## **CITY OF LOMITA**



# Cypress Water Production Facility Monthly Status Report

February 2019

### TABLE OF CONTENTS

COVER LETTER 1
A. BACKGROUND 2
B. WELL PRODUCTION AND OPERATIONS 2
C. OPERATIONAL INTERRUPTIONS
D. SAMPLE LOCATIONS
E. WATER QUALITY MONITORING
E1. IRON, MANGANESE AND COLOR
E2. FREE AND TOTALCHLORINE RESIDUALS
E3. TOTAL DISSOLVED SOLIDS (TDS), ODOR, HARDNESS AND METHANE3
E3-1 TOTAL DISSOLVED SOLIDS (TDS)
E3-2 HARDNESS 3
E3-3 DISSOLVED MATHANE (IN WATER)4
E3-4 METHANE (IN AIR)4
E3-5 ODOR4
E3-6 TOTAL PHOSPHATE/ORTHOPHOSPHATE4
E4. NITRIFICATION MONITORING4
<b>F. TABLES</b>

.

#### **CITY COUNCIL**

HENRY SANCHEZ, JR JIM GAZELEY MICHAEL SAVIDAN CINDY SEGAWA MARK WARONEK



#### ADMINISTRATION

RYAN SMOOT CITY MANAGER

March 11, 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 February 1 through February 28, 2019.

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 February 2019.

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 May 30, 2018, the City of Lomita received its Domestic Water Supply Permit Amendment from the State Water Resources Control Board, Division of Drinking Water 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 February 2019 maintaining water levels inside the reservoir ranging from 7 feet to 10 feet. The average flow from Well No. 5 was 364 gpm and 575 gpm from MWD. The blend ratio for month was 33% Well water and 67% MWD water. See Table 1 below for production totals for the month of February 2019.

Table 1, Wonthly Product	on Lotais.										
	P	Production for February 2019									
Well No. 5	28.03	ac-ft	9,134,494 (gallons)								
MWD.	55.85	ac ii	18,200,000 (gellons)								
Combined Total	83.89	ac-ft	27,334,494 (gallons)								
Daily	3.00	ac-ft/day	976,232 (gallons/day)								

Table 1. Monthly Production Totals.

### C. OPERATIONAL INTERRUPTIONS

The CWPF was offline for approximately six days during this month to collect samples of the green sand filter media. Routine and preventive maintenance was performed on various pieces of equipment as-needed. Also, during this month, the HACH chemical analyzers at the CWPF were serviced, certified and calibrated. 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 at 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 665 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 820 mg/L and 620 mg/L, respectively.

### E3-2 HARDNESS

The sampling results for the month indicate the hardness levels of the blended water to be on average 350 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 0.23 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 February 2019 in Appendix B.

### E3-5 ODOR

The odor levels at the CWPF effluent averaged 1.5 units for the month. Odor levels within the distribution system averaged 1.1 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.

### **E4. NITRIFICATION MONITORING**

Weekly nitrification sampling was performed during the month of February 2019 following the City's Nitrification Monitoring Plan. Refer to Appendix C for results.

### F. TABLES

	SP1, Well Raw Water Discharge						Pres	Combi sure Fi	ilter	SP3, After chloramination static m reservoir entry			tatic mi	cer;		
Date, week of	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
2/5/2019		Data data		Ra							ND	300	ND	50	5	15
2/12/2019	170	300	150	50	15	15	Α	А	ND	500	ND	300	ND	50	5	15
2/20/2019					-	A SALA				The state	ND	300	ND	50	5	15
2/26/2019	40					and the second s			and and a	建建筑	ND	300	ND	50	ND	15

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

#### 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, SP2			SP3		1. 1. 1.	SP4		SP5			
week of	Free CI	Free CI	Total CI	Total NH <sub>3</sub>	Free CI	Total CI	Total NH₃	Free CI	Total CI	Total NH <sub>3</sub>	
2/5/2019	9.90	0.70	4.60	0.72	1.00	5.10	0.64	0.11	3.12	0.59	
2/12/2019	8.90	0.80	9.80	0.90	0.56	10.00	0.70	0.05	3.06	0.54	
2/20/2019	10.25	1.00	7.85	1.02	0.57	5.70	0.84	0.12	3.39	0.54	
2/26/2019	-		-	-	-	-	1.50	0.07	3.34	0.61	

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

		TD	S, mg/L		T.O.I	N.		Hardn	ess, mç	J/L		hane r), mg/L
Date, week of	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
2/5/2019	and the second s		650	500-750	2	3						0.15
2/12/2019	820	620	710	500-750	2	3	440	300	350	180-250	3.0	0.30
2/20/2019			690	500-750	1	3		11.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1		191.35		0.18
2/26/2019			610	500-750	1	3	Rections					0.27
Average	12.3		665	500-750	1.5	3		No.	115 12	C. Bell		0.23

#### Notes:

Monthly-<u>Orange;</u> Weekly-<u>Yellow</u> 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 252 <sup>nd</sup> St		0.41	0.38
24632 S Moon Ave		0.43	0.44
2450 W 247 <sup>th</sup> St	1/8/19	0.45	0.47
2052 Dawn St	•	0.48	0.49
CWPF SP5		0.40	States and the second second

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

### Monthly CWPF Monitoring Report – February <u>2019</u> Cypress Water Production Facility City of Lomita; System No. 1910073

		City	or Lomita	; System	10. 19100	13		
Sample Locations	Frequency	MCL/	2/5/19	2/12/19	2/20/19	2/26/19		Comments
and Parameters		Goal	1 <sup>st</sup> Wk	2 <sup>nd</sup> Wk	3 <sup>rd</sup> Wk	4 <sup>th</sup> Wk	5 <sup>th</sup> Wk	and/or
								Other Info.
			or Mo.					
			Result					
			(date)					
SP1 Also called	Well 5 Raw		or Site#1.					
TDS, ppm	Monthly	See SP5	820	Operations	Data/Inform	nation:		*Chlorine injected after
Llandaaaa	Monthly	See SP5	2/12/19	CWPF opera	tion days			SP1, before entering the greensand filter.
Hardness	Monuny	000 01 0	440 2/12/19					and groonbaria mor.
CH4, ppm	Monthly	See SP5	3.0	<u>On Well 5:</u> [ - 28.03 AF	Daily average	flow – <mark>364 gp</mark> n	n; total prod.	
			2/12/19		ell 5/MWD da	ata: Average V	Vell 5: MWD	
Iron, ppb	Monthly	See SP3	170	blend Ratio -	33% WELL: 6	67% MWD; tot	al prod	
Manganese, ppb	Monthly	See SP3	2/12/19 150	83.89 AF				
Mangariese, ppb	Monany		2/12/19	Chlorine Do	sage: N/A*			
Color, units	Monthly	See SP3	15	ornonno De	ougo.			
Total Coliform, P or A	Monthly	Δ.	2/12/19					
Total Collionn, P of A	Monuny	A	A 2/12/19					
SP2 Also called	Filter Efflu	ent or Si						The second second second second
Total Coliform, P or A	Monthly	A	A					*Ammonia added after
HPC,MPN/100 ml	Monthly	500	ND	Ammonia D	osage: N/A*			filter effluent
Free CI Res, ppm	Continuous	111000000000000000000000000000000000000	9.68 ; Ran	ge: 8.90 – 1	0.25			
SP3 Also called	the Site Af					ending 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 CI Res,	Continuous	(15)(15)()	verage: 0.8	; Range: 0.	70 – 1.00	0.0-	I	
ppm		Total CI: A	Average: 7.4	2; Range: 4	.60 - 9.80			
				.88; Range:				
SP4 Also called	Reservoir	Construction of the local data and the local data a			WD Water	Blend Po	oint/Phosp	phate Injection.
Phosphate Injection			e Dosage: C					
Free and Total CI Res,	Continuous			3; Range: 0				CI/NH3 Ratio:
ppm				9; Range: <mark>5</mark> . .71; Range:				9.95
SP5 Also called	Pacanyoir					to 7000 1	of the die	tribution oveters
JPS AISU Calleu	Weekly	SI Goal:	or Sile#3.	JF5 UISC	narges m		of the dis	Tribution system.
TDS, ppm	VVeekiy	500-750ppm	650	710	690	610		
Hardness	Monthly	SI Goal:		350				4
		180-250ppm Goal: from		350				
CH4, ppm	Weekly	PA	0.15	0.30	0.18	0.27		% CH4 Removal: 92.5%
Odor, units	Monthly	1	2	2	1	1		92.070
Free and Total CI Res,	Continuous		-	9; Range: 0.	05 - 0.12			CI/NH3 Ratio:
ppm				4; Range: 2.				5.70
			: Average: 0	.57; Range: (	0.51 – 0.61			
Headspace of the (	and the second se	Contraction of the local division of the loc						
<sup>1</sup> CH4 ppmv; using	Daily	Goal -		age: 0.0%	1000			
Portable Device	(from log)	LEL	the second se	nge: <mark>0% - 0</mark> 9	Artista Martin and an and an article of the local distance of the			
SP 6 MWD Sour	ce Feeding	CWPF.	Also calle	d Zone 2	of the dist	tribution s	system or	Site #6.
TDS, ppm	Monthly			620				
Hardness	Monthly			300				
Notes: 1Self-Imposed (SI) G	oals: TDS Goa	al-500-750 pr	m; Hardness	as CaCO3 Go	al-180-250 pp	m.	J	
***This Report is d	ue to DDW	by the 1	0 <sup>th</sup> of the	following	month.			

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

### **APPENDIX A**

LABORATORY RESULTS



18 February 2019

Clinical Lab No.: 19B0228

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

Project Name:Standard AnalysisSub Project:CWPF 1st Week of Feb, 2019 Compliance Sampling

Enclosed are the results of the analyses for samples received at the laboratory on 02/05/19. 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,

tister

Stu Styles Client Services Manager



Lomita, City of 24373 Walnut Avenue Lomita CA, 91717	venue Sub Project: CWPF 1st Week of Feb, 2019 Compliance Sampling Received: 02/05/19 17:0									
Reservoir Influent Site #3		19B0228-0	01 (Water)	9 10:30 Sa	Sampler: P.M.					
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier	
Field Analyses										
Cl Res Total (Field)	Field	8.8		N/A	mg/L	02/05/19	02/05/19	1906077		
pH (Field)	Field	7.77		N/A	pH Units	02/05/19	02/05/19	1906077		
Temperature (Field)	Field	19.9		N/A	°C	02/05/19	02/05/19	1906077		
General Physical Analyses										
Apparent Color	SM 2120BM	5.0	3.0	15	Color Units	02/05/19	02/05/19	1906148		
Metals										
Iron (Fe)	EPA 200.7	ND	100	300	ug/L	02/07/19	02/07/19	1906100		
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	02/07/19	02/07/19	1906100		
Reservoir Effluent Site #5		19B0228-0	02 (Water)		Sample Da	te: 02/05/19	9 10:05 Sa	mpler: P.	M.	
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier	
Field Analyses										
Cl Res Total (Field)	Field	2.98		N/A	mg/L	02/05/19	02/05/19	1906077		
pH (Field)	Field	8.04		N/A	pH Units	02/05/19	02/05/19	1906077		
Temperature (Field)	Field	16.7		N/A	°C	02/05/19	02/05/19	1906077		
General Physical Analyses										
Apparent Color	SM 2120BM	ND	3.0	15	Color Units	02/05/19	02/05/19	1906148		
Odor Threshold	EPA 140.1-M	2	1	3	TON	02/05/19	02/05/19	1906148		
General Chemical Analyses										
Total Filterable Residue/TDS	SM 2540C	650	5.0	1000	mg/L	02/07/19	02/08/19	1906109		
ND Analyte NOT DETECTED at o	r above the reporting limit									

Analyte NOT DETECTED at or above the reporting limit

1 of 4 K020602



February 13, 2019



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

TX Cert T104704450-14-6 EPA Methods T014A, T015

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:19B0228Lab Number:K020602-01

Enclosed are results for sample(s) received 2/06/19 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.

#### SUBCONTRACT ORDER

in a fear - jeans a sa san kan sa san sa	Clinical Laboratory of San Bernardino 19B0228	-01
SENDING LABORATORY:	RECEIVING LABORATORY:	baat v s
Clinical Laboratory of San Bernardino 21881 Barton Road Grand Terrace, CA 92313	Air Technology Labs 18501 East Gale Avenue Suite 130 City of Industry, CA 91748	
Phone: 909.825.7693 Fax: 909.825.7696 Project Manager: Stu Styles	Phone :(626) 964-4032 Fax:	
Please email results to Project Manager: [] glaubig@clinical-lab.com [] style	: Stu Styles es@clinical-lab.com [] bernstein@clinical-lab.com	
Water Trax Upload Client:		n Norman Norman
Turn Around Time     [] 10 Days       Subcontract Comments:	[\] 5 Days [] Other Days	
	n an	
Analysis	Comments	<b>6</b> 1
Sample ID: Reservoir Effluent Site #5 / 19	9B0228-02 Sampled: 02/05/19 10:05 PS Code: Water WTX ID:	
Methane RSK175 Containers Supplied: Oml Amber Vial (B)	Report in mg/L 40ml Amber Vial (C)	
	a and a maging way a gray gay a g	
		ði.
	్లస్, ఎంస్టెస్, ఎంస్టెస్, ఎంస్ట్ రాజులో 1000 గ్రామం గ్రామంలో 1000 గ్రామం గ్రామంలో 1000 గ్రామం	J.
		×
	$\frac{1}{2}$	G
an a		
	2/06/19 07:45 A Date / Time 2/06/19 07:45 A Date / Time 2/06/19 07:45 A Date / Time	15
Réleased By	Date/Time Received By Date/Time	52

Client:	<b>Clinical Laboratory</b>
Attn:	Stu Styles
<b>Project Name:</b>	NA
Project No.:	19B0228
Date Received:	02/06/19
Matrix:	Water
<b>Reporting Units:</b>	mg/L

		RS	K175			
Lab No.:	K0206	02-01				
Client Sample I.D.:	Reservoir Site #5 / 1 02	9B0228-		а 1		±.
Date/Time Sampled:	2/5/19					
Date/Time Analyzed:	2/12/19 15:39			n. ,		
QC Batch No.:	1902120	GC8A1				
Analyst Initials:	CM/	AS				
Dilution Factor:	1.(	)				
ANALYTE	Result RL mg/L mg/L					×
Methane	0.15 0.0010					

Date 13

ND = Not Detected (below RL)

**RL** = Reporting Limit

Reviewed/Approved By:

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

4 of 4 K020602

### QC Batch #: 190212GC8A1

Matrix: Air

Reporting Units: mg/L

	RSK175 LABORATORY CONTROL SAMPLE SUMMARY											
Lab No.: METHOD BLANK LCS LCSD												
Date/Time Analyzed:				2/12/1	19 9:34	2/12/	19 9:48					
Analyst Initials:	CM/A	S		CM/AS		CN	I/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 0.654 0.686 105 0.641 97.9 6.8									130	30	

MALL. 1

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

Reviewed/Approved By: \_

Mark Johnson **Operations Manager** 

The cover letter is an integral part of this analytical report

Date 2/13/19

page 1 of 1

AirTECHNOLOGY Laboratories, Inc.

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19 B0 228 Chain of Custody 4/4/0

Client		City of Lomita	<u>S</u>	System Nur	ımber			Anal	Analysis Requested	quest	D		
Address	24.	24373 Walnut Avenue			101	101072							
	I	Lomita, CA 91717				0 J J J				М			
Phone #	2 20 2 2	(310)903-2243		Ď	stination	estination Laboratory				eth			
Fax #				0	(] Clinica	X] Cilnical Laboratory		Iro	Fotal	ane			
Project	- 1	Standard Analysis		100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100	WQCB C	RWQCB Compliance		n / M					
Sub Project	Co Co	CWPF 1st week of February, 2019 Compliance Sampling			EL	yes ELAP #		anganes	olor otved Sol	ter) (R	lor		
Comments	For TC/EC/BA	For TC/EC/BACT see weekly Distro CoC			4	1088		e	lids	SK1			
Sampled by		P.M.				000				75)			
Date	Time San	Sample Idenitification	Matrix	Type	Preserv	pH Te	Temp. Total Chlorine						Comments / P.S. Codes
2/5/2019 (0	(030 Reservoir Influent Site #3	ent Site #3	MQ	1W	N/A	7.77 19	9 8.8	X	×				
						1						_	
2/5/2019 10	1006 Reservoir Effluent Site #5	ent Site #5	ΜŪ	<u>»</u>	A/A	9- 20.0	16.1 2.98		x x	+	×	_	والمتعاوية المالية الأحجاج والمستعدية وأوراد والمستعد والمستعدين والمستعدين والمستعد والمعالي المراجع والمستعد والمعار
2/5/2019	005 Reservoir Effluent Site #5	ent Site #5	DW	1W	2				-	×		_	
												_	
						_			-+			_	
									+-				
									╋				
Preservatives: (	1 1 1 Preservatives: (1) Na.S.O. (2) HCI (3) HNO3 (4) NH4CI	NO3 (4) NH4CI	Matrix: C	Matrix: DW-Drinkin	g Water,	ig Water, WW-Waste Water, SW-Storm Water, GW- Ground Water, A-Ali	ter, SW-Storm	7 Water,	GW- Gro	und Wa	ter, A-Air		Type- 1-Routine, 2-Repeat, 3-
(5) H2SO4	(5) H2SO4 (6) Na2SO3 (7) Cold (8) Other	Other:					Re	placeme	nt, 4-Spi	scial W.	Replacement, 4-Special W-Well D-Dist.	ist	
Relinquis	Relinquished By (Sign)	Print Name / Company				Date / Time	12.000 12.000 12.000		11	6			Print Name / Company
Retor A Martine	Merce	Patrick McCue / City of Lomita		2/5/2019			QHI	Ŕ	1100	Arr	101 m		1)/ Magarya/ CESS
W Cham	Lanna	NO Ulacomo / LLSS	8	મ			2	00		5		au	12
Comments:					õ	Samples received: 📈 On ice 🕺	ived: (200	n ice }		SIntact (	) Cust	ody sea	Custody seals Temp 3.7 ()F ()C
Shipped Via		Fed X     Golden State	SAU [ ]	[] Client	-	Other			ł	Pag	Page_1_of_1		
I an i unddawn					·								

"Your Water and Wastewater Analysis Solution"



25 February 2019

Clinical Lab No.: 19B0887

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

Project Name:Standard AnalysisSub Project:CWPF Monthly Compliance Samples, 2nd Wk of Feb

Enclosed are the results of the analyses for samples received at the laboratory on 02/12/19. 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,

tister

Stu Styles Client Services Manager



Lomita, City of 24373 Walnut Avenue Lomita CA, 91717			Project: Star b Project: CW Manager: Mar	PF Montl	nly Compliance	e Samples, 2nd	Wk of Fe	Work Order bReceived: Reported:	: 19B0887 02/12/19 18:12 02/25/19
Raw Water Site #1		19B0887-0	01 (Water)		Sample Dat	e: 02/12/19	7:25	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	02/12/19	02/12/19	1907123	i
pH (Field)	Field	7.63		N/A	pH Units	02/12/19	02/12/19	1907123	i i
Temperature (Field)	Field	20.3		N/A	°C	02/12/19	02/12/19	1907123	i i
Microbiology Analyses									
Total Coliform	SM 9223	А		N/A	P/A	02/12/19	02/13/19	1907132	
E. Coli	SM 9223	А		N/A	P/A	02/12/19	02/13/19	1907132	
Plate Count	SM9215B	51	1	500	CFU/ml	02/12/19	02/14/19	1907181	HT-08
General Physical Analyses									
Apparent Color	SM 2120BM	15.0	3.0	15	Color Units	02/12/19	02/12/19	1907144	ļ
General Chemical Analyses									
Hardness, Total (as CaCO3)	Calculated	440	9.1	N/A	mg/L	02/21/19	02/21/19	[CALC]	
Total Filterable Residue/TDS	SM 2540C	820	5.0	1000	mg/L	02/18/19	02/20/19	1908023	i i
<u>Metals</u>									
Calcium (Ca)	EPA 200.7	120	2.0	N/A	mg/L	02/21/19	02/21/19	1908112	
Iron (Fe)	EPA 200.7	170	100	300	ug/L	02/20/19	02/20/19	1908070	1
Magnesium (Mg)	EPA 200.7	37	1.0	N/A	mg/L	02/21/19	02/21/19	1908112	
Manganese (Mn)	EPA 200.7	150	20	50	ug/L	02/20/19	02/20/19	1908070	)
Filter Effluent (Free Chlorine) Site #2		19B0887-(	02 (Water)		Sample Dat	e: 02/12/19	7:28	Sampler:	Patrick McCue
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	10.3		N/A	mg/L	02/12/19	02/12/19	1907123	
pH (Field)	Field	7.67		N/A	pH Units	02/12/19	02/12/19	1907123	
Temperature (Field)	Field	20.3		N/A	°C	02/12/19	02/12/19	1907123	
Microbiology Analyses									
Total Coliform	SM 9223	А		N/A	P/A	02/12/19	02/13/19	1907132	1
E. Coli	SM 9223	А		N/A	P/A	02/12/19	02/13/19	1907132	1
Plate Count	SM9215B	ND				02/12/19	02/14/19	1907181	



Lomita, City of 24373 Walnut Avenue		Su	Project: Star		2	e Samples, 2nd		/ork Order: eceived: (	19B0887 )2/12/19 18:12
Lomita CA, 91717			Manager: Mar			e Sumples, 2nd			)2/25/19
Filter Effluent (Total Chlorine) Site #3		19B0887-0	)3 (Water)		Sample Da	<b>te:</b> 02/12/19	7:30 Sa	mpler: P	atrick McCue
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	10		N/A	mg/L	02/12/19	02/12/19	1907123	
pH (Field)	Field	7.68		N/A	pH Units	02/12/19	02/12/19	1907123	
Temperature (Field)	Field	20.3		N/A	°C	02/12/19	02/12/19	1907123	
General Physical Analyses									
Apparent Color	SM 2120BM	5.0	3.0	15	Color Units	02/12/19	02/12/19	1907144	
<u>Metals</u>									
Iron (Fe)	EPA 200.7	ND	100	300	ug/L	02/20/19	02/20/19	1908070	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	02/20/19	02/20/19	1908070	
Zone #2 Site #6		19B0887-0	04 (Water)		Sample Da	<b>te:</b> 02/12/19	7:32 Sa	mpler: P	atrick McCue
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	2.04		N/A	mg/L	02/12/19	02/12/19	1907123	
pH (Field)	Field	8.23		N/A	pH Units	02/12/19	02/12/19	1907123	
Temperature (Field)	Field	16.2		N/A	°C	02/12/19	02/12/19	1907123	
General Chemical Analyses									
Hardness, Total (as CaCO3)	Calculated	300	6.6	N/A	mg/L	02/21/19	02/21/19	[CALC]	
Total Filterable Residue/TDS	SM 2540C	620	5.0	1000	mg/L	02/18/19	02/20/19	1908023	
Metals									
Calcium (Ca)	EPA 200.7	74	1.0	N/A	mg/L	02/21/19	02/21/19	1908112	
Magnesium (Mg)	EPA 200.7	27	1.0	N/A	mg/L	02/21/19	02/21/19	1908112	



<b>Lomita, City of</b> 24373 Walnut Avenue Lomita CA, 91717			Project: Star b Project: CW Manager: Mar	PF Month	ly Complian	ce Samples, 2n	d Wk of Feb		19B0887 02/12/19 18:12 02/25/19
Reservoir Effluent Site #5		19B0887-0	)5 (Water)		Sample Da	ote: 02/12/1	9 10:00	Sampler: F	Patrick McCue
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	3.01		N/A	mg/L	02/12/19	02/12/19	1907123	
pH (Field)	Field	8.05		N/A	pH Units	02/12/19	02/12/19	1907123	
Temperature (Field)	Field	16.7		N/A	°C	02/12/19	02/12/19	1907123	
General Physical Analyses									
Odor Threshold	EPA 140.1-M	2	1	3	TON	02/12/19	02/12/19	1907144	
General Chemical Analyses									
Hardness, Total (as CaCO3)	Calculated	350	6.6	N/A	mg/L	02/21/19	02/21/19	[CALC]	
Total Filterable Residue/TDS	SM 2540C	710	5.0	1000	mg/L	02/18/19	02/20/19	1908023	
Metals									
Calcium (Ca)	EPA 200.7	89	1.0	N/A	mg/L	02/21/19	02/21/19	1908112	
Magnesium (Mg)	EPA 200.7	31	1.0	N/A	mg/L	02/21/19	02/21/19	1908112	

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

1 of 4 K021403



February 20, 2019



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

TX Cert T104704450-14-6 EPA Methods T014A, T015

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: 19B0887 Lab Number: K021403-01/02

Enclosed are results for sample(s) received 2/14/19 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.

#### SUBCONTRACT ORDER

2 of 4 K021403

102

21403-01/

Clinical Laboratory of San Bernardino

19B0887

SENDING LABORATORY:	RECEIVING 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	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 California EDT transfer those samples with PS c Water Trax Upload Client:	
Turn Around Time [] 10 Days 5 Days [ Subcontract Comments:	] Other Days
Analysis	Comments
Analysis Sample ID: Raw Water Site #1 / 19B0887-01 6 (	Comments Sampled: 02/12/19 07:25 PS Code: Water WTX ID:
Sample ID: Raw Water Site #1 / 19B0887-01	Sampled: 02/12/19 07:25 PS Code:
Sample ID: Raw Water Site #1 / 19B0887-01	Sampled: 02/12/19 07:25 PS Code: Water WTX ID:
Sample ID: Raw Water Site #1 / 19B0887-01	Sampled: 02/12/19 07:25 PS Code: Water WTX ID: Report in mg/L
Sample ID: Raw Water Site #1 / 19B0887-01         6           Methane RSK175         Containers Supplied:         40mL Amber Vial pH<2 w/HCl (A)	Sampled: 02/12/19 07:25 PS Code: Water WTX ID: Report in mg/L er Vial pH<2 w/HCl (B) Sampled: 02/12/19 10:00 PS Code:

Released By Date / Time Received By Date / Time Received By Date / Time Received By Date / Time Date /

Client:	<b>Clinical Laboratory</b>
Attn:	Stu Styles
<b>Project Name:</b>	NA
Project No.:	19B0887
Date Received:	02/14/19
Matrix:	Water
<b>Reporting Units:</b>	mg/L

		RS	K175			
Lab No.:	K0214	03-01	K0214	03-02		
Client Sample I.D.:	Raw Wate / 19B08		Reservoir Site #5 / 1 05	9B0887-		
Date/Time Sampled:	2/12/19	7:25	2/12/19	10:00		
Date/Time Analyzed:	2/18/19	10:14	2/18/19	10:29		
QC Batch No.:	1902180	GC8A1	1902180	GC8A1		
Analyst Initials:	CM/	AS	CM/	AS		
Dilution Factor:	1.(	0 1.0				
ANALYTE	Result mg/L	RL mg/L	Result mg/L	RL mg/L		
Methane	3.0	0.0010	0.30	0.0010		

ND = Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By:

Mark Johnson

Operations Manager

The cover letter is an integral part of this analytical report

page 1 of 1

Date 2/19/19

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

Date 2/19/19

### QC Batch #: 190218GC8A1

#### Matrix: Air

Reporting Units: mg/L

	LAR	ORATOR			LE SUM	ARY				
	LAD	ORATON	II CONTR							
METHOD	BLANK			CS	LC	CSD				
2/18/19	9:44		2/18/1	19 9:16	2/18/1	19 9:30				
CM/A	S		CM	1/AS	CN	I/AS				
1.0			1.0		1	.0				
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
ND	0.0010	0.654	0.668	102	0.678	104	1.5	70	130	30
	2/18/19 CM/A 1.0 Result mg/L	METHOD BLANK 2/18/19 9:44 CM/AS 1.0 Result RL mg/L mg/L	METHOD BLANK 2/18/19 y:44 CM/AS 1.0 Result RL AMT. mg/L mg/L mg/L	LABORATORY CONTE       METHOD BLANK     L       2/18/19 9:44     2/18/19       CM/AS     CM       CM/AS     CM       1.0     SPIKE       Result     RL       mg/L     mg/L	METHOD BLANK     LCS       2/18/19 9:44     2/18/19 9:16       CM/AS     CM/AS       1.0     1.0       Result RL AMT. Result mg/L       mg/L     mg/L	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c } \mbox{LABORATORY CONTROL SAMPLE SUMMARY} \\ \hline \begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	$\begin{array}{c c c c c c c c } \hline LABORATORY CONTROL SAMPLE SUMMARY \\ \hline \begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{tabular}{ c c c c c } \hline LABORATORY CONTROL SAMPLE SUMMARY \\ \hline \begin{tabular}{ c c c c c } \hline METHOD & $LANK$ & $$L$ & $L$ & $$L$ & $L$ & $L$$

M.M. f

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

Reviewed/Approved By: \_

Mark Johnson Operations Manager

The cover letter is an integral part of this analytical report

- Air TECHNOLOGY Laboratories, Inc. —

page 1 of 1

															2	2/2/12	2	
Client		City of Lomita	Sy	System Numbe	umber				Ana	Analysis Requested	Reque	sted			Handelle			
Address		24373 Walnut Avenue	i I I		Č	100				-	-		-			-		
		Lomita, CA 91717			ת	1910013	2			100	Tat							
Phone #		(310)903-2243			Destinati	Destination Laboratory	atory		7			Me						
Fax #					[X] Clinic	[X] Clinical Laboratory	atory		Fots			thai						
Project		Standard Analysis		and): areas	RWQCB	RWQCB Compliance	756		al Di			ne ('						
Sub Project	CWPI	CWPF Monthly Compliance Samples;				YES			issolv		ardn	Wate	Colo Nitra	Odo				
Comments		200 WEEK OJ FED., 2019			Ц Т	ELAP#			ed So	ngane		r) (RS						
Sampled by		Patrick McCue			***	1088			lids		P-A / H	5K175)						
Date	Time	Sample Idenitification	Matrix	Type	Preserv	Temp.	Hd	Total										
5260 6102/21/2	25	Raw Water Site #1	GW	<u>w</u>	N/A	20.3	763	Ø	×	×			×					
2/12/2019 OT	0725	Raw Water Site #1	GW	1W	1, 2, 7						x x	×		ļ				
2/12/2019 O 7	0726 Filter	Filter Effluent (Free Chlorine) Site#2	MQ	1W	1,7	Ze. 3	7.67	10.3		<u>^</u>	×		+					
2/12/2019 0730		Filter Effluent (Total Chlorine) Site#3	DW	1W	N/A	20.2	7.68	0.01		×			×					
2/12/2019 CJ	0732	Zone #2 Site #6	MQ	01	N/A	رم. 11 ک	823	2.cH	×		×							
														ļ		-		
2/12/2019 1 0 0	00	Reservoir Effluent Site #5	MQ	a	N/A	16.70	0.0	3.01	×	<u> </u>	×		-	×				
2/12/2019 1000	00	Reservoir Effluent Site #5	MQ	9	2.7					<u> </u>		×						
Preservatives: (1) Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> (2) HCI (3) HNO3 (4) NH4CI (5) U2SCA (5) N2SCO3 (7) C214 (6) C4420	Ia2S203 (2) HCI (		Matrix: DW-Drinking W	W-Drink	ting Wate	r, WW-W	ater, WW-Waste Water, SW-Storm Water, GW- Ground Water, A-Air	SW-Ston	Storm Water, GW- Ground Water, A-Air	r, GW-	Groun	d Wate	r, A-Ai				Type- 1-Re	Type- 1-Routine, 2-Repeat,
Relinquishe	Relinquished By (Sign)	Print Name / Company				Date / Time	Time	AV-C	biaceil		Rend	AV-W	Pecial W-Well D- Dis Peopled Rit (Sign)	//SI.	1		Dates Manual / Contraction	
PARIS A. MIN	N.C.	Patrick McCue /City of Lomita	omita					1			11		8			$\overline{\lambda}$	· /	517
- Som mo	- ann			/12/20	19		167			$\frac{1}{2}$	Ľ	204	シノン	9		ろつ	hapaved,	1/2158
Witzarro	zro	alaparo/crss	LSB	2				612		子 子	B	5	5	$\mathbf{k}$		Bol	Bob Glach.	45777
Comments:					Х	mples i	Samples received: (MOn ice	UN()		Z.	tact	Ĉ	Custo	dy sea	(XIntact ( ) Custody seals Temp.		6.2 ()F	( ) C
Chinned Via		1   Fod X     Golden State	DOLL 1															

"Your Water and Wastewater Analysis Solution"

1960887



05 March 2019

Clinical Lab No.: 19B1604

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

Project Name:Standard AnalysisSub Project:CWPF 3rd Week of Feb, 2019 Compliance Sampling

Enclosed are the results of the analyses for samples received at the laboratory on 02/20/19 . 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,

tister

Stu Styles Client Services Manager



Lomita, City of 24373 Walnut Avenue Lomita CA, 91717			Project: Star b Project: CW Manager: Mar	PF 3rd W	veek of Feb, 20	19 Compliance	Sampling I		19B1604 )2/20/19 16:50 )3/05/19
Reservoir Influent Site #3		19B1604-(	01 (Water)		Sample Da	te: 02/20/19	6:05 Sa	ampler: 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	02/20/19	02/20/19	1908138	
pH (Field)	Field	7.54		N/A	pH Units	02/20/19	02/20/19	1908138	
Temperature (Field)	Field	18.6		N/A	°C	02/20/19	02/20/19	1908138	
General Physical Analyses									
Apparent Color	SM 2120BM	5.0	3.0	15	Color Units	02/20/19	02/20/19	1908135	
Metals									
Iron (Fe)	EPA 200.7	ND	100	300	ug/L	02/28/19	02/28/19	1909104	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	02/28/19	02/28/19	1909104	
Reservoir Effluent Site #5		19B1604-(	02 (Water)		Sample Da	te: 02/20/19	9:10 S	ampler: P.	M.
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	3.75		N/A	mg/L	02/20/19	02/20/19	1908138	
pH (Field)	Field	8.06		N/A	pH Units	02/20/19	02/20/19	1908138	
Temperature (Field)	Field	16.8		N/A	°C	02/20/19	02/20/19	1908138	
General Physical Analyses									
Apparent Color	SM 2120BM	5.0	3.0	15	Color Units	02/20/19	02/20/19	1908135	
Odor Threshold	EPA 140.1-M	1	1	3	TON	02/20/19	02/20/19	1908135	
General Chemical Analyses									
Total Filterable Residue/TDS	SM 2540C	690	5.0	1000	mg/L	02/26/19	02/28/19	1909040	
ND Analyte NOT DETECTED at o	r above the reporting limit								

1 of 4 K022202



March 1, 2019



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

TX Cert T104704450-14-6 EPA Methods T014A, T015

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:19B1604Lab Number:K022202-01

Enclosed are results for sample(s) received 2/22/19 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,

Nbl. 1

Mark Johnson Operations Manager MJohnson@AirTechLabs.com

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

### SUBCONTRACT ORDER

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	2	of 4	
Κ	022	2202	

	Clinical Laboratory of San Bernardino 19B1604	14022202-01
SENDING LABORATORY:	<b>RECEIVING LABORATORY:</b>	
Clinical Laboratory of San Bernardino 21881 Barton Road Grand Terrace, CA 92313 Phone: 909.825.7693 Fax: 909.825.7696 Project Manager: Stu Styles	Air Technology Labs 18501 East Gale Avenue Suite 13 City of Industry, CA 91748 Phone :(626) 964-4032 Fax:	0
Please email results to Project Manager: Stu S [] glaubig@clinical-lab.com [V] styles@cl	Styles linical-lab.com [] bernstein@clinical-lab.com	
California EDT transfer those samples Water Trax Upload Client:	s with PS codes provided [] Yes [V] No [] Yes [V] No	
Turn Around Time [] 10 Days [√] 5 Subcontract Comments:	Days [] Other Days	
Analysis		Comments
Sample ID: Reservoir Effluent Site #5 / 19B160	04-02 Sampled: 02/20/19 09:10 PS Code: Water WTX I	D:
Methane RSK175	and the second secon	Report in mg/L
Containers Supplied: 10ml Amber Vial (B) 40	0ml Amber Vial (C)	
		n a an
		4.0
BJ Dy 02/21 Réleased By Date	119 15:15 Time Received By 19 1056 Time Received By	2/22/19 857 Date/Time 2/22/19 1056 Date/Time

Client:	<b>Clinical Laboratory</b>
Attn:	Stu Styles
<b>Project Name:</b>	NA
Project No.:	19B1604
Date Received:	02/22/19
Matrix:	Water
Reporting Units.	mg/I

Reporting Units: mg/L

		RS	K175			
T I NY	TZOAAA	0.0.0.1	1	 1	1	
Lab No.:	K0222					
	Reservoir					
Client Sample I.D.:	Site #5 / 1	9B1604-				
	02	02				
Date/Time Sampled:	2/20/19	9:10				
Date/Time Analyzed:	2/27/29	11:54				
QC Batch No.:	1902270	GC8A1				
Analyst Initials:	CM/	CM/AS				
Dilution Factor:	1.0					
	Result	RL				
ANALYTE	mg/L	mg/L				
Methane	0.18	0.0010				

ND = Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By: \_

Mark Johnson **Operations Manager** 

The cover letter is an integral part of this analytical report

Date - 28 (19

AirTECHNOLOGY Laboratories, Inc. -

### QC Batch #: 190227GC8A1

Matrix: Air

Reporting Units: mg/L

		LAB	ORATOR		K175 ROL SAMP	LE SUMN	MARY				
Lab No.: Date/Time Analyzed:	METHOD 2/27/19 1				CS 9 10:42		CSD 9 10:56				
Analyst Initials:					I/AS		1/AS		1		
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	0.654	100.0	0.667	102	2.0	70	130	30

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

Reviewed/Approved By: \_

MM- K

Date 2/28/19

Mark Johnson Operations Manager

The cover letter is an integral part of this analytical report

Air TECHNOLOGY Laboratories, Inc. -

m p

Chain of Custody

			-											192	19 BIDUM	
Client		City of Lomita	Sy	System Nu	umber			Aná	Analysis Requested	Reque	sted			and a state of the		2 - S
Address	243	24373 Walnut Avenue			1011	1010072										
	Γ	Lomita, CA 91717			101	0.00										
Phone #	- 14	(310)903-2243	P.	٩	estination	Destination Laboratory				leth						
Fax#				1	X] Clinical	[X] Clinical Laboratory		Ire	Tota	ane						
Project	<b>S</b>	Standard Analysis			RWQCB C	RWQCB Compliance		on / N	l Diss	(Wa						·
1.1.0	CWPF 31	CWPF 3rd week of February, 2019				yes		1ang	· · · · ·	ater olor	dor					
ouv rioject	Co.	Compliance Sampling			EL	ELAP#		anes								
Comments	For TC/EC/BA(	For TC/EC/BACT see weekly Distro CoC			4	00		e	lids	SK						
Sampled by		P.M.			2	0001				175)						
Date	Time San	Sample Idenitification	Matrix	Type	Preserv	Hđ	Temp. To Chic	Total Chlorine						Comments	Comments / P.S. Codes	
2/20/2019 CV	C CC Reservoir Influent Site #3	ent Site #3	MO	1W	N/A	1152	18.6 11.	x Z		x						Γ
																Γ
5/20/2019 09	O9 I O Reservoir Effluent Site #5	ent Site #5	Ma	<u>N</u>	N/A	2000	ы С С	15	×	X	×					
2/20/2019 O <sup>c</sup>	U <sup>Q</sup> / C Reservoir Effluent Site #5	ent Site #5	MQ	N.	2	8.06	1 1 2 9	1.		×						
																Γ
											_					
										+						
Preservatives: (1	Preservatives: (1) Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> (2) HCI (3) HNO3 (4) NH4CI	4) NH4CI	Matrix: D	W-Drinkin	g Water, I	WW-Waste M	Matrix: DW-Drinking Water, WW-Waste Water, SW-Storm Water, GW- Ground Water, A-Air	orm Water	GW-O	Sround	Water,	A-Air		Type	Type- 1-Routine, 2-Repeat, 3-	4
(5) H2SO4 (	(5) H2SO4 (6) Na2SO3 (7) Cold (8) Other:	Other:						Replacement,		4-Special	W-We	W-Well D- Dist.				
Relinquist	Relinquished By (Sign)	Print Name / Company				Date / Time	e	)	$\langle \cdot \rangle$	10			1	/ Print Nam	(npamo)	
Tatriner	meen	Patrick McCue / City of Lomita		2/20/201	0	1:20		-(	$\mathbf{A}$	A	Y	7		ncella	ary L	
		Thraeld CIJA		2-20	19 11	1650				NO N	K T	1 all	PANAN	white /	M CUSIR	
Comments:	}				ŝ.	Samples received	$\mathcal{V}$	on ice	てこ		$\sim$	Custody	) Custody seals Temp	S.C.	()F	
Shipped Via		[ ] Fed X [ ] Golden State	SAU [ ]	C'llent		Other					_age_	Page_1_ of_1_				Π

"Your Water and Wustewater Analysis Solution"



05 March 2019

Clinical Lab No.: 19B1924

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

Project Name:Standard AnalysisSub Project:CWPF 4th Week of Feb, 2019 Compliance Sampling

Enclosed are the results of the analyses for samples received at the laboratory on 02/26/19 . 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,

tister

Stu Styles Client Services Manager



Lomita, City of			Project: Star		2			Vork Order:	19B1924
24373 Walnut Avenue		Su	ib Project: CW	PF 4th W	eek of Feb, 20	19 Compliance			02/26/19 16:40
Lomita CA, 91717		Project	Manager: Mar	k Anders	en		R	eported: 0	03/05/19
Reservoir Influent Site #3		19B1924-	01 (Water)		Sample Da	<b>te:</b> 02/26/19	6:05 <b>S</b> a	mpler: 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	02/26/19	02/26/19	1909058	
pH (Field)	Field	7.74		N/A	pH Units	02/26/19	02/26/19	1909058	
Temperature (Field)	Field	19.7		N/A	°C	02/26/19	02/26/19	1909058	
General Physical Analyses									
Apparent Color	SM 2120BM	ND	3.0	15	Color Units	02/26/19	02/26/19	1909077	
Metals									
Iron (Fe)	EPA 200.7	ND	100	300	ug/L	02/28/19	02/28/19	1909104	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	02/28/19	02/28/19	1909104	
Reservoir Effluent Site #5		19B1924-	02 (Water)		Sample Da	<b>te:</b> 02/26/19	10:00 Sa	mpler: P.	M.
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	3.8		N/A	mg/L	02/26/19	02/26/19	1909058	
pH (Field)	Field	8.16		N/A	pH Units	02/26/19	02/26/19	1909058	
Temperature (Field)	Field	16.8		N/A	°C	02/26/19	02/26/19	1909058	
General Physical Analyses									
Apparent Color	SM 2120BM	ND	3.0	15	Color Units	02/26/19	02/26/19	1909077	
Odor Threshold	EPA 140.1-M	1	1	3	TON	02/26/19	02/26/19	1909077	
General Chemical Analyses									
Total Filterable Residue/TDS	SM 2540C	610	5.0	1000	mg/L	02/27/19	03/01/19	1909087	

ND Analyte NOT DETECTED at or above the reporting limit

1 of 4 K022701



March 6, 2019



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

TX Cert T104704450-14-6 EPA Methods T014A, T015

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:19B1924Lab Number:K022701-01

Enclosed are results for sample(s) received 2/27/19 by Air Technology Laboratories. Samples were received intact and chilled to  $6^{\circ}$  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

2 of 4 K022701

	SUBCONTRACTORDER	
	Clinical Laboratory of San Bernardino 19B1924	4022701-81
SENDING LABORATORY:	RECEIVING 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	Air Technology Labs 18501 East Gale Avenue Suite City of Industry, CA 91748 Phone :(626) 964-4032 Fax:	e 130
Please email results to Project Manager: S []]glaubig@clinical-lab.com [\/ styles(	tu Styles @clinical-lab.com [] bernstein@clinical-lab.com	
California EDT transfer those samp Water Trax Upload Client:	ples with PS codes provided [] Yes [] No [] Yes [] No	х я
Turn Around Time [] 10 Days [\] Subcontract Comments:	5 Days [] Other Days	
Analysis	n na standing and an	Community
Analysis		Comments
Sample ID: Reservoir Effluent Site #5 / 19B		TX ID:
Methane RSK175		Report in mg/L
ontainers Supplied:		<b>F F F F F F F F F F</b>
0ml Amber Vial (B)	40ml Amber Vial (C)	
		τ · · · · · · · · · · · · · · · · · · ·
	17	ŕ
(1) All and the second seco		6°C
ht 2/27	1/19 07:40 te / Time Received By AMA te / Time Received By AMA te / Time Received By	Date / Time 217/19 8:30 Date / Time Date / Time

3 of 4 K022701

Client:	<b>Clinical Laboratory</b>
Attn:	Stu Styles
<b>Project Name:</b>	NA
Project No.:	19B1924
Date Received:	02/27/19
Matrix:	Water
Reporting Units:	mg/L

Reporting Units: mg/L

		RS	K175			
					1	
Lab No.:	K0227	01-01				
	Reservoir	Effluent				2
Client Sample I.D.:	Site #5 / 1	9B1924-				
	02				585 G	
Date/Time Sampled:	2/26/19	10:00				
Date/Time Analyzed:	2/27/19	12:25				
QC Batch No.:	1902270	GC8A1				
Analyst Initials:	CM/	AS				
Dilution Factor:	1.(	)				
	Result	RL				
ANALYTE	mg/L	mg/L				
Methane	0.27	0.0010				

ND = Not Detected (below RL)

**RL** = **Reporting Limit** 

Reviewed/Approved By:

Mark Johnson

**Operations Manager** 

The cover letter is an integral part of this analytical report

Date 3/6/19

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

4 of 4 K022701

#### QC Batch #: 190227GC8A1

Matrix: Air Reporting Units: mg/L

				RS	K175						
		LAB	ORATOR	RY CONTR	ROL SAMP	LE SUMN	/IARY				
Lab No.:	METHOD	BLANK		L	CS	LO	CSD			v	
Date/Time Analyzed:	2/27/19 1	1:10		2/27/1	9 10:42	2/27/1	9 10:56				
Analyst Initials:	CM/A	S		CN	I/AS	CN	1/AS				
Dilution Factor:	1.0			- 1	.0	1	.0				к.
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	0.654	100.0	0.667	102	2.0	70	130	30

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

Reviewed/Approved By: \_

Mark Johnson Operations Manager

The cover letter is an integral part of this analytical report

Mall. 1

Date 3/2/19

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

•

Chain of Custody

Client	City of Lomita	System	Number			Analy	Analysis Requested	gues	ted				
Address	24373 Walnut Avenue		10,	1010073									
	Lomita, CA 91717		-	0,001				M					
Phone #	(310)903-2243		Destinet	Destination Laboratory				leth					
Fax#			[X] Clinic	[X] Clinical Laboratory			 Tote	ane					
Project	Standard Analysis		RWQCB	RWQCB Compliance		on / M	Co Diss	(Wa	0				
Sub Declear	CWPF 4th week of February, 2019			yes			olor	iter	dor				
ann riolect	Compliance Sampling		Ш	ELAP# 👔				) (R					
Comments	For TC/EC/BACT see weekly Distro CoC		*	1000			lid•	SK					
Sampled by	P.M.		-	000				175)					
Date Time	sample Idenitification	Matris Type	e Preserv	pH Temp.	. Total					•		Comments	Comments / P.S. Codes
2/26/2019 060t	၀(၀၀၆) Reservoir Influent Site #3	MI MO	NIA	7. PH 19.7	2.11 2		×			-			
						<u>↓</u>							
2/26/2019 1 0 00	Reservoir Effluent Site #5	WI WO	NIA	3 16 16.	<b>6 3.8</b>		X X		×				
2/26/2019 000	<b>し</b> の〇 Reservoir Effluent Site #5	WI WO			-			×					
			•										
					-				+				
									+		_		
					-				+-				
		-	_		+				+	1			
										<b>†</b>			
							•	1					
Preservatives: (1) Na	I) NH4CI	Watrix: DW-Dr	inking Water	Matrix: DW-Drinking Water, WW-Waste Water, SW-Storm Water, GW- Ground Water, A-Air	r, SW-Storm V	Vater, G	W. Oro.	N pun	ater, A	-Air 2 - 2 : -		Type	Type- 1-Routine, 2-Repeat, 3-
(5) H2SO4 (6) N	(5) H2SO4 (6) Na2SO3 (7) Cold (8) Other:				Idex	Kepiacement,	( 4-5pa	Clar V.	-Mell	4-Spocial W-Well D- Dist.			
Relinquished By (Sign)	l By (Sign) Print Name / Company			Date / Time			D		8	-	- 1 - 2	Print Name / Company	/ Company
Pedruck 9	ADICE Batrick McCue/City of Lomita	nita 2/26/20 5.8 2/2	2019 2 < / 1 7	04.40		-		K.F.				Olchar R	ALLIS.S
Commonte:				Samples received: ( $A$ ) On the	st: (A) On						T alaca		1
comments.							   		ן ג און	Gooren	mater (X) custody scars 1 cmp	cmp d	TH AC
Shipped Via	] Fed X   ] Golden State	511 Sd/11	llent	Other			- -	Pay	Page_1_ of	<u>1_1</u>			

"Your Water and Wastewater Analysis Solution"



04 March 2019

Clinical Lab No.: 19B1536

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

Project Name:Standard AnalysisSub Project:Lomita Distribution Ortho, 3rd Week February 2019

Enclosed are the results of the analyses for samples received at the laboratory on 02/20/19 . 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,

tister

Stu Styles Client Services Manager



Lomita, City of			Project: Star		-			Work Order:	19B1536
24373 Walnut Avenue		Su	b Project: Lon	nita Distri	bution Ortho,	3rd Week Febru	ary 2019	Received: 0	2/20/19 16:50
Lomita CA, 91717		Project	Manager: Mar	k Anderse	en		]	Reported: 0	3/04/19
1948 252nd St.		19B1536-0	)1 (Water)		Sample Da	<b>te:</b> 02/20/19	7:50 <b>S</b>	ampler: P.1	M.
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	3.6		N/A	mg/L	02/20/19	02/20/19	1908117	
pH (Field)	Field	8.08		N/A	pH Units	02/20/19	02/20/19	1908117	
Temperature (Field)	Field	15.4		N/A	°C	02/20/19	02/20/19	1908117	
<u>General Chemical Analyses</u>									
Ortho-Phosphate (PO4)	HACH 8048	0.38	0.020	N/A	mg/L	02/21/19	02/21/19	1908091	
Phosphorus (Total as P)	HACH 8190	0.41	0.0067	N/A	mg/L	03/01/19	03/01/19	1910006	
24632 S. Moon		19B1536-(	02 (Water)		Sample Da	te: 02/20/19	8:25 S	ampler: P.1	M.
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	3		N/A	mg/L	02/20/19	02/20/19	1908117	
pH (Field)	Field	7.98		N/A	pH Units	02/20/19	02/20/19	1908117	
Temperature (Field)	Field	16		N/A	°C	02/20/19	02/20/19	1908117	
General Chemical Analyses									
Ortho-Phosphate (PO4)	HACH 8048	0.44	0.020	N/A	mg/L	02/21/19	02/21/19	1908091	
Phosphorus (Total as P)	HACH 8190	0.43	0.0067	N/A	mg/L	03/01/19	03/01/19	1910006	
2450 W. 247th St.		19B1536-0	03 (Water)		Sample Da	te: 02/20/19	8:35 S	ampler: P.1	M.
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	0.42		N/A	mg/L	02/20/19	02/20/19	1908117	
pH (Field)	Field	7.84		N/A	pH Units	02/20/19	02/20/19	1908117	
Temperature (Field)	Field	15.7		N/A	°C	02/20/19	02/20/19	1908117	
General Chemical Analyses									
Ortho-Phosphate (PO4)	HACH 8048	0.47	0.020	N/A	mg/L	02/21/19	02/21/19	1908091	
010001000000000000000000000000000000000			0.020	14/14	1116/12				



Lomita, City of 24373 Walnut Avenue Lomita CA, 91717			Project: Star b Project: Lon Manager: Mar	nita Distri	bution Ortho,	3rd Week Febru	ary 2019	Work Order Received: Reported:	19B1536 02/20/19 16:50 03/04/19
2052 Dawn St.		19B1536-(	04 (Water)		Sample Da	te: 02/20/19	8:10	Sampler:	P.M.
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	1.9		N/A	mg/L	02/20/19	02/20/19	1908117	
pH (Field)	Field	7.97		N/A	pH Units	02/20/19	02/20/19	1908117	
Temperature (Field)	Field	15.5		N/A	°C	02/20/19	02/20/19	1908117	
General Chemical Analyses									
Ortho-Phosphate (PO4)	HACH 8048	0.49	0.020	N/A	mg/L	02/21/19	02/21/19	1908091	
Phosphorus (Total as P)	HACH 8190	0.48	0.0067	N/A	mg/L	03/01/19	03/01/19	1910006	
CWPF SP5		19B1536-0	05 (Water)		Sample Da	te: 02/20/19	9:10	Sampler:	P.M.
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	3.75		N/A	mg/L	02/20/19	02/20/19	1908117	
pH (Field)	Field	8.06		N/A	pH Units	02/20/19	02/20/19	1908117	
Temperature (Field)	Field	16.8		N/A	°C	02/20/19	02/20/19	1908117	
General Chemical Analyses									
Ortho-Phosphate (PO4)	HACH 8048	0.48	0.020	N/A	mg/L	02/21/19	02/21/19	1908091	
Phosphorus (Total as P)	HACH 8190	0.40	0.0067	N/A	mg/L	03/01/19	03/01/19	1910006	

ND Analyte NOT DETECTED at or above the reporting limit

1913153C Chain of Custody

Client	City of Lomita	System	System Number					ulys	<b>Analysis Requested</b>	ted	
Address	24373 Walnut Avenue			10400	7.0			<u> </u>			
	Lomita, CA 91717			1310010	2						
Phone #	(310) 903-2243		Desi	<b>Destination Laboratory</b>	oratory						
Fax #	(310) 325-3627		X	[X] Clinical Laboratory	oratory						
Project	Standard Analysis		RW	RWQCB Compliance	oliance						
0.150	Lomita Distribution Ortho, 3rd Week			No							
oud right	February, 2019		inini	ELAP #	34						
Comments				1000				E (PC			
Sampled by	P.M.			0001	_						
Date	Sample Idenitification	Matrix Type	Preserv	Bottle Number	Temp.	Total Chlorine	Hq				Comments / P.S. Codes
2/20/2019 6750	6 <i>7<i>S</i>じ 1948 252ND ST. D</i>	DW DI	N/A	s	اح کړ	3,6	8,05	XX			
2/20/2019 68 20	68 C 24632 S. MOON	DW DI	N/A	4	16.0	0.5	7.98	X X			
2/20/2019 0835	2450 W. 247th ST.	DW D1	N/A	9	15.7 (	24.0	1.81	XX			
2/20/2019 C8/C	C8(C 2052 DAWN ST.	IQ MO	N/A	7	1.1.2	١ و	7.9.7	XX			
2/20/2019 0910		DW DI	N/A	8	16.85	3.75	8,06	××			
		_									
Preservatives: (1) Na	Preservatives: (1) Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> (2) HCI (3) HNO3 (4) NH4CI	-	Matrix: DW	/-Drinking V	Vater, WW-	Waste Wa	ter, SW-Sto	rm Wat	Matrix: DW-Drinking Water, WW-Waste Water, SW-Storm Water, GW- Ground Water, A-Air	und Wat	er, A-Air
(5) H2SO4 (6) N			1	Type-1-Rou	itine, 2-Rep	oeat, 3-Re	placement,	4-Speci	Type- 1-Routine, 2-Repeat, 3-Replacement, 4-Special W-Well D- Dist.	D- Dist.	
Relinquished By (Sign)	By (Sign) Print Name / Company			Da	Date / Time		$\left( \right)$	C Re	ceived By (Sign)		Print Name / Company
Patrick Mu	Patrick McCue / City of Lomita	14	/20/2019	11:20				A V	11	Þ	LULGNICIAS
OV Mr	- Jucon/2150		Z-20191	1650				X	Mand	وكالكري	MANANA AT CA
			Sandple	Sandples received: 7	d: 💦 On ice	n ice (	<b>Intact</b>	5	Custody seals		remp J. 9 ()
							<u>-</u>	S X	0		•
Shipped Via	[] Fed X     [] Golden State		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

		FEBR	UARY 2019	
DATE	DAY	METHAN	E HANDHELD	COMMENTS
2/1/2019	Fri	CH4- 0%	Oxy- 20.9%	
2/2/2019	Sat	CH4-	Oxy-	
2/3/2019	Sun	CH4-	Oxy-	
2/4/2019	Mon	CH4- 0%	Oxy- 20.7%	
2/5/2019	Tue	CH4- 0%	Oxy- 20.9%	
2/6/2019	Wed	CH4- 0%	Oxy- 20.6%	
2/7/2019	Thu	CH4- 0%	Oxy- 20.9%	
2/8/2019	Fri	CH4-	Oxy-	
2/9/2019	Sat	CH4-	Oxy-	
2/10/2019	Sun	CH4-	Оху-	
2/11/2019	Mon	CH4- 0%	Oxy- 20.9%	
2/12/2019	Tue	CH4- 0%	Oxy- 20.9%	
2/13/2019	Wed	CH4- 0%	Oxy- 20.9%	
2/14/2019	Thu	CH4- 0%	Oxy- 20.9%	
2/15/2019	Fri	CH4- 0%	Oxy- 20.9%	
2/16/2019	Sat	CH4-	Oxy-	
2/17/2019	Sun	CH4-	Oxy-	
2/18/2019	Mon			President's Day Holiday
2/19/2019	Tue	CH4-	Oxy-	
2/20/2019	Wed	CH4-	Oxy-	
2/21/2019	Thu	CH4- 0%	Oxy- 19.9%	
2/22/2019	Fri	CH4-	Oxy-	
2/23/2019	Sat	CH4-	Oxy-	
2/24/2019	Sun	CH4-	Oxy-	
2/25/2019	Mon	CH4-	Oxy-	
2/26/2019	Tue	CH4- 0%	Oxy- 20.9%	
2/27/2019	Wed	CH4- 0%	Oxy- 20.9%	
2/28/2019	Thu	CH4- 0%	Oxy- 20.9%	
ND- Non Detect CH4- Methane Oxy- Oxygen	1	1		
Day Off/Holiday- R	ed			

## **APPENDIX C**

NITRIFICATION MONITORING DATA SUMMARY

### <sup>1</sup> MONTHLY NITRIFICATION MONITORING SUMMARY REPORT CITY OF LOMITA, System No. 1910073 --- Month, Year: FEBRUARY 2019

# Code	Sample ID	Location	Sample Date	Temp	рН	Total Chlorine	Free Chlorine	Total Ammonia;	Free Ammonia	Nitrite	Nitrate	Coliform <sup>2</sup>	HPC	Zone	Comments
Units/O	$\rightarrow$		MM/DD/YYYY	°C		mg/L	mg/L	mg/L	∭gmg/L	mg/L	mg/L	P/A	CFU/ml		
1 D	S13-003	1948 W 252nd St	2/5/2019	16.5	8.02	2.50	0.10	2.0.47	0.04	-32.003	ND	A	ND	1	Well/MWD Blend
2 D	S13-004	24632 S Moon Ave	2/5/2019	16.5	7.96	2.60	0.05	0.39	0.07	0.015	ND	А	5	1	Well/MWD Blend
3 D	S13-008	25417 Pennsylvania Ave	2/5/2019	16.9	7.99	2.90	0.06	0.44	0.00	0.009	ND	А	6	1	Well/MWD Blend
4 D	A	2052 Dawn St	2/5/2019	16.4	7.94	1.11	0.02	0:26	0.14	0.020	ND	A	8	1	Well/MWD Blend
5 D		Reservoir SP5	2/5/2019	16.7	8.04	2.98	0.05	0.53	0.00		ND	А	NĎ	1	Well/MWD Blend
6 D	\$13-001	1912 W 259th St	2/5/2019	14.8	8.28	2.19	0.04	0.52	0.09	0.005	ND	A	ND	2	MWD Only
7 D	\$13-002	26314 S Monte Vista Ave	2/5/2019	14.9	8.26	2.05	0.09	0.45.	0.04	0.005	ND	A	ND	3	MWD Only
8 D	\$13-005	2500 PCH	2/5/2019	15.8	8.27	1.84	0.05	0.44	0.01	0.004	ND	A	1	2	MWD Only
1 D	S13-003	1948 W 252nd St	2/12/2019	15.6	7.99	2.60	0.07	0:46	0,03	0.007	ND	A	ND	1	Well/MWD Blend
2 D	\$13-004	24632 S Moon Ave	2/12/2019	16.7	7.91	2.40	0.10	0:34	a	0.015	ND	Α	3	1	Well/MWD Blend
3 D	S13-008	25417 Pennsylvania Ave	2/12/2019	16.8	7.95	2.80	0.09	0.42	0.00	0.011	ND	А	4	1	Well/MWD Blend
4 D	А	2052 Dawn St	2/12/2019	16.4	7.89	1.02	0.02	0.24	0.15	0.016	0.51	A	14	1	Well/MWD Blend
5 D		Reservoir SP5	2/12/2019	16.7	8.05	3.01	0.06	0:50	0.00	0.006	0.50	A	ND	1	Well/MWD Blend
6 D	S13-001	1912 W 259th St	2/12/2019	14.2	8.24	2.12	0.05	0.51	. 0.10	0.005	ND	A	ND	2	MWD Only
7 D	\$13-002	26314 S Monte Vista Ave	2/12/2019	14.2	8.23	1.90	0.06	0.40	- 0.04	0.005	ND	A	ND	3	MWD Only
8 D	S13-005	2500 PCH	2/12/2019	15.7	8.22	2.04	0.06	0.42	0.02	0.004	ND	A	1	2	MWD Only
1 D	S13-003	1948 W 252nd St	2/20/2019	15.4	8.08	3,60	0.06	0.10	0.00	0.009	ND	А	ND	1	Well/MWD Blend
2 D	S13-004	24632 S Moon Ave	2/20/2019	16.0	7.98	3.00	0.10	0.29	0.01	0.021	ND	A	ND	1	Well/MWD Blend
3 D	S13-008	25417 Pennsylvania Ave	2/20/2019	16.1	7.99	3.40	0.07	0.38	0.00	0.009	ND	А	ND	1	Well/MWD Blend
4 D	A	2052 Dawn St	2/20/2019	15.5	7.97	1.90	0.02	0.07	A. 0.15	c c0.015 😒	ND	А	2	1	Well/MWD Blend
5 D		Reservoir SP5	2/20/2019	16.8	8.06	3.75	0.06	0.50	0.00	0.003	ND	A	ND	1	Well/MWD Blend
6 D	\$13-001	1912 W 259th St	2/20/2019	14.2	8.30	1.91	0.05	\\;;::0.36 ₹`\*	0.07	0.005	ND	A	ND	2	MWD Only
7 D	S13-002	26314 S Monte Vista Ave	2/20/2019	13.8	8.32	1.89	0.04	0:34	0.06	0.010	ND	A	ND	3	MWD Only
8 D.	S13-005	2500 PCH	2/20/2019	15.1	8.29	1.99	0.07	0.35	0.08	0.007	ND	A	ND	2	MWD Only
1 D	S13-003	1948 W 252nd St	2/26/2019	15.2	8.21	2.80	0.07		0.02	÷ 0.008	ND	A	7	1	Well/MWD Blend
2 D	S13-004	24632 5 Moon Ave	2/26/2019	15.8	8.10	3.20	0.06	0.46	0.02	S 0:019	ND	A	4	1	Well/MWD Blend
3 D	S13-008	25417 Pennsylvania Ave	2/26/2019	15.9	8.13	4.00	0.06	0.64	3**0:00 ×*	0.011	ND	A		1	Well/MWD Blend
4 D	A	2052 Dawn St	2/26/2019	15.9	8.14	1.21	0.04	0:25	0.14	0.007	ND	A	81	1	Well/MWD Blend
5 D		Reservoir SP5	2/26/2019	16.8	8. <u>16</u>	3.80	0.06		0.00	0.006	ND	A	380	1	Well/MWD Blend
6 D	\$13-001	1912 W 259th St	2/26/2019	14.4	8.34	2.16	0.06	0.57	0:03	0.006	ND	Α	ND	2	MWD Only
7 D	S13-002	26314 S Monte Vista Ave	2/26/2019	14.4	8.35	2.05	0.07	0.48	÷ 0.08 ÷ ,	×== 0.006	ND	А	ND	3	MWD Only
8 D	S13-005	2500 PCH	2/26/2019	14.8	8.33	2.11	0.05	0.48	ie ≪0.07 °	0.006	ND	A	3	2	MWD Only
				_				for the second	the second second second	<ul> <li>March 200 March 200 Distances</li> </ul>					
1 D	\$13-003	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					· · · · · · · · · · · · · · · · · · ·	Second Alt	8 - 18 A - 18 - 18 - 18 - 18 - 18 - 18 -	1988 (FE 194				1	Well/MWD Blend
4 D	A	2052 Dawn St							a a ghair a she	g States to				1	Well/MWD Blend
5 D		Reservoir					<u> </u>	S. S. Messel	医肠管菌素	Real Andrews				1	Well/MWD Blend
6 D	\$13-001	1912 W 259th St						通常的影響		A DE LA CENCE	. —			2	MWD Only
7 D	\$13-002	26314 S Monte Vista Ave				L	<u> </u>							3	MWD Only
8 D	\$13-005	2500 PCH						國國國新教師		法理查查加的				2	MWD Only

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

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

<sup>3</sup>The City is monitoring trends of Nitrite in Zone I, in accordance with the Nitrification Monitoring Plan. Due to elevated reads additional hydrant flushing has been implemented.

### **APPENDIX D**

HACH CHEMICAL ANALYZER CERTIFICATION



**Certificate of Instrument Performance** 

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Company Name: CITY OF LOMITA Account Number: 40157716 Contract Number: HACH584486-03-DEC-2017 07:31:59 Certification Number: WO-00222156

Part Numb	er: 5500.AN	мС.AC.1.US, 5500s	C AMMONIA MONOCHLORAMINE ANALYZER, AC,
	Serial N	Number: 15328030	
		Asset Tag	י כי
RECEIVED CONDITION: (One must be Checked)		Within Tolerance	heck Out Tests, <b>NOT</b> performed ce ce but Limited (*see servicing notes) e (*see servicing notes)
RETURNED CONDITION: (One must be Checked)			ee but Limited (*see servicing notes) e (*see servicing notes)
Chemical Standards Used, (Hach, Reg 1, cat# 25234000) (Hach, Reg 2, cat# 2523500 10-2020)(Hach, Reg 3, Cat# 04-2019)(Hach, Std1, Cat# 2 10-2023)(Hach, Std2, Cat# 25 (Hach, Chemkey Free and T 112018255, exp. 3-14-2019) cat#9429400, lot# 11201829	0, lot# A8281, 00, lot# A8290 25236000, lot 25237000, lot# 2523800, lot# 5239000, lot# otal Ammonia 0(Hach, Chemi	), exp. t# A8284, exp. # A8276, exp. A8177, exp. A8065, exp.03-2021) a, cat# 8791500, lot# kev Monochlorimine,	Test Equipment Used, (ID#): (Hach SL1000, I.D.# 181380103771, exp. 5-18-2019)(Extech Humidity/Temperature Pen, I.D# 1100422, exp. 5-2-2019)
		Environmental	
Te	mperature:	18.2°C	Humidity: 58.9%

Hach Company does hereby certify that the above listed equipment meets or exceeds all Manufacturer's Service Specifications (unless limited conditions apply). Test equipment and chemicals used for performance verification are calibrated using standards traceable to the National Institute of Standards and Technology (NIST). Where such standards do not exist, the basis for calibration is documented. The proper operation of the above instrument was established at the time of certificate issuance. To insure continued performance, user must adhere to all requirements listed in the instrument manual.

Certified by: Se	ergioDebia	Certification Date: 2/26/2019
Signature:	In super Datas	Title: Authorized Service Representative



**Certificate of Instrument Performance** 

0000

Company Name: CITY OF LOMITA Account Number: 40157716 Contract Number: HACH584486-03-DEC-2017 07:31:59 Certification Number: WO-00222156

Part Number: 9180600, PANEL ASSY, AMPEROMETRIC CHLORINE, ENGLISH						
Serial Number: 151145003599						
Asset Tag :						
RECEIVED CONDITION: (One must be Checked)		heck Out Tests, <b>NOT</b> performed ce ce but Limited (*see servicing notes) e (*see servicing notes)				
RETURNED CONDITION: (One must be Checked)		Within Tolerance Within Tolerance but Limited (*see servicing notes) Out of Tolerance (*see servicing notes)				
Chemical Standards Used, (Hach, Free Chlorine Electrol exp.05-2021)(Hach, DPD Por Reagent, cat#1407099, lot#A	Test Equipment Used, (ID#): (Hach DR900, REF348, exp. 4-2-2019), (Extech Humidity/Temperature Pen, I.D# 1100422, exp. 5-2-2019)					
	Environmental Conditions					
Temperature: 18.2°C Humidity: 58.9%						

Hach Company does hereby certify that the above listed equipment meets or exceeds all Manufacturer's Service Specifications (unless limited conditions apply). Test equipment and chemicals used for performance verification are calibrated using standards traceable to the National Institute of Standards and Technology (NIST). Where such standards do not exist, the basis for calibration is documented. The proper operation of the above instrument was established at the time of certificate issuance. To insure continued performance, user must adhere to all requirements listed in the instrument manual.

Certified by: Ser	rgioDebia	Certification Date: 2/26/2019
Signature:	- info Bringen &	Title: Authorized Service Representative



Account Number:	40157716	Contact Name: PATRICK MCCUE				
Phone: Location:	: CITY OF LOMITA : 310 9032243 :CITY OF LOMITA, 26112 CYPRESS STREET CYPRESS \$ RESERVOIR, LOMITA, California, 90717, US	Fax: Email: p.mccue@lomitacity.com PRESS STREET Technician: SergioDebia				
	HACH584486-03-DEC-2017 07:31:59	Purchase Order: PO 18-52 Date of Service: 2/26/2019				
Product	Product Description	Serial Number	Asset Tag			
5500.AMC.AC.1.US	NIA MONOCHLORAMINE ANALYZER, AC, 1 CH, US (9560	0 153280300001				
readings. I replaced the 6-month faulty sample pump was the cau was 0.99 on Cell 1 and 0.97 on 0 acceptable tolerance when the s within 5%. After PM service was	Notes alyzer was Fair, the software version is 1.13 and reading wer maintenance kit which includes the capillary modules, all tub se of the alarm). I cleaned both colorimeter cells. Cleaned an Cell 2. Slope correction after service was 1.00 on Cell 1 and 1 ystem was pressurized and that all solenoids were working p completed the as left reading of the analyzer was 3.033 ppm condition has been verified within customers' expectations.	ing, compressor check valve, fan filte d calibrated the unit using internal sta .00 on Cell 2. I verified that the reag roperly. I verified the results with a ce	er, stir magnets and sample pump (a andards, slope correction before service lent and sample pressures were within the rifified Hach SL1000 the results were			
9180600	Product Description PANEL ASSY, AMPEROMETRIC CHLORINE, ENGLISH	Serial Number 151145003599	Asset Tag			
	een verified within customers' expectations.					
Product	Product Description	Serial Number	Asset Tag			
	Notes					
Product	Product Description	Serial Number	Asset Tag			
	Notes					
Product	Product Description	Serial Number	Asset Tag			
	Notes					
Product	Product Description	Serial Number	Asset Tag			
	Notes					

#### Service Price Detail for Work Listed Above

Item Number	Item Description	Qty	Unit Price	Disc. %	Ext Price	Net Price
ZONE-1	* HACH SVC TRAVEL CHARGE 0-100M (P)	1.0	492.00	0	492.00	0.00
MC_M82	** Certificate of Instrument Perf (P) (FRRF)	2.0	94.49	0	188.98	0.00
9160200	KIT, MEMBRANE REPLACEMENT, CLF10sc PLASTIC TIP	1.0	77.75	0	77.75	0.00
9713300	ASSY, PKG OF SAMPLE PUMP REPLACEMENT, 5500sc AMC	1.0	202.00	0	202.00	0.00
FIELD_LABOR	* FIELD SERVICE LABOR HACH	6.1	260.00	0	1573.00	0.00

Subtotal: 0.00

All purchases of Hach Company products and/or services are expressly and without limitation subject to Hach Company's Terms & Conditions of Sale ("Hach TCS"), incorporated herein by reference and published on Hach Company's website at www.hach.com/terms. Hach TCS are incorporated by reference into each of Hach's offers or quotations, order acknowledgments, and invoice and shipping documents. The first of the following acts shall constitute an acceptance of Hach's offer and not a counteroffer and shall create a contract of sale ("Contract") in accordance with the Hach TCS, subject to Hach's final credit approval: (i) Buyer's issuance of a purchase order document against Hach's offer or quotation; (ii) Hach's acknowledgement of Buyer's order; or (iii) commencement of any performance by Hach in response to Buyer's order. Provisions contained in Buyer's purchase documents that materially alter, add to or subtract from the provisions of these Terms and Conditions of Sale shall be null and void and not considered part of the Contract.

#### THIS IS NOT AN INVOICE

ANY DOLLAR AMOUNTS PRESENTED IN THIS REPORT IS AN ESTIMATION AND DOES NOT INCLUDE ANY APPLICABLE TAXES. IF CHARGES ARE OVER \$500.00, A HARD COPY OF A PURCHASE ORDER MAY BE REQUIRED.

Customer Name: CITY OF LOMITA

#### Signature:

Date:

Hach Tech Name: SergioDebia

Signature:



Date: 2/27/2019