



November 11, 2019

Client: Perkins PWA

PO Box 9

Perkins, OK 74059

**Requested By:** Janet Noe



National  
Environmental  
Laboratory  
Accreditation  
Program  
Kansas CERT # E-10219

**Sample Project Name:** Wastewater Treatment Plant - Permit # OK0028801

**Date Samples Received:** November 04, 2019      Time: 11:05      sample temp upon arrival at lab = 13°C - On Ice

**Matrix:** Waste Water

**Lab Log Numbers:**      **BK04010-01**      **BK04010-02**

**Work Order:** BK04010

**Report #** BK04010-1111191546

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

**Oklahoma Certification:** Stillwater WasteWater, DEQ 8316/ Drinking Water, DEQ D9602  
Tulsa WasteWater, DEQ 9905 / Drinking Water, DEQ D9901  
Oklahoma City WasteWater DEQ 7202 / Drinking Water, DEQ D9937

**Kansas Certification:** Stillwater NELAP CERT # E-10219  
Oklahoma City NELAP CERT # E-10414

**New Hampshire Cert.:** Oklahoma City Drinking Water NH ELAP Lab ID # 2072

**Texas Certification:** Stillwater Drinking Water NELAP CERT # T105704533-14-1

**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: Influent: WWTP

Location Code:

PWSID#:

Collection Type: Grab

Sample Time: 11/4/19 8:00

Lab Log# BK04010-01

Method/Parameter	Test	Result	Notes	PQL#	Prep Info	Analysis Info
BOD5 SM5210 B	Biochemical Oxygen Demand	257 mg/L		2.0	11/06/19 07:45 BM	11/11/19 09:45 MR
Total Suspended Solids SM2540D	Total Suspended Solids	232 mg/L		50.0	11/06/19 10:30 MR	11/07/19 18:30 MR

Sample: Effluent: WWTP

Location Code:

PWSID#:

Collection Type: Composite

Start Date: 11/4/19 8:00

End Date: 11/4/19 8:00

Lab Log# BK04010-02

Method/Parameter	Test	Result	Notes	PQL#	Prep Info	Analysis Info
BOD5 SM5210 B	Biochemical Oxygen Demand	15.0 mg/L		2.0	11/06/19 07:45 BM	11/11/19 09:45 MR
Total Suspended Solids SM2540D	Total Suspended Solids	19.3 mg/L		8.33	11/06/19 10:30 MR	11/07/19 18:30 MR
Total Dissolved Solids SM2540 C	Total Dissolved Solids	423.0 mg/L		25.0	11/06/19 09:57 CWK	11/07/19 13:10 CWK

### Notes and Definitions

BOD-4 The BOD batch blanks failed QC criteria. The blanks showed Oxygen depletion greater than 0.2mg/L.

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
19K0611-BLK1	BOD5 SM5210 B	Biochemical Oxygen Demand	BPQL mg/L	2.0	BOD-4
19K0656-BLK1	Total Suspended Solids SM2540D	Total Suspended Solids	BPQL mg/L	2.50	
19K0626-BLK1	Total Dissolved Solids SM2540 C	Total Dissolved Solids	BPQL mg/L	25.0	

### Duplicate Sample Data

QC Lab #	Test Group	Test Name	Source	Dup Result	Samp Result	% RPD	RPD Limit	Flags
19K0611-DUP1	BOD5 SM5210 B	Biochemical Oxygen Demand	BK04010-01	244	257	5	20	
19K0656-DUP1	Total Suspended Solids SM2540D	Total Suspended Solids	BK04010-01	240	232	3	10	

### Laboratory Control Sample Data

Lab QC#	Test Group	Test Name	LCS Result	Spike Level	Units	% Rec.	Control Limits	Flags
19K0611-BS1	BOD5 SM5210 B	Biochemical Oxygen Demand	216	198.0	mg/L	109	84.6 - 115.4	
19K0626-BS1	Total Dissolved Solids SM2540 C	Total Dissolved Solids	982.0	1000	mg/L	98	80 - 120	
19K0656-BS1	Total Suspended Solids SM2540D	Total Suspended Solids	296	250.0	mg/L	118	80 - 120	



# Chain of Custody

Client Name- **City of Perkins - Public Works Authority**  
 Project Name- **Wastewater Treatment Plant - Permit # OK0028801**

Sample Preserv. & Container →	1000 ml Plastic	1000 ml Plastic	500ml Plastic		
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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)			Analysis Requested →  # of Container ↓	TSS / BOD	TSS / BOD	TDS
						pH	Temp C°					
BK04010												
-01	11/04/19	08:00	WW	G	Influent: WWTP	7.77	17.7		2	x		
-02	11/04/19	08:00	WW	C	Effluent: WWTP	7.30	16.5		2		x	x

On-Site Info	Raw Alkalinity (TOC Raw) = _____ mg/L	Turbidity (E.Coli) = _____ ntu	Field Instrument Calibration -				
	Meter Type: HACH	Standards: 4-7-10	Final Read.: 7.01	Date / Time: 11/04/19-07:00	Initials: SP		

Matrix Codes: DW = Drinkingwater; WW = Wastewater; SL = Sludge; O = Other  
 E.Coli Source: FS = Flowing Stream; RL = Reservoir Lake; GWUDI = Groundwater under direct influence of surface water

Comments: **Samples Delivered On Ice. (Effluent is Disinfected with Ultra Violet Light)**

-- 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 --

COC Date - 10.02.09

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: *Steven Pitzl* Date/Time 11/04/19-08:00

Sampled By: Steven Pitzl Company: City of Perkins Sample Method: GRAB

Relinquished By:	Date/Time	Received By:	Date/Time
<i>Steven Pitzl</i>	11/04/19	<i>Erin Snow</i>	11/04/19
Relinquished to Lab By: Steven Pitzl	Date/Time: 11/04/19	Received at Lab by: <i>Erin Snow</i>	Date/Time 11/04/19
Relq'd to Log-In Fridge By:		Rec'd °C: 13.0	

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

Mail Report To: Janet Noe - jnoe@cityofperkins.net  
 Steven Pitzl - spitzl@cityofperkins.net  
 City Manager - citymanager@cityofperkins.net

Address: City of Perkins  
 P.O. Box. 9  
 Perkins, Ok. 74059

Phone #: (405) 714-7859 Fax #: (405) 547-5440

Mail Invoice To: Bid # - \_\_\_\_\_  
 Address: City of Perkins  
 P.O. Box. 9  
 Perkins, Ok. 74059  
 PO # - \_\_\_\_\_

Phone #: (405) 547-2445 Fax #: (405) 547-5440