CITY OF LOMITA

Cypress Water Production Facility Monthly Status Report

September 2018

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October 10, 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 September 1 through September 30, 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 September 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 September 2018 maintaining water levels inside the reservoir ranging from 7 feet to 10 feet. The average flow from Well No. 5 was 404 gpm and 601 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 September 2018.

Table 1. Monthly Production Totals.

	Production for September 2018		
Well No. 5	48.38	ac-ft	15,764,975 (gallons)
MWD	71.00	ac-ft	23,135,000 (gallons)
Combined Total	119.38	ac-ft	38,899,975 (gallons)
Daily	3.98	ac-ft/day	1,296,666 (gallons/day)

C. OPERATIONAL INTERRUPTIONS

There were no operational interruptions during the month of September 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 590 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 730 mg/L and 420 mg/L, respectively.

E3-2 HARDNESS

The sampling results for the month indicate the hardness levels of the blended water to be on average 270 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 0.21 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 September 2018 in Appendix B.

E3-5 ODOR

The odor levels at the CWPF effluent averaged 1.8 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 third quarter in 2018.

E4. NITRIFICATION MONITORING

Weekly nitrification sampling was performed during the month of September 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
9/4/2018											ND	300	ND	50	5	15
9/11/2018	200	300	150	50	10	15	A	ND	ND	500	ND	300	ND	50	5	15
9/18/2018											ND	300	ND	50	5	15
9/25/2018											ND	300	ND	50	ND	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
9/4/2018	10.31	0.90	8.25	1.00	0.75	4.97	0.80	0.10	3.53	0.68
9/11/2018	9.31	1.00	10.18	1.08	0.82	4.97	0.88	0.08	3.64	0.77
9/18/2018	9.53	1.10	8.78	1.18	0.78	4.87	0.82	0.08	3.60	0.74
9/25/2018	8.79	0.95	9.05	1.10	0.81	5.29	0.93	0.07	3.64	0.78

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
9/4/2018			590	500-750	1	3						0.23
9/11/2018	730	420	590	500-750	2	3	350	190	270	180-250	1.6	0.15
9/18/2018			570	500-750	2	3						0.23
9/25/2018			610	500-750	2	3						0.25
Average			**590**	500-750	**1.8**	3						**0.22**

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	9/11/18	0.36	0.48
24632 S Moon Ave		0.36	0.47
2450 W 247th St		0.35	0.54
2052 Dawn St		0.34	0.50
CWPF SP5		0.34	-

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

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

Sample Locations and Parameters	Frequency	MCL/ Goal	9/4/18 1stWk or Mo. Result (date)	9/11/18 2nd Wk	9/18/18 3rdWk	9/25/18 4th Wk	5th Wk	Comments and/or Other Info.
SP1 --- Also called Well 5 Raw Water or Site#1.								
TDS, ppm	Monthly	See SP5	730 9/11/18	**Operations Data/Information:**				*Chlorine injected after SP1, before entering the greensand filter.
Hardness	Monthly	See SP5	350 9/11/18	**CWPF operation days**				
CH4, ppm	Monthly	See SP5	1.6 9/11/18	**On Well 5:** Daily average flow – 404 gpm; total prod. – 48.38 AF				
Iron, ppb	Monthly	See SP3	200 9/11/18	**Combined Well 5/MWD data:** Average Well 5: MWD blend Ratio – 41% WELL: 59% MWD; total prod.- 119.38 AF				
Manganese, ppb	Monthly	See SP3	150 9/11/18					
Color, units	Monthly	See SP3	10 9/11/18	Chlorine Dosage: N/A*				
Total Coliform, P or A	Monthly	A	A 9/11/18					
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: 9.48 ; Range: 8.79 – 10.31						
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	5	5	ND		
Free and Total Cl Res, ppm	Continuous	Free Cl: Average: 0.99; Range: 0.90 – 1.10 Total Cl: Average: 9.06; Range: 8.25 – 10.18 Ammonia: Average: 1.09; Range: 1.00 – 1.18						
SP4 --- Also called Reservoir Influent or the Site Well 5/MWD Water Blend Point/Phosphate Injection.								
Phosphate Injection		Phosphate Dosage: 0.52 mg/L						
Free and Total Cl Res, ppm	Continuous	Free Cl: Average: 0.80; Range: 0.75 – 0.82 Total Cl: Average: 5.06; Range: 4.87 – 5.29 Ammonia: Average: 0.87; Range: 0.80 – 0.93						Cl/NH3 Ratio: 5.81
SP5 --- Also called Reservoir Effluent or Site#5. SP5 discharges into Zone 1 of the distribution system.								
TDS, ppm	Weekly	SI Goal: 500-750ppm	590	590	570	610		
Hardness	Monthly	SI Goal: 180-250ppm		270				
CH4, ppm	Weekly	Goal: from PA	0.23	0.15	0.23	0.25		% CH4 Removal: 86.6%
Odor, units	Monthly	1	1	2	2	2		
Free and Total Cl Res, ppm	Continuous	Free Cl: Average: 0.08; Range: 0.07 – 0.10 Total Cl: Average: 3.61; Range: 3.53 - 3.64 Ammonia: Average: 0.75; Range: 0.68 – 0.78						Cl/NH3 Ratio: 4.81
Headspace of the Cypress Reservoir.								
[1]CH4 ppmv; using Portable Device	Daily (from log)	Goal - LEL	CH4 Average: 0.21% CH4 Range: 0% - 1%					
SP 6 --- MWD Source Feeding CWPF. Also called Zone 2 of the distribution system or Site #6.								
TDS, ppm	Monthly	-----		420				
Hardness	Monthly	-------		190				

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 September 2018 Clinical Lab No.: 18I0082

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

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

Enclosed are the results of the analyses for samples received at the laboratory on 09/04/18 . 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 Sept, 2018 Compliance Sampling
Project Manager: Mark Andersen

Work Order: 18I0082
Received: 09/04/18 14:55
Reported: 09/17/18

Reservoir Influent Site #3 **18I0082-01 (Water)** **Sample Date:** 09/04/18 9:40 **Sampler:** P.M.

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	**8.3**		N/A	mg/L	09/04/18	09/04/18	1836035	
pH (Field)	Field	**7.87**		N/A	pH Units	09/04/18	09/04/18	1836035	
Temperature (Field)	Field	**23.4**		N/A	°C	09/04/18	09/04/18	1836035	
General Physical Analyses									
Apparent Color	SM 2120BM	**5.0**	3.0	15	Color Units	09/04/18	09/04/18	1836084	
Metals									
Iron (Fe)	EPA 200.7	ND	100	300	ug/L	09/12/18	09/12/18	1837061	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	09/12/18	09/12/18	1837061	

Reservoir Effluent Site #5 **18I0082-02 (Water)** **Sample Date:** 09/04/18 9:10 **Sampler:** P.M.

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	**3.22**		N/A	mg/L	09/04/18	09/04/18	1836035	
pH (Field)	Field	**8.14**		N/A	pH Units	09/04/18	09/04/18	1836035	
Temperature (Field)	Field	**24**		N/A	°C	09/04/18	09/04/18	1836035	
General Physical Analyses									
Apparent Color	SM 2120BM	ND	3.0	15	Color Units	09/04/18	09/04/18	1836084	
Odor Threshold	EPA 140.1-M	**1**	1	3	TON	09/04/18	09/04/18	1836084	
General Chemical Analyses									
Total Filterable Residue/TDS	SM 2540C	**590**	5.0	1000	mg/L	09/05/18	09/06/18	1836026	

ND Analyte NOT DETECTED at or above the reporting limit

AirTECHNOLOGY
Laboratories, Inc.

September 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: 18I0082
Lab Number: J090502-01

Enclosed are results for sample(s) received 9/05/18 by Air Technology Laboratories. Samples were received intact and chilled to 4° 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

18I0082

J090502-01

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 [ ] nelson@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 / 18I0082-02 **Sampled: 09/04/18 09:10 PS Code: Water** **WTX ID:**	
01	
Methane RSK175	Report in mg/L

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

4°C

BJ Shy	09/04/18 16:30		9/5/18 835
Released By	Date / Time	Received By	Date / Time
	9/5/18 10:22		9/5/18 1022
Released By	Date / Time	Received By	Date / Time

Client:	**Clinical Laboratory**
Attn:	**Stu Styles**
Project Name:	**NA**
Project No.:	**18I0082**
Date Received:	**09/05/18**
Matrix:	**Water**
Reporting Units:	**mg/L**

RSK175

Lab No.:	**J090502-01**							
Client Sample I.D.:	**Reservoir Effluent Site #5/ 18I0082-02**							
Date/Time Sampled:	**9/4/18 9:10**							
Date/Time Analyzed:	**9/6/18 14:40**							
QC Batch No.:	**180906GC8A1**							
Analyst Initials:	**AS**							
Dilution Factor:	**1.0**							
ANALYTE	**Result mg/L**	**RL mg/L**						
Methane	0.23	0.0010						

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

Reviewed/Approved By: _____ **Date** 9/12/18

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 #: 180906GC8A1

Matrix: Air
Reporting Units: mg/L

RSK175
LABORATORY CONTROL SAMPLE SUMMARY

Lab No.:	METHOD BLANK			LCS		LCSD					
Date/Time Analyzed:	9/6/18 10:18			9/6/18 9:52		9/6/18 10:06					
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	0.572	87.4	0.566	86.5	0.9	70	130	30.0

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

Reviewed/Approved By: _____ Date 9/12/18
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.

Chain of Custody

18I0082

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 September, 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
9/4/2018	0940	Reservoir Influent Site #3	DW	1W	N/A	7.87	23.4°	8.3	X		X							
9/4/2018	0910	Reservoir Effluent Site #5	DW	1W	N/A	8.14	24.0°	3.22		X	X		X					
9/4/2018	0910	Reservoir Effluent Site #5	DW	1W	2	8.14	24.0°	3.22				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 McCoy	Patrick McCoy / City of Lomita	9/4/2018 /	12:45	Chris Martinez
Chris Martinez	Chris Martinez	9-4-18	2:55	Chris Perez / CLSB

Comments:

Samples received: ( ) On ice ( ) Intact ( ) Custody seals Temp 4.5 ( ) F (X) 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 September 2018 Clinical Lab No.: 18I0788

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

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

Enclosed are the results of the analyses for samples received at the laboratory on 09/11/18 . 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 Sep
Project Manager: Mark Andersen

Work Order: 18I0788
Received: 09/11/18 15:00
Reported: 09/21/18

Raw Water Site #1 **18I0788-01 (Water)** **Sample Date:** 09/11/18 9:50 **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	09/11/18	09/11/18	1837056	
pH (Field)	Field	**7.83**		N/A	pH Units	09/11/18	09/11/18	1837056	
Temperature (Field)	Field	**23.4**		N/A	°C	09/11/18	09/11/18	1837056	
Microbiology Analyses									
Total Coliform	SM 9223	A		N/A	P/A	09/11/18	09/12/18	1837084	
E. Coli	SM 9223	A		N/A	P/A	09/11/18	09/12/18	1837084	
Plate Count	SM9215B	**160**	1	500	CFU/ml	09/11/18	09/13/18	1837119	
General Physical Analyses									
Apparent Color	SM 2120BM	**10.0**	3.0	15	Color Units	09/11/18	09/11/18	1837094	
General Chemical Analyses									
Hardness, Total (as CaCO3)	Calculated	**350**	6.6	N/A	mg/L	09/18/18	09/18/18	[CALC]	
Total Filterable Residue/TDS	SM 2540C	**730**	5.0	1000	mg/L	09/11/18	09/13/18	1837029	
Metals									
Calcium (Ca)	EPA 200.7	**93**	1.0	N/A	mg/L	09/18/18	09/18/18	1838046	
Iron (Fe)	EPA 200.7	**200**	100	300	ug/L	09/19/18	09/19/18	1838074	
Magnesium (Mg)	EPA 200.7	**28**	1.0	N/A	mg/L	09/18/18	09/18/18	1838046	
Manganese (Mn)	EPA 200.7	**150**	20	50	ug/L	09/19/18	09/19/18	1838074	

Filter Effluent (Free Chlorine) Site #2 **18I0788-02 (Water)** **Sample Date:** 09/11/18 10:40 **Sampler:** Patrick McCue

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	**13.8**		N/A	mg/L	09/11/18	09/11/18	1837056	
pH (Field)	Field	**7.83**		N/A	pH Units	09/11/18	09/11/18	1837056	
Temperature (Field)	Field	**23.8**		N/A	°C	09/11/18	09/11/18	1837056	
Microbiology Analyses									
Total Coliform	SM 9223	A		N/A	P/A	09/11/18	09/12/18	1837084	
E. Coli	SM 9223	A		N/A	P/A	09/11/18	09/12/18	1837084	
Plate Count	SM9215B	ND	1	500	CFU/ml	09/11/18	09/13/18	1837119	

Lomita, City of
24373 Walnut Avenue
Lomita CA, 91717

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

Work Order: 18I0788
Received: 09/11/18 15:00
Reported: 09/21/18

Filter Effluent (Total Chlorine) Site #3 **18I0788-03 (Water)** **Sample Date:** 09/11/18 10:48 **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	09/11/18	09/11/18	1837056	
pH (Field)	Field	**7.91**		N/A	pH Units	09/11/18	09/11/18	1837056	
Temperature (Field)	Field	**23.4**		N/A	°C	09/11/18	09/11/18	1837056	
General Physical Analyses									
Apparent Color	SM 2120BM	**5.0**	3.0	15	Color Units	09/11/18	09/11/18	1837094	
Metals									
Iron (Fe)	EPA 200.7	ND	100	300	ug/L	09/19/18	09/19/18	1838074	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	09/19/18	09/19/18	1838074	

Zone #2 Site #6 **18I0788-04 (Water)** **Sample Date:** 09/11/18 10:50 **Sampler:** Patrick McCue

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	**2.02**		N/A	mg/L	09/11/18	09/11/18	1837056	
pH (Field)	Field	**8.53**		N/A	pH Units	09/11/18	09/11/18	1837056	
Temperature (Field)	Field	**23.9**		N/A	°C	09/11/18	09/11/18	1837056	
General Chemical Analyses									
Hardness, Total (as CaCO3)	Calculated	**190**	6.6	N/A	mg/L	09/18/18	09/18/18	[CALC]	
Total Filterable Residue/TDS	SM 2540C	**420**	5.0	1000	mg/L	09/11/18	09/13/18	1837029	
Metals									
Calcium (Ca)	EPA 200.7	**46**	1.0	N/A	mg/L	09/18/18	09/18/18	1838046	
Magnesium (Mg)	EPA 200.7	**19**	1.0	N/A	mg/L	09/18/18	09/18/18	1838046	

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 Sep
Project Manager: Mark Andersen

Work Order: 18I0788
Received: 09/11/18 15:00
Reported: 09/21/18

Reservoir Effluent Site #5 **18I0788-05 (Water)** **Sample Date:** 09/11/18 10:15 **Sampler:** Patrick McCue

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	**3.79**		N/A	mg/L	09/11/18	09/11/18	1837056	
pH (Field)	Field	**8.16**		N/A	pH Units	09/11/18	09/11/18	1837056	
Temperature (Field)	Field	**24**		N/A	°C	09/11/18	09/11/18	1837056	
General Physical Analyses									
Odor Threshold	EPA 140.1-M	**2**	1	3	TON	09/11/18	09/11/18	1837094	
General Chemical Analyses									
Hardness, Total (as CaCO3)	Calculated	**270**	6.6	N/A	mg/L	09/18/18	09/18/18	[CALC]	
Total Filterable Residue/TDS	SM 2540C	**590**	5.0	1000	mg/L	09/11/18	09/13/18	1837029	
Metals									
Calcium (Ca)	EPA 200.7	**69**	1.0	N/A	mg/L	09/18/18	09/18/18	1838046	
Magnesium (Mg)	EPA 200.7	**23**	1.0	N/A	mg/L	09/18/18	09/18/18	1838046	

ND Analyte NOT DETECTED at or above the reporting limit

AirTECHNOLOGY
Laboratories, Inc.

September 19, 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: 18I0788
Lab Number: J091202-01/02

Enclosed are results for sample(s) received 9/12/18 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,

Mark Johnson
Operations Manager
MJohnson@AirTechLabs.com

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

J091202-01/02

SUBCONTRACT ORDER

Clinical Laboratory of San Bernardino

18I0788

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 [ ] nelson@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: Raw Water Site #1 / 18I0788-01	**Sampled: 09/11/18 09:50 PS Code: Water** **WTX ID:**
01	
Methane RSK175	Report in mg/L
Containers Supplied:	
40ml Amber Vial (B) 40ml Amber Vial (C)	
Sample ID: Reservoir Effluent Site #5 / 18I0788-05	**Sampled: 09/11/18 10:15 PS Code: Water** **WTX ID:**
02	
Methane RSK175	Report in mg/L
Containers Supplied:	
40ml Amber Vial (B) 40ml Amber Vial (C)	

7°C

BJ Shy	09/12/18 07:50		9/12/18 841
Released By	Date / Time	Received By	Date / Time
	9/12/18 1050		9/12/18 1050
Released By	Date / Time	Received By	Date / Time

Client: Clinical Laboratory
Attn: Stu Styles
Project Name: NA
Project No.: 18I0788
Date Received: 09/12/18
Matrix: Water
Reporting Units: mg/L

RSK175

Lab No.:	J091202-01		J091202-02					
Client Sample I.D.:	Raw Water Site #1 / 18I0788-01		Reservoir Effluent Site #5 / 18I0788-05					
Date/Time Sampled:	9/11/18 9:50		9/11/18 10:15					
Date/Time Analyzed:	9/19/18 14:05		9/19/18 13:52					
QC Batch No.:	180919GC8A1		180919GC8A1					
Analyst Initials:	AS		AS					
Dilution Factor:	1.0		1.0					
ANALYTE	Result mg/L	RL mg/L	Result mg/L	RL mg/L				
Methane	1.6	0.0010	0.15	0.0010				

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

Reviewed/Approved By: _____ Date 9/19/18
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 #: 180919GC8A1

Matrix: Air

Reporting Units: mg/L

RSK175
LABORATORY CONTROL SAMPLE SUMMARY

Lab No.:	METHOD BLANK			LCS		LCSD					
Date/Time Analyzed:	9/19/18 13:38			9/19/18 12:45		9/19/18 13:01					
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	0.790	121	0.824	126	4.2	70	130	30.0

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

Reviewed/Approved By: _____ Date 9/19/18

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

18I0788

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 Monthly Compliance Samples; 2nd week of September, 2018*	*YES*	
		ELAP #	
Comments		**1088**	
Sampled by	*Patrick McCue*		

Date	Time	Sample Idenitification	Matrix	Type	Preserv	Temp.	pH	Total Chlorine	Total Dissolved Solids	Iron & Manganese	E. Coli	Total Coliform	Hetetrophic Plate Count	Nitrate	Color	Odor	Methane (WATER) (RSK175)	Hardness
9/11/2018	0950	Raw Water Site #1	GW	1W	N/A	23.4°	7.83	Ø	X•	X•					X•			
9/11/2018	0950	Raw Water Site #1	GW	1W	1, 2, 7						X•	X•	X•				X•	X•
9/11/2018	1040	Filter Effluent (Free Chlorine) Site#2	DW	1W	1,7	23.8°	7.83	13.8			X•	X•	X•					
9/11/2018	1048	Filter Effluent (Total Chlorine) Site#3	DW	1W	N/A	23.4°	7.91	10.6		X•					X•			
9/11/2018	1050	Zone #2 Site #6	DW	1D	N/A	23.9°	8.53	2.02	X•									X•
9/11/2018	1015	Reservoir Effluent Site #5	DW	1D	N/A	24.6°	8.16	3.79	X•							X•		X•
9/11/2018	1015	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	9/11/2018 / 1:00	Chris Martinez	Chris Martinez
Chris Martinez	Chris Martinez	9-11-18 3:00		Chris Perez /LCSB

Comments:

Samples received: ( ) On ice ( ) Intact ( ) Custody seals Temp 8 ( ) F (X) 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.

02 October 2018 Clinical Lab No.: 18I1461

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

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

Enclosed are the results of the analyses for samples received at the laboratory on 09/18/18 . 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 Sept, 2018 Compliance Sampling
Project Manager: Mark Andersen

Work Order: 18I1461
Received: 09/18/18 16:15
Reported: 10/02/18

Reservoir Influent Site #3 **18I1461-01 (Water)** **Sample Date:** 09/18/18 10:40 **Sampler:** P.M.

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	**11.2**		N/A	mg/L	09/18/18	09/18/18	1838084	
pH (Field)	Field	**7.94**		N/A	pH Units	09/18/18	09/18/18	1838084	
Temperature (Field)	Field	**23.5**		N/A	°C	09/18/18	09/18/18	1838084	
General Physical Analyses									
Apparent Color	SM 2120BM	**5.0**	3.0	15	Color Units	09/18/18	09/18/18	1838094	
Metals									
Iron (Fe)	EPA 200.7	ND	100	300	ug/L	09/27/18	09/27/18	1839101	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	09/27/18	09/27/18	1839101	

Reservoir Effluent Site #5 **18I1461-02 (Water)** **Sample Date:** 09/18/18 10:55 **Sampler:** P.M.

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	**3.79**		N/A	mg/L	09/18/18	09/18/18	1838084	
pH (Field)	Field	**8.22**		N/A	pH Units	09/18/18	09/18/18	1838084	
Temperature (Field)	Field	**24**		N/A	°C	09/18/18	09/18/18	1838084	
General Physical Analyses									
Apparent Color	SM 2120BM	ND	3.0	15	Color Units	09/18/18	09/18/18	1838094	
Odor Threshold	EPA 140.1-M	**2**	1	3	TON	09/18/18	09/18/18	1838094	
General Chemical Analyses									
Total Filterable Residue/TDS	SM 2540C	**570**	5.0	1000	mg/L	09/19/18	09/25/18	1838078	

ND Analyte NOT DETECTED at or above the reporting limit

AirTECHNOLOGY
Laboratories, Inc.

September 27, 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: 18I1461
Lab Number: J092001-01

Enclosed are results for sample(s) received 9/20/18 by Air Technology Laboratories. Samples were received intact and chilled to 11° 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

18I1461

J092001-01

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 [ ] nelson@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 / 18I1461-02 **Sampled: 09/18/18 10:55 PS Code: Water** **WTX ID:**	
01	
Methane RSK175	Report in mg/L
Containers Supplied:	
40ml Amber Vial (B) 40ml Amber Vial (C)	

11°C

Released By	Date / Time	Received By	Date / Time
[signature]	09/19/18 10:00	[signature]	9/20/18 8:00
[signature]	9/20/18 10:59	[signature]	9/20/18 1059

Client: Clinical Laboratory
Attn: Stu Styles
Project Name: NA
Project No.: 18I1461
Date Received: 09/20/18
Matrix: Water
Reporting Units: mg/L

RSK175

Lab No.:	**J092001-01**							
Client Sample I.D.:	**Reservoir Effluent Site #5/18I1461-02**							
Date/Time Sampled:	**9/18/18 10:55**							
Date/Time Analyzed:	**9/27/18 11:00**							
QC Batch No.:	**180927GC8A1**							
Analyst Initials:	**AS**							
Dilution Factor:	**1.0**							
ANALYTE	**Result mg/L**	**RL mg/L**						
Methane	0.23	0.0010						

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

Reviewed/Approved By: _____ **Date** 9/27/18

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 #: 180927GC8A1

Matrix: Air

Reporting Units: mg/L

RSK175
LABORATORY CONTROL SAMPLE SUMMARY

Lab No.:	METHOD BLANK			LCS		LCSD					
Date/Time Analyzed:	9/27/18 10:47			9/27/18 10:12		9/27/18 10:26					
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	0.713	109	0.694	106	2.6	70	130	30.0

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

Reviewed/Approved By: _____ Date 9/27/18
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

18I1461

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		
Phone #	(310)903-2243	*Destination Laboratory*	
Fax #		[X] Clinical Laboratory	
Project	*Standard Analysis*	*RWQCB Compliance*	
Sub Project	*CWPF 3rd week of September, 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
9/18/2018	1040	Reservoir Influent Site #3	DW	1W	N/A	7.94	23.5°	11.2	X		X							
9/18/2018	1055	Reservoir Effluent Site #5	DW	1W	N/A	8.22	24.0°	3.79		X	X		X					
9/18/2018	1055	Reservoir Effluent Site #5	DW	1W	2							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*		*Print Name / Company*
Patrick McCue	Patrick McCue / City of Lomita	9/18/2018 /	1:30	Chris Martinez
Chris Martinez	Chris Martinez	9-18-18	4:15	JK CISB

Comments:

Samples received: ( ) On ice ( ) Intact ( ) Custody seals Temp 11 ( ) F (X) 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.

08 October 2018 Clinical Lab No.: 18I1992

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

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

Enclosed are the results of the analyses for samples received at the laboratory on 09/25/18 . 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 4th Week of Sept, 2018 Compliance Sampling
Project Manager: Mark Andersen

Work Order: 18I1992
Received: 09/25/18 14:40
Reported: 10/08/18

Reservoir Influent Site #3 **18I1992-01 (Water)** **Sample Date:** 09/25/18 9:05 **Sampler:** P.M.

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	**11.6**		N/A	mg/L	09/25/18	09/25/18	1839067	
pH (Field)	Field	**7.41**		N/A	pH Units	09/25/18	09/25/18	1839067	
Temperature (Field)	Field	**22.6**		N/A	°C	09/25/18	09/25/18	1839067	
General Physical Analyses									
Apparent Color	SM 2120BM	ND	3.0	15	Color Units	09/25/18	09/25/18	1839087	
Metals									
Iron (Fe)	EPA 200.7	ND	100	300	ug/L	10/03/18	10/03/18	1840071	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	10/03/18	10/03/18	1840071	

Reservoir Effluent Site #5 **18I1992-02 (Water)** **Sample Date:** 09/25/18 9:30 **Sampler:** P.M.

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	**3.69**		N/A	mg/L	09/25/18	09/25/18	1839067	
pH (Field)	Field	**7.73**		N/A	pH Units	09/25/18	09/25/18	1839067	
Temperature (Field)	Field	**22.7**		N/A	°C	09/25/18	09/25/18	1839067	
General Physical Analyses									
Apparent Color	SM 2120BM	ND	3.0	15	Color Units	09/25/18	09/25/18	1839087	
Odor Threshold	EPA 140.1-M	**2**	1	3	TON	09/25/18	09/25/18	1839087	
General Chemical Analyses									
Total Filterable Residue/TDS	SM 2540C	**610**	5.0	1000	mg/L	09/26/18	09/27/18	1839078	

ND Analyte NOT DETECTED at or above the reporting limit

Air TECHNOLOGY
Laboratories, Inc.

October 3, 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: 18I1992
Lab Number: J092602-01

Enclosed are results for sample(s) received 9/26/18 by Air Technology Laboratories. Samples were received intact and chilled to 8° 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

18I1992

J092602-01

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 [ ] nelson@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
-01 **Sample ID: Reservoir Effluent Site #5 / 18I1992-02** **Sampled: 09/25/18 09:30 PS Code: Water** **WTX ID:**	
Methane RSK175	Report in mg/L

Containers Supplied:

40ml Amber Vial (B) 40ml Amber Vial (C)

gc

Released By	Date / Time	Received By	Date / Time
	09/26/18 07:45		9/26/18 8:27
Released By	Date / Time	Received By	Date / Time
	9/26/18 9:48		9/26/18 0948

Client: Clinical Laboratory
Attn: Stu Styles
Project Name: NA
Project No.: 18I1992
Date Received: 09/26/18
Matrix: Water
Reporting Units: mg/L

RSK175

Lab No.:	**J092602-01**							
Client Sample I.D.:	**Reservoir Effluent Site #5/18I1992-02**							
Date/Time Sampled:	**9/25/18 9:30**							
Date/Time Analyzed:	**9/27/18 11:13**							
QC Batch No.:	**180927GC8A1**							
Analyst Initials:	**AS**							
Dilution Factor:	**1.0**							
ANALYTE	**Result mg/L**	**RL mg/L**						
Methane	0.25	0.0010						

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

Reviewed/Approved By: _____ **Date** 10/3/18
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 #: 180927GC8A1

Matrix: Air
Reporting Units: mg/L

RSK175
LABORATORY CONTROL SAMPLE SUMMARY

Lab No.:	METHOD BLANK			LCS		LCSD					
Date/Time Analyzed:	9/27/18 10:47			9/27/18 10:12		9/27/18 10:26					
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	0.713	109	0.694	106	2.6	70	130	30.0

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

Reviewed/Approved By: _____ Date 10/3/18
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

1811992

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 September, 2018 Compliance Sampling*	**ELAP #**	
Comments	*For TC/EC/BACT see weekly Distro CoC*	**1088**	
Sampled by	P. Ma		

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
9/25/2018	0905	Reservoir Influent Site #3	DW	1W	N/A	7.41	22.6°	11.6	X		X						
9/25/2018	0930	Reservoir Effluent Site #5	DW	1W	N/A	7.73	22.7°	3.69		X	X		X				
9/25/2018	0930	Reservoir Effluent Site #5	DW	1W	2							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*		*Print Name / Company*
Patrick McGee	Patrick McGee / City of Lomita	9/25/2018 /	12:40	Chris Martinez
Chris Martinez	Chris Martinez	9-25-18	2:40	CLSB

Comments:

Samples received: ( ) On ice (✓) Intact ( ) Custody seals Temp 9.6 ( ) 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.

24 September 2018 Clinical Lab No.: 18I0786

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

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

Enclosed are the results of the analyses for samples received at the laboratory on 09/11/18 . 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 September 2018
Project Manager: Mark Andersen

Work Order: 18I0786
Received: 09/11/18 15:00
Reported: 09/24/18

1948 252nd St. **18I0786-01 (Water)** **Sample Date:** 09/11/18 8:00 **Sampler:** P.M.

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	**3.7**		N/A	mg/L	09/11/18	09/11/18	1837056	
pH (Field)	Field	**8.09**		N/A	pH Units	09/11/18	09/11/18	1837056	
Temperature (Field)	Field	**24.2**		N/A	°C	09/11/18	09/11/18	1837056	
General Chemical Analyses									
Ortho-Phosphate (PO4)	HACH 8048	**0.48**	0.020	N/A	mg/L	09/12/18	09/12/18	1837064	
Phosphorus (Total as P)	HACH 8190	**0.36**	0.0067	N/A	mg/L	09/18/18	09/18/18	1838062	

24632 S. Moon **18I0786-02 (Water)** **Sample Date:** 09/11/18 8:40 **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	09/11/18	09/11/18	1837056	
pH (Field)	Field	**8.09**		N/A	pH Units	09/11/18	09/11/18	1837056	
Temperature (Field)	Field	**24.1**		N/A	°C	09/11/18	09/11/18	1837056	
General Chemical Analyses									
Ortho-Phosphate (PO4)	HACH 8048	**0.47**	0.020	N/A	mg/L	09/12/18	09/12/18	1837064	
Phosphorus (Total as P)	HACH 8190	**0.36**	0.0067	N/A	mg/L	09/18/18	09/18/18	1838062	

2450 W. 247th St. **18I0786-03 (Water)** **Sample Date:** 09/11/18 8:50 **Sampler:** P.M.

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	**0.8**		N/A	mg/L	09/11/18	09/11/18	1837056	
pH (Field)	Field	**7.96**		N/A	pH Units	09/11/18	09/11/18	1837056	
Temperature (Field)	Field	**24.6**		N/A	°C	09/11/18	09/11/18	1837056	
General Chemical Analyses									
Ortho-Phosphate (PO4)	HACH 8048	**0.54**	0.020	N/A	mg/L	09/12/18	09/12/18	1837064	
Phosphorus (Total as P)	HACH 8190	**0.35**	0.0067	N/A	mg/L	09/18/18	09/18/18	1838062	

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: Lomita Distribution Ortho, 2nd Week September 2018
Project Manager: Mark Andersen

Work Order: 18I0786
Received: 09/11/18 15:00
Reported: 09/24/18

2052 Dawn St. **18I0786-04 (Water)** **Sample Date:** 09/11/18 8:15 **Sampler:** P.M.

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	**0.83**		N/A	mg/L	09/11/18	09/11/18	1837056	
pH (Field)	Field	**7.91**		N/A	pH Units	09/11/18	09/11/18	1837056	
Temperature (Field)	Field	**25.7**		N/A	°C	09/11/18	09/11/18	1837056	
General Chemical Analyses									
Ortho-Phosphate (PO4)	HACH 8048	**0.50**	0.020	N/A	mg/L	09/12/18	09/12/18	1837064	
Phosphorus (Total as P)	HACH 8190	**0.34**	0.0067	N/A	mg/L	09/18/18	09/18/18	1838062	

CWPF SP5 **18I0786-05 (Water)** **Sample Date:** 09/11/18 10:15 **Sampler:** P.M.

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	**3.79**		N/A	mg/L	09/11/18	09/11/18	1837056	
pH (Field)	Field	**8.16**		N/A	pH Units	09/11/18	09/11/18	1837056	
Temperature (Field)	Field	**24**		N/A	°C	09/11/18	09/11/18	1837056	
General Chemical Analyses									
Ortho-Phosphate (PO4)	HACH 8048	**0.46**	0.020	N/A	mg/L	09/12/18	09/12/18	1837064	
Phosphorus (Total as P)	HACH 8190	**0.34**	0.0067	N/A	mg/L	09/18/18	09/18/18	1838062	

ND Analyte NOT DETECTED at or above the reporting limit

Clinical Laboratory of San Bernardino, Inc.

Chain of Custody

1907786

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 #	(310) 325-3627	*RWQCB Compliance*	
Project	*Standard Analysis*	*No*	
Sub Project	*Lomita Distribution Ortho, 2nd Week September, 2018*	ELAP #	
Comments		**1088**	
Sampled by	P. M.		

Date	Time	Sample Idenitification	Matrix	Type	Preserv	Bottle Number	Temp.	Total Chlorine	pH	ORTHO PHOSPHATE (o-PO4)	TOTAL PHOSPHATE (PO4)				Comments / P.S. Codes
9/11/2018	0800	1948 252ND ST.	DW	D1	N/A	3	24.2°	3.7	8.09	X	X				
9/11/2018	0840	24632 S. MOON	DW	D1	N/A	4	24.1°	2.9	8.09	X	X				
9/11/2018	0850	2450 W. 247th ST.	DW	D1	N/A	6	24.6°	0.6	7.96	X	X				
9/11/2018	0815	2052 DAWN ST.	DW	D1	N/A	7	25.7°	0.83	7.91	X	X				
9-11-18	1015	CWPF SP5	DW	D1	N/A	8	24.0°	3.79	8.16	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 McCue	Patrick McCue/City of Lomita	9/11/2018 / 1:00	Chris M	Chris Martinez
Chris Martinez	Chris Martinez	9-11-18 3:00		CUSB

Samples received: ( ) On ice ( ) Intact ( ) Custody seals Temp 8 ( )
F (X) 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.

24 September 2018 Clinical Lab No.: 18I0956

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

Project Name: Standard Analysis
Sub Project: Well TCP Quarterly

Enclosed are the results of the analyses for samples received at the laboratory on 09/11/18 . 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

Clinical Laboratory of San Bernardino, Inc.

Lomita, City of	Project: Standard Analysis	Work Order: 18I0956
24373 Walnut Avenue	Sub Project: Well TCP Quarterly	Received: 09/11/18 15:00
Lomita CA, 91717	Project Manager: Mark Andersen	Reported: 09/24/18

CWPF SP1 **18I0956-01 (Water)** **Sample Date:** 09/11/18 9:50 **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	09/11/18	09/11/18	1837102	
pH (Field)	Field	**7.83**		N/A	pH Units	09/11/18	09/11/18	1837102	
Temperature (Field)	Field	**23.4**		N/A	°C	09/11/18	09/11/18	1837102	
Synthetic Organic Analyses / 1,2,3-TCP									
1,2,3-Trichloropropane	SRL 524M-TCP	ND	0.0050	0.005	ug/L	09/19/18	09/20/18	1838099	

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

Clinical Laboratory of San Bernardino, Inc.

EDT Transfer Confirmation 1

Work Order: 18I0956
Report Date: 09/24/2018
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: 180911 09:50

1,2,3-TRICHLOROPROPANE	Result: ND	Units: UG/L	Entry No.: 77443	Analyzed: 180920

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

1810956

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	*WELL TCP, QUARTERLY*	*yes*	
		ELAP #	
Comments	*WELL TCP, QUARTERLY*	**1088**	
Sampled by	*PM*		

Date	Time	Sample Idenitification	Matrix	Type	Preserv	pH	Temp.	Total Chlorine	TCP								Comments / P.S. Codes
9/11/2018	0950	CWPF SP1	DW	1W	2	7.83	23.4°	Ø	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 McCue	Patrick McCue / City of Lomita	9/11/2018 /	1:00	Chris Martinez
Chris Martinez	Chris Martinez	9-11-18	3:00	

Comments:

Samples received: ( ) On ice ( ) Intact ( ) Custody seals Temp 8 ( ) F (X) C

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

SEPTEMBER 2018				
DATE	**DAY**	**METHANE HANDHELD**		**COMMENTS**
9/1/2018	Sat			
9/2/2018	Sun			
9/3/2018	Mon	CH_4-	Oxy-	
9/4/2018	Tue	CH_4- 1%	Oxy- 20.9%	
9/5/2018	Wed	CH_4- 1%	Oxy- 20.9%	
9/6/2018	Thu	CH_4- 0%	Oxy- 20.9%	
9/7/2018	Fri	CH_4-	Oxy-	
9/8/2018	Sat			
9/9/2018	Sun			
9/10/2018	Mon	CH_4- 0%	Oxy- 20.3%	
9/11/2018	Tue	CH_4- 1%	Oxy- 20.8%	
9/12/2018	Wed	CH_4- 1%	Oxy- 20.9%	
9/13/2018	Thu	CH_4-	Oxy-	
9/14/2018	Fri	CH_4-	Oxy-	
9/15/2018	Sat			
9/16/2018	Sun			
9/17/2018	Mon	CH_4- 1%	Oxy- 20.8%	
9/18/2018	Tue	CH_4- 0%	Oxy- 20.9%	
9/19/2018	Wed	CH_4- 1%	Oxy- 20.8%	
9/20/2018	Thu	CH_4-	Oxy-	
9/21/2018	Fri	CH_4-	Oxy-	
9/22/2018	Sat			
9/23/2018	Sun			
9/24/2018	Mon	CH_4-	Oxy-	
9/25/2018	Tue	CH_4-	Oxy-	
9/26/2018	Wed	CH_4-	Oxy-	
9/27/2018	Thu	CH_4- 0%	Oxy- 20.9%	
9/28/2018	Fri	CH_4-	Oxy-	
9/29/2018	Sat			
9/30/2018	Sun			

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, Year: **September 2018**

#	Code	Sample ID	Location	Sample Date	Temp	pH	Total Chlorine	Free Chlorine	Total Ammonia	Free Ammonia	Nitrite[3]	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	9/4/2018	24.8	8.08	3.00	0.05	0.62	0.11	0.003	ND	A	ND	1	Well/MWD Blend
2	D	S13-004	24632 S Moon Ave	9/4/2018	24.6	8.07	2.60	0.03	0.53	0.09	0.034	ND	A	3	1	Well/MWD Blend
3	D	S13-008	25417 Pennsylvania Ave	9/4/2018	24.7	8.09	3.20	0.05	0.56	0.10	0.013	ND	A	ND	1	Well/MWD Blend
4	D	A	2052 Dawn St	9/4/2018	25.6	7.95	0.97	0.01	0.30	0.15	0.087	ND	A	110	1	Well/MWD Blend
5	D		Reservoir SP5	9/4/2018	24.0	8.14	3.22	0.04	0.60	0.00	0.004	ND	A	ND	1	Well/MWD Blend
6	D	S13-001	1912 W 259th St	9/4/2018	24.7	8.59	2.20	0.05	0.44	0.09	0.018	ND	A	ND	2	MWD Only
7	D	S13-002	26314 S Monte Vista Ave	9/4/2018	24.4	8.62	2.20	0.03	0.43	0.07	0.019	ND	A	ND	3	MWD Only
8	D	S13-005	2500 PCH	9/4/2018	24.4	8.62	2.10	0.02	0.42	0.08	0.030	ND	A	ND	2	MWD Only
1	D	S13-003	1948 W 252nd St	9/11/2018	24.2	8.09	3.70	0.05	0.72	0.12	0.010	ND	A	ND	1	Well/MWD Blend
2	D	S13-004	24632 S Moon Ave	9/11/2018	24.1	8.09	2.90	0.06	0.56	0.14	0.014	ND	A	3	1	Well/MWD Blend
3	D	S13-008	25417 Pennsylvania Ave	9/11/2018	25.1	8.11	3.70	0.08	0.62	0.12	0.012	ND	A	ND	1	Well/MWD Blend
4	D	A	2052 Dawn St	9/11/2018	25.7	7.91	0.83	0.03	0.31	0.15	0.087	0.45	A	87	1	Well/MWD Blend
5	D		Reservoir SP5	9/11/2018	24.0	8.16	3.79	0.08	0.72	0.00	0.014	ND	A	1	1	Well/MWD Blend
6	D	S13-001	1912 W 259th St	9/11/2018	23.5	8.54	2.30	0.05	0.52	0.06	0.009	ND	A	ND	2	MWD Only
7	D	S13-002	26314 S Monte Vista Ave	9/11/2018	23.2	8.58	2.30	0.04	0.45	0.05	0.004	ND	A	ND	3	MWD Only
8	D	S13-005	2500 PCH	9/11/2018	23.8	8.58	2.40	0.05	0.45	0.07	0.011	ND	A	ND	2	MWD Only
1	D	S13-003	1948 W 252nd St	9/18/2018	24.4	8.07	3.40	0.06	0.72	0.05	0.010	ND	A	ND	1	Well/MWD Blend
2	D	S13-004	24632 S Moon Ave	9/18/2018	23.8	8.14	3.00	0.06	0.61	0.08	0.019	ND	A	6	1	Well/MWD Blend
3	D	S13-008	25417 Pennsylvania Ave	9/18/2018	24.0	8.17	3.70	0.07	0.53	0.03	0.016	ND	A	ND	1	Well/MWD Blend
4	D	A	2052 Dawn St	9/18/2018	25.5	7.91	0.89	0.04	0.30	0.11	0.116	0.41	A	130	1	Well/MWD Blend
5	D		Reservoir SP5	9/18/2018	24.0	8.22	3.79	0.04	0.70	0.04	0.006	ND	A	ND	1	Well/MWD Blend
6	D	S13-001	1912 W 259th St	9/18/2018	23.6	8.55	2.30	0.06	0.46	0.03	0.010	ND	A	ND	2	MWD Only
7	D	S13-002	26314 S Monte Vista Ave	9/18/2018	23.1	8.60	2.30	0.04	0.37	0.05	0.008	ND	A	ND	3	MWD Only
8	D	S13-005	2500 PCH	9/18/2018	23.3	8.65	2.20	0.06	0.46	0.06	0.011	ND	A	ND	2	MWD Only
1	D	S13-003	1948 W 252nd St	9/25/2018	23.5	7.74	3.40	0.07	0.72	0.10	0.006	ND	A	ND	1	Well/MWD Blend
2	D	S13-004	24632 S Moon Ave	9/25/2018	23.1	7.63	3.20	0.04	0.62	0.12	0.041	ND	A	ND	1	Well/MWD Blend
3	D	S13-008	25417 Pennsylvania Ave	9/25/2018	23.4	7.66	3.70	0.06	0.64	0.09	0.015	ND	A	ND	1	Well/MWD Blend
4	D	A	2052 Dawn St	9/25/2018	23.6	7.55	1.03	0.05	0.32	0.14	0.182	0.40	A	180	1	Well/MWD Blend
5	D		Reservoir SP5	9/25/2018	22.7	7.73	3.69	0.09	0.76	0.00	0.002	ND	A	ND	1	Well/MWD Blend
6	D	S13-001	1912 W 259th St	9/25/2018	23.4	8.17	2.20	0.05	0.47	0.03	0.004	ND	A	ND	2	MWD Only
7	D	S13-002	26314 S Monte Vista Ave	9/25/2018	22.8	7.20	2.30	0.05	0.49	0.05	0.007	ND	A	ND	3	MWD Only
8	D	S13-005	2500 PCH	9/25/2018	23.0	8.09	2.20	0.06	0.45	0.05	0.026	ND	A	ND	2	MWD Only
1	D	S13-003	1948 W 252nd St												1	Well/MWD Blend
2	D	S13-004	24632 S Moon Ave												1	Well/MWD Blend
3	D	S13-008	25417 Pennsylvania Ave												1	Well/MWD Blend
4	D	A	2052 Dawn St												1	Well/MWD Blend
5	D		Reservoir												1	Well/MWD Blend
6	D	S13-001	1912 W 259th St												2	MWD Only
7	D	S13-002	26314 S Monte Vista Ave												3	MWD Only
8	D	S13-005	2500 PCH												2	MWD Only

[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.

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