

CITY OF LOMITA



# Cypress Water Production Facility Monthly Status Report

---

October 2018

## TABLE OF CONTENTS

<b>COVER LETTER .....</b>	<b>1</b>
<b>A. BACKGROUND .....</b>	<b>2</b>
<b>B. WELL PRODUCTION AND OPERATIONS .....</b>	<b>2</b>
<b>C. OPERATIONAL INTERRUPTIONS .....</b>	<b>2</b>
<b>D. SAMPLE LOCATIONS .....</b>	<b>2</b>
<b>E. WATER QUALITY MONITORING .....</b>	<b>3</b>
E1. IRON, MANGANESE AND COLOR .....	3
E2. FREE AND TOTAL CHLORINE RESIDUALS .....	3
E3. TOTAL DISSOLVED SOLIDS (TDS), ODOR, HARDNESS AND METHANE...	3
E3-1 TOTAL DISSOLVED SOLIDS (TDS) .....	3
E3-2 HARDNESS .....	3
E3-3 DISSOLVED METHANE (IN WATER) .....	4
E3-4 METHANE (IN AIR) .....	4
E3-5 ODOR .....	4
E3-6 TOTAL PHOSPHATE/ORTHOPHOSPHATE .....	4
E4. NITRIFICATION MONITORING .....	4
<b>F. TABLES .....</b>	<b>5-6</b>

**CITY COUNCIL**

MICHAEL G. SAVIDAN  
HENRY SANCHEZ, JR  
JAMES GAZELEY  
BEN TRAINA  
MARK WARONEK



**ADMINISTRATION**

RYAN SMOOT  
CITY MANAGER

November 13, 2018

Mr. Dmitry Ginzburg, P.E.  
District Engineer – Hollywood District  
State Water Resources Control Board – Division of Drinking Water  
500 North Central Avenue, Suite 500  
Glendale, CA 91203

Subject: System No. 1910073 - Monthly Report for the Cypress Water Production Facility (CWPF) for the period of October 1 through October 31, 2018.

Dear Mr. Ginzburg,

In accordance with the Department of Public Health temporary approval letter dated March 15, 2013 and Permit Amendment No. 1910073, I am submitting the following report for the Cypress Water Production Facility operations for the month of October 2018.

If you should have any questions or concerns, please contact me at 310-325-7110 Ext. 310.

Sincerely,

Mark Andersen  
Public Works Superintendent

## A. BACKGROUND

On March 15, 2013, the City of Lomita received conditional approval from the Department of Public Health (DPH) to distribute blended water from the Cypress Water Production Facility (CWPF) Well No. 5 to the City's customers.

The CWPF is an iron-manganese greensand filtration treatment system designed to remove primarily iron, manganese, and color. The CWPF was recently modified to enable aeration and blending with Metropolitan Water District (MWD) imported water to address the aesthetic secondary issues of Total Dissolved Solids (TDS), Hardness (as Calcium Carbonate), and Taste/Odor.

The CWPF came online on April 1, 2013. The first week of operations from April 1 to April 5, 2013 was utilized for conducting routine startup activities. The distribution of blended water to the City's residents began on April 5, 2013.

## B. WELL PRODUCTION

The CWPF operated continuously during the month of October 2018 maintaining water levels inside the reservoir ranging from 7 feet to 10 feet. The average flow from Well No. 5 was 417 gpm and 575 gpm from MWD. The blend ratio for month was 41% Well water and 59% MWD water. See Table 1 below for production totals for the month of October 2018.

Table 1. Monthly Production Totals.

Production for October 2018			
Well No. 5	40.67	ac-ft	13,251,366 (gallons)
MWD	59.10	ac-ft	19,257,000 (gallons)
Combined Total	99.77	ac-ft	32,508,366 (gallons)
Daily	3.99	ac-ft/day	1,300,335 (gallons/day)

## C. OPERATIONAL INTERRUPTIONS

The CWPF was offline for approximately six days during the month of October to perform routine and preventive maintenance on various pieces of equipment. During this time, Zone 1 was being supplied only by MWD water. The CWPF was put back online on October 9, 2018. No major planned operational interruptions are anticipated for the following month.

## D. SAMPLE LOCATIONS

Compliance monitoring is performed at the following sample locations: SP1, SP2, SP3, SP5, and SP6. The SP1 sample location is the raw well water sample location. The SP2 sample location is on the effluent side of the greensand filter (before ammonia injection or full chloramination). The SP3 sample location is downstream of the greensand filter after full chloramination and the static mixer before entering the reservoir. The SP5 sample location is the reservoir effluent sample location before entering the distribution system. The SP6 sample location is the MWD source sample location before blending occurs.



## **E. WATER QUALITY MONITORING**

All water quality monitoring analyses were performed by laboratories certified by the Department of Health's Environmental Laboratory Accreditation Branch (ELAB). The CWPF has been continuously monitored, maintained and inspected, per the CWPF Operations Monitoring and Maintenance Plan. A brief discussion of the laboratory and/or monitoring results is provided below. Refer to Appendix A for laboratory results.

### **E1. IRON, MANGANESE AND COLOR**

See Table 2 below for a summary of the results for the compliance monitoring at the three sample locations SP1 through SP3. Color for raw water (SP1) was below the MCL level. Iron for raw water was below the MCL level and Manganese was above the MCL level for the month. Iron and Manganese levels before entering the reservoir (SP3) show non-detect, indicating the greensand filtration system remains highly effective.

### **E2. FREE AND TOTAL CHLORINE RESIDUALS**

Daily free chlorine residuals were monitored at SP2, SP3, SP4 and SP5. Daily total chlorine residuals were monitored at SP3, SP4 and SP5. Free chlorine and total chlorine residuals, at all respective sample points, were monitored using a combination of continuous chlorine analyzers and SCADA. See Table 3 below for a weekly summary of results.

### **E3. TOTAL DISSOLVED SOLIDS (TDS), ODOR, HARDNESS AND METHANE**

See Table 4 below for a summary of the results for the monitoring of Total Dissolved Solids (TDS), Odor (as measured by the Threshold Odor No. - T.O.N.), Total Hardness as Calcium Carbonate, and Methane levels in water at three sample locations SP1, SP5 and SP6.

#### **E3-1 TOTAL DISSOLVED SOLIDS (TDS)**

The sampling results indicate the TDS levels of the effluent blended water to be on average 596 mg/L. The TDS level of the effluent water meets the City's Water Quality Objective/Goal of 500 to 750 mg/L. The sampling results indicate the TDS levels in the raw water and MWD water source to be 750 mg/L and 360 mg/L, respectively.

#### **E3-2 HARDNESS**

The sampling results for the month indicate the hardness levels of the blended water to be on average 250 mg/L. This hardness level is within the City's Water Quality Objective/Goal of 180 to 250 mg/L; staff continues to monitor hardness levels at the CWPF effluent (SP5) and within the water distribution system. The City has maintained a consistent blend ratio to ensure acceptable hardness levels are met.

Staff continues to use an orthophosphate/polyphosphate additive to sequester calcium hardness. Orthophosphate/Polyphosphate is a food grade National Sanitation Foundation (NSF 60) approved additive which decreases iron tuberculation, diminishes calcium scale deposits, minimizes corrosion, reduces discoloration, reduces staining and mineral build-up resulting in fewer customer complaints.

### **E3-3 DISSOLVED METHANE (IN WATER)**

The methane levels in the CWPF effluent after aeration treatment remain negligible averaging 0.28 mg/L.

### **E3-4 METHANE (IN AIR)**

The methane levels in the reservoir headspace are monitored daily by staff using a handheld device. These readings have consistently read non-detect to low concentrations for methane in air. Available methane hand held monitoring instruments can only detect levels of 1% Lower Explosive Limit (LEL) or greater. The handheld methane readings during the month were below the 50,000 ppm LEL. See attached methane log for the month of October 2018 in Appendix B.

### **E3-5 ODOR**

The odor levels at the CWPF effluent averaged 2.0 units for the month.

### **E3-6 TOTAL PHOSPHATE AND ORTHOPHOSPHATE**

See Table 5 below for a summary of the results for the monitoring of Orthophosphate and Total Phosphate both in the distribution system and CWPF.

## **E4. NITRIFICATION MONITORING**

Weekly nitrification sampling was performed during the month of October 2018 following the City's Nitrification Monitoring Plan. Refer to Appendix C for results.

## F. TABLES

Table 2. Monitoring Results for SP1, SP2, and SP3 Sample Locations.

Date, week of	SP1, Well Raw Water Discharge							SP2, Combined Pressure Filter Effluent			SP3, After chloramination static mixer; reservoir entry					
	Iron, ug/L	*MCL = 3 00 ug/L	Manganese, ug/L	*MCL = 50 ug/L	Color	*MCL=15	Total Coliform	Total Coliform	HPC, MPN/100mL	MCL=500	Iron, mg/L	*MCL = 300 ug/L	Manganese, mg/L	*MCL = 50 ug/L	Color	*MCL=15
10/2/2018											ND	300	ND	50	5	15
10/9/2018	200	300	150	50	10	15	A	ND	ND	500	ND	300	ND	50	5	15
10/16/2018											ND	300	ND	50	5	15
10/23/2018											ND	300	ND	50	5	15
10/30/2018											ND	300	ND	50	5	15

**Notes:**

Monthly- Orange; Weekly- Yellow

A – Absent

ND – Non Detect

\*Per the SWRCB Drinking Water "Chemicals and Contaminants in Drinking Water" Regulations

Table 3. Monitoring Results for Free and Total Chlorine at SP2, SP3, SP4 and SP5 Sample Locations.

Date, week of	SP2	SP3			SP4			SP5		
	Free Cl	Free Cl	Total Cl	Total NH <sub>3</sub>	Free Cl	Total Cl	Total NH <sub>3</sub>	Free Cl	Total Cl	Total NH <sub>3</sub>
10/22/2018	-	-	-	-	-	-	-	0.07	3.77	0.87
10/9/2018	8.91	1.01	8.70	0.96	0.78	5.18	0.77	0.05	3.55	0.73
10/16/2018	8.98	0.96	9.76	1.02	0.68	5.37	0.84	0.06	3.70	0.77
10/23/2018	8.54	1.05	9.68	1.01	0.73	5.11	0.80	0.07	3.52	0.74
10/30/2018	8.89	1.00	9.40	1.10	0.62	4.49	0.86	0.05	3.39	0.72

Table 4. Monitoring Requirements and Frequencies for SP1, SP5, and SP6.

Date, week of	TDS, mg/L				T.O.N.		Hardness, mg/L				Methane (Water), mg/L	
	SP1 - Raw Well Water	SP6 - MWD Water	SP5 - Reservoir Effluent	Goal= 500 - 750 mg/L	SP5 - Reservoir Effluent	MCL= 3	SP1 - Raw Well Water	SP6 - MWD Water	SP5 - Reservoir Effluent	Goal= 180 - 250 mg/L	SP1 - Raw Well Water	SP5 - Reservoir Effluent
10/2/2018			600	500-750	2	3						0.31
10/9/2018	750	360	580	500-750	2	3	370	160	250	180-250	2.0	0.18
10/16/2018			620	500-750	2	3						0.32
10/23/2018			650	500-750	2	3						0.30
10/30/2018			530	500-750	2	3						0.29
Average			596	500-750	2	3						0.28

**Notes:**

Monthly- Orange; Weekly- Yellow

ppm – parts per million

mg/L – milligram per liter

T.O.N. - Threshold Odor Number

TDS - Total Dissolved Solids

Hardness - As total CaCO<sub>3</sub>

Methane (Water) - Methane dissolved in water

Table 5. Monitoring Requirements and Frequencies for Total Phosphate and Orthophosphate.

Sample Location	Date, week of	Total Phosphate, mg/L	Orthophosphate, mg/L
1948 W 252 <sup>nd</sup> St	10/9/18	0.11	0.16
24632 S Moon Ave		0.13	0.19
2450 W 247 <sup>th</sup> St		0.062	0.075
2052 Dawn St		0.043	0.098
CWPF SP5		0.39	-

**Notes:**

Monthly- Orange;

mg/L – milligram per liter



**City of Lomita; System No. 1910073**

Sample Locations and Parameters	Frequency	MCL/ Goal	10/2/18	10/9/18	10/16/18	10/23/18	10/30/18	Comments and/or Other Info.
			1stWk	2 <sup>nd</sup> Wk	3rdWk	4 <sup>th</sup> Wk	5 <sup>th</sup> Wk	
			or Mo. Result (date)					

**SP1 --- Also called Well 5 Raw Water or Site#1.**

TDS, ppm	Monthly	See SP5	750 10/9/18	<b>Operations Data/Information:</b>  <u>CWPF operation days</u>  <u>On Well 5:</u> Daily average flow – 417 gpm; total prod. – 40.67 AF <u>Combined Well 5/MWD data:</u> Average Well 5: MWD blend Ratio – 41% WELL: 59% MWD; total prod.- 99.77 AF  Chlorine Dosage: N/A*	*Chlorine injected after SP1, before entering the greensand filter.
Hardness	Monthly	See SP5	370 10/9/18		
CH4, ppm	Monthly	See SP5	2.0 10/9/18		
Iron, ppb	Monthly	See SP3	220 10/9/18		
Manganese, ppb	Monthly	See SP3	150 10/9/18		
Color, units	Monthly	See SP3	10 10/9/18		
Total Coliform, P or A	Monthly	A	A 10/9/18		

**SP2 --- Also called Filter Effluent or Site#3**

Total Coliform, P or A	Monthly	A	A	Ammonia Dosage: N/A*	*Ammonia added after filter effluent
HPC,MPN/100 ml	Monthly	500	ND		
Free Cl Res, ppm	Continuous	Average: 8.83 ; Range: 8.54 – 8.98			

SP3 --- Also called the Site After Chloramination & Before MWD Blending or Site#4.

Iron, ppb	Weekly	ND	ND	ND	ND	ND	ND
Manganese, ppb	Weekly	50	ND	ND	ND	ND	ND
Color	Weekly	15	5	5	5	5	5
Free and Total Cl Res, ppm	Continuous	Free Cl: Average: 1.00; Range: 0.96 – 1.05 Total Cl: Average: 9.38; Range: 8.70 – 9.76 Ammonia: Average: 1.02; Range: 0.96 – 1.10					

SP4 --- Also called Reservoir Influent or the Site Well 5/MWD Water Blend Point/Phosphate Injection.

Phosphate Injection		Phosphate Dosage: 0.48 mg/L	
Free and Total Cl Res, ppm	Continuous	Free Cl: Average: 0.72; Range: 0.62 – 0.78 Total Cl: Average: 5.07; Range: 4.49 – 5.37 Ammonia: Average: 0.81; Range: 0.77 – 0.84	Cl/NH3 Ratio: 6.29

SP5 --- Also called Reservoir Effluent or Site#5. SP5 discharges into Zone 1 of the distribution system.

TDS, ppm	Weekly	SI Goal: 500-750ppm	600	580	620	650	530	
Hardness	Monthly	SI Goal: 180-250ppm		250				
CH <sub>4</sub> , ppm	Weekly	Goal: from PA	0.31	0.18	0.32	0.30	0.29	% CH <sub>4</sub> Removal: 86.0%
Odor, units	Monthly	1	2	2	2	2	2	
Free and Total Cl Res, ppm	Continuous	Free Cl: Average: 0.06; Range: 0.05 – 0.07 Total Cl: Average: 3.59; Range: 3.39 - 3.77 Ammonia: Average: 0.76; Range: 0.72 – 0.87						Cl/NH <sub>3</sub> Ratio: 4.73

### Headspace of the Cypress Reservoir.

1CH4 ppmv; using Portable Device	Daily (from log)	Goal - LEL	CH4 Average: 0.38% CH4 Range: 0% - 4%	
----------------------------------	------------------	------------	--	--

SP 6 --- MWD Source Feeding CWPF. Also called Zone 2 of the distribution system or Site #6.

TDS, ppm	Monthly	-----		360			
Hardness	Monthly	-----		160			

Notes: <sup>1</sup>Self-Imposed (SI) Goals: TDS Goal-500-750 ppm; Hardness as CaCO<sub>3</sub> Goal-180-250 ppm.

\*\*\*This Report is due to DDW by the 10<sup>th</sup> of the following month.

**Other Notes/Comments:** (1) See comments on the last column

## **APPENDIX A**

### LABORATORY RESULTS

# *Clinical Laboratory of San Bernardino, Inc.*



12 October 2018

Clinical Lab No.: 18J0186

Mark Andersen  
Lomita, City of  
24373 Walnut Avenue  
Lomita, CA 91717

Project Name: Standard Analysis  
Sub Project: CWPF 1st Week of October, 2018 Compliance Sampling

Enclosed are the results of the analyses for samples received at the laboratory on 10/02/18 . Samples were received within temperature range, in correct containers and preservation.

Analyses were performed pursuant to client's chain of custody, within hold times, utilizing EPA or other ELAP approved methodologies.

I certify that the results are within compliance both technically and for completeness. Analytical results are attached to this letter. Please call if any additional information and or assistance are needed.

Thank you for choosing Clinical Laboratory of San Bernardino for your analytical needs.

Sincerely,

A handwritten signature in black ink, appearing to read 'Stu Styles', with a stylized flourish at the end.

Stu Styles  
Client Services Manager

# Clinical Laboratory of San Bernardino, Inc.



**Lomita, City of**  
24373 Walnut Avenue  
Lomita CA, 91717

Project: Standard Analysis  
Sub Project: CWPf 1st Week of October, 2018 Compliance Sampling  
Project Manager: Mark Andersen

Work Order: 18J0186  
Received: 10/02/18 16:22  
Reported: 10/12/18

**Reservoir Influent Site #3** **18J0186-01 (Water)** **Sample Date:** 10/02/18 9:00 **Sampler:** P.M.

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
---------	--------	--------	------------	-----	-------	----------	----------	-------	-----------

## Field Analyses

<b>Cl Res Total (Field)</b>	Field	<b>3.7</b>		N/A	mg/L	10/02/18	10/02/18	1840076	
<b>pH (Field)</b>	Field	<b>7.47</b>		N/A	pH Units	10/02/18	10/02/18	1840076	
<b>Temperature (Field)</b>	Field	<b>23.7</b>		N/A	°C	10/02/18	10/02/18	1840076	

## General Physical Analyses

<b>Apparent Color</b>	SM 2120BM	<b>5.0</b>	3.0	15	Color Units	10/02/18	10/02/18	1840093	
-----------------------	-----------	------------	-----	----	-------------	----------	----------	---------	--

## Metals

Iron (Fe)	EPA 200.7	ND	100	300	ug/L	10/04/18	10/05/18	1840123	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	10/04/18	10/05/18	1840123	

**Reservoir Effluent Site #5** **18J0186-02 (Water)** **Sample Date:** 10/02/18 9:20 **Sampler:** P.M.

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
---------	--------	--------	------------	-----	-------	----------	----------	-------	-----------

## Field Analyses

<b>Cl Res Total (Field)</b>	Field	<b>3.56</b>		N/A	mg/L	10/02/18	10/02/18	1840076	
<b>pH (Field)</b>	Field	<b>7.79</b>		N/A	pH Units	10/02/18	10/02/18	1840076	
<b>Temperature (Field)</b>	Field	<b>24</b>		N/A	°C	10/02/18	10/02/18	1840076	

## General Physical Analyses

<b>Apparent Color</b>	SM 2120BM	ND	3.0	15	Color Units	10/02/18	10/02/18	1840093	
<b>Odor Threshold</b>	EPA 140.1-M	<b>2</b>	1	3	TON	10/02/18	10/02/18	1840093	

## General Chemical Analyses

<b>Total Filterable Residue/TDS</b>	SM 2540C	<b>600</b>	5.0	1000	mg/L	10/02/18	10/04/18	1840061	
-------------------------------------	----------	------------	-----	------	------	----------	----------	---------	--

ND Analyte NOT DETECTED at or above the reporting limit





October 10, 2018

Clinical Laboratory of San Bernardino  
ATTN: Stu Styles  
21881 Barton Rd.  
Grand Terrace, CA 92313



LA Cert #04140  
EPA Methods TO3, TO14A, TO15, 25C/3C,  
RSK-175

TX Cert T104704450-14-6  
EPA Methods TO14A, TO15

UT Cert CA0133332015-3  
EPA Methods TO3, TO14A, TO15, RSK-175

### LABORATORY TEST RESULTS

Project Reference: 18J0186  
Lab Number: J100301-01

Enclosed are results for sample(s) received 10/03/18 by Air Technology Laboratories. Samples were received intact and chilled to 5° C. Analyses were performed according to specifications on the chain of custody provided with the sample(s).

#### Report Narrative:

- Unless otherwise noted in the report, sample analyses were performed within method performance criteria and meet all requirements of the TNI Standards.
- The enclosed results relate only to the sample(s).

ATL appreciates the opportunity to provide testing services to your company. If you have any questions regarding these results, please call me at (626) 964-4032.

Sincerely,

A handwritten signature in blue ink, appearing to read "Mark Johnson".

Mark Johnson  
Operations Manager  
MJohnson@AirTechLabs.com

Note: The cover letter is an integral part of this analytical report.

SUBCONTRACT ORDER  
Clinical Laboratory of San Bernardino  
18J0186

J100301-81

**SENDING LABORATORY:**

Clinical Laboratory of San Bernardino  
21881 Barton Road  
Grand Terrace, CA 92313  
Phone: 909.825.7693  
Fax: 909.825.7696  
Project Manager: Stu Styles

**RECEIVING LABORATORY:**

Air Technology Labs  
18501 East Gale Avenue Suite 130  
City of Industry, CA 91748  
Phone : (626) 964-4032  
Fax:

Please email results to Project Manager: Stu Styles

[ ] glaubig@clinical-lab.com [x] styles@clinical-lab.com [ ] nelson@clinical-lab.com

California EDT transfer those samples with PS codes provided [ ] Yes [x] No

Water Trax Upload Client: [ ] Yes [x] No

Turn Around Time [ ] 10 Days [x] 5 Days [ ] Other \_\_\_ Days

Subcontract Comments:

**Analysis****Comments**

Sample ID: Reservoir Effluent Site #5 / 18J0186-02

Sampled: 10/02/18 09:20 PS Code:  
Water

WTX ID:

01  
Methane RSK175

Report in mg/L

Containers Supplied:

40ml Amber Vial (B)

40ml Amber Vial (C)

5°C

Released By

Date / Time

Received By

Date / Time

Released By

Date / Time

Received By

Date / Time

**Client:** Clinical Laboratory  
**Attn:** Stu Styles  
**Project Name:** NA  
**Project No.:** 18J0186  
**Date Received:** 10/03/18  
**Matrix:** Water  
**Reporting Units:** mg/L

RSK175

<b>Lab No.:</b>	J100301-01						
<b>Client Sample I.D.:</b>	Reservoir Effluent Site #5/18J0186-02						
<b>Date/Time Sampled:</b>	10/2/18 9:20						
<b>Date/Time Analyzed:</b>	10/5/18 9:35						
<b>QC Batch No.:</b>	181004GC8A2						
<b>Analyst Initials:</b>	AS						
<b>Dilution Factor:</b>	1.0						
<b>ANALYTE</b>	<b>Result mg/L</b>	<b>RL mg/L</b>					
Methane	0.31	0.0010					

ND = Not Detected (below RL)  
 RL = Reporting Limit

Reviewed/Approved By: \_\_\_\_\_

  
 Mark Johnson  
 Operations Manager

Date \_\_\_\_\_

10/10/18

The cover letter is an integral part of this analytical report



## LCS/LCSD Recovery and RPD Summary Report

QC Batch #: 181004GC8A2

Matrix: Air

Reporting Units: mg/L

RSK175  
LABORATORY CONTROL SAMPLE SUMMARY

Lab No.:	METHOD BLANK			LCS		LCSD					
Date/Time Analyzed:	10/4/18 15:17			10/4/18 14:31		10/4/18 14:44					
Analyst Initials:	AS			AS		AS					
Dilution Factor:	1.0			1.0		1.0					
ANALYTE	Result mg/L	RL mg/L	SPIKE AMT. mg/L	Result mg/L	% Rec.	Result mg/L	% Rec.	RPD	Low %Rec	High %Rec	Max. RPD
Methane	ND	0.0010	0.65	0.638	97.5	0.697	107	8.9	70	130	30.0

ND= Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By: \_\_\_\_\_

Mark Johnson  
Operations Manager

Date

10/10/18

The cover letter is an integral part of this analytical report



1870-9

## "Your Water and Wastewater Analysis Solution"

# *Clinical Laboratory of San Bernardino, Inc.*



24 October 2018

Clinical Lab No.: 18J0898

Mark Andersen  
Lomita, City of  
24373 Walnut Avenue  
Lomita, CA 91717

Project Name: Standard Analysis  
Sub Project: CWPF Monthly Compliance Samples, 2nd Wk of Oct

Enclosed are the results of the analyses for samples received at the laboratory on 10/09/18 . Samples were received within temperature range, in correct containers and preservation.

Analyses were performed pursuant to client's chain of custody, within hold times, utilizing EPA or other ELAP approved methodologies.

I certify that the results are within compliance both technically and for completeness. Analytical results are attached to this letter. Please call if any additional information and or assistance are needed.

Thank you for choosing Clinical Laboratory of San Bernardino for your analytical needs.

Sincerely,

A handwritten signature in black ink, appearing to read 'Stu Styles', with a stylized flourish at the end.

Stu Styles  
Client Services Manager

# Clinical Laboratory of San Bernardino, Inc.



**Lomita, City of**  
24373 Walnut Avenue  
Lomita CA, 91717

Project: Standard Analysis  
Sub Project: CWP Monthly Compliance Samples, 2nd Wk of Oct  
Project Manager: Mark Andersen

Work Order: 18J0898  
Received: 10/09/18 15:45  
Reported: 10/24/18

**Raw Water Site #1** **18J0898-01 (Water)** **Sample Date:** 10/09/18 11:40 **Sampler:** Patrick McCue

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
---------	--------	--------	------------	-----	-------	----------	----------	-------	-----------

## Field Analyses

Cl Res Total (Field)	Field	0		N/A	mg/L	10/09/18	10/09/18	1841121	
pH (Field)	Field	7.4		N/A	pH Units	10/09/18	10/09/18	1841121	
Temperature (Field)	Field	23.5		N/A	°C	10/09/18	10/09/18	1841121	

## Microbiology Analyses

Total Coliform	SM 9223	A		N/A	P/A	10/09/18	10/10/18	1841126	
E. Coli	SM 9223	A		N/A	P/A	10/09/18	10/10/18	1841126	
Plate Count	SM9215B	65	1	500	CFU/ml	10/09/18	10/11/18	1841171	

## General Physical Analyses

Apparent Color	SM 2120BM	10.0	3.0	15	Color Units	10/09/18	10/09/18	1841132	
----------------	-----------	------	-----	----	-------------	----------	----------	---------	--

## General Chemical Analyses

Hardness, Total (as CaCO3)	Calculated	370	6.6	N/A	mg/L	10/18/18	10/18/18	[CALC]	
Total Filterable Residue/TDS	SM 2540C	750	5.0	1000	mg/L	10/10/18	10/11/18	1841044	

## Metals

Calcium (Ca)	EPA 200.7	99	1.0	N/A	mg/L	10/18/18	10/18/18	1842103	
Iron (Fe)	EPA 200.7	220	100	300	ug/L	10/19/18	10/19/18	1842157	
Magnesium (Mg)	EPA 200.7	30	1.0	N/A	mg/L	10/18/18	10/18/18	1842103	
Manganese (Mn)	EPA 200.7	150	20	50	ug/L	10/19/18	10/19/18	1842157	

**Filter Effluent (Free Chlorine) Site #2** **18J0898-02 (Water)** **Sample Date:** 10/09/18 11:55 **Sampler:** Patrick McCue

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
---------	--------	--------	------------	-----	-------	----------	----------	-------	-----------

## Field Analyses

Cl Res Total (Field)	Field	10.6		N/A	mg/L	10/09/18	10/09/18	1841121	
pH (Field)	Field	7.46		N/A	pH Units	10/09/18	10/09/18	1841121	
Temperature (Field)	Field	23.2		N/A	°C	10/09/18	10/09/18	1841121	

## Microbiology Analyses

Total Coliform	SM 9223	A		N/A	P/A	10/09/18	10/10/18	1841126	
E. Coli	SM 9223	A		N/A	P/A	10/09/18	10/10/18	1841126	
Plate Count	SM9215B	ND	1	500	CFU/ml	10/09/18	10/11/18	1841171	



# Clinical Laboratory of San Bernardino, Inc.



**Lomita, City of**  
24373 Walnut Avenue  
Lomita CA, 91717

Project: Standard Analysis  
Sub Project: CWPf Monthly Compliance Samples, 2nd Wk of Oct  
Project Manager: Mark Andersen

Work Order: 18J0898  
Received: 10/09/18 15:45  
Reported: 10/24/18

## Filter Effluent (Total Chlorine) Site #3

**18J0898-03 (Water)**

**Sample Date:** 10/09/18 12:00 **Sampler:** Patrick McCue

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
---------	--------	--------	------------	-----	-------	----------	----------	-------	-----------

### Field Analyses

<b>Cl Res Total (Field)</b>	Field	<b>9.8</b>		N/A	mg/L	10/09/18	10/09/18	1841121	
<b>pH (Field)</b>	Field	<b>7.6</b>		N/A	pH Units	10/09/18	10/09/18	1841121	
<b>Temperature (Field)</b>	Field	<b>23.2</b>		N/A	°C	10/09/18	10/09/18	1841121	

### General Physical Analyses

<b>Apparent Color</b>	SM 2120BM	<b>5.0</b>	3.0	15	Color Units	10/09/18	10/09/18	1841132	
-----------------------	-----------	------------	-----	----	-------------	----------	----------	---------	--

### Metals

Iron (Fe)	EPA 200.7	ND	100	300	ug/L	10/19/18	10/19/18	1842157	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	10/19/18	10/19/18	1842157	

## Zone #2 Site #6

**18J0898-04 (Water)**

**Sample Date:** 10/09/18 12:05 **Sampler:** Patrick McCue

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
---------	--------	--------	------------	-----	-------	----------	----------	-------	-----------

### Field Analyses

<b>Cl Res Total (Field)</b>	Field	<b>2.15</b>		N/A	mg/L	10/09/18	10/09/18	1841121	
<b>pH (Field)</b>	Field	<b>8.3</b>		N/A	pH Units	10/09/18	10/09/18	1841121	
<b>Temperature (Field)</b>	Field	<b>22.2</b>		N/A	°C	10/09/18	10/09/18	1841121	

### General Chemical Analyses

<b>Hardness, Total (as CaCO3)</b>	Calculated	<b>160</b>	6.6	N/A	mg/L	10/15/18	10/16/18	[CALC]	
<b>Total Filterable Residue/TDS</b>	SM 2540C	<b>360</b>	5.0	1000	mg/L	10/10/18	10/11/18	1841044	

### Metals

<b>Calcium (Ca)</b>	EPA 200.7	<b>37</b>	1.0	N/A	mg/L	10/15/18	10/16/18	1842026	
<b>Magnesium (Mg)</b>	EPA 200.7	<b>15</b>	1.0	N/A	mg/L	10/15/18	10/16/18	1842026	



# Clinical Laboratory of San Bernardino, Inc.



**Lomita, City of**  
24373 Walnut Avenue  
Lomita CA, 91717

Project: Standard Analysis  
Sub Project: CWPf Monthly Compliance Samples, 2nd Wk of Oct  
Project Manager: Mark Andersen

Work Order: 18J0898  
Received: 10/09/18 15:45  
Reported: 10/24/18

**Reservoir Effluent Site #5**      **18J0898-05 (Water)**      **Sample Date:** 10/09/18 12:10      **Sampler:** Patrick McCue

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
---------	--------	--------	------------	-----	-------	----------	----------	-------	-----------

## Field Analyses

<b>Cl Res Total (Field)</b>	Field	<b>3.44</b>		N/A	mg/L	10/09/18	10/09/18	1841121	
<b>pH (Field)</b>	Field	<b>7.86</b>		N/A	pH Units	10/09/18	10/09/18	1841121	
<b>Temperature (Field)</b>	Field	<b>22.8</b>		N/A	°C	10/09/18	10/09/18	1841121	

## General Physical Analyses

<b>Odor Threshold</b>	EPA 140.1-M	<b>2</b>	1	3	TON	10/09/18	10/09/18	1841132	
-----------------------	-------------	----------	---	---	-----	----------	----------	---------	--

## General Chemical Analyses

<b>Hardness, Total (as CaCO<sub>3</sub>)</b>	Calculated	<b>250</b>	6.6	N/A	mg/L	10/15/18	10/16/18	[CALC]	
<b>Total Filterable Residue/TDS</b>	SM 2540C	<b>580</b>	5.0	1000	mg/L	10/10/18	10/11/18	1841044	

## Metals

<b>Calcium (Ca)</b>	EPA 200.7	<b>64</b>	1.0	N/A	mg/L	10/15/18	10/16/18	1842026	
<b>Magnesium (Mg)</b>	EPA 200.7	<b>22</b>	1.0	N/A	mg/L	10/15/18	10/16/18	1842026	

ND      Analyte NOT DETECTED at or above the reporting limit



October 18, 2018

Clinical Laboratory of San Bernardino  
ATTN: Stu Styles  
21881 Barton Rd.  
Grand Terrace, CA 92313



LA Cert #04140  
EPA Methods TO3, TO14A, TO15, 25C/3C,  
RSK-175

TX Cert T104704450-14-6  
EPA Methods TO14A, TO15

UT Cert CA0133332015-3  
EPA Methods TO3, TO14A, TO15, RSK-175

### LABORATORY TEST RESULTS

Project Reference: 18J0898  
Lab Number: J101105-01/02

Enclosed are results for sample(s) received 10/11/18 by Air Technology Laboratories. Samples were received intact and chilled to 5° C. Analyses were performed according to specifications on the chain of custody provided with the sample(s).

#### Report Narrative:

- Unless otherwise noted in the report, sample analyses were performed within method performance criteria and meet all requirements of the TNI Standards.
- The enclosed results relate only to the sample(s).

ATL appreciates the opportunity to provide testing services to your company. If you have any questions regarding these results, please call me at (626) 964-4032.

Sincerely,

A handwritten signature in blue ink, appearing to read "Mark Johnson".

Mark Johnson  
Operations Manager  
MJohnson@AirTechLabs.com

Note: The cover letter is an integral part of this analytical report.

**SUBCONTRACT ORDER**  
**Clinical Laboratory of San Bernardino**  
**18J0898**

J101105-0102

**SENDING LABORATORY:**

Clinical Laboratory of San Bernardino  
21881 Barton Road  
Grand Terrace, CA 92313  
Phone: 909.825.7693  
Fax: 909.825.7696  
Project Manager: Stu Styles

**RECEIVING LABORATORY:**

Air Technology Labs  
18501 East Gale Avenue Suite 130  
City of Industry, CA 91748  
Phone : (626) 964-4032  
Fax:

Please email results to Project Manager: Stu Styles

[ ] glaubig@clinical-lab.com [x] styles@clinical-lab.com [ ] nelson@clinical-lab.com

California EDT transfer those samples with PS codes provided [ ] Yes [x] No

Water Trax Upload Client: [ ] Yes [x] No

Turn Around Time [ ] 10 Days [x] 5 Days [ ] Other \_\_\_ Days

Subcontract Comments:

**Analysis****Comments****Sample ID: Raw Water Site #1 / 18J0898-01****Sampled: 10/09/18 11:40 PS Code:**  
**Water****WTX ID:**

Methane RSK175

Report in mg/L

Containers Supplied:

40ml Amber Vial (B)

40ml Amber Vial (C)

**Sample ID: Reservoir Effluent Site #5 / 18J0898-05****Sampled: 10/09/18 12:10 PS Code:**  
**Water****WTX ID:**

Methane RSK175

Report in mg/L

Containers Supplied:

40ml Amber Vial (B)

40ml Amber Vial (C)

Released By

Date / Time

Received By

Date / Time

Released By

Date / Time

Received By

Date / Time

**Client:** Clinical Laboratory  
**Attn:** Stu Styles  
**Project Name:** NA  
**Project No.:** 18J0898  
**Date Received:** 10/11/18  
**Matrix:** Water  
**Reporting Units:** ug/L

RSK175

Lab No.:	J101105-01	J101105-02		
Client Sample I.D.:	Raw Water Site #1 / 18J0898-01	Reservoir Effluent Site #5 / 18J0898-05		
Date/Time Sampled:	10/9/18 11:40	10/9/18 12:10		
Date/Time Analyzed:	10/11/18 15:28	10/11/18 15:16		
QC Batch No.:	181011GC8A1	181011GC8A1		
Analyst Initials:	AS	AS		
Dilution Factor:	1.0	1.0		
ANALYTE	Result ug/L	RL ug/L	Result ug/L	RL ug/L
Methane	2,000	1.0	180	1.0

ND = Not Detected (below RL)  
 RL = Reporting Limit

Reviewed/Approved By: Mark Johnson  
 Mark Johnson  
 Operations Manager

Date 10/18/18

The cover letter is an integral part of this analytical report



## LCS/LCSD Recovery and RPD Summary Report

QC Batch #: 181011GC8A1

Matrix: Air

Reporting Units: ug/L

RSK175 LABORATORY CONTROL SAMPLE SUMMARY											
Lab No.:		METHOD BLANK		LCS		LCSD					
Date/Time Analyzed:		10/11/18 11:52		10/11/18 11:24		10/11/18 11:37					
Analyst Initials:		AS		AS		AS					
Dilution Factor:		1.0		1.0		1.0					
ANALYTE	Result ug/L	RL ug/L	SPIKE AMT. ug/L	Result ug/L	% Rec.	Result ug/L	% Rec.	RPD	Low %Rec	High %Rec	Max. RPD
Ethene	ND	1.0	1,150	1,060	92.6	1,050	91.6	1.1	70	130	30
Ethane	ND	1.0	1,230	1,200	98.0	1,200	97.6	0.4	70	130	30
Methane	ND	1.0	654	653	99.8	654	99.9	0.2	70	130	30

ND= Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By: \_\_\_\_\_

Mark Johnson  
Operations Manager

Date

10/18/18

The cover letter is an integral part of this analytical report





18J0898

Client		City of Lomita		System Number		Analysis Requested													
Address		24373 Walnut Avenue		1910073															
Phone #		Lomita, CA 91717		Destination Laboratory															
Fax #		(310)903-2243		[X] Clinical Laboratory															
Project		Standard Analysis		RWQCB Compliance															
Sub Project		CWPFC Monthly Compliance Samples; 2nd week of October, 2018		YES ELAP #															
Comments				1088															
Sampled by		Patrick McCue																	
Date	Time	Sample Identification	Matrix	Type	Preserv	Temp.	pH	Total Chlorine	Total Dissolved Solids	Iron & Manganese	E. Coli	Total Coliform	Heterotrophic Plate Count	Nitrate	Color	Odor	Methane (WATER) (RSK175)	Hardness	
10/9/2018	1140	Raw Water Site #1	GW	IW	N/A	23.5°	7.40	Ø	X	X	X	X			X				
10/9/2018	1140	Raw Water Site #1	GW	IW	1, 2, 7												X		
10/9/2018	1155	Filter Effluent (Free Chlorine) Site#2	DW	IW	1, 7	23.2°	7.46	10.6			X	X							
10/9/2018	1200	Filter Effluent (Total Chlorine) Site#3	DW	IW	N/A	23.2°	7.60	9.8		X					X				
10/9/2018	1205	Zone #2 Site #6	DW	ID	N/A	22.2°	8.30	2.15	X								X		
10/9/2018	1210	Reservoir Effluent Site #5	DW	ID	N/A	22.8°	7.86	3.44	X						X				
10/9/2018	1210	Reservoir Effluent Site #5	DW	ID	2, 7												X		
Preservatives: (1) Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> (2) HCl (3) HNO <sub>3</sub> (4) NH <sub>4</sub> Cl (5) H <sub>2</sub> SO <sub>4</sub> (6) Na <sub>2</sub> SO <sub>3</sub> (7) Gold (8) Other:		Matrix: DW-Drinking Water, WW-Waste Water, SW-Storm Water, GW- Ground Water, A-Air		3-Replacement, 4-Special W-Well D-Dist		Type- 1-Routine, 2-Repeat,													
Relinquished By (Sign)		Print Name / Company		Date / Time		Received By (Sign)		Print Name / Company											
Patrick McCue		Patrick McCue / City of Lomita		10/9/2018 / 1:15		Chris Martinez		Chris Martinez											
Chris M				10-9-18 3:45		Jeanette Hernandez		Jeanette Hernandez											
Comments:						Samples received: ( ) On ice ( ) Intact ( ) Custody seals Temp 11.4 ( ) F ( ) C													
Shipped Via		Fed X		Golden State		UPS		Client		Other		Page 1 of 1							

# *Clinical Laboratory of San Bernardino, Inc.*



29 October 2018

Clinical Lab No.: 18J1392

Mark Andersen  
Lomita, City of  
24373 Walnut Avenue  
Lomita, CA 91717

Project Name: Standard Analysis  
Sub Project: CWPF 3rd Week of October, 2018 Compliance Sampling

Enclosed are the results of the analyses for samples received at the laboratory on 10/16/18 . Samples were received within temperature range, in correct containers and preservation.

Analyses were performed pursuant to client's chain of custody, within hold times, utilizing EPA or other ELAP approved methodologies.

I certify that the results are within compliance both technically and for completeness. Analytical results are attached to this letter. Please call if any additional information and or assistance are needed.

Thank you for choosing Clinical Laboratory of San Bernardino for your analytical needs.

Sincerely,

A handwritten signature in black ink, appearing to read "Stu Styles", is written over a light blue horizontal line.

Stu Styles  
Client Services Manager

# Clinical Laboratory of San Bernardino, Inc.



**Lomita, City of**  
24373 Walnut Avenue  
Lomita CA, 91717

Project: Standard Analysis  
Sub Project: CWPf 3rd Week of October, 2018 Compliance Sampling  
Project Manager: Mark Andersen

Work Order: 18J1392  
Received: 10/16/18 15:28  
Reported: 10/29/18

**Reservoir Influent Site #3** **18J1392-01 (Water)** **Sample Date:** 10/16/18 9:45 **Sampler:** P.M.

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
---------	--------	--------	------------	-----	-------	----------	----------	-------	-----------

## Field Analyses

<b>Cl Res Total (Field)</b>	Field	<b>10.7</b>		N/A	mg/L	10/16/18	10/16/18	1842072	
<b>pH (Field)</b>	Field	<b>7.92</b>		N/A	pH Units	10/16/18	10/16/18	1842072	
<b>Temperature (Field)</b>	Field	<b>22.5</b>		N/A	°C	10/16/18	10/16/18	1842072	

## General Physical Analyses

<b>Apparent Color</b>	SM 2120BM	<b>5.0</b>	3.0	15	Color Units	10/16/18	10/16/18	1842090	
-----------------------	-----------	------------	-----	----	-------------	----------	----------	---------	--

## Metals

Iron (Fe)	EPA 200.7	ND	100	300	ug/L	10/26/18	10/26/18	1843133	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	10/26/18	10/26/18	1843133	

**Reservoir Effluent Site #5** **18J1392-02 (Water)** **Sample Date:** 10/16/18 9:55 **Sampler:** P.M.

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
---------	--------	--------	------------	-----	-------	----------	----------	-------	-----------

## Field Analyses

<b>Cl Res Total (Field)</b>	Field	<b>3.76</b>		N/A	mg/L	10/16/18	10/16/18	1842072	
<b>pH (Field)</b>	Field	<b>8.21</b>		N/A	pH Units	10/16/18	10/16/18	1842072	
<b>Temperature (Field)</b>	Field	<b>22.5</b>		N/A	°C	10/16/18	10/16/18	1842072	

## General Physical Analyses

<b>Apparent Color</b>	SM 2120BM	ND	3.0	15	Color Units	10/16/18	10/16/18	1842090	
<b>Odor Threshold</b>	EPA 140.1-M	<b>2</b>	1	3	TON	10/16/18	10/16/18	1842090	

## General Chemical Analyses

<b>Total Filterable Residue/TDS</b>	SM 2540C	<b>620</b>	5.0	1000	mg/L	10/17/18	10/18/18	1842071	
-------------------------------------	----------	------------	-----	------	------	----------	----------	---------	--

ND Analyte NOT DETECTED at or above the reporting limit





October 25, 2018

Clinical Laboratory of San Bernardino  
ATTN: Stu Styles  
21881 Barton Rd.  
Grand Terrace, CA 92313



LA Cert #04140  
EPA Methods TO3, TO14A, TO15, 25C/3C,  
RSK-175

TX Cert T104704450-14-6  
EPA Methods TO14A, TO15

UT Cert CA0133332015-3  
EPA Methods TO3, TO14A, TO15, RSK-175

### LABORATORY TEST RESULTS

Project Reference: 18J1392  
Lab Number: J101701-01

Enclosed are results for sample(s) received 10/17/18 by Air Technology Laboratories. Samples were received intact and chilled to 7° C. Analyses were performed according to specifications on the chain of custody provided with the sample(s).

#### Report Narrative:

- Unless otherwise noted in the report, sample analyses were performed within method performance criteria and meet all requirements of the TNI Standards.
- The enclosed results relate only to the sample(s).

ATL appreciates the opportunity to provide testing services to your company. If you have any questions regarding these results, please call me at (626) 964-4032.

Sincerely,

A handwritten signature in blue ink that appears to read "M. Johnson".

Mark Johnson  
Operations Manager  
MJohnson@AirTechLabs.com

Note: The cover letter is an integral part of this analytical report.

SUBCONTRACT ORDER  
Clinical Laboratory of San Bernardino  
18J1392

J101701-01

SENDING LABORATORY:

Clinical Laboratory of San Bernardino  
21881 Barton Road  
Grand Terrace, CA 92313  
Phone: 909.825.7693  
Fax: 909.825.7696  
Project Manager: Stu Styles

RECEIVING LABORATORY:

Air Technology Labs  
18501 East Gale Avenue Suite 130  
City of Industry, CA 91748  
Phone : (626) 964-4032  
Fax:

Please email results to Project Manager: Stu Styles

[ ] glaubig@clinical-lab.com [x] styles@clinical-lab.com [ ] nelson@clinical-lab.com

California EDT transfer those samples with PS codes provided [ ] Yes [x] No

Water Trax Upload Client: [ ] Yes [x] No

Turn Around Time [ ] 10 Days [x] 5 Days [ ] Other \_\_\_ Days

Subcontract Comments:

AnalysisComments

Sample ID: Reservoir Effluent Site #5 / 18J1392-02

Sampled: 10/16/18 09:55 PS Code:  
Water

WTX ID:

Methane RSK175

Report in mg/L

Containers Supplied:

40ml Amber Vial (B)

40ml Amber Vial (C)

7°C

Released By

10/17/18 07:30

Date / Time

Received By

10/17/18 8:35

Date / Time

Released By

10/17/18 10:00

Date / Time

Received By

10/17/18 1:00

Date / Time

**Client:** Clinical Laboratory  
**Attn:** Stu Styles  
**Project Name:** NA  
**Project No.:** 18J1392  
**Date Received:** 10/17/18  
**Matrix:** Water  
**Reporting Units:** mg/L

RSK175

<b>Lab No.:</b>	<b>J101701-01</b>						
<b>Client Sample I.D.:</b>	<b>Reservoir Effluent Site #5/18J1392-02</b>						
<b>Date/Time Sampled:</b>	<b>10/16/18 9:55</b>						
<b>Date/Time Analyzed:</b>	<b>10/24/18 12:37</b>						
<b>QC Batch No.:</b>	<b>181024GC8A1</b>						
<b>Analyst Initials:</b>	<b>CM/MJ</b>						
<b>Dilution Factor:</b>	<b>1.0</b>						
<b>ANALYTE</b>	<b>Result mg/L</b>	<b>RL mg/L</b>					
Ethene	ND	0.0010					
Ethane	0.00026	0.0010					
Methane	0.32	0.0010					

ND = Not Detected (below RL)  
 RL = Reporting Limit

Reviewed/Approved By: \_\_\_\_\_

  
 Mark Johnson  
 Operations Manager

Date 10/25/18

The cover letter is an integral part of this analytical report



## LCS/LCSD Recovery and RPD Summary Report

QC Batch #: 181024GC8A1

Matrix: Air

Reporting Units: mg/L

RSK175  
LABORATORY CONTROL SAMPLE SUMMARY

Lab No.:		METHOD BLANK			LCS		LCSD				
Date/Time Analyzed:		10/24/18 11:39			10/24/18 10:59		10/24/18 11:22				
Analyst Initials:		CM/MJ			CM/MJ		CM/MJ				
Dilution Factor:		1.0			1.0		1.0				
ANALYTE	Result mg/L	RL mg/L	SPIKE AMT. mg/L	Result mg/L	% Rec.	Result mg/L	% Rec.	RPD	Low %Rec	High %Rec	Max. RPD
Ethene	ND	0.0010	1.15	1.06	92.6	1.01	87.8	5.3	70	130	30
Ethane	ND	0.0010	1.23	1.19	96.7	1.11	90.2	6.9	70	130	30
Methane	ND	0.0010	0.654	0.599	91.5	0.566	86.4	5.7	70	130	30

ND= Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By: \_\_\_\_\_

Mark Johnson  
Operations Manager

Date \_\_\_\_\_

The cover letter is an integral part of this analytical report



03/4

18/1392

*"Your Water and Waste" Water Analysis Solution"*

# *Clinical Laboratory of San Bernardino, Inc.*



05 November 2018

Clinical Lab No.: 18J2007

Mark Andersen  
Lomita, City of  
24373 Walnut Avenue  
Lomita, CA 91717

Project Name: Standard Analysis  
Sub Project: CWPF 4th Week of October, 2018 Compliance Sampling

Enclosed are the results of the analyses for samples received at the laboratory on 10/23/18 . Samples were received within temperature range, in correct containers and preservation.

Analyses were performed pursuant to client's chain of custody, within hold times, utilizing EPA or other ELAP approved methodologies.

I certify that the results are within compliance both technically and for completeness. Analytical results are attached to this letter. Please call if any additional information and or assistance are needed.

Thank you for choosing Clinical Laboratory of San Bernardino for your analytical needs.

Sincerely,

A handwritten signature in black ink, appearing to read 'Stu Styles', with a stylized flourish at the end.

Stu Styles  
Client Services Manager



# Clinical Laboratory of San Bernardino, Inc.



**Lomita, City of**  
24373 Walnut Avenue  
Lomita CA, 91717

Project: Standard Analysis  
Sub Project: CWPf 4th Week of October, 2018 Compliance Sampling  
Project Manager: Mark Andersen

Work Order: 18J2007  
Received: 10/23/18 18:30  
Reported: 11/05/18

**Reservoir Influent Site #3** **18J2007-01 (Water)** **Sample Date:** 10/23/18 10:05 **Sampler:** P.M.

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
---------	--------	--------	------------	-----	-------	----------	----------	-------	-----------

## Field Analyses

<b>Cl Res Total (Field)</b>	Field	<b>11</b>		N/A	mg/L	10/23/18	10/23/18	1843075	
<b>pH (Field)</b>	Field	<b>7.94</b>		N/A	pH Units	10/23/18	10/23/18	1843075	
<b>Temperature (Field)</b>	Field	<b>22.6</b>		N/A	°C	10/23/18	10/23/18	1843075	

## General Physical Analyses

<b>Apparent Color</b>	SM 2120BM	<b>5.0</b>	3.0	15	Color Units	10/23/18	10/23/18	1843109	
-----------------------	-----------	------------	-----	----	-------------	----------	----------	---------	--

## Metals

Iron (Fe)	EPA 200.7	ND	100	300	ug/L	11/01/18	11/01/18	1844087	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	11/01/18	11/01/18	1844087	

**Reservoir Effluent Site #5** **18J2007-02 (Water)** **Sample Date:** 10/23/18 10:25 **Sampler:** P.M.

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
---------	--------	--------	------------	-----	-------	----------	----------	-------	-----------

## Field Analyses

<b>Cl Res Total (Field)</b>	Field	<b>3.45</b>		N/A	mg/L	10/23/18	10/23/18	1843075	
<b>pH (Field)</b>	Field	<b>8.18</b>		N/A	pH Units	10/23/18	10/23/18	1843075	
<b>Temperature (Field)</b>	Field	<b>21.4</b>		N/A	°C	10/23/18	10/23/18	1843075	

## General Physical Analyses

<b>Apparent Color</b>	SM 2120BM	ND	3.0	15	Color Units	10/23/18	10/23/18	1843109	
<b>Odor Threshold</b>	EPA 140.1-M	<b>2</b>	1	3	TON	10/23/18	10/23/18	1843109	

## General Chemical Analyses

<b>Total Filterable Residue/TDS</b>	SM 2540C	<b>650</b>	5.0	1000	mg/L	10/25/18	11/01/18	1843106	
-------------------------------------	----------	------------	-----	------	------	----------	----------	---------	--

ND Analyte NOT DETECTED at or above the reporting limit



November 1, 2018

Clinical Laboratory of San Bernardino  
ATTN: Stu Styles  
21881 Barton Rd.  
Grand Terrace, CA 92313



LA Cert #04140  
EPA Methods TO3, TO14A, TO15, 25C/3C,  
RSK-175

TX Cert T104704450-14-6  
EPA Methods TO14A, TO15

UT Cert CA0133332015-3  
EPA Methods TO3, TO14A, TO15, RSK-175

### LABORATORY TEST RESULTS

Project Reference: 18J2007  
Lab Number: J102504-01

Enclosed are results for sample(s) received 10/25/18 by Air Technology Laboratories. Samples were received intact and chilled to 5° C. Analyses were performed according to specifications on the chain of custody provided with the sample(s).

#### Report Narrative:

- Unless otherwise noted in the report, sample analyses were performed within method performance criteria and meet all requirements of the TNI Standards.
- The enclosed results relate only to the sample(s).

ATL appreciates the opportunity to provide testing services to your company. If you have any questions regarding these results, please call me at (626) 964-4032.

Sincerely,

A handwritten signature in blue ink, appearing to read "Mark Johnson", with a small blue checkmark or flourish to the right.

Mark Johnson  
Operations Manager  
MJohnson@AirTechLabs.com

Note: The cover letter is an integral part of this analytical report.

**SUBCONTRACT ORDER**  
**Clinical Laboratory of San Bernardino**  
**18J2007**

2 of 4  
J102504

J102504-01

**SENDING LABORATORY:**

Clinical Laboratory of San Bernardino  
21881 Barton Road  
Grand Terrace, CA 92313  
Phone: 909.825.7693  
Fax: 909.825.7696  
Project Manager: Stu Styles

**RECEIVING LABORATORY:**

Air Technology Labs  
18501 East Gale Avenue Suite 130  
City of Industry, CA 91748  
Phone : (626) 964-4032  
Fax:

Please email results to Project Manager: Stu Styles

[ ] glaubig@clinical-lab.com [x] styles@clinical-lab.com [ ] nelson@clinical-lab.com

California EDT transfer those samples with PS codes provided [ ] Yes [x] No

Water Trax Upload Client: [ ] Yes [x] No

Turn Around Time [ ] 10 Days [x] 5 Days [ ] Other \_\_\_ Days

Subcontract Comments:

**Analysis**

**Comments**

Sample ID: Reservoir Effluent Site #5 / 18J2007-02

Sampled: 10/23/18 10:25 PS Code:  
Water

WTX ID:

Methane RSK175

Report in mg/L

Containers Supplied:

40ml Amber Vial (B)

40ml Amber Vial (C)

Released By

Date / Time

Received By

Date / Time

Released By

Date / Time

Received By

Date / Time

5°C

Client: Clinical Laboratory  
Attn: Stu Styles  
Project Name: NA  
Project No.: 18J2007  
Date Received: 10/25/18  
Matrix: Water  
Reporting Units: mg/L

RSK175

Lab No.:	J102504-01											
Client Sample I.D.:	Reservoir Effluent Site #5/18J2007-02											
Date/Time Sampled:	10/23/18 10:25											
Date/Time Analyzed:	10/30/18 15:32											
QC Batch No.:	181030GC8A1											
Analyst Initials:	CM/MJ											
Dilution Factor:	1.0											
ANALYTE	Result mg/L	RL mg/L										
Methane	0.30	0.0010										

ND= Not Detected (below RL)  
RL = Reporting Limit

Reviewed/Approved By: \_\_\_\_\_

  
Mark Johnson  
Operations Manager

Date 11/1/18

The cover letter is an integral part of this analytical report



## LCS/LCSD Recovery and RPD Summary Report

QC Batch #: 181030GC8A1

Matrix: Air

Reporting Units: mg/L

RSK175  
LABORATORY CONTROL SAMPLE SUMMARY

Lab No.:	METHOD BLANK			LCS		LCSD					
Date/Time Analyzed:	10/30/18 15:14			10/30/18 12:04		10/30/18 12:18					
Analyst Initials:	CM/MJ			CM/MJ		CM/MJ					
Dilution Factor:	1.0			1.0		1.0					
ANALYTE	Result mg/L	RL mg/L	SPIKE AMT. mg/L	Result mg/L	% Rec.	Result mg/L	% Rec.	RPD	Low %Rec	High %Rec	Max. RPD
Methane	ND	0.0010	0.654	0.629	96.1	0.639	97.7	1.6	70	130	30

ND= Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By: \_\_\_\_\_

Mark Johnson  
Operations Manager

Date \_\_\_\_\_

11/1/18

The cover letter is an integral part of this analytical report



*"Your 'Water and Wastewater Analysis Solution"*



# *Clinical Laboratory of San Bernardino, Inc.*



07 November 2018

Clinical Lab No.: 18K0006

Mark Andersen  
Lomita, City of  
24373 Walnut Avenue  
Lomita, CA 91717

Project Name: Standard Analysis  
Sub Project: CWPF 5th Week of October, 2018 Compliance Sampling

Enclosed are the results of the analyses for samples received at the laboratory on 10/30/18 . Samples were received within temperature range, in correct containers and preservation.

Analyses were performed pursuant to client's chain of custody, within hold times, utilizing EPA or other ELAP approved methodologies.

I certify that the results are within compliance both technically and for completeness. Analytical results are attached to this letter. Please call if any additional information and or assistance are needed.

Thank you for choosing Clinical Laboratory of San Bernardino for your analytical needs.

Sincerely,

A handwritten signature in black ink, appearing to read 'Stu Styles', with a stylized flourish at the end.

Stu Styles  
Client Services Manager

# Clinical Laboratory of San Bernardino, Inc.



**Lomita, City of**  
24373 Walnut Avenue  
Lomita CA, 91717

Project: Standard Analysis  
Sub Project: CWPf 5th Week of October, 2018 Compliance Sampling  
Project Manager: Mark Andersen

Work Order: 18K0006  
Received: 10/30/18 16:40  
Reported: 11/07/18

**Reservoir Influent Site #3** **18K0006-01 (Water)** **Sample Date:** 10/30/18 10:55 **Sampler:** P.M.

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
---------	--------	--------	------------	-----	-------	----------	----------	-------	-----------

## Field Analyses

<b>Cl Res Total (Field)</b>	Field	<b>9.2</b>		N/A	mg/L	10/30/18	10/30/18	1844106	
<b>pH (Field)</b>	Field	<b>7.53</b>		N/A	pH Units	10/30/18	10/30/18	1844106	
<b>Temperature (Field)</b>	Field	<b>22.3</b>		N/A	°C	10/30/18	10/30/18	1844106	

## General Physical Analyses

<b>Apparent Color</b>	SM 2120BM	<b>5.0</b>	3.0	15	Color Units	10/30/18	10/30/18	1844095	
-----------------------	-----------	------------	-----	----	-------------	----------	----------	---------	--

## Metals

Iron (Fe)	EPA 200.7	ND	100	300	ug/L	11/05/18	11/05/18	1845027	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	11/05/18	11/05/18	1845027	

**Reservoir Effluent Site #5** **18K0006-02 (Water)** **Sample Date:** 10/30/18 11:10 **Sampler:** P.M.

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
---------	--------	--------	------------	-----	-------	----------	----------	-------	-----------

## Field Analyses

<b>Cl Res Total (Field)</b>	Field	<b>2.86</b>		N/A	mg/L	10/30/18	10/30/18	1844106	
<b>pH (Field)</b>	Field	<b>7.72</b>		N/A	pH Units	10/30/18	10/30/18	1844106	
<b>Temperature (Field)</b>	Field	<b>21.7</b>		N/A	°C	10/30/18	10/30/18	1844106	

## General Physical Analyses

<b>Apparent Color</b>	SM 2120BM	ND	3.0	15	Color Units	10/30/18	10/30/18	1844095	
<b>Odor Threshold</b>	EPA 140.1-M	<b>2</b>	1	3	TON	10/30/18	10/30/18	1844095	

## General Chemical Analyses

<b>Total Filterable Residue/TDS</b>	SM 2540C	<b>530</b>	5.0	1000	mg/L	11/05/18	11/07/18	1845025	
-------------------------------------	----------	------------	-----	------	------	----------	----------	---------	--

ND Analyte NOT DETECTED at or above the reporting limit



November 8, 2018



Clinical Laboratory of San Bernardino  
ATTN: Stu Styles  
21881 Barton Rd.  
Grand Terrace, CA 92313

LA Cert #04140  
EPA Methods TO3, TO14A, TO15, 25C/3C,  
RSK-175

TX Cert T104704450-14-6  
EPA Methods TO14A, TO15

UT Cert CA0133332015-3  
EPA Methods TO3, TO14A, TO15, RSK-175

### LABORATORY TEST RESULTS

Project Reference: 18K0006  
Lab Number: J110204-01

Enclosed are results for sample(s) received 11/02/18 by Air Technology Laboratories. Samples were received intact and chilled to 3° C. Analyses were performed according to specifications on the chain of custody provided with the sample(s).

#### Report Narrative:

- Unless otherwise noted in the report, sample analyses were performed within method performance criteria and meet all requirements of the TNI Standards.
- The enclosed results relate only to the sample(s).

ATL appreciates the opportunity to provide testing services to your company. If you have any questions regarding these results, please call me at (626) 964-4032.

Sincerely,

A handwritten signature in blue ink, appearing to read "Mark Johnson", with a stylized flourish at the end.

Mark Johnson  
Operations Manager  
MJohnson@AirTechLabs.com

Note: The cover letter is an integral part of this analytical report.

**SUBCONTRACT ORDER**  
**Clinical Laboratory of San Bernardino**  
**18K0006**

2 of 4  
J110204

J110204-81

**SENDING LABORATORY:**

Clinical Laboratory of San Bernardino  
21881 Barton Road  
Grand Terrace, CA 92313  
Phone: 909.825.7693  
Fax: 909.825.7696  
Project Manager: Stu Styles

**RECEIVING LABORATORY:**

Air Technology Labs  
18501 East Gale Avenue Suite 130  
City of Industry, CA 91748  
Phone : (626) 964-4032  
Fax:

Please email results to Project Manager: Stu Styles

[ ] glaubig@clinical-lab.com [x] styles@clinical-lab.com [ ] nelson@clinical-lab.com

California EDT transfer those samples with PS codes provided [ ] Yes [x] No  
Water Trax Upload Client: [ ] Yes [x] No

Turn Around Time [ ] 10 Days [x] 5 Days [ ] Other \_\_\_ Days

Subcontract Comments:

**Analysis**

**Comments**

Sample ID: Reservoir Effluent Site #5 / 18K0006-02

Sampled: 10/30/18 11:10 PS Code:  
Water

WTX ID:

Methane RSK175

Report in mg/L

Containers Supplied:

40ml Amber Vial (B)

40ml Amber Vial (C)

30C

Released By

Date / Time

Received By

Date / Time

Released By

Date / Time

Received By

Date / Time

Client: Clinical Laboratory  
Attn: Stu Styles  
Project Name: NA  
Project No.: 18K0006  
Date Received: 11/02/18  
Matrix: Water  
Reporting Units: mg/L

RSK175

Lab No.:	J110204-01											
Client Sample I.D.:	Reservoir Effluent Site #5 / 18K0006-02											
Date/Time Sampled:	10/30/18 11:10											
Date/Time Analyzed:	11/7/18 13:06											
QC Batch No.:	181107GC8A1											
Analyst Initials:	CM/MJ											
Dilution Factor:	1.0											
ANALYTE	Result mg/L	RL mg/L										
Methane	0.29	0.0010										

ND= Not Detected (below RL)  
RL = Reporting Limit

Reviewed/Approved By: \_\_\_\_\_

  
Mark Johnson  
Operations Manager

Date \_\_\_\_\_

11/8/18

The cover letter is an integral part of this analytical report



## LCS/LCSD Recovery and RPD Summary Report

QC Batch #: 181107GC8A1

Matrix: Air

Reporting Units: mg/L

RSK175 LABORATORY CONTROL SAMPLE SUMMARY											
Lab No.:	METHOD BLANK			LCS		LCSD					
Date/Time Analyzed:	11/7/18 12:19			11/7/18 10:41		11/7/18 10:56					
Analyst Initials:	CM/MJ			CM/MJ		CM/MJ					
Dilution Factor:	1.0			1.0		1.0					
ANALYTE	Result mg/L	RL mg/L	SPIKE AMT. mg/L	Result mg/L	% Rec.	Result mg/L	% Rec.	RPD	Low %Rec	High %Rec	Max. RPD
Methane	ND	0.0010	0.654	0.610	93.3	0.618	94.4	1.2	70	130	30

ND= Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By: \_\_\_\_\_

Mark Johnson  
Operations Manager

Date

11/8/18

The cover letter is an integral part of this analytical report





*"Your Water and Wastewater Analysis Solution"*

# *Clinical Laboratory of San Bernardino, Inc.*



19 October 2018

Clinical Lab No.: 18J0818

Mark Andersen  
Lomita, City of  
24373 Walnut Avenue  
Lomita, CA 91717

Project Name: Standard Analysis  
Sub Project: Lomita Distribution Ortho, 2nd Week October 2018

Enclosed are the results of the analyses for samples received at the laboratory on 10/09/18 . Samples were received within temperature range, in correct containers and preservation.

Analyses were performed pursuant to client's chain of custody, within hold times, utilizing EPA or other ELAP approved methodologies.

I certify that the results are within compliance both technically and for completeness. Analytical results are attached to this letter. Please call if any additional information and or assistance are needed.

Thank you for choosing Clinical Laboratory of San Bernardino for your analytical needs.

Sincerely,

Stu Styles  
Client Services Manager

# Clinical Laboratory of San Bernardino, Inc.



**Lomita, City of**  
24373 Walnut Avenue  
Lomita CA, 91717

Project: Standard Analysis  
Sub Project: Lomita Distribution Ortho, 2nd Week October 2018  
Project Manager: Mark Andersen

Work Order: 18J0818  
Received: 10/09/18 15:45  
Reported: 10/19/18

**1948 252nd St.**

**18J0818-01 (Water)**

**Sample Date:** 10/09/18 9:15 **Sampler:** Not Listed

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
---------	--------	--------	------------	-----	-------	----------	----------	-------	-----------

## Field Analyses

<b>Cl Res Total (Field)</b>	Field	<b>2.2</b>		N/A	mg/L	10/09/18	10/09/18	1841113	
<b>pH (Field)</b>	Field	<b>8.22</b>		N/A	pH Units	10/09/18	10/09/18	1841113	
<b>Temperature (Field)</b>	Field	<b>22.4</b>		N/A	°C	10/09/18	10/09/18	1841113	

## General Chemical Analyses

<b>Ortho-Phosphate (PO4)</b>	HACH 8048	<b>0.16</b>	0.020	N/A	mg/L	10/10/18	10/10/18	1841133	
<b>Phosphorus (Total as P)</b>	HACH 8190	<b>0.11</b>	0.0067	N/A	mg/L	10/12/18	10/12/18	1841199	

**24632 S. Moon**

**18J0818-02 (Water)**

**Sample Date:** 10/09/18 9:45 **Sampler:** Not Listed

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
---------	--------	--------	------------	-----	-------	----------	----------	-------	-----------

## Field Analyses

<b>Cl Res Total (Field)</b>	Field	<b>1.8</b>		N/A	mg/L	10/09/18	10/09/18	1841113	
<b>pH (Field)</b>	Field	<b>8.09</b>		N/A	pH Units	10/09/18	10/09/18	1841113	
<b>Temperature (Field)</b>	Field	<b>23.7</b>		N/A	°C	10/09/18	10/09/18	1841113	

## General Chemical Analyses

<b>Ortho-Phosphate (PO4)</b>	HACH 8048	<b>0.19</b>	0.020	N/A	mg/L	10/10/18	10/10/18	1841133	
<b>Phosphorus (Total as P)</b>	HACH 8190	<b>0.13</b>	0.0067	N/A	mg/L	10/12/18	10/12/18	1841199	

**2450 W. 247th St.**

**18J0818-03 (Water)**

**Sample Date:** 10/09/18 10:40 **Sampler:** Not Listed

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
---------	--------	--------	------------	-----	-------	----------	----------	-------	-----------

## Field Analyses

<b>Cl Res Total (Field)</b>	Field	<b>0.37</b>		N/A	mg/L	10/09/18	10/09/18	1841113	
<b>pH (Field)</b>	Field	<b>8.01</b>		N/A	pH Units	10/09/18	10/09/18	1841113	
<b>Temperature (Field)</b>	Field	<b>24.6</b>		N/A	°C	10/09/18	10/09/18	1841113	

## General Chemical Analyses

<b>Ortho-Phosphate (PO4)</b>	HACH 8048	<b>0.075</b>	0.020	N/A	mg/L	10/10/18	10/10/18	1841133	
<b>Phosphorus (Total as P)</b>	HACH 8190	<b>0.062</b>	0.0067	N/A	mg/L	10/12/18	10/12/18	1841199	

# Clinical Laboratory of San Bernardino, Inc.



**Lomita, City of**  
24373 Walnut Avenue  
Lomita CA, 91717

Project: Standard Analysis  
Sub Project: Lomita Distribution Ortho, 2nd Week October 2018  
Project Manager: Mark Andersen

Work Order: 18J0818  
Received: 10/09/18 15:45  
Reported: 10/19/18

**2052 Dawn St.**

**18J0818-04 (Water)**

**Sample Date:** 10/09/18 9:25 **Sampler:** Not Listed

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
---------	--------	--------	------------	-----	-------	----------	----------	-------	-----------

## Field Analyses

<b>Cl Res Total (Field)</b>	Field	<b>2.7</b>		N/A	mg/L	10/09/18	10/09/18	1841113	
<b>pH (Field)</b>	Field	<b>8.27</b>		N/A	pH Units	10/09/18	10/09/18	1841113	
<b>Temperature (Field)</b>	Field	<b>22.9</b>		N/A	°C	10/09/18	10/09/18	1841113	

## General Chemical Analyses

<b>Ortho-Phosphate (PO4)</b>	HACH 8048	<b>0.098</b>	0.020	N/A	mg/L	10/10/18	10/10/18	1841133	
<b>Phosphorus (Total as P)</b>	HACH 8190	<b>0.043</b>	0.0067	N/A	mg/L	10/12/18	10/12/18	1841199	

**CWPF SP5**

**18J0818-05 (Water)**

**Sample Date:** 10/09/18 12:10 **Sampler:** Not Listed

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
---------	--------	--------	------------	-----	-------	----------	----------	-------	-----------

## Field Analyses

<b>Cl Res Total (Field)</b>	Field	<b>3.44</b>		N/A	mg/L	10/09/18	10/09/18	1841113	
<b>pH (Field)</b>	Field	<b>7.86</b>		N/A	pH Units	10/09/18	10/09/18	1841113	
<b>Temperature (Field)</b>	Field	<b>22.8</b>		N/A	°C	10/09/18	10/09/18	1841113	

## General Chemical Analyses

<b>Ortho-Phosphate (PO4)</b>	HACH 8048	<b>0.57</b>	0.020	N/A	mg/L	10/10/18	10/10/18	1841133	
<b>Phosphorus (Total as P)</b>	HACH 8190	<b>0.39</b>	0.0067	N/A	mg/L	10/12/18	10/12/18	1841199	

ND Analyte NOT DETECTED at or above the reporting limit

1810818

Client		City of Lomita		System Number		Analysis Requested			
Address		24373 Walnut Avenue Lomita, CA 91717		1910073					
Phone #	(310) 903-2243			Destination Laboratory					
Fax #	(310) 325-3627			[X] Clinical Laboratory					
Project	Standard Analysis			RWQCB Compliance					
Sub Project	Lomita Distribution Ortho, 2nd Week October, 2018			No					
Comments				ELAP #					
Sampled by				1088					
Date	Time	Sample Identification	Matrix	Type	Preserv	Bottle Number	Temp.	Total Chlorine	pH
10/9/2018	0915	1948 252ND ST.	DW	DI	N/A	3	22.4°	2.7	8.22
10/9/2018	0915	24632 S. MOON	DW	DI	N/A	4	23.7°	1.8	8.09
10/9/2018	1040	2450 W. 247th ST.	DW	DI	N/A	6	24.6°	0.37	8.01
10/9/2018	0925	2052 DAWN ST.	DW	DI	N/A	7	22.9°	2.7	8.27
10/9/2018	1210	CWPF SP5	DW	DI	N/A	8	22.8°	3.44	7.86
Preservatives: (1) Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> (2) HCl (3) HNO <sub>3</sub> (4) NH <sub>4</sub> Cl (5) H <sub>2</sub> SO <sub>4</sub> (6) Na <sub>2</sub> SO <sub>3</sub> (7) Cold (8) Other:			Matrix: DW-Drinking Water, WW-Waste Water, SW-Storm Water, GW- Ground Water, A-Air Type- 1-Routine, 2-Repeat, 3-Replacement, 4-Special W-Well D- Dist.						
Relinquished By (Sign)		Print Name / Company		Date / Time		Received By (Sign)		Print Name / Company	
Patrick McGee		Patrick McGee/City of Lomita		10/9/2018 / 1:15		Christy Martinez		Christy Martinez	
Chris M				10-9-18 5:45		Janette Hernandez		Janette Hernandez	
				Samples received: ( ) On ice ( ) Intact ( ) F		Custody seals Temp 18.4 ( )			
Shipped Via		Fed X		Golden State		UPS		Client	
								Other	

## **APPENDIX B**

### METHANE MONITORING LOG





CITY OF LOMITA  
PUBLIC WORKS DEPARTMENT

**CYPRESS WATER PRODUCTION FACILITY  
HANDHELD METHANE LOG READINGS**

OCTOBER 2018				
DATE	DAY	METHANE HANDHELD		COMMENTS
10/1/2018	Mon	CH4- 0%	Oxy- 20.8%	
10/2/2018	Tue	CH4- 0%	Oxy- 20.3%	
10/3/2018	Wed	CH4- 0%	Oxy- 20.9%	Offline
10/4/2018	Thu	CH4-	Oxy-	Offline
10/5/2018	Fri	CH4-	Oxy-	Offline
10/6/2018	Sat	CH4-	Oxy-	Offline
10/7/2018	Sun	CH4-	Oxy-	Offline
10/8/2018	Mon	CH4-	Oxy-	Offline
10/9/2018	Tue	CH4-	Oxy-	
10/10/2018	Wed	CH4- 0%	Oxy- 20.6%	
10/11/2018	Thu	CH4- 0%	Oxy- 20.9%	
10/12/2018	Fri	CH4-	Oxy-	
10/13/2018	Sat	CH4-	Oxy-	
10/14/2018	Sun	CH4-	Oxy-	
10/15/2018	Mon	CH4- 0%	Oxy- 20.6%	
10/16/2018	Tue	CH4- 0%	Oxy- 20.9%	
10/17/2018	Wed	CH4- 0%	Oxy- 20.7%	
10/18/2018	Thu	CH4- 0%	Oxy- 20.9%	
10/19/2018	Fri	CH4-	Oxy-	
10/20/2018	Sat	CH4-	Oxy-	
10/21/2018	Sun	CH4-	Oxy-	
10/22/2018	Mon	CH4- 0%	Oxy- 20.9%	
10/23/2018	Tue	CH4- 0%	Oxy- 20.8%	
10/24/2018	Wed	CH4-	Oxy-	
10/25/2018	Thu	CH4- 0%	Oxy- 20.6%	
10/26/2018	Fri	CH4- 0%	Oxy- 20.9%	
10/27/2018	Sat	CH4-	Oxy-	
10/28/2018	Sun	CH4-	Oxy-	
10/29/2018	Mon	CH4- 0%	Oxy- 20.7%	
10/30/2018	Tue	CH4- 2%	Oxy- 20.8%	
10/31/2018	Wed	CH4- 4%	Oxy- 20.8%	

ND- Non Detect  
CH4- Methane  
Oxy- Oxygen  
Day Off/Holiday- Red

## **APPENDIX C**

### **NITRIFICATION MONITORING DATA SUMMARY**

1 MONTHLY NITRIFICATION MONITORING SUMMARY REPORT  
CITY OF LOMITA, System No. 1910073 --- Month, Year: **October 2018**

#	Code	Sample ID	Location	Sample Date	Temp	pH	Total Chlorine	Free Chlorine	Total Ammonia	Free Ammonia	Nitrite <sup>1</sup>	Nitrate	Coliform <sup>2</sup>	HPC	Zone	Comments
Units/Others →				MM/DD/YYYY	°C		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	P/A	CFU/ml		
1	D	S13-003	1948 W 252nd St	10/2/2018	24.7	7.75	3.50	0.06	0.66	0.07	0.010	ND	A	ND	1	Well/MWD Blend
2	D	S13-004	24632 S Moon Ave	10/2/2018	24.0	7.67	3.20	0.06	0.62	0.15	0.022	ND	A	3	1	Well/MWD Blend
3	D	S13-008	25417 Pennsylvania Ave	10/2/2018	24.5	7.72	3.70	0.05	0.66	0.03	0.011	ND	A	ND	1	Well/MWD Blend
4	D	A	2052 Dawn St	10/2/2018	24.7	7.55	0.98	0.05	0.31	0.14	0.129	ND	A	100	1	Well/MWD Blend
5	D		Reservoir SP5	10/2/2018	24.0	7.79	3.56	0.06	0.82	0.09	0.005	ND	A	ND	1	Well/MWD Blend
6	D	S13-001	1912 W 259th St	10/2/2018	24.7	8.21	2.20	0.05	0.47	0.09	0.008	ND	A	ND	2	MWD Only
7	D	S13-002	26314 S Monte Vista Ave	10/2/2018	24.6	8.21	2.30	0.04	0.48	0.03	0.005	ND	A	ND	3	MWD Only
8	D	S13-005	2500 PCH	10/2/2018	24.6	8.16	2.00	0.05	0.47	0.08	0.024	ND	A	ND	2	MWD Only

1	D	S13-003	1948 W 252nd St	10/9/2018	22.4	8.22	2.20	0.07	0.46	0.07	0.009	ND	A	ND	1	Well/MWD Blend
2	D	S13-004	24632 S Moon Ave	10/9/2018	23.7	8.09	1.80	0.06	0.22	0.14	0.025	ND	A	8	1	Well/MWD Blend
3	D	S13-008	25417 Pennsylvania Ave	10/9/2018	24.1	7.79	3.30	0.06	0.51	0.10	0.016	ND	A	ND	1	Well/MWD Blend
4	D	A	2052 Dawn St	10/9/2018	22.9	8.27	2.70	0.06	0.42	0.10	0.012	ND	A	6	1	Well/MWD Blend
5	D		Reservoir SP5	10/9/2018	22.8	7.86	3.14	0.07	0.70	0.00	0.009	ND	A	ND	1	Well/MWD Blend
6	D	S13-001	1912 W 259th St	10/9/2018	21.6	8.27	2.50	0.05	0.46	0.03	0.010	ND	A	ND	2	MWD Only
7	D	S13-002	26314 S Monte Vista Ave	10/9/2018	20.6	8.26	2.40	0.08	0.48	0.00	0.009	ND	A	ND	3	MWD Only
8	D	S13-005	2500 PCH	10/9/2018	22.8	8.25	2.20	0.05	0.53	0.00	0.013	ND	A	ND	2	MWD Only

1	D	S13-003	1948 W 252nd St	10/16/2018	21.6	8.18	3.30	0.01	0.59	0.06	0.009	ND	A	ND	1	Well/MWD Blend
2	D	S13-004	24632 S Moon Ave	10/16/2018	22.2	8.16	3.50	0.01	0.55	0.08	0.008	ND	A	ND	1	Well/MWD Blend
3	D	S13-008	25417 Pennsylvania Ave	10/16/2018	23.2	8.18	3.80	0.03	0.59	0.06	0.008	ND	A	ND	1	Well/MWD Blend
4	D	A	2052 Dawn St	10/16/2018	22.5	8.12	1.93	0.01	0.51	0.15	0.008	ND	A	130	1	Well/MWD Blend
5	D		Reservoir SP5	10/16/2018	22.5	8.21	3.76	0.04	0.64	0.04	0.009	ND	A	ND	1	Well/MWD Blend
6	D	S13-001	1912 W 259th St	10/16/2018	22.1	8.56	2.20	0.02	0.45	0.10	0.014	ND	A	ND	2	MWD Only
7	D	S13-002	26314 S Monte Vista Ave	10/16/2018	21.5	8.57	2.40	0.01	0.45	0.08	0.012	ND	A	ND	3	MWD Only
8	D	S13-005	2500 PCH	10/16/2018	22.9	8.57	2.30	0.16	0.44	0.05	0.022	ND	A	ND	2	MWD Only

1	D	S13-003	1948 W 252nd St	10/23/2018	22.3	8.22	3.00	0.05	0.52	0.00	0.006	ND	A	ND	1	Well/MWD Blend
2	D	S13-004	24632 S Moon Ave	10/23/2018	22.1	8.14	3.30	0.06	0.52	0.05	0.006	ND	A	1	1	Well/MWD Blend
3	D	S13-008	25417 Pennsylvania Ave	10/23/2018	22.4	8.16	3.60	0.07	0.57	0.03	0.006	ND	A	ND	1	Well/MWD Blend
4	D	A	2052 Dawn St	10/23/2018	22.2	8.13	1.89	0.05	0.45	0.16	0.003	ND	A	90	1	Well/MWD Blend
5	D		Reservoir SP5	10/23/2018	21.4	8.18	3.45	0.04	0.60	0.02	0.006	ND	A	ND	1	Well/MWD Blend
6	D	S13-001	1912 W 259th St	10/23/2018	21.4	8.51	1.90	0.09	0.33	0.05	0.010	ND	A	ND	2	MWD Only
7	D	S13-002	26314 S Monte Vista Ave	10/23/2018	20.7	8.46	2.10	0.10	0.39	0.06	0.009	ND	A	ND	3	MWD Only
8	D	S13-005	2500 PCH	10/23/2018	21.5	8.44	2.00	0.06	0.40	0.08	0.012	ND	A	ND	2	MWD Only

1	D	S13-003	1948 W 252nd St	10/30/2018	21.8	7.73	3.00	0.06	0.47	0.05	0.001	ND	A	ND	1	Well/MWD Blend
2	D	S13-004	24632 S Moon Ave	10/30/2018	22.8	7.68	2.60	0.06	0.39	0.00	0.006	ND	A	4	1	Well/MWD Blend
3	D	S13-008	25417 Pennsylvania Ave	10/30/2018	22.7	7.69	3.00	0.06	0.42	0.00	0.008	ND	A	2	1	Well/MWD Blend
4	D	A	2052 Dawn St	10/30/2018	22.6	7.66	1.82	0.07	0.39	0.15	0.008	ND	A	140	1	Well/MWD Blend
5	D		Reservoir	10/30/2018	21.7	7.72	2.86	0.09	0.43	0.00	0.003	ND	A	1	1	Well/MWD Blend
6	D	S13-001	1912 W 259th St	10/30/2018	20.6	8.11	2.20	0.07	0.44	0.03	0.017	ND	A	ND	2	MWD Only
7	D	S13-002	26314 S Monte Vista Ave	10/30/2018	19.7	8.14	2.20	0.09	0.43	0.02	0.009	ND	A	ND	3	MWD Only
8	D	S13-005	2500 PCH	10/30/2018	21.9	8.09	2.70	0.04	0.39	0.00	0.024	ND	A	1	2	MWD Only

<sup>1</sup>Notes: Report Due to DDW by the 10th of the following month. This Report can be used for the routine weekly monitoring (one Report per month) as well as for daily monitoring when there is actual and potential for nitrification (about four or five Reports per month, in this case).

<sup>2</sup>Coliform results are part of weekly Bacti sampling results.

<sup>3</sup>The City is monitoring trends of Nitrite in Zone I, in accordance with the Nitrification Monitoring Plan. Hydrant flushing has been implemented.