



May 24, 2022

Client: Perkins PWA

PO Box 9

Perkins, OK 74059

Requested By: Chad Beitz



National Environmental Laboratory Accreditation Program
ODEQ TNI Certified

Sample Project Name: SDWIS Analysis - WQP

Date Samples Received: May 10, 2022 Time: 13:36 sample temp upon arrival at lab = 9.40°C - On Ice

Matrix: Drinking Water

Lab Log Numbers: **EE10101-01** **EE10101-02** **EE10101-03** **EE10101-04**
EE10101-05

Work Order: EE10101

Report # EE10101-0524220817

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 III. Standard Methods 1998 (20th Edition), Standard Methods 2005 (21st Edition) and Standard Methods 2011 (22nd 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: 1106 Sharp

Location Code: LC004

PWSID#: OK2006012

Collection Type: Grab

Sample Time: 5/10/22 5:40

Lab Log# EE10101-01

Method/Parameter	Test	Result	Notes	PQL#	Prep Info	Analysis Info
pH in Field by Client	pH	6.90	pH	0.01	05/10/22 05:40	05/10/22 05:40
Temperature by Client	Temperature	25.6	C		05/10/22 05:40	05/10/22 05:40
Alkalinity Total SM2320B	Alkalinity as CaCO3	123.0	mg/L	10.0	05/13/22 10:19 CPL	05/13/22 11:54 CPL
Ortho-Phosphate (PO4) SM4500P E	Ortho-Phosphate	2.70	mg/L	0.92	05/11/22 07:55 BM	05/11/22 10:00 BM
Conductivity SM2510 B	Conductivity	381.3	umho/cm	2.0	05/13/22 12:20 MHM	05/13/22 12:59 MHM
Calcium (Ca) EPA 200.7	Calcium	27.3	mg/L	0.20	05/12/22 14:25 NIC	05/13/22 11:29 SMV
Copper (Cu) EPA 200.8	Copper	1.07	mg/L	0.010	05/12/22 14:00 @PD	05/12/22 16:03 @PD
Lead (Pb) EPA 200.8	Lead	BPQL	mg/L	0.0050	05/12/22 14:00 @PD	05/12/22 16:03 @PD

Sample: 1100 Lovers Lane

Location Code: LC007

PWSID#: OK2006012

Collection Type: Grab

Sample Time: 5/10/22 5:40

Lab Log# EE10101-02

Method/Parameter	Test	Result	Notes	PQL#	Prep Info	Analysis Info
pH in Field by Client	pH	6.80	pH	0.01	05/10/22 05:40	05/10/22 05:40
Temperature by Client	Temperature	25.3	C		05/10/22 05:40	05/10/22 05:40
Alkalinity Total SM2320B	Alkalinity as CaCO3	124.1	mg/L	10.0	05/13/22 10:19 CPL	05/13/22 11:54 CPL
Ortho-Phosphate (PO4) SM4500P E	Ortho-Phosphate	1.66	mg/L	0.92	05/11/22 07:55 BM	05/11/22 10:00 BM
Conductivity SM2510 B	Conductivity	375.9	umho/cm	2.0	05/13/22 12:20 MHM	05/13/22 12:59 MHM
Calcium (Ca) EPA 200.7	Calcium	27.2	mg/L	0.20	05/12/22 14:25 NIC	05/13/22 11:33 SMV
Copper (Cu) EPA 200.8	Copper	0.317	mg/L	0.010	05/12/22 14:00 @PD	05/12/22 16:07 @PD
Lead (Pb) EPA 200.8	Lead	BPQL	mg/L	0.0050	05/12/22 14:00 @PD	05/12/22 16:07 @PD

Sample: 108 Lewis

Location Code: LC008

PWSID#: OK2006012

Collection Type: Grab

Sample Time: 5/10/22 6:58

Lab Log# EE10101-03

Method/Parameter	Test	Result	Notes	PQL#	Prep Info	Analysis Info
pH in Field by Client	pH	6.70	pH	0.01	05/10/22 06:58	05/10/22 06:58
Temperature by Client	Temperature	25.4	C		05/10/22 06:58	05/10/22 06:58
Alkalinity Total SM2320B	Alkalinity as CaCO3	119.0	mg/L	10.0	05/13/22 10:19 CPL	05/13/22 11:54 CPL
Ortho-Phosphate (PO4) SM4500P E	Ortho-Phosphate	1.90	mg/L	0.92	05/11/22 07:55 BM	05/11/22 10:00 BM
Conductivity SM2510 B	Conductivity	376.8	umho/cm	2.0	05/13/22 12:20 MHM	05/13/22 12:59 MHM
Calcium (Ca) EPA 200.7	Calcium	27.3	mg/L	0.20	05/12/22 14:25 NIC	05/13/22 11:37 SMV
Copper (Cu) EPA 200.8	Copper	0.331	mg/L	0.010	05/12/22 14:00 @PD	05/12/22 16:11 @PD
Lead (Pb) EPA 200.8	Lead	BPQL	mg/L	0.0050	05/12/22 14:00 @PD	05/12/22 16:11 @PD

Sample: 114 Sasser Ct

Location Code: LC010

PWSID#: OK2006012

Collection Type: Grab

Sample Time: 5/10/22 10:51

Lab Log# EE10101-04

Method/Parameter	Test	Result	Notes	PQL#	Prep Info	Analysis Info
pH in Field by Client	pH	6.60 pH		0.01	05/10/22 10:51	05/10/22 10:51
Temperature by Client	Temperature	22.3 C			05/10/22 10:51	05/10/22 10:51
Alkalinity Total SM2320B	Alkalinity as CaCO3	123.9 mg/L		10.0	05/13/22 10:19 CPL	05/13/22 11:54 CPL
Ortho-Phosphate (PO4) SM4500P E	Ortho-Phosphate	2.58 mg/L		0.92	05/11/22 07:55 BM	05/11/22 10:00 BM
Conductivity SM2510 B	Conductivity	383.6 umho/cm		2.0	05/13/22 12:20 MHM	05/13/22 12:59 MHM
Calcium (Ca) EPA 200.7	Calcium	27.2 mg/L		0.20	05/12/22 14:25 NIC	05/13/22 11:40 SMV
Copper (Cu) EPA 200.8	Copper	1.83 mg/L	MCL	0.050	05/12/22 14:00 @PD	05/12/22 17:30 @PD
Lead (Pb) EPA 200.8	Lead	BPQL mg/L		0.0050	05/12/22 14:00 @PD	05/12/22 16:14 @PD

Sample: 107 Sasser Ct

Location Code: LC009

PWSID#: OK2006012

Collection Type: Grab

Sample Time: 5/10/22 10:55

Lab Log# EE10101-05

Method/Parameter	Test	Result	Notes	PQL#	Prep Info	Analysis Info
pH in Field by Client	pH	6.70 pH		0.01	05/10/22 10:55	05/10/22 10:55
Temperature by Client	Temperature	20.6 C			05/10/22 10:55	05/10/22 10:55
Alkalinity Total SM2320B	Alkalinity as CaCO3	121.8 mg/L		10.0	05/13/22 10:19 CPL	05/13/22 11:54 CPL
Ortho-Phosphate (PO4) SM4500P E	Ortho-Phosphate	1.59 mg/L		0.92	05/11/22 07:55 BM	05/11/22 10:00 BM
Conductivity SM2510 B	Conductivity	375.8 umho/cm		2.0	05/13/22 12:20 MHM	05/13/22 12:59 MHM
Calcium (Ca) EPA 200.7	Calcium	27.2 mg/L		0.20	05/12/22 14:25 NIC	05/13/22 11:44 SMV
Copper (Cu) EPA 200.8	Copper	0.124 mg/L		0.010	05/12/22 14:00 @PD	05/12/22 16:18 @PD
Lead (Pb) EPA 200.8	Lead	BPQL mg/L		0.0050	05/12/22 14:00 @PD	05/12/22 16:18 @PD

Notes and Definitions

- #52 Analyte recoveries are outside of acceptance limits for the matrix spike sample. This failure does not invalidate data reported.
- 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

A handwritten signature in black ink, appearing to read "Dg Cu", is written on a light gray rectangular background.

Quality Control Data

Blank Data

QC Lab #	Test Group	Test	Result	PQL	Flags
22E1317-BLK1	Alkalinity Total SM2320B	Alkalinity as CaCO3	BPQL mg/L	10.0	
22E1106-BLK1	Ortho-Phosphate (PO4) SM4500P E	Ortho-Phosphate	BPQL mg/L	0.15	
22E1326-BLK1	Conductivity SM2510 B	Conductivity	BPQL umho/cm	2.0	
22E1256-BLK1	Calcium (Ca) EPA 200.7	Calcium	BPQL mg/L	0.20	
22E1225-BLK1	Copper (Cu) EPA 200.8	Copper	BPQL mg/L	0.010	
22E1225-BLK1	Lead (Pb) EPA 200.8	Lead	BPQL mg/L	0.0050	

Laboratory Control Sample Data

Lab QC#	Test Group	Test Name	LCS Result	Spike Level	Units	% Rec.	Control Limits	Flags
22E1106-BS1	Ortho-Phosphate (PO4) SM4500P E	Ortho-Phosphate	1.59	1.533	mg/L	104	90 - 110	
22E1317-BS1	Alkalinity Total SM2320B	Alkalinity as CaCO3	104.0	100.0	mg/L	104	90 - 110	
22E1326-BS1	Conductivity SM2510 B	Conductivity	1405	1413	umho/cm	99	90 - 110	
22E1225-BS1	Copper (Cu) EPA 200.8	Copper	0.100	0.1000	mg/L	100	90 - 110	
22E1225-BS1	Lead (Pb) EPA 200.8	Lead	0.102	0.1000	mg/L	102	90 - 110	
22E1225-MRL1	Copper (Cu) EPA 200.8	Copper	0.005	0.005000	mg/L	92	50 - 150	
22E1225-MRL1	Lead (Pb) EPA 200.8	Lead	0.0048	0.005000	mg/L	97	50 - 150	
22E1256-BS1	Calcium (Ca) EPA 200.7	Calcium	2.01	2.000	mg/L	100	85 - 115	

Matrix Spike Data

QC Lab #	Test Group	Test Name	Source Sample	Sample Result	Units	Spike Result	Spike Level	% Rec.	Acceptance Limits	Flags
22E1106-MS1	Ortho-Phosphate (PO4) SM4500P E	Ortho-Phosphate	EE10101-05	1.59	mg/L	4.48	3.066	94	80 - 120	
22E1256-MS1	Calcium (Ca) EPA 200.7	Calcium	EE10101-01	27.3	mg/L	37.4	10.00	101	85 - 115	
22E1225-MS2	Copper (Cu) EPA 200.8	Copper	EE10101-01	1.07	mg/L	1.09	0.1000	21	85 - 115	#52
22E1225-MS2	Lead (Pb) EPA 200.8	Lead	EE10101-01	0.0014	mg/L	0.0949	0.1000	93	85 - 115	

Matrix Spike Duplicate Data

QC Lab #	Test Group	Test Name	Sample Result	Spike Result	Spike Level	Units	% Rec.	Rec. Limits	% RPD	RPD Limit	Flags
22E1106-MSD1	Ortho-Phosphate (PO4) SM4500P E	Ortho-Phosphate	1.59	4.54	3.066	mg/L	96	80-120	1	20	
22E1256-MSD1	Calcium (Ca) EPA 200.7	Calcium	27.3	37.1	10.00	mg/L	98	85-115	0.8	20	
22E1225-MSD2	Copper (Cu) EPA 200.8	Copper	1.07	1.10	0.1000	mg/L	28	85-115	0.7	20	#52
22E1225-MSD2	Lead (Pb) EPA 200.8	Lead	0.0014	0.0953	0.1000	mg/L	94	85-115	0.4	20	

* Complete Entire COC to be in Compliance*

RUSH Due Date



Chain of Custody

Client Name- **Perkins PWA**
 Project Name- **SDWIS Analysis - WQP**

Sample Preserv. & Container	ICE 1000 mL Plastic	1000 mL Plastic						
→		→						
Analysis Requested	WQP: Calcium, pH, Alk, conductivity	Lead and Copper	Orthophosphate					
→								
# of Container								

Accurate Work Order #	Date Sample Taken	Time Sample Taken	Matrix or Source (Refer. below)	Grab (G) or Com (C)	Client I.D. / Sample Location or DEQ / EPA Location Code	Field Results			# of Container	WQP: Calcium, pH, Alk, conductivity	Lead and Copper	Orthophosphate				
						Location Code	pH	Temp								
EE 10101																
01	5/10/22	0540	DW	G	1106 Sharp	LC004	6.9	25.6	1	1	1	1				
02	5/10/22	0540	DW	G	1100 Lovers Lane	LC007	6.8	25.3	1	1	1	1				
03	5/10/22	0658	DW	G	108 Lewis	LC008	6.7	25.4	1	1	1	1				
04	5/10/22	1051	DW	G	114 Sasser Ct	LC010	6.6	22.3	1	1	1	1				
05	5/10/22	1055	DW	G	107 Sasser Ct	LC009	6.7	20.6	1	1	1	1				

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

Matrix Codes DW = Drinking water ; 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

Comments

-- 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:** *[Signature]* **Date/Time:** 5/10/22

Sampled By: Zachery Isca *[Signature]* **Company:** City of Perkins **Sample Method:**

Relinquished By: Zachery Isca *[Signature]* **Date/Time:** 5/10/22 **Received By:** Zachery Isca *[Signature]* **Date/Time:** 5/10/22

Relinquished to Lab By: Zachery Isca *[Signature]* **Date/Time:** 5/10/22 **Received at Lab By:** *[Signature]* **Rec'd °C:** 9.4 **Date/Time:** 5/10/22 **1336**

Reporting Requirements (standard 10-15 working days) **Compliance Reporting?** Yes or No (DMR, PWS,) **Oklahoma PWS ID #** **OK2006012** **RUSH Request** (if available) _____ (Working Days)

Mail Report: Chad Beitz
 City of Perkins
 PO Box 9
 Perkins, OK 74059
 Phone #: 405-547-2445 Fax #: 405-547-5440
 Email: cbeitz@cityofperkins.net zisca@cityofperkins.net

Address: citymanager@cityofperkins.net cityclerk@cityofperkins.net

Mail Invoice: Accounts Payable
 City of Perkins
 PO Box 9
 Perkins, OK 74059
 cityclerk@cityofperkins.net
 Phone #: 405-547-2445 Fax #: 405-547-5440

Address: Bid # -
 PO # -
 091020 tkw