Scott A. Thompson
Executive Director

OKLAHOMA Environmental Quality

Kevin Stitt
Governor

September 1, 2023

Scot Rigby, City Manager
City of Edmond
c/o Kris Neifing, Director of Water Resources
P.O. Box 2970
Edmond, Oklahoma 73083-2970

Re: Amendment to Add Biosolids Land Application Sites - Approved
City of Edmond Coffee Creek Water Resource Recovery Facility
Sludge Management Plan No. 3555039
Facility No. S-20724
OPDES Permit No. OK0026026

Dear Mr. Rigby:

On August 24, 2023, the Oklahoma Department of Environmental Quality (DEQ), Water Quality Division (WQD), received the City of Edmond's request to add two (2) land application sites. On August 31, 2023, DEQ received an updated landowner agreement form and revised locational information for the proposed sites. Approval of the sites is granted based on the information provided.

APPROVED:

DW 2: 68 acres located within the SW¼ Section 3, Township 12 N, Range 2 W of the Indian Meridian, Oklahoma County, Oklahoma.

DW 3: 88 acres located within the W½ of SW¼ Section 2, Township 12 N, Range 2 W of the Indian Meridian, Oklahoma County, Oklahoma.

It should be noted that DEQ regulation prohibits land application on slopes exceeding five percent (5%). Sites application approved is subject to the provisions of Oklahoma City Sludge Management Permit No. 3555039 and should be made a part of the permanent record. Any change or deviation from the permit must be approved in writing by DEQ.

During review of the application, DEQ identified that the City did not provide results for a toxicity characteristic leaching potential analysis from within the last five (5) years as is required by Part IV of the Permit. The City must sample the biosolids that will be land applied and provide results to DEQ within thirty (30) days.

If you have any questions, please contact me at 405-702-8132 or write to me at the letterhead address.

Sincerely,

David Mercer

David Mercer, P.E., District Engineer
Municipal Wastewater Enforcement Section
Water Quality Division
Oklahoma Department of Environmental Quality

DM/MM/hb TWH/TJB

cc: Ruben Ayala, WRRF Supervisor, City of Edmond
Stephen Henry, ECLS, Oklahoma City DEQ Office
Ryan McIntosh. Regional Manager, ECLS, DEQ

From: Aaron Gruenewald <agruenewald@hodgesfd.com>
Sent: Thursday, August 24, 2023 11:47 AM
To: Toby Harden <Toby.Harden@deq.ok.gov>
Subject: [EXTERNAL] Re: Facility Permit - Edmond Coffee Creek WWTP

Site Paperwork for David Webb Sites DW2 and DW3.

From: Aaron Gruenewald <agruenewald@hodgesfd.com>
Sent: Thursday, August 24, 2023 9:04 AM
To: Toby Harden <Toby.Harden@deq.ok.gov>
Subject: Re: Facility Permit - Edmond Coffee Creek WWTP

Thanks Toby for looking into this! Question... If I send you information to add these two sites to Edmond/Coffee Creeks permit how long would it take to do the site transfer from OKC to Coffee Creek? I have all the information including soil agronomy testing, soil metal testing, sludge testing including fecal, nutrients, metals, and PCB, letter from Coffee Creek requesting the site be added to their permit, landowner and operator signed consent forms, field maps including soils, location, and setback information, and nutrient and metal loading calculations including PAN calculations...

We are in the process of cleaning Edmonds North storage pond and need these sites to finish the work. It was under our impression that these sites were ok to us but after discussion on Monday it was determined that more questions needed to be answered. Sorry for the extra work on your part but just wanting to make sure we check all the boxes needed for proper disposal and permitting.

Thanks!

From: Toby Harden <Toby.Harden@deq.ok.gov>
Sent: Thursday, August 24, 2023 8:27 AM
To: Aaron Gruenewald <agruenewald@hodgesfd.com>
Subject: RE: Facility Permit - Edmond Coffee Creek WWTP

Morning Aaron,
I've gone through all of the Coffee Creek sludge files, those sites do not appear to be permitted for Edmond. If they got biosolids in the past, I would guess it would be from OKC

Thanks,
Toby

From: Aaron Gruenewald <agruenewald@hodgesfd.com>
Sent: Tuesday, August 22, 2023 2:56 PM
To: Toby Harden <Toby.Harden@deq.ok.gov>
Subject: [EXTERNAL] RE: Facility Permit - Edmond Coffee Creek WWTP

Any chance you would know if the two attached sites are part of the Coffee Creek permit... David Webb is the landowner and his other site off of Hefner Road and Midwest Blvd (north od these) is. He was unsure the status of these two sites. It sounds like it's been a few years since recent application but claims he received liquid biosolids some years ago but unsure from what facility. Just trying to make sure all of his sites are able to be land applied with biosolids from Coffee Creek.

David Webb East site - W 1/2 of SE 1/4 of Sec 3, T12N, R2W

David Webb West site - SE 1/4 of Sec 3, T12N, R2W

Robert Ross typically handles the landbase for Coffee Creek but we are helping out with some of the duties. Any help would be appreciated to see if we can move his direction soon.

Thanks!!

-------- Original message --------
From: Aaron Gruenewald <agruenewald@hodgesfd.com>
Date: 8/22/23 2:12 PM (GMT-06:00)
To: Toby Harden <Toby.Harden@deq.ok.gov>
Subject: Facility Permit - Edmond Coffee Creek WWTP

Would you be able to forward the facility permit for Edmond's Coffee Creek WWTP please?

Thank you!!

Aaron

Toby Harden

To: Aaron Gruenewald <agruenewald@hodgesfd.com>

Cc: Myles Mungle; Heather Bateman

Fri 8/25/2023 8:39 AM

Morning Aaron,
Sorry, had several things come up yesterday that took up the whole day. The usual timeline for an amendment is 30 days, but I'll see if we can't get this out faster. I'll keep you in the loop as it moves along

Thanks,
Toby

From: Aaron Gruenewald <agruenewald@hodgesfd.com>
Sent: Thursday, August 24, 2023 3:34 PM
To: Toby Harden <Toby.Harden@deq.ok.gov>
Subject: [EXTERNAL] Re: Facility Permit - Edmond Coffee Creek WWTP

Just checking back with you on the timeline for the David Webb/Coffee Creek site... I know it typically takes some time to review a new site/one time permit application but I was hoping a simple site transfer/historical site that has received other biosolids in the past would be a simple and/or quick approval. Thank you!!

EDMOND WATER RESOURCES

June 23, 2022

Facility ID # S-20724

Compliance Unit

Water Quality Division

Oklahoma Department of Water Quality

PO box 1677, Oklahoma City, OK

RE: Additional Biosolids Land Application Sites

Dear Myles Mungle

Please find attached copies of land owner/farmer agreements, associated lab sample data, and appropriate maps for the following new land application sites.

DW 2) 68 acres located in Oklahoma County in the SW ¼ section of section 3, township 12 N Range 2 West of N Midwest Blvd

DW 3) 88 acres located in Oklahoma County in the W ½ of SW ¼ of section 2, Township 12 N Range 2 West of N Midwest Blvd

The sites subject to approval is part of the City of Edmond, Coffee Creek WRRF's Sludge Management Plan permit # OK0026026 and should be made part of the permanent record.

If you have any question regarding this report, please contact Ruben Ayala, Coffee Creek supervisor at (405)216-7709

Sincerely ,

Ruben Ayala, Coffee Creek WRRF Supervisor

1600 N. Midwest Blvd. | Edmond, OK 73034 | Office: 405-216-7675 | Fax: 405-216-7235 | edmondwater.com

Hodges Farms & Dredging, LLC

Site Addition to Permit OK0026026 Coffee Creek WRRF's Sludge Management Plan

Permit No. OK0026026 and Facility ID No. S-20724
Edmond, OK

Oklahoma Department of Environmental Quality
Water Quality Division

August 23, 2023

Exhibit A: Proof of Ownership and Supporting Documentation

Exhibit B: Operator / Landowner Agreement

Exhibit C: Residuals Sampling Data, Field Loading Report and PAN Calculations and Analytical Results – Metals, Nutrients and PCB

Exhibit D: Analytical Results – Fecal

Exhibit E: Soil and Application Map

Exhibit F: Soil Sample Results – Agronomy

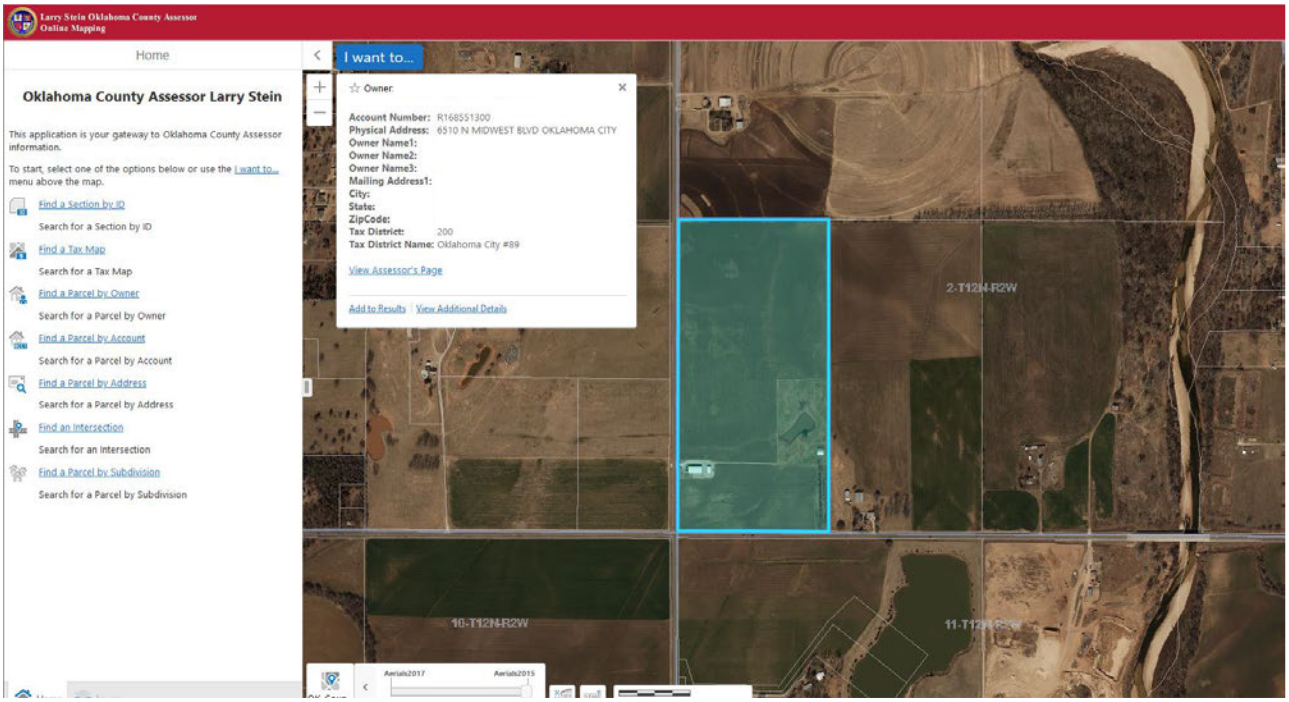
Exhibit G: Soil Sample Results – Metals

EXHIBIT A

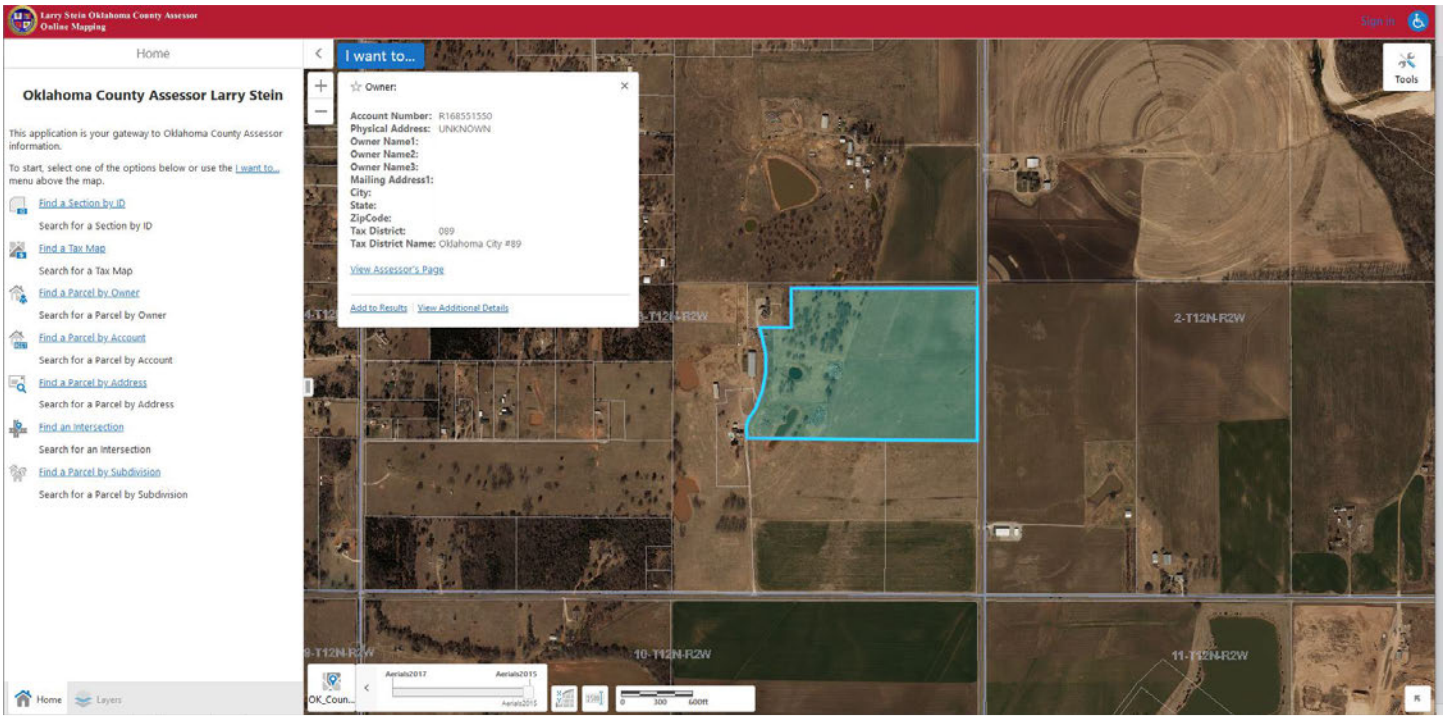
PROOF OF OWNERSHIP AND SUPORTING DOCUMENTATION

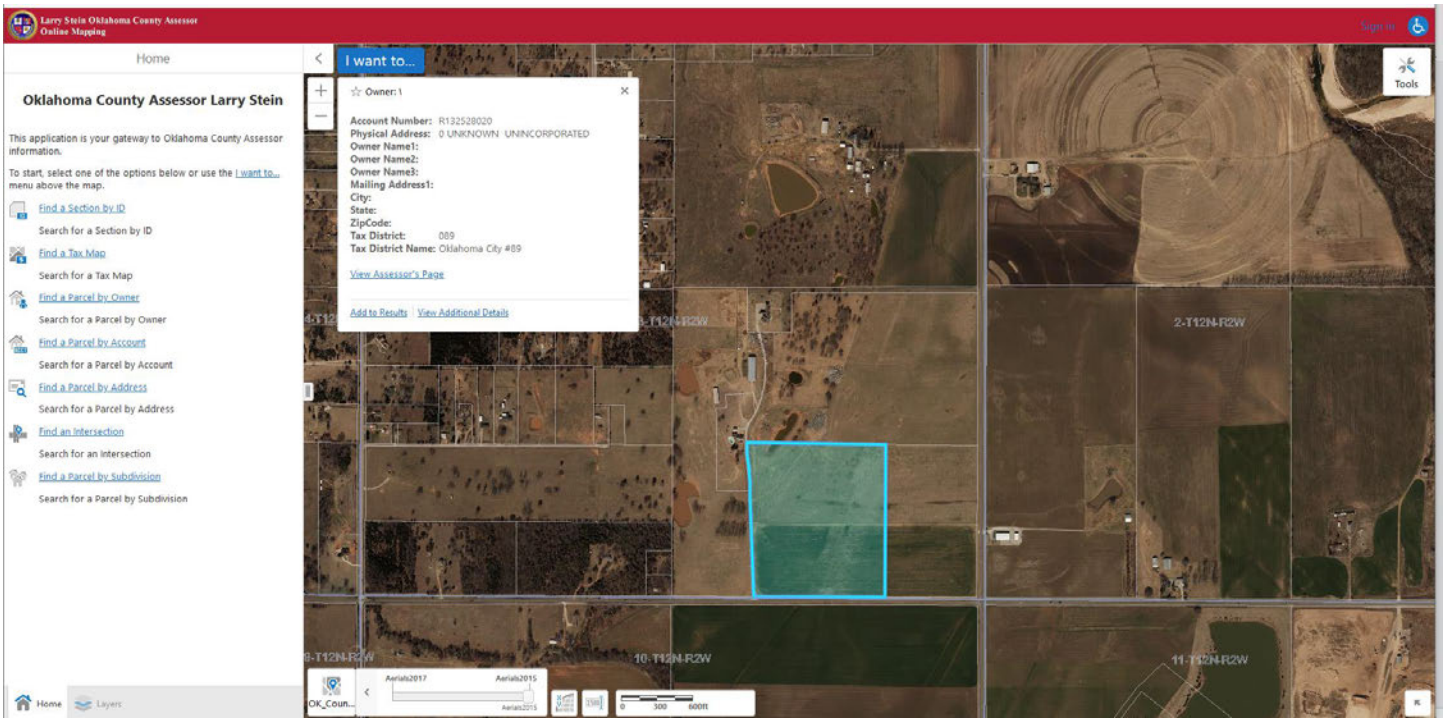
Proof of ownership –

DW2



DW3




Larry Stein Oklahoma County Assessor
Online Mapping
Sign In
Home
Oklahoma County Assessor Larry Stein
This application is your gateway to Oklahoma County Assessor information.
To start, select one of the options below or use the I want to... menu above the map.
Find a Section by ID
Search for a Section by ID
Find a Tax Map
Search for a Tax Map
Find a Parcel by Owner
Search for a Parcel by Owner
Find a Parcel by Account
Search for a Parcel by Account
Find a Parcel by Address
Search for a Parcel by Address
Find an Intersection
Search for an Intersection
Find a Parcel by Subdivision
Search for a Parcel by Subdivision
Home
Layers
I want to...
Tools
Owner: 1
Account Number: R132528020
Physical Address: 0 UNKNOWN UNINCORPORATED
Owner Name1:
Owner Name2:
Owner Name3:
Mailing Address1:
City:
State:
ZipCode:
Tax District: 089
Tax District Name: Oklahoma City #89
View Assessor's Page
Add to Results | View Additional Details
2-T12N-R2W
10-T12N-R2W
11-T12N-R2W
Aerials2017
Aerials2015
0 300 600ft

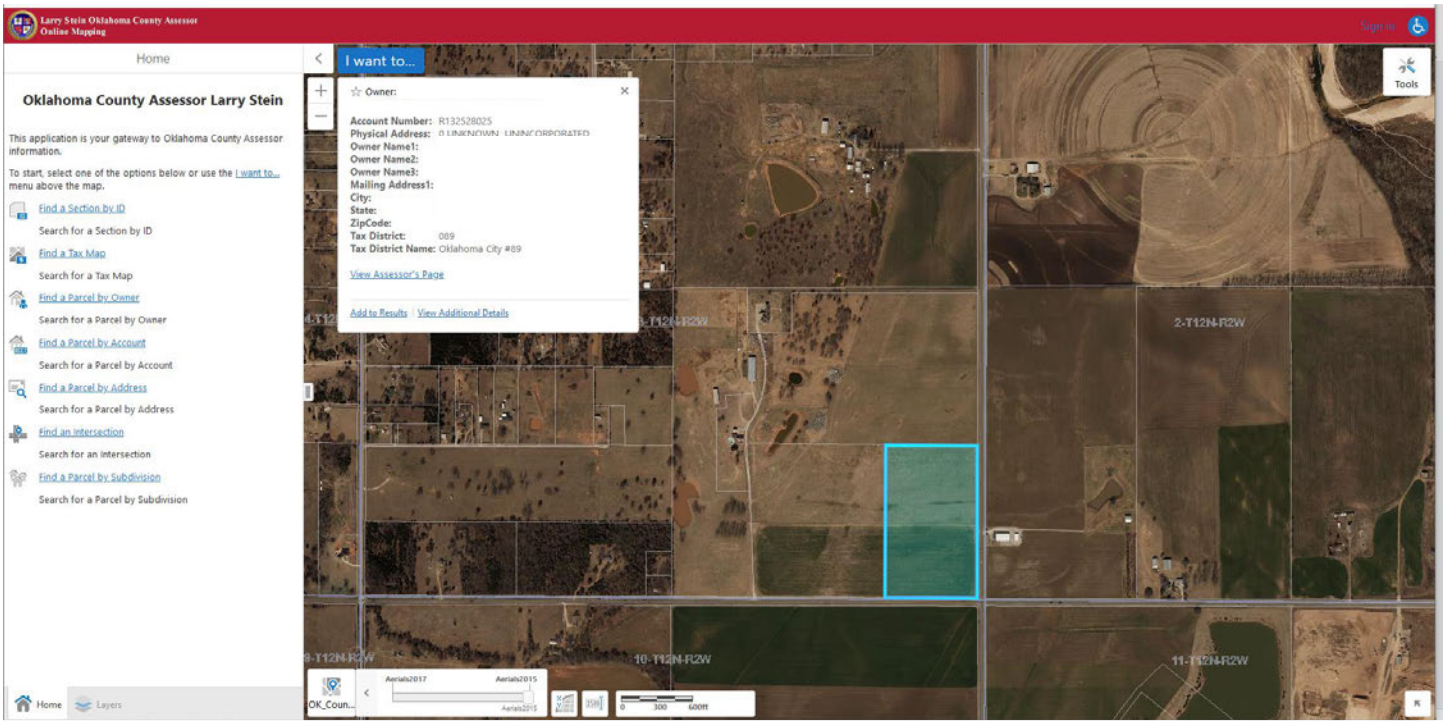

Larry Stein Oklahoma County Assessor
Online Mapping
Sign In
Home
Oklahoma County Assessor Larry Stein
This application is your gateway to Oklahoma County Assessor information.
To start, select one of the options below or use the I want to... menu above the map.
Find a Section by ID
Search for a Section by ID
Find a Tax Map
Search for a Tax Map
Find a Parcel by Owner
Search for a Parcel by Owner
Find a Parcel by Account
Search for a Parcel by Account
Find a Parcel by Address
Search for a Parcel by Address
Find an Intersection
Search for an Intersection
Find a Parcel by Subdivision
Search for a Parcel by Subdivision
Home
Layers
I want to...
Tools
Owner:
Account Number: R132528025
Physical Address: 0 UNKNOWN UNINCORPORATED
Owner Name1:
Owner Name2:
Owner Name3:
Mailing Address1:
City:
State:
ZipCode:
Tax District: 089
Tax District Name: Oklahoma City #89
View Assessor's Page
Add to Results | View Additional Details
2-T12N-R2W
10-T12N-R2W
11-T12N-R2W
Aerials2017
Aerials2015
0 300 600ft

EXHIBIT B

OPERATOR AND LANDOWNER AGREEMENT

LAND OWNER AGREEMENT

Land Owners Name: [redacted]

Address: [redacted]

Phone Number: [redacted]

This letter is for the purpose of authorizing the application of biosolids to my farm located: (include county & legal description)

6510 N. Midwest Blvd, DKC, OK 73141 DK County

Below is a list of conditions I have agreed to follow and report any of these conditions which are violated.

1. All animals shall be excluded for 30 days from the area where biosolids has been applied.
2. Direct human consumption food chain crops, which touch the amended soil, shall not be grown for 14 months.
3. The access to general public shall be controlled for 12 months.
4. Biosolids shall be incorporated the same day it is delivered.
5. Biosolids applied to land within the 100 year flood plain shall be applied prior to the rainy season and a vegetative crop established.
6. Biosolids shall not be applied within two feet of the highest seasonal water table.
7. Biosolids shall not be applied to land having a slope exceeding 10 percent.
8. Biosolids shall not be applied to land within 100 feet of stream or a standing body of water used for a potable water source.
9. Biosolids shall not be applied within 250 feet of a private water supply or 600 feet of a public water supply.
10. No on site storage of biosolids. No stockpiling of biosolids.
11. Each annual application shall be followed by a crop.

Date: 6/23/23 Signature: [signature]

FARM OPERATOR'S AGREEMENT
AGRICULTURAL BENEFICIAL BIOSOLIDS
APPLICATION PROGRAM

NAME: [redacted]

ADDRESS: [redacted]

PHONE NUMBER: [redacted]

ACRES: 80 east 155 west

CROPS: bermuda hay

COUNTY: DK

This letter is for the purpose of requesting application of sludge to agricultural land I operate. Below is a list of conditions I have agreed to follow and will report any of these conditions which are violated.

1. All animals shall be excluded for 30 days from the last date of application based on the area where biosolids have been applied.

2. Direct human consumption food chain crops that are grown above the ground shall not be grown for 14 months.

3. The access to general public shall be controlled for 12 months.

4. Biosolids shall be incorporated into the soil at the time of application.

5. Biosolids applied to land within the 100 year flood plain shall be applied prior to the rainy season and a vegetative crop established.

6. Biosolids shall not be applied within two feet of the highest seasonal water table.

7. Biosolids shall not be applied to land having a slope exceeding 10 percent.

8. Biosolids shall not be applied to land within 100 feet from a stream or United States body of water, or which is intended for human consumption.

9. Biosolids shall not be applied with 250 feet of a private water supply or 600 feet of a public water supply.

10. No on site storage of biosolids. No stockpiling of biosolids off site.

11. Each annual application shall be followed by a crop.

Date: 9/23/23 Signature: [signature]

EXHIBIT C

RESIDUALS SAMPLING DATA
FIELD LOADING REPORT – PAN CALCULATIONS
ANALYTICAL RESULTS –METALS, NUTRIENTS AND PCB

Residuals Sampling Data

Project Name: **Biosolids Removal and Land Application - Coffee Creek Water Resource Recovery Facility**

Sampling Date: **6/13/2023** **Sampling Date Range Start:** **6/13/2023** **Sampling Date Range End:** **12/31/2023**

		Sample		North Lagoon				Average
Parameters								
% Solids				3.26				3.26
Total Kjeldahl Nitrogen (TKN)	mg/kg			48,800				48,800
Ammonia Nitrogen	mg/kg			13,300				13,300
Nitrate Nitrogen	mg/kg			<5.0				<5.0
Nitrite Nitrogen	mg/kg			30.7				30.7
Organic Nitrogen	mg/kg			35,500				35,500
Total Phosphorus (P)	mg/kg			25,500				25,500
Total Potassium (K)	mg/kg			5,110				5,110
Arsenic (As)	mg/kg			<25.0				<25.0
Cadmium (Cd)	mg/kg			<2.5				<2.5
Chromium (Cr)	mg/kg			76.5				76.5
Copper (Cu)	mg/kg			424.0				424.0
Lead (Pb)	mg/kg			<25.0				<25.0
Mercury (Hg)	mg/kg			0.46				0.46
Molybdenum (Mo)	mg/kg			7.45				7.5
Nickel (Ni)	mg/kg			24.3				24.3
Selenium (Se)	mg/kg			15.9				15.9
Zinc (Zn)	mg/kg			745				745
Aluminum (Al)	mg/kg			NR				NR
Calcium (Ca)	mg/kg			NR				NR
Iron (Fe)	mg/kg			NR				NR
Magnesium (Mg)	mg/kg			NR				NR
Manganese (Mn)	mg/kg			NR				NR
Silver (Ag)	mg/kg			NR				NR
Sodium (Na)	mg/kg			NR				NR
Sulfur (S)	mg/kg			NR				NR
Chloride (Cl)	mg/kg			NR				NR
pH				NR				NR
Volatile Solids	%			NR				NR
Effective Cal Carbonate Eq (ECCE)	%			NR				NR

NR: Not Reported
All reported values are on a "dry weight" basis or noted by *

Field Loading Report - Average Residuals Concentrations

Project Name: **Biosolids Removal and Land Application - Coffee Creek Water Resource Recovery Facility**

Sample Date: **6/13/2023** Report Start: **6/13/2023** Report End: **12/31/2023**

Parameter		PPM (mg/kg)	Lbs/Dry Ton	40 CFR 503 Table 1 Ceiling Concentrations (mg/kg)	40 CFR 503 Low Metals Ceiling Concentrations (mg/kg)
PAN (Injected)		7,105	14.210		
PAN (Surface with Incorporation)		13,305	26.610		
PAN (Dewatered Surface without Incorporation)		13,305	26.610		
PAN (Liquid Surface without Incorporation)		13,305	26.610		
Total Kjeldahl Nitrogen (TKN)		48,800			
Ammonia Nitrogen (NH3-N)		13,300			
Nitrate Nitrogen (NO3-N)	<	5.0			
Organic Nitrogen		35,500			
Total Phosphorus (P)		25,500	51.000		
Total Potassium (K)		5,110	10.220		
Arsenic (As)	<	25.0	0.050	75	41
Cadmium (Cd)	<	2.5	0.005	85	39
Chromium (Cr)		76.5	0.153	3,000	1,200
Copper (Cu)		424.0	0.848	4,300	1,500
Lead (Pb)	<	25.0	0.050	840	300
Mercury (Hg)		0.46	0.0009	57	17
Molybdenum (Mo)		7.5	0.015	75	18
Nickel (Ni)		24.3	0.049	420	420
Selenium (Se)		15.9	0.032	100	36
Zinc (Zn)		745	1.490	7,500	2,800
Calcium (Ca)		NR	NR		
Magnesium (Mg)		NR	NR		
Aluminum (Al)		NR	NR		
Sodium (Na)		NR	NR		
Chloride (Cl)		NR	NR		
K_2O			12.3		
P_2O_5			5.9		

Percent Solids: 3.26 %

Formula:

PAN (ppm) = [(f1)(ppm Organic Nitrogen)]+[(V1)(ppm Ammonia)+(ppm Nitrate N)

lbs/dry ton = ppm or mg/kg x 0.002

Notes:

PAN = Plant Available Nitrogen

State of Application: Oklahoma

Organic Nitrogen Mineralization Rate (f1): 20 %

Anaerobically Digested: 20%

Aerobically Digested: 30%

Unstablized Primary and Waste: 40%

Lime Stablilized: 25%

Ammonia Nitrogen Non-Volatilized Fraction (V1):

For Injection:	1
For Surface with Incorporation:	1
For Dewatered Surface without Incorporation:	1
Liquid Surface without Incorporation:	0.25

NR = Not Reported

Sample Note: Results are an average of samples taken from 2 ponds on 5/10/2023 and Lime Analysis on 5/17/2023

Accurate Environmental Laboratories

June 30, 2023

Client: Edmond, Coffee Creek Plant

PO Box 2970 1600 North Midwest Blvd.

Edmond, OK 73083

Requested By: -

National Environmental Laboratory Accreditation Program
ODEQ TNI Certified

Sample Project Name:

Date Samples Received: June 13, 2023 Time: 11:20 sample temp upon arrival at lab = 25.70°C

Matrix: Sludge

Lab Log Numbers: **FF13086-01** **FF13086-02** **FF13086-03**

Work Order: FF13086

Report # FF13086-0630231336

EPA Lab ID#'s: **Stillwater OK00092** **Tulsa OK00983** **OKC OK00129** **ICR OK 001**

Oklahoma Certification: Stillwater NELAP WasteWater, ODEQ 8316/ Drinking Water, DEQ D9602

NELAP Tulsa WasteWater, ODEQ 9905 / Drinking Water, DEQ D9901

Oklahoma City NELAP WasteWater ODEQ 7202 / Drinking Water, DEQ D9937

Kansas Certification: Stillwater NELAP CERT # E-10219

Method Reference: 40 CFR 136, 141, and 261 Methods for Chemical Analysis of Water and Wastes EPA-600/4-79-020, March 1983. Test Methods for Evaluating Solid Wastes, SW-846, Final Update VI. Standard Methods 2005 (21st Edition), Standard Methods 2011 (22nd Edition), Standard Methods 2017 (23rd Edition) for the Examination of Water and Wastewater.

Analysis Reference: If qualifiers present in "Prep Info" or "Analysis Info", then analysis performed as follows: @= Tulsa Lab and * = OKC Lab. If no qualifiers present, then analysis performed at Stillwater Lab.

Accurate Environmental Laboratories certify that the test results performed at the Stillwater lab meet all requirements of NELAP. Any exceptions to this can be found in the report footer or Quality Control Section of the report.

This report is to only be replicated in its entirety.

Accurate Environmental sampling protocol was followed for any sampling performed by Accurate Field Services.

Sample: ***East Lagoon*** **Location Code:** **PWSID#:**

Collection Type: Grab Sample Time: 6/13/23 9:49 **Lab Log#** FF13086-01

Method/Parameter	Test	Result		Notes	PQL#	Prep Info	Analysis Info
Ammonia, Total SM4500NH3 C	Ammonia as N	17200	mg/kg dry		0.75	06/21/23 09:30 RND	06/21/23 14:17 RND
pH in Lab EPA 9045D	pH	7.03	pH Units	#03	0.0100	06/19/23 08:00 JGB	06/19/23 11:50 JGB
Phosphorus (P), Total - EPA 365.1	Phosphorus	12700	mg/kg dry		12.4	06/20/23 10:14 KMK	06/22/23 09:11 KMK
Temperature SM2550 B	Temperature	23.5	°C			06/19/23 08:00 JGB	06/19/23 11:50 JGB
Nitrate EPA 300.0	Nitrate as N	BPQL	mg/kg dry		5.00	06/22/23 15:06 CPL	06/22/23 20:02 CPL
Nitrite EPA 300.0	Nitrite as N	33.4	mg/kg dry		1.00	06/22/23 15:06 CPL	06/22/23 20:02 CPL
Solids, Percent SM2540 B	Percent Solids	3.29	%		0.100	06/17/23 10:45 RND	06/19/23 17:00 RND
Kjeldahl Nitrogen SM4500Norg C	Total Kjeldahl Nitrogen	56400	mg/kg dry		2.00	06/21/23 10:30 CPL	06/22/23 16:08 CPL
Arsenic (As) EPA 6010B	Arsenic	BPQL	mg/kg dry		25.0	06/14/23 15:15 SAK	06/15/23 16:44 CJS
Cadmium (Cd) EPA 6010B	Cadmium	BPQL	mg/kg dry		2.50	06/14/23 15:15 SAK	06/16/23 16:00 CJS
Copper (Cu) EPA 6010B	Copper	299	mg/kg dry		12.5	06/14/23 15:15 SAK	06/15/23 16:44 CJS
Lead (Pb) EPA 6010B	Lead	BPQL	mg/kg dry		25.0	06/14/23 15:15 SAK	06/15/23 16:44 CJS
Mercury (Hg) EPA 7471A	Mercury	0.761	mg/kg dry		0.0100	06/14/23 14:02 SAK	06/15/23 09:37 SAK
Molybdenum (Mo) EPA 6010B	Molybdenum	5.70	mg/kg dry		5.00	06/14/23 15:15 SAK	06/16/23 16:00 CJS
Nickel (Ni) EPA 6010B	Nickel	18.2	mg/kg dry		5.00	06/14/23 15:15 SAK	06/15/23 16:44 CJS
Potassium (K) EPA 6010B	Potassium	3840	mg/kg dry		125	06/14/23 15:15 SAK	06/15/23 16:44 CJS
Selenium (Se) EPA 6010B	Selenium	15.6	mg/kg dry		12.5	06/14/23 15:15 SAK	06/15/23 16:44 CJS
Zinc (Zn) EPA 6010B	Zinc	579	mg/kg dry		12.5	06/14/23 15:15 SAK	06/15/23 16:44 CJS
PCB Analysis by SW846 8082	PCB-1016	BPQL	mg/kg dry		0.0576	06/14/23 12:06 DMM	06/14/23 19:37 SJ
PCB Analysis by SW846 8082	PCB-1221	BPQL	mg/kg dry		0.115	06/14/23 12:06 DMM	06/14/23 19:37 SJ
PCB Analysis by SW846 8082	PCB-1232	BPQL	mg/kg dry		0.0576	06/14/23 12:06 DMM	06/14/23 19:37 SJ
PCB Analysis by SW846 8082	PCB-1242	BPQL	mg/kg dry		0.0576	06/14/23 12:06 DMM	06/14/23 19:37 SJ
PCB Analysis by SW846 8082	PCB-1248	BPQL	mg/kg dry		0.0576	06/14/23 12:06 DMM	06/14/23 19:37 SJ
PCB Analysis by SW846 8082	PCB-1254	BPQL	mg/kg dry		0.0576	06/14/23 12:06 DMM	06/14/23 19:37 SJ
PCB Analysis by SW846 8082	PCB-1260	BPQL	mg/kg dry		0.0576	06/14/23 12:06 DMM	06/14/23 19:37 SJ

Sample: ***West Lagoon*** **Location Code:** **PWSID#:**

Collection Type: Grab Sample Time: 6/13/23 9:23 **Lab Log#** FF13086-02

Method/Parameter	Test	Result		Notes	PQL#	Prep Info	Analysis Info
Ammonia, Total SM4500NH3 C	Ammonia as N	25400	mg/kg dry		0.75	06/21/23 09:30 RND	06/21/23 14:17 RND
pH in Lab EPA 9045D	pH	7.02	pH Units	#03	0.0100	06/19/23 08:00 JGB	06/19/23 11:50 JGB
Phosphorus (P), Total - EPA 365.1	Phosphorus	18600	mg/kg dry		12.3	06/20/23 10:14 KMK	06/22/23 09:17 KMK
Temperature SM2550 B	Temperature	23.0	°C			06/19/23 08:00 JGB	06/19/23 11:50 JGB
Nitrate EPA 300.0	Nitrate as N	BPQL	mg/kg dry		5.00	06/22/23 15:06 CPL	06/22/23 20:24 CPL
Nitrite EPA 300.0	Nitrite as N	BPQL	mg/kg dry		1.00	06/22/23 15:06 CPL	06/22/23 20:24 CPL

Sample: **Location Code:** **PWSID#:**

Collection Type: Grab Sample Time: 6/13/23 9:23 **Lab Log#** FF13086-02

Method/Parameter	Test	Result	Notes	PQL#	Prep Info	Analysis Info
Solids, Percent SM2540 B	Percent Solids	2.49 %		0.100	06/17/23 10:45 RND	06/19/23 17:00 RND
Kjeldahl Nitrogen SM4500Norg C	Total Kjeldahl Nitrogen	50400 mg/kg dry		2.00	06/21/23 10:30 CPL	06/22/23 16:08 CPL
Arsenic (As) EPA 6010B	Arsenic	BPQL mg/kg dry		25.0	06/14/23 15:15 SAK	06/15/23 16:48 CJS
Cadmium (Cd) EPA 6010B	Cadmium	BPQL mg/kg dry		2.50	06/14/23 15:15 SAK	06/16/23 16:04 CJS
Chromium (Cr) EPA 6010B	Chromium	59.7 mg/kg dry		12.5	06/14/23 15:15 SAK	06/15/23 16:48 CJS
Copper (Cu) EPA 6010B	Copper	267 mg/kg dry		12.5	06/14/23 15:15 SAK	06/15/23 16:48 CJS
Lead (Pb) EPA 6010B	Lead	BPQL mg/kg dry		25.0	06/14/23 15:15 SAK	06/15/23 16:48 CJS
Mercury (Hg) EPA 7471A	Mercury	0.404 mg/kg dry		0.0100	06/14/23 14:02 SAK	06/15/23 09:39 SAK
Molybdenum (Mo) EPA 6010B	Molybdenum	5.73 mg/kg dry		5.00	06/14/23 15:15 SAK	06/16/23 16:04 CJS
Nickel (Ni) EPA 6010B	Nickel	19.0 mg/kg dry		5.00	06/14/23 15:15 SAK	06/15/23 16:48 CJS
Potassium (K) EPA 6010B	Potassium	6320 mg/kg dry		125	06/14/23 15:15 SAK	06/15/23 16:48 CJS
Selenium (Se) EPA 6010B	Selenium	13.3 mg/kg dry		12.5	06/14/23 15:15 SAK	06/15/23 16:48 CJS
Zinc (Zn) EPA 6010B	Zinc	533 mg/kg dry		12.5	06/14/23 15:15 SAK	06/15/23 16:48 CJS
PCB Analysis by SW846 8082	PCB-1016	BPQL mg/kg dry		0.0800	06/14/23 12:06 DMM	06/14/23 20:32 SJ
PCB Analysis by SW846 8082	PCB-1221	BPQL mg/kg dry		0.160	06/14/23 12:06 DMM	06/14/23 20:32 SJ
PCB Analysis by SW846 8082	PCB-1232	BPQL mg/kg dry		0.0800	06/14/23 12:06 DMM	06/14/23 20:32 SJ
PCB Analysis by SW846 8082	PCB-1242	BPQL mg/kg dry		0.0800	06/14/23 12:06 DMM	06/14/23 20:32 SJ
PCB Analysis by SW846 8082	PCB-1248	BPQL mg/kg dry		0.0800	06/14/23 12:06 DMM	06/14/23 20:32 SJ
PCB Analysis by SW846 8082	PCB-1254	BPQL mg/kg dry		0.0800	06/14/23 12:06 DMM	06/14/23 20:32 SJ
PCB Analysis by SW846 8082	PCB-1260	BPQL mg/kg dry		0.0800	06/14/23 12:06 DMM	06/14/23 20:32 SJ

Sample: ***North Lagoon*** **Location Code:** **PWSID#:**

Collection Type: Grab Sample Time: 6/13/23 10:05 **Lab Log#** FF13086-03

Method/Parameter	Test	Result	Notes	PQL#	Prep Info	Analysis Info
Ammonia, Total SM4500NH3 C	Ammonia as N	13300 mg/kg dry		0.75	06/21/23 09:30 RND	06/21/23 14:17 RND
pH in Lab EPA 9045D	pH	7.05 pH Units	#03	0.0100	06/19/23 08:00 JGB	06/19/23 11:50 JGB
Phosphorus (P), Total - EPA 365.1	Phosphorus	25500 mg/kg dry		12.2	06/20/23 10:14 KMK	06/22/23 09:18 KMK
Temperature SM2550 B	Temperature	22.8 °C			06/19/23 08:00 JGB	06/19/23 11:50 JGB
Nitrate EPA 300.0	Nitrate as N	BPQL mg/kg dry		5.00	06/22/23 15:06 CPL	06/22/23 21:32 CPL
Nitrite EPA 300.0	Nitrite as N	30.7 mg/kg dry		1.00	06/22/23 15:06 CPL	06/22/23 21:32 CPL
Solids, Percent SM2540 B	Percent Solids	3.26 %		0.100	06/17/23 10:45 RND	06/19/23 17:00 RND
Kjeldahl Nitrogen SM4500Norg C	Total Kjeldahl Nitrogen	48800 mg/kg dry		2.00	06/21/23 10:30 CPL	06/22/23 16:08 CPL
Arsenic (As) EPA 6010B	Arsenic	BPQL mg/kg dry		25.0	06/14/23 15:15 SAK	06/15/23 16:56 CJS
Cadmium (Cd) EPA 6010B	Cadmium	BPQL mg/kg dry		2.50	06/14/23 15:15 SAK	06/16/23 16:08 CJS
Chromium (Cr) EPA 6010B	Chromium	76.5 mg/kg dry		12.5	06/14/23 15:15 SAK	06/15/23 16:56 CJS
Copper (Cu) EPA 6010B	Copper	424 mg/kg dry		12.5	06/14/23 15:15 SAK	06/15/23 16:56 CJS
Lead (Pb) EPA 6010B	Lead	BPQL mg/kg dry		25.0	06/14/23 15:15 SAK	06/15/23 16:56 CJS

Sample: **Location Code:** **PWSID#:**

Collection Type: Grab Sample Time: 6/13/23 10:05 **Lab Log#** FF13086-03

Method/Parameter	Test	Result	Notes	PQL#	Prep Info	Analysis Info
Mercury (Hg) EPA 7471A	Mercury	0.460 mg/kg dry		0.0100	06/14/23 14:02 SAK	06/15/23 09:42 SAK
Molybdenum (Mo) EPA 6010B	Molybdenum	7.45 mg/kg dry		5.00	06/14/23 15:15 SAK	06/16/23 16:08 CJS
Nickel (Ni) EPA 6010B	Nickel	24.3 mg/kg dry		5.00	06/14/23 15:15 SAK	06/15/23 16:56 CJS
Potassium (K) EPA 6010B	Potassium	5110 mg/kg dry		125	06/14/23 15:15 SAK	06/15/23 16:56 CJS
Selenium (Se) EPA 6010B	Selenium	15.9 mg/kg dry		12.5	06/14/23 15:15 SAK	06/15/23 16:56 CJS
Zinc (Zn) EPA 6010B	Zinc	745 mg/kg dry		12.5	06/14/23 15:15 SAK	06/15/23 16:56 CJS
PCB Analysis by SW846 8082	PCB-1016	BPQL mg/kg dry		0.0604	06/14/23 12:06 DMM	06/14/23 21:26 SJ
PCB Analysis by SW846 8082	PCB-1221	BPQL mg/kg dry		0.121	06/14/23 12:06 DMM	06/14/23 21:26 SJ
PCB Analysis by SW846 8082	PCB-1232	BPQL mg/kg dry		0.0604	06/14/23 12:06 DMM	06/14/23 21:26 SJ
PCB Analysis by SW846 8082	PCB-1242	BPQL mg/kg dry		0.0604	06/14/23 12:06 DMM	06/14/23 21:26 SJ
PCB Analysis by SW846 8082	PCB-1248	BPQL mg/kg dry		0.0604	06/14/23 12:06 DMM	06/14/23 21:26 SJ
PCB Analysis by SW846 8082	PCB-1254	BPQL mg/kg dry		0.0604	06/14/23 12:06 DMM	06/14/23 21:26 SJ
PCB Analysis by SW846 8082	PCB-1260	BPQL mg/kg dry		0.0604	06/14/23 12:06 DMM	06/14/23 21:26 SJ

Notes and Definitions

Sample(s) for PCB 8082 analysis recieved in plastic containers.

#52	Analyte recoveries are outside of acceptance limits for the matrix spike sample. This failure does not invalidate data reported.
#03	This sample was received outside of EPA recommended holding time.
MCL	Analyte concentration may exceed Maximum Contaminant Limit (MCL) for EPA Primary or Secondary Drinking Water Regulations.
###	Analyte concentration may exceed regulatory limit.
PQL	Practical Quantitation Limit - the method reporting limit (MRL) adjusted for any dilutions or other changes made to the sample to deal with interferences/matrix effects
BPQL	Below Practical Quantitation Limit (if applicable).

The "Prep Date" of the QC analysis coincides with the characters of the appropriate QC Lab ID. (Example: 19 A 02 15 - BLK = 2019, Jan 2, Batch #15 - Blank)

Lab Manager

Quality Control Data

Blank Data

QC Lab #	Test Group	Test	Result	PQL	Flags
23F2120-BLK1	Ammonia, Total SM4500NH3 C	Ammonia as N	BPQL mg/kg wet	0.75	
23F2025-BLK1	Phosphorus (P), Total - EPA 365.1	Phosphorus	BPQL mg/kg wet	2.50	
23F2234-BLK1	Nitrate EPA 300.0	Nitrate as N	BPQL mg/kg wet	0.500	
23F2234-BLK1	Nitrite EPA 300.0	Nitrite as N	BPQL mg/kg wet	0.10	
23F2133-BLK1	Kjeldahl Nitrogen SM4500Norg C	Total Kjeldahl Nitrogen	BPQL mg/kg wet	2.00	
23F1471-BLK1	Arsenic (As) EPA 6010B	Arsenic	BPQL mg/kg dry	25.0	
23F1471-BLK1	Cadmium (Cd) EPA 6010B	Cadmium	BPQL mg/kg dry	2.50	
23F1471-BLK1	Chromium (Cr) EPA 6010B	Chromium	BPQL mg/kg dry	12.5	
23F1471-BLK1	Copper (Cu) EPA 6010B	Copper	BPQL mg/kg dry	12.5	
23F1471-BLK1	Lead (Pb) EPA 6010B	Lead	BPQL mg/kg dry	25.0	
23F1447-BLK1	Mercury (Hg) EPA 7471A	Mercury	BPQL mg/kg wet	0.0100	
23F1471-BLK1	Molybdenum (Mo) EPA 6010B	Molybdenum	BPQL mg/kg dry	5.00	
23F1471-BLK1	Nickel (Ni) EPA 6010B	Nickel	BPQL mg/kg dry	5.00	
23F1471-BLK1	Potassium (K) EPA 6010B	Potassium	BPQL mg/kg dry	125	
23F1471-BLK1	Selenium (Se) EPA 6010B	Selenium	BPQL mg/kg dry	12.5	
23F1471-BLK1	Zinc (Zn) EPA 6010B	Zinc	BPQL mg/kg dry	12.5	
23F1436-BLK1	PCB Analysis by SW846 8082	PCB-1016	BPQL mg/kg wet	0.0033	
23F1436-BLK1	PCB Analysis by SW846 8082	PCB-1221	BPQL mg/kg wet	0.0067	
23F1436-BLK1	PCB Analysis by SW846 8082	PCB-1232	BPQL mg/kg wet	0.0033	
23F1436-BLK1	PCB Analysis by SW846 8082	PCB-1242	BPQL mg/kg wet	0.0033	
23F1436-BLK1	PCB Analysis by SW846 8082	PCB-1248	BPQL mg/kg wet	0.0033	
23F1436-BLK1	PCB Analysis by SW846 8082	PCB-1254	BPQL mg/kg wet	0.0033	
23F1436-BLK1	PCB Analysis by SW846 8082	PCB-1260	BPQL mg/kg wet	0.0033	

Duplicate Sample Data

QC Lab #	Test Group	Test Name	Source	Dup Result	Samp Result	% RPD	RPD Limit	Flags
23F2025-DUP1	Phosphorus (P), Total - EPA 365.1	Phosphorus	FF13086-01	12900	12700	2	20	
23F2234-DUP1	Nitrate EPA 300.0	Nitrate as N	FF13086-02	BPQL	BPQL	UDL	20	
23F2234-DUP1	Nitrite EPA 300.0	Nitrite as N	FF13086-02	BPQL	BPQL	UDL	20	

Quality Control Data

Laboratory Control Sample Data

Lab QC#	Test Group	Test Name	LCS Result	Spike Level	Units	% Rec.	Control Limits	Flags
23F1925-BS1	pH in Lab EPA 9045D	pH	6.96	7.000	pH Units	99	99 - 101	
23F2025-BS1	Phosphorus (P), Total - EPA 365.1	Phosphorus	49.8	50.00	mg/kg wet	100	90 - 110	
23F2120-BS1	Ammonia, Total SM4500NH3 C	Ammonia as N	4.81	5.000	mg/kg wet	96	90 - 110	
23F2120-BS2	Ammonia, Total SM4500NH3 C	Ammonia as N	9.73	10.00	mg/kg wet	97	90 - 110	
23F2133-BS1	Kjeldahl Nitrogen SM4500Norg C	Total Kjeldahl Nitrogen	19.8	20.00	mg/kg wet	99	90 - 110	
23F2133-BS2	Kjeldahl Nitrogen SM4500Norg C	Total Kjeldahl Nitrogen	39.6	40.00	mg/kg wet	99	90 - 110	
23F2234-BS1	Nitrate EPA 300.0	Nitrate as N	9.92	10.00	mg/kg wet	99	90 - 110	
23F2234-BS1	Nitrite EPA 300.0	Nitrite as N	6.11	6.090	mg/kg wet	100	90 - 110	
23F2234-MRL1	Nitrate EPA 300.0	Nitrate as N	0.530	0.5015	mg/kg wet	106	50 - 150	
23F2234-MRL1	Nitrite EPA 300.0	Nitrite as N	0.21	0.2001	mg/kg wet	105	0 - 200	
23F1447-BS1	Mercury (Hg) EPA 7471A	Mercury	0.390	0.4167	mg/kg wet	94	85 - 115	
23F1471-BS1	Arsenic (As) EPA 6010B	Arsenic	469	486.1	mg/kg dry	96	85 - 115	
23F1471-BS1	Cadmium (Cd) EPA 6010B	Cadmium	486	486.1	mg/kg dry	100	85 - 115	
23F1471-BS1	Chromium (Cr) EPA 6010B	Chromium	463	486.1	mg/kg dry	95	85 - 115	
23F1471-BS1	Copper (Cu) EPA 6010B	Copper	479	486.1	mg/kg dry	99	85 - 115	
23F1471-BS1	Lead (Pb) EPA 6010B	Lead	467	486.1	mg/kg dry	96	85 - 115	
23F1471-BS1	Molybdenum (Mo) EPA 6010B	Molybdenum	491	486.1	mg/kg dry	101	85 - 115	
23F1471-BS1	Nickel (Ni) EPA 6010B	Nickel	472	486.1	mg/kg dry	97	85 - 115	
23F1471-BS1	Potassium (K) EPA 6010B	Potassium	474	486.1	mg/kg dry	98	85 - 115	
23F1471-BS1	Selenium (Se) EPA 6010B	Selenium	466	486.1	mg/kg dry	96	85 - 115	
23F1471-BS1	Zinc (Zn) EPA 6010B	Zinc	469	486.1	mg/kg dry	96	85 - 115	
23F1436-BS1	PCB Analysis by SW846 8082	PCB-1016	0.0119	0.01333	mg/kg wet	89	53.1 - 129	
23F1436-BS1	PCB Analysis by SW846 8082	PCB-1260	0.0121	0.01333	mg/kg wet	91	64.3 - 139	

LCS Duplicate Data

QC Lab#	Test Group	Test Name	LCS % Rec.	LCS Dup % Rec.	Recovery Limits	RPD	RPD Limit	Flags
23F1436-BSD1	PCB Analysis by SW846 8082	PCB-1016	89	96	53.1 - 129	7	20	
23F1436-BSD1	PCB Analysis by SW846 8082	PCB-1260	91	101	64.3 - 139	10	20	

Matrix Spike Data

QC Lab #	Test Group	Test Name	Source Sample	Sample Result	Units	Spike Result	Spike Level	% Rec.	Acceptance Limits	Flags
23F2120-MS1	Ammonia, Total SM4500NH3 C	Ammonia as N	FF13086-01	17200	mg/kg dry	151000	137800	97	80 - 120	
23F2025-MS1	Phosphorus (P), Total - EPA 365.1	Phosphorus	FF13086-01	12700	mg/kg dry	21700	7225	125	90 - 110	#52
23F2234-MS1	Nitrate EPA 300.0	Nitrate as N	FF13086-02	BPQL	mg/kg dry	1380	1343	103	80 - 120	
23F2234-MS1	Nitrite EPA 300.0	Nitrite as N	FF13086-02	BPQL	mg/kg dry	442	407.6	108	80 - 120	
23F2133-MS1	Kjeldahl Nitrogen SM4500Norg C	Total Kjeldahl Nitrogen	FF13086-01	56400	mg/kg dry	109000	55710	94	80 - 120	

Quality Control Data

Matrix Spike Duplicate Data

QC Lab #	Test Group	Test Name	Sample Result	Spike Result	Spike Level	Units	% Rec.	Rec. Limits	% RPD	RPD Limit	Flags
23F2120-MSD1	Ammonia, Total SM4500NH3 C	Ammonia as N	17200	143000	131500	ng/kg dry	95	80-120	6	20	
23F2133-MSD1	Kjeldahl Nitrogen SM4500Norg C	Total Kjeldahl Nitrogen	56400	111000	60520	ng/kg dry	91	80-120	3	20	

Quality Control Data

Surrogate Recovery Data

QC Lab#	Test Group	Test Name	% Recovery	Recovery Limits	Flags
23F1436-BLK1	PCB Analysis by SW846 8082	DCB	88	60 - 163	
23F1436-BLK1	PCB Analysis by SW846 8082	TCMX	62	41 - 109	
23F1436-BS1	PCB Analysis by SW846 8082	DCB	99	60 - 163	
23F1436-BS1	PCB Analysis by SW846 8082	TCMX	72	41 - 109	
23F1436-BSD1	PCB Analysis by SW846 8082	DCB	99	60 - 163	
23F1436-BSD1	PCB Analysis by SW846 8082	TCMX	74	41 - 109	
FF13086-01	PCB Analysis by SW846 8082	DCB	85	60 - 163	
FF13086-01	PCB Analysis by SW846 8082	TCMX	72	41 - 109	
FF13086-02	PCB Analysis by SW846 8082	DCB	80	60 - 163	
FF13086-02	PCB Analysis by SW846 8082	TCMX	65	41 - 109	
FF13086-03	PCB Analysis by SW846 8082	DCB	74	60 - 163	
FF13086-03	PCB Analysis by SW846 8082	TCMX	70	41 - 109	

* Complete Entire COC to be in Compliance*

☐ RUSH Due Date

Chain of Custody

Accurate Environmental Labs

Client Name- *City of Edmond-Coffee Creek WRRF*

Project Name-

Accurate Work Order #	Date Sample Taken	Time Sample Taken	Matrix or Source (Refer. below)	Grab (G) or Comp (C)	Client I.D. / Sample Location and / or (DEQ / EPA Location Code)	Field Results (pH, Temp, Chlorine, ...) (note analysis & units)			Sample Preserv. & Container →	Analysis Requested → # of Container ↓						
						( )	( )	( )	500 mL-NP	503+Mo As,Cd,Cu,Pb,Mo, Ni,Se,Zn,Hg metals	P.A.N Nutrients	PCB				
FF13086																
-01	6/13/2023	9.49	SL	G	East Lagoon				3	X	X	X				
-02	6/13/2023	9:23	SL	G	West Lagoon				3	X	X	X				
-03	6/13/2023	10:05	SL	G	North Lagoon				3	X	X	X				

On-Site Info *TOC RAW* **E.Coli**

Alkalinity = _____ *mg/L* *Turbidity =* _____ *ntu*

E.Coli Source- **GWUDI-FS** = *Groundwater under direct influence of Flowing Stream* **GWUDI-RL** = *Groundwater under direct influence of Reservoir/Lake*

Matrix Codes **DW** = *Drinkingwater ;* **WW** = *Wastewater ;* **SL** = *Sludge ;* **O** = *Other* _____

Field Instrument Calibration -				
Meter Type	Standards	Final Read.	Date , Time	Initials

Comments

Report results in mg/kg dry

- - All Glass containers provided by Accurate Labs have Teflon lined lids - -

- - All samples are scheduled to be disposed of in 4 weeks of receipt at Accurate. - -

- - Hazardous samples will be returned to client or will be disposed of for a fee - -

Certification by Company Official: I hereby certify that the above sampling occurred during a period such that the sample(s) is/are representative of a typical operating day discharge for the above facility. Signature : Date/Time

Sampled By: Mickey Whitney Company: City of Edmond WWTP Sample Method:

Relinquished By: Date/Time 06/13/23 11:20 Received By: Date/Time

☐ Relinquished to Lab By: Date/Time Received at Lab By: Madisyn Taylor Rec'd °C 2.5° Date/Time 6-13-23 1120

☐ Relq'd to Log-In Fridge By:

Reporting Requirements (standard 10-15 working days)		Compliance Reporting?	Yes or No (DMR, PWS,)	Oklahoma PWS ID #		RUSH Request (if available)	_____ (Working Days)

Email Report To: robert.whitney@edmondok.gov

Address: *1600 North Midwest Blvd., Edmond OK. 73034*

Phone #: *(405)216-7822* Fax #: ( )

Email:

Email Invoice To: "Same as Report info"

Bid # -

Address:

PO # -

Phone #: ( ) Fax #: ( )

www.accuratelabs.com **(800) 516-5227**

505 South Lowry Street **Stillwater, OK** 74074 Phone: (405) 372-5300 Fax: (405) 372-5396

6558 E. 40th Street **Tulsa, OK** 74145 Phone: (918) 663-5400 Fax: (918) 663-6300

12036 N. Pennsylvania **Oklahoma City, OK** 73120 Phone: (405) 751-3132 Fax: (405) 751-3108

EXHIBIT D

FECAL RESULTS

June 19, 2023

Client: Edmond - WTP

1600 N. Midwest Blvd

Edmond, OK 73007

Requested By: -

National Environmental Laboratory Accreditation Program
ODEQ TNI Certified

Sample Project Name:	2023 Lagoon Fecal Coliform
Date Samples Received:	June 13, 2023 Time: 11:20 sample temp upon arrival at lab = 25.70°C
Matrix:	Sludge
Lab Log Numbers:	**FF13074-01 FF13074-02 FF13074-03 FF13074-04 FF13074-05 FF13074-06 FF13074-07**
Work Order:	FF13074
Report #	FF13074-0619230917
EPA Lab ID#'s:	**Stillwater OK00092 Tulsa OK00983 OKC OK00129 ICR OK 001**
Oklahoma Certification:	Stillwater NELAP WasteWater, ODEQ 8316/ Drinking Water, DEQ D9602 NELAP Tulsa WasteWater, ODEQ 9905 / Drinking Water, DEQ D9901 Oklahoma City NELAP WasteWater ODEQ 7202 / Drinking Water, DEQ D9937
Kansas Certification:	Stillwater NELAP CERT # E-10219
Method Reference:	40 CFR 136, 141, and 261 Methods for Chemical Analysis of Water and Wastes EPA-600/4-79-020, March 1983. Test Methods for Evaluating Solid Wastes, SW-846, Final Update VI. Standard Methods 2005 (21st Edition), Standard Methods 2011 (22nd Edition), Standard Methods 2017 (23rd Edition) for the Examination of Water and Wastewater.
Analysis Reference:	If qualifiers present in "Prep Info" or "Analysis Info", then analysis performed as follows: @= Tulsa Lab and * = OKC Lab. If no qualifiers present, then analysis performed at Stillwater Lab.

Accurate Environmental Laboratories certify that the test results performed at the Stillwater lab meet all requirements of NELAP. Any exceptions to this can be found in the report footer or Quality Control Section of the report.

This report is to only be replicated in its entirety.

Accurate Environmental sampling protocol was followed for any sampling performed by Accurate Field Services.

Sample: ***Sludge North Lagoon #1*** **Location Code:** **PWSID#:**

Collection Type: Grab Sample Time: 6/13/23 10:02 **Lab Log#** FF13074-01

Method/Parameter	Test	Result	Notes	PQL#	Prep Info	Analysis Info
Fecal Coliform SM9222 D	Fecal Coliform	159 CFU/g dry		1.0	06/13/23 14:00 *MLT	06/14/23 12:40 *MLT
Solids, Percent - SM2540 B	Percent Solids	3.3 %		0.01	06/13/23 15:20 *SEL	06/14/23 10:30 *RSH

Sample: ***Sludge North Lagoon #2*** **Location Code:** **PWSID#:**

Collection Type: Grab Sample Time: 6/13/23 10:12 **Lab Log#** FF13074-02

Method/Parameter	Test	Result	Notes	PQL#	Prep Info	Analysis Info
Fecal Coliform SM9222 D	Fecal Coliform	3320 CFU/g dry		1.0	06/13/23 14:00 *MLT	06/14/23 12:40 *MLT
Solids, Percent - SM2540 B	Percent Solids	3.4 %		0.01	06/13/23 15:20 *SEL	06/14/23 10:30 *RSH

Sample: ***Sludge North Lagoon #3*** **Location Code:** **PWSID#:**

Collection Type: Grab Sample Time: 6/13/23 10:15 **Lab Log#** FF13074-03

Method/Parameter	Test	Result	Notes	PQL#	Prep Info	Analysis Info
Fecal Coliform SM9222 D	Fecal Coliform	2100 CFU/g dry		1.0	06/13/23 14:00 *MLT	06/14/23 12:40 *MLT
Solids, Percent - SM2540 B	Percent Solids	5.6 %		0.01	06/13/23 15:20 *SEL	06/14/23 10:30 *RSH

Sample: ***Sludge North Lagoon #4*** **Location Code:** **PWSID#:**

Collection Type: Grab Sample Time: 6/13/23 10:17 **Lab Log#** FF13074-04

Method/Parameter	Test	Result	Notes	PQL#	Prep Info	Analysis Info
Fecal Coliform SM9222 D	Fecal Coliform	2260 CFU/g dry		1.0	06/13/23 14:00 *MLT	06/14/23 12:40 *MLT
Solids, Percent - SM2540 B	Percent Solids	3.0 %		0.01	06/13/23 15:20 *SEL	06/14/23 10:30 *RSH

Sample: ***Sludge North Lagoon #5*** **Location Code:** **PWSID#:**

Collection Type: Grab Sample Time: 6/13/23 10:19 **Lab Log#** FF13074-05

Method/Parameter	Test	Result	Notes	PQL#	Prep Info	Analysis Info
Fecal Coliform SM9222 D	Fecal Coliform	2540 CFU/g dry		1.0	06/13/23 14:00 *MLT	06/14/23 12:40 *MLT
Solids, Percent - SM2540 B	Percent Solids	2.8 %		0.01	06/13/23 15:20 *SEL	06/14/23 10:30 *RSH

Sample: ***Sludge North Lagoon #6*** **Location Code:** **PWSID#:**

Collection Type: Grab Sample Time: 6/13/23 10:21 **Lab Log#** FF13074-06

Method/Parameter	Test	Result	Notes	PQL#	Prep Info	Analysis Info
Fecal Coliform SM9222 D	Fecal Coliform	2880 CFU/g dry		1.0	06/13/23 14:00 *MLT	06/14/23 12:40 *MLT
Solids, Percent - SM2540 B	Percent Solids	2.9 %		0.01	06/13/23 15:20 *SEL	06/14/23 10:30 *RSH

Sample: ***Sludge North Lagoon #7*** **Location Code:** **PWSID#:**

Collection Type: Grab Sample Time: 6/13/23 10:23 **Lab Log#** FF13074-07

Method/Parameter	Test	Result	Notes	PQL#	Prep Info	Analysis Info
Fecal Coliform SM9222 D	Fecal Coliform	2250 CFU/g dry		1.0	06/13/23 14:00 *MLT	06/14/23 12:40 *MLT
Solids, Percent - SM2540 B	Percent Solids	3.6 %		0.01	06/13/23 15:20 *SEL	06/14/23 10:30 *RSH

Notes and Definitions

MCL Analyte concentration may exceed Maximum Contaminant Limit (MCL) for EPA Primary or Secondary Drinking Water Regulations.

Analyte concentration may exceed regulatory limit.

PQL Practical Quantitation Limit - the method reporting limit (MRL) adjusted for any dilutions or other changes made to the sample to deal with interferences/matrix effects

BPQL Below Practical Quantitation Limit (if applicable).

The "Prep Date" of the QC analysis coincides with the characters of the appropriate QC Lab ID. (Example: 19 A 02 15 - BLK = 2019, Jan 2, Batch #15 - Blank)

Lab Manager

Quality Control Data

Blank Data

QC Lab #	Test Group	Test	Result		PQL	Flags
23F1343-BLK1	Fecal Coliform SM9222 D	Fecal Coliform	BPQL	CFU/g dry	1.0	
23F1343-BLK2	Fecal Coliform SM9222 D	Fecal Coliform	BPQL	CFU/g dry	1.0	

* Complete Entire COC to be in Compliance*

☐ RUSH Due Date _____

Accurate Environmental Labs

Chain of Custody

Client Name- City of Edmond WRRF

Project Name- 2023 ~~2022~~ Lagoon Fecal Coliform

Accurate Work Order #	Date Sample Taken	Time Sample Taken	Matrix or Source (Refer. below)	Grab (G) or Comp (C)	Client I.D. / Sample Location or DEQ / EPA Location Code	Field Results (pH, Temp, Chlorine, ...) (note analysis & units)			Sample Preserv. & Container →	Analysis Requested →							
									# of Container ↓	Fecal Coliform							
FF13074									125mL NA Na2S2O3								
-01	6/13/2023	10:02	SL	G	Sludge North Lagoon # 1				1	X							
-02	6/13/2023	10:12	SL	G	Sludge North Lagoon # 2				1	X							
-03	6/13/2023	10:15	SL	G	Sludge North Lagoon # 3				1	X							
-04	6/13/2023	10:17	SL	G	Sludge North Lagoon # 4				1	X							
-05	6/13/2023	10:19	SL	G	Sludge North Lagoon # 5				1	X							
-06	6/13/2023	10:21	SL	G	Sludge North Lagoon # 6				1	X							
-07	6/13/2023	10:23	SL	G	Sludge North Lagoon # 7				1	X							

On-Site Info *Raw* **Alkalinity** *(TOC Raw)=* _____ *mg/L* **Turbidity** *(E.Coli)=* _____ *ntu*

Matrix Codes **DW** = *Drinkingwater ;* **WW** = *Wastewater ;* **SL** = *Sludge ;* **O** = *Other* _____

E.Coli Source - **GWUDI-FS** = *Groundwater under direct influence of Flowing Stream* **GWUDI-RL** = *Groundwater under direct influence of Reservoir/Lake*

Field Instrument Calibration -

Meter Type	Standards	Final Read.	Date , Time	Initials

Comments

Fecal results reported as CFU/g dry wt.

- - All Glass containers provided by Accurate Labs have Teflon lined lids - -

- - All samples are scheduled to be disposed of in 4 weeks of receipt at Accurate. - -

- - Hazardous samples will be returned to client or will be disposed of for a fee - -

Certification by Company Official: I hereby certify that the above sampling occurred during a period such that the sample(s) is/are representative of a typical operating day discharge for the above facility. Signature : Date/Time

Sampled By: Company: City of Edmond WRRF Sample Method: Grab

Relinquished By: Date/Time 6/13/23 11:20 Received By: Date/Time

☐Relinquished to Lab By: Date/Time Received at Lab By: Madisyn Taylor Rec'd °C 7.5° Date/Time 6-13-23 1120

☐Relq'd to Log-In Fridge By:

Reporting Requirements (standard 10-15 working days) ☐ **Compliance** *Reporting?* *Yes or No* (DMR, PWS,) *Oklahoma* **PWS ID #** ***RUSH*** *Request* (if available) _____ (Working Days)

Email Report to:

robert.whitney@edmondok.gov

Email Invoice To:

robert.whitney@edmondok.com

Bid # -

PO # -

Phone #: Fax #:

EXHIBIT E

SOIL AND APPLICATION MAP

Soil Map—Oklahoma County, Oklahoma
East Site / 63rd Street)

Map Scale: 1:15,800 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 200 400 800 1200

Feet: 0 500 1000 2000 3000

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 14N WGS84

Residence/Private Domestic Water Supply - 250'

Surface Water (Incorporation/ Injection) - 100'

Unsuitable Soil Type for Application or No App.

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Political Features
- PLSS Township and Range
- PLSS Section

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Oklahoma County, Oklahoma
Survey Area Data: Version 24, Sep 6, 2022

Date(s) aerial images were photographed: Oct 14, 2020—Nov 2, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
AmbE	Amber very fine sandy loam, 5 to 15 percent slopes, rarely flooded	4.4	5.4%
AshA	Asher silty clay loam, 0 to 1 percent slopes, rarely flooded	23.4	28.8%
DalA	Dale silt loam, 0 to 1 percent slopes, rarely flooded	0.9	1.1%
KekA	Keokuk very fine sandy loam, 0 to 1 Percent slopes, rarely flooded	38.9	47.9%
KeoA	Keokuk very fine sandy loam, 0 to 1 percent slopes, occasionally flooded	3.9	4.7%
LomA	Lomill silty clay loam, 0 to 1 percent slopes, occasionally flooded	8.9	10.9%
W	Water	0.6	0.7%
WtgA	Watonga silty clay, 0 to 1 percent slopes, rarely flooded	0.4	0.4%
Totals for Area of Interest		**81.2**	**100.0%**

Soil Map—Oklahoma County, Oklahoma
West Site / 63rd Street)

Map Scale: 1:15,800 if printed on A portrait (8.5" x 11") sheet.

N

0 200 400 800 1200 Meters

0 500 1000 2000 3000 Feet

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 14N WGS84

Residence/Private Domestic Water Supply - 250'

Surface Water (Incorporation/ Injection) - 100'

Unsuitable Soil Type for Application or No App.

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Political Features
- PLSS Township and Range
- PLSS Section

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Oklahoma County, Oklahoma
Survey Area Data: Version 24, Sep 6, 2022

Date(s) aerial images were photographed: Oct 14, 2020—Nov 2, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
AshA	Asher silty clay loam, 0 to 1 percent slopes, rarely flooded	25.5	27.6%
DalA	Dale silt loam, 0 to 1 percent slopes, rarely flooded	16.5	17.8%
HarC	Harrah fine sandy loam, 3 to 5 percent slopes	3.9	4.2%
KekA	Keokuk very fine sandy loam, 0 to 1 Percent slopes, rarely flooded	41.8	45.1%
PulA	Pulaski fine sandy loam, 0 to 1 percent slopes, occasionally flooded	3.3	3.6%
WtgA	Watonga silty clay, 0 to 1 percent slopes, rarely flooded	1.6	1.7%
Totals for Area of Interest		**92.6**	**100.0%**

EXHIBIT F

SOIL SAMPLE RESULTS – NUTRIENTS

SOIL ANALYSIS REPORT

CLIENT: 25842	HODGES FARMS & DREDGING 501 NW STREET LEBO, KS 66856

servi tech www.servitech.com

1816 E. Wyatt Earp
PO Box 1397
Dodge City, KS 67801
800.557.7509
620.227.7123
Fax 620.227.2047

LAB NO:	95891 - 95892
INVOICE NO:	899922
DATE RECEIVED:	07/03/2023
DATE REPORTED:	07/05/2023

SOIL ANALYSIS RESULTS FOR: **FIELD IDENTIFICATION:** DW EAST

METHOD USED: 1:1 (c) Water-Soil | XSL(i) | LOI(r) | Cd Reduction | Mehlich 3 | Mehlich 3 ICP

Lab Number	Sample ID	Sample Depth	Soil pH	Buffer pH		Excess Lime	% Organic Matter	Nitrate-Nitrogen ppm	Nitrate-Nitrogen lb. N/A	Phosphorus ppm P	Potassium ppm K	Sulfur ppm	Sulfur lb. S/A	Calcium ppm Ca	Magnesium ppm Mg	Sodium ppm Na	Zinc ppm Zn	Iron ppm Fe	Manganese ppm Mn	Copper ppm Cu	Boron ppm B
95891	1	0 - 8	6.6			No	0.5	6.4	15	51	159	6	14								
95892	2	0 - 8	6.7			No	0.6	5.5	13	57	190	6	14								

FERTILIZER RECOMMENDATIONS: POUNDS ACTUAL NUTRIENT PER ACRE

Lab Number	Sample ID	Crop To Be Grown	Yield Goal	Lime, ECC Tons/A to raise pH to: 6.0	6.5	7.0	N	P_2O_5	K_2O	Zn	S	Mn	Cu	MgO	B	Ca	Cl
95891	1	CORN	180 bu				240	0	15		10						
95891	1	BERMUDAGRASS HAY	6 tons				225	0	40		15						
95891	1	WINTER WHEAT/FALLOW	80 bu				85	0	0		0						
95892	2	CORN	180 bu				240	0	0		5						
95892	2	BERMUDAGRASS HAY	6 tons				225	0	0		15						
95892	2	WINTER WHEAT/FALLOW	80 bu				85	0	0		0						

Cation Exchange Capacity

CEC	%H	%K	%Ca	%Mg	%Na

SPECIAL COMMENTS AND SUGGESTIONS:

Lab Number(s): 95891, 95892

CORN: Consider applying part of the recommended nitrogen (N) and sulfur (S) fertilizer in a band at planting, especially with early-planted corn. Avoid placing fertilizer in direct contact with seed to prevent potential injury to young seedlings.

Site DW2

Analyses are representative of the samples submitted | Samples are retained 30 days after report of analysis | Explanations of soil analysis terms are available upon request

Reviewed and Approved By: Michele Lawson, Data Review Coordinator

Michele Lawson

SOIL ANALYSIS REPORT

CLIENT: 25842	HODGES FARMS & DREDGING 501 NW STREET LEBO, KS 66856

servi tech
www.servitech.com
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PO Box 1397
Dodge City, KS 67801
800.557.7509
620.227.7123
Fax 620.227.2047

LAB NO:	95891 - 95892
INVOICE NO:	899922
DATE RECEIVED:	07/03/2023
DATE REPORTED:	07/05/2023

SOIL ANALYSIS RESULTS FOR: **FIELD IDENTIFICATION:** DW EAST

Lab Number(s): 95891, 95892

IMPROVED BERMUDAGRASS: Split the nitrogen (N) applications through the summer growing season according to hay harvest or grazing schedule. Make the first nitrogen application prior to vigorous growth (April or early May) to help avoid weed competition. Make other applications after each cutting or grazing period. The required phosphate (P_2O_5) or potash (K_2O) may be blended with one of the early nitrogen applications to be topdressed on established stands.

PASTURE: Use fertilizer recommendations that have been developed for hay production. In an improved grazing system, the equivalent of one ton of hay yield should provide about 30 days grazing for a cow-calf pair or about 40 days grazing for a weaned calf or about 25 to 30 days grazing for a yearling calf.

Lab Number(s): 95891, 95892

CORN: Nitrogen fertilizer recommendations have been adjusted for soil organic matter content.

Lab Number(s): 95891, 95892

WHEAT/FALLOW: Above N recommendations are for samples taken from a fallow field to be planted to wheat this coming fall.

Analyses are representative of the samples submitted | Samples are retained 30 days after report of analysis | Explanations of soil analysis terms are available upon request

Reviewed and Approved By: Michele Lawson, Data Review Coordinator

Michele Lawson

SOIL ANALYSIS REPORT

CLIENT:	HODGES FARMS & DREDGING 501 NW STREET LEBO, KS 66856
25842	

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PO Box 1397
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620.227.7123
Fax 620.227.2047

LAB NO:	95893 - 95894
INVOICE NO:	899922
DATE RECEIVED:	07/03/2023
DATE REPORTED:	07/05/2023

SOIL ANALYSIS RESULTS FOR: **FIELD IDENTIFICATION:** DW WEST

METHOD USED: 1:1 (c) Water-Soil | XSL(i) | LOI(r) | Cd Reduction | Mehlich 3 | Mehlich 3 ICP

Lab Number	Sample ID	Sample Depth	Soil pH	Buffer pH		Excess Lime	% Organic Matter	Nitrate-Nitrogen ppm	Nitrate-Nitrogen lb. N/A	Phosphorus ppm P	Potassium ppm K	Sulfur ppm	Sulfur lb. S/A	Calcium ppm Ca	Magnesium ppm Mg	Sodium ppm Na	Zinc ppm Zn	Iron ppm Fe	Manganese ppm Mn	Copper ppm Cu	Boron ppm B
95893	1	0 - 8	7.1			No	0.8	9.7	23	147	323	11	26								
95894	2	0 - 8	6.9			No	1.0	7.1	17	123	299	8	19								

FERTILIZER RECOMMENDATIONS: POUNDS ACTUAL NUTRIENT PER ACRE

Lab Number	Sample ID	Crop To Be Grown	Yield Goal	Lime, ECC Tons/A to raise pH to: 6.0	6.5	7.0	N	P_2O_5	K_2O	Zn	S	Mn	Cu	MgO	B	Ca	Cl
95893	1	CORN	180 bu				230	0	0		0						
95893	1	BERMUDAGRASS HAY	6 tons				215	0	0		5						
95893	1	WINTER WHEAT/FALLOW	80 bu				75	0	0		0						
95894	2	CORN	180 bu				230	0	0		0						
95894	2	BERMUDAGRASS HAY	6 tons				225	0	0		10						
95894	2	WINTER WHEAT/FALLOW	80 bu				85	0	0		0						

Cation Exchange Capacity

CEC	%H	%K	%Ca	%Mg	%Na

SPECIAL COMMENTS AND SUGGESTIONS:

Lab Number(s): 95893, 95894

IMPROVED BERMUDAGRASS: Split the nitrogen (N) applications through the summer growing season according to hay harvest or grazing schedule. Make the first nitrogen application prior to vigorous growth (April or early May) to help avoid weed competition. Make other applications after each cutting or grazing period. The required phosphate (P2O5) or potash (K2O) may be blended with one of the early nitrogen applications to be topdressed on established stands.

PASTURE: Use fertilizer recommendations that have been developed for hay production. In an improved grazing system, the equivalent of one ton of hay yield should provide about 30 days grazing for a cow-calf pair or about 40 days grazing for a weaned calf or about 25 to 30 days grazing for a yearling calf.

Site DW3

Lab Number(s): 95893, 95894

CORN: Nitrogen fertilizer recommendations have been adjusted for soil organic matter content.

Analyses are representative of the samples submitted | Samples are retained 30 days after report of analysis | Explanations of soil analysis terms are available upon request

Reviewed and Approved By: Michele Lawson, Data Review Coordinator

Michele Lawson

SOIL ANALYSIS REPORT

CLIENT: 25842	HODGES FARMS & DREDGING 501 NW STREET LEBO, KS 66856

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www.servitech.com
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PO Box 1397
Dodge City, KS 67801
800.557.7509
620.227.7123
Fax 620.227.2047

LAB NO:	95893 - 95894
INVOICE NO:	899922
DATE RECEIVED:	07/03/2023
DATE REPORTED:	07/05/2023

SOIL ANALYSIS RESULTS FOR: **FIELD IDENTIFICATION:** DW WEST

Lab Number(s): 95893, 95894

WHEAT/FALLOW: Above N recommendations are for samples taken from a fallow field to be planted to wheat this coming fall.

Analyses are representative of the samples submitted | Samples are retained 30 days after report of analysis | Explanations of soil analysis terms are available upon request

Reviewed and Approved By: Michele Lawson, Data Review Coordinator

Michele Lawson

EXHIBIT G

SOIL SAMPLE RESULTS – METALS

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

August 07, 2023

Jeff Hodges
Hodges Farms & Dredging LLC
501 N. West Street
Lebo, KS 66856

RE: Project: EDMOND, OK
Pace Project No.: 60434312

Dear Jeff Hodges:

Enclosed are the analytical results for sample(s) received by the laboratory on August 01, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Kansas City

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Ryan N. Brumfield
ryan.brumfield@pacelabs.com
(913)599-5665
Project Manager

Enclosures

cc: Aaron Gruenwald, Hodges Farms and Dredging, LLC

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

CERTIFICATIONS

Project: EDMOND, OK
Pace Project No.: 60434312

Pace Analytical Services Kansas

9608 Loiret Boulevard, Lenexa, KS 66219
Missouri Inorganic Drinking Water Certification #: 10090
Arkansas Drinking Water
Arkansas Certification #: 88-00679
Illinois Certification #: 2000302023-5
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Nevada Certification #: KS000212023-1
Oklahoma Certification #: 2022-057
Florida: Cert E871149 SEKS WET
Texas Certification #: T104704407-22-16
Utah Certification #: KS000212022-12
Illinois Certification #: 004592
Kansas Field Laboratory Accreditation: # E-92587
Missouri SEKS Micro Certification: 10070

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

SAMPLE SUMMARY

Project: EDMOND, OK
Pace Project No.: 60434312

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60434312001	**DW-W**	Solid	07/31/23 09:30	08/01/23 08:50
60434312002	**DW-E**	Solid	07/31/23 09:30	08/01/23 08:50

DW-W - Site DW3

DW-E - Site DW2

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

SAMPLE ANALYTE COUNT

Project: EDMOND, OK
Pace Project No.: 60434312

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60434312001	**DW-W**	EPA 6010	MA1	13	PASI-K
		EPA 7471	JDS	1	PASI-K
		ASTM D2974	DWC	1	PASI-K
60434312002	**DW-E**	EPA 6010	MA1	13	PASI-K
		EPA 7471	JDS	1	PASI-K
		ASTM D2974	DWC	1	PASI-K

PASI-K = Pace Analytical Services - Kansas City

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: EDMOND, OK
Pace Project No.: 60434312

Sample: DW-W **Lab ID: 60434312001** Collected: 07/31/23 09:30 Received: 08/01/23 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP Red. Interference	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Arsenic	**2.4**	mg/kg	1.1	1	08/04/23 11:32	08/07/23 10:36	7440-38-2	
Cadmium	ND	mg/kg	0.54	1	08/04/23 11:32	08/07/23 10:36	7440-43-9	
Calcium	**2580**	mg/kg	21.5	1	08/04/23 11:32	08/07/23 10:36	7440-70-2	
Chromium	**11.6**	mg/kg	0.54	1	08/04/23 11:32	08/07/23 10:36	7440-47-3	
Copper	**9.5**	mg/kg	2.1	1	08/04/23 11:32	08/07/23 10:36	7440-50-8	
Lead	**7.9**	mg/kg	1.1	1	08/04/23 11:32	08/07/23 10:36	7439-92-1	
Magnesium	**2320**	mg/kg	5.4	1	08/04/23 11:32	08/07/23 10:36	7439-95-4	
Molybdenum	ND	mg/kg	2.1	1	08/04/23 11:32	08/07/23 10:36	7439-98-7	
Nickel	**7.6**	mg/kg	0.54	1	08/04/23 11:32	08/07/23 10:36	7440-02-0	
Potassium	**1510**	mg/kg	53.7	1	08/04/23 11:32	08/07/23 10:36	7440-09-7	
Selenium	ND	mg/kg	1.6	1	08/04/23 11:32	08/07/23 10:36	7782-49-2	
Silver	ND	mg/kg	0.75	1	08/04/23 11:32	08/07/23 10:36	7440-22-4	
Zinc	**44.2**	mg/kg	10.7	1	08/04/23 11:32	08/07/23 10:36	7440-66-6	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Kansas City							
Mercury	ND	mg/kg	0.047	1	08/03/23 08:51	08/03/23 13:48	7439-97-6	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	**12.2**	%	0.50	1		08/04/23 14:36		

Sample: DW-E **Lab ID: 60434312002** Collected: 07/31/23 09:30 Received: 08/01/23 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP Red. Interference	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Kansas City							
Arsenic	**2.8**	mg/kg	1.1	1	08/04/23 11:32	08/07/23 10:39	7440-38-2	
Cadmium	ND	mg/kg	0.57	1	08/04/23 11:32	08/07/23 10:39	7440-43-9	
Calcium	**6410**	mg/kg	22.9	1	08/04/23 11:32	08/07/23 10:39	7440-70-2	
Chromium	**17.5**	mg/kg	0.57	1	08/04/23 11:32	08/07/23 10:39	7440-47-3	
Copper	**24.1**	mg/kg	2.3	1	08/04/23 11:32	08/07/23 10:39	7440-50-8	
Lead	**9.0**	mg/kg	1.1	1	08/04/23 11:32	08/07/23 10:39	7439-92-1	
Magnesium	**3290**	mg/kg	5.7	1	08/04/23 11:32	08/07/23 10:39	7439-95-4	
Molybdenum	ND	mg/kg	2.3	1	08/04/23 11:32	08/07/23 10:39	7439-98-7	
Nickel	**9.8**	mg/kg	0.57	1	08/04/23 11:32	08/07/23 10:39	7440-02-0	
Potassium	**1610**	mg/kg	57.2	1	08/04/23 11:32	08/07/23 10:39	7440-09-7	
Selenium	ND	mg/kg	1.7	1	08/04/23 11:32	08/07/23 10:39	7782-49-2	
Silver	ND	mg/kg	0.80	1	08/04/23 11:32	08/07/23 10:39	7440-22-4	
Zinc	**76.0**	mg/kg	11.4	1	08/04/23 11:32	08/07/23 10:39	7440-66-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: EDMOND, OK
Pace Project No.: 60434312

Sample: DW-E **Lab ID: 60434312002** Collected: 07/31/23 09:30 Received: 08/01/23 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Kansas City							
Mercury	**0.087**	mg/kg	0.058	1	08/03/23 08:51	08/03/23 13:55	7439-97-6	
Percent Moisture	Analytical Method: ASTM D2974 Pace Analytical Services - Kansas City							
Percent Moisture	**14.2**	%	0.50	1		08/04/23 14:36		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: EDMOND, OK
Pace Project No.: 60434312

QC Batch: 859002
QC Batch Method: EPA 7471
Analysis Method: EPA 7471
Analysis Description: 7471 Mercury
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60434312001, 60434312002

METHOD BLANK: 3401552 Matrix: Solid
Associated Lab Samples: 60434312001, 60434312002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	mg/kg	ND	0.050	08/03/23 13:27	

LABORATORY CONTROL SAMPLE: 3401553

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	0.5	0.48	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3401554 3401555

Parameter	Units	60433443002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/kg	0.31	3.2	3	2.6	3.1	74	91	75-125	18	20	M1

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: EDMOND, OK
Pace Project No.: 60434312

QC Batch: 859229
QC Batch Method: EPA 3050
Analysis Method: EPA 6010
Analysis Description: 6010 MET
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60434312001, 60434312002

METHOD BLANK: 3402555 Matrix: Solid
Associated Lab Samples: 60434312001, 60434312002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/kg	ND	1.0	08/07/23 10:20	
Cadmium	mg/kg	ND	0.50	08/07/23 10:20	
Calcium	mg/kg	ND	20.0	08/07/23 10:20	
Chromium	mg/kg	ND	0.50	08/07/23 10:20	
Copper	mg/kg	ND	2.0	08/07/23 10:20	
Lead	mg/kg	ND	1.0	08/07/23 10:20	
Magnesium	mg/kg	ND	5.0	08/07/23 10:20	
Molybdenum	mg/kg	ND	2.0	08/07/23 10:20	
Nickel	mg/kg	ND	0.50	08/07/23 10:20	
Potassium	mg/kg	ND	50.0	08/07/23 10:20	
Selenium	mg/kg	ND	1.5	08/07/23 10:20	
Silver	mg/kg	ND	0.70	08/07/23 10:20	
Zinc	mg/kg	ND	10.0	08/07/23 10:20	

LABORATORY CONTROL SAMPLE: 3402556

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/kg	100	83.0	83	80-120	
Cadmium	mg/kg	100	89.3	89	80-120	
Calcium	mg/kg	1000	911	91	80-120	
Chromium	mg/kg	100	92.4	92	80-120	
Copper	mg/kg	100	89.8	90	80-120	
Lead	mg/kg	100	91.6	92	80-120	
Magnesium	mg/kg	1000	894	89	80-120	
Molybdenum	mg/kg	100	93.8	94	80-120	
Nickel	mg/kg	100	94.2	94	80-120	
Potassium	mg/kg	1000	888	89	80-120	
Selenium	mg/kg	100	81.8	82	80-120	
Silver	mg/kg	50	42.5	85	80-120	
Zinc	mg/kg	100	91.7	92	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3402557 3402558

Parameter	Units	60434617007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	mg/kg	3.3	98.4	96.5	89.5	85.6	88	85	75-125	5	20	
Cadmium	mg/kg	ND	98.4	96.5	89.7	84.9	91	88	75-125	6	20	

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REPORT OF LABORATORY ANALYSIS

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(913)599-5665

QUALITY CONTROL DATA

Project: EDMOND, OK
Pace Project No.: 60434312

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3402557 3402558

Parameter	Units	60434617007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/kg	10200	984	965	13300	13300	315	320	75-125	0	20	M1
Chromium	mg/kg	14.7	98.4	96.5	112	107	99	96	75-125	5	20	
Copper	mg/kg	7.1	98.4	96.5	104	98.1	98	94	75-125	6	20	
Lead	mg/kg	16.0	98.4	96.5	110	106	95	94	75-125	3	20	
Magnesium	mg/kg	3190	984	965	5280	4940	213	182	75-125	7	20	M1
Molybdenum	mg/kg	ND	98.4	96.5	92.1	88.9	93	92	75-125	3	20	
Nickel	mg/kg	10.1	98.4	96.5	103	99.7	94	93	75-125	3	20	
Potassium	mg/kg	884	984	965	2460	2340	160	151	75-125	5	20	M1
Selenium	mg/kg	ND	98.4	96.5	84.0	80.4	85	83	75-125	4	20	
Silver	mg/kg	ND	49.2	48.3	44.4	41.5	90	86	75-125	7	20	
Zinc	mg/kg	24.8	98.4	96.5	119	115	95	94	75-125	3	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: EDMOND, OK
Pace Project No.: 60434312

QC Batch: 859285
QC Batch Method: ASTM D2974
Analysis Method: ASTM D2974
Analysis Description: Dry Weight/Percent Moisture
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60434312001, 60434312002

METHOD BLANK: 3402775 Matrix: Solid
Associated Lab Samples: 60434312001, 60434312002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Percent Moisture	%	ND	0.50	08/04/23 14:36	

SAMPLE DUPLICATE: 3402776

Parameter	Units	60434312001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	12.2	12.1	1	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Lenexa, KS 66219
(913)599-5665

QUALIFIERS

Project: EDMOND, OK
Pace Project No.: 60434312

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: EDMOND, OK
Pace Project No.: 60434312

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60434312001	**DW-W**	EPA 3050	859229	EPA 6010	859415
60434312002	**DW-E**	EPA 3050	859229	EPA 6010	859415
60434312001	**DW-W**	EPA 7471	859002	EPA 7471	859038
60434312002	**DW-E**	EPA 7471	859002	EPA 7471	859038
60434312001	**DW-W**	ASTM D2974	859285		
60434312002	**DW-E**	ASTM D2974	859285		

WO# : 60434312

60434312

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-LENE-0009_Sample Cor		
	Revision: 2	Effective Date: 01/12/2022	Issued By: Lenexa

Client Name: Hodges Farms + Dredgings

Courier: FedEx ☑ UPS ☐ VIA ☐ Clay ☐ PEX ☐ ECI ☐ Pace ☐ Xroads ☐ Client ☐ Other ☐

Tracking #: 6432 1387 7442 Pace Shipping Label Used? Yes ☐ No ☑

Custody Seal on Cooler/Box Present: Yes ☑ No ☐ Seals intact: Yes ☑ No ☐

Packing Material: Bubble Wrap ☑ Bubble Bags ☐ Foam ☐ None ☐ Other ☐

Thermometer Used: T271 **Type of Ice:** Wet ☑ Blue None

Cooler Temperature (°C): **As-read** 2.5 **Corr. Factor** +0.2 **Corrected** 2.7

Date and initials of person examining contents: AF 8/1

Temperature should be above freezing to 6°C

Chain of Custody present:	☑Yes ☐No ☐N/A	
Chain of Custody relinquished:	☑Yes ☐No ☐N/A	
Samples arrived within holding time:	☑Yes ☐No ☐N/A	
Short Hold Time analyses (<72hr):	☐Yes ☑No ☐N/A	
Rush Turn Around Time requested:	☐Yes ☑No ☐N/A	
Sufficient volume:	☑Yes ☐No ☐N/A	
Correct containers used:	☑Yes ☐No ☐N/A	
Pace containers used:	☑Yes ☐No ☐N/A	
Containers intact:	☑Yes ☐No ☐N/A	
Unpreserved 5035A / TX1005/1006 soils frozen in 48hrs?	☐Yes ☐No ☑N/A	
Filtered volume received for dissolved tests?	☐Yes ☐No ☑N/A	
Sample labels match COC: Date / time / ID / analyses	☑Yes ☐No ☐N/A	
Samples contain multiple phases? Matrix: SL	☐Yes ☑No ☐N/A	
Containers requiring pH preservation in compliance? (HNO_3, H_2SO_4, HCl<2; NaOH>9 Sulfide, NaOH>10 Cyanide) (Exceptions: VOA, Micro, O&G, KS TPH, OK-DRO) **LOT#:**	☐Yes ☐No ☑N/A	List sample IDs, volumes, lot #'s of preservative and the date/time added.
Cyanide water sample checks: Lead acetate strip turns dark? (Record only)	☐Yes ☐No	
Potassium iodide test strip turns blue/purple? (Preserve)	☐Yes ☐No	
Trip Blank present:	☐Yes ☐No ☑N/A	
Headspace in VOA vials (>6mm):	☐Yes ☐No ☑N/A	
Samples from USDA Regulated Area: State:	☐Yes ☑No ☐N/A	AF
Additional labels attached to 5035A / TX1005 vials in the field?	☐Yes ☐No ☑N/A	

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ Date: _____

Pace Analytical
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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 1

Section A — **Required** Client Information:

Company:	Hodges Farms and Dredging
Address:	501 N. West Street
	Lebo, KS 66856
Email To:	agruenewald@hodgesfd.com
Phone: 920-373-8715	Fax:
Requested Due Date/TAT:	

Section B — **Required** Project Information:

Report To:	Aaron Gruenewald/Jeff Hodges
Copy To:	
Purchase Order No.:	
Project Name:	Elmont, OK
Project Number:	

Section C — Invoice Information:

Attention:	
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	Ryan Brumfield 913.563.1436
Pace Profile #:	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER _____

Site Location **STATE:** OK

Section D — **Required** Client Information

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	6010 Metals / Mercury	Sodium	Chloride	Total Phosphorus	TKN	Total Solids	Aluminium	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	DW-W	SL	C	7-31-23	900	7-31-23	930		1										X								60434312
2	DW-E	SL	C	"	"	"	"		1										X								
3																											
4																											
5																											
6																											
7																											
8																											
9																											
10																											
11																											
12																											

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
*Collect Fecal Coliform samples after 10:00am	Aaron Gruenewald	7-31-23	1410	Pace	7-31-23	1410				
*For metals/nutrients, leave at least 1 inch of headspace in containers for off-gassing	Pace	7-31-23	1600	Pace	8/1/23	0850	2.7	Y	Y	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Aaron Gruenewald

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 7-31-23

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Client: Hodges Farms & Dredging

Profile # 2421-1

Site: Edmond, OK

Notes

COC Line Item	Matrix	VG9H	DG9H	DG9Q	VG9U	DG9U	DG9M	DG9B	BG1U	AG1H	AG1U	AG2U	AG3S	AG4U	AG5U	JGFU	WGKU	WGDU	BP1U	BP2U	BP3U	BP1N	BP3N	BP3F	BP3S	BP3C	BP3Z	WPDU	ZPLC	Other		
1	SL																1															
2																	1															
3																																
4																																
5																																
6																																
7																																
8																																
9																																
10																																
11																																
12																																

Container Codes

Glass				Plastic		Misc.	
DG9B	40mL bisulfate clear vial	WGKU	8oz clear soil jar	BP1C	1L NAOH plastic	I	Wipe/Swab
DG9H	40mL HCl amber voa vial	WGFU	4oz clear soil jar	BP1N	1L HNO3 plastic	SP5T	120mL Coliform Na Thiosulfate
DG9M	40mL MeOH clear vial	WG2U	2oz clear soil jar	BP1S	1L H2SO4 plastic	ZPLC	Ziploc Bag
DG9Q	40mL TSP amber vial	JGFU	4oz unpreserved amber wide	BP1U	1L unpreserved plastic	AF	Air Filter
DG9S	40mL H2SO4 amber vial	AG0U	100mL unores amber glass	BP1Z	1L NaOH, Zn Acetate	C	Air Cassettes
DG9T	40mL Na Thio amber vial	AG1H	1L HCl amber glass	BP2C	500mL NAOH plastic	R	Terracore Kit
DG9U	40mL amber unpreserved	AG1S	1L H2SO4 amber glass	BP2N	500mL HNO3 plastic	U	Summa Can
VG9H	40mL HCl clear vial	AG1T	1L Na Thiosulfate clear/amber glass	BP2S	500mL H2SO4 plastic		
VG9T	40mL Na Thio. clear vial	AG1U	1liter unpres amber glass	BP2U	500mL unpreserved plastic		
VG9U	40mL unpreserved clear vial	AG2N	500mL HNO3 amber glass	BP2Z	500mL NaOH, Zn Acetate	Matrix	
BG1S	1liter H2SO4 clear glass	AG2S	500mL H2SO4 amber glass	BP3C	250mL NaOH plastic		
BG1U	1liter unpres glass	AG3S	250mL H2SO4 amber glass	BP3F	250mL HNO3 plastic - field filtered	WT	Water
BG3H	250mL HCL Clear glass	AG2U	500mL unpres amber glass	BP3N	250mL HNO3 plastic	SL	Solid
BG3U	250mL Unpres Clear glass	AG3U	250mL unpres amber glass	BP3U	250mL unpreserved plastic	NAL	Non-aqueous Liquid
WGDU	16oz clear soil jar	AG4U	125mL unpres amber glass	BP3S	250mL H2SO4 plastic	OL	OIL
		AG5U	100mL unpres amber glass	BP3Z	250mL NaOH, Zn Acetate	WP	Wipe
				BP4U	125mL unpreserved plastic	DW	Drinking Water
				BP4N	125mL HNO3 plastic		
				BP4S	125mL H2SO4 plastic		
				WPDU	16oz unpresserved plstic		

Work Order Number: 60134312