

**NOTICE OF MEETING OF THE COMMISSIONERS' COURT OF
HOCKLEY COUNTY, TEXAS**

Notice is hereby given that a Regular Meeting of the above named Commissioners' Court will be held on the 26th day of August, 2024 at 9:30 a.m. in the Commissioners' Courtroom, Hockley County Courthouse, Levelland, Texas, at which time the following subjects will be discussed to-wit:

1. Read for approval the minutes for the Regular Meeting held at 9:00 a.m. on Monday, August 19, 2024.
2. Read for approval all monthly bills and claims submitted to the Court dated through August 26, 2024.
3. Discussion and potential action to approve extending the Disaster Declaration Renewal dated July 29, 2024.
4. Consider and take necessary action to approve Ad Valorem tax refunds.
5. Consider and take necessary action concerning the application submitted by the Levelland Main Street Program requesting permission to use the courthouse lawn on October 11, 2024.
6. Consider and take necessary action to approve the Final Plat for Quail Road Estates, Lots 1-17, an Addition to Hockley County, Texas located in Precinct 1.

COMMISSIONERS' COURT OF HOCKLEY COUNTY, TEXAS.

FILED FOR RECORD
AT _____ O'CLOCK ____ M.

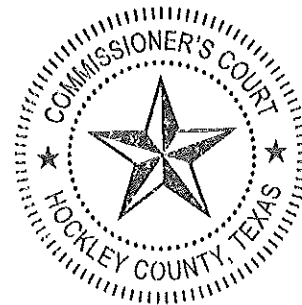
BY: *Sharla Baldrige*
Sharla Baldrige, Hockley County Judge

AUG 23 2024

I, the undersigned County Clerk, do hereby certify that the above Notice of Meeting of the above named Commissioners' Court, is a true and correct copy of said Notice on the bulletin board at the Courthouse, and at the east door of the Courthouse of Hockley County, Texas, as place readily accessible to the general public at all times on the 23rd day of August, 2024, and said Notice remained posted continuously for at least 72 hours preceding the scheduled time of said meeting.

Dated this 23rd day of August, 2024.

Jennifer Palermo
Jennifer Palermo, County Clerk, and Ex-Officio
Clerk of Commissioners' Court, Hockley County, Texas



THE STATE OF TEXAS
COUNTY OF HOCKLEY

IN THE COMMISSIONER'S COURT
OF HOCKEY COUNTY, TEXAS

REGULAR MEETING
AUGUST 26, 2024

Be it remembered that on this the 26th day of JUNE A.D. 2024, there came on to be held a REGULAR Meeting of the Commissioners Court, and the court having convened in REGULAR Session at the usual meeting place thereof at the Courthouse in Levelland, Texas, with the following members present to-wit:

Sharla Baldrige	County Judge
Alan Wisdom	Commissioner Precinct No. 1
Larry Carter	Commissioner Precinct No. 2
Seth Graf	Commissioner Precinct No. 3
Thomas R "Tommy" Clevenger	Commissioner Precinct No. 4

Jennifer Palermo, County Clerk, and Ex-Officio Clerk of Commissioners Court when the following proceedings were had to-wit:

Motion by Commissioner Carter, second by Commissioner Graf, 4 Votes Yes, 0 Votes No, that the Minutes of a Regular Meeting of the Commissioner's Court, held on Monday August 19, 2024, at 9:00 a.m., be approved and stand as read.

Motion by Commissioner Graf, second by Commissioner Clevenger, 4 Votes Yes, 0 Votes No, that all monthly claims and bills submitted to the court and dated through August 26, 2024, A.D. be approved and stand as read.

Motion by Commissioner Carter, second by Commissioner Graf, 4 votes yes, 0 votes No, that Commissioners Court approved extending the Disaster Declaration renewal dated July 29, 2024. As per Disaster Declaration 4th Renewal and Extension recorded below.



DISASTER DECLARATION

4TH RENEWAL AND EXTENSION

WHEREAS, Hockley County, Texas on the 28th and 29th days of May, 2024, suffered widespread or severe damage, injury or loss of life or property (or there is imminent threat of the same) resulting from severe weather, straight-line winds, and suspected tornado impact and has severely damages homes, businesses and infrastructure.

WHEREAS, the Hockley County Judge did determine that extraordinary measures must be taken to alleviate the suffering of people and to protect or rehabilitate property and did issue a Disaster Declaration on May 29, 2024.

WHEREAS, on June 4, 2024, the Hockley County Commissioners Court approved to renew and extend the Disaster Declaration issued by Hockley County Judge, Sharla Baldrige on May 29, 2024 for thirty (30) days.

WHEREAS, on June 24, 2024, the Hockley County Commissioners Court approved to renew and extend the Disaster Declaration issued by Hockley County Judge, Sharla Baldrige on May 29, 2024 until July 31, 2024 at 11:59 p.m.

WHEREAS, on June 29, 2024, the Hockley County Commissioners Court approved to renew and extend the Disaster Declaration issued by Hockley County Judge, Sharla Baldrige on May 29, 2024 until August 30, 2024 at 11:59 p.m.

WHEREAS, the Hockley County Commissioners Court believes circumstances still exist to renew and extend the Disaster Declaration until November 30, 2024 at 11:59 p.m.

NOW, THEREFORE, BE IT PROCLAIMED AND APPROVED by the Hockley County Commissioners Court that the Disaster Declaration issued on May 29, 2024 by the Hockley County Judge; was renewed and extended by the Hockley County Commissioners Court on June 4, 2024; was renewed and extended by the Hockley County Commissioners Court on June 24, 2024; was renewed and extended by the Hockley County Commissioners Court on June 29, 2024 until August 30, 2024 at 11:59 p.m.; and is hereby renewed and extended until November 30, 2024 at 11:59 p.m. pursuant to 418.108(b) of the Texas Government Code unless renewed, extended, amended or canceled by the Hockley County Commissioners Court.

Pursuant to 418.108(c) of the Texas Government Code, this Disaster Declaration 4TH Renewal and Extension shall be given prompt and general publicity and shall be filed promptly with the Hockley County Clerk.

Pursuant to 418.108(d) of the Texas Government Code, this Disaster Declaration Renewal continues activation of the Hockley County Emergency Management Plan; and all local or inter-jurisdictional emergency management plans and authorizes the furnishing of aid and assistance under the declaration.

This Disaster Declaration Renewal shall take effect immediately from and after its issuance.

ORDERED this 26th day of August, 2024.

ATTEST:

HOCKLEY COUNTY, TEXAS

BY: Jennifer Palermo
Jennifer Palermo, County Clerk

BY: Sharla Baldrige
Sharla Baldrige, County Judge



Motion by Commissioner Graf, second by Commissioner Clevenger, 4 votes yes, 0 votes no, that commissioner's court approved the ad valorem tax refund in the amount of Five hundred seventy-two dollars (\$572.00) to Levelland Chevrolet Buick GMC

As per Debbie Bramlett Tax Assessor Collector

Motion by Commissioner Clevenger, second by Commissioner Wisdom, 4 votes yes, 0 votes no, that commissioner's court approved the application submitted by the Levelland Mainstreet program requesting use of courthouse lawn on October 11, 2024. As per Order to approve use of Courthouse lawn Mainstreet program- Sip and Swirl recorded below.

THE STATE OF TEXAS

COMMISSIONERS' COURT

COUNTY OF HOCKLEY

HOCKLEY COUNTY, TEXAS

**ORDER TO APPROVE USE OF COURTHOUSE LAWN
MAINSTREET PROGRAM – SIP AND SWIRL**

The Commissioners' Court of Hockley County has hereby approved AND IT IS SO ORDERED that the Courthouse lawn shall be used by the Levelland Mainstreet Program for Sip and Swirl on October 11, 2024 from 10 a.m. until 11:59 p.m. This will be subject to the Application requirements and the Hold Harmless Agreement.

DONE IN OPEN COURT, this the 26th day of August, 2024, upon motion by Commissioner, Tommy Clevenger, seconded by Commissioner, Alan Wisdom and unanimously carried.

Sharla Baldrige
Sharla Baldrige, Hockley County Judge

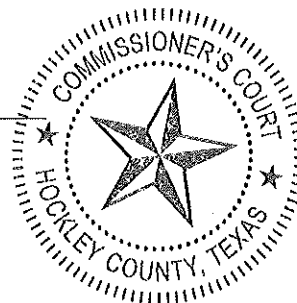
Alan Wisdom
Alan Wisdom, Commissioner, Pct 1

Larry Carter
Larry Carter, Commissioner, Pct 2

Seth Graf
Seth Graf, Commissioner, Pct 3

Tommy Clevenger
Tommy Clevenger, Commissioner, Pct 4

ATTEST: Jennifer Palermo
Jennifer Palermo, County Clerk,
Ex-Officio Clerk of Commissioners
Court of Hockley County, Texas





HOCKLEY COUNTY

Hold Harmless/Indemnity Agreement

"The undersigned, Kelly Hancock, agrees to hold harmless and indemnify Hockley County, its Commissioners Court, elected officials, employees and volunteers who are acting in their official capacity, from any and all claims made by them or on their behalf for any losses, injuries, or damages reported on the Hockley County Lawn or any portion of the Courthouse Square, which may be made by reason of the group's use of the Hockley County Lawn or any portion of the Courthouse Square."

"The undersigned, Kelly Hancock, hereby releases and forever discharges Hockley County, its Commissioners Court, elected officials, employees and volunteers who might be claimed to be liable for any and all claims, demands, damages, actions, causes of action, suit, judgments or executions by reason of any losses incurred on the Hockley County Lawn or any portion of the Courthouse Square, which may be made by reason of the group's use of the Courthouse Lawn, any portion of the Courthouse Square and/or equipment."

"It is further stipulated and agreed that the laws of the State of Texas shall control in the construction of this instrument."

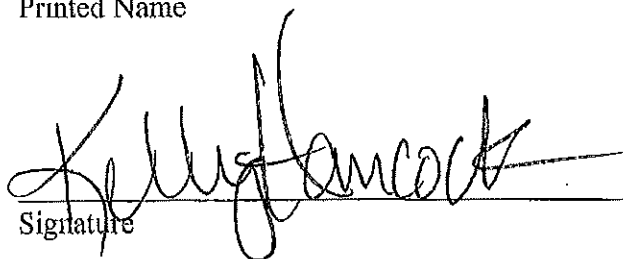
"In Witness whereof we have hereunto set our hands this the 13th day of August, 2024."

Kelly Hancock

08/13/24

Printed Name

Date



806-894-9079

Signature

Contact Phone No.

1709 Ave H

Levelland, TX

79336

Address

City, State

Zip

Motion by Commissioner Wisdom, second by Commissioner Carter, 4 votes yes, 0 votes no, that commissioner's court approved the Final Plat for Quail Estates, Lots 1-17, an Addition to Hockley County, Texas located in Precinct 1. As per plat recorded in cabinet B Slide 67.



**Groundwater Availability
Report**

**Quail Road Development
Lubbock, TX 79407**

Centerline Project #: 24-07-1712

Report Completion Date: 8/7/2024

Prepared For: MRG Land Development, LLC

Partum Solutio

Groundwater Availability Study ■ Lubbock, Texas ■ August 7th, 2024
Centerline ■ Project No. 24-07-1712

Groundwater Availability Report

Quail Road Development
Lubbock, TX

Centerline Project #: 24-05-1543

Prepared for:

MRG Land Development, LLC
4301 N Fm 2528
Lubbock, TX 79416

Provided by:



TBPELS Firm No. F-16713
TBPG Firm No. 50683

8312 Upland Avenue
Lubbock, TX 79424
Phone: (806) 470-8686
www.thecenterline.com



August 7th, 2024



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1.0 Introduction

1.1 Overview

Centerline was retained to conduct a groundwater availability study (GAS) in support of a proposed development in Hockley County, Texas (the Site.) The Site is located in eastern Hockley County, Texas in the northwest corner of the intersection between Quail Road and Elk Road [Appendix A.] This report details the results of a GAS conducted for the Site to meet the requirements of the Certification of Groundwater Availability for Platting Form (Title 30, Texas Administrative Code, Chapter 230, Sections 230.2 through and including 230.11.)

The proposed subdivision is documented within the Hockley County Tax Assessor as Property ID: 97488. MRG Land Development, LLC, 4301 N Fm 2528, Lubbock, TX 79416 is the plat applicant. Appendix B provides the completed Certification of Groundwater Availability for Platting Form.

MRG Land Development, LLC proposes to develop the approximately 42.5-acre property as a subdivision including 17 single-family residential lots. The average lot size is 2.50 acres, and each lot will be served by an individual private water well. The subdivision is located within the jurisdiction of the High Plains Underground Water Conservation District (HPWD.)

2.0 Projected Water Demand Estimation

2.1 Overview

To estimate the total annual water demand for the subdivision, we utilized an average number of persons per household for Hockley County from U.S. Census data^[1] (2.63 persons) and an average usage of 150 gallons per person per day (per capita) (gpcd) from the Llano Estacado (Region O) Regional Water Plan^[2] published by the Texas Water Development Board (TWDB.) The formulae in the following section were used to calculate the projected water demand for the subdivision.

2.2 Equations

Equation 1: Total Water Demand

$$Q_s = 17 \times 2.63 \times 150 \times 365 \text{ days} = 2,447,872.5 \text{ gallons/year or } 7.51 \text{ acre-feet/year}$$

Where:

Q_s = total water demand at full build out for the subdivision;

17 = Number of lots;
2.63 = Average number of persons per household; and
150 = The average per capita usage of water per day in gallons.

Equation 2: Water Demand per Housing Unit

$$Q_h = 2.63 \times 150 \times 365 \text{ days} = 143,993 \text{ gallons/year or } 0.44 \text{ acre-feet/year}$$

Where:

Q_h = Total Water Demand per house per year.

Equation 1 assumes 2.63 persons per household using 150 gallons per person per day which results in a total water demand for the subdivision of 7.51 acre-feet/year. Equation 2 results in a water demand per housing unit of 0.44 acre-feet/year. There are no planned non-residential water demands.

3.0 General Groundwater Resource Information

3.1 Introduction

According to the Texas Water Development Board (TWDB), there are one (1) major aquifer (the Ogallala Aquifer) and two (2) minor aquifers (Edwards-Trinity (High Plains) Aquifer and the Dockum Aquifer) present within the study area. The TWDB classifies major aquifers as aquifers that produce large amounts of water over large areas, and minor aquifers as aquifers that produce minor amounts of water over large areas or large amounts of water over small areas. The Dockum Aquifer is of subpar quality locally and, accordingly, is not considered in this study.

The Edwards-Trinity (High Plains) Aquifer is a minor aquifer spanning approximately 9,000 mi² beneath the Ogallala Aquifer in western Texas and eastern New Mexico. Its water-yielding formations include the sandstone of the Antlers Formation (Trinity Group) and the limestone layers of the Comanche Peak and Edwards formations.

The Ogallala Aquifer, the largest aquifer in the United States, is a crucial groundwater resource underlying much of the High Plains region of Texas. Within the Southern High Plains, it reaches a maximum thickness of 800 feet, with an average freshwater saturated thickness of 95 feet^[2].

3.2 Geomorphology

The Southern High Plains covers an aerial extent of approximately 15,500 mi², comprising a predominantly flat mesa extending across a broad swath of western Texas and eastern New Mexico. While the bounding escarpments display significant relief, often exceeding hundreds of



feet, the plains themselves exhibit modest local relief, largely defined by around 17,000 ephemeral lake basins. These basins, referred to as "playas," are shallow, typically less than 15 feet deep, and are situated above the water table, likely serving as a major recharge mechanism^[3] for the underlying Ogallala Aquifer.

In addition to these smaller basins, the region also hosts approximately 40 larger basins, many of which feature elongated shapes and are encrusted with salt or contain saline lakes. Notable examples include the Double Lakes of Lynn County. Positioned at or near the water table, these expansive saline playas are sustained by groundwater seepage, highlighting their dependence on subterranean water sources for stability and existence.

3.3 Stratigraphy and Geologic History

Overview

The Southern High Plains primarily consists of fluvial sands and gravels overlain by eolian sands and silts from the Tertiary (Miocene-Pliocene) period^{[10][11][12]}. These are further covered by Quaternary eolian sands, silts, and lacustrine deposits^{[10][11][12]}. This Tertiary-Quaternary sequence rests unconformably on Triassic sands and shales or Cretaceous shales, limestones, sandstones, and clays.

Triassic

The Triassic section beneath the Southern High Plains in Texas is expressed as the Dockum Group. The Dockum Group consists of two major fining-upward sequences represented by the lower Santa Rosa-Tecovas Formation overlain by the much thicker and present across a broader geography Trujillo-Cooper Canyon Formation^[4]. The depositional environments characteristic of both sequences within the Dockum Group is described as alluvial and lacustrine, however they are distinct in that each formation sources their sediments from a different terrain^[4].

Cretaceous

During the Cretaceous, the region was inundated by an epicontinental marine transgression^[5] that retreated with the onset of the Tertiary Laramide orogeny in the southern Rocky Mountains. Most of the Cretaceous marine section in the area was eroded except for the central part of the Southern High Plains^[6].

Comanche Series (Lower Cretaceous)

Trinity Group

Antlers Formation. The basal unit of the Cretaceous section, the Antlers disconformably overlies the Triassic Dockum Group beds. The formation is described as white to purple, loosely consolidated, fine to coarse-grained, well-sorted unfossiliferous quartz sandstone with scattered lenses of gravel and has been interpreted as braided stream deposits^[7].

Fredericksburg Group

The Fredericksburg Group represents a transgressive sequence of marginal marine deposits and includes the Walnut, Comanche Peak, Edwards, and Kiamichi Formations in the Southern High Plains^{[7][8]}.

Walnut Formation. The Walnut Formation consists of argillaceous sandstone, limestone, calcareous shale, and normal marine deposits reflecting northwestward transgression of the Comanchean Sea^{[7][8]}.

Comanche Peak Formation. The Comanche Peak Formation is characterized by argillaceous limestone with numerous shaly interbeds suggestive of fluctuating coastline conditions^{[7][8]}. The contact between the Comanche Peak and the overlying Edwards Formation is gradational.

Edwards Formation. The Edwards Formation comprises limestone that becomes sandy towards the west, indicating a transgressive pulse likely in response to eustatic rise in sea levels^{[7][8]}.

Kiamichi Formation. The Kiamichi Formation, which conformably overlies the Edwards Formation, has been described as shale, thin, light grey limestone and moderate yellowish-brown sandstone^[7].

Washita Group

The Washita Group, consisting only of the Duck Creek Formation in the Southern High Plains, is the uppermost unit of the Comanche series.

Duck Creek Formation. The Duck Creek Formation has been described as moderate yellow shale and thin moderate yellowish-brown limestone ranging in thickness from a thin layer to 36 feet thick^[7]. It has been suggested that the sporadic presence of the Duck Creek Formation on the Southern High Plains was due to post-Cretaceous stream erosion^[8].



Tertiary

From the end of the Cretaceous to early-to-mid Miocene, the Southern High Plains experienced extensive erosion, forming a middle Tertiary erosional surface^[9]. This period saw the evolution of a dissected plain with mesas capped by resistant Cretaceous limestone. Salt dissolution at depth altered the pre-Ogallala surface, with major valleys becoming sites for deposition during the mid-to-late Miocene epoch^{[10][11][12]}.

Miocene-Pliocene

Ogallala Formation

The Ogallala Formation comprises an aerially expansive blanket of predominantly fluvial and eolian sediments accumulated from the late Miocene through the Pliocene epoch across a substantial portion of the High Plains region in the interior of North America^{[10][11][12]}. While there are multiple interpretations for specific regional depositional environments, it is broadly agreed that the section found in the Southern High Plains was accumulated as sediments were shed from the greater Rocky Mountains of northern New Mexico and southern Colorado and deposited across the region^{[10][11][12]}. In the vicinity of the Site, the Ogallala Formation is comprised of two members, the basal Couch Member overlain by the Bridwell Member.

Couch Member. The Couch Member consists of up to 150 feet of fluvial, eolian, and pedogenic sediments^[13]. The lower Couch Member consists of cross-stratified sandstone and basal conglomerate interpreted as channel fill facies^[13]. Basal conglomerate is present in most channel deposits^[12]. The upper stratigraphy of the Couch Member is comprised of massive eolian sand-sheet and siltstone facies with local pedogenic carbonate (caliche) expressed as thin horizons and aerially discrete lenses^{[12][13]}. The lower and upper Couch Members are separated by an erosional contact^[13].

The Bridwell Member. The overlying Bridwell Member also consists of up to 150 feet of fluvial, eolian, and pedogenic sediments but is readily distinguished by its characteristic red color^{[12][13]}. At its base, it rests on an erosional scour into the underlying Couch Member^{[12][13]}. The lower section of the Bridwell Member predominantly comprises fluvial channel deposits, interspersed with two notable layers of extensive eolian silty sand sheets^[12]. Moving upward, the upper portion of the member transitions to fluvial overbank deposits, characterized by laminated mudstone layers containing minor amounts of siltstone and fine-grained sandstone with evidence of root



traces and burrows^[12]. At the top of the Bridwell Member, the sequence culminates in the pedogenic Caprock caliche profile.

Quaternary

Overlying the pedogenic Caprock caliche, the Quaternary Blackwater Draw Formation, a widespread deposit primarily composed of aeolian sediments, is exposed to the current ground surface. These sediments exhibit varying textures, ranging from sand-dominated to clayey^[14]. Thicknesses of the Blackwater Draw Formation range from a few feet to more than 100 feet^[15]. Due to similarities in sedimentary facies and weathering characteristics between the Ogallala eolian sand-sheet facies and the Blackwater Draw Formation, it is inferred that these two units share comparable genetic histories.

3.4 Hydrogeology

There are two accessible freshwater aquifers located beneath the property which include the Ogallala and Edwards-Trinity (High Plains) Aquifers. The Edward-Trinity (High Plains) Aquifer is encountered at greater depths, with no wells completed within the aquifer in the immediate vicinity.

The Ogallala Aquifer. The Ogallala Aquifer is a major aquifer in the United States and underlies much of the High Plains region. Its water-yielding units are all of late Miocene to early Pliocene age and include the basal conglomerates and sandstones to upper sand-sheets and siltstones of the Couch Member and the fluvial, eolian, and pedogenic sediments of the Bridwell Member.

North of the Canadian River, the water is generally fresh, with total dissolved solids typically below 400 milligrams per liter (mg/L). However, water quality deteriorates to the south, where extensive areas exhibit total dissolved solids exceeding 1,000 mg/L. The increased salinity may stem from the concentration of groundwater in saline playa lakes in the southern part of the aquifer, as well as the upwelling of more saline groundwater from the underlying Dockum Aquifer and other sources.

The Ogallala Aquifer is the primary source of water for users in the region, supplying significantly more water than any other aquifer in Texas. Its availability is vital to the local economy, as approximately 95 percent of the pumped groundwater is used for irrigated agriculture. Groundwater withdrawals surpass recharge across much of the aquifer, leading to a consistent decline in water levels over time. While some areas have experienced declines exceeding 300

feet in the past 50 to 60 years, the rate of decline has moderated, and water levels have even rebounded in a few locations.

The Edwards-Trinity (High Plains) Aquifer. The Edwards-Trinity (High Plains) Aquifer is a minor aquifer spanning approximately 9,000 mi² beneath the Ogallala Aquifer in western Texas and eastern New Mexico. Its water-yielding formations are all of Cretaceous age and include the sandstone of the Antlers Formation (Trinity Group) and the limestone layers of the Comanche Peak and Edwards formations. Groundwater flow within the aquifer generally trends southeastward regionally, although local flow patterns are influenced by the presence of Ogallala-filled paleochannels cutting through the underlying Cretaceous limestone. Recharge to the aquifer primarily occurs through downward leakage from the younger Ogallala Aquifer. The most significant recharge likely takes place where impermeable clay layers of the Duck Creek and Kiamichi formations, separating the Edwards-Trinity (High Plains) and Ogallala aquifers, are either absent, thin, or comparatively permeable.

Water produced from the Edwards-Trinity (High Plains) Aquifer typically contains higher concentrations of total dissolved solids compared to the overlying Ogallala Aquifer. They tend to be mildly saline, with total dissolved solids ranging from 1,000 to 2,000 mg/l on average, but concentrations can vary widely from 400 to over 3,000 mg/l. In areas where the aquifer is overlain by saline lakes or gypsum-rich formations like the Tahoka and Double Lakes formations, groundwater quality is poorest, with total dissolved solids exceeding 20,000 mg/l. The average freshwater saturated thickness in the aquifer is 126 feet.

The primary use of groundwater from this aquifer is for irrigation, which accounts for approximately 95 percent of all pumped groundwater.

4.0 Aquifer Testing

4.1 Well Details

There are a total of two (2) wells within the proposed subdivision that are included in this study. Both are newly drilled wells installed by Rhoads Drilling within the Ogallala Aquifer. Drawing Number A1.0 in Appendix A features a map detailing the locations of the wells at the Site, along with all documented wells within a one-quarter-mile radius of the property boundary. The map ID numbers referenced in Drawing A1.0 correspond to Table 1. Appendix C contains available state well reports. Table 1 summarizes existing wells based on TWDB well data within a one-mile radius



Groundwater Availability Study ■ Lubbock, Texas ■ August 7th, 2024
Centerline ■ Project No. 24-07-1712

of the subdivision that were not used in testing, while Table 2 outlines the construction details of wells used in the testing.



Well Summary				
Map ID	State Well ID	Owner	Well Depth (ft.)	Well Use
1	674532	MRG Land Development, LLC	136	Domestic
2	674533	MRG Land Development, LLC	142	Domestic
3	39670	E.A. Hankins	138	Irrigation
4	93558	-	-	-
5	47079	-	-	-
6	42403	B.Z. Birdsong	140	Irrigation
7	40114	Harry Wiltbanks	139	Irrigation
8	40120	Harry Wiltbanks	138	Irrigation
9	40121	Harry Wiltbanks	139	Irrigation
10	40138	Harry Wiltbanks	139	Irrigation
11	47078	-	-	-
12	40122	Harry Wiltbanks	138	Irrigation
13	41475	Melville Hankins	132	Irrigation
14	41503	Melville Hankins	131	Irrigation
15	47997	-	-	-
16	50444	-	-	-
17	40793	Doyle Nordyke	138	Irrigation
18	48000	-	-	-
19	47999	-	-	-
20	42347	M.K. Bingham	155	Irrigation
21	154667	Rosa Hernandez	170	Domestic
22	48018	-	-	-
23	480349	Mustang Homes and Land	131	Domestic
24	48197	-	-	-
25	505779	Dan Ruther	136	Domestic
26	40784	L.P. and Alvis Miller	124	Irrigation
27	39691	L.P. and Alvis Miller	135	Irrigation

Table 1: Summary of wells within 1-mile of the Site (corresponding map in Appendix A)



Groundwater Availability Study ■ Lubbock, Texas ■ August 7th, 2024
Centerline ■ Project No. 24-07-1712

In accordance with Hockley County development regulations, and to thoroughly assess groundwater availability near the proposed subdivision, one (1) aquifer test was conducted. The test involved pumping one well continuously for a minimum of 24 hours during which water levels in both the pumping well and a nearby observation well were monitored. These procedures adhere to the testing protocols outlined in the *Texas Administrative Code (TAC) Title 30 Part 1 Chapter 230.8*.

Based on data from state well reports and drillers' lithology logs, all wells used in the aquifer test are completed in the Couch Member of the Ogallala Aquifer with full penetration of the aquifer and into the aquitard comprised by underlying Cretaceous rocks. Below is a summary detailing the construction of the wells utilized in the aquifer tests.

Well No. 1

According to the State Well Report [Tracking No. 674532; Appendix C], Well No. 1 was completed by Rhoads Drilling on July 15, 2024. The well was drilled to a total depth of 145 feet below ground level (bgl) with an 8-inch borehole from 0 to 145 feet bgl. The well was completed with 5-inch PVC casing set from +2 to 105 feet bgl and a 5-inch slotted PVC screen from 105 to 145 feet bgl. The well was completed in the Ogallala Aquifer.

Well No. 2

According to the State Well Report [Tracking No. 674533; Appendix C], Well No. 2 was completed by Rhoads Drilling on July 15, 2024. The well was drilled to a total depth of 137 feet bgl with an 8-inch borehole from 0 to 137 feet bgl. The well was completed with 5-inch PVC casing set from +2 to 97 feet bgl and a 5-inch slotted PVC screen from 97 to 132 feet bgl. The well was completed in the Ogallala Aquifer.

Well Construction Summary											
Well	Tracking No.	Latitude	Longitude	Elevation (ft. MSL)	Date Completed	Aquifer	Well Depth (ft. BGL)	Static Water Level (ft. BGS; ft. MSL; date)	Borehole (diameter; ft. BGL)	Casing (diameter; material; ft. BGL)	Screen (diameter; material; ft. BGS)
Well No. 1	674532	33°32'26.45"N	102°05'34.76"W	3,332	7-15-24	Ogallala	145	93 (7-19-24) 3,123	8-in (0 - 134)	5-in PVC (+2 - 94)	5-in PVC (105 - 134)
Well No. 2	674533	33°32'26.56"N	102°05'38.11"W	3,332	7-15-24	Ogallala	137	93 (7-19-24) 3,122	8-in (0 - 132)	5-in PVC (+2 - 92)	5-in PVC (97 - 132)

Note: ft. = feet; bgl = below ground level; MSL = Mean Sea Level; N/A = not available.

Table 2: Well construction summary



4.2 Aquifer Parameters and Methods

Quantitative parameters calculated from aquifer testing results include Transmissivity, Hydraulic Conductivity, and Storativity. The transmissivity of an aquifer is defined as the rate of groundwater flow within an aquifer under a unit hydraulic gradient through a unit width of aquifer of given saturated thickness. Aquifer transmissivity (T) is related to its hydraulic conductivity as follows:

$$T = Kb$$

where:

T = transmissivity (ft²/day);
 K = hydraulic conductivity (ft/day); and
 b = aquifer thickness (ft.)

The storativity (S) of an aquifer is effectively defined as the total storage capacity of an aquifer. Storativity describes the capacity of an aquifer to store or release water. It is defined as the volume of water removed or stored per unit change in head normal to the earth's surface over a unit area. Storativity is dimensionless and is expressed as a decimal. The storativity for an unconfined aquifer is dominated by the gravity drainage term, specific yield (S_y). Specific yield reflects the volume of water that drains by gravity when the water table is lowered or fills with water when the water table is raised. Specific storage (S_s) is defined as the volume of water that is released from (or added to) storage per unit volume of saturated material. The storativity of an unconfined aquifer is composed of two components as follows:

$$S_{unconfined} = S_y + S_s b_{average}$$

where:

$S_{unconfined}$ = storativity of an unconfined aquifer (dimensionless);
 S_y = specific yield (dimensionless);
 S_s = specific storage (1/ft); and
 $b_{average}$ = average thickness before and after a water level change (ft.)

The modified Cooper-Jacob^[23] straight-line solution involves matching a straight line to drawdown data plotted as a function of the logarithm of time since pumping began. Their solution models transient flow to a well discharging at an assumed constant rate from an assumed homogeneous and isotropic nonleaky confined aquifer of infinite extent and uniform thickness. This method may be used for the interpretation of pumping tests in unconfined aquifers through the application of

the following simple correction to drawdown data measured during a test (Kruseman and de Ridder, 1994)^[24]:

$$s' = s - \frac{s^2}{2b}$$

where:

b = aquifer thickness (ft);
s = observed drawdown (ft); and
s' = corrected drawdown (ft.)

4.3 Aquifer Testing

To evaluate the hydrogeologic characteristics of the Ogallala Aquifer within the proposed subdivision, one (1) aquifer test was conducted using two (2) wells. For these tests, Rhoads Drilling deployed a submersible pump in the pumping well that allowed for variable discharge rates. Flow meter readings and water levels were recorded before, during, and after the tests. The collected data were analyzed using the Cooper-Jacob method. A summary of the aquifer testing results is presented in Table 3.

Aquifer Test of Well No. 1

The aquifer test for Well No. 1 was carried out on July 15, 2024, with Well No. 1 also serving as the observation well, located approximately 285 feet from the pumping well. The pumping phase commenced at 7:30 A.M. on July 1, 2024, with water levels being monitored for 8 hours of pumping prior to concluding the test due to drawdown stabilization. Before the test began, the static water level was recorded at 93 feet bgl for Well No. 1 (3,123 feet above mean sea level, MSL) and 93 feet bgl (3,122 feet above MSL) for Well No. 2.

During the test, Well No. 1 was pumped at an average rate of 40.0 gallons per minute (gpm), with a final measured pumping rate of 40.0 gpm and a drawdown of 3.4 feet, resulting in a specific capacity of 11.7 gpm/foot. Analysis using the Cooper-Jacob method yielded a calculated transmissivity of 367.6 ft² per day and a hydraulic conductivity of 0.63 feet per day. Observing a hydraulic connection between the wells, a storativity value of 9.45x10⁻⁴ for Well No. 2 was calculated.

Figures 1 and 2 illustrate the hydrograph of the pumping well during the test, as well as the hydrograph of both the pumping and observation wells throughout the test.

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Initially, the water level in the pumping well experienced a drawdown before stabilizing towards the end of the pumping phase. The observation well exhibited a clear response to the operation of the pump in Well No. 1 (Figures 1 and 2.) No aquifer boundary conditions were detected during the test.

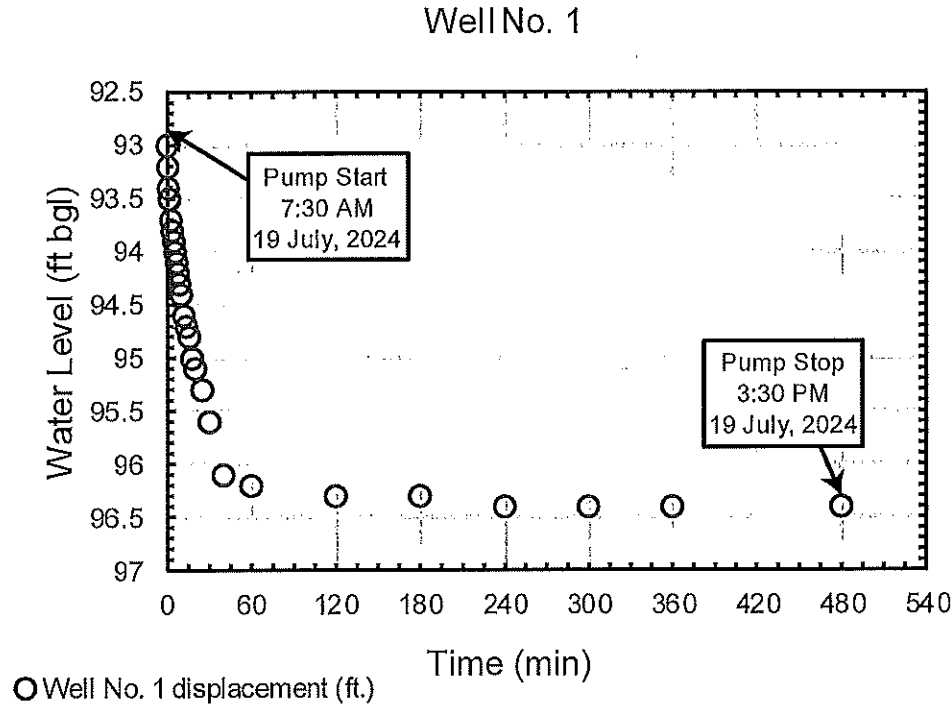


Figure 1: Hydrograph for aquifer test of Well No. 1



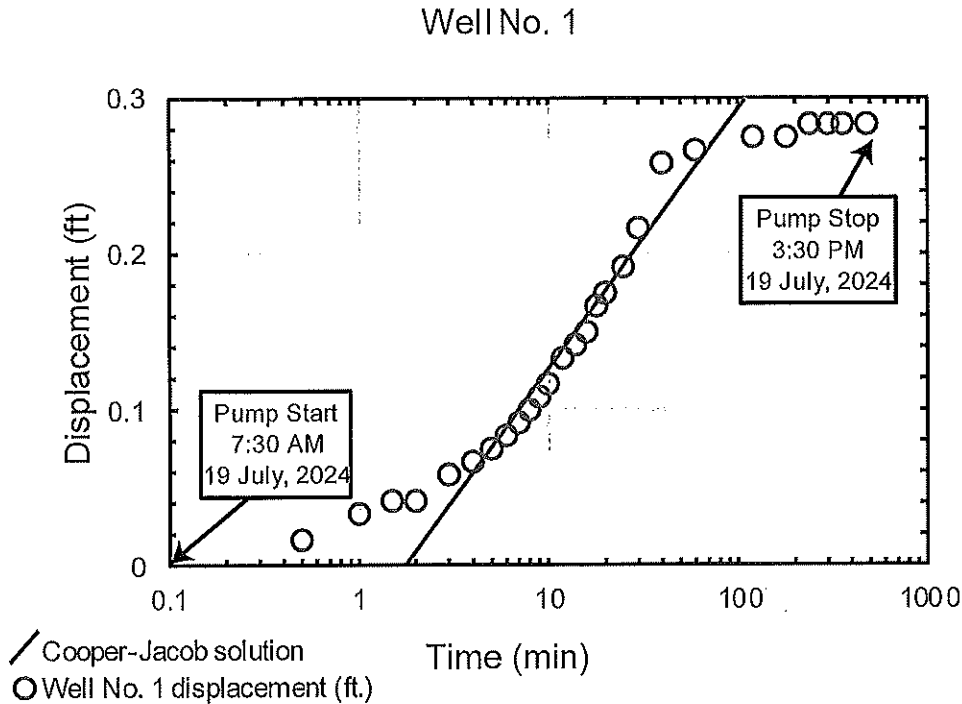


Figure 2: Modified Cooper-Jacob straight-line solution plot for aquifer test of Well No. 1

Aquifer Test Summary										
Test Date	Well	Average Pump Rate (gpm)	Final Pump Rate (gpm)	Drawdown (ft.)	Specific Capacity (gpm/ft.)	Transmissivity (ft ² /d)	Storativity	Hydraulic Conductivity (ft./d)	Aquifer Thickness (ft.)	Well Efficiency
Jul. 19, 2024	Well No. 1	-	-	3.4	-	367.6	9.45x10 ⁻⁴	0.63	40	91%
	Well No. 2	50	50	30	1.7	-	-	-	40	-

Note: ft. = feet; gpm = gallons per minute; d = day, observation wells are highlighted in blue, aquifer thickness were based upon State Well Reports.

Table 3: Aquifer test summary

5.0 Water Quality

A water quality sample was collected from the pumping well at the end of the pumping phase. The samples were collected by Centerline staff in sealed containers and stored on ice in a cooler. The samples were transported after collection to Eurofins Environment Testing Lab and tested in accordance with *Texas Administrative Code 230.9* (Determination of Groundwater Quality.) Appendix D provides a copy of the water quality reports.

Table 4 provides the water quality summary of the samples. The results were compared to the Texas Commission on Environmental Quality (TCEQ) Maximum Contaminant Levels (MCLs) and



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Secondary Contaminant Levels (SCLs.) Results indicate measured fluoride (F) higher than both TCEQ MCL and SCL values and total dissolved solids (TDS) higher than TCEQ SCL values. Concentrations of analytes that exceed TCEQ MCL values are significant and should be considered when determining final drinking water filtration appurtenances. Concentrations of analytes above TCEQ SCL standards are not considered health risks but may affect the aesthetic quality of the water. The water samples were also tested for the presence or absence of total coliform and E. coli. Total coliform bacteria were present in the well. The presence of total coliform bacteria within a well that has recently been drilled is not uncommon. With additional proper chlorination of the wells, we anticipate that future samples will indicate the absence of total coliform bacteria.

Water Quality Test Summary												
Well	Sample Date	Cl	Conductivity (umhos/cm)	F	Fe	NO ₃	Mn	pH	SO ₄	Hardness (as CaCO ₃)	TDS	TCE. coll
TCEQ MCLs & SCLs												
		300 ²		4 ¹ & 2 ²	0.3 ¹	10 ¹	0.05 ²	≥7 ¹	300 ²		1,000 ²	Presence
No. 1	7-19-24	190	1,620	4.06	-	9.09	0.002	7.7	228	257	1,510	Present/Absent
No. 2	-	-	-	-	-	-	-	-	-	-	-	-

Note: 1 = TCEQ Maximum Containment Level; 2 = TCEQ Secondary Constituent Level; Concentrations in red are above TCEQ SCLs; All units expressed in mg/L (except pH & conductivity); 3 = Below Detection Limits (BDL.)

Table 4: Water quality test summary

6.0 Groundwater Availability

6.1 Overview

Based on the analysis of the aquifer tests, drawdown estimates were calculated for 10 and 30 years of continuous production. Several assumptions were considered in the drawdown calculations and the evaluation of groundwater availability for the proposed subdivision, including some inherent uncertainties such as:

- Potential future withdrawal from the aquifer or connected aquifers from nearby wells outside the subdivision, or other unpredictable factors affecting aquifer water storage;
- Long-term impacts on the aquifer due to climatic changes; and
- Possible future contamination of usable groundwater from unforeseen sources.

The drawdown estimates were derived using the Theis equation^[16], which is based on several assumptions outlined by Driscoll^[17]:

- The water-bearing formation is uniform and isotropic in hydraulic conductivity;



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- The aquifer is of uniform thickness and extends infinitely in all directions;
- The aquifer receives no external recharge;
- The well penetrates the full thickness of the aquifer;
- Water from storage is discharged instantaneously when the head is lowered;
- The well operates with 100% efficiency;
- All extracted water comes solely from aquifer storage;
- Flow through the well and aquifer is laminar; and
- The water table or potentiometric surface is level.

It's important to note that some of these assumptions may not fully apply to the Ogallala Aquifer. Additionally, Theis's assumptions^[16]—that the formation receives no recharge and that all extracted water comes from storage—can lead to inaccuracies in drawdown estimates. Driscoll highlights that while the Theis equation assumes no recharge during pumping, most formations do receive some form of recharge^[17].

Moreover, with prolonged pumping, the proportion of water derived from recharge may increase^[18]. Eventually, a new equilibrium is reached when the aquifer's water levels stabilize, and the cone of depression reaches a recharge source. The time required for an aquifer system to achieve this new equilibrium varies based on the aquifer's properties and conditions, ranging from days to millennia^{[19][20][21][22]}. Given that the Theis equation assumes all water comes from storage and no recharge occurs, it may overestimate drawdown in aquifers where recharge is rapid^[16].

6.2 Well Spacing

The lot layout provided to Centerline at the time of this investigation indicated an on-center spacing of approximately 160 feet from lot to lot. If feasible, increasing the spacing between wells will help minimize drawdown due to well interference. It is important to note that well interference may be more significant in areas where aquifer units are strongly connected, whereas in regions where the aquifer is less connected or has high permeability, well interference may be less of an issue. Table 5 summarizes the results from the distance-drawdown calculations. The drawdown estimates are based on the following parameters:

- Total water demand for the entire subdivision is 7.51 acre-feet per year;
- The water demand per housing unit is 0.44 acre-feet per year, equivalent to 394 gallons per day (gpd);

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- Each individual well will be pumped at a rate of 15 gallons per minute (gpm) for 0.438 hours per day (as shown in Table 5);
- Drawdown estimates used median transmissivity (367.6 ft² per day) and storativity (9.5x10⁻⁴) values derived from aquifer testing. The edge of the cone of depression was determined by identifying the distance from the well where drawdown levels off or become minimal.

According to the distance-drawdown projections, after 10 years of continuous production at 15 gpm (proposed on-center lot spacing provided to Centerline in red):

- At a spacing of 100 feet, estimated drawdown is 2.6 feet.
- At a spacing of 160 feet, estimated drawdown increases to 2.4 feet.
- At a spacing of 250 feet, estimated drawdown increases to 2.2 feet.
- At a spacing of 500 feet, estimated drawdown increases to 1.9 feet.

For a 30-year production period at the same rate:

- At a spacing of 100 feet, estimated drawdown is 2.8 feet.
- At a spacing of 160 feet, estimated drawdown increases to 2.6 feet.
- At a spacing of 250 feet, estimated drawdown increases to 2.4 feet.
- At a spacing of 500 feet, estimated drawdown increases to 2.1 feet.

Distance-Drawdown Calculations Summary				
	Drawdown at Pumped Well After 10-Years of Pumping	Drawdown at Pumped Well After 30-Years of Pumping	Distance to Outer Edge of Cone of Depression – 10-years	Distance to Outer Edge of Cone of Depression – 30-years
Well	(ft)	(ft)	(mi)	(mi)
Pumping Well	3.7	4.2	1.0	1.5

Table 5: Summary of distance-drawdown calculations

6.3 Groundwater Model

A groundwater model was constructed using Aqtesolv (Version 4.5) with the Theis (1935)^[16] solution to determine projected impacts from pumping at the proposed subdivision at full build out.

The model calculates drawdown at each cell using the Theis equation^[16],



$$s = \left(\frac{Q}{4\pi T} \right) W(u)$$

where:

s = drawdown (ft);
 Q = discharge (gpm);
 T = transmissivity (ft²/day); and
 $W(u)$ = the well function.

The well function $W(u)$ is estimated by:

$$W(u) = -0.5772 - \ln(u) + u - \frac{u^2}{2 * 2!} + \frac{u^3}{3 * 3!} - \frac{u^4}{4 * 4!} + \dots$$

where:

$$u = \frac{r^2 S}{4Tt}$$

r = the radius at which drawdown is estimated (ft);
 t = time (min); and
 S = storativity (dimensionless.)

6.4 Drawdown Analysis

The groundwater model was used to assess the potential impacts of pumping from the subdivision. This model was specifically designed to estimate drawdown at full buildout, which includes 17 lots, after 10 and 30 years of continuous pumping at a rate of 394 gallons per day (0.274 gallons per minute) per well. The design cumulative pumping rate from the Ogallala Aquifer is approximately 4.7 gallons per minute. To simplify the model, pumping was concentrated at a single central location within the proposed subdivision, continuously pumping 4.7 gallons per minute. This approach provides a straightforward way to estimate the long-term effects of operating multiple wells within the subdivision.

In order to align the modeled aquifer impacts from the proposed total withdrawal with site-specific data, the following mean values calculated from Site aquifer testing were incorporated:

- Transmissivity: 367.6 ft²/day; and
- Storativity: 9.45x10⁻⁴.



Model Results - 10 Years

After 10 years of pumping at 394 gallons per day per well, the model predicts an approximate drawdown of 23.4 feet at the nearest boundary of the subdivision, which is 185 feet away (refer to Drawing A1.0.) The model's results were combined with aquifer test data to estimate drawdown at each well. The drawdown at each location was calculated using the Theis equation^[16] with transmissivity values from the aquifer test and a median storativity value of 9.45×10^{-4} , while pumping at 394 gallons per day.

Model Results - 30 Years

After 30 years of pumping at 394 gallons per day per well, the model forecasts a theoretical drawdown of approximately 27.9 feet at the nearest subdivision boundary (185 feet away.) As with the 10-year projections, the results were integrated with aquifer test data to estimate the drawdown at each individual well, using the Theis equation^[16] with transmissivity from each aquifer test and a median storativity value 9.45×10^{-4} .

7.0 Conclusions

A test well drilling and aquifer testing program was conducted at the Site using two newly drilled wells to estimate the potential long-term groundwater availability and water quality from the Ogallala Aquifer for use at the proposed development. Based on the results of site-specific aquifer testing and groundwater modeling, it is evident that the long-term demand of 394 gpd per connection can be met with 17 individual domestic wells spaced at least 160 feet apart (approximate proposed on-center lot spacing provided to Centerline) across the Site. However, it should be noted that additional development that may occur adjacent to and surrounding the proposed subdivision was not accounted for in this evaluation nor was excessive water usage outside the per-capita values referenced and utilized in this report. The laboratory analyses from samples collected during the aquifer testing program indicate that the groundwater produced at the Site from the Ogallala Aquifer is fresh, and although not used for public supply, generally complies with TCEQ primary and secondary standards for drinking water upon treatment with commercially available in-home reverse osmosis filtration systems.

8.0 Limitations

The interpretations and recommendations presented in this report are based upon the information obtained from site data collected at the time of this study and from other information discussed in



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Centerline ■ Project No. 24-07-1712

this report. This report is based upon a discrete dataset and may not identify all subsurface variations which exist across the site.

No warranties, either expressed or implied, are intended or made. In the event that changes in the nature, design, or location of the project as outlined in this report are made, the recommendations contained in this report shall not be considered valid unless Centerline reviews the changes and either verifies or modifies the conclusions of this report in writing.



9.0 References

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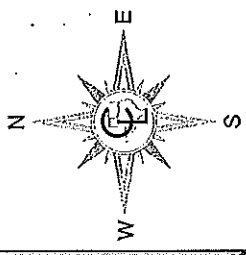
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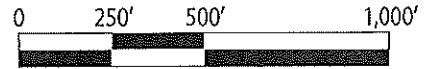
Appendix A: Site Map





Approximate Site boundary
 Approximate 0.25-mile radius around Site

● Approximate existing well location
 ● Approximate new well location



CENTERLINE
 8312 Upland Avenue
 Lubbock, TX 79424
 F-16713

Groundwater Availability Study

Quail Road Development
 Hockley County, TX

WELL LOCATION
 MAP

Project: 24-07-1712

Drawing No.

A1.0

Date: 8/2/2024

Sheet 1 of 1

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Appendix B: Certification of Groundwater Availability for Platting Form

CF

CERTIFICATION OF GROUNDWATER AVAILABILITY FOR PLATTING FORM

Use of this form: If required by a municipal authority pursuant to Texas Local Government Code, §212.0101, or a county authority pursuant to §232.0032, Texas Local Government Code, the plat applicant and the Texas licensed professional engineer or Texas licensed professional geoscientist shall use this form based upon the requirements of Title 30, TAC, Chapter 230 to certify that adequate groundwater is available under the land to be subdivided (if the source of water for the subdivision is groundwater under the subdivision) for any subdivision subject to platting under Texas Local Government Code, §212.004 and §232.001. The form and Chapter 230 do not replace state requirements applicable to public drinking water supply systems or the authority of counties or groundwater conservation districts under either Texas Water Code, §35.019 or Chapter 36.

Administrative Information (30 TAC §230.4)	
1. Name of Proposed Subdivision:	
2. Any Previous Name Which Identifies the Tract of Land:	
3. Property Owner's Name(s): MRG Land Development, LLC	
Address: 4301 N Fm 2528, Lubbock, TX 79416	
Phone:	
Fax:	
4. Plat Applicant's Name: MRG Land Development, LLC	
Address: 4301 N Fm 2528, Lubbock, TX 79416	
Phone:	
Fax:	
5. Licensed Professional Engineer or Geoscientist: Licensed Professional Geoscientist	
Name: Taylor S. Newton, PG	
Address: 8312 Upland Ave., Lubbock, TX 79424	
Phone: (806) 470-8686	
Fax:	
Certificate Number: 15414	
6. Location and Property Description of Proposed Subdivision: The northwest corner of the intersection of Quail Road and Elk Road in Hockley County, TX.	
7. Tax Assessor Parcel Number(s): HCAD 97488	
Book:	
Map:	
Parcel: HCAD 97488	

Proposed Subdivision Information (30 TAC §230.5)			
8. Purpose of Proposed Subdivision (single family/multi-family residential, non-residential, commercial): single family			
9. Size of Proposed Subdivision (acres): Approximately 42.5 acres			
10. Number of Proposed Lots: 17			
11. Average Size of Proposed Lots (acres): 2.5			
12. Anticipated Method of Water Distribution: Privately-owned individual wells on each lot			
Expansion of Existing Public Water Supply System?	Yes	<input type="checkbox"/>	No <input checked="" type="checkbox"/>
New (Proposed) Public Water Supply System?	Yes	<input type="checkbox"/>	No <input checked="" type="checkbox"/>
Individual Water Wells to Serve Individual Lots?	Yes	<input checked="" type="checkbox"/>	No <input type="checkbox"/>
Combination of Methods?	Yes	<input type="checkbox"/>	No <input checked="" type="checkbox"/>
Description (if needed):			
13. Additional Information (if required by the municipal or county authority):			
<p>Note: If public water supply system is anticipated, written application for service to existing water providers within a 1/2-mile radius should be attached to this form (30 TAC §230.5(f) of this title). See attached Groundwater Availability Report.</p>			

Projected Water Demand Estimate (30 TAC §230.6)	
14. Residential Water Demand Estimate at Full Build Out (includes both single family and multi-family residential):	
Number of Proposed Housing Units (single and multi-family): 17	
Average Number of Persons per Housing Unit: 2.63	
Gallons of Water Required per Person per Day: 150	
Water Demand per Housing Unit per Year (acre feet/year): 0.44	
Total Expected Residential Water Demand per Year (acre feet/year): 7.51	
15. Non-residential Water Demand Estimate at Full Build Out: Not known	
Type(s) of Non-residential Water Uses: N/A	
Water Demand per Type per Year (acre feet/year): N/A	
16. Total Water Demand Estimate at Full Build Out (acre feet/year): 7.51	
17. Sources of Information Used for Demand Estimates: TWDB 2022 Regional Water Plan; 30 TAC §230.7 and 230.8	

General Groundwater Resource Information (30 TAC §230.7)

18. Identify and describe, using Texas Water Development Board names, the aquifer(s) which underlies the proposed subdivision:

Ogallala Aquifer; See attached Groundwater Availability Report.

Note: Users may refer to the most recent State Water Plan to obtain general information pertaining to the state's aquifers. The State Water Plan is available on the Texas Water Development Board's Internet website at: www.twdb.state.tx.us

Obtaining Site-Specific Groundwater Data (30 TAC §230.8)

19. Have all known existing, abandoned, and inoperative wells within the proposed subdivision been located, identified, and shown on the plat as required under §230.8(b) of this title?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
20. Were the geologic and groundwater resource factors identified under §230.7(b) of this title considered in planning and designing the aquifer test required under §230.8(c) of this title?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
21. Have test and observation wells been located, drilled, logged, completed, developed, and shown on the plat as required by §230.8(c)(1) - (4) of this title?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
22. 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 (§230.8(c)(5) of this title)?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
23. Has an aquifer test been conducted which meets the requirements of §230.8(c)(1) and (6) of this title?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
24. Were existing wells or previous aquifer test data used?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
25. If yes, did they meet the requirements of §230.8(c)(7) of this title?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
26. Were additional observation wells or aquifer testing utilized?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>

Note: If expansion of an existing public water supply system or a new public water supply system is the anticipated method of water distribution for the proposed subdivision, site-specific groundwater data shall be developed under the requirements of 30 TAC, Chapter 290, Subchapter D of this title (relating to 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 §230.8(a) of this title.

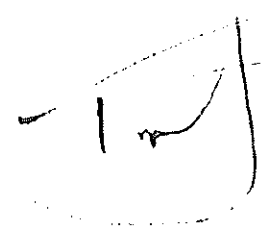

Determination of Groundwater Quality (30 TAC §230.9)

27. Have water quality samples been collected as required by §230.9 of this title?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
28. Has a water quality analysis been performed which meets the requirements of §230.9 of this title?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

Determination of Groundwater Availability (30 TAC §230.10)		
29. Have the aquifer parameters required by §230.10(c) of this title been determined?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
30. If so, provide the aquifer parameters as determined:		
Rate of yield and drawdown: 50 gpm, 30 ft		
Specific capacity: 1.7		
Efficiency of the pumped well: 0.91		
Transmissivity: 367.6		
Coefficient of storage: 9.45×10^{-4}		
Hydraulic conductivity: 0.63		
Were any recharge or barrier boundaries detected?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
If yes, please describe:		
Thickness of aquifer(s): approx. 44 feet		
31. Have time-drawdown determinations been calculated as required under §230.10(d)(1) of this title?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
32. Have distance-drawdown determinations been calculated as required under §230.10(d)(2) of this title?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
33. Have well interference determinations been made as required under §230.10(d)(3) of this title?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
34. 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?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
35. Has the water quality analysis required under §230.9 of this title been compared to primary and secondary public drinking water standards as required under §230.10(e) of this title?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Does the concentration of any analyzed constituent exceed the standards?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
If yes, please list the constituent(s) and concentration measure(s) which exceed standards: F - 4.06 mg/L, TDS - 1,510 mg/L, total coliform present		

Determination of Groundwater Availability (30 TAC §230.10)
36. Drawdown of the aquifer at the pumped well(s) is estimated to be <u>3.7</u> feet over a 10-year period and <u>4.2</u> feet over a 30-year period.
37. Drawdown of the aquifer at the property boundary is estimated to be <u>23.4</u> feet over a 10-year period and <u>27.9</u> feet over a 30-year period.
38. The distance from the pumped well(s) to the outer edges of the cone(s)-of-depression is estimated to be <u>1 mi</u> feet over a 10-year period and <u>1.5 mi</u> feet over a 30-year period.
39. The recommended minimum spacing limit between wells is <u>160</u> feet with a recommended well yield of <u>15</u> gallons per minute per well.
40. Available groundwater <input checked="" type="radio"/> is / is not <input type="radio"/> (circle one) of sufficient quality to meet the intended use of the platted subdivision.
41. The groundwater availability determination does not consider the following conditions (identify any assumptions or uncertainties that are inherent in the groundwater availability determination): <small>Assumptions: No groundwater production off this tract by others is considered. It is assumed that there is no groundwater recharge. Climate change is not considered in this study. Estimates and calculations are presented on a continuous pumping basis for the time periods indicated. The water-bearing formation is uniform in character and the hydraulic conductivity is the same in all directions. The formation is uniform in thickness and infinite in areal extent. The formation receives no recharge from any source. The pumped well penetrates and receives water from the full thickness of the water-bearing formation. The water removed from storage is discharged instantaneously when the head is lowered. The pumping well is 100 percent efficient. All water removed from the well comes from aquifer storage. Laminar flow exists throughout the well and aquifer. The water table or potentiometric surface has no slope.</small>

Certification of Groundwater Availability (30 TAC §230.11(c)) Must be signed by a Texas Licensed Professional Engineer or a Texas Licensed Professional Geoscientist.
42. I, <u>Taylor S. Newton, P.G.</u> , Texas Licensed Professional Engineer or Texas Licensed Professional Geoscientist (circle which applies), certificate number <u>15414</u> , 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.

Date: <u>8/7/2024</u>	(affix seal)
	

Groundwater Availability Study ■ Lubbock, Texas ■ August 7th, 2024
Centerline ■ Project No. 24-07-1712

Appendix C: State Well Reports



STATE OF TEXAS WELL REPORT for Tracking #674532

Owner:	MGR Land Development	Owner Well #:	No Data
Address:	4402 10th St Lubbock, TX 79424	Grid #:	24-32-7
Well Location:	1000ft NW of Quail Rd & Elk Rd In Country, TX	Latitude:	33° 32' 26.45" N
Well County:	Hockley	Longitude:	102° 05' 34.76" W
		Elevation:	No Data

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

Drilling Start Date: 7/15/2024 Drilling End Date: 7/15/2024

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	8.75	0	145

Drilling Method: **Mud (Hydraulic) Rotary**

Borehole Completion: **Perforated or Slotted**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	3	60	Bentonite 15 Bags/Sacks

Seal Method: **Poured**

Sealed By: **Driller**

Distance to Property Line (ft.): **>200**

Distance to Septic Field or other
concentrated contamination (ft.): **>500**

Distance to Septic Tank (ft.): **>500**

Method of Verification: **GPS**

Surface Completion: **Pitless Adapter Used** Surface Completion by **Driller**

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **No Test Data Specified**

Groundwater Availability Study ■ Lubbock, Texas ■ August 7th, 2024
Centerline ■ Project No. 24-07-1712

Appendix D: Water Quality Test Summary

ANALYTICAL REPORT

PREPARED FOR

Attn: Taylor Newton
Centerline
8312 Upland Ave
Lubbock, Texas 79424
Generated 7/29/2024 6:48:47 PM

JOB DESCRIPTION

Quail Rd. Gas
24-07-1712

JOB NUMBER

820-14324-1

Eurofins Lubbock

1

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

Authorization



Generated
7/29/2024 6:48:47 PM

Authorized for release by
Holly Taylor, Project Manager
Holly.Taylor@et.eurofinsus.com
(806)794-1296

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Definitions/Glossary

Client: Centerline
Project/Site: Quail Rd. Gas

Job ID: 820-14324-1
SDG: 24-07-1712

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Qualifiers

HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD recovery exceeds control limits.
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.
U	Indicates the analyte was analyzed for but not detected.

Biology

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)

Definitions/Glossary

Client: Centerline
Project/Site: Quail Rd. Gas

Job ID: 820-14324-1
SDG: 24-07-1712

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count



Case Narrative

Client: Centerline
Project: Quail Rd. Gas

Job ID: 820-14324-1

Job ID: 820-14324-1

Eurofins Lubbock

**Job Narrative
820-14324-1**

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Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The sample was received on 7/19/2024 12:13 PM. Unless otherwise noted below, the sample arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt time was 25.7°C.

HPLC/IC

Method 300_ORGFMS: The following sample was analyzed outside of analytical holding time due to instrumentation column problems in the initial analysis: Quail Rd Well (820-14324-1).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Biology

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

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Client Sample Results

Client: Centerline
 Project/Site: Quail Rd. Gas

Job ID: 820-14324-1
 SDG: 24-07-1712

Client Sample ID: Quail Rd Well

Lab Sample ID: 820-14324-1

Date Collected: 07/19/24 11:30

Matrix: Drinking Water

Date Received: 07/19/24 12:13

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Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	190		0.500	0.250	mg/L			07/21/24 16:55	1
Nitrate as N	9.09	H	0.100	0.0391	mg/L			07/21/24 16:55	1
Fluoride	4.06		0.500	0.100	mg/L			07/21/24 16:55	1
Nitrite as N	1.36	H F1	0.100	0.0699	mg/L			07/21/24 16:55	1
Sulfate	228		0.500	0.200	mg/L			07/21/24 16:55	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	44.2		0.200	0.115	mg/L		07/23/24 02:38	07/23/24 12:39	1
Magnesium	62.4		0.200	0.0428	mg/L		07/23/24 02:38	07/23/24 12:39	1
Sodium	158		0.500	0.152	mg/L		07/23/24 02:38	07/23/24 12:39	1

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.00229		0.00200	0.000160	mg/L		07/23/24 09:30	07/23/24 15:30	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	367		0.400	0.400	mg/L			07/23/24 16:19	1
Calcium hardness as calcium carbonate	110		0.200	0.200	mg/L			07/23/24 16:19	1
Magnesium hardness as calcium carbonate	257		0.400	0.400	mg/L			07/23/24 16:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance (SM 2510B)	1620		10.0	10.0	umho/cm @ 25C			07/27/24 21:06	1
Total Dissolved Solids (SM 2540C)	1510		20.0	20.0	mg/L			07/23/24 11:50	1
pH (SM 4500 H+ B)	7.7	HF			SU			07/26/24 18:02	1
Temperature (SM 4500 H+ B)	14.0	HF			Degrees C			07/26/24 18:02	1

Method: SM 9223B - Coliforms, Total, and E.Coli (Presence/Absence)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Escherichia coli	ABSENT	U			NONE			07/19/24 14:37	1
Coliform, Total	PRESENT				NONE			07/19/24 14:37	1

QC Sample Results

Client: Centerline
Project/Site: Quail Rd. Gas

Job ID: 820-14324-1
SDG: 24-07-1712

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 860-174105/3
Matrix: Drinking Water
Analysis Batch: 174105

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	DII Fac
	Result	Qualifier							
Chloride	<0.250	U	0.500	0.250	mg/L			07/21/24 15:06	1
Fluoride	<0.100	U	0.500	0.100	mg/L			07/21/24 15:06	1
Sulfate	<0.200	U	0.500	0.200	mg/L			07/21/24 15:06	1

6

Lab Sample ID: LCS 860-174105/4
Matrix: Drinking Water
Analysis Batch: 174105

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	10.0	10.21		mg/L		102	90 - 110
Sulfate	10.0	10.42		mg/L		104	90 - 110

Lab Sample ID: LCSD 860-174105/5
Matrix: Drinking Water
Analysis Batch: 174105

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Fluoride	10.0	10.20		mg/L		102	90 - 110	0	20
Sulfate	10.0	10.43		mg/L		104	90 - 110	0	20

Lab Sample ID: LLCS 860-174105/7
Matrix: Drinking Water
Analysis Batch: 174105

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	0.500	0.5145		mg/L		103	50 - 150
Sulfate	0.500	0.5348		mg/L		107	50 - 150

Lab Sample ID: 820-14324-1 MS
Matrix: Drinking Water
Analysis Batch: 174105

Client Sample ID: Quail Rd Well
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	4.06		10.0	14.12		mg/L		101	90 - 110
Sulfate	228		10.0	232.6	4	mg/L		51	90 - 110

Lab Sample ID: 820-14324-1 MSD
Matrix: Drinking Water
Analysis Batch: 174105

Client Sample ID: Quail Rd Well
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Fluoride	4.06		10.0	14.08		mg/L		100	90 - 110	0	15
Sulfate	228		10.0	232.5	4	mg/L		49	90 - 110	0	15

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QC Sample Results

Client: Centerline
Project/Site: Quail Rd. Gas

Job ID: 820-14324-1
SDG: 24-07-1712

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 860-174106/3
Matrix: Drinking Water
Analysis Batch: 174106

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	DII Fac
	Result	Qualifier							
Nitrate as N	<0.0391	U	0.100	0.0391	mg/L			07/21/24 15:08	1
Nitrite as N	<0.0699	U	0.100	0.0699	mg/L			07/21/24 15:08	1

6

Lab Sample ID: LCS 860-174106/4
Matrix: Drinking Water
Analysis Batch: 174106

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrite as N	10.0	9.995		mg/L		100	90 - 110

Lab Sample ID: LCSD 860-174106/5
Matrix: Drinking Water
Analysis Batch: 174106

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrite as N	10.0	10.01		mg/L		100	90 - 110	0	20

Lab Sample ID: LLCS 860-174106/6
Matrix: Drinking Water
Analysis Batch: 174106

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrite as N	0.100	0.09609	J	mg/L		96	50 - 150

Lab Sample ID: 820-14324-1 MS
Matrix: Drinking Water
Analysis Batch: 174106

Client Sample ID: Quail Rd Well
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrite as N	1.36	H F1	2.50	3.447	F1	mg/L		83	90 - 110

Lab Sample ID: 820-14324-1 MSD
Matrix: Drinking Water
Analysis Batch: 174106

Client Sample ID: Quail Rd Well
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrite as N	1.36	H F1	2.50	3.464	F1	mg/L		84	90 - 110	0	15

QC Sample Results

Client: Centerline
Project/Site: Quail Rd. Gas

Job ID: 820-14324-1
SDG: 24-07-1712

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 860-176435/1-A
Matrix: Drinking Water
Analysis Batch: 177111

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 176435

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Calcium	<0.115	U	0.200	0.115	mg/L		07/23/24 02:38	07/23/24 11:23	1
Magnesium	<0.0428	U	0.200	0.0428	mg/L		07/23/24 02:38	07/23/24 11:23	1
Sodium	<0.152	U	0.500	0.152	mg/L		07/23/24 02:38	07/23/24 11:23	1

6

Lab Sample ID: LCS 860-176435/2-A
Matrix: Drinking Water
Analysis Batch: 177111

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 176435

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec	
							Limits	
Calcium	25.0	24.50		mg/L		98	85 - 115	
Magnesium	25.0	24.00		mg/L		96	85 - 115	
Sodium	25.0	24.50		mg/L		98	85 - 115	

Lab Sample ID: LCSD 860-176435/3-A
Matrix: Drinking Water
Analysis Batch: 177111

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 176435

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec		RPD	Limit
							Limits			
Calcium	25.0	24.50		mg/L		98	85 - 115	0	20	
Magnesium	25.0	23.90		mg/L		96	85 - 115	0	20	
Sodium	25.0	24.60		mg/L		98	85 - 115	0	20	

Lab Sample ID: LLCS 860-176435/4-A
Matrix: Drinking Water
Analysis Batch: 177111

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 176435

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec	
							Limits	
Calcium	0.200	0.1890	J	mg/L		95	50 - 150	
Magnesium	0.200	0.1870	J	mg/L		94	50 - 150	
Sodium	0.500	0.5330		mg/L		107	50 - 150	

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 860-176871/1-A
Matrix: Drinking Water
Analysis Batch: 177104

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 176871

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Manganese	<0.000160	U	0.00200	0.000160	mg/L		07/23/24 09:30	07/23/24 14:37	1

Lab Sample ID: LCS 860-176871/2-A
Matrix: Drinking Water
Analysis Batch: 177104

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 176871

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec	
							Limits	
Manganese	0.100	0.09519		mg/L		95	85 - 115	

Eurofins Lubbock

QC Sample Results

Client: Centerline
Project/Site: Quail Rd. Gas

Job ID: 820-14324-1
SDG: 24-07-1712

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCSD 860-176871/3-A
Matrix: Drinking Water
Analysis Batch: 177104

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 176871

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Manganese	0.100	0.09577		mg/L		96	85 - 115	1	20

6

Lab Sample ID: LLCS 860-176871/4-A
Matrix: Drinking Water
Analysis Batch: 177104

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 176871

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Manganese	0.00200	0.001986	J	mg/L		99	50 - 150

Method: SM 2510B - Conductivity, Specific Conductance

Lab Sample ID: MB 860-178057/41
Matrix: Drinking Water
Analysis Batch: 178057

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	DII Fac
	Result	Qualifier							
Specific Conductance	<10.0	U	10.0	10.0	umho/cm @ 25C			07/27/24 20:28	1

Lab Sample ID: LCS 860-178057/42
Matrix: Drinking Water
Analysis Batch: 178057

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Specific Conductance	1410	1387		umho/cm @ 25C		98	90 - 110

Lab Sample ID: LCSD 860-178057/43
Matrix: Drinking Water
Analysis Batch: 178057

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Specific Conductance	1410	1392		umho/cm @ 25C		99	90 - 110	0	20

Lab Sample ID: LLCS 860-178057/44
Matrix: Drinking Water
Analysis Batch: 178057

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Specific Conductance	10.0	<10.0	U	umho/cm @ 25C		93	50 - 150

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 860-177044/1
Matrix: Drinking Water
Analysis Batch: 177044

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	DII Fac
	Result	Qualifier							
Total Dissolved Solids	<5.00	U	5.00	5.00	mg/L			07/23/24 11:50	1

Eurofins Lubbock

QC Sample Results

Client: Centerline
Project/Site: Quail Rd. Gas

Job ID: 820-14324-1
SDG: 24-07-1712

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: LCS 860-177044/2
Matrix: Drinking Water
Analysis Batch: 177044

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	1000	960.0		mg/L		96	80 - 120

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Lab Sample ID: LCSD 860-177044/3
Matrix: Drinking Water
Analysis Batch: 177044

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Total Dissolved Solids	1000	1048		mg/L		105	80 - 120	9	10

Lab Sample ID: LLCS 860-177044/4
Matrix: Drinking Water
Analysis Batch: 177044

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	5.00	7.000		mg/L		140	50 - 150

Method: SM 4500 H+ B - pH

Lab Sample ID: MB 860-178058/41
Matrix: Drinking Water
Analysis Batch: 178058

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.5				SU			07/27/24 20:28	1
Temperature	19.4				Degrees C			07/27/24 20:28	1

QC Association Summary

Client: Centerline
Project/Site: Quail Rd. Gas

Job ID: 820-14324-1
SDG: 24-07-1712

HPLC/IC

Analysis Batch: 174105

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-14324-1	Quail Rd Well	Total/NA	Drinking Water	300.0	
MB 860-174105/3	Method Blank	Total/NA	Drinking Water	300.0	
LCS 860-174105/4	Lab Control Sample	Total/NA	Drinking Water	300.0	
LCSD 860-174105/5	Lab Control Sample Dup	Total/NA	Drinking Water	300.0	
LLCS 860-174105/7	Lab Control Sample	Total/NA	Drinking Water	300.0	
820-14324-1 MS	Quail Rd Well	Total/NA	Drinking Water	300.0	
820-14324-1 MSD	Quail Rd Well	Total/NA	Drinking Water	300.0	

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Analysis Batch: 174106

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-14324-1	Quail Rd Well	Total/NA	Drinking Water	300.0	
MB 860-174106/3	Method Blank	Total/NA	Drinking Water	300.0	
LCS 860-174106/4	Lab Control Sample	Total/NA	Drinking Water	300.0	
LCSD 860-174106/5	Lab Control Sample Dup	Total/NA	Drinking Water	300.0	
LLCS 860-174106/6	Lab Control Sample	Total/NA	Drinking Water	300.0	
820-14324-1 MS	Quail Rd Well	Total/NA	Drinking Water	300.0	
820-14324-1 MSD	Quail Rd Well	Total/NA	Drinking Water	300.0	

Metals

Prep Batch: 176435

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-14324-1	Quail Rd Well	Total Recoverable	Drinking Water	200.7	
MB 860-176435/1-A	Method Blank	Total Recoverable	Drinking Water	200.7	
LCS 860-176435/2-A	Lab Control Sample	Total Recoverable	Drinking Water	200.7	
LCSD 860-176435/3-A	Lab Control Sample Dup	Total Recoverable	Drinking Water	200.7	
LLCS 860-176435/4-A	Lab Control Sample	Total Recoverable	Drinking Water	200.7	

Prep Batch: 176871

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-14324-1	Quail Rd Well	Total Recoverable	Drinking Water	200.8	
MB 860-176871/1-A	Method Blank	Total Recoverable	Drinking Water	200.8	
LCS 860-176871/2-A	Lab Control Sample	Total Recoverable	Drinking Water	200.8	
LCSD 860-176871/3-A	Lab Control Sample Dup	Total Recoverable	Drinking Water	200.8	
LLCS 860-176871/4-A	Lab Control Sample	Total Recoverable	Drinking Water	200.8	

Analysis Batch: 177104

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-14324-1	Quail Rd Well	Total Recoverable	Drinking Water	200.8	176871
MB 860-176871/1-A	Method Blank	Total Recoverable	Drinking Water	200.8	176871
LCS 860-176871/2-A	Lab Control Sample	Total Recoverable	Drinking Water	200.8	176871
LCSD 860-176871/3-A	Lab Control Sample Dup	Total Recoverable	Drinking Water	200.8	176871
LLCS 860-176871/4-A	Lab Control Sample	Total Recoverable	Drinking Water	200.8	176871

Analysis Batch: 177111

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-14324-1	Quail Rd Well	Total Recoverable	Drinking Water	200.7 Rev 4.4	176435
MB 860-176435/1-A	Method Blank	Total Recoverable	Drinking Water	200.7 Rev 4.4	176435
LCS 860-176435/2-A	Lab Control Sample	Total Recoverable	Drinking Water	200.7 Rev 4.4	176435
LCSD 860-176435/3-A	Lab Control Sample Dup	Total Recoverable	Drinking Water	200.7 Rev 4.4	176435
LLCS 860-176435/4-A	Lab Control Sample	Total Recoverable	Drinking Water	200.7 Rev 4.4	176435

Eurofins Lubbock

QC Association Summary

Client: Centerline
Project/Site: Quail Rd. Gas

Job ID: 820-14324-1
SDG: 24-07-1712

Metals

Analysis Batch: 177144

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-14324-1	Quail Rd Well	Total/NA	Drinking Water	SM 2340B	

General Chemistry

Analysis Batch: 177044

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-14324-1	Quail Rd Well	Total/NA	Drinking Water	SM 2540C	
MB 860-177044/1	Method Blank	Total/NA	Drinking Water	SM 2540C	
LCS 860-177044/2	Lab Control Sample	Total/NA	Drinking Water	SM 2540C	
LCSD 860-177044/3	Lab Control Sample Dup	Total/NA	Drinking Water	SM 2540C	
LLCS 860-177044/4	Lab Control Sample	Total/NA	Drinking Water	SM 2540C	

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Analysis Batch: 177932

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-14324-1	Quail Rd Well	Total/NA	Drinking Water	SM 4500 H+ B	

Analysis Batch: 178057

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-14324-1	Quail Rd Well	Total/NA	Drinking Water	SM 2510B	
MB 860-178057/41	Method Blank	Total/NA	Drinking Water	SM 2510B	
LCS 860-178057/42	Lab Control Sample	Total/NA	Drinking Water	SM 2510B	
LCSD 860-178057/43	Lab Control Sample Dup	Total/NA	Drinking Water	SM 2510B	
LLCS 860-178057/44	Lab Control Sample	Total/NA	Drinking Water	SM 2510B	

Analysis Batch: 178058

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 860-178058/41	Method Blank	Total/NA	Drinking Water	SM 4500 H+ B	

Biology

Analysis Batch: 2860

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-14324-1	Quail Rd Well	Total/NA	Drinking Water	9223B	

Lab Chronicle

Client: Centerline
 Project/Site: Quail Rd. Gas

Job ID: 820-14324-1
 SDG: 24-07-1712

Client Sample ID: Quail Rd Well

Lab Sample ID: 820-14324-1

Date Collected: 07/19/24 11:30

Matrix: Drinking Water

Date Received: 07/19/24 12:13

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			174105	07/21/24 16:55	WIN	EET HOU
Total/NA	Analysis	300.0		1			174106	07/21/24 16:55	WIN	EET HOU
Total Recoverable	Prep	200.7			50 mL	50 mL	176435	07/23/24 02:38	AGR	EET HOU
Total Recoverable	Analysis	200.7 Rev 4.4		1			177111	07/23/24 12:39	JDM	EET HOU
Total Recoverable	Prep	200.8			50 mL	50 mL	176871	07/23/24 09:30	MD	EET HOU
Total Recoverable	Analysis	200.8		1			177104	07/23/24 15:30	DP	EET HOU
Total/NA	Analysis	SM 2340B		1			177144	07/23/24 16:19	DP	EET HOU
Total/NA	Analysis	SM 2510B		1			178057	07/27/24 21:06	RY	EET HOU
Total/NA	Analysis	SM 2540C		1	50 mL	200 mL	177044	07/23/24 11:50	TR	EET HOU
Total/NA	Analysis	SM 4500 H+ B		1			177932	07/26/24 18:02	MR	EET HOU
Total/NA	Analysis	9223B		1	100 mL	100 mL	2860	07/19/24 14:37	LT	EET LUB

Laboratory References:

EET HOU = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

EET LUB = Eurofins Lubbock, 6701 Aberdeen Ave., Suite 8, Lubbock, TX 79424, TEL (806)794-1296

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Accreditation/Certification Summary

Client: Centerline
 Project/Site: Quail Rd. Gas

Job ID: 820-14324-1
 SDG: 24-07-1712

Laboratory: Eurofins Lubbock

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704219	03-31-25

Laboratory: Eurofins Houston

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704215	06-30-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
200.7 Rev 4.4	200.7	Drinking Water	Calcium
SM 2340B		Drinking Water	Calcium hardness as calcium carbonate
SM 2340B		Drinking Water	Hardness as calcium carbonate
SM 2340B		Drinking Water	Magnesium hardness as calcium carbonate
SM 4500 H+ B		Drinking Water	pH
SM 4500 H+ B		Drinking Water	Temperature



Method Summary

Client: Centerline
Project/Site: Quail Rd. Gas

Job ID: 820-14324-1
SDG: 24-07-1712

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	EPA	EET HOU
200.7 Rev 4.4	Metals (ICP)	EPA	EET HOU
200.8	Metals (ICP/MS)	EPA	EET HOU
SM 2340B	Total Hardness (as CaCO ₃) by calculation	SM	EET HOU
SM 2510B	Conductivity, Specific Conductance	SM	EET HOU
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET HOU
SM 4500 H+ B	pH	SM	EET HOU
9223B	Coliforms, Total, and E.Coli (Presence/Absence)	SM	EET LUB
200.7	Preparation, Total Recoverable Metals	EPA	EET HOU
200.8	Preparation, Total Recoverable Metals	EPA	EET HOU

Protocol References:

- EPA = US Environmental Protection Agency
- SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

- EET HOU = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200
- EET LUB = Eurofins Lubbock, 6701 Aberdeen Ave., Suite 8, Lubbock, TX 79424, TEL (806)794-1296



Sample Summary

Client: Centerline
Project/Site: Quail Rd. Gas

Job ID: 820-14324-1
SDG: 24-07-1712

<u>Lab Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Collected</u>	<u>Received</u>
820-14324-1	Quail Rd Well	Drinking Water	07/19/24 11:30	07/19/24 12:13



Loc: 820

14324

ofins

Environmental Testing
Xenoco

Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

14324
Work Order No: 24-07-17R
#011

www.xenoco.com Page 1 of 1

Project Manager:	Taylor Newton	Bill To: (if different)	
Company Name:	Centraline	Company Name:	
Address:	8312 Upland Ave.	Address:	
City, State ZIP:	Lubbock, TX 79424	City, State ZIP:	
Phone:	(806) 252-5575	Email:	Newton@the-centraline.com

Project Name:	Quail Rd. 15AS	Turn Around	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush	Preservative Codes	None: NO DI Water: H ₂ O Cool: Cool MeOH: Me HCL: HC HNO ₃ : HN H ₂ SO ₄ : H ₂ H ₃ PO ₄ : HP NaHSO ₄ : NABS Na ₂ S ₂ O ₃ : NaSO ₃ Zn Acetate+NaOH: Zn NaOH+Ascorbic Acid: SAPC
Project Number:	24-07-17R	Due Date:			
Project Location:	Lubbock, TX	TAT starts the day received by the lab, if received by 4:30pm			
Sampler's Name:	Anton Reed	Wet Ice:	Yes No <input checked="" type="checkbox"/> <input type="checkbox"/>		
P.O. #:		Thermometer ID:	11-4		
SAMPLE RECEIPT		Correction Factor:	-0.7		
Samples Received Intact:	Yes No <input checked="" type="checkbox"/> <input type="checkbox"/>	Temperature Reading:	25.9		
Cooler Custody Seals:	Yes No N/A <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Corrected Temperature:	25.7		
Sample Custody Seals:	Yes No N/A <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>				
Total Containers:					
Sample Identification	Quail Rd Well	Date Sampled	7/19/24 11:30		
Matrix		Time Sampled			
Grab/Comp		Depth			
# of Cont					

ANALYSIS REQUEST

CR, F, NO₃, SO₄
CO₂ pH
TDS
P/A Bacteria
Total Hardness
Iron, manganese

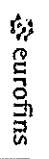
Total 200.7/6010	200.8/6020:	8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed		TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenoco. Its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenoco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenoco. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenoco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Relinquished by: (Signature)	Received by: (Signature)
<i>[Signature]</i>	<i>Taylor Newton</i>	<i>[Signature]</i>	<i>Taylor Newton</i>
Date/Time	Date/Time	Date/Time	Date/Time
7/19/24 11:30	7/19/24 12:13		

Eurofins Lubbock
 6701 Aberdeen Ave, Suite 8
 Lubbock, TX 79424
 Phone: 806-794-1295

Chain of Custody Record



Environment Testing

Client Information (Sub Contract Lab)		Sampler	Lab P/N:	Center Testing Unit(s)	COC No:
Client Contact		Phone:	Taylor Holly	State of Origin:	820-5647 1
Shipping/Receiving		E-Mail: Holly Taylor@eurofins.com		Page:	Page 1 of 1
Company: Eurofins Environment Testing South Cent		Accelerators Required (See note): NEAP Texas		Job #:	820-14324-1
Address: 4145 Greenbriar Dr		Due Date Requested:	Preservation Codes:		
City: Stafford		TAT Requested (days):			
State, zip: TX 77417		PO #:			
Phone: 281-240-4200(Te)		V.O. #:			
Email:		Project #:			
Project Name: Quail Rd. Cass		SSOW#:			
Slur:		Project #:			
		SSOW#:			
Sample Identification - Client ID (Lab ID)		Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	MATRIX (W=Water, S=Soil, O=Organic, A=Asb)
Quail Rd Well (820-14324-1)		7/19/24	11:30		inking Wash
				Field Filtered Sample (Y or N)	
				Perforated MSB (Y or N)	
				200,7/200,7_P_TR (MOD) Custom List	X
				SM2340B	X
				26400_Galcd	X
				300_ORGFH_28D/ (MOD) Custom List	X
				300_ORGFMS/ (MOD) Custom List	X
				SM4500_HH pH and Temperature	X
				200,8/200,8_P_TR (MOD) Custom List	X
				2510B/ Specific Conductance	X
				Total Number of Containers	
				Special Instructions/Note:	

Return To Client Disposal By Lab Archive For _____ Months

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Uncollected
 Deliverable Requested: I, II, III, IV Other (specify) _____ Primary Deliverable Rank: 2

Empty Kit Returned by: _____ Date: _____ Time: _____ Method of Shipment: _____

Relinquished by: *Taylor Holly* Date/Time: 7/19/24 17:00 Company: _____

Relinquished by: _____ Date/Time: _____ Company: _____

Relinquished by: _____ Date/Time: _____ Company: _____

Cooling Temperature(s) °C and Other Remarks: 1.40

Login Sample Receipt Checklist

Client: Centerline

Job Number: 820-14324-1

SDG Number: 24-07-1712

Login Number: 14324

List Source: Eurofins Lubbock

List Number: 1

Creator: Lee, Randell

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

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Login Sample Receipt Checklist

Client: Centerline

Job Number: 820-14324-1
SDG Number: 24-07-1712

Login Number: 14324

List Number: 2

Creator: Grandits, Corey

List Source: Eurofins Houston
List Creation: 07/20/24 10:35 AM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	

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There being no further business to come before the Court, the Judge declared Court adjourned, subject to call.

The foregoing Minutes of a Commissioner's Court meeting held on the 26th day of August, A. D. 2024, was examined by me and approved.

Alan Wisdom
Commissioner, Precinct No. 1

[Signature]
Commissioner, Precinct No. 3

[Signature]
Commissioner, Precinct No. 2

[Signature]
Commissioner, Precinct No. 4

[Signature]
County Judge

Jennifer Palermo
JENNIFER PALERMO, County Clerk, and
Ex-Officio Clerk of Commissioners' Court
Hockley County, Texas

