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:
17800	3-14-2023	C1	4	3
6. Status: ☐ Approved ☐ Deni	ed by DWR/GMD	Dismiss by Reques	t/Failure to Return	7. Filing Date of Change:
				1/31/2023
8a. Applicant(s), Landowner New to system ⊠	Person IDAdd Seq#	8c. Landowne	* *	Person ID
CARPENTER FAM TRUS % CARPENTER, MARK E 4585 MEADE ST DENVE	3			
8b. Landowner(s) New to system □	Person IDAdd Seq#	New to sy ANTHC 815 S V	stem □ ONY J STEGMAN /AN BUREN ST FON, KS 67951-2	Person ID 23257 Add Seq#
9. Documents and Enclosure(s): 🛛 DV	VR Meter(s) Date to Compl	y: 12/31/2023	N & P Date to	Comply: 3/1/2024
☐ Anti-Reverse Meter ☐ Meter S	Seal Check Valve	⊠ N & P Form	⊠ Water Tube ⊠ Dı	riller Copy
☐ Conservation Plan Date Require	ed: Da	te Approved:	Date to	Comply:
10. Use Made of Water From:		To: _		
			Date Prepared: 3/09/2 Date Entered:	023 ву: МАМ Ву:

File No. 17800 11. County: SV Basin: CIMARRON RIVER	Stream:	-	Formation Code: 211 Special Use:				
12. Points of Diversion CHK MOD	Ra	ate and Quantity Authorized	Additional				
DEL PDIV ENT Qualifier S T R ID 'N 'W Commi	,	Rate Quantity gpm af	Rate Quantity gpm af Overlap PD Files				
DEL 35317							
ENT SE SE NE 26 33S 37W 2194 218		650 352	327 270 42145				
13. Storage: Rate NF Quantity ac/ft Additional Rate NF Additional Quantity ac/ft							
14. Limitation: af/yr at gpm (cfs	s) when combined with fi	ile number(s)					
Limitation: af/yr at gpm (cfs	s) when combined with fi	ile number(s)					
15. 5YR Allocation: Allocation Type Start Year 5 YR Amount /	Amount Unit Ba	sase Acres Co	mment				
16. Place of Use NE1/4 NW1/4 CHK	SW1/4	SE¼	Total Owner Chg? Overlap Files				
		NE NW SW SE 1/4 1/4 1/4					
CHK 6153			8a Y				
CHK 8509			8a Y				
Base Acres: Year: Minimum Reasonable Quantity:							

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



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

Mike Beam, Secretary

Laura Kelly, Governor

March 14, 2023

CARPENTER FAM TRUST % CARPENTER, MARK B 4585 MEADE ST DENVER CO 80211-1361

RE:

Field Office Application for Change Water Right, File Nos. 17800 & 42145

Dear Sir:

Enclosed are orders 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 numbers.

Your attention is directed to the enclosures and to the terms, conditions, and limitations specified in these approvals 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. Please note the additional well construction condition attached.

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,

Michael A. Meyer

Water Commissioner

MAM: Enclosures

pc:

ANTHONY STEGMAN GMD3

CERTIFICATE OF SERVICE

On this 14th day of March 2023, I hereby certify that the foregoing Approval of Application for Change in Point of Diversion, Water Right, File Nos. 17,800 and 42,145 dated 14th day of March 2023 was mailed postage prepaid, first class, US mail to the following:

CARPENTER FAM TRUST % CARPENTER, MARK B 4585 MEADE ST DENVER CO 80211-1361

Pc:

ANTHONY J STEGMAN 815 S VAN BUREN ST HUGOTON, KS 67951-2301

GMD3

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 11:40 am JAN 3 1 2023 File No. ____17800 1. Application is hereby made for approval of the Chief Engineer to change the (check one or both): Garden City Field Office Division of Water Resources ☐ 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: ☐ Surface water 2. Name and address of Applicant: CARPENTER FAMILY TRUST C/O MARK CARPENTER Phone Number: (520) 990-7644 Email address: ZONAWINGS@YAHOO.COM Name and address of Water Use Correspondent: TRON STEGMAN Phone Number: (620)544-5293 Email address: STEGRACE@PLD.COM 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.) SW1/4 TOTAL ACRES Sec. Twp. Range NE1/4 NW1/4 SW1/4 SE1/4 NW1/4 SW1/4 SE1/4 NE1/4 NW1/4 SW1/4 SE1/4 NE1/4 NW1/4 SW1/4 NE1/4 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.) SW1/4 SE1/4 TOTAL Sec. Twp. Range NE1/4 NW1/4 SW1/4 SE1/4 NE' NW' SW' SE' NE' NW' SW' SE' NE1/4 NW1/4 SW1/4 SE1/4

For Office Use Only: Code _____ Fee \$\(\frac{200.00}{200.00}\) TR # _____ Receipt Date \(\frac{1-31-23}{3}\) Check # \(\frac{118}{200.00}\)

Presently author	rized point of d	iversion:				
One in the	SE	Quarter of the	SE	Quarter of the	NE	Quarter
of Section	26	, Township	33	South, Range	37	W,
in STEVENS	Cou	nty, Kansas, <u>2750</u>	feet North	150 feet West of S	outheast corner	
Authorized Rate _	650 GPM	_ Authorized Quantity	352 AF	Depth of well	(fee	t)
(DWR use only:	Computer ID I	No. <u>1</u> GP	'S	feet North	feet We	st)
						W,
in STEVENS	Cou	nty, Kansas, <u>2194</u>	_ feet North	218 feet West of S	outheast corne	of section.
This point is: 🔲	Additional Well	☐ Geo Center List o	ther water right	ts that will use this point 4	2145	
			· i			
				Quarter of the		Quarter
Authorized Rate	Committee ID	Authorized Quantity	26	Depth of well	(fee	(1)
		T 1:		0 " D		107
in Section	Carr	, rownship	foot North	South, Kange	outhoast corns	r of section
Proposed Rate	Cou	Proposed Quantity	_ leet North	Proposed well death (foot)	or section.
Proposed Nate _		Proposed Quantity _		Froposed well depth (
This point is.	Additional Well	Coo Center Fist (Aner water right	to that will use this point_		
The changes here	ein are desired	for the following reason	is?			
(blease be specific	c)			North		110
(please be specific	c)		300	200 100 0	100 200	300
(please be specific	c)		300	200 100 0	100 200	300
		ed? 🗌 Yes 🔲 No	300	200 100 0	100 200	
If a well, is the tes	t hole log attach	ed? Yes No	300	200 100 0	100 200	300
	t hole log attach	ed? Yes No	300	200 100 0	100 200	
If a well, is the tes	t hole log attach	ed? Yes No	200	200 100 0	+ + +	
If a well, is the tes	t hole log attach	ed? Yes No	200	200 100 0	+ + +	200
If a well, is the test The change(s) (water the point of divertible to the	t hole log attache as)(will be) comp rsion is a well:	ed? Yes No	200	200 100 0	+ + + +	200
If a well, is the tes	t hole log attache as)(will be) comp rsion is a well:	ed? Yes No	200	200 100 0	+ + + +	200
If a well, is the test The change(s) (water the point of divertible to the	t hole log attache as)(will be) comp rsion is a well:	ed? Yes No	200	200 100 0	+ + + +	200
If a well, is the test The change(s) (water If the point of diverting the control of the change (a) What are you	t hole log attache as)(will be) comp rsion is a well: going to do with	ed? Yes No	200	200 100 0	+ + + +	200
If a well, is the test The change(s) (water the point of divertible to the	t hole log attache as)(will be) comp rsion is a well: going to do with	ed? Yes No	300 200 100 West 0	200 100 0	+ + + +	200 100 11+++0 East
If a well, is the test The change(s) (water If the point of diver (a) What are you (b) When will this	t hole log attachers)(will be) composition is a well: going to do with	ed? Yes No	300 200 100 West 0	200 100 0	+ + + +	200 100 East
If a well, is the test The change(s) (water the point of diverties) If the point of diverties (a) What are you (b) When will this Groundwater Man	t hole log attache as)(will be) comp rsion is a well: going to do with be be done? agement District	ed? Yes No	300 200 100 West 0	200 100 0	+ + + +	200 100 11+++0 East
If a well, is the test The change(s) (water If the point of diver (a) What are you (b) When will this	t hole log attache as)(will be) comp rsion is a well: going to do with be be done? agement District	ed? Yes No	300 200 100 West 0	200 100 0	+ + + +	200 100 East
If a well, is the test The change(s) (water the point of diverties) If the point of diverties (a) What are you (b) When will this Groundwater Man	t hole log attachers)(will be) comparsion is a well: going to do with be be done? agement District fes No	ed? Yes No	300 200 100 West 0	200 100 0	+ + + +	200 100 East
	of Section	of Section	of Section	of Section	of Section	in STEVENS County, Kansas, 2750 feet North 150 feet West of Southeast corner Authorized Rate 650 GPM Authorized Quantity 352 AF Depth of well (feet (DWR use only: Computer ID No. 1 GPS feet North feet West of Southeast corner This point will not be changed This point will be changed as follows: No change, point better described with GPS Proposed point of diversion: (Complete only if change is requested or if existing point is better described One in the NE Quarter of the NE Quarter of the SE of Section 26 , Township 33 South, Range 37 in STEVENS County, Kansas, 2194 feet North 218 feet West of Southeast corner Proposed Rate Proposed Quantity Proposed well depth (feet) This point is: Additional Well Geo Center List other water rights that will use this point 42145 Presently authorized point of diversion: One in the Quarter of the Depth (feet)

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 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

14. If the proposed groundwater point of diversion is 300 or lewer feet from	the existing point of diversion, complete the following:
(a) Does the undersigned represent all owners of the currently author ☐ Yes ☐ No (If no, all owners must sign this applica	
 (b) Will the ownership interest of any owner of the currently authoriz affected if this application is approved as requested? ☐ Yes ☐ No (If yes, all owners must sign this applic 	* ************************************
(c) If this application is not approved expeditiously, will there be subst	
Yes No (If no, all owners must sign this applica	
If the application proposes a surface water change in point of diversion, a gor a change in place of use, the application must be signed by all owners of agent (attach notarized statement authorizing representation).	groundwater change in point of diversion greater than 300 feet, f the currently authorized place of use, or their duly authorized
I hereby verify, being first duly sworn upon my oath or affirma age and the owner, the spouse of the owner, or a duly authoriz their behalf, in regards to the water right(s) to which this application are true, correct and complete.	ed agent of the owner(s) to make this application on ication pertains. I further verify that the statements
Dated at January 27, UPS Store , Kansas, this _	27 day of <u>January</u> , 20 <u>23</u> .
The Carpenter Family Trust	/
(Owner)	(Spouse)
Mark R Carpenter TTEE	
M 10 (Please Print)	(Please Print)
/ Carperter 17EE	(Spouse)
y (Owner)	(Spouse)
(Please Print)	(Please Print)
(Owner)	(Spouse)
State of Kensas (Please Print) State of Kensas (Please Print))11
I he eby certify that the foregoing application was signed in m	y presence and sworn to before me this day
of January , 20 ds.	
My Commission Expires 04-21-2026	Notary Public
ONLY COMPLETE APPLICATIONS WILL BE PROCESSED. To be complete, all of accurate information; maps, if necessary, must be included; signatures of all the app	
the appropriate fee must be paid.	_
Each application to change the place of use or the point of diversion under forth in the schedule below: Make checks payable to: Kansas Departmet (1) Application to change a point of diversion 300 feet or less (2) Application to change a point of diversion more than 300 feet	this section shall be accompanied by the application fee set nt of Agriculture \$100 \$200

Page 3

File No. <u>17800</u>

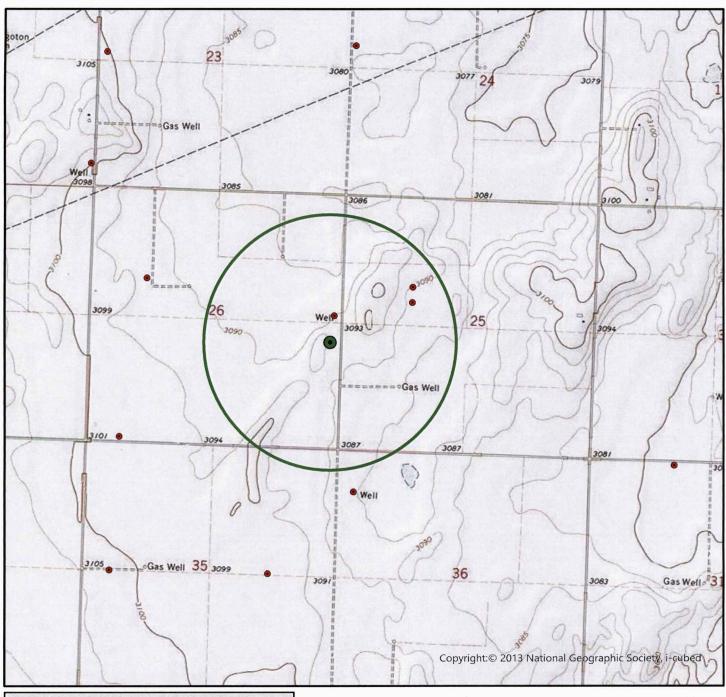
DWR 1-121 (Revised 09/11/2019)

SUMMARY ORDER APPROVING APPLICATION FOR CHANGE AND IMPOSING CONDITIONS

pro	ovisions of the <i>Kansas Water Appropriation Law, K</i> .S.A. 82a-7	8b, as amended, and K.A.R. 5-5-1, et seq. and other applicable 701 et. seq., and rules and regulations promulgated thereunder, and this Summary Order does not change the terms, conditions and
1.	A change application was received on	requesting that the place of use and / or point of per be changed as described in the application.
2.	On and after the effective date of this summary order, the auth the topographic map accompanying the application to char	horized place(s) of use shall be located substantially as shown on nge the place of use. Applicable Total Applicable
3.	The change in point of diversion shall not impair existing righ previously authorized. The point of diversion authorized by radius of the authorized point(s) of diversion.	ts and shall be limited to the same source or sources of water as y this summary order shall be located within a foot le Not Applicable
4.	The point(s) of diversion described herein is administrative Positioning System (GPS), as described in the application.	ly corrected to be more accurately described using the Global . ☐ Applicable ☐ Not Applicable
5.	The point(s) of diversion authorized herein shall not actually to authorized point(s) of diversion.	be located more than feet from the previously of Applicable
6.	As required by K.A.R. 5-3-5d, if the works for diversion is a w or other device suitable for making water level measuremer K.A.R. 5-6-13. Applicable \square Not Applicable	rell with a diversion rate of 100 gallons per minute or more, a tube nts shall be installed, operated and maintained in accordance with
7.	December 31, 20_23_, or before the first use of water, operated and maintained in accordance with K.A.R. 5-1-4 t	operly install an acceptable water flow meter on or before whichever occurs first. The water flow meter shall be installed, through 5-1-12. As required by K.S.A. 82a-732, as amended, and the reading of the water flow meter and the total quantity of watering the end of each calendar year.
8.	installation of the works for diversion of water shall be authorized extension of time. By March 1, 202 the works for diversion has been completed, on the form provided Applicable Not Applicable	completed on or before December 31, 20 3, or within any applicant shall notify the Chief Engineer that construction of the ded by the Chief Engineer, as required by K.A.R. 5-8-4e.
9.	The completed well log shall be submitted with the requi	red notice. Applicable
10.	with an in-line, automatic, quick-closing check valve capat	oreign substance will be injected into the water shall be equipped ble of preventing pollution of the source of the water supply. The in accordance with K.A.R. 5-3-5c. ☐ Applicable ☐ Not Applicable
11.	. Additional Conditions are attached. Yes No	,
12	water appropriated under the above-referenced file numb limitations, as amended and/or supplemented by this Sum Appropriation Law and the Rules and Regulations promu	.R. 5-5-14, all of the owners of the authorized place(s) of use of the are responsible for compliance with its terms, conditions and amary Order, and with applicable provisions of the <i>Kansas Water</i> algated thereunder. Failure to comply with these provisions may be used, and/or the suspension or revocation and dismissal of the terms authorized by law.
	Administrative Appeal and Effective Date of Order	FOR OFFICE USE ONLY
If v	you are aggrieved by this order, pursuant to K.S.A. 82a-1901,	APPLICATION APPROVED AND
you	u may request an evidentiary hearing before the Chief	SUMMARY ORDER ISSUED
Ag	rgineer or request administrative review by the Secretary of priculture. A request for hearing by the Chief Engineer must be	By: Mahul A. Mag
	ed within 15 days of service of this Order and a request for ministrative review by the Secretary must be filed within 30	Duly Authorized Designee of the Chief Engineer
da	ys pursuant to K.S.Á. 77-531. Any request for administrative view must state a basis for review pursuant to K.S.A. 77-527.	(Print Name):
File	e any request with Kansas Department of Agriculture,	Date of Issuance: MARCH 14, 2023
66	gal Division, 1320 Research Park Drive, Manhattan, KS 502. Failure to timely request a hearing or review may	State of Kansas
pre	eclude review under the Kansas Judicial Review Act. For Use by Register of Deeds) SS
	r or odd sy riografar or boodd	County of Juney
		Acknowledged before me on warch 14, 2023
		by IV) chael A. Weyer.
		Signature: Notary Public
		My commission expires: JULIE JONES PUBLIC PUBLIC December 15, 2026

CHANGE IN PLACE OF DIVERSION WATER RIGHT, FILE NO. 17 800

SE 1/4 of Section 26 Township 33 South Range 37 West Stevens 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:

Donald Dee Knier SR Living Trust 449 Road 14 Hugoton, KS, 67951



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



3795 W. Jones Ave . Phone: 620-277-2389 Fax: 620-277-0224

PO Box 639 Garden City, KS 67846

CUSIC	ADDRES	AIVIE / C	iny si	EGMAN.	TEST # 1 E. LOG NO
	STATE_	·			DRILLED TANAL LUGAC
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OCAT	ION .			Wig# 28 Me_498	
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J. U	313	11011	- 00.		·
	F	OOTAG	Ε	·	Static Water Level: 200 ESTIMAT
-%				DESCRIPTION OF STRATA	Proposed Well Depth:
	Ò	1	2	Suffice	1 10pb3cq vven beptn.
		 		SAND, FINE	· . (Soct)
	2	-	57	BROWNCIAY	(5057)
5	52	-	18	SAND PINE, MED,	(LOOSE)
	or one was a section.		92	SAND FINE, MED, COVESE, (FEW, SM.	CDA(CE) (I - CE)
	68		110	SANS FINE MEN, COUSE (FEW, 511)	CENUEL ILLOUSE)
	92	_		SAND, CINE, (SLUFFING CLAYS)	(a. m. V
	110	_	193	SAND, FINE MED, COURSE, ISM, MED, LE	GRAVET HUSE SOME WATER
		<u> </u>		BROWN CLAY, FINE SOUR, MIXED, LIN	ME HOCK, LAEW SAND STRANS
5%	193	-	219	BROWN Clay, (Sluffing SANDS) (204-17
		17	291	SAND, FINE,	(Sluffing Clays)
15%		38		SAND HINE, MED, LOUYSE	(Sluffing Clmys).
	329	-	440	BROWN, Chylling Rock, LOLES (HARD)	(Sluffing cans)
a	440		510	Blue, Seown, Chy (Firm) RED CIA	y: (Slurking SANDS)
150	-Sto-	-90	-600	SANDTINE, MED, COURSE,	(SIUFFING CHUS)
-	600		<u> </u>	LOST CIRC DIDNOT GET IT BACK	
	<u> </u>	·			
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S. Thurlow 3/7/2023

Theis evaluation of proposed change in point of diversion, File Nos. 17800 & 42145

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 the one well authorized by File Nos. 17800 and 42145. The change proposes reallocating the well approximately 556 feet South and 68 feet West of the currently authorized location (Figure 1).

The GMD No. 3 groundwater model was used with an adjustment factor for a projected future (2068) saturated thickness (298.9 ft). The average of model cells located within Township 33 South, Range 37 West, Sections 23-26, 35 and 36 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 1.5 miles 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. Hydraulic conductivity assumptions were based on the calibrated values used for the GMD No. 3 groundwater model (Figures 2 and 3). In all, eleven lithological logs were evaluated (Figure 4-5, Tables 1-11), with an average transmissivity of 11,498.1 square feet per day. An assumed specific storage of 1×10⁻⁵ and the projected saturated thickness was used to determine the assumed storativity of 0.00299.

Drawdown was evaluated at 4 nearby existing wells authorized by File Nos. 41837 & 41948, 43828, 41561 & 41752, and 14437 (Tables 12-15). A quantity of 352 acre-feet (AF) at a rate of 650 gallons per minute (gpm) was compared to the average historic use (34.8 AF, 2012-2017) at the most recent pumping rate (224 gpm). The maximum net drawdown occurred at the point of diversion authorized by File No. 14437. The net drawdown at that distance was 4.2 feet, or 1.4% of the projected future saturated thickness (Table 15).

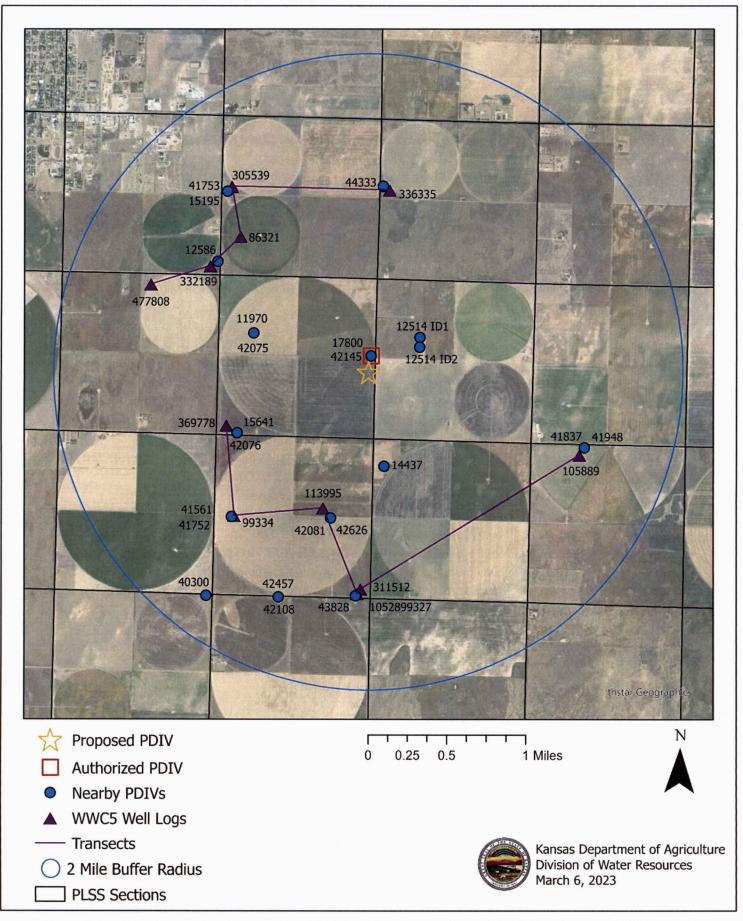


Figure 1: Location of current and proposed point of diversion, surrounding points of diversion, and WWC5 records

Synonymy	Lithology	Synonymy	Lithology	Synonymy	Lithology
sh	Shale	SC	Sandy Clay or Silty Sand	fand	Fine Sand
c	Clay	fds	Fine Sandy Silt	fmasnd	Fine to Medium Sand
coal	Coal	fmds	Fine to Medium Sandy Silt	fmand	Fine to Medium Sand
br	Bedrock	fcrsds	Fine to Coarse Sandy Silt	snd	Sand
rb	Red Bed	ds	Sandy Silt	forssnd	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	cq	Clayey Gravel
0	Overburden	crsds	Coarse Sandy Silt	crssnd	Coarse Sand
ts	Topsoil	cesd-cg	Cemented Sand and/or Gravel	sq	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	88	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

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
0	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

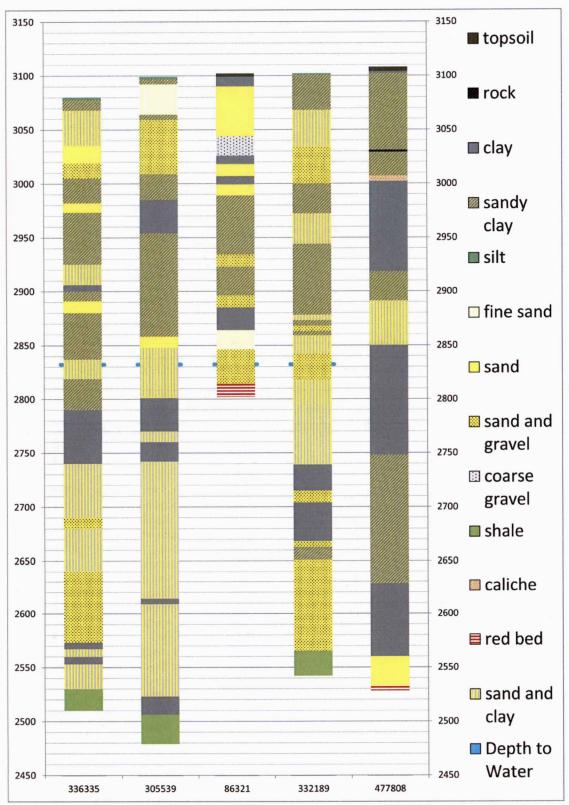


Figure 4: lithology log of KGS Wells on North transect line

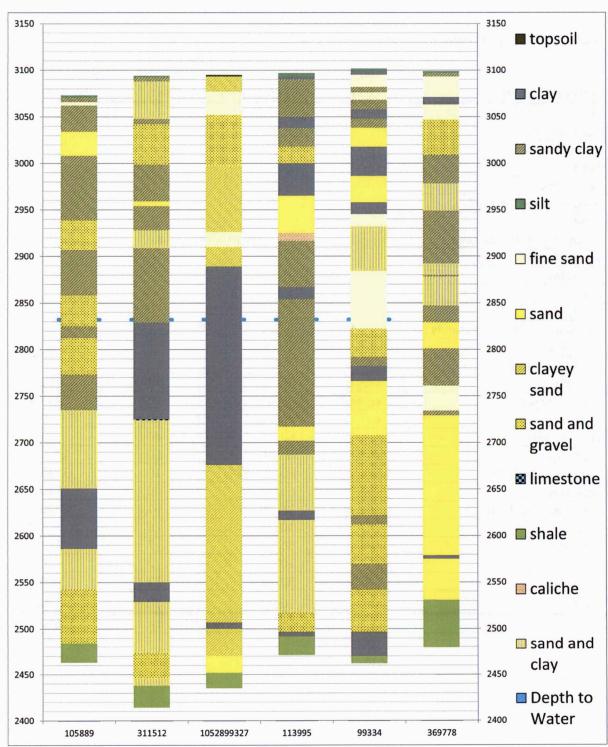


Figure 5: lithology log of KGS Wells on South transect line

Table 1: Lithology, KGS Well ID 336335

Table 1: Lithology, KGS Well ID 3363	35			
			Saturated	T
5 11 4 5 1 1 1	Synonymy		Thickness	Transmissivity
Driller's Description	Codes	Percentages	(Feet)	(feet²/day)
silt				
sandy clay caliche				
fine sand clay				
sand				
sand gravel				
sandy clay caliche sand				
sand				
sandy clay limestone sand		Above wa	ater surface	
sandy clay sand				
sand clay				
clay				
sandy clay				
fine sand medium sand sandy clay				
sand clay				
sandy clay sand				
sand clay	snd, c	60, 40	13	491.4
sandy clay sand	sc, snd	60, 40	29	250.6
clay	С	100	10	0.0
clay limestone	c, ca	60, 40	40	0.0
sand clay	sc	60, 40	50	1890.0
sand fine gravel clay	snd, fg, c	50, 30, 20	10	1212.0
sand clay	snd, c	60, 40	40	1512.0
sand fine gravel clay	snd, fg, c	50, 30, 20	67	8120.4
clay	С	100	6	0.0
sand clay	snd, c	60, 40	7	264.6
clay	С	100	7	0.0
sand clay	snd, c	60, 40	23	869.4
shale	sh	100	20	0.0
		Total Tra	nsmissivity:	14610.4

Table 2: Lithology, KGS Well ID 305539

Driller's Description	Synonymy Codes	Percentages	Saturated Thickness (Feet)	Transmissivity (feet²/day)		
silt						
sandy clay						
fine sand						
sandy clay caliche						
sand gravel clay		A I	- .			
sandy clay limestone		Above water surface				
clay limestone						
clay limestone	F					
sandy clay limestone sand						
sand						
clay sand	c, snd	60, 40	16	403.2		
very fine sand and clay	fsnd, c	60, 40	15	135.0		
clay	С	100	31	0.0		
very fine sand and clay	fsnd, c	60, 40	10	90.0		
clay	С	100	18	0.0		
very fine sand and clay	fsnd, c	60, 40	23	207.0		
very fine sand and clay	fsnd, c	60, 40	23	207.0		
clay and sand	c, snd	60, 40	16	403.2		
clay and sand	c, snd	60, 40	26	655.2		
fine and medium sand with clay	fmsnd, c	70, 30	14	147.0		
sand and clay	snd, c	60, 40	26	982.8		
clay	С	100	5	0.0		
sand and clay	snd, c	60, 40	36	1360.8		
sand and clay	snd, c	60, 40	50	1890.0		
clay	С	100	6	0.0		
clay	С	100	11	0.0		
shale	sh	100	27	0.0		
		Total Tra	nsmissivity:	6481.2		

Table 3: Lithology, KGS Well ID 86321

Driller's Description	Synonymy Codes	Percentages	Saturated Thickness (Feet)	Transmissivity (feet²/day)			
top soil							
clay							
sand							
large gravel							
clay							
sand		Above water surface					
clay							
sand		Above wa	ater surface				
sandy clay							
sand and gravel							
sandy clay							
sand and gravel							
red clay							
fine red sand							
sand and gravel	snd, g	60, 40	18	2833.2			
red bed	rb	100	12	0.0			
	nsmissivity:	2833.2					

Table 4: Lithology, KGS Well ID 332189

Table 4. Lithology, Rd3 Well ID 332	Synonymy		Saturated Thickness	Transmissivity
Driller's Description	Codes	Percentages	(Feet)	(feet²/day)
silt				
sandy clay caliche				
sand				
sand clay				
sand gravel clay				
sandy clay				
clay sandy clay sand		A b		
sandy clay sand		Above wa	ater surface	
sandy clay sand				
sand clay				
sandy clay				
sand fine gravel clay	9			
sandy clay clay				
clay coarse sand fine gravel				
sand fine gravel clay	snd, fg, c	50, 30, 20	14	1696.8
clay sand	c, snd	60, 40	79	1990.8
clay	С	100	24	0.0
sand fine gravel rock	snd, fg, r	50, 30, 20	11	1333.2
clay	С	100	36	0.0
sand fine gravel clay	snd, fg, c	20, 30, 20	5	606.0
sandy clay	sc	100	12	52.8
sand fine gravel clay	snd, fg, c	50, 30, 20	86	10423.2
shale	sh	100	23	0.0
		Total Trai	nsmissivity:	16102.8

Table 5: Lithology, KGS Well ID 477808

			Saturated						
	Synonymy		Thickness	Transmissivity					
Driller's Description	Codes	Percentages	(Feet)	(feet²/day)					
top soil									
gray clay									
sandy clay and sand layers									
rock									
sandy clay and sand layers		Above water surface							
caliche									
clay and sandstone layers									
sandy clay and sand streaks									
tan clay and medium sand									
red clay and fine sand streaks	c, fsnd	80, 20	84	252.0					
red and pink sand	snd	100	120	7560.0					
clay and very fine sand streaks and									
rock layers	c, fsnd, r	70, 15, 15	68	153.0					
medium fine sand	fmsnd	100	27	405.0					
red bed	rb	100	5	0.0					
		Total Trai	nsmissivity:	8370.0					

Table 6: Lithology, KGS Well ID 105889

Table 6: Lithology, KGS Well ID 105889	9			
	Synonymy		Saturated Thickness	Transmissivity
Driller's Description	Codes	Percentages	(Feet)	(feet²/day)
silt				7
sandy clay				
fine sand				
sandy clay fine sand caliche				
sandy clay sand				
fine sand medium sand coarse sand				
sandy clay fine sand medium sand		Above wa	ater surface	
sandy clay				
sandy clay caliche				
sandy clay sand caliche				
sand gravel				
sandy clay sand				
sandy clay sand				
sand gravel sandy clay	snd, g, sc	50, 30, 20	7	854.6
sandy clay	sc	100	13	57.2
sand gravel sandy clay	snd, g, sc	50, 30, 20	39	4761.1
sandy clay sand	sc, snd	60, 40	20	556.8
sandy clay sand clay	sc, snd, c	50, 30, 20	18	379.8
clay fine sand	c, fsnd	60, 40	84	504.0
clay	С	100	65	0.0
clay fine sand	c, fsnd	60, 40	44	264.0
sand gravel	snd, g	60, 40	32	5036.8
sand gravel clay	snd, g, c	50, 30, 20	26	3151.2
shale	sh	100	21	0.0
		Total Tra	nsmissivity:	15565.5

Table 7: Lithology, KGS Well ID 311512

	Sum a mumau		Saturated	Transmissivity
Drillar's Description	Synonymy	Dorsantages	Thickness	Transmissivity
Driller's Description	Codes	Percentages	(Feet)	(feet²/day)
silt				
sandy clay caliche fine sand				
fine sand clay				
sandy clay sand				
sand fine gravel clay				
sand gravel				
sandy clay limestone				
sandy clay		Above wa	ater surface	
sandy clay sand limestone				
sand				
sandy clay sand				
fine sand medium sand clay				
sandy clay sand limestone				
sandy clay				
sandy clay coarse sand				
sandy clay	sc	100	3	13.2
clay	С	100	18	0.0
clay limestone sand	c, ca, snd	50, 30, 20	16	201.6
clay	С	100	48	0.0
clay fine sand limestone	c, fsnd, ca	50, 30, 20	22	99.0
limestone	ca	100	1	0.0
clay fine sand	c, fsnd	60, 40	29	174.0
fine sand medium sand clay	fmsnd, c	60, 40	65	585.0
sand clay	snd, c	100	21	92.4
fine sand medium sand clay	fmsnd, c	60, 40	19	171.0
clay sand	c, snd	60, 40	13	327.6
sand clay	snd, c	60, 40	27	1020.6
clay caliche sand	c, ca, snd	50, 30, 20	21	264.6
clay fine sand	c, fsnd	60, 40	15	90.0
clay sand	c, snd	60, 40	21	529.2
sand clay	snd, c	60, 40	20	756.0
sand fine gravel	snd, fg	60, 40	27	4249.8
clay sand	c, snd	60, 40	8	201.6
shale	sh	100	24	0.0
		Total Tra	nsmissivity:	8775.6

Table 8: Lithology, KGS Well ID 1052899327

	Synonymy	I Car	Saturated Thickness	Transmissivity		
Driller's Description	Codes	Percentages	(Feet)	(feet²/day)		
top soil						
clayey fine sand						
fine sand						
gravelly fine sand						
fine to coarse sand, gravelly						
clayey fine sand, brown		Above wa	ater surface			
clayey fine sand, red						
clayey fine sand						
clayey fine sand						
fine sand with caliche stringers						
clayey fine sand						
clay, brownish red	С	100	1	0.0		
clay, bluish red	С	100	58	0.0		
clay, red	С	100	97	0.0		
clayey fine to medium sand	c, fmsnd	60, 40	56	336.0		
clayey fine to coarse sand	c, snd	60, 40	65	1638.0		
clayey fine to medium sand	c, fmsnd	60, 40	48	288.0		
clay, brown	С	100	7	0.0		
clayey fine to medium sand	c, fmsnd	60, 40	30	180.0		
fine to coarse sand	snd	100	18	1134.0		
shale, unweathered, and red bed	sh	100	17	17 0.0		
		Total Tra	nsmissivity:	3576.0		

Table 9: Lithology, KGS Well ID 113995

Driller's Description	Synonymy Codes	Percentages	Saturated Thickness (Feet)	Transmissivity (feet²/day)
silt			, , , ,	(,,
clay caliche				
sandy clay fine sand caliche				
sandy clay sand				
clay				
sandy clay sand				
sand fine gravel				
clay caliche gravel				
clay caliche	1	Above wa	iter surface	
clay caliche sand	1			
fine sand medium sand coarse sand	1			
sand rock	1			
sand sandy clay limestone	1			
caliche fine sand				
sandy clay				
sandy clay fine sand]			
clay limestone				
sandy clay fine sand limestone	sc, fsnd, ca	50, 30, 20	15	100.5
sandy clay	sc	100	18	79.2
sandy clay fine sand	sc, fsnd	60, 40	82	708.5
fine sand medium sand sandy clay	fmsnd, sc	60, 40	15	161.4
sandy clay fine sand	sc, fsnd	60, 40	15	129.6
clay fine sand limestone	c, fsnd, ca	50, 30, 20	60	270.0
clay limestone	c, ca	60, 40	10	0.0
sand clay	sc	60, 40	100	3780.0
sand fine gravel	snd, fg	60, 40	20	3148.0
clay gravel	c, g	60, 40	5	598.0
shale	sh	100	21	0.0
		Total Trai	nsmissivity:	8975.2

Table 10: Lithology, KGS Well ID 99334

	Synonymy		Saturated Thickness	Transmissivity	
Driller's Description	Codes	Percentages	(Feet)	(feet²/day)	
silt					
clay					
very fine and fine sand					
sandy clay					
very fine and fine sand					
sandy clay					
clay					
sandy clay		Above wa	ater surface		
fine and coarse sand					
clay					
clay					
fine and coarse sand					
clay					
very fine and fine sand					
clay sand					
very fine and fine sand with silt	fsnd, s	70, 30	10	105.0	
sand, medium gravel, and silt	snd, g, s	50, 30, 20	30	3636.0	
sandy clay	SC	100	10	44.0	
clay	С	100	16	0.0	
fine, coarse, and medium sand	snd	100	24	1512.0	
fine and coarse sand with silt	snd, s	70, 20	34	1499.4	
sand, medium gravel, and silt	snd, g, s	50, 30, 20	86	10423.2	
sandy clay	sc	100	10	44.0	
sand, medium gravel, and silt	snd, g, s	50, 30, 20	42	5090.4	
sandy clay	sc	100	28	123.2	
sand, coarse gravel, and silt	snd, crsg, s	50, 30, 20	45	5454.0	
clay and shale	c, sh	100	27	0.0	
shale	sh	100	8	0.0	
		Total Tra	nsmissivity:	27931.2	

Table 11: Lithology, KGS Well ID 369778

	Synonymy		Saturated Thickness	Transmissivity			
Driller's Description	Codes	Percentages	(Feet)	(feet²/day)			
silt							
sandy clay							
fine sand							
clay							
fine sand							
sand gravel		A hove we	ater surface				
sandy clay		Above wa	ater surrace				
fine sand medium sand clay							
sandy clay sand							
sand clay							
sandy clay							
fine sand medium sand clay							
sandy clay	sc	100	3	13.2			
fine sand medium sand	fmsnd	100	28	420.0			
sandy clay	sc	100	40	176.0			
fine sand	fsnd	100	27	405.0			
sandy clay	sc	100	5	22.0			
sand	snd	100	26	1638.0			
sand	snd	100	124	7812.0			
clay	С	100	4	0.0			
sand	snd	100	44	2772.0			
shale	sh	sh 100 52					
		Total Trai	nsmissivity:	13258.2			

Table 12: Theis drawdown evaluated at File Nos. 41837 & 41948; T = 11,498.1 ft²/day, S = 0.00299

Scenario	Distance (FT)	Pump Rate (GPM)	Volume (AF)	Drawdown (FT)	Drawdown (%ST)
Proposed	7655.1	650.0	352.0	3.8	1.3%
Baseline	7775.9	224.0	34.8	0.6	0.2%
			Net:	3.1	1.0%

Table 13: Theis drawdown evaluated at File No. 43828; $T = 11,498.1 \text{ ft}^2/\text{day}$, S = 0.00299

Scenario	Distance (FT)	Pump Rate (GPM)	Volume (AF)	Drawdown (FT)	Drawdown (%ST)
Proposed	7409.4	650.0	352.0	3.8	1.3%
Baseline	7969.5	224.0	34.8	0.6	0.2%
			Net:	3.2	1.1%

Table 14: Theis drawdown evaluated at File Nos. 41561 & 41752; T = 11,498.1 ft²/day, S = 0.00299

Scenario	Distance (FT)	Pump Rate (GPM)	Volume (AF)	Drawdown (FT)	Drawdown (%ST)
Proposed	6621.4	650.0	352.0	4.0	1.3%
Baseline	7087.3	224.0	34.8	0.7	0.2%
***************************************			Net:	3.3	1.1%

Table 15: Theis drawdown evaluated at File No. 14437; $T = 11,498.1 \text{ ft}^2/\text{day}$, S = 0.00299

Scenario	Distance (FT)	Pump Rate (GPM)	Volume (AF)	Drawdown (FT)	Drawdown (%ST)
Proposed	3140.0	650.0	352.0	5.3	1.8%
Baseline	3678.7	224.0	34.8	1.1	0.4%
			Net:	4.2	1.4%



Southwest Kansas Groundwater Management District No. 3 2009 E. Spruce Street Garden City, Kansas 67846

(620) 275-7147 phone www.gmd3.org

February 27, 2023

Michael A. Meyer Division of Water Resources 4532 W Jones Ave., Suite B Garden City, Kansas 67846

RE:

Application for Change in Point of Diversion

Water Right, File Nos. 17800 & 42145

Dear Mike:

We have completed a review of the applications for the above referenced water rights. 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 (4.0 ft with saturated thickness is greater than 200ft), 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 some of the neighboring wells exceeded the net effect above the maximum allowable threshold and needed further evaluation. Critical wells were determined possible in the area if the proposed well pumped at full authority. We did not receive any comments from neighboring well owners. Therefore, GMD3 sees these moves as meeting current rules and would recommend approval with better information given to ensure that neighboring wells are not adversely affected. 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

RECEIVED

FEB 2 7 2023

GMD3 Change Review

File No(s).: 17800 & 42145. DWR office: GC. App filed to change: PD. Is Landowner(s) correct in WRIS: Carpenter Family Trust % Mark Carpenter. 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 2750 150 Sect 26-33-37 Proposed PD 2194 218 Difference 556 s -68 w 4624 a2 + b2 = c2309136 560.1428 foot move SW GPS for proposed PD: Lat: 37.14692 Long: -101.30334. Is proposed PD stacking on existing WRs? No. Is Proposed PU overlapping existing WRs? No Change. Neighboring certified well(s) notified: . Name Donald Dee Knier Sr Living Trust % Donnie & Naomi Knier (12514). Address 449 Road 14. Hugoton, KS 67951. Zip Email: kfarms@pld.com Phone: <u>620-544-6652.</u> Name ATS Enterprises LLC (14437, 42626). Address 815 S Van Buren St. Hugoton, KS 67851. Zip Email: stegrace@pld.com Phone: 620-544-5293. Domestic well(s) notified: __. Name Address Zip Base Acres: ___. Perfected Acres: ___. Irr. Return-Flow ____% **Stevens County** Authorized 352AF @ 650gpm Well not running during 2022 inspection. Average water use reported (2012-2017): 34.83AF/year. 2018-2021 reported physical problems with the well and no pumping.

GMD3 Change Review

Is a waiver needed: <u>Move is less than half mile</u>. <u>Minimum spacing to neighboring wells appears to be met</u>. <u>Analysis shows that there could be possible critical wells if pumped at full authority</u>.

Recommendation: After review of all available information, it appears current area rules are met. There is possible critical wells in area if the proposed well is pumped at full authority. No response from neighboring well owners. We would recommend approval of the application if no concerns are found.

In

Report Date: Thursday, February 16 2023

Water Rights and Points of Diversion Within 1 mile of point defined as: 2194 Feet N and 218 Feet W of the Southeast Corner of Section 26 Twp 33S Rng 37W Located at: 101.303339 West Longitude and 37.146920 North Latitude Both SURFACE WATER and GROUNDWATER

=====					===:									====					
File Unit	Number		Use	ST	SR	Dist	(ft)	Q4	Q3	Q2	Q1	FeetN	FeetW	Sec	Twp	Rng	ID	Batt Auth_Quan	Add_Quan
A	11970	00	IRR	NK	G		4086	_	NE	SW	NW	3432	4115	26	33	37W	5	1.0 288.00	288.00
AF					200			/						04000					Making No. 184 Mil
A_AF	12514	00	IRR	NK	G		1880		SW	SE	NW	3016	3788	25	33	37W	2	214.00	214.00
Same							2048	4	NW	SE	NW	3360	3804	25	33	37W	1	230.00	230.00
AF																			
A	14437	00	IRR	NK	G		3141		SW	NW	NW	4400	4900	36	33	37W	1	9 32°573.00	573.00
AF					_			1								_	^		
A_AF	15641	00	IRR	NK	G		4885		SW	SW	SW	113	4639	26	33	37W	(3)	140 288.00	288.00
A	17800	00	IRR	NK	G*	4	- 561		SE	SE	NE	2750	150	26	33	37W	3	352.00	352.00
AF						7)	
A	42075	00	IRR	NK	G	1	4086	4	NE	SW	NW	3432	4115	26	33	37W	5	175.00	.00
AF						- 1		1									1		
A_AF	42076	00	IRR	NK	G	1	4885		SW	SW	SW	113	4639	26	33	37W	(4)	88.00	.00
A	42081	00	IRR	NK	G	ļ	4982	1	SE	SW	NE	2650	1395	35	33	37W	3	14 320.00	320.00
AF						- 1								-		T 1 12	=		
A	42145	00	IRR	NK	G	-51-	561		SE	SE	NE	2750	150	26	33	37W	3	88.00	.00
AF																	_		
A	42626	00	IRR	NK	G		4982		SE	SW	NE	2650	1395	35	33	37W	3	11.00	.00
AF																			
Total	Net Qu	ant	titie	es A	Auth	noriz	 ed:	Di	ect	:		Sto	orage						
Total	Reques	tec	d Amo	ount	: (Z	AF) =			.00)			.00	1	W;	7.7	N V	~ 7puci	r. m
Total	Permit	tec	d Amo	ount	: (2	AF) =			.00)			.00					V	,
Total	Inspec	tec	d Amo	ount	: (7	AF) =			.00)			.00		14	2/2-		n Touch	
	Pro_Ce								.00)			.00		111	V	6	> / ()	•
Total	Certif	ie	d Amo	ount	([AF) =		2265	.00)			.00		•				
Total	Vested	l	Amo	ount	- (<i>I</i>	AF) =			.00)			.00						
TOTAL	INUOMA .				(F	AF) =		2265	5.00)			.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.

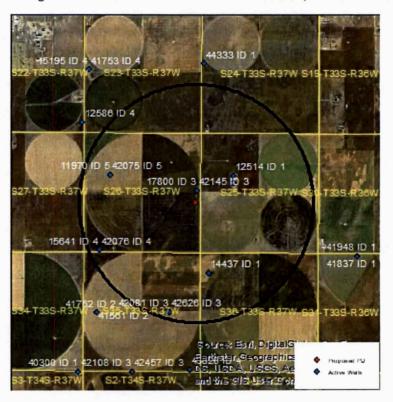
Water Rights and Points of Diversion Within 1 mile of point defined as:
2194 Feet North and 218 Feet West of the Southeast Corner of Section 26 Twp 33S Rng 37W
Located at: 101.303339 West Longitude and 37.146920 North Latitude
Both SURFACE WATER and GROUNDWATER
WATER USE CORRESPONDENTS:

-------File Number Use ST SR > ANTHONY J STEGMAN 11970 > 815 S VAN BUREN ST > HUGOTON KS 67951 >------> DONALD DEE KNIER SR LIVING TRUST > DONNIE & NAOMI KNIER TTEE 125/4 ✓ 449 ROAD 14 > HUGOTON KS 67951 >-----> ATS ENTERPRISES LLC 14437

>				
	815 S VAN BUREN ST			
>	HUGOTON KS 67951			
>	ANTHONY J STEGMAN			
>		15641		
	815 S VAN BUREN ST	150		
>	HUGOTON KS 67951			
>				
>		17800		Ap
>	815 S VAN BUREN ST	17800	/	1
>.	ANTHONY J STEGMAN			
>				Sa
>	815 S VAN BUREN ST			74
>	HUGOTON KS 67951			
>.	ANTHONY J STEGMAN			
>				
	815 S VAN BUREN ST	1		
>	HUGOTON KS 67951			
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Ζ	815 S VAN BUREN ST			
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	ANTHONY J STEGMAN	111111	-	
>	815 S VAN BUREN ST	42145		/
	HUGOTON KS 67951			
>-				
>	ATS ENTERPRISES LLC			
Ζ	815 S VAN BUREN ST	42626		
	HUGOTON KS 67951	.000		
>-				

Evaluation of proposed move for Water Right Nos. 17800 & 42145

Proposed: Move water right nos. 17800 & 42145 to a new well location, 561 ft to the southwest.



Wells within 1 mile: 11970 & 42075, 15641 & 42076, 12514 ID1, 12514 ID2, 42081 & 42626, and 14437.

The saturated thickness at the proposed well location is estimated to be 343 ft, based upon the GMD3 model. For saturated thickness greater than 200 ft, the drawdown allowance is 4.0 ft.

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

 $S=0.124, T=3116 \ ft^2/day, tp_{current}=79 \ days, Q_{current}=100 \ gpm, tp_{proposed}=123 \ days, Q_{proposed}=650 \ gpm$

Theis drawdowns were calculated as follows:

11970 & 42075:

Drawdown from current location = 0.47 ft

Drawdown from proposed location = 4.67 ft

Net drawdown = 4.2 ft

15641 & 42076:

Drawdown from current location = 0.40 ft

Drawdown from proposed location = 4.20 ft

Net drawdown = 3.8 ft

12514 ID1:

Drawdown from current location = 0.83 ft

Drawdown from proposed location = 7.08 ft

Net drawdown = 6.2 ft

12514 ID2:

Drawdown from current location = 0.87 ft

Drawdown from proposed location = 7.49 ft

Net drawdown = 6.6 ft

42081 & 42626:

Drawdown from current location = 0.38 ft

Drawdown from proposed location = 4.13 ft

Net drawdown = 3.7 ft

14437:

Drawdown from current location = 0.49 ft

Drawdown from proposed location = 5.44 ft

Net drawdown = 4.9 ft

Net drawdown exceeds the drawdown allowance of 4.0 ft for the wells authorized under water right nos. 11970 & 42075, 12514 ID1, 12514 ID2, and 14437. Critical well analysis was conducted for those wells.

Critical Well Evaluation:

11970 & 42075:

Water Column = 343 ft

DP = 4.2 ft (Net drawdown from the proposal indicated above)

DE = 26.6 ft (Water level decline from 2023 through 2048 based upon GMD3 model)

DD = 42.4 ft (S = 0.124, T = 3116 ft²/day, Q = 389 gpm, tp = 97 days, efficiency = 70%)

DT = 73.2 ft

Economic Drawdown Constraint (EDC) = 0.4 * 343 ft = 137.2 ft

Physical Drawdown Constraint (PDC) = 343 ft - 60 ft = 283.0 ft

Total drawdown of 73.2 is less than the EDC and PDC, so this well is not critical.

12514 ID1:

Water Column = 339 ft

DP = 6.2 ft (Net drawdown from the proposal indicated above)

DE = 22.9 ft (Water level decline from 2023 through 2048 based upon GMD3 model)

DD = 151.0 ft (S = 0.1758, T = 394.7 ft²/day, Q = 199 gpm, tp = 174 days, efficiency = 70%)

DT = 180.1 ft

Economic Drawdown Constraint (EDC) = 0.4 * 339 ft = 135.6 ft

Physical Drawdown Constraint (PDC) = 339 ft - 60 ft = 279.0 ft

Total drawdown of 180.1 ft is greater than the EDC, so this well is critical.

12514 ID2:

Water Column = 339 ft

DP = 6.6 ft (Net drawdown from the proposal indicated above)

DE = 22.9 ft (Water level decline from 2023 through 2048 based upon GMD3 model)

DD = 145.3 ft (S = 0.1758, T = 394.7 ft²/day, Q = 199 gpm, tp = 105 days, efficiency = 70%)

DT = 174.8 ft

Economic Drawdown Constraint (EDC) = 0.4 * 339 ft = 135.6 ft

Physical Drawdown Constraint (PDC) = 339 ft - 60 ft = 279.0 ft

Total drawdown of 174.8 ft is greater than the EDC, so this well is critical.

14437:

Water Column = 330 ft

DP = 4.9 ft (Net drawdown from the proposal indicated above)

DE = 40.6 ft (Water level decline from 2022 through 2047 based upon GMD3 model)

DD = $49.6 \text{ ft } (S = 0.1391, T = 2367 \text{ ft}^2/\text{day}, Q = 349 \text{ gpm, tp} = 124 \text{ days, efficiency} = 70\%)$

DT = 95.1 ft

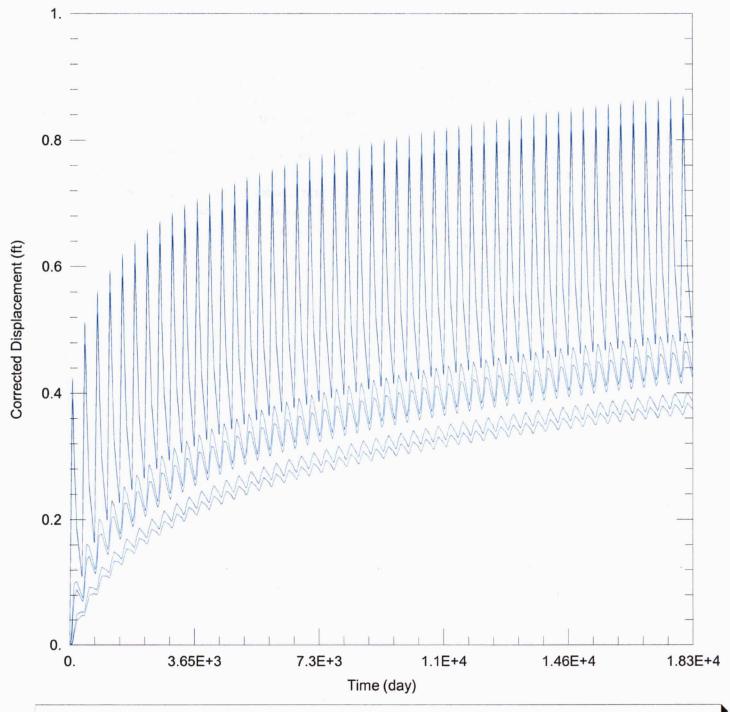
Economic Drawdown Constraint (EDC) = 0.4 * 330 ft = 132.0 ft

Physical Drawdown Constraint (PDC) = 330 ft - 60 ft = 270.0 ft

Total drawdown of 95.1 ft is less than the EDC and PDC, so this well is not critical.

Conclusion:

The proposed move is in an area with more than 300 ft saturated thickness, but some neighboring wells are in aquifer with somewhat poor pumping conditions. Modeled aquifer properties require well drawdown of about 150 ft to achieve observed pumping rates and quantities in section 25-33-37, indicating that wells in that section are likely to experience diminished pumping capacity over the near future with the projected aquifer decline rate. If the proposed well is operated at its fully authorized rate and quantity, it is likely to create a noticeable effect on those critical wells. The GMD3 model was created using well logs in the KGS Water Well Completion Records Database, which shows only one well in section 25, drilled only 260 ft deep, so it is plausible that aquifer conditions are better in that section than the model 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\17800_42145\17800 & 42145 Current.aqt

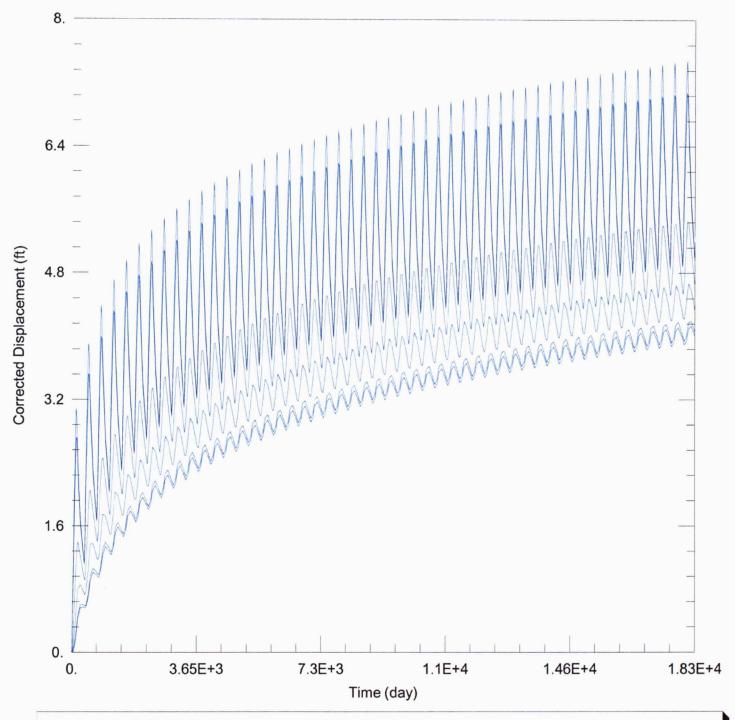
Date: 02/17/23 Time: 14:29:49

PROJECT INFORMATION

Company: GMD 3
Project: 17800 & 42145
Location: Stevens County

W	Εl	L	D.	ΑT	ГΑ

Pu	imping Wells		Observation Wells			
Well Name	X (ft)	Y (ft)	Well Name	X (ft)	Y (ft)	
17800 & 42145	-146800	99953		-146800	99953	
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WELL TEST ANALYSIS

Data Set: C:\Users\trevora\Documents\2023_moves\17800_42145\17800 & 42145 Proposed.aqt
Date: 02/17/23 Time: 14:29:42

PROJECT INFORMATION

Company: GMD 3 Project: 17800 & 42145 Location: Stevens County

WELL DATA

Pu	mping vveils		Obser	vation wells	
Well Name	X (ft)	Y (ft)	Well Name	X (ft)	Y (ft)
17800 & 42145	-146872	99396		-146872	99396

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



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

Mike Beam, Secretary

Laura Kelly, Governor

February 15, 2023

SOUTHWEST KANSAS GROUNDWATER MANAGEMENT DISTRICT NO. 3 2009 E SPRUCE ST GARDEN CITY KS 67846

Re:

Request for Recommendation

Water Right, File No. 17800

Dear Mr. Norquest:

This is to advise you that Carpenter Family Trust filed an application for approval of the Chief Engineer, Division of Water Resources, Kansas Department of Agriculture, to change the point of diversion.

We are delaying action on the change application to allow you time to review and provide a recommendation. Please submit a recommendation within 15 days from the date of this letter.

Thank you and as always feel free to contact this office at any time.

Sincerely,

Michael A. Meyer

Water Commissioner

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



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

Mike Beam, Secretary

Laura Kelly, Governor

February 15, 2023

DONALD DEE KNIER SR LIVING TRUST Attn: DONNIE & NAOMI KNIER TTEE 449 ROAD 14 HUGOTON, KS 67951-5126

Re:

Water Right, File No. 17,800

Dear Sir:

This is to advise you that Carpenter Family Trust has filed an application for approval of the Chief Engineer, Division of Water Resources, Kansas Department of Agriculture, for change in point of diversion under the above referenced application.

You can find the complete application posted by water right file number as referenced above at www.agriculture.ks.gov/divisions-programs/dwr/water-appropriation/notices

You are notified of this proposed point of diversion (well) so that you may furnish this office with any comments or other information you may 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 to call this office. If you would prefer, an appointment could be arranged for additional assistance. Please refer to the file number when you contact us if you wish to discuss a specific file. Sincerely,

Sincerely,

Michael A. Meyer

Water Commissioner

MAM

