



May 02, 2022

Client: Perkins PWA

PO Box 9

Perkins, OK 74059

Requested By: -



National Environmental Laboratory Accreditation Program
ODEQ TNI Certified

Sample Project Name: SDWIS Analysis - WQP+orthophosphate

Date Samples Received: April 20, 2022 Time: 13:08 sample temp upon arrival at lab = 8.40°C - On Ice

Matrix: Drinking Water

Lab Log Numbers: **ED20081-01** **ED20081-02**

Work Order: ED20081

Report # ED20081-0502220925

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: 401 NE 2nd

Location Code: LC012

PWSID#: OK2006012

Collection Type: Grab

Sample Time: 4/20/22 11:10

Lab Log# ED20081-01

Method/Parameter	Test	Result	Notes	PQL#	Prep Info	Analysis Info
pH in Field by Client	pH	6.81	pH	0.01	04/20/22 11:10	04/20/22 11:10
Temperature by Client	Temperature	19.4	C		04/20/22 11:10	04/20/22 11:10
Ortho-Phosphate (PO4) EPA 365.1	Ortho-Phosphate	3.83	mg/L	0.383	04/21/22 12:17 KMK	04/22/22 11:09 KMK
Alkalinity Total SM2320B	Alkalinity as CaCO3	144.5	mg/L	10.0	04/21/22 08:00 BM	04/21/22 10:58 BM
Total Dissolved Solids SM2540 C	Total Dissolved Solids	311	mg/L	25.0	04/25/22 08:30 RMM	04/27/22 12:00 RMM
Conductivity SM2510 B	Conductivity	526.4	umho/cm	2.0	04/26/22 13:38 MHM	04/26/22 14:11 MHM
Calcium (Ca) EPA 200.7	Calcium	46.2	mg/L	0.20	04/22/22 15:40 LF	04/27/22 12:09 SMV
Copper (Cu) EPA 200.8	Copper	0.104	mg/L	0.010	04/21/22 13:00 @PD	04/21/22 14:22 @PD
Lead (Pb) EPA 200.8	Lead	BPQL	mg/L	0.0050	04/21/22 13:00 @PD	04/21/22 14:22 @PD

Sample: 505 NE 5th

Location Code: LC001

PWSID#: OK2006012

Collection Type: Grab

Sample Time: 4/20/22 8:00

Lab Log# ED20081-02

Method/Parameter	Test	Result	Notes	PQL#	Prep Info	Analysis Info
pH in Field by Client	pH	6.75	pH	0.01	04/20/22 08:00	04/20/22 08:00
Temperature by Client	Temperature	19.6	C		04/20/22 08:00	04/20/22 08:00
Ortho-Phosphate (PO4) EPA 365.1	Ortho-Phosphate	1.96	mg/L	0.153	04/21/22 12:17 KMK	04/22/22 11:10 KMK
Alkalinity Total SM2320B	Alkalinity as CaCO3	138.1	mg/L	10.0	04/21/22 08:00 BM	04/21/22 10:58 BM
Total Dissolved Solids SM2540 C	Total Dissolved Solids	235	mg/L	25.0	04/25/22 08:30 RMM	04/27/22 12:00 RMM
Conductivity SM2510 B	Conductivity	425.2	umho/cm	2.0	04/26/22 13:38 MHM	04/26/22 14:11 MHM
Calcium (Ca) EPA 200.7	Calcium	27.9	mg/L	0.20	04/22/22 15:40 LF	04/27/22 12:12 SMV
Copper (Cu) EPA 200.8	Copper	1.56	mg/L MCL	0.050	04/21/22 13:00 @PD	04/21/22 14:42 @PD
Lead (Pb) EPA 200.8	Lead	BPQL	mg/L	0.0050	04/21/22 13:00 @PD	04/21/22 14:26 @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 displayed on a light gray rectangular background.

Quality Control Data

Blank Data

QC Lab #	Test Group	Test	Result	PQL	Flags
22D2143-BLK1	Ortho-Phosphate (PO4) EPA 365.1	Ortho-Phosphate	BPQL mg/L	0.077	
22D2110-BLK1	Alkalinity Total SM2320B	Alkalinity as CaCO3	BPQL mg/L	10.0	
22D2503-BLK1	Total Dissolved Solids SM2540 C	Total Dissolved Solids	BPQL mg/L	25.0	
22D2627-BLK1	Conductivity SM2510 B	Conductivity	BPQL umho/cm	2.0	
22D2253-BLK1	Calcium (Ca) EPA 200.7	Calcium	BPQL mg/L	0.20	
22D2139-BLK1	Copper (Cu) EPA 200.8	Copper	BPQL mg/L	0.010	
22D2139-BLK1	Lead (Pb) EPA 200.8	Lead	BPQL mg/L	0.0050	

Duplicate Sample Data

QC Lab #	Test Group	Test Name	Source	Dup Result	Samp Result	% RPD	RPD Limit	Flags
22D2627-DUP1	Conductivity SM2510 B	Conductivity	ED20081-02	420.6	425.2	1	20	

Laboratory Control Sample Data

Lab QC#	Test Group	Test Name	LCS Result	Spike Level	Units	% Rec.	Control Limits	Flags
22D2110-BS1	Alkalinity Total SM2320B	Alkalinity as CaCO3	104.0	100.0	mg/L	104	90 - 110	
22D2143-BS1	Ortho-Phosphate (PO4) EPA 365.1	Ortho-Phosphate	0.303	0.3066	mg/L	99	90 - 110	
22D2143-MRL1	Ortho-Phosphate (PO4) EPA 365.1	Ortho-Phosphate	0.023	0.01533	mg/L	147	50 - 150	
22D2503-BS1	Total Dissolved Solids SM2540 C	Total Dissolved Solids	962	1000	mg/L	96	80 - 120	
22D2627-BS1	Conductivity SM2510 B	Conductivity	1436	1413	umho/cm	102	90 - 110	
22D2139-BS1	Copper (Cu) EPA 200.8	Copper	0.092	0.1000	mg/L	92	90 - 110	
22D2139-BS1	Lead (Pb) EPA 200.8	Lead	0.0907	0.1000	mg/L	91	90 - 110	
22D2139-MRL1	Copper (Cu) EPA 200.8	Copper	0.004	0.005000	mg/L	85	50 - 150	
22D2139-MRL1	Lead (Pb) EPA 200.8	Lead	0.0049	0.005000	mg/L	97	50 - 150	
22D2253-BS1	Calcium (Ca) EPA 200.7	Calcium	2.02	2.000	mg/L	101	85 - 115	

Matrix Spike Data

QC Lab #	Test Group	Test Name	Source Sample	Sample Result	Units	Spike Result	Spike Level	% Rec.	Acceptance Limits	Flags
22D2143-MS1	Ortho-Phosphate (PO4) EPA 365.1	Ortho-Phosphate	ED20081-02	1.96	mg/L	2.57	0.6132	99	80 - 120	
22D2253-MS1	Calcium (Ca) EPA 200.7	Calcium	ED20081-01	46.2	mg/L	54.0	10.00	78	85 - 115	#52
22D2139-MS1	Copper (Cu) EPA 200.8	Copper	ED20081-01	0.104	mg/L	0.192	0.1000	88	85 - 115	
22D2139-MS1	Lead (Pb) EPA 200.8	Lead	ED20081-01	0.0014	mg/L	0.0966	0.1000	95	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
22D2143-MSD1	Ortho-Phosphate (PO4) EPA 365.1	Ortho-Phosphate	1.96	2.61	0.6132	mg/L	105	80-120	1	20	
22D2253-MSD1	Calcium (Ca) EPA 200.7	Calcium	46.2	54.0	10.00	mg/L	78	85-115	0	20	#52
22D2139-MSD1	Copper (Cu) EPA 200.8	Copper	0.104	0.188	0.1000	mg/L	84	85-115	2	20	#52
22D2139-MSD1	Lead (Pb) EPA 200.8	Lead	0.0014	0.0962	0.1000	mg/L	95	85-115	0.3	20	

* Complete Entire COC to be in Compliance*

RUSH Due Date



Chain of Custody

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

Sample Preserv. & Container →	ICE 1000 mL Plastic								
Analysis Requested →	Calcium, pH, Alk, conductivity, TDS, orthophosphate								
# of Container ↓									

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, ...)		# of Container	Calcium, pH, Alk, conductivity, TDS, orthophosphate	Lead/Copper
						Location Code				
ED20081										
-01	4/20/22	1110	DW	G	401 NE 2nd	LCO12	6.81	19.4	1	1
-02	4/20/22	0800	DW	G	505 NE 5th	LCO1	6.75	19.6	1	1
			DW	G					1	1
			DW	G					1	1
			DW	G					1	1
			DW	G					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: _____

Sampled By: *Customer* Company: _____ Sample Method: _____

Relinquished By: *[Signature]* Date/Time: _____ Received By: *[Signature]* Date/Time: _____

Relinquished to Lab By: *[Signature]* Date/Time: *04/20/22 1308* Received at Lab By: *[Signature]* Rec'd °C: *8.4* Date/Time: *04/20/22 1308*

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: *City of Perkins* Mail Invoice: Accounts Payable City of Perkins Bid # - _____
 Address: PO Box 9 Perkins, OK 74059 Address: PO Box 9 Perkins, OK 74059 PO # - _____
 Phone #: 405-714-7859 Fax #: 405-547-5440 cityclerk@cityofperkins.net 091020 tkw
 Email: cityclerk@cityofperkins.net cbeitz@cityofperkins.net Phone #: 405-547-2445 Fax #: 405-547-5440

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Failure to complete this Chain of Custody form correctly may delay turnaround time of analytical reporting.