## CITY OF LOMITA



# Cypress Water Production Facility Monthly Status Report

May 2018

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#### **CITY COUNCIL**

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



**ADMINISTRATION** 

RYAN SMOOT CITY MANAGER

June 11, 2018

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

<u>Subject: System No. 1910073 - Monthly Report for the Cypress Water Production Facility (CWPF) for the period of May 1 through May 30, 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 May 2018.

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

Sincerely,

Mark Andersen

Field Operations Manager

#### 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 May 2018 maintaining water levels inside the reservoir ranging from 7 feet to 10 feet. The average flow from Well No. 5 was 429 gpm and 522 gpm from MWD. The blend ratio for month was 46% Well water and 54% MWD water. See Table 1 below for production totals for the month of May 2018.

Table 1. Monthly Production Totals.

		Productio	n for May 2018
Well No. 5	47.20		15,379,568 (gallons)
MWD	55.09	ac ff	177,950,000 (gallons)
Combined Total	102.29	ac-ft	33,329,568 (gallons)
Daily	3.93	ac-ft/day	1,281,906 (gailons/day)

#### C. OPERATIONAL INTERRUPTIONS

During the month of May 2018, the CWPF was placed offline for approximately five (5) days and water was supplied by the City's West Basin 8 MWD interconnection with no interruption of service to customers. Routine and preventive maintenance of equipment was performed during this time. 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 622.0 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 270 mg/L, respectively.

#### E3-2 HARDNESS

The sampling results for the month indicate the hardness levels of the blended water to be on average 230 mg/L. This hardness level is within the City's Water Quality Objective/Goal of 180 to 250 mg/L; staff continues to monitor hardness levels at the CWPF effluent (SP5) and within the water distribution system. The

City has maintained a consistent blend ratio to ensure acceptable hardness levels are met.

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

## E3-3 DISSOLVED METHANE (IN WATER)

The methane levels in the CWPF effluent after aeration treatment remain negligible averaging 0.27 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 May 2018 in Appendix B.

#### **E3-5 ODOR**

The odor levels at the CWPF effluent averaged 2.2 units for the month.

#### **E4. NITRIFICATION MONITORING**

Weekly nitrification sampling was performed during the month of May 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	v Water	Discha	irge		Pres	Combi sure Fi Effluent	Iter	SP3, /		nloramin reservoir		tatic mi	ker;
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
5/2/2018											ND	300	ND	50	7.5	15
5/9/2018	210	300	150	50	7.5	15	А	Α	ND	500	ND	300	ND	50	ND	15
5/16/2018											ND	300	ND	50	5	15
5/23/2018									100/45		ND	300	ND	50	ND	15
5/30/2018											ND	300	ND	50	5	15

Notes:

Monthly- Orange; Weekly- Yellow

A – Absent

ND - Non Detect

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

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

Date,	SP2		SP3			SP4			SP5	
week of	Free CI	Free CI	Total CI	Total NH <sub>3</sub>	Free CI	Total CI	Total NH <sub>3</sub>	Free CI	Total CI	Total NH <sub>3</sub>
5/2/2018	10.43	1.47	8.67	0.86	1.13	5.77	0.74	0.25	3.77	0.61
5/9/2018	8.10	1.56	7.90	0.74	0.63	4.33	0.64	0.08	3.47	0.61
5/16/2018	9.57	2.13	8.13	1.02	1.20	6.13	0.70	0.20	2.79	0.54
5/23/2018	8.35	2.04	7.88	0.89	0.85	5.19	0.75	0.32	3.69	0.53
5/30/2018	6.76	0.92	5.73	0.82	0.56	4.62	0.64	0.06	3.34	0.67

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

		TD	S, mg/L		T.O.I	N.		Hardn	ess, mç	ı/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
5/2/2018			540	500-750	3	3						0.19
5/9/2018	820	270	500	500-750	2	3	390	120	230	180-250	2.7	0.29
5/16/2018			580	500-750	2	3						0.24
5/23/2018			760	500-750	2	3						0.33
5/30/2018			730	500-750	2	3						0.31
Average			622	500-750	2.2	3						0.27

#### Notes:

Monthly- <u>Orange</u>; Weekly- <u>Yellow</u> ppm – parts per million

mg/L – milligram per liter T.O.N. - Threshold Odor Number

T.O.N. - Threshold Odor Numb TDS - Total Dissolved Solids Hardness - As total CaCO3

Methane (Water) - Methane dissolved in water

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

			Marie Colonia		vo. 19100	Assistant to the second	_	
Sample Locations	Frequency	MCL/	5/2	5/9	5/16	5/23	5/30	Comments
and Parameters		Goal	1stWk	2 <sup>nd</sup> Wk	3rdWk	4 <sup>th</sup> Wk	5 <sup>th</sup> Wk	and/or
			or Mo.					Other Info.
			particular and the second			1		
			Result					
		107	(date)					
SP1 Also called								
TDS, ppm	Monthly	See SP5	<b>820</b> 5/9	Operations	Data/Inforn	nation:		*Chlorine injected afte SP1, before entering
Hardness	Monthly	See SP5	390	CWPF opera	tion days			the greensand filter.
Tidi di 1000		\$100 mg 190 mg 1	5/9	On Mall E. I	Na:!! aa.a.a.a.d	100		11 (abbunio 20 € 000 1 (abesperio de laborar) ( 2000 1 (b) (350 100 100 100 100 100 100 100 100 100 1
CH4, ppm	Monthly	See SP5	2.7	- 47.20 AF	Daily average 1	flow – 429 gpn	n; total prod.	
Iron noh	Monthly	See SP3	5/9 <b>210</b>	Combined V	/ell 5/MWD da	ata: Average V	Vell 5: MWD	
Iron, ppb	Wichting	000 01 0	5/9	blend Ratio – 102.29 AF	46% WELL: 5	54% MWD; tot	al prod	
Manganese, ppb	Monthly	See SP3	150	102.29 AI				
		O OD0	5/9	Chlorine Do	sage: N/A*			
Color, units	Monthly	See SP3	7.5 5/9					
Total Coliform, P or A	Monthly	Α	A					
		93. 95.	5/9					
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		osage: N/A*			filter effluent
Free Cl Res, ppm	Continuous	Average:	8.64 ; Ran	ge: $6.76 - 1$	0.43			
SP3 Also called	the Site Af	ter Chlor	aminatio	n & Before	MWD BI	ending or	Site#4.	
Iron, ppb	Weekly	ND	ND	ND	ND	ND	ND	
Manganese, ppb					NID	NID		1
Manganese, ppb	Weekly	50	ND	ND	ND	ND	ND	1
	Weekly	50 15	7.5	ND ND	5 ND	ND ND	ND 5	-
Color Free and Total Cl Res,		15 Free Cl: A	7.5 verage: 1.62	ND 2; Range: 0.9	5 92 – 2.13	00 10 10 10		-
Color	Weekly	15 Free CI: A Total CI: A	7.5 Average: 1.62 Average: 7.6	ND 2; Range: 0.9 6; Range: 5	5 92 – 2.13 .73 – 8.67	00 10 10 10		
Color Free and Total Cl Res, ppm	Weekly Continuous	15 Free Cl: A Total Cl: A Ammonia	7.5 Average: 1.62 Average: 7.6 : Average: 0	ND 2; Range: 0.9 6; Range: 5 .86; Range:	5 92 – 2.13 .73 – 8.67 0.74 – 1.02	ND	5	
Color Free and Total CI Res, ppm  SP4 Also called	Weekly Continuous	15 Free Cl: A Total Cl: A Ammonia Influent	7.5 Average: 1.62 Average: 7.6 : Average: 0 or the Site	ND 2; Range: 0.9 6; Range: 5 .86; Range:	5 92 – 2.13 .73 – 8.67 0.74 – 1.02	ND	5	phate Injection.
Color Free and Total CI Res, ppm  SP4 Also called Phosphate Injection	Weekly Continuous Reservoir	15 Free CI: A Total CI: A Ammonia Influent	7.5 Average: 1.62 Average: 7.6 : Average: 0 or the Site e Dosage: 0	ND 2; Range: 0.9 6; Range: 5 .86; Range: • Well 5/M 0.49 mg/L	5 92 – 2.13 .73 – 8.67 0.74 – 1.02 WD Water	ND	5	
Color Free and Total CI Res, ppm  SP4 Also called Phosphate Injection Free and Total CI Res,	Weekly Continuous	15 Free CI: A Total CI: A Ammonia Influent Phosphat Free CI: A	7.5 Average: 1.62 Average: 7.6 : Average: 0 or the Site e Dosage: 0 Average: 0.8	ND 2; Range: 0.9 6; Range: 0.8 86; Range: e Well 5/M 0.49 mg/L 6; Range: 0.9	5 92 - 2.13 .73 - 8.67 0.74 - 1.02 WD Water 56 - 1.20	ND	5	CI/NH3 Ratio:
Color Free and Total CI Res, ppm  SP4 Also called Phosphate Injection Free and Total CI Res,	Weekly Continuous Reservoir	15 Free CI: A Total CI: A Ammonia Influent Phosphat Free CI: Total CI: A	7.5 Average: 1.62 Average: 7.6 : Average: 0 or the Site e Dosage: 0 Average: 0.8 Average: 5.0	ND 2; Range: 0.9 6; Range: 5 86; Range: e Well 5/M 0.49 mg/L 6; Range: 0.8 8; Range: 4.	5 92 - 2.13 .73 - 8.67 0.74 - 1.02 <b>WD Water</b> 56 - 1.20 33 - 6.13	ND	5	
Color Free and Total CI Res, ppm  SP4 Also called Phosphate Injection Free and Total CI Res, ppm	Weekly Continuous  Reservoir Continuous	15 Free CI: A Total CI: A Ammonia Influent Phosphat Free CI: A Total CI: A Ammonia	7.5 Average: 1.62 Average: 7.6 : Average: 0 or the Site e Dosage: 0 Average: 0.8 Average: 5.0 : Average: 0	ND 2; Range: 0.6; Range: 5.86; Range: e Well 5/M 0.49 mg/L 6; Range: 0.8; Range: 4.69; Range: 4.	5 92 - 2.13 .73 - 8.67 0.74 - 1.02 <b>WD Water</b> 56 - 1.20 33 - 6.13 0.57 - 0.76	ND Blend Po	5 bint/Phosp	CI/NH3 Ratio: 7.41
Color Free and Total CI Res, ppm  SP4 Also called Phosphate Injection Free and Total CI Res, ppm  SP5 Also called	Weekly Continuous  Reservoir Continuous  Reservoir	Total Cl: Ammonia Influent Phosphat Free Cl: Total Cl: Ammonia Effluent SI Goal:	7.5 Average: 1.62 Average: 7.6 : Average: 0 or the Site e Dosage: 0 Average: 0.8 Average: 5.0 : Average: 0 or Site#5.	ND 2; Range: 0.9 6; Range: 5 86; Range: e Well 5/M 0.49 mg/L 6; Range: 0.8 8; Range: 4.69; Range: 4	5 92 - 2.13 .73 - 8.67 0.74 - 1.02 WD Water 56 - 1.20 33 - 6.13 0.57 - 0.76 harges in	ND Blend Po	5 bint/Phosp	CI/NH3 Ratio: 7.41
Color Free and Total CI Res, ppm  SP4 Also called Phosphate Injection Free and Total CI Res, ppm  SP5 Also called	Weekly Continuous  Reservoir Continuous	15 Free CI: A Total CI: A Ammonia Influent ( Phosphat Free CI: A Total CI: A Ammonia Effluent	7.5 Average: 1.62 Average: 7.6 : Average: 0 or the Site e Dosage: 0 Average: 0.8 Average: 5.0 : Average: 0	ND 2; Range: 0.6; Range: 5.86; Range: e Well 5/M 0.49 mg/L 6; Range: 0.8; Range: 4.69; Range: 4.	5 92 - 2.13 .73 - 8.67 0.74 - 1.02 <b>WD Water</b> 56 - 1.20 33 - 6.13 0.57 - 0.76	ND Blend Po	5 bint/Phosp	CI/NH3 Ratio: 7.41
Color Free and Total CI Res, ppm  SP4 Also called Phosphate Injection Free and Total CI Res, ppm  SP5 Also called TDS, ppm	Weekly Continuous  Reservoir Continuous  Reservoir Weekly	Total Cl: A Ammonia Influent ( Phosphat Free Cl: A Total Cl: A Ammonia Effluent SI Goal: 500-750ppm SI Goal:	7.5 Average: 1.62 Average: 7.6 : Average: 0 or the Site e Dosage: 0 Average: 0.8 Average: 5.0 : Average: 0 or Site#5.	ND 2; Range: 0.9 6; Range: 5.8 86; Range: 2 4 Well 5/M 0.49 mg/L 6; Range: 0.8 8; Range: 4 69; Range: 4 595 disc	5 92 - 2.13 .73 - 8.67 0.74 - 1.02 WD Water 56 - 1.20 33 - 6.13 0.57 - 0.76 harges in	Blend Po	of the dis	CI/NH3 Ratio: 7.41
Color Free and Total CI Res, ppm  SP4 Also called Phosphate Injection Free and Total CI Res, ppm  SP5 Also called TDS, ppm  Hardness	Weekly Continuous  Reservoir Continuous  Reservoir Weekly Monthly	Total Cl: A Ammonia Influent Phosphat Free Cl: A Total Cl: A Ammonia  Effluent SI Goal: 500-750ppm	7.5 Average: 1.62 Average: 7.6 : Average: 0 or the Site e Dosage: 0 Average: 0.8 Average: 5.0 : Average: 0 or Site#5.	ND 2; Range: 0.9 6; Range: 5 86; Range: e Well 5/M 0.49 mg/L 6; Range: 0.9 8; Range: 4 69; Range: 4 500 230	5 92 - 2.13 .73 - 8.67 0.74 - 1.02 WD Water 56 - 1.20 33 - 6.13 0.57 - 0.76 harges in	Blend Poto Zone 1	of the dis	CI/NH3 Ratio: 7.41 Stribution system
Color Free and Total CI Res, ppm  SP4 Also called Phosphate Injection Free and Total CI Res, ppm  SP5 Also called TDS, ppm  Hardness	Weekly Continuous  Reservoir Continuous  Reservoir Weekly	Total Cl: A Ammonia Influent Phosphat Free Cl: A Total Cl: A Ammonia Free Cl: A SI Goal: 500-750ppm SI Goal: 180-250ppm	7.5 Average: 1.62 Average: 7.6 : Average: 0 or the Site e Dosage: 0 Average: 0.8 Average: 5.0 : Average: 0 or Site#5.	ND 2; Range: 0.9 6; Range: 5.8 86; Range: 2 4 Well 5/M 0.49 mg/L 6; Range: 0.8 8; Range: 4 69; Range: 4 595 disc	5 92 - 2.13 .73 - 8.67 0.74 - 1.02 WD Water 56 - 1.20 33 - 6.13 0.57 - 0.76 harges in	Blend Po	of the dis	CI/NH3 Ratio: 7.41 Stribution system % CH4 Removal:
Color 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	Weekly Continuous  Reservoir Continuous  Reservoir Weekly Monthly	15 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	7.5 Average: 1.62 Average: 7.6 : Average: 0 or the Site e Dosage: 0 Average: 0.8 Average: 5.0 : Average: 0 or Site#5.	ND 2; Range: 0.9 6; Range: 5 86; Range: e Well 5/M 0.49 mg/L 6; Range: 0.9 8; Range: 4 69; Range: 4 500 230	5 92 - 2.13 .73 - 8.67 0.74 - 1.02 WD Water 56 - 1.20 33 - 6.13 0.57 - 0.76 harges in	Blend Poto Zone 1	of the dis	CI/NH3 Ratio: 7.41 Stribution system
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Color 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	Weekly Continuous  Reservoir Continuous  Reservoir Weekly Monthly Weekly Monthly Continuous	15 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	7.5 Average: 1.62 Average: 0.6 : Average: 0.  Or the Site e Dosage: 0. Average: 0.8 Average: 0.0 : Average: 0  or Site#5.  540  0.19  3 Average: 0.1 Average: 0.1 Average: 3.4	ND 2; Range: 0.9 6; Range: 5 86; Range: 5 9 Well 5/M 0.49 mg/L 6; Range: 0.8 8; Range: 4 69; Range: 4 69; Range: 4 69; Range: 4 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	5 92 - 2.13 .73 - 8.67 0.74 - 1.02 WD Water 56 - 1.20 33 - 6.13 0.57 - 0.76 harges in 580 0.24 2 06 - 0.35 79 - 3.77	Blend Po	of the dis	CI/NH3 Ratio: 7.41  Stribution system  % CH4 Removal: 89.9%  CI/NH3 Ratio:
Color 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	Weekly Continuous  Reservoir Continuous  Reservoir Weekly Monthly Weekly Monthly Continuous	Total Cl: A Ammonia Influent Phosphat Free Cl: A Total Cl: A Ammonia  Free Cl: A Ammonia  Effluent SI Goal: 500-750ppm Goal: from PA  1 Free Cl: A Ammonia eservoir.	7.5 Average: 1.62 Average: 7.6 : Average: 0 or the Site e Dosage: 0 Average: 0.8 Average: 0.0 or Site#5. 540  0.19 3 Average: 0.1 Average: 3.4 : Average: 0	ND 2; Range: 0.9 6; Range: 5.8 86; Range: 2 4 Well 5/M 0.49 mg/L 6; Range: 4 69; Range: 4 69; Range: 4 500 230 0.29 2 9; Range: 0.0 0; Range: 2.1 58; Range: 0.1	5 92 - 2.13 .73 - 8.67 0.74 - 1.02 WD Water 56 - 1.20 33 - 6.13 0.57 - 0.76 harges in 580 0.24 2 06 - 0.35 79 - 3.77 0.53 - 0.67	Blend Po	of the dis	CI/NH3 Ratio: 7.41  Stribution system  % CH4 Removal: 89.9%  CI/NH3 Ratio:
Color 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	Weekly Continuous  Reservoir Continuous  Reservoir Weekly Monthly Weekly Monthly Continuous  Cypress Re	Total Cl: A Ammonia Influent Phosphat Free Cl: A Total Cl: A Ammonia  Free Cl: A Ammonia  Effluent SI Goal: 500-750ppm Goal: from PA  1 Free Cl: A Ammonia  eservoir. Goal -	7.5 Average: 1.62 Average: 7.6 : Average: 0 or the Site e Dosage: 0 Average: 0.8 Average: 5.0 : Average: 0 or Site#5.  540  0.19 3 Average: 0.1 Average: 3.4 : Average: 0 CH4 Aver	ND 2; Range: 0.9 6; Range: 5 86; Range: 5 86; Range: 6 9 Well 5/M 0.49 mg/L 6; Range: 4 69; Range: 4 69; Range: 4 500 230 0.29 2 9; Range: 0.12% crage: 0.12%	5 92 - 2.13 .73 - 8.67 0.74 - 1.02 WD Water 56 - 1.20 33 - 6.13 0.57 - 0.76 harges in 580 0.24 2 06 - 0.35 79 - 3.77 0.53 - 0.67	Blend Po	of the dis	CI/NH3 Ratio: 7.41  Stribution system  % CH4 Removal: 89.9%  CI/NH3 Ratio:
Color 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	Weekly Continuous  Reservoir Continuous  Reservoir Weekly Monthly Weekly Monthly Continuous  Cypress Re Daily (from log)	Total Cl: A Ammonia Influent Phosphat Free Cl: A Total Cl: A Ammonia  Free Cl: A Ammonia  Effluent SI Goal: 500-750ppm Goal: from PA  1 Free Cl: A Ammonia  eservoir. Goal- LEL	7.5 Average: 1.62 Average: 7.6 : Average: 0 or the Site e Dosage: 0 Average: 0.8 Average: 5.0 : Average: 0 or Site#5.  540  0.19 3 Average: 0.1 Average: 0.1 Average: 0.4 : Average: 0 CH4 Average: 0 CH4 Rar	ND 2; Range: 0.8 6; Range: 5 86; Range: 5 Well 5/M 0.49 mg/L 6; Range: 4 69; Range: 5 500 230 0.29 2 9; Range: 0.12% 0; Range: 0.12% 0ge: 0% - 39	5 92 - 2.13 .73 - 8.67 0.74 - 1.02 WD Water 56 - 1.20 33 - 6.13 0.57 - 0.76 harges in 580 0.24 2 06 - 0.35 79 - 3.77 0.53 - 0.67	to Zone 1	of the dis	CI/NH3 Ratio: 7.41  Stribution system  % CH4 Removal: 89.9%  CI/NH3 Ratio: 5.89
Color 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	Weekly Continuous  Reservoir Continuous  Reservoir Weekly Monthly Weekly Monthly Continuous  Cypress Re Daily (from log) Ce Feeding	Total Cl: A Ammonia Influent Phosphat Free Cl: A Total Cl: A Ammonia  Free Cl: A Ammonia  Effluent SI Goal: 500-750ppm Goal: from PA  1 Free Cl: A Ammonia  eservoir. Goal- LEL	7.5 Average: 1.62 Average: 7.6 : Average: 0 or the Site e Dosage: 0 Average: 0.8 Average: 5.0 : Average: 0 or Site#5.  540  0.19 3 Average: 0.1 Average: 0.1 Average: 0.4 : Average: 0 CH4 Average: 0 CH4 Rar	ND 2; Range: 0.8 6; Range: 5 86; Range: 5 Well 5/M 0.49 mg/L 6; Range: 4 69; Range: 5 500 230 0.29 2 9; Range: 0.12% 0; Range: 0.12% 0ge: 0% - 39	5 92 - 2.13 .73 - 8.67 0.74 - 1.02 WD Water 56 - 1.20 33 - 6.13 0.57 - 0.76 harges in 580 0.24 2 06 - 0.35 79 - 3.77 0.53 - 0.67	to Zone 1	of the dis	CI/NH3 Ratio: 7.41  Stribution system  % CH4 Removal: 89.9%  CI/NH3 Ratio: 5.89
Color Free and Total CI Res, ppm  SP4 Also called Phosphate Injection Free and Total CI Res, ppm  SP5 Also called TDS, ppm  Hardness	Weekly Continuous  Reservoir Continuous  Reservoir Weekly Monthly Weekly Monthly Continuous  Cypress Re Daily (from log) Ce Feeding Monthly	Total Cl: A Ammonia Influent Phosphat Free Cl: A Total Cl: A Ammonia  Free Cl: A Ammonia  Effluent SI Goal: 500-750ppm Goal: from PA  1 Free Cl: A Ammonia  eservoir. Goal- LEL	7.5 Average: 1.62 Average: 7.6 : Average: 0 or the Site e Dosage: 0 Average: 0.8 Average: 5.0 : Average: 0 or Site#5.  540  0.19 3 Average: 0.1 Average: 0.1 Average: 0.4 : Average: 0 CH4 Average: 0 CH4 Rar	ND 2; Range: 0.8 6; Range: 5 86; Range: 5 Well 5/M 0.49 mg/L 6; Range: 4 69; Range: 5 500 230 0.29 2 9; Range: 0.12% 0; Range: 0.12% 0ge: 0% - 39	5 92 - 2.13 .73 - 8.67 0.74 - 1.02 WD Water 56 - 1.20 33 - 6.13 0.57 - 0.76 harges in 580 0.24 2 06 - 0.35 79 - 3.77 0.53 - 0.67	to Zone 1	of the dis	CI/NH3 Ratio: 7.41  Stribution system  % CH4 Removal: 89.9%  CI/NH3 Ratio: 5.89
Color 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 SP 6 MWD Source	Weekly Continuous  Reservoir Continuous  Reservoir Weekly Monthly Weekly Monthly Continuous  Cypress Re Daily (from log) Ce Feeding	Total Cl: A Ammonia Influent Phosphat Free Cl: A Total Cl: A Ammonia  Free Cl: A Ammonia  Effluent SI Goal: 500-750ppm Goal: from PA  1 Free Cl: A Ammonia  eservoir. Goal- LEL	7.5 Average: 1.62 Average: 7.6 : Average: 0 or the Site e Dosage: 0 Average: 0.8 Average: 5.0 : Average: 0 or Site#5.  540  0.19 3 Average: 0.1 Average: 0.1 Average: 0.4 : Average: 0 CH4 Average: 0 CH4 Rar	ND 2; Range: 0.9 6; Range: 0.9 86; Range: e Well 5/M 0.49 mg/L 6; Range: 0.8 8; Range: 4.69; Range: 4.69; Range: 4.69; Range: 4.69; Range: 500 230 0.29 2 9; Range: 0.0 0; Range: 2.0 58; Range: 0.12% age: 0.12% age: 0.42 age: 0.42% age: 0.42% age: 0.42%	5 92 - 2.13 .73 - 8.67 0.74 - 1.02 WD Water 56 - 1.20 33 - 6.13 0.57 - 0.76 harges in 580 0.24 2 06 - 0.35 79 - 3.77 0.53 - 0.67	to Zone 1	of the dis	CI/NH3 Ratio: 7.41  Stribution system  % CH4 Removal: 89.9%  CI/NH3 Ratio: 5.89

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

## **APPENDIX A**

LABORATORY RESULTS



18 May 2018 Clinical Lab No.: 18E0344

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

Project Name: Standard Analysis

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

Enclosed are the results of the analyses for samples received at the laboratory on 05/02/18 . Samples were received within temperature range, in correct containers and preservation.

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

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

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

Sincerely,

Stu Styles

Client Services Manager

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Lomita, City ofProjectStandard AnalysisWork Order:18E034424373 Walnut AvenueSub Project:CWPF 1st Week of May, 2018 Compliance Sampling Received:05/02/18 15:00Lomita CA, 91717Project Manager:Mark AndersenReported:05/18/18

Reservoir Influent Site #3		18E0344-0	1 (Water)		Sample Date	te: 05/02/18	8:30 <b>S</b>	ampler: D	avid Huerta
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	8.3		N/A	mg/L	05/02/18	05/02/18	1818135	
pH (Field)	Field	7.65		N/A	pH Units	05/02/18	05/02/18	1818135	
Temperature (Field)	Field	20.2		N/A	°C	05/02/18	05/02/18	1818135	
General Physical Analyses									
Apparent Color	SM 2120BM	7.5	3.0	15	Color Units	05/02/18	05/02/18	1818154	
<u>Metals</u>									
Iron (Fe)	EPA 200.7	ND	100	300	ug/L	05/07/18	05/07/18	1819006	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	05/07/18	05/07/18	1819006	
Reservoir Effluent Site #5		18E0344-0	02 (Water)		Sample Da	te: 05/02/18	8:20 S	ampler: D	avid Huerta
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	4		N/A	mg/L	05/02/18	05/02/18	1818135	
pH (Field)	Field	7.84		N/A	pH Units	05/02/18	05/02/18	1818135	
Temperature (Field)	Field	18.6		N/A	°C	05/02/18	05/02/18	1818135	
Microbiology Analyses									
Total Coliform	SM 9223	A		N/A	P/A	05/02/18	05/03/18	1818140	
Total Coliform E. Coli	SM 9223 SM 9223	A A		N/A N/A	P/A P/A	05/02/18 05/02/18	05/03/18 05/03/18	1818140 1818140	
			1						
E. Coli Plate Count	SM 9223	A	1	N/A	P/A	05/02/18	05/03/18	1818140	
E. Coli Plate Count	SM 9223	A	1 3.0	N/A	P/A	05/02/18	05/03/18	1818140	
E. Coli Plate Count  General Physical Analyses	SM 9223 SM9215B	A ND		N/A 500	P/A CFU/ml	05/02/18 05/02/18	05/03/18 05/04/18	1818140 1818196	
E. Coli Plate Count  General Physical Analyses  Apparent Color	SM 9223 SM9215B SM 2120BM	A ND 5.0	3.0	N/A 500	P/A CFU/ml	05/02/18 05/02/18 05/02/18	05/03/18 05/04/18 05/02/18	1818140 1818196 1818154	
E. Coli Plate Count  General Physical Analyses  Apparent Color Odor Threshold	SM 9223 SM9215B SM 2120BM	A ND 5.0	3.0	N/A 500	P/A CFU/ml	05/02/18 05/02/18 05/02/18	05/03/18 05/04/18 05/02/18	1818140 1818196 1818154	



May 11, 2018



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: 18E0344

Lab Number:

J050401-01

Enclosed are results for sample(s) received 5/04/18 by Air Technology Laboratories. Samples were received intact and properly chilled. 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

2 of 4 J050401 Ton 0401-01

## 18E0344

inical Laboratory of San Bernardino 881 Barton Road rand Terrace, CA 92313 one: 909.825.7693 x: 909.825.7696 oject Manager: Stu Styles	Air Technology Labs 18501 East Gale Avenue Suite 130 City of Industry, CA 91748 Phone: (626) 964-4032 Fax:	* *.
and Terrace, CA 92313 one: 909.825.7693 x: 909.825.7696 oject Manager: Stu Styles	City of Industry, CA 91748 Phone: (626) 964-4032	
one: 909.825.7693 x: 909.825.7696 oject Manager: Stu Styles	Phone :(626) 964-4032	
x: 909.825.7696 oject Manager: Stu Styles		
oject Manager: Stu Styles	Fax:	
ease email results to Project Manager: Stu Styles  glaubig@clinical-lab.com [v] styles@clinical-lab.com	n [] nelson@clinical-lab.com	,
California EDT transfer those samples with PS code: Water Trax Upload Client:	s provided [ ] Yes [/] Mo [ ] Yes [/] No	
rn Around Time [] 10 Days [/] 5 Days [] C	Other Days	
alysis	Comm	ents
aiyais	•	
ample ID: Reservoir Effluent Site #5 / 18E0344-02	Sampled: 05/02/18 08:20 PS Code: Water WTX ID:	
	Water WTX ID:	
ethane RSK175	Report	in mg/L
tainers Supplied:		
al Amber Vial (B) 40ml Amber Via	al (C)	
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BI DUA 05/03/18 151.	30 Pen harane	5)4/18 84
Bl O5/63/18 15'. 3 Date / Time  5/4/18 92	Received By Received By	Date / Time / Date / Time

Client:

**Clinical Laboratory** 

Attn:

Stu Styles

**Project Name:** 

NA

Project No.:

18E0344

Date Received:

05/04/18

Matrix:

Water

Reporting Units: mg/L

## **RSK175**

Lab No.:	J05040	01-01			
	Reservoir	Effluent			
Client Sample I.D.:	Site	#5/			
	18E034	14-02			
Date/Time Sampled:	5/2/18	8:20			
Date/Time Analyzed:	5/10/18	16:25			
QC Batch No.:	1805100	GC8A2			
Analyst Initials:	AS	5			
Dilution Factor:	1.0	)			
	Result	RL			
ANALYTE	mg/L	mg/L			
Methane	0.19	0.0010			

ND = Not Detected (below RL)	ND = I	Not De	tected	(below	RL
------------------------------	--------	--------	--------	--------	----

RL = Reporting Limit

Reviewed/Approved By:

**Operations Manager** 

The cover letter is an integral part of this analytical report

QC Batch No.:

180510GC8A2

Matrix:

Water

Units:

mg/L

QC for Dissolved Gases by EPA Procedure RSKSOP-175	OC for	Dissolved	Gases h	v EPA	Procedure	RSKSOP-175
----------------------------------------------------	--------	-----------	---------	-------	-----------	------------

	Lab	No.:	Metho	d Blank	LCS		LCSD			
Date/	Time An	alyzed:	5/10/18 16:12		5/10/18 15:45		5/10/18 15:58			
An	Analyst Initials:		A	AS		AS		AS		
	Datafile:		10m	10may019		nay017	10may018			
Dil	ution Fac	tor:	1	.0	1.0 1.0					
ANALYTE		PQL	RL	Results	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Methane		0.0010	0.0010	ND	119	70-130%	114	70-130%	3.9	<30

**PQL = Practical Quantitation Limit** 

ND = Not Detected (Below RL).

RL = PQL X Dilution Factor

Reviewed/Approved By:	MADU.	4	Date:	5/11/18
	Mark J. Johnson	V		1
	<b>Operations Manager</b>			

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

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			·			·	•								HRE0381
Client		City of Lomita	S	System N	umber				Analy	<b>Analysis Requested</b>	dnes	ted			
Address		24373 Walnut Avenue			191	1910073									
		Lomita, CA 91717									М	To			
Phone #		(310) 325-9830			Destinatio	Destination Laboratory	tory				eth	tal			
Fax#		(310) 325-3627			[X] Clinic	[X] Clinical Laboratory	tory			Tota	ane				
Project		Standard Analysis			RWQCB	RWQCB Compliance	93		on / N	Co l Diss	(Wa	rdne	rate CT/		
Sub Broiset	_	CWPF 1st week of May, 2018 Compliance				yes				olor	ater			dor	
ann Liolect		Sampling				ELAP#					) (R		ΉΡ		
Comments		For TC/EC/BACT see weekly Distro CoC			7	4000	-			lide	SKI		<u> </u>		
Sampled by		David Huerta			•	000					175)	O3)			
Date	Time	Sample Idenitification	Matrix	Type	Preserv	#d	Temp.	Total							Comments / P.S. Codes
5/2/2018	8.36	Reservoir Influent Site #3	MG	<u>M</u>	A/A	7.45	20.5	5.8.3	1	×			-	-	
5/2/2018	8:0 14	8:0 (4) Reservoir Effluent Site #5	š	<u>*</u>	1,7	7 84	د! - -	4.6					X	×	
5/2/2018		Reservoir Effluent Site #5	š	3	Ą Ż	7.84	.8 .8	۲.0		×				×	
5/2/2018	3.10	Reservoir Effluent Site #5	DΨ	<u>w</u>	7	786	-8 -	4.0			×			_	
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Preservatives:	: (1) Na,	Preservatives: (1) Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> (2) HCI (3) HNO3 (4) NH4CI	Matrix:	Matrix: DW-Drinki	ing Water,	WW-Was	te Water, S	ng Water, WW-Waste Water, SW-Storm Water, GW- Ground Water, A-Air	Vater, G	W. Gro	nud N	ater, /	I-Air		Type- 1-Routine, 2-Repeat, 3-
(5) H2SO	74 (6) Ni	(5) H2SO4 (6) Na2SO3 (7) Cold (8) Other:						Repl	Replacement,	4	cial V	Special W-Well D-Dist.	0-0	st.	
Reling	uished	Relinquished By (Sign)			Ą	Date / Time	Time	>	1		_ 、			1	Print Name / Company
	A	David Huerta / Gity of Lomita	omita	5/2/2018	8 /12	51.7		₹ %	R		Z	_	=	1	44-200 COR
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													;		



29 May 2018 Clinical Lab No.: 18E1060

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

Project Name: Standard Analysis

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

Enclosed are the results of the analyses for samples received at the laboratory on 05/09/18 . Samples were received within temperature range, in correct containers and preservation.

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

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

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

Sincerely,

Stu Styles

Client Services Manager

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Lomita, City ofProject:Standard AnalysisWork Order:18E106024373 Walnut AvenueSub Project:CWPF Monthly Compliance Samples, 2nd Wk of MayReceived:05/09/18 14:00Lomita CA, 91717Project Manager:Mark AndersenReported:05/29/18

Raw Water Site #1		18E1060-0	01 (Water)		Sample Date	te: 05/09/18	7:55	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	05/09/18	05/09/18	1819125	j
pH (Field)	Field	7.67		N/A	pH Units	05/09/18	05/09/18	1819125	j
Temperature (Field)	Field	22.3		N/A	°C	05/09/18	05/09/18	1819125	i
Microbiology Analyses									
Total Coliform	SM 9223	Α		N/A	P/A	05/09/18	05/10/18	1819127	,
E. Coli	SM 9223	A		N/A	P/A	05/09/18	05/10/18	1819127	•
Plate Count	SM9215B	10	1	500	CFU/ml	05/09/18	05/11/18	1819183	;
General Physical Analyses									
Apparent Color	SM 2120BM	7.5	3.0	15	Color Units	05/09/18	05/09/18	1819130	)
General Chemical Analyses									
Hardness, Total (as CaCO3)	Calculated	390	9.1	N/A	mg/L	05/22/18	05/22/18	[CALC]	
Total Filterable Residue/TDS	SM 2540C	820	5.0	1000	mg/L	05/16/18	05/18/18	1820085	i
<u>Metals</u>									
Calcium (Ca)	EPA 200.7	100	2.0	N/A	mg/L	05/22/18	05/22/18	1820174	ļ
Iron (Fe)	EPA 200.7	210	100	300	ug/L	05/16/18	05/16/18	1820078	}
Magnesium (Mg)	EPA 200.7	34	1.0	N/A	mg/L	05/18/18	05/18/18	1820140	)
Manganese (Mn)	EPA 200.7	150	20	50	ug/L	05/16/18	05/16/18	1820078	3
Filter Effluent (Free Chlorine) Site #2		18E1060-0	02 (Water)		Sample Da	te: 05/09/18	8:28	Sampler:	Patrick McCue
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	8.2		N/A	mg/L	05/09/18	05/09/18	1819125	;
pH (Field)	Field	7.65		N/A	pH Units	05/09/18	05/09/18	1819125	;
Temperature (Field)	Field	22		N/A	°C	05/09/18	05/09/18	1819125	;
<u> Iicrobiology Analyses</u>									
Total Coliform	SM 9223	A		N/A	P/A	05/09/18	05/10/18	1819127	,
E. Coli	SM 9223	A		N/A	P/A	05/09/18	05/10/18	1819127	,
Plate Count	SM9215B	ND	1	500	CFU/ml	05/09/18	05/11/18	1819183	;



Lomita, City ofProject:Standard AnalysisWork Order:18E106024373 Walnut AvenueSub Project:CWPF Monthly Compliance Samples, 2nd Wk of May Received:05/09/18 14:00Lomita CA, 91717Project Manager:Mark AndersenReported:05/29/18

Filter Effluent (Total Chlorine) Site #3		18E1060-0	3 (Water)		Sample Da	te: 05/09/18	8:30 Sa	impler: P	atrick McCue
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	7.9		N/A	mg/L	05/09/18	05/09/18	1819125	
pH (Field)	Field	7.71		N/A	pH Units	05/09/18	05/09/18	1819125	
Temperature (Field)	Field	22.4		N/A	°C	05/09/18	05/09/18	1819125	
General Physical Analyses									
Apparent Color	SM 2120BM	ND	3.0	15	Color Units	05/09/18	05/09/18	1819130	
<u>Metals</u>									
Iron (Fe)	EPA 200.7	ND	100	300	ug/L	05/16/18	05/16/18	1820078	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	05/16/18	05/16/18	1820078	
Zone #2 Site #6		18E1060-0	04 (Water)		Sample Da	te: 05/09/18	8:32 Sa	ımpler: P	atrick McCue
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	2.52		N/A	mg/L	05/09/18	05/09/18	1819125	
pH (Field)	Field	8.65		N/A	pH Units	05/09/18	05/09/18	1819125	
Temperature (Field)	Field	18.1		N/A	°C	05/09/18	05/09/18	1819125	
General Chemical Analyses									
Hardness, Total (as CaCO3)	Calculated	120	6.6	N/A	mg/L	05/18/18	05/18/18	[CALC]	
Total Filterable Residue/TDS	SM 2540C	270	5.0	1000	mg/L	05/16/18	05/18/18	1820085	
<u>Metals</u>									
Calcium (Ca)	EPA 200.7	27	1.0	N/A	mg/L	05/18/18	05/18/18	1820140	



Lomita, City ofProject:Standard AnalysisWork Order:18E106024373 Walnut AvenueSub Project:CWPF Monthly Compliance Samples, 2nd Wk of MayReceived:05/09/18 14:00

Lomita CA, 91717 Project Manager: Mark Andersen Reported: 05/29/18

Reservoir Effluent Site #5		18E1060-0	05 (Water)		Sample Da	ote: 05/09/1	8 8:45 <b>Sa</b>	mpler: Pa	atrick McCue
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	3.76		N/A	mg/L	05/09/18	05/09/18	1819125	
pH (Field)	Field	8.04		N/A	pH Units	05/09/18	05/09/18	1819125	
Temperature (Field)	Field	18.7		N/A	°C	05/09/18	05/09/18	1819125	
Microbiology Analyses									
Total Coliform	SM 9223	A		N/A	P/A	05/09/18	05/10/18	1819127	
E. Coli	SM 9223	A		N/A	P/A	05/09/18	05/10/18	1819127	
Plate Count	SM9215B	ND	1	500	CFU/ml	05/09/18	05/11/18	1819183	
General Physical Analyses									
Odor Threshold	EPA 140.1-M	2	1	3	TON	05/09/18	05/09/18	1819130	
General Chemical Analyses									
Hardness, Total (as CaCO3)	Calculated	230	6.6	N/A	mg/L	05/18/18	05/18/18	[CALC]	
Nitrate as N (NO3-N)	EPA 300.0	ND	0.40	10	mg/L	05/10/18	05/10/18	1819119	
Total Filterable Residue/TDS	SM 2540C	500	5.0	1000	mg/L	05/16/18	05/18/18	1820085	
Metals _									
Calcium (Ca)	EPA 200.7	60	1.0	N/A	mg/L	05/18/18	05/18/18	1820140	
Magnesium (Mg)	EPA 200.7	20	1.0	N/A	mg/L	05/18/18	05/18/18	1820140	
ND Analyte NOT DETECTED at o	or above the reporting limit								



May 18, 2018

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: 18E1060

Lab Number:

J051101-01/02

Enclosed are results for sample(s) received 5/11/18 by Air Technology Laboratories. Samples were received intact and properly chilled. 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 J051101

## Clinical Laboratory of San Bernardino 18E1060

J05/101-01/62

## **SENDING LABORATORY:**

Clinical Laboratory of San Bernardino

21881 Barton Road

Grand Terrace, CA 92313

Phone: 909.825.7693

## **RECEIVING LABORATORY:**

Air Technology Labs

18501 East Gale Avenue Suite 130

City of Industry, CA 91748

Phone:(626) 964-4032

Fax: 909.825.7696 Project Manager: Stu Styles	Fax:	
Please email results to Project Ma [ ] glaubig@clinical-lab.com	anager: Stu Styles  styles@clinical-lab.com [ ] nelson@clinical-lab.com	4.4
California EDT transfer the Water Trax Upload Client	nose samples with PS codes provided [ ] Yes [ ] No	
Turn Around Time [ ] 10 D Subcontract Comments:	ays [ ] Other _ Days	
Analysis	Comments	
Analysis  Sample ID: Raw Water Site #1 / 1		
	8E1060-01 Sampled: 05/09/18 07:55 PS Code:	
Sample ID: Raw Water Site #1 / 1	8E1060-01 Sampled: 05/09/18 07:55 PS Code: Water WTX ID:	:
Sample ID: Raw Water Site #1 / 1.  Methane RSK175  Containers Supplied:	Sampled: 05/09/18 07:55 PS Code: Water WTX ID:  Report in n  40ml Amber Vial (C)	
Sample ID: Raw Water Site #1 / 1  Methane RSK175  Containers Supplied:  Oml Amber Vial (B)  Sample ID: Reservoir Effluent Sit	8E1060-01 Sampled: 05/09/18 07:55 PS Code: Water WTX ID:  Report in n  40ml Amber Vial (C)  # #5 / 18E1060-05 Sampled: 05/09/18 08:45 PS Code:	ng/L

Refeased By Date / Time Received By Date / Time Date / Time Date / Time Date / Time

Client:

**Clinical Laboratory** 

Attn:

Stu Styles

**Project Name:** 

NA

Project No.:

18E1060

Date Received:

05/11/18

Matrix:

Water

Reporting Units: mg/L

## **RSK175**

Lab No.:	J05110	01-01	J05110	01-02		
	Raw V	Vater	Reservoir	Effluent		
Client Sample I.D.:	Site a	<b>#1</b> /	Site	<b>#5</b> /		
	18E10	60-01	18E10	60-05		
Date/Time Sampled:	5/9/18	7:55	5/9/18	8:45		
Date/Time Analyzed:	5/16/18	13:08	5/16/18	12:53		
QC Batch No.:	1805160	GC8A1	1805160	GC8A1		
Analyst Initials:	AS	8	AS			
Dilution Factor:	1.0	)	1.0	)		
	Result	RL	Result	RL		
ANALYTE	mg/L	mg/L	mg/L	mg/L		
Methane	2.7	0.0010	0.29	0.0010		

ND = Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By:

**Operations Manager** 

The cover letter is an integral part of this analytical report

Date 0/17/18

QC Batch No.:

180516GC8A1

Matrix:

Water

Units:

mg/L

#### QC for Dissolved Gases by EPA Procedure RSKSOP-175

Lab	No.:	Metho	d Blank	I	LCS	L	CSD		
Date/Time An	alyzed:	5/16/1	8 12:16	5/16/	18 11:37	5/16/	18 11:58		
Analyst Init	tials:	F	AS		AS		AS		
Data	file:	16m	ay003	16r	nay001	16n	nay002		
Dilution Fa	ctor:	1	1.0		1.0		1.0		
ANALYTE	PQL	RL	Results	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Methane	0.0010	0.0010	ND	119	70-130%	123	70-130%	2.6	<30

PQL = Practical Quantitation Limit

ND = Not Detected (Below RL).

RL = PQL X Dilution Factor

Reviewed/Approved By:

**Operations Manager** 

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

Chain of Custody

<u>a</u>

						***	6										Q9121381
Client		City of Lomita	Sys	System Num	umber				Analy	<b>Analysis Requested</b>	sanba	ted					
Address		24373 Walnut Avenue			10,	1910072						_					
		Lomita, CA 91717			2	7 700									М		
Phone #		(310)903-2243		,	Destinati	Destination Laboratory	tory		ī			He			eth		
Fax#					[X] Clinic	Clinical Laboratory	tory			1		eteti			ane		
Project		Standard Analysis			RWQCB	RWQCB Compliance	)ce									—	
Sub Project		CWPF Monthly Compliance Samples;				YES				E. C		hic l	Col	Od		ard	
ano ano		2nd week of May, 2018			Ш	ELAP#					olifo					ness	
Comments					*	4000			anese Solid			e Cou			(RS		
Sampled by	>	Patrick McCue			_	000			ls			ınt			K175		
Date	Time	Sample Idenitification	Matrix	Type	Preserv	l cmp.	Hd	Fotal Chlorine							)		
5/9/2018	2510	Raw Water Site #1	89	3	N/N	223	7.67	Ø	×	   			×		<del> </del>		
5/9/2018	5510	Raw Water Site #1	δW	<u>\$</u>	1,2,7					×	×	×			×	×	
			-														
5/9/2018	8280	Filter Effluent (Free Chlorine) Site#2	DW	1W	1,7	220°	7,65	8.7		×	×	×					
5/9/2018	0830	Filter Effluent (Total Chlorine) Site#3	DW	1.0	V/N	34.25	17.7	7.9		×			×				
5/9/2018	0832	Zone #2 Site #6	DW	<u> </u>	V/N	18.10	59.00	757	7							×	
5/9/2018	3480	Reservoir Effluent Site #5	)M	=	1,7	18.7	804	3.76	-	×	/	7			_		
8/9/2018	2530	Reservoir Effluent Site #5	NO.	£	Y.				×			×		×		×	
2/9/2018	5680	Reservoir Effluent Site #5	<u>%</u>	=	2,7					-					×		
Preservatives (5) H2SO	(1) Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> (	Preservatives: (1) Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> (2) HCI (3) HNO3 (4) NH4CI (5) H2SO4 (6) Na <sub>2</sub> SO3 (7) Cold (8) Other:	Matrix: I	JW-Drin	king Wat	er, WW-W	aste Water	Matrix: DW-Drinking Water, WW-Waste Water, SW-Storm Water, GW- Ground Water, A-Air 3-Replacement 4-Special W-Well D-D	Storm Water, GW- Ground Water, A-Air 3-Replacement 4-Special W-Well D- Dist	GW-C	round	Water, W-Well	A-Air D-Di	1		-	Type- 1-Routine, 2-Repeat,
Reling	Relinquished By (Sign)	ign) Print Name / Company	l m			Date / Time	Time		=		Recei	Received By (Sign)	(Sign)			7	Print Name / Company
Patr	ich M	- My Lomita 5/9/2018	Lomita	5/9/201	8	2.30	)	The state of the s	5	13	/	·	7	3	3	4/1/	ALSB
		1 J. Welle Cos	108	3.6.5		ZQ	$\mathcal{L}$			201		J.	AR	\v	Z		J.A. C1517
Coprimepris:	);s		3		× ×	amples r	Samples received: (	( ) On ice	ice (	Intact	nct (	Ö C	ustod	Custody seals Tem	s Tei	1 2 ·	7 () FXC
Shipped Via	)	Fed X     Golden State	e II UPS		Client	Other	37					Page_1_	l of	-			

"Your Water and Wastewater Analysis Solution"



01 June 2018 Clinical Lab No.: 18E1623

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

Project Name: Standard Analysis

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

Enclosed are the results of the analyses for samples received at the laboratory on 05/16/18 . Samples were received within temperature range, in correct containers and preservation.

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

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

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

Sincerely,

Stu Styles

Client Services Manager

tistes



Lomita, City ofProjectStandard AnalysisWork Order:18E162324373 Walnut AvenueSub Project:CWPF 3rd Week of May, 2018 Compliance Sampling Received:05/16/18 14:30Lomita CA, 91717Project Manager:Mark AndersenReported:06/01/18

Field Analyses Cl Res Total (Field) pH (Field) Temperature (Field) General Physical Analyses Apparent Color Metals Iron (Fe) Manganese (Mn) Reservoir Effluent Site #5 Analyte Field Analyses	Field Field Field SM 2120BM  EPA 200.7 EPA 200.7	9.8 7.75 21.3 5.0 ND	Rep. Limit	MCL  N/A  N/A  N/A  15	Units  mg/L pH Units °C  Color Units	05/16/18 05/16/18 05/16/18	05/16/18 05/16/18 05/16/18	1820119 1820119 1820119	Qualifier
Cl Res Total (Field) pH (Field) Temperature (Field) General Physical Analyses Apparent Color Metals Iron (Fe) Manganese (Mn) Reservoir Effluent Site #5 Analyte	Field Field SM 2120BM EPA 200.7	7.75 21.3 5.0	3.0	N/A N/A	pH Units °C	05/16/18 05/16/18	05/16/18 05/16/18	1820119	
pH (Field) Temperature (Field) General Physical Analyses Apparent Color Metals Iron (Fe) Manganese (Mn) Reservoir Effluent Site #5 Analyte	Field Field SM 2120BM EPA 200.7	7.75 21.3 5.0	3.0	N/A N/A	pH Units °C	05/16/18 05/16/18	05/16/18 05/16/18	1820119	
Temperature (Field)  General Physical Analyses  Apparent Color  Metals  Iron (Fe)  Manganese (Mn)  Reservoir Effluent Site #5  Analyte	Field SM 2120BM EPA 200.7	21.3 5.0 ND	3.0	N/A	°C	05/16/18	05/16/18		
General Physical Analyses Apparent Color Metals Iron (Fe) Manganese (Mn) Reservoir Effluent Site #5 Analyte	SM 2120BM EPA 200.7	5.0 ND	3.0					1820119	
Apparent Color  Metals  Iron (Fe)  Manganese (Mn)  Reservoir Effluent Site #5  Analyte	EPA 200.7	ND	3.0	15	Color Units	05/16/18	05/16/18		
Metals Iron (Fe) Manganese (Mn) Reservoir Effluent Site #5 Analyte	EPA 200.7	ND	3.0	15	Color Units	05/16/18	05/16/10		
Iron (Fe) Manganese (Mn)  Reservoir Effluent Site #5  Analyte						05/10/10	05/16/18	1820151	
Manganese (Mn)  Reservoir Effluent Site #5  Analyte									
Reservoir Effluent Site #5  Analyte	EPA 200.7		100	300	ug/L	05/23/18	05/24/18	1821082	
Analyte		ND	20	50	ug/L	05/23/18	05/24/18	1821082	
•		18E1623-0	02 (Water)		Sample Da	te: 05/16/18	8 8:20 <b>S</b> a	ampler: D	avid Huerta
Field Analyses	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
<del></del>									
Cl Res Total (Field)	Field	3.1		N/A	mg/L	05/16/18	05/16/18	1820119	
pH (Field)	Field	8.01		N/A	pH Units	05/16/18	05/16/18	1820119	
Temperature (Field)	Field	19.1		N/A	°C	05/16/18	05/16/18	1820119	
Microbiology Analyses									
Total Coliform	SM 9223	A		N/A	P/A	05/16/18	05/17/18	1820129	
E. Coli	SM 9223	A		N/A	P/A	05/16/18	05/17/18	1820129	
Plate Count	SM9215B	ND	1	500	CFU/ml	05/16/18	05/18/18	1820175	
General Physical Analyses									
Apparent Color	SM 2120BM	ND	3.0	15	Color Units	05/16/18	05/16/18	1820151	
Odor Threshold	EPA 140.1-M	2	1	3	TON	05/16/18	05/16/18	1820151	
General Chemical Analyses									
Nitrate as N (NO3-N)	EPA 300.0	ND	0.40	10	mg/L	05/16/18	05/17/18	1820077	
Total Filterable Residue/TDS	SM 2540C	580	5.0	1000	mg/L	05/23/18	05/25/18	1821068	



May 25, 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: 18E1623

Lab Number:

J051706-01

Enclosed are results for sample(s) received 5/17/18 by Air Technology Laboratories. Samples were received intact and properly chilled. 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.

## J051706 Page 2 of 4

## SUBCONTRACT ORDER

# Clinical Laboratory of San Bernardino 18E1623

J051706-0

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 [\sqrt{]} styles@clinical-lab.com  California EDT transfer those samples with PS code Water Trax Upload Client:	
	Other Days
Analysis	Comments
Sample ID: Reservoir Effluent Site #5 / 18E1623-02	Sampled: 05/16/18 08:20 PS Code: Water WTX ID:
Methane RSK175	Report in mg/L
Containers Supplied:	

40ml Amber Vial (C)

40ml Amber Vial (B)

Released By Date / Time Received By Date / Time

Received By Date / Time

Received By Date / Time

Received By Date / Time

**Client:** 

**Clinical Laboratory** 

Attn:

Stu Styles

**Project Name:** 

NA

Project No.:

18E1623

Date Received:

05/17/18

Matrix:

Water

Reporting Units:

mg/L

## **RSK175**

Lab No.:	J051706-01			1		
	Reservoir Efflu	ent				
Client Sample I.D.:	Site #5 /	-1		i		
	18E1623-02					
Date/Time Sampled:	5/16/18 8:20					
Date/Time Analyzed:	5/24/18 15:2	4				
QC Batch No.:	180524GC8A	2				
Analyst Initials:	AS					
Dilution Factor:	1.0					
	Result R	L				
ANALYTE	mg/L mg	/L				
Methane	0.24 0.00	10				

ND =	= Not	Detected	(below	RL)
111	1100	Dottoctou	(2001011	111

RL = Reporting Limit

Reviewed/Approved By:

Mark Johnson Operations Manager Date 5.25-18

The cover letter is an integral part of this analytical report

QC Batch No.:

180524GC8A2

Matrix:

Water

Units:

mg/L

## QC for Dissolved Gases by EPA Procedure RSKSOP-175

	Lab No.:		Metho	Method Blank		LCS	L	CSD		
	Date/Time An	alyzed:	5/24/18 15:11		5/24/	18 14:44	5/24/	18 14:58		
	Analyst Initials:		I	AS		AS		AS		
	Datafile:		24MAY026		24N	IAY024	24N	IAY025		
	Dilution Factor:		1	1.0	1.0		1.0			
AN	ANALYTE PQL		RL	Results	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Methane		0.0010	0.0010	ND	99	70-130%	105	70-130%	5.5	<30

**PQL = Practical Quantitation Limit** 

ND = Not Detected (Below RL).

RL = PQL X Dilution Factor

Reviewed/Approved By:

Mark J. Johnson

**Operations Manager** 

Date: 5.75-18

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

				,		c							1861623
Client		City of Lomita	System Num	n Number	) L			Analysis Requested	is Req	nestec			
Address		24373 Walnut Avenue		7	1940073	ر د				_			
		Lomita, CA 91717			70016	2							
Phone #		(310)903-2243		Destin	Destination Laboratory	atory							
Fax#				[X] CI	Clinical Laboratory	atory						Nit	
Project		Standard Analysis		RWQ	RWQCB Compliance	nce						O	
Sub Project	CWPF	CWPF 3rd week of May, 2018 Compliance Sampling			yes ELAP#			olved So langane	olor	ess (as ater) (I	TC/HI	dor 	
Comments	For TC/E	For TC/EC/BACT see weekly Distro CoC			0007						PC_		
Sampled by		David Huerta			1088								
Date	Time	Sample Idenitification	Matrix Type	pe Preserv	serv pH	Temp.	Total						Comments / P.S. Codes
5/16/2018	<b>OGAN</b> Reservoir	8.000 Reservoir Influent Site #3	DW 1W	_	Sr. L AIN	5-121.3	816	×	×	-			
5/16/2018 8/	¿CA MReservoi	<b>8分といれ、</b> Reservoir Effluent Site #5	DW 1W		7 8.01	3-	3.1				×	×	
5/16/2018 <i>B'</i> ,	12A Reservoir	8/72 Reservoir Effluent Site #5	DW 1W		N/A &	- 51	3.1	×	×			×	
5/16/2018 8:	76.∧ w Reservoi	8:ひょか Reservoir Effluent Site #5	DW, IW				3.			×			
										-			
				-						-			
	5		-						1	+		+	
										+			
									1	+		+	
Preservatives: (	(1) Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> (2) HC	Preservatives: (1) Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> (2) HCI (3) HNO3 (4) NH4CI	Matrix: DW-Drinking	rinking Wa	ter, WW-Wa	ste Water,	Water, WW-Waste Water, SW-Storm Water, GW- Ground Water, A-Air	Nater, GV	- Groun	d Wate	, A-Air	$\frac{1}{2}$	Type- 1-Routine, 2-Repeat, 3-
(5) H2SO4	(6) Na2SO3 (7) Cc	old (8) Other:					Repl	Replacement,	4-Special W-Well D- Dist.	al W-W	ol D- C	ist.	
Relinquis	Relinquished By (Sign)	Print Name / Company David Huerta / City of Lor	ny Lomita 5/16	5/16/2018	77	Date / Time	7		7		\ 5	11.	Priht Name / Company
	7	- J. Meday C	45 B S	S.16.6		$\mathcal{R}$	$\prec$				₹,	3	
Comments		1			Sample	Samples received:	d: Con ice		Intact	<u> </u>	Cust	ody se	Custody seals Temp 7 9 ( ) F
Shipped Via		Fed X     Golden State	NPS	Client	Other					Page	Page_I_of_		

"Your Water and Wastewater Analysis Solution"



08 June 2018 Clinical Lab No.: 18E2169

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

Project Name: Standard Analysis

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

Enclosed are the results of the analyses for samples received at the laboratory on 05/23/18 . Samples were received within temperature range, in correct containers and preservation.

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

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

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

Sincerely,

Stu Styles

Client Services Manager

tistes



Lomita, City ofProjectStandard AnalysisWork Order:18E216924373 Walnut AvenueSub Project:CWPF 4th Week of May, 2018 Compliance Sampling Received:05/23/18 15:00Lomita CA, 91717Project Manager:Mark AndersenReported:06/08/18

Reservoir Influent Site #3		18E2169-0	01 (Water)		Sample Da	te: 05/23/1	8 7:55 <b>Sa</b>	mpler: N	ot Listed
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	7.8		N/A	mg/L	05/23/18	05/23/18	1821135	
pH (Field)	Field	7.59		N/A	pH Units	05/23/18	05/23/18	1821135	
Temperature (Field)	Field	22		N/A	°C	05/23/18	05/23/18	1821135	
General Physical Analyses									
Apparent Color	SM 2120BM	ND	3.0	15	Color Units	05/23/18	05/23/18	1821158	
<u>Metals</u>									
Iron (Fe)	EPA 200.7	ND	100	300	ug/L	05/30/18	05/30/18	1822059	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	05/30/18	05/30/18	1822059	
Reservoir Effluent Site #5		18E2169-0	02 (Water)		Sample Da	te: 05/23/1	8 8:30 <b>Sa</b>	mpler: N	ot Listed
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	3.9		N/A	mg/L	05/23/18	05/23/18	1821135	
pH (Field)	Field	7.8		N/A	pH Units	05/23/18	05/23/18	1821135	
Temperature (Field)	Field	19.5		N/A	°C	05/23/18	05/23/18	1821135	
General Physical Analyses									
Apparent Color	SM 2120BM	ND	3.0	15	Color Units	05/23/18	05/23/18	1821158	
Odor Threshold	EPA 140.1-M	2	1	3	TON	05/23/18	05/23/18	1821158	
General Chemical Analyses									
Total Filterable Residue/TDS	SM 2540C	760	5.0	1000	mg/L	05/30/18	05/31/18	1822066	
ND Analyte NOT DETECTED at or									



June 1, 2018

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: 18E2169 Lab Number: J052403-01

Enclosed are results for sample(s) received 5/24/18 by Air Technology Laboratories. Samples were received intact and properly chilled. 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 18E2169

**SENDING LABORATORY:** 

**RECEIVING LABORATORY:** 

J852403-01

Clinical Laboratory of San Bernardino	Air Technology Labs	
21881 Barton Road	18501 East Gale Avenue Suite 130	
Grand Terrace, CA 92313	City of Industry, CA 91748	
Phone: 909.825.7693	Phone :(626) 964-4032	
Fax: 909.825.7696 Project Manager: Stu Styles	Fax:	
Please email results to Project Manager: Stu Styles  [ ] glaubig@clinical-lab.com [ \sqrt{x} styles@clinical-lab.com	om [] nelson@clinical-lab.com	
California EDT transfer those samples with PS co Water Trax Upload Client:	des provided [ ] Yes [ \] No	
	Other Days	
Subcontract Comments:	Office Days	
Analysis	Comm	ents
	9	Y
Sample ID: Reservoir Effluent Site #5 / 18E2169-02	Sampled: 05/23/18 08:30 PS Code: Water WTX ID:	
Methane RSK175	Report	in mg/L
Containers Supplied:		
40ml Amber Vial (B) 40ml Amber V	Vial (C)	
		* 8
		*
		つい
		D
BINI	20 - 0 101	Macille Man
15) O 5/2 4/1 O 7; Released By Date / Time	Received By I	3/24/19 8-00
michael   Could g:		pate / Time

Received By

Date / Time

Client:

**Clinical Laboratory** 

Attn:

Stu Styles

**Project Name:** 

NA

Project No.:

18E2169

Date Received:

05/24/18

Matrix:

Water

Reporting Units: mg/L

### **RSK175**

Lab No.:	J05240				
	Reservoir	Effluent			
Client Sample I.D.:	Site 7	<i>#5 /</i>			
	18E21	69-02			
Date/Time Sampled:	5/23/18	8 8:30			
Date/Time Analyzed:	5/29/18	13:57			
QC Batch No.:	180529GC8A1 AS 1.0				
Analyst Initials:					
Dilution Factor:					
	Result	RL			
ANALYTE	mg/L	mg/L			
Methane	0.33	0.0010			

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

RL = Reporting Limit

Reviewed/Annroyed Ry						
	D	DATTIC	houre	/ A	nnwawad	Dare

**Operations Manager** 

The cover letter is an integral part of this analytical report

QC Batch No.:

180529GC8A1

Matrix:

Water

Units: mg/L

QC for Dissolve	I Gases by	<b>EPA</b>	Procedure	RSKSOP-175	
-----------------	------------	------------	-----------	------------	--

La	Lab No.:				L	CS	I	CSD		
Date/Time A	Date/Time Analyzed:			5/29	/1	8 9:16	5/29	/18 9:30		
Analyst II	Analyst Initials:		AS			S		AS		
Da	Datafile:		29may002			ay003	291	may004		
Dilution F	Dilution Factor:		1.0			.0		1.0		
ANALYTE	PQL	RL	Results	% Rec.		Criteria	% Rec.	Criteria	%RPD	Criteria
Methane	0.0010	0.0010	ND	112		70-130%	116	70-130%	3.8	<30

**PQL** = **Practical Quantitation Limit** 

ND = Not Detected (Below RL).

RL = PQL X Dilution Factor

Reviewed/Approved By:	MAL	1	Date: 6/1/8
	Mark J. Johnson/		
	Operations Manager	r	

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

 $\phi$  | 3 Chain of Custody

1862169											Comments / P.S. Codes													Type- 1-Routine, 2-Repeat, 3-		Print Name / Company		exponers of CISR	Antact ( ) Custody seals Temp 6.6 ( ) F X C		
																+	+		1	+				4-Air	t, 4-Special W-Well D-Dist.	-1	7		Custody	Page 1 of 1	
	ted					O	dor		-				X											Vater, /	W-Well	1				age 1	
	Analysis Requested		Mo	etha	ane	(Wa			SKI	75)				X	_	-	-	-		-	-	-	-	A puno.	ecial		1	3	ıtact	Pe	•
	sis R				 Fotal	Disse	olor		ids			X	x x		_	+	+	+	-		+	+	+	3W-G	it, 4-SF		4	X	广		
	Analy					n / M						×					1							/ater, (	Replayeme	2	1		ريع ا		1
											Total Chlorine	3,5	3.9	3.9										V-Storm M	Repla	A			75 X		
											Temp.	23.0	5'51	19.5										Water, SV	`	) əu	K	_	ceived:		
		073		Destination Laboratory	[X] Clinical Laboratory	npliance		#	α	2	Hd	7.34	7,80	7,80										Matrix: DW-Drinking Water, WW-Waste Water, SW-Storm Water, GW- Ground Water, A-Air		Date / Time	00,	Ŝ	Samples received:	her	1
*	ber	1910073		tination L	Clinical L	WQCB Compliance	ves	ELAP#	1088	2	Preserv	N/A	N/A	. 7										Water, W				2,18	Sar	Other	
	System Number	•		Des	X	Z.					Type	1W	WI	WI										Drinking			5/23/2018		)	Client	
	Syste										Matrix T	DW 1	DW	DW.					+					trix: DW-						Sd/I	
		Т					-				Ma		D	n n	_	-	+	+		+	+	-	+	Ma	Τ	yn,	omita	503		-	-
	City of Lomita	24373 Walnut Avenue	Lomita, CA 91717	(310)903-2243		Standard Analysis	CWPF 4th week of May, 2018 Compliance	Sampling	For TC/EC/BACT see weekly Distro CoC		Sample Idenitification	7,55 4 Reservoir Influent Site #3	81 SA Reservoir Effluent Site #5	5/23/2018 🛠 🛂 AyReservoir Effluent Site #5										Preservatives: (1) Na.S.O., (2) HCI (3) HNO3 (4) NH4CI	(5) H2SO4 (6) Na2SO3 (7) Cold (8) Other:	(Sign) Print Name / Company		11 - T WCPM CX83		Fod X       Galden State	
									Fc		Time	55 A-Re	1 Sporte	& AnRe	-						-	+		(1) Na,S,O	(6) Na2S(	shed By				<b>)</b>	_
•	Client	Address		Phone #	Fax#	Project		Sub Project	Comments	Sampled by	Date	5/23/2018 72	5/23/2018	5/23/2018										Preservatives:	(5) H2SO4	Relinguished By (Sign)	P		Comments	)	Shipped Via

"Your Water and Wastewater Analysis Solution"

### Clinical Laboratory of San Bernardino, Inc.



06 June 2018 Clinical Lab No.: 18E2658

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

Project Name: Standard Analysis

Sub Project: CWPF 5th Week of May, 2018 Compliance Sampling

Enclosed are the results of the analyses for samples received at the laboratory on 05/30/18 . Samples were received within temperature range, in correct containers and preservation.

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

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

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

Sincerely,

Stu Styles

Client Services Manager

tistes

### Clinical Laboratory of San Bernardino, Inc.



Lomita, City ofProjectStandard AnalysisWork Order:18E265824373 Walnut AvenueSub Project:CWPF 5th Week of May, 2018 Compliance Sampling Received:05/30/18 15:00Lomita CA, 91717Project Manager:Mark AndersenReported:06/06/18

Reservoir Influent Site #3		18E2658-0	01 (Water)		Sample Da	<b>te:</b> 05/30/18	8 7:10 <b>Sa</b>	mpler: P.1	M.
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	5.73		N/A	mg/L	05/30/18	05/30/18	1822099	
pH (Field)	Field	7.8		N/A	pH Units	05/30/18	05/30/18	1822099	
Temperature (Field)	Field	22.2		N/A	°C	05/30/18	05/30/18	1822099	
General Physical Analyses									
Apparent Color	SM 2120BM	5.0	3.0	15	Color Units	05/30/18	05/30/18	1822134	
<u>Metals</u>									
Iron (Fe)	EPA 200.7	ND	100	300	ug/L	05/31/18	05/31/18	1822098	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	05/31/18	05/31/18	1822098	
Reservoir Effluent Site #5		18E2658-0	02 (Water)		Sample Da	te: 05/30/18	8 7:20 <b>Sa</b>	mpler: P.1	M.
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	3.39		N/A	mg/L	05/30/18	05/30/18	1822099	
pH (Field)	Field	8		N/A	pH Units	05/30/18	05/30/18	1822099	
Temperature (Field)	Field	20.6		N/A	°C	05/30/18	05/30/18	1822099	
General Physical Analyses									
Apparent Color	SM 2120BM	ND	3.0	15	Color Units	05/30/18	05/30/18	1822134	
Odor Threshold	EPA 140.1-M	2	1	3	TON	05/30/18	05/30/18	1822134	
General Chemical Analyses									
Total Filterable Residue/TDS	SM 2540C	730	5.0	1000	mg/L	05/31/18	06/01/18	1822110	
ND Analyte NOT DETECTED at or a	above the reporting limit								



June 7, 2018



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: 18E2658

Lab Number:

J053104-01

Enclosed are results for sample(s) received 5/31/18 by Air Technology Laboratories. Samples were received intact and properly chilled. 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

J053104-01

## 18E2658

SENDING LABORATORY:	<b>RECEIVING LABORATORY:</b>	
Clinical Laboratory of San Bernardino	Air Technology Labs	
21881 Barton Road	18501 East Gale Avenue Suite 130	
Grand Terrace, CA 92313	City of Industry, CA 91748	
Phone: 909.825.7693	Phone :(626) 964-4032	
Fax: 909.825.7696	Fax:	
Project Manager: Stu Styles		
	,	5-4
Subcontract Comments:		¥
Analysis	Comments	
	· · · · · · · · · · · · · · · · · · ·	į.
Sample ID: Reservoir Effluent Site #5 / 18E2658-02	Sampled: 05/30/18 07:20 PS Code: Water WTX ID:	
01	D	
Methane RSK175	Report in mg/L	
Containers Supplied:		
Oml Amber Vial (B) 40ml Amb	ber Vial (C)	
		í
	12	:: 10
		200
31/18 05/31/18 07 Released By Date / Time	7:20 Michael Salam 5/3/18	8:00
Released By Date / Time	Received By Date / Time	1 1 11
Michael Jalman 5/31/18 1	1:49 106 12 5/31/	18 119
Released By Date / Time	Received By Date / Time	

Client:

**Clinical Laboratory** 

Attn:

Stu Styles

**Project Name:** 

NA

Project No.: Date Received: 18E2658 05/31/18

Matrix:

Water

Reporting Units: mg/L

### **RSK175**

Lab No.:	J05310				
	Reservoir	Effluent			
Client Sample I.D.:	Site	#5/			
	18E265	58-02			
Date/Time Sampled:	5/30/18	37:20			
Date/Time Analyzed:	6/5/18	12:13			
QC Batch No.:	180605GC8A2				
Analyst Initials:	AS	3			
Dilution Factor:	1.0	)			
	Result	RL			
ANALYTE	mg/L	mg/L			
Methane	0.31	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 6-7-18

QC Batch No.:

180605GC8A2

Matrix:

Water

Units: mg/L

#### QC for Dissolved Gases by EPA Procedure RSKSOP-175

Lab	Lab No.:			1	LCS	L	CSD		
Date/Time Ar	Date/Time Analyzed:			6/5/1	8 10:41	6/5/1	8 10:57		
Analyst Ini	Analyst Initials:		AS		AS	5	AS		
Data	Datafile:		un021	05	un018	05j	un019		
Dilution Fa	Dilution Factor:		1.0		1.0		1.0		
ANALYTE	ANALYTE PQL		RL Results		% Rec. Criteria		% Rec. Criteria		Criteria
Methane	0.0010	0.0010	ND	105	70-130%	105	70-130%	0.4	<30

**PQL** = Practical Quantitation Limit

ND = Not Detected (Below RL).

RL = PQL X Dilution Factor

Reviewed/Approved By:

Mark J. Johnson

**Operations Manager** 

Date: 6-7-18

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

Client	City of Lomita	S	System Nu	umber				Analysis Requested	sis Re	dnes	ted				
Address	24373 Walnut Avenue			40,	1010073			_	_						
	Lomita, CA 91717			- 0	, , , , ,	•				M					
Phone #	(310)903-2243			Destination	estination Laboratory	tory				leth					
Fax#	•	G		[X] Clinic	X] Clinical Laboratory	tony			Та:	ane					
Project	Standard Analysis			RWQCB	RWQCB Compliance	e S		on / M	Co	(Wa	0				
Sub Broicet	CWPF 5th week of May, 2018 Compliance				yes				olor	iter	dor				
and Project	Sampling			Ш	ELAP#					) (R					
Comments	For TC/EC/BACT see weekly Distro CoC			7	000				. در:	SK					
Sampled by	P. M.			-	000					175)					
Date Time	ne Sample Idenitification	Matrix	Type	Preserv	Hd	Temp.	Total							Comments / P.S. Codes	Ş
5/30/2018 O 7	5/30/2018 O 7 JO Reservoir Influent Site #3	DW	WI	N/A	7.80	3223	ļ ,	×	×		$\vdash$				
5/30/2018 0-7:	5/30/2018 D-72C Reservoir Effluent Site #5	DW	MΙ	N/A	0%	206	3.39		X		×				
5/30/2018 CT	ろフ2C Reservoir Effluent Site #5	DW,	MI	7						×					
	gr.														
									+			1	1		
Preservatives: (1)	Preservatives: (1) Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> (2) HCI (3) HNO3 (4) NH4CI	Matrix:	Matrix: DW-Drinkin	ng Water	; WW-Was	ste Water, S	g Water, WW-Waste Water, SW-Storm Water, GW- Ground Water, A-Air	/ater, G	W- Gro	und W	ater, A	-Air		Type- 1-Routine, 2-Repeat, 3-	2-Repeat, 3-
(5) H2SO4 (t	(5) H2SO4 (6) Na2SO3 (7) Cold (8) Other:						Repla	Replacemen	4	cial M	/-Well	Special W-Well D-Dist.			
Relinquish	Relinquished By (Sign) Print Name / Company				Date /	Time,			(	ر.				Hrint Name Company	
Petrice B.	Petrick & more Catrick Marketing of Lomita	nita	5/30/201	/ 81	12: 7	50	t	1	5	2	1		11(0)	11/1 12/2	
3	MAN T WOOD PAIR	Ì	5.30.	8	3.0	0		7	1	A A		M		13/2 C(SB	
Comments:			1		Samples	Samples received:	On ice	ر يو	Intact	yet (		ustody	Sustody seals Temp	Femp_6.6 ()F	Z C
Shipped Via	Fed X     Golden State	I I UPS	UPS     Client		Other					Pay	Page_I_of_	of_1_			

### **APPENDIX B**

METHANE MONITORING LOG



# CITY OF LOMITA PUBLIC WORKS DEPARTMENT

# CYPRESS WATER PRODUCTION FACILITY HANDHELD METHANE LOG READINGS

			2018				
DATE	DAY	N	IETHANE H	IANDHEI	.D		COMMENTS
5/1/2018	Tue	CH4- (	0%	Оху-	21.6%		
5/2/2018	Wed	CH4- (	0%	Оху-	20.9%		
5/3/2018	Thu	CH4- (	0%	Оху-	20.8%		
5/4/2018	Fri	CH4- (	0%	Оху-	20.6%		
5/5/2018	Sat	CH4- (	0%	Оху-	20.7%		
5/6/2018	Sun	CH4- (	0%	Оху-	20.9%		
5/7/2018	Mon	CH4- (	0%	Оху-	20.9%		
5/8/2018	Tue	CH4- (	0%	Оху-	20.9%		
5/9/2018	Wed	CH4- (	0%	Оху-	22.8%		
5/10/2018	Thu	CH4- (	0%	Оху-	20.8%		
5/11/2018	Fri					OFFLINE	
5/12/2018	Sat					OFFLINE	
5/13/2018	Sun					OFFLINE	
5/14/2018	Mon					OFFLINE	
5/15/2018	Tue					OFFLINE	
5/16/2018	Wed	CH4- (	0%	Оху-	20.9%		
5/17/2018	Thu	CH4-	0%	Оху-	20.9%		
5/18/2018	Fri	CH4-	0%	Оху-	20.8%		
5/19/2018	Sat	CH4-	0%	Оху-	20.7%		
5/20/2018	Sun	CH4-	0%	Оху-	20.9%		
5/21/2018	Mon	CH4-	0%	Оху-	20.9%		
5/22/2018	Tue	CH4-	0%	Оху-	20.7%		
5/23/2018	Wed	CH4-	0%	Оху-	20.6%		
5/24/2018	Thu	CH4-	0%	Оху-	20.8%		
5/25/2018	Fri	CH4-	0%	Оху-	20.9%		
5/26/2018	Sat	CH4-	0%	Оху-	20.8%		
5/27/2018	Sun	CH4-	0%	Оху-	20.5%		50
5/28/2018	Mon	CH4-	0%	Оху-	20.6%		
5/29/2018	Tue	CH4-	0%	Оху-	20.7%		
5/30/2018	Wed	CH4-	0%	Оху-	20.6%		
5/31/2018	Thu	CH4-	3%	Оху-	20.6%		

ND- Non Detect

CH4- Methane

Oxy- Oxygen

Day Off/Holiday- Red

### **APPENDIX C**

NITRIFICATION MONITORING DATA SUMMARY

## <sup>1</sup> MONTHLY NITRIFICATION MONITORING SUMMARY REPORT CITY OF LOMITA, System No. 1910073 --- Month, Year: <u>May 2018</u>

# Code	Sample ID	Location	Sample Date	Temp	рН	Total Chlorine	Free Chlorine	Total Ammonia	Free Ammonia	Nitrite <sup>3</sup>	Nitrate	Coliform <sup>2</sup>	HPC	Zone	Comments
Units/O	thers $ ightarrow$		MM/DD/YYYY	°C		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	P/A	CFU/ml	<u> </u>	
1 D	513-003	1948 W 252nd St	5/2/2018	19.3	7.71	3.60	0.06	0.59	0.00	0.005	ND	A	ND		Well/MWD Blend
2 D	S13-004	24632 S Moon Ave	5/2/2018	19.1	7.84	3.50	0.14	0.54	0.00	0.007	ND	Α	6	1	Well/MWD Blend
3 D	S13-008	25417 Pennsylvania Ave	5/2/2018	19.3	7.76	4.00	0.08	0.58	0.00	0.009	ND	Α	ND	1	Well/MWD Blend
4 D	A	2052 Dawn St	5/2/2018	20.6	7.23	1.65	0.14	0.40	0.10	0.002	ND	Α	89	1	Well/MWD Blend
5 D		Reservoir SP5	5/2/2018	18.6	7.8	4.00	0.20	0.60	0.00	0.009	ND	A	ND	1	Well/MWD Blend
6 D	S13-001	1912 W 259th St	5/2/2018	17.8	8.60	2.80	0.03	0.52	0.01	0.008	ND	Α	ND	2	MWD Only
7 D	\$13-002	26314 S Monte Vista Ave	5/2/2018	17.7	8.54	2.70	0.13	0.46	0.00	0.006	NĐ	Α	ND	3	MWD Only
8 D	S13-005	2500 PCH	5/2/2018	17.8	8.44	2.70	0.06	0.48	0.01	0.004	ND	A	NĐ	2	MWD Only
												,		,	
1 D	S13-003	1948 W 252nd St	5/9/2018	19.9	7.8 <u>1</u>	3.50	0.04	0.55	0.00	0.006	NĐ	A	ND	1	Well/MWD Blend
2 D	\$13-004	24632 S Moon Ave	5/9/2018	19.5	7.60	3.40	0.08	0.49	0.06	0.005	NĐ	Α	ND	1	Well/MWD Blend
3 D	S13-008	25417 Pennsylvania Ave	5/9/2018	20.8	7.92	3.70	0.04	0.60	0.05	0.007	ND	A	2	1	Well/MWD Blend
4 D	Α	2052 Dawn St	5/9/2018	20.0	7.87	1.50	0.01	0.39	0.14	0.006	0.42	Α	23	1	Well/MWD Blend
5 D		Reservoir SP5	5/9/2018	18.7	8.04	3.76	0.04	0.60	0.60	0.003	NĎ	Α	ND	1	Well/MWD Blend
6 D	S13-001	1912 W 259th St	5/9/2018	18.1	8.46	2.70	0.06	0.52	0.05	0.006-	0.43	A	ND	2	MWD Only
7 D	S13-002	26314 S Monte Vista Ave	5/9/2018	17.6	8.56	2.60	0.13	0.51	0.13	0.003	0.43	Α	. 7	3	MWD Only
8 D	S13-005	2500 PCH	5/9/2018	18.2	8.54	2.70	0.11	0.49	0.07	0.006	0.44	A	ND	2	MWD Only
							-,								
1 D	S13-003	1948 W 252nd St	5/16/2018	16.1	8.28	2.70	0.15				0.45	ΑΑ	ND		Well/MWD Blend
2 D	513-004	24632 S Moon Ave	5/16/2018	16.8	8.26	2.12	0.07	3:449,47 <sub>6</sub> 4,150	\$,000 (10 <del>8</del> ,000 (108)		0.48	Α	ND	1	Well/MWD Blend
3 D	S13-008	25417 Pennsylvania Ave	5/16/2018	18.7	8.15	1.84	0.15				0.5	Α	3	1	Well/MWD Blend
4 D	А	2052 Dawn St	5/16/2018	18.5	8.24	1.04	0.05			dyna deligation	0.42	Α	67	1	Well/MWD Blend
5 D		Reservoir SP5	5/16/2018	19.1	8.01	3.10	0.20	na la Yindagi			ND	A	NĐ	1	Well/MWD Blend
6 D	S13-001	1912 W 259th St	5/16/2018	18.2	8.70	2.60	0.12	Mark Andrews			0.45	Α	NĐ	2	MWD Only
7 D	S13-002	26314 S Monte Vista Ave	5/16/218	18.0	8.65	2.70	0.11	a sparked for the second		电分类子 经	0.46	Α	ND	3	MWD Only
8 D	S13-005	2500 PCH	5/16/2018	17.6	8.48	2.40	80.0		as fide for th		0.45	Α	ND	2	MWD Only
							<u> </u>	Y							
1 D	S13-003	1948 W 252nd St	5/23/2018	20.0	7.66	3.20	0.06	0.74	0.03	0.002	ND	Α	ND	1	Well/MWD Blend
2 D		24632 S Moon Ave	5/23/2018	19.7	7.64	3.40	0.07	0.62	0.04	0.005	ND	Α	2	1	Well/MWD Blend
3 D	S13-008	25417 Pennsylvania Ave	5/23/2018	20.2	7.73	3.70	0.09	0.62	0.00	0.004	ND	Α	ND	1	Well/MWD Blend
4 D	Α	2052 Dawn St	5/23/2018	20.3	7.74	1.74	0.11	0.48	0.09	0.005	ND	A	40	·	Well/MWD Blend
5 D		Reservoir SP5	5/23/2018	19.5	7.80	3.90	0.50	0.72	0.00	0.004	ND	Α	ND	_	Well/MWD Blend
6 D	S13-001	1912 W 259th St	5/23/2018	20.3	8.74	2.60	80.0	0.56	0.06	0.004	ND	Α	NĎ	-	MWD Only
7 D		26314 S Monte Vista Ave	5/23/2018	18.3	8.28	2.50	0.04	0.54	0.00	0,004	ND	Α	ND	•	MWD Only
8 D	\$13-005	2500 PCH	5/23/2018	18.7	8.14	2.20	0.04	0.49	0.04	0.004	ND	Α	NĐ	2	MWD Only
						<del>,                                      </del>		L Whiteham a Truesa		land record courses in				1 -	111 117 414 (D. D.L I
1 D		1948 W 252nd St	5/30/2018	20.4	7.79	3.30	0.12	0.64	0.07	0.004	ND	A	2		Well/MWD Blend
2 D		24632 S Moon Ave	5/30/2018	20.2	7.89	3.10	0.04	0.57	0.06	0.011	ND	Α	2		Well/MWD Blend
3 D		25417 Pennsylvania Ave	5/30/2018	21.4	7.88	3.80	0.10	0.64	0.05	0.007	ND	A	ND		Well/MWD Blend
4 D	Α	2052 Dawn St	5/30/2018	20.2	7.85	1.94	0.04	0.51	0.19	0.010	ND	A	5	_	Well/MWD Blend
5 D		Reservoir	5/30/2018	20.6	8.00	3.39	0.11	0.70	0.00	0.005	ND	Α	ND	•	Well/MWD Blend
6 D		1912 W 259th St	5/30/2018	19.3	8.31	2.50	80.0	0.47	0.07	0.014	ND	A	ND		MWD Only
7 D		26314 S Monte Vista Ave	5/30/2018	19.0	8.33	2.50	80.0	0.50	0.04	0.006	ND	A	ND		MWD Only
8 D	S13-005	2500 PCH	5/30/2018	19.5	8.28	2.50	0.11	0.50	0.03	0.005	ND	Α	ND	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>&</sup>lt;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.