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

1. File Number:	2. Status Change Date:	3. Field Office:	4. GMD:
50,153	3/6/2019	**02**	**0**

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) — Person ID **20572** — Add Seq# ____ — New to system ☐

KNIGHT FEEDLOT INC
1768 AVENUE J
LYONS KS 67554-8805

7c. Landowner(s) — Person ID ____ — Add Seq# ____ — New to system ☐

7b. Landowner(s) — Person ID ____ — Add Seq# ____ — New to system ☐

7a

7d. Misc. — Person ID ____ — Add Seq# ____ — New to system ☐

KLA ENVIRONMENTAL SERVICES INC
1700 E IRON AVE
SALINA KS 67401

8. WUR Correspondent — Person ID ____ — Add Seq# ____ — New to system ☐ — Notarized WUC Form ☐
Overlap File (s) WUC Agree ☐ Yes ☐ No
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: **12/31/2020** 11. Perfection Date: **12/31/2024** 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: **12/18/2018** By: **DWS**
Date Entered: 3/12/2019 By: UM

File No. **50,153**	15. Formation Code: 100/330	Drainage Basin: **Cow Creek**	County: **RC**	Special Use:	Stream:

16. Points of Diversion									17. Rate and Quantity MOD ADDL QTY				
									Authorized		Additional		
MOD DEL ENT	PDIV	Qualifier	S	T	R	ID	'N	'W	Rate gpm	Quantity mgy	Rate gpm	Quantity mgy	Overlap PD Files
√	87141	SE NE NE	15	19	8W	1	4170	13	80	32.585	80	0	NONE

18. Storage: Rate _____ NF Quantity _____ ac/ft Additional Rate _____ NF Additional Quantity _____ ac/ft

19. Limitation: **174.25** **MG**/yr at ____ gpm (_____ cfs) when combined with file number(s) **RC-2; 3,543; 9,997; 34,290; 38,175; 38,177; 47,276; 47,277; 50,093 & 50,094**

Limitation: _____ af/yr at _____ gpm (_____ cfs) when combined with file number(s) _____

20. Meter Required? ☒ Yes ☐ No To be installed by **12/31/2020** Date Acceptable Meter Installed _____

21. Place of Use						NE¼				NW¼				SW¼				SE¼				Total	Owner	Chg?	Overlap Files
						NE ¼	NW ¼	SW ¼	SE ¼	NE ¼	NW ¼	SW ¼	SE ¼	NE ¼	NW ¼	SW ¼	SE ¼	NE ¼	NW ¼	SW ¼	SE ¼				
MOD DEL ENT	PUSE	S	T	R	ID																				
√	31039	23	19	8W	1	**FEEDLOT – ENTIRE SECTION**																	7a.	NO	See Below

Comments: **KNIGHT FEEDLOT FILES: 34,290; 38,175; 38,177; 47,276; 47,277; 50,093; 50,094 & 50,153 all overlap in Place of Use.**

CITY OF LYONS FILES: RC-2; 3,543 and 9,997 overlap in Place of Use.

KANSAS DEPARTMENT OF AGRICULTURE
Division of Water Resources
MEMORANDUM

TO: Files **DATE:** December 18, 2018

FROM: Doug Schemm **RE:** Application, File No. 50,153

Knight Feedlot Inc has filed the above referenced application proposing to appropriate 35.585 million gallons (100 acre-feet), at a diversion rate of 80 gallons per minute for stockwatering use. The proposed well is located in the Northeast Quarter of Section 15, Township 19 South, Range 8 West, Rice County, Kansas, within the Cow Creek drainage basin. The applicant has signed the application form stating that they have legal access to the point of diversion. There are no overlapping files in point of diversion. However, this application is part of an expanding feedlot operation, which has multiple overlapping files in place of use, including seven senior water rights, File Nos. 34,290; 38,175; 38,177; 47,276; 47,277; 50,093; and 50,094. KLA Environmental Services, Inc. assisted with the application process.

File No. 34,290 is authorized 3 million gallons, File No. 38,175 is authorized 15.4 million gallons, File No. 38,177 is authorized 16.16 million gallons, File No. 47,276 is authorized 31.536 (limited to 109.5 million gallons with 24.24 million gallons additional), File No. 47,277 is authorized 21.024 million gallons (limited to 109.5 million gallons with 0 additional), File No. 50,093 is authorized 100 million gallons (limited to 174.25 million gallons), and File No. 50,094 is authorized 47.3 million gallons (limited to 174.25 million gallons). Note that in addition to being limited with these senior STK files, these files are also limited in quantity with File Nos. RC-2; 3,543 and 9,997, which are owned by the City of Lyons. File No. RC-2 can provide 23 million gallons; File No. 3,543 can provide 7.1 million gallons; and File No. 9,997 can provide 24.6 million gallons for a total of 54.7 million gallons from the City of Lyons. The applicant's files are limited to total of 174.25 million gallons when combined with the City's files. Note that recent Place of Use changes were approved on all senior files to create a complete overlap in Place of Use with new applications (entire Section 23).

The applicant provided an estimate for total water needs, as follows: 30,000 head of cattle x 10.5 gallons per head per day x 365 days = 114.975 million gallons. This is less than the typical maximum value requested of 15 gallons per head per day, which would equate to 164.25 million gallons. In addition, for similar operations water for cooling, sanitation, and other uses, can be estimated at 10 million gallons, for a total of 174.25 million gallons. As noted above, the authorized quantity for the feedlot supply is 174.25 million gallons. Therefore, it is proposed that File No. 50,153 will be limited to 174.25 million gallons with all senior files, providing 0 additional water. This additional well will provide flexibility and backup supply for the feedlot if any other wells were to fail.

The applicant provided multiple test hole logs with the previous applications and a well log for the pending application. In addition, during the processing of File Nos. 47,276 and 47,277 the applicant was required to provide additional hydrogeological data due to failure to meet well spacing for the confined Dakota system aquifer. Ground Water Associates, Inc. conducted pumping tests and reviewed available geologic reports and well logs, and prepared a letter dated July 23, 2009. This letter indicates that there are two aquifers, a shallow unconsolidated Quaternary Age aquifer composed of silt and sand, and a deeper sandstone aquifer (Dakota system). The letter also notes that both aquifers are considered to be semi-confined. Pump test results showed minimal drawdown of less than one foot in a well just 50 feet away from the pumping well, and no drawdown at wells 400 feet and 800 feet away. Based on this data, DWR approved File Nos. 47,276 and 47,277 noting that the required minimum well spacing criteria is not necessary to prevent direct impairment in this instance.

In general, the nearby well logs show clay and "Dakota drift" extending to depths of 40 feet to 60 feet below ground, underlain by interbedded sandstone and shale. The sandstone units range from 6 feet to 27 feet in thickness, with several of them labeled as "coarse".

However, the well log submitted with this pending application extends to a total depth of 260 feet, which is significantly deeper (over 100 feet deeper) than other nearby wells. Depths to sandstone and static water level were also considerably deeper, and the static water level extends above the top of the sandstone aquifers. This well log also does not contain any of the shallower drift deposits other area wells show. Based on the depth to the aquifer and static water level, this well log indicates it is sourcing the confined Dakota aquifer system. As noted above, the senior files to the south and nearby domestic wells are sourcing unconfined Dakota aquifer system and Quaternary deposits.

As discussed above, the source of water for the pending application appears to be the **confined Dakota aquifer system** based on the test hole log that was submitted. No specific safe yield evaluation has been adopted by the chief engineer for the confined Dakota aquifer system, although it is likely that the confined Dakota aquifer system would receive significantly less recharge then a near-surface, unconfined aquifer. Therefore, in order to better represent the potential recharge to this confined aquifer, it was determined that the saturated thickness of the aquifer and the thickness of the confining unit are critical factors. Limited saturated thickness with a significant confining unit would get less recharge (0.3 times the "standard" K.A.R. 5-3-11 value), while significant saturated thickness with a limited confining unit would get more recharge (0.5 times the "standard" K.A.R. 5-3-11 value). This well log shows only 22 feet of saturated thickness and over 200 feet of confining unit (clay and shale). Dividing the saturated thickness by the confining unit thickness (22/257) results in a factor of 0.11. A factor less than 1 gets 0.3 times the "normal" recharge. The K.A.R. 5-3-11 safe yield recharge value was determined to be 1.9 inches. Multiplying 1.9 inches x 0.3 results in a recharge of 0.5 inches. The area of consideration was determined to be 3,209 acres (truncating out all of the south portion of the circle). Therefore, 3,209 acres x 0.5 inches x 100% recharge available / 12 provides a safe yield of 133.71 acre-feet. There are no existing appropriations sourcing the confined Dakota aquifer system in this area, leaving 133.71 acre-feet available, and the application meets safe yield (see attached calculation sheets).

The applicant did not identify any wells within one-half (½) mile of the proposed point of diversion. A review of aerial photo maps also indicates that there are no nearby residences or other structures, which would indicate there are no nearby domestic wells. Per K.A.R. 5-4-4, for the confined Dakota aquifer system, well spacing is 2,640 feet to domestic wells and 4 miles to non-domestic wells, and the application appears to comply with well spacing criteria to all other wells. The nearest non-domestic wells are all sourcing the unconfined Dakota aquifer system. The applicant owns all of the other wells in this area, and the nearest non-domestic well is over 4,500 feet away (and in a different source).

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 December 12, 2018 e-mail, Jeff Lanterman, Water Commissioner, Stafford Field Office, recommended approval of the referenced application. Based on the above discussion, well spacing and safe yield criteria are met, approval of the application will not impair senior water rights nor prejudicially or unreasonably affect the public interest, and it will provide greater flexibility in sources of water and provide backup in case of other well failure, it is recommended that the referenced new application be approved.

Douglas W. Schemm
Environmental Scientist
Topeka Field Office

1320 Research Park Drive
Manhattan, KS 66502
785-564-6700
www. agriculture.ks.gov

Kansas
Department of Agriculture

900 SW Jackson, Room 456
Topeka, KS 66612
785-296-3556

Mike Beam, Acting Secretary

Laura Kelly, Governor

March 15, 2019

KNIGHT FEEDLOT INC
1768 AVENUE J
LYONS KS 67554-8805

Re: Appropriation of Water, File No. 50,153

FILE COPY

Dear Mr. Knight:

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,

Brent A. Turney, P.G.
Change Application Unit Supervisor
Water Appropriation Program

BAT:dws
Enclosures

pc: Stafford Field Office
KLA Environmental Services, Inc.

THE STATE OF KANSAS

KANSAS DEPARTMENT OF AGRICULTURE
Mike Beam, Acting 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. 50,153** of the applicant

KNIGHT FEEDLOT INC
1768 AVENUE J
LYONS KS 67554-8805

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 **October 29, 2018.**

2. That the water sought to be appropriated shall be used for stockwatering use at a cattle feedlot located in Section 23, in Township 19 South, Range 8 West, Rice County, Kansas.

3. That the authorized source from which the appropriation shall be made is groundwater, to be withdrawn by means of one (1) well located in the Southeast Quarter of the Northeast Quarter of the Northeast Quarter (SE¼ NE¼ NE¼) of Section 15, more particularly described as being near a point 4,170 feet North and 13 feet West of the Southeast corner of said section, in Township 19 South, Range 8 West, Rice 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 **80 gallons per minute (0.18 c.f.s.)** and to a quantity not to exceed **32.585 million gallons** (100 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, 2020** or within any authorized extension thereof. The applicant shall notify the Chief Engineer and pay the statutorily required field inspection fee of $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 submitted prior to the expiration of the deadline and shall be accompanied by the required statutory fee of $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, 2024** 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 of $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 an acceptable water flow meter shall be installed and maintained on the diversion works authorized by this permit in accordance with 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 readings at the beginning and end of the report year).

13. 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.

14. That no water user shall engage in nor allow the waste of any water diverted under the authority of this permit.

15. 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.

16. 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.

17. That the quantity of water approved under this permit is further limited to the quantity which combined with Vested Water Right, RC-02; Water Right, File Nos. 3,543; 9,997; 34,290; 38,175; 38,177; and Appropriation of Water, File Nos. 47,276; 47,277; 50,093; and 50,094, will provide a **total not to exceed 174.25 million gallons of water** per calendar year for stockwatering use as described herein.

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 6th day of March, 2019, in Manhattan, Riley County, Kansas.

DIVISION OF WATER RESOURCES
DAVID W. BARFIELD
CHIEF ENGINEER
KANSAS DEPARTMENT of AGRICULTURE

David W. Barfield, P.E.
Chief Engineer
Division of Water Resources
Kansas Department of Agriculture

State of Kansas)
) SS
County of Riley)

The foregoing instrument was acknowledged before me this 6th day of March, 2019, by David W. Barfield, P.E., Chief Engineer, Division of Water Resources, Kansas Department of Agriculture.

STATE OF KANSAS NOTARY PUBLIC
KAREN HUNTER
My Appointment Expires
October 24, 2022

Notary Public

CERTIFICATE OF SERVICE

On this 1st day of March, 2019, I hereby certify that the foregoing Approval of Application and Permit to Proceed, File No. 50,153, dated March 1, 2019 was mailed postage prepaid, first class, US mail to the following:

KNIGHT FEEDLOT INC
1768 AVENUE J
LYONS KS 67554-8805

With photocopies to:

KLA ENVIRONMENTAL SERVICES INC
1700 E IRON AVE
SALINA KS 67401

STAFFORD FIELD OFFICE

Danielle Wilson

Division of Water Resources

THE STATE OF KANSAS

KANSAS DEPARTMENT OF AGRICULTURE
Jackie McClaskey, Secretary of Agriculture

DIVISION OF WATER RESOURCES
David W. Barfield, Chief Engineer

File Number 50153
This item to be completed by the Division of Water Resources.

Water Resources Received
OCT 29 2018
1:10
KS Dept Of Agriculture

APPLICATION COMPLETE
12/12/18
Reviewer KAB

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, Kansas 66502:

1. Name of Applicant (Please Print): Knight Feedlot, Inc.
   Address: 1768 Avenue J
   City: Lyons State KS Zip Code 67554
   Telephone Number: (620) 257-5106

2. The source of water is: ☐ surface water in _____ (stream)
   OR ☒ groundwater in Cow Creek (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 100 acre-feet OR _____ gallons per calendar year, to be diverted at a maximum rate of 80 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. 2 *GMD* 8 *Meets K.A.R. 5-3-1 (YES / NO)* *Use* STK *Source* G/S *County* RC *By* DAW *Date* 10/29/18
Code REG *Fee $* 200 *TR #* _____ *Receipt Date* 10/29/18 *Check #* 6023

DWR 1-100 (Revised 06/16/2014)

SCANNED
11/1/2018 UM

File No. 50153

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.

(A) One in the SE quarter of the NE quarter of the NE quarter of Section 15, more particularly described as being near a point 4170 feet North and 13 feet West of the Southeast corner of said section, in Township 19 South, Range 8 East/West (circle one), Rice County, Kansas.

(B) One in the _____ quarter of the _____ quarter of the _____ quarter of Section _____, more particularly described as being near a point _____ feet North and _____ feet West of the Southeast corner of said section, in Township _____ South, Range _____ East/West (circle one), _____ County, Kansas.

(C) One in the _____ quarter of the _____ quarter of the _____ quarter of Section _____, more particularly described as being near a point _____ feet North and _____ feet West of the Southeast corner of said section, in Township _____ South, Range _____ East/West (circle one), _____ County, Kansas.

(D) One in the _____ quarter of the _____ quarter of the _____ quarter of Section _____, more particularly described as being near a point _____ feet North and _____ feet West of the Southeast corner of said section, in Township _____ South, Range _____ East/West (circle one), _____ 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 (¼) 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):
Knight Farms, Inc., 1768 Avenue J, Lyons, KS 67554 620-257-5106
(name, address and telephone number)

_____
(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 October 23, 2018. X _____
Applicant's Signature

The applicant must provide the required information or signature irrespective of whether they are the landowner. Failure to complete this portion of the application will cause it to be unacceptable for filing and the application will be returned to the applicant.

7. The proposed project for diversion of water will consist of one well
(number of wells, pumps or dams, etc.)
and (was)(will be) completed (by) 12/31/2018.
(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 03/31/2019.
(Mo/Day/Year)

Water Resources
Received
OCT 29 2018
KS Dept Of Agriculture

SCANNED

File No. 50153

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.

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 _____

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 ½ 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 ½ mile, please advise us.

(c) If the application is for surface water, the names and addresses of the landowner(s) ½ mile downstream and ½ 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.

Water Right File Nos. A 50080, A 50079, A 50078, A 50093, A 50094,A 47276, A 47277, A 34290, A 38175 and A 38177

50153

FEE SCHEDULE

1. The fee for an application for a permit to appropriate water for beneficial use, except for domestic use, shall be (see paragraph No. 2 below if requesting storage):

ACRE-FEET	FEE	
0-100	$200.00	
101-320	$300.00	
More than 320	$300.00	plus $20.00 for each additional 100 acre-feet or any part thereof.

2. The fee for an application in which storage is requested, except for domestic use, shall be:

ACRE-FEET	FEE	
0-250	$200.00	
More than 250	$200.00	plus $20.00 for each additional 250 acre-feet of storage or any part thereof.

Note: If an application requests both direct use *and* storage, the fee charged shall be as determined under No. 1 or No. 2 above, whichever is greater, but not both fees.

3. The fee for an application for a permit to appropriate water for water power or dewatering purposes shall be $100.00 plus $200.00 for each 100 cubic feet per second, or part thereof, of the diversion rate requested.

Note: The applicant shall notify the Chief Engineer and pay the statutorily required field inspection fee of $400.00 when construction of the works for diversion has been completed, except that for applications filed on or after July 1, 2009, for works constructed for sediment control use and for evaporation from a groundwater pit for industrial use shall be accompanied by a field inspection fee of $200.00.

MAKE CHECKS PAYABLE TO THE KANSAS DEPARTMENT OF AGRICULTURE

ATTENTION

A Water Conservation Plan may be required per K.S.A. 82a-733. A statement that your application for permit to appropriate water may be subject to the minimum desirable streamflow requirements per K.S.A. 82a-703a, b, and c may also be required from you. After the Division of Water Resources has had the opportunity to review your application, you will be notified whether or not you will need to submit a Water Conservation Plan. You also may be required to install a water flow meter or water stage measuring device on your diversion works prior to diverting water. There may be other special conditions or Groundwater Management District regulations that you will need to comply with if this application is approved.

CONVERSION FACTORS

1 acre-foot equals 325,851 gallons

1 million gallons equal 3.07 acre-feet

File No. 50153

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	Unknown			
Total depth of well	230'			
Depth to water bearing formation	Unknown			
Depth to static water level	80'			
Depth to bottom of pump intake pipe	220'			

14. The relationship of the applicant to the proposed place where the water will be used is that of

_____.
(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):

_____
(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 Lyons, Kansas, this 23 day of October (month), 2018 (year).

X _____
(Applicant Signature)

By _____
(Agent or Officer Signature)

_____
(Agent or Officer - Please Print)

Assisted by _____ _____ Date: _____
(office/title)

Water Resources
Received
OCT 29 2018
SCANNED
KS Dept Of Agriculture

STOCKWATER USE
SUPPLEMENTAL SHEET

File No. 50153

Name of Applicant (Please Print): Knight Feedlot, Inc.

1. Please indicate type of livestock (cattle, hogs, etc.): Cattle (greater than 700 pounds)

2. Please complete the following table showing past and present water requirements:

PAST NUMBER OF HEAD AND WATER DIVERTED, IF APPLICABLE

LAST 5 YEARS	NUMBER OF HEAD	WATER DIVERTED (GALLONS)	GALLONS PER HEAD PER DAY
5 years ago	8,575	42,340,150	12.92
Last year	11,875	50,847,140	11.75
Present Year	13,442	22,041,410	10.90

3. Please complete the following table showing estimated future water requirements:

ESTIMATED FUTURE NUMBER OF HEAD AND WATER DIVERTED

NEXT 5 YEARS	NUMBER OF HEAD	WATER TO BE DIVERTED (GALLONS)	GALLONS PER HEAD PER DAY
Year 1	30,000	114,975,000	10.5
Year 2	30,000	114,975,000	10.5
Year 3	30,000	114,975,000	10.5
Year 4	30,000	114,975,000	10.5
Year 5	30,000	114,975,000	10.5

Please attach any additional information, tables, or curves showing past, present and estimated future water requirements to substantiate the amount of water requested.

4. Please designate the legal description of the location where the water is to be used. Show in the space provided below the Section (S), Township (T), and Range (R), and the number of acres in each forty acre tract or fractional portion thereof.

S	T	R	NE¼				NW¼				SW¼				SE¼				TOTAL
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
23	19	8W	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	640

50153

5. Show quantities of water used and all associated water uses at the feedlot such as water used in feed mills, cooling of animals, washing, flushing of wastes, etc.:

DRINKING

30,000 head of Cattle x 10.5 gallons/head (avg.) x 365 days = 114,975,000 gallons

_____ head of _____ x _____ gallons/head (avg.) x _____ days = _____ gallons

_____ head of _____ x _____ gallons/head (avg.) x _____ days = _____ gallons

COOLING

_____ gallons/hour x _____ hour/day x _____ days = _____ gallons

SANITATION

_____ g.p.m. x 60 min/hr x _____ hr/wk x _____ wks/yr = _____ gallons

OTHER USE (Explain) _____ = _____ gallons

TOTAL ---------- 114,975,000 gallons

6. Show location of present and future location of confinement pens on your attached maps or photographs.

7. Total feed bunk space for cattle or livestock is 30,000 linear feet.

8. Total size of stock pens for confinement area of cattle, hogs, etc. is 7,500,000 square feet.

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

Schemm, Doug [KDA]

Subject: FW: 50,153 Knight Feedlot

From: Lanterman, Jeff [KDA]
Sent: Wednesday, December 12, 2018 10:40 AM
To: Schemm, Doug [KDA] <Doug.Schemm@ks.gov>
Cc: Conant, Cameron [KDA] <Cameron.Conant@ks.gov>
Subject: RE: 50,153 Knight Feedlot

Doug.

Based on that well log I totally agree with you on confined Dakota. That is an interesting approach to SY for sure. Is this consistent with how all confined Dakota wells are evaluated? I also wonder how they decided how to screen and grout that well. Looks like the screen started in a clay layer and had about 70 feet till they probably hit aquifer material.

I think its good enough since there is essentially nothing else in that source in the area per your memo.

I feel confident that 80 GPM on a backup well with no additional quantity in a fairly unused aquifer is not going to cause impairment.

Approve it.

Jeff

From: Schemm, Doug [KDA]
Sent: Monday, December 3, 2018 4:47 PM
To: Lanterman, Jeff [KDA] <Jeff.Lanterman@ks.gov>
Cc: Conant, Cameron [KDA] <Cameron.Conant@ks.gov>
Subject: 50,153 Knight Feedlot

So I decided to go with the confined Dakota for this new well. I don't know if you have seen my confined Dakota matrix before, but it reduces recharge quite a bit.
I've attached a well log, and my calculations. There are no other wells sourcing this deeper confined aquifer in this area within at least 4 miles.
I thought it would be a good idea to get this one done to go along with the other package.
Please review,
Thanks, Doug

50,153
meets safe yield for Confined Dakota Aquifer System.

Analysis Results

The selected PD is in an area OPEN to new appropriations.
The safe yield based on the variables listed below is ~~381.09~~ 133.71 AF.
Total prior appropriations in the circle is 100.00 AF. -100 = 0
Total quantity of water available for appropriation is ~~281.09~~ 133.71 AF.

Safe Yield Variables

The area used for the analysis is set at 3,209 acres.
The potential annual recharge at the circle center is estimated to be 1.9 inches. x0.3 = 0.5
The percent of recharge available for appropriation is 75%.

(3209 Acres x0.5 x.75 ÷ 12 = 133.71)

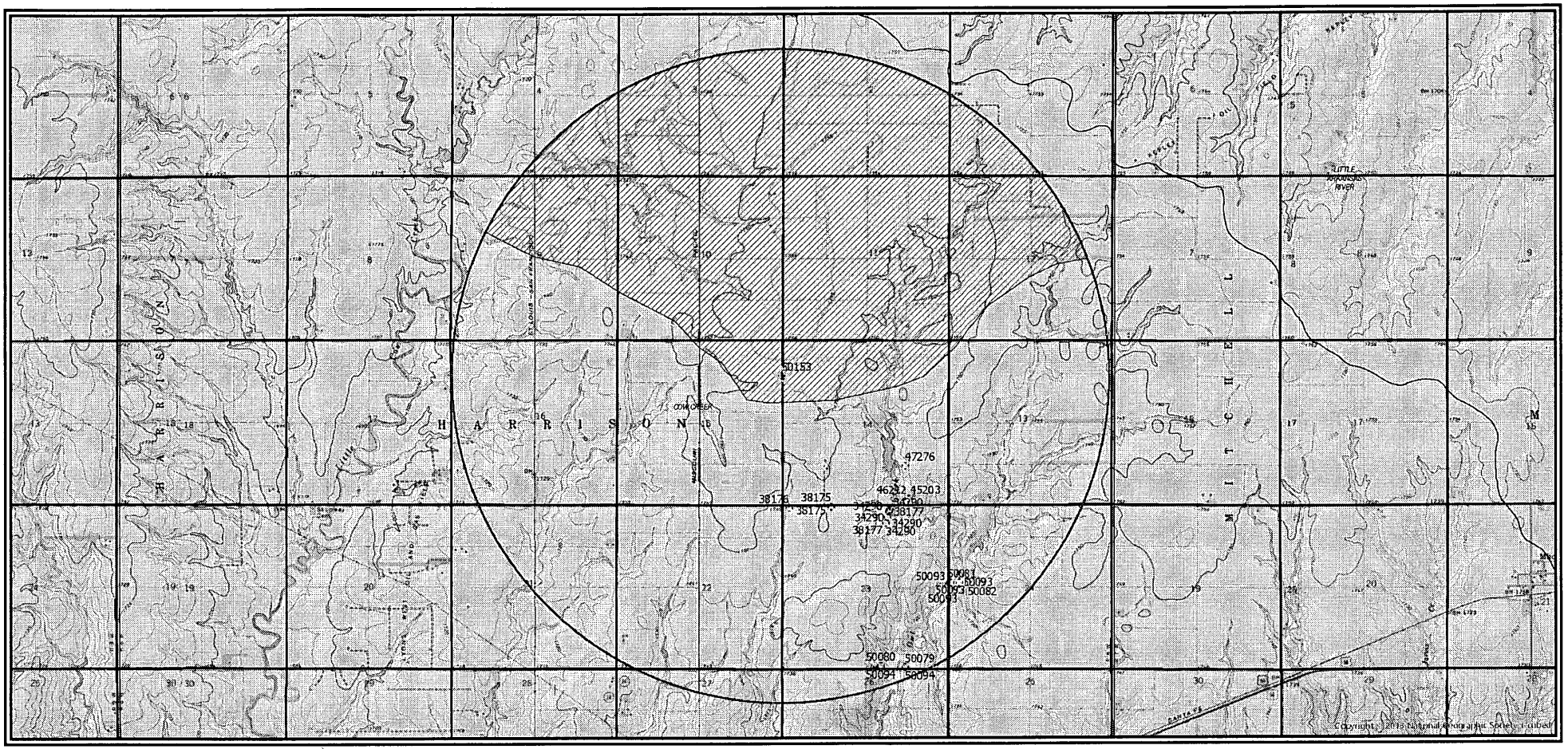
Authorized Quantity values are as of 03-DEC-2018 and are based on Appropriated and Vested ground water right and possible stream nodes for GMD #2. Domestic, Term and Temporary water rights have been excluded.
There is 1 water right and 1 point of diversion within the circle.

File Number	Use	ST	SR	Q4	Q3	Q2	Q1	FeetN	FeetW	Sec	Twp	Rng	ID	Qind	Auth Quant	Add Quant	Tot Acres	Net Acres
A 50153 00	STK	AY	G		SE	NE	NE	4170	13	15	19	08W	1	WR	100.00	100.00		

Limitations

File Number	Seq Num	Limitations
A 38177 00	1	40GPM COM/W #34,290
A 47276 00	1	109.5MGY COM/W #RC 2, 3543, 9997, 34290, 38175 & 38177
A 47277 00	1	109.5MGY COM/W #RC 2, 3543, 9997, 34290, 38175, 38177 & 47276

Safe Yield Report Sheet
Water Right- A5015300
Point of Diversion in 15-19S-08W
Footages from SE corner- 4,170 feet North 13 feet West



CONFINED DAKOTA AQUIFER SYSTEM SAFE YIELD EVALUATION FILE NUMBER: **50,153**

Safe Yield Calculation

Thickness of Saturated Aquifer (in feet)	divided by	Thickness of Confining Unit (in feet)	=	A Factor
22		200	=	0.11

If Factor < 1 — Multiply Normal Recharge by 0.3 to get Confined Aquifer Recharge (in inches)

If Factor is between 1 and 2 — **Multiply Normal Recharge by 0.4 to get Confined Aquifer Recharge (in inches)**

If Factor > 2 — Multiply Normal Recharge by 0.5 to get Confined Aquifer Recharge (in inches)

Normal Recharge (per 5-3-11) = 1.9 inches

1.9 inches x 0.3 = 0.5 inches of recharge

Area of consideration = 3209 acres

Annual Recharge = 0.5 inches

Percent Recharge = 1 100%

Confined Dakota Aquifer Safe Yield = **133.708** acre-feet

This would provide more recharge to a well that has a thinner confining unit and greater saturated thickness (i.e. a higher factor score).

Further review indicates that saturated thickness of the aquifer and thickness of confining unit are the 2 key variables that would most likely influence well production and recharge, respectively. Therefore, a weighted system was designed to account for this by dividing the saturated thickness by the thickness of the confining unit. The less confining unit you have the higher the recharge potential and the greater the saturated thickness the better production you will get from the well. This ratio provides a factor which can be used to evaluate the percentage of safe yield to consider as reasonable. Saturated thickness is pertinent to safe yield since per definition it is "long-term sustainable yield of the source".

#50,153

Report Date Tuesday, December 18 2018

AMOUNT STATISTICS REPORT FOR POINTS OF DIVERSION UNDER A 50153 00

##########

AMOUNT STATISTICS REPORT FOR POINTS OF DIVERSION UNDER A 50153 00 STK

Water Right and Points of Diversion Within 4.00 miles of point defined as:

4170 Feet North and 13 Feet West of the Southeast Corner of Section 15 T 19S R 8W

GROUNDWATER ONLY

Meets Spacing of 4 miles to all other wells in same source of supply

File Number	Use	ST	SR	Dist (mi)	Q4	Q3	Q2	Q1	FeetN	FeetW	Sec	Twp	Rng	ID	Batt	Auth_Quan	Add_Quan	Unit
A__ 34290	00	STK	NK	G* 1.06	--	NE	NW	NE	5067	1867	23	19	8W	10	G 2	9.21	9.21	AF
Same				1.06	--	NE	NW	NE	5053	1874	23	19	8W	4	B 2			
Same				1.05	--	NE	NW	NE	5080	1860	23	19	8W	9	B 2			
A__ 38175	00	STK	NK	G* .86	--	NW	NE	NW	5202	3721	23	19	8W	8		47.26	47.26	AF
A__ 38177	00	STK	NK	G* 1.06	--	NE	NW	NE	5067	1867	23	19	8W	10	G 2	49.59	49.59	AF
Same				1.06	--	NE	NW	NE	5053	1874	23	19	8W	4	B 2			
Same				1.05	--	NE	NW	NE	5080	1860	23	19	8W	9	B 2			
A__ 41196	00	IND	NK	G 3.26	--	NE	SE	NW	3372	3131	30	19	7W	5	G 3	22.34	22.34	AF
Same				3.28	--	NE	SE	NW	3302	3080	30	19	7W	3	B 3			
Same				3.25	--	NE	SE	NW	3393	3212	30	19	7W	4	B 3			
Same				3.26	--	NE	SE	NW	3420	3103	30	19	7W	6	B 3			
A__ 47276	00	STK	KK	G* .93	--	NE	SW	SE	1260	1360	14	19	8W	2		96.78	.00	AF
A__ 47277	00	STK	KK	G* 1.07	--	SW	SE	SE	191	1254	14	19	8W	1		64.52	.00	AF
A__ 50078	00	STK	AY	G 2.02	--	SE	SE	SE	82	229	23	19	8W	11		50.00	50.00	AF
A__ 50079	00	STK	AY	G 1.93	--	SE	SW	SE	46	1374	23	19	8W	12		50.00	50.00	AF
A__ 50080	00	STK	AY	G 1.87	--	SW	SW	SE	82	2147	23	19	8W	13		50.00	50.00	AF
A__ 50081	00	STK	AY	G 1.63	--	SW	SW	NW	2765	5241	24	19	8W	1		50.00	50.00	AF
A__ 50082	00	STK	AY	G 1.70	--	SW	SW	NW	2765	4640	24	19	8W	2		50.00	50.00	AF
A__ 50093	00	STK	AY	G 1.66	--	SW	SW	NW	2765	4940	24	19	8W	3	G 4	306.89	306.89	AF
Same				1.63	--	SW	SW	NW	2765	5241	24	19	8W	1	B 4			
Same				1.70	--	SW	SW	NW	2765	4640	24	19	8W	2	B 4			
Same				1.63	--	SW	SW	NW	3015	4940	24	19	8W	4	B 4			
Same				1.70	--	NW	NW	SW	2515	4940	24	19	8W	5	B 4			
A__ 50094	00	STK	AY	G 2.02	--	SE	SE	SE	82	229	23	19	8W	11		145.16	145.16	AF
Same				1.93	--	SE	SW	SE	46	1374	23	19	8W	12				
Same				1.87	--	SW	SW	SE	82	2147	23	19	8W	13				
A__ 50131	00	IND	KE	G 3.26	--	NE	SE	NW	3372	3131	30	19	7W	5	G 3	61.38	39.04	AF
Same				3.28	--	NE	SE	NW	3302	3080	30	19	7W	3	B 3			
Same				3.25	--	NE	SE	NW	3393	3212	30	19	7W	4	B 3			
Same				3.26	--	NE	SE	NW	3420	3103	30	19	7W	6	B 3			
A__ 50153	00	STK	AY	G .00	--	SE	NE	NE	4170	13	15	19	8W	1		100.00	100.00	AF

Total Net Quantities Authorized:	Direct	Storage
Total Requested Amount (AF) =	802.05	.00
Total Permitted Amount (AF) =	39.04	.00
Total Inspected Amount (AF) =	.00	.00
Total Pro_Cert Amount (AF) =	.00	.00
Total Certified Amount (AF) =	128.40	.00
Total Vested Amount (AF) =	.00	.00
TOTAL AMOUNT (AF) =	969.49	.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.

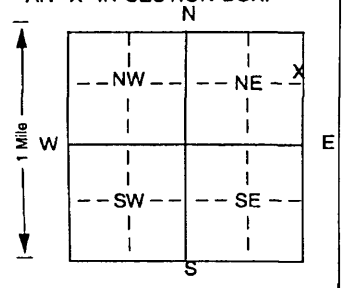
467 7551 WATER WELL RECORD Form WWC-5 KSA 82a-1212 ID No. #50,153

1 LOCATION OF WATER WELL:	Fraction	Section Number	Township Number	Range Number
County: Rice	SE 1/4 NE 1/4 NE 1/4	15	T 19 S	R 8 E (W)

Distance and direction from nearest town or city street address of well if located within city?
Approximately 3 3/4 miles north and 1 mile east of Lyons

2 WATER WELL OWNER: Knight Feedlot
RR#, St. Address, Box # : Route 1 - Box 93
City, State, ZIP Code : Lyons, KS 67554
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 256 ft. ELEVATION: unknown
Depth(s) Groundwater Encountered 1 ft. 2 ft. 3 ft.
WELL'S STATIC WATER LEVEL 103.6 ft. below land surface measured on mo/day/yr 1-13-05
Pump test data: Well water was not checked ft. after hours pumping gpm
Est. Yield unknown gpm: Well water was ft. after hours pumping gpm
Bore Hole Diameter 7 7/8 in. to 260 ft., and in. to ft.

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

Was a chemical/bacteriological sample submitted to Department? Yes No ✓ If yes, mo/day/yrs sample was submitted
Water Well Disinfected? Yes ✓ No

5 TYPE OF BLANK CASING USED: 1 Steel (2) PVC 3 RMP (SR) 4 ABS 5 Wrought iron 6 Asbestos-Cement 7 Fiberglass 8 Concrete tile 9 Other (specify below)
CASING JOINTS: Glued ✓ Clamped Welded Threaded

Blank casing diameter 5 in. to 164 ft., Dia 5 in. to 234 ft., Dia in. to ft
Casing height above land surface 24 in., weight 2.36 lbs./ft. Wall thickness or gauge No .214

TYPE OF SCREEN OR PERFORATION MATERIAL: 1 Steel 2 Brass 3 Stainless steel 4 Galvanized steel 5 Fiberglass 6 Concrete tile (7) PVC 8 RMP (SR) 9 ABS 10 Asbestos-cement 11 Other (specify) 12 None used (open hole)

SCREEN OR PERFORATION OPENINGS ARE: 1 Continuous slot (3) Mill slot 2 Louvered shutter 4 Key punched 5 Gauzed wrapped 6 Wire wrapped 7 Torch cut 8 Saw cut 9 Drilled holes 10 Other (specify) 11 None (open hole)

SCREEN-PERFORATED INTERVALS: From 164 ft. to 180 ft., From ft. to ft.
From 234 ft. to 254 ft., From ft. to ft.
GRAVEL PACK INTERVALS: From 152 ft. to 260 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 Bentonite Holeplug Sand

Grout Intervals: From 20 ft. to 149 ft., From 0 ft. to 20 ft., From 149 ft. to 152 ft.

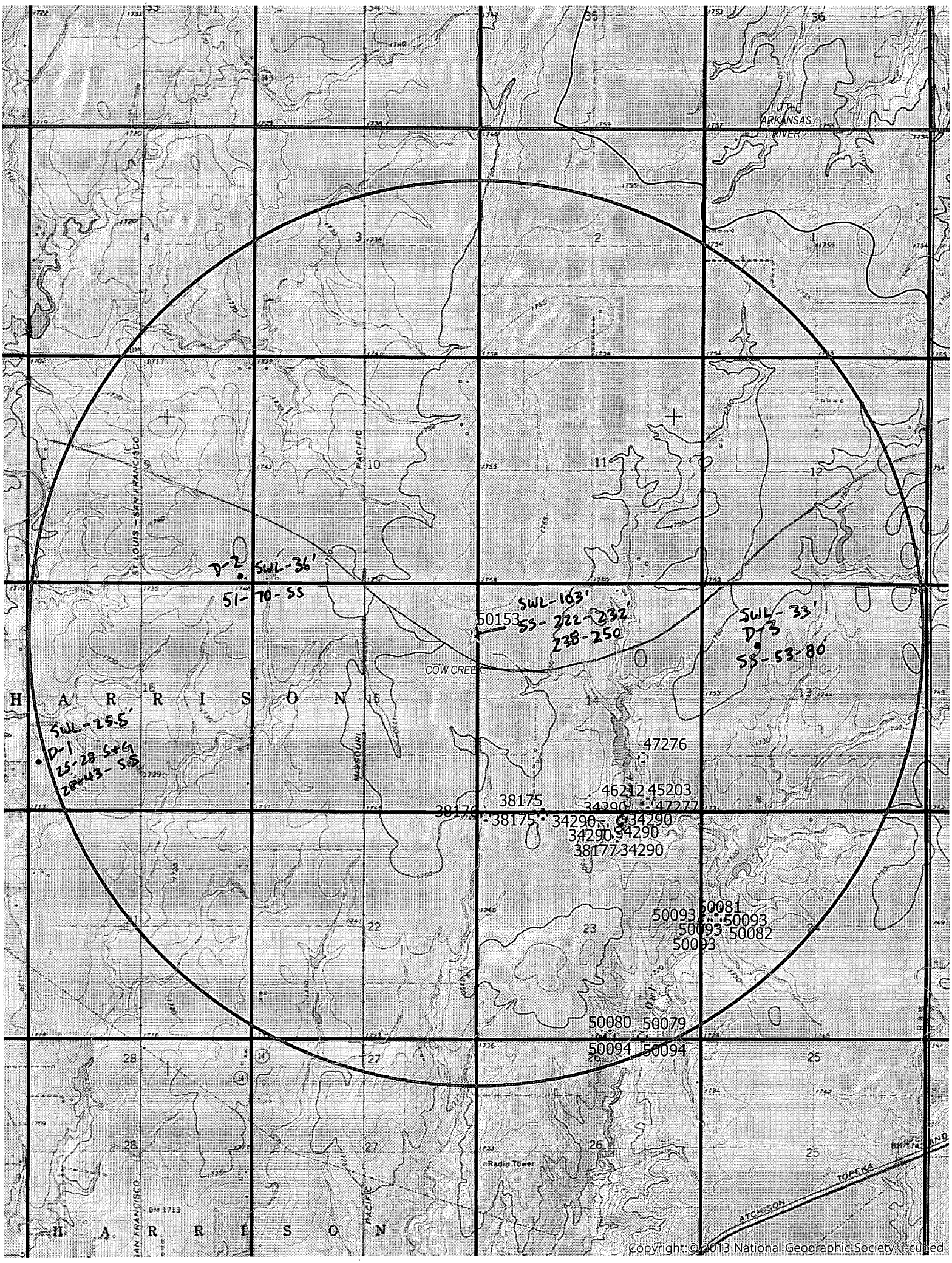
What is the nearest source of possible contamination:
1 Septic tank 2 Sewer lines 3 Watertight sewer lines 4 Lateral lines 5 Cess pool 6 Seepage pit 7 Pit privy 8 Sewage lagoon 9 Feedyard 10 Livestock pens 11 Fuel storage 12 Fertilizer storage 13 Insecticide storage 14 Abandoned water well 15 Oil well/Gas well 16 Other (specify below) None known

Direction from well? How many feet?

FROM	TO	LITHOLOGIC LOG	FROM	TO	PLUGGING INTERVALS
0	5	Topsoil			
5	8	Clay, dark gray			
8	77	Clay, brown			
77	122	Clay, white and yellow, sandstone streaks			
122	160	Clay, dark gray, sandstone streaks			
160	200	Clay, dark gray			
200	222	Shale, black			
222	232	Sandstone with shale streaks			
232	238	Shale, black			
238	250	Sandstone, soft			
250	254	Clay, greenish blue with sandstone streaks			
254	260	Shale, red			

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) 1-13-05 and this record is true to the best of my knowledge and belief. Kansas Water Well Contractor's License No 185 This Water Well Record was completed on (mo/day/yr) 1-19-05 under the business name of Clarke Well & Equipment, Inc. by (signature) Daniel W Clark

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, Topeka, Kansas 66620-0001. Telephone 785-296-5524. Send one to WATER WELL OWNER and retain one for your records. Fee of $5.00 for each constructed well.



D-1

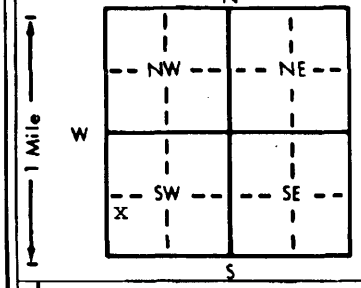
WATER WELL RECORD Form WWC-5 KSA 82a-1212

1 LOCATION OF WATER WELL: County: Rice | Fraction: NW ¼ SW ¼ SW ¼ | Section Number: 16 | Township Number: T 19 S | Range Number: R 8 E W

Distance and direction from nearest town or city street address of well if located within city?
Approx. 3 miles north and 1 mile west of K14 and 56 Hwys in Lyons, KS

2 WATER WELL OWNER: Richard F. Hysell
RR#, St. Address, Box # : Route 3
City, State, ZIP Code : Lyons, KS 67554
Board of Agriculture, Division of Water Resources
Application Number: not required

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



4 DEPTH OF COMPLETED WELL 49 ft. ELEVATION: unknown
Depth(s) Groundwater Encountered 1. 25.5 ft. 2. ft. 3. ft.
WELL'S STATIC WATER LEVEL 25.5 ft. below land surface measured on mo/day/yr 12/16/87
Pump test data: Well water was not ck'd. ft. after hours pumping gpm
Est. Yield unknown gpm: Well water was ft. after hours pumping gpm
Bore Hole Diameter 9 in. to 47 ft., and in. to ft.
WELL WATER TO BE USED AS: 1 Domestic 2 Irrigation 3 Feedlot 4 Industrial 5 Public water supply 6 Oil field water supply 7 Lawn and garden only 8 Air conditioning 9 Dewatering 10 Observation well 11 Injection well 12 Other (Specify below)
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 BLANK CASING USED: 1 Steel 2 PVC 3 RMP (SR) 4 ABS 5 Wrought iron 6 Asbestos-Cement 7 Fiberglass 8 Concrete tile 9 Other (specify below)
CASING JOINTS: Glued X Clamped Welded Threaded
Blank casing diameter 5 in. to 29 ft., Dia 5" in. to 47 ft., Dia in. to ft.
Casing height above land surface 24 in., weight 2.277 lbs./ft. Wall thickness or gauge No. .214

TYPE OF SCREEN OR PERFORATION MATERIAL: 7 PVC
1 Steel 2 Brass 3 Stainless steel 4 Galvanized steel 5 Fiberglass 6 Concrete tile 8 RMP (SR) 9 ABS 10 Asbestos-cement 11 Other (specify) 12 None used (open hole)

SCREEN OR PERFORATION OPENINGS ARE: 9 Drilled holes
1 Continuous slot 2 Louvered shutter 3 Mill slot 4 Key punched 5 Gauzed wrapped 6 Wire wrapped 7 Torch cut 8 Saw cut 9 Drilled holes 10 Other (specify) 11 None (open hole)

SCREEN-PERFORATED INTERVALS: From 29 ft. to 44 ft., From ft. to ft.
From ft. to ft., From ft. to ft.
GRAVEL PACK INTERVALS: From 22 ft. to 47 ft., From ft. to ft.
From ft. to ft., From ft. to ft.

6 GROUT MATERIAL: a) 1 Neat cement 2 Cement grout b) 3 Bentonite 4 Other
Grout Intervals: From a) 5 ft. to 20 ft., From b) 20 ft. to 22 ft., From ft. to ft.
What is the nearest source of possible contamination:
1 Septic tank 2 Sewer lines 3 Watertight sewer lines 4 Lateral lines 5 Cess pool 6 Seepage pit 7 Pit privy 8 Sewage lagoon 9 Feedyard 10 Livestock pens 11 Fuel storage 12 Fertilizer storage 13 Insecticide storage 14 Abandoned water well 15 Oil well/Gas well 16 Other (specify below)
Direction from well? Southwest How many feet? 100

FROM	TO	LITHOLOGIC LOG	FROM	TO	LITHOLOGIC LOG
0	25	Topsoil & brown clay			
25	28	Sand & gravel, fine w/broken lime-			
		stone & sandstone cobble and clay			
28	43	Sandstone, soft brown			
43	47	Dakota clay, gray & yellow			

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) 12/16/87 and this record is true to the best of my knowledge and belief. Kansas Water Well Contractor's License No. 185 This Water Well Record was completed on (mo/day/yr) 12/17/87 under the business name of Clarke Well & Equipment, Inc. 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, Bureau of Water Protection, Topeka, Kansas 66620-7320, Telephone: 913-862-9360. Send one to WATER WELL OWNER and retain one for your records.

OFFICE USE ONLY T R E/W SEC. ¼ ¼ ¼

D-2

WATER WELL RECORD Form WWC-5

Division of Water Resources App. No.

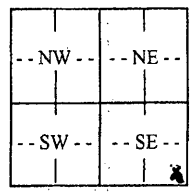
1 LOCATION OF WATER WELL: County: Rice	Fraction: ¼ SE ¼ SE ¼ SE ¼	Section Number: 9	Township No.: T 19 S	Range Number: R 8 ☐E ☑W

Street/Rural Address of Well Location; if unknown, distance & direction from nearest town or intersection: If at owner's address, check here ☐.
3 1/4 North of Lyons

Global Positioning System (GPS) information:
Latitude: ..... (in decimal degrees)
Longitude: ..... (in decimal degrees)
Elevation: .....
Datum: ☐ WGS 84, ☐ NAD 83, ☐ NAD 27
Collection Method:
☐ GPS unit (Make/Model: .....)
☐ Digital Map/Photo, ☐ Topographic Map, ☐ Land Survey
Est. Accuracy: ☐ <3 m, ☐ 3-5 m, ☐ 5-15 m, ☐ >15 m

2 WATER WELL OWNER: Venture Corp.
RR#, Street Address, Box #: 214 S. Hwy 281
City, State, ZIP Code : Great Bend, Ks. 67530

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



4 DEPTH OF COMPLETED WELL 80 ft.
Depth(s) Groundwater Encountered (1)..... ft. (2)..... ft. (3)..... ft.
WELL'S STATIC WATER LEVEL 36 ft. below land surface measured on mo/day/yr. 6-30-11
Pump test data: Well water was..... ft. after..... hours pumping..... gpm
EST. YIELD N/A gpm. Well water was..... ft. after..... hours pumping..... gpm
Bore Hole Diameter 10 in. to 80 ft., and ..... in. to ..... ft.
WELL WATER TO BE USED AS: ☐ Public water supply ☐ Geothermal ☐ Injection well
☐ Domestic ☐ Feedlot ☐ Oil field water supply ☐ Dewatering ☑ Other (Specify below)
☐ Irrigation ☐ Industrial ☐ Domestic-lawn & garden ☐ Monitoring well Supply
Was a chemical/bacteriological sample submitted to Department? ☐ Yes ☑ No
If yes, mo/day/yr sample was submitted.....
Water well disinfected? ☑ Yes ☐ No

5 TYPE OF CASING USED: ☐ Steel ☑ PVC ☐ Other .....
CASING JOINTS: ☑ Glued ☐ Clamped ☐ Welded ☐ Threaded
Casing diameter 5 in. to 80 ft., Diameter ..... in. to ..... ft., Diameter ..... in. to ..... ft.
Casing height above land surface 18 in., Weight SDR 26 lbs./ft., Wall thickness or gauge No. .....
TYPE OF SCREEN OR PERFORATION MATERIAL:
☐ Steel ☐ Stainless Steel ☑ PVC ☐ Other (Specify) .....
☐ Brass ☐ Galvanized Steel ☐ None used (open hole)
SCREEN OR PERFORATION OPENINGS ARE:
☐ Continuous slot ☐ Mill slot ☐ Gauze wrapped ☐ Torch cut ☐ Drilled holes ☐ None (open hole)
☐ Louvered shutter ☐ Key punched ☐ Wire wrapped ☑ Saw cut ☐ Other (specify) .....
SCREEN-PERFORATED INTERVALS: From 80 ft. to 50 ft., From ..... ft. to ..... ft.
From ..... ft. to ..... ft., From ..... ft. to ..... ft.
GRAVEL PACK INTERVALS: From 80 ft. to 20 ft., From ..... ft. to ..... ft.
From ..... ft. to ..... ft., From ..... ft. to ..... ft.

6 GROUT MATERIAL: ☐ Neat cement ☐ Cement grout ☑ Bentonite ☐ Other .....
Grout Intervals: From ..... ft. to ..... ft., From 20 ft. to 0 ft., From ..... ft. to ..... ft.
What is the nearest source of possible contamination:
☐ Septic tank ☐ Lateral lines ☐ Pit privy ☐ Livestock pens ☐ Insecticide storage ☑ Other (specify below)
☐ Sewer lines ☐ Cesspool ☐ Sewage lagoon ☐ Fuel storage ☐ Abandoned water well Asphalt plant
☐ Watertight sewer lines ☐ Seepage pit ☐ Feedyard ☐ Fertilizer storage ☐ Oil well/gas well
Direction from well North Distance from well 10

FROM	TO	LITHOLOGIC LOG	FROM	TO	LITHO. LOG (cont.) or PLUGGING INTERVALS
0	4	Top soil			
4	38	Tan clay/ caliche			
38	51	Tan clay			
51	70	Sandstone & rock			
70	74	Black shale			
74	75	Hard rock			
75	80	Black shale			

7 CONTRACTOR'S OR LANDOWNER'S CERTIFICATION: This water well was ☑ constructed, ☐ reconstructed, or ☐ plugged under my jurisdiction and was completed on (mo/day/year) 6-30-11 and this record is true to the best of my knowledge and belief. Kansas Water Well Contractor's License No. 134 This Water Well Record was completed on (mo/day/year) 7-8-11 under the business name of Rosencrantz- Bemis by (signature) Dana Adye

INSTRUCTIONS: Use typewriter or ball point pen. *PLEASE PRESS FIRMLY* and *PRINT* clearly. Please fill in blanks and check the correct answers. Send three copies (white, blue, pink) 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 copy to WATER WELL OWNER and retain one for your records. Include fee of $5.00 for each constructed well. Visit us at http://www.kdheks.gov/waterwell/index.html.

KSA 82a-1212 Check: ☒ White Copy, ☐ Blue Copy, ☐ Pink Copy

D-3

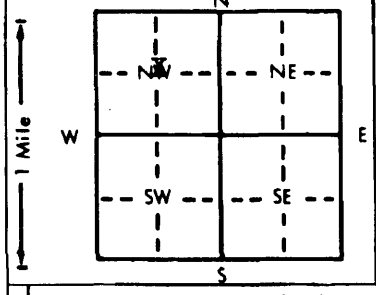
WATER WELL RECORD Form WWC-5 KSA 82a-1212

1 LOCATION OF WATER WELL: County: Rice	Fraction: NC ¼ NW ¼ ¼	Section Number: 13	Township Number: T 19 S	Range Number: R 8W E(W)

Distance and direction from nearest town or city street address of well if located within city?
3 E, 3½ N of Lyons, Kansas

2 WATER WELL OWNER: Knight Feedyards
RR#, St. Address, Box # : Route 1
City, State, ZIP Code : Lyons, Ks. 67544
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 80 ft. ELEVATION: Unknown
Depth(s) Groundwater Encountered 1. 33 ft. 2. ft. 3. ft.
WELL'S STATIC WATER LEVEL 33 ft. below land surface measured on mo/day/yr 9/10/87
Pump test data: Well water was ft. after hours pumping gpm
Est. Yield 60 gpm: Well water was ft. after hours pumping gpm
Bore Hole Diameter 8 in. to 80 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
Was a chemical/bacteriological sample submitted to Department? Yes No; If yes, mo/day/yr sample was submitted
Water Well Disinfected? Yes No

5 TYPE OF BLANK CASING USED: 5 Wrought iron 8 Concrete tile CASING JOINTS: Glued Clamped
1 Steel 3 RMP (SR) 6 Asbestos-Cement 9 Other (specify below) Welded
2 PVC 4 ABS 7 Fiberglass Threaded
Blank casing diameter 5 in. to 60 ft., Dia in. to ft., Dia in. to ft.
Casing height above land surface 12 in., weight 2.8 lbs./ft. Wall thickness or gauge No. Sch. 40

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 6 Wire wrapped 9 Drilled holes
2 Louvered shutter 4 Key punched 7 Torch cut 10 Other (specify)

SCREEN-PERFORATED INTERVALS: From 60 ft. to 80 ft., From ft. to ft.
From ft. to ft., From ft. to ft.
GRAVEL PACK INTERVALS: From 20 ft. to 80 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 20 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 Middle of pasture
Direction from well? How many feet?

FROM	TO	LITHOLOGIC LOG	FROM	TO	LITHOLOGIC LOG
0	53	Clay			
53	80	Sand rock			

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) 9/10/87 and this record is true to the best of my knowledge and belief. Kansas Water Well Contractor's License No. 186. This Water Well Record was completed on (mo/day/yr) 11/16/87
under the business name of Kelly's Water Well Service 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, Bureau of Water Protection, Topeka, Kansas 66620-7320, Telephone: 913-862-9360. Send one to WATER WELL OWNER and retain one for your records.

OFFICE USE ONLY T R E/W SEC. ¼ ¼ ¼

STATE OF KANSAS

DEPARTMENT OF AGRICULTURE
1320 RESEARCH PARK DRIVE
MANHATTAN, KS 66502
PHONE: (785) 564-6700
FAX: (785) 564-6777

900 SW JACKSON, ROOM 456
TOPEKA, KS 66612
PHONE: (785) 296-3556
www.agriculture.ks.gov

GOVERNOR JEFF COLYER, M.D.
JACKIE MCCLASKEY, SECRETARY OF AGRICULTURE

11/1/2018

KNIGHT FEEDLOT, INC
1768 AVENUE J
LYONS, KS 67554

RE: Application, File No. **50153**

Dear Sir or Madam:

The Division of Water Resources (Division) has received your application for a permit to appropriate water for beneficial use. Your application has been assigned the file number referenced above. Please be aware that the Division may have a large number of pending applications on hand at times and makes every attempt to process them in the order in which they are received. You will be contacted if additional information is required.

Please note, this letter only acknowledges receipt of your application and does not guarantee approval. In accordance with the provisions of the Kansas Water Appropriation Act, the use of water as proposed prior to approval of the application is unlawful.

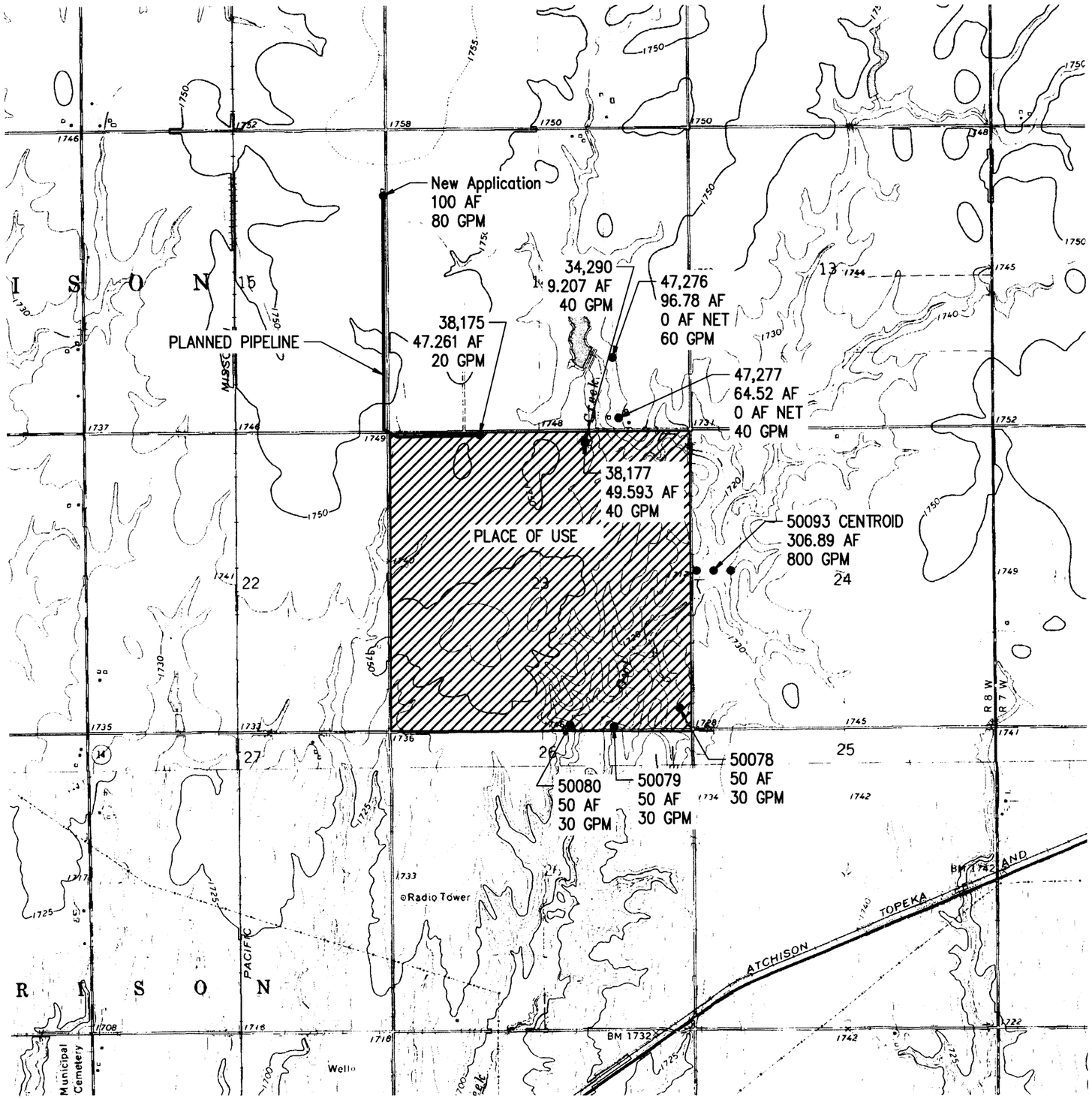
Additional information about the process may be found on our website at *agriculture.ks.gov/divisions-programs/dwr*. If you have any other questions, please contact our office at 785-564-6640 or your local Stafford Field Office at 620-234-5311. If you call, please reference the file number so we can help you more efficiently.

Sincerely,

Kristen A Baum

Kristen A. Baum
New Application Unit Supervisor
Division of Water Resources

50153



LEGEND

- • POINT OF DIVERSION (STK)
- • POINT OF DIVERSION (STK NEW)
- FEEDYARD EXPANSION AREA

N
W E
S

SCALE IN FEET
0 2000 4000

Water Resources Received
OCT 29 2018
KS Dept Of Agriculture

SCANNED

RATE, QUANTITY AND PLACE OF USE MAP

DRAWN	DLB	DATE 6/18
CHECKED	KLS	DATE 6/18
APPROVED	KLS	DATE 6/18

KNIGHT FEEDLOT, INC.
WATER RIGHTS
SECTION 23 T19S R8W
RICE COUNTY, KANSAS

1700 E. IRON
SALINA, KANSAS 67401
(785) 823-0097

1303 YUCCA STREET
SCOTT CITY, KANSAS 67871
(620) 872-2300

KLA ENVIRONMENTAL SERVICES, INC.

CAD FILE NAME:
WATER RIGHTS.dwg

SHEET NO. 2 OF 2

50153

KLA ENVIRONMENTAL SERVICES, INC.

PROJECT: **KNIGHT FEEDLOT, INC.**

LOCATION: SECTION 23 T19S R8W, RICE COUNTY, KS

BY: KLS
DATE: 6/14/2018

CHECKED BY: _____
DATE: _____

WATER RIGHT SUMMARY

WATER RIGHT FILE NO.	TEST HOLE ID	BENEFICIAL USE	AUTHORIZED QUANTITY (AC-FT)	NET QUANTITY (AC-FT)	AUTHORIZED OR REQUESTED RATE (GPM)	Longitude	Latitude	P/D DIST. FROM SE SECTION CORNER			QUALIFIERS		
								SEC-TWP-RGE	NORTH	WEST			
A 34290 00		STK	9.207	9.207	40	-98.17095	38.39067	**23-19S-8W**	**5067 FT**	**1867 FT**	NE	NW	NE
A 34290 00		STK				-98.17092589	38.39066854	**23-19S-8W**					
A 34290 00		STK				-98.17085	38.39083	**23-19S-8W**					
A 38175 00		STK	47.261	47.261	20	-98.17741	38.39106	**23-19S-8W**	**5202 FT**	**3721 FT**	NW	NE	NW
A 38177 00		STK	49.593	49.593	40	-98.17092589	38.39066854	**23-19S-8W**	**5067 FT**	**1867 FT**	NE	NW	NE
A 38177 00		STK				-98.17095	38.39067	**23-19S-8W**					
A 38177 00		STK				-98.17085	38.39083	**23-19S-8W**					
A 47276 00		STK	96.780	0	60	-98.16912821	38.39475584	**14-19S-8W**	**1260 FT**	**1360 FT**	NE	SW	SE
A 47277 00		STK	64.520	0	40	-98.16875837	38.39182047	**14-19S-8W**	**191 FT**	**1254 FT**	SW	SE	SE
50,093.00		STK		306.89	800	-98.16361389	38.3842	**24-19S-8W**	**2765 FT**	**4940 FT**	SW	SW	NW
50,094.00		STK		145.16	90	-98.1723	38.3770	**23-19S-8W**	**82 FT**	**2147 FT**	SW	SW	SE
50,094.00		STK				-98.1656	38.3770	**23-19S-8W**	**82 FT**	**229 FT**	SE	SE	SE
50,094.00		STK				-98.1696	38.3769	**23-19S-8W**	**46 FT**	**1374 FT**	SE	SW	SE
	Domestic	STK		100	80	-98.183219	38.402716	**15-19S-8W**	**4170 FT**	**13 FT**	SE	NE	NE

658.11 Acre-Feet
214,430,000 Gallons

Livestock water needs calculator

Input		Calculated			
Head of Beef Cattle	Gal/Head/Day	Gallons/Day	GPM	Ac-Feet/Yr	Gallons/Yr
30,000	**10.50**	315,000	219	353	114,975,000

50153

KLA ENVIRONMENTAL SERVICES, INC.

PROJECT: **KNIGHT FEEDLOT, INC.**

LOCATION: SECTION 23 T19S R8W, RICE COUNTY, KS

BY: JLW
DATE: 6/14/2018

CHECKED BY: KLS
DATE: 6/15/2018

WATER USE DATA FROM PCP RECORDS

KNIGHT FEEDLOT WATER USAGE 2015 TO 2017

2014	Days	Water Use By Month	Water Purchased	Average # of Cattle	Gal/Head/ Day	2015	Days	Water Use By Month	Water Purchased	Average # of Cattle	Gal/Head/ Day	2016	Days	Water Use By Month	Water Purchased	Average # of Cattle	Gal/Head/ Day
January	31	0	539,000	7,262	**2.39**	January	31	4,112,030		13,862	**9.57**	January	31		3,400,000	12,156	**9.02**
February	28	0	1,496,000	6,664	**8.02**	February	28	3,163,530	691,000	11,700	**11.77**	February	28	1,599,460	1,606,000	12,819	**8.93**
March	31	0	875,000	7,392	**3.82**	March	31	4,379,740	998,890	10,414	**16.66**	March	31	768,840	3,101,000	14,372	**8.69**
April	30	0	1,115,000	6,868	**5.41**	April	30	1,737,880	1,249,110	11,439	**8.70**	April	30	850,500	2,560,000	14,730	**7.72**
May	31	0	95,000	6,969	**0.44**	May	31	1,487,060		10,696	**4.48**	May	31	696,610	3,220,000	12,696	**9.95**
June	30	0	25,000	9,251	**0.09**	June	30	310,720	3,417,000	10,730	**11.58**	June	30	826,770	2,430,000	11,985	**9.06**
July	31	14,155,710	61,000	8,453	**54.25**	July	31	559,730	3,358,000	9,826	**12.86**	July	31	772,640	1,890,000	7,893	**10.88**
August	31	1,363,260	44,000	9,120	**4.98**	August	31	175,000	4,414,000	11,052	**13.39**	August	31	999,470	1,860,000	10,196	**9.05**
September	30	1,174,070	27,000	12,322	**3.25**	September	30	331,070	3,485,000	11,156	**11.40**	September	30	845,985	1,010,600	11,470	**5.40**
October	31	2,023,170	33,000	13,520	**4.91**	October	31	5,000	4,744,000	12,518	**12.24**	October	31	1,709,365	501,800	12,775	**5.58**
November	30	1,711,130	113,000	14,601	**4.16**	November	30	545,800	2,773,000	13,237	**8.36**	November	30	3,181,800	200,000	13,396	**8.41**
December	31	2,655,500	332,000	14,510	**6.64**	December	31	645,850	328,000	13,015	**2.41**	December	31	6,184,630	104600	13,568	**14.95**
TOTAL	**365**	**23,082,840**	**4,755,000**	**9,744**	**7.83**	**TOTAL**	**365**	**17,453,410**	**25,458,000**	**11,637**	**10.10**	**TOTAL**	**365**	**18,436,070**	**21,884,000**	**12,338**	**8.95**

2017	Days	Water Use By Month	Water Purchased	Average # of Cattle	Gal/Head/ Day	2018	Water Use By Month	Water Purchased	Average # of Cattle	Gal/Head/ Day
January	31	2,326,420	1,371,000	12,697	**9.39**	January	3,903,540	462,000	12,746	11.05
February	28	3,350,850	1,202,000	10,842	**15.00**	February	3,639,660	843,000	13,124	12.20
March	31	4,378,190	1,483,000	14,191	**13.32**	March	4,430,410	686,000	13,984	11.80
April	30	4,036,150	521,000	14,087	**10.78**	April	2,652,980	204,000	14,068	6.77
May	31	2,740,090	367,000	13,765	**7.28**	May	4,674,820	545,000	13,287	12.67
June	30	4,390,570	1,859,000	12,496	**16.67**					
July	31	3,555,450	807,000	10,598	**13.28**					
August	31	2,860,010	306,000	9,011	**11.33**					
September	30	3,419,240	238,000	8,687	**14.03**					
October	31	3,057,790	100,000	9,985	**10.20**					
November	30	4,043,710	123,000	12,955	**10.72**					
December	31	4,099,670	212,000	12,971	**10.72**					
TOTAL	**365**	**42,258,140**	**8,589,000**	**11,857**	**11.75**	**TOTAL**	**19,301,410**	**2,740,000**	**13,442**	**10.90**

50153

KLA ENVIRONMENTAL SERVICES, INC.

PROJECT: **KNIGHT FEEDLOT, INC.**

LOCATION: SECTION 23 T19S R8W, RICE COUNTY, KS

BY: JLW
DATE: 6/14/2018

CHECKED BY: KLS
DATE: 6/15/2018

Average Gal/Head/Day 2014 to 2017		
January		**7.59**
February		**10.93**
March		**10.62**
April		**8.15**
May		**5.54**
June		**9.35**
July		**22.82**
August		**9.69**
September		**8.52**
October		**8.23**
November		**7.91**
December		**8.68**
TOTAL		**9.66**

Annual Water Use Report

Water Right		2013*	2014	2015	2016	2017		**Average**
34290		2,430,270	2,773,330	1,709,370	4,735,250	6,450,090		**3,619,662**
34290		4,723,270	2,898,320	855,290	580,870	2,736,110		**2,358,772**
38175		1,998,610	9,161,790	0	707,350	843,640		**2,542,278**
47276		25,191,700	3,863,500	9,751,300	6,564,500	30,510,200		**15,176,240**
47277		6,070,300	4,385,900	5,191,600	5,848,100	1,718,100		**4,642,800**
Total		40,414,150	23,082,840	17,507,560	18,436,070	42,258,140		**28,339,752**
Water Purcha	**365**	1,926,000	4,755,000	25,458,000	21,884,000	8,589,000		**12,522,400**
Average Head		8,575	9,744	11,637	12,338	11,857		**10,830**
Gal/Head/Day		12.92	7.83	10.12	8.95	11.75		**10.31**

*Monthly well readings not available in 2013