Kansas Department of Agriculture
Division of Water Resources

CHANGE: P/D WORKSHEET

1. File Number:	2. Status Change Date:	3. Change Num:	4. Field Office:	5. GMD:
20526-D5		**C1**	**4**	**3**

6. Status: ☒ Approved ☐ Denied by DWR/GMD ☐ Dismiss by Request/Failure to Return

7. Filing Date of Change: **7/25/2023**

8a. Applicant(s) Person ID **67219**
New to system ☐ Add Seq# _____

GARRETT & CALEY LOVE
21506 12 ROAD
MONTEZUMA, KS 67867-9032

8c. Landowner(s) Person ID _____
New to system ☐ Add Seq# _____

8b. Landowner(s) Person ID _____
New to system ☐ Add Seq# _____

8a

8d. WUC Person ID _____
New to system ☐ Add Seq# _____

8a

9. Documents and Enclosure(s): ☒ DWR Meter(s) Date to Comply: **12/31/2024** ☒ N & P Date to Comply: **3/1/2025**

☐ Anti-Reverse Meter ☐ Meter Seal ☒ Check Valve ☒ N & P Form ☒ Water Tube ☒ Driller Copy ☒ H & E Letter

☐ Conservation Plan Date Required: _____ Date Approved: _____ Date to Comply: _____

10. Use Made of Water From: _____ To: _____

Date Prepared: **10/24/2023** By: **AM**
Date Entered: By:

File No. **20526-D5**	11. County: **GY**	Basin: **ARKANSAS RIVER**	Stream:	Formation Code: **211**	Special Use:

12. Points of Diversion

CHK MOD DEL ENT	PDIV	Qualifier	S	T	R	ID	'N	'W	Comment (AKA Line)	Rate and Quantity Authorized Rate gpm	Authorized Quantity af	Additional Rate gpm	Additional Quantity af	Overlap PD Files
DEL	**41868**													
ENT		**NE NE NE**	**34**	**26S**	**30W**		**5034**	**490**		**434**	**272**	**434**	**272**	**NONE**
											NOTE: VOL. REDUCTION IN RATE			

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

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

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

15. 5YR Allocation: Allocation Type _____ Start Year _____ 5 YR Amount _____ Amount Unit ____ Base Acres _____ Comment _____

16. Place of Use

CHK MOD DEL ENT	PUSE	S	T	R	ID	NE¼ NE ¼	NE¼ NW ¼	NE¼ SW ¼	NE¼ SE ¼	NW¼ NE ¼	NW¼ NW ¼	NW¼ SW ¼	NW¼ SE ¼	SW¼ NE ¼	SW¼ NW ¼	SW¼ SW ¼	SW¼ SE ¼	SE¼ NE ¼	SE¼ NW ¼	SE¼ SW ¼	SE¼ SE ¼	Total	Owner	Chg?	Overlap Files
CHK	**2986**																							

Base Acres: Year: Minimum Reasonable Quantity:

Comments: **ADDITIONAL CONDITIONS INCLUDED TO REDUCE RATE**

Garden City Field Office
4532 W. Jones, Suite B
Garden City, KS 67846

Kansas
Department of Agriculture
Division of Water Resources

Phone: 620-276-2901
Fax: 620-276-9315
www.agriculture.ks.gov

Mike Beam, Secretary

Laura Kelly, Governor

October 24, 2023

GARRETT & CALEY LOVE
21506 12 ROAD
MONTEZUMA, KS 67867-9032

RE: Filed Office Application for Change
Water Right, File No. 20526-D5

Dear Sir or Madam:

Enclosed is the order executed by the designee of the Chief Engineer, Division of Water Resources, Kansas Department of Agriculture, approving the application for change under the above referenced file number.

Your attention is directed to the enclosures and to the terms, conditions, and limitations specified in this approval for change. A condition of this approval is that an acceptable water flow meter must be installed on the diversion works authorized under the referenced file number and meet current specifications. Please return the required notification of completion of the diversion works and installation of the required meter as soon as these actions are completed.

Since the order modifies the original document referred to above, it should be recorded with the Register of Deeds as other instruments affecting real estate.

The abandoned well must be plugged in accordance with the requirements of Article 30 of the Rules and Regulations as adopted by the Kansas Department of Health and Environment.

Should you have any questions, please feel free contact this office. If you would prefer, you could arrange an appointment for additional assistance.

Sincerely,

Austin J. McColloch
Assistant Water Commissioner

AM:
enclosures

pc: Groundwater Management District 3

CERTIFICATE OF SERVICE

On this 24th day of October, 2023, I hereby certify that the foregoing Approval of Application for Change in Point of Diversion, Water Right, File No. 20,526-D5 dated 24th day of October, 2023 was mailed postage prepaid, first class, US mail to the following:

GARRETT & CALEY LOVE
21506 12 ROAD
MONTEZUMA, KS 67867-9032

Pc:

GMD 3

Julie Jones

Division of Water Resources Staff

Submit completed application to:
Kansas Department of Agriculture
Division of Water Resources
Field Office for your area.
Call for address:
Topeka -- (785) 296-5733
Stafford -- (620) 234-5311
Stockton -- (785) 425-6787
Garden City -- (620) 276-2901
http://agriculture.ks.gov/dwr

DWR FIELD OFFICE APPLICATION FOR APPROVAL TO CHANGE THE PLACE OF USE AND/OR THE POINT OF DIVERSION

STATE OF KANSAS

Filing Fee Must Accompany the Application, K.S.A. 82a-708b(b), as amended.
Fee Schedule is on the third page of this application form.

Paragraph Nos. 1, 2, 3 & 5 must be completed. Complete all other applicable portions. If change in point of diversion is greater than 100 feet, or if place of use will be changed, include a topographic map or detailed plat showing the authorized and proposed point(s) of diversion and/or place of use.

RECEIVED
3:35PM
JUL 25 2023
Garden City Field Office
Division of Water Resources

File No. 20526-D5

1. Application is hereby made for approval of the Chief Engineer to change the (check one or both):
☐ Place of Use ☒ Point of Diversion
under the water right which is the subject of this application in accordance with the conditions described below.
The source of supply is: ☒ Groundwater ☐ Surface water

2. Name and address of Applicant: GARRETT & CALEY LOVE
21506 12 ROAD, MONTEZUMA, KS 67867-9032
Phone Number: (____) Email address:
Name and address of Water Use Correspondent: SAME AS ABOVE
SAME AS ABOVE
Phone Number: (____) Email address:

3. The presently authorized place of use is:
Owner of Land ---- NAME:
ADDRESS:
(If there is more than one landowner, attach supplemental sheets as necessary.)

Sec. Twp. Range	NE¼				NW¼				SW¼				SE¼				TOTAL ACRES
	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	

4. If this application is for a change in place of use, it is proposed that the place of use be changed to:
Owner of Land ---- NAME:
ADDRESS:
(If there is more than one landowner, attach supplemental sheets as necessary.)

Sec. Twp. Range	NE¼				NW¼				SW¼				SE¼				TOTAL ACRES
	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	

For Office Use Only: *Code* _____ ***Fee $*** 200.00 ***TR #*** _____ ***Receipt Date*** 7.25.23 ***Check #*** 304

5. **Presently authorized point of diversion:**

One in the _____ Quarter of the NC Quarter of the NE Quarter
of Section 34, Township 26 South, Range 30 W,
in GRAY County, Kansas, 3940 feet North 1300 feet West of Southeast corner of section.
Authorized Rate 965 GPM Authorized Quantity 272 AF Depth of well _____ (feet)
(DWR use only: Computer ID No. 1 GPS _____ feet North _____ feet West)
☐ **This point will not be changed** ☒ **This point will be changed as follows:** ☐ **No change, point better described with GPS as follows:**

Proposed point of diversion: (Complete only if change is requested or if existing point is better described by GPS)

One in the NE Quarter of the NE Quarter of the NE Quarter
of Section 34, Township 26 South, Range 30 W,
in GRAY County, Kansas, 5034 feet North 490 feet West of Southeast corner of section.
Proposed Rate 434 GPM Proposed Quantity 272 AF Proposed well depth (feet) _____.
This point is: ☐ Additional Well ☐ Geo Center List other water rights that will use this point _____.

6. **Presently authorized point of diversion:**

One in the _____ Quarter of the _____ Quarter of the _____ Quarter
of Section _____, Township _____ South, Range _____ W,
in _____ County, Kansas, _____ feet North _____ feet West of Southeast corner of section.
Authorized Rate _____ Authorized Quantity _____ Depth of well _____ (feet)
(DWR use only: Computer ID No. _____ GPS _____ feet North _____ feet West)
☒ **This point will not be changed** ☐ **This point will be changed as follows:** ☐ **No change, point better described with GPS as follows:**

Proposed point of diversion: (Complete only if change is requested or if existing point is better described by GPS)

One in the _____ Quarter of the _____ Quarter of the _____ Quarter
of Section _____, Township _____ South, Range _____ W,
in _____ County, Kansas, _____ feet North _____ feet West of Southeast corner of section.
Proposed Rate _____ Proposed Quantity _____ Proposed well depth (feet) _____.
This point is: ☐ Additional Well ☐ Geo Center List other water rights that will use this point _____.

7. The changes herein are desired for the following reasons? (please be specific) _____

8. If a well, is the test hole log attached? ☒ Yes ☐ No

9. The change(s) (was)(will be) completed by?

_____

10. If the point of diversion is a well:

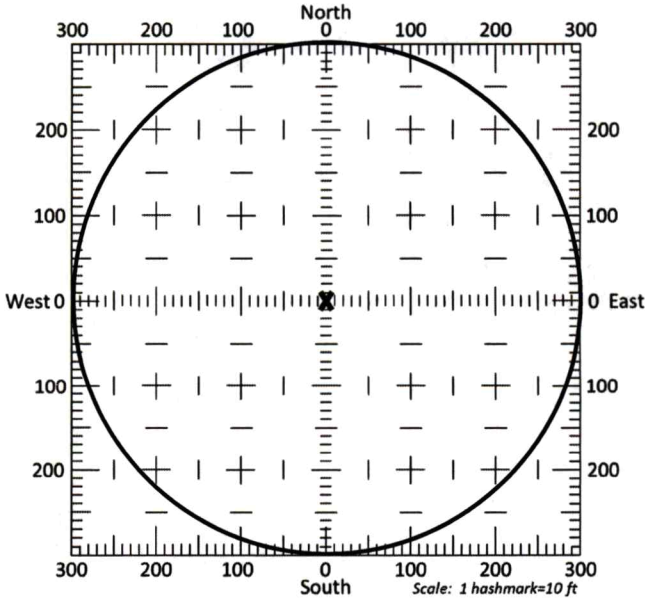
(a) What are you going to do with the old well?

_____

(b) When will this be done? _____

11. Groundwater Management District recommendation attached?
☐ Yes ☐ No

12. Assisted by JG/GCFO



13a. If the proposed point of diversion will be relocated more than 300 feet but within 2,640 feet of the existing point of diversion, attach a topographic map or aerial photograph. For groundwater sources, show all wells (including domestic) within one-half mile of the proposed point of diversion and the names and mailing addresses of the owners. For surface water sources, show the names and addresses of the landowner(s) one-half mile downstream and one-half mile upstream from your property lines

13b. If the proposed point of diversion will be relocated within a 300 foot radius of the existing point of diversion, indicate its location on the diagram shown above in relation to the existing point of diversion. The proposed point of diversion must be located within the circle shown above. **(PLEASE NOTE: The "X" in center of diagram above represents the presently authorized point of diversion.)**

File No. 20526-D5

Additional condition attachment to the

DWR Field Office Application for Approval to Change the Place of Use and / or the Point of Diversion

It is requested that the maximum annual quantity of water be reduced to _____ (acre-feet or million gallons).

It is requested that the maximum rate of diversion of water be reduced to 434 gallons per minute (0.96 c.f.s.).

I hereby verify, being first duly sworn upon my oath or affirmation and under penalty of perjury, that I am of lawful age and the owner, the spouse of the owner, or a duly authorized agent of the owner(s) to make this application on their behalf, in regards to the water right(s) to which this application pertains. I further verify that the statements contained in this application are true, correct and complete.

Dated at Montezuma, Kansas, this 20th day of ~~December~~ October, 2023.

Garrett Love	Caley Love
(Owner)	(Spouse)
Garrett Love	Caley Love
(Please Print)	(Please Print)
(Owner)	(Spouse)
(Please Print)	(Please Print)
(Owner)	(Spouse)
(Please Print)	(Please Print)

State of Kansas)
County of Gray) SS

I hereby certify that the foregoing application was signed in my presence and sworn to before me this 20th day of October, 2023.

JANE A. JANTZ
Notary Public - State of Kansas
My Appt Expires 7-21-24

Jane A. Jantz
Notary Public

My Commission Expires 7-21-24

RECEIVED

OCT 23 2023

Garden City Field Office
Division of Water Resources

14. If the proposed groundwater point of diversion is 300 or fewer feet from the existing point of diversion, complete the following:

(a) Does the undersigned represent all owners of the currently authorized place(s) of use identified in this application?
☒ Yes ☐ No (If no, all owners must sign this application.)

(b) Will the ownership interest of any owner of the currently authorized place(s) of use identified in this application be adversely affected if this application is approved as requested?
☐ Yes ☒ No (If yes, all owners must sign this application.)

(c) If this application is not approved expeditiously, will there be substantial damage to property, public health or safety?
☒ Yes ☐ No (If no, all owners must sign this application.)

If the application proposes a surface water change in point of diversion, a groundwater change in point of diversion greater than 300 feet, or a change in place of use, the application must be signed by all owners of the currently authorized place of use, or their duly authorized agent (attach notarized statement authorizing representation).

I hereby verify, being first duly sworn upon my oath or affirmation and under penalty of perjury, that I am of lawful age and the owner, the spouse of the owner, or a duly authorized agent of the owner(s) to make this application on their behalf, in regards to the water right(s) to which this application pertains. I further verify that the statements contained in this application are true, correct and complete.

Dated at Montezuma, Kansas, this 24th day of July, 2023.

(Owner)	(Spouse)
Garrett Love Garrett Love	Caley Love Caley Love
(Please Print) Garrett Love	(Please Print) Caley Love
(Owner)	(Spouse)
(Please Print)	(Please Print)
(Owner)	(Spouse)
(Please Print)	(Please Print)

State of Kansas }
County of Gray } SS

I hereby certify that the foregoing application was signed in my presence and sworn to before me this 24th day of July, 2023.

KIMBERLEY A. RILEY
Notary Public – State of Kansas
My Appt. Exp. 6-12-25

Notary Public

My Commission Expires 6-12-25

ONLY COMPLETE APPLICATIONS WILL BE PROCESSED. To be complete, all of the applicable portions of the application form must be completed with accurate information; maps, if necessary, must be included; signatures of all the appropriate owners' must be affixed to the application and notarized; and the appropriate fee must be paid.

FEE SCHEDULE

Each application to change the place of use or the point of diversion under this section shall be accompanied by the application fee set forth in the schedule below: Make checks payable to: **Kansas Department of Agriculture**

(1) Application to change a point of diversion 300 feet or less $100
(2) Application to change a point of diversion more than 300 feet $200
(3) Application to change the place of use $200

SUMMARY ORDER APPROVING APPLICATION FOR CHANGE AND IMPOSING CONDITIONS

This Summary Order is issued under authority of K.S.A. 82a-708b, as amended, and K.A.R. 5-5-1, *et seq.* and other applicable provisions of the *Kansas Water Appropriation Law, K.S.A. 82a-701 et. seq.,* and rules and regulations promulgated thereunder, With the exception of those conditions expressly contained herein, this Summary Order does not change the terms, conditions and limitations of File No. 20526-D5.

1. A change application was received on July 25 2023 requesting that the place of use and / or point of diversion authorized under the above-referenced file number be changed as described in the application.
2. On and after the effective date of this summary order, the authorized place(s) of use shall be located substantially as shown on the topographic map accompanying the application to change the place of use. ☐ Applicable ☒ Not Applicable
3. The change in point of diversion shall not impair existing rights and shall be limited to the same source or sources of water as previously authorized. The point of diversion authorized by this summary order shall be located within a 300 **foot** radius of the authorized point(s) of diversion. ☒ Applicable ☐ Not Applicable
4. The point(s) of diversion described herein is administratively corrected to be more accurately described using the Global Positioning System (GPS), as described in the application. ☐ Applicable ☒ Not Applicable
5. The point(s) of diversion authorized herein shall not actually be located more than 2640 feet from the previously authorized point(s) of diversion. ☒ Applicable ☐ Not Applicable
6. As required by K.A.R. 5-3-5d, if the works for diversion is a well with a diversion rate of 100 gallons per minute or more, a tube or other device suitable for making water level measurements shall be installed, operated and maintained in accordance with K.A.R. 5-6-13. ☒ Applicable ☐ Not Applicable
7. **The owner of the authorized place(s) of use shall properly install an acceptable water flow meter on or before December 31, 2024**, or before the first use of water, whichever occurs first. The water flow meter shall be installed, operated and maintained in accordance with K.A.R. 5-1-4 through 5-1-12. As required by K.S.A. 82a-732, as amended, and K.A.R. 5-3-5e, the owner shall maintain records and report the reading of the water flow meter and the total quantity of water diverted annually to the Chief Engineer by March 1 following the end of each calendar year.
   ☒ Applicable ☐ Not Applicable
8. **Installation of the works for diversion of water shall be completed on or before December 31, 2024**, or within any authorized extension of time. By March 1, 2025 the applicant shall notify the Chief Engineer that construction of the works for diversion has been completed, on the form provided by the Chief Engineer, as required by K.A.R. 5-8-4e.
   ☒ Applicable ☐ Not Applicable
9. **The completed well log shall be submitted with the required notice.** ☒ Applicable ☐ Not Applicable
10. All diversion works into which any type of chemical or other foreign substance will be injected into the water shall be equipped with an in-line, automatic, quick-closing check valve capable of preventing pollution of the source of the water supply. The check valve(s) shall be installed, operated and maintained in accordance with K.A.R. 5-3-5c. ☒ Applicable ☐ Not Applicable
11. Additional Conditions are attached. ☒ Yes ☐ No
12. In accordance with K.S.A. 82a-708a, as amended, and K.A.R. 5-5-14, all of the owners of the authorized place(s) of use of water appropriated under the above-referenced file number are responsible for compliance with its terms, conditions and limitations, as amended and/or supplemented by this Summary Order, and with applicable provisions of the *Kansas Water Appropriation Law* and the *Rules and Regulations* promulgated thereunder. Failure to comply with these provisions may result in civil penalties pursuant to K.S.A. 82a-737, as amended, and/or the suspension or revocation and dismissal of the water or appropriation right or any other enforcement actions authorized by law.

Administrative Appeal and Effective Date of Order

If you are aggrieved by this order, pursuant to K.S.A. 82a-1901, you may request an evidentiary hearing before the Chief Engineer or request administrative review by the Secretary of Agriculture. A request for hearing by the Chief Engineer must be filed within **15 days** of service of this Order and a request for administrative review by the Secretary must be filed within **30 days** pursuant to K.S.A. 77-531. Any request for administrative review must state a basis for review pursuant to K.S.A. 77-527. File any request with **Kansas Department of Agriculture, Legal Division, 1320 Research Park Drive, Manhattan, KS 66502**. Failure to timely request a hearing or review may preclude review under the Kansas Judicial Review Act.

For Use by Register of Deeds

FOR OFFICE USE ONLY

APPLICATION APPROVED AND SUMMARY ORDER ISSUED

By: Austin McCulloch

Duly Authorized Designee of the Chief Engineer

(Print Name): Austin McCulloch

Division of Water Resources - Kansas Department of Agriculture

Date of Issuance: October 24, 2023

State of Kansas)
) SS
County of Finney)

Acknowledged before me on October 24, 2023

by Austin McCulloch.

Signature: Julie Jones
Notary Public

My commission expires: (Notary Seal)

JULIE JONES
My Appointment Expires
December 15, 2026

ADDITIONAL CONDITIONS TO
SUMMARY ORDER APPROVING APPLICATION FOR CHANGE
AND IMPOSING CONDITIONS,
Water Right, File No. 20,526-D5

The effective date of the change shall be the date this order is executed by the Chief Engineer, after which the following condition is included as a condition of the approval of this application for change in point of diversion.

This order effectively reduces the authorized maximum rate of diversion to a rate no to exceed 434 gallons per minute (0.96 c.f.s.) from the authorized point of diversion described herein.

By: Austin McColloch
(Duly Authorized Designee of the Chief Engineer)

(Print Name): Austin McColloch
Division of Water Resources Kansas Department of Agriculture

Dated of Issuance: October 24, 2023

State of Kansas)
) SS
County of Finney)

Acknowledged before me on the 24th day of October, 2023

By Austin McColloch

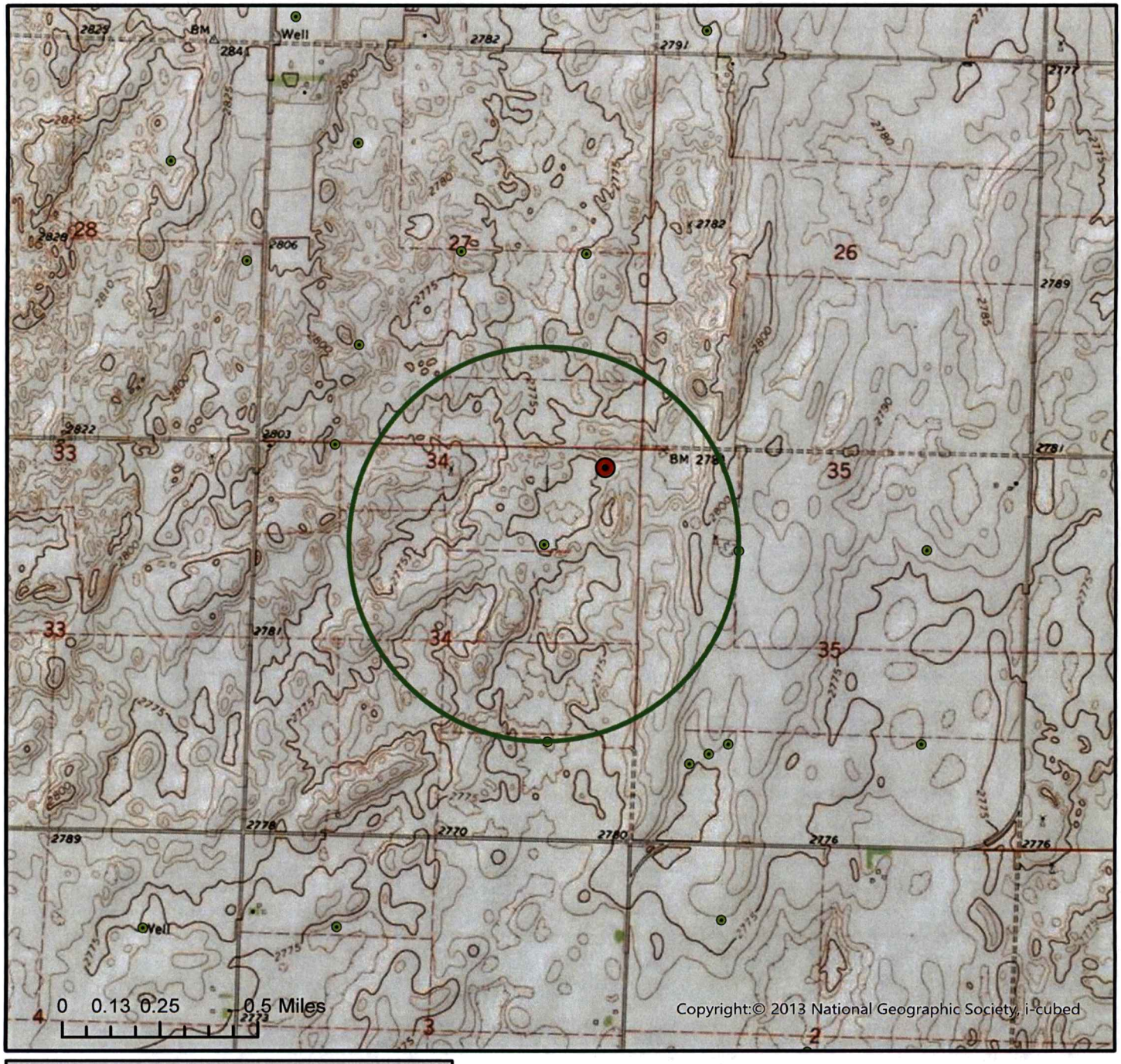
Signature Julie Jones
Notary Public

My Commission expires: _____
(Notarial Seal)

STATE OF KANSAS NOTARY PUBLIC
JULIE JONES
My Appointment Expires
December 15, 2026

CHANGE IN PLACE OF DIVERSION WATER RIGHT, FILE NO. 20526-D5

NE 1/4 of Section 34 Township 26 South Range 30 West GRAY County



- Authorized Point of Diversion
- Proposed Point of Diversion
- Domestic Well within 1/2 mile
- 1/2 mile buffer

List of owner name and addresses within 1/2 mile:

N
W E
S

All wells of any kind within 1/2 mile of the requested place of use have been plotted.

(Signature) Date

Date JG/GCFO
1:24,000 Scale

3795 W. Jones Ave.
Garden City, KS 67846
PH: 620-277-2389

Hydro resources

Copy

PO Box 639
Garden City, KS 67846
Fax: 620-277-0224

GARRETT LOVE 620-846-0823

Customer Name: Garrett Love
Street Address: ~~21506 Rd 12~~ 21506 Road 12
City, State: Montezuma, Ks 67867
County: Gray **Quarter:** NE **Section:** 34 **Township:** 26 **Range:** 30
Location:
Rig #: 1003 **Elevation:** 2774 **GPS:** 37.75045°N 100.58103°W **Static WL:** 212' **Estimated?** old well

WO#: 25501 **Date:** 7/19/23
Test #: 6 **E LOG:** —
Driller: David Fenzel

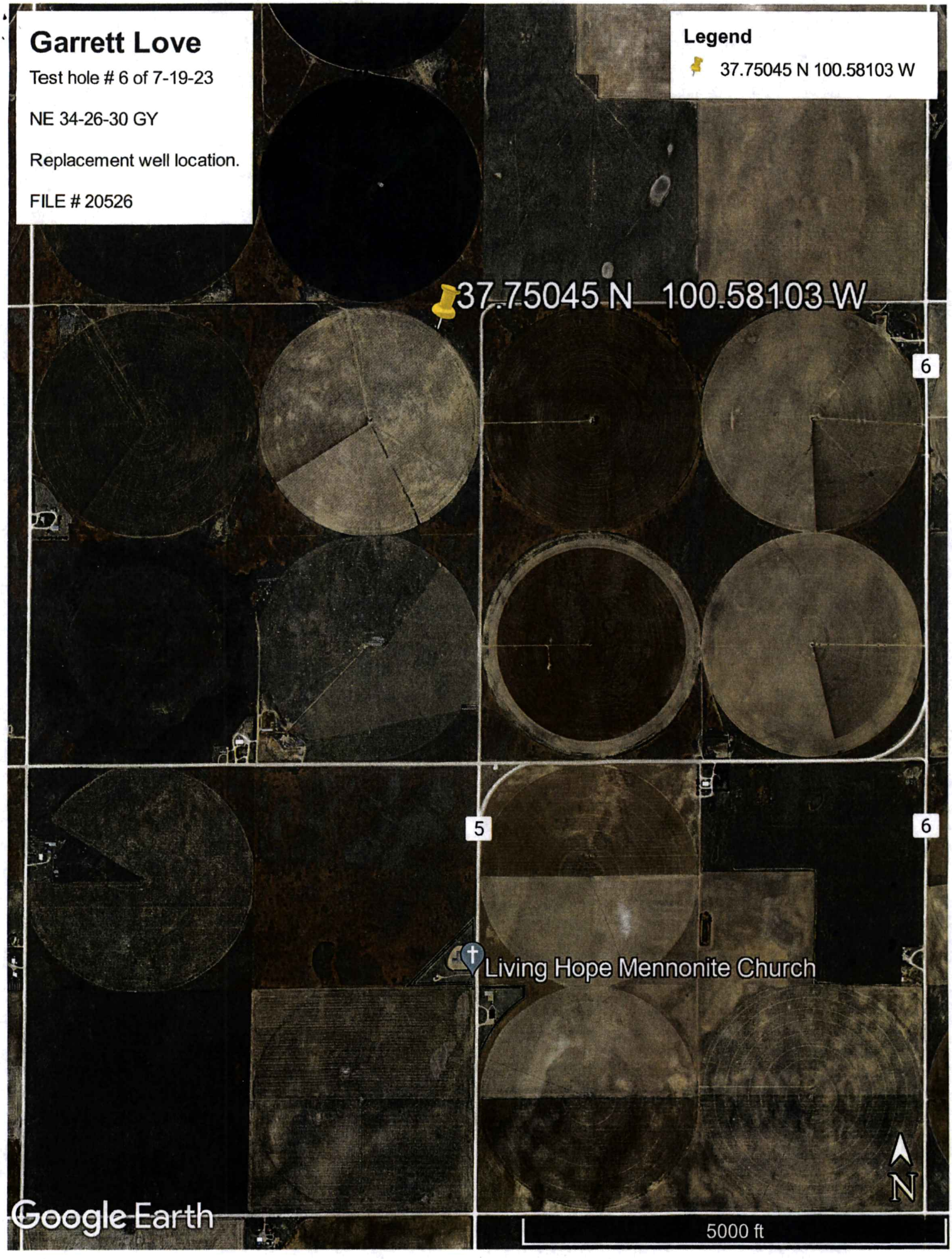
Proposed Well Depth 355

Possible Well Location
20' SAMP
Bos 24

%	Footage From	Pay	To	Description of Strata
	0		3	Blow Sand
	3		35	Fine Sand, (Clean) few rocks
	35		41	Water Clay
	41		—	Sand fine to med, coarse, small to large gravel, cobble stone
	—		134	Few Redcon (Wet mixture)
	134		221	Brown Clay, Limerock, few sand
20%	221	14	235	Sand fine to small, few med.
	235	—	246	Brown Clay, limerocks
15%	246	23	269	Sand, fine to small, few med, clay mixed
20%	269	11	280	Sand fine to small, few med, few thin clay
25%	280	8	288	Sand fine to small, med, few coarse, few small gravel
	288	—	294	Brown Clay
15%	294	30	324	Sand fine to some small, thin clay
5%	324	11	335	Sandstone, Limestone, Some sandstone Cuttings a little wet
	335		349	Gray Shale, limestone, some shale
	349		360	Shale, limestone

Rig Up
Trip X
Trip

Big Rig
move 4' South
Set up Same
Test Rig
- Set up Mast -
- Pit to North
3 - Super Gel X
3 - Gel
6 - Bentonite Plug
1 - Poly Plug
1 - 4 3/4 clay blade


Garrett Love
Test hole # 6 of 7-19-23
NE 34-26-30 GY
Replacement well location.
FILE # 20526
Legend
37.75045 N 100.58103 W
37.75045 N 100.58103 W
6
5
6
Living Hope Mennonite Church
N
Google Earth
5000 ft

KANSAS DEPARTMENT OF AGRICULTURE
Division of Water Resources
Garden City Field Office

M E M O R A N D U M

TO: File

DATE: October 24, 2023

FROM: Austin J. McColloch AM
Assistant Water Commissioner

RE: File No. 20526-D5

An *Application to Change the Point of Diversion* under the above referenced water right was received in this office July 25, 2023. This application received a recommendation from the GMD3 that there were concerning effects with the proposal to change the point of diversion which caused DWR to run Theis analysis for the application. This application appeared to show concerns of effects to the nearest well which was the same applicant. The landowner agreed to reduce his authorized diversion rate to limit effects.

The referenced will be reduced to 434 GPM by amending the proposed diversion rate on the application and applying a condition to reduce the diversion rate.

With these reductions, it meets our future calculations to limit effects and thus can be approved.

S. Thurlow
9/27/2023

Theis evaluation of proposed change in point of diversion, File No. 20526-D5

A 50-year Theis analysis was used to evaluate the potential increase in dynamic drawdown as a result of the proposed change in point of diversion for one well authorized by File No. 20526-D5. The change proposes reallocating the well approximately 810 feet East and 1,094 feet North of the currently authorized location (Figure 1).

The GMD No. 3 groundwater model was used for a projected future (2068) saturated thickness (77.1 ft). The average of model cells located within Township 26 South, Range 30 West, Sections 26, 27, 34, and 35 was used.

The transmissivity was estimated based on lithological logs from the Kansas Geological Survey's Water Well Completion Records Database (WWC5). WWC5 records within 1 mile of the proposed point of diversion were used. Records that were within that area, but did not include lithological data, were not drilled to bed rock, or had poor lithological descriptions were excluded. The lithological log supplied with the change application was also considered. Hydraulic conductivity assumptions were based on the calibrated values used for the GMD No. 3 groundwater model (Figures 2 and 3). In all, seven lithological logs were evaluated (Figure 4-6, Tables 1-7), with an average transmissivity of 2,602 square feet per day. An assumed specific storage (1×10^{-5} for the Ogallala Aquifer) and the projected saturated thickness was used to determine the assumed storativity of 0.00077. The average Practical saturated thickness (46.6 ft) was used when calculating the net drawdown as a percentage of saturated thickness (Tables 8-12).

Drawdown was evaluated at 4 nearby existing wells authorized by File Nos. 23018 ID1, 23018 ID2, 21933, and 17808 (Tables 8-12). A quantity of 272 acre-feet (AF) at a rate of 965 gallons per minute (gpm) was compared to the average historic use (99.8 AF, 2013-2022) at the most recent recorded pumping rate (275 gpm). The maximum net drawdown occurred at the point of diversion authorized by File No. 23018 ID2. The net drawdown at that distance was 22.0 feet, or 47.1% of the Practical saturated thickness (Table 11). If the proposed rate is limited to 434 gallons per minute, the increase in drawdown will be limited to 9.3 feet, or 20.0% of the Practical saturated thickness (Table 12).

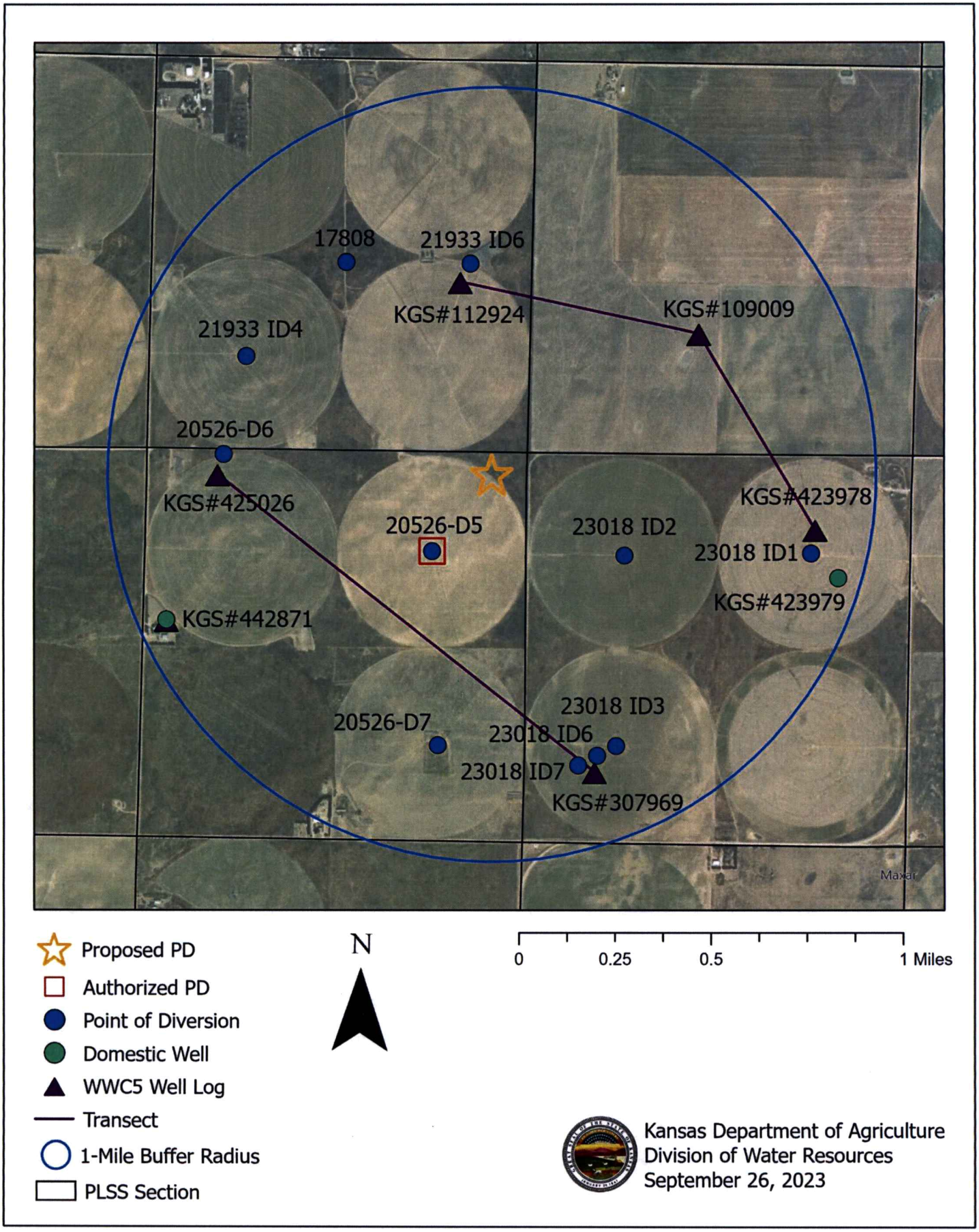


Figure 1: Location of current and proposed point of diversion, surrounding points of diversion, and WWC5 records

Table 1. PST+ synonymy codes and lithology descriptions.

Synonymy	Lithology	Synonymy	Lithology	Synonymy	Lithology
sh	Shale	sc	Sandy Clay or Silty Sand	fsnd	Fine Sand
c	Clay	fds	Fine Sandy Silt	fmgsnd	Fine to Medium Sand
coal	Coal	fmds	Fine to Medium Sandy Silt	fmsnd	Fine to Medium Sand
br	Bedrock	fcrsds	Fine to Coarse Sandy Silt	snd	Sand
rb	Red Bed	ds	Sandy Silt	fcrssnd	Fine to Coarse Sand
r	Rock	mds	Medium Sandy Silt	msnd	Medium Sand
sst	Siltstone	gc	Gravelly Clay	mcrssnd	Medium to Coarse Sand
ca	Limestone/caliche	mcrsds	Medium to Coarse Sandy Silt	cg	Clayey Gravel
o	Overburden	crsds	Coarse Sandy Silt	crssnd	Coarse Sand
ts	Topsoil	cesd-cg	Cemented Sand and/or Gravel	sg	Silty Gravel
fs	Fine Silt	fss	Fine Silty Sand	fsdg	Fine Sand and Gravel
fsc	Fine Sandy Clay	fmss	Fine to Medium Silty Sand	fmsdg	Fine to Medium Sand and Gravel
fmsc	Fine to Medium Sandy Clay	ss	Silty Sand	msdg	Medium Sand and Gravel
m	Marl or Ochre	mss	Medium Silty Sand	sdg	Sand and Gravel
msc	Medium Sandy Clay	fcrsss	Fine to Coarse Silty Sand	fcrssdg	Fine to Coarse Sand and Gravel
s	Silt	mcrsss	Medium to Coarse Silty Sand	mcrssdg	Medium to Coarse Sand and Gravel
crssc	Coarse Sandy Clay	crsss	Coarse Silty Sand	crssdg	Coarse Sand and Gravel
fcrssc	Fine to Coarse Sandy Clay	u	Unknown (most likely unintelligible)	fg	Fine Gravel
mcrssc	Medium to Coarse Sandy Clay			fmg	Fine to Medium Gravel
				fcrsg	Fine to Coarse Gravel
				fcrssg	Fine to Coarse Gravel
				g	Gravel
				mg	Medium Gravel
				mcrsg	Medium to Coarse Gravel
				crsg	Coarse Gravel

Figure 2: Synonymy codes and lithology descriptions. Source: KGS OFR 2010-18

Table 6. The calibrated values for PST+ synonymy lithologies.

Synonymy	K	SY	Synonymy	K (ft/d)	Sy	Synonymy	K (ft/d)	Sy
sh	0.00004	0.05	sc	4.4	0.08	fsnd	15	0.24
c	0.00004	0.05	fds	4.4	0.08	fmgsnd	15	0.24
coal	0.00004	0.05	fmds	4.4	0.08	fmsnd	15	0.24
br	0.00004	0.05	fcrsds	4.4	0.08	snd	63	0.24
rb	0.00004	0.05	ds	4.4	0.08	fcrssnd	63	0.24
r	0.00004	0.05	mds	4.4	0.08	msnd	63	0.24
sst	0.00004	0.05	gc	4.4	0.08	mcrssnd	63	0.24
ca	0.0001	0.08	mcrsds	4.4	0.08	cg	63	0.24
o	0.0001	0.08	crsds	4.4	0.08	crssnd	63	0.29
ts	0.0001	0.08	cesd-cg	14.5	0.16	sg	63	0.29
fs	0.0001	0.08	fss	14.5	0.16	fsdg	299	0.29
fsc	0.0001	0.08	fmss	14.5	0.16	fmsdg	299	0.29
fmsc	0.0001	0.08	ss	14.5	0.16	msdg	299	0.29
m	0.0001	0.08	mss	14.5	0.16	sdg	299	0.29
msc	0.0001	0.08	fcrsss	14.5	0.16	fcrssdg	299	0.29
s	0.0001	0.08	mcrsss	14.5	0.16	mcrssdg	299	0.29
crssc	0.0001	0.08	crsss	14.5	0.16	crssdg	299	0.29
fcrssc	0.0001	0.08	u	14.5	0.16	fg	299	0.29
mcrssc	0.0001	0.08				fmg	299	0.29
						fcrsg	299	0.29
						fcrssg	299	0.29
						g	299	0.29
						mg	299	0.29
						mcrsg	299	0.29
						crsg	299	0.29

Figure 3: Calibrated hydraulic conductivity values. Source: KGS OFR 2010-18

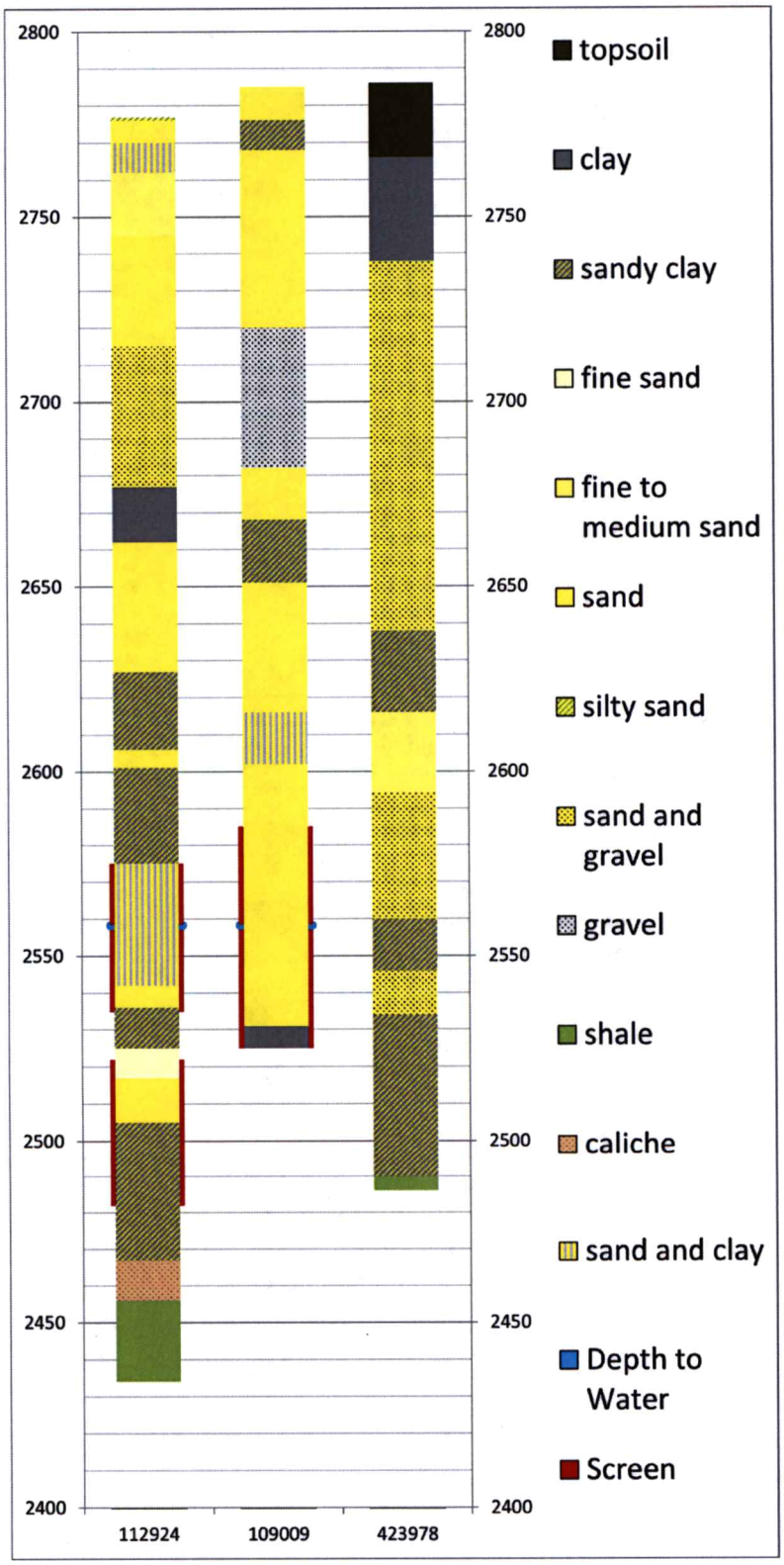


Figure 4: lithology log of KGS Wells on North transect

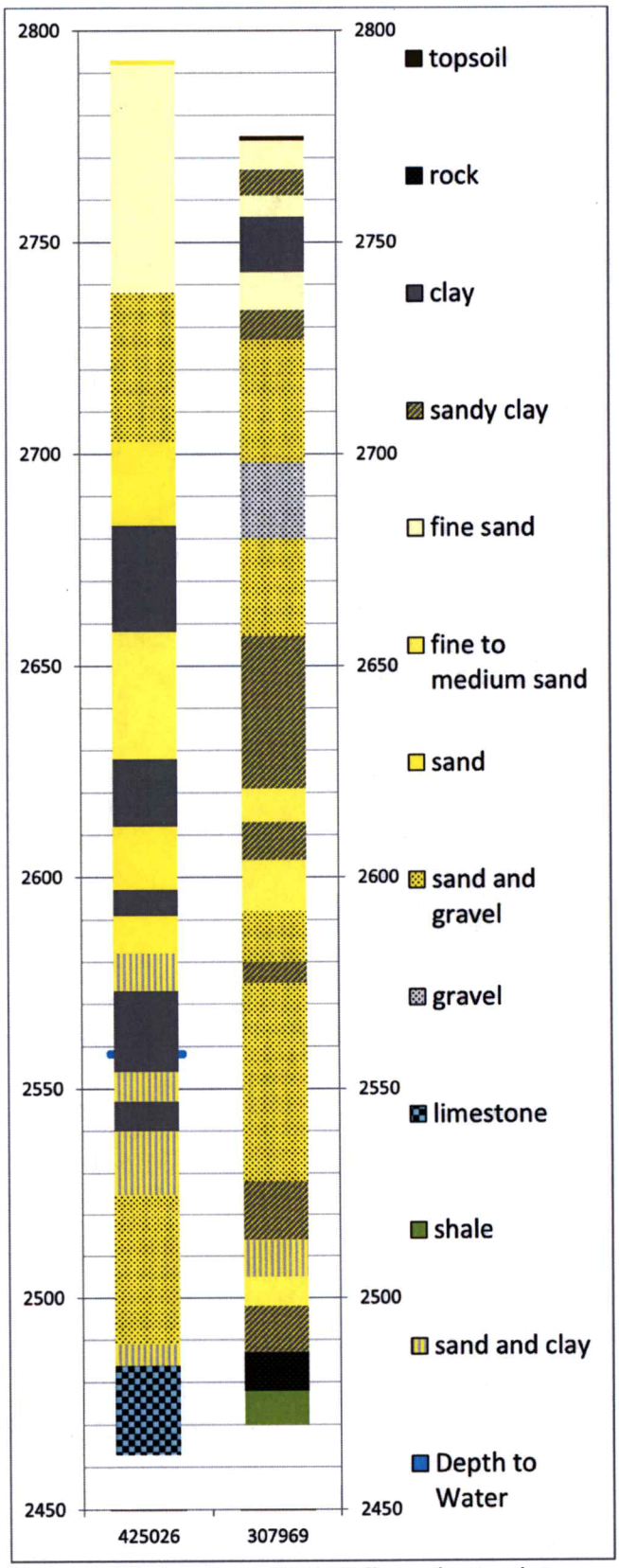


Figure 5: lithology log of KGS Wells on the South transect

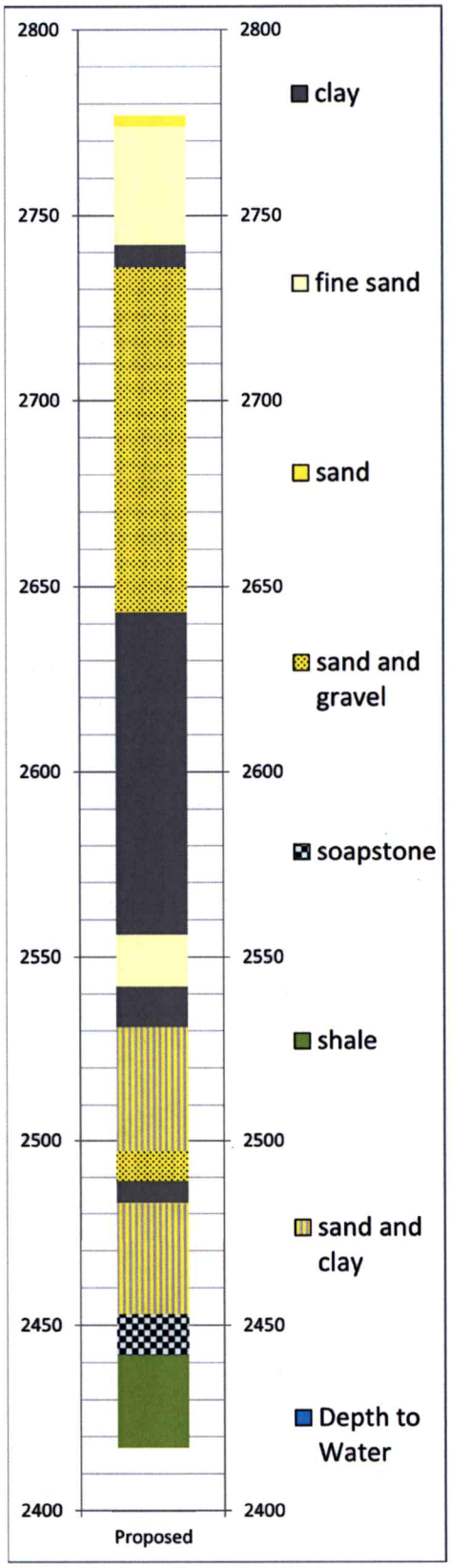


Figure 6: lithology log of the proposed location

Table 1: Lithology, Proposed Well

Driller's Description	Synonymy Codes	Percentages	Saturated Thickness (Feet)	Transmissivity (feet²/day)
Blow sand	Above water surface			
fine sand				
white clay				
sand, fine to med coarse, small to large gravel, cobblestone				
brown clay, limerock, few sand	c, ca, snd	50, 30, 20	2	25.2
sand, fine to small, few med	fmsnd	100	14	210.0
brown clay, limerock, few sand	c, ca, snd	50, 30, 20	11	138.6
sand, fine to small, few med., clays mixed	fmsnd, c	60, 40	23	207.0
sand fine to small, few med, clay	fmsnd, c	60, 40	11	99.0
sand fine to small, med, few coarse, few small gravel	snd, g	80, 20	8	881.6
brown clay	c	100	6	0.0
sand, fine to some small, thin clay	fsnd, c	60, 40	30	270.0
soapstone, limestone, some sandstone	ca, ds	80, 20	11	9.7
gray shale, limestone, some sand	sh, ca, snd	50, 30, 20	14	176.4
shale, limestone	sh, ca	60, 40	11	0.0
			Total Transmissivity:	2017.5

Table 2: Lithology, KGS Well ID 307969

Driller's Description	Synonymy Codes	Percentages	Saturated Thickness (Feet)	Transmissivity (feet²/day)
Top soil	Above water surface			
Fine sand – loose				
Brown sandy clay				
Fine sand – loose				
Brown clay				
Fine sand – loose				
Brown sandy clay				
Fine to medium sand and gravel				
Medium coarse gravel				
Fine to medium sand and gravel				
Brown sandy clay				
Fine to medium sand				
Brown sandy clay				
Fine to medium sand				
Fine to medium sand and gravel				
Brown sandy clay				
Fine to medium sand and gravel – small clay streak	fmsnd, g, c	50, 40, 10	23	2923.3
Fine to medium sand and gravel – 10% clay	fmsnd, g, c	50, 40, 10	7	889.7
Brown sandy clay	sc	100	14	61.6
Fine sand – clay streak	fsnd, c	80, 20	9	108.0
Fine to medium sand	fmsnd	100	7	105.0
Brown sandy clay	sc	100	11	48.4
Yellow white rock – hard pull down 300 to 900	r	100	9	0.0
shale	sh	100	8	0.0
			Total Transmissivity:	4136.0

Table 3: Lithology, KGS Well ID 423978

Driller's Description	Synonymy Codes	Percentages	Saturated Thickness (Feet)	Transmissivity (feet²/day)
topsoil and fine sand	Above water surface			
clay				
fine medium sand and coarse gravel (loose)				
fine medium sand and gravel 20% clay				
fine medium sand and gravel (loose)				
sandy clay				
fine medium sand with white rock 10% clay				
fine to medium sand and gravel (loose)				
sandy clay	sc	100	12	52.8
fine medium sand and gravel (loose)	fmsnd, g	60, 40	12	1543.2
sandy clay	sc	100	44	193.6
shale	sh	100	4	0.0
			Total Transmissivity:	1789.6

Table 4: Lithology, KGS Well ID 442871

Driller's Description	Synonymy Codes	Percentages	Saturated Thickness (Feet)	Transmissivity (feet²/day)
topsoil, clay	Above water surface			
clay, fine sand				
fine-coarse sand				
fine-coarse sand, small-medium gravel				
fine-coarse sand, small gravel, gravel				
clay				
fine-coarse sand				
clay, fine sand layers				
clay				
fine-medium sand, clay	fmsnd, c	60, 40	16	144.0
fine-medium sand, clay layers	fmsnd, c	60, 40	20	180.0
fine-coarse sand, clay layers	snd, c	60, 40	20	756.0
fine-medium sand, clay layers	fmsnd, c	60, 40	20	180.0
white clay, rock layers	c	100	20	0.0
			Total Transmissivity:	1260.0

Table 5: Lithology, KGS Well ID 425026

Driller's Description	Synonymy Codes	Percentages	Saturated Thickness (Feet)	Transmissivity (feet²/day)
blue sand	Above water surface			
fine sand				
fine-medium coarse sand, gravel, yellow and blue clay				
fine-medium coarse sand, small-large cemented ledges				
fine to medium coarse sand				
brown clay, limerock				
white and brown clay, limerock				
fine to medium sand, some coarse				
brown clay, limerock, few sand				
fine to medium coarse sand				
brown clay, limerock				
fine to medium coarse sand				
sand, fine to small clays				
brown and white clay, limerock	c, ca	60, 40	4	0.0
fine sand, thin clay	fsnd, c	60, 40	7	63.0
brown clay, hard limerock	c, ca	60, 40	7	0.0
fine sand, clay	fsnd, c	60, 40	15	135.0
fine-medium coarse sand, some small gravel	snd, g	70, 30	36	4816.8
fine sand, clays, limerock	fsnd, c, ca	50, 30, 20	5	37.5
limerock, soapstone	ca	100	21	0.0
			Total Transmissivity:	5052.3

Table 6: Lithology, KGS Well ID 112924

Driller's Description	Synonymy Codes	Percentages	Saturated Thickness (Feet)	Transmissivity (feet²/day)
silt and sand	Above water surface			
sand and sandy clay				
clay and sand				
fine and medium sand				
fine sand, medium sand, and coarse sand				
sand and gravel				
sand and gravel, limestone, and clay				
clay, caliche, rock, and sand				
sand, sandy clay, and caliche				
sandy clay and caliche				
sand, sandy clay, and caliche				
sandy clay, caliche, and sand				
sand and clay	snd, c	60, 40	16	604.8
sand and sandy clay	snd, sc	60, 40	6	237.36
sandy clay	sc	100	11	48.4
fine sand	fsnd	100	8	120.0
sand rock	ds	100	12	52.8
sandy clay, gravel, and sand	sc, g, snd	50, 30, 20	8	836.0
sandy clay, fine sand, and medium sand	sc, fsnd, snd	50, 30, 20	15	289.5
sandy clay	sc	100	15	66.0
caliche and limestone	ca	100	11	0.0
shale and limestone	sh, ca	60, 40	22	0.0
			Total Transmissivity:	2254.9

Table 7: Lithology, KGS Well ID 109009

Driller's Description	Synonymy Codes	Percentages	Saturated Thickness (Feet)	Transmissivity (feet²/day)
Sand	Above water surface			
Sandy Clay				
Sand				
Gravel				
Tight Sand				
Sandy Clay/ Clay				
Sand				
Sand/Clay Streaks				
Sand	snd	100	26	1701.0
Clay	c	100	6	0.0
			Total Transmissivity:	1701.0

Table 8: Theis drawdown evaluated at File No. 23018 ID1; T = 2,602 ft²/day, S = 0.00077

Scenario	Distance (FT)	Pump Rate (GPM)	Volume (AF)	Drawdown (FT)	Drawdown (%ST)
Proposed	4515.2	965.0	272.0	22.4	48.0%
Baseline	5210.7	275.0	99.8	6.7	14.3%
			Net:	15.7	33.6%

Table 9: Theis drawdown evaluated at File No. 17808; T = 2,602 ft²/day, S = 0.00077

Scenario	Distance (FT)	Pump Rate (GPM)	Volume (AF)	Drawdown (FT)	Drawdown (%ST)
Proposed	3517.4	965.0	272.0	25.2	53.9%
Baseline	4105.5	275.0	99.8	7.4	15.9%
			Net:	17.8	38.0%

Table 10: Theis drawdown evaluated at File No. 21933; T = 2,602 ft²/day, S = 0.00077

Scenario	Distance (FT)	Pump Rate (GPM)	Volume (AF)	Drawdown (FT)	Drawdown (%ST)
Proposed	2889.7	965.0	272.0	27.4	58.7%
Baseline	3949.7	275.0	99.8	7.6	16.2%
			Net:	19.8	42.5%

Table 11: Theis drawdown evaluated at File No. 23018 ID2; T = 2,602 ft²/day, S = 0.00077

Scenario	Distance (FT)	Pump Rate (GPM)	Volume (AF)	Drawdown (FT)	Drawdown (%ST)
Proposed	2132.8	965.0	272.0	30.8	66.0%
Baseline	2651.6	275.0	99.8	8.8	19.0%
			Net:	22.0	47.1%

Table 12: Theis drawdown evaluated at File No. 23018 ID2; T = 2,602 ft²/day, S = 0.00077; Rate = 434 GPM

Scenario	Distance (FT)	Pump Rate (GPM)	Volume (AF)	Drawdown (FT)	Drawdown (%ST)
Proposed	2132.8	434.0	272.0	18.1	38.9%
Baseline	2651.6	275.0	99.8	8.8	19.0%
			Net:	9.3	19.9%

WATER MANAGEMENT
FOR SOUTHWEST
KANSAS
GMD3

Southwest Kansas
Groundwater Management District No. 3
2009 E. Spruce Street
Garden City, Kansas 67846
(620) 275-7147 phone
www.gmd3.org

August 16, 2023

Austin McColloch
Division of Water Resources
4532 W Jones Ave., Suite B
Garden City, Kansas 67846

RECEIVED
AUG 16 2023
Garden City Field Office
Division of Water Resources

RE: Application for Change in Point of Diversion
Water Right, File No. 20526 D5

Dear Austin:

We have completed a review of the application for the above referenced water right. The proposed change in point of diversion is in accordance with current area rules, K.A.R. 5-23-3, as it pertains to minimum spacing to neighboring wells and distance moved.

Well evaluations were conducted to estimate possible effects of the proposal on the supply of other wells with water rights prior to the proposal per K.S.A. 82a-708b, and the management program. Under K.S.A. 82a-708b, an applicant requesting a change in point of diversion must demonstrate to the chief engineer that any proposed change is reasonable and will not impair. The enclosed report is an analysis performed by the GMD on behalf of our membership. Under this analysis, the proposed change is considered to be reasonable and unlikely to impair if either the net in-season well-to-well effect of the proposed change is less than a strict maximum allowable threshold (2.0 ft with saturated thickness is between 75-100ft), or if no well with a net well-to-well effect exceeding the threshold is identified as critical. Critical wells are identified as wells that are expected to either lose or greatly diminish water supply over the next 25 years. The attached review information is based on a Theis analysis using inputs from the GMD3 aquifer model, which is considered to be the best information on well and aquifer data readily and easily available to the public. If either the applicant or the neighbors believe they have better data that might change the result of the analysis, they should contact GMD3. Conclusions of the well analysis may change if better information on well and aquifer data can be made available.

Every neighboring well within 1 mile of the proposed move was evaluated. Evaluations showed that two of the neighboring wells exceeded the net effect above the maximum allowable threshold and needed further evaluation. Based on current model data, critical wells were determined in the area. Pump testing in the area shows model could be over estimating values, but was determined the test was too far away to use those numbers. We did not receive any comments from neighboring well owners. Therefore, GMD3 sees this move as meeting current area rules and would recommend approval if the State could verify if values may over estimated in current model. If aquifer conditions change or there is a change to the water right in the future, we would be happy to evaluate the effects at that time.

Thank you for the opportunity to review the applications and to provide a recommendation. If you have any questions, please don't hesitate to contact us.

Sincerely,

Jason L. Norquest
Assistant Manager

GMD3 Change Review

File No(s).: 20526D5. DWR office: GC.
App filed to change: PD.
Is Landowner(s) correct in WRIS: Garrett & Caley Love.
If NO, is documentation included?
Is Water Use Correspondent correct in WRIS? __.
If NO, is documentation included?
Regulation(s) Reviewed: KAR 5-23-3
Point of diversion ID No(s) 01 being changed.

	ft. North	ft. West	
Authorized PD	3940	1300	Section 34-26-30
Proposed PD	5034	490	
Difference	-1094 n	810 e	
a2 + b2 = c2	1196836	656100	1361.226 foot move NE

GPS for proposed PD: Lat: 37.75045 Long: -100.58103.
Is proposed PD stacking on existing WRs? No.
Is Proposed PU overlapping existing WRs? No Change.
Neighboring certified well(s) notified: __.
Name Lloyd Schmidt (17808, 21933).
Address 4105 Q RD.
Zip Ingalls, KS 67853.
Email: lpschmidt@ucom.net Phone: 620-335-5431.

Name Ira Llyod & Phyllis J Schmidt (20526D6).
Address 4104 Q RD.
Zip Ingalls, KS 67853.
Email: . Phone: .

Name Clark & Annette Isaac (20526D7, domestic).
Address 4502 S RD.
Zip Ingalls, KS 67853.
Email: clarkisaac586@gmail.com Phone: 620-521-274.

Name Henry Schmidt %Lonnie Schmidt (23018).
Address 26906 12 Road.
Zip Montezuma, KS 67867.
Email: lrschmidt64@gmail.com Phone: .

GMD3 Change Review

Domestic well(s) notified: __.
Name Pete & Ines Enns (NC W2 of 34).
Address 18404 4 RD.
Zip Ingalls, KS 67853.
Called in after getting our notice. Wanted more information and understanding of the analysis. Did not have an issue since possible effects showed to be within guidelines for his well as not critical.
Base Acres: __.
Perfected Acres: __.
Irr. Return-Flow ___%
Gray County
Authorized: 272AF @ 965gpm
Average reported use (2013-2022): 99.8AF/year. Two of those years reported zero use, which effects the average.
Well not running during most recent GMD3 inspection.

Is a waiver needed: Move is less than half mile. GPS shows that minimum spacing is met. Analysis shows that two wells could have effects, but that would be pumping at full authority, which is unlikely. Pump test performed about 8 miles away was deemed to far to use those specs here, but could also support that the current model over accessed some of the values.
Recommendation: After review of all available information, it appears current area rules are met. Staff believes effects in area may be overstated based on past well evaluations. We would recommend approval of the application if DWR concludes the same and there would be no critical wells in the area.

Report Date: Monday, August 14 2023

Water Rights and Points of Diversion Within 1 mile of point defined as:
5034 Feet N and 490 Feet W of the Southeast Corner of Section 34 Twp 26S Rng 30W
Located at: 100.581029 West Longitude and 37.750451 North Latitude
Both SURFACE WATER and GROUNDWATER

File Number	Use	ST	SR	Dist (ft)	Q4	Q3	Q2	Q1	FeetN	FeetW	Sec	Twp	Rng	ID	Batt	Auth_Quan	Add_Quan	Unit
A__ 17808	00	IRR	NK	G	3525	--	NW	NW	SE	2563	2543	27	26	30W	1		272.00	272.00	AF
A__ 20526	D5	IRR	NK	G*	1358	--	--	NC	NE	3940	1300	34	26	30W	2		272.00	272.00	AF
A__ 20526	D6	IRR	NK	G	3726	--	NE	NW	NW	5222	4210	34	26	30W	5		272.00	272.00	AF
A__ 20526	D7	IRR	NK	G	3766	--	--	NC	SE	1330	1180	34	26	30W	4		272.00	272.00	AF
A__ 21933	00	IRR	NK	G	2893	--	NW	NE	SE	2582	829	27	26	30W	6		272.00	272.00	AF
Same					3746	--	--	NC	SW	1278	3882	27	26	30W	4		272.00	272.00	AF
A__ 23018	00	IRR	NK	G	2099	--	--	NC	NW	3925	3960	35	26	30W	2		452.00	452.00	AF
Same					4079	--	--	NC	SW	1330	3980	35	26	30W	3	B2	.00	.00	AF
Same					4102	--	NE	SW	SW	1190	4240	35	26	30W	6	G2	272.00	272.00	AF
Same					4145	--	NE	SW	SW	1050	4500	35	26	30W	7	B2	.00	.00	AF
Same					4581	--	--	NC	NE	3960	1290	35	26	30W	1		92.00	92.00	AF

Total Net Quantities Authorized:	Direct	Storage
Total Requested Amount (AF) =	.00	.00
Total Permitted Amount (AF) =	.00	.00
Total Inspected Amount (AF) =	.00	.00
Total Pro_Cert Amount (AF) =	.00	.00
Total Certified Amount (AF) =	2448.00	.00
Total Vested Amount (AF) =	.00	.00
TOTAL AMOUNT (AF) =	2448.00	.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.

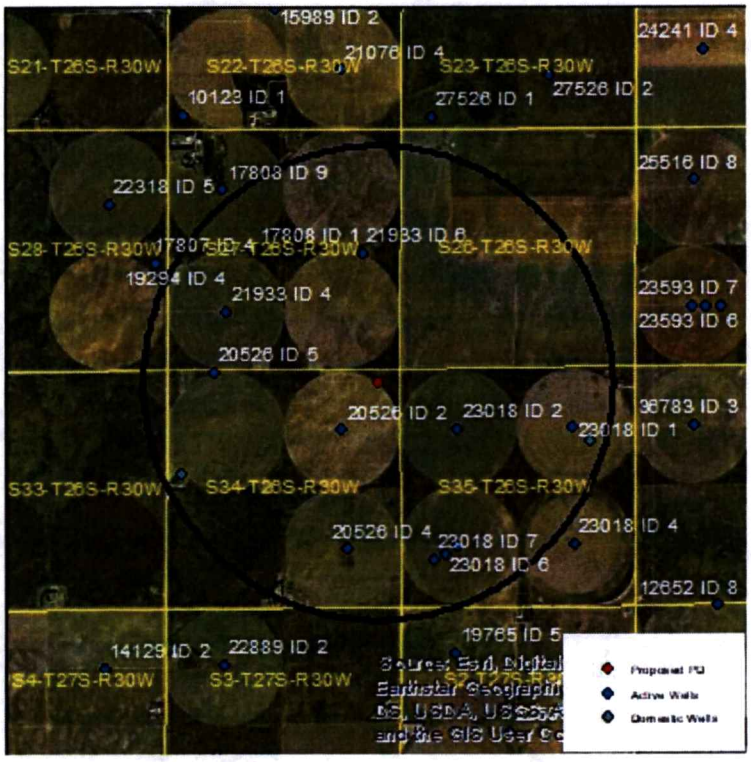
Water Rights and Points of Diversion Within 1 mile of point defined as:
5034 Feet North and 490 Feet West of the Southeast Corner of Section 34 Twp 26S Rng 30W
Located at: 100.581029 West Longitude and 37.750451 North Latitude
Both SURFACE WATER and GROUNDWATER
WATER USE CORRESPONDENTS:

File Number	Use	ST	SR
> LLOYD SCHMIDT			
>			
> 4105 Q RD			
> INGALLS KS 67853			
>----------			
> GARRETT & CALEY LOVE			
>			
> 21506 12 ROAD			
> MONTEZUMA KS 67867			
>----------			
> IRA LLOYD & PHYLLIS J SCHMIDT			

>
> 4105 Q RD
> INGALLS KS 67853
>---
> CLARK & ANNETTE ISAAC
>
> 4502 S RD
> INGALLS KS 67853
>---
> LLOYD SCHMIDT
>
> 4105 Q RD
> INGALLS KS 67853
>---
> HENRY SCHMIDT
> LONNIE R SCHMIDT
> 26906 12 ROAD
> MONTEZUMA KS 67867
>---
==========

Evaluation of proposed move for Water Right No. 20526 D5

Proposed: Move water right no. 20526 D5 ID2 to a new well location, 1,326 ft to the northeast.



Wells within 1 mile: 20526 ID4, 20526 ID5, 21933 ID4, 21933 ID6, 17808, 23018 ID1, 23018 ID2, 23018 ID6, a domestic well in section 34-26-30, and a domestic well in section 35-26-30.

The saturated thickness at the proposed well location is estimated to be 99 ft, based upon the GMD3 model. For saturated thickness between than 75 ft and 100 ft, the drawdown allowance is 2.0 ft.

50 year Theis Analysis: The following values were used to run the analysis:

S = 0.2125, T = 4272 ft^2/day, $tp_{current}$ = 75 days, $Q_{current}$ = 300 gpm, $tp_{proposed}$ = 64 days, $Q_{proposed}$ = 965 gpm

Theis drawdowns were calculated as follows:

20526 ID4: Drawdown from current location = 1.17 ft

Drawdown from proposed location = 2.58 ft

Net drawdown = **1.4 ft**

20526 ID5: Drawdown from current location = 1.06 ft

Drawdown from proposed location = 2.61 ft

Net drawdown = **1.6 ft**

21933 ID4:	Drawdown from current location = 0.95 ft
	Drawdown from proposed location = 2.59 ft
	Net drawdown = **1.6 ft**
21933 ID6:	Drawdown from current location = 0.91 ft
	Drawdown from proposed location = 3.07 ft
	Net drawdown = **2.2 ft**
17808:	Drawdown from current location = 0.89 ft
	Drawdown from proposed location = 2.70 ft
	Net drawdown = **1.8 ft**
23018 ID1:	Drawdown from current location = 0.77 ft
	Drawdown from proposed location = 2.32 ft
	Net drawdown = **1.5 ft**
23018 ID2:	Drawdown from current location = 1.19 ft
	Drawdown from proposed location = 3.88 ft
	Net drawdown = **2.7 ft**
23018 ID6:	Drawdown from current location = 0.97 ft
	Drawdown from proposed location = 2.44 ft
	Net drawdown = **1.5 ft**
Domestic 34-26-29:	Drawdown from current location = 0.94 ft
	Drawdown from proposed location = 2.21 ft
	Net drawdown = **1.3 ft**
Domestic 35-26-30:	Drawdown from current location = 0.74 ft
	Drawdown from proposed location = 2.19 ft
	Net drawdown = **1.4 ft**

Net drawdown exceeds the drawdown allowance of 2.0 ft for water right nos. 21933 ID6 and 23018 ID2. Critical well analysis is necessary on those wells.

Critical Well Evaluation:

21933 ID6:

Water Column = 105 ft

DP = 2.2 ft (Net drawdown from the proposal indicated above)

DE = 25.1 ft (Water level decline from 2023 through 2048 based upon GMD3 model)

DD = 35.7 ft (S = 0.1336, T = 2840 ft^2/day, Q = 289 gpm, tp = 192 days, efficiency = 70%)

DT = 63.0 ft

Economic Drawdown Constraint (EDC) = 0.4 * 105 ft = 42.0 ft

Physical Drawdown Constraint (PDC) = 105 ft – 60 ft = 45.0 ft

Total drawdown of 63.0 ft is greater than the EDC and the PDC, so this well **is critical.**

23018 ID2:

Water Column = 86 ft

DP = 2.7 ft (Net drawdown from the proposal indicated above)

DE = 17.2 ft (Water level decline from 2023 through 2048 based upon GMD3 model)

DD = 55.4 ft (S = 0.1645, T = 2793 ft^2/day, Q = 462 gpm, tp = 116 days, efficiency = 70%)

DT = 75.3 ft

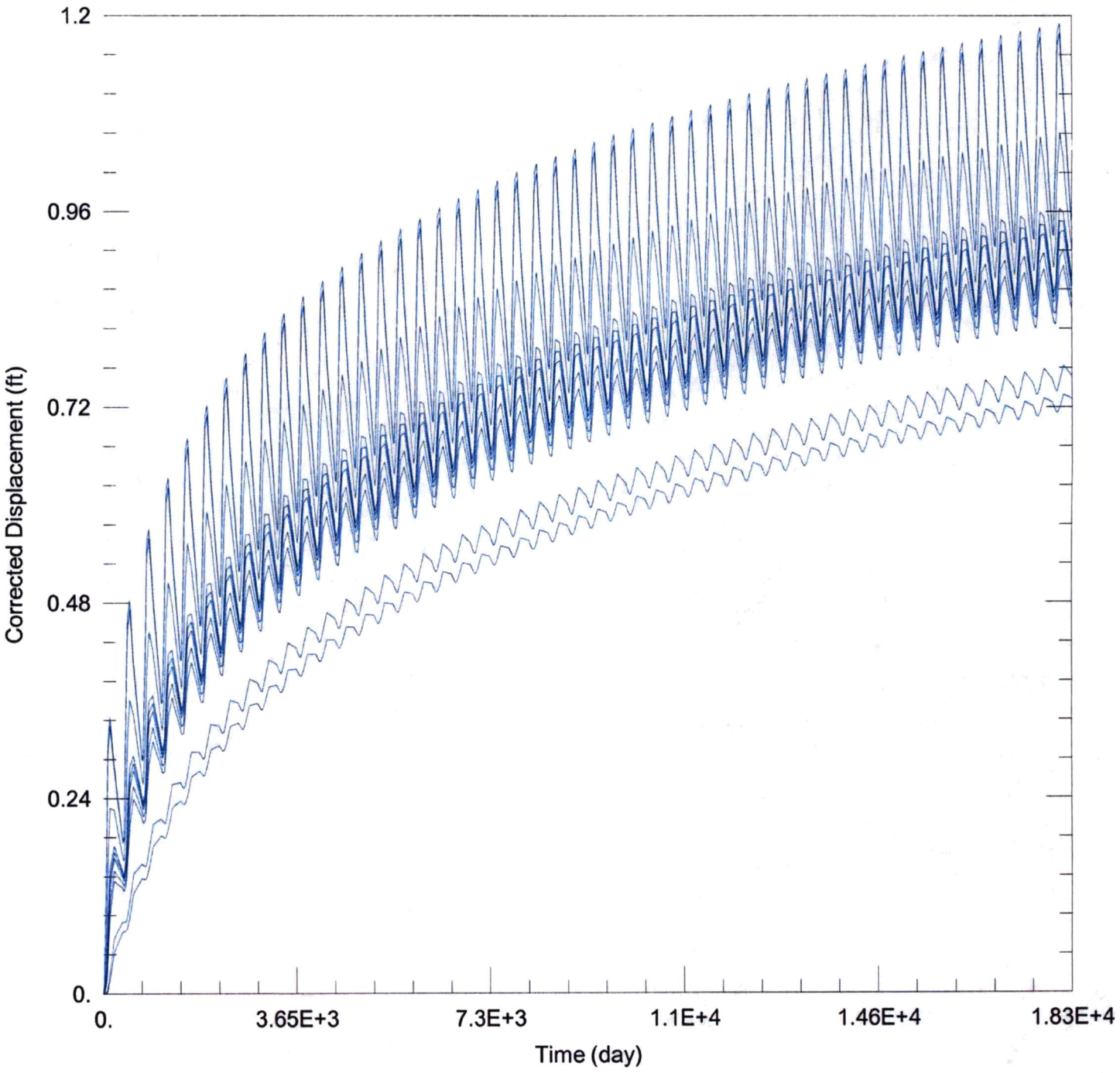
Economic Drawdown Constraint (EDC) = 0.4 * 86 ft = 34.4 ft

Physical Drawdown Constraint (PDC) = 86 ft – 60 ft = 26.0 ft

Total drawdown of 75.3 ft exceeds the EDC and the PDC, so this well **is critical.**

Conclusion:

The proposed move is in a depleted aquifer area with a little less than 100 ft of remaining saturated thickness. The analysis shows that net well-to-well effects are likely to be small but are slightly greater than the 2.0 ft drawdown allowance set to assure that effects are not noticeable. Critical well analysis flagged these two wells as critical because modeled depletions and well drawdown effects exceed 40% over the next 25 years and will leave less than 60 ft of saturated thickness remaining. A recent pump test about 8 miles to the southeast of the proposed location demonstrated aquifer transmissivity greater than predicted by the GMD3 model. This proposal was determined to be too far from that test to use the test result data, but it is somewhat likely that the model is underestimating transmissivity in this area, too, and that actual well-to-well effects will be smaller than this analysis indicates. Concerned neighbors should contact GMD3 at (620) 275-7147 or the Division of Water Resources at (620) 276-2901.



WELL TEST ANALYSIS

Data Set: C:\Users\trevora\Documents\2023_moves\20526\20526 Current.aqt
Date: 07/31/23 Time: 11:47:28

PROJECT INFORMATION

Company: GMD 3
Project: 20526
Location: Gray County

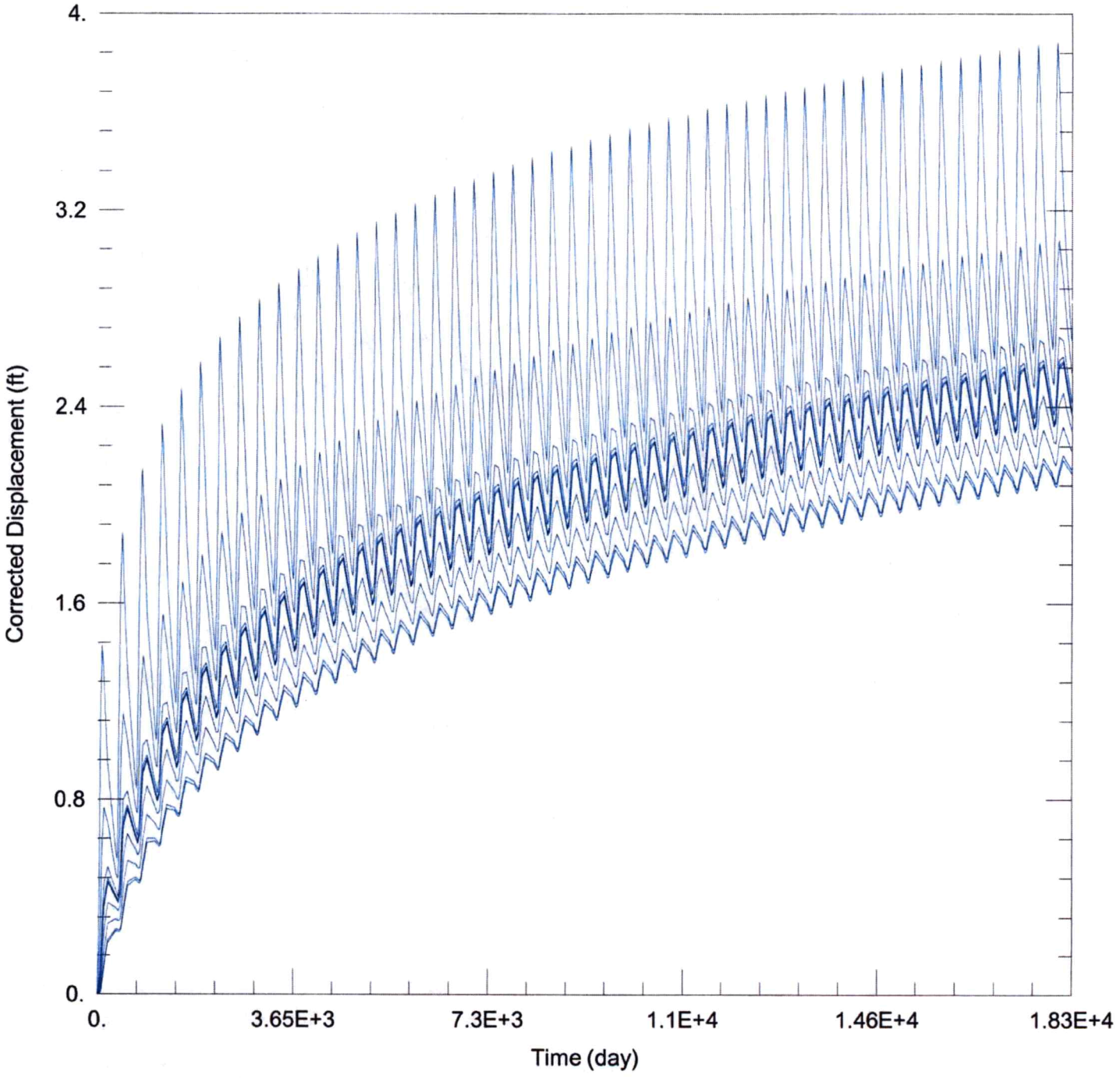
WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
20526 ID2	62347	317784

Observation Wells

Well Name	X (ft)	Y (ft)
□	62347	317784



WELL TEST ANALYSIS

Data Set: C:\Users\trevora\Documents\2023_moves\20526\20526 Proposed.aqt
Date: 07/31/23 Time: 11:47:09

PROJECT INFORMATION

Company: GMD 3
Project: 20526
Location: Gray County

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
20526 ID2	63151	318838

Observation Wells

Well Name	X (ft)	Y (ft)
□	63151	318838

Garden City Field Office
4532 W. Jones, Suite B
Garden City, KS 67846

Kansas
Department of Agriculture
Division of Water Resources

Phone: 620-276-2901
Fax: 620-276-9315
www.agriculture.ks.gov

Mike Beam, Secretary

Laura Kelly, Governor

August 10, 2023

GROUNDWATER MANAGEMENT DISTRICT #3
2009 E SPRUCE ST
GARDEN CITY KS 67846

Re: Request for Recommendation,
File Nos. 20526-D5

Dear Sir or Madam:

We are enclosing a copy of the referenced application, which was submitted by Garrett Love and appears to be in proper form, for your review.

We are delaying any further action for a period of 15 days from the date of this letter to allow you time to submit your recommendation concerning this application. Please submit your recommendation within the allotted time, or any authorized extension of time thereof.

If you have any questions, please contact me at (620) 276-2901. If you wish to discuss a specific file, please have the file number ready to that I may help you more efficiently.

Sincerely,

Austin McColloch
Assistant Water Commissioner

Enclosure
pc:

Garden City Field Office
4532 W. Jones, Suite B
Garden City, KS 67846

Kansas
Department of Agriculture
Division of Water Resources

Phone: 620-276-2901
Fax: 620-276-9315
www.agriculture.ks.gov

Mike Beam, Secretary

Laura Kelly, Governor

July 26, 2023

HENRY SCHMIDT INC
Attn: LONNIE R SCHMIDT PRESIDENT
26906 12 ROAD
MONTEZUMA, KS 67867

RE: Application for Change
Water Right, File Nos. 20526-D5

Dear Sir or Madam:

This is to advise you that Garrett & Caley Love has filed an application for approval of the Chief Engineer, Division of Water Resources, Kansas Department of Agriculture, to change the point of diversion under the above referenced applications. An irrigation well is proposed to be relocated to the NE¼ NE¼ NE¼ of Section 34, Township 26 South, Range 30 West, Gray County.

You can find the complete applications posted by water right file number as referenced above at:
www.Agriculture.ks.gov/DWRNotices

You are notified on this proposed point of diversion (well) so that you may furnish this office with any comments or other information you want to submit. Such comments or other information must be received in this office within 15 days from the date of this letter.

Should you have any questions, please feel free contact this office. If you would prefer, you could arrange an appointment for additional assistance. Please refer to the file number when you contact us if you wish to discuss a specific file.

Sincerely,

Austin J. McColloch
Assistant Water Commissioner

AM:

pc:

SCANNED