CITY OF LOMITA



Cypress Water Production Facility Monthly Status Report

December 2018

TABLE OF CONTENTS

COVER LETTER
A. BACKGROUND
B. WELL PRODUCTION AND OPERATIONS
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)3
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
E3-7 1,2,3-TRICHLOROPROPANE MONITORING4
E4. NITRIFICATION MONITORING4
F. TABLES

CITY COUNCIL

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



ADMINISTRATION

RYAN SMOOT
CITY MANAGER

January 10, 2019

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

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

Dear Mr. Ginzburg,

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

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

Mark Andersen

Sincerely

Public Works Superintendent

A. BACKGROUND

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

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

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

B. WELL PRODUCTION

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

Table 1. Monthly Production Totals.

	Р	roduction f	or December 2018
Well No. 5	42.29	ac-ft	13,778,040 (gallons)
MYY/D	56.95	(i) (ii)	188,5538,0000 (gallloins)):
Combined Total	99.24	ac-ft	32,336,040 (gallons)
Daily	3.20	ac-ft/day	1,043,098 (gallons/day)

C. OPERATIONAL INTERRUPTIONS

There were no operational interruptions during the month of December 2018. Routine and preventive maintenance was performed on various pieces of equipment as-needed. No major planned operational interruptions are anticipated for the following month.

D. SAMPLE LOCATIONS

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

E. WATER QUALITY MONITORING

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

E1. IRON, MANGANESE AND COLOR

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

E2. FREE AND TOTAL CHLORINE RESIDUALS

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

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

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

E3-1 TOTAL DISSOLVED SOLIDS (TDS)

The sampling results indicate the TDS levels of the effluent blended water to be on average 640 mg/L. The TDS level of the effluent water meets the City's Water Quality Objective/Goal of 500 to 750 mg/L. The sampling results indicate the TDS levels in the raw water and MWD water source to be 780 mg/L and 630 mg/L, respectively.

E3-2 HARDNESS

The sampling results for the month indicate the hardness levels of the blended water to be on average 310 mg/L. This hardness level is above the City's Water Quality Objective/Goal of 180 to 250 mg/L; staff continues to monitor hardness levels at the CWPF effluent (SP5) and within the water distribution system. The City has maintained a consistent blend ratio to ensure acceptable hardness levels are met.

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

E3-3 DISSOLVED METHANE (IN WATER)

The methane levels in the CWPF effluent after aeration treatment remain negligible averaging 0.33 mg/L.

E3-4 METHANE (IN AIR)

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

E3-5 ODOR

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

E3-6 TOTAL PHOSPHATE AND ORTHOPHOPHATE

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

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

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

E4. NITRIFICATION MONITORING

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

F. TABLES

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

		SP1, V	Vell Raw	Water	Discha	irge		Pres	Combi sure F	lter	SP3, After chloramination static mixer; reservoir entry					
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
12/4/2018											ND	300	ND	50	5	15
12/11/2018	180	300	150	50	10	15	А	ND	ND	500	ND	300	ND	50	7.5	15
12/18/2018											ND	300	ND	50	5	15
12/27/2018											ND	300	ND	50	7.5	15

Notes:

Monthly- Orange; Weekly- Yellow

A – Absent

ND - Non Detect

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

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

Date,	SP2		SP3			SP4			SP5	
week of	Free CI	Free CI	Total CI	Total NH ₃	Free CI	Total CI	Total NH₃	Free CI	Total CI	Total NH ₃
12/4/2018	6.79	0.70	8.00	0.90	0.50	4.58	0.80	0.07	3.11	0.65
12/11/2018	9.10	0.80	8.40	0.51	0.30	5.30	0.44	0.07	3.05	0.51
12/18/2018	6.79	0.85	7.80	0.80	0.68	3.53	0.55	0.06	2.84	0.51
12/27/2018	٠		-	-	<u> </u>	-	-	0.05	3.23	0.60

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

		TD	S, mg/L		T.O.	N.		Hardn	Methane (Water), 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
12/4/2018			600	500-750	2	3						0.34
12/11/2018	780	630	690	500-750	2	3	370	270	310	180-250	3.1	0.28
12/18/2018			660	500-750	2	3						0.38
12/27/2018			610	500-750	2	3						0.30
Average			640	500-750	2	3						0.33

Notes:

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

Notes:

Monthly- Orange;

mg/L - milligram per liter

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

	Frequency	MOL	12/4/18	12/11/18	40/40/40			
Sample Locations and Parameters	Frequency	MCL/	The state of the s	2 nd Wk	12/18/18	12/27/18 4 th Wk		Comments
and Parameters		Goal	1stWk	ZTVVK	3rdWk	4"VVK		and/or
			or Mo.					Other Info.
			Result					
			(date)	l				
SP1 Also called	Woll 5 Pay	Water						
	Monthly	See SP5	780	Operations	Data/Inforn	antion		*Chlorine injected afte
TDS, ppm	Wiorithiy	000 01 0	12/11/18	Operations	Data/IIIIOIII	iation.		SP1, before entering
Hardness	Monthly	See SP5	370 12/11/18	CWPF opera	P			the greensand filter.
CH4, ppm	Monthly	See SP5	3.1 12/11/18	-42.29 AF	Daily average f	70	20 200	
Iron, ppb	Monthly	See SP3	180 12/11/18	blend Ratio – 99.24 AF	Vell 5/MWD da - 43% WELL: 5	or a state of the	al prod	
Manganese, ppb	Monthly	See SP3	150 12/11/18		sage: N/A*			
Color, units	Monthly	See SP3	10 12/11/18	Cilionine De	sage. N/A			
Total Coliform, P or A	Monthly	Α	A 12/11/18					
SP2 Also called	Filter Efflu	ent or Si	te#3.					
Total Coliform, P or A	Monthly	Α	Α					*Ammonia added after
HPC,MPN/100 ml	Monthly	500	ND	Ammonia D	osage: N/A*			filter effluent
Free Cl Res, ppm	Continuous	Average:	7.56 ; Ran	ge: 6.79 - 9	.10			1
SP3 Also called	the Site Af	ter Chlor	ramination	a & Before	MWD Ble	ending or	Site#4.	
Iron, ppb	Weekly	ND	ND	ND	ND	ND		
Manganese, ppb	Weekly	50	ND	ND	ND	ND		1
Color	Weekly	15	5	7.5	5	7.5		
Free and Total CI Res,	Weekly Continuous	Free CI: A	5 Average: 0.78	7.5 3; Range: 0.	5 70 – 0.85			
Free and Total CI Res,		Free Cl: A Total Cl: A	5 Average: 0.78 Average: 8.0	7.5 3; Range: 0.7 7; Range: 7	5 70 – 0.85 .80 – 8.40		3	
Free and Total CI Res, ppm	Continuous	Free CI: A Total CI: A Ammonia	5 Average: 0.78 Average: 8.0 : Average: 0	7.5 B; Range: 0.7; Range: 7 .74; Range:	5 70 – 0.85 .80 – 8.40 0.51 – 0.90	7.5		
Free and Total CI Res, ppm SP4 Also called	Continuous	Free Cl: A Total Cl: A Ammonia Influent	5 Average: 0.78 Average: 8.0 : Average: 0. or the Site	7.5 3; Range: 0.7; Range: 7.74; Range:	5 70 – 0.85 .80 – 8.40 0.51 – 0.90	7.5	int/Phosp	hate Injection.
Color Free and Total CI Res, ppm SP4 Also called Phosphate Injection	Continuous Reservoir	Free CI: A Total CI: A Ammonia Influent of Phosphat	5 Average: 0.78 Average: 8.0 : Average: 0. or the Site e Dosage: 0	7.5 3; Range: 0.7; Range: 7.74; Range: • Well 5/M 0.47 mg/L	5 70 – 0.85 .80 – 8.40 0.51 – 0.90 WD Water	7.5	int/Phosp	
Free and Total CI Res, ppm SP4 Also called Phosphate Injection Free and Total CI Res,	Continuous	Free CI: A Total CI: A Ammonia Influent of Phosphat Free CI: A	5 Average: 0.78 Average: 8.0 : Average: 0 or the Site e Dosage: 0 Average: 0.4	7.5 3; Range: 0. 7; Range: 7 .74; Range: e Well 5/M 0.47 mg/L 9; Range: 0	5 70 - 0.85 .80 - 8.40 0.51 - 0.90 WD Water 30 - 0.68	7.5	int/Phosp	CI/NH3 Ratio:
Free and Total CI Res, ppm SP4 Also called Phosphate Injection Free and Total CI Res,	Continuous Reservoir	Free CI: A Total CI: A Ammonia Influent (Phosphat Free CI: A Total CI: A	5 Average: 0.78 Average: 8.0 : Average: 0. or the Site e Dosage: 0.4 Average: 0.4 Average: 4.4	7.5 3; Range: 0. 7; Range: 7 .74; Range: e Well 5/M 0.47 mg/L 9; Range: 0. 5; Range: 3.	5 70 - 0.85 .80 - 8.40 0.51 - 0.90 WD Water 30 - 0.68 53 - 5.30	7.5	int/Phosp	
Free and Total CI Res, ppm SP4 Also called Phosphate Injection Free and Total CI Res, ppm	Reservoir Continuous	Free CI: A Total CI: A Ammonia Influent (Phosphat Free CI: A Total CI: A Ammonia	5 Average: 0.78 Average: 8.0 : Average: 0. or the Site e Dosage: 0. Average: 0.4 Average: 4.4 : Average: 0.	7.5 3; Range: 0. 7; Range: 7 74; Range: 9 Well 5/M 0.47 mg/L 9; Range: 0 5; Range: 3. 56; Range:	5 70 - 0.85 .80 - 8.40 0.51 - 0.90 WD Water 30 - 0.68 53 - 5.30 0.44 - 0.80	7.5 Blend Po		CI/NH3 Ratio: 7.99
Free and Total CI Res, ppm SP4 Also called Phosphate Injection Free and Total CI Res, ppm SP5 Also called	Reservoir Continuous	Free CI: A Total CI: A Ammonia Influent (Phosphat Free CI: A Total CI: A Ammonia	5 Average: 0.78 Average: 8.0 : Average: 0. or the Site e Dosage: 0. Average: 0.4 Average: 4.4 : Average: 0.	7.5 3; Range: 0. 7; Range: 7 74; Range: 9 Well 5/M 0.47 mg/L 9; Range: 0 5; Range: 3. 56; Range:	5 70 - 0.85 .80 - 8.40 0.51 - 0.90 WD Water 30 - 0.68 53 - 5.30 0.44 - 0.80	7.5 Blend Po		CI/NH3 Ratio: 7.99
Free and Total CI Res, ppm SP4 Also called Phosphate Injection Free and Total CI Res, ppm SP5 Also called TDS, ppm	Reservoir Continuous Reservoir Weekly Monthly	Free CI: A Total CI: A Ammonia Influent (Phosphat Free CI: A Total CI: A Ammonia Effluent SI Goal: 500-750ppm	5 Average: 0.78 Average: 8.0 : Average: 0. or the Site e Dosage: 0.4 Average: 0.4 Average: 4.4 : Average: 0. or Site#5.	7.5 3; Range: 0.7; Range: 7.74; Range: 6 Well 5/M 0.47 mg/L 9; Range: 0.5; Range: 3.56; Range: 3.56; Range:	5 70 - 0.85 .80 - 8.40 0.51 - 0.90 WD Water 30 - 0.68 53 - 5.30 0.44 - 0.80 harges in	7.5 Blend Po		CI/NH3 Ratio: 7.99
Free and Total CI Res, ppm SP4 Also called Phosphate Injection Free and Total CI Res, ppm SP5 Also called TDS, ppm Hardness	Reservoir Continuous Reservoir Weekly	Free CI: A Total CI: A Ammonia Influent Phosphat Free CI: A Total CI: A Ammonia Effluent SI Goal: 500-750ppm SI Goal:	5 Average: 0.78 Average: 8.0 : Average: 0. or the Site e Dosage: 0.4 Average: 0.4 Average: 4.4 : Average: 0. or Site#5.	7.5 3; Range: 0.7; Range: 7.74; Range: 6 Well 5/M 0.47 mg/L 9; Range: 0.5; Range: 3.56; Range: 3.66; Range: 690	5 70 - 0.85 .80 - 8.40 0.51 - 0.90 WD Water 30 - 0.68 53 - 5.30 0.44 - 0.80 harges in	7.5 Blend Po		CI/NH3 Ratio: 7.99 tribution system
Free and Total CI Res, ppm SP4 Also called Phosphate Injection Free and Total CI Res, ppm SP5 Also called TDS, ppm Hardness CH4, ppm	Reservoir Continuous Reservoir Weekly Monthly	Free CI: A Total CI: A Ammonia Influent Phosphat Free CI: A Total CI: A Ammonia Effluent SI Goal: 500-750ppm SI Goal: 180-250ppm Goal: from	5 Average: 0.78 Average: 8.0 : Average: 0. or the Site e Dosage: 0. Average: 0.4 Average: 4.4 : Average: 0. or Site#5.	7.5 3; Range: 0.7; Range: 7.74; Range: 6 Well 5/M 0.47 mg/L 9; Range: 0.5; Range: 3.56; Range: 3.56; Range: 3.10	5 70 - 0.85 .80 - 8.40 0.51 - 0.90 WD Water 30 - 0.68 53 - 5.30 0.44 - 0.80 harges in	7.5 Blend Poto Zone 1		CI/NH3 Ratio: 7.99 tribution system % CH4 Removal:
Free and Total CI Res, ppm SP4 Also called Phosphate Injection Free and Total CI Res, ppm SP5 Also called TDS, ppm Hardness CH4, ppm Odor, units	Reservoir Continuous Reservoir Weekly Monthly Weekly	Free CI: A Total CI: A Ammonia Influent Phosphat Free CI: A Total CI: A Ammonia Effluent SI Goal: 500-750ppm Goal: from PA 1 Free CI: A	5 Average: 0.78 Average: 8.0 : Average: 0.0 or the Site e Dosage: 0.0 Average: 0.4 Average: 4.4 : Average: 0.0 or Site#5. 600 0.34 2 Average: 0.0	7.5 3; Range: 0. 7; Range: 7 74; Range: 8 8 Well 5/M 0.47 mg/L 9; Range: 3 56; Range: 3 56; Range: 3 690 310 0.28 2 6; Range: 0.	5 70 - 0.85 .80 - 8.40 0.51 - 0.90 WD Water 30 - 0.68 53 - 5.30 0.44 - 0.80 harges in 660 0.38 2 05 - 0.07	7.5 Blend Po		CI/NH3 Ratio: 7.99 stribution system % CH4 Removal:
Free and Total CI Res, ppm SP4 Also called Phosphate Injection Free and Total CI Res, ppm SP5 Also called TDS, ppm Hardness CH4, ppm Odor, units Free and Total CI Res,	Reservoir Continuous Reservoir Weekly Monthly Weekly Monthly	Free CI: A Total CI: A Ammonia Influent Phosphat Free CI: A Total CI: A Ammonia Effluent SI Goal: 500-750ppm Goal: from PA 1 Free CI: A Total CI: A	5 Average: 0.78 Average: 8.0 : Average: 0.0 or the Site e Dosage: 0.0 Average: 0.4 Average: 0.4 : Average: 0.0 or Site#5. 600 0.34 2 Average: 0.0 Average: 0.0 Average: 3.0	7.5 3; Range: 0.7 7; Range: 7 74; Range: 8 8 Well 5/M 0.47 mg/L 9; Range: 0.5 5; Range: 3 56; Range: 3 690 310 0.28 2	5 70 - 0.85 .80 - 8.40 0.51 - 0.90 WD Water 30 - 0.68 53 - 5.30 0.44 - 0.80 harges in 660 0.38 2 05 - 0.07 34 - 3.24	7.5 Blend Po		CI/NH3 Ratio: 7.99 tribution system % CH4 Removal: 89.5%
Free and Total CI Res, ppm SP4 Also called Phosphate Injection Free and Total CI Res, ppm SP5 Also called TDS, ppm Hardness CH4, ppm Odor, units Free and Total CI Res, ppm	Reservoir Continuous Reservoir Weekly Monthly Weekly Monthly Continuous	Free CI: A Total CI: A Ammonia Influent Phosphat Free CI: A Total CI: A Ammonia Effluent SI Goal: 500-750ppm Goal: from PA 1 Free CI: A Total CI: A Ammonia	5 Average: 0.78 Average: 8.0 : Average: 0.0 or the Site e Dosage: 0.0 Average: 0.4 Average: 0.4 : Average: 0.0 or Site#5. 600 0.34 2 Average: 0.0 Average: 0.0 Average: 3.0	7.5 3; Range: 0. 7; Range: 7 74; Range: 9 8 Well 5/M 0.47 mg/L 9; Range: 3 56; Range: 3 56; Range: 3 690 310 0.28 2 6; Range: 0. 5; Range: 0. 5; Range: 2.8	5 70 - 0.85 .80 - 8.40 0.51 - 0.90 WD Water 30 - 0.68 53 - 5.30 0.44 - 0.80 harges in 660 0.38 2 05 - 0.07 34 - 3.24	7.5 Blend Po		CI/NH3 Ratio: 7.99 Stribution system % CH4 Removal: 89.5% CI/NH3 Ratio:
Free and Total CI Res, ppm SP4 Also called	Reservoir Continuous Reservoir Weekly Monthly Weekly Monthly Continuous Cypress Re	Free CI: A Total CI: A Ammonia Influent (Phosphat Free CI: A Total CI: A Ammonia Effluent SI Goal: 500-750ppm Goal: from PA 1 Free CI: A Ammonia eservoir. Goal -	5 Average: 0.78 Average: 8.0 : Average: 0.0 or the Site e Dosage: 0.4 Average: 0.4 Average: 0.4 Or Site#5. 600 0.34 2 Average: 0.0 Average: 0.0 Average: 0.0 2 Average: 0.0 Average: 0.0 Average: 0.0 Average: 0.0 Average: 0.0 Average: 0.0	7.5 3; Range: 0. 7; Range: 7 74; Range: 9 8 Well 5/M 0.47 mg/L 9; Range: 3 56; Range: 3 56; Range: 3 690 310 0.28 2 6; Range: 0. 5; Range: 0. 5; Range: 2.8	5 70 - 0.85 .80 - 8.40 0.51 - 0.90 WD Water 30 - 0.68 53 - 5.30 0.44 - 0.80 harges in 660 0.38 2 05 - 0.07 34 - 3.24 0.51 - 0.65	7.5 Blend Po		CI/NH3 Ratio: 7.99 tribution system % CH4 Removal: 89.5% CI/NH3 Ratio:
Free and Total CI Res, ppm SP4 Also called Phosphate Injection Free and Total CI Res, ppm SP5 Also called TDS, ppm Hardness CH4, ppm Odor, units Free and Total CI Res, ppm Headspace of the C CH4 ppmv; using	Reservoir Continuous Reservoir Weekly Monthly Weekly Monthly Continuous	Free CI: A Total CI: A Ammonia Influent (Phosphat Free CI: A Total CI: A Ammonia Effluent SI Goal: 500-750ppm Goal: from PA 1 Free CI: A Ammonia eservoir.	5 Average: 0.78 Average: 8.0 : Average: 0.0 or the Site e Dosage: 0.4 Average: 0.4 Average: 4.4 : Average: 0.0 or Site#5. 600 0.34 2 Average: 3.0 : Average: 0.0 CH4 Aver	7.5 3; Range: 0.7; Range: 7.74; Range: 7.74; Range: 9 Well 5/M 0.47 mg/L 9; Range: 0.5; Range: 3.56; Range: 3.10 0.28 2 6; Range: 0.5; Range: 2.56; Range: 2.56; Range: 0.56;	5 70 - 0.85 .80 - 8.40 0.51 - 0.90 WD Water 30 - 0.68 53 - 5.30 0.44 - 0.80 harges in 660 0.38 2 05 - 0.07 34 - 3.24 0.51 - 0.65	7.5 Blend Po		CI/NH3 Ratio: 7.99 Stribution system % CH4 Removal: 89.5% CI/NH3 Ratio:
Free and Total CI Res, ppm SP4 Also called Phosphate Injection Free and Total CI Res, ppm SP5 Also called TDS, ppm Hardness CH4, ppm Odor, units Free and Total CI Res, ppm Headspace of the C CH4 ppmv; using Portable Device	Reservoir Continuous Reservoir Weekly Monthly Weekly Monthly Continuous Cypress Re Daily (from log)	Free CI: A Total CI: A Ammonia Influent of Phosphat Free CI: A Total CI: A Ammonia Effluent SI Goal: 500-750ppm Goal: from PA 1 Free CI: A Total CI: A Ammonia eservoir. Goal- LEL	5 Average: 0.78 Average: 8.0 : Average: 0.0 or the Site e Dosage: 0.4 Average: 0.4 Average: 0.4 Or Site#5. 600 0.34 2 Average: 0.0 Average: 0.0 Average: 0.0 CH4 Average: 0.0 CH4 Average: 0.0	7.5 3; Range: 0.7; Range: 7.74;	5 70 - 0.85 .80 - 8.40 0.51 - 0.90 WD Water 30 - 0.68 53 - 5.30 0.44 - 0.80 harges in 660 0.38 2 05 - 0.07 34 - 3.24 0.51 - 0.65	7.5 Blend Po to Zone 1 610 0.30 2	of the dis	CI/NH3 Ratio: 7.99 Stribution system % CH4 Removal: 89.5% CI/NH3 Ratio: 5.49
Free and Total CI Res, ppm SP4 Also called Phosphate Injection Free and Total CI Res, ppm SP5 Also called TDS, ppm Hardness CH4, ppm Odor, units Free and Total CI Res, ppm Headspace of the C1 CH4 ppmv; using Portable Device SP 6 MWD Source	Reservoir Continuous Reservoir Weekly Monthly Weekly Monthly Continuous Cypress Re Daily (from log)	Free CI: A Total CI: A Ammonia Influent of Phosphat Free CI: A Total CI: A Ammonia Effluent SI Goal: 500-750ppm Goal: from PA 1 Free CI: A Total CI: A Ammonia eservoir. Goal- LEL	5 Average: 0.78 Average: 8.0 : Average: 0.0 or the Site e Dosage: 0.4 Average: 0.4 Average: 0.4 Or Site#5. 600 0.34 2 Average: 0.0 Average: 0.0 Average: 0.0 CH4 Average: 0.0 CH4 Average: 0.0	7.5 3; Range: 0.7; Range: 7.74;	5 70 - 0.85 .80 - 8.40 0.51 - 0.90 WD Water 30 - 0.68 53 - 5.30 0.44 - 0.80 harges in 660 0.38 2 05 - 0.07 34 - 3.24 0.51 - 0.65	7.5 Blend Po to Zone 1 610 0.30 2	of the dis	CI/NH3 Ratio: 7.99 Stribution system % CH4 Removal: 89.5% CI/NH3 Ratio: 5.49
Free and Total CI Res, ppm SP4 Also called Phosphate Injection Free and Total CI Res, ppm SP5 Also called TDS, ppm Hardness CH4, ppm Odor, units Free and Total CI Res, ppm Headspace of the C	Reservoir Continuous Reservoir Weekly Monthly Weekly Monthly Continuous Cypress Re Daily (from log) Ce Feeding	Free CI: A Total CI: A Ammonia Influent of Phosphat Free CI: A Total CI: A Ammonia Effluent SI Goal: 500-750ppm Goal: from PA 1 Free CI: A Total CI: A Ammonia eservoir. Goal- LEL	5 Average: 0.78 Average: 8.0 : Average: 0.0 or the Site e Dosage: 0.4 Average: 0.4 Average: 0.4 Or Site#5. 600 0.34 2 Average: 0.0 Average: 0.0 Average: 0.0 CH4 Average: 0.0 CH4 Average: 0.0	7.5 3; Range: 0.7; Range: 7.74; Range: 7.74; Range: 9 Well 5/M 0.47 mg/L 9; Range: 0.5; Range: 3.56; Range: 3.10 0.28 2 6; Range: 0.28 6; Range: 0.5; Range: 0.5; Range: 2.3 6; Range: 0.5; Range: 0.56; Range: 0.	5 70 - 0.85 .80 - 8.40 0.51 - 0.90 WD Water 30 - 0.68 53 - 5.30 0.44 - 0.80 harges in 660 0.38 2 05 - 0.07 34 - 3.24 0.51 - 0.65	7.5 Blend Po to Zone 1 610 0.30 2	of the dis	CI/NH3 Ratio: 7.99 Stribution system % CH4 Removal: 89.5% CI/NH3 Ratio: 5.49

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

APPENDIX A

LABORATORY RESULTS



17 December 2018 Clinical Lab No.: 18L0254

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

Project Name: Standard Analysis

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

Enclosed are the results of the analyses for samples received at the laboratory on 12/04/18 . Samples were received within temperature range, in correct containers and preservation.

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

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

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

Sincerely,

Stu Styles

Client Services Manager

tistes



Lomita, City ofProjectStandard AnalysisWork Order:18L025424373 Walnut AvenueSub Project:CWPF 1st Week of Dec., 2018 Compliance Sampling Received:12/04/18 18:36Lomita CA, 91717Project Manager:Mark AndersenReported:12/17/18

Reservoir Influent Site #3		18L0254-0	01 (Water)		Sample Da	te: 12/04/1	8 9:55 Sa	mpler: P.1	M.
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	7.6		N/A	mg/L	12/04/18	12/04/18	1849098	
pH (Field)	Field	7.51		N/A	pH Units	12/04/18	12/04/18	1849098	
Temperature (Field)	Field	20.9		N/A	°C	12/04/18	12/04/18	1849098	
General Physical Analyses									
Apparent Color	SM 2120BM	5.0	3.0	15	Color Units	12/04/18	12/04/18	1849122	
<u>Metals</u>									
Iron (Fe)	EPA 200.7	ND	100	300	ug/L	12/12/18	12/12/18	1850097	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	12/12/18	12/12/18	1850097	
Reservoir Effluent Site #5		18L0254-0	02 (Water)		Sample Da	te: 12/04/1	8 10:15 Sa	mpler: P.1	M.
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	3.16		N/A	mg/L	12/04/18	12/04/18	1849098	
pH (Field)	Field	7.87		N/A	pH Units	12/04/18	12/04/18	1849098	
Temperature (Field)	Field	18.7		N/A	°C	12/04/18	12/04/18	1849098	
General Physical Analyses									
Apparent Color	SM 2120BM	ND	3.0	15	Color Units	12/04/18	12/04/18	1849122	
Odor Threshold	EPA 140.1-M	2	1	3	TON	12/04/18	12/04/18	1849122	
General Chemical Analyses									
Total Filterable Residue/TDS	SM 2540C	600	5.0	1000	mg/L	12/10/18	12/11/18	1850022	



December 12, 2018

EPA Methods TO3, TO14A, TO15, 25C/3C, RSK-175

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

TX Cert T104704450-14-6 EPA Methods TO14A, TO15 UT Cert CA0133332015-3 EPA Methods TO3, TO14A, TO15, RSK-175

LABORATORY TEST RESULTS

Project Reference: 18L0254

Lab Number:

J120603-01

Enclosed are results for sample(s) received 12/06/18 by Air Technology Laboratories. Samples were received intact and chilled to 3° C. Analyses were performed according to specifications on the chain of custody provided with the sample(s).

Report Narrative:

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

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

Sincerely,

Mark Johnson

Operations Manager

MJohnson@AirTechLabs.com

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

SUBCONTRACT ORDER

Clinical Laboratory of San Bernardino 18L0254

U120603-01

SENDING LABORATORY:	REC	CEIVING LABORATORY:		
Clinical Laboratory of San Bernardino 21881 Barton Road Grand Terrace, CA 92313	185	Technology Labs 01 East Gale Avenue Suite 1 y of Industry, CA 91748	30	
Phone: 909.825.7693 Fax: 909.825.7696 Project Manager: Stu Styles	Pho	one :(626) 964-4032 ::		
Please email results to Project Manage [] glaubig@clinical-lab.com [] sty	r: Stu Styles vles@clinical-lab.com [] bern	stein@clinical-lab.com		
California EDT transfer those s Water Trax Upload Client:	amples with PS codes provided	[] Yes [v] No [] Yes [v] No		0 V
Turn Around Time [] 10 Days Subcontract Comments:	[5 Days [] Other Da	ys		
Analysis			Comments	
Sample ID: Reservoir Effluent Site #5 /	Water	12/04/18 10:15 PS Code: WTX	ID: Report in mg/L	(4)
Methane RSK175	2 ²² g		Report in ing/L	
Containers Supplied: Oml Amber Vial (B)	40ml Amber Vial (C)			
ominmon via (b)	101111111111111111111111111111111111111			
	e a and a management of the contract of the contract of	s reserve as a function of State on the		
and the second s	Sina di Banana di James			
				a 1
2				
			7	0
to the second decision	ENERGY PROPERTY.			
BINA	12/1/18 02/2	missing	12/01/1	9:00
Released By	12/6/18 07:30 Date / Time Reco	eived By	Date / Time	1014
Released By	Date / Time Reco	eived By	Date / Time	10/

Client:

Clinical Laboratory

Attn:

Stu Styles

Project Name:

NA

Project No .:

18L0254

Date Received:

12/06/18

Matrix:

Water

Reporting Units: mg/L

		RS	K175				
Lab No.:	J12060	03-01				T	
	Reservoir				NO COMMON AND REAL PROPERTY AN		
Client Sample I.D.:	Site #5/18						
	02						
Date/Time Sampled:	12/4/18	10:15					
Date/Time Analyzed:	12/12/18	12/12/18 10:48					
QC Batch No.:	1812120	GC8A1					
Analyst Initials:	CM/	MJ					
Dilution Factor:	1.0)					
	Result	RL					
ANALYTE	mg/L	mg/L mg/L					
Methane	0.34	0.0010					

MDL = Method Detection Limit

ND= Not Detected (below MDL)

RL = Reporting Limit

D	A * 1 . A *	1600	A	mmmorrod	Dere

Operations Manager

The cover letter is an integral part of this analytical report

LCS/LCSD Recovery and RPD Summary Report

QC Batch #: 181212GC8A1

Matrix: Air Reporting Units: mg/L

RSK175 LABORATORY CONTROL SAMPLE SUMMARY

METHOD	BLANK		LCS		LCSD			A COLUMN TO THE				
12/12/18	9:59		12/12/		12/12/18 8:25		12/12/18 9:30			CIT COMMON CIT		
CM/N	AJ		CM/MJ		CM/MJ							
1.0			1.0		1	0		No.				
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	0.557	85.1	0.642	98.2	14.2	70	130	30		
The second laboratory and party and	12/12/18 CM/N 1.0 Result mg/L	12/12/18 9:59 CM/MJ 1.0 Result RL mg/L mg/L	CM/MJ 1.0 Result RL AMT. mg/L mg/L mg/L	12/12/18 9:59 12/12/ CM/MJ	12/12/18 9:59	12/12/18 9:59 12/12/18 8:25 12/12/20 1.0 CM/MJ CM/	12/12/18 9:59 12/12/18 8:25 12/12/18 9:30 CM/MJ CM/MJ CM/MJ 1.0 1.0 1.0 Result mg/L RESult mg/L Result mg/L Result mg/L Result mg/L Result mg/L Resc.	12/12/18 9:59 12/12/18 8:25 12/12/18 9:30 CM/MJ CM/MJ CM/MJ 1.0 1.0 1.0 Result mg/L	12/12/18 9:59 12/12/18 8:25 12/12/18 9:30 CM/MJ CM/MJ CM/MJ 1.0 1.0 1.0 Result mg/L Result mg/L Result mg/L % Rec. RPD Low %Rec	12/12/18 9:59		

ND= Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By:

Date 12 (12/18

Mark Johnson Operations Manager

The cover letter is an integral part of this analytical report

1 SU0254 Chain of Custody

Chain of Cus 0/2/4

Client	City of Lomita	System	m Number	er			Ana	Analysis Requested	Sedne	sted		region in the control of the control
Address	24373 Walnut Avenue			1040072	7.2							
	Lomita, CA 91717	-	_	3 0	2				M			
Phone #	(310)903-2243		Dest	Destination Laboratory	boratory				leth			
Fax#) [x]	[X] Clinical Laboratory	boratory		Ire	Tota	ane			
Project	Standard Analysis		RW	RWQCB Compliance	pliance		on / M	l Diss	(Wa	0	*******	
Sub Droject	CWPF 1st week of December, 2018			yes			lang		ater olor	dor		
onn Liolect	Compliance Sampling			ELAP#	#		anes					
Comments	For TC/EC/BACT see weekly Distro CoC			7			e 	lids	SK			
Sampled by	\frac{1}{2}.			0001	0				175)			
Date Time	S	Matrix T	Type Pr	Preserv	pH Temp.	ap. Chlorine	<u> </u>					Comments / P.S. Codes
12/4/2018 0955	12/4/2018 955 Reservoir Influent Site #3	D MG	<u>*</u>	N/A 7	51 209	:	×		\ \ \			
											-	
12/4/2018 1015	12/4/2018 O i S Reservoir Effluent Site #5	- %a	<u></u>	N/A	2018	7. 3.10		×	×	×		
12/4/2018 1015	Reservoir Effluent Site #5		<u>×</u>	7	+-	\ \ -	_		×			
				1	-				+			
					-	-			+			
							-		-		-	
Preservatives: (1) Na,	Preservatives: (1) Na.S.O., (2) HCI (3) HNO3 (4) NH4CI	Matrix: DW-Drinking Water, WW-Waste Water. SW-Storm Water, GW- Ground Water, A-Air	Orinking V	/ater, WV	/-Waste Wat	er, SW-Stor	m Water	GW-G	round	Nater, A	-Air	Type- 1-Routine. 2-Repeat. 3-
(5) H2SO4 (6) Na	(5) H2SO4 (6) Na2SO3 (7) Cold (8) Other:					æ	Replacement, 4-Special W-Well D- Dist.	ent, 4-S	pecial	W-Well	D- Dist.	
Relinquished By (Sign)	By (Sign) Print Name / Company			a	Date / Time		l		(Print Name / Company
Patrick Met	drick Mra /	omita 12/4/2	4/2018		-	9		12.54	200	M. Jak		Deligano/USK
Magaine					3	36		K	B	X	X	
Comments:	•			S. E	Samples received: (🖄 On ice	/ed: (🔀 🤇)n ice	Z	Intact (ustody	Custody seals Temp i. [.] () F () C
Shinned Via	Fed X Golden State	SAN	Client	Other	er					Page 1 of	I Jo	
s madding										- 0		



21 December 2018 Clinical Lab No.: 18L0996

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

Project Name: Standard Analysis

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

Enclosed are the results of the analyses for samples received at the laboratory on 12/11/18. Samples were received within temperature range, in correct containers and preservation.

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

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

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

Sincerely,

Stu Styles

Client Services Manager

tistes



Lomita, City ofProject:Standard AnalysisWork Order:18L099624373 Walnut AvenueSub Project:CWPF Monthly Compliance Samples, 2nd Wk of DecReceived:12/11/18 19:25Lomita CA, 91717Project Manager:Mark AndersenReported:12/21/18

Raw Water Site #1		18L0996-0	01 (Water)		Sample Da	te: 12/11/18	9:15 S	ampler: P	atrick McCu
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	0		N/A	mg/L	12/11/18	12/11/18	1850110	
pH (Field)	Field	7.46		N/A	pH Units	12/11/18	12/11/18	1850110	
Temperature (Field)	Field	22.9		N/A	°C	12/11/18	12/11/18	1850110	
Microbiology Analyses									
Total Coliform	SM 9223	A		N/A	P/A	12/11/18	12/12/18	1850096	
E. Coli	SM 9223	A		N/A	P/A	12/11/18	12/12/18	1850096	
Plate Count	SM9215B	91	1	500	CFU/ml	12/11/18	12/13/18	1850137	HT-08
General Physical Analyses									
Apparent Color	SM 2120BM	10.0	3.0	15	Color Units	12/11/18	12/11/18	1850101	
General Chemical Analyses									
Hardness, Total (as CaCO3)	Calculated	370	6.6	N/A	mg/L	12/17/18	12/17/18	[CALC]	
Total Filterable Residue/TDS	SM 2540C	780	5.0	1000	mg/L	12/17/18	12/19/18	1851022	
<u>Metals</u>									
Calcium (Ca)	EPA 200.7	98	1.0	N/A	mg/L	12/17/18	12/17/18	1851014	
Iron (Fe)	EPA 200.7	180	100	300	ug/L	12/18/18	12/18/18	1851037	
Magnesium (Mg)	EPA 200.7	29	1.0	N/A	mg/L	12/17/18	12/17/18	1851014	
Manganese (Mn)	EPA 200.7	150	20	50	ug/L	12/18/18	12/18/18	1851037	
Filter Effluent (Free Chlorine) Site #2		18L0996-0	02 (Water)		Sample Da	te: 12/11/18	9:25 S	ampler: P	atrick McCu
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	8.9		N/A	mg/L	12/11/18	12/11/18	1850110	
pH (Field)	Field	7.48		N/A	pH Units	12/11/18	12/11/18	1850110	
Temperature (Field)	Field	22.9		N/A	°C	12/11/18	12/11/18	1850110	
Aicrobiology Analyses									
Total Coliform	SM 9223	A		N/A	P/A	12/11/18	12/12/18	1850096	
E. Coli	SM 9223	A		N/A	P/A	12/11/18	12/12/18	1850096	
Plate Count	SM9215B	ND	1	500	CFU/ml	12/11/18	12/13/18	1850137	HT-08



Lomita, City ofProject:Standard AnalysisWork Order:18L099624373 Walnut AvenueSub Project:CWPF Monthly Compliance Samples, 2nd Wk of DecReceived:12/11/18 19:25

Lomita CA, 91717 Project Manager: Mark Andersen Reported: 12/21/18

Filter Effluent (Total Chlorine) Site #3		18L0996-0	03 (Water)		Sample Da	te: 12/11/18	9:25	Sampler: Pa	atrick McCue
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	8.9		N/A	mg/L	12/11/18	12/11/18	1850110	
General Physical Analyses									
Apparent Color	SM 2120BM	7.5	3.0	15	Color Units	12/11/18	12/11/18	1850101	
<u>Metals</u>									
Iron (Fe)	EPA 200.7	ND	100	300	ug/L	12/18/18	12/18/18	1851037	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	12/18/18	12/18/18	1851037	
Zone #2 Site #6		18L0996-0	04 (Water)		Sample Da	te: 12/11/18	9:27	Sampler: Pa	atrick McCue
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
<u> ^Cield Analyses</u>									
Cl Res Total (Field)	Field	1.91		N/A	mg/L	12/11/18	12/11/18	1850110	
pH (Field)	Field	8.13		N/A	pH Units	12/11/18	12/11/18	1850110	
Temperature (Field)	Field	19.2		N/A	°C	12/11/18	12/11/18	1850110	
General Chemical Analyses									
Hardness, Total (as CaCO3)	Calculated	270	6.6	N/A	mg/L	12/17/18	12/17/18	[CALC]	
Total Filterable Residue/TDS	SM 2540C	630	5.0	1000	mg/L	12/17/18	12/19/18	1851022	
<u>Metals</u>									
Calcium (Ca)	EPA 200.7	69	1.0	N/A	mg/L	12/17/18	12/17/18	1851014	



Lomita, City ofProject:Standard AnalysisWork Order:18L099624373 Walnut AvenueSub Project:CWPF Monthly Compliance Samples, 2nd Wk of DecReceived:12/11/18 19:25Lomita CA, 91717Project Manager:Mark AndersenReported:12/21/18

12/11/18 12:30 Reservoir Effluent Site #5 18L0996-05 (Water) **Sample Date:** Patrick McCue Sampler: Analyte Method Result Rep. Limit MCL Units Prepared Analyzed Batch Qualifier Field Analyses Field 12/11/18 12/11/18 1850110 2.93 Cl Res Total (Field) N/A mg/LpH (Field) Field 7.86 N/A pH Units 12/11/18 12/11/18 1850110 Field 19.4 °C 12/11/18 12/11/18 1850110 Temperature (Field) N/A**General Physical Analyses** EPA 140.1-M **Odor Threshold** 2 TON 12/11/18 12/11/18 1850101 3 **General Chemical Analyses** Hardness, Total (as CaCO3) Calculated 310 12/17/18 12/17/18 [CALC] 6.6 N/Amg/L SM 2540C 12/17/18 12/19/18 1851022 **Total Filterable Residue/TDS** 690 1000 5.0 mg/LMetals Calcium (Ca) EPA 200.7 12/17/18 12/17/18 1851014 82 1.0 N/A mg/L EPA 200.7 12/17/18 1851014 Magnesium (Mg) 27 12/17/18 1.0 N/A mg/L

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



December 20, 2018

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

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

TX Cert T104704450-14-6 EPA Methods TO14A, TO15 UT Cert CA0133332015-3 EPA Methods TO3, TO14A, TO15, RSK-175

LABORATORY TEST RESULTS

Project Reference: 18L0996

Lab Number:

J121303-01/02

Enclosed are results for sample(s) received 12/13/18 by Air Technology Laboratories. Samples were received intact and chilled to 5° C. Analyses were performed according to specifications on the chain of custody provided with the sample(s).

Report Narrative:

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

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

Sincerely.

Mark Johnson

Operations Manager

MJohnson@AirTechLabs.com

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

SUBCONTRACT ORDER

Clinical Laboratory of San Bernardino 18L0996

JIZ1303-01/02

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 Sty [] glaubig@clinical-lab.com	
California EDT transfer those samples w Water Trax Upload Client:	th PS codes provided [] Yes] No [] Yes No
Turn Around Time [] 10 Days Subcontract Comments:	ys [] Other Days
Analysis	Comments
Sample ID: Raw Water Site #1 / 18L0996-01	Sampled: 12/11/18 09:15 PS Code: Water WTX ID:
Methane RSK175	Report in mg/L
Containers Supplied: Oml Amber Vial (A) 40ml	Amber Vial (B)
Sample ID: Reservoir Effluent Site #5 / 18L0996-0	N 2
Methane RSK175	Report in mg/L
Containers Supplied:	Andrew WL (C)
Oml Amber Vial (B) 40ml	Amber Vial (C)

| 12/13/18 | 12/13/19 | 8-00 |
| Released By | Date / Time | Received By | Date / Time | 12/13/18 | (0:03 |
| Released By | Date / Time | Received By | Date / Time | Date / Date

Client:

Clinical Laboratory

Attn:

Stu Styles

Project Name:

NA

Project No.:

18L0996

Date Received:

12/13/18

Matrix:

Water

Reporting Units: mg/L

RSK175

Lab No.:	J12130	03-01	J12130	03-02			
Client Sample I.D.:	Raw Wate		Reservoir Site #5 / 1				ė
Cheffe Sample 1.D	/ 18L09	96-01	05				
Date/Time Sampled:	12/11/1	8 9:15	12/11/18	3 12:30			
Date/Time Analyzed:	12/19/18	14:01	12/19/18	14:41			
QC Batch No.:	1812190	181219GC8A1		GC8A1			
Analyst Initials:	CM/	MJ	CM/	MJ			
Dilution Factor:	1.0)	1.0)			
	Result	RL	Result	RL			
ANALYTE	mg/L	mg/L	mg/L	mg/L			
Methane	3.1	0.0010	0.28	0.0010			

MDL = Method Detection Limit

The cover letter is an integral part of this analytical report

RL = Reporting Limit

Reviewed/Approved By:

Mark Johnson

Operations Manager

Date 17-26-18

LCS/LCSD Recovery and RPD Summary Report

QC Batch #: 181219GC8A1

Matrix: Air Reporting Units: mg/L

RSK175 LABORATORY CONTROL SAMPLE SUMMARY

Lab No.:	METHOD :	BLANK		L	CS	L	CSD		T		
Date/Time Analyzed:	12/19/18	13:38		12/19/	18 12:46	12/19/	18 13:06				
Analyst Initials:	CM/N	1J		C.W.	I/MJ	CM	I/MJ				
Dilution Factor:	1.0			1	.0	1	.0				
ANALYTE	Result mg/L	RL mg/L	SPIKE AMT. mg/L	Result mg/L	% Rec.	Result mg/L	% Rec.	RPD	Low %Rec	High %Rec	Max. RPD
Ethene	ND	0.0010	1.15	1.08	93.9	1.11	96.7	2.9	70	130	30
											2

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

Reviewed/Approved By:

Mark Johnson

Operations Manager

Date 17-20-18

The cover letter is an integral part of this analytical report

18L 0996 2/3/10

Client			City of Lomita	Sy	stem N	umber		}		An	alysi	s Re	que	sted	Ī	_					——————————————————————————————————————	
Address		24	373 Walnut Avenue			10	10073	,				,			[
			Lomita, CA 91717			19	10073					Total						ļ				
Phone #	· ····		(310)903-2243			Destinati	on Labora	tory]) C		Met			l					1
Fax #						[X] Clinic	al Labora	tory		Total	Iron	Coliform		Methane								4
Project			Standard Analysis			RWQCB	Complian	rcé			æ n	orm	Ħ		_							,
Sub Projec	:t	L	onthly Compliance Samples;				YES			Dissolved	Z 2	/ E.	Hardness	Vat	Nitrate	Color	Odor	ŀ				
		2n	d week of Dec., 2018			E	LAP#				nga	က္ပ	ıess	<u>ٿ</u>	ह ि	۲	ĭ				,	
Comments	3					4	088			Solids	Manganese	Coli P-A		(Water) (RSK175)							*	
Sampled b	у		Patrick McCue			'	000	ţ		<u> </u>		\/HPC		175)								
Date	Time	Sar	mple Idenitification	Matrix	Туре	Preserv	Тетр.	pН	Total Chlorine			ကို										
12/11/2018	0912		Raw Water Site #1	GW	1W	N/A	22.9°	7.46	8	X	Х					X						
12/11/2018	0915		Raw Water Site #1	GW	1W	1, 2, 7						X	X	X								
12/11/2018	0925	Filter Eff	fluent (Free Chlorine) Site#2	DW	1W	1,7	22,9	7.48	g.9			X										
12/11/2018	0925	Filter Eff	luent (Total Chlorine) Site#3	DW	1W	N/A	229°	748	89		X					X						
12/11/2018	C927		Zone #2 Site #6	DW	1D	N/A	19.20	8.13	1.91	X			¥									
12/11/2018	1230	Res	servoir Effluent Site #5	DW	1D	N/A	19.40	7,86	2.93	X							X				- · · · · · · · · · · · · · · · · · · ·	
12/11/2018	1230	Res	servoir Effluent Site #5	DW	1 D	2,7		* mine						X								
	3: (1) Na ₂ S ₂ O ₃ O4 (6) Na2SO3			Matrix:	DW-Drin	king Wate	er, WW-Wa	aste Water,	SW-Storn 3-Rep	n Wat	ter, G	W- G	round	d Wat	ter, A-	Air					Type- 1-Routine, 2-	Repeat,
	quished By (S		Print Name / Compan	y I			Date /	Time	3-110	Jiace	inent,		_		By (S		· · · · · · · · · · · · · · · · · · ·			Ī	Print Name / Compai	nv
Patrice	b Ma	سعب	Patrick McCue /City of	Lomita	12/11/2	2018		125	7_		A	7/		7 <u> </u>	00	<u>"</u> 7/				1)	hasars/ce	o.R
Lla	rzon	^	OCh opparo la		47		· · · · · · · · · · · · · · · · · · ·	£ a	25			<u>د د</u> در	M	Ŋ.		<u>ری</u> 				Sta	Herces B	39
Comment	s:		7-1,41			S	amples r	eçeived:		ice	X	Inta	ct (()	Cus	tody	sea	ls T	emp	q	()F ()	С
Shipped Via			[] Fed X [] Golden State	[]0	PS [] Client	[] Oth	er :						Pa	ge_1_	of_	1					



31 December 2018 Clinical Lab No.: 18L1508

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

Project Name: Standard Analysis

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

Enclosed are the results of the analyses for samples received at the laboratory on 12/18/18 . Samples were received within temperature range, in correct containers and preservation.

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

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

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

Sincerely,

Stu Styles

Client Services Manager

tistes



Lomita, City ofProject:Standard AnalysisWork Order:18L150824373 Walnut AvenueSub Project:CWPF 3rd Week of Dec., 2018 Compliance Sampling Received:12/18/18 17:17Lomita CA, 91717Project Manager:Mark AndersenReported:12/31/18

Reservoir Influent Site #3		18L1508-0	01 (Water)		Sample Da	te: 12/18/1	8 10:35 Sa	mpler: P.1	M.
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	9.4		N/A	mg/L	12/18/18	12/18/18	1851082	
pH (Field)	Field	7.53		N/A	pH Units	12/18/18	12/18/18	1851082	
Temperature (Field)	Field	20.4		N/A	°C	12/18/18	12/18/18	1851082	
General Physical Analyses									
Apparent Color	SM 2120BM	5.0	3.0	15	Color Units	12/18/18	12/18/18	1851119	
<u>Metals</u>									
Iron (Fe)	EPA 200.7	ND	100	300	ug/L	12/26/18	12/26/18	1852069	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	12/26/18	12/26/18	1852069	
Reservoir Effluent Site #5		18L1508-0	02 (Water)		Sample Da	te: 12/18/1	8 10:50 Sa	mpler: P.1	M.
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	2.85		N/A	mg/L	12/18/18	12/18/18	1851082	
pH (Field)	Field	7.81		N/A	pH Units	12/18/18	12/18/18	1851082	
Temperature (Field)	Field	19.7		N/A	°C	12/18/18	12/18/18	1851082	
General Physical Analyses									
Apparent Color	SM 2120BM	ND	3.0	15	Color Units	12/18/18	12/18/18	1851119	
Odor Threshold	EPA 140.1-M	2	1	3	TON	12/18/18	12/18/18	1851119	
General Chemical Analyses									
General Chemical Analyses Total Filterable Residue/TDS	SM 2540C	660	5.0	1000	mg/L	12/21/18	12/26/18	1851140	



December 28, 2018

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



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

LABORATORY TEST RESULTS

Project Reference: 18L1508

Lab Number:

J121901-01

Enclosed are results for sample(s) received 12/19/18 by Air Technology Laboratories. Samples were received intact and chilled to 5° C. Analyses were performed according to specifications on the chain of custody provided with the sample(s).

Report Narrative:

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

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

Sincerely,

Mark Johnson

Operations Manager

MJohnson@AirTechLabs.com

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

SUBCONTRACT ORDER

2 of 4 J121901 J[21901 - 8]

Clinical Laboratory of San Bernardino 18L1508

SENDING LABORATORY:	RECEIVING LABORATORY:	
Clinical Laboratory of San Bernardino	Air Technology Labs	1
21881 Barton Road	18501 East Gale Avenue Suite 130	· · · · · · · · · · · · · · · · · · ·
Grand Terrace, CA 92313	City of Industry, CA 91748	r I
Phone: 909.825.7693	Phone :(626) 964-4032	
Fax: 909.825.7696	Fax:	
Project Manager: Stu Styles		,
	cal-lab.com [] bernstein@clinical-lab.com	
California EDT transfer those samples with Water Trax Upload Client:	th PS codes provided [] Yes [/] No [] Yes [/] No	
Turn Around Time [] 10 Days [] 5 Day Subcontract Comments:	ys [] Other Days	
	P . 6	
	The of the control of	
Analysis	Commo	ents

5.0

Released By

Methane RSK175

Containers Supplied:

40ml Amber Vial (B)

12/14/18 07:20

Received By

2/19/18 8:15

Zhali 8 1023

40ml Amber Vial (C)

Received By

Date / Time

Report in mg/L

Client:

Clinical Laboratory

Attn:

Stu Styles

Project Name:

NA

Project No.:

18L1508

Date Received: Matrix:

12/19/18 Water

Reporting Units: mg/L

			F	RSK175					
Lab No.:	J1219	01_01			T		I		
Lab Ivo	Reservoir								
Client Sample I.D.:	Site #5/18								
	02	2							
Date/Time Sampled:	12/18/18	3 10:50						8	
Date/Time Analyzed:	12/19/18	3 17:33							
QC Batch No.:	1812190	181219GC8A1							
Analyst Initials:	CM/	MJ							
Dilution Factor:	1.0)							
ANALYTE	Result mg/L	RL mg/L							
Methane	0.38	0.0010							
1	I				1				

ND= Not Detected (below	MDL)
--------------------	-------	------

RL = Reporting Limit

Reviewed/Approved By:

Operations Manager

The cover letter is an integral part of this analytical report

LCS/LCSD Recovery and RPD Summary Report

QC Batch #: 181219GC8A1

Matrix: Air Reporting Units: mg/L

RSK175 LABORATORY CONTROL SAMPLE SUMMARY

Lab No.:	METHOD	BLANK		L	CS	LO	CSD				
Date/Time Analyzed:	12/19/18	13:38		12/19/1	18 12:46	12/19/	18 13:06				
Analyst Initials:	CM/N	1J		CM	I/MJ	CN	I/MJ				
Dilution Factor:	1.0			1	.0	1	.0				
ANALYTE	Result mg/L	RL mg/L	SPIKE AMT. mg/L	Result mg/L	% Rec.	Result mg/L	% Rec.	RPD	Low %Rec	High %Rec	Max. RPD
Methane	ND	0.0010	0.654	0.626	95.7	0.646	98.7	3.1	70	130	30

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

Reviewed/Approved By:

Mark Johnson
Operations Manager

Date 12/28/18

The cover letter is an integral part of this analytical report

15USOS Chain of Custody

Clinical Laboratory of San Bernardino, Inc.

4/5/0

December 1910073 1910	Client		City of Lomita	Sys	System Nur	umber				Analysis Requested	is Req	neste				
Chipper 2143	Address		24373 Walnut Avenue			1010	270									
The Standard Analysis Process			Lomita, CA 91717			ופו	0/0						-			
Standard Analysis	Phone #		(310)903-2243		De	stination	Laborato	ıry				leth				
CMP 3d week of December, 2018 1988 1989 1980 198	Fax#				۵	J Clinical	Laborato	,ry				ane		•		
For TCECCERCI see weekly District Confidence Sampling For TCECCERCI see weekly District Confidence Sampling For TCECCERCI see weekly District Cocces For TCECCERCI see weekly District District District District District District Dist	Project		Standard Analysis		ĸ	WQCB Co	mpliance	a								
Comments District	Sub Project	CWPF	7 3rd week of December, 2018 Compliance Sampling			ye ELA	s d₁									
1000 1 1 1 1 1 1 1 1	Comments	For TC/EC/E	BACT see weekly Distro CoC			7	000					RSK				
te #3 DW IW N/A 7_G3 Co.Y° 9_Y X	Sampled by		P.M.			2	00					175)				
te #5 DW 1W NIA 7.53 LO.4° 9.4 X X X X X X X X X X X X X X X X X X X			Sample Idenitification	Matrix	Type	Preserv	Нq	Temp.	Total Chlorine						Comments / P.S. Co.	es
1		35 Reservoir In	fluent Site #3	DW	1W	A/N	7.53	24.0.7€	4.4	×	×					
te #5 DW 1W 2 Ref #5 Ref #6 Re								•								
1	-	C Reservoir Ef	fluent Site #5	DW	¥1	A/N	ල	يل.61	285	X	×	×				
And And Company Print Name / Company Adapta are (LL28) Samples received: (Monice (Minater) Custody seals Pemp 6.1 () F () C		S ○ Reservoir Ef	fluent Site #5	DW	1W	2						X				
Alapaan Company Samples received: (Monice (Mintact () Custody seals Remp_ 6.1 () F () C					-											
Print Name / Company And																
Print Name Company Print Name Company Print Name Company																
All Hales Matrix: DW-Drinking Water, WW-Waste Water, SW-Storm Water, GW-Ground Water, AAir Replacement, 4-Special W-Well D-Dist. Print Name / Company Date / Time Print Name / Company Date / Time Print Name / Company Date / Time All Magazine Land Date / Time Print Name / Company Anagazine Land												\dashv				
4) NHACI Print Name / Company Anagazarre CLESA Samples received: (XOn ice (Yoldan State 1 UPS 1 Client 1 Other Page 1_of 1_												+				
A) NH4Cl Matrix: DW-Drinking Water, WW-Waste Water, SW-Storm Water, GW-Ground Water, A-Air Type-1-Routine, 2-Repeat, Replacement, 4-Special W-Well D- Dist. Type-1-Routine, 2-Repeat, Replacement, 4-Special W-Well D- Dist. Print Name / Company Co												+				
Print Name / Company																
Print Name / Company																
Print Name / Company Print Name / Company Print Name / Company Adaptative Class Classer Company Adaptative CLSS Samples received: (XOn ice (X) Intract () Custody seals Femp F () F () Page 1 of 1	Preservatives: (1)	Na ₂ S ₂ O ₃ (2) HCI (3)) HNO3 (4) NH4CI	Matrix: DV		y Water, V	W-Waste	e Water, S	W-Storm V	/ater, GV	V- Groun	d Wat	er, A-Air	J	Type- 1-Routin	, 2-Repeat, 3-
Print Name / Company Print Name / Company Print Name / Company Print Name / Company Adapta vre / CLSA Samples received: (XOn ice (X) Intract () Custody seals Femp 6.1 () F () Page 1.01-1.	(5) H2SO4 (t) Na2SO3 (7) Cold							Repli	cement,	4-Speci	al W-V	/ell D-Dist			
Allowante Refrick MY Jetrick MY J	Relinquish	ed By (Sign)					Date / T	ïme			1			-	Print Name / Compa	ıy
Samples received: (Non ice (Nontact () Custody seals Femp 6.1 () F () Page 1.01.	C. L. Sizza	J. C. S. J.	Potrick My Con City of La		2/18/201	8			hor	1	Ser Ser	7		0	Chavare/cuss	
Samples received: (Mon ice (Montact () Custody seals Remp 6, 1 () F () F ()	1/ Leva		10 Chassiero / cuss		, ₁				517	7	-83	E.	Alena	2	· 分科 的路路	
Fed X Golden State UPS Client Other Page_1_of_1_	Comments:	.				Sa	mples r	eceived:	(MOn	د نه	€ √ Inta		Custod	v seals	(Amp 6.1) C
Fed X Golden State UPS Client Other							-					, [,		
	Shipped Via	-	Fed X Golden State	I UPS	Clien		ther				,	Page	1 fo 1			



04 January 2019 Clinical Lab No.: 18L2143

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

Project Name: Standard Analysis

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

Enclosed are the results of the analyses for samples received at the laboratory on 12/27/18 . Samples were received within temperature range, in correct containers and preservation.

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

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

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

Sincerely,

Stu Styles

Client Services Manager

tistes



Lomita, City ofProjectStandard AnalysisWork Order:18L214324373 Walnut AvenueSub Project:CWPF 4th Week of December, 2018 Compliance SampReceived:12/27/18 15:20Lomita CA, 91717Project Manager:Mark AndersenReported:01/04/19

Reservoir Influent Site #3		18L2143-0	01 (Water)		Sample Da	te: 12/27/18	8 6:15 Sa	mpler: P.1	M.
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	9		N/A	mg/L	12/27/18	12/27/18	1852119	
pH (Field)	Field	7.66		N/A	pH Units	12/27/18	12/27/18	1852119	
Temperature (Field)	Field	19.4		N/A	°C	12/27/18	12/27/18	1852119	
General Physical Analyses									
Apparent Color	SM 2120BM	7.5	3.0	15	Color Units	12/27/18	12/27/18	1901001	
Metals									
Iron (Fe)	EPA 200.7	ND	100	300	ug/L	01/02/19	01/02/19	1901026	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	01/02/19	01/02/19	1901026	
Reservoir Effluent Site #5		18L2143-0	02 (Water)		Sample Da	te: 12/27/18	3 9:45 Sa	mpler: P.1	M.
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	3.21		N/A	mg/L	12/27/18	12/27/18	1852119	
pH (Field)	Field	7.94		N/A	pH Units	12/27/18	12/27/18	1852119	
Temperature (Field)	Field	18		N/A	°C	12/27/18	12/27/18	1852119	
General Physical Analyses									
Apparent Color	SM 2120BM	5.0	3.0	15	Color Units	12/27/18	12/27/18	1901001	
Odor Threshold	EPA 140.1-M	2	1	3	TON	12/27/18	12/27/18	1901001	
General Chemical Analyses									
Total Filterable Residue/TDS	SM 2540C	610	5.0	1000	mg/L	12/28/18	12/31/18	1852128	



January 7, 2019

LA Cert #04140 EPA Methods T03, T014A, T015, 25C/3C, RSK-175

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

TX Cert T104704450-14-6 EPA Methods T014A, T015 UT Cert CA0133332015-3 EPA Methods T03, T014A, T015, RSK-175

LABORATORY TEST RESULTS

Project Reference: 18L2143 Lab Number: J122801-01

Enclosed are results for sample(s) received 12/28/18 by Air Technology Laboratories. Samples were received intact and chilled to 6° C. Analyses were performed according to specifications on the chain of custody provided with the sample(s).

Report Narrative:

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

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

Sincerely,

Mark Johnson

Operations Manager

MJohnson@AirTechLabs.com

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

SUBCONTRACT ORDER

Clinical Laboratory of San Bernardino 181.2143

J 22801-01

	1012145	
SENDING LABORATORY:	RECEIVING LABORATORY:	
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:	1
Please email results to Project Manager: Stu Styles [] glaubig@clinical-lab.com [v] styles@clinical	s al-lab.com [] bernstein@clinical-lab.com	
California EDT transfer those samples with Water Trax Upload Client:	h PS codes provided [] Yes [V] No y	1 W
Turn Around Time [] 10 Days [] 5 Days Subcontract Comments:	s [] Other Days	
Analysis	Comments	1
Sample ID: Reservoir Effluent Site #5 / 18L2143-02	Sampled: 12/27/18 09:45 PS Code: Water WTX ID:	
Methane RSK175	Report in mg/L	
ontainers Supplied:		
0ml Amber Vial (B) 40ml A	Amber Vial (C)	
		8 -

BJ Dhy 12/28/18 07:15 Majoano 12/28/18 845

Released By Date / Time Received By Date / Time

| 12/28/18 957 | 12/28/18 957 | 12/28/18 0957

| Released By Date / Time Received By Date / Time

Client:

Clinical Laboratory

Attn:

Stu Styles

Project Name:

NA

Project No.:

18L2143

Date Received:

12/28/18

Matrix:

Water

Reporting Units: ug/L

RSK175

Lab No.:	J12280	01-01				
	Reservoir	Effluent				
Client Sample I.D.:	Site #5/18	3L2143-				
	02					
Date/Time Sampled:	12/27/1	8 9:45				
Date/Time Analyzed:	1/7/19	10:42				
QC Batch No.:	1901070	GC8A1				
Analyst Initials:	CM/	MJ				
Dilution Factor:	1.0)		7		
	Result	RL				
ANALYTE	ug/L	ug/L			6	
Methane	300	1.0				
	×					

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

RL = Reporting Limit

Reviewed/Approved By:

Mark Johnson

Operations Manager

Date 1-7-19

The cover letter is an integral part of this analytical report

LCS/LCSD Recovery and RPD Summary Report

QC Batch #: 190107GC8A1

Matrix: Air Reporting Units: mg/L

RSK175 LABORATORY CONTROL SAMPLE SUMMARY

Lab No.:	METHOD	BLANK		L	CS	LO	CSD				
Date/Time Analyzed:	1/7/19 1	0:16		1/7/1	9 9:47	1/7/19	0 10:02				
Analyst Initials:	CM/M	IJ		CM	I/MJ	CM	I/MJ				
Dilution Factor:	1.0			1	.0	1	.0				
ANALYTE	Result mg/L	RL mg/L	SPIKE AMT. mg/L	Result mg/L	% Rec.	Result mg/L	% Rec.	RPD	Low %Rec	High %Rec	Max. RPD
Methane	ND	0.0010	0.654	0.619	94.6	0.648	99.0	4.6	70	130	30

ND= Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By:

Mark Johnson Operations Manager Date 1-7-19

The cover letter is an integral part of this analytical report

1862 193 Chain of Custody

Clinical Laboratory of San Bernardino, Inc.

Client	City of Lomita	S	System No	Number				Analy	Analysis Requested	duest	eq			
Address	24373 Walnut Avenue			107	1010072									
	Lomita, CA 91717			131	001					M				
Phone #	(310)903-2243		7	Destinatio	Destination Laboratory	tory				leth				
Fax#				X] Clinic	[X] Clinical Laboratory	tory			т	ane				
Project	Standard Analysis			RWQCB	RWQCB Compliance	еэ					0		····	
Sub Project	CWPF 4th week of December, 2018			تا	yes			olved S angan	olor	iter) (dor			
Comments	Ear TO/FO/BACT see weekly Dietro			֓֞֓֞֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓	ξ				.1:4-	RSk				
Sampled by	P.M.	T		_	1088					(175)				
Date Time	Sample Idenitification	Matrix	Type	Preserv	Hd.	Temp.	Total							Comments / P.S. Codes
12/27/2018 0615	12/27/2018 $\partial 6 \mathcal{S} $ Reservoir Influent Site #3	DW	1W	N/A	7,66	19.45	9.0	X	×					
2445 DA45	12/27/2018 0945 Reservoir Effluent Site #5	ΜΩ	1W	Ϋ́	794	S. S.	321	-	×		×			
12/27/2018 0945	〇今りらReservoir Effluent Site #5	DW.	1W	7						~				
•														
Preservatives: (1) Na.S.O. (2) HCI (3) HNO3	S-O- (2) HCI (3) HNO3 (4) NH4CI	Matrix: 1	W-Drinki	ng Water	WW-Was	te Water, S	Matrix: DW-Drinking Water, WW-Waste Water, SW-Storm Water, GW- Ground Water, A-Air	/ater, G	W- Gro	- M pun	ater, A-	₽ir 		Type- 1-Routine, 2-Repeat, 3-
(5) H2SO4 (6) Na	1 <u>-</u>	Т)			Repla	Replacement, 4-Special W-Well D-Dist	, 4-Spe	cial W	-Well	D- Dist.		
Relinquished By (Sign)	By (Sign) Print Name / Company	,			Date / Time	Time					,			Print Name / Company
Potriet Me	Patrick McCue / City of Lomita	omita	12/27/2018	18			11.40		Z	300	1	11	(a)	, SIS 7
Mich	7	357	12/21	81		49	202			1		100	17	Vira McCarly/Cl.
Comments:			•	J 1	samples	received	Samples received: (*) On ice	•	(4) Intact	act () C	ustody	Custody seals Temp 2	mp 2 - 9 () F YC
Shipped Via	Fed X Golden State	I I UPS	Clie	Tient	Other					Pag	Page_1_of_	J_1_t		
				-										

"Your Water and Wastewater Analysis Solution"



26 December 2018 Clinical Lab No.: 18L0995

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

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

Enclosed are the results of the analyses for samples received at the laboratory on 12/11/18. Samples were received within temperature range, in correct containers and preservation.

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

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

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

Sincerely,

Stu Styles

Client Services Manager



Lomita, City ofProjectStandard AnalysisWork Order:18L099524373 Walnut AvenueSub Project:Well TCP, QuaterlyReceived:12/11/18 19:25Lomita CA, 91717Project Manager:Mark AndersenReported:12/26/18

CWPF SP1		18L0995-0	01 (Water)		Sample Da	te: 12/11/18	9:15 S a	ampler: PM	
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	0		N/A	mg/L	12/11/18	12/11/18	1850110	
pH (Field)	Field	7.46		N/A	pH Units	12/11/18	12/11/18	1850110	
Temperature (Field)	Field	22.9		N/A	°C	12/11/18	12/11/18	1850110	
Synthetic Organic Analyses / 1,2,3-TCP									
1,2,3-Trichloropropane	SRL 524M-TCP	ND	0.0050	0.005	ug/L	12/22/18	12/23/18	1852003	
ND Analyte NOT DETECTED at or above	the reporting limi	t							

EDT Transfer Confirmation 1



Work Order: 18L0995 Report Date: 12/26/2018

Analyzing Lab: Clinical Laboratory of San Bernardino, Inc. ELAP 1088

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

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

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

Printed: 12/26/2018 07:09:41 AM Results of 18L0995 FINAL WRITEON 1910073-003

1820995

Chain of Custody

Client			City of Lomita	S	ystem Nu	ımber	;			Ana	llvsis	Real	ıested							
Address		24	1373 Walnut Avenue			_	0070				ÍΤ	T.		Γ		i i				
			Lomita, CA 91717	7		191	0073													
Phone #			(310)903-2243		Ĺ	estination	Laborate	ory												
Fax#						X] Clinica								1	ļ					
Project			Standard Analysis			RWQCB C	omplianc	е		7		- 1								
Sub Projec	:t	WEI	LL TCP, QUARTERLY				es AP#			CP										
Comments	i	WE	LL TCP, QUARTERLY			4.0									1					
Sampled b	у		PM	1		10	88													
Date	Time	Sa	mple Idenitification	Matrix	Туре	Preserv	pН	Temp.	Total Chlorine								С	omments / I	P.S. Codes	
12/11/2018	2915	CWPF SP1		DW	1W	2	7,46	229	Ø	X										
							,													
	 														<u></u>					
														ļ						
					_															
															<u>L</u>					
Preservatives (5) H2S0	6: (1) Na ₂ 9 O4 (6) Na	S ₂ O ₃ (2) HCI (3) HI 2SO3 (7) Cold (8)	NO3 (4) NH4CI Other:	Matrix:	DW-Drinkir —	ig Water, l	WW-Wast	e Water, S	W-Storm W Repla				d Wate I W-W					Туре-	I-Routine, 2-R	epeat, 3-
Reling	uished E	By (Sign)	Print Name / Company	,			Date / T	ïme									1	Print Name /	Company	
Patrick	me	a.	Patrick McCue / City of	Lomita	12/11/20	18 /	4	Ear .	258	7	12	1	en	-			97/1	man /	CUSB	
\(\sigma\)\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	ano	ام	Deparamoleus	R	4		,		725	_	1	UTV					152Ch	60		
Comment	s:	,	To Conforth of say			Sa	ımples r	eceived:	() (On i	ice	K	Intac	t ()) Cu	stod	y sea	ls Temp_	9,2)F ()	С
Shipped Via			[] Fed X [] Golden State	[] UPS	[] Clie	nt [] (Other						Page_	1_ of	_1_					



20 December 2018 Clinical Lab No.: 18L0928

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

Project Name: Standard Analysis

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

Enclosed are the results of the analyses for samples received at the laboratory on 12/11/18. Samples were received within temperature range, in correct containers and preservation.

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

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

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

Sincerely,

Stu Styles

Client Services Manager

tistes



Lomita, City ofProject:Standard AnalysisWork Order:18L092824373 Walnut AvenueSub Project:Lomita Distribution Ortho, 2nd Week December 2018 Received:12/11/18 19:25Lomita CA, 91717Project Manager:Mark AndersenReported:12/20/18

1948 252nd St.		18L0928-0	01 (Water)		Sample Da	ite: 12/11/18	3 10:40 Sa	mpler: P.1	M.
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	2.9		N/A	mg/L	12/11/18	12/11/18	1850095	
pH (Field)	Field	7.87		N/A	pH Units	12/11/18	12/11/18	1850095	
Temperature (Field)	Field	19.1		N/A	°C	12/11/18	12/11/18	1850095	
General Chemical Analyses									
Ortho-Phosphate (PO4)	HACH 8048	0.57	0.020	N/A	mg/L	12/12/18	12/12/18	1850085	
Phosphorus (Total as P)	HACH 8190	0.50	0.0067	N/A	mg/L	12/19/18	12/19/18	1851060	
24632 S. Moon		18L0928-0	02 (Water)		Sample Da	ate: 12/11/18	3 11:05 Sa	mpler: P.1	M.
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	2.7		N/A	mg/L	12/11/18	12/11/18	1850095	
pH (Field)	Field	7.78		N/A	pH Units	12/11/18	12/11/18	1850095	
Temperature (Field)	Field	19.3		N/A	°C	12/11/18	12/11/18	1850095	
General Chemical Analyses									
Ortho-Phosphate (PO4)	HACH 8048	1.0	0.020	N/A	mg/L	12/12/18	12/12/18	1850085	
Phosphorus (Total as P)	HACH 8190	0.60	0.0067	N/A	mg/L	12/19/18	12/19/18	1851060	
2450 W. 247th St.		18L0928-0	03 (Water)		Sample Da	ite: 12/11/18	3 11:15 Sa	mpler: P.1	M.
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	0.91		N/A	mg/L	12/11/18	12/11/18	1850095	
pH (Field)	Field	7.7		N/A	pH Units	12/11/18	12/11/18	1850095	
Temperature (Field)	Field	19.7		N/A	°C	12/11/18	12/11/18	1850095	
General Chemical Analyses									
Ortho-Phosphate (PO4)	HACH 8048	0.64	0.020	N/A	mg/L	12/12/18	12/12/18	1850085	
Phosphorus (Total as P)	HACH 8190	0.46	0.0067		-	12/19/18	12/19/18	1851060	



Lomita, City ofProjectStandard AnalysisWork Order:18L092824373 Walnut AvenueSub Project:Lomita Distribution Ortho, 2nd Week December 2018 Received:12/11/18 19:25Lomita CA, 91717Project Manager:Mark AndersenReported:12/20/18

2052 Dawn St.		18L0928-0	04 (Water)		Sample Da	te: 12/11/18	3 10:50 Sa	mpler: P.1	M.
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	1.62		N/A	mg/L	12/11/18	12/11/18	1850095	
pH (Field)	Field	7.77		N/A	pH Units	12/11/18	12/11/18	1850095	
Temperature (Field)	Field	19.9		N/A	°C	12/11/18	12/11/18	1850095	
General Chemical Analyses									
Ortho-Phosphate (PO4)	HACH 8048	0.52	0.020	N/A	mg/L	12/12/18	12/12/18	1850085	
Phosphorus (Total as P)	HACH 8190	0.51	0.0067	N/A	mg/L	12/19/18	12/19/18	1851060	
CWPF SP5		18L0928-0	05 (Water)		Sample Da	te: 12/11/18	3 12:30 Sa	mpler: P.I	M.
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Field Analyses Cl Res Total (Field)	Field	2.93		N/A	mg/L	12/11/18	12/11/18	1850095	
Field Analyses Cl Res Total (Field) pH (Field)	Field Field	2.93 7.86		N/A N/A	mg/L pH Units	12/11/18 12/11/18	12/11/18 12/11/18	1850095 1850095	
Cl Res Total (Field)					-				
Cl Res Total (Field) pH (Field)	Field	7.86		N/A	pH Units	12/11/18	12/11/18	1850095	
Cl Res Total (Field) pH (Field) Temperature (Field)	Field	7.86	0.020	N/A	pH Units	12/11/18	12/11/18	1850095	
Cl Res Total (Field) pH (Field) Temperature (Field) General Chemical Analyses	Field Field	7.86 19.4	0.020 0.0067	N/A N/A	pH Units °C	12/11/18 12/11/18	12/11/18 12/11/18	1850095 1850095	

18L0478 Chain of Custody

Client		City of Lomita	Sy	stem N	umber					Ana	alysis Requested							
Address		24373 Walnut Avenue				19100	172	******										
		Lomita, CA 91717			ļ	19100)			。								
Phone #		(310) 903-2243			Des	tination La	boratory			октно	101							
Fax #		(310) 325-3627			[X]	Clinical La	boratory] 🛱	AL							
Project		Standard Analysis			ŖИ	/QCB Com	pliance	1 1.1.2		Ħ	PHO							
Sub Projec	:t	Lomita Distribution Ortho, 2nd Week December, 2018				<i>No</i> ELAP	#			PHOSPHATE	TOTAL PHOSPHATE			:				
Comments	;				1	400	^			ଚ	E (P							
Sampled b	У	P.M.			ļ	108	8			(o-PO4)	(PO4)			*				
Date	Time	Sample Idenitification	Matrix	Туре	Preserv	Bottle Number	Temp.	Total Chlorine	рН						Comments / P.S. Codes			
12/11/2018	1040	1948 252ND ST.	DW	D1	N/A	3	19.10	2.9	7.87	X	X							
12/11/2018	 	24632 S. MOON	DW	D1	N/A	4	19.3°	7.7		X	X,							
12/11/2018	1115	2450 W. 247th ST.	DW	DI DI	N/A	6	19.70	0.91	7.78	X	X							
12/11/2018		2052 DAWN ST.	DW	D1	N/A	7	19.90	1.62	7.70	X	$\frac{\Lambda}{X}$							
12/11/2018		CWPF SP5	DW	D1	N/A	8	19,40	2.93	7.86		X		_					
													-					
											ļ							
			-															
		 S ₂ O ₃ (2) HCI (3) HNO3 (4) NH4CI 2SO3 (7) Cold (8) Othér:		N	latrix: DW	 /-Drinking 「ype- 1-Ro	 Water, WM utine, 2-Re	 V-Waste W epeat, 3-Re	 /ater, SW-S eplacemen	 	Wate pecia	r, GW I W-W	- Gra Vell	ound VI D- Dist	Vater, A-Air t.			
Relinq	uished l	By (Sign) Print Name / Company	v				ate / Time	-	-			eiyed .			Print Name / Company			
Patrick	Marchan	Red rick MquiCity of I	∠omita	12/11/2 7	2018 ،	152			7.25	_	R	hore The	K	14	ochogono lecor			
	7				Sample	es receivo	ed: (X)_(On ice (/ Intac F	t (C	usto	dy s	seals	Temp 9.2 ()			
Shipped Via		[] Fed X [] Golden State	[] UPS	[] CI	ient [Other				` /		ige_1	_ of	_1_				

APPENDIX B

METHANE MONITORING LOG



CITY OF LOMITA PUBLIC WORKS DEPARTMENT

CYPRESS WATER PRODUCTION FACILITY HANDHELD METHANE LOG READINGS

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

ND- Non Detect CH4- Methane

Oxy- Oxygen

Day Off/Holiday- Red

APPENDIX C

NITRIFICATION MONITORING DATA SUMMARY

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

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

¹Notes: 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).

²Coliform results are part of weekly Bacti sampling results.