

Kansas Department of Agriculture  
Division of Water Resources  
**CHANGE: P/D WORKSHEET**

1. File Number: <b>29946</b>	2. Status Change Date:	3. Change Num: <b>C1</b>	4. Field Office: <b>4</b>	5. GMD: <b>3</b>
6. Status: <input checked="" type="checkbox"/> Approved <input type="checkbox"/> Denied by DWR/GMD <input type="checkbox"/> Dismiss by Request/Failure to Return				7. Filing Date of Change: <b>4/17/2023</b>
8a. Applicant(s) New to system <input type="checkbox"/>  <b>DUANE E &amp; KATHLEEN A KOSTER TRUSTS PO BOX 897 GARDEN CITY, KS 67846-0897</b>		Person ID <b>34535</b> Add Seq# <b>01</b>	8c. Landowner(s) New to system <input type="checkbox"/>  <b>WHEATLAND ELECTRIC COOPERATIVE INC Attn: PERRY SMITH PO BOX 953 GARDEN CITY, KS 67846</b>	
8b. Landowner(s) New to system <input type="checkbox"/>  <b>8a</b>		Person ID _____ Add Seq# _____	8d. WUC New to system <input type="checkbox"/>  <b>8a &amp; 8c  *NO CHANGE*</b>	
9. Documents and Enclosure(s): <input checked="" type="checkbox"/> DWR Meter(s) Date to Comply: <u>12/31/2023</u> <input checked="" type="checkbox"/> N & P Date to Comply: <u>3/1/2024</u> <input type="checkbox"/> Anti-Reverse Meter <input type="checkbox"/> Meter Seal <input checked="" type="checkbox"/> Check Valve <input checked="" type="checkbox"/> N & P Form <input checked="" type="checkbox"/> Water Tube <input checked="" type="checkbox"/> Driller Copy <input checked="" type="checkbox"/> H & E Letter <input type="checkbox"/> Conservation Plan    Date Required: _____    Date Approved: _____    Date to Comply: _____				
10. Use Made of Water    From: _____    To: _____				
			Date Prepared: <b>7/6/2023</b>	By: <b>AM</b>
			Date Entered:	By:

File No. **29946**      11. County: **FI**      Basin: **ARKANSAS RIVER**      Stream:      Formation Code: **211/331**      Special Use:

12. Points of Diversion										Rate and Quantity						
CHK	MOD	DEL	PDIV	Qualifier	S	T	R	ID	'N	'W	Comment (AKA Line)	Rate gpm	Quantity af	Rate gpm	Quantity af	Overlap PD Files
CHK																
CHK																
CHK																
DEL																
ENT				NE NW SE	2		26S	34W			1332 817	1162	272	1162	272	NONE

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				NW¼				SW¼				SE¼				Total	Owner	Chg?	Overlap Files
						NE ¼	NW ¼	SW ¼	SE ¼	NE ¼	NW ¼	SW ¼	SE ¼	NE ¼	NW ¼	SW ¼	SE ¼	NE ¼	NW ¼	SW ¼	SE ¼				
CHK																									
CHK																									
CHK																									

Base Acres:      Year:      Minimum Reasonable Quantity:

Comments:

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

July 6, 2023

DUANE E & KATHLEEN A KOSTER TRUSTS  
PO BOX 897  
GARDEN CITY, KS 67846-0897

RE: Filed Office Application for Change  
Water Right, File No. 29946

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,

A handwritten signature in blue ink, appearing to read "Austin J. McColloch".

Austin J. McColloch  
Assistant Water Commissioner

AM:  
enclosures

pc: Wheatland Electric Cooperative Inc.  
Groundwater Management District No. 3

## CERTIFICATE OF SERVICE

On this 6<sup>th</sup> day of July, 2023, I hereby certify that the foregoing Approval of Application for Change in Point of Diversion, Water Right, File No. 29,946 dated 6<sup>th</sup> day of July, 2023 was mailed postage prepaid, first class, US mail to the following:

DUANE E & KATHLEEN A KOSTER TRUSTS  
PO BOX 897  
GARDEN CITY, KS 67846-0897

Pc:

WHEATLAND ELECTRIC COOPERATIVE INC  
Attn: PERRY SMITH  
PO BOX 953  
GARDEN CITY, KS 67846

GMD 3

  
\_\_\_\_\_  
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.**

File No. 29946

**RECEIVED**  
 2:50 pm  
 APR 17 2023

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

Garden City Field Office  
 Division of Water Resources

2. Name and address of Applicant: DUANE E & KATHLEEN A KOSTER TRUSTS

PO BOX 897, GARDEN CITY, KS 67846-0897

Phone Number: ( ) \_\_\_\_\_

Email address: \_\_\_\_\_

Name and address of Water Use Correspondent: Same

Phone Number: ( ) \_\_\_\_\_

Email address: \_\_\_\_\_

3. The presently authorized place of use is:

Owner of Land --- NAME: Same

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 4-17-23 Check # 000386**

5. **Presently authorized point of diversion:**  
 One in the NW Quarter of the SE Quarter of the SW Quarter of Section 2, Township 26 South, Range 34 W, in FI County, Kansas, 1110 feet North 3750 feet West of Southeast corner of section.  
 Authorized Rate No change Authorized Quantity No change Depth of well \_\_\_\_\_ (feet)  
 (DWR use only: Computer ID No. 3 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 \_\_\_\_\_ (E.W0), 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 N/A

6. **Presently authorized point of diversion:**  
 One in the \_\_\_\_\_ Quarter of the NC Quarter of the SW Quarter of Section 3, Township 26 South, Range 34 W, in FI County, Kansas, 1355 feet North 3960 feet West of Southeast corner of section.  
 Authorized Rate No change Authorized Quantity no change Depth of well \_\_\_\_\_ (feet)  
 (DWR use only: Computer ID No. 2 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 \_\_\_\_\_ (E/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

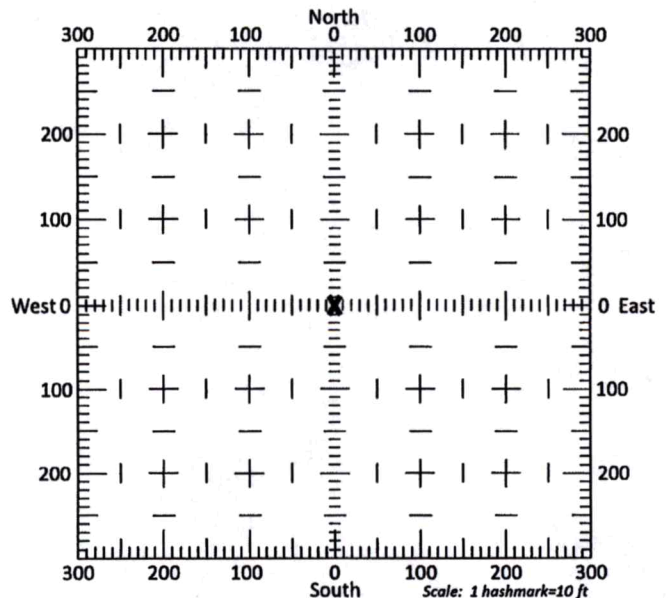
9. The change(s) (was)(will be) completed by?  
 \_\_\_\_\_  
 \_\_\_\_\_

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 mdf/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 300 feet of the existing point of diversion, indicate its location on the diagram shown above in relation to the existing point of diversion. (PLEASE NOTE: The "X" in center of diagram above represents the presently authorized point of diversion.)

APPLICATION FOR APPROVAL TO CHANGE  
THE PLACE OF USE AND/OR POINT OF DIVERSION  
SUPPLEMENTAL SHEET  
FILE NO. 29946

**Presently authorized point of diversion:**

One in the NW Quarter of the SE Quarter of the SE Quarter  
of Section 2, Township 26 South, Range 34 W,  
in FI County, Kansas, 1070 feet North 1280 feet West of Southeast corner of section.  
Authorized Rate No change Authorized Quantity No change Depth of well \_\_\_\_\_ (feet)  
(DWR use only: Computer ID No. 4 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)**

One in the NE Quarter of the NW Quarter of the SE Quarter  
of Section 2, Township 26 South, Range 34 W,  
in FI County, Kansas, 443/533 feet North 817 feet West of Southeast corner of section.  
Proposed Rate No change Proposed Quantity No change Proposed well depth (feet) 645  
This point is:  Additional Well  Geo Center List other water rights that will use this point \_\_\_\_\_

**Presently authorized point of diversion:**

One in the \_\_\_\_\_ Quarter of the CN Quarter of the SE Quarter  
of Section 3, Township 26 South, Range 34 W,  
in FI County, Kansas, 2610 feet North 1060 feet West of Southeast corner of section.  
Authorized Rate No change Authorized Quantity No change Depth of well \_\_\_\_\_ (feet)  
(DWR use only: Computer ID No. 3 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)**

One in the \_\_\_\_\_ Quarter of the \_\_\_\_\_ Quarter of the \_\_\_\_\_ Quarter  
of Section \_\_\_\_\_, Township \_\_\_\_\_ South, Range \_\_\_\_\_ (E/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 \_\_\_\_\_

**Presently authorized point of diversion:**

One in the \_\_\_\_\_ Quarter of the \_\_\_\_\_ Quarter of the \_\_\_\_\_ Quarter  
of Section \_\_\_\_\_, Township \_\_\_\_\_ South, Range \_\_\_\_\_ (E/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)**

One in the \_\_\_\_\_ Quarter of the \_\_\_\_\_ Quarter of the \_\_\_\_\_ Quarter  
of Section \_\_\_\_\_, Township \_\_\_\_\_ South, Range \_\_\_\_\_ (E/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 \_\_\_\_\_

**Presently authorized point of diversion:**

One in the \_\_\_\_\_ Quarter of the \_\_\_\_\_ Quarter of the \_\_\_\_\_ Quarter  
of Section \_\_\_\_\_, Township \_\_\_\_\_ South, Range \_\_\_\_\_ (E/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)**

One in the \_\_\_\_\_ Quarter of the \_\_\_\_\_ Quarter of the \_\_\_\_\_ Quarter  
of Section \_\_\_\_\_, Township \_\_\_\_\_ South, Range \_\_\_\_\_ (E/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 \_\_\_\_\_

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 Garden City, Kansas, this 17 day of April, 2023.

[Signature]  
(Owner)

Duane E. Koster  
(Please Print)

(Owner)

(Please Print)

(Owner)

(Please Print)

[Signature]  
(Spouse)

Kathleen A. Koster  
(Please Print)

(Spouse)

(Please Print)

(Spouse)

(Please Print)

State of Kansas }  
County of Finney } SS



I hereby certify that the foregoing application was signed in my presence and sworn to before me this 17 day of April, 2023.

[Signature]  
Notary Public

My Commission Expires 4-7-2025

**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



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 Garden City, Kansas, this 1st day of June, 2023.

BY: *Bruce W. Mueller*  
\_\_\_\_\_  
(Owner)  
Bruce W. Mueller - General Manager

\_\_\_\_\_  
(Spouse)

\_\_\_\_\_  
(Please Print)

\_\_\_\_\_  
(Please Print)

\_\_\_\_\_  
(Owner)

\_\_\_\_\_  
(Spouse)

\_\_\_\_\_  
(Please Print)

\_\_\_\_\_  
(Please Print)

\_\_\_\_\_  
(Owner)

\_\_\_\_\_  
(Spouse)

\_\_\_\_\_  
(Please Print)

\_\_\_\_\_  
(Please Print)

State of Kansas }  
County of Finney } SS

I hereby certify that the foregoing application was signed in my presence and sworn to before me this 1st day of June, 2023.



*Megan Jo Sneath*  
\_\_\_\_\_  
Notary Public

My Commission Expires 01/30/24

**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

**RECEIVED**

**JUN 05 2023**

**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. 29946.

1. A change application was received on April 17, 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, 2023, 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, 2023, or within any authorized extension of time. By March 1, 2024 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 McColloch  
Duly Authorized Designee of the Chief Engineer

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

Date of Issuance: July 6, 2023

State of Kansas )

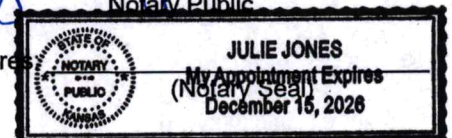
County of Winney ) SS

Acknowledged before me on July 6, 2023

by Austin McColloch

Signature: Julie Jones  
Notary Public

My commission expires \_\_\_\_\_



## Change in point of diversion for water right 29946



● Authorized point of diversion

● Proposed point of diversion



0 0.1 0.2 0.4 0.6 0.8  
Miles

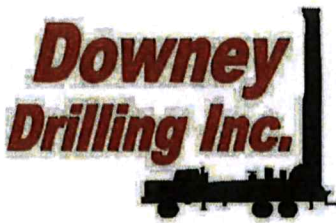
All wells within 1/2 mile are on this map.

X \_\_\_\_\_

mdf/GCFO

# WELL LOG

DATE: 3/14/2023



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MAR 28 2023

Garden City Field Office  
Division of Water Resources

CUSTOMER NAME: SOUTHWEST AG, DUANE KOSTER

TH#1

LEGAL: SE 2-26S-34W

D-4

COUNTY: FINNEY CO, KS

GPS: 37.813053

-101.001288

DRILLER: DIEGO

WO: 22-1445

TW	FROM	TO	TYPE	HARDNESS	COLOR	SPEED	PULL DOWN	OTHER / DRILLING ACTION
	0	9	SURFACE SAND	SOFT	LIGHT BROWN	FAST		SMOOTH
	9	35	BROWN SILTY CLAY	SOFT	BROWN	FAST		SMOOTH
	35	60	FINE SAND W/ CALICHE & SANDY CLAY LEDGES	SOFT	WHITE & TAN	FAST		VIBRATION
	60	85	FINE-MED-COARSE SAND	FIRM		FAST		FAST CHATTER
	85	103	FINE-MED-COARSE SAND W/ FINE-MED GRAVEL	STIFF		FAST		FAST CHATTER
	103	124	SANDY CLAY	SOFT	TAN	FAST		SMOOTH
	124	142	LIGHT GRAY & TAN SANDY CLAY W/ CEMENTED SAND LAYERS	FIRM	LIGHT GRAY & TAN	FAST		SMOOTH & CHOPPY VIBRATION & SMOOTH
	142	151	FINE SAND W/ SANDY CLAY	SOFT	TAN	FAST		SMOOTH
	151	159	SANDY CLAY	SOFT	TAN	FAST		SMOOTH
	159	165	CEMENTED SAND W/ SANDY CLAY	FIRM	WHITE & TAN	FAST		CHOPPY & SMOOTH
	165	187	SANDY CLAY	SOFT	TAN	FAST		SMOOTH VIBRATION & SMOOTH
	187	235	FINE-MED SAND W/ SANDY CLAY	SOFT	TAN	FAST		SMOOTH
	235	241	FINE-MED-COARSE SAND W/ CEMENTED SAND	STIFF	WHITE	SEMI SLOW		CHATTER
	241	276	FINE-MED-COARSE SAND W/ FINE GRAVEL	FIRM		FAST		FAST CHATTER
	276	279	CEMENTED SAND	HARD	WHITE	SLOW		CHATTER
	279	286	FINE-MED-COARSE SAND W/ FINE GRAVEL	FIRM		FAST		FAST CHATTER
	286	305	FINE-MED-COARSE SAND W/ SANDY CLAY LEDGES	FIRM		FAST		CHOPPY & SMOOTH SMOOTH & VIBRATION
	305	312	SANDY CLAY W/ FINE SAND	SOFT	TAN	FAST		FAST CHATTER SMOOTH & VIBRATION
	312	324	FINE-MED-COARSE SAND	STIFF		FAST		FAST CHATTER SMOOTH & VIBRATION
	324	333	SANDY CLAY W/ FINE SAND	SOFT	TAN	FAST		FAST CHATTER
	333	352	FINE-MED-COARSE SAND	FIRM		FAST		FAST CHATTER
	352	359	WHITE SANDY CLAY W/ LIME ROCK & FINE SAND	FIRM	WHITE BROWN & WHITE	FAST		SMOOTH & CHOPPY
	359	380	BROWN CLAY W/ SANDY CLAY & LIME ROCK	SOFT		FAST		SMOOTH & CHOPPY
	380	404	FINE-MED SAND	SOFT		FAST		VIBRATION
X	404	420	FINE-MED-COARSE SAND W/ LIME ROCK & BROWN ROCK TRACE	STIFF	WHITE & BROWN	FAST		FAST CHATTER
X	420	448	FINE-MED SAND	SOFT		FAST		VIBRATION SMOOTH & VIBRATION
X	448	475	SANDY CLAY W/ FINE SAND	SOFT	TAN	FAST		FAST CHATTER
X	475	508	FINE-MED SAND W/ SANDSTONE & BROWN ROCK	FIRM	YELLOW BROWN	FAST		FAST CHATTER
X	508	519	GRAY CLAY	SOFT		SLOW		SMOOTH
X	519	526	FINE SAND W/ SANDSTONE & BROWN ROCK	FIRM	YELLOW & BROWN	FAST		FAST CHATTER SMOOTH & VIBRATION
X	526	554	GRAY CLAY W/ SOAPSTONE	SOFT	GRAY	SEMI SLOW		FAST CHATTER SMOOTH & VIBRATION
X	554	566	SANDSTONE W/ FINE SAND	STIFF	GRAY	FAST		FAST CHATTER SMOOTH & VIBRATION
X	566	601	GRAY CLAY W/ SOAPSTONE	SOFT	GRAY	SEMI SLOW		FAST CHATTER SMOOTH & VIBRATION
X	601	623	SANDSTONE W/ FINE SAND & SOAPSTONE LEDGES	STIFF	GRAY	FAST		FAST CHATTER VIBRATION & SMOOTH
X	623	630	SOAPSTONE W/ GRAY CLAY	SOFT	GRAY	SEMI SLOW		FAST CHATTER VIBRATION & SMOOTH

APPROX  
305'  
STATIC  
↓

630	650	SHALE	SOFT	BLUE	SLOW	SMOOTH
		QG - 20				
		WATER LOADS - 4				
		SA - 1				
		EZ MUD - 1/4				
		BRAN - 7				
		HOLE PLUG - 2				
		CS - 1				

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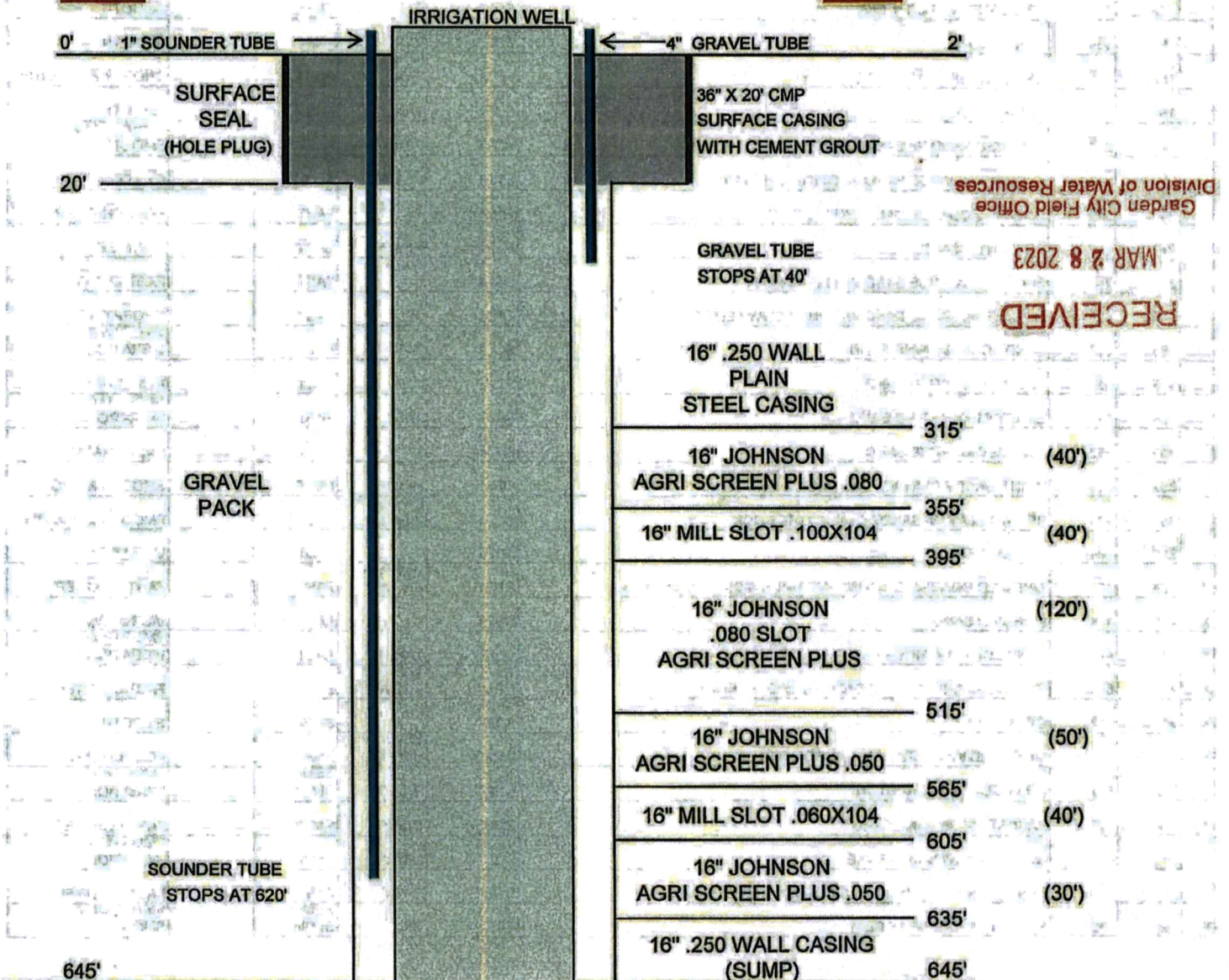
# Well Design & Construction

"PROPOSED  
WR #29946

Customer Name: SOUTHWEST AG D-4  
 Legal: SE 2-26S-34W County: FINNEY  
 GPS: 37.813053 Date: \_\_\_\_\_  
-101.00129 WO #: TBD  
 DRILLER: \_\_\_\_\_ WATER SUPPLY: NEARBY IRRIGATION WELL  
 HELPER(S): \_\_\_\_\_ DRILLING RIG: TBD  
 BOREHOLE DIAMETER: 30" DRILLING METHOD: REVERSE CIRCULATION  
 CASING DIAMETER: 16" QUIKGEL: TBD HOLE PLUG: 20'  
 TOTAL WELL DEPTH: 645' GRAVEL: 125 TONS #1 COARSE X 4 LOADS  
 DRILLING FLUID: TBD GRAVEL SUPPLIER: TBD #1C / #1F 70/30 X1 LOAD  
 ADDITIONAL INFO: 36' X 20' SURFACE CASING W/CONCRETE GROUT

**GROUT  
AND  
GRAVEL**

**SCREEN AND  
CASING**



Garden City Field Office  
Division of Water Resources

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MAR 28 2023



# Century GEOPHYSICAL CORP.

SOUTHWEST AG, DUANE KOSTER

COMPANY : DOWNEY DRILLING INC

WELL : SOUTHWEST AG, DUANE KOSTE

LOCATION/FIELD : TH#1

COUNTY : FINNEY

LOCATION : SE

SECTION : 2

**D-4**

OTHER SERVICES:

TOWNSHIP : 26S

RANGE : 34W

DATE : 03/14/23

PERMANENT DATUM : GL

DEPTH DRILLER : 650

KB :

LOG BOTTOM : 650.10

LOG MEASURED FROM: GL

DF :

LOG TOP : 1.00

DRL MEASURED FROM: GL

GL :

CASING DIAMETER : 10.

LOGGING UNIT : 1903

CASING TYPE :

FIELD OFFICE : DDI

CASING THICKNESS:

RECORDED BY : DIEGO

BIT SIZE : 6.25 "

BOREHOLE FLUID : MUD

FILE : ORIGINAL

MAGNETIC DECL. : 0

RM :

TYPE : 8144A

MATRIX DENSITY : 2.71

RM TEMPERATURE :

LGDATE: 03/14/23

NEUTRON MATRIX : LIMESTON

MATRIX DELTA T : 49

LGTIME : 18:17:

THRESH: 99999

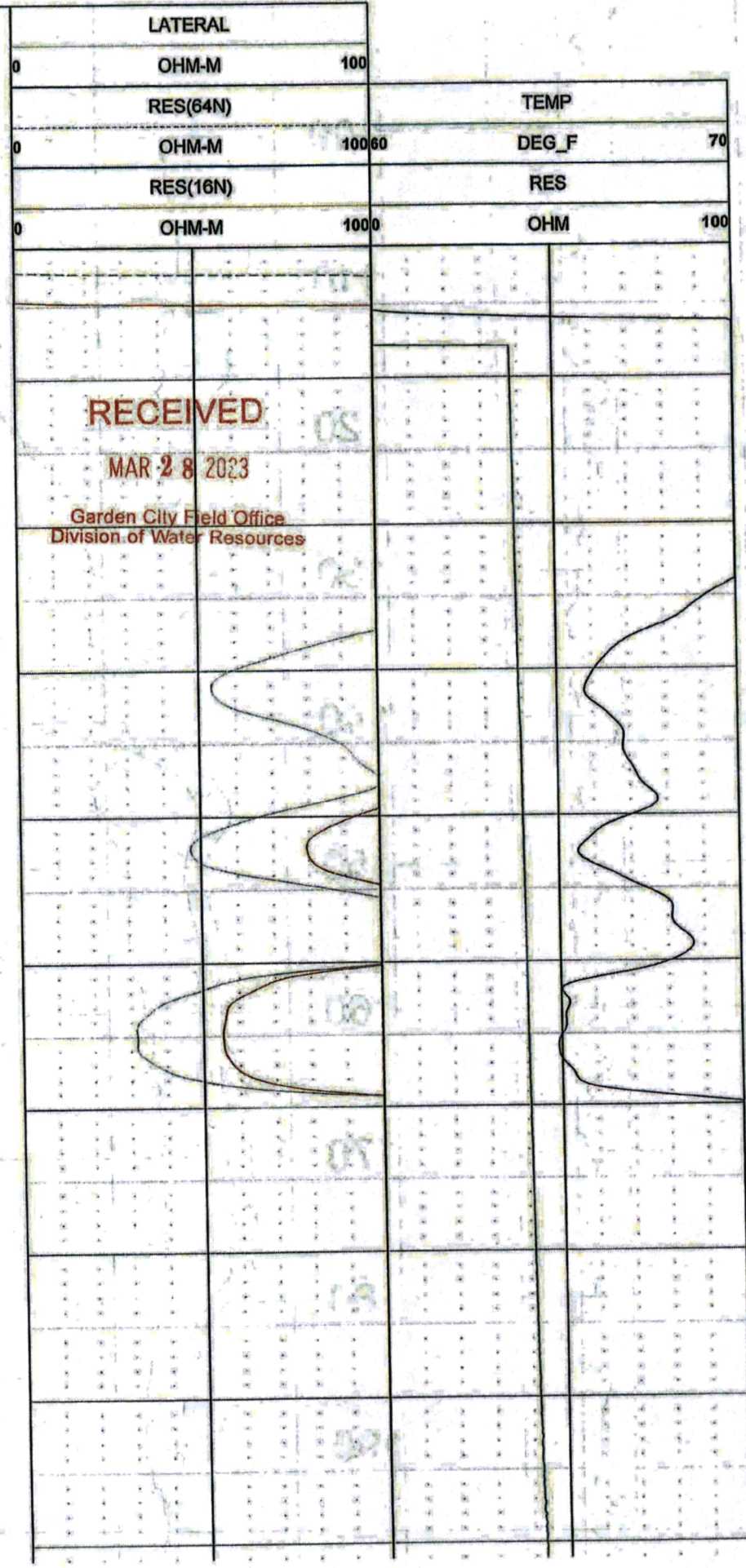
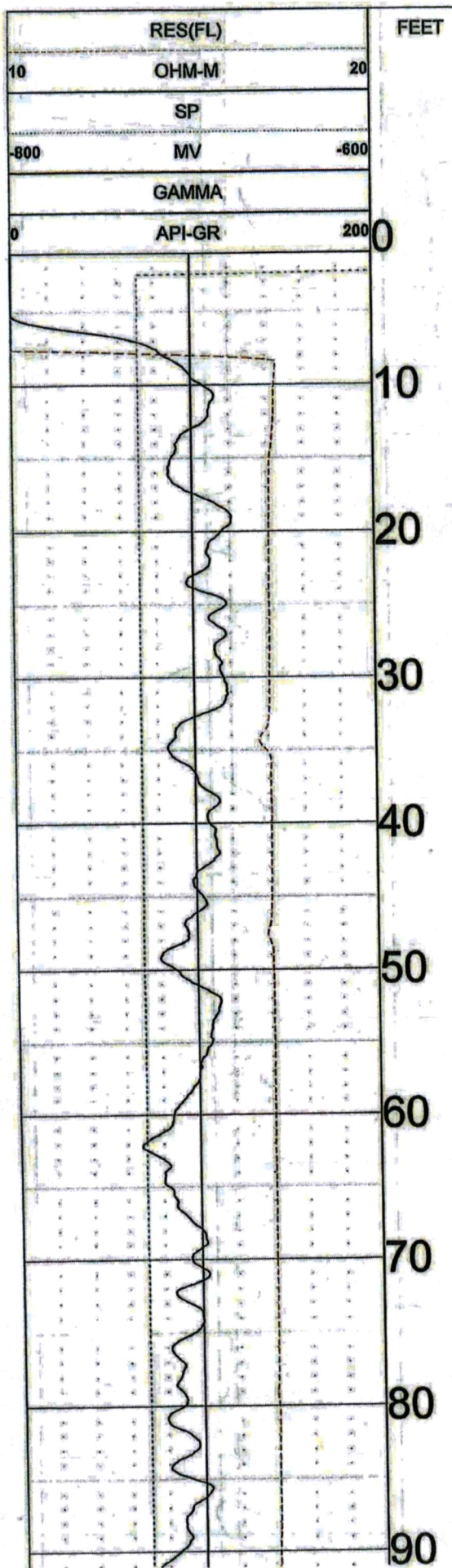
N 37.81305

W -101.00128

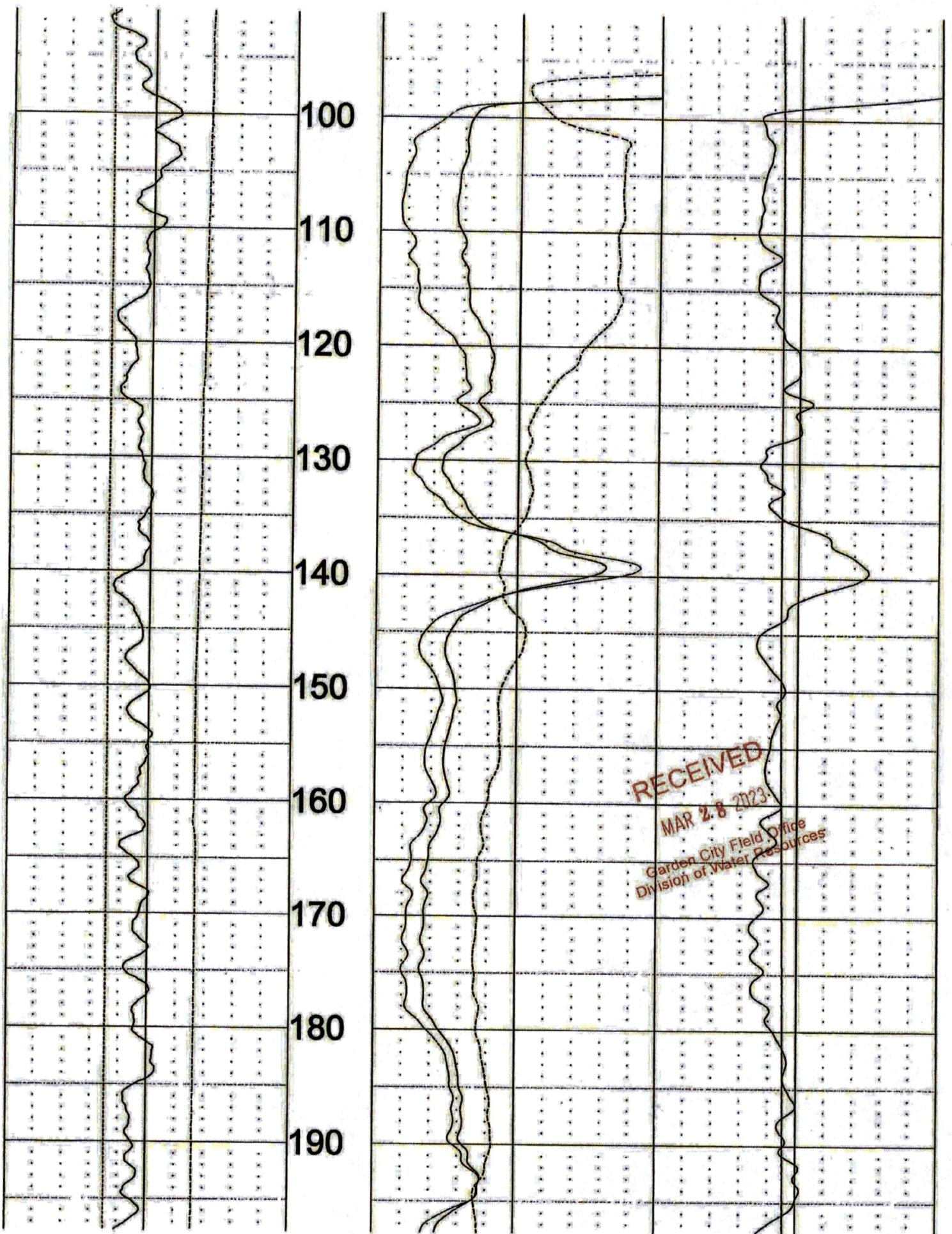
ALL SERVICES PROVIDED SUBJECT TO STANDARD TERMS AND CONDITIONS

**RECEIVED**  
**MAR 28 2023**

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Division of Water Resources







200

210

220

230

240

250

260

270

280

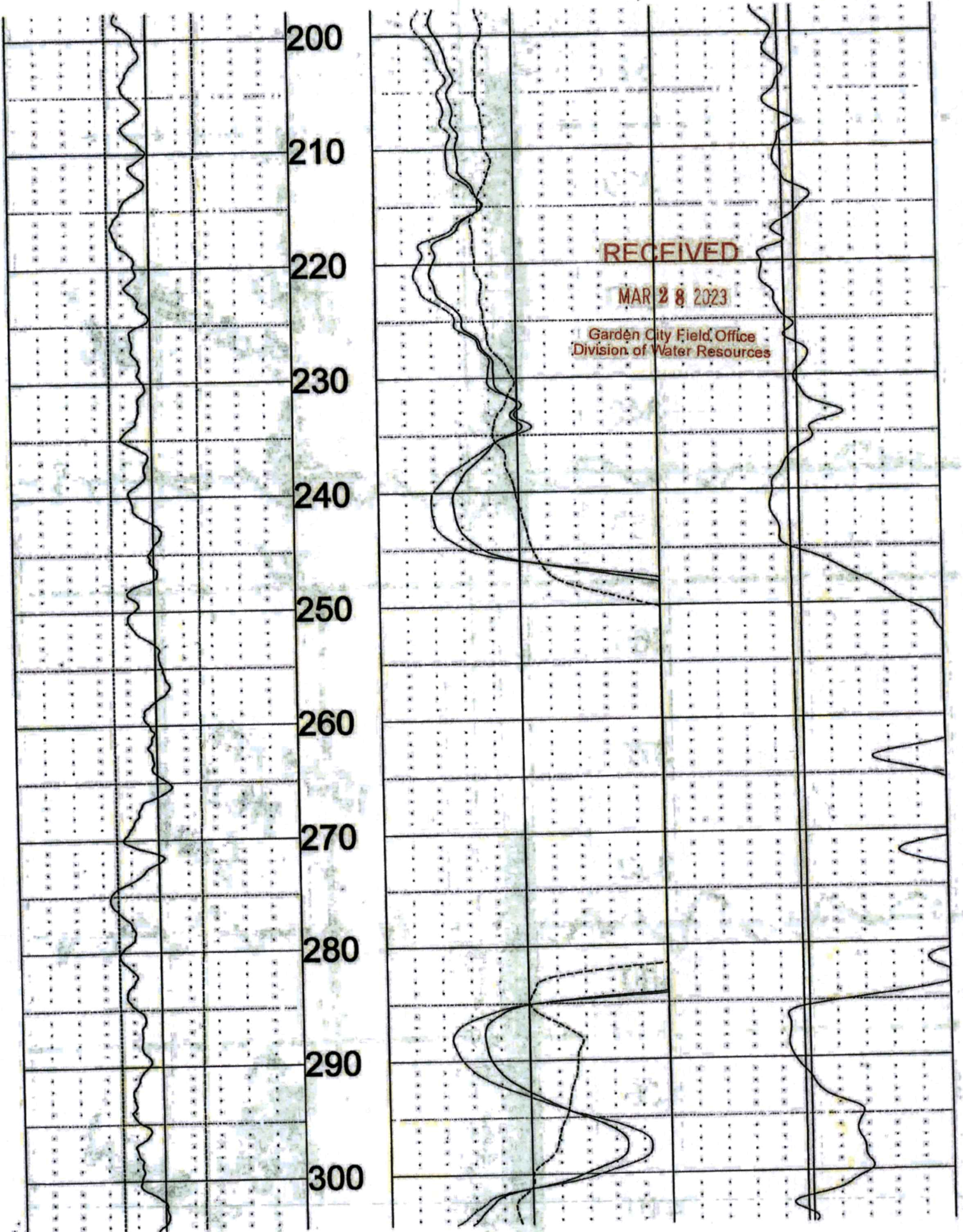
290

300

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EST. STATIC

310

320

330

340

350

360

370

380

390

400

410

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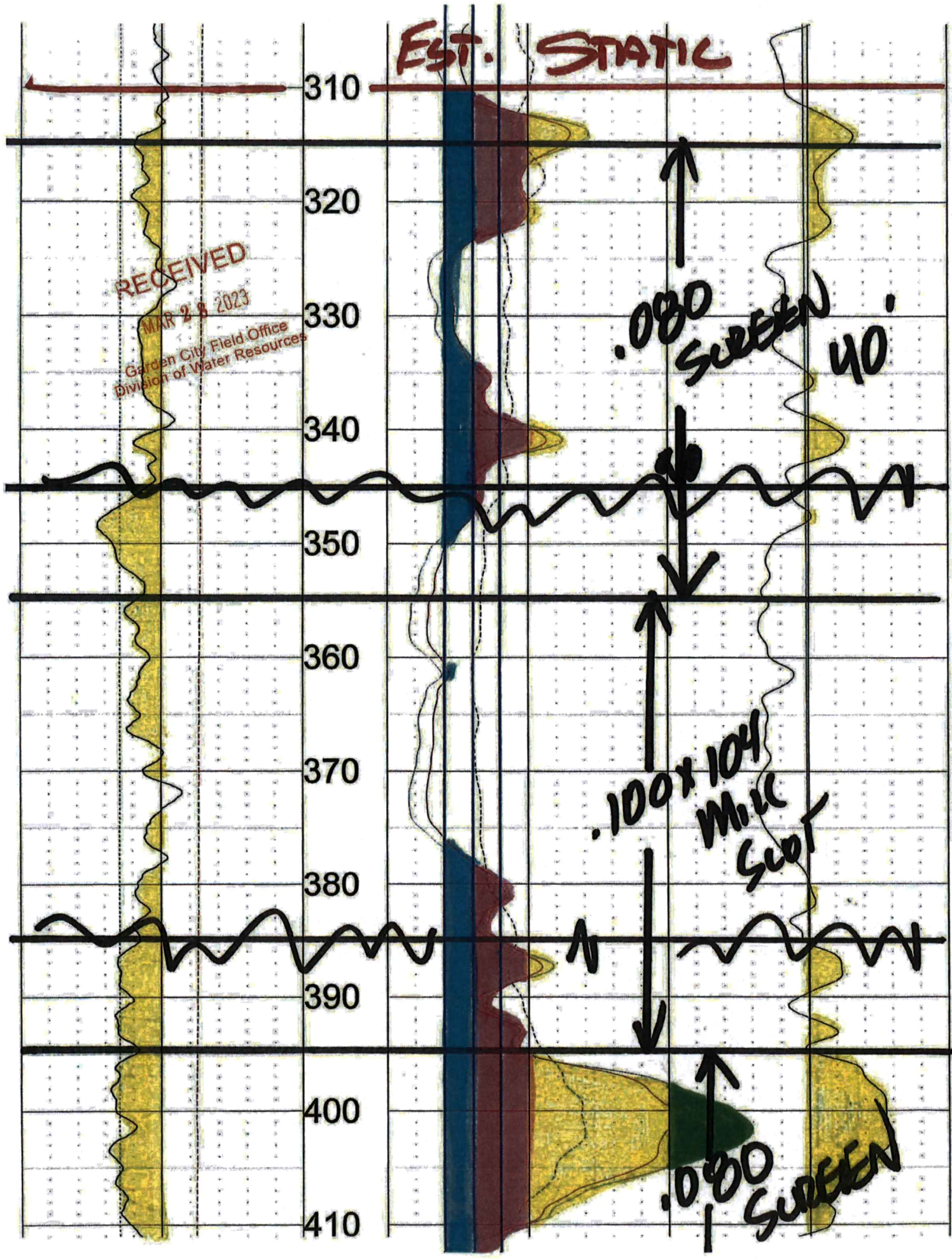
MAR 28 2023

Garden City Field Office  
Division of Water Resources

.080  
SCREEN  
40'

.100 x 104  
MIL  
SLOT

.080  
SCREEN



420

430

440

450

460

470

480

490

500

510

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MAR 28 2003

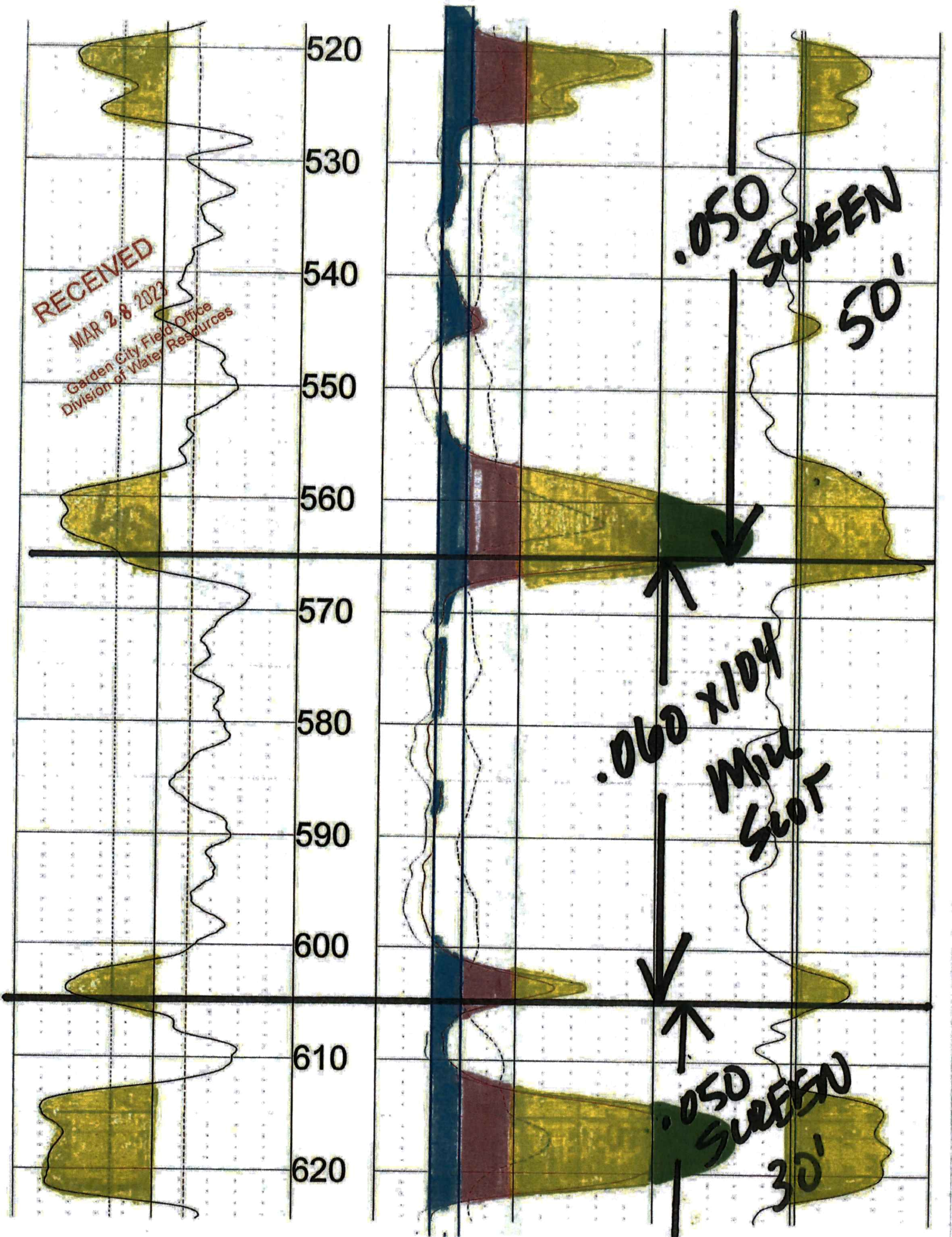
Garden City Field Office  
Division of Water Resources

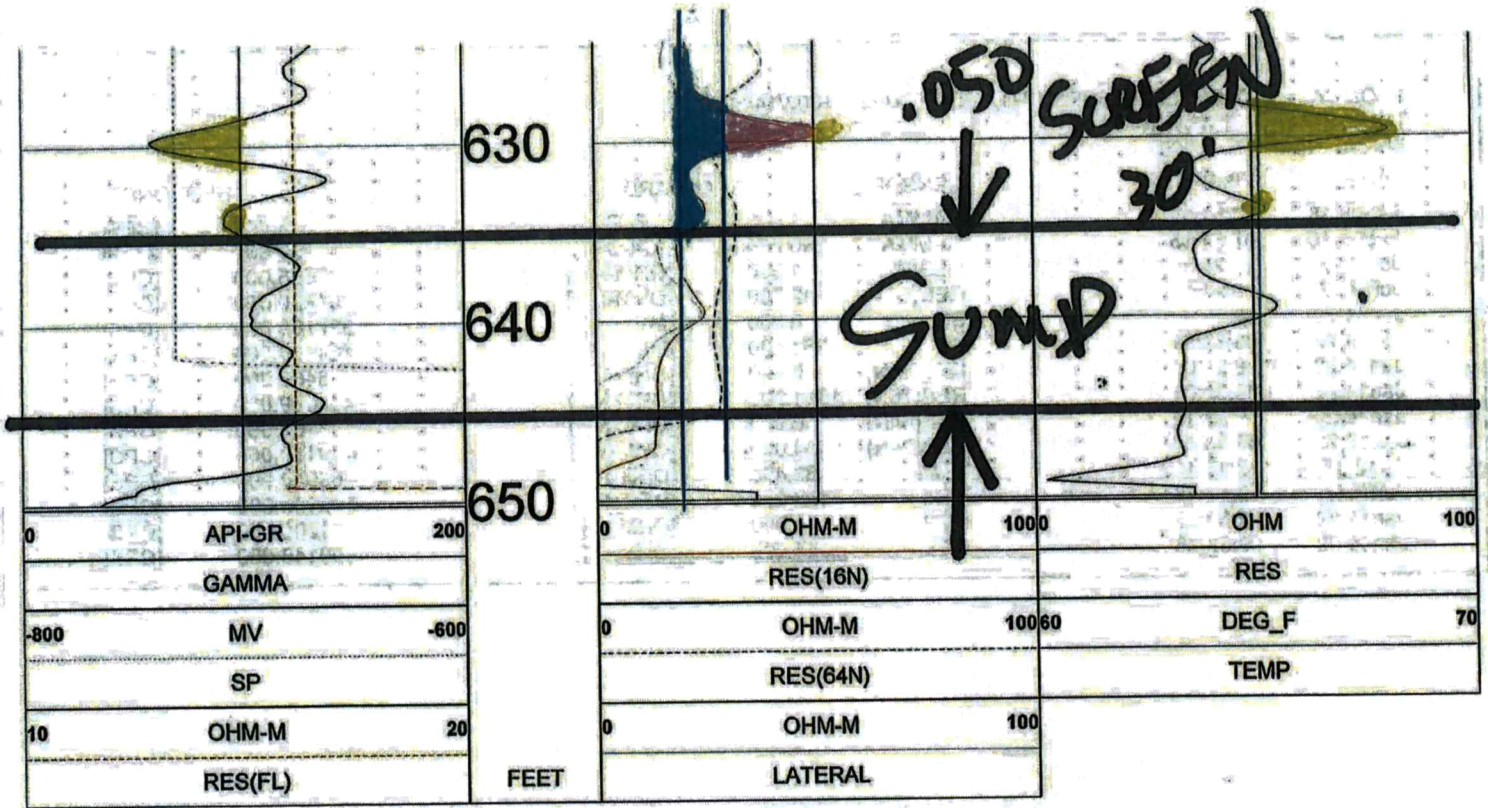
↑  
CURRENT  
WELL  
DEPTH

080  
SCREEN  
120



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TOOL CALIBRATION SOUTHWEST AG, DUANE KOSTER 03/14/23 18:17  
 TOOL 8144A TM VERSION 1  
 SERIAL NUMBER 365

	DATE	TIME	SENSOR	STANDARD	RESPONSE		
1	Feb08,18	07:51:35	GAMMA	1.000	[API-GR ]	4.000	[CPS]
	Feb08,18	07:51:35	GAMMA	340.000	[API-GR ]	290.000	[CPS]
2	Jul12,17	13:24:17	RES(FL)	1.330	[OHM-M ]	7595.000	[CPS]
	Jul12,17	13:24:17	RES(FL)	42.700	[OHM-M ]	64820.000	[CPS]
3	Jan14,22	08:32:51	SP	0.000	[MV ]	327768.000	[CPS]
	Jan14,22	08:32:51	SP	381.500	[MV ]	164650.000	[CPS]
4	Jan14,22	08:33:01	RES(16N)	0.000	[OHM-M ]	3453.000	[CPS]
	Jan14,22	08:33:01	RES(16N)	1951.500	[OHM-M ]	448089.000	[CPS]
5	Jan14,22	08:33:10	RES(64N)	0.000	[OHM-M ]	3163.000	[CPS]
	Jan14,22	08:33:10	RES(64N)	1994.000	[OHM-M ]	449170.000	[CPS]
6	Jul12,17	13:17:49	TEMP	33.400	[DEG_F ]	66910.000	[CPS]
	Jul12,17	13:17:49	TEMP	102.200	[DEG_F ]	270930.000	[CPS]
7	Jan14,22	08:33:36	RES	0.000	[OHM ]	21285.000	[CPS]
	Jan14,22	08:33:36	RES	944.000	[OHM ]	190148.000	[CPS]

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 Division of Water Resources



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

June 30, 2023

**RECEIVED**

**JUN 30 2023**

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

**Garden City Field Office**  
**Division of Water Resources**

RE: Application for Change in Point of Diversion  
Water Right, File No. 29946

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 (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 none of the neighboring wells exceeded the net effect above the maximum allowable threshold and needed no further evaluation. No critical wells were determined in the area. At this time, we have not received any comments from neighboring well owners. Therefore, GMD3 sees this move as meeting current area rules and would recommend approval. 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,

A handwritten signature in blue ink that reads "Jason L. Norquest".

Jason L. Norquest  
Assistant Manager



## GMD3 Change Review

---

File No(s): 29946.

DWR office: GC.

App filed to change: PD.

Is Landowner(s) correct in WRIS: Duane E & Kathleen A Koster Trusts.

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) 04 being changed.

	ft. North	ft. West	
Authorized PD	1070	1280	Sect 2-26-34
Proposed PD	1332	817	
Difference	-262 n	463 e	
a <sup>2</sup> + b <sup>2</sup> = c <sup>2</sup>	68644	214369	531.9897 foot move NE

GPS for proposed PD: Lat: 37.813053 Long: -101.001288.

Is proposed PD stacking on existing WRs? No.

Is Proposed PU overlapping existing WRs? No Change.

Neighboring certified well(s) notified:   .

Name Whearland Electric Cooperative Inc %Perry Smith (28623D1, 29945, 29946).

Address PO Box 953.

Zip Garden City, KS 67846.

Email: psmith@weci.net Phone: 620-271-4424.

Name Sandyhill Enterprises LLC %Jacob Neufeld (29938D1, 32073).

Address PO Box 1005.

Zip Holcomb, KS 67851.

Email: jacob@jandapartnership.com Phone: 620-271-8283.

Name Shane Browning (29938D2).

Address 1418 E Michigan Ave.

Zip Ulysses, KS 67880.

Email: bigbrowning@gmail.com Phone: 620-521-2496.

Domestic well(s) notified:   .

Name   .

Address   .

Zip   .

Base Acres:   .

Perfected Acres:   .

Irr. Return-Flow   %

## GMD3 Change Review

---

**Finney County**

**ID04 currently authorized 272AF @ 1162gpm**

**Average reported use (2013-2022): 238.1AF/year**

**Reported 400gpm on 2017 WUR**

**2019 GMD3 inspection calculated 393gpm.**

**Current well depth 450'**

**Proposed depth 645'**

Is a waiver needed: Move is less than half mile. Minimum spacing to neighboring wells appears to be met. Analysis shows effects within guidelines, no critical wells.

Recommendation: After review of all available information, it appears all current area rules are met. Staff therefore recommends approval of the application.

Water Rights and Points of Diversion Within 1 mile of point defined as:

1332 Feet N and 817 Feet W of the Southeast Corner of Section 2 Twp 26S Rng 34W  
 Located at: 101.001290 West Longitude and 37.813054 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
A__ 28623	D1	IND	NK	G	4388	/	--	--	5361	2540	2	26	34W	5		1400 369.06	369.06
AF																	
A__ 29938	D1	IRR	NK	G	1790	/	NE	NW	4944	1590	11	26	34W	7		1500 272.00	272.00
AF																	
Same					4345	/	NW	NW	4910	4835	11	26	34W	6		272.00	272.00
AF																	
A__ 29938	D2	IRR	NK	G	2064	/	NW	NW	4915	4865	12	26	34W	7		272.00	272.00
AF																	
A__ 29941	D2	IRR	NK	G	2453	/	NW	SE	1289	3614	1	26	34W	3		260.00	260.00
AF																	
Same					4735	/	--	NC	1325	1340	1	26	34W	4		260.00	260.00
AF																	
A__ 29945	00	IRR	NK	G	5079	/	--	--	5930	3932	1	26	34W	1		228.48	228.48
AF																	
A__ 29946	00	IRR	NK	G*	535	/	NW	SE	1070	1280	2	26	34W	4		272.00	272.00
AF																	
Same					2958	/	NW	SE	1110	3750	2	26	34W	3		272.00	272.00
AF																	
A__ 32073	00	IRR	NK	G	5066	/	SW	NE	1520	1280	11	26	34W	3		272.00	272.00
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) =	2749.54	.00
Total Vested Amount (AF) =	.00	.00
TOTAL AMOUNT (AF) =	2749.54	.00

*Minimum Spacing*  
*Approved MET*

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:  
 1332 Feet North and 817 Feet West of the Southeast Corner of Section 2 Twp 26S Rng 34W  
 Located at: 101.001290 West Longitude and 37.813054 North Latitude  
 Both SURFACE WATER and GROUNDWATER  
 WATER USE CORRESPONDENTS:

- > File Number Use ST SR
- > WHEATLAND ELECTRIC COOPERATIVE INC
- > PERRY SMITH
- > PO BOX 953
- > GARDEN CITY KS 67846
- > SANDYHILL ENTERPRISES LLC
- > JACOB NEUFELD
- > P O BOX 1005
- > HOLCOMB KS 67851
- > SHANE BROWNING
- > 1418 E MICHIGAN AVE

*28623 D1*

*29938 D1*

*29938 D2*

> ULYSSES KS 67880

-----  
> DUANE E & KATHLEEN A KOSTER TRUSTS

> PO BOX 897  
> GARDEN CITY KS 67846

29941 D2 Applicant

-----  
> WHEATLAND ELECTRIC COOPERATIVE INC

> PERRY SMITH  
> PO BOX 953  
> GARDEN CITY KS 67846

29945

-----  
> WHEATLAND ELECTRIC COOPERATIVE INC

> PERRY SMITH  
> PO BOX 953  
> GARDEN CITY KS 67846

29946

-----  
> DUANE E & KATHLEEN A KOSTER TRUSTS

> PO BOX 897  
> GARDEN CITY KS 67846

Applicant

-----  
> SANDYHILL ENTERPRISES LLC

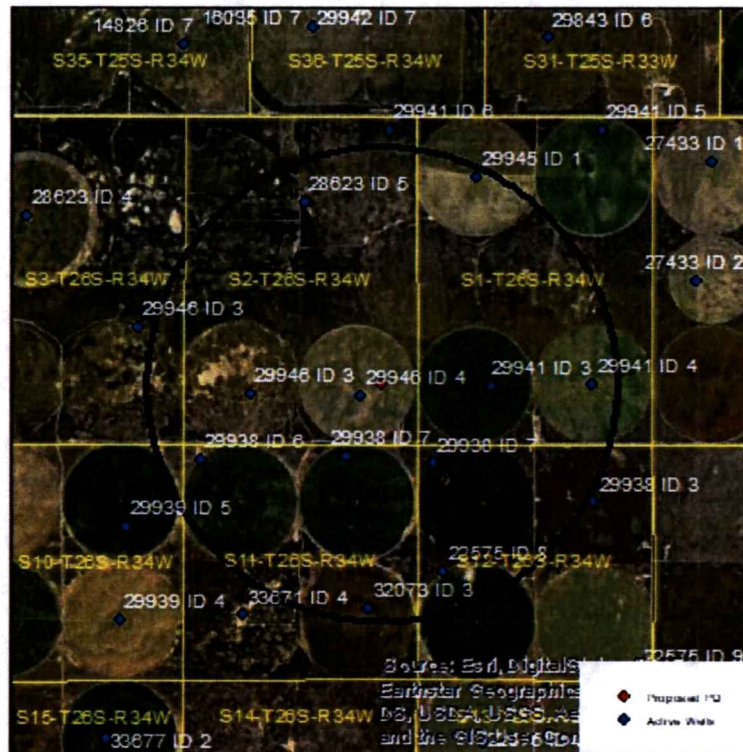
> JACOB NEUFELD  
> P O BOX 1005  
> HOLCOMB KS 67851

32073

-----

## Evaluation of proposed move for Water Right No. 29946

Proposed: Move water right no. 29946 ID4 to a new well location, a distance of 535 ft to the northeast.



Wells within 1 mile: 29946 ID3, 28623, 29945, 29941 ID3, 29941 ID4, 29938 ID6, 29938 ID7 in section 11, 29938 ID7 in section 12, 32073, and 22575.

The saturated thickness at the proposed well location is estimated to be 213 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:

$S = 0.2077$ ,  $T = 29,594 \text{ ft}^2/\text{day}$ ,  $t_{\text{current}} = 137 \text{ days}$  (based on average use and observed rate),  
 $Q_{\text{current}} = 393 \text{ gpm}$  (based on 2019 field inspection),  $t_{\text{proposed}} = 53 \text{ days}$ ,  $Q_{\text{proposed}} = 1162 \text{ gpm}$

Theis drawdowns were calculated as follows:

29946 ID3:	Drawdown from current location = .73 ft
	Drawdown from proposed location = .96 ft
	Net drawdown = <b>0.23 ft</b>
28623:	Drawdown from current location = .53 ft
	Drawdown from proposed location = .67 ft
	Net drawdown = <b>0.14 ft</b>

29945: Drawdown from current location = 0.46 ft  
Drawdown from proposed location = 0.6 ft  
Net drawdown = **0.14 ft**

29941 ID3: Drawdown from current location = 0.67 ft  
Drawdown from proposed location = 1.12 ft  
Net drawdown = **0.44 ft**

29941 ID4: Drawdown from current location = 0.48 ft  
Drawdown from proposed location = 0.64 ft  
Net drawdown = **0.16 ft**

29938 ID6: Drawdown from current location = 0.57 ft  
Drawdown from proposed location = 0.67 ft  
Net drawdown = **0.09 ft**

29938 ID7 S11: Drawdown from current location = 0.96 ft  
Drawdown from proposed location = 1.44 ft  
Net drawdown = **0.48 ft**

29938 ID7 S12: Drawdown from current location = 0.78 ft  
Drawdown from proposed location = 1.27 ft  
Net drawdown = **0.49 ft**

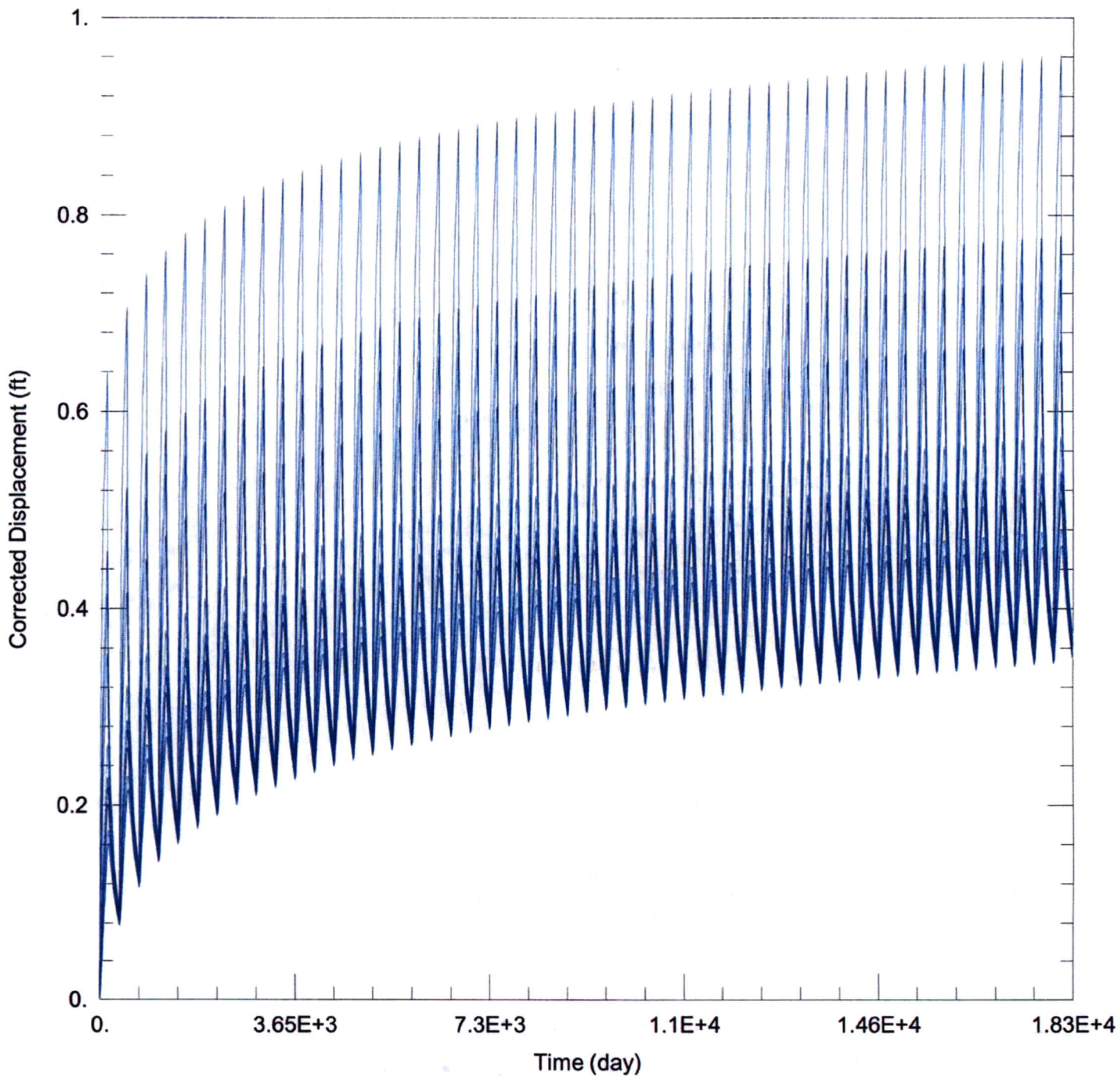
32073: Drawdown from current location = 0.51 ft  
Drawdown from proposed location = 0.61 ft  
Net drawdown = **0.1 ft**

22575: Drawdown from current location = 0.54 ft  
Drawdown from proposed location = 0.67 ft  
Net drawdown = **0.13 ft**

Net drawdown does not exceed the drawdown allowance of 4.0 ft for any well within 1 mile of the proposed location. Therefore, critical well analysis is not necessary.

**Conclusion:**

The proposed move is likely to create minimal effects on neighboring wells and appears unlikely to cause impairment. Any 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\29946\29946 Current.aqt  
 Date: 06/28/23 Time: 10:01:28

**PROJECT INFORMATION**

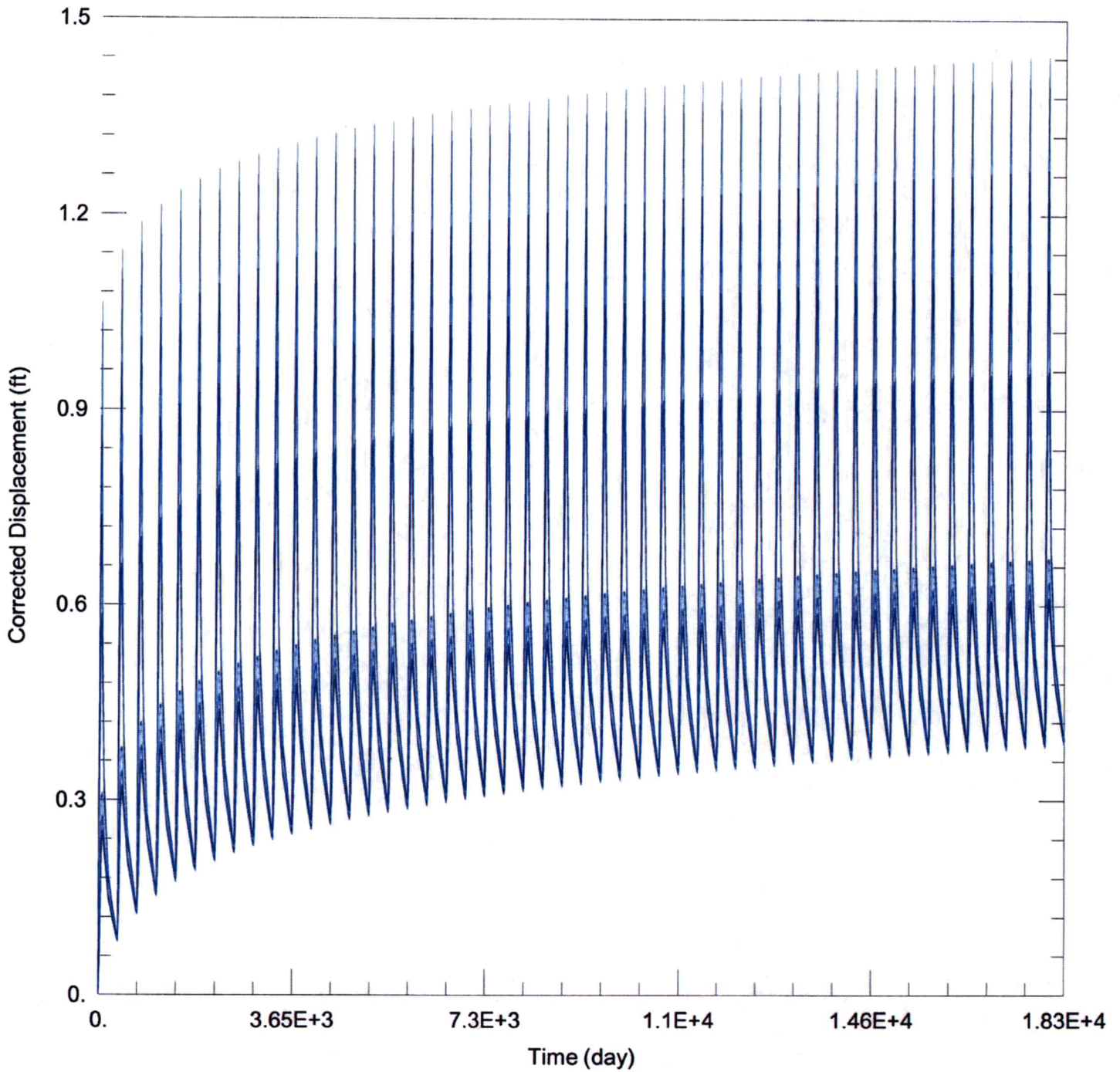
Company: GMD 3  
 Project: 29946 ID4  
 Location: Finney County

**WELL DATA**

**Pumping Wells**

**Observation Wells**

Well Name	X (ft)	Y (ft)	Well Name	X (ft)	Y (ft)
29946 ID4	-58777	341362	□	-58777	341362



**WELL TEST ANALYSIS**

Data Set: C:\Users\trevora\Documents\2023\_moves\29946\29946 Proposed.aqt  
 Date: 06/28/23 Time: 10:01:21

**PROJECT INFORMATION**

Company: GMD 3  
 Project: 29946 ID4  
 Location: Finney County

**WELL DATA**

Pumping Wells			Observation Wells		
Well Name	X (ft)	Y (ft)	Well Name	X (ft)	Y (ft)
29946 ID4	-58311	341624	□	-58311	341624



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](http://www.agriculture.ks.gov)

Mike Beam, Secretary

Laura Kelly, Governor

June 20, 2023

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

Re: Request for Recommendation,  
File Nos. 29946

Dear Sir or Madam:

We are enclosing a copy of the referenced application, which was submitted by Duane Koster 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,

A handwritten signature in blue ink that reads "Austin McColloch".

Austin McColloch  
Assistant Water Commissioner

Enclosure  
pc:

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](http://www.agriculture.ks.gov)

Mike Beam, Secretary

Laura Kelly, Governor

June 5, 2023

SHANE BROWNING  
1418 E MICHIGAN AVE  
ULYSSES, KS 67880

RE: Application for Change  
Water Right, File Nos. 29946

Dear Sir or Madam:

This is to advise you that Duane Koster 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 NE $\frac{1}{4}$  NW $\frac{1}{4}$  SE $\frac{1}{4}$  of Section 2, Township 26 South, Range 34 West, Finney County.

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

A handwritten signature in black ink, appearing to read "Austin J. McColloch".

Austin J. McColloch  
Assistant Water Commissioner

AM:

pc:

SCANNED

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](http://www.agriculture.ks.gov)

Mike Beam, Secretary

Laura Kelly, Governor

June 5, 2023

SANDYHILL ENTERPRISES LLC  
Attn: JACOB NEUFELD  
P O BOX 1005  
HOLCOMB, KS 67851

RE: Application for Change  
Water Right, File Nos. 29946

Dear Sir or Madam:

This is to advise you that Duane Koster 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 NE $\frac{1}{4}$  NW $\frac{1}{4}$  SE $\frac{1}{4}$  of Section 2, Township 26 South, Range 34 West, Finney County.

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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,

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Austin J. McColloch  
Assistant Water Commissioner

AM:

pc:

SCANNED

S. Thurlow  
5/15/2023

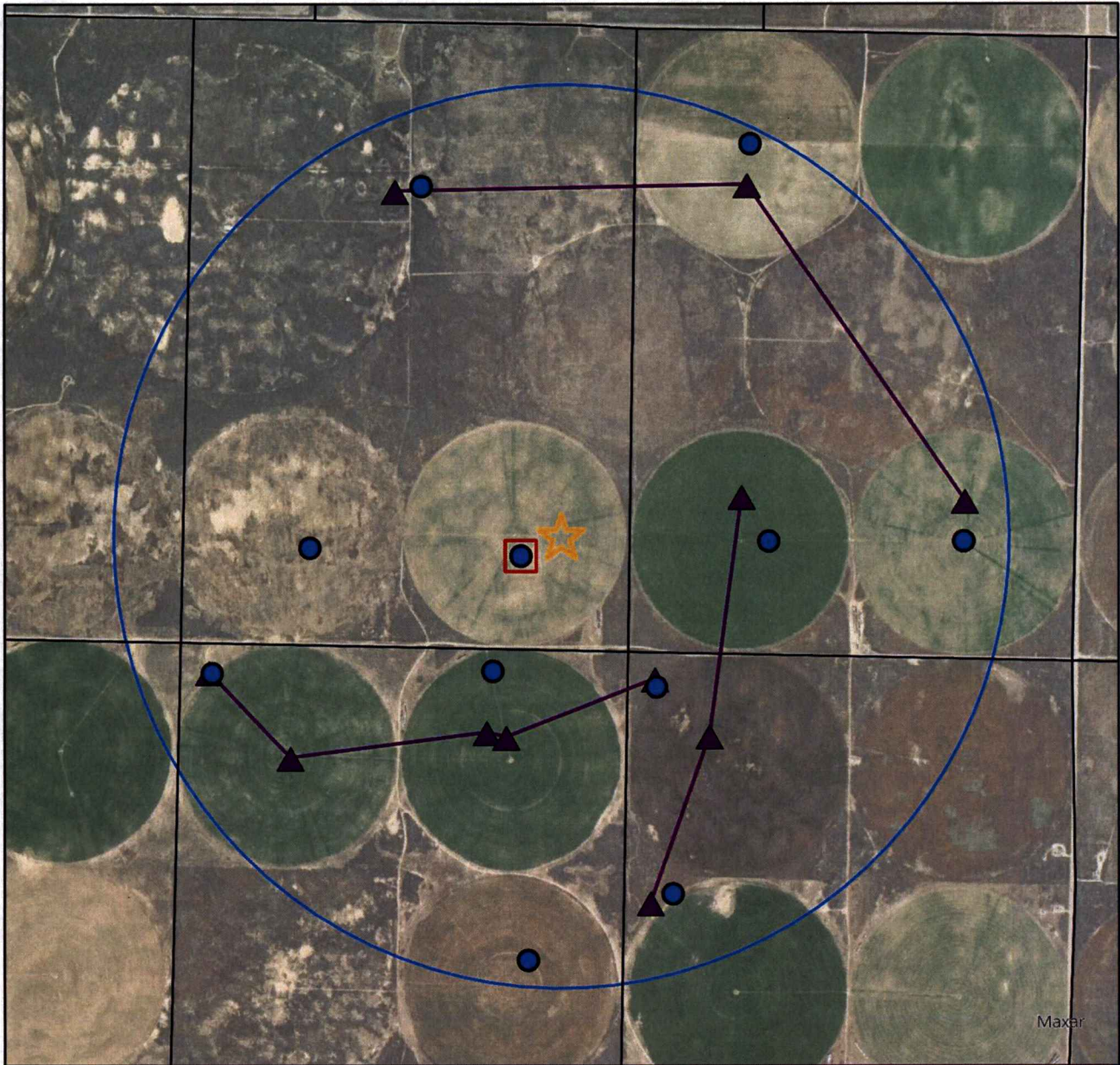
**This evaluation of proposed change in point of diversion, File No. 29946**








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. 29946 ID4. The change proposes reallocating the well approximately 463 feet East and 262 feet North of the currently authorized location (Figure 1).

The GMD No. 3 groundwater model was used for a projected future (2068) saturated thickness (132.0 ft). The average of model cells located within Township 26 South, Range 34 West, Sections 1, 2, 3, 10, 11, and 12 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, twelve lithological logs were evaluated (Figure 4-7, Tables 1-12), with an average transmissivity of 3,685 square feet per day. An assumed specific storage ( $1 \times 10^{-5}$  for the Ogallala Aquifer and  $1 \times 10^{-6}$  for the Dakota Aquifer) and the projected saturated thickness was used to determine the assumed storativity of 0.00128.

Drawdown was evaluated at 4 nearby existing wells authorized by File Nos. 29941-D2 ID4, 28623-D1, 29441-D2 ID3, and 29938-D2 (Tables 13-16). A quantity of 272 acre-feet (AF) at a rate of 1,162 gallons per minute (gpm) was compared to the average historic use (238.1 AF, 2013-2022) at the most recent pumping rate (400 gpm). The maximum net drawdown occurred at the point of diversion authorized by File No. 29938-D2. The net drawdown at that distance was 12.9 feet, or 8.8% of the projected future saturated thickness (Table 16).



-  Proposed PD
-  Authorized PD
-  Points of Diversion
-  WWC5 Well Logs
-  Transect
-  PLSS Sections
-  1-Mile Buffer Radius



0 0.25 0.5 1 Miles



Kansas Department of Agriculture  
Division of Water Resources  
May 12, 2023

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	fmgnd	Fine to Medium Sand
coal	Coal	fnds	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	fcrossnd	Fine to Coarse Sand
r	Rock	mnd	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	fms	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	fcross	Fine to Coarse Silty Sand	fcrossdg	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
fcrossc	Fine to Coarse Sandy Clay	u	Unknown (most likely unintelligible)	fg	Fine Gravel
mcrssc	Medium to Coarse Sandy Clay			fmg	Fine to Medium Gravel
				fcrg	Fine to Coarse Gravel
				fcrgg	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	fmgnd	15	0.24
coal	0.00004	0.05	fnds	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	fcrossnd	63	0.24
r	0.00004	0.05	mnd	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	fms	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	fcross	14.5	0.16	fcrossdg	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
fcrossc	0.0001	0.08	u	14.5	0.16	fg	299	0.29
mcrssc	0.0001	0.08				fmg	299	0.29
						fcrg	299	0.29
						fcrgg	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**

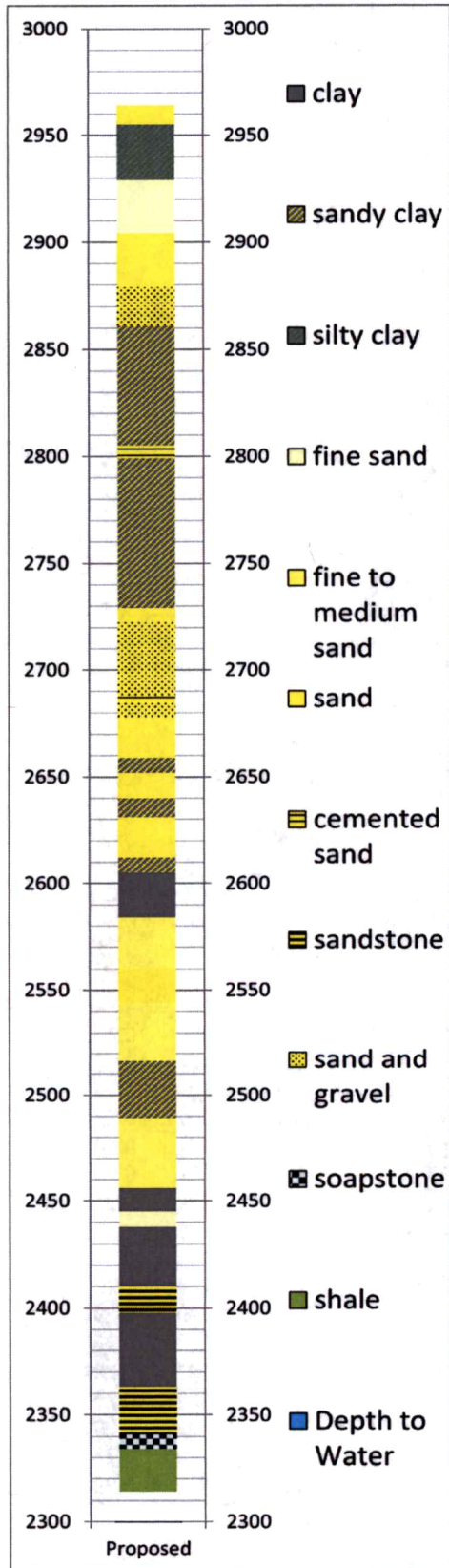


Figure 4: lithology log of proposed location

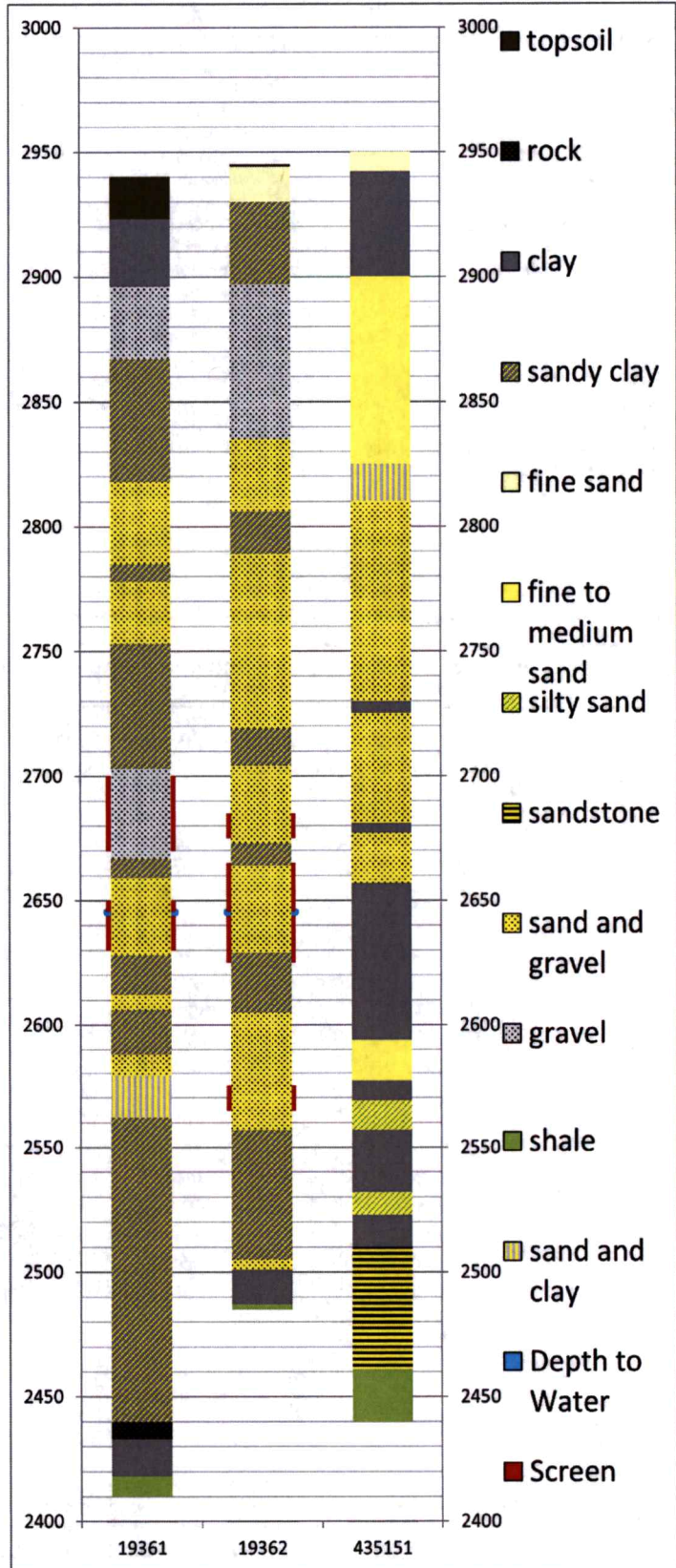


Figure 5: lithology log of KGS Wells on North transect

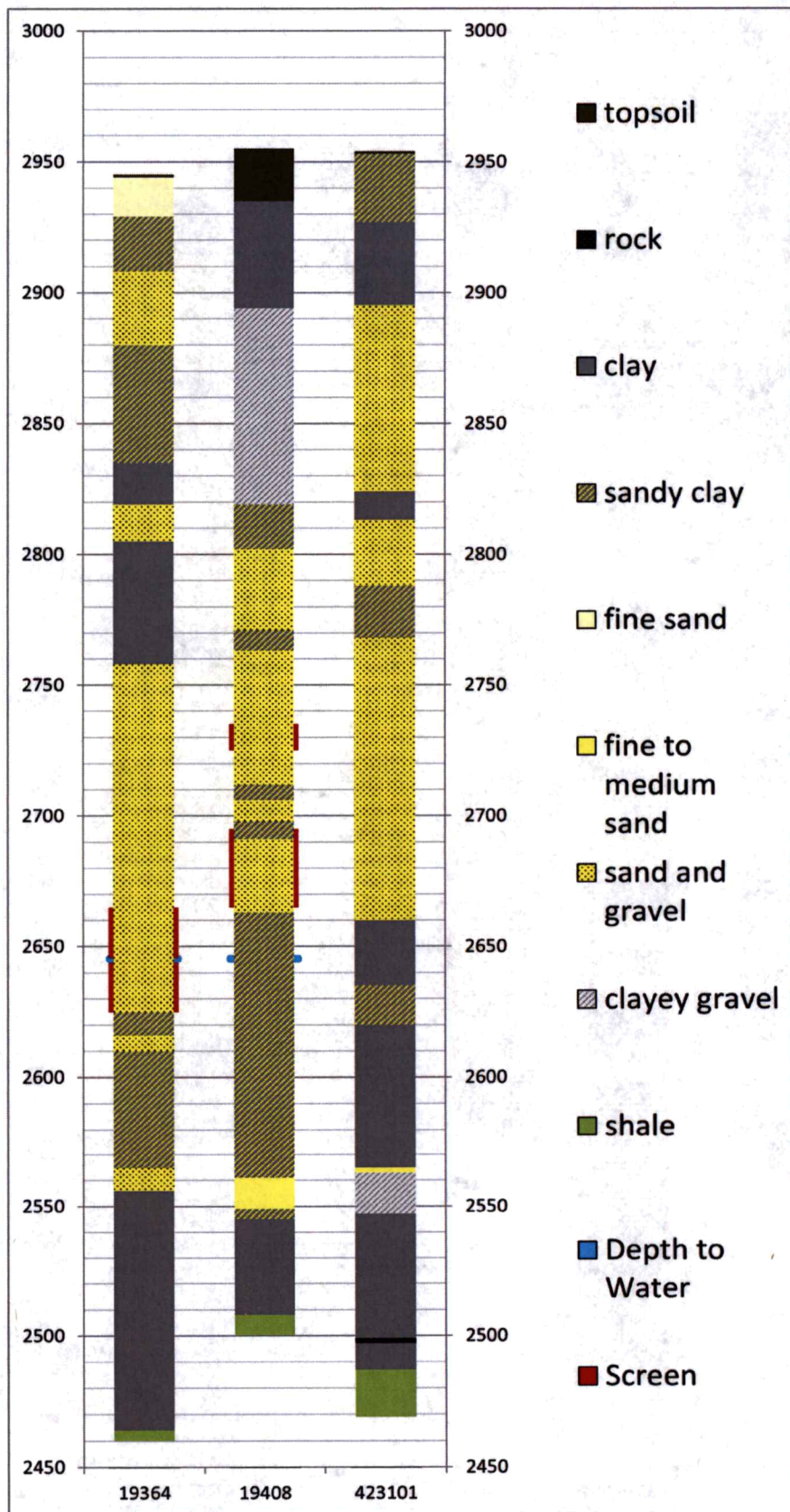


Figure 6: lithology log of KGS Wells on East transect



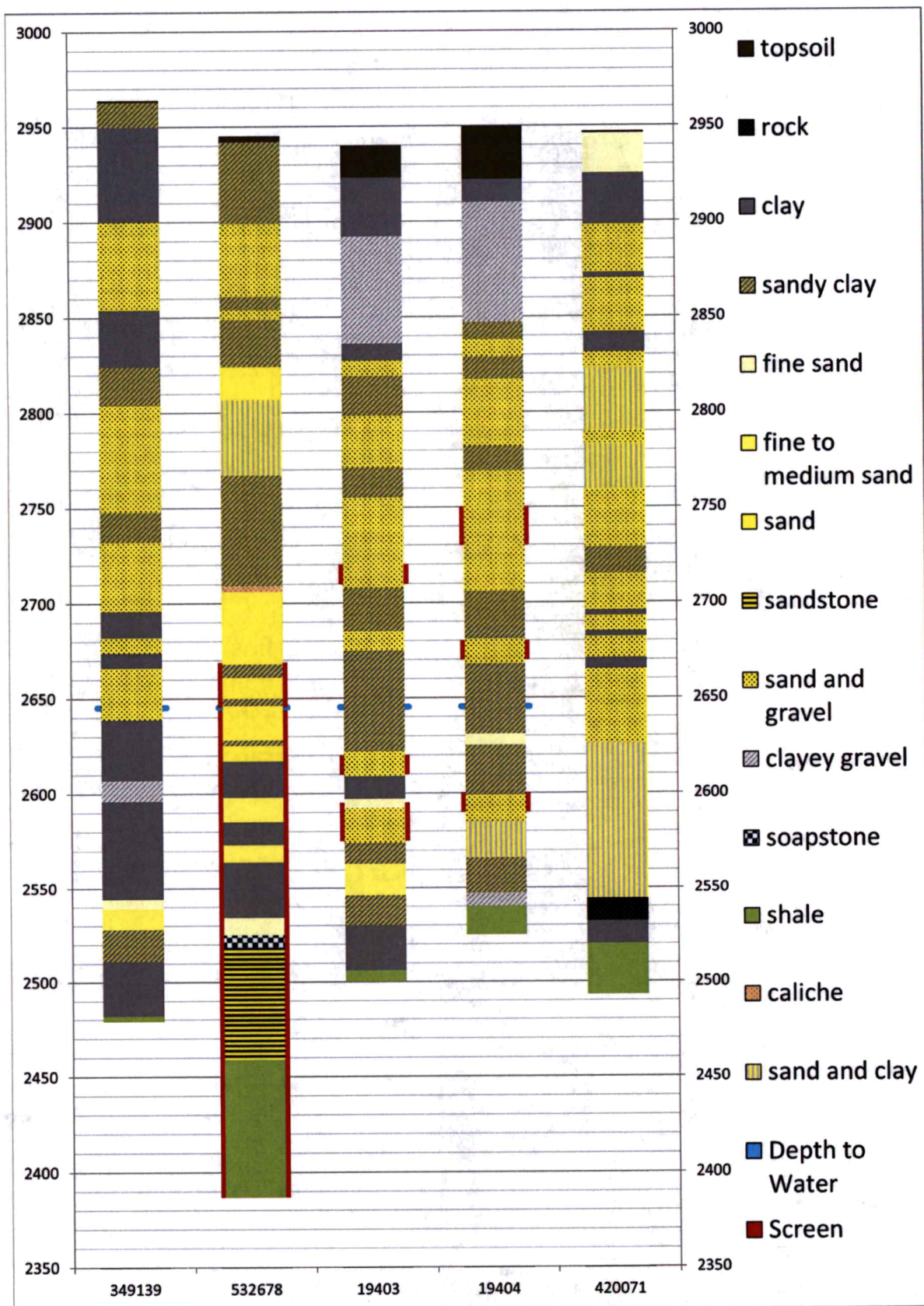


Figure 7: lithology log of KGS Wells on West transect

**Table 1: Lithology, Proposed Location**

Driller's Description	Synonymy Codes	Percentages	Saturated Thickness (Feet)	Transmissivity (feet <sup>2</sup> /day)
surface sand				
brown silty clay				
fine sand w/ caliche & sandy clay ledges				
fine-med-coarse sand				
fine-med-coarse sand w/ fine-med gravel				
sandy clay				
light gray & tan sandy clay w/ cemented sand layers				
fine sand w/ sandy clay				
sandy clay				
cemented sand w/ sandy clay				
sandy clay				
fine-med sand w/ sandy clay				
fine-med-coarse sand w/ cemented sand				
fine-med-coarse sand w/ fine gravel				
cemented sand				
fine-med-coarse sand w/ fine gravel				
fine-med-coarse sand w/ sandy clay ledges				
sandy clay w/ fine sand				
fine-med-coarse sand	snd	100	5	315.0
sandy clay w/ fine sand	sc, fsnd	70, 30	9	68.2
fine-med-coarse sand	snd	100	19	1197.0
white sandy clay w/ lime rock & fine sand	sc, ca, fsnd	60, 20, 20	7	39.5
brown clay w/ sandy clay & lime rock	c, sc, ca	60, 20, 20	21	18.5
fine-med sand	fmsnd	100	24	360.0
fine-med-coarse sand w/ lime rock & brown rock trace	snd, ca, r	70, 20, 10	16	705.6
fine-med sand	fmsnd	100	28	420.0
sandy clay w/ fine sand	sc, fsnd	70, 30	27	204.66
fine-med sand w/ sandstone & brown rock	fmsnd, ca, r	60, 20, 20	33	326.0
gray clay	c	100	11	0.0
fine sand w/ sandstone & brown rock	fsnd, ds, r	60, 20, 20,	7	69.2
gray clay w/ soapstone	c, ca	70, 30	28	0.0
sandstone w/ fine sand	ds, fsnd	70, 30	12	90.1
gray clay w/ soapstone	c, ca	70, 30	35	0.0
sandstone w/ fine sand & soapstone ledges	ds, fsnd, ca	70, 20, 10	22	133.8
soapstone w/ gray clay	ca, c	70, 30	7	0.0
shale	sh	100	20	0.0
Total Transmissivity:				3948.4

Above water surface

**Table 2: Lithology, KGS Well ID 435151**

Driller's Description	Synonymy Codes	Percentages	Saturated Thickness (Feet)	Transmissivity (feet <sup>2</sup> /day)
fine sand				
brown/white clay, caliche, cemented sand				
sand fine to medium coarse, cobblestone				
brown clay, sand mixed, few ledges				
sand fine to medium coarse, small to medium gravel				
brown clay				
sand fine to medium coarse, small to medium gravel				
brown/yellow clay				
sand fine to medium coarse, small to medium gravel				
brown/white clay, limerock, sands	c, ca, snd	50, 30, 20	51	642.6
sand fine to small, few medium	fmsnd	100	17	255.0
brown clay	c	100	8	0.0
silty sand to very fine, few clay	sc, c	90, 10	12	47.5
brown clay - sticky, few limerock	c, ca	90, 10	25	0.0
silty to fine sand	sc	100	9	39.6
brown clay, firm and sticky	c	100	13	0.0
sandstone, soapstone, limerock	ds, ca	50, 50	49	107.8
red shale	sh	100	4	0.0
shale and limestone	sh, ca	60, 40	17	0.0
Total Transmissivity:				1092.5

**Table 3:** Lithology, KGS Well ID 19362

Driller's Description	Synonymy Codes	Percentages	Saturated Thickness (Feet)	Transmissivity (feet <sup>2</sup> /day)
top soil				
fine sand				
brown sandy clay				
medium to coarse gravel				
fine to medium sand and gravel (loose)				
brown sandy clay				
fine to medium sand and gravel (loose)				
fine to medium sand and gravel streaks of clay 10% loose				
brown sandy clay				
fine to medium sand and gravel (loose)				
fine to medium sand and gravel streaks of clay 10% loose				
brown sandy clay				
fine to medium sand and gravel (loose)	fmsnd, g	60, 40	16	2057.6
brown sandy clay	sc	100	24	105.6
fine to medium sand and fine gravel streaks of clay 10% loose	fmsnd, fg, c	50, 40, 10	9	1141.7
fine to medium sand and gravel streaks of clay 30% tight	fmsnd, g, c	40, 30, 30	21	2005.5
fine to medium sand and gravel streak of clay 10% loose	fmsnd, g, c	50, 40, 10	18	2283.3
brown sandy clay	sc	100	52	228.8
fine to medium sand and gravel and brown rock (loose)	fmsnd, g, r	50, 30, 20	4	387.8
brown clay	c	100	13	0.0
yellow clay	c	100	1	0.0
shale	sh	100	2	0.0
Total Transmissivity:				8210.3

**Table 4: Lithology, KGS Well ID 19364**

Driller's Description	Synonymy Codes	Percentages	Saturated Thickness (Feet)	Transmissivity (feet <sup>2</sup> /day)
top soil				
fine sand				
brown sandy clay				
fine to medium sand and gravel				
brown sandy clay				
brown clay				
fine to medium sand and gravel streaks of clay 30% tight				
brown clay				
fine to medium sand and gravel streaks of clay 40%				
fine to medium sand and gravel (loose)				
fine to medium sand and gravel streaks of clay 10% loose				
fine to medium sand and gravel streaks of brown rock (loose)				
fine to medium sand and gravel (loose)				
fine to medium sand and gravel streaks of clay 10%	fmsnd, g, c	50, 40, 10	6	762.6
fine to medium sand and gravel (loose)	fmsnd, g	60, 40	14	1800.4
brown sandy clay	sc	100	9	39.6
fine to medium sand and gravel (loose)	fmsnd, g	60, 40	6	771.6
brown sandy clay	sc	100	45	198.0
fine to medium sand and gravel streaks of clay 10% loose	fmsnd, g, c	50, 40, 10	9	1143.9
brown clay	c	100	83	0.0
brown and yellow clay	c	100	9	0.0
shale	sh	100	4	0.0
<b>Total Transmissivity:</b>				<b>4716.1</b>

**Table 5: Lithology, KGS Well ID 19361**

Driller's Description	Synonymy Codes	Percentages	Saturated Thickness (Feet)	Transmissivity (feet <sup>2</sup> /day)
top soil fine sand	Above water surface			
brown clay				
medium coarse gravel				
brown sandy clay				
fine to medium sand and gravel				
brown sandy clay				
fine to medium sand and gravel				
brown sandy clay gravel streak				
medium coarse gravel (loose)				
brown sandy clay				
fine to medium sand and gravel				
brown sandy clay	sc	100	16	70.4
fine to medium sand and gravel (loose)	fmsnd, g	60, 40	6	771.6
light brown sandy clay sticky	sc	100	18	79.2
fine to medium sand and fine gravel	fmsnd, fg	60, 40	9	1157.4
fine to medium sand 10% clay (tight)	fmsnd, c	90, 10	17	229.5
brown sandy clay sticky	sc	100	35	154.0
brown sandy clay	sc	100	67	294.8
brown sandy clay brown rock mixed	sc, r	50, 50	10	22.0
brown sandy clay 20% brown rock	sc, r	80, 20	10	35.2
medium coarse brown rock (loose)	r	100	7	0.0
brown clay	c	100	9	0.0
brown red yellow clay hard	c	100	6	0.0
shale	sh	100	8	0.0
<b>Total Transmissivity:</b>				<b>5000.3</b>

**Table 6:** Lithology, KGS Well ID 420071

Driller's Description	Synonymy Codes	Percentages	Saturated Thickness (Feet)	Transmissivity (feet <sup>2</sup> /day)
topsoil				
fine sand - loose				
brown clay				
fine to medium sand and gravel - some coarse				
brown clay				
fine to medium sand and gravel - some coarse with streaks of brown clay				
brown clay				
fine to medium sand and gravel - some coarse				
brown clay with streaks of sand and gravel				
fine to medium sand and gravel				
fine sand with sandy brown clay mixed				
fine to medium sand and gravel				
brown sandy clay with streaks of sand				
fine to medium sand and gravel				
brown clay				
fine to medium sand and gravel - some coarse				
brown clay				
fine to medium sand and gravel with streaks of brown clay 1%				
brown clay				
fine to medium sand and gravel with streaks of brown clay 10%	fmsnd, g, c	50, 40, 10	19	2414.9
brown clay with streaks of sand and gravel 20% gravel	c, snd, g	60, 20, 20	82	5936.8
brown rock, yellow clay and brown clay mixed	r	100	12	0.0
red clay - 300 pull down	c	100	5	0.0
yellow clay - 300 pull down	c	100	7	0.0
hard brown clay and gray shale - some brown rock 10% - 300 pull down	c	100	27	0.0
Total Transmissivity:				8351.7

**Table 7: Lithology, KGS Well ID 19404**

Driller's Description	Synonymy Codes	Percentages	Saturated Thickness (Feet)	Transmissivity (feet <sup>2</sup> /day)
top soil				
brown clay				
medium coarse gravel 10% clay				
brown sandy clay				
fine to medium sand and gravel (loose)				
brown sandy clay				
fine to medium sand and fine gravel				
fine to medium sand and gravel (loose)				
brown sandy clay				
fine to medium sand and gravel				
fine to medium sand and gravel streak of medium coarse gravel (loose)				
fine to medium sand and gravel streak of medium coarse gravel 10% clay				
fine to medium sand and gravel 10% clay				
brown sandy clay				
fine to medium sand and gravel				
Above water surface				
brown sandy clay	sc	100	14	61.6
fine sand (loose)	fsnd	100	6	90.0
brown sandy clay	sc	100	26	114.4
fine to medium sand and gravel (tight)	fmsnd, g	60, 40	14	1800.4
fine sand 10% clay tight	fsnd, c	90, 10	19	256.5
brown sandy clay brown rock and gravel streak	sc, r, g	50, 40, 10	19	609.9
brown yellow clay mixed with brown rock	c	100	7	0.0
yellow clay and shale	c	100	15	0.0
<b>Total Transmissivity:</b>				<b>2932.8</b>



**Table 8:** Lithology, KGS Well ID 19403

Driller's Description	Synonymy Codes	Percentages	Saturated Thickness (Feet)	Transmissivity (feet <sup>2</sup> /day)
top soil fine sand				
brown clay				
medium coarse gravel 10% clay				
brown clay				
fine to medium sand and gravel				
brown sandy clay				
fine to medium sand and gravel				
brown sandy clay small streak of gravel				
fine to medium sand and gravel				
fine to medium sand and gravel hard streak				
brown sandy clay 15 % gravel				
brown sandy clay				
fine to medium sand and gravel				
brown sandy clay				
brown sandy clay 10% gravel				
Above water surface				
brown sandy clay mixed with white rock	sc, r	50, 50	23	50.6
fine to medium sand and gravel	fmsnd, g	60, 40	13	4671.8
brown clay	c	100	12	0.0
fine sand	fsnd	100	5	75.0
fine to medium sand and gravel small clay streak (loose)	fmsnd, g, c	50, 40, 10	18	2287.8
brown sandy clay	sc	100	11	48.4
fine to medium sand	fmsnd	100	17	255.0
brown sandy clay	sc	100	16	70.4
brown yellow clay brown rock (hard)	c	100	24	0.0
shale	sh	100	6	0.0
Total Transmissivity:				4459.0

**Table 9: Lithology, KGS Well ID 532678**

Driller's Description	Synonymy Codes	Percentages	Saturated Thickness (Feet)	Transmissivity (feet <sup>2</sup> /day)
sandy top soil				
sandy clay				
fine-medium-coarse sand and small-medium gravel				
sandy clay				
fine-medium-coarse sand and small-medium gravel				
sandy clay				
fine-medium-coarse sand				
fine-medium-coarse sand with clay layers				
fine-medium-coarse sand with clay layers				
sticky sandy clay				
caliche and lime rock				
fine-medium-coarse sand with brown rock				
sandy clay				
fine-medium-coarse sand with brown rock				
sandy clay				
fine-medium-coarse sand and few small brown rock	snd, r	90, 10	17	963.9
sandy clay	sc	100	3	13.2
fine-medium-coarse sand	snd	100	8	504.0
clay	c	100	19	0.0
fine-medium sand	fmsnd	100	13	195.0
clay	c	100	12	0.0
fine-medium sand	fmsnd	100	9	135.0
sticky clay	c	100	30	0.0
fine sand	fsnd	100	9	135.0
soapstone	ca	100	7	0.0
sandstone with brown rock	ds, r	70, 30	59	181.7
shale with couple sandstone ledges	sh, ds	90, 10	72	31.7
<b>Total Transmissivity:</b>				<b>2159.5</b>

**Table 10: Lithology, KGS Well ID 349139**

Driller's Description	Synonymy Codes	Percentages	Saturated Thickness (Feet)	Transmissivity (feet <sup>2</sup> /day)
top soil				
brown sandy clay				
brown clay				
fine to medium sand and gravel with some coarse				
brown clay				
brown sandy clay				
fine to medium sand and gravel				
brown sandy clay				
fine to medium sand and gravel				
brown clay				
fine to medium sand and gravel				
brown clay				
fine to medium sand and gravel - 10% clay	fmsnd, g, c	50, 40, 10	6	762.6
brown clay	c	100	32	0.0
brown clay with small gravel streaks	c, g	80, 20	11	657.8
brown clay	c	100	52	0.0
fine sand	fsnd	100	5	75.0
fine to medium sand	fmsnd	100	11	165.0
brown sandy clay	sc	100	17	74.8
brown clay	c	100	24	0.0
yellow clay	c	100	5	0.0
shale	sh	100	3	0.0
			<b>Total Transmissivity:</b>	<b>1735.2</b>

**Table 11: Lithology, KGS Well ID 19408**

Driller's Description	Synonymy Codes	Percentages	Saturated Thickness (Feet)	Transmissivity (feet <sup>2</sup> /day)
top soil fine sand				
brown clay				
medium coarse gravel 10% clay				
brown sandy clay				
fine to medium sand and gravel				
brown sandy clay				
fine to medium sand and gravel (loose)				
fine to medium sand and gravel hard hard				
brown sandy clay				
fine to medium sand and gravel				
brown sandy clay				
fine to medium sand and gravel				
brown sandy clay brown rock (no good)	sc, r	60, 40	2	5.3
brown sandy clay	sc	100	82	3660.8
fine to medium sand fine sand	fmsnd	100	12	180.0
brown sandy clay	sc	100	4	17.6
brown clay brown rock	c	100	13	0.0
brown yellow clay brown rock hard	c	100	24	0.0
shale	sh	100	8	0.0
Total Transmissivity:				563.7

**Table 12: Lithology, KGS Well ID 423101**

Driller's Description	Synonymy Codes	Percentages	Saturated Thickness (Feet)	Transmissivity (feet <sup>2</sup> /day)
topsoil				
brown sandy clay				
brown clay				
fine to medium sand and gravel				
fine to medium sand and gravel - some coarse				
brown clay				
fine to medium sand and gravel - 10% clay				
brown sandy clay				
fine to medium sand and fine gravel				
fine to medium sand and gravel with clay streaks				
	Above water surface			
brown clay	c	100	10	0.0
brown sandy clay	c	100	15	66.0
brown clay - sticky	c	100	40	0.0
brown clay	c	100	15	0.0
fine to medium sand	fmsnd	100	2	30.0
brown clay with streaks of gravel	c, g	80, 20	16	956.8
brown clay	c	100	48	0.0
brown rock	r	100	2	0.0
brown yellow clay	c	100	6	0.0
yellow clay	c	100	4	0.0
shale - hard pull down	sh	100	18	0.0
Total Transmissivity:				1052.8

**Table 13:** This drawdown evaluated at File No. 29941-D2 ID4; T = 3,685 ft<sup>2</sup>/day, S = 0.00128

Scenario	Distance (FT)	Pump Rate (GPM)	Volume (AF)	Drawdown (FT)	Drawdown (%ST)
Proposed	4739.1	1162.0	272.0	16.3	11.1%
Baseline	5222.3	400.0	238.1	8.4	5.7%
			Net:	7.9	5.4%

**Table 14:** This drawdown evaluated at File No. 28623-D1; T = 3,685 ft<sup>2</sup>/day, S = 0.00128

Scenario	Distance (FT)	Pump Rate (GPM)	Volume (AF)	Drawdown (FT)	Drawdown (%ST)
Proposed	4415.6	1162.0	272.0	17.0	11.6%
Baseline	4477.5	400.0	238.1	8.9	6.1%
			Net:	8.1	5.5%

**Table 15:** This drawdown evaluated at File No. 29941-D2 ID3; T = 3,685 ft<sup>2</sup>/day, S = 0.00128

Scenario	Distance (FT)	Pump Rate (GPM)	Volume (AF)	Drawdown (FT)	Drawdown (%ST)
Proposed	2442.2	1162.0	272.0	22.6	15.4%
Baseline	2927.1	400.0	238.1	10.3	7.0%
			Net:	12.3	8.4%

**Table 16:** This drawdown evaluated at File No. 29938-D2; T = 3,685 ft<sup>2</sup>/day, S = 0.00128

Scenario	Distance (FT)	Pump Rate (GPM)	Volume (AF)	Drawdown (FT)	Drawdown (%ST)
Proposed	2084.8	1162.0	272.0	24.1	16.5%
Baseline	2214.6	400.0	238.1	11.2	7.7%
			Net:	12.9	8.8%