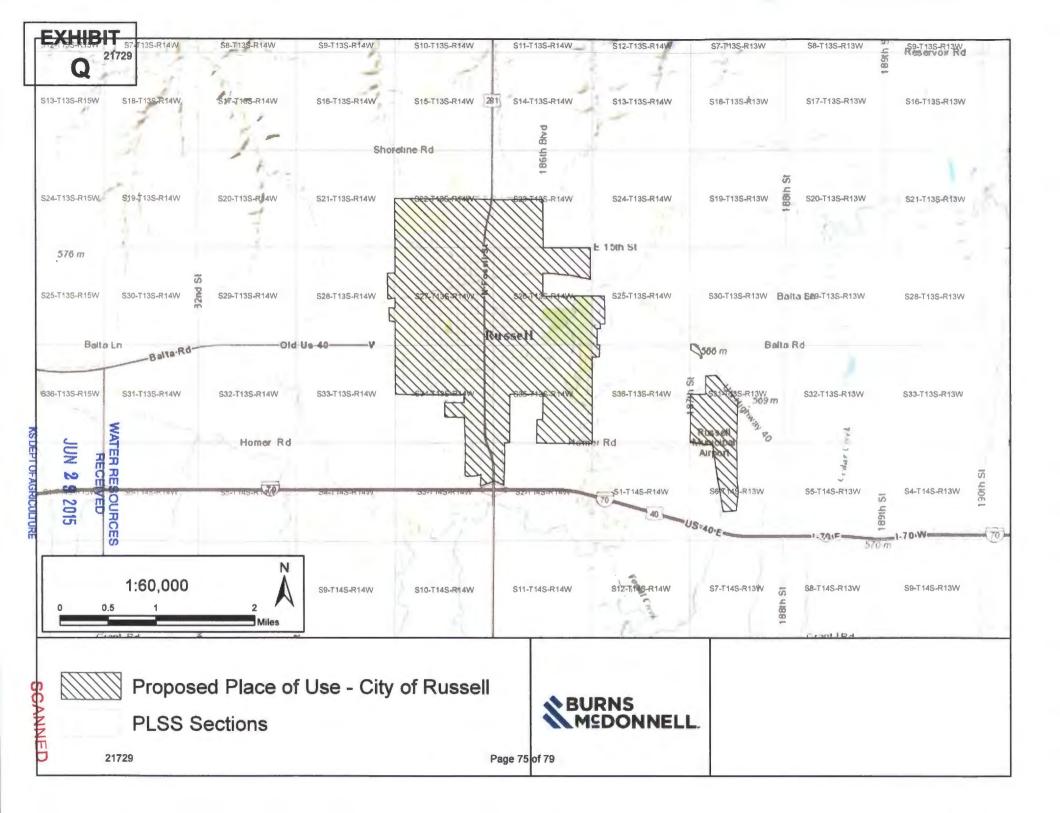


21729

EXHIBIT O 21729







Applican	ıť

21729

S	s Name	City of	Russe
		(Please	

# MUNICIPAL (PUBLIC WATER SUPPLY) APPLICATION SUPPLEMENTAL INFORMATION SHEET

(assigned by DWR)

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

Column 1	Column 2	Column 3	Column 4 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			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 this number exceeds 20%, please explain the large amount of unaccounted for water and describe any steps being taken to reduce it.

**EXHIBIT** 

R

#### SECTION 2: PAST WATER USE

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

)	TOTAL WATER	= Columns 1 + 2	ACCOUNTED FOR WATER = Columns 3 + 4 + 5 + 6				UNACCOUNTED FOR WATER
5 years ago	375,790,000	0	0	144,277,000	123,343,000	18,907,000	89,263,000
10 years ago	477,486,000	0	0	222,781,000	147,340,000	19.483,000	87,882,000
15 years ago	373,757,000	0	0	171,928,220	115,864,670	18,687,850	67,276,260
20 years ago							
RESO CEIVE	Raw Water Diverted Under Your Rights	Water Purchased From All Sources	Water Sold to Other Public Water Suppliers	Water Sold to Your Industrial, Stock, and Bulk Customers	Water Sold to Your Residential and Commercial Customers	Other Metered Water	Remaining Water Used (See Above Explanation)
≥ RH	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7

KS DEPT OF AGRICULTURE

## SECTION 3: PROJECTED FUTURE WATER NEEDS

PLEASE COMPLETE THE FOLLOWING TARLE SHOWING YOUR FUTURE WATER REQUIREMENTS FOR THE NEXT 20 YEARS.

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

## 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 4,710 15 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

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

RECEIVED

221,991,000

+ 4,475

÷ 365 Days/Year = 135.9

GALLONS PER PERSON PER DAY.

Amount of water in
Columns 5, 6, and 7
of Section 1

Population from Last
Year of Section 4

SECTION 6: AREA TO BE SERVED

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

Note that the actual quantity of "Unaccounted for Water" is lower than shown here. Large quantities diverted from the Pfeifer Wells are returned to the aquifer in the "Collector Well." See detailed explanation in the cover letter accompanying this application. Projected future water needs include losses in the collector well but when repaired or replaced, total raw water diversion will be reduced.

You mai/Jatisch additional information you believe will assist in informing the Division of the ame a few request.

SCANNE

21729 Applicant's Name	City Of Hays KS
	(Please Print)

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

Application File Number

(assigned by DWR)

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

Column 1	Column 2	Column 3	Column 4 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)
684,559,000			10,806,000	595,254,000	16,327,000	62,172,000
TOTAL WATER = Columns 1 + 2			UNACCOUNTED FOR WATER			

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

- The amount of raw water diverted from all of your points of diversion. Column 1:
- Column 2: The amount of water purchased wholesale from all other public water supply systems or the Kansas Water Office.
- The amount of water sold wholesale to all other public water supply systems. Column 3:
- 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
- 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 7, 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** S

#### SECTION 2: PAST WATER USE

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

	MPLETE THE FOLLO	WING TABLE FROM	YOUR PAST WATER USE	RECORDS.			
NO CA	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7
ESOURED 9 20	Raw Water Diverted Under Your Rights	Water Purchased From All Sources	Water Sold to Other Public Water Suppliers	Water Sold to Your Industrial, Stock, and Bulk Customers	Water Sold to Your Residential and Commercial Customers	Other Metered Water	Remaining Water Used (See Above Explanation)
20 years ago	592,323,000			5,029,000	469,314,000	5,155,000	112,825,000
15 years ago	780,527,000			10,619,000	587,965,000	10,470,000	171,473,000
10 years ago	706,926,000			7,103,000	639,222,000	20,861,000	39,740,000
5 years ago	693,966,000			13,537,000	581,900,000	19,362,000	114,383,000
	TOTAL WATER	= Columns 1 + 2	Α	CCOUNTED FOR WATER		UNACCOUNTED FOR WATER	

NUC

2 9 2015

SCANNEL

SECTION 3. PROJECTED FUTURE WATER NEEDS	
DI EASE COMPLETE THE FOLLOWING TARLE SHOWING YOUR FUTURE WATER REQUIREMENTS FOR THE NEXT 20 YEARS:	

	PLEASE COMPLETE THE	E FOLLOWING TABLE	E SHOWING YOUR FUTUR	RE WATER REQUIREMEN	TS FOR THE NEXT 20 YEA	RS:	
	Column 1	Column 2	Column 3	Column 4 Water Sold to Your	Column 5 Water Sold to Your	Cotumn 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 Explanation on other side)
Year 5	753,014,800			11,886,600	654,779,400	17,959,700	68,389,200
Year 10	828,316,390			13,075,260	720,257,340	19,755,670	75,228,120
Year 15	911,148,029			14,382,786	792,283,074	21,731,237	82,750,932
Year 20	1,002,262,832			15,821,065	871,511,381	23,904,361	91,026,025
	TOTAL WATER = Columns 1 + 2		ACCOUNTED FOR WATER = Columns 3 + 4 + 5 + 6				UNACCOUNTED FOR WATER

#### **SECTION 4: POPULATION AND SERVICE CONNECTIONS** ESTIMATE THE NUMBER OF PERSONS DIRECTLY SERVED BY YOUR WATER DISTRIBUTION SYSTEM

#### PAST POPULATION - PROVIDE INFORMATION BELOW: (CENSUS BUREAU INFORMATION)

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

#### PROJECTED FUTURE POPULATION **ESTIMATE FUTURE POPULATION AND SUBSTANTIATE NUMBERS ON SEPARATE ATTACKMENTS**

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

Provide number of current active service connections:

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

SECTION 5:	PRESENT GALLONS PER PERSON PER DAY
8	CALCULATE YOUR GALLONS PER PERSON PER DA

Population from Last

Year of Section 4

whater in Columns 5, 6, and 7 + Population + 365 Days/Year = Gallons per Person per Day RECEIVE 365 Days/Year = 88 **67**3,753,000

GALLONS PER PERSON PER DAY.

SECTION 6: AREA TO BE SERVED

Amount of water in Columns 5, 6, and 7

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 Hays, KS Municipal Water Supply

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

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

21729

Page 79 of 79