Accurate Environmental Laboratories

June 20, 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:	June 02, 2022 Time: 14:01 sample temp upon arrival at lab = 12.00°C
Matrix:	Drinking Water
Lab Log Numbers:	**EF02087-01 EF02087-02 EF02087-03 EF02087-04**
Work Order:	EF02087
Report #	EF02087-0620220825
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:** TP001 **PWSID#:** OK2006012

Collection Type: Grab Sample Time: 6/2/22 10:25 **Lab Log#** EF02087-01

Method/Parameter	Test	Result	Notes	PQL#	Prep Info	Analysis Info
pH in Field by Client	pH	6.70 pH		0.01	06/02/22 10:25	06/02/22 10:25
Temperature by Client	Temperature	20.1 C			06/02/22 10:25	06/02/22 10:25
Ortho-Phosphate (PO4) EPA 365.1	Ortho-Phosphate	1.22 mg/L		0.077	06/03/22 11:15 KMK	06/03/22 14:13 KMK
Alkalinity Total SM2320B	Alkalinity as CaCO3	127.5 mg/L		10.0	06/07/22 15:24 CPL	06/07/22 16:46 CPL
Temperature SM2550 B	Temperature	21.6 °C			06/03/22 13:05 RMM	06/03/22 15:14 RMM
Conductivity SM2510 B	Conductivity	386.0 umho/cm		2.0	06/03/22 13:05 MHM	06/03/22 13:49 MHM
Calcium (Ca) EPA 200.7	Calcium	27.1 mg/L		0.20	06/10/22 11:30 CJS	06/10/22 14:43 SMV
Copper (Cu) EPA 200.8	Copper	0.028 mg/L		0.010	06/06/22 12:00 @PD	06/07/22 14:53 @PD
Lead (Pb) EPA 200.8	Lead	BPQL mg/L		0.0050	06/06/22 12:00 @PD	06/07/22 14:53 @PD

Sample: ***Well 2*** **Location Code:** TP002 **PWSID#:** OK2006012

Collection Type: Grab Sample Time: 6/2/22 10:30 **Lab Log#** EF02087-02

Method/Parameter	Test	Result	Notes	PQL#	Prep Info	Analysis Info
pH in Field by Client	pH	6.70 pH		0.01	06/02/22 10:30	06/02/22 10:30
Temperature by Client	Temperature	20.4 C			06/02/22 10:30	06/02/22 10:30
Ortho-Phosphate (PO4) EPA 365.1	Ortho-Phosphate	1.17 mg/L		0.077	06/03/22 11:15 KMK	06/03/22 14:14 KMK
Alkalinity Total SM2320B	Alkalinity as CaCO3	125.2 mg/L		10.0	06/07/22 15:24 CPL	06/07/22 16:46 CPL
Temperature SM2550 B	Temperature	21.4 °C			06/03/22 13:05 RMM	06/03/22 15:14 RMM
Conductivity SM2510 B	Conductivity	381.2 umho/cm		2.0	06/03/22 13:05 MHM	06/03/22 13:49 MHM
Calcium (Ca) EPA 200.7	Calcium	26.6 mg/L		0.20	06/10/22 16:00 SMV	06/15/22 14:57 SMV
Copper (Cu) EPA 200.8	Copper	0.089 mg/L		0.010	06/06/22 12:00 @PD	06/07/22 14:57 @PD
Lead (Pb) EPA 200.8	Lead	BPQL mg/L		0.0050	06/06/22 12:00 @PD	06/07/22 14:57 @PD

Sample: ***Well 7*** **Location Code:** TP007 **PWSID#:** OK2006012

Collection Type: Grab Sample Time: 6/2/22 10:40 **Lab Log#** EF02087-03

Method/Parameter	Test	Result	Notes	PQL#	Prep Info	Analysis Info
pH in Field by Client	pH	6.90 pH		0.01	06/02/22 10:40	06/02/22 10:40
Temperature by Client	Temperature	19.8 C			06/02/22 10:40	06/02/22 10:40
Ortho-Phosphate (PO4) EPA 365.1	Ortho-Phosphate	1.43 mg/L		0.077	06/03/22 11:15 KMK	06/03/22 14:16 KMK
Alkalinity Total SM2320B	Alkalinity as CaCO3	140.2 mg/L		10.0	06/07/22 15:24 CPL	06/07/22 16:46 CPL
Temperature SM2550 B	Temperature	21.7 °C			06/03/22 13:05 RMM	06/03/22 15:14 RMM
Conductivity SM2510 B	Conductivity	472.9 umho/cm		2.0	06/03/22 13:05 MHM	06/03/22 13:49 MHM
Calcium (Ca) EPA 200.7	Calcium	45.9 mg/L		0.20	06/10/22 11:30 CJS	06/10/22 14:47 SMV
Copper (Cu) EPA 200.8	Copper	0.017 mg/L		0.010	06/06/22 12:00 @PD	06/07/22 15:01 @PD
Lead (Pb) EPA 200.8	Lead	BPQL mg/L		0.0050	06/06/22 12:00 @PD	06/07/22 15:01 @PD

Sample: ***Sonic Well*** **Location Code:** **PWSID#:**

Collection Type: Grab Sample Time: 6/2/22 10:35 **Lab Log#** EF02087-04

Method/Parameter	Test	Result	Notes	PQL#	Prep Info	Analysis Info
pH in Field by Client	pH	6.80 pH		0.01	06/02/22 10:35	06/02/22 10:35
Temperature by Client	Temperature	19.6 C			06/02/22 10:35	06/02/22 10:35
Ortho-Phosphate (PO4) EPA 365.1	Ortho-Phosphate	0.871 mg/L		0.077	06/03/22 11:15 KMK	06/03/22 14:17 KMK
Alkalinity Total SM2320B	Alkalinity as CaCO3	124.0 mg/L		10.0	06/07/22 15:24 CPL	06/07/22 16:46 CPL
Temperature SM2550 B	Temperature	21.7 °C			06/03/22 13:05 RMM	06/03/22 15:14 RMM
Conductivity SM2510 B	Conductivity	376.6 umho/cm		2.0	06/03/22 13:05 MHM	06/03/22 13:49 MHM
Calcium (Ca) EPA 200.7	Calcium	27.0 mg/L		0.20	06/10/22 11:30 CJS	06/10/22 14:51 SMV
Copper (Cu) EPA 200.8	Copper	BPQL mg/L		0.010	06/06/22 12:00 @PD	06/07/22 15:05 @PD
Lead (Pb) EPA 200.8	Lead	BPQL mg/L		0.0050	06/06/22 12:00 @PD	06/07/22 15:05 @PD

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
22F0335-BLK1	Ortho-Phosphate (PO4) EPA 365.1	Ortho-Phosphate	BPQL mg/L	0.077	
22F0749-BLK1	Alkalinity Total SM2320B	Alkalinity as CaCO3	BPQL mg/L	10.0	
22F0348-BLK1	Temperature SM2550 B	Temperature	23.8 °C		
22F0348-BLK1	Conductivity SM2510 B	Conductivity	BPQL umho/cm	2.0	
22F1029-BLK1	Calcium (Ca) EPA 200.7	Calcium	BPQL mg/L	0.20	
22F1073-BLK1	Calcium (Ca) EPA 200.7	Calcium	BPQL mg/L	0.20	
22F0613-BLK1	Copper (Cu) EPA 200.8	Copper	BPQL mg/L	0.010	
22F0613-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
22F0335-BS1	Ortho-Phosphate (PO4) EPA 365.1	Ortho-Phosphate	0.294	0.3066	mg/L	96	90 - 110	
22F0335-MRL1	Ortho-Phosphate (PO4) EPA 365.1	Ortho-Phosphate	0.018	0.01533	mg/L	120	50 - 150	
22F0348-BS1	Conductivity SM2510 B	Conductivity	1414	1413	umho/cm	100	90 - 110	
22F0749-BS1	Alkalinity Total SM2320B	Alkalinity as CaCO3	104.9	100.0	mg/L	105	90 - 110	
22F0613-BS1	Copper (Cu) EPA 200.8	Copper	0.098	0.1000	mg/L	98	90 - 110	
22F0613-BS1	Lead (Pb) EPA 200.8	Lead	0.0960	0.1000	mg/L	96	90 - 110	
22F0613-MRL1	Copper (Cu) EPA 200.8	Copper	0.007	0.005000	mg/L	135	50 - 150	
22F0613-MRL1	Lead (Pb) EPA 200.8	Lead	0.0053	0.005000	mg/L	107	50 - 150	
22F1029-BS1	Calcium (Ca) EPA 200.7	Calcium	1.82	2.000	mg/L	91	85 - 115	
22F1073-BS1	Calcium (Ca) EPA 200.7	Calcium	2.09	2.000	mg/L	104	85 - 115	

Matrix Spike Data

QC Lab #	Test Group	Test Name	Source Sample	Sample Result	Units	Spike Result	Spike Level	% Rec.	Acceptance Limits	Flags
22F0335-MS1	Ortho-Phosphate (PO4) EPA 365.1	Ortho-Phosphate	EF02087-01	1.22	mg/L	1.53	0.3097	99	80 - 120	
22F0613-MS1	Copper (Cu) EPA 200.8	Copper	EF02087-01	0.028	mg/L	0.113	0.1000	85	85 - 115	
22F0613-MS1	Lead (Pb) EPA 200.8	Lead	EF02087-01	BPQL	mg/L	0.0972	0.1000	97	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
22F0335-MSD1	Ortho-Phosphate (PO4) EPA 365.1	Ortho-Phosphate	1.22	1.53	0.3097	mg/L	98	80-120	0.2	20	
22F0613-MSD1	Copper (Cu) EPA 200.8	Copper	0.028	0.118	0.1000	mg/L	91	85-115	5	20	
22F0613-MSD1	Lead (Pb) EPA 200.8	Lead	BPQL	0.0983	0.1000	mg/L	98	85-115	1	20	

* Complete Entire COC to be in Compliance*

☐ RUSH Due Date _____

Chain of Custody

Accurate Environmental Labs

Client Name- **Perkins PWA**

Project Name- SDWIS Analysis - WQP

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) Location Code	pH	Temp	# of Container ↓	WQP: Calcium, pH, Alk, conductivity	Lead and Copper	Orthophosphate				
									Sample Preserv. & Container →	ICE 1000 mL Plastic	1000 mL Plastic					
									Analysis Requested →							
E.F02087																
-01	6/2/22	1025	DW	G	Well 1	TC001	6.7	20.1	1	1	1	1				
-02	6/2/22	1030	DW	G	Well 2	TC002	6.7	20.4	1	1	1	1				
-03	6/2/22	1040	DW	G	Well 7	TC007	6.9	19.8	1	1	1	1				
-04	6/2/22	1035	DW	G	Sonic Well		6.8	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 : _____ Date/Time 6/2/22

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

Relinquished By: Zachery Isca Date/Time 6/2/22 Received By: Zachery Isca Date/Time 6/2/22

☐ Relinquished to Lab By: Zachery Isca Date/Time 6/2/22 2:01 pm Received at Lab By: Madison Hooker Rec'd °C 12.0 Date/Time 6/2/22 2:01 pm

☐ Relq'd to Log-In Fridge By:

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
citymanager@cityofperkins.net cityclerk@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

Bid # - _____

PO # - _____

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