CITY OF LOMITA

Cypress Water Production Facility Monthly Status Report

June 2017

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CITY OF LOMITA

July 10, 2017

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

Subject: System No. 1910073 - Monthly Report for the Cypress Water Production Facility (CWPF) for the period of June 1 through June 30, 2017.

Dear Mr. Williams,

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 June 2017.

If you should have any questions or concerns, please contact me at 310-325-7110 Ext. 124.

Sincerely,

Mark A. McAvoy, P.E.
Public Works Director/City Engineer

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 June 2017 maintaining water levels inside the reservoir ranging from 7 feet to 10 feet. The average flow from Well No. 5 was 503 gpm and 503 gpm from MWD. The blend ratio for month was 50% Well water and 50% MWD water. See Table 1 below for production totals for the month of May 2017.

Table 1. Monthly Production Totals.

	Production for June 2017		
Well No. 5	60.37	ac-ft	(19,669,228 gallons)
MWD	59.59	ac-ft	(19,419,000 gallons)
Combined Total	119.96	ac-ft	(39,088,228 gallons)
Daily	3.87	ac-ft/day	(1,302,941 gallons/day)

C. OPERATIONAL INTERRUPTIONS

There were no operational interruptions during the month of June 2017. 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. Iron and Manganese in the raw water (SP1) for the month were below and above the MCL, respectively. 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 615 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 850 mg/L and 360 mg/L, respectively.

E3-2 HARDNESS

The sampling results for the month indicate the hardness levels of the blended water to be on average 240 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 0.43 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 June 2017 in Appendix B.

E3-5 ODOR

The odor levels at the CWPF effluent averaged 3.3 units for the month.

E4. NITRIFICATION MONITORING

Weekly Nitrification sampling was performed during the month of June 2017, see Appendix C.

F. TABLES

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

Date, week of	SP1, Well Raw Water Discharge							SP2, Combined Pressure Filter Effluent			SP3, After chloramination static mixer; reservoir entry					
	Iron, ug/L	*MCL = 3 00 ug/L	Manganese, ug/L	*MCL = 50 ug/L	Color	*MCL=15	Total Coliform	Total Coliform	HPC, MPN/100mL	MCL=500	Iron, mg/L	*MCL = 300 ug/L	Manganese, mg/L	*MCL = 50 ug/L	Color	*MCL=15
6/7/2017											ND	300	ND	50	ND	15
6/14/2017	230	300	170	50	10	15	A	A	A	500	ND	300	ND	50	5	15
6/21/2017											ND	300	ND	50	5	15
6/28/2017											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, week of	SP2	SP3			SP4			SP5		
	Free Cl	Free Cl	Total Cl	Total NH_3	Free Cl	Total Cl	Total NH_3	Free Cl	Total Cl	Total NH_3
6/7/2017	4.48	0.44	4.90	1.09	0.52	4.21	0.84	0.07	3.29	0.68
6/14/2017	5.23	0.74	4.36	0.91	0.45	4.16	0.74	0.06	3.33	0.71
6/21/2017	4.66	0.47	5.20	1.01	0.46	4.08	0.75	0.08	3.46	0.82
6/28/2017	4.66	0.51	4.84	1.01	0.49	3.92	0.79	0.06	3.45	0.73

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

Date, week of	TDS, mg/L				T.O.N.		Hardness, mg/L				Methane (Water), mg/L	
	SP1 - Raw Well Water	SP6 - MWD Water	SP5 - Reservoir Effluent	Goal= 500 - 750 mg/L	SP5 - Reservoir Effluent	MCL= 3	SP1 - Raw Well Water	SP6 - MWD Water	SP5 - Reservoir Effluent	Goal= 180 - 250 mg/L	SP1 - Raw Well Water	SP5 - Reservoir Effluent
6/7/2017			670	500-750	2	3						0.40
6/14/2017	850	360	580	500-750	5	3	360	120	230	180-250	3	0.53
6/21/2017			650	500-750	3	3						0.45
6/28/2017			560	500-750	3	3						0.44
Average			**615**	500-750	**3.3**	3						**0.43**

Notes:
Monthly- Orange; Weekly- Yellow
ppm – parts per million
mg/L – milligram per liter
T.O.N. - Threshold Odor Number
TDS - Total Dissolved Solids
Hardness - As total CaCO3
Methane (Water) - Methane dissolved in water

Monthly CWPF Monitoring Report – June 2017
Cypress Water Production Facility
City of Lomita; System No. 1910073

Sample Locations and Parameters	Frequency	MCL/ Goal	6/7 1stWk or Mo. Result (date)	6/14 2ndWk	6/21 3rdWk	6/28 4thWk	5thWk	Comments and/or Other Info.
SP1 --- Also called Well 5 Raw Water or Site#1.								
TDS, ppm	Monthly	See SP5	**850** 6/14/17	**Operations Data/Information:**				*Chlorine injected after SP1, before entering the greensand filter.
Hardness	Monthly	See SP5	**360** 6/14/17	**CWPF operation days**				
CH4, ppm	Monthly	See SP5	**3** 6/14/17	**On Well 5:** Daily average flow - 503 gpm; total prod. – 60.37 AF				
Iron, ppb	Monthly	See SP3	**230** 6/14/17	**Combined Well 5/MWD data:** Average Well 5: MWD blend Ratio – 50% WELL:50% MWD; total prod.- 119.96 AF				
Manganese, ppb	Monthly	See SP3	**170** 6/14/17					
Color, units	Monthly	See SP3	**10** 6/14/17	Chlorine Dosage: N/A*				
Total Coliform, P or A	Monthly	A	**A** 6/14/17					
SP2 --- Also called Filter Effluent or Site#3.								
Total Coliform, P or A	Monthly	A	A					*Ammonia added after filter effluent
HPC,MPN/100 ml	Monthly	500	A	Ammonia Dosage: N/A*				
Free Cl Res, ppm	**Continuous**	Average: 4.76; Range: 4.48 – 5.23						
SP3 --- Also called the Site After Chloramination & Before MWD Blending or Site#4.								
Iron, ppb	Weekly	300	ND	ND	ND	ND		
Manganese, ppb	Weekly	50	ND	ND	ND	ND		
Color	Weekly	15	ND	5	5	5		
Free and Total Cl Res, ppm	**Continuous**	Free Cl: Average: 0.54; Range: 0.44 – 0.74 Total Cl: Average: 4.82; Range: 4.36 – 5.20 Ammonia: Average: 1.00; Range: 0.91 – 1.09						
SP4 --- Also called Reservoir Influent or the Site Well 5/MWD Water Blend Point/Phosphate Injection.								
Phosphate Injection		Phosphate Dosage: 0.40 mg/L						
Free and Total Cl Res, ppm	**Continuous**	Free Cl: Average: 0.48; Range: 0.45 – 0.52 Total Cl: Average: 4.09; Range: 3.92 – 4.21 Ammonia: Average: 0.78; Range: 0.74 – 0.84						Cl/NH3 Ratio: 5.25
SP5 --- Also called Reservoir Effluent or Site#5. SP5 discharges into Zone 1 of the distribution system.								
TDS, ppm	Weekly	SI Goal: 500-750ppm	670	580	650	560		
Hardness	Monthly	SI Goal: 180-250ppm		240				
CH4, ppm	Weekly	Goal: from PA	0.28	0.39	0.50	0.54		% CH4 Removal: 85.8
Odor, units	Monthly	1	2	5	3	3		
Free and Total Cl Res, ppm	Continuous	Free Cl: Average: 0.07; Range: 0.06 – 0.08 Total Cl: Average: 3.38; Range: 3.29 – 3.46 Ammonia: Average: 0.73; Range: 0.68 – 0.82						Cl/NH3 Ratio: 4.61
Headspace of the Cypress Reservoir.								
[1]CH4 ppmv; using Portable Device	Daily (from log)	Goal - LEL	CH4 Average: 0.03% CH4 Range: 0% - 1%					
SP 6 --- MWD Source Feeding CWPF. Also called Zone 2 of the distribution system or Site #6.								
TDS, ppm	Monthly	-----		360				
Hardness	Monthly	-------		120				

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

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

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

APPENDIX A

LABORATORY RESULTS

Clinical Laboratory of San Bernardino, Inc.

23 June 2017 Clinical Lab No.: 17F0681

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

Project Name: Standard Analysis
Sub Project: CWPF 1st week June 2017 Compliance Sampling

Enclosed are the results of the analyses for samples received at the laboratory on 06/07/17 . Samples were received within temperature range, in correct containers and preservation.

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

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

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

Sincerely,

Stu Styles
Client Services Manager

Lomita, City of
24373 Walnut Avenue
Lomita CA, 91717

Project: Standard Analysis
Sub Project: CWPF 1st week June 2017 Compliance Sampling
Project Manager: Mark Andersen

Work Order: 17F0681
Received: 06/07/17 15:30
Reported: 06/23/17

Reservoir Influent Site #3 **17F0681-01 (Water)** **Sample Date:** 06/07/17 9:10 **Sampler:** Patrick McCue

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	**5.8**		N/A	mg/L	06/07/17	06/07/17	1723191	
pH (Field)	Field	**7.78**		N/A	pH Units	06/07/17	06/07/17	1723191	
Temperature (Field)	Field	**21.4**		N/A	°C	06/07/17	06/07/17	1723191	
General Physical Analyses									
Apparent Color	SM 2120BM	ND	3.0	15	Color Units	06/07/17	06/07/17	1723166	
Metals									
Iron (Fe)	EPA 200.7	ND	100	300	ug/L	06/14/17	06/14/17	1724069	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	06/14/17	06/14/17	1724069	

Reservoir Effluent Site #5 **17F0681-02 (Water)** **Sample Date:** 06/07/17 9:20 **Sampler:** Patrick McCue

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	**3.6**		N/A	mg/L	06/07/17	06/07/17	1723191	
pH (Field)	Field	**8.04**		N/A	pH Units	06/07/17	06/07/17	1723191	
Temperature (Field)	Field	**20.2**		N/A	°C	06/07/17	06/07/17	1723191	
General Physical Analyses									
Apparent Color	SM 2120BM	ND	3.0	15	Color Units	06/07/17	06/07/17	1723166	
Odor Threshold	EPA 140.1-M	**2**	1	3	TON	06/07/17	06/07/17	1723166	
General Chemical Analyses									
Total Filterable Residue/TDS	SM 2540C	**670**	5.0	1000	mg/L	06/09/17	06/13/17	1723188	

ND Analyte NOT DETECTED at or above the reporting limit

Air TECHNOLOGY Laboratories, Inc.

June 14, 2017

ADE-1461
EPA Methods TO3, TO14A, TO15 SIM & SCAN
ASTM D1946

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

TX Cert T104704450-14-6
EPA Methods TO14A, TO15

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

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

LABORATORY TEST RESULTS

Project Reference: 17F0681
Lab Number: I060802-01

Enclosed are results for sample(s) received 6/08/17 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 NELAC 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

17F0681

I060802-01

SENDING LABORATORY:

Clinical Laboratory of San Bernardino
21881 Barton Road
Grand Terrace, CA 92313
Phone: 909.825.7693
Fax: 909.825.7696
Project Manager: Stu Styles

RECEIVING LABORATORY:

Air Technology Labs
18501 East Gale Avenue Suite 130
City of Industry, CA 91748
Phone :(626) 964-4032
Fax:

Please email results to Project Manager: Stu Styles
[ ] glaubig@clinical-lab.com [ ] ybarra@clinical-lab.com [✓] styles@clinical-lab.com [ ] nelson@clinical-lab.com

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

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

Analysis	Comments
Sample ID: Reservoir Effluent Site #5 / 17F0681-02 -01	**Sampled: 06/07/17 09:20 PS Code: Water** **WTX ID:**
Methane RSK175	Report in mg/L

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

4°C

Released By	Date / Time	Received By	Date / Time
BJ Sly	06/08/17 07:45		6/8/17 938
	6/8/17 1026		6/8/17 1026

Client: Clinical Laboratory
Attn: Stu Styles
Project Name: NA
Project No.: 17F0681
Date Received: 06/08/17
Matrix: Water
Reporting Units: mg/L

RSK175

Lab No.:	**I060802-01**							
Client Sample I.D.:	**Reservoir Effluent Site #5/17F0681-02**							
Date/Time Sampled:	**6/7/17 9:20**							
Date/Time Analyzed:	**6/12/17 10:08**							
QC Batch No.:	**170612GC8A1**							
Analyst Initials:	**AS**							
Dilution Factor:	**1.0**							
ANALYTE	**Result mg/L**	**RL mg/L**						
Methane	0.28	0.0010						

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

Reviewed/Approved By: _____ Date 6-14-17

Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

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

QC Batch No.: 170612GC8A1
Matrix: Water
Units: mg/L

QC for Dissolved Gases by EPA Procedure RSKSOP-175

Lab No.:		Method Blank		LCS		LCSD			
Date/Time Analyzed:		6/12/17 8:55		6/12/17 9:08		6/12/17 9:22			
Analyst Initials:		AS		AS		AS			
Datafile:		12jun002		12jun003		12jun004			
Dilution Factor:		1.0		1.0		1.0			
ANALYTE	PQL	RL	Results	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Methane	0.001	0.001	ND	107	70-130%	112	70-130%	4.7	<30

PQL = Practical Quantitation Limit
ND = Not Detected (Below RL).
RL = PQL X Dilution Factor

Reviewed/Approved By: _____ Date: 6-14-17
Mark J. Johnson
Operations Manager

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

Clinical Laboratory of San Bernardino, Inc.

913

Chain of Custody

1 (4)

17F0681

Client	*City of Lomita*	System Number	Analysis Requested
Address	24373 Walnut Avenue Lomita, CA 91717	**1910073**	
Phone #	(310) 325-9830	*Destination Laboratory*	
Fax #	(310) 325-3627	[X] Clinical Laboratory	
Project	*Standard Analysis*	*RWQCB Compliance*	
Sub Project	*CWPF 1st week of JUNE, 2017 Compliance Sampling*	*yes*	
Comments	*For TC/EC/BACT see weekly Distro CoC*	ELAP #	
Sampled by	*Patrick McCue*	**1088**	

Date	Time	Sample Idenitification	Matrix	Type	Preserv	Total Chlorine	Iron	Manganese	Total Dissolved Solids	Color	Methane (Water) (RSK175)	Total Hardness (as CaCO3)	BACT/TC/HPC	Odor	Comments / P.S. Codes
6/7/2017	0910	Reservoir Influent Site #3	DW	1W	N/A	5.80	X	X		X					ph 7.78 temp 21.4°
6/7/2017	0920	Reservoir Effluent Site #5	DW	1W	N/A	3.60				X				X	ph 8.04 temp 20.2°
6/7/2017	0920	Reservoir Effluent Site #5	DW	1W	HCL				X		X				

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

Matrix: DW-Drinking Water, WW-Waste Water, SW-Storm Water, GW- Ground Water, A-Air

Type- 1-Routine, 2-Repeat, 3-Replacement, 4-Special W-Well D- Dist.

Relinquished By (Sign)	*Print Name / Company*	*Date / Time*	*Received By (Sign)*	*Print Name / Company*
Patrick McCue	City of Lomita	6/7/17 / 0925 / 2:00		J. Wood / CSB
	J. Wood / CSB	6.7.17 / 3:30		AM CSB

Comments:

Samples received: ~~(~~) On ice (X) Intact ( ) Custody seals Temp 10.4 ( ) F (X) C

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

"Your Water and Wastewater Analysis Solution"

Clinical Laboratory of San Bernardino, Inc.

30 June 2017

Clinical Lab No.: 17F1418

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

Project Name: Standard Analysis
Sub Project: Monthly Compliance / Monthly 2nd Week June

Enclosed are the results of the analyses for samples received at the laboratory on 06/14/17 . Samples were received within temperature range, in correct containers and preservation.

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

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

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

Sincerely,

Stu Styles
Client Services Manager

Lomita, City of	Project: Standard Analysis	Work Order: 17F1418
24373 Walnut Avenue	Sub Project: Monthly Compliance / Monthly 2nd Week June	Received: 06/14/17 15:45
Lomita CA, 91717	Project Manager: Mark Andersen	Reported: 06/30/17

Raw Water Site #1 **17F1418-01 (Water)** **Sample Date:** 06/14/17 7:25 **Sampler:** DGM

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	0		N/A	mg/L	06/14/17	06/14/17	1725009	
pH (Field)	Field	**7.53**		N/A	pH Units	06/14/17	06/14/17	1725009	
Temperature (Field)	Field	**22.5**		N/A	°C	06/14/17	06/14/17	1725009	
Microbiology Analyses									
Total Coliform	SM 9223	A		N/A	P/A	06/14/17	06/15/17	1724125	
E. Coli	SM 9223	A		N/A	P/A	06/14/17	06/15/17	1724125	
Plate Count	SM9215B	**270**	1	500	CFU/ml	06/14/17	06/16/17	1724175	HT-08
General Physical Analyses									
Apparent Color	SM 2120BM	**10.0**	3.0	15	Color Units	06/14/17	06/14/17	1724124	
General Chemical Analyses									
Hardness, Total (as CaCO3)	Calculated	**360**	6.6	N/A	mg/L	06/22/17	06/22/17	[CALC]	
Total Filterable Residue/TDS	SM 2540C	**850**	5.0	1000	mg/L	06/21/17	06/22/17	1725090	
Metals									
Calcium (Ca)	EPA 200.7	**94**	1.0	N/A	mg/L	06/22/17	06/22/17	1725116	
Iron (Fe)	EPA 200.7	**230**	100	300	ug/L	06/23/17	06/23/17	1725160	
Magnesium (Mg)	EPA 200.7	**30**	1.0	N/A	mg/L	06/22/17	06/22/17	1725116	
Manganese (Mn)	EPA 200.7	**170**	20	50	ug/L	06/23/17	06/23/17	1725160	

Filter Effluent (Free Chlorine) Site #2 **17F1418-02 (Water)** **Sample Date:** 06/14/17 7:35 **Sampler:** DGM

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	**7.6**		N/A	mg/L	06/14/17	06/14/17	1725009	
pH (Field)	Field	**7.53**		N/A	pH Units	06/14/17	06/14/17	1725009	
Temperature (Field)	Field	**22.8**		N/A	°C	06/14/17	06/14/17	1725009	
Microbiology Analyses									
Total Coliform	SM 9223	A		N/A	P/A	06/14/17	06/15/17	1724125	
E. Coli	SM 9223	A		N/A	P/A	06/14/17	06/15/17	1724125	
Plate Count	SM9215B	ND	1	500	CFU/ml	06/14/17	06/16/17	1724175	HT-08

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

Lomita, City of
24373 Walnut Avenue
Lomita CA, 91717

Project: Standard Analysis
Sub Project: Monthly Compliance / Monthly 2nd Week June
Project Manager: Mark Andersen

Work Order: 17F1418
Received: 06/14/17 15:45
Reported: 06/30/17

Filter Effluent (Total Chlorine) Site #3 **17F1418-03 (Water)** **Sample Date:** 06/14/17 7:35 **Sampler:** DGM

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	**7.9**		N/A	mg/L	06/14/17	06/14/17	1725009	
pH (Field)	Field	**7.61**		N/A	pH Units	06/14/17	06/14/17	1725009	
Temperature (Field)	Field	**22.8**		N/A	°C	06/14/17	06/14/17	1725009	
General Physical Analyses									
Apparent Color	SM 2120BM	**5.0**	3.0	15	Color Units	06/14/17	06/14/17	1724124	
Metals									
Iron (Fe)	EPA 200.7	ND	100	300	ug/L	06/23/17	06/23/17	1725160	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	06/23/17	06/23/17	1725160	

Zone #2 Site #6 **17F1418-04 (Water)** **Sample Date:** 06/14/17 7:40 **Sampler:** DGM

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	**2.4**		N/A	mg/L	06/14/17	06/14/17	1725009	
pH (Field)	Field	**8.6**		N/A	pH Units	06/14/17	06/14/17	1725009	
Temperature (Field)	Field	**17.9**		N/A	°C	06/14/17	06/14/17	1725009	
General Chemical Analyses									
Hardness, Total (as CaCO3)	Calculated	**120**	6.6	N/A	mg/L	06/22/17	06/22/17	[CALC]	
Total Filterable Residue/TDS	SM 2540C	**360**	5.0	1000	mg/L	06/21/17	06/22/17	1725090	
Metals									
Calcium (Ca)	EPA 200.7	**26**	1.0	N/A	mg/L	06/22/17	06/22/17	1725116	
Magnesium (Mg)	EPA 200.7	**14**	1.0	N/A	mg/L	06/22/17	06/22/17	1725116	

Lomita, City of	Project: Standard Analysis	Work Order: 17F1418
24373 Walnut Avenue	Sub Project: Monthly Compliance / Monthly 2nd Week June	Received: 06/14/17 15:45
Lomita CA, 91717	Project Manager: Mark Andersen	Reported: 06/30/17

Reservoir Effluent Site #5 **17F1418-05 (Water)** **Sample Date:** 06/14/17 7:55 **Sampler:** DGM

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	**3.75**		N/A	mg/L	06/14/17	06/14/17	1725009	
pH (Field)	Field	**7.8**		N/A	pH Units	06/14/17	06/14/17	1725009	
Temperature (Field)	Field	**19.4**		N/A	°C	06/14/17	06/14/17	1725009	
General Physical Analyses									
Odor Threshold	EPA 140.1-M	**5**	1	3	TON	06/14/17	06/14/17	1724124	
General Chemical Analyses									
Hardness, Total (as CaCO3)	Calculated	**240**	13	N/A	mg/L	06/22/17	06/22/17	[CALC]	
Total Filterable Residue/TDS	SM 2540C	**580**	5.0	1000	mg/L	06/21/17	06/22/17	1725090	
Metals									
Calcium (Ca)	EPA 200.7	**60**	2.0	N/A	mg/L	06/22/17	06/22/17	1725116	
Magnesium (Mg)	EPA 200.7	**21**	2.0	N/A	mg/L	06/22/17	06/22/17	1725116	

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

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

Air TECHNOLOGY
Laboratories, Inc.

June 22, 2017

ADE-1461
EPA Methods TO3, TO14A, TO15 SIM & SCAN
ASTM D1946

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

TX Cert T104704450-14-6
EPA Methods TO14A, TO15

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

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

LABORATORY TEST RESULTS

Project Reference: 17F1418
Lab Number: I061602-01/02

Enclosed are results for sample(s) received 6/16/17 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 NELAC 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

17F1418

I061602-01/02

SENDING LABORATORY:

Clinical Laboratory of San Bernardino
21881 Barton Road
Grand Terrace, CA 92313
Phone: 909.825.7693
Fax: 909.825.7696
Project Manager: Stu Styles

RECEIVING LABORATORY:

Air Technology Labs
18501 East Gale Avenue Suite 130
City of Industry, CA 91748
Phone :(626) 964-4032
Fax:

Please email results to Project Manager: Stu Styles
[ ] glaubig@clinical-lab.com [ ] ybarra@clinical-lab.com [✓] styles@clinical-lab.com [ ] nelson@clinical-lab.com

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

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

Analysis	Comments
Sample ID: Raw Water Site #1 / 17F1418-01 — **Sampled: 06/14/17 07:25 PS Code: Water** — **WTX ID:**	
01	
Methane RSK175	Report in mg/L
Containers Supplied:	
40ml Amber Vial (B) — 40ml Amber Vial (C)	
Sample ID: Reservoir Effluent Site #5 / 17F1418-05 — **Sampled: 06/14/17 07:55 PS Code: Water** — **WTX ID:**	
02	
Methane RSK175	Report in mg/L
Containers Supplied:	
40ml Amber Vial (B) — 40ml Amber Vial (C)	

4°C

Released By	Date / Time	Received By	Date / Time
[signature]	06/15/17 17:15	[signature]	6/16/17 915
[signature]	6/16/17 1050	[signature]	6/16/17 1050

Client: Clinical Laboratory
Attn: Stu Styles
Project Name: NA
Project No.: 17F1418
Date Received: 06/16/17
Matrix: Water
Reporting Units: mg/L

RSK175

Lab No.:	I061602-01		I061602-02					
Client Sample I.D.:	Raw Water Site #1/17F1418-01		Reservoir Effluent Site #5/17F1418-05					
Date/Time Sampled:	6/14/17 7:25		6/14/17 7:55					
Date/Time Analyzed:	6/19/17 13:40		6/19/17 13:27					
QC Batch No.:	170619GC8A1		170619GC8A1					
Analyst Initials:	AS		AS					
Dilution Factor:	1.0		1.0					
ANALYTE	Result mg/L	RL mg/L	Result mg/L	RL mg/L				
Methane	3.0	0.0010	0.39	0.0010				

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

Reviewed/Approved By: _____ Date 6/22/17
Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

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

QC Batch No.: 170619GC8A1
Matrix: Water
Units: mg/L

QC for Dissolved Gases by EPA Procedure RSKSOP-175

Lab No.:		Method Blank		LCS		LCSD			
Date/Time Analyzed:		6/19/17 8:42		6/19/17 9:50		6/19/17 10:04			
Analyst Initials:		AS		AS		AS			
Datafile:		19jun002		19jun007		19jun008			
Dilution Factor:		1.0		1.0		1.0			
ANALYTE	PQL	RL	Results	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Methane	0.001	0.001	ND	107	70-130%	102	70-130%	4.6	<30

PQL = Practical Quantitation Limit
ND = Not Detected (Below RL).
RL = PQL X Dilution Factor

Reviewed/Approved By: _____ Date: 6/22/17
Mark J. Johnson
Operations Manager

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

Clinical Laboratory of San Bernardino, Inc. 17R1418 2|3 *Chain of Custody*

Client	*City of Lomita*	System Number	Analysis Requested
Address	24373 Walnut Avenue	**1910073**	
	Lomita, CA 91717		
Phone #	(310) 325-9830	*Destination Laboratory*	
Fax #	(310) 325-3627	[X] Clinical Laboratory	
Project	*Standard Analysis*	*RWQCB Compliance*	
Sub Project	*Monthly Compliance/ Monthly 2nd week of JUNE*	*YES*	
		ELAP #	
Comments		**1088**	
Sampled by	DGM		

Date	Time	Sample Idenitification	Matrix	Type	Preserv	Total Chlorine	Total Dissolved Solids	Iron & Manganese	E. Coli	Total Coliform	Hetetrophic Plate Count	Color	Odor	Methane (WATER) (RSK175)	Hardness	
6/14/17	0725	Raw Water Site #1	GW	1W	N/A	0.0	X	X				X				PH 7.53 TEMP 22.5°
6/14/17	0725	Raw Water Site #1	GW	1W	2,7				X	X	X			X	X	
6/14/17		Raw Water Site #1	GW	1W	1,7											
6/14/17	0735	Filter Effluent (Free Chlorine) Site#2	DW	1W	1,7	7.6			X	X	X					PH 7.53 TEMP 22.8°
6/14/17	0735	Filter Effluent (Total Chlorine) Site#3	DW	1W	N/A	7.9		X				X				PH 7.61 TEMP 22.8°
6/14/17	0740	Zone #2 Site #6	DW	1D	N/A	2.4	X								X	PH 8.60 TEMP 17.9°
6/14/17	0755	Reservoir Effluent Site #5	DW	1D	N/A	3.75	X						X		X	PH 7.80 TEMP 19.4°
6/14/17	0755	Reservoir Effluent Site #5	DW	1D	2,7									X		

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

Matrix: DW-Drinking Water, WW-Waste Water, SW-Storm Water, GW- Ground Water, A-Air
Type- 1-Routine, 2-Repeat, 3-Replacement, 4-Special W-Well D- Dist.

Relinquished By (Sign)	*Print Name / Company*	*Date / Time*	*Received By (Sign)*	*Print Name / Company*
Patrick McCue	City of Lomita, CA	6/14/17 / 12:00		J.Lucero/CSB
Patrick McCue	J.Lucero/CSB	6.14.17/3:45		

Comments:

Samples received: (X) On ice ( ) Intact ( ) Custody seals Temp 10.5
( ) F (X) C

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

"Your Water and Wastewater Analysis Solution"

Clinical Laboratory of San Bernardino, Inc.

07 July 2017 Clinical Lab No.: 17F2006

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

Project Name: Standard Analysis
Sub Project: CWPF 3rd week June, 2017 Compliance Sampling

Enclosed are the results of the analyses for samples received at the laboratory on 06/21/17 . Samples were received within temperature range, in correct containers and preservation.

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

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

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

Sincerely,

Stu Styles
Client Services Manager

Lomita, City of
24373 Walnut Avenue
Lomita CA, 91717

Project: Standard Analysis
Sub Project: CWPF 3rd week June, 2017 Compliance Sampling
Project Manager: Mark Andersen

Work Order: 17F2006
Received: 06/21/17 15:45
Reported: 07/07/17

Reservoir Influent Site #3 **17F2006-01 (Water)** **Sample Date:** 06/21/17 7:55 **Sampler:** Patrick McCue

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	**5.79**		N/A	mg/L	06/21/17	06/21/17	1725152	
pH (Field)	Field	**7.65**		N/A	pH Units	06/21/17	06/21/17	1725152	
Temperature (Field)	Field	**23.4**		N/A	°C	06/21/17	06/21/17	1725152	
General Physical Analyses									
Apparent Color	SM 2120BM	**5.0**	3.0	15	Color Units	06/21/17	06/21/17	1725129	
Metals									
Iron (Fe)	EPA 200.7	ND	100	300	ug/L	06/28/17	06/28/17	1726059	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	06/28/17	06/28/17	1726059	

Reservoir Effluent Site #5 **17F2006-02 (Water)** **Sample Date:** 06/21/17 8:10 **Sampler:** Patrick McCue

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	**3.52**		N/A	mg/L	06/21/17	06/21/17	1725152	
pH (Field)	Field	**7.92**		N/A	pH Units	06/21/17	06/21/17	1725152	
Temperature (Field)	Field	**20.9**		N/A	°C	06/21/17	06/21/17	1725152	
General Physical Analyses									
Apparent Color	SM 2120BM	ND	3.0	15	Color Units	06/21/17	06/21/17	1725129	
Odor Threshold	EPA 140.1-M	**3**	1	3	TON	06/21/17	06/21/17	1725129	
General Chemical Analyses									
Total Filterable Residue/TDS	SM 2540C	**650**	5.0	1000	mg/L	06/28/17	06/30/17	1726092	

ND Analyte NOT DETECTED at or above the reporting limit

Air TECHNOLOGY Laboratories, Inc.

June 29, 2017

ADE-1461
EPA Methods TO3, TO14A, TO15 SIM & SCAN
ASTM D1946

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

TX Cert T104704450-14-6
EPA Methods TO14A, TO15

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

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

LABORATORY TEST RESULTS

Project Reference: 17F2006
Lab Number: I062303-01

Enclosed are results for sample(s) received 6/23/17 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 NELAC 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

17F2006

I062303-01

SENDING LABORATORY:

Clinical Laboratory of San Bernardino
21881 Barton Road
Grand Terrace, CA 92313
Phone: 909.825.7693
Fax: 909.825.7696
Project Manager: Stu Styles

RECEIVING LABORATORY:

Air Technology Labs
18501 East Gale Avenue Suite 130
City of Industry, CA 91748
Phone :(626) 964-4032
Fax:

Please email results to Project Manager: Stu Styles
[ ] glaubig@clinical-lab.com [ ] ybarra@clinical-lab.com [✓] styles@clinical-lab.com [ ] nelson@clinical-lab.com

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

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

Analysis	Comments
Sample ID: Reservoir Effluent Site #5 / 17F2006-02	**Sampled: 06/21/17 08:10 PS Code: Water** **WTX ID:**
61	
Methane RSK175	Report in mg/L
Containers Supplied:	
40ml Amber Vial (B) 40ml Amber Vial (C)	

1°C

Released By	Date / Time	Received By	Date / Time
	06/23/17 07:45		6/23/17 8:30
	6/23/17		6/23/17 1052

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

Client: Clinical Laboratory
Attn: Stu Styles
Project Name: NA
Project No.: 17F2006
Date Received: 06/23/17
Matrix: Water
Reporting Units: mg/L

RSK175

Lab No.:	I062303-01							
Client Sample I.D.:	Reservoir Effluent Site #5/17F2006-02							
Date/Time Sampled:	6/21/17 8:10							
Date/Time Analyzed:	6/26/17 15:35							
QC Batch No.:	170626GC8A1							
Analyst Initials:	AS							
Dilution Factor:	1.0							
ANALYTE	Result mg/L	RL mg/L						
Methane	0.50	0.0010						

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

Reviewed/Approved By: _____ Date 6-29-17

Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

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

QC Batch No.: 170626GC8A1
Matrix: Water
Units: mg/L

QC for Dissolved Gases by EPA Procedure RSKSOP-175

Lab No.:		Method Blank		LCS		LCSD			
Date/Time Analyzed:		6/26/17 11:55		6/26/17 11:20		6/26/17 11:33			
Analyst Initials:		AS		AS		AS			
Datafile:		26jun013		26jun011		26jun012			
Dilution Factor:		1.0		1.0		1.0			
ANALYTE	PQL	RL	Results	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Methane	0.0010	0.0010	ND	89	70-130%	94	70-130%	5.1	<30

PQL = Practical Quantitation Limit
ND = Not Detected (Below RL).
RL = PQL X Dilution Factor

Reviewed/Approved By: _____ Date: 6-29-17
Mark J. Johnson
Operations Manager

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

Clinical Laboratory of San Bernardino, Inc.

Chain of Custody

413

1 | (9)

17F2006

Client	City of Lomita	System Number	
Address	24373 Walnut Avenue	1910073	
	Lomita, CA 91717		
Phone #	(310) 325-9830	Destination Laboratory	
Fax #	(310) 325-3627	[X] Clinical Laboratory	
Project	Standard Analysis	RWQCB Compliance	
Sub Project	CWPF 3rd week of JUNE, 2017 Compliance Sampling	yes	
		ELAP #	
Comments	For TC/EC/BACT see weekly Distro CoC	1088	
Sampled by	Patrick McCue		

Analysis Requested

Date	Time	Sample Idenitification	Matrix	Type	Preserv	PH	Temp.	Total Chlorine	Iron	Manganese	Total Dissolved Solids	Color	Methane (Water) (RSK175)	Total Hardness (as CaCO3)	BACT/TC/HPC	Odor	Comments / P.S. Codes
6/21/17	0755	Reservoir Influent Site #3	DW	1W	N/A	7.65	23.4	5.79	X	X		X					
6/21/17	0810	Reservoir Effluent Site #5	DW	1W	N/A	7.92	20.9	3.52				X				X	
6/21/17	0810	Reservoir Effluent Site #5	DW	1W	HCL						X		X				

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

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

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

Relinquished By (Sign)	Print Name / Company	Date / Time	Received By (Sign)	Print Name / Company
Patrick McCue	City of Lomita	6/21/17 / 2:00	[signature]	J. Lucero / CLSB
Patrick McCue [signature]		6.21.17 / 3:45		AH - CLSB

Comments: [signature] J. Lucero / CLSB

Samples received: (X) On ice (X) Intact ( ) Custody seals Temp 11.5 ( ) F (X) C

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

Page _1_ of _1_

"Your Water and Wastewater Analysis Solution"

Clinical Laboratory of San Bernardino, Inc.

07 July 2017 Clinical Lab No.: 17F2421

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

Project Name: Standard Analysis
Sub Project: CWPF 4th week June, 2017 Compliance Sampling

Enclosed are the results of the analyses for samples received at the laboratory on 06/28/17 . Samples were received within temperature range, in correct containers and preservation.

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

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

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

Sincerely,

Stu Styles
Client Services Manager

Lomita, City of
24373 Walnut Avenue
Lomita CA, 91717

Project: Standard Analysis
Sub Project: CWPF 4th week June, 2017 Compliance Sampling
Project Manager: Mark Andersen

Work Order: 17F2421
Received: 06/28/17 15:15
Reported: 07/07/17

Reservoir Influent Site #3 **17F2421-01 (Water)** **Sample Date:** 06/28/17 8:05 **Sampler:** Patrick McCue

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	**5.125**		N/A	mg/L	06/28/17	06/28/17	1726127	
pH (Field)	Field	**7.67**		N/A	pH Units	06/28/17	06/28/17	1726127	
Temperature (Field)	Field	**23.3**		N/A	°C	06/28/17	06/28/17	1726127	
General Physical Analyses									
Apparent Color	SM 2120BM	**5.0**	3.0	15	Color Units	06/28/17	06/28/17	1726128	
Metals									
Iron (Fe)	EPA 200.7	ND	100	300	ug/L	06/29/17	06/30/17	1726149	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	06/29/17	06/30/17	1726149	

Reservoir Effluent Site #5 **17F2421-02 (Water)** **Sample Date:** 06/28/17 8:10 **Sampler:** Patrick McCue

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	**3.482**		N/A	mg/L	06/28/17	06/28/17	1726127	
pH (Field)	Field	**7.94**		N/A	pH Units	06/28/17	06/28/17	1726127	
Temperature (Field)	Field	**20.9**		N/A	°C	06/28/17	06/28/17	1726127	
General Physical Analyses									
Apparent Color	SM 2120BM	ND	3.0	15	Color Units	06/28/17	06/28/17	1726128	
Odor Threshold	EPA 140.1-M	**3**	1	3	TON	06/28/17	06/28/17	1726128	
General Chemical Analyses									
Total Filterable Residue/TDS	SM 2540C	**560**	5.0	1000	mg/L	07/03/17	07/05/17	1727020	

ND Analyte NOT DETECTED at or above the reporting limit

Air TECHNOLOGY Laboratories, Inc.

July 6, 2017

ADE-1461
EPA Methods TO3, TO14A, TO15 SIM & SCAN
ASTM D1946

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

TX Cert T104704450-14-6
EPA Methods TO14A, TO15

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

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

LABORATORY TEST RESULTS

Project Reference: 17F2421
Lab Number: I062901-01

Enclosed are results for sample(s) received 6/29/17 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 NELAC 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

17F2421

I062901-01

SENDING LABORATORY:

Clinical Laboratory of San Bernardino
21881 Barton Road
Grand Terrace, CA 92313
Phone: 909.825.7693
Fax: 909.825.7696
Project Manager: Stu Styles

RECEIVING LABORATORY:

Air Technology Labs
18501 East Gale Avenue Suite 130
City of Industry, CA 91748
Phone :(626) 964-4032
Fax:

Please email results to Project Manager: Stu Styles
[ ] glaubig@clinical-lab.com [ ] ybarra@clinical-lab.com [✓] styles@clinical-lab.com [ ] nelson@clinical-lab.com

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

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

Analysis	Comments
Sample ID: Reservoir Effluent Site #5 / 17F2421-02 **Sampled: 06/28/17 08:10 PS Code: Water** **WTX ID:**	
61	
Methane RSK175	Report in mg/L

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

7°C

Released By	Date / Time	Received By	Date / Time
[signature]	06/29/17 08:00	[signature]	6/29 8:1[illegible]
[signature]	6/29 9:30	[signature]	6/29/17 0936

Client:	**Clinical Laboratory**
Attn:	**Stu Styles**
Project Name:	**NA**
Project No.:	**17F2421**
Date Received:	**06/29/17**
Matrix:	**Water**
Reporting Units:	**mg/L**

RSK175

Lab No.:	**I062901-01**							
Client Sample I.D.:	**Reservoir Effluent Site #5/17F2421-02**							
Date/Time Sampled:	**6/28/17 8:10**							
Date/Time Analyzed:	**7/3/17 13:37**							
QC Batch No.:	**170703GC8A1**							
Analyst Initials:	**AS**							
Dilution Factor:	**1.0**							
ANALYTE	**Result mg/L**	**RL mg/L**						
Methane	0.54	0.0010						

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

Reviewed/Approved By: _____ **Date** 7/6/17

Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

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

QC Batch No.: 170703GC8A1
Matrix: Water
Units: mg/L

QC for Dissolved Gases by EPA Procedure RSKSOP-175

Lab No.:		Method Blank		LCS		LCSD			
Date/Time Analyzed:		7/3/17 10:30		7/3/17 9:54		7/3/17 10:08			
Analyst Initials:		AS		AS		AS			
Datafile:		03jul003		03jul001		03jul002			
Dilution Factor:		1.0		1.0		1.0			
ANALYTE	PQL	RL	Results	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Methane	0.0010	0.0010	ND	96	70-130%	102	70-130%	5.3	<30

PQL = Practical Quantitation Limit
ND = Not Detected (Below RL).
RL = PQL X Dilution Factor

Reviewed/Approved By: _____ Date: 7/6/17
Mark J. Johnson
Operations Manager

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

1 1(4) 17F2421

Client	City of Lomita	System Number	Analysis Requested
Address	24373 Walnut Avenue Lomita, CA 91717	1910073	
Phone #	(310) 325-9830	Destination Laboratory	
Fax #	(310) 325-3627	[X] Clinical Laboratory	
Project	Standard Analysis	RWQCB Compliance	
Sub Project	CWPF 4th week of JUNE, 2017 Compliance Sampling	yes ELAP #	
Comments	For TC/EC/BACT see weekly Distro CoC	1088	
Sampled by	Patrick McCue		

Date	Time	Sample Idenitification	Matrix	Type	Preserv	pH	Temp.	Total Chlorine	Iron	Manganese	Total Dissolved Solids	Color	Methane (Water) (RSK175)	Total Hardness (as CaCO3)	BACT/TC/HPC	Odor	Comments / P.S. Codes
6/28/17	0805	Reservoir Influent Site #3	DW	1W	N/A	7.67	23.3°	6.125	X	X		X					
6/28/17	0810	Reservoir Effluent Site #5	DW	1W	N/A	7.94	20.9°	3.482				X				X	
6/28/17	0810	Reservoir Effluent Site #5	DW	1W	HCL						X		X				

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

Matrix: DW-Drinking Water, WW-Waste Water, SW-Storm Water, GW- Ground Water, A-Air Type- 1-Routine, 2-Repeat, 3-Replacement, 4-Special W-Well D- Dist.

Relinquished By (Sign)	Print Name / Company	Date / Time	Received By (Sign)	Print Name / Company
Patrick McCue	City of Lomita	6/28/17 / 1:45	[signature]	J. Lucero CLSB
Patrick McCue [signature]	J. Lucero / CLSB	6·29·17 / 3:15		Am CLSB

Comments: [signature] Samples received: (X) On ice (X) Intact ( ) Custody seals Temp 11.1 ( ) F (X) C

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

APPENDIX B

METHANE MONITORING LOG

CITY OF LOMITA
PUBLIC WORKS DEPARTMENT

CYPRESS WATER PRODUCTION FACILITY
HANDHELD METHANE LOG READINGS

JUNE 2017				
DATE	DAY	METHANE HANDHELD		COMMENTS
6/1/2017	TH	CH_4- 0%	Oxy- 20.2%	
6/2/2017	F	CH_4- 0%	Oxy- 21.1%	
6/3/2017	SA	CH_4- 0%	Oxy- 19.9%	
6/4/2017	SU	CH_4- 0%	Oxy- 20.1%	
6/5/2017	M	CH_4- 0%	Oxy- 20.5%	
6/6/2017	T	CH_4- 0%	Oxy- 19.9%	
6/7/2017	W	CH_4- 0%	Oxy- 20.1%	
6/8/2017	TH	CH_4- 0%	Oxy- 19.8%	
6/9/2017	F	CH_4- 0%	Oxy- 20.3%	
6/10/2017	SA	CH_4- 0%	Oxy- 20.2%	
6/11/2017	SU	CH_4- 0%	Oxy- 20.4%	
6/12/2017	M	CH_4- 1%	Oxy- 19.9%	
6/13/2017	T	CH_4- 0%	Oxy- 20.0%	
6/14/2017	W	CH_4- 0%	Oxy- 19.8%	
6/15/2017	TH	CH_4- 0%	Oxy- 19.8%	
6/16/2017	F	CH_4- 0%	Oxy- 19.8%	
6/17/2017	SA	CH_4- 0%	Oxy- 21.1%	
6/18/2017	SU	CH_4- 0%	Oxy- 20.3%	
6/19/2017	M	CH_4- 0%	Oxy- 20.1%	
6/20/2017	T	CH_4- 0%	Oxy- 19.8%	
6/21/2017	W	CH_4- 0%	Oxy- 19.8%	
6/22/2017	TH	CH_4- 0%	Oxy- 19.8%	
6/23/2017	F	CH_4- 0%	Oxy- 21.0%	
6/24/2017	SA	CH_4- 0%	Oxy- 19.9%	
6/25/2017	SU	CH_4- 0%	Oxy- 19.8%	
6/26/2017	M	CH_4- 0%	Oxy- 19.8%	
6/27/2017	T	CH_4- 0%	Oxy- 20.1%	
6/28/2017	W	CH_4- 0%	Oxy- 20.1%	
6/29/2017	TH	CH_4- 0%	Oxy- 19.9%	
6/30/2017	F	CH_4- 0%	Oxy- 19.8%	

ND- Non Detect
CH_4- Methane
Oxy- Oxygen
Day Off/Holiday- Red

APPENDIX C

NITRIFICATION MONITORING DATA SUMMARY

[1] MONTHLY NITRIFICATION MONITORING SUMMARY REPORT

CITY OF LOMITA, System No. 1910073 --- Month, Year: **June 2017**

#	Code	Sample ID	Location	Sample Date	Temp	pH	Total Chlorine	Free Chlorine	Total Ammonia	Free Ammonia	Nitrite	Nitrate	Coliform[2]	HPC	Zone	Comments
Units/Others →				MM/DD/YYYY	°C		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	P/A	CFU/ml		
1	D	S13-003	1948 W 252nd St	6/7/2017	21.2	7.78	3.00	0.23	0.60	0.00	0.012	ND	A	ND	1	Well/MWD Blend
2	D	S13-004	24632 S Moon Ave	6/7/2017	20.6	7.79	2.80	0.16	0.72	0.21	0.019	ND	A	ND	1	Well/MWD Blend
3	D	S13-008	25417 Pennsylvania Ave	6/7/2017	21.0	7.33	3.20	0.19	0.68	0.20	0.016	ND	A	1	1	Well/MWD Blend
4	D	A	2052 Dawn St	6/7/2017	20.7	7.76	1.90	0.03	0.54	0.32	0.043[3]	ND	A	10	1	Well/MWD Blend
5	D		Reservoir	6/7/2017	20.2	8.04	3.60	0.12	0.80	0.20	0.000	ND	A	ND	1	Well/MWD Blend
6	D	S13-001	1912 W 259th Pl	6/7/2017	18.6	8.56	2.30	0.07	0.48	0.00	0.012	0.49	A	ND	2	MWD Only
7	D	S13-002	26314 S Monte Vista Ave	6/7/2017	18.1	8.49	2.30	0.67	0.44	0.00	0.009	0.52	A	ND	3	MWD Only
8	D	S13-005	2500 PCH	6/7/2017	18.6	8.12	2.40	0.09	0.41	0.03	0.008	0.50	A	ND	2	MWD Only
1	D	S13-003	1948 W 252nd St	6/14/2017	20.9	7.87	3.20	0.21	0.44	0.00	0.010	ND	A	ND	1	Well/MWD Blend
2	D	S13-004	24632 S Moon Ave	6/14/2017	21.4	7.72	3.30	0.07	0.45	0.00	0.010	ND	A	ND	1	Well/MWD Blend
3	D	S13-008	25417 Pennsylvania Ave	6/14/2017	23.6	7.85	3.50	0.10	0.55	0.00	0.009	ND	A	ND	1	Well/MWD Blend
4	D	A	2052 Dawn St	6/14/2017	19.3	7.90	1.55	0.19	0.32	0.25	0.044[3]	ND	A	3	1	Well/MWD Blend
5	D		Reservoir	6/14/2017	19.4	7.80	3.75	0.19	0.60	0.00	0.00	ND	A	1	1	Well/MWD Blend
6	D	S13-001	1912 W 259th Pl	6/14/2017	19.7	8.58	2.30	0.13	0.48	0.00	0.014	0.58	A	ND	2	MWD Only
7	D	S13-002	26314 S Monte Vista Ave	6/14/2017	19.5	8.54	2.10	0.07	0.44	0.04	0.010	0.54	A	ND	3	MWD Only
8	D	S13-005	2500 PCH	6/14/2017	21.5	8.29	2.30	0.21	0.45	0.00	0.010	0.58	A	ND	2	MWD Only
1	D	S13-003	1948 W 252nd St	6/21/2017	21.4	7.92	3.30	0.26	0.60	0.01	0.016	ND	A	ND	1	Well/MWD Blend
2	D	S13-004	24632 S Moon Ave	6/21/2017	20.9	7.85	3.10	0.07	0.60	0.07	0.019	ND	A	ND	1	Well/MWD Blend
3	D	S13-008	25417 Pennsylvania Ave	6/21/2017	22.5	7.78	3.30	0.09	0.62	0.00	0.015	ND	A	ND	1	Well/MWD Blend
4	D	A	2052 Dawn St	6/21/2017	21.1	7.82	1.50	0.03	0.37	0.00	0.094[3]	ND	A	8	1	Well/MWD Blend
5	D		Reservoir	6/21/2017	20.9	7.92	3.5	0.11	0.60	0.00	0.00	ND	A	ND	1	Well/MWD Blend
6	D	S13-001	1912 W 259th Pl	6/21/2017	21.2	8.43	2.40	0.11	0.41	0.00	0.013	0.49	A	6	2	MWD Only
7	D	S13-002	26314 S Monte Vista Ave	6/21/2017	19.8	8.35	2.40	0.07	0.48	0.00	0.016	0.51	A	ND	3	MWD Only
8	D	S13-005	2500 PCH	6/21/2017	20.1	8.37	2.40	0.09	0.50	0.00	0.012	0.51	A	ND	2	MWD Only
1	D	S13-003	1948 W 252nd St	6/28/2017	21.4	7.82	3.20	0.10	0.68	0.00	0.017	ND	A	ND	1	Well/MWD Blend
2	D	S13-004	24632 S Moon Ave	6/28/2017	21.1	7.71	3.20	0.06	0.66	0.00	0.009	ND	A	ND	1	Well/MWD Blend
3	D	S13-008	25417 Pennsylvania Ave	6/28/2017	21.3	7.84	3.50	0.29	0.60	0.00	0.01	ND	A	1	1	Well/MWD Blend
4	D	A	2052 Dawn St	6/28/2017	21.0	7.84	1.52	0.10	0.42	0.13	0.105[3]	0.46	A	8	1	Well/MWD Blend
5	D		Reservoir	6/28/2017	20.9	7.94	3.48	0.08	0.78	0.07	0.008	ND	A	ND	1	Well/MWD Blend
6	D	S13-001	1912 W 259th Pl	6/28/2017	19.6	8.48	2.50	0.13	0.44	0.04	0.005	0.59	A	1	2	MWD Only
7	D	S13-002	26314 S Monte Vista Ave	6/28/2017	18.5	8.44	2.50	0.28	0.51	0.02	0.008	0.59	A	5	3	MWD Only
8	D	S13-005	2500 PCH	6/28/2017	18.4	8.46	2.50	0.24	0.52	0.00	0.007	0.60	A	ND	2	MWD Only
1	D	S13-003	1948 W 252nd St												1	Well/MWD Blend
2	D	S13-004	24632 S Moon Ave												1	Well/MWD Blend
3	D	S13-008	25417 Pennsylvania Ave												1	Well/MWD Blend
4	D	A	2052 Dawn St												1	Well/MWD Blend
5	D		Reservoir												1	Well/MWD Blend
6	D	S13-001	1912 W 259th Pl												2	MWD Only
7	D	S13-002	26314 S Monte Vista Ave												3	MWD Only
8	D	S13-005	2500 PCH												2	MWD Only

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

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

[3]The City is monitoring the upward trend of Nitrite on Dawn St in accordance with the Nitrification Monitoring Plan.