



August 15, 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: August 02, 2022 Time: 13:36 sample temp upon arrival at lab = 16.30°C - On Ice

Matrix: Drinking Water

Lab Log Numbers: **EH02088-01** **EH02088-02** **EH02088-03** **EH02088-04**

Work Order: EH02088

Report # EH02088-0815220901

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: Well 1

Location Code: TC001

PWSID#: OK2006012

Collection Type: Grab

Sample Time: 8/2/22 10:45

Lab Log# EH02088-01

Method/Parameter	Test	Result	Notes	PQL#	Prep Info	Analysis Info
pH in Field by Client	pH	6.40	pH	0.01	08/02/22 10:45	08/02/22 10:45
Temperature by Client	Temperature	20.1	C		08/02/22 10:45	08/02/22 10:45
Ortho-Phosphate (PO4) EPA 365.1	Ortho-Phosphate	1.39	mg/L	0.077	08/03/22 14:15 KMK	08/03/22 16:15 KMK
Alkalinity Total SM2320B	Alkalinity as CaCO3	119.6	mg/L	10.0	08/03/22 12:50 CPL	08/03/22 14:03 CPL
Temperature SM2550 B	Temperature	22.1	°C		08/08/22 14:00 MHM	08/08/22 14:47 MHM
Conductivity SM2510 B	Conductivity	393.4	umho/cm	2.0	08/08/22 14:00 MHM	08/08/22 14:47 MHM
Calcium (Ca) EPA 200.7	Calcium	28.3	mg/L	0.20	08/04/22 15:00 RAF	08/05/22 14:52 RAF
Copper (Cu) EPA 200.8	Copper	0.011	mg/L	0.010	08/04/22 15:00 RAF	08/08/22 18:47 LF
Lead (Pb) EPA 200.8	Lead	BPQL	mg/L	0.0050	08/04/22 15:00 RAF	08/04/22 20:42 LF

Sample: Well 2

Location Code: TC002

PWSID#: OK2006012

Collection Type: Grab

Sample Time: 8/2/22 10:48

Lab Log# EH02088-02

Method/Parameter	Test	Result	Notes	PQL#	Prep Info	Analysis Info
pH in Field by Client	pH	6.50	pH	0.01	08/02/22 10:48	08/02/22 10:48
Temperature by Client	Temperature	20.4	C		08/02/22 10:48	08/02/22 10:48
Ortho-Phosphate (PO4) EPA 365.1	Ortho-Phosphate	1.36	mg/L	0.077	08/03/22 14:15 KMK	08/03/22 16:16 KMK
Alkalinity Total SM2320B	Alkalinity as CaCO3	124.5	mg/L	10.0	08/03/22 12:50 CPL	08/03/22 14:03 CPL
Temperature SM2550 B	Temperature	23.1	°C		08/08/22 14:00 MHM	08/08/22 14:47 MHM
Conductivity SM2510 B	Conductivity	392.7	umho/cm	2.0	08/08/22 14:00 MHM	08/08/22 14:47 MHM
Calcium (Ca) EPA 200.7	Calcium	28.2	mg/L	0.20	08/04/22 15:00 RAF	08/05/22 14:56 RAF
Copper (Cu) EPA 200.8	Copper	BPQL	mg/L	0.010	08/04/22 15:00 RAF	08/08/22 18:52 LF
Lead (Pb) EPA 200.8	Lead	BPQL	mg/L	0.0050	08/04/22 15:00 RAF	08/04/22 20:47 LF

Sample: Well 7

Location Code: TC007

PWSID#: OK2006012

Collection Type: Grab

Sample Time: 8/2/22 10:58

Lab Log# EH02088-03

Method/Parameter	Test	Result	Notes	PQL#	Prep Info	Analysis Info
pH in Field by Client	pH	6.40	pH	0.01	08/02/22 10:58	08/02/22 10:58
Temperature by Client	Temperature	19.8	C		08/02/22 10:58	08/02/22 10:58
Ortho-Phosphate (PO4) EPA 365.1	Ortho-Phosphate	0.898	mg/L	0.077	08/03/22 14:15 KMK	08/03/22 16:17 KMK
Alkalinity Total SM2320B	Alkalinity as CaCO3	137.7	mg/L	10.0	08/03/22 12:50 CPL	08/03/22 14:03 CPL
Temperature SM2550 B	Temperature	23.9	°C		08/08/22 14:00 MHM	08/08/22 14:47 MHM
Conductivity SM2510 B	Conductivity	482.2	umho/cm	2.0	08/08/22 14:00 MHM	08/08/22 14:47 MHM
Calcium (Ca) EPA 200.7	Calcium	46.7	mg/L	0.20	08/04/22 15:00 RAF	08/05/22 15:00 RAF
Copper (Cu) EPA 200.8	Copper	BPQL	mg/L	0.010	08/04/22 15:00 RAF	08/08/22 18:57 LF
Lead (Pb) EPA 200.8	Lead	BPQL	mg/L	0.0050	08/04/22 15:00 RAF	08/04/22 20:51 LF

Sample: Sonic Well

Location Code:

PWSID#:

Collection Type: Grab

Sample Time:

8/2/22 10:53

Lab Log#

EH02088-04

Method/Parameter	Test	Result	Notes	PQL#	Prep Info	Analysis Info
pH in Field by Client	pH	6.50 pH		0.01	08/02/22 10:53	08/02/22 10:53
Temperature by Client	Temperature	19.6 C			08/02/22 10:53	08/02/22 10:53
Ortho-Phosphate (PO4) EPA 365.1	Ortho-Phosphate	1.07 mg/L		0.077	08/03/22 14:15 KMK	08/03/22 16:18 KMK
Alkalinity Total SM2320B	Alkalinity as CaCO3	115.5 mg/L		10.0	08/03/22 12:50 CPL	08/03/22 14:03 CPL
Temperature SM2550 B	Temperature	22.0 °C			08/08/22 14:00 MHM	08/08/22 14:47 MHM
Conductivity SM2510 B	Conductivity	381.0 umho/cm		2.0	08/08/22 14:00 MHM	08/08/22 14:47 MHM
Calcium (Ca) EPA 200.7	Calcium	28.0 mg/L		0.20	08/04/22 15:00 RAF	08/05/22 15:04 RAF
Copper (Cu) EPA 200.8	Copper	BPQL mg/L		0.010	08/04/22 15:00 RAF	08/08/22 19:01 LF
Lead (Pb) EPA 200.8	Lead	BPQL mg/L		0.0050	08/04/22 15:00 RAF	08/04/22 20:55 LF

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
22H0338-BLK1	Ortho-Phosphate (PO4) EPA 365.1	Ortho-Phosphate	BPQL mg/L	0.077	
22H0343-BLK1	Alkalinity Total SM2320B	Alkalinity as CaCO3	BPQL mg/L	10.0	
22H0832-BLK1	Temperature SM2550 B	Temperature	23.6 °C		
22H0832-BLK1	Conductivity SM2510 B	Conductivity	BPQL umho/cm	2.0	
22H0460-BLK1	Calcium (Ca) EPA 200.7	Calcium	BPQL mg/L	0.20	
22H0458-BLK1	Copper (Cu) EPA 200.8	Copper	BPQL mg/L	0.010	
22H0458-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
22H0832-DUP1	Temperature SM2550 B	Temperature	EH02088-01	22.2	22.1	0.5	20	
22H0832-DUP1	Conductivity SM2510 B	Conductivity	EH02088-01	393.2	393.4	0.05	20	

Laboratory Control Sample Data

Lab QC#	Test Group	Test Name	LCS Result	Spike Level	Units	% Rec.	Control Limits	Flags
22H0338-BS1	Ortho-Phosphate (PO4) EPA 365.1	Ortho-Phosphate	0.313	0.3066	mg/L	102	90 - 110	
22H0338-MRL1	Ortho-Phosphate (PO4) EPA 365.1	Ortho-Phosphate	0.020	0.01533	mg/L	133	50 - 150	
22H0343-BS1	Alkalinity Total SM2320B	Alkalinity as CaCO3	104.5	100.0	mg/L	104	90 - 110	
22H0832-BS1	Conductivity SM2510 B	Conductivity	1426	1413	umho/cm	101	90 - 110	
22H0458-BS1	Copper (Cu) EPA 200.8	Copper	0.104	0.1000	mg/L	104	90 - 110	
22H0458-BS1	Lead (Pb) EPA 200.8	Lead	0.101	0.1000	mg/L	101	90 - 110	
22H0458-MRL1	Copper (Cu) EPA 200.8	Copper	0.006	0.005000	mg/L	111	50 - 150	
22H0458-MRL1	Lead (Pb) EPA 200.8	Lead	0.0057	0.005000	mg/L	114	50 - 150	
22H0460-BS1	Calcium (Ca) EPA 200.7	Calcium	1.82	2.000	mg/L	91	85 - 115	

Matrix Spike Data

QC Lab #	Test Group	Test Name	Source Sample	Sample Result	Units	Spike Result	Spike Level	% Rec.	Acceptance Limits	Flags
22H0338-MS1	Ortho-Phosphate (PO4) EPA 365.1	Ortho-Phosphate	EH02088-03	0.898	mg/L	1.21	0.3097	102	80 - 120	
22H0458-MS1	Copper (Cu) EPA 200.8	Copper	EH02088-01	BPQL	mg/L	0.470	0.5000	94	85 - 115	
22H0458-MS1	Lead (Pb) EPA 200.8	Lead	EH02088-01	BPQL	mg/L	0.466	0.5000	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
22H0338-MSD1	Ortho-Phosphate (PO4) EPA 365.1	Ortho-Phosphate	0.898	1.21	0.3097	mg/L	100	80-120	0.5	20	
22H0458-MSD1	Copper (Cu) EPA 200.8	Copper	BPQL	0.487	0.5000	mg/L	97	85-115	4	20	
22H0458-MSD1	Lead (Pb) EPA 200.8	Lead	BPQL	0.469	0.5000	mg/L	94	85-115	0.6	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 Comp (C)	Client I.D. / Sample Location or DEQ / EPA Location Code	Field Results (pH, Temp, Chlorine, ...) (note analysis & units)			# of Container ↓	WQP: Calcium, pH, Alk, conductivity	Lead and Copper	Orthophosphate					
						Location Code	pH	Temp									
E#02088																	
-01	8/2/22	1045			Well 1	TC001	6.4	20.1	1	1	1	1					
-02	8/2/22	1048			Well 2	TC002	6.5	20.4	1	1	1	1					
-03	8/2/22	1058			Well 7	TC007	6.4	19.8	1	1	1	1					
-04	8/2/22	1053			Sonic Well		6.5	19.6	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

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

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: *Zachery Isca* Date/Time: 8/2/22

Sampled By: Zachery Isca Company: City of Perkins Sample Method:

Relinquished By: Zachery Isca	Date/Time: 8/2/22	Received By: Zachery Isca	Date/Time: 8/2/22
<input type="checkbox"/> Relinquished to Lab By: Zachery Isca	Date/Time: 8/2/22	Received at Lab By: <i>J. K...</i>	Date/Time: 8/2/22
<input type="checkbox"/> Relq'd to Log-In Fridge By:	1336	Rec'd °C: 16.3	Date/Time: 8/2/22

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
Address: PO Box 9
 Perkins, OK 74059
 Phone #: 405-547-2445 Fax #: 405-547-5440
Email: cbeitz@cityofperkins.net zisca@cityofperkins.net

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

citymanager@cityofperkins.net cityclerk@cityofperkins.net