

Kansas Department of Agriculture  
Division of Water Resources  
**PERMIT OF NEW APPLICATION WORKSHEET**

1. File Number: <p style="text-align: center; font-size: 1.2em;">49,932</p>	2. Status Change Date: <p style="text-align: center; font-size: 1.2em;">1/17/2018</p>	3. Field Office: <p style="text-align: center; font-size: 1.2em;">01</p>	4. GMD: <p style="text-align: center; font-size: 1.2em;">0</p>
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5. Status:       Approved       Denied by DWR/GMD       Dismiss by Request/Failure to Return

6. Enclosures:     Check Valve       N of C Form       Water Tube       Driller Copy       Meter

7a. Applicant(s) New to system <input type="checkbox"/>	Person ID <b>65391</b> Add Seq# _____
ROGER D BECKER TRUST 1095 52ND RD CORNING KS 66417	
7b. Landowner(s) New to system <input type="checkbox"/>  <p style="font-size: 1.5em; margin-left: 20px;">7a</p>	
Person ID _____ Add Seq# _____	Notarized WUC Form <input type="checkbox"/>

7c. Landowner(s) New to system <input type="checkbox"/>	Person ID <b>65840</b> Add Seq# _____
ROYCE M & MONICA K BECKER 761 J RD CORNING KS 66417	
7d. Misc. New to system <input type="checkbox"/>	
Person ID _____ Add Seq# _____	Notarized WUC Form <input type="checkbox"/>
MIDWEST IRRIGATION % KEITH GRIMM 2991 GOLDFINCH RD HIAWATHA KS 66434 8371	

8. WUR Correspondent  
New to system   
Overlap File (s) WUC Agree  Yes  No

Person ID \_\_\_\_\_  
Add Seq# \_\_\_\_\_

7a.

9. Use of Water:    Changing?     Yes     No

Groundwater     Surface Water

IRR           REC           DEW           MUN

STK           SED           DOM           CON

HYD DRG     WTR PWR     ART RECHRG

IND SIC: \_\_\_\_\_     OTHER: \_\_\_\_\_

10. Completion Date: **12/31/2019**      11. Perfection Date: **12/31/2023**      12. Exp Date: \_\_\_\_\_

13. Conservation Plan Required?  Yes  No Date Required: \_\_\_\_\_ Date Approved: \_\_\_\_\_ Date to Comply: \_\_\_\_\_

14. Water Level Measuring Device?  Yes  No Date to Comply: \_\_\_\_\_ Date WLMD Installed: \_\_\_\_\_

Date Prepared: **12/4/2018**    By: **DWS**  
Date Entered: **1/18/2018**    By: **LM**

File No. **49,932**      15. Formation Code: 100      Drainage Basin: **VERMILLION RIVER**      County: **NM**      Special Use:      Stream:

16. Points of Diversion										17. Rate and Quantity				
T MOD DEL ENT	PDIV	Qualifier	S	T	R	ID	'N	'W		Authorized		Additional		Overlap PD Files
										Rate gpm	Quantity af	Rate gpm	Quantity af	
√	86416	SE SE SE	33	4	12E	1	225	325	(Geo-Ctr)	800	778.8	800	778.8	None
√	86417	SE SE SE	33	4	12E	2	300	450	Batt 1 of 4					
√	86418	SE SE SE	33	4	12E	3	300	350	Batt 1 of 4					
√	86419	SE SE SE	33	4	12E	4	200	250	Batt 1 of 4					
√	86420	SE SE SE	33	4	12E	5	100	250	Batt 1 of 4					

18. Storage: Rate \_\_\_\_\_ NF Quantity \_\_\_\_\_ ac/ft      Additional Rate \_\_\_\_\_ NF Additional Quantity \_\_\_\_\_ ac/ft

19. Limitation: \_\_\_\_\_ af/yr at \_\_\_\_\_ gpm ( \_\_\_\_\_ cfs) when combined with file number(s) \_\_\_\_\_  
 Limitation: \_\_\_\_\_ af/yr at \_\_\_\_\_ gpm ( \_\_\_\_\_ cfs) when combined with file number(s) \_\_\_\_\_

20. Meter Required?  Yes  No      To be installed by **12/31/2019**      Date Acceptable Meter Installed \_\_\_\_\_

21. Place of Use										NE 1/4				NW 1/4				SW 1/4				SE 1/4				Total	Owner	Chg? NO	Overlap Files
T MOD DEL ENT	PUSE	S	T	R	ID	NE 1/4	NW 1/4	SW 1/4	SE 1/4	NE 1/4	NW 1/4	SW 1/4	SE 1/4	NE 1/4	NW 1/4	SW 1/4	SE 1/4	NE 1/4	NW 1/4	SW 1/4	SE 1/4								
						√	68618	28	4	12E	1									40	40	40	40			40	40	240	7a.
√	68223	33	4	12E	1	40	40	40	33									35	40	40	40	308 <i>153</i>	7a.	No	49,775*				
√	68619	33	4	12E	2					40	40	40	40					<i>* No New AC Authorized</i>				160	7c.	No	None				

Comments: \*File No. 49,775 overlaps the 155 acres in the SE1/4 of Sec. 33, but can't physically serve this place of use (located over a mile away).  
 \*

**KANSAS DEPARTMENT OF AGRICULTURE**  
**Division of Water Resources**

**M E M O R A N D U M**

**TO:** Files

**DATE:** December 4, 2017

**FROM:** Doug Schemm

**RE:** Application, File No. 49,932

Roger D. Becker Trust has filed the referenced application to appropriate 778.8 acre-feet of groundwater from a battery of four wells at a rate of diversion of 800 gallons per minute to irrigate 708 acres in Nemaha County, within the Vermillion River Drainage Basin. The battery of wells will be located in the Southeast Quarter of Section 33, Township 4 South, Range 12 East, Nemaha County. The proposed place of use is primarily owned by the applicant, and a portion is owned by Royce & Monica Becker (Applicant's son). There are no overlapping points of diversion. Appropriation of Water, File No. 49,775 overlaps a small portion of the place of use. However, the applicant is not planning on running the pipe necessary to irrigate this place of use under File No. 49,775, which is over a mile away from the well battery. Therefore, per K.A.R. 5-3-5n, this minor overlap is allowable because this place of use (SE $\frac{1}{4}$  of Section 33) cannot be physically served by the senior file. The requested quantity of 778.8 acre-feet for the irrigation of 708 acres of land is equivalent to 1.1 acre-feet per acre, which is the maximum allowable quantity for irrigation in Nemaha County per K.A.R. 5-3-19.

The applicant did not identify any domestic wells within one-half mile, and the map was signed to verify this. A review of aerial photographs and the KGS WWC-5 database does not show any nearby domestic wells either. The WRIS database shows the only other permitted well within the two-mile circle is the applicant's file No. 49,775. No nearby well owner letters are required. The proposed point of diversion, geographic center of the well battery, meets minimum well spacing criteria to all other wells.

Based on the geographical location of the wells, and the test hole lithology, it appears that the source of supply is groundwater from glacial drift deposits. This is also consistent with the source of water for the applicant's senior File No. 49,775, area domestic wells, and KGS test holes. A well log provided with the application shows the primary aquifer consists of a sand and gravel zone approximately 58 feet in thickness, extending from 266 feet to 324 feet below ground surface, where shale bedrock was encountered. This thickness corresponds with the deposit thickness shown on the "Saturated Thickness and Specific Yield of Cenozoic Deposits in Kansas" map by Bayne and Ward, 1967, which shows glacial deposits of roughly 360 feet thick in this local area. In addition, a KGS test hole in the NW $\frac{1}{4}$  of adjacent Section 34, encountered a gravel zone immediately above bedrock extending from 330 feet to 334 feet.

Further review of the "Geohydrology of Nemaha County, Northeastern Kansas" also shows that several other wells in this local area have total depths exceeding 300 feet and are all producing from glacial drift deposits. Figure 6 of this publication shows that the well is in the deepest portion of a glacial valley that extends from southwest to northeast across this area. The well depths and thickness contours clearly indicate that significant glacial drift deposits extend throughout this area.

Per the requirements in K.A.R. 5-3-11, safe yield is determined by the extent of the unconfined aquifer (glacial drift), within a two-mile circle radius of the point of diversion, which establishes the area of consideration. As detailed above, DWR staff reviewed domestic well logs, test hole log data, and published reports, and based on this review the glacial aquifer extends across the entire circle. Therefore, the area of consideration is 8,042 acres. With a potential annual recharge of 4.5 inches, and 100% of recharge available for appropriation, safe yield was determined to be 3,015.75 acre-feet. The applicant's senior file has appropriated 290 acre-feet, leaving 2,725.75 acre-feet available for appropriation, and the application meets safe yield criteria.

Becker Memorandum  
File No. 49,932  
Page 2

In accordance with K.S.A. 82a-706c, the Chief Engineer retains full authority to require any water user to install meters, gages, or other measuring devices, which devices he or she or his or her agents may read at any time. Water flowmeter requirements are further described in K.A.R. 5-1-4 through K.A.R. 5-1-12. If any chemical or foreign substance is injected into the water pumped under this permit, a check valve will also need to be installed.

In a November 29, 2017 discussion, Katie Tietsort, Water Commissioner, Topeka Field Office, recommended approval of the referenced application. Based on the above discussion, well spacing and safe yield criteria are met, and approval of the application will not impair senior water rights nor prejudicially or unreasonably affect the public interest, it is recommended that the referenced application be approved.

Douglas W. Schemm  
Environmental Scientist  
Topeka Field Office

1320 Research Park Drive  
Manhattan, Kansas 66502  
(785) 564-6700



900 SW Jackson, Room 456  
Topeka, Kansas 66612  
(785) 296-3556

Jackie McClaskey, Secretary

Governor Sam Brownback

January 18, 2018

ROGER D BECKER TRUST  
1095 52<sup>ND</sup> RD  
CORNING KS 66417

**FILE COPY**

Re: Appropriation of Water, File No. 49,932

Dear Mr. Becker:

There is enclosed a permit to appropriate water authorizing you to proceed with construction of the proposed diversion works (except those dams and stream obstructions regulated by K.S.A. 82a-301 through 305a), to divert such unappropriated water as may be available from the source and at the location specified in the permit, and to use it for the purpose and at the location described in the permit.

Your attention is directed to the enclosures and to the terms, conditions, and limitations specified in these approval documents. A water meter is required on the proposed diversion works and you must install it prior to water being put to beneficial use in order for you to maintain accurate records of water use. The meter should be used to provide the information required on the annual water use report.

Failure to notify the Chief Engineer of the Division of Water Resources of the completion of the diversion works within the time allowed, or within any authorized extension of time thereof, will result in the dismissal of this permit. Enclosed is a form which may be used to notify the Chief Engineer that the proposed diversion works have been completed. All requests for extensions of time to complete diversion works, or to perfect appropriations, must be submitted to the Chief Engineer before the expiration of time originally set forth in the permit to complete diversion works or to perfect an appropriation. If for any reason, you require an extension of time, you must request it before the expiration of time set forth in this permit. Failure to comply with this regulation will result in the dismissal of your permit or your water right. Any request for an extension of time shall be accompanied by the required statutory fee, which is currently \$100.00.

There is also enclosed an information sheet setting forth the procedure to obtain a Certificate of Appropriation which will establish the extent of your water right. If you have any questions, please contact our office. If you wish to discuss this specific file, please have the file number ready so that we may help you more efficiently.

Sincerely,

Kristen A. Baum  
New Application Unit Supervisor  
Water Appropriation Program

KAB:dws  
Enclosures

pc: Topeka Field Office  
Royce & Monica Becker  
Keith Grimm – MWI

  
 THE STATE OF KANSAS

**KANSAS DEPARTMENT OF AGRICULTURE**  
 Jackie McClaskey, Secretary of Agriculture

**DIVISION OF WATER RESOURCES**  
 David W. Barfield, 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, **File No. 49,932** of the applicant

**ROGER D BECKER TRUST**  
**1095 52ND RD**  
**CORNING KS 66417**

for a permit to appropriate water for 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 (except those dams and stream obstructions regulated by K.S.A. 82a-301 through 305a, as amended), 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 **November 2, 2017**.
2. That the water sought to be appropriated shall be used for irrigation use on land described in the application, as follows:

Sec.	Twp.	Range	NE¼				NW¼				SW¼				SE¼				TOTAL
			NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	
28	4S	12E								40	40	40	40			40	40	240	
33	4S	12E	40	40	40	33	40	40	40					35	40	40	40	468	

3. That the authorized source from which the appropriation shall be made is groundwater, to be withdrawn by means of a battery of four (4) wells with a geographic center located in the Southeast Quarter of the Southeast Quarter of the Southeast Quarter (SE¼ SE¼ SE¼) of Section 33, more particularly described as being near a point 225 feet North and 325 feet West of the Southeast corner of said section, in Township 4 South, Range 12 East, Nemaha County, Kansas, located substantially as shown on the topographic map accompanying the application.

4. That the appropriation sought shall be limited to a maximum diversion rate not in excess of **800 gallons per minute** (1.78 c.f.s.) and to a quantity not to exceed **778.8 acre-feet** of water for any calendar year.

5. That installation of works for diversion of water shall be completed on or before **December 31, 2019**, or within any authorized extension thereof. The applicant shall notify the Chief Engineer and pay the statutorily required field inspection fee, which is currently \$400.00, when construction of the works has been completed. Failure to timely submit the notice and the fee will result in revocation of the permit. Any request for an extension of time shall be accompanied by the required statutory fee, which is currently \$100.00.

6. That the proposed appropriation shall be perfected by the actual application of water to the proposed beneficial use on or before **December 31, 2023**, or any authorized extension thereof. Any request for an extension of time shall be submitted prior to the expiration of the deadline and shall be accompanied by the required statutory fee, which is currently \$100.00.
7. 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 for perfection or any authorized extension thereof.
8. That the use of water herein authorized shall not be made so as to impair any use under existing water rights nor prejudicially and unreasonably affect the public interest.
9. 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.
10. That this permit does not constitute authority under K.S.A. 82a-301 through 305a to construct any dam or other obstruction; nor does it grant any right-of-way, or authorize entry upon or injury to, public or private property.
11. That all diversion works constructed under the authority of this permit into which any type of chemical or other foreign substance will be injected into the water pumped from the diversion works shall be equipped with an in-line, automatic quick-closing, check valve capable of preventing pollution of the source of the water supply. The type of valve installed shall meet specifications adopted by the Chief Engineer and shall be maintained in an operating condition satisfactory to the Chief Engineer.
12. That all wells with a diversion rate of 100 gallons per minute or more drilled under the authority of this permit shall have a tube or other device installed in a manner acceptable to, and in accordance with specifications adopted by, the Chief Engineer. This tube or device shall be suitable for making water level measurements and shall be maintained in a condition satisfactory to the Chief Engineer.
13. That an acceptable water flow meter shall be installed and maintained on the diversion works authorized by this permit in accordance Kansas Administrative Regulations 5-1-4 through 5-1-12 adopted by the Chief Engineer. This water flow meter shall be used to provide an accurate quantity of water diverted as required for the annual water use report (including the meter reading at the beginning and end of the report year).
14. That the applicant shall maintain accurate and complete records from which the quantity of water diverted during each calendar year may be readily determined and the applicant shall file an annual water use report with the Chief Engineer by March 1 following the end of each calendar year. Failure to file the annual water use report by the due date shall cause the applicant to be subject to a civil penalty.
15. That no water user shall engage in nor allow the waste of any water diverted under the authority of this permit.
16. 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.
17. That the right to appropriate water under authority of this permit is subject to any minimum desirable streamflow requirements identified and established pursuant to K.S.A. 82a-703c for the source of supply to which this water right applies.

18. That this permit is limited such that all wells shall be located within a three hundred (300) foot radius circle, in the same local source of supply, and shall supply water to a common distribution system.

**RIGHT TO A HEARING AND TO ADMINISTRATIVE REVIEW**

If you are aggrieved by this Order, then pursuant to K.S.A. 82a-1901, you may:

- 1) request an evidentiary hearing before the Chief Engineer, or
- 2) request administrative review by the Secretary of Agriculture.

Failure to request an evidentiary hearing before the Chief Engineer does not preclude your right to administrative review by the Secretary. To obtain an evidentiary hearing before the Chief Engineer, a written request for hearing must be filed within 15 days after service of this Order as provided in K.S.A. 77-531 (i.e., **within a total of 18 days after this Order was mailed to you**), with: Kansas Department of Agriculture, Attn: Legal Section, 1320 Research Park Drive, Manhattan, Kansas 66502, FAX (785) 564-6777.

If you do not file a request for an evidentiary hearing before the Chief Engineer, you may petition for administrative review of the Order by the Secretary of Agriculture. A petition for review shall be in writing and state the basis for requesting administrative review. The request for hearing may be denied if the request fails to clearly establish factual or legal issues for review. See K.S.A. 77-527. The petition must be filed within 30 days after service of this Order as provided in K.S.A. 77-531 (i.e., **within a total of 33 days after this Order was mailed to you**), and be filed with: Secretary of Agriculture, Attn: Legal Division, Kansas Department of Agriculture, 1320 Research Park Drive, Manhattan, Kansas 66502, FAX (785) 564-6777.

If neither a request for an evidentiary hearing nor a petition for administrative review is filed as set forth above, then this Order shall be effective and become a final agency action as defined in K.S.A. 77-607(b). Failure to timely request either an evidentiary hearing or administrative review may preclude further judicial review under the Kansas Judicial Review Act.

Ordered this 17<sup>th</sup> day of January, 2018, in Topeka, Shawnee County, Kansas.

*Lane P. Letourneau*

Lane P. Letourneau, P.G.  
Program Manager  
Water Appropriation Program  
Division of Water Resources  
Kansas Department of Agriculture

State of Kansas                    )  
  ) SS  
County of Riley                    )

The foregoing instrument was acknowledged before me this 17<sup>th</sup> day of January, 2018, by Lane P. Letourneau, P.G., Program Manager, Division of Water Resources, Kansas Department of Agriculture.



*Danielle Wilson*

Notary Public



**CERTIFICATE OF SERVICE**

On this <sup>18<sup>th</sup></sup> day of <sup>January</sup>, 2018, I hereby certify that the foregoing Approval of Application, File No. 49,932, dated <sup>January 17, 2018</sup> was mailed postage prepaid, first class, US mail to the following:

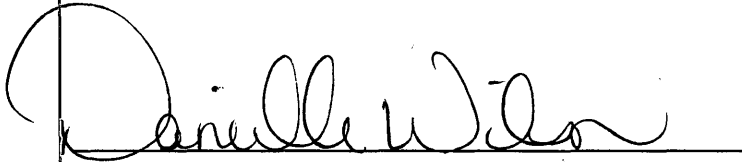
ROGER D BECKER TRUST  
1095 52ND RD  
CORNING KS 66417

With photocopies to:

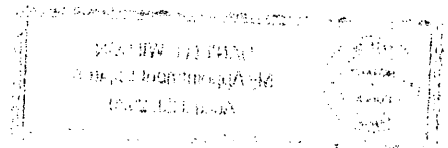
ROYCE M & MONICA K BECKER  
761 J RD  
CORNING KS 66417

MIDWEST IRRIGATION  
% KEITH GRIMM  
2991 GOLDFINCH RD  
HIAWATHA KS 66434 8371

Topeka Field Office



Division of Water Resources



APPLICATION COMPLETE  
11/29/2017  
Reviewer DWS



THE STATE OF KANSAS

KANSAS DEPARTMENT OF AGRICULTURE  
Jackie McClaskey, Secretary of Agriculture

DIVISION OF WATER RESOURCES  
David W. Barfield, Chief Engineer

File Number 49932  
This item to be completed by the Division of Water Resources.

WATER RESOURCES RECEIVED  
NOV 02 2017  
9:38  
KS DEPT OF AGRICULTURE

APPLICATION FOR PERMIT TO APPROPRIATE WATER FOR BENEFICIAL USE

Filing Fee Must Accompany the Application  
(Please refer to Fee Schedule attached to this application form.)

To the Chief Engineer of the Division of Water Resources, Kansas Department of Agriculture,  
1320 Research Park Drive, Manhattan, KS 66502:

1. Name of Applicant (Please Print): ROGER D BECKER TRUST  
Address: 1095 52ND RD  
City: CORNING State: KS Zip Code 66417  
Telephone Number: (785) 868-3255

2. The source of water is:  surface water in \_\_\_\_\_ (stream)  
OR  groundwater in VERMILLION RIVER (drainage basin)

Certain streams in Kansas have minimum target flows established by law or may be subject to administration when water is released from storage for use by water assurance district members. If your application is subject to these regulations on the date we receive your application, you will be sent the appropriate form to complete and return to the Division of Water Resources.

3. The maximum quantity of water desired is 778.8 acre-feet OR \_\_\_\_\_ gallons per calendar year, to be diverted at a maximum rate of 800 gallons per minute OR \_\_\_\_\_ cubic feet per second.

Once your application has been assigned a priority, the requested maximum rate of diversion and maximum requested quantity of water under that priority number can **NOT** be increased. Please be certain your requested maximum rate of diversion and maximum quantity of water are appropriate and reasonable for your proposed project and are in agreement with the Division of Water Resources' requirements.

4. The water is intended to be appropriated for (Check use intended):  
(a)  Artificial Recharge (b)  Irrigation (c)  Recreational (d)  Water Power  
(e)  Industrial (f)  Municipal (g)  Stockwatering (h)  Sediment Control  
(i)  Domestic (j)  Dewatering (k)  Hydraulic Dredging (l)  Fire Protection  
(m)  Thermal Exchange (n)  Contamination Remediation

YOU **MUST** COMPLETE AND ATTACH ADDITIONAL DIVISION OF WATER RESOURCES FORM(S) PROVIDING INFORMATION TO SUBSTANTIATE YOUR REQUEST FOR THE AMOUNT OF WATER FOR THE INTENDED USE REFERENCED ABOVE.

For Office Use Only:  
F.O. GMD Meets K.A.R. 5-3-1 (YES/NO) Use IRR Source (G) S County NM By AW Date 11/2/17  
Code REG Fee \$ 400 TR # \_\_\_\_\_ Receipt Date 11/2/17 Check # 1731

11/13/2017 LSMANNED

Geo-Center: SE SE SE, 33-4S-12E, Nemaha Co.

225' N & 325' W

File No. 49,932

*Basin: 12*

5. The location of the proposed wells, pump sites or other works for diversion of water is:

**Note:** For the application to be accepted, the point of diversion location must be described to at least a 10 acre tract, unless you specifically request a 60 day period of time in which to locate the site within a specifically described, minimal legal quarter section of land.

*Batt 1 of 4*

(A) One in the SE quarter of the SE quarter of the SE quarter of Section 33, more particularly described as being near a point 300 feet North and 450 feet West of the Southeast corner of said section, in Township 4 South, Range 12 EAST, NEMAHA County, Kansas. ~~Geo-Center~~

*Batt 2 of 4*

(B) One in the SE quarter of the SE quarter of the SE quarter of Section 33, more particularly described as being near a point 300 feet North and 350 feet West of the Southeast corner of said section, in Township 4 South, Range 12 (East) West (circle one), NM County, Kansas.

*3 of 4*

(C) One in the SE quarter of the SE quarter of the SE quarter of Section 33, more particularly described as being near a point 200 feet North and 250 feet West of the Southeast corner of said section, in Township 4 South, Range 12 (East) West (circle one), Nm County, Kansas.

*4 of 4*

(D) One in the SE quarter of the SE quarter of the SE quarter of Section 33, more particularly described as being near a point 100 feet North and 250 feet West of the Southeast corner of said section, in Township 4 South, Range 12 (East) West (circle one), Nm County, Kansas.

If the source of supply is groundwater, a separate application shall be filed for each proposed well or battery of wells, except that a single application may include up to four wells within a circle with a quarter (1/4) mile radius in the same local source of supply which do not exceed a maximum diversion rate of 20 gallons per minute per well.

A battery of wells is defined as two or more wells connected to a common pump by a manifold; or not more than four wells in the same local source of supply within a 300 foot radius circle which are being operated by pumps not to exceed a total maximum diversion rate of 800 gallons per minute and which supply water to a common distribution system.

6. The owner of the point of diversion, if other than the applicant is (please print):

Same

(name, address and telephone number)

You must provide evidence of legal access to, or control of, the point of diversion from the landowner or the landowner's authorized representative. Provide a copy of a recorded deed, lease, easement or other document with this application. In lieu thereof, you may sign the following sworn statement:

I have legal access to, or control of, the point of diversion described in this application from the landowner or the landowner's authorized representative. I declare under penalty of perjury that the foregoing is true and correct.

Executed on 10-31, 2017.

Roger D. Becher  
Applicant's Signature

7. The proposed project for diversion of water will consist of BATTERY OF 4 WELLS  
(number of wells, pumps or dams, etc.)

and (was)(will be) completed (by) SPRING 2018  
(Month/Day/Year - each was or will be completed)

8. The first actual application of water for the proposed beneficial use was or is estimated to be Spring 2018  
(Mo/Day/Year)

9. Will pesticide, fertilizer, or other foreign substance be injected into the water pumped from the diversion works?

Yes  No If "yes", a check valve shall be required.

All chemigation safety requirements must be met including a chemigation permit and reporting requirements.

*MA*

10. If you are planning to impound water, please contact the Division of Water Resources for assistance, prior to submitting the application. Please attach a reservoir area capacity table and inform us of the total acres of surface drainage area above the reservoir.

Have you also made an application for a permit for construction of this dam and reservoir with the Division of Water Resources?  Yes  No

• If yes, show the Water Structures permit number here \_\_\_\_\_

• If no, explain here why a Water Structures permit is not required \_\_\_\_\_

GROUNDWATER WELL

11. The application must be supplemented by a U.S.G.S. topographic map, aerial photograph or a detailed plat showing the following information. On the topographic map, aerial photograph, or plat, identify the center of the section, the section lines or the section corners and show the appropriate section, township and range numbers. Also, please show the following information:

- (a) The location of the proposed point(s) of diversion (wells, stream-bank installations, dams, or other diversion works) should be plotted as described in Paragraph No. 5 of the application, showing the North-South distance and the East-West distance from a section line or southeast corner of section.
- (b) If the application is for groundwater, please show the location of any existing water wells of any kind within 1/2 mile of the proposed well or wells. Identify each existing well as to its use and furnish the name and mailing address of the property owner or owners. If there are no wells within 1/2 mile, please advise us.
- (c) If the application is for surface water, the names and addresses of the landowner(s) 1/2 mile downstream and 1/2 mile upstream from your property lines must be shown.
- (d) The location of the proposed place of use should be shown by crosshatching on the topographic map, aerial photograph or plat.
- (e) Show the location of the pipelines, canals, reservoirs or other facilities for conveying water from the point of diversion to the place of use.

A 7.5 minute U.S.G.S. topographic map may be obtained by providing the section, township and range numbers to: Kansas Geological Survey, 1930 Constant, Campus West, University of Kansas, Lawrence, Kansas 66047.

12. List any application, appropriation of water, water right, or vested right file number that covers the same diversion points or any of the same place of use described in this application. Also list any other recent modifications made to existing permits or water rights in conjunction with the filing of this application.

FILE NO. 49,775 PARTIAL PU OVERLAP (SE 1/4 OF SEC. 33).

(But can't physically serve it)

WATER RESOURCES  
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13. Furnish the following well information if the proposed appropriation is for the use of groundwater. If the well has not been completed, give information obtained from test holes, if available.

Information below is from:  Test holes  Well as completed  Drillers log attached

Well location as shown in paragraph No.	(A)	(B)	(C)	(D)
Date Drilled	_____	_____	_____	_____
Total depth of well	_____	_____	_____	_____
Depth to water bearing formation	_____	_____	_____	_____
Depth to static water level	_____	_____	_____	_____
Depth to bottom of pump intake pipe	_____	_____	_____	_____

14. The relationship of the applicant to the proposed place where the water will be used is that of OWNER/AGENT  
(owner, tenant, agent or otherwise)

15. The owner(s) of the property where the water is used, if other than the applicant, is (please print):  
ROYCE M & MONICA K BECKER, 761 J RD, CORNING, KS 66417  
(name, address and telephone number)

\_\_\_\_\_  
(name, address and telephone number)

16. The undersigned states that the information set forth above is true to the best of his/her knowledge and that this application is submitted in good faith.

Dated at \_\_\_\_\_, Kansas, this \_\_\_\_\_ day of \_\_\_\_\_, 2017  
(month) (year)

Roger D. Becker  
(Applicant Signature)

[REDACTED]  
APPLICANT(S) SOCIAL SECURITY IDENTIFICATION NUMBER(S)

By \_\_\_\_\_  
(Agent or Officer Signature)

\_\_\_\_\_  
and/or  
APPLICANT(S) TAXPAYER I.D. NO.(S)

\_\_\_\_\_  
(Agent or Officer - Please Print)

Assisted by DWS

TOPEKA FO  
(office/title)

Date: 10/26/2017

**IRRIGATION USE  
SUPPLEMENTAL SHEET**

File No. 49932

Name of Applicant (Please Print): ROGER D BECKER TRUST

1. Please supply the name and address of each landowner, the legal description of the lands to be irrigated, and designate the actual number of acres to be irrigated in each forty acre tract or fractional portion thereof:

**Landowner of Record** NAME: ROGER D BECKER TRUST

ADDRESS: 1095 52<sup>ND</sup> RD, CORNING, KS 66417

S	T	R	NE¼				NW¼				SW¼				SE¼				TOTAL				
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE					
28	4	12E												40	40	40	40			40	40	240	
33	4	12E	40	40	40	33												35	40	40	40	308	

**Landowner of Record** NAME: ROYCE M & MONICA K BECKER

ADDRESS: 761 J RD, CORNING, KS 66417

S	T	R	NE¼				NW¼				SW¼				SE¼				TOTAL				
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE					
33	4	12E					40	40	40	40													160

TOTAL ACRES = 708

**Landowner of Record** NAME: \_\_\_\_\_

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

S	T	R	NE¼				NW¼				SW¼				SE¼				TOTAL				
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE					

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2. Please complete the following information for the description of the operation for the irrigation project. Attach supplemental sheets as needed.

a. Indicate the soils in the field(s) and their intake rates:

Soil Name	Percent of field (%)	Intake Rate (in/hr)	Irrigation Design Group
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
Total:	100 %		

b. Estimate the average land slope in the field(s): \_\_\_\_\_%

Estimate the maximum land slope in the field(s): \_\_\_\_\_%

c. Type of irrigation system you propose to use (check one):

- Center pivot     
  Center pivot - LEPA     
  "Big gun" sprinkler  
 Gravity system (furrows)     
  Gravity system (borders)     
  Sideroll sprinkler

Other, please describe: \_\_\_\_\_

d. System design features:

i. Describe how you will control tailwater:

ii. For sprinkler systems:

(1) Estimate the operating pressure at the distribution system: \_\_\_\_\_ psi

(2) What is the sprinkler package design rate? \_\_\_\_\_ gpm

(3) What is the wetted diameter (twice the distance the sprinkler throws water) of a sprinkler on the outer 100 feet of the system? \_\_\_\_\_ feet

(4) Please include a copy of the sprinkler package design information.

e. Crop(s) you intend to irrigate. Please note any planned crop rotations:

f. Please describe how you will determine when to irrigate and how much water to apply (particularly important if you do not plan a full irrigation).

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

49932

# associated DRILLING, INC.

201 Industrial Rd., PO Box 7, Olsburg, KS 66520  
(785) 468-3324, Fax: (785) 468-3363

October 24, 2017

Test hole log for 4R Farms.

The location of the test hole is approximately 2 miles west and ½ mile south of Corning, Kansas. The latitude and longitude coordinates of the test hole are N 39.656002 W 96.072551.

0-3	Top soil
3-125	Clay, brown to gray
125-151	Sand fine, trace medium grades to med. at 146 ft.
151-169	Clay, gray
169-178	Sand, fine
178-190	Clay, gray
190-197	Sand, fine
197-266	Clay, gray
266-317	Sand, fine with clay
317-324	Gravel, pea, sub angular
324-326	Shale, gray
326	Limestone, total depth

Static Water Level estimated at 100 feet below ground surface.

The test hole is estimated to yield over 200 gpm based on the gravel thickness and the history of other wells in the area.

\_\_\_\_\_  
Darin R. Duncan, PG  
Associated Drilling, Inc.

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#49,932

meets Safe  
Yield

**Analysis Results**

The selected PD is in an area to new appropriations.  
The safe yield, based on the variables listed below is 3,015.75 AF.  
Total prior appropriation in the circle is 1,068.80 AF.  $-778.8 = 290$  AF  
Total quantity of water available for appropriation is 1,946.95 AF.

2,725.75AF

**Safe Yield Variables**

The area used for the analysis is set at 8,042 acres.  
Potential annual recharge of the area is estimated to be 4.5 inches.  
The percent of recharge available for appropriation is 100%.

Authorized Quantity values are as of 29-NOV-2017 and are based on Appropriated and Vested ground water right and possible stream nodes for GMD #2. Domestic, Term and Temporary water rights have been excluded.

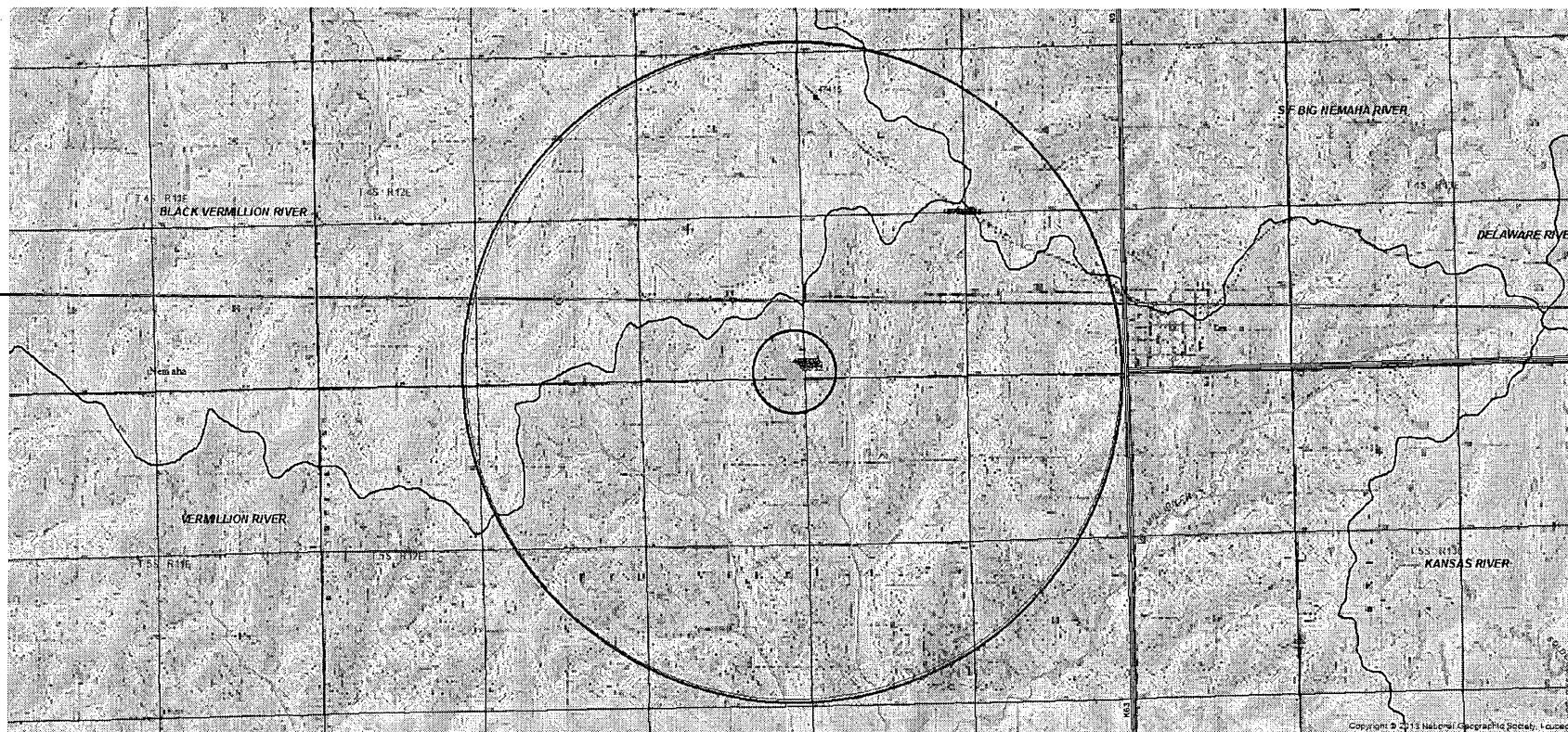
There are 2 water right(s) and 10 point(s) of diversion within the circle.

File Number	Use	ST	SR	Q4	Q3	Q2	Q1	FeetN	FeetW	Sec	Twp	Rng	ID	Qind	Auth_Quant	Add_Quant	Tacres	Nacres
A 49775 00	IRR	GY	G		NE	NE	NE	5081	527	34	04	12E	1	WR	290.00	290.00	295.00	295.00
Same	IRR	GY	G		NE	NE	NE	5081	402	34	04	12E	2	WR				
Same	IRR	GY	G		NE	NE	NE	5081	277	34	04	12E	3	WR				
Same	IRR	GY	G		NE	NE	NE	5081	652	34	04	12E	4	WR				
Same	IRR	GY	G		NW	NE	NE	5081	777	34	04	12E	5	WR				
A 49932 00	IRR	AY	G		SE	SE	SE	225	325	33	04	12E	1	WR	778.80	778.80	708.00	553.00
Same	IRR	AY	G		SE	SE	SE	300	450	33	04	12E	2	WR				
Same	IRR	AY	G		SE	SE	SE	300	350	33	04	12E	3	WR				
Same	IRR	AY	G		SE	SE	SE	200	250	33	04	12E	4	WR				
Same	IRR	AY	G		SE	SE	SE	100	250	33	04	12E	5	WR				

Safe Yield Report Sheet  
Water Right- A4993200  
Point of Diversion in SESESE 33-4S-12E

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49932 00

AMOUNT STATISTICS REPORT FOR POINTS OF DIVERSION UNDER A

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AMOUNT STATISTICS REPORT FOR POINTS OF DIVERSION UNDER A 49932 00 IRR

Water Right and Points of Diversion Within 2.00 miles of point defined as:

225 Feet North and 325 Feet West of the Southeast Corner of Section 33 T 4S R 12E

GROUNDWATER ONLY

meets  
Spacing  
all > 1,320'

File Number	Use	ST	SR	Dist (ft)	Q4	Q3	Q2	Q1	FeetN	FeetW	Sec	Twp	Rng	ID	Batt	Auth_Quan	Add_Quan	Unit	
A_ 49775 00	IRR	GY	G	7003	--	NE	NE	NE	5081	527	34	4	12E	1	G	4	290.00	290.00	AF
Same				7094	--	NE	NE	NE	5081	402	34	4	12E	2	B	4			
Same				7186	--	NE	NE	NE	5081	277	34	4	12E	3	B	4			
Same				6913	--	NE	NE	NE	5081	652	34	4	12E	4	B	4			
Same				6824	--	NW	NE	NE	5081	777	34	4	12E	5	B	4			
A_ 49932 00	IRR	AY	G	0	--	SE	SE	SE	225	325	33	4	12E	1	G	4	778.80	778.80	AF
Same				146	--	SE	SE	SE	300	450	33	4	12E	2	B	4			
Same				79	--	SE	SE	SE	300	350	33	4	12E	3	B	4			
Same				79	--	SE	SE	SE	200	250	33	4	12E	4	B	4			
Same				146	--	SE	SE	SE	100	250	33	4	12E	5	B	4			

Total Net Quantities Authorized:		Direct	Storage
Total Requested Amount (AF) =		778.80	.00
Total Permitted Amount (AF) =		290.00	.00
Total Inspected Amount (AF) =		.00	.00
Total Pro_Cert Amount (AF) =		.00	.00
Total Certified Amount (AF) =		.00	.00
Total Vested Amount (AF) =		.00	.00
TOTAL AMOUNT (AF) =		1068.80	.00

An \* after the source of supply indicates a pending application for change under the file number.  
 An \* after the ID indicates a 15 AF exemption was granted under the file number.  
 A "G" in the Batt column indicates the GEO CTR of a battery. A "B" indicates a well in the battery.  
 The number in the Batt column is the number of wells in the battery.

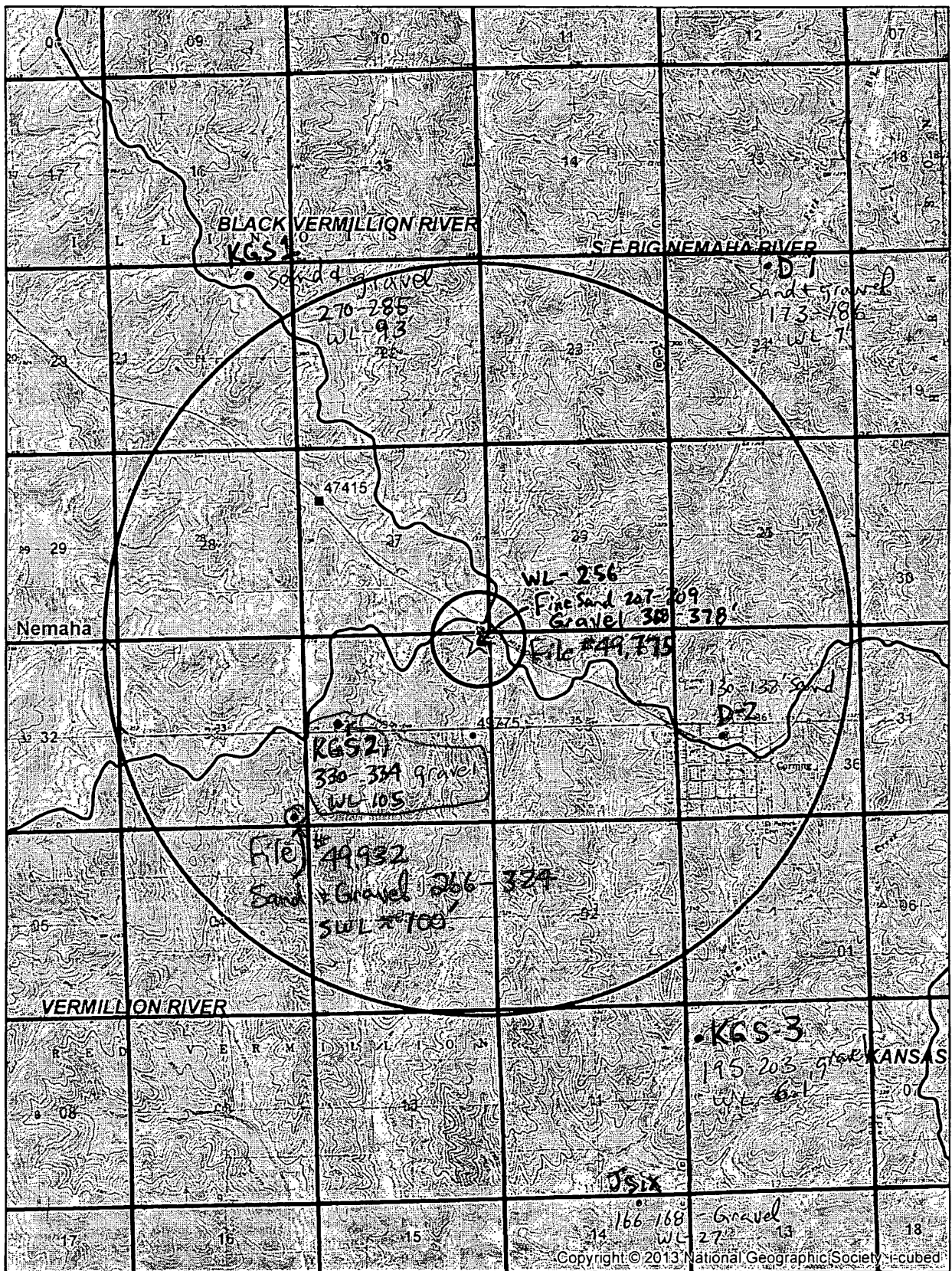
Water Rights and Points of Diversion Within 2.00 miles of point defined as:  
 225 Feet North and 325 Feet West of the Southeast Corner of Section 33 T 4S R 12E

GROUNDWATER ONLY

WATER USE CORRESPONDENTS:

File Number	Use	ST	SR
A_ 49775 00	IRR	GY	G
>	ROGER D BECKER TRUST		
>	1095 52ND RD		
>	CORNING KS 66417		
-----			
A_ 49932 00	IRR	AY	G
>	ROGER D BECKER TRUST		
>	1095 52ND RD		
>	CORNING KS 66417		
-----			

FILE NO. 49,775 / 49,932



1:48,000

49,775

WATER WELL RECORD Form WWC-5

Division of Water Resources App. No.

Well ID

Original Record Correction Change in Well Use

1 LOCATION OF WATER WELL: County: Nemaha Fraction NW 1/4 NE 1/4 NE 1/4 NE 1/4 Section Number 34 Township Number T 4 S Range Number R 12 E W

2 WELL OWNER: Last Name: Becker First: Royce Street or Rural Address where well is located (if unknown, distance and direction from nearest town or intersection): If at owner's address, check here: 5 mile N on K Rd off 52nd Rd the West in pasture 1/8 mile

3 LOCATE WELL WITH 'X' IN SECTION BOX: N W E S 1 mile

4 DEPTH OF COMPLETED WELL: 395 ft. Depth(s) Groundwater Encountered: 1) 368 ft. 2) ft. 3) ft. or 4) Dry Well WELL'S STATIC WATER LEVEL: 256 ft. below land surface, measured on (mo-day-yr) 07/28/2016

5 Latitude: 39.667076 Longitude: 96.053692 Datum: WGS 84 NAD 83 NAD 27 Source for Latitude/Longitude: GPS (unit make/model) (WAAS enabled? Yes No) Land Survey Topographic Map Online Mapper Elevation: 1379 ft. Ground Level TOC Source: Land Survey GPS Topographic Map Other: KOLAR

7 WELL WATER TO BE USED AS: 1. Domestic: Household Lawn & Garden Livestock Irrigation Feedlot Industrial 2. Public Water Supply: well ID Dewatering: how many wells? Aquifer Recharge: well ID Monitoring: well ID Environmental Remediation: well ID Air Sparge Soil Vapor Extraction Recovery Injection Oil Field Water Supply: lease Test Hole: well ID Cased Uncased Geotechnical Geothermal: how many bores? Closed Loop Horizontal Vertical Open Loop Surface Discharge Inj. of Water Other (specify):

Was a chemical/bacteriological sample submitted to KDHE? Yes No If yes, date sample was submitted: Water well disinfected? Yes No

8 TYPE OF CASING USED: Steel PVC Other CASING JOINTS: Glued Clamped Welded Threaded Casing diameter 6 in. to 395 ft. Diameter in. to ft. Diameter in. to ft. Casing height above land surface 24 in. Weight lbs./ft. Wall thickness or gauge No. SDR17 TYPE OF SCREEN OR PERFORATION MATERIAL: Steel Stainless Steel Fiberglass PVC Brass Galvanized Steel Concrete tile None used (open hole) SCREEN OR PERFORATION OPENINGS ARE: Continuous Slot Mill Slot Gauze Wrapped Torch Cut Drilled Holes Other (Specify) Louvered Shutter Key Punched Wire Wrapped Saw Cut None (Open Hole) SCREEN-PERFORATED INTERVALS: From 355 ft. to 395 ft. From ft. to ft. From ft. to ft. GRAVEL PACK INTERVALS: From 20 ft. to 395 ft. From ft. to ft. From ft. to ft.

9 GROUT MATERIAL: Neat cement Cement grout Bentonite Other Grout Intervals: From 0 ft. to 20 ft. From ft. to ft. From ft. to ft. Nearest source of possible contamination: Septic Tank Lateral Lines Pit Privy Livestock Pens Insecticide Storage Sewer Lines Cess Pool Sewage Lagoon Fuel Storage Abandoned Water Well Watertight Sewer Lines Seepage Pit Fecdyard Fertilizer Storage Oil Well/Gas Well Other (Specify) Direction from well? SE Distance from well? 150 ft.

Table with columns: TO, LITHOLOGIC LOG, FROM, TO, LITHO. LOG (cont.) or PLUGGING INTERVALS. Rows include: 0-72 Brown clay, 72-199 Grey clay, 199-203 Fine sand, 203-207 Grey clay, 207-209 Fine sand, 209-368 Grey clay, 368-378 Large gravel, 378-397 Grey shale. Includes 'WATER RESOURCES RECEIVED' and 'FEB 15 2017' stamp.

11 CONTRACTOR'S OR LANDOWNER'S CERTIFICATION: This water well was constructed, reconstructed, or plugged under my jurisdiction and was completed on (mo-day-year) 07/28/2016 and this record is true to the best of my knowledge and belief. Kansas Water Well Contractor's License No. 760 This Water Well Record was completed on (mo-day-year) 07/28/2016 under the business name of Associated Drilling, Inc.

Send one copy to WATER WELL OWNER and retain one for your records. Fee of \$5.00 for each constructed well. KS Department of Health and Environment, Bureau of Water, Geology Section, 1000 SW Jackson St., Suite 420, Topeka, Kansas 66612-1367. Telephone 785-296-3565. Visit us at http://www.kdheks.gov/waterwell/index.html KSA 82a-1212

SCANNED

KGS 1

WATER WELL RECORD Form WWC-5 KSA 82a-1212

1 LOCATION OF WATER WELL: County: <b>Nemaha</b>	Fraction <b>NW 1/4 NE 1/4 NE 1/4</b>	Section Number <b>21</b>	Township Number <b>T 4 S</b>	Range Number <b>R 12</b> <b>EW</b>
--	---	-----------------------------	---------------------------------	---------------------------------------

Distance and direction from nearest town or city street address of well if located within city?  
**2 miles west, 2 1/2 miles north, and 1/4 mile west of Corning**

2 WATER WELL OWNER: **KGS**  
 RR#, St. Address, Box #: **1930 Constant Ave**  
 City, State, ZIP Code: **Lawrence, KS 66046**  
 Board of Agriculture, Division of Water Resources  
 Application Number:

3 LOCATE WELL'S LOCATION WITH AN "X" IN SECTION BOX:

4 DEPTH OF COMPLETED WELL: **285** ft. ELEVATION: **1360±**  
 Depth(s) Groundwater Encountered 1. \_\_\_\_\_ ft. 2. \_\_\_\_\_ ft. 3. \_\_\_\_\_ ft.  
 WELL'S STATIC WATER LEVEL: **9.3** ft. below land surface measured on **6/2/86**  
 Pump test data: Well water was \_\_\_\_\_ ft. after \_\_\_\_\_ hours pumping \_\_\_\_\_ gpm  
 Est. Yield \_\_\_\_\_ gpm: Well water was \_\_\_\_\_ ft. after \_\_\_\_\_ hours pumping \_\_\_\_\_ gpm  
 Bore Hole Diameter: **9.7/8** in. to **285** ft., and **5.1/2** in. to **286** ft.  
 WELL WATER TO BE USED AS:  
 5 Public water supply 8 Air conditioning 11 Injection well  
 1 Domestic 3 Feedlot 6 Oil field water supply 9 Dewatering 12 Other (Specify below)  
 2 Irrigation 4 Industrial 7 Lawn and garden only 10 Observation well **Monitoring & Research**  
 Was a chemical/bacteriological sample submitted to Department? Yes \_\_\_\_\_ No **X**; if yes, mo/day/yr sample was submitted \_\_\_\_\_  
 Water Well Disinfected? Yes \_\_\_\_\_ No **X**

5 TYPE OF BLANK CASING USED:  
 1 Steel 3 RMP (SR) 5 Wrought iron 8 Concrete tile CASING JOINTS: Glued **X** Clamped \_\_\_\_\_  
 2 **PVC** 4 ABS 6 Asbestos-Cement 9 Other (specify below) Welded \_\_\_\_\_  
 7 Fiberglass Threaded \_\_\_\_\_  
 Blank casing diameter **5** in. to **285** ft. Dia \_\_\_\_\_ in. to \_\_\_\_\_ ft. Dia \_\_\_\_\_ in. to \_\_\_\_\_ ft.  
 Casing height above land surface **24** in., weight \_\_\_\_\_ lbs./ft. Wall thickness or gauge No. **SDR 26**  
 TYPE OF SCREEN OR PERFORATION MATERIAL:  
 1 Steel 3 Stainless steel 5 Fiberglass 7 **PVC** 10 Asbestos-cement  
 2 Brass 4 Galvanized steel 6 Concrete tile 9 ABS 11 Other (specify) \_\_\_\_\_  
 12 None used (open hole)  
 SCREEN OR PERFORATION OPENINGS ARE:  
 1 Continuous slot 3 Mill slot **.035** 5 Gauzed wrapped 8 Saw cut 11 None (open hole)  
 2 Louvered shutter 4 Key punched 6 Wire wrapped 9 Drilled holes  
 7 Torch cut 10 Other (specify) \_\_\_\_\_  
 SCREEN-PERFORATED INTERVALS: From **277** ft. to **285** ft. From \_\_\_\_\_ ft. to \_\_\_\_\_ ft.  
 From \_\_\_\_\_ ft. to \_\_\_\_\_ ft. From \_\_\_\_\_ ft. to \_\_\_\_\_ ft.  
 GRAVEL PACK INTERVALS: From **255** ft. to **285** ft. From \_\_\_\_\_ ft. to \_\_\_\_\_ ft.  
 From \_\_\_\_\_ ft. to \_\_\_\_\_ ft. From \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

6 GROUT MATERIAL: 1 **Neat cement** 2 Cement grout 3 Bentonite 4 Other \_\_\_\_\_  
 Grout intervals: From **0** ft. to **255** ft. From \_\_\_\_\_ ft. to \_\_\_\_\_ ft. From \_\_\_\_\_ ft. to \_\_\_\_\_ ft.  
 What is the nearest source of possible contamination:  
 1 Septic tank 4 Lateral lines 7 Pit privy 10 Livestock pens 14 Abandoned water well  
 2 Sewer lines 5 Cess pool 8 Sewage lagoon 11 Fuel storage 15 Oil well/Gas well  
 3 Watertight sewer lines 6 Seepage pit 9 Feedyard 12 Fertilizer storage 16 Other (specify below)  
 13 Insecticide storage \_\_\_\_\_  
 Direction from well? \_\_\_\_\_ How many feet? \_\_\_\_\_

FROM	TO	LITHOLOGIC LOG	FROM	TO	LITHOLOGIC LOG
0	3	Dark brown silty clay topsoil			content at depth
3	9	Pinkish tan to brown sity clay	253	270	Greenish gray silty clay to clayey
9	20	Pinkish tan to pinkish brown to medium tan silty clay with lime concretions	270	281	silt with some gravel and lime nodules below 257 feet
20	72	Light ashy grayish tan to tan to yellowish tan silty clay with gravel	281	285	Medium to light gray to olive gray silty sandy clay with sand and gravel
72	236	Medium gray silty clay to silty sandy clay with gravel and some layers of fine sand and some sand and gravel layers (e.g., between 184 & 199 and 222 & 226ft.)			Gravel
236	253	Light to medium to dark gray silty clay with increasing sand and gravel			

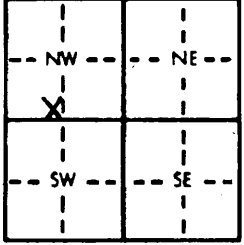
7 CONTRACTOR'S OR LANDOWNER'S CERTIFICATION: This water well was **(1) constructed** (2) reconstructed, or (3) plugged under my jurisdiction and was completed on (mo/day/year) **1/10-17/86**; developed **2/18 & 6/3, 4/86** and this record is true to the best of my knowledge and belief. Kansas Water Well Contractor's License No. \_\_\_\_\_ This Water Well Record was completed on (mo/day/yr) **7/28/86**  
 under the business name of **KGS; M. KLEINSCHMIDT, MGR. DRILLER** by (signature) *[Signature]*

INSTRUCTIONS: Use typewriter or ball point pen. PLEASE PRESS FIRMLY and PRINT clearly. Please fill in blanks, underline or circle the correct answers. Send top three copies to Kansas Department of Health and Environment, Office of Oil Field and Environmental Geology, Regulation and Permitting Section, Topeka, Kansas 66620-7500, Telephone: 913-862-9360. Send one to WATER WELL OWNER and retain one for your records.

OFFICE USE ONLY  
T  
R  
EW  
SEC.

1 LOCATION OF WATER WELL: Fraction SE 1/4 SW 1/4 NW 1/4 Section Number 34 Township Number T 4 S Range Number R 12 EW  
 County: Nemaha  
 Distance and direction from nearest town or city street address of well if located within city?  
approximately 1 3/4 miles west of Corning

2 WATER WELL OWNER: KGS  
 RR#, St. Address, Box # : 1930 Constant Ave. Board of Agriculture, Division of Water Resources  
 City, State, ZIP Code : Lawrence, KS 66046 Application Number:

3 LOCATE WELL'S LOCATION WITH AN "X" IN SECTION BOX:  
  
 4 DEPTH OF COMPLETED WELL... 334 ft. ELEVATION: 1350  
 Depth(s) Groundwater Encountered 1. .... ft. 2. .... ft. 3. .... ft.  
 WELL'S STATIC WATER LEVEL, 105.2 ft. below land surface measured on mo/day/yr 7/24/86  
 Pump test data: Well water was ..... ft. after ..... hours pumping ..... gpm  
 Est. Yield ..... gpm: Well water was ..... ft. after ..... hours pumping ..... gpm  
 Bore Hole Diameter, 10 in. to 336 ft., and ..... in. to ..... ft.  
 WELL WATER TO BE USED AS: 5 Public water supply 8 Air conditioning 11 Injection well  
 1 Domestic 3 Feedlot 6 Oil field water supply 9 Dewatering 12 Other (Specify below)  
 2 Irrigation 4 Industrial 7 Lawn and garden only 10 Observation well Monitoring & research  
 Was a chemical/bacteriological sample submitted to Department? Yes.....No...X.....; if yes, mo/day/yr sample was submitted  
 Water Well Disinfected? Yes ..... No X

5 TYPE OF BLANK CASING USED: 5 Wrought iron 8 Concrete tile CASING JOINTS: Glued X Clamped .....  
 1 Steel 3 RMP (SR) 9 Other (specify below) Welded .....  
2 PVC 4 ABS 7 Fiberglass Threaded .....  
 Blank casing diameter .5 in. to 334 ft., Dia. .... in. to ..... ft., Dia. .... in. to ..... ft.  
 Casing height above land surface .16 in., weight ..... lbs./ft. Wall thickness or gauge No. SDR 26  
 TYPE OF SCREEN OR PERFORATION MATERIAL: 7 PVC 10 Asbestos-cement  
 1 Steel 3 Stainless steel 5 Fiberglass 8 RMP (SR) 11 Other (specify) .....  
 2 Brass 4 Galvanized steel 6 Concrete tile 9 ABS 12 None used (open hole)  
 SCREEN OR PERFORATION OPENINGS ARE: 5 Gauzed wrapped 8 Saw cut 11 None (open hole)  
 1 Continuous slot 3 Mill slot .035 6 Wire wrapped 9 Drilled holes  
 2 Louvered shutter 4 Key punched 7 Torch cut 10 Other (specify) .....  
 SCREEN-PERFORATED INTERVALS: From 324 ft. to 334 ft., From ..... ft. to ..... ft.  
 From ..... ft. to ..... ft., From ..... ft. to ..... ft.  
 GRAVEL PACK INTERVALS: From 318 ft. to 336 ft., From ..... ft. to ..... ft.  
 From ..... ft. to ..... ft., From ..... ft. to ..... ft.

6 GROUT MATERIAL: 1 Neat cement 2 Cement grout 3 Bentonite 4 Other .....  
 Grout intervals: From 0 ft. to 318 ft., From ..... ft. to ..... ft., From ..... ft. to ..... ft.  
 What is the nearest source of possible contamination:  
 1 Septic tank 4 Lateral lines 7 Pit privy 10 Livestock pens 14 Abandoned water well  
 2 Sewer lines 5 Cess pool 8 Sewage lagoon 11 Fuel storage 15 Oil well/Gas well  
 3 Watertight sewer lines 6 Seepage pit 9 Feedyard 12 Fertilizer storage 16 Other (specify below)  
 13 Insecticide storage .....  
 Direction from well? How many feet?

FROM	TO	LITHOLOGIC LOG	FROM	TO	LITHOLOGIC LOG
0	3	Dark brown silty clay topsoil			
3	4	Medium brown silty sandy clay			
4	54	Tan silty sandy clay w/gravel			
54	59	Interbedded tan and gray layers of silty sandy clay with gravel			
59	330	Gray silty sandy clay with gravel and some silt, sandy and/or gravel layers, especially below 157 feet.			
330	334	Gravel			
334	336	White to light gray to tan limestone			

7 CONTRACTOR'S OR LANDOWNER'S CERTIFICATION: This water well was 1 constructed, (2) reconstructed, or (3) plugged under my jurisdiction and was completed on (mo/day/year) 8/29-9/6/85; bailed 9/26, 27/85 & flushed 4/10/86 record is true to the best of my knowledge and belief. Kansas Water Well Contractor's License No. .... This Water Well Record was completed on (mo/day/yr) 7/25/86  
 under the business name of KGS; M. Kleinschmidt, Mgr./Driller w/R. John [Signature]  
 INSTRUCTIONS: Use typewriter or ball point pen. PLEASE PRESS FIRMLY and PRINT clearly. Please fill in blanks, underline or circle the correct answers. Send top three copies to Kansas Department of Health and Environment, Office of Oil Field and Environmental Geology, Regulation and Permitting Section, Topeka, Kansas 66620-7500, Telephone: 913-862-9360. Send one to WATER WELL OWNER and retain one for your records.

OFFICE USE ONLY  
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W

**WATER WELL RECORD**

Form WWC-5

Division of Water Resources; App. No.  

D-1

<b>1 LOCATION OF WATER WELL:</b> County: <u>NEMAH</u>	Fraction <u>NW 1/4 NW 1/4 NE 1/4</u>	Section Number <u>24</u>	Township Number T <u>4</u> S	Range Number R <u>12</u> <u>EW</u>
--	---	-----------------------------	---------------------------------	---------------------------------------

Distance and direction from nearest town or city street address of well if located within city? From KELLY: 3 SOUTH AND 1 WEST

**Global Positioning Systems** (decimal degrees, min. of 4 digits)  
 Latitude: 39.71774  
 Longitude: 96.00258  
 Elevation: 1191  
 Datum: \_\_\_\_\_  
 Data Collection Method: \_\_\_\_\_

**2 WATER WELL OWNER:** ROY WINKLER  
 RR#, St. Address, Box # : 1178 MY RD  
 City, State, ZIP Code : CORNWELL, KS 66417

**3 LOCATE WELL'S LOCATION WITH AN "X" IN SECTION BOX:**

N		E	
W	X		
S			

**4 DEPTH OF COMPLETED WELL** ..... 192 ..... ft.

Depth(s) Groundwater Encountered (1) 173 ..... ft. (2) ..... ft. (3) ..... ft.  
 WELL'S STATIC WATER LEVEL ..... 7 ..... ft. below land surface measured on mo/day/yr. 11/7/08  
 Pump test data: Well water was ..... ft. after ..... hours pumping ..... gpm  
 Est. Yield 100 gpm: Well water was ..... ft. after ..... hours pumping ..... gpm

**WELL WATER TO BE USED AS:** 5 Public water supply 8 Air conditioning 11 Injection well  
1 Domestic 3 Feedlot 6 Oil field water supply 9 Dewatering 12 Other (Specify below)  
 2 Irrigation 4 Industrial 7 Domestic (lawn & garden) 10 Monitoring well

Was a chemical/bacteriological sample submitted to Department? Yes ..... No X .....; If yes, mo/day/yr  
 Sample was submitted ..... Water well disinfected? Yes X ..... No .....

**5 TYPE OF CASING USED:** 5 Wrought Iron 8 Concrete tile CASING JOINTS: Glued X ..... Clamped .....  
 1 Steel 3 RMP (SR) 6 Asbestos-Cement 9 Other (specify below) Welded .....  
PVC 4 ABS 7 Fiberglass Threaded .....

Blank casing diameter 6 ..... in. to 192 ..... ft., Diameter ..... in. to ..... ft., Diameter ..... in. to ..... ft.  
 Casing height above land surface ..... 24 ..... in., Weight ..... lbs./ft. Wall thickness or gauge No. SPR 26

**TYPE OF SCREEN OR PERFORATION MATERIAL:**  
 1 Steel 3 Stainless Steel 5 Fiberglass PVC 9 ABS 11 Other (Specify) .....  
 2 Brass 4 Galvanized Steel 6 Concrete tile 8 RM (SR) 10 Asbestos-Cement 12 None used (open hole)

**SCREEN OR PERFORATION OPENINGS ARE:**  
 1 Continuous slot 1 Mill slot 5 Gauzed wrapped 7 Torch cut 9 Drilled holes 11 None (open hole)  
 2 Louvered shutter 4 Key punched 6 Wire wrapped 8 Saw cut 10 Other (specify) .....

**SCREEN-PERFORATED INTERVALS:** From ..... ft. to ..... ft., From ..... ft. to ..... ft.  
 From ..... ft. to ..... ft., From ..... ft. to ..... ft.

**GRAVEL PACK INTERVALS:** From ..... ft. to ..... ft., From ..... ft. to ..... ft.  
 From ..... ft. to ..... ft., From ..... ft. to ..... ft.

**6 GROUT MATERIAL:** 1 Neat cement 2 Cement grout Bentonite 4 Other .....

Grout Intervals: From 3 ..... ft. to 25 ..... ft., From ..... ft. to ..... ft., From ..... ft. to ..... ft.

What is the nearest source of possible contamination:  
 1 Septic tank 4 Lateral lines 7 Pit privy 10 Livestock pens 13 Insecticide storage 6 Other (specify below)  
 2 Sewer lines 5 Cess pool 8 Sewage lagoon 11 Fuel storage 14 Abandoned water well  
 3 Watertight sewer lines 6 Seepage pit 9 Feedyard 12 Fertilizer storage 15 Oil well/gas well CREEK

Direction from well? EAST ..... How many feet? 100 .....

FROM	TO	LITHOLOGIC LOG	FROM	TO	PLUGGING INTERVALS
<u>0</u>	<u>105</u>	<u>CLAY TRACE GRAVEL BRAS (1-2")</u>			
<u>105</u>	<u>173</u>	<u>INTER BEDDED FINE SAND &amp; CLAY</u>			
<u>173</u>	<u>186</u>	<u>SAND COURSE W/ GRAVEL</u>			
<u>186</u>	<u>192</u>	<u>SHALE, GRAY</u>			

**7 CONTRACTOR'S OR LANDOWNER'S CERTIFICATION:** This water well was (1) constructed, (2) reconstructed, or (3) plugged under my jurisdiction and was completed on (mo/day/year) 7/27/08 ..... and this record is true to the best of my knowledge and belief. Kansas Water Well Contractor's License No. 760 ..... This Water Well Record was completed on (mo/day/year) 4/18/08 ..... under the business name of ASSOCIATED DRILLERS INC by (signature) [Signature]

**INSTRUCTIONS:** Use typewriter or ball point pen. PLEASE PRESS FIRMLY and PRINT clearly. Please fill in blanks, underline or circle the correct answers. Send three copies to Kansas Department of Health and Environment, Bureau of Water, Geology Section, 1000 SW Jackson St., Suite 420, Topeka, Kansas 66612-1367. Telephone 785-296-5522. Send one to WATER WELL OWNER and retain one for your records. Fee of \$5.00 for each constructed well. Visit us at <http://www.kdheks.gov/waterwell/index.html>.





D-2

WATER WELL RECORD Form WWC-5 1074955

Division of Water Resources App. No.

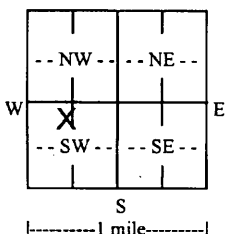
Well ID

Original Record  Correction  Change in Well Use

1 LOCATION OF WATER WELL: County: Nemaha Fraction SE 1/4 NE 1/4 NW 1/4 SW 1/4 Section Number 36 Township Number T 4 S Range Number R 12 [X] E [ ] W

2 WELL OWNER: Last Name: Winkler First: LeROV Street or Rural Address where well is located (if unknown, distance and direction from nearest town or intersection): If at owner's address, check here: [X] Business: Address: 11784 M4 Rd City: Corning State: KS ZIP: 66417

3 LOCATE WELL WITH "X" IN SECTION BOX: N



4 DEPTH OF COMPLETED WELL: 200 ft. Depth(s) Groundwater Encountered: 1) ... ft. 2) ... ft. 3) ... ft., or 4) [ ] Dry Well WELL'S STATIC WATER LEVEL: ... ft. [ ] below land surface, measured on (mo-day-yr) ... ft. [ ] above land surface, measured on (mo-day-yr) ... ft. Pump test data: Well water was ... ft. after ... hours pumping ... gpm Well water was ... ft. after ... hours pumping ... gpm Estimated Yield: ... gpm Bore Hole Diameter: ... 6 in. to ... 200 ft. and ... in. to ... ft.

5 Latitude: 39.659247 (decimal degrees) Longitude: 96.029328 (decimal degrees) Datum: [X] WGS 84 [ ] NAD 83 [ ] NAD 27 Source for Latitude/Longitude: [ ] GPS (unit make/model: ... (WAAS enabled? [ ] Yes [ ] No) [ ] Land Survey [ ] Topographic Map [ ] Online Mapper: ...

6 Elevation: 1340 ft. [X] Ground Level [ ] TOC Source: [ ] Land Survey [ ] GPS [ ] Topographic Map [X] Other KOLAR

7 WATER TO BE USED AS: 1. Domestic: [ ] Household [ ] Lawn & Garden [ ] Livestock 2. [ ] Irrigation 3. [ ] Feedlot 4. [ ] Industrial 5. [ ] Public Water Supply: well ID ... 6. [ ] Dewatering: how many wells? ... 7. [ ] Aquifer Recharge: well ID ... 8. [ ] Monitoring: well ID ... 9. Environmental Remediation: well ID [ ] Air Sparge [ ] Soil Vapor Extraction [ ] Recovery [ ] Injection 10. [ ] Oil Field Water Supply: lease ... 11. Test Hole: well ID [ ] Cased [ ] Uncased [ ] Geotechnical 12. Geothermal: how many bores? 4 a) Closed Loop [ ] Horizontal [X] Vertical b) Open Loop [ ] Surface Discharge [ ] Inj. of Water 13. [ ] Other (specify): ...

Was a chemical/bacteriological sample submitted to KDHE? [ ] Yes [X] No If yes, date sample was submitted: ... Water well disinfected? [ ] Yes [X] No

8 TYPE OF CASING USED: [ ] Steel [ ] PVC [X] Other HDPE CASING JOINTS: [ ] Glued [ ] Clamped [X] Welded [ ] Threaded Casing diameter .75 in. to 200 ft., Diameter ... in. to ... ft., Diameter ... in. to ... ft. Casing height above land surface 18 in. Weight ... lbs./ft. Wall thickness or gauge No. SDR11

TYPE OF SCREEN OR PERFORATION MATERIAL: [ ] Steel [ ] Stainless Steel [ ] Fiberglass [ ] PVC [ ] Brass [ ] Galvanized Steel [ ] Concrete tile [X] None used (open hole) [ ] Other (Specify) ...

SCREEN OR PERFORATION OPENINGS ARE: [ ] Continuous Slot [ ] Mill Slot [ ] Gauze Wrapped [ ] Torch Cut [ ] Drilled Holes [ ] Other (Specify) ... [ ] Louvered Shutter [ ] Key Punched [ ] Wire Wrapped [ ] Saw Cut [X] None (Open Hole)

SCREEN-PERFORATED INTERVALS: From ... ft. to ... ft., From ... ft. to ... ft., From ... ft. to ... ft. GRAVEL PACK INTERVALS: From ... ft. to ... ft., From ... ft. to ... ft., From ... ft. to ... ft.

9 GROUT MATERIAL: [ ] Neat cement [ ] Cement grout [X] Bentonite [ ] Other Grout Intervals: From 0 ft. to 200 ft., From ... ft. to ... ft., From ... ft. to ... ft.

Nearest source of possible contamination: [ ] Septic Tank [ ] Lateral Lines [ ] Pit Privy [ ] Livestock Pens [ ] Insecticide Storage [ ] Sewer Lines [ ] Cess Pool [ ] Sewage Lagoon [ ] Fuel Storage [ ] Abandoned Water Well [ ] Watertight Sewer Lines [ ] Seepage Pit [ ] Feedyard [ ] Fertilizer Storage [ ] Oil Well/Gas Well [ ] Other (Specify) ... Direction from well? ... Distance from well? ... ft.

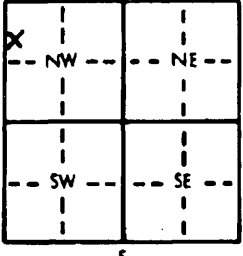
Table with columns: 10 FROM, TO, LITHOLOGIC LOG, FROM, TO, LITHO. LOG (cont.) or PLUGGING INTERVALS. Rows: 0-3 Topsoil, 3-35 Tan Shale, 35-37 Sand, 37-50 Tan Shale, 50-130 Black Shale, 130-132 Sand (Biqder), 132-200 Black Shale. Includes a Notes section.

11 CONTRACTOR'S OR LANDOWNER'S CERTIFICATION: This water well was [X] constructed, [ ] reconstructed, or [ ] plugged under my jurisdiction and was completed on (mo-day-year) 9/28/2011 and this record is true to the best of my knowledge and belief. Kansas Water Well Contractor's License No. 760 This Water Well Record was completed on (mo-day-year) 2/22/2012 under the business name of Associated Drilling, Inc.

1 LOCATION OF WATER WELL: Fraction SW 1/4 NW 1/4 NW 1/4 Section Number 12 Township Number T 5 S Range Number R 12 **EW**

Distance and direction from nearest town or city street address of well if located within city?  
approximately 1 1/8 miles south of Corning

2 WATER WELL OWNER: KGS  
 RR#, St. Address, Box # : 1930 Constant Av. Board of Agriculture, Division of Water Resources  
 City, State, ZIP Code : Lawrence, KS 66046 Application Number:

3 LOCATE WELL'S LOCATION WITH AN "X" IN SECTION BOX:  4 DEPTH OF COMPLETED WELL... 207 ft. ELEVATION: 1245 ft.  
 Depth(s) Groundwater Encountered 1. above ft. 2. above ft. 3. above ft.  
 WELL'S STATIC WATER LEVEL 6.1 ft. below land surface measured on mo/day/yr 7/24/86  
 Pump test data: Well water was          ft. after          hours pumping          gpm  
 Est. Yield          gpm: Well water was          ft. after          hours pumping          gpm  
 Bore Hole Diameter... 6 3/4 in. to          ft., and          in. to          ft.  
 WELL WATER TO BE USED AS: 5 Public water supply 8 Air conditioning 11 Injection well  
 1 Domestic 3 Feedlot 8 Oil field water supply 9 Dewatering 12 Other (Specify below)  
 2 Irrigation 4 Industrial 7 Lawn and garden only 10 Observation well Monitoring and research  
 Was a chemical/bacteriological sample submitted to Department? Yes          No X; If yes, mo/day/yr sample was submitted

5 TYPE OF BLANK CASING USED: 1 Steel 3 RMP (SR) 5 Wrought iron 8 Concrete tile CASING JOINTS: Glued          Clamped           
2 PVC 4 ABS 7 Fiberglass 9 Other (specify below) Welded          Threaded           
 Blank casing diameter 2 in. to 207 ft., Dia.          in. to          ft., Dia.          in. to          ft.  
 Casing height above land surface 82 in., weight 9 lbs./ft. Wall thickness or gauge No. Sch. 80  
 TYPE OF SCREEN OR PERFORATION MATERIAL: 7 PVC 10 Asbestos-cement  
 1 Steel 3 Stainless steel 5 Fiberglass 8 RMP (SR) 11 Other (specify)           
 2 Brass 4 Galvanized steel 6 Concrete tile 9 ABS 12 None used (open hole)  
 SCREEN OR PERFORATION OPENINGS ARE: 5 Gauzed wrapped 8 Saw cut 11 None (open hole)  
 1 Continuous slot 3 Mill slot .01 6 Wire wrapped 9 Drilled holes  
 2 Louvered shutter 4 Key punched 7 Torch cut 10 Other (specify)           
 SCREEN-PERFORATED INTERVALS: From 202 ft. to 207 ft., From          ft. to          ft.  
 From          ft. to          ft., From          ft. to          ft.  
 GRAVEL PACK INTERVALS: From 197 ft. to 210 ft., From          ft. to          ft.  
 From          ft. to          ft., From          ft. to          ft.

6 GROUT MATERIAL: 1 Neat cement 2 Cement grout 3 Bentonite 4 Other           
 Grout Intervals: From 0 ft. to 197 ft., From          ft. to          ft., From          ft. to          ft.  
 What is the nearest source of possible contamination:  
 1 Septic tank 4 Lateral lines 7 Pit privy 10 Livestock pens 14 Abandoned water well  
 2 Sewer lines 5 Cess pool 8 Sewage lagoon 11 Fuel storage 15 Oil well/Gas well  
 3 Watertight sewer lines 6 Seepage pit 9 Feedyard 12 Fertilizer storage 16 Other (specify below)  
 13 Insecticide storage           
 Direction from well?          How many feet?         

FROM	TO	LITHOLOGIC LOG	FROM	TO	LITHOLOGIC LOG
0	10	Dark to medium brown clayey silt to silty clay	203	209	Black to gray silty clay, silt, and clay (thin layers).
10	15	Dark gray silty clay	209	210	Black shale and light gray limestone
15	24	Greenish gray silty clay with increasing sand and gravel content at depth			
24	68	Dark gray silty sandy gravelly clay to clayey silty sandy gravel			
68	75	Very dark gray fine sandy silt			
75	85	Dark gray silty clay or clayey silt w/some gravel			
85	195	Dark gray silty clay with some gravel (esp. 100-105, 125-135 ft)			
195	203	Dark gray silty sandy clay with some gravel			

7 CONTRACTOR'S OR LANDOWNER'S CERTIFICATION: This water well was (1) constructed, (2) reconstructed, or (3) plugged under my jurisdiction and was completed on (mo/day/year) 4/23/86; developed 4/24, 5/8 & 12/86 and this record is true to the best of my knowledge and belief. Kansas Water Well Contractor's License No.          This Water Well Record was completed on (mo/day/yr) 7/25/86 under the business name of KGS; M. Kleinschmidt, Mgr./Driller by (signature)         

INSTRUCTIONS: Use typewriter or ball point pen. PLEASE PRESS FIRMLY and PRINT clearly. Please fill in blanks, underline or circle the correct answers. Send top three copies to Kansas Department of Health and Environment, Office of Oil Field and Environmental Geology, Regulation and Permitting Section, Topeka, Kansas 66620-7500, Telephone: 913-862-9360. Send one to WATER WELL OWNER and retain one for your records.

OFFICE USE ONLY  
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1/4

**WATER WELL RECORD**

Form WWC-5

Division of Water Resources; App. No.

J-517

<b>1 LOCATION OF WATER WELL:</b> County: <u>NEMAH</u>		Fraction <u>NE 1/4 NW 1/4 NE 1/4</u>	Section Number <u>14</u>	Township Number <u>T 5 S</u>	Range Number <u>R 12 E</u>
Distance and direction from nearest town or city street address of well if located within city? <u>FROM CORNING, 2 MILES SOUTHWEST 1/4 WEST</u>			Global Positioning Systems (decimal degrees, min. of 4 digits) Latitude: <u>39° 35.685</u> Longitude: <u>96° 02.542</u> Elevation: _____ Datum: _____ Data Collection Method: _____		
<b>2 WATER WELL OWNER:</b> <u>J-SEX FARMS</u> RR#, St. Address, Box # : <u>604 NEMAH ST.</u> City, State, ZIP Code : <u>SENECA, KS. 66533</u>					

<b>3 LOCATE WELL'S LOCATION WITH AN "X" IN SECTION BOX:</b> N <table border="1" style="width: 100px; height: 100px; text-align: center;"> <tr><td></td><td></td><td>X</td></tr> <tr><td>NW</td><td></td><td>NE</td></tr> <tr><td>SW</td><td></td><td>SE</td></tr> </table> S			X	NW		NE	SW		SE	<b>4 DEPTH OF COMPLETED WELL</b> ..... <u>170</u> ..... ft.	
			X								
NW		NE									
SW		SE									
Depth(s) Groundwater Encountered (1) <u>38</u> ..... ft. (2) _____ ..... ft. (3) _____ ..... ft. WELL'S STATIC WATER LEVEL ..... <u>27</u> ..... ft. below land surface measured on mo/day/yr. <u>2/13/07</u> Pump test data: Well water was _____ ft. after _____ hours pumping _____ gpm Est. Yield <u>9</u> gpm: Well water was _____ ft. after _____ hours pumping _____ gpm WELL WATER TO BE USED AS: 5 Public water supply 8 Air conditioning 11 Injection well 1 Domestic 3 Feedlot 6 Oil field water supply 9 Dewatering 12 Other (Specify below) 2 Irrigation 4 Industrial 7 Domestic (lawn & garden) 10 Monitoring well _____ Was a chemical/bacteriological sample submitted to Department? Yes _____ No <u>X</u> _____; If yes, mo/day/yr Sample was submitted _____ Water well disinfected? Yes <u>X</u> _____ No _____											

<b>5 TYPE OF CASING USED:</b> 1 Steel <u>PVC</u> 3 RMP (SR) 4 ABS 5 Wrought Iron 8 Concrete tile 6 Asbestos-Cement 7 Fiberglass 9 Other (specify below)		CASING JOINTS: Glued <u>X</u> Clamped _____ Welded _____ Threaded _____
Blank casing diameter <u>5</u> in. to <u>70</u> ft., Diameter <u>5</u> in. to <u>150</u> ft., Diameter _____ in. to _____ ft. Casing height above land surface <u>24</u> in., Weight _____ lbs./ft. Wall thickness or gauge No. <u>SOR21</u>		
TYPE OF SCREEN OR PERFORATION MATERIAL: 1 Steel 3 Stainless Steel 5 Fiberglass <u>PVC</u> 9 ABS 11 Other (Specify) _____ 2 Brass 4 Galvanized Steel 6 Concrete tile 8 RM (SR) 10 Asbestos-Cement 12 None used (open hole)		
SCREEN OR PERFORATION OPENINGS ARE: 1 Continuous slot <u>3 Mill slot</u> 5 Gauzed wrapped 7 Torch cut 9 Drilled holes 11 None (open hole) 2 Louvered shutter 4 Key punched 6 Wire wrapped 8 Saw Cut 10 Other (specify) _____		
SCREEN-PERFORATED INTERVALS: From <u>70</u> ft. to <u>90</u> ft., From _____ ft. to _____ ft. From <u>150</u> ft. to <u>170</u> ft., From _____ ft. to _____ ft.		
GRAVEL PACK INTERVALS: From <u>25</u> ft. to <u>170</u> ft., From _____ ft. to _____ ft. From _____ ft. to _____ ft., From _____ ft. to _____ ft.		

<b>6 GROUT MATERIAL:</b> 1 Neat cement 2 Cement grout <u>Bentonite</u> 4 Other _____	
Grout Intervals: From <u>3</u> ft. to <u>25</u> ft., From _____ ft. to _____ ft., From _____ ft. to _____ ft.	
What is the nearest source of possible contamination: 1 Septic tank 4 Lateral lines 7 Pit privy 10 Livestock pens 13 Insecticide Storage <u>16 Other (specify below)</u> 2 Sewer lines 5 Cess pool 8 Sewage lagoon 11 Fuel storage 14 Abandoned water well 3 Watertight sewer lines 6 Seepage pit 9 Feedyard 12 Fertilizer Storage 15 Oil well/gas well <u>HOG BARN</u>	
Direction from well? <u>WEST</u> How many feet? <u>200</u>	

FROM	TO	LITHOLOGIC LOG	FROM	TO	PLUGGING INTERVALS
0	34	CLAY BROWN TO TAN			
34	38	SAND POORLY SORTED, FINE TO COARSE			
38	76	CLAY, TAN			
76	105	CLAY, GRAY			
105	106	GRAVEL			
106	166	CLAY, GRAY			
166	168	GRAVEL			
168	170	CLAY, GRAY			

**7 CONTRACTOR'S OR LANDOWNER'S CERTIFICATION:** This water well was (1) constructed, (2) reconstructed, or (3) plugged under my jurisdiction and was completed on (mo/day/year) 2/13/07 and this record is true to the best of my knowledge and belief. Kansas Water Well Contractor's License No. 760 This Water Well Record was completed on (mo/day/year) 3/11/07 under the business name of ASSOCIATES DRENDEL INC by (signature) [Signature]

INSTRUCTIONS: Use typewriter or ball point pen. PLEASE PRESS FIRMLY and PRINT clearly. Please fill in blanks, underline or circle the correct answers. Send top three copies to Kansas Department of Health and Environment, Bureau of Water, Geology Section, 1000 SW Jackson St., Suite 420, Topeka, Kansas 66612-1367. Telephone 785-296-5522. Send one to WATER WELL OWNER and retain one for your records. Fee of \$5.00 for each constructed well. Visit us at <http://www.kdhe.state.ks.us/geo/waterwells>.

Although the potentiometric surface is continuous in the alluvium of South Fork Big Nemaha River and Turkey Creek, there are not enough data to show the surface in detail. Large areas of the uplands are underlain by isolated deposits of saturated sand and gravel that are separated by great thicknesses of relatively impermeable glacial till. Water in the sand and gravel deposits may be semiconfined (semiarartesian) or unconfined.

Greatest saturated thicknesses generally are in areas that are underlain by buried valleys filled with large thicknesses of glacial materials (fig. 5). Locally, however, the valleys are filled by relatively impermeable till that yields little water to wells. Often, a shallow aquifer is underlain by till of low permeability so that the effective water-producing zone is much less than the saturated thickness of glacial deposits. The unconsolidated deposits thin near valley walls and bedrock highs, resulting in less saturated thickness. In most areas where 20 to 30 feet of saturation exists, thin sand or gravel deposits should yield sufficient quantities of water for domestic and stock use. The range in yields to wells from the unconsolidated deposits (fig. 6) is related both to the saturated thickness and the permeability of the water-producing material.

Figure 5--Saturated thickness of unconsolidated deposits, 1968-72.

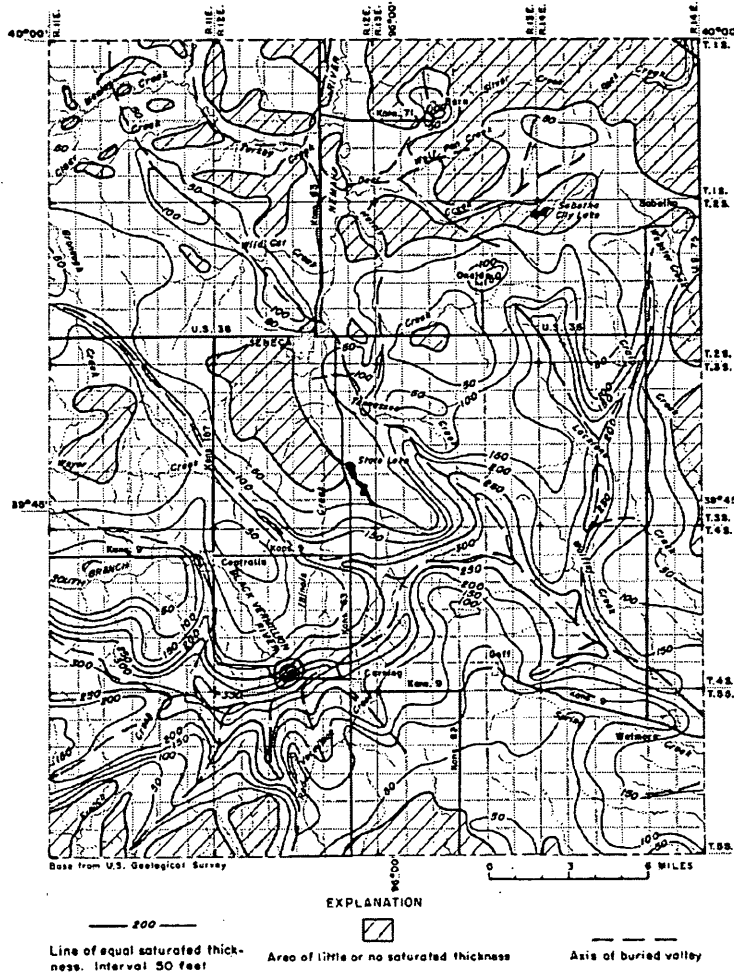
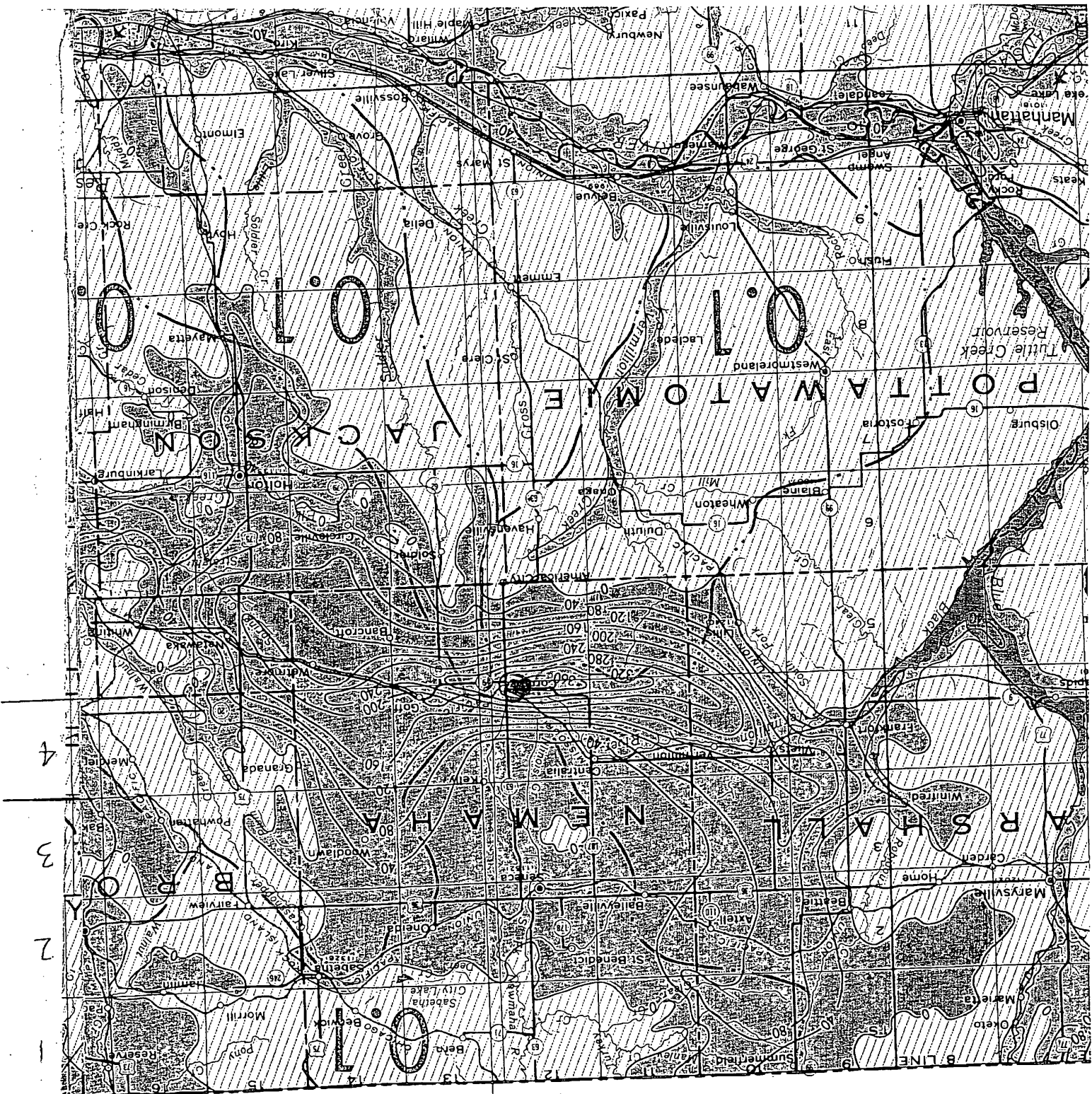
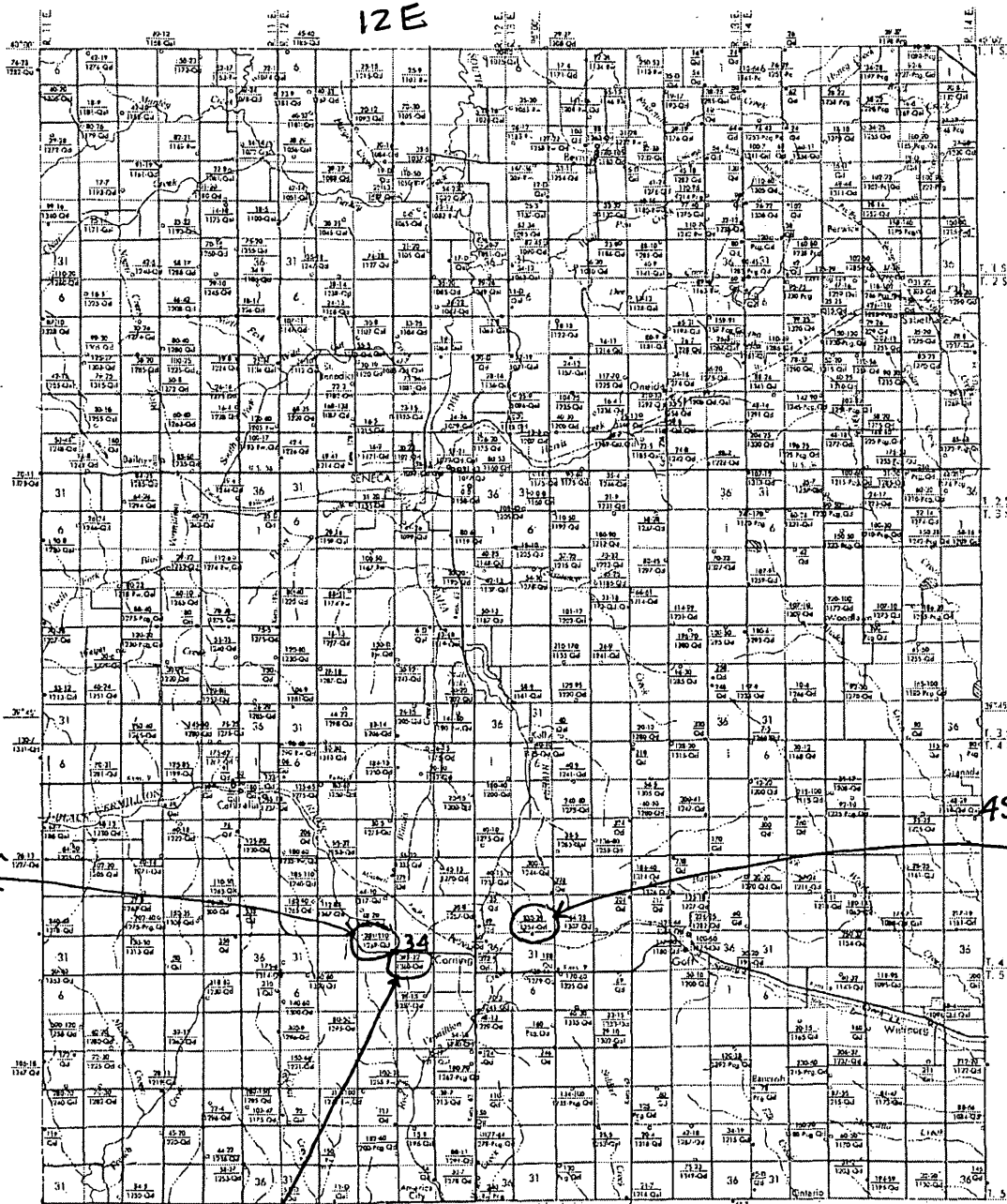


Figure 6--Generalized yields to wells in uncolidated deposits, 1968-72.

≈ 330' thickness



12



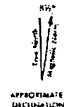
### EXPLANATION

- Domestic or stock well
- Public supply well
- Spring
- Public supply spring
- Observation well
- Test hole

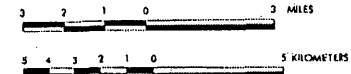
Upper left number is depth of well or test hole, in feet below land surface; second number (when shown) is depth to water level, in feet below land surface (D indicates dry hole). Lower left number is altitude of water level, in feet above mean sea level; second symbol is aquifer (see list below):

- Qd - Alluvium and terrace deposits
- Qd - Glacial drift
- Pc - Chase Group
- Pg - Council Grove Group
- W - Wabaussee Group

Area of attainable flow



Scale 1:125 000



381' depth  
110' water  
Drift

330' depth  
29' water  
Drift

393' depth  
22' water  
glacial drift

Map from U.S. Geological Survey, *Hydrology*, 1923, 1-2 Kansas City, 1920  
Illustration prepared by Lane J. Cooke

Prepared by the Kansas Geological Survey and the U.S. Geological Survey in cooperation with the Director of Environmental Health of the Kansas State Department of Health and the Director of Water Resources of the Kansas State Board of Agriculture

1320 Research Park Drive  
Manhattan, Kansas 66502

Jackie McClaskey, Secretary



Phone: (785) 564-6700

Fax: (785) 564-6777

Email: ksag@kda.ks.gov

www.agriculture.ks.gov

Sam Brownback, Governor

November 9, 2017

ROGER D BECKER TRUST  
1095 52ND RD  
CORNING KS 66417

**FILE COPY**

RE: Application  
File No. 49932

Dear Sir or Madam:

Your application for permit to appropriate water in 33-4S-12E in Nemaha County, was received and has been assigned the file number noted above.

As a matter of record, the Division of Water Resources has on hand a large number of applications awaiting processing. Therefore to be fair to all concerned, and so that we can process those applications on hand in the order they were received, we intend to concentrate on the backlog of applications until the issue is resolved. Once review of your application has begun, we will contact you, if additional information is required.

In accordance with the provisions of the Kansas Water Appropriation Act, a portion of which is included below, the use of water as proposed prior to approval of the application is unlawful. Once approved, compliance with the terms, conditions and limitations of the permit is necessary. Conservation of the water resources of Kansas is required.

**Section 82a-728 of the Kansas Water Appropriation Act, provides (a) except for the appropriation of water for the purpose of domestic use, . . . it shall be unlawful for any person to appropriate or threaten to appropriate water from any source without first applying for and obtaining a permit to appropriate water in accordance with the provisions of the Water Appropriation Act or for any person to violate any condition of a vested right, appropriation right or an approved application for a permit to appropriate water for beneficial use.**

**(b) (1) The violation of any provision of this section by any person is a class C misdemeanor . . .**

**A class C misdemeanor is punishable by a fine not to exceed \$500 and/or a term of confinement not to exceed one month in the county jail. Each day that the violation occurs constitutes a separate offense.**

If you have any questions, please contact me at (785) 564-6645. If you wish to discuss a specific file, please have the file number ready so that we may help you more efficiently.

Sincerely,

A handwritten signature in black ink that reads "Kristen A. Baum". The signature is written in a cursive style.

Kristen A. Baum  
New Applications Unit Supervisor  
Water Appropriation Program

BAT: dlw  
pc: TOPEKA Field Office  
GMD

SCANNED

ROGER BECKER TRUST SITE MAP  
SECS. 28 & 33, T4S, R12E  
NEMAHA COUNTY

1:24,000

49932  
WATER RESOURCES  
RECEIVED

NOV 02 2017



Proposed Place of Use



Proposed Point of Diversion

There are no known wells of any kind within 1/2 mile of the proposed point of diversion.

*Roger S. Becker*

SCANNED