CITY OF LOMITA

Cypress Water Production Facility Monthly Status Report

December 2018

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January 10, 2019

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 December 1 through December 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 December 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 December 2018 maintaining water levels inside the reservoir ranging from 7 feet to 10 feet. The average flow from Well No. 5 was 369 gpm and 513 gpm from MWD. The blend ratio for month was 43% Well water and 57% MWD water. See Table 1 below for production totals for the month of December 2018.

Table 1. Monthly Production Totals.

	Production for December 2018	
Well No. 5	42.29 ac-ft	13,778,040 (gallons)
MWD	56.95 ac-ft	18,558,000 (gallons)
Combined Total	99.24 ac-ft	32,336,040 (gallons)
Daily	3.20 ac-ft/day	1,043,098 (gallons/day)

C. OPERATIONAL INTERRUPTIONS

There were no operational interruptions during the month of December 2018. Routine and preventive maintenance was performed on various pieces of equipment as-needed. 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 640 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 780 mg/L and 630 mg/L, respectively.

E3-2 HARDNESS

The sampling results for the month indicate the hardness levels of the blended water to be on average 310 mg/L. This hardness level is above 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 0.33 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 December 2018 in Appendix B.

E3-5 ODOR

The odor levels at the CWPF effluent averaged 2.0 units for the month. Odors levels within the distribution system averaged 1.38 units for the month.

E3-6 TOTAL PHOSPHATE AND ORTHOPHOPHATE

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.

E3-7 1,2,3-TRICHLOROPROPANE QUARTERLY MONITORING

The 1,2,3 TCP levels at Well No. 5 show ND for the fourth quarter in 2018.

E4. NITRIFICATION MONITORING

Weekly nitrification sampling was performed during the month of December 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
12/4/2018											ND	300	ND	50	5	15
12/11/2018	180	300	150	50	10	15	A	ND	ND	500	ND	300	ND	50	7.5	15
12/18/2018											ND	300	ND	50	5	15
12/27/2018											ND	300	ND	50	7.5	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_3	Free Cl	Total Cl	Total NH_3	Free Cl	Total Cl	Total NH_3
12/4/2018	6.79	0.70	8.00	0.90	0.50	4.58	0.80	0.07	3.11	0.65
12/11/2018	9.10	0.80	8.40	0.51	0.30	5.30	0.44	0.07	3.05	0.51
12/18/2018	6.79	0.85	7.80	0.80	0.68	3.53	0.55	0.06	2.84	0.51
12/27/2018	-	-	-	-	-	-	-	0.05	3.23	0.60

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
12/4/2018			600	500-750	2	3						0.34
12/11/2018	780	630	690	500-750	2	3	370	270	310	180-250	3.1	0.28
12/18/2018			660	500-750	2	3						0.38
12/27/2018			610	500-750	2	3						0.30
Average			**640**	500-750	**2**	3						**0.33**

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 CaCO3
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 252nd St	12/11/18	0.50	0.57
24632 S Moon Ave		0.60	1.00
2450 W 247th St		0.46	0.64
2052 Dawn St		0.51	0.52
CWPF SP5		0.44	-

Notes:
Monthly- Orange;
mg/L – milligram per liter

Monthly CWPF Monitoring Report – December 2018
Cypress Water Production Facility
City of Lomita; System No. 1910073

Sample Locations and Parameters	Frequency	MCL/ Goal	12/4/18 1stWk or Mo. Result (date)	12/11/18 2nd Wk	12/18/18 3rdWk	12/27/18 4th Wk		Comments and/or Other Info.
SP1 --- Also called Well 5 Raw Water or Site#1.								
TDS, ppm	Monthly	See SP5	780 12/11/18	**Operations Data/Information:**				*Chlorine injected after SP1, before entering the greensand filter.
Hardness	Monthly	See SP5	370 12/11/18	**CWPF operation days**				
CH4, ppm	Monthly	See SP5	3.1 12/11/18	**On Well 5:** Daily average flow – 369 gpm; total prod. – 42.29 AF				
Iron, ppb	Monthly	See SP3	180 12/11/18	**Combined Well 5/MWD data:** Average Well 5: MWD blend Ratio – 43% WELL: 57% MWD; total prod.- 99.24 AF				
Manganese, ppb	Monthly	See SP3	150 12/11/18					
Color, units	Monthly	See SP3	10 12/11/18	Chlorine Dosage: N/A*				
Total Coliform, P or A	Monthly	A	A 12/11/18					
SP2 --- Also called Filter Effluent or Site#3.								
Total Coliform, P or A	Monthly	A	A					*Ammonia added after filter effluent
HPC,MPN/100 ml	Monthly	500	ND	Ammonia Dosage: N/A*				
Free Cl Res, ppm	Continuous	Average: 7.56 ; Range: 6.79 – 9.10						
SP3 --- Also called the Site After Chloramination & Before MWD Blending or Site#4.								
Iron, ppb	Weekly	ND	ND	ND	ND	ND		
Manganese, ppb	Weekly	50	ND	ND	ND	ND		
Color	Weekly	15	5	7.5	5	7.5		
Free and Total Cl Res, ppm	Continuous	Free Cl: Average: 0.78; Range: 0.70 – 0.85 Total Cl: Average: 8.07; Range: 7.80 – 8.40 Ammonia: Average: 0.74; Range: 0.51 – 0.90						
SP4 --- Also called Reservoir Influent or the Site Well 5/MWD Water Blend Point/Phosphate Injection.								
Phosphate Injection		Phosphate Dosage: 0.47 mg/L						
Free and Total Cl Res, ppm	Continuous	Free Cl: Average: 0.49; Range: 0.30 – 0.68 Total Cl: Average: 4.45; Range: 3.53 – 5.30 Ammonia: Average: 0.56; Range: 0.44 – 0.80						Cl/NH3 Ratio: 7.99
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	690	660	610		
Hardness	Monthly	SI Goal: 180-250ppm		310				
CH4, ppm	Weekly	Goal: from PA	0.34	0.28	0.38	0.30		% CH4 Removal: 89.5%
Odor, units	Monthly	1	2	2	2	2		
Free and Total Cl Res, ppm	Continuous	Free Cl: Average: 0.06; Range: 0.05 – 0.07 Total Cl: Average: 3.05; Range: 2.84 - 3.24 Ammonia: Average: 0.56; Range: 0.51 – 0.65						Cl/NH3 Ratio: 5.49
Headspace of the Cypress Reservoir.								
[1]CH4 ppmv; using Portable Device	Daily (from log)	Goal - LEL	CH4 Average: 3.13% CH4 Range: 0% - 5%					
SP 6 --- MWD Source Feeding CWPF. Also called Zone 2 of the distribution system or Site #6.								
TDS, ppm	Monthly	-----		630				
Hardness	Monthly	------		270				

Notes: [1]Self-Imposed (SI) Goals: TDS Goal-500-750 ppm; Hardness as CaCO3 Goal-180-250 ppm.

*****This Report is due to DDW by the 10th of the following month.**

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

APPENDIX A

LABORATORY RESULTS

Clinical Laboratory of San Bernardino, Inc.

17 December 2018 Clinical Lab No.: 18L0254

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

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

Enclosed are the results of the analyses for samples received at the laboratory on 12/04/18 . 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

Lomita, City of
24373 Walnut Avenue
Lomita CA, 91717

Project: Standard Analysis
Sub Project: CWPF 1st Week of Dec., 2018 Compliance Sampling
Project Manager: Mark Andersen

Work Order: 18L0254
Received: 12/04/18 18:36
Reported: 12/17/18

Reservoir Influent Site #3 **18L0254-01 (Water)** **Sample Date:** 12/04/18 9:55 **Sampler:** P.M.

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	**7.6**		N/A	mg/L	12/04/18	12/04/18	1849098	
pH (Field)	Field	**7.51**		N/A	pH Units	12/04/18	12/04/18	1849098	
Temperature (Field)	Field	**20.9**		N/A	°C	12/04/18	12/04/18	1849098	
General Physical Analyses									
Apparent Color	SM 2120BM	**5.0**	3.0	15	Color Units	12/04/18	12/04/18	1849122	
Metals									
Iron (Fe)	EPA 200.7	ND	100	300	ug/L	12/12/18	12/12/18	1850097	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	12/12/18	12/12/18	1850097	

Reservoir Effluent Site #5 **18L0254-02 (Water)** **Sample Date:** 12/04/18 10:15 **Sampler:** P.M.

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	**3.16**		N/A	mg/L	12/04/18	12/04/18	1849098	
pH (Field)	Field	**7.87**		N/A	pH Units	12/04/18	12/04/18	1849098	
Temperature (Field)	Field	**18.7**		N/A	°C	12/04/18	12/04/18	1849098	
General Physical Analyses									
Apparent Color	SM 2120BM	ND	3.0	15	Color Units	12/04/18	12/04/18	1849122	
Odor Threshold	EPA 140.1-M	**2**	1	3	TON	12/04/18	12/04/18	1849122	
General Chemical Analyses									
Total Filterable Residue/TDS	SM 2540C	**600**	5.0	1000	mg/L	12/10/18	12/11/18	1850022	

ND Analyte NOT DETECTED at or above the reporting limit

Air TECHNOLOGY
Laboratories, Inc.

December 12, 2018

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

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

LABORATORY TEST RESULTS

Project Reference: 18L0254
Lab Number: J120603-01

Enclosed are results for sample(s) received 12/06/18 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,

Mark Johnson
Operations Manager
MJohnson@AirTechLabs.com

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

J120603-01

SUBCONTRACT ORDER

Clinical Laboratory of San Bernardino

18L0254

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 [✓] styles@clinical-lab.com [ ] bernstein@clinical-lab.com

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

Turn Around Time [ ] 10 Days [✓] 5 Days [ ] Other __ Days
Subcontract Comments:

Analysis	Comments
Sample ID: Reservoir Effluent Site #5 / 18L0254-02 **Sampled: 12/04/18 10:15 PS Code:** **Water** **WTX ID:**	
Methane RSK175	Report in mg/L

Containers Supplied:
40ml Amber Vial (B) 40ml Amber Vial (C)

3°C

Released By	Date / Time	Received By	Date / Time
[signature]	12/6/18 07:30	[signature]	12/6/18 9:00
[signature]	12/6/18 - 10:14	[signature]	12/6/18 10:14

Client:	Clinical Laboratory
Attn:	Stu Styles
Project Name:	NA
Project No.:	18L0254
Date Received:	12/06/18
Matrix:	Water
Reporting Units:	mg/L

RSK175

Lab No.:	J120603-01							
Client Sample I.D.:	Reservoir Effluent Site #5/18L0254-02							
Date/Time Sampled:	12/4/18 10:15							
Date/Time Analyzed:	12/12/18 10:48							
QC Batch No.:	181212GC8A1							
Analyst Initials:	CM/MJ							
Dilution Factor:	1.0							
ANALYTE	Result mg/L	RL mg/L						
Methane	0.34	0.0010						

MDL = Method Detection Limit
ND= Not Detected (below MDL)
RL = Reporting Limit

Reviewed/Approved By: _____ Date 12/12/18

Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

AirTECHNOLOGY Laboratories, Inc.
18501 E. Gale Avenue, Suite 130 ♦ City of Industry, CA 91748 ♦ Ph: (626) 964-4032 ♦ Fx: (626) 964-5832

LCS/LCSD Recovery and RPD Summary Report

QC Batch #: 181212GC8A1

Matrix: Air

Reporting Units: mg/L

RSK175
LABORATORY CONTROL SAMPLE SUMMARY

Lab No.:	METHOD BLANK			LCS		LCSD					
Date/Time Analyzed:	12/12/18 9:59			12/12/18 8:25		12/12/18 9:30					
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	0.557	85.1	0.642	98.2	14.2	70	130	30

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

Reviewed/Approved By: _____ Date 12/12/18

Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

AirTECHNOLOGY Laboratories, Inc.
18501 E. Gale Avenue, Suite 130 ♦ City of Industry, CA 91748 ♦ Ph: (626) 964-4032 ♦ Fx: (626) 964-5832

Clinical Laboratory of San Bernardino, Inc.

1910254

Chain of Custody

0/3/4

Client	*City of Lomita*	System Number	Analysis Requested
Address	24373 Walnut Avenue Lomita, CA 91717	**1910073**	
Phone #	(310)903-2243	*Destination Laboratory*	
Fax #		[X] Clinical Laboratory	
Project	*Standard Analysis*	*RWQCB Compliance*	
Sub Project	*CWPF 1st week of December, 2018 Compliance Sampling*	*yes*	
Comments	*For TC/EC/BACT see weekly Distro CoC*	ELAP #	
Sampled by	P. M.	**1088**	

Date	Time	Sample Idenitification	Matrix	Type	Preserv	pH	Temp.	Total Chlorine	Iron / Manganese	Total Dissolved Solids	Color	Methane (Water) (RSK175)	Odor					Comments / P.S. Codes
12/4/2018	0955	Reservoir Influent Site #3	DW	1W	N/A	7.51	20.9°	7.6	X		X							
12/4/2018	1015	Reservoir Effluent Site #5	DW	1W	N/A	7.87	18.7°	3.16		X	X		X					
12/4/2018	1015	Reservoir Effluent Site #5	DW	1W	2							X						

Preservatives: (1) $Na_2S_2O_3$ (2) HCl (3) HNO_3 (4) NH_4Cl (5) H_2SO_4 (6) Na_2SO_3 (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*		*Print Name / Company*
Patrick McEvoy	Patrick McEvoy / City of Lomita	12/4/2018	1450	D Chaparro / CLSB
D Chaparro	D Chaparro / CLSB		1636	

Comments:

Samples received: (X) On ice (X) Intact ( ) Custody seals Temp 1.1 ( ) F ( ) C

Shipped Via | | | | *Fed X* | | *Golden State* | | *UPS* | | *Client* | | *Other* _____ *Page 1 of 1*

"Your Water and Wastewater Analysis Solution"

Clinical Laboratory of San Bernardino, Inc.

21 December 2018 Clinical Lab No.: 18L0996

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

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

Enclosed are the results of the analyses for samples received at the laboratory on 12/11/18 . 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

Lomita, City of
24373 Walnut Avenue
Lomita CA, 91717

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

Work Order: 18L0996
Received: 12/11/18 19:25
Reported: 12/21/18

Raw Water Site #1 **18L0996-01 (Water)** **Sample Date:** 12/11/18 9:15 **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	12/11/18	12/11/18	1850110	
pH (Field)	Field	**7.46**		N/A	pH Units	12/11/18	12/11/18	1850110	
Temperature (Field)	Field	**22.9**		N/A	°C	12/11/18	12/11/18	1850110	
Microbiology Analyses									
Total Coliform	SM 9223	A		N/A	P/A	12/11/18	12/12/18	1850096	
E. Coli	SM 9223	A		N/A	P/A	12/11/18	12/12/18	1850096	
Plate Count	SM9215B	**91**	1	500	CFU/ml	12/11/18	12/13/18	1850137	HT-08
General Physical Analyses									
Apparent Color	SM 2120BM	**10.0**	3.0	15	Color Units	12/11/18	12/11/18	1850101	
General Chemical Analyses									
Hardness, Total (as CaCO3)	Calculated	**370**	6.6	N/A	mg/L	12/17/18	12/17/18	[CALC]	
Total Filterable Residue/TDS	SM 2540C	**780**	5.0	1000	mg/L	12/17/18	12/19/18	1851022	
Metals									
Calcium (Ca)	EPA 200.7	**98**	1.0	N/A	mg/L	12/17/18	12/17/18	1851014	
Iron (Fe)	EPA 200.7	**180**	100	300	ug/L	12/18/18	12/18/18	1851037	
Magnesium (Mg)	EPA 200.7	**29**	1.0	N/A	mg/L	12/17/18	12/17/18	1851014	
Manganese (Mn)	EPA 200.7	**150**	20	50	ug/L	12/18/18	12/18/18	1851037	

Filter Effluent (Free Chlorine) Site #2 **18L0996-02 (Water)** **Sample Date:** 12/11/18 9:25 **Sampler:** Patrick McCue

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	**8.9**		N/A	mg/L	12/11/18	12/11/18	1850110	
pH (Field)	Field	**7.48**		N/A	pH Units	12/11/18	12/11/18	1850110	
Temperature (Field)	Field	**22.9**		N/A	°C	12/11/18	12/11/18	1850110	
Microbiology Analyses									
Total Coliform	SM 9223	A		N/A	P/A	12/11/18	12/12/18	1850096	
E. Coli	SM 9223	A		N/A	P/A	12/11/18	12/12/18	1850096	
Plate Count	SM9215B	ND	1	500	CFU/ml	12/11/18	12/13/18	1850137	HT-08

Lomita, City of
24373 Walnut Avenue
Lomita CA, 91717

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

Work Order: 18L0996
Received: 12/11/18 19:25
Reported: 12/21/18

Filter Effluent (Total Chlorine) Site #3 **18L0996-03 (Water)** **Sample Date:** 12/11/18 9:25 **Sampler:** Patrick McCue

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	**8.9**		N/A	mg/L	12/11/18	12/11/18	1850110	
General Physical Analyses									
Apparent Color	SM 2120BM	**7.5**	3.0	15	Color Units	12/11/18	12/11/18	1850101	
Metals									
Iron (Fe)	EPA 200.7	ND	100	300	ug/L	12/18/18	12/18/18	1851037	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	12/18/18	12/18/18	1851037	

Zone #2 Site #6 **18L0996-04 (Water)** **Sample Date:** 12/11/18 9:27 **Sampler:** Patrick McCue

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	**1.91**		N/A	mg/L	12/11/18	12/11/18	1850110	
pH (Field)	Field	**8.13**		N/A	pH Units	12/11/18	12/11/18	1850110	
Temperature (Field)	Field	**19.2**		N/A	°C	12/11/18	12/11/18	1850110	
General Chemical Analyses									
Hardness, Total (as CaCO3)	Calculated	**270**	6.6	N/A	mg/L	12/17/18	12/17/18	[CALC]	
Total Filterable Residue/TDS	SM 2540C	**630**	5.0	1000	mg/L	12/17/18	12/19/18	1851022	
Metals									
Calcium (Ca)	EPA 200.7	**69**	1.0	N/A	mg/L	12/17/18	12/17/18	1851014	
Magnesium (Mg)	EPA 200.7	**24**	1.0	N/A	mg/L	12/17/18	12/17/18	1851014	

Post Office Box 329 San Bernardino, CA 92402 (909) 825-7693 Fax (909) 825-7696 ELAP Number 1088

Lomita, City of
24373 Walnut Avenue
Lomita CA, 91717

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

Work Order: 18L0996
Received: 12/11/18 19:25
Reported: 12/21/18

Reservoir Effluent Site #5 **18L0996-05 (Water)** **Sample Date:** 12/11/18 12:30 **Sampler:** Patrick McCue

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	**2.93**		N/A	mg/L	12/11/18	12/11/18	1850110	
pH (Field)	Field	**7.86**		N/A	pH Units	12/11/18	12/11/18	1850110	
Temperature (Field)	Field	**19.4**		N/A	°C	12/11/18	12/11/18	1850110	
General Physical Analyses									
Odor Threshold	EPA 140.1-M	**2**	1	3	TON	12/11/18	12/11/18	1850101	
General Chemical Analyses									
Hardness, Total (as CaCO3)	Calculated	**310**	6.6	N/A	mg/L	12/17/18	12/17/18	[CALC]	
Total Filterable Residue/TDS	SM 2540C	**690**	5.0	1000	mg/L	12/17/18	12/19/18	1851022	
Metals									
Calcium (Ca)	EPA 200.7	**82**	1.0	N/A	mg/L	12/17/18	12/17/18	1851014	
Magnesium (Mg)	EPA 200.7	**27**	1.0	N/A	mg/L	12/17/18	12/17/18	1851014	

HT-08 Analysis performed outside of recommended 8 hour hold time but within required 24 hour hold time.

ND Analyte NOT DETECTED at or above the reporting limit

Air TECHNOLOGY
Laboratories, Inc.

December 20, 2018

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

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

LABORATORY TEST RESULTS

Project Reference: 18L0996
Lab Number: J121303-01/02

Enclosed are results for sample(s) received 12/13/18 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,

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

18L0996

J121303-01/02

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 [ ] bernstein@clinical-lab.com

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

5°C

Turn Around Time [ ] 10 Days [X] 5 Days [ ] Other __ Days
Subcontract Comments:

Analysis	Comments
-01 **Sample ID: Raw Water Site #1 / 18L0996-01** **Sampled: 12/11/18 09:15 PS Code: Water** **WTX ID:**	
Methane RSK175	Report in mg/L
Containers Supplied: 40ml Amber Vial (A) 40ml Amber Vial (B)	
-02 **Sample ID: Reservoir Effluent Site #5 / 18L0996-05** **Sampled: 12/11/18 12:30 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
[signature]	12/13/18	[signature]	12/13/18 8:00
[signature]	12/13/18- 10:03	[signature]	12/13/18 10:03

Client: Clinical Laboratory
Attn: Stu Styles
Project Name: NA
Project No.: 18L0996
Date Received: 12/13/18
Matrix: Water
Reporting Units: mg/L

RSK175

Lab No.:	J121303-01		J121303-02							
Client Sample I.D.:	Raw Water Site #1 / 18L0996-01		Reservoir Effluent Site #5 / 18L0996-05							
Date/Time Sampled:	12/11/18 9:15		12/11/18 12:30							
Date/Time Analyzed:	12/19/18 14:01		12/19/18 14:41							
QC Batch No.:	181219GC8A1		181219GC8A1							
Analyst Initials:	CM/MJ		CM/MJ							
Dilution Factor:	1.0		1.0							
ANALYTE	Result mg/L	RL mg/L	Result mg/L	RL mg/L						
Methane	3.1	0.0010	0.28	0.0010						

MDL = Method Detection Limit
RL = Reporting Limit

Reviewed/Approved By: _____ Date 12-20-18
Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

AirTECHNOLOGY Laboratories, Inc.
18501 E. Gale Avenue, Suite 130 ♦ City of Industry, CA 91748 ♦ Ph: (626) 964-4032 ♦ Fx: (626) 964-5832

LCS/LCSD Recovery and RPD Summary Report

QC Batch #: 181219GC8A1

Matrix: Air

Reporting Units: mg/L

RSK175
LABORATORY CONTROL SAMPLE SUMMARY

Lab No.:	METHOD BLANK			LCS		LCSD					
Date/Time Analyzed:	12/19/18 13:38			12/19/18 12:46		12/19/18 13:06					
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	1.08	93.9	1.11	96.7	2.9	70	130	30

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

Reviewed/Approved By: _____ Date 12-20-18

Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

AirTECHNOLOGY Laboratories, Inc.
18501 E. Gale Avenue, Suite 130 ♦ City of Industry, CA 91748 ♦ Ph: (626) 964-4032 ♦ Fx: (626) 964-5832

Clinical Laboratory of San Bernardino, Inc.

Chain of Custody

18L0996 2/3/20

Client	*City of Lomita*	System Number	Analysis Requested
Address	24373 Walnut Avenue Lomita, CA 91717	**1910073**	
Phone #	(310)903-2243	*Destination Laboratory*	
Fax #		[X] Clinical Laboratory	
Project	*Standard Analysis*	*RWQCB Compliance*	
Sub Project	*CWPF Monthly Compliance Samples; 2nd week of Dec., 2018*	*YES*	
Comments		ELAP # **1088**	
Sampled by	*Patrick McCue*		

Date	Time	Sample Identification	Matrix	Type	Preserv	Temp.	pH	Total Chlorine	Total Dissolved Solids	Iron & Manganese	Total Coliform / E. Coli P-A / HPC	Hardness	Methane (Water) (RSK175)	Nitrate	Color	Odor			
12/11/2018	0915	Raw Water Site #1	GW	1W	N/A	22.9°	7.46	Ø	X	X					X				
12/11/2018	0915	Raw Water Site #1	GW	1W	1, 2, 7						X	X	X						
12/11/2018	0925	Filter Effluent (Free Chlorine) Site#2	DW	1W	1,7	22.9	7.48	8.9			X								
12/11/2018	0925	Filter Effluent (Total Chlorine) Site#3	DW	1W	N/A	22.9°	7.48	8.9		X					X				
12/11/2018	0927	Zone #2 Site #6	DW	1D	N/A	19.2°	8.13	1.91	X			X							
12/11/2018	1230	Reservoir Effluent Site #5	DW	1D	N/A	19.4°	7.86	2.93	X							X			
12/11/2018	1230	Reservoir Effluent Site #5	DW	1D	2,7								X						

Preservatives: (1) $Na_2S_2O_3$ (2) HCl (3) HNO3 (4) NH4Cl (5) H2SO4 (6) Na2SO3 (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 McCue	Patrick McCue /City of Lomita	12/11/2018 / 252	O Chaparro	OChaparro/CLSB
O Chaparro	OChaparro/CLSB	〃 725	[illegible]	[illegible]/CLSB

Comments:

Samples received: (X) On ice (X) Intact ( ) Custody seals Temp 9.2 ( ) F ( ) C

Shipped Via			[ ] *Fed X* [ ] *Golden State* [ ] *UPS* [ ] *Client* [ ] *Other*________	*Page _1_ of _1_*

"Your Water and Wastewater Analysis Solution"

Clinical Laboratory of San Bernardino, Inc.

31 December 2018 Clinical Lab No.: 18L1508

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

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

Enclosed are the results of the analyses for samples received at the laboratory on 12/18/18 . 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

Lomita, City of
24373 Walnut Avenue
Lomita CA, 91717

Project: Standard Analysis
Sub Project: CWPF 3rd Week of Dec., 2018 Compliance Sampling
Project Manager: Mark Andersen

Work Order: 18L1508
Received: 12/18/18 17:17
Reported: 12/31/18

Reservoir Influent Site #3 **18L1508-01 (Water)** **Sample Date:** 12/18/18 10:35 **Sampler:** P.M.

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	**9.4**		N/A	mg/L	12/18/18	12/18/18	1851082	
pH (Field)	Field	**7.53**		N/A	pH Units	12/18/18	12/18/18	1851082	
Temperature (Field)	Field	**20.4**		N/A	°C	12/18/18	12/18/18	1851082	
General Physical Analyses									
Apparent Color	SM 2120BM	**5.0**	3.0	15	Color Units	12/18/18	12/18/18	1851119	
Metals									
Iron (Fe)	EPA 200.7	ND	100	300	ug/L	12/26/18	12/26/18	1852069	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	12/26/18	12/26/18	1852069	

Reservoir Effluent Site #5 **18L1508-02 (Water)** **Sample Date:** 12/18/18 10:50 **Sampler:** P.M.

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	**2.85**		N/A	mg/L	12/18/18	12/18/18	1851082	
pH (Field)	Field	**7.81**		N/A	pH Units	12/18/18	12/18/18	1851082	
Temperature (Field)	Field	**19.7**		N/A	°C	12/18/18	12/18/18	1851082	
General Physical Analyses									
Apparent Color	SM 2120BM	ND	3.0	15	Color Units	12/18/18	12/18/18	1851119	
Odor Threshold	EPA 140.1-M	**2**	1	3	TON	12/18/18	12/18/18	1851119	
General Chemical Analyses									
Total Filterable Residue/TDS	SM 2540C	**660**	5.0	1000	mg/L	12/21/18	12/26/18	1851140	

ND Analyte NOT DETECTED at or above the reporting limit

Air TECHNOLOGY
Laboratories, Inc.

December 28, 2018

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

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

LABORATORY TEST RESULTS

Project Reference: 18L1508
Lab Number: J121901-01

Enclosed are results for sample(s) received 12/19/18 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,

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

18L1508

J121901-01

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 [✓] styles@clinical-lab.com [ ] bernstein@clinical-lab.com

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

Turn Around Time [ ] 10 Days [✓] 5 Days [ ] Other __ Days
Subcontract Comments:

Analysis	Comments
Sample ID: Reservoir Effluent Site #5 / 18L1508-02 **Sampled: 12/18/18 10:50 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
[signature]	12/14/18 07:20	[signature]	12/19/18 8:15
[signature]	12/19/18 1023	[signature]	12/19/18 1023

Client:	**Clinical Laboratory**
Attn:	**Stu Styles**
Project Name:	**NA**
Project No.:	**18L1508**
Date Received:	**12/19/18**
Matrix:	**Water**
Reporting Units:	**mg/L**

RSK175

Lab No.:	J121901-01										
Client Sample I.D.:	Reservoir Effluent Site #5/18L1508-02										
Date/Time Sampled:	12/18/18 10:50										
Date/Time Analyzed:	12/19/18 17:33										
QC Batch No.:	181219GC8A1										
Analyst Initials:	CM/MJ										
Dilution Factor:	1.0										
ANALYTE	**Result mg/L**	**RL mg/L**									
Methane	0.38	0.0010									

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

Reviewed/Approved By: _____ Date 12/28/18

Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

AirTECHNOLOGY Laboratories, Inc.
18501 E. Gale Avenue, Suite 130 ♦ City of Industry, CA 91748 ♦ Ph: (626) 964-4032 ♦ Fx: (626) 964-5832

LCS/LCSD Recovery and RPD Summary Report

QC Batch #: 181219GC8A1

Matrix: Air

Reporting Units: mg/L

RSK175
LABORATORY CONTROL SAMPLE SUMMARY

Lab No.:	METHOD BLANK			LCS		LCSD					
Date/Time Analyzed:	12/19/18 13:38			12/19/18 12:46		12/19/18 13:06					
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	0.626	95.7	0.646	98.7	3.1	70	130	30

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

Reviewed/Approved By: _____ Date 12/28/18
Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

AirTECHNOLOGY Laboratories, Inc.
18501 E. Gale Avenue, Suite 130 ♦ City of Industry, CA 91748 ♦ Ph: (626) 964-4032 ♦ Fx: (626) 964-5832

Clinical Laboratory of San Bernardino, Inc.

1811508

Chain of Custody

0/3/4

Client	*City of Lomita*	System Number	Analysis Requested
Address	24373 Walnut Avenue	**1910073**	
	Lomita, CA 91717		
Phone #	(310)903-2243	*Destination Laboratory*	
Fax #		[X] Clinical Laboratory	
Project	*Standard Analysis*	*RWQCB Compliance*	
Sub Project	*CWPF 3rd week of December, 2018 Compliance Sampling*	*yes*	
		ELAP #	
Comments	*For TC/EC/BACT see weekly Distro CoC*	**1088**	
Sampled by	P.M.		

Date	Time	Sample Idenitification	Matrix	Type	Preserv	pH	Temp.	Total Chlorine	Iron / Manganese	Total Dissolved Solids	Color	Methane (Water) (RSK175)	Odor				Comments / P.S. Codes
12/18/2018	1035	Reservoir Influent Site #3	DW	1W	N/A	7.53	20.4°	9.4	X		X						
12/18/2018	1050	Reservoir Effluent Site #5	DW	1W	N/A	7.81	19.7°	2.85		X	X		X				
12/18/2018	1250	Reservoir Effluent Site #5	DW	1W	2							X					

Preservatives: (1) $Na_2S_2O_3$ (2) HCl (3) HNO_3 (4) NH_4Cl (5) H_2SO_4 (6) Na_2SO_3 (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*		*Print Name / Company*
Patrick McEwen	Patrick McEwen / City of Lomita	12/18/2018 204	D Chapparro	D Chapparro / CLSB
D Chapparro	D Chapparro / CLSB	517	Jeanette Hernandez	UPS 0185

Comments:

Samples received: (X) On ice (X) Intact ( ) Custody seals **Temp** 6.1 ( ) F ( ) C

Shipped Via | | | *Fed X* | | *Golden State* | | *UPS* | | *Client* | | *Other* _____ *Page 1 of 1*

"Your Water and Wastewater Analysis Solution"

Clinical Laboratory of San Bernardino, Inc.

04 January 2019 Clinical Lab No.: 18L2143

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

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

Enclosed are the results of the analyses for samples received at the laboratory on 12/27/18 . 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	Project: Standard Analysis	Work Order: 18L2143
24373 Walnut Avenue	Sub Project: CWPF 4th Week of December,2018 Compliance Sam	Received: 12/27/18 15:20
Lomita CA, 91717	Project Manager: Mark Andersen	Reported: 01/04/19

Reservoir Influent Site #3 **18L2143-01 (Water)** **Sample Date:** 12/27/18 6:15 **Sampler:** P.M.

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	**9**		N/A	mg/L	12/27/18	12/27/18	1852119	
pH (Field)	Field	**7.66**		N/A	pH Units	12/27/18	12/27/18	1852119	
Temperature (Field)	Field	**19.4**		N/A	°C	12/27/18	12/27/18	1852119	
General Physical Analyses									
Apparent Color	SM 2120BM	**7.5**	3.0	15	Color Units	12/27/18	12/27/18	1901001	
Metals									
Iron (Fe)	EPA 200.7	ND	100	300	ug/L	01/02/19	01/02/19	1901026	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	01/02/19	01/02/19	1901026	

Reservoir Effluent Site #5 **18L2143-02 (Water)** **Sample Date:** 12/27/18 9:45 **Sampler:** P.M.

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	**3.21**		N/A	mg/L	12/27/18	12/27/18	1852119	
pH (Field)	Field	**7.94**		N/A	pH Units	12/27/18	12/27/18	1852119	
Temperature (Field)	Field	**18**		N/A	°C	12/27/18	12/27/18	1852119	
General Physical Analyses									
Apparent Color	SM 2120BM	**5.0**	3.0	15	Color Units	12/27/18	12/27/18	1901001	
Odor Threshold	EPA 140.1-M	**2**	1	3	TON	12/27/18	12/27/18	1901001	
General Chemical Analyses									
Total Filterable Residue/TDS	SM 2540C	**610**	5.0	1000	mg/L	12/28/18	12/31/18	1852128	

ND Analyte NOT DETECTED at or above the reporting limit

Post Office Box 329 San Bernardino, CA 92402 (909) 825-7693 Fax (909) 825-7696 ELAP Number 1088

Air TECHNOLOGY
Laboratories, Inc.

January 7, 2019

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

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

LABORATORY TEST RESULTS

Project Reference: 18L2143
Lab Number: J122801-01

Enclosed are results for sample(s) received 12/28/18 by Air Technology Laboratories. Samples were received intact and chilled to 6° 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,

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

18L2143

J122801-01

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 [√] styles@clinical-lab.com [ ] bernstein@clinical-lab.com

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

Turn Around Time [ ] 10 Days [√] 5 Days [ ] Other __ Days
Subcontract Comments:

Analysis	Comments
Sample ID: Reservoir Effluent Site #5 / 18L2143-02 **Sampled: 12/27/18 09:45 PS Code: Water** **WTX ID:**	
61	
Methane RSK175	Report in mg/L

Containers Supplied:
40ml Amber Vial (B) 40ml Amber Vial (C)

6 °C

Released By	Date / Time	Received By	Date / Time
[signature]	12/28/18 07:15	[signature]	12/28/18 845
[signature]	12/28/18 957	[signature]	12/28/18 0957

Client:	**Clinical Laboratory**
Attn:	**Stu Styles**
Project Name:	**NA**
Project No.:	**18L2143**
Date Received:	**12/28/18**
Matrix:	**Water**
Reporting Units:	**ug/L**

RSK175

Lab No.:	**J122801-01**							
Client Sample I.D.:	**Reservoir Effluent Site #5/18L2143-02**							
Date/Time Sampled:	**12/27/18 9:45**							
Date/Time Analyzed:	**1/7/19 10:42**							
QC Batch No.:	**190107GC8A1**							
Analyst Initials:	**CM/MJ**							
Dilution Factor:	**1.0**							
ANALYTE	**Result ug/L**	**RL ug/L**						
Methane	300	1.0						

MDL = Method Detection Limit
ND= Not Detected (below MDL)
RL = Reporting Limit

Reviewed/Approved By: _____ **Date** 1-7-19

Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

AirTECHNOLOGY Laboratories, Inc.
18501 E. Gale Avenue, Suite 130 ♦ City of Industry, CA 91748 ♦ Ph: (626) 964-4032 ♦ Fx: (626) 964-5832

LCS/LCSD Recovery and RPD Summary Report

QC Batch #: 190107GC8A1

Matrix: Air

Reporting Units: mg/L

RSK175
LABORATORY CONTROL SAMPLE SUMMARY

Lab No.:	METHOD BLANK			LCS		LCSD					
Date/Time Analyzed:	1/7/19 10:16			1/7/19 9:47		1/7/19 10:02					
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	0.619	94.6	0.648	99.0	4.6	70	130	30

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

Reviewed/Approved By: _____ Date 1-7-19

Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

AirTECHNOLOGY Laboratories, Inc.
18501 E. Gale Avenue, Suite 130 ♦ City of Industry, CA 91748 ♦ Ph: (626) 964-4032 ♦ Fx: (626) 964-5832

18L2143

Clinical Laboratory of San Bernardino, Inc.

Chain of Custody

Client	*City of Lomita*	System Number	Analysis Requested
Address	24373 Walnut Avenue	**1910073**	
	Lomita, CA 91717	*Destination Laboratory*	
Phone #	(310)903-2243	[X] Clinical Laboratory	
Fax #		*RWQCB Compliance*	
Project	*Standard Analysis*	*yes*	
Sub Project	*CWPF 4th week of December, 2018 Compliance Sampling*	ELAP #	
Comments	*For TC/EC/BACT see weekly Distro CoC*	**1088**	
Sampled by	*P.M.*		

Date	Time	Sample Idenitification	Matrix	Type	Preserv	pH	Temp.	Total Chlorine	Iron / Manganese	Total Dissolved Solids	Color	Methane (Water) (RSK175)	Odor				Comments / P.S. Codes
12/27/2018	0615	Reservoir Influent Site #3	DW	1W	N/A	7.66	19.4°	9.0	X		X						
12/27/2018	0945	Reservoir Effluent Site #5	DW	1W	N/A	7.94	18.0°	3.21		X	X		X				
12/27/2018	0945	Reservoir Effluent Site #5	DW	1W	2							X					

Preservatives: (1) $Na_2S_2O_3$ (2) HCl (3) HNO_3 (4) NH_4Cl (5) H_2SO_4 (6) Na_2SO_3 (7) Cold (8) Other:_____

Matrix: DW-Drinking Water, WW-Waste Water, SW-Storm Water, GW- Ground Water, A-Air Replacement, 4-Special W-Well D- Dist.

Type- 1-Routine, 2-Repeat, 3-

Relinquished By (Sign)	*Print Name / Company*	*Date / Time*		*Print Name / Company*
Patrick McCue	Patrick McCue / City of Lomita	12/27/2018	11:40	CLSB
Mike Clark	Mike Clark CLSB	12/27/18	5:20 15:20	Rebecca McCarthy / CLSB

Comments:

Samples received: (Y) **On ice** (Y) **Intact** ( ) **Custody seals** **Temp** 2.9 ( ) F (Y) C

Shipped Via | | | [ ] *Fed X* [ ] *Golden State* [ ] *UPS* [ ] *Client* [ ] *Other*_____ *Page _1_ of _1_*

"Your Water and Wastewater Analysis Solution"

Clinical Laboratory of San Bernardino, Inc.

26 December 2018

Clinical Lab No.: 18L0995

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

Project Name: Standard Analysis
Sub Project: Well TCP, Quaterly

Enclosed are the results of the analyses for samples received at the laboratory on 12/11/18 . 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

Lomita, City of
24373 Walnut Avenue
Lomita CA, 91717

Project: Standard Analysis
Sub Project: Well TCP, Quaterly
Project Manager: Mark Andersen

Work Order: 18L0995
Received: 12/11/18 19:25
Reported: 12/26/18

CWPF SP1 **18L0995-01 (Water)** **Sample Date:** 12/11/18 9:15 **Sampler:** PM

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	0		N/A	mg/L	12/11/18	12/11/18	1850110	
pH (Field)	Field	**7.46**		N/A	pH Units	12/11/18	12/11/18	1850110	
Temperature (Field)	Field	**22.9**		N/A	°C	12/11/18	12/11/18	1850110	
Synthetic Organic Analyses / 1,2,3-TCP									
1,2,3-Trichloropropane	SRL 524M-TCP	ND	0.0050	0.005	ug/L	12/22/18	12/23/18	1852003	

ND Analyte NOT DETECTED at or above the reporting limit

Clinical Laboratory of San Bernardino, Inc.

EDT Transfer Confirmation 1

Work Order: 18L0995
Report Date: 12/26/2018
Analyzing Lab: Clinical Laboratory of San Bernardino, Inc. ELAP 1088

LOMITA-CITY, WATER DEPT. User ID: 4TH System: 1910073

WELL 05 Station No.: 1910073-003 Sampled: 181211 09:15

1,2,3-TRICHLOROPROPANE	Result: ND	Units: UG/L	Entry No.: 77443	Analyzed: 181223

Post Office Box 329 San Bernardino, CA 92402 (909) 825-7693 Fax (909) 825-7696 ELAP Number 1088

Clinical Laboratory of San Bernardino, Inc.

18L0995

Chain of Custody

0/0/2

Client	City of Lomita	System Number	Analysis Requested
Address	24373 Walnut Avenue Lomita, CA 91717	1910073	
Phone #	(310)903-2243	Destination Laboratory	
Fax #		[X] Clinical Laboratory	
Project	Standard Analysis	RWQCB Compliance	
Sub Project	WELL TCP, QUARTERLY	yes	
Comments	WELL TCP, QUARTERLY	ELAP #	
Sampled by	PM	1088	

Date	Time	Sample Idenitification	Matrix	Type	Preserv	pH	Temp.	Total Chlorine	TCP							Comments / P.S. Codes
12/11/2018	0915	CWPF SP1	DW	1W	2	7.46	22.9	Ø	X							

Preservatives: (1) $Na_2S_2O_3$ (2) HCl (3) HNO3 (4) NH4Cl (5) H2SO4 (6) Na2SO3 (7) Cold (8) Other:______

Matrix: DW-Drinking Water, WW-Waste Water, SW-Storm Water, GW- Ground Water, A-Air Replacement, 4-Special W-Well D- Dist.

Type- 1-Routine, 2-Repeat, 3-

Relinquished By (Sign)	Print Name / Company	Date / Time		Received By (Sign)	Print Name / Company
Patrick McCue	Patrick McCue / City of Lomita	12/11/2018 /	254	[signature]	D Chaparro / CLSB
[signature]	D Chaparro / CLSB	4	725	[signature]	SFSHES

Comments:

Samples received: (X) On ice (X) Intact ( ) Custody seals Temp 9.2 ( ) F ( ) C

Shipped Via [ ] Fed X [ ] Golden State [ ] UPS [ ] Client [ ] Other ______ Page 1 of 1

Clinical Laboratory of San Bernardino, Inc.

20 December 2018 Clinical Lab No.: 18L0928

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

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

Enclosed are the results of the analyses for samples received at the laboratory on 12/11/18 . 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

Lomita, City of
24373 Walnut Avenue
Lomita CA, 91717

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

Work Order: 18L0928
Received: 12/11/18 19:25
Reported: 12/20/18

1948 252nd St. **18L0928-01 (Water)** **Sample Date:** 12/11/18 10:40 **Sampler:** P.M.

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	**2.9**		N/A	mg/L	12/11/18	12/11/18	1850095	
pH (Field)	Field	**7.87**		N/A	pH Units	12/11/18	12/11/18	1850095	
Temperature (Field)	Field	**19.1**		N/A	°C	12/11/18	12/11/18	1850095	
General Chemical Analyses									
Ortho-Phosphate (PO4)	HACH 8048	**0.57**	0.020	N/A	mg/L	12/12/18	12/12/18	1850085	
Phosphorus (Total as P)	HACH 8190	**0.50**	0.0067	N/A	mg/L	12/19/18	12/19/18	1851060	

24632 S. Moon **18L0928-02 (Water)** **Sample Date:** 12/11/18 11:05 **Sampler:** P.M.

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	**2.7**		N/A	mg/L	12/11/18	12/11/18	1850095	
pH (Field)	Field	**7.78**		N/A	pH Units	12/11/18	12/11/18	1850095	
Temperature (Field)	Field	**19.3**		N/A	°C	12/11/18	12/11/18	1850095	
General Chemical Analyses									
Ortho-Phosphate (PO4)	HACH 8048	**1.0**	0.020	N/A	mg/L	12/12/18	12/12/18	1850085	
Phosphorus (Total as P)	HACH 8190	**0.60**	0.0067	N/A	mg/L	12/19/18	12/19/18	1851060	

2450 W. 247th St. **18L0928-03 (Water)** **Sample Date:** 12/11/18 11:15 **Sampler:** P.M.

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	**0.91**		N/A	mg/L	12/11/18	12/11/18	1850095	
pH (Field)	Field	**7.7**		N/A	pH Units	12/11/18	12/11/18	1850095	
Temperature (Field)	Field	**19.7**		N/A	°C	12/11/18	12/11/18	1850095	
General Chemical Analyses									
Ortho-Phosphate (PO4)	HACH 8048	**0.64**	0.020	N/A	mg/L	12/12/18	12/12/18	1850085	
Phosphorus (Total as P)	HACH 8190	**0.46**	0.0067	N/A	mg/L	12/19/18	12/19/18	1851060	

Lomita, City of
24373 Walnut Avenue
Lomita CA, 91717

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

Work Order: 18L0928
Received: 12/11/18 19:25
Reported: 12/20/18

2052 Dawn St. **18L0928-04 (Water)** **Sample Date:** 12/11/18 10:50 **Sampler:** P.M.

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	**1.62**		N/A	mg/L	12/11/18	12/11/18	1850095	
pH (Field)	Field	**7.77**		N/A	pH Units	12/11/18	12/11/18	1850095	
Temperature (Field)	Field	**19.9**		N/A	°C	12/11/18	12/11/18	1850095	
General Chemical Analyses									
Ortho-Phosphate (PO4)	HACH 8048	**0.52**	0.020	N/A	mg/L	12/12/18	12/12/18	1850085	
Phosphorus (Total as P)	HACH 8190	**0.51**	0.0067	N/A	mg/L	12/19/18	12/19/18	1851060	

CWPF SP5 **18L0928-05 (Water)** **Sample Date:** 12/11/18 12:30 **Sampler:** P.M.

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	**2.93**		N/A	mg/L	12/11/18	12/11/18	1850095	
pH (Field)	Field	**7.86**		N/A	pH Units	12/11/18	12/11/18	1850095	
Temperature (Field)	Field	**19.4**		N/A	°C	12/11/18	12/11/18	1850095	
General Chemical Analyses									
Ortho-Phosphate (PO4)	HACH 8048	**0.52**	0.020	N/A	mg/L	12/12/18	12/12/18	1850085	
Phosphorus (Total as P)	HACH 8190	**0.44**	0.0067	N/A	mg/L	12/19/18	12/19/18	1851060	

ND Analyte NOT DETECTED at or above the reporting limit

Clinical Laboratory of San Bernardino, Inc.

18L0428

Chain of Custody

0/0/5

Client	City of Lomita	System Number	1910073
Address	24373 Walnut Avenue Lomita, CA 91717	Destination Laboratory	[X] Clinical Laboratory
Phone #	(310) 903-2243	RWQCB Compliance	No
Fax #	(310) 325-3627	ELAP #	1088
Project	Standard Analysis		
Sub Project	Lomita Distribution Ortho, 2nd Week December, 2018		
Comments			
Sampled by	P.M.		

Analysis Requested

Date	Time	Sample Idenitification	Matrix	Type	Preserv	Bottle Number	Temp.	Total Chlorine	pH	ORTHO PHOSPHATE (o-PO4)	TOTAL PHOSPHATE (PO4)				Comments / P.S. Codes
12/11/2018	1040	1948 252ND ST.	DW	D1	N/A	3	19.1°	2.9	7.87	X	X				
12/11/2018	1105	24632 S. MOON	DW	D1	N/A	4	19.3°	2.7	7.78	X	X				
12/11/2018	1115	2450 W. 247th ST.	DW	D1	N/A	6	19.7°	0.91	7.70	X	X				
12/11/2018	1050	2052 DAWN ST.	DW	D1	N/A	7	19.9°	1.62	7.77	X	X				
12/11/2018	1230	CWPF SP5	DW	D1	N/A	8	19.4°	2.93	7.86	x	X				

Preservatives: (1) $Na_2S_2O_3$ (2) HCl (3) HNO3 (4) NH4Cl (5) H2SO4 (6) Na2SO3 (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 McC[illegible]	Patrick McC[illegible] City of Lomita	12/11/2018 252	7.25	[signature]	DChaparro/CLSB
[signature]	DChaparro/CLSB			[signature]	

Samples received: (X) On ice (X) Intact ( ) Custody seals Temp 9.2 ( ) F ( ) C

Shipped Via | [ ] Fed X [ ] Golden State [ ] UPS [ ] Client [ ] Other ______ Page _1_ of _1_

"Your Water and Wastewater Analysis Solution"

APPENDIX B

METHANE MONITORING LOG

CITY OF LOMITA
PUBLIC WORKS DEPARTMENT

CYPRESS WATER PRODUCTION FACILITY
HANDHELD METHANE LOG READINGS

DECEMBER 2018				
DATE	**DAY**	**METHANE HANDHELD**		**COMMENTS**
12/1/2018	Sat	CH_4-	Oxy-	
12/2/2018	Sun	CH_4-	Oxy-	
12/3/2018	Mon	CH_4- 5%	Oxy- 20.9%	
12/4/2018	Tue	CH_4- 3%	Oxy- 20.9%	
12/5/2018	Wed	CH_4- 4%	Oxy- 20.9%	
12/6/2018	Thu	CH_4- 3%	Oxy- 20.9%	
12/7/2018	Fri	CH_4- 4%	Oxy- 20.9%	
12/8/2018	Sat	CH4-	Oxy-	
12/9/2018	Sun	CH_4-	Oxy-	
12/10/2018	Mon	CH_4- 0%	Oxy- 20.9%	
12/11/2018	Tue	CH_4- 5%	Oxy- 20.9%	
12/12/2018	Wed	CH_4- 4%	Oxy- 20.9%	
12/13/2018	Thu	CH_4- 3%	Oxy- 20.9%	
12/14/2018	Fri	CH_4-	Oxy-	
12/15/2018	Sat	CH_4-	Oxy-	
12/16/2018	Sun	CH_4-	Oxy-	
12/17/2018	Mon	CH_4- 2%	Oxy- 20.9%	
12/18/2018	Tue	CH_4-	Oxy-	
12/19/2018	Wed	CH_4- 2%	Oxy- 20.9%	
12/20/2018	Thu	CH_4- 2%	Oxy- 20.9%	
12/21/2018	Fri	CH_4- 3%	Oxy- 20.8%	
12/22/2018	Sat	CH_4-	Oxy-	
12/23/2018	Sun	CH_4-	Oxy-	
12/24/2018	Mon	CH_4- 4%	Oxy- 20.9%	
12/25/2018	Tue	CH_4-	Oxy-	
12/26/2018	Wed	CH_4-	Oxy-	
12/27/2018	Thu	CH_4-	Oxy-	
12/28/2018	Fri	CH_4-	Oxy-	
12/29/2018	Sat	CH_4-	Oxy-	
12/30/2018	Sun	CH_4- 3%	Oxy- 20.9%	
12/31/2018	Mon	CH_4-	Oxy-	

ND- Non Detect
CH_4- 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: December, Year: **2018**

#	Code	Sample ID	Location	Sample Date	Temp	pH	Total Chlorine	Free Chlorine	Total Ammonia	Free Ammonia	Nitrite	Nitrate	Coliform [2]	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	12/4/2018	18.8	8.00	3.10	0.03	0.62	0.07	0.004	ND	A	ND	1	WELL/MWD blend
2	D	S13-004	24632 S Moon Ave	12/4/2018	18.8	7.82	3.30	0.02	0.55	0.09	0.007	ND	A	4	1	WELL/MWD blend
3	D	S13-008	25417 Pennsylvania Ave	12/4/2018	19.3	7.83	3.30	0.07	0.50	0.07	0.005	ND	A	9	1	WELL/MWD blend
4	D	A	2052 Dawn St	12/4/2018	19.3	7.82	1.73	0.02	0.34	0.13	0.016	ND	A	19	1	WELL/MWD blend
5	D		Reservoir	12/4/2018	18.7	7.87	3.16	0.04	0.35	0.04	0.005	ND	A	3.0	1	WELL/MWD blend
6	D	S13-001	1912 W 259th Pl	12/4/2018	17.8	8.27	2.10	0.03	0.38	0.10	0.023	ND	A	ND	2	MWD Only
7	D	S13-002	26314 S Monte Vista Ave	12/4/2018	17.5	8.26	2.10	0.07	0.47	0.07	0.016	ND	A	ND	3	MWD Only
8	D	S13-005	2500 PCH	12/4/2018	18.8	8.21	2.10	0.03	0.36	0.07	0.033	ND	A	ND	2	MWD Only
1	D	S13-003	1948 W 252nd St	12/11/2018	19.1	7.87	2.90	0.07	0.39	0.00	0.002	ND	A	ND	1	WELL/MWD blend
2	D	S13-004	24632 S Moon Ave	12/11/2018	19.3	7.78	2.70	0.03	0.48	0.06	0.006	ND	A	3	1	WELL/MWD blend
3	D	S13-008	25417 Pennsylvania Ave	12/11/2018	19.6	7.79	3.20	0.09	0.46	0.05	0.007	ND	A	10	1	WELL/MWD blend
4	D	A	2052 Dawn St	12/11/2018	19.9	7.77	1.62	0.06	0.09	0.10	0.032	ND	A	73	1	WELL/MWD blend
5	D		Reservoir	12/11/2018	19.4	7.86	2.93	0.07	0.52	0.17	0.004	ND	A	ND	1	WELL/MWD blend
6	D	S13-001	1912 W 259th Pl	12/11/2018	17.8	8.02	1.97	0.06	0.42	0.06	0.022	ND	A	ND	2	MWD Only
7	D	S13-002	26314 S Monte Vista Ave	12/11/2018	17.8	8.03	2.00	0.05	0.33	0.05	0.013	ND	A	ND	3	MWD Only
8	D	S13-005	2500 PCH	12/11/2018	18.8	8.00	2.10	0.06	0.42	0.05	0.022	ND	A	ND	2	MWD Only
1	D	S13-003	1948 W 252nd St	12/18/2018	18.2	7.83	2.70	0.04	0.41	0.06	0.006	ND	A	ND	1	WELL/MWD blend
2	D	S13-004	24632 S Moon Ave	12/18/2018	18.6	7.78	2.60	0.03	0.41	0.05	0.015	ND	A	2	1	WELL/MWD blend
3	D	S13-008	25417 Pennsylvania Ave	12/18/2018	18.9	7.79	3.00	0.06	0.52	0.05	0.014	ND	A	61	1	WELL/MWD blend
4	D	A	2052 Dawn St	12/18/2018	18.7	7.74	1.48	0.08	0.18	0.19	0.041	ND	A	370	1	WELL/MWD blend
5	D		Reservoir	12/18/2018	19.7	7.81	2.85	0.03	0.48	0.00	0.010	ND	A	ND	1	WELL/MWD blend
6	D	S13-001	1912 W 259th Pl	12/18/2018	16.6	8.18	2.20	0.04	0.40	0.09	0.017	ND	A	ND	2	MWD Only
7	D	S13-002	26314 S Monte Vista Ave	12/18/2018	16.0	8.17	2.00	0.08	0.34	0.10	0.014	ND	A	ND	3	MWD Only
8	D	S13-005	2500 PCH	12/18/2018	18.1	8.16	2.20	0.02	0.43	0.09	0.032	ND	A	ND	2	MWD Only
1	D	S13-003	1948 W 252nd St	12/27/2018	16.8	7.89	3.20	0.04	0.05	0.62	0.022	ND	A	ND	1	Well/MWD Blend
2	D	S13-004	24632 S Moon Ave	12/27/2018	17.6	7.83	3.10	0.03	0.11	0.37	0.021	ND	A	ND	1	Well/MWD Blend
3	D	S13-008	25417 Pennsylvania Ave	12/27/2018	18.0	7.86	3.40	0.04	0.00	0.37	0.013	ND	A	27	1	Well/MWD Blend
4	D	A	2052 Dawn St	12/27/2018	17.5	7.80	1.68	0.02	0.09	0.39	0.070	0.41	A	480	1	Well/MWD Blend
5	D		Reservoir	12/27/2018	18.0	7.94	3.21	0.03	0.05	0.64	0.005	ND	A	ND	1	Well/MWD Blend
6	D	S13-001	1912 W 259th Pl	12/27/2018	14.4	8.21	1.84	0.02	0.06	0.42	0.018	ND	A	ND	2	MWD Only
7	D	S13-002	26314 S Monte Vista Ave	12/27/2018	15.2	8.18	1.71	0.04	0.07	0.39	0.011	ND	A	ND	3	MWD Only
8	D	S13-005	2500 PCH	12/27/2018	17.0	8.16	1.70	0.04	0.08	0.36	0.021	ND	A	ND	2	MWD Only
1	D	S13-003	1948 W 252nd St												1	
2	D	S13-004	24632 S Moon Ave												1	
3	D	S13-008	25417 Pennsylvania Ave												1	
4	D	A	2052 Dawn St												1	
5	D		Reservoir												1	
6	D	S13-001	1912 W 259th Pl												2	
7	D	S13-002	26314 S Monte Vista Ave												3	
8	D	S13-005	2500 PCH												2	

[1]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).

[2]Coliform results are part of weekly Bacti sampling results.