

Appendix A1
Application for Subdivision of Land in
Jack County, Texas

1. Name of Applicant: MKG Homes

FILED FOR RECORD

2. Name of Subdivision: Bryson Estates

11:39 O'CLOCK a M

3. Designated Contact Person for Applicant:

AUG 14 2026

a. Name: Kelly Pollard

b. Address: 6749 Bennett Lawson Rd

c. City/Zip: Mansfield, TX 76063

d. Phone Number: 817-504-7830

VANESSA JAMES, County Clerk
JACK COUNTY, TEXAS

BY [Signature] DEPUTY

4. Name of all Title Owner(s) of Property to be sub-divided:

a. Name Mark Spradlin Living Trust

b. Address: 4101 W. Green oaks Blvd Ste 305-268

c. City/Zip: Arlington, TX 76016

d. Phone Number:

5. Jack County Appraisal District Tract or Parcel Identification
Number for land to be developed: 5728 Parcel 10

6. County Commissioner Precinct in which land to be developed is
located: #3 Henry Birdwell

7. Location of Land to be Developed: 20.28 acres in the N.B. Jones survey
abstract 1628 Jack County, TX

a. Legal or Mailing Address:

b. 911 Address:

c. Coordinates:

d. Topo or other suitable map depicting entire area to be
subdivided.

Appendix B

CERTIFICATE OF FIRE DEPARTMENT

THE STATE OF TEXAS

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COUNTY OF JACK

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I, JEFF JACKSON, an authorized agent of the Jack County Rural fire department, have inspected the property described as the Bayson Estate subdivision of Jack County, Texas, and I do hereby certify that the subdivision as platted will satisfy the requirements of the Jack County Subdivision Regulation, specifically sections 2.2, 2.4.3 (d), 2.5(F), of said regulation, subject to final inspection as built upon the ground.

WITNESS MY HAND AND SEAL OF OFFICE this the 31 day of July, A.D., 2026.

Asst Fire Chief
COUNTY CLERK
JACK COUNTY, TEXAS

Appendix C (1)

CERTIFICATE OF DEDICATION BY OWNER/SUBDIVIDER/developer
(When owner/subdivider/developer is an Individual)

THE STATE OF TEXAS

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COUNTY OF JACK

KNOW ALL MEN BY THESE PRESENT, that I, Mark Spradlin, owner/subdivider/developer of 20.28 acres of land out of the A-1628 Jones, NB B/K Survey, Jack County, Texas as conveyed to me by deed dated 7/29/25, and recorded in Volume _____, Page _____, Real Property Records of Jack County, Texas, **DO HEREBY SUBDIVIDE** _____ acres of land out of said Survey,

(Note: if the subdivision lies in more than one survey, determine an acreage in each survey and repeat for each original survey within the subdivision)

to be known as the Bryson Estates Subdivision, in accordance with the plat shown hereon, subject to any and all easements or restrictions heretofore granted and do hereby dedicate to the public (or "owners of the property shown hereon" for private streets) the use of the streets and easements shown hereon.

WITNESS MY HAND, this the 2 day of July, A.D., 2026.

[Signature]
(Owner/subdivider/developer's name)

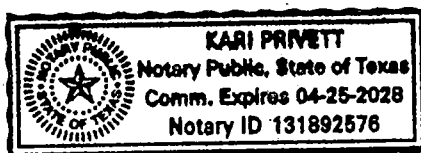
THE STATE OF TEXAS

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COUNTY OF JACK

BEFORE ME, the undersigned authority, on this day personally appeared Mark Spradlin, known by me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that (s)he executed the same for the purposes and consideration of therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 2nd day of July, A.D., 2026.



[Signature]
Notary Public in and for
The State of Texas

N/A

Appendix C (2)

CERTIFICATE OF DEDICATION BY OWNER/SUBDIVIDER/developer
(When owner/subdivider/developer is a Corporation)

THE STATE OF TEXAS §
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COUNTY OF JACK §

KNOW ALL MEN BY THESE PRESENT, that MKG Homes inc, a corporation organized and existing under the laws of the State of Texas, with its home address at 6749 Bennett Lane Red Marsfield 76063 and owner/subdivider/ or developer of 2.014 acres of land out of the Parcel ID 5728 Survey, in ABSTRACT 1628 JUNE Jack County, Texas, as conveyed to it by deed dated _____ and recorded in Volume _____, Page _____, Real Property Records of Jack County, **DOES HEREBY SUBDIVIDE** _____ acres of land out of said Survey,

(Note: if the subdivision lies in more than one survey, determine the acreage in each survey and repeat for each original survey within the subdivision)

to be known as the Bryson Estates Subdivision, in accordance with the plat shown hereon, subject to any and all easements or restrictions heretofore granted and does hereby dedicate to the public (or "owner/subdivider/developer of the property shown hereon" for private streets) the use of the streets and easements shown hereon.

IN WITNESS WHEREOF the said _____ has caused these present to be executed by its _____, thereunto duly authorized, this the _____ day of _____, A.D., 20____.

Kelly Pollard
(Name, Title)

ATTEST: Kelly Pollard President
(Name, Title)

THE STATE OF TEXAS §
§
COUNTY OF JACK §

BEFORE ME, the undersigned authority, on this day personally appeared Kelly Pollard known to me to be the person whose name is subscribed to the foregoing instrument as an officer of MKG Homes, and acknowledged to me that the foregoing was executed in such capacity as the act of said corporation for the purposes and considerations therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 31 day of _____, A.D., 2026.

Notary Public in and for the State of Texas



WAIVER OF INSPECTION AND DISCLOSURE TO OWNER

To: Stewart Title Guaranty Company ("Title Insurer")

Spiller Title ("The Company")

Re: Samuel Woodard Leatherwood, Pamela Lynee Leatherwood, and AMNAT Exchange Manager, LLC as Qualified Intermediary for Samuel Woodard Leatherwood & Pamela Leatherwood to Mark E. Spradlin, Trustee of The Mark Spradlin Living Trust

File No.: GF-25-124

Land: Tract of land containing 20.28 acres, more or less, in the N. B. Jones Survey, Abstract No. 1628, Jack County, Texas, being the same tracts conveyed to Perry and Peggy Applewhite in Volume 882, Page 599, Official Public Records of Jack County and being more particularly described as follows:

BEGINNING at a 2 inch cap on a 5/8 inch iron rod found at the Northwest base of a 4 inch steel pipe fence corner, being the Northeast corner of the said Applewhite Tracts, the Southeast corner of the Perry and Peggy Applewhite Tract recorded in Volume 700, Page 209, Official Public Records of Jack County, on the East line of the said Jones Survey and on the West line of the Valarie Kondracki Tract recorded in Volume 1072, Page 378, Official Public Records of Jack County, also being North 00° 51' 17" West a distance of 1612.70 feet from the Southeast corner of the J. D. Burk Survey;

THENCE South 00° 51' 17" East for a distance of 1006.00 feet to a 2 inch cap on a 5/8 inch iron rod set, being the Southeast corner of the said Applewhite Tracts Volume 882, Page 599, the Northeast corner of the Mark and Cindie Spradlin Tract recorded in Volume 774, Page 627, Official Public Records of Jack County, on the East line of the said Jones Survey and on the West line of the said Kondracki Tract, from which a 4 inch steel pipe fence corner bears South 15° 02' 32" East a distance of 10.73 feet;

THENCE South 89° 08' 43" West for a distance of 883.04 feet to an unmarked corner in Texas Farm Road No. 1191, being the Southwest corner of the said Applewhite Tracts Volume 882, Page 559, the Northwest corner of the said Spradlin Tract and on the West line of the said Jones Survey, from which a 2 inch cap on a 5/8 inch iron rod set bears North 89° 08' 43" East a distance of 40.00 feet;

THENCE North 00° 187' 59" West for a distance of 1006.04 feet to an unmarked corner in the said highway, being the Northwest corner of the said Applewhite Tracts Volume 882, Page 599 and the Southwest corner of the said Applewhite Tract Volume 700, Page 209, from which a 2 inch cap on a 5/8 inch iron rod found bears North 89° 08' 43" East a distance of 40.00 feet;

THENCE North 89° 08' 43" East for a distance of 873.59 feet to the place of beginning.

NOTE: The Company is prohibited from insuring the area or quantity of the land described herein. Any statement in the above legal description of the area or quantity of land is not a representation that such area or quantity is correct, but is made only for informational and/or identification purposes and does not override Item 2 of Schedule B hereof.

This Commitment has been prepared based upon the existing legal description and/or survey furnished to the Company upon placement of the request for Commitment covering the Property.

IF a new, updated, and/or corrected survey (or legal description) covering the Property is obtained prior to Closing, the Company reserves the right to make additional changes, requirements, and/or exceptions to the Commitment, as may be necessary.

1. Waiver of Inspection

Appendix D

CERTIFICATE OF COUNTY APPROVAL OF PLAT AND RECORDING

THE STATE OF TEXAS

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COUNTY OF JACK

I, Vanessa James, County Clerk of Jack County, Texas, do hereby certify that the foregoing instrument of writing with its certificate of authentication was filed for record in my office on the 14th day of August, 2026, at 11:37 o'clock a.m., and duly recorded on the 14th day of August, A.D., 2026, at 11:39 o'clock a.m., in the Real Property Records of Jack County, Texas in Volume A, Page 55.
cabinet

WITNESS MY HAND AND SEAL OF OFFICE this the 14th day of August, A.D., 2026.



Vanessa James by
COUNTY CLERK
JACK COUNTY, TEXAS

Gizelle Brooks

Appendix F

CERTIFICATE OF SURVEYOR

THE STATE OF TEXAS

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COUNTY OF JACK

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KNOW ALL MEN BY THESE PRESENT, that I, the undersigned, a Registered Professional / State Land Surveyor in the State of Texas, do hereby certify that this Plat complies with the survey related requirements of Texas law and of the Jack County Subdivision Regulations and I further certify that this plat is prepared from an actual survey of the property made under my supervision on the ground and that the corner monuments were properly placed under my supervision.

Donald R. Crowley
Registered Professional / State Land Surveyor

July 6, 2026
Date

License No. *5210*

Appendix H

AS we build homes

CERTIFICATE OF ON-SITE SEWAGE FACILITY INSPECTOR'S APPROVAL

THE STATE OF TEXAS

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COUNTY OF JACK

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KNOW ALL MEN BY THESE PRESENTS, that I, the undersigned, a Licensed On-Site Sewage Facility Inspector in the State of Texas, hereby certify that I have inspected the On-Site Sewage Facilities for this plat, and the same complies with the related requirements of the Jack County Subdivision Regulations and the TCEQ.

[Signature]
On-Site Inspector

8-6-26
Date

License No. 0336200

Seal:

[NOTE: The inspector may be required to be present for questioning at the presentation of the plat to the Commissioners Court.]

AS we build homes

TAX CERTIFICATE

Please remit payment to:
 Jack County Tax Office
 Traci Ogle, PCC, CTOP
 100 N. Main Street, Ste 209
 Jacksboro, TX 76458
 Phone: (940)567-2352

Fee: 10.00

Certificate Number: 54889

This is to certify that, after a careful check of the tax records of this office, the following delinquent taxes, penalties, interest and any known costs and expenses as provided by Tax Code Section 33.48 are due on the described property for the following taxing unit(s):

Owner Interest: 1.000000
 Owner: R975064
 SPRADLIN MARK LIVING TRUST
 MARK E SPRADLIN TTEE
 4101 W GREEN OAKS BLVD STE 305
 ARLINGTON TX 76016

Parcel ID/Seq: 5728/1
 Account #: 21628-00031-00500-000000
 Legals: AB 1628 N B JONES

Suit: No
 Acres: 20.280
 Land Value: \$ 152100
 Pers Value: \$ 0
 Imp Value: \$ 0
 Ag/Timber: \$ 1460
 HS Code:
 Cat Code: D1
 MTG/Loan: -

Property FM 1191
 Address:
 MH Label:
 MH Serial:

Abst/Subdiv: 1628
 Block: Lot:

Year	Entity	Value	Original Tax	Tax Due	Discount	Penalty/ Interest	Total Due
2025	01 - JACK COUNTY	1,460	\$5.23	\$0.00	\$0.00	\$0.00	\$0.00
2025	30 - BRYSON ISD M&O	1,460	\$9.04	\$0.00	\$0.00	\$0.00	\$0.00
2025	30IS - BRYSON ISD I&S	1,460	\$6.42	\$0.00	\$0.00	\$0.00	\$0.00
2025	61 - JACK CO HOSPITAL DIST	1,460	\$4.41	\$0.00	\$0.00	\$0.00	\$0.00
2025	63 - JACK CO WCID #1	1,460	\$0.11	\$0.00	\$0.00	\$0.00	\$0.00
2025	65 - JACK COUNTY SPECIAL	1,460	\$1.23	\$0.00	\$0.00	\$0.00	\$0.00
Totals:			\$26.44	\$0.00	\$0.00	\$0.00	\$0.00

Parcel Total: \$26.44 \$0.00 \$0.00 \$0.00 \$0.00

PAID HISTORY (CURRENT TAX YEAR) 2025

Jurisdiction	Tax	Discount	Penalty	Other Payment	Total Amount	Cod	Ref Number	Posting Date
01	\$5.23	\$(0.10)	0.00	\$0.00	\$5.13		1258	11/14/2025
30	\$9.04	\$0.00	0.00	\$0.00	\$9.04		1258	11/14/2025
30IS	\$6.42	\$0.00	0.00	\$0.00	\$6.42		1258	11/14/2025
61	\$4.41	\$(0.09)	0.00	\$0.00	\$4.32		1258	11/14/2025
63	\$0.11	\$0.00	0.00	\$0.00	\$0.11		1258	11/14/2025
65	\$1.23	\$(0.02)	0.00	\$0.00	\$1.21		1258	11/14/2025
	\$26.44	\$(0.21)	\$0.00	\$0.00	\$26.23			

If applicable, the above-described property has / is receiving special appraisal based on its use, and additional rollback taxes may become due based on the provisions of the special appraisal (Comptroller Rule 9.3040) or property omitted from the appraisal roll as described under Tax Code Section 25.21 is not included in this certificate [Tax Code Section 31.08(b)].

sign
here →

Authorized Officer of Collecting Office

07/31/2026

Date of Tax Certificate

Issued By: Front Counter

Issued To: Kelly Doyle

Issued Date: 7/31/2026 9:59:35AM



Pursuant to Tax Code Section 31.08, if a person transfers property accompanied by a tax certificate that erroneously indicates that no delinquent taxes, penalties or interest are due a taxing unit on the property or that fails to include property because of its omission from an appraisal roll, the taxing unit's tax lien on the property is extinguished and the purchaser of the property is absolved of liability to the taxing unit for delinquent taxes, penalties or interest on the property or for taxes based on omitted property. The person who was liable for the tax for the year the tax was imposed or the property was omitted remains personally liable for the tax and for any penalties or interest.

A tax certificate issued through fraud of collusion is void.

Jack County Tax Office
Trasi Ogle, PCC, CTOP
100 N. Main Street, Ste 209
Jacksboro, TX 76458
(940)567-2352

TAX RECEIPT

This is a receipt. Do not pay.

PAID BY

KELLY DOYLE

Property owner as of payment:

Current Statement #: 0

Posting ID: 107312026100038

R9999999 - MISC FEES

Owner Interest: 0.000000

Agent:

Property Information	
Parcel ID/Sequence: 9999999/1 Account: 9999999 Category Code: Acres: 0.0000 MH Label Number: MH Serial Number: Location Code: MISC Jurs - MISC 01 32 60 61 65	Legal: X Situs: 0

Year	Jurisdiction	Tax Rate	Tax Value	Payment Type	Base Tax	Dis/Pen/Other	Total Amount
2025	CERTIFICATE FEE	0.00000000	\$0	Full Payment	\$10.00	\$0.00	\$10.00
2025 Year Totals:					\$10.00	\$0.00	\$10.00
Parcel 9999999 Totals:					\$10.00	\$0.00	\$10.00
Payment Ref Totals:					\$10.00	\$0.00	\$10.00
DPI Year/Month: 202607							
Clerk: front		Payment Type: Cash		Payment Ref No: Certificate Misc Fee			
Effective Payment Date: 07/31/2026		Deposit Date: 07/31/2026		Drawer User/Number: Front -10 -4833			

Jack County Tax Office TAX CERTIFICATE PAID REPORT

Posting Date: 07/31/2026

Issued To:	Certificate #:	Parcel Id	Account:	Amount:	Posted Date:
Kelly Doyle	54889	5728	21628-00031-00500-0000	10.00	07/31/2026

Posting Date:	Certificates Posted:	Total Amount:	Paid by:
07/31/2026	1	\$10.00	KELLY DOYLE

JURISDICTIONS:

Total Fee : 10.00

Jurisdiction	Fee
01 JACK COUNTY	2.00
30 BRYSON ISD M&O	2.00
61 JACK CO HOSPITAL DIST	2.00
63 JACK CO WCID #1	2.00
65 JACK COUNTY SPECIAL	2.00



**Nortex
Regional
Planning
Commission**

**9-1-1 EMERGENCY SERVICES
P. O. BOX 5144
WICHITA FALLS, TX 76307-5144**

JULY 13, 2026

MKG HOMES
6749 BENNETT LAWSON RD
MANSFIELD, TX 76063

Recently, you contacted our office requesting or inquiring about a 9-1-1 address. Listed below is the 9-1-1 address assigned to the location you inquired about.

YOUR ASSIGNED 9-1-1 AND PHYSICAL ADDRESS: LOT 1

**3407 FM 1191 S
BRYSON, TX 76427**

Upon receipt of this letter, you should display this address on or near your residence or business and your driveway, so that it will be clearly visible to emergency service personnel. This will enable emergency service personnel to locate you easily in the event that you require their assistance. Place your new house number on your mailbox as well, to assist the Postal Service delivering your mail. In the event your driveway location changes, this address will also change.

Please contact this office if you have questions concerning this address assignment.

Respectfully,

Julie A. Pascal
911 Geographic Information Specialist

Archer, Baylor, Clay, Cottle, Foard, Hardeman, Jack, Montague, & Young Counties



**Nortex
Regional
Planning
Commission**

**9-1-1 EMERGENCY SERVICES
P. O. BOX 5144
WICHITA FALLS, TX 76307-5144**

JULY 13, 2026

MKG HOMES
6749 BENNETT LAWSON RD
MANSFIELD, TX 76063

Recently, you contacted our office requesting or inquiring about a 9-1-1 address. Listed below is the 9-1-1 address assigned to the location you inquired about.

YOUR ASSIGNED 9-1-1 AND PHYSICAL ADDRESS: LOT 2

**3425 FM 1191 S
BRYSON, TX 76427**

Upon receipt of this letter, you should display this address on or near your residence or business and your driveway, so that it will be clearly visible to emergency service personnel. This will enable emergency service personnel to locate you easily in the event that you require their assistance. Place your new house number on your mailbox as well, to assist the Postal Service delivering your mail. In the event your driveway location changes, this address will also change.

Please contact this office if you have questions concerning this address assignment.

Respectfully,

Julie A. Pascal
911 Geographic Information Specialist

Archer, Baylor, Clay, Cottle, Foard, Hardeman, Jack, Montague, & Young Counties



**Nortex
Regional
Planning
Commission**

**9-1-1 EMERGENCY SERVICES
P. O. BOX 5144
WICHITA FALLS, TX 76307-5144**

JULY 13, 2026

MKG HOMES
6749 BENNETT LAWSON RD
MANSFIELD, TX 76063

Recently, you contacted our office requesting or inquiring about a 9-1-1 address. Listed below is the 9-1-1 address assigned to the location you inquired about.

YOUR ASSIGNED 9-1-1 AND PHYSICAL ADDRESS: LOT 3

**3453 FM 1191 S
BRYSON, TX 76427**

Upon receipt of this letter, you should display this address on or near your residence or business and your driveway, so that it will be clearly visible to emergency service personnel. This will enable emergency service personnel to locate you easily in the event that you require their assistance. Place your new house number on your mailbox as well, to assist the Postal Service delivering your mail. In the event your driveway location changes, this address will also change.

Please contact this office if you have questions concerning this address assignment.

Respectfully,

Julie A. Pascal
911 Geographic Information Specialist

Archer, Baylor, Clay, Cottle, Foard, Hardeman, Jack, Montague, & Young Counties



**Nortex
Regional
Planning
Commission**

**9-1-1 EMERGENCY SERVICES
P. O. BOX 5144
WICHITA FALLS, TX 76307-5144**

JULY 13, 2026

MKG HOMES
6749 BENNETT LAWSON RD
MANSFIELD, TX 76063

Recently, you contacted our office requesting or inquiring about a 9-1-1 address. Listed below is the 9-1-1 address assigned to the location you inquired about.

YOUR ASSIGNED 9-1-1 AND PHYSICAL ADDRESS: LOT 4

**3471 FM 1191 S
BRYSON, TX 76427**

Upon receipt of this letter, you should display this address on or near your residence or business and your driveway, so that it will be clearly visible to emergency service personnel. This will enable emergency service personnel to locate you easily in the event that you require their assistance. Place your new house number on your mailbox as well, to assist the Postal Service delivering your mail. In the event your driveway location changes, this address will also change.

Please contact this office if you have questions concerning this address assignment.

Respectfully,

Julie A. Pascal
911 Geographic Information Specialist

Archer, Baylor, Clay, Cottle, Foard, Hardeman, Jack, Montague, & Young Counties



**Nortex
Regional
Planning
Commission**

**9-1-1 EMERGENCY SERVICES
P. O. BOX 5144
WICHITA FALLS, TX 76307-5144**

JULY 13, 2026

MKG HOMES
6749 BENNETT LAWSON RD
MANSFIELD, TX 76063

Recently, you contacted our office requesting or inquiring about a 9-1-1 address. Listed below is the 9-1-1 address assigned to the location you inquired about.

YOUR ASSIGNED 9-1-1 AND PHYSICAL ADDRESS: LOT 5

**3489 FM 1191 S
BRYSON, TX 76427**

Upon receipt of this letter, you should display this address on or near your residence or business and your driveway, so that it will be clearly visible to emergency service personnel. This will enable emergency service personnel to locate you easily in the event that you require their assistance. Place your new house number on your mailbox as well, to assist the Postal Service delivering your mail. In the event your driveway location changes, this address will also change.

Please contact this office if you have questions concerning this address assignment.

Respectfully,

Julie A. Pascal
911 Geographic Information Specialist

Archer, Baylor, Clay, Cottle, Foard, Hardeman, Jack, Montague, & Young Counties

Appendix S
Development Fees and Receipt

The following are a list of development fees for Jack County. These fees are subject to change.

Plat without a designated floodplain: \$2000.00 + \$10.00 per lot

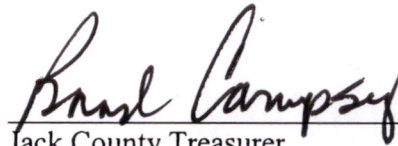
Plat in a designated floodplain: \$2500.00 + \$10.00 per lot

Final Plat: \$250.00

Total Development Fees due with Application:	\$	<u>2300.⁰⁰</u>
Inspection Fees pursuant to Section 2.8.4	\$	_____
Total Fees due:	\$	_____

Receipt of Development and Inspection Fees:

On this date, the sum of \$ ^{\$}2300.⁰⁰ was received and receipt given by the Treasurer of Jack County.



Jack County Treasurer

MKG HOMES, INC.
OPERATING ACCOUNT
 6749 BENNETT LAWSON ROAD
 MANSFIELD, TX 76063

CITIZENS NATIONAL BANK OF TEXAS
 88-162/1119

8/14/2026

PAY TO THE
 ORDER OF Jack County

\$ **2,300.00

Two Thousand Three Hundred and 00/100*****

DOLLARS

Jack County
 100 N. Main St Ste 208
 Jacksboro, TX 76458



[Handwritten Signature]
 AUTHORIZED SIGNATURE

MEMO

⑈001365⑈ ⑆111901629⑆ ⑈120111955⑈

MKG HOMES, INC. OPERATING ACCOUNT

1365

Jack County					8/14/2026	
Date	Type	Reference	Original Amt.	Balance Due	Discount	Payment
8/3/2026	Bill	plat fees	2,300.00	2,300.00		2,300.00
					Check Amount	2,300.00

CNB OPERATING

2,300.00

MKG HOMES, INC. OPERATING ACCOUNT

1365

Jack County					8/14/2026	
Date	Type	Reference	Original Amt.	Balance Due	Discount	Payment
8/3/2026	Bill	plat fees	2,300.00	2,300.00		2,300.00
					Check Amount	2,300.00

CNB OPERATING

2,300.00



Bryson Estates Groundwater Availability Study

TCEQ Chapter 230

Prepared for:

MKG Homes

By:

Bryan Erwin, PE

PLAT ATTESTING FORM

Title 30 Texas Administrative Code, Section 230.1(b) and (c)(2)

Name of Proposed Subdivision:

Property Owner's Contact Information

Name: Mark Spradlin Living Trust

Address: P.O. BOX 4101 GREEN OAKS BLVD STE 305-268 ARLINGTON, TX 76016

Phone: 817-829-7958

Email: kelly@mkghomes.net

Plat Applicant's Contact Information

Name: MKG Homes - Kelly Pollard

Address: 6749 Bennett Lawson Road, Mansfield, TX 76063

Phone: 817-634-3935

Email: info@mkghomes.net

Required Additional Information:

Has this Plat Attesting Form (TCEQ-20983) and the Certification of Groundwater Availability for Platting Form (TCEQ-20982) been provided to the following? Please check "YES" to verify:

1. Municipal or county authority ☒ YES
2. Executive administrator of the Texas Water Development Board ☒ YES

Please check "YES" or "N/A" to verify:

3. Applicable groundwater conservation district(s) ☐ YES ☒ N/A

Name of GCD(s) - indicate N/A if not applicable: N/A

Have copies of the information, estimates, data, calculations, determinations, and statements required by 30 TAC Sections 230.8 through 230.11 been provided to the following? Please check "YES" to confirm:

4. Executive administrator of the Texas Water Development Board ☒ YES

Plat Attesting Form

Please check "YES" or "N/A" to verify:

5. Applicable Groundwater Conservation District(s) (GCD) ☐ YES ☒ N/A

Name of GCD(s) - indicate N/A if not applicable: N/A

TWDB Contact Information:

Executive Administrator
Texas Water Development Board
Groundwater Resources Division
P.O. Box 13231
Austin, Texas 78711-3231

Contact and other information for the Texas Water Development Board may be accessed on the following webpage:

- www.twdb.texas.gov

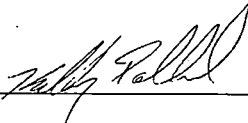
Contact and other information for GCDs within the state may be accessed on the following webpages:

- https://www.twdb.texas.gov/groundwater/conservation_districts/index.asp
- <https://texasgroundwater.org/resources/gcd-index/>

Certification Statement:

"I, Kelly Pollard, the Plat Applicant, attest that the Plat Attesting Form (TCEQ-20983), the Certification of Groundwater Availability for Platting Form (TCEQ-20982), and copies of the information, estimates, data, calculations, and determinations required by Title 30, Texas Administrative Code, Chapter 230 have been provided."

Signature



Date 6/5/2026



CERTIFICATION OF GROUNDWATER AVAILABILITY FOR PLATTING FORM

Use of this form: This form was developed by TCEQ consistent with 30 Texas Administrative Code, Chapter 230. The purpose of the form is to certify that adequate groundwater is available beneath a subdivision if that groundwater will be used to supply water to the subdivision.

The form must be submitted by plat applicants and certified by a Texas licensed professional engineer or Texas licensed professional geoscientist as part of an application to a platting authority. The platting authority could be a municipal authority pursuant to Texas Local Government Code (TLGC) Section 212.0101 or a county authority pursuant to TLGC 232.0032.

The form and 30 TAC Chapter 230 do not replace state or federal requirements applicable to public drinking water systems nor the authority of counties or groundwater conservation districts under the Texas Water Code.

For any questions regarding this form, contact the TCEQ Water Availability Division, Groundwater Planning and Assessment Team at GPAT@tceq.texas.gov or by phone at (512) 239-4600.



Certification of Groundwater Availability for Platting Form

Administrative Information, 30 TAC 230.4

1. Name of Proposed Subdivision:

Bryson Estates

2. Any Previous Names that Identify the Tract of Land:

20.28 acres tract or parcel of land being situated in the N. B. Jones Survey, Abstract 1628, in Jack County, Texas

3. Property Owner(s) Information:

Name: Mark Spradlin Living Trust

Address: P.O. BOX 4101 GREEN OAKS BLVD STE 305-268 ARLINGTON, TX 76010

Phone: 817-829-7958

Fax: _____

Email: kelly@mkghomes.net

4. Plat Applicant Information:

Name: MKG Homes - Kelly Pollard

Address: 6749 Bennett Lawson Road, Mansfield, TX 76063

Phone: 817-634-3935

Fax: _____

Email: info@mkghomes.net

5. Licensed Professional Engineer or Geoscientist Information:

Name: Bryan Erwin, PE

Address: 6991 FM 4 Jacksboro, TX 76458

Phone: 940-567-5708

Fax: _____

Email: bryan@erwindrilling.com

Certificate / License Number: Texas PE 109851

6. Location and Property Description of Proposed Subdivision:

3525 FM 1191, Bryson TX

20.28 acres tract or parcel of land being situated in the N. B. Jones Survey, Abstract 1628, in Jack County, Texas

7. Tax Assessor Parcel Number(s).

Book: _____

Map: _____

Parcel: ID 5728 Jack CAD _____

8. Groundwater Conservation District Information:

Name: N/A _____

Address: _____

Phone: _____ Fax: _____

Email: _____

Proposed Subdivision Information, 30 TAC 230.5

9. Purpose of Proposed Subdivision (single family/multi-family residential, non-residential, commercial, other):

Single Family _____

If "Other," explain:

10. Size of Proposed Subdivision (in acres): 20.28 _____

11. Number of Proposed Lots: 5 _____

12. Average Size of Proposed Lots (in acres): 3.85 _____

13. Anticipated Method of Water Distribution (check all that apply). If any options related to PWS are checked below, number 14 must be answered YES.

☐ Expansion of Existing Public Water System (PWS)

☐ New (Proposed) PWS System

☒ Individual Water Wells to Serve Individual Lots

☐ Combination of Methods (Describe below)

Description, if needed:

14. If PWS is anticipated, a written application for service for existing water providers within a one-half mile radius must be attached to this form (30 TAC 230.5(f)). Is this application for service for existing water providers attached to this form?

☐ YES ☒ N/A

15. Additional Information, if required by the municipal or county authority:

none

Projected Water Demand Estimate, 30 TAC 230.6

16. Residential Water Demand estimate at Full Build Out (includes both single family and multi-family residential): _____

- a. Number of Proposed Housing Units (single and multi-family): 5
- b. Average Number of Persons Per Housing Unit: 2.87
- c. Volume of Water Required Per Person Per Day (gallons): 101.89
- d. Water Demand Per Housing Unit Per Year (acre-feet): 0.328
- e. Total Expected Residential Water Demand Per Year (acre-feet): 1.64

17. Non-Residential Water Demand Estimate at Full Build-Out (acre-feet/year): 250

- a. Type(s) of Non-Residential Water Use(s):

Lawn irrigation and small livestock watering

- b. Water Demand Per Type Per Year (acre-feet):

50% Lawn irrigation (estimated) and 50% Small livestock watering

18. Total Water Demand Estimate at Full Build-Out (acre-feet/year): 3.04

19. Sources of Information Used for Demand Estimates:

Subdivision plat; US Census; TWDB Technical Note 12-01 The Grass Is Always Greener...
Outdoor Residential Water Use in Texas

General Groundwater Resource Information, 30 TAC 230.7

20. Identify and describe the aquifer(s) that underlie(s) the proposed subdivision, using Texas Water Development Board (TWDB) names:

Cross Timbers minor aquifer. (ref TWDB R308 for Jack County)

Note: Users may refer to the most recent State Water Plan, Groundwater Management Area Desired Future Condition adoption, and Groundwater Availability Model to obtain general information pertaining to the state's aquifers. The State Water Plan is available on TWDB's webpage at:
<https://www.twdb.texas.gov/waterplanning/swp/index.asp>

Obtaining Site-Specific Groundwater Data, 30 TAC 230.8

Answer by checking YES or NO for each of the following questions. For any "NO" response, please provide an explanation in question number 45.

21. ☒ YES ☐ NO Have all known existing, abandoned, and inoperative wells within the proposed subdivision been located, identified, and shown on the plat as required under 30 TAC 230.8(b)?
22. ☒ YES ☐ NO Were the geologic and groundwater resource factors identified under 30 TAC 230.7(b) considered in planning and designing the aquifer test required under 30 TAC 230.8(c)?
23. ☒ YES ☐ NO Have test and observation wells been located, drilled, logged, completed, developed, and shown on the plat as required by 30 TAC 230.8(c)(1) through (4)?
24. ☒ YES ☐ NO Have all reasonable precautions been taken to ensure that contaminants do not reach the subsurface environment and that undesirable groundwater has been confined to the zone(s) of origin (30 TAC 230.8(c)(5))?
25. ☒ YES ☐ NO Has an aquifer test been conducted which meets the requirements of 30 TAC 230.8(c)(1) and (6)?
26. ☐ YES ☒ NO Were existing wells or previous aquifer test data used?
27. ☐ YES ☒ NO If YES to number 26, did they meet the requirements of 30 TAC 230.8(c)(7)?
If NO to number 26, check ☒ N/A.
28. ☐ YES ☒ NO Were additional observation wells or aquifer testing utilized?

Note: If the anticipated method of water distribution for the proposed subdivision is expansion of an existing public water system (PWS) or a new PWS, site-specific groundwater data shall be developed under the requirements of 30 TAC, Chapter 290, Subchapter D, *Rules and Regulations for Public Water Systems*, and the applicable information and correspondence developed in meeting those requirements shall be attached to this form pursuant to 30 TAC 230.8(a). Per 230.8(c) the aquifer test must provide sufficient information to allow evaluation of each aquifer that is being considered as a source of residential and non-residential water supply for the proposed subdivision.

Determination of Groundwater Quality, 30 TAC 230.9

Answer by checking YES or NO for each of the following questions. For any "NO" response, please provide an explanation in question number 45.

29. ☒ YES ☐ NO Have water quality samples been collected as required by 30 TAC 230.9?
30. ☒ YES ☐ NO Has a water quality analysis been performed which meets the requirements of 30 TAC 230.9?

Determination of Groundwater Availability, 30 TAC 230.10

Complete the following by filling in the blanks or answering YES, NO, or N/A as applicable. For any NO or N/A, please provide explanation on number 45.

31. ☒ YES ☐ NO Have the aquifer parameters required by 30 TAC 230.10(c) been determined?

32. If YES, provide the aquifer parameters as determined, including units as applicable (check here if a. through h. below are N/A: ☐):

a. Rate of yield and drawdown: 14 gpm with 96 ft drawdown after 24 hrs

b. Specific capacity: 0.15

c. Efficiency of the pumped well: >95%

d. Transmissivity: 16.21 ft²/d

e. Coefficient of storage: 0.00001332

f. Hydraulic conductivity: 0.37 ft/d

g. Were any recharge or barrier boundaries detected? ☐ YES ☒ NO

If YES, please describe:

h. Thickness of aquifer(s): 44 ft

33. ☒ YES ☐ NO Have time-drawdown determinations been calculated as required under 30 TAC 230.10(d)(1)?
34. ☒ YES ☐ NO Have distance-drawdown determinations been calculated as required under 30 TAC 230.10(d)(2)?
35. ☒ YES ☐ NO Have well interference determinations been made as required under 30 TAC 230.10(d)(3)?
36. ☒ YES ☐ NO Has the anticipated method of water delivery, the annual groundwater demand estimates at full build out, and geologic and groundwater information been taken into account in making these determinations?
37. ☒ YES ☐ NO Has the water quality analysis required under 30 TAC 230.9 been compared to primary and secondary public drinking water standards as required under 30 TAC 230.10(e)?
38. ☐ YES ☒ NO Does the concentration of any analyzed constituent exceed the standards?

If YES, list the constituent(s) and concentration measure(s) that exceed standards:

SEE ATTACHED TABLE and Q45

Groundwater Availability and Usability Statements, 30 TAC 230.11(a) and (b)

Complete the following by filling in the blanks or answering YES/NO as applicable. For any "NO" response, please provide an explanation in question number 45:

39. Drawdown of the aquifer at the pumped well(s) is estimated to be 45 feet over a ten-year period and 47 feet over a 30-year period.
40. Drawdown of the aquifer at the property boundary is estimated to be 23 feet over a ten-year period and 25 feet over a 30-year period.
41. The distance from the pumped well(s) to the outer edges of the cone(s)-of-depression is estimated to be 6,046 feet over a ten-year period and 10,471 feet over a 30-year period.
42. The recommended minimum spacing limit between wells is 200 feet with a recommended well yield of 6 gallons per minute per well.
43. Available groundwater is of sufficient quality to meet the intended use of the platted subdivision. ☒ YES ☐ NO
44. The groundwater availability determination does not consider the following conditions (identify any assumptions or uncertainties that are inherent in the groundwater availability determination):

Variations in the aquifer properties over the entire property. Possible shallow water with hydraulic connectivity with the nearby lake and extensive irrigation. Cont. on Q45

45. Provide explanation for any NO or N/A answered in any section above, and include the associated question number:

Question 38:

Based on the water quality analysis, the following constituents exceeded the listed standards: Chloride: 377 mg/L Iron: 0.968 mg/L Total Dissolved Solids: 1,280 mg/L Total Coliform Bacteria: Present The sample did not detect E. coli. The well should be disinfected and re-tested for total coliform. Treatment is expected to include water softening and/or iron filtration for iron and manganese, with reverse osmosis treatment for potable use to reduce TDS and chloride this could be done at point of use as TDS only slightly exceeds TCEQ standards.

Question 44:

Groundwater production appears to vary across the subdivision. The southern test well encountered more variable sand intervals and exhibited lower production than the northern test well, indicating changing aquifer conditions across the site. Based on the available data, domestic water demands are expected to be met; however, irrigation capacity may be limited in some areas due to localized variations in aquifer productivity. Additional water-bearing zones were encountered at shallower depths during drilling but were not included in the aquifer test or groundwater availability calculations. Development of these zones could supplement groundwater production and may affect the groundwater level responses and predictions presented in this report.

Certification of Groundwater Availability (30 TAC 230.11(c))

Must be signed by a Texas Licensed Professional Engineer or a Texas Licensed Professional Geoscientist.

46. I, Bryan Erwin, a

☒ Texas Licensed Professional Engineer,

☐ Texas Licensed Professional Geoscientist,

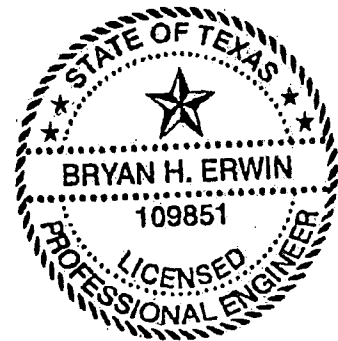
license number 109851, based on best professional judgment, current groundwater conditions, and the information developed and presented in this form, certify that adequate groundwater is available from the underlying aquifer(s) to supply the anticipated use of the proposed subdivision.

Signature

Bryan Erwin

Date 6/5/2026

(affix seal)



STATE OF TEXAS WELL REPORT for Tracking #724706

Owner: **MKG Homes** Owner Well #: **1**
Address: **6749 Bennett Lawson Rd** Grid #: **20-61-3**
Mansfield, TX 76063
Well Location: **TBD Birdwell Rd** Latitude: **33° 06' 43" N**
Bryson, TX 76427 Longitude: **098° 23' 05.4" W**
Well 1 Elevation: **1235 ft. above sea level**
Well County: **Jack**
Number of Wells Drilled: **2**

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: **5/4/2026** Drilling End Date: **5/4/2026**

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	7.875	0	280

Drilling Method: **Air Rotary**

Borehole Completion: **Filter Packed**

	Top Depth (ft.)	Bottom Depth (ft.)	Filter Material	Size
Filter Pack Intervals:	200	280	Gravel	3/8

	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
Annular Seal Data:	0	4	Cement 2 Bags/Sacks
	4	10	Bentonite 2 Bags/Sacks
	190	200	Bentonite 5 Bags/Sacks

Seal Method: **Poured**

Distance to Property Line (ft.): **50+**

Sealed By: **Driller**

Distance to Septic Field or other
concentrated contamination (ft.): **None**

Variance Number: **N/A**

Distance to Septic Tank (ft.): **None**

Method of Verification: **Tape**

Surface Completion: **Surface Sleeve Installed**

Surface Completion by Driller

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **Submersible**

Well Tests: **Estimated** Yield: **30 GPM**

Water Quality:

Strata Depth (ft.)	Water Type
215 - 259	No Data

Chemical Analysis Made: **No**

Did the driller knowingly penetrate any strata which
contained injurious constituents?: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **Erwin Water Well Drilling**

**6991 FM 4
Jacksboro, TX 76458**

Driller Name: **Henry Erwin**

License Number: **2555**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	3	Top Soil and Red Sandy Clay
3	10	Sand Rock
10	15	Red and Yellow Clay
15	16	Sand Rock
16	28	Gray Shale and Lime Layers
28	60	Sand Rock and Sand Layers
60	77	Sand Rock and Gray Shale Layers
77	138	Gray Shale
138	142	Sand Rock
142	170	Gray Shale
170	180	Sandy Shale
180	192	Sand and Gray Shale
192	200	Gray Shale
200	215	Sandy Shale
215	259	Sand
259	280	Gray Shale

Casing:
BLANK PIPE & WELL SCREEN DATA

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
4	Blank	New Plastic (PVC)	40	0	220
4	Screen	New Plastic (PVC)	40 0.020	220	260
4	Blank	New Plastic (PVC)	40	260	280

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

TEX. OCC. CODE Title 12, Chapter 1901.251, authorizes the owner (owner or the person for whom the well was drilled) to keep information in Well Reports confidential. The Department shall hold the contents of the well log confidential and not a matter of public record if it receives, by certified mail, a written request to do so from the owner.

Please include the report's Tracking Number on your written request.

**Texas Department of Licensing and Regulation
P.O. Box 12157
Austin, TX 78711
(512) 334-5540**

STATE OF TEXAS WELL REPORT for Tracking #724707

Owner: **MKG Homes** Owner Well #: **2**
Address: **6749 Bennett Lawson Rd** Grid #: **20-61-3**
Mansfield, TX 76063
Well Location: **TBD Birdwell Rd** Latitude: **33° 06' 40.9" N**
Bryson, TX 76427 Longitude: **098° 23' 05.3" W**
Well 2 Elevation: **1235 ft. above sea level**
Well County: **Jack**
Number of Wells Drilled: **2**

Type of Work: **New Well**

Proposed Use: **Domestic**

Drilling Start Date: **5/4/2026**

Drilling End Date: **5/4/2026**

Borehole:

<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
7.875	0	340

Drilling Method:

Air Rotary

Borehole Completion:

Filter Packed

Filter Pack Intervals:

<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Filter Material</i>	<i>Size</i>
200	340	Gravel	3/8

Annular Seal Data:

<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
0	4	Cement 2 Bags/Sacks
4	10	Bentonite 2 Bags/Sacks
190	200	Bentonite 5 Bags/Sacks

Seal Method: **Poured**

Distance to Property Line (ft.): **50+**

Sealed By: **Driller**

Distance to Septic Field or other
concentrated contamination (ft.): **None**

Variance Number: **N/A**

Distance to Septic Tank (ft.): **None**

Method of Verification: **Tape**

Surface Completion:

Surface Sleeve Installed

Surface Completion by Driller

Water Level:

No Data

Packers:

No Data

Type of Pump:

Submersible

Well Tests:

Estimated

Yield: 5 GPM

Water Quality:

Strata Depth (ft.)	Water Type
215 - 250	No Data

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which
contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: Erwin Water Well Drilling

6991 FM 4
Jacksboro, TX 76458

Driller Name: Henry Erwin

License Number: 2555

Comments: No Data

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	3	Top Soil and Red Sandy Clay
3	10	Sand Rock
10	15	Red and Yellow Clay
15	16	Sand Rock
16	28	Gray Shale and Lime Layers
28	60	Sand Rock and Sand Layers
60	77	Sand Rock and Gray Shale
77	138	Gray Shale
138	142	Sand Rock
142	170	Gray Shale
170	180	Sandy Shale
180	192	Sand and Gray Shale
192	200	Gray Shale
200	215	Sandy Shale
215	250	Sand
250	305	Gray Shale
305	325	Sandy Lime

Casing:
BLANK PIPE & WELL SCREEN DATA

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
4	Blank	New Plastic (PVC)	40	0	240
4	Screen	New Plastic (PVC)	40 0.020	240	260
4	Blank	New Plastic (PVC)	40	260	320
4	Screen	New Plastic (PVC)	40 0.020	320	340

325	340	Green Shale and Lime Layers
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IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

TEX. OCC. CODE Title 12, Chapter 1901.251, authorizes the owner (owner or the person for whom the well was drilled) to keep information in Well Reports confidential. The Department shall hold the contents of the well log confidential and not a matter of public record if it receives, by certified mail, a written request to do so from the owner.

Please include the report's Tracking Number on your written request.

**Texas Department of Licensing and Regulation
P.O. Box 12157
Austin, TX 78711
(512) 334-5540**

FM 1191 S

FM 1191 S

FM 1191 S

230 ft

340 ft

Measurement Tool



Feet (US)

Measurement Result

212.2 Feet (US)

Clear

Browell Rd



Centralized Water and Wastewater Laboratory

2600 SE Loop 820 Fort Worth, Texas 76140 Tel: 817-392-5900 Fax: 817-392-5920



Certificate of Analysis

TCEQ Lab Approval ID: T104704200

Monday, May 11, 2026

Bryan Erwin
Erwin Water Well
6991 FM 4
Jacksboro, TX 76458

RE: Final Analytical Report: ERWINWATER CC 050526 RUSH B
(142540)

Enclosed are the analytical results for sample(s) received by the laboratory 05/05/2026. Results reported herein conform to the 2016 TNI Standards, where applicable, unless otherwise narrated in the body of the report. All results being reported under this Report Identification Number apply only to the samples analyzed and properly identified with a Sample ID number.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by The City of Fort Worth Water Department Centralized Water and Wastewater Laboratory. A PDF version of this report will be maintained electronically for 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The sample(s) received, and described as recorded in this report will be stored up to 30 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample size exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting The City of Fort Worth Water Department Centralized Water and Wastewater Laboratory to serve your analytical needs. If you have any questions concerning this report, please feel free to contact the Laboratory at (817) 392-5900 any time.

Report Authorization:

Maria Isabel Carrillo
Laboratory Manager



Centralized Water and Wastewater Laboratory

2600 SE Loop 820 Fort Worth, Texas 76140 Tel: 817-392-5900 Fax: 817-392-5920



Certificate of Analysis

TCEQ Lab Approval ID: T104704200

Workorder: ERWINWATER CC 050526 RUSH B (142540)

Sample Summary

Lab ID	Sample ID	Date Collected	Date Received	Sampler	Matrix
14254001	BRYSON 20	05/05/2026 09:00	05/05/2026 13:42	C Crow	Drinking Water



Centralized Water and Wastewater Laboratory

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Certificate of Analysis

TCEQ Lab Approval ID: T104704200

Workorder: ERWINWATER CC 050526 RUSH B (142540)

Workorder Summary

Analysis Results Comments

14254001 (BRYSON 20) - Hardness as CaCO_3

SQ4|Sample received and analyzed without chemical preservation.

14254001 (BRYSON 20) - pH

HT3|Sample received past hold time.



Centralized Water and Wastewater Laboratory

2600 SE Loop 820 Fort Worth, Texas 76140 Tel: 817-392-5900 Fax: 817-392-5920



Certificate of Analysis

TCEQ Lab Approval ID: T104704200

Workorder: ERWINWATER CC 050526 RUSH B (142540)

Analytical Results

Parameter	Results	Units	DF	Cert	Analyzed	By	Qual
Lab ID: 14254001	Date Collected: 05/05/2026 09:00				Matrix: Drinking Water		
Sample ID: BRYSON 20	Date Received: 05/05/2026 13:42						
GENCHEM (SM 2340C Hardness)							
Hardness as CaCO ₃	35.8	mg/L	1	TX	05/07/2026 10:30	FB	*
GENCHEM (SM 2510B Conductivity)							
Specific Conductance at 25 °C	741	umhos/cm	1	TX	05/07/2026 12:31	SCC	
GENCHEM (SM 4500H+B pH)							
Temperature	20.5	°C	1		05/05/2026 15:03	SAR	
pH at 20.5 °C	8.2	Units	1		05/05/2026 15:03	SAR	*
GRAV (SM 2540C TDS)							
Total Dissolved Solids	1280	mg/L	1	TX	05/06/2026 17:50	LB	
IC (EPA 300.0 Part A Anions)							
Chloride	377	mg/L	4	TX	05/05/2026 17:10	KB1	
Fluoride	1.61	mg/L	1	TX	05/05/2026 14:31	KB1	
Nitrate as N	<0.10	mg/L	1	TX	05/05/2026 14:31	KB1	
Sulfate	269	mg/L	4	TX	05/05/2026 17:10	KB1	
METALS (EPA 200.8 - ICP-MS Metals Prep/EPA 200.8, ICP-MS Metals)							
Manganese	0.0519	mg/L	1	TX	05/07/2026 14:10	MG	
Iron	0.968	mg/L	1		05/07/2026 14:10	MG	
MICROBIOLOGY (SM 9223B Coliforms)							
Total Coliform	Presence		1	TX	05/05/2026 15:37	LD	
E. Coli	Absence		1	TX	05/05/2026 15:37	LD	

Analysis Results Comments

Hardness as CaCO₃

SQ4|Sample received and analyzed without chemical preservation.

pH

HT3|Sample received past hold time.



Centralized Water and Wastewater Laboratory

2600 SE Loop 820 Fort Worth, Texas 76140 Tel: 817-392-5900 Fax: 817-392-5920



Certificate of Analysis

TCEQ Lab Approval ID: T104704200

Workorder: ERWINWATER CC 050526 RUSH B (142540)

Fort Worth Water Certification Legend:

TX - Methods accredited in Texas through the National Environmental Laboratory Accreditation Program (NELAP)

TX APP - Methods approved for drinking water through the Texas Commission on Environmental Quality (TCEQ)

No TX or TX APP - Methods neither accredited nor drinking water approved



Centralized Water and Wastewater Laboratory

2600 SE Loop 820 Fort Worth, Texas 76140 Tel: 817-392-5900 Fax: 817-392-5920



Certificate of Analysis

TCEQ Lab Approval ID: T104704200

Workorder: ERWINWATER CC 050526 RUSH B (142540)

QC Results

QC Batch: INOR/111618

Analysis Method: SM 4500H+B pH

Preparation Method: SM 4500H+B pH

Associated Lab IDs: 14254001

Sample Duplicate (590794)		Original (14250906)				
Parameter	Orig Result	Duplicate	Units	RPD	RPD Limit	Qual
Temperature	23.9	22.6	°C	6		
pH	5.5	5.5	Units	0		*
Sample Duplicate (590795)		Original (14251310)				
Parameter	Orig Result	Duplicate	Units	RPD	RPD Limit	Qual
Temperature	21.1	21.8	°C	3		
pH	7.2	7.3	Units	1		*

QC Result Comments

Sample Duplicate - 590794 - pH

HT3|Sample received past hold time.

Sample Duplicate - 590795 - pH

HT3|Sample received past hold time.



Centralized Water and Wastewater Laboratory

2600 SE Loop 820 Fort Worth, Texas 76140 Tel: 817-392-5900 Fax: 817-392-5920



Certificate of Analysis

TCEQ Lab Approval ID: T104704200

Workorder: ERWINWATER CC 050526 RUSH B (142540)

QC Results

QC Batch: INOR/111640

Analysis Method: SM 2540C TDS

Preparation Method: SM 2540C TDS

Associated Lab IDs: 14254001

Method Blank(590947)

Parameter	Results	Units	RDL	MDL	Qual
Total Dissolved Solids	<17.0	mg/L	17.0	6.00	

Lab Fortified Blank (590948)

Parameter	Units	Spiked Amount	Spike Result	Spike Rec %	Control Limits	Qual
Total Dissolved Solids	mg/L	1000	1010	101	80 - 120	

Sample Duplicate (590949) Original (14250601)

Parameter	Orig Result	Duplicate	Units	RPD	RPD Limit	Qual
Total Dissolved Solids	538	536	mg/L	0	10	



Centralized Water and Wastewater Laboratory

2600 SE Loop 820 Fort Worth, Texas 76140 Tel: 817-392-5900 Fax: 817-392-5920



Certificate of Analysis

TCEQ Lab Approval ID: T104704200

Workorder: ERWINWATER CC 050526 RUSH B (142540)

QC Results

QC Batch: INOR/111642

Analysis Method: SM 2340C Hardness

Preparation Method: SM 2340C Hardness

Associated Lab IDs: 14254001

Method Blank(590960)

Parameter	Results	Units	RDL	MDL	Qual
Hardness as CaCO3	<2	mg/L	2		

Lab Fortified Blank (590962)

Parameter	Units	Spiked Amount	Spike Result	Spike Rec %	Control Limits	Qual
Hardness as CaCO3	mg/L	50	52.8	106	80 - 120	

Fortified Sample (590964); Fortified Sample Dup (590965) Original (14253901)

Parameter	Orig Result	Units	Spiked Amount	Spike Result	Spike Rec %	Control Limits	Dup Result	Dup Rec %	RPD	RPD Limit	Qual
Hardness as CaCO3	376	mg/L	50	420	88	80 - 120	417	82	7	20	*

QC Result Comments

Fortified Sample - 590964 - Hardness as CaCO3

SQ4|Sample received and analyzed without chemical preservation.

Fortified Sample Dup - 590965 - Hardness as CaCO3

SQ4|Sample received and analyzed without chemical preservation.



Centralized Water and Wastewater Laboratory

2600 SE Loop 820 Fort Worth, Texas 76140 Tel: 817-392-5900 Fax: 817-392-5920



Certificate of Analysis

TCEQ Lab Approval ID: T104704200

Workorder: ERWINWATER CC 050526 RUSH B (142540)

QC Results

QC Batch: INOR/111655
Preparation Method: SM 2510B Conductivity
Associated Lab IDs: 14254001

Analysis Method: SM 2510B Conductivity

Method Blank(591041)

Parameter	Results	Units	RDL	MDL	Qual
Specific Conductance at 25 °C	<0.78	umhos/cm	0.78		

Lab Fortified Blank (591043)

Parameter	Units	Spiked Amount	Spike Result	Spike Rec %	Control Limits	Qual
Specific Conductance at 25 °C	umhos/cm	447	444	99	90 - 110	

Sample Duplicate (591045) Original (14250601)

Parameter	Orig Result	Duplicate	Units	RPD	RPD Limit	Qual
Specific Conductance at 25 °C	937	938	umhos/cm	0	20	



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Certificate of Analysis

TCEQ Lab Approval ID: T104704200

Workorder: ERWINWATER CC 050526 RUSH B (142540)

QC Results

QC Batch: MET/11190

Analysis Method: EPA 200.8, ICP-MS Metals

Preparation Method: EPA 200.8 - ICP-MS Metals Prep

Associated Lab IDs: 14254001

Lab Reagent Blank(590898)

Parameter	Results	Units	RDL	MDL	Qual
Iron	<0.016	mg/L	0.016		
Manganese	<0.0003	mg/L	0.0003	0.0000	

Lab Fortified Blank (590899)

Parameter	Units	Spiked Amount	Spike Result	Spike Rec %	Control Limits	Qual
Iron	mg/L	5	5.27	105	85 - 115	
Manganese	mg/L	0.1	.1048	105	85 - 115	

Fortified Sample (590901); Fortified Sample Dup (590902) Original (14247201)

Parameter	Orig Result	Units	Spiked Amount	Spike Result	Spike Rec %	Control Limits	Dup Result	Dup Rec %	RPD	RPD Limit	Qual
Iron	0.036	mg/L	5	5.38	107	70 - 130	5.32	106	1	20	
Manganese	0.0017	mg/L	0.1	.1056	104	70 - 130	.1074	106	2	20	

Fortified Sample (590966); Fortified Sample Dup (590967) Original (14258201)

Parameter	Orig Result	Units	Spiked Amount	Spike Result	Spike Rec %	Control Limits	Dup Result	Dup Rec %	RPD	RPD Limit	Qual
Iron	0	mg/L	5	5.18	104	70 - 130	5.16	103	1	20	
Manganese	0.0004	mg/L	0.1	.1067	106	70 - 130	.1044	104	2	20	



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Certificate of Analysis

TCEQ Lab Approval ID: T104704200

Workorder: ERWINWATER CC 050526 RUSH B (142540)

QC Results

QC Batch: MIC/29846

Analysis Method: SM 9223B Coliforms

Preparation Method: SM 9223B Coliforms

Associated Lab IDs: 14254001

QC Blank(590817)

Parameter	Results	Units	RDL	MDL	Qual
Total Coliform	Absence		1		
E. Coli	Absence		1		

QC Positive(590818)

Parameter	Results	Units	RDL	MDL	Qual
Total Coliform	Presence		1		
E. Coli	Presence		1		



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Certificate of Analysis

TCEQ Lab Approval ID: T104704200

Workorder: ERWINWATER CC 050526 RUSH B (142540)

QC Results

QC Batch: ORG/20589

Analysis Method: EPA 300.0 PartA Anions

Preparation Method: EPA 300.0 PartA Anions

Associated Lab IDs: 14254001

Lab Fortified Blank - Filtered (590809)

Parameter	Units	Spiked Amount	Spike Result	Spike Rec %	Control Limits	Qual
Fluoride	mg/L	1	1.05	105	90 - 110	
Chloride	mg/L	60	61.9	103	90 - 110	
Nitrate as N	mg/L	2	2.12	106	90 - 110	
Sulfate	mg/L	60	62.3	104	90 - 110	

Method Blank Filtered(590811)

Parameter	Results	Units	RDL	MDL	Qual
Fluoride	<0.04	mg/L	0.04	0.00	
Chloride	<0.81	mg/L	0.81	0.01	
Nitrate as N	<0.06	mg/L	0.06	0.00	
Sulfate	0.94	mg/L	0.76	0.01	

Fortified Sample (590812); Fortified Sample Dup (590813) Original (14253901)

Parameter	Orig Result	Units	Spiked Amount	Spike Result	Spike Rec %	Control Limits	Dup Result	Dup Rec %	RPD	RPD Limit	Qual
Fluoride	0.17	mg/L	1	1.23	106	80 - 120	1.22	106	0	20	
Chloride	9.98	mg/L	60	71.6	103	80 - 120	71	102	1	20	
Nitrate as N	0	mg/L	2	2.13	107	80 - 120	2.11	106	1	20	
Sulfate	77.5	mg/L	60	135	96	80 - 120	135	95	1	20	



Centralized Water and Wastewater Laboratory

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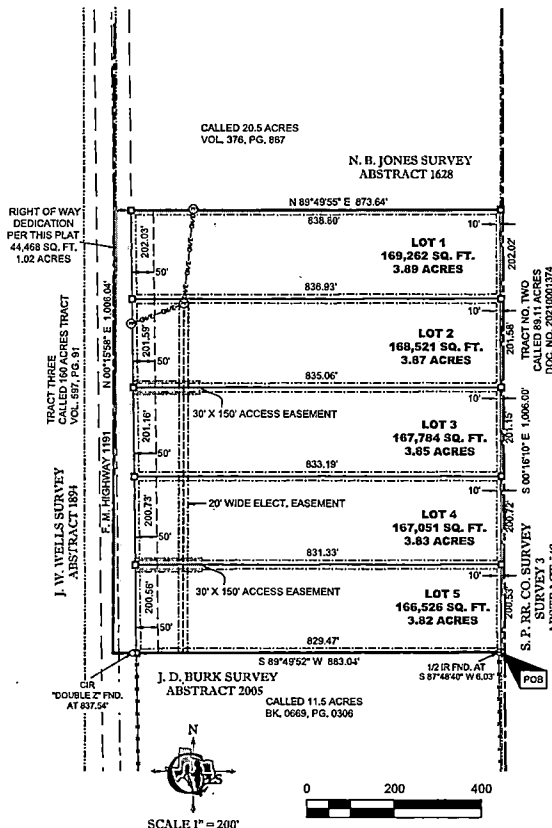
Certificate of Analysis

TCEQ Lab Approval ID: T104704200

Workorder: ERWINWATER CC 050526 RUSH B (142540)

QC Cross Reference

Lab ID	Sample ID	Prep Batch	Prep Method	Analytical Batch	Analytical Method
INOR/111618 - SM 4500H+B pH					
14254001	BRYSON 20			INOR/111618	SM 4500H+B pH
INOR/111640 - SM 2540C TDS					
14254001	BRYSON 20			INOR/111640	SM 2540C TDS
INOR/111642 - SM 2340C Hardness					
14254001	BRYSON 20			INOR/111642	SM 2340C Hardness
INOR/111655 - SM 2510B Conductivity					
14254001	BRYSON 20			INOR/111655	SM 2510B Conductivity
MET/11190 - EPA 200.8, ICP-MS Metals					
14254001	BRYSON 20	MET/11188	EPA 200.8 - ICP-MS Metals Prep	MET/11190	EPA 200.8, ICP-MS Metals
MIC/29846 - SM 9223B Coliforms					
14254001	BRYSON 20			MIC/29846	SM 9223B Coliforms
ORG/20589 - EPA 300.0 PartA Anions					
14254001	BRYSON 20			ORG/20589	EPA 300.0 PartA Anions



BEARINGS AND DISTANCES ARE
BASED ON U. S. STATE PLANE
NAD 1983 COORDINATES, TEXAS
NORTH CENTRAL ZONE - 4202

NOTES:

- 1) This plat represents property which has been platted without groundwater certification as prescribed in Texas Local Government Code Section 232.0032. Buyer is advised to question seller as to the groundwater availability.
- 2) Water source is from private water wells.
- 3) Property corners are 1/2" iron rebar with an aluminum cap stamped "RPLS 5210"
- 4) 10 feet wide utility easement along all property lines.
- 5) 50 feet wide building set back lines along all major road ways.

NOTES:

- 1.) Approval of a plat by the Commissioners Court shall not be deemed to suggest that Jack County will eventually accept subdivision streets for public maintenance. Street maintenance shall be the responsibility of the owner/subdivider/developer or a Home Owners Association.
- 2.) Jack County makes no representation that adequate water suitable for human consumption will be available within this subdivision.
- 3.) Jack County makes no representation that adequate sewerage facilities will be legally feasible within this subdivision.
- 4.) Jack County shall not repair, maintain, install, or provide any streets or roads in any subdivision for which a final plat has not been approved and filed for record, nor in which the standards contained herein or referred to herein have not been complied with in full, nor shall Jack County repair, maintain, or install any streets or roads until such time as the roads or streets have been formally accepted for inclusion into the County maintenance inventory by an order separate and apart from approval of any plat for filing purposes only by the Commissioners Court. Approval of the subdivision plat for filing does not indicate any agreement or understanding that Jack County will assume responsibility for maintenance of roads, streets, alleys or other areas dedicated to public use on the plat.

LEGAL DESCRIPTION 20.28 ACRES

All that certain 20.28 acres tract or parcel of land being situated in the N. B. Jones Survey, Abstract 1628, in Jack County, Texas and being described in a General Warranty Deed to Mark E. Spradlin, Trustee of The Mark Spradlin Living Trust, as recorded in Inst. No. 20250002259 of the Official Public Records of said county and said 20.28 acres tract being described by metes and bounds, as follows:

BEGINNING at a 1/2 inch iron rebar, with an aluminum cap stamped "RPLS 5210", set on the west line of a Tract No. Two recorded in Doc. No. 20210001374 of said Official Public Records of said county, for the northeast corner of a called 11.5 acres tract recorded in Bk. 0669, Pg. 0306 of the Deed Records of said county, and the southeast corner described herein, from which a 1/2 inch iron rod found bears South 87°48'40" West, a distance of 6.03 feet.

THENCE South 89°49'52" West, leaving said west line and along the north line of said 11.5 acres tract part of the way, at 837.54 feet passing a capped iron rod stamped "Double Z" found, continuing in all, a total distance of 883.04 feet, to a point in F. M. Highway 1191;

THENCE North 00°15'58" East, along said Highway, a distance of 1,006.04 feet to a point;

THENCE North 89°49'55" East, leaving said highway and along the south line of a called 20.5 acres tract recorded in Vol. 376, Pg. 867 of said Official Public Records, a distance of 873.64 feet to 1/2 inch iron rebar, with an aluminum cap stamped "RPLS 5210", set on said west line, for the southeast corner of said 20.5 acres tract and the northeast corner described herein;

THENCE South 00°16'10" East, along said west line, a distance of 1,006.00 feet to the **POINT OF BEGINNING** and containing 20.28 acres of land.

STATE OF TEXAS §
COUNTY OF JACK §

BEFORE ME, the undersigned authority, a notary public in and for said county and state, on this day personally appeared _____, owners of Bryson Estates, known to me to be the persons whose names are subscribed to the foregoing instrument and acknowledged to me that they executed the same for the purpose and considerations therein expressed.

Given under my hand and seal of office, this _____ day of _____, 2026.

Notary Public in and for the State of Texas

By:

Authorized Signature or Owner

Printed name and title

NOW THEREFORE KNOW ALL MEN BY THESE PRESENTS

That I, representative for Mark Spradlin Living Trust, do hereby adopt this plat designating the herein described real property as BRYSON ESTATES, an addition in Jack County, Texas and do hereby dedicate to the public's use forever the easements and streets shown hereon, the builder, the developer and their assignees, shall at all times have full right of ingress and egress to or from their respective easements for the purpose of constructing, reconstructing, inspecting, patrolling, maintaining, reading meters, and adding to or removing all or parts of their respective systems without the necessity at any time procuring permission from anyone.

Witness my hand in _____ County, Texas, the _____ day of _____, 20____.

Before me the undersigned authority, a Notary Public, in and for said County and State, on this day personally appeared I, Representative for Mark Spradlin Living Trust, known to me to be the entity whose name is subscribed to the foregoing instrument and acknowledge to me that they executed the same for purposes and consideration therein expressed

and given under my hand and seal of office this _____ day of _____, 20____.

Notary Public My Commission Expires

I, _____
A REPRESENTATIVE OF BRYSON ESTATES, HAS REVIEWED AND ACCEPTED THIS

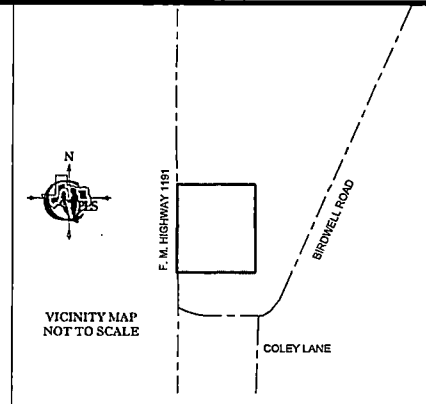
PLAT ON THIS DAY, _____, 2026.

OWNERSHIP AND / OR DEVELOPMENT REPRESENTATIVE

MARK SPRADLIN LIVING TRUST

NOTE:
According to the Flood Insurance Rate Map for Jack County, Texas, and incorporated areas, Community Panel Number 48237C0500A, dated February 12, 2021, this tract is in Zone X.

LEGEND
 - - - - - = APPROXIMATE SURVEY LINE
 - - - - - = DEED LINE
 - - - - - = LOT LINE
 [] = 28.28 ACRES
 - - - - - = 10' UTILITY EASEMENT
 - - - - - = 50' BUILDING LINE
 ⊙ = POWER POLE
 □ = 1/2" IRS WITH AN ALUMINUM CAP STAMPED "RPLS 5210"



APPROVED BY THE
COMMISSIONERS COURT
OF JACK COUNTY, TEXAS
ON THIS THE _____ DAY
OF _____, 2026

COUNTY JUDGE
BRIAN KEITH UMPHRESS

PRECINCT #1 COMMISSIONER
GARY OLIVER

PRECINCT #2 COMMISSIONER
RONALD FITZGERALD

PRECINCT #3 COMMISSIONER
HENRY BIRDWELL, JR.

PRECINCT #4 COMMISSIONER
TERRY WARD

I hereby certify that the above and foregoing plat represents an on
ground survey conducted under my supervision in May of 2026.

THIS DOCUMENT SHALL NOT BE RECORDED FOR ANY PURPOSE AND SHALL NOT BE USED, VIEWED OR RELIED UPON AS A FINAL SURVEY DOCUMENT.
DONALD R. CROWLEY RPLS NO. 5210
 FOR CROWLEY...
 FRN:100455-00
 117 W. ARCHER ST.
 JACKSBORO, TX 76458
 (940) 567-2234 OFFICE
 (940) 567-2155 FAX

**FINAL PLAT
BRYSON ESTATES
LOTS 1 THRU 5
20.28 ACRES IN THE
N. B. JONES SURVEY, ABSTRACT 1628
JACK COUNTY, TEXAS**

Date: May 2026 Drawn: SDC Checked: DFC Scale: 1" = 200' Sheet: 1 of 1
 Owner: MARK SPRADLIN LIVING TRUST
 P.O. BOX
 4101 GREEN OAKS BLVD
 SUITE 205-26
 ARLINGTON, TEXAS 76016
 PHONE NUMBER: 817-423-7954
 Surveyor: DONALD R. CROWLEY R.P.L.S. NO. 5210
 117 W. ARCHER ST.
 JACKSBORO, TX 76458
 (940) 567-2234 OFFICE
 (940) 567-2155 FAX
CROWLEY SURVEYING

Test Well	
No	724706
Depth	280
Elev	1206
Pump Type	25gpm 1.5 hp
Pump Depth	240
Transducer Depth	235
Water above	95.86
Static Depth of Water	139.14

Start

5/6/2026 5:18pm

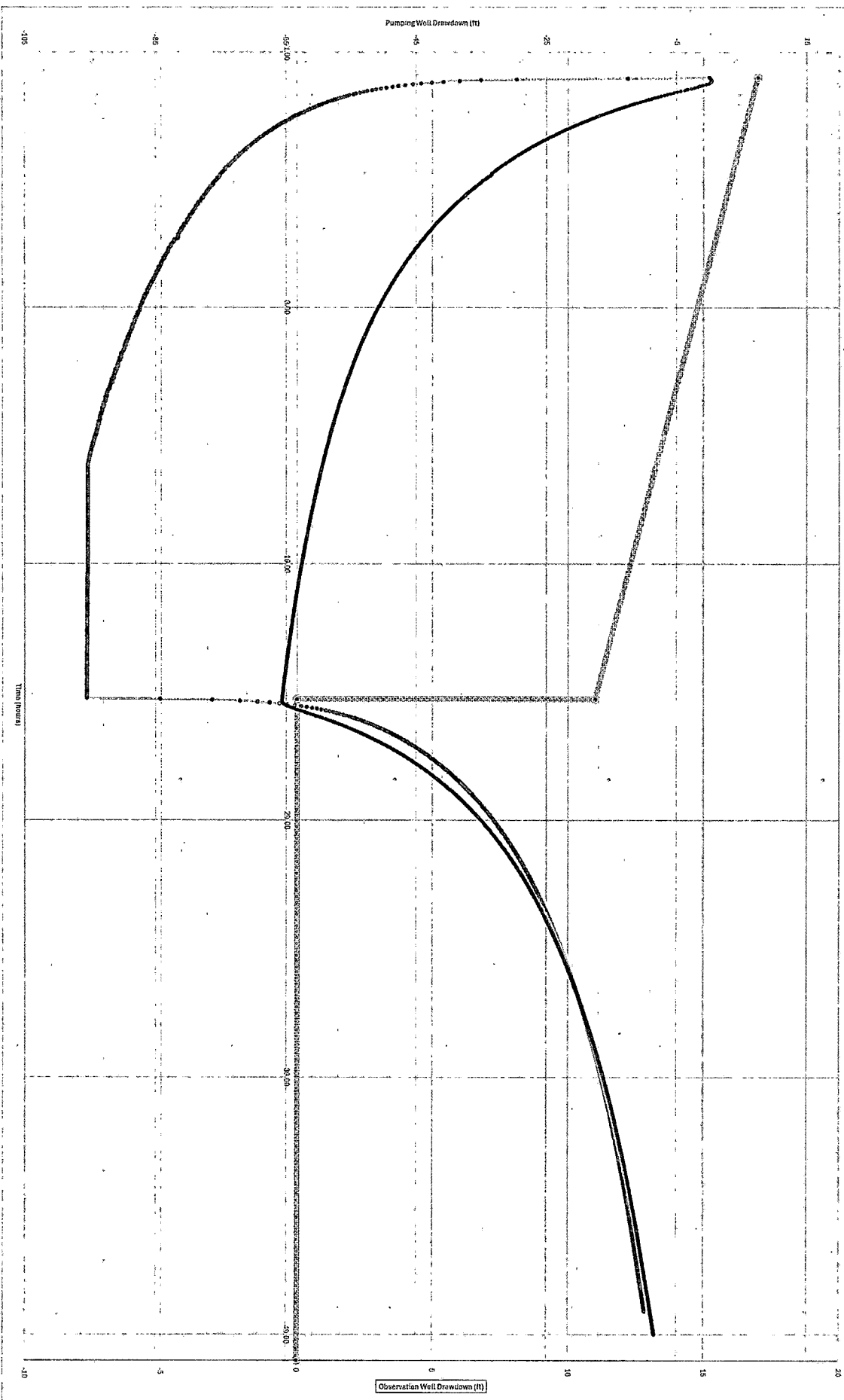
Lot	Acre
1	3.89
2	3.87
3	3.85
4	3.83
5	3.82

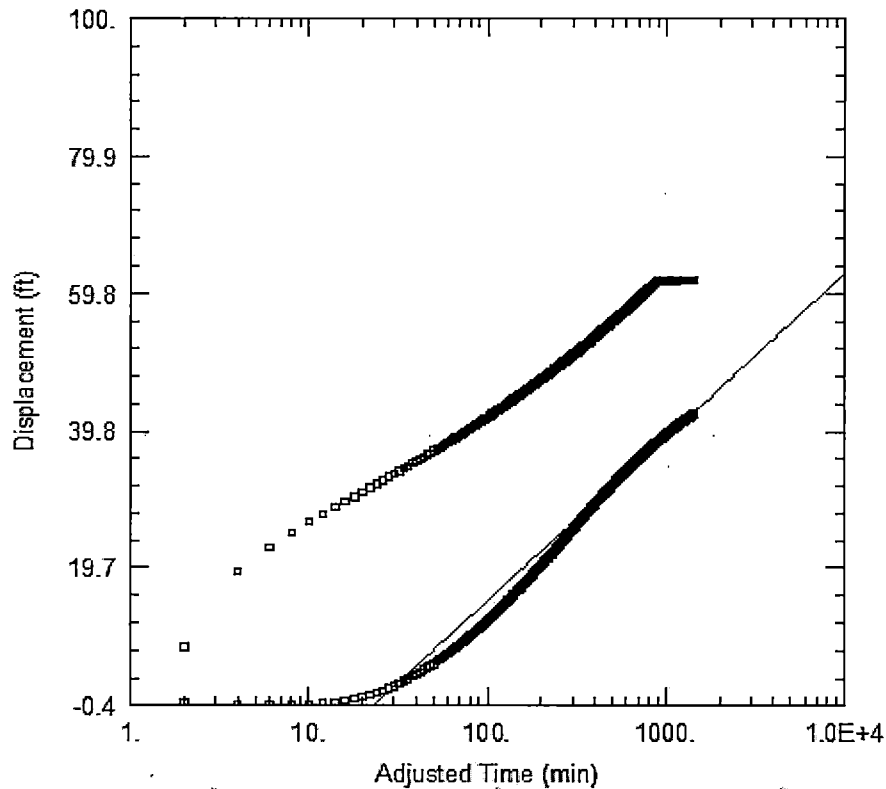
Obs Well		
No	724707	
Depth	340	diff
Elev	1205	-1
Pump	NA	
Pump Depth	NA	
Transducer Depth	235	ft
Water above	92.72	
Static Depth of Water	142.28	3.14

Number	5
Total	19.26
Parcel Total	20.28
Average	3.85

Pump Test

• Drawdown ft ••••• GPM





BRYSON ESTATES

Data Set: O:\1 Water Well\04 Projects\2026\260528 Kelly Pollard\WGK.aqt
 Date: 06/05/26 Time: 08:02:25

PROJECT INFORMATION

Company: EEC
 Client: MGK
 Project: 2605
 Location: Jacksboro
 Test Well: 724706
 Test Date: 6/5/2026

AQUIFER DATA

Saturated Thickness: 44 ft

Anisotropy Ratio (Kz/Kr): 1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
724706	0	0

Observation Wells

Well Name	X (ft)	Y (ft)
724706	0	0
724707	213	0

SOLUTION

Aquifer Model: Confined

Solution Method: Cooper-Jacob

T = 16.21 ft²/day

S = 1.332E-5

Well Depth (ft)	280
Static Water Level (ft below ground surface)	139.14
Aquifer Thickness b (ft)	44
Transmissivity (ft²/day)	16.21
Storativity	0.0000133
Hydraulic Conductivity K (ft/d)	0.37

Casing radius (ft)	0.166666667
r(eq) (ft)	0.1484375
r(p)	0
r(w) (in)	0.328125
Casing radius (in)	4
Hole diameter (in)	7.875
Pump diameter (in)	3.5625

Demand Estimate

Proposed Subdivision Name	Bryson Estates
Subdivision Size (in acres)	19.26
Number of Lots	5
Average Lot Size (exlcuding roads)	3.85
Persons per lot (assumed)	2.87
Public useage per Capita (GPD)	101.89
GPD/Lot	292
GPY/Lot	106735
Ac-Ft/Yr	0.328
Total Per Capita Demand Ac-Ft/Yr	1.64
Non per capita usage per lot (assumed, GPD/Lot)	250
GPY/Lot	91250
Total other usage Ac-Ft/Yr	1.40
Total Usage, AC-Ft/YR	3.04
Constant Rate pumping (gpm)	0.38

$$\text{Well Efficiency} = \text{Expected Drawdown} / \text{Observed Drawdown}$$

Observed Drawdown (ft.) 95.58

Discharge (Q) 14.00

Transmissivity ft²/d 16.21

Storativity 0.0000133

Time d (@Max Drawdown) 1

Well Radius (ft.) 0.328125

Expected Drawdown (ft.) 100

Well Efficiency >95% (full drawdown)

Drawdown ft. (10 years)	45
Discharge (Ac-ft/yr)	3.04
Transmissivity (ft ² /d)	16.21
Storativity	0.00001332
Time (years)	10
distance (ft.)	0.328

OSE Inverse Theis Calculator

This application allows one to input 5 of the following 6 parameters to predict the 6th (pumping; pumping rate (select units of gpm or acre-feet/yr); Distance (select units of feet or miles); Transmissivity (select units of ft²/d or gpd/ft); Storativity; Time (select units of years or days); Distance (select units of feet or miles); Drawdown (feet)). If only 5 values, there is not a unique solution for Transmissivity.

Please select the parameter to be determined and enter the other parameter values:

- Transmissivity ☐ gpd/ft ☒ ft²/d
- ☐ Storage Coefficient
- ☐ Pumping Rate ☐ gpm ☒ acre-ft/yr
- ☐ Time ☒ years ☐ days
- ☐ Distance ☒ feet ☐ miles
- ☒ Drawdown (feet)

Calculate The drawdown is 44.99 feet

Drawdown ft. (30 years)	47
Discharge (Ac-ft/yr)	3.04
Transmissivity (ft ² /d)	16.21
Storativity	0.00001332
Time (years)	30
distance (ft.)	0.167

OSE Inverse Theis Calculator

This application allows one to input 5 of the following 6 parameters to predict the 6th (pumping; pumping rate (select units of gpm or acre-feet/yr); Distance (select units of feet or miles); Transmissivity (select units of ft²/d or gpd/ft); Storativity; Time (select units of years or days); Distance (select units of feet or miles); Drawdown (feet)). If only 5 values, there is not a unique solution for Transmissivity.

Please select the parameter to be determined and enter the other parameter values:

- Transmissivity ☐ gpd/ft ☒ ft²/d
- ☐ Storage Coefficient
- ☐ Pumping Rate ☐ gpm ☒ acre-ft/yr
- ☐ Time ☒ years ☐ days
- ☐ Distance ☒ feet ☐ miles
- ☒ Drawdown (feet)

Calculate The drawdown is 46.95 feet

Drawdown ft. (10 years)	23.17
Discharge (Ac-ft/yr)	7.00
Transmissivity (ft ² /d)	16.21
Storativity	0.00001332
Time (years)	10
distance (ft.)	150

OSE Inverse Theis Calculator

This application allows one to input 5 of the following 6 parameters to predict the 6th (wi pumping; pumping rate (select units of gpm or acre-feet/yr); Distance (select units of feet values, there is not a unique solution for Transmissivity.

Please select the parameter to be determined and enter the the other parameter values:

- Transmissivity ☐ gpd/ft ☒ ft²/d
- ☐ Storage Coefficient
- ☐ Pumping Rate ☐ gpm ☒ acre-ft/yr
- ☐ Time ☒ years ☐ days
- ☐ Distance ☒ feet ☐ miles
- ☒ Drawdown (feet)

Calculate The drawdown is 23.17 feet

Drawdown ft. (30 years)	25.12
Discharge (Ac-ft/yr)	3.04
Transmissivity (ft ² /d)	16.21
Storativity	0.00001332
Time (years)	30
distance (ft.)	150

OSE Inverse Theis Calculator

This application allows one to input 5 of the following 6 parameters to predict the 6th (v pumping; pumping rate (select units of gpm or acre-feet/yr); Distance (select units of feet values, there is not a unique solution for Transmissivity.

Please select the parameter to be determined and enter the the other parameter values:

- Transmissivity ☐ gpd/ft ☒ ft²/d
- ☐ Storage Coefficient
- ☐ Pumping Rate ☐ gpm ☒ acre-ft/yr
- ☐ Time ☒ years ☐ days
- ☐ Distance ☒ feet ☐ miles
- ☒ Drawdown (feet)

Calculate The drawdown is 25.12 feet

10 Year Cone of Depression (mi.) 6,046

30 Year Cone of Depression (mi.) 10,471

*outer edges are calculated at 10 ft. of drawdown

OSE Inverse Theis Calculator

This application allows one to input 5 of the following 6 parameters to predict the 6th (with pumping; pumping rate (select units of gpm or acre-feet/yr); Distance (select units of feet or miles); there is not a unique solution for Transmissivity.

Please select the parameter to be determined and enter the the other parameter values:

Transmissivity ☐ gpd/ft ☒ ft²/d
☐ Storage Coefficient
☐ Pumping Rate ☐ gpm ☒ acre-ft/yr
☐ Time ☒ years ☐ days
☒ Distance ☒ feet ☐ miles
☐ Drawdown (feet)

Calculate The distance from the pumping well is 6045.58 feet (1.14 miles)

OSE Inverse Theis Calculator

This application allows one to input 5 of the following 6 parameters to predict the 6th (with pumping; pumping rate (select units of gpm or acre-feet/yr); Distance (select units of feet or miles); there is not a unique solution for Transmissivity.

Please select the parameter to be determined and enter the the other parameter values:

Transmissivity ☐ gpd/ft ☒ ft²/d
☐ Storage Coefficient
☐ Pumping Rate ☐ gpm ☒ acre-ft/yr
☐ Time ☒ years ☐ days
☒ Distance ☒ feet ☐ miles
☐ Drawdown (feet)

Calculate The distance from the pumping well is 10471.25 feet (1.98 miles)

Equipment	Brand	Model
Water Level Meter	In-Situ	Level Troll 400
Flow Meter	Assured Automation	1" Turbine

Constituent	Standard	Sample	Result
Chloride	300	377	High
Conductivity (indicator of TDS only)	na	741	OK
Flouride	2	1.61	OK
Iron	0.3	0.968	High
Nitrate (as nitrogen)	10	<0.10	OK
Manganese	0.05	0.0519	OK
pH	>7.0	8.2	OK
Sulfate	300	269	OK
Total Hardness (quality issue not health)	500	35.8	OK
Total Dissolved Solids	1000	1280	High
Presence/Absence of total coliform Bacteria	Absence	Presence	Retest
E. Coli	Absence	Absence	OK

Summary:

A water softener will treat manganese and iron. Under sink RO treatment will reduce TDS to a potable level. Presence of coliform is common in new wells and can be resolved by re-testing.

Data Set: O:\1 Water Well\04 Projects\2026\260528 Kelly Pollard\MGK.aqt
 Title: Bryson Estates
 Date: 06/05/26
 Time: 12:19:08

PROJECT INFORMATION

Company: EEC
 Client: MGK
 Project: 2605
 Location: Jacksboro
 Test Date: 6/5/2026
 Test Well: 724706

AQUIFER DATA

Saturated Thickness: 44. ft
 Anisotropy Ratio (Kz/Kr): 1.

PUMPING WELL DATA

No. of pumping wells: 1

Pumping Well No. 1: 724706

X Location: 0. ft
 Y Location: 0. ft

Casing Radius: 0.1667 ft
 Well Radius: 0.3281 ft

Fully Penetrating Well

No. of pumping periods: 3

Pumping Period Data			
Time (min)	Rate (gal/min)	Time (min)	Rate (gal/min)
0.	17.	1441.	0.
1440.	11.		

OBSERVATION WELL DATA

No. of observation wells: 2

Observation Well No. 1: 724706

X Location: 0. ft
 Y Location: 0. ft

Radial distance from 724706: 0. ft

Fully Penetrating Well

No. of Observations: 1470

Observation Data			
Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
2.	12.51	1472.	62.71
4.	29.54	1474.	61.84
6.	35.06	1476.	61.01
8.	38.33	1478.	60.3
10.	40.79	1480.	59.59
12.	42.55	1482.	58.96
14.	44.18	1484.	58.38
16.	45.49	1486.	57.79
18.	46.63	1488.	57.26
20.	47.68	1490.	56.74

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)	Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
22.	48.63	1492.	56.23	22.	48.63	1492.	56.23
24.	49.53	1494.	55.77	24.	49.53	1494.	55.77
26.	50.43	1496.	55.32	26.	50.43	1496.	55.32
28.	51.15	1498.	54.9	28.	51.15	1498.	54.9
30.	51.76	1500.	54.48	30.	51.76	1500.	54.48
32.	52.47	1502.	54.1	32.	52.47	1502.	54.1
34.	53.02	1504.	53.7	34.	53.02	1504.	53.7
36.	53.58	1506.	53.33	36.	53.58	1506.	53.33
38.	54.24	1508.	52.96	38.	54.24	1508.	52.96
40.	54.65	1510.	52.6	40.	54.65	1510.	52.6
42.	55.29	1512.	52.26	42.	55.29	1512.	52.26
44.	55.66	1514.	51.92	44.	55.66	1514.	51.92
46.	56.15	1516.	51.62	46.	56.15	1516.	51.62
48.	56.55	1518.	51.31	48.	56.55	1518.	51.31
50.	57.02	1520.	50.97	50.	57.02	1520.	50.97
52.	57.44	1522.	50.67	52.	57.44	1522.	50.67
54.	57.83	1524.	50.39	54.	57.83	1524.	50.39
56.	58.22	1526.	50.08	56.	58.22	1526.	50.08
58.	58.65	1528.	49.8	58.	58.65	1528.	49.8
60.	58.91	1530.	49.52	60.	58.91	1530.	49.52
62.	59.3	1532.	49.25	62.	59.3	1532.	49.25
64.	59.58	1534.	48.98	64.	59.58	1534.	48.98
66.	59.99	1536.	48.73	66.	59.99	1536.	48.73
68.	60.29	1538.	48.48	68.	60.29	1538.	48.48
70.	60.62	1540.	48.21	70.	60.62	1540.	48.21
72.	60.89	1542.	47.96	72.	60.89	1542.	47.96
74.	61.26	1544.	47.7	74.	61.26	1544.	47.7
76.	61.48	1546.	47.48	76.	61.48	1546.	47.48
78.	61.8	1548.	47.24	78.	61.8	1548.	47.24
80.	62.07	1550.	47.02	80.	62.07	1550.	47.02
82.	62.27	1552.	46.78	82.	62.27	1552.	46.78
84.	62.65	1554.	46.56	84.	62.65	1554.	46.56
86.	62.87	1556.	46.33	86.	62.87	1556.	46.33
88.	63.12	1558.	46.12	88.	63.12	1558.	46.12
90.	63.51	1560.	45.91	90.	63.51	1560.	45.91
92.	63.73	1562.	45.7	92.	63.73	1562.	45.7
94.	63.99	1564.	45.47	94.	63.99	1564.	45.47
96.	64.14	1566.	45.24	96.	64.14	1566.	45.24
98.	64.45	1568.	45.03	98.	64.45	1568.	45.03
100.	64.55	1570.	44.85	100.	64.55	1570.	44.85
102.	64.94	1572.	44.66	102.	64.94	1572.	44.66
104.	65.07	1574.	44.45	104.	65.07	1574.	44.45
106.	65.39	1576.	44.26	106.	65.39	1576.	44.26
108.	65.6	1578.	44.06	108.	65.6	1578.	44.06
110.	65.84	1580.	43.88	110.	65.84	1580.	43.88
112.	66.05	1582.	43.69	112.	66.05	1582.	43.69
114.	66.26	1584.	43.49	114.	66.26	1584.	43.49
116.	66.37	1586.	43.3	116.	66.37	1586.	43.3
118.	66.65	1588.	43.15	118.	66.65	1588.	43.15
120.	66.91	1590.	42.96	120.	66.91	1590.	42.96
122.	67.04	1592.	42.77	122.	67.04	1592.	42.77
124.	67.24	1594.	42.62	124.	67.24	1594.	42.62
126.	67.41	1596.	42.41	126.	67.41	1596.	42.41
128.	67.63	1598.	42.26	128.	67.63	1598.	42.26
130.	67.79	1600.	42.08	130.	67.79	1600.	42.08
132.	68.03	1602.	41.91	132.	68.03	1602.	41.91
134.	68.22	1604.	41.75	134.	68.22	1604.	41.75
136.	68.38	1606.	41.59	136.	68.38	1606.	41.59
138.	68.56	1608.	41.41	138.	68.56	1608.	41.41
140.	68.82	1610.	41.24	140.	68.82	1610.	41.24
142.	68.94	1612.	41.1	142.	68.94	1612.	41.1
144.	69.1	1614.	40.95	144.	69.1	1614.	40.95
146.	69.34	1616.	40.76	146.	69.34	1616.	40.76
148.	69.51	1618.	40.63	148.	69.51	1618.	40.63
150.	69.6	1620.	40.47	150.	69.6	1620.	40.47
152.	69.75	1622.	40.32	152.	69.75	1622.	40.32

<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
154.	69.91	1624.	40.15
156.	70.09	1626.	40.02
158.	70.24	1628.	39.86
160.	70.42	1630.	39.71
162.	70.62	1632.	39.58
164.	70.78	1634.	39.42
166.	70.89	1636.	39.3
168.	71.1	1638.	39.13
170.	71.14	1640.	38.99
172.	71.41	1642.	38.88
174.	71.58	1644.	38.74
176.	71.6	1646.	38.57
178.	71.8	1648.	38.45
180.	71.99	1650.	38.31
182.	72.01	1652.	38.18
184.	72.25	1654.	38.04
186.	72.31	1656.	37.92
188.	72.52	1658.	37.78
190.	72.65	1660.	37.65
192.	72.71	1662.	37.51
194.	72.84	1664.	37.39
196.	73.01	1666.	37.26
198.	73.16	1668.	37.12
200.	73.29	1670.	37.01
202.	73.44	1672.	36.88
204.	73.56	1674.	36.76
206.	73.74	1676.	36.64
208.	73.75	1678.	36.5
210.	73.99	1680.	36.38
212.	74.11	1682.	36.29
214.	74.2	1684.	36.14
216.	74.35	1686.	36.04
218.	74.39	1688.	35.9
220.	74.5	1690.	35.81
222.	74.64	1692.	35.68
224.	74.72	1694.	35.56
226.	74.88	1696.	35.46
228.	75.	1698.	35.34
230.	75.06	1700.	35.21
232.	75.22	1702.	35.1
234.	75.27	1704.	34.97
236.	75.49	1706.	34.88
238.	75.51	1708.	34.78
240.	75.68	1710.	34.65
242.	75.79	1712.	34.55
244.	75.85	1714.	34.45
246.	75.97	1716.	34.33
248.	76.09	1718.	34.22
250.	76.13	1720.	34.12
252.	76.28	1722.	34.03
254.	76.39	1724.	33.89
256.	76.56	1726.	33.79
258.	76.63	1728.	33.69
260.	76.75	1730.	33.61
262.	76.84	1732.	33.52
264.	76.86	1734.	33.41
266.	77.	1736.	33.27
268.	77.18	1738.	33.21
270.	77.21	1740.	33.09
272.	77.28	1742.	32.98
274.	77.33	1744.	32.89
276.	77.51	1746.	32.8
278.	77.58	1748.	32.71
280.	77.63	1750.	32.6
282.	77.85	1752.	32.52
284.	77.83	1754.	32.42

<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
286.	77.92	1756.	32.28
288.	78.06	1758.	32.22
290.	78.1	1760.	32.11
292.	78.31	1762.	32.05
294.	78.4	1764.	31.95
296.	78.5	1766.	31.88
298.	78.51	1768.	31.77
300.	78.65	1770.	31.7
302.	78.79	1772.	31.6
304.	78.84	1774.	31.48
306.	78.84	1776.	31.39
308.	78.98	1778.	31.32
310.	79.09	1780.	31.23
312.	79.14	1782.	31.12
314.	79.25	1784.	31.04
316.	79.32	1786.	30.96
318.	79.38	1788.	30.86
320.	79.45	1790.	30.79
322.	79.59	1792.	30.72
324.	79.72	1794.	30.61
326.	79.71	1796.	30.52
328.	79.84	1798.	30.45
330.	79.94	1800.	30.37
332.	79.96	1802.	30.27
334.	80.14	1804.	30.2
336.	80.09	1806.	30.09
338.	80.19	1808.	30.01
340.	80.25	1810.	29.97
342.	80.38	1812.	29.88
344.	80.6	1814.	29.79
346.	80.63	1816.	29.69
348.	80.67	1818.	29.61
350.	80.78	1820.	29.55
352.	80.83	1822.	29.49
354.	81.01	1824.	29.38
356.	80.95	1826.	29.32
358.	81.02	1828.	29.22
360.	81.2	1830.	29.15
362.	81.25	1832.	29.08
364.	81.32	1834.	28.99
366.	81.42	1836.	28.91
368.	81.52	1838.	28.85
370.	81.46	1840.	28.75
372.	81.44	1842.	28.69
374.	81.6	1844.	28.58
376.	81.53	1846.	28.55
378.	81.79	1848.	28.46
380.	82.06	1850.	28.39
382.	82.11	1852.	28.33
384.	82.18	1854.	28.24
386.	82.31	1856.	28.16
388.	82.45	1858.	28.1
390.	82.45	1860.	28.02
392.	82.59	1862.	27.94
394.	82.63	1864.	27.87
396.	82.67	1866.	27.8
398.	82.75	1868.	27.75
400.	82.93	1870.	27.65
402.	82.96	1872.	27.59
404.	83.03	1874.	27.53
406.	83.05	1876.	27.44
408.	83.06	1878.	27.38
410.	83.15	1880.	27.33
412.	83.22	1882.	27.24
414.	83.35	1884.	27.19
416.	83.42	1886.	27.13

<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
418.	83.58	1888.	27.05
420.	83.61	1890.	26.97
422.	83.73	1892.	26.94
424.	83.64	1894.	26.83
426.	83.73	1896.	26.77
428.	83.9	1898.	26.73
430.	83.94	1900.	26.64
432.	84.02	1902.	26.56
434.	84.09	1904.	26.53
436.	84.08	1906.	26.45
438.	84.22	1908.	26.4
440.	84.19	1910.	26.32
442.	84.39	1912.	26.27
444.	84.51	1914.	26.21
446.	84.36	1916.	26.13
448.	84.6	1918.	26.09
450.	84.6	1920.	26.02
452.	84.57	1922.	25.94
454.	84.78	1924.	25.87
456.	84.91	1926.	25.8
458.	84.89	1928.	25.74
460.	84.88	1930.	25.71
462.	85.03	1932.	25.62
464.	85.06	1934.	25.56
466.	85.09	1936.	25.5
468.	85.17	1938.	25.42
470.	85.27	1940.	25.4
472.	85.37	1942.	25.32
474.	85.3	1944.	25.27
476.	85.48	1946.	25.21
478.	85.6	1948.	25.16
480.	85.55	1950.	25.08
482.	85.59	1952.	25.02
484.	85.72	1954.	24.95
486.	85.76	1956.	24.91
488.	85.9	1958.	24.84
490.	85.87	1960.	24.8
492.	85.99	1962.	24.73
494.	86.1	1964.	24.67
496.	86.06	1966.	24.64
498.	86.28	1968.	24.55
500.	86.27	1970.	24.49
502.	86.32	1972.	24.44
504.	86.32	1974.	24.38
506.	86.36	1976.	24.35
508.	86.54	1978.	24.27
510.	86.52	1980.	24.22
512.	86.72	1982.	24.15
514.	86.64	1984.	24.1
516.	86.65	1986.	24.05
518.	86.82	1988.	23.99
520.	86.88	1990.	23.94
522.	86.89	1992.	23.9
524.	86.92	1994.	23.83
526.	87.02	1996.	23.77
528.	87.06	1998.	23.74
530.	87.09	2000.	23.67
532.	87.17	2002.	23.61
534.	87.24	2004.	23.59
536.	87.28	2006.	23.51
538.	87.38	2008.	23.45
540.	87.43	2010.	23.41
542.	87.41	2012.	23.35
544.	87.38	2014.	23.28
546.	87.47	2016.	23.25
548.	87.49	2018.	23.19

<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
550.	87.61	2020.	23.16
552.	87.74	2022.	23.1
554.	87.69	2024.	23.06
556.	87.76	2026.	23.01
558.	87.85	2028.	22.93
560.	87.85	2030.	22.87
562.	88.02	2032.	22.83
564.	87.96	2034.	22.8
566.	88.05	2036.	22.73
568.	88.17	2038.	22.69
570.	88.13	2040.	22.65
572.	88.19	2042.	22.57
574.	88.22	2044.	22.55
576.	88.28	2046.	22.49
578.	88.4	2048.	22.43
580.	88.5	2050.	22.41
582.	88.52	2052.	22.35
584.	88.56	2054.	22.31
586.	88.51	2056.	22.24
588.	88.65	2058.	22.18
590.	88.65	2060.	22.12
592.	88.65	2062.	22.09
594.	88.71	2064.	22.05
596.	88.78	2066.	22.01
598.	88.88	2068.	21.96
600.	88.96	2070.	21.91
602.	88.98	2072.	21.86
604.	89.06	2074.	21.81
606.	89.07	2076.	21.76
608.	89.07	2078.	21.71
610.	89.28	2080.	21.65
612.	89.24	2082.	21.6
614.	89.3	2084.	21.58
616.	89.26	2086.	21.53
618.	89.4	2088.	21.48
620.	89.4	2090.	21.42
622.	89.54	2092.	21.39
624.	89.5	2094.	21.36
626.	89.64	2096.	21.27
628.	89.7	2098.	21.24
630.	89.58	2100.	21.21
632.	89.76	2102.	21.15
634.	89.68	2104.	21.1
636.	89.75	2106.	21.05
638.	89.85	2108.	21.02
640.	89.88	2110.	20.98
642.	89.93	2112.	20.91
644.	90.03	2114.	20.91
646.	90.11	2116.	20.85
648.	90.23	2118.	20.8
650.	90.23	2120.	20.76
652.	90.25	2122.	20.7
654.	90.28	2124.	20.66
656.	90.29	2126.	20.61
658.	90.32	2128.	20.58
660.	90.52	2130.	20.54
662.	90.37	2132.	20.48
664.	90.44	2134.	20.44
666.	90.54	2136.	20.39
668.	90.66	2138.	20.35
670.	90.71	2140.	20.32
672.	90.76	2142.	20.27
674.	90.73	2144.	20.22
676.	90.75	2146.	20.17
678.	90.87	2148.	20.14
680.	90.78	2150.	20.11

<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
682.	90.91	2152.	20.08
684.	91.09	2154.	20.03
686.	90.95	2156.	19.97
688.	91.18	2158.	19.94
690.	91.1	2160.	19.9
692.	91.19	2162.	19.85
694.	91.2	2164.	19.82
696.	91.33	2166.	19.77
698.	91.3	2168.	19.75
700.	91.44	2170.	19.69
702.	91.38	2172.	19.63
704.	91.5	2174.	19.58
706.	91.42	2176.	19.55
708.	91.55	2178.	19.52
710.	91.73	2180.	19.51
712.	91.76	2182.	19.45
714.	91.63	2184.	19.39
716.	91.61	2186.	19.36
718.	91.86	2188.	19.32
720.	91.93	2190.	19.28
722.	91.89	2192.	19.24
724.	91.94	2194.	19.21
726.	91.97	2196.	19.18
728.	92.1	2198.	19.14
730.	92.05	2200.	19.08
732.	92.09	2202.	19.06
734.	92.26	2204.	19.03
736.	92.32	2206.	18.95
738.	92.4	2208.	18.95
740.	92.44	2210.	18.9
742.	92.48	2212.	18.86
744.	92.56	2214.	18.81
746.	92.56	2216.	18.75
748.	92.46	2218.	18.74
750.	92.71	2220.	18.69
752.	92.63	2222.	18.66
754.	92.68	2224.	18.65
756.	92.66	2226.	18.6
758.	92.67	2228.	18.58
760.	92.69	2230.	18.52
762.	92.85	2232.	18.49
764.	92.93	2234.	18.44
766.	93.	2236.	18.4
768.	93.02	2238.	18.38
770.	92.89	2240.	18.33
772.	92.95	2242.	18.3
774.	93.	2244.	18.25
776.	93.17	2246.	18.22
778.	93.18	2248.	18.19
780.	93.16	2250.	18.15
782.	93.17	2252.	18.12
784.	93.26	2254.	18.04
786.	93.25	2256.	18.01
788.	93.37	2258.	17.99
790.	93.3	2260.	17.95
792.	93.37	2262.	17.93
794.	93.49	2264.	17.89
796.	93.49	2266.	17.84
798.	93.56	2268.	17.82
800.	93.51	2270.	17.79
802.	93.56	2272.	17.74
804.	93.56	2274.	17.7
806.	93.59	2276.	17.69
808.	93.75	2278.	17.65
810.	93.74	2280.	17.61
812.	93.7	2282.	17.57

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
814.	816.	2284.	17.51	93.73	95.38
818.	820.	2288.	17.46	93.88	95.37
822.	822.	2290.	17.43	93.85	95.39
824.	824.	2292.	17.39	93.88	95.38
826.	826.	2294.	17.35	93.88	95.37
828.	828.	2296.	17.32	93.97	95.36
830.	830.	2298.	17.29	93.98	95.38
832.	832.	2299.	17.32	94.04	95.38
834.	834.	2300.	17.24	94.05	95.36
836.	836.	2302.	17.21	94.12	95.38
838.	838.	2304.	17.18	94.14	95.37
840.	840.	2306.	17.13	94.19	95.36
842.	842.	2308.	17.09	94.25	95.38
844.	844.	2310.	17.06	94.35	95.38
846.	846.	2312.	17.05	94.41	95.37
848.	848.	2314.	17.01	94.46	95.36
850.	850.	2316.	16.99	94.53	95.38
852.	852.	2318.	16.93	94.56	95.38
854.	854.	2320.	16.85	94.61	95.37
856.	856.	2322.	16.85	94.62	95.37
858.	858.	2324.	16.85	94.64	95.38
860.	860.	2326.	16.8	94.72	95.38
862.	862.	2328.	16.76	94.76	95.38
864.	864.	2330.	16.75	94.84	95.38
866.	866.	2332.	16.7	94.89	95.37
868.	868.	2334.	16.66	94.91	95.36
870.	870.	2336.	16.64	94.94	95.38
872.	872.	2338.	16.63	94.94	95.37
874.	874.	2340.	16.58	95.	95.38
876.	876.	2342.	16.54	95.	95.36
878.	878.	2344.	16.51	95.31	95.38
880.	880.	2346.	16.49	95.37	95.38
882.	882.	2348.	16.46	95.4	95.37
884.	884.	2350.	16.42	95.4	95.36
886.	886.	2352.	16.39	95.35	95.38
888.	888.	2354.	16.34	95.31	95.38
890.	890.	2356.	16.32	95.26	95.38
892.	892.	2358.	16.32	95.22	95.39
894.	894.	2360.	16.32	95.2	95.38
896.	896.	2362.	16.28	95.18	95.39
898.	898.	2364.	16.24	95.17	95.38
900.	900.	2366.	16.23	95.1	95.38
902.	902.	2368.	16.19	95.08	95.37
904.	904.	2370.	16.15	95.07	95.4
906.	906.	2372.	16.15	95.	95.37
908.	908.	2374.	16.1	95.	95.36
910.	910.	2376.	16.07	94.94	95.38
912.	912.	2378.	16.07	94.89	95.38
914.	914.	2380.	16.07	94.84	95.37
916.	916.	2382.	16.07	94.76	95.36
918.	918.	2384.	16.07	94.62	95.38
920.	920.	2386.	16.07	94.56	95.38
922.	922.	2388.	16.07	94.46	95.37
924.	924.	2390.	16.07	94.41	95.36
926.	926.	2392.	16.07	94.35	95.38
928.	928.	2394.	16.07	94.25	95.38
930.	930.	2396.	16.07	94.19	95.37
932.	932.	2398.	16.07	94.14	95.36
934.	934.	2400.	16.07	94.05	95.38
936.	936.	2402.	16.07	94.04	95.37
938.	938.	2404.	16.07	93.98	95.38
940.	940.	2406.	16.07	93.97	95.38
942.	942.	2408.	16.07	93.9	95.37
944.	944.	2410.	16.07	93.88	95.36

<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
946.	95.37	2416.	15.38
948.	95.38	2418.	15.35
950.	95.37	2420.	15.33
952.	95.37	2422.	15.3
954.	95.38	2424.	15.26
956.	95.37	2426.	15.23
958.	95.39	2428.	15.19
960.	95.37	2430.	15.17
962.	95.38	2432.	15.16
964.	95.36	2434.	15.12
966.	95.37	2436.	15.09
968.	95.37	2438.	15.04
970.	95.38	2440.	15.05
972.	95.38	2442.	15.
974.	95.39	2444.	14.98
976.	95.39	2446.	14.94
978.	95.39	2448.	14.91
980.	95.38	2450.	14.91
982.	95.38	2452.	14.88
984.	95.4	2454.	14.85
986.	95.4	2456.	14.82
988.	95.4	2458.	14.78
990.	95.39	2460.	14.74
992.	95.39	2462.	14.73
994.	95.39	2464.	14.68
996.	95.37	2466.	14.66
998.	95.38	2468.	14.64
1000.	95.4	2470.	14.61
1002.	95.4	2472.	14.58
1004.	95.39	2474.	14.56
1006.	95.37	2476.	14.52
1008.	95.38	2478.	14.51
1010.	95.4	2480.	14.46
1012.	95.39	2482.	14.43
1014.	95.4	2484.	14.44
1016.	95.4	2486.	14.4
1018.	95.38	2488.	14.32
1020.	95.38	2490.	14.34
1022.	95.38	2492.	14.29
1024.	95.39	2494.	14.26
1026.	95.4	2496.	14.27
1028.	95.4	2498.	14.23
1030.	95.38	2500.	14.19
1032.	95.4	2502.	14.17
1034.	95.43	2504.	14.14
1036.	95.39	2506.	14.12
1038.	95.39	2508.	14.09
1040.	95.41	2510.	14.06
1042.	95.39	2512.	14.03
1044.	95.42	2514.	14.
1046.	95.4	2516.	13.98
1048.	95.4	2518.	13.96
1050.	95.41	2520.	13.94
1052.	95.41	2522.	13.92
1054.	95.4	2524.	13.87
1056.	95.41	2526.	13.84
1058.	95.39	2528.	13.82
1060.	95.41	2530.	13.81
1062.	95.4	2532.	13.77
1064.	95.4	2534.	13.76
1066.	95.39	2536.	13.72
1068.	95.41	2538.	13.71
1070.	95.41	2540.	13.67
1072.	95.39	2542.	13.66
1074.	95.41	2544.	13.62
1076.	95.41	2546.	13.6

<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
1078.	95.41	2548.	13.58
1080.	95.4	2550.	13.55
1082.	95.4	2552.	13.53
1084.	95.41	2554.	13.51
1086.	95.41	2556.	13.46
1088.	95.41	2558.	13.44
1090.	95.41	2560.	13.42
1092.	95.41	2562.	13.38
1094.	95.41	2564.	13.36
1096.	95.41	2566.	13.33
1098.	95.39	2568.	13.31
1100.	95.39	2570.	13.31
1102.	95.41	2572.	13.25
1104.	95.41	2574.	13.23
1106.	95.41	2576.	13.24
1108.	95.42	2578.	13.19
1110.	95.41	2580.	13.17
1112.	95.42	2582.	13.15
1114.	95.41	2584.	13.11
1116.	95.41	2586.	13.1
1118.	95.43	2588.	13.09
1120.	95.43	2590.	13.03
1122.	95.41	2592.	13.03
1124.	95.43	2594.	13.
1126.	95.41	2596.	12.97
1128.	95.41	2598.	12.94
1130.	95.41	2600.	12.94
1132.	95.41	2602.	12.91
1134.	95.41	2604.	12.88
1136.	95.44	2606.	12.86
1138.	95.45	2608.	12.83
1140.	95.45	2610.	12.8
1142.	95.43	2612.	12.77
1144.	95.41	2614.	12.75
1146.	95.44	2616.	12.73
1148.	95.41	2618.	12.71
1150.	95.43	2620.	12.67
1152.	95.43	2622.	12.67
1154.	95.44	2624.	12.66
1156.	95.44	2626.	12.63
1158.	95.45	2628.	12.58
1160.	95.44	2630.	12.57
1162.	95.43	2632.	12.55
1164.	95.46	2634.	12.51
1166.	95.44	2636.	12.5
1168.	95.47	2638.	12.47
1170.	95.45	2640.	12.45
1172.	95.45	2642.	12.42
1174.	95.46	2644.	12.43
1176.	95.47	2646.	12.4
1178.	95.45	2648.	12.36
1180.	95.46	2650.	12.33
1182.	95.45	2652.	12.3
1184.	95.47	2654.	12.3
1186.	95.45	2656.	12.28
1188.	95.45	2658.	12.27
1190.	95.47	2660.	12.23
1192.	95.45	2662.	12.22
1194.	95.46	2664.	12.18
1196.	95.47	2666.	12.16
1198.	95.48	2668.	12.14
1200.	95.47	2670.	12.12
1202.	95.49	2672.	12.09
1204.	95.47	2674.	12.06
1206.	95.49	2676.	12.05
1208.	95.48	2678.	12.02

<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
1210.	95.48	2680.	12.02
1212.	95.49	2682.	11.97
1214.	95.49	2684.	11.96
1216.	95.49	2686.	11.91
1218.	95.47	2688.	11.89
1220.	95.48	2690.	11.89
1222.	95.47	2692.	11.86
1224.	95.49	2694.	11.84
1226.	95.49	2696.	11.81
1228.	95.47	2698.	11.81
1230.	95.48	2700.	11.78
1232.	95.49	2702.	11.73
1234.	95.46	2704.	11.72
1236.	95.48	2706.	11.73
1238.	95.48	2708.	11.68
1240.	95.52	2710.	11.65
1242.	95.5	2712.	11.63
1244.	95.49	2714.	11.61
1246.	95.51	2716.	11.58
1248.	95.49	2718.	11.59
1250.	95.52	2720.	11.56
1252.	95.49	2722.	11.54
1254.	95.49	2724.	11.51
1256.	95.49	2726.	11.5
1258.	95.5	2728.	11.46
1260.	95.5	2730.	11.47
1262.	95.51	2732.	11.44
1264.	95.5	2734.	11.42
1266.	95.52	2736.	11.39
1268.	95.5	2738.	11.37
1270.	95.51	2740.	11.36
1272.	95.51	2742.	11.31
1274.	95.49	2744.	11.32
1276.	95.52	2746.	11.28
1278.	95.53	2748.	11.28
1280.	95.52	2750.	11.24
1282.	95.52	2752.	11.24
1284.	95.52	2754.	11.23
1286.	95.52	2756.	11.18
1288.	95.52	2758.	11.15
1290.	95.52	2760.	11.15
1292.	95.53	2762.	11.12
1294.	95.53	2764.	11.11
1296.	95.52	2766.	11.11
1298.	95.54	2768.	11.05
1300.	95.52	2770.	11.02
1302.	95.52	2772.	11.
1304.	95.53	2774.	11.01
1306.	95.53	2776.	10.99
1308.	95.53	2778.	10.95
1310.	95.52	2780.	10.94
1312.	95.53	2782.	10.91
1314.	95.54	2784.	10.89
1316.	95.56	2786.	10.86
1318.	95.54	2788.	10.85
1320.	95.53	2790.	10.85
1322.	95.52	2792.	10.79
1324.	95.54	2794.	10.79
1326.	95.53	2796.	10.78
1328.	95.54	2798.	10.77
1330.	95.53	2800.	10.75
1332.	95.53	2802.	10.71
1334.	95.53	2804.	10.7
1336.	95.53	2806.	10.67
1338.	95.55	2808.	10.68
1340.	95.52	2810.	10.63

<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
1342.	95.52	2812.	10.63
1344.	95.52	2814.	10.6
1346.	95.53	2816.	10.61
1348.	95.53	2818.	10.57
1350.	95.53	2820.	10.54
1352.	95.53	2822.	10.53
1354.	95.53	2824.	10.5
1356.	95.55	2826.	10.49
1358.	95.55	2828.	10.46
1360.	95.54	2830.	10.45
1362.	95.55	2832.	10.42
1364.	95.52	2834.	10.42
1366.	95.55	2836.	10.38
1368.	95.55	2838.	10.37
1370.	95.54	2840.	10.35
1372.	95.54	2842.	10.31
1374.	95.55	2844.	10.32
1376.	95.55	2846.	10.3
1378.	95.55	2848.	10.25
1380.	95.56	2850.	10.25
1382.	95.56	2852.	10.23
1384.	95.56	2854.	10.21
1386.	95.57	2856.	10.16
1388.	95.56	2858.	10.18
1390.	95.56	2860.	10.16
1392.	95.55	2862.	10.1
1394.	95.55	2864.	10.12
1396.	95.56	2866.	10.09
1398.	95.58	2868.	10.07
1400.	95.56	2870.	10.06
1402.	95.54	2872.	10.03
1404.	95.54	2874.	10.01
1406.	95.55	2876.	9.973
1408.	95.55	2878.	9.96
1410.	95.55	2880.	9.959
1412.	95.56	2882.	9.91
1414.	95.54	2884.	9.901
1416.	95.56	2886.	9.908
1418.	95.56	2888.	9.877
1420.	95.56	2890.	9.838
1422.	95.56	2892.	9.844
1424.	95.58	2894.	9.827
1426.	95.56	2896.	9.808
1428.	95.56	2898.	9.798
1430.	95.56	2900.	9.76
1432.	95.56	2902.	9.731
1434.	95.55	2904.	9.712
1436.	95.56	2906.	9.721
1438.	95.57	2908.	9.674
1440.	95.56	2910.	9.687
1442.	95.56	2912.	9.652
1444.	95.56	2914.	9.628
1446.	95.58	2916.	9.612
1448.	95.56	2918.	9.58
1450.	95.57	2920.	9.557
1452.	95.54	2922.	9.549
1454.	95.56	2924.	9.516
1456.	84.33	2926.	9.486
1458.	76.31	2928.	9.509
1460.	72.01	2930.	9.496
1462.	69.39	2932.	9.448
1464.	67.52	2934.	9.452
1466.	66.04	2936.	9.411
1468.	64.77	2938.	9.401
1470.	63.7	2940.	9.388

Observation Well No. 2: 724707

X Location: 213. ft

Y Location: 0. ft

Radial distance from 724706: 213. ft

Fully Penetrating Well

No. of Observations: 1470

Observation Data			
<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
2.	-0.1581	1472.	64.72
4.	-0.2761	1474.	64.41
6.	-0.3714	1476.	64.04
8.	-0.3811	1478.	63.68
10.	-0.3221	1480.	63.31
12.	-0.1034	1482.	62.92
14.	0.03117	1484.	62.52
16.	0.432	1486.	62.12
18.	0.9952	1488.	61.72
20.	1.405	1490.	61.32
22.	1.752	1492.	60.93
24.	2.239	1494.	60.53
26.	2.733	1496.	60.14
28.	3.343	1498.	59.76
30.	3.722	1500.	59.37
32.	4.378	1502.	58.98
34.	4.89	1504.	58.6
36.	5.404	1506.	58.24
38.	5.917	1508.	57.88
40.	6.407	1510.	57.52
42.	6.9	1512.	57.17
44.	7.389	1514.	56.82
46.	7.851	1516.	56.48
48.	8.32	1518.	56.14
50.	8.795	1520.	55.81
52.	9.245	1522.	55.48
54.	9.703	1524.	55.15
56.	10.14	1526.	54.85
58.	10.57	1528.	54.53
60.	11.	1530.	54.22
62.	11.42	1532.	53.93
64.	11.85	1534.	53.63
66.	12.25	1536.	53.32
68.	12.66	1538.	53.04
70.	13.06	1540.	52.75
72.	13.44	1542.	52.48
74.	13.84	1544.	52.2
76.	14.21	1546.	51.92
78.	14.59	1548.	51.64
80.	14.97	1550.	51.38
82.	15.34	1552.	51.1
84.	15.7	1554.	50.85
86.	16.06	1556.	50.6
88.	16.42	1558.	50.35
90.	16.75	1560.	50.09
92.	17.11	1562.	49.83
94.	17.45	1564.	49.6
96.	17.77	1566.	49.36
98.	18.11	1568.	49.12
100.	18.44	1570.	48.87
102.	18.78	1572.	48.65
104.	19.09	1574.	48.42
106.	19.41	1576.	48.19
108.	19.71	1578.	47.96

<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
110.	20.02	1580.	47.74
112.	20.33	1582.	47.52
114.	20.63	1584.	47.3
116.	20.95	1586.	47.08
118.	21.24	1588.	46.88
120.	21.52	1590.	46.67
122.	21.82	1592.	46.44
124.	22.1	1594.	46.24
126.	22.38	1596.	46.04
128.	22.66	1598.	45.85
130.	22.95	1600.	45.64
132.	23.2	1602.	45.43
134.	23.47	1604.	45.25
136.	23.74	1606.	45.04
138.	24.01	1608.	44.86
140.	24.27	1610.	44.68
142.	24.54	1612.	44.48
144.	24.8	1614.	44.28
146.	25.05	1616.	44.11
148.	25.29	1618.	43.92
150.	25.55	1620.	43.73
152.	25.79	1622.	43.55
154.	26.02	1624.	43.37
156.	26.27	1626.	43.19
158.	26.52	1628.	43.02
160.	26.74	1630.	42.85
162.	26.99	1632.	42.67
164.	27.22	1634.	42.5
166.	27.46	1636.	42.32
168.	27.68	1638.	42.16
170.	27.9	1640.	41.99
172.	28.13	1642.	41.82
174.	28.34	1644.	41.67
176.	28.58	1646.	41.49
178.	28.79	1648.	41.34
180.	29.01	1650.	41.19
182.	29.22	1652.	41.02
184.	29.43	1654.	40.87
186.	29.63	1656.	40.71
188.	29.85	1658.	40.55
190.	30.05	1660.	40.39
192.	30.25	1662.	40.25
194.	30.45	1664.	40.1
196.	30.66	1666.	39.94
198.	30.85	1668.	39.79
200.	31.05	1670.	39.65
202.	31.24	1672.	39.49
204.	31.44	1674.	39.35
206.	31.63	1676.	39.21
208.	31.83	1678.	39.07
210.	32.02	1680.	38.91
212.	32.21	1682.	38.77
214.	32.38	1684.	38.63
216.	32.56	1686.	38.49
218.	32.74	1688.	38.37
220.	32.92	1690.	38.22
222.	33.11	1692.	38.07
224.	33.28	1694.	37.94
226.	33.46	1696.	37.81
228.	33.41	1698.	37.67
230.	33.55	1700.	37.54
232.	33.76	1702.	37.39
234.	33.96	1704.	37.27
236.	34.16	1706.	37.13
238.	34.35	1708.	37.02
240.	34.53	1710.	36.87

<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
242.	34.72	1712.	36.77
244.	34.86	1714.	36.63
246.	35.01	1716.	36.5
248.	35.19	1718.	36.37
250.	35.36	1720.	36.25
252.	35.54	1722.	36.12
254.	35.72	1724.	36.
256.	35.88	1726.	35.88
258.	36.05	1728.	35.76
260.	36.21	1730.	35.63
262.	36.37	1732.	35.52
264.	36.54	1734.	35.41
266.	36.69	1736.	35.28
268.	36.85	1738.	35.17
270.	37.	1740.	35.05
272.	37.14	1742.	34.93
274.	37.32	1744.	34.82
276.	37.46	1746.	34.68
278.	37.59	1748.	34.59
280.	37.75	1750.	34.48
282.	37.9	1752.	34.36
284.	38.04	1754.	34.25
286.	38.17	1756.	34.14
288.	38.33	1758.	34.03
290.	38.48	1760.	33.92
292.	38.61	1762.	33.81
294.	38.75	1764.	33.69
296.	38.89	1766.	33.59
298.	39.03	1768.	33.48
300.	39.17	1770.	33.38
302.	39.31	1772.	33.26
304.	39.42	1774.	33.16
306.	39.57	1776.	33.05
308.	39.7	1778.	32.96
310.	39.83	1780.	32.85
312.	39.97	1782.	32.76
314.	40.11	1784.	32.64
316.	40.24	1786.	32.55
318.	40.37	1788.	32.43
320.	40.49	1790.	32.35
322.	40.62	1792.	32.24
324.	40.74	1794.	32.12
326.	40.86	1796.	32.03
328.	40.98	1798.	31.93
330.	41.11	1800.	31.85
332.	41.26	1802.	31.75
334.	41.35	1804.	31.65
336.	41.48	1806.	31.54
338.	41.6	1808.	31.46
340.	41.73	1810.	31.37
342.	41.84	1812.	31.27
344.	41.98	1814.	31.18
346.	42.08	1816.	31.08
348.	42.2	1818.	30.99
350.	42.31	1820.	30.88
352.	42.43	1822.	30.81
354.	42.54	1824.	30.7
356.	42.65	1826.	30.6
358.	42.76	1828.	30.53
360.	42.87	1830.	30.44
362.	43.	1832.	30.35
364.	43.1	1834.	30.25
366.	43.22	1836.	30.17
368.	43.32	1838.	30.07
370.	43.44	1840.	29.99
372.	43.54	1842.	29.9

<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
374.	43.66	1844.	29.8
376.	43.77	1846.	29.73
378.	43.87	1848.	29.65
380.	43.98	1850.	29.55
382.	44.08	1852.	29.48
384.	44.19	1854.	29.38
386.	44.29	1856.	29.3
388.	44.39	1858.	29.21
390.	44.5	1860.	29.12
392.	44.6	1862.	29.04
394.	44.71	1864.	28.97
396.	44.79	1866.	28.88
398.	44.9	1868.	28.81
400.	45.	1870.	28.71
402.	45.1	1872.	28.64
404.	45.2	1874.	28.55
406.	45.29	1876.	28.48
408.	45.4	1878.	28.4
410.	45.49	1880.	28.31
412.	45.59	1882.	28.23
414.	45.68	1884.	28.16
416.	45.78	1886.	28.1
418.	45.88	1888.	28.
420.	45.95	1890.	27.93
422.	46.06	1892.	27.86
424.	46.15	1894.	27.76
426.	46.24	1896.	27.69
428.	46.33	1898.	27.62
430.	46.43	1900.	27.53
432.	46.52	1902.	27.47
434.	46.6	1904.	27.39
436.	46.7	1906.	27.32
438.	46.79	1908.	27.25
440.	46.88	1910.	27.17
442.	46.96	1912.	27.08
444.	47.04	1914.	27.02
446.	47.14	1916.	26.93
448.	47.22	1918.	26.89
450.	47.31	1920.	26.8
452.	47.4	1922.	26.73
454.	47.49	1924.	26.64
456.	47.57	1926.	26.58
458.	47.65	1928.	26.52
460.	47.73	1930.	26.43
462.	47.83	1932.	26.36
464.	47.91	1934.	26.29
466.	47.99	1936.	26.22
468.	48.07	1938.	26.16
470.	48.16	1940.	26.09
472.	48.24	1942.	26.02
474.	48.31	1944.	25.95
476.	48.4	1946.	25.88
478.	48.48	1948.	25.81
480.	48.56	1950.	25.74
482.	48.64	1952.	25.67
484.	48.71	1954.	25.6
486.	48.79	1956.	25.53
488.	48.88	1958.	25.49
490.	48.94	1960.	25.4
492.	49.01	1962.	25.34
494.	49.1	1964.	25.28
496.	49.17	1966.	25.21
498.	49.24	1968.	25.14
500.	49.33	1970.	25.07
502.	49.4	1972.	25.02
504.	49.49	1974.	24.95

<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
506.	49.54	1976.	24.88
508.	49.62	1978.	24.82
510.	49.69	1980.	24.75
512.	49.77	1982.	24.69
514.	49.85	1984.	24.62
516.	49.91	1986.	24.57
518.	49.99	1988.	24.51
520.	50.07	1990.	24.45
522.	50.14	1992.	24.39
524.	50.2	1994.	24.32
526.	50.28	1996.	24.26
528.	50.36	1998.	24.2
530.	50.43	2000.	24.14
532.	50.49	2002.	24.08
534.	50.56	2004.	24.01
536.	50.62	2006.	23.96
538.	50.7	2008.	23.9
540.	50.78	2010.	23.83
542.	50.85	2012.	23.77
544.	50.92	2014.	23.73
546.	50.99	2016.	23.65
548.	51.05	2018.	23.61
550.	51.12	2020.	23.54
552.	51.18	2022.	23.47
554.	51.25	2024.	23.42
556.	51.31	2026.	23.35
558.	51.39	2028.	23.28
560.	51.43	2030.	23.24
562.	51.5	2032.	23.18
564.	51.58	2034.	23.12
566.	51.65	2036.	23.06
568.	51.71	2038.	23.
570.	51.77	2040.	22.95
572.	51.83	2042.	22.91
574.	51.9	2044.	22.84
576.	51.96	2046.	22.77
578.	52.01	2048.	22.72
580.	52.08	2050.	22.67
582.	52.14	2052.	22.61
584.	52.21	2054.	22.57
586.	52.26	2056.	22.5
588.	52.33	2058.	22.45
590.	52.4	2060.	22.41
592.	52.46	2062.	22.34
594.	52.49	2064.	22.29
596.	52.57	2066.	22.23
598.	52.61	2068.	22.18
600.	52.67	2070.	22.11
602.	52.74	2072.	22.07
604.	52.8	2074.	22.02
606.	52.85	2076.	21.96
608.	52.91	2078.	21.91
610.	52.99	2080.	21.86
612.	53.03	2082.	21.8
614.	53.09	2084.	21.74
616.	53.14	2086.	21.69
618.	53.19	2088.	21.64
620.	53.26	2090.	21.61
622.	53.32	2092.	21.55
624.	53.38	2094.	21.5
626.	53.43	2096.	21.43
628.	53.48	2098.	21.38
630.	53.54	2100.	21.33
632.	53.6	2102.	21.28
634.	53.65	2104.	21.23
636.	53.7	2106.	21.18

<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
638.	53.74	2108.	21.13
640.	53.81	2110.	21.08
642.	53.86	2112.	21.03
644.	53.9	2114.	21.
646.	53.97	2116.	20.94
648.	54.02	2118.	20.88
650.	54.06	2120.	20.84
652.	54.12	2122.	20.79
654.	54.17	2124.	20.75
656.	54.22	2126.	20.69
658.	54.27	2128.	20.65
660.	54.33	2130.	20.58
662.	54.38	2132.	20.55
664.	54.43	2134.	20.5
666.	54.48	2136.	20.44
668.	54.53	2138.	20.4
670.	54.59	2140.	20.35
672.	54.65	2142.	20.29
674.	54.68	2144.	20.25
676.	54.73	2146.	20.21
678.	54.76	2148.	20.17
680.	54.83	2150.	20.12
682.	54.87	2152.	20.07
684.	54.92	2154.	20.02
686.	54.98	2156.	19.99
688.	55.01	2158.	19.92
690.	55.07	2160.	19.86
692.	55.12	2162.	19.83
694.	55.16	2164.	19.78
696.	55.2	2166.	19.75
698.	55.25	2168.	19.69
700.	55.28	2170.	19.64
702.	55.35	2172.	19.59
704.	55.4	2174.	19.55
706.	55.44	2176.	19.51
708.	55.5	2178.	19.48
710.	55.55	2180.	19.43
712.	55.6	2182.	19.37
714.	55.64	2184.	19.32
716.	55.68	2186.	19.28
718.	55.72	2188.	19.24
720.	55.77	2190.	19.19
722.	55.83	2192.	19.14
724.	55.86	2194.	19.11
726.	55.92	2196.	19.08
728.	55.98	2198.	19.03
730.	55.99	2200.	18.98
732.	56.04	2202.	18.94
734.	56.09	2204.	18.89
736.	56.14	2206.	18.85
738.	56.19	2208.	18.81
740.	56.22	2210.	18.77
742.	56.27	2212.	18.71
744.	56.32	2214.	18.69
746.	56.34	2216.	18.63
748.	56.38	2218.	18.59
750.	56.43	2220.	18.55
752.	56.49	2222.	18.5
754.	56.54	2224.	18.46
756.	56.59	2226.	18.44
758.	56.63	2228.	18.38
760.	56.68	2230.	18.35
762.	56.72	2232.	18.3
764.	56.76	2234.	18.26
766.	56.82	2236.	18.22
768.	56.85	2238.	18.19

<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
770.	56.9	2240.	18.13
772.	56.93	2242.	18.09
774.	56.98	2244.	18.05
776.	57.	2246.	18.01
778.	57.05	2248.	17.97
780.	57.1	2250.	17.94
782.	57.13	2252.	17.88
784.	57.17	2254.	17.85
786.	57.22	2256.	17.81
788.	57.28	2258.	17.76
790.	57.3	2260.	17.74
792.	57.34	2262.	17.69
794.	57.38	2264.	17.65
796.	57.43	2266.	17.62
798.	57.46	2268.	17.57
800.	57.49	2270.	17.54
802.	57.54	2272.	17.48
804.	57.57	2274.	17.44
806.	57.62	2276.	17.4
808.	57.64	2278.	17.36
810.	57.68	2280.	17.32
812.	57.73	2282.	17.3
814.	57.76	2284.	17.25
816.	57.8	2286.	17.2
818.	57.85	2288.	17.16
820.	57.89	2290.	17.14
822.	57.92	2292.	17.09
824.	57.96	2294.	17.05
826.	57.99	2296.	17.03
828.	58.03	2298.	17.
830.	58.06	2300.	16.94
832.	58.1	2302.	16.91
834.	58.15	2304.	16.87
836.	58.18	2306.	16.82
838.	58.21	2308.	16.79
840.	58.25	2310.	16.76
842.	58.28	2312.	16.72
844.	58.32	2314.	16.69
846.	58.36	2316.	16.64
848.	58.39	2318.	16.59
850.	58.43	2320.	16.56
852.	58.46	2322.	16.52
854.	58.49	2324.	16.5
856.	58.53	2326.	16.47
858.	58.56	2328.	16.42
860.	58.61	2330.	16.39
862.	58.64	2332.	16.35
864.	58.67	2334.	16.31
866.	58.72	2336.	16.28
868.	58.76	2338.	16.22
870.	58.79	2340.	16.2
872.	58.83	2342.	16.16
874.	58.85	2344.	16.13
876.	58.88	2346.	16.1
878.	58.92	2348.	16.06
880.	58.95	2350.	16.03
882.	58.97	2352.	15.98
884.	59.02	2354.	15.95
886.	59.06	2356.	15.92
888.	59.08	2358.	15.87
890.	59.12	2360.	15.83
892.	59.15	2362.	15.8
894.	59.19	2364.	15.77
896.	59.21	2366.	15.74
898.	59.26	2368.	15.7
900.	59.29	2370.	15.67

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
902.	15.64	2372.	15.64	59.32	61.26
904.	15.59	2374.	15.59	59.35	61.23
906.	15.56	2376.	15.56	59.39	61.21
908.	15.53	2378.	15.53	59.43	61.19
910.	15.5	2380.	15.5	59.46	61.15
912.	15.47	2382.	15.47	59.47	61.11
914.	15.42	2384.	15.42	59.52	61.09
916.	15.4	2386.	15.4	59.54	61.08
918.	15.37	2388.	15.37	59.58	61.04
920.	15.33	2390.	15.33	59.62	61.
922.	15.3	2392.	15.3	59.64	60.99
924.	15.28	2394.	15.28	59.68	60.96
926.	15.24	2396.	15.24	59.71	60.93
928.	15.2	2398.	15.2	59.74	60.91
930.	15.16	2400.	15.16	59.78	60.87
932.	15.13	2402.	15.13	59.81	60.85
934.	15.09	2404.	15.09	59.84	60.81
936.	15.05	2406.	15.05	59.86	60.78
938.	15.02	2408.	15.02	59.89	60.75
940.	15.	2410.	15.	59.92	60.73
942.	14.97	2412.	14.97	59.96	60.7
944.	14.92	2414.	14.92	59.99	60.68
946.	14.87	2416.	14.87	59.99	60.65
948.	14.85	2418.	14.85	59.84	60.62
950.	14.8	2420.	14.8	59.81	60.6
952.	14.78	2422.	14.78	59.78	60.57
954.	14.76	2424.	14.76	59.74	60.54
956.	14.72	2426.	14.72	59.71	60.51
958.	14.68	2428.	14.68	59.68	60.48
960.	14.65	2430.	14.65	59.64	60.44
962.	14.62	2432.	14.62	59.62	60.41
964.	14.58	2434.	14.58	59.58	60.38
966.	14.55	2436.	14.55	59.54	60.35
968.	14.52	2438.	14.52	59.52	60.32
970.	14.48	2440.	14.48	59.47	60.28
972.	14.45	2442.	14.45	59.46	60.25
974.	14.43	2444.	14.43	59.43	60.23
976.	14.4	2446.	14.4	59.4	60.2
978.	14.37	2448.	14.37	59.39	60.18
980.	14.33	2450.	14.33	59.35	60.14
982.	14.3	2452.	14.3	59.32	60.11
984.	14.28	2454.	14.28	59.28	60.07
986.	14.24	2456.	14.24	59.24	60.05
988.	14.22	2458.	14.22	59.2	60.02
990.	14.17	2460.	14.17	59.16	59.99
992.	14.14	2462.	14.14	59.12	59.96
994.	14.11	2464.	14.11	59.08	59.92
996.	14.1	2466.	14.1	59.04	59.89
998.	14.07	2468.	14.07	59.02	59.86
1000.	14.04	2470.	14.04	59.0	59.84
1002.	14.01	2472.	14.01	58.98	59.81
1004.	13.97	2474.	13.97	58.96	59.78
1006.	13.94	2476.	13.94	58.94	59.74
1008.	13.91	2478.	13.91	58.92	59.71
1010.	13.88	2480.	13.88	58.9	59.68
1012.	13.85	2482.	13.85	58.88	59.64
1014.	13.82	2484.	13.82	58.86	59.62
1016.	13.78	2486.	13.78	58.84	59.6
1018.	13.77	2488.	13.77	58.82	59.58
1020.	13.73	2490.	13.73	58.8	59.54
1022.	13.69	2492.	13.69	58.78	59.52
1024.	13.67	2494.	13.67	58.76	59.47
1026.	13.63	2496.	13.63	58.74	59.46
1028.	13.6	2498.	13.6	58.72	59.43
1030.	13.57	2500.	13.57	58.7	59.4
1032.		2502.		58.68	59.39

<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
1034.	61.28	2504.	13.57
1036.	61.32	2506.	13.52
1038.	61.34	2508.	13.49
1040.	61.36	2510.	13.46
1042.	61.42	2512.	13.43
1044.	61.43	2514.	13.41
1046.	61.46	2516.	13.38
1048.	61.48	2518.	13.35
1050.	61.5	2520.	13.32
1052.	61.54	2522.	13.29
1054.	61.55	2524.	13.26
1056.	61.59	2526.	13.24
1058.	61.6	2528.	13.2
1060.	61.63	2530.	13.17
1062.	61.65	2532.	13.15
1064.	61.68	2534.	13.13
1066.	61.71	2536.	13.09
1068.	61.73	2538.	13.07
1070.	61.75	2540.	13.04
1072.	61.77	2542.	13.
1074.	61.81	2544.	12.98
1076.	61.85	2546.	12.95
1078.	61.86	2548.	12.93
1080.	61.89	2550.	12.91
1082.	61.91	2552.	12.87
1084.	61.93	2554.	12.84
1086.	61.96	2556.	12.81
1088.	61.98	2558.	12.78
1090.	62.01	2560.	12.76
1092.	62.04	2562.	12.75
1094.	62.05	2564.	12.71
1096.	62.07	2566.	12.68
1098.	62.12	2568.	12.65
1100.	62.13	2570.	12.62
1102.	62.15	2572.	12.6
1104.	62.17	2574.	12.58
1106.	62.2	2576.	12.54
1108.	62.22	2578.	12.52
1110.	62.25	2580.	12.5
1112.	62.28	2582.	12.46
1114.	62.3	2584.	12.44
1116.	62.33	2586.	12.41
1118.	62.35	2588.	12.37
1120.	62.38	2590.	12.35
1122.	62.39	2592.	12.35
1124.	62.41	2594.	12.32
1126.	62.44	2596.	12.29
1128.	62.46	2598.	12.26
1130.	62.49	2600.	12.23
1132.	62.52	2602.	12.19
1134.	62.55	2604.	12.16
1136.	62.57	2606.	12.15
1138.	62.59	2608.	12.11
1140.	62.6	2610.	12.1
1142.	62.65	2612.	12.08
1144.	62.67	2614.	12.05
1146.	62.69	2616.	12.02
1148.	62.7	2618.	12.
1150.	62.75	2620.	11.96
1152.	62.75	2622.	11.93
1154.	62.78	2624.	11.92
1156.	62.8	2626.	11.91
1158.	62.83	2628.	11.85
1160.	62.86	2630.	11.83
1162.	62.87	2632.	11.82
1164.	62.88	2634.	11.79

<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
1166.	62.92	2636.	11.77
1168.	62.95	2638.	11.74
1170.	62.96	2640.	11.71
1172.	62.99	2642.	11.69
1174.	63.01	2644.	11.67
1176.	63.04	2646.	11.65
1178.	63.06	2648.	11.62
1180.	63.07	2650.	11.59
1182.	63.1	2652.	11.58
1184.	63.12	2654.	11.55
1186.	63.15	2656.	11.51
1188.	63.18	2658.	11.5
1190.	63.19	2660.	11.47
1192.	63.21	2662.	11.45
1194.	63.24	2664.	11.44
1196.	63.26	2666.	11.4
1198.	63.28	2668.	11.37
1200.	63.31	2670.	11.36
1202.	63.31	2672.	11.33
1204.	63.35	2674.	11.3
1206.	63.37	2676.	11.27
1208.	63.38	2678.	11.25
1210.	63.4	2680.	11.23
1212.	63.42	2682.	11.2
1214.	63.44	2684.	11.17
1216.	63.47	2686.	11.16
1218.	63.48	2688.	11.14
1220.	63.52	2690.	11.11
1222.	63.53	2692.	11.08
1224.	63.55	2694.	11.04
1226.	63.56	2696.	11.04
1228.	63.59	2698.	11.01
1230.	63.61	2700.	10.98
1232.	63.63	2702.	10.97
1234.	63.64	2704.	10.94
1236.	63.67	2706.	10.91
1238.	63.69	2708.	10.9
1240.	63.71	2710.	10.87
1242.	63.73	2712.	10.85
1244.	63.75	2714.	10.82
1246.	63.77	2716.	10.79
1248.	63.8	2718.	10.77
1250.	63.81	2720.	10.76
1252.	63.82	2722.	10.73
1254.	63.85	2724.	10.72
1256.	63.87	2726.	10.69
1258.	63.89	2728.	10.67
1260.	63.91	2730.	10.64
1262.	63.93	2732.	10.62
1264.	63.95	2734.	10.6
1266.	63.97	2736.	10.58
1268.	63.99	2738.	10.56
1270.	64.	2740.	10.54
1272.	64.02	2742.	10.52
1274.	64.05	2744.	10.49
1276.	64.05	2746.	10.48
1278.	64.09	2748.	10.43
1280.	64.11	2750.	10.42
1282.	64.12	2752.	10.39
1284.	64.15	2754.	10.38
1286.	64.15	2756.	10.37
1288.	64.2	2758.	10.33
1290.	64.2	2760.	10.31
1292.	64.22	2762.	10.29
1294.	64.25	2764.	10.27
1296.	64.26	2766.	10.25

<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
1298.	64.28	2768.	10.23
1300.	64.3	2770.	10.2
1302.	64.31	2772.	10.18
1304.	64.32	2774.	10.15
1306.	64.35	2776.	10.14
1308.	64.36	2778.	10.11
1310.	64.39	2780.	10.1
1312.	64.41	2782.	10.07
1314.	64.43	2784.	10.06
1316.	64.43	2786.	10.03
1318.	64.46	2788.	10.
1320.	64.48	2790.	9.972
1322.	64.51	2792.	9.95
1324.	64.52	2794.	9.93
1326.	64.52	2796.	9.909
1328.	64.56	2798.	9.885
1330.	64.56	2800.	9.884
1332.	64.59	2802.	9.868
1334.	64.6	2804.	9.825
1336.	64.62	2806.	9.803
1338.	64.64	2808.	9.796
1340.	64.65	2810.	9.762
1342.	64.68	2812.	9.76
1344.	64.69	2814.	9.735
1346.	64.7	2816.	9.706
1348.	64.73	2818.	9.671
1350.	64.76	2820.	9.666
1352.	64.77	2822.	9.647
1354.	64.79	2824.	9.614
1356.	64.8	2826.	9.6
1358.	64.82	2828.	9.578
1360.	64.84	2830.	9.549
1362.	64.85	2832.	9.531
1364.	64.87	2834.	9.506
1366.	64.88	2836.	9.501
1368.	64.92	2838.	9.467
1370.	64.91	2840.	9.443
1372.	64.94	2842.	9.42
1374.	64.96	2844.	9.408
1376.	64.98	2846.	9.384
1378.	65.	2848.	9.36
1380.	65.	2850.	9.323
1382.	65.04	2852.	9.312
1384.	65.05	2854.	9.305
1386.	65.06	2856.	9.281
1388.	65.09	2858.	9.25
1390.	65.1	2860.	9.228
1392.	65.11	2862.	9.205
1394.	65.13	2864.	9.193
1396.	65.15	2866.	9.175
1398.	65.17	2868.	9.142
1400.	65.18	2870.	9.139
1402.	65.2	2872.	9.113
1404.	65.21	2874.	9.102
1406.	65.24	2876.	9.074
1408.	65.25	2878.	9.04
1410.	65.26	2880.	9.024
1412.	65.28	2882.	9.013
1414.	65.3	2884.	8.99
1416.	65.32	2886.	8.966
1418.	65.33	2888.	8.949
1420.	65.35	2890.	8.926
1422.	65.37	2892.	8.906
1424.	65.38	2894.	8.881
1426.	65.4	2896.	8.858
1428.	65.41	2898.	8.848

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
1430.	65.43	2900.	8.828
1432.	65.44	2902.	8.805
1434.	65.45	2904.	8.783
1436.	65.46	2906.	8.772
1438.	65.48	2908.	8.744
1440.	65.49	2910.	8.728
1442.	65.51	2912.	8.699
1444.	65.52	2914.	8.695
1446.	65.55	2916.	8.66
1448.	65.58	2918.	8.648
1450.	65.58	2920.	8.639
1452.	65.6	2922.	8.607
1454.	65.61	2924.	8.588
1456.	65.62	2926.	8.565
1458.	65.65	2928.	8.554
1460.	65.64	2930.	8.535
1462.	65.63	2932.	8.51
1464.	65.54	2934.	8.48
1466.	65.42	2936.	8.463
1468.	65.24	2938.	8.442
1470.	65.01	2940.	8.425

SOLUTION

Pumping Test
 Aquifer Model: Confined
 Solution Method: Cooper-Jacob

VISUAL ESTIMATION RESULTSEstimated Parameters

Parameter	Estimate	
T	16.21	ft ² /day
S	1.332E-5	

$K = T/b = 0.3684$ ft/day (0.0001299 cm/sec)
 $S_s = S/b = 3.028E-7$ 1/ft

AUTOMATIC ESTIMATION RESULTSEstimated Parameters

Parameter	Estimate	Std. Error	Approx. C.I.	t-Ratio	
T	16.21	0.1072	+/- 0.2104	151.2	ft ² /day
S	1.332E-5	2.039E-7	+/- 4.002E-7	65.33	

C.I. is approximate 95% confidence interval for parameter
 t-ratio = estimate/std. error
 No estimation window

$K = T/b = 0.3684$ ft/day (0.0001299 cm/sec)
 $S_s = S/b = 3.028E-7$ 1/ft

Parameter Correlations

	T	S
T	1.00	-0.91
S	-0.91	1.00

Residual Statistics

for weighted residuals

Sum of Squares 5505. ft²
 Variance 7.667 ft²

Std. Deviation 2.769 ft
Mean -9.678E-7 ft
No. of Residuals 720
No. of Estimates 2