

CITY OF LOMITA



Cypress Water Production Facility Monthly Status Report

July 2017

TABLE OF CONTENTS

COVER LETTER	1
A. BACKGROUND	2
B. WELL PRODUCTION AND OPERATIONS	2
C. OPERATIONAL INTERRUPTIONS	2
D. SAMPLE LOCATIONS	2
E. WATER QUALITY MONITORING	3
E1. IRON, MANGANESE AND COLOR	3
E2. FREE AND TOTAL CHLORINE RESIDUALS	3
E3. TOTAL DISSOLVED SOLIDS (TDS), ODOR, HARDNESS AND METHANE...	3
E3-1 TOTAL DISSOLVED SOLIDS (TDS)	3
E3-2 HARDNESS	3
E3-3 DISSOLVED METHANE (IN WATER)	4
E3-4 METHANE (IN AIR)	4
E3-5 ODOR	4
E4. NITRIFICATION MONITORING	4
F. TABLES	5

CITY COUNCIL

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



CITY OF LOMITA

ADMINISTRATION

RYAN SMOOT
CITY MANAGER

August 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 July 1 through July 31, 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 July 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 July 2017 maintaining water levels inside the reservoir ranging from 7 feet to 10 feet. The average flow from Well No. 5 was 527 gpm and 526 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 July 2017.

Table 1. Monthly Production Totals.

Production for July 2017			
Well No. 5	70.19	ac-ft	(22,869,681 gallons)
MWD	69.28	ac-ft	(22,574,000 gallons)
Combined Total	139.47	ac-ft	(45,443,681 gallons)
Daily	4.50	ac-ft/day	(1,465,925 gallons/day)

C. OPERATIONAL INTERRUPTIONS

There were no operational interruptions during the month of July 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 555 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 790 mg/L and 330 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 July 2017 in Appendix B.

E3-5 ODOR

The odor levels at the CWPF effluent averaged 2.0 units for the month.

E4. NITRIFICATION MONITORING

Weekly Nitrification sampling was performed during the month of July 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
7/5/2017											ND	300	ND	50	5	15
7/12/2017	250	300	170	50	10	15	A	A	1	500	ND	300	ND	50	ND	15
7/19/2017											ND	300	ND	50	ND	15
7/26/2017											ND	300	ND	50	ND	15

Notes:

Monthly- Orange; Weekly- Yellow

A – Absent

ND – Non Detect

*Per the SWRCB Drinking Water “Chemicals and Contaminants in Drinking Water” Regulations

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

Date, week of	SP2	SP3			SP4			SP5		
	Free Cl	Free Cl	Total Cl	Total NH ₃	Free Cl	Total Cl	Total NH ₃	Free Cl	Total Cl	Total NH ₃
7/5/2017	4.26	0.46	4.73	0.96	0.43	3.90	0.71	0.10	3.45	0.72
7/12/2017	4.62	0.33	4.96	0.95	0.42	4.05	0.71	0.05	3.39	0.69
7/19/2017	4.63	0.46	4.66	0.84	0.45	4.04	0.68	0.13	3.48	0.65
7/26/2017	4.93	0.50	4.87	0.91	0.45	4.32	0.75	0.12	3.51	0.67

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
7/5/2017			550	500-750	2	3						0.30
7/12/2017	790	330	560	500-750	2	3	350	120	240	180-250	3.7	0.45
7/19/2017			570	500-750	2	3						0.53
7/26/2017			540	500-750	2	3						0.44
Average			555	500-750	2	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 CWPFF Monitoring Report – July 2017
Cypress Water Production Facility
City of Lomita; System No. 1910073

Sample Locations and Parameters	Frequency	MCL/ Goal	7/5 1stWk or Mo. Result (date)	7/12 2 nd Wk	7/19 3rdWk	7/26 4 th Wk	5 th Wk	Comments and/or Other Info.
SP1 --- Also called Well 5 Raw Water or Site#1.								
TDS, ppm	Monthly	See SP5	790 7/12/17	Operations Data/Information: <u>CWPFF operation days</u> On Well 5: Daily average flow - 527 gpm; total prod. – 70.19 AF Combined Well 5/MWD data: Average Well 5: MWD blend Ratio – 50% WELL:50% MWD; total prod.- 139.47 AF Chlorine Dosage: N/A*				*Chlorine injected after SP1, before entering the greensand filter.
Hardness	Monthly	See SP5	350 7/12/17					
CH4, ppm	Monthly	See SP5	3.7 7/12/17					
Iron, ppb	Monthly	See SP3	250 7/12/17					
Manganese, ppb	Monthly	See SP3	170 7/12/17					
Color, units	Monthly	See SP3	10 7/12/17					
Total Coliform, P or A	Monthly	A	A 7/12/17					
SP2 --- Also called Filter Effluent or Site#3.								
Total Coliform, P or A	Monthly	A	A	Ammonia Dosage: N/A*				*Ammonia added after filter effluent
HPC,MPN/100 ml	Monthly	500	1					
Free Cl Res, ppm	Continuous	Average: 4.62; Range: 4.26 – 4.93						
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	5	ND	ND	ND		
Free and Total Cl Res, ppm	Continuous	Free Cl: Average: 0.45; Range: 0.33 – 0.50						
		Total Cl: Average: 4.82; Range: 4.66 – 4.96 Ammonia: Average: 0.91; Range: 0.84 – 0.96						
SP4 --- Also called Reservoir Influent or the Site Well 5/MWD Water Blend Point/Phosphate Injection.								
Phosphate Injection		Phosphate Dosage: 0.28 mg/L						
Free and Total Cl Res, ppm	Continuous	Free Cl: Average: 0.45; Range: 0.42 – 0.48 Total Cl: Average: 4.10; Range: 3.90 – 4.32 Ammonia: Average: 0.72; Range: 0.68 – 0.75						Cl/NH3 Ratio: 5.72
SP5 --- Also called Reservoir Effluent or Site#5. SP5 discharges into Zone 1 of the distribution system.								
TDS, ppm	Weekly	SI Goal: 500-750ppm	550	560	570	540		% CH4 Removal: 88.4
Hardness	Monthly	SI Goal: 180-250ppm		240				
CH4, ppm	Weekly	Goal: from PA	0.30	0.45	0.53	0.44		
Odor, units	Monthly	1	2	2	2	2		
Free and Total Cl Res, ppm	Continuous	Free Cl: Average: 0.09; Range: 0.05 – 0.13 Total Cl: Average: 3.50; Range: 3.39 – 3.69 Ammonia: Average: 0.69; Range: 0.65 – 0.72						Cl/NH3 Ratio: 5.09
Headspace of the Cypress Reservoir.								
¹ CH4 ppmv; using Portable Device	Daily (from log)	Goal - LEL	CH4 Average: 0.00% CH4 Range: 0%					
SP 6 --- MWD Source Feeding CWPFF. Also called Zone 2 of the distribution system or Site #6.								
TDS, ppm	Monthly	-----		330				
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 10 th of the following month.								

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

APPENDIX A

LABORATORY RESULTS

Clinical Laboratory of San Bernardino, Inc.



20 July 2017

Clinical Lab No.: 17G0322

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

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

Enclosed are the results of the analyses for samples received at the laboratory on 07/05/17. 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

Clinical Laboratory of San Bernardino, Inc.



Lomita, City of
24373 Walnut Avenue
Lomita CA, 91717

Project: Standard Analysis
Sub Project: CWPf 1st week July, 2017 Compliance Sampling
Project Manager: Mark Andersen

Work Order: 17G0322
Received: 07/05/17 15:20
Reported: 07/20/17

Reservoir Influent Site #3 **17G0322-01 (Water)** **Sample Date:** 07/05/17 7:20 **Sampler:** Patrick McCue

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
---------	--------	--------	------------	-----	-------	----------	----------	-------	-----------

Field Analyses

Cl Res Total (Field)	Field	5.05		N/A	mg/L	07/05/17	07/05/17	1727132	
pH (Field)	Field	7.43		N/A	pH Units	07/05/17	07/05/17	1727132	
Temperature (Field)	Field	23.3		N/A	°C	07/05/17	07/05/17	1727132	

General Physical Analyses

Apparent Color	SM 2120BM	5.0	3.0	15	Color Units	07/05/17	07/05/17	1727145	
-----------------------	-----------	------------	-----	----	-------------	----------	----------	---------	--

Metals

Iron (Fe)	EPA 200.7	ND	100	300	ug/L	07/14/17	07/14/17	1728176	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	07/14/17	07/14/17	1728176	

Reservoir Effluent Site #5 **17G0322-02 (Water)** **Sample Date:** 07/05/17 7:25 **Sampler:** Patrick McCue

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
---------	--------	--------	------------	-----	-------	----------	----------	-------	-----------

Field Analyses

Cl Res Total (Field)	Field	3.51		N/A	mg/L	07/05/17	07/05/17	1727132	
pH (Field)	Field	7.77		N/A	pH Units	07/05/17	07/05/17	1727132	
Temperature (Field)	Field	21		N/A	°C	07/05/17	07/05/17	1727132	

General Physical Analyses

Apparent Color	SM 2120BM	ND	3.0	15	Color Units	07/05/17	07/05/17	1727145	
Odor Threshold	EPA 140.1-M	2	1	3	TON	07/05/17	07/05/17	1727145	

General Chemical Analyses

Total Filterable Residue/TDS	SM 2540C	550	5.0	1000	mg/L	07/11/17	07/14/17	1728057	
-------------------------------------	----------	------------	-----	------	------	----------	----------	---------	--

ND Analyte NOT DETECTED at or above the reporting limit



July 14, 2017

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



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

LABORATORY TEST RESULTS

Project Reference: 17G0322
Lab Number: I070702-01

Enclosed are results for sample(s) received 7/07/17 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,

A handwritten signature in blue ink, appearing to read "Mark Johnson".

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
17G0322

2 of 4
1070702

1570702-01

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 [x] styles@clinical-lab.com [] nelson@clinical-lab.com

California EDT transfer those samples with PS codes provided [] Yes [x] No

Water Trax Upload Client: [] Yes [x] No

Turn Around Time [] 10 Days [x] 5 Days [] Other ___ Days

Subcontract Comments:

Analysis

Comments

Sample ID: Reservoir Effluent Site #5 / 17G0322-02

Sampled: 07/05/17 07:25 PS Code:
Water

WTX ID:

01

Methane RSK175

Report in mg/L

Containers Supplied:

40ml Amber Vial (B)

40ml Amber Vial (C)

3°C

Released By	07/07/17 07:30	Received By	7/7/17 8:30
m cl	7/7/17 8:52	Received By	7/7/17 1852

Client: Clinical Laboratory
Attn: Stu Styles
Project Name: NA
Project No.: 17G0322
Date Received: 07/07/17
Matrix: Water
Reporting Units: mg/L

RSK175

Lab No.:	I070702-01			
Client Sample I.D.:	Reservoir Effluent Site #5/17G0322- 02			
Date/Time Sampled:	7/5/17 7:25			
Date/Time Analyzed:	7/13/17 14:27			
QC Batch No.:	170713GC8A1			
Analyst Initials:	AS			
Dilution Factor:	1.0			
ANALYTE	Result mg/L	RL mg/L		
Methane	0.30	0.0010		

ND = Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By: Mark Johnson
Mark Johnson
Operations Manager

Date 7/14/17

The cover letter is an integral part of this analytical report



QC Batch No.: 170713GC8A1
Matrix: Water
Units: mg/L

QC for Dissolved Gases by EPA Procedure RSKSOP-175


Lab No.:		Method Blank		LCS		LCSD			
Date/Time Analyzed:		7/13/17 14:14		7/13/17 13:32		7/13/17 13:45			
Analyst Initials:		AS		AS		AS			
Datafile:		13jul004		13jul001		13jul002			
Dilution Factor:		1.0		1.0		1.0			
ANALYTE	PQL	RL	Results	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Methane	0.0010	0.0010	ND	99	70-130%	102	70-130%	2.4	<30

PQL = Practical Quantitation Limit

ND = Not Detected (Below RL).

RL = PQL X Dilution Factor

Reviewed/Approved By: _____


Mark J. Johnson
Operations Manager

Date: _____

7/14/17

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

176 0322

9

[illegible]

Clinical Laboratory of San Bernardino, Inc.



28 July 2017

Clinical Lab No.: 17G1201

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

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

Enclosed are the results of the analyses for samples received at the laboratory on 07/12/17. 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,

A handwritten signature in black ink, appearing to read 'Stu Styles', with a stylized flourish at the end.

Stu Styles
Client Services Manager

Clinical Laboratory of San Bernardino, Inc.



Lomita, City of
24373 Walnut Avenue
Lomita CA, 91717

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

Work Order: 17G1201
Received: 07/12/17 15:25
Reported: 07/28/17

Raw Water Site #1

17G1201-01 (Water)

Sample Date: 07/12/17 8:59 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	07/12/17	07/12/17	1729006	
pH (Field)	Field	7.42		N/A	pH Units	07/12/17	07/12/17	1729006	
Temperature (Field)	Field	23		N/A	°C	07/12/17	07/12/17	1729006	

Microbiology Analyses

Total Coliform	SM 9223	A		N/A	P/A	07/12/17	07/13/17	1728174	
E. Coli	SM 9223	A		N/A	P/A	07/12/17	07/13/17	1728174	
Plate Count	SM9215B	690	1	500	CFU/ml	07/12/17	07/14/17	1729047	Note

General Physical Analyses

Apparent Color	SM 2120BM	10.0	3.0	15	Color Units	07/12/17	07/12/17	1728169	
----------------	-----------	------	-----	----	-------------	----------	----------	---------	--

General Chemical Analyses

Hardness, Total (as CaCO3)	Calculated	350	6.6	N/A	mg/L	07/24/17	07/24/17	[CALC]	
Total Filterable Residue/TDS	SM 2540C	790	5.0	1000	mg/L	07/19/17	07/24/17	1729097	

Metals

Calcium (Ca)	EPA 200.7	91	1.0	N/A	mg/L	07/24/17	07/24/17	1730007	
Iron (Fe)	EPA 200.7	250	100	300	ug/L	07/24/17	07/24/17	1730022	
Magnesium (Mg)	EPA 200.7	29	1.0	N/A	mg/L	07/24/17	07/24/17	1730007	
Manganese (Mn)	EPA 200.7	170	20	50	ug/L	07/24/17	07/24/17	1730022	

Filter Effluent (Free Chlorine) Site #2

17G1201-02 (Water)

Sample Date: 07/12/17 8:55 Sampler: D G M

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
---------	--------	--------	------------	-----	-------	----------	----------	-------	-----------

Field Analyses

Cl Res Total (Field)	Field	6.51		N/A	mg/L	07/12/17	07/12/17	1729006	
pH (Field)	Field	7.43		N/A	pH Units	07/12/17	07/12/17	1729006	
Temperature (Field)	Field	23.2		N/A	°C	07/12/17	07/12/17	1729006	

Microbiology Analyses

Total Coliform	SM 9223	A		N/A	P/A	07/12/17	07/13/17	1728174	
E. Coli	SM 9223	A		N/A	P/A	07/12/17	07/13/17	1728174	
Plate Count	SM9215B	1	1	500	CFU/ml	07/12/17	07/14/17	1729047	

Clinical Laboratory of San Bernardino, Inc.



Lomita, City of
24373 Walnut Avenue
Lomita CA, 91717

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

Work Order: 17G1201
Received: 07/12/17 15:25
Reported: 07/28/17

Filter Effluent (Total Chlorine) Site #3

17G1201-03 (Water)

Sample Date: 07/12/17 8:50

Sampler: D G M

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
---------	--------	--------	------------	-----	-------	----------	----------	-------	-----------

Field Analyses

Cl Res Total (Field)	Field	5.82		N/A	mg/L	07/12/17	07/12/17	1729006	
pH (Field)	Field	7.54		N/A	pH Units	07/12/17	07/12/17	1729006	
Temperature (Field)	Field	23.3		N/A	°C	07/12/17	07/12/17	1729006	

General Physical Analyses

Apparent Color	SM 2120BM	ND	3.0	15	Color Units	07/12/17	07/12/17	1728169	
----------------	-----------	----	-----	----	-------------	----------	----------	---------	--

Metals

Iron (Fe)	EPA 200.7	ND	100	300	ug/L	07/24/17	07/24/17	1730022	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	07/24/17	07/24/17	1730022	

Zone #2 Site #6

17G1201-04 (Water)

Sample Date: 07/12/17 8:40

Sampler: DGM

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
---------	--------	--------	------------	-----	-------	----------	----------	-------	-----------

Field Analyses

Cl Res Total (Field)	Field	2.54		N/A	mg/L	07/12/17	07/12/17	1729006	
pH (Field)	Field	8.3		N/A	pH Units	07/12/17	07/12/17	1729006	
Temperature (Field)	Field	18.6		N/A	°C	07/12/17	07/12/17	1729006	

General Chemical Analyses

Hardness, Total (as CaCO3)	Calculated	120	6.6	N/A	mg/L	07/24/17	07/24/17	[CALC]	
Total Filterable Residue/TDS	SM 2540C	330	5.0	1000	mg/L	07/19/17	07/24/17	1729097	

Metals

Calcium (Ca)	EPA 200.7	27	1.0	N/A	mg/L	07/24/17	07/24/17	1730007	
Magnesium (Mg)	EPA 200.7	13	1.0	N/A	mg/L	07/24/17	07/24/17	1730007	

Clinical Laboratory of San Bernardino, Inc.



Lomita, City of
24373 Walnut Avenue
Lomita CA, 91717

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

Work Order: 17G1201
Received: 07/12/17 15:25
Reported: 07/28/17

Reservoir Effluent Site #5 **17G1201-05 (Water)** **Sample Date:** 07/12/17 8:45 **Sampler:** DGM

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
---------	--------	--------	------------	-----	-------	----------	----------	-------	-----------

Field Analyses

Cl Res Total (Field)	Field	3.45		N/A	mg/L	07/12/17	07/12/17	1729006	
pH (Field)	Field	7.69		N/A	pH Units	07/12/17	07/12/17	1729006	
Temperature (Field)	Field	21.5		N/A	°C	07/12/17	07/12/17	1729006	

General Physical Analyses

Odor Threshold	EPA 140.1-M	2	1	3	TON	07/12/17	07/12/17	1728169	
-----------------------	-------------	----------	---	---	-----	----------	----------	---------	--

General Chemical Analyses

Hardness, Total (as CaCO3)	Calculated	240	6.6	N/A	mg/L	07/24/17	07/24/17	[CALC]	
Total Filterable Residue/TDS	SM 2540C	560	5.0	1000	mg/L	07/19/17	07/24/17	1729097	

Metals

Calcium (Ca)	EPA 200.7	60	1.0	N/A	mg/L	07/24/17	07/24/17	1730007	
Magnesium (Mg)	EPA 200.7	21	1.0	N/A	mg/L	07/24/17	07/24/17	1730007	

Note Botified Mark 7/17/17, 1359

ND Analyte NOT DETECTED at or above the reporting limit



July 24, 2017

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



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

LABORATORY TEST RESULTS

Project Reference: 17G1201
Lab Number: I071701-01/02

Enclosed are results for sample(s) received 7/17/17 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,

A handwritten signature in blue ink, appearing to read "Mark Johnson", is written over a white background.

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
17G1201

1071701-01/02

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 [x] styles@clinical-lab.com [] nelson@clinical-lab.com

California EDT transfer those samples with PS codes provided [] Yes [x] No

Water Trax Upload Client: [] Yes [x] No

Turn Around Time [] 10 Days [x] 5 Days [] Other ___ Days

Subcontract Comments:

AnalysisComments

Sample ID: Raw Water Site #1 / 17G1201-01

Sampled: 07/12/17 08:59 PS Code:
Water

WTX ID:

Methane RSK175

Report in mg/L

Containers Supplied:

40mL Amber Vial w/ Na2S2O3 (B)

40mL Amber Vial w/ Na2S2O3 (C)

Sample ID: Reservoir Effluent Site #5 / 17G1201-05

Sampled: 07/12/17 08:45 PS Code:
Water

WTX ID:

Methane RSK175

Report in mg/L

Containers Supplied:

40ml Amber Vial (B)

40ml Amber Vial (C)

Released By

Date / Time

Received By

Date / Time

Released By

Date / Time

Received By

Date / Time

3°C

Client: Clinical Laboratory
Attn: Stu Styles
Project Name: NA
Project No.: 17G1201
Date Received: 07/17/17
Matrix: Water
Reporting Units: mg/L

RSK175

Lab No.:	I071701-01	I071701-02		
Client Sample I.D.:	Raw Water Site #1/17G1201-01	Reservoir Effluent Site #5/17G1201-05		
Date/Time Sampled:	7/12/17 8:59	7/12/17 8:45		
Date/Time Analyzed:	7/24/17 9:44	7/24/17 9:57		
QC Batch No.:	170724GC8A1	170724GC8A1		
Analyst Initials:	AS	AS		
Dilution Factor:	1.0	1.0		
ANALYTE	Result mg/L	RL mg/L	Result mg/L	RL mg/L
Methane	3.7	0.0010	0.45	0.0010

ND = Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By: _____

Mark Johnson
Operations Manager

Date

7-24-17

The cover letter is an integral part of this analytical report



QC Batch No.: 170724GC8A1
Matrix: Water
Units: mg/L

QC for Dissolved Gases by EPA Procedure RSKSOP-175

Lab No.:		Method Blank		LCS		LCSD			
Date/Time Analyzed:		7/24/17 9:31		7/24/17 8:56		7/24/17 9:18			
Analyst Initials:		AS		AS		AS			
Datafile:		24jul004		24jul002		24jul003			
Dilution Factor:		1.0		1.0		1.0			
ANALYTE	PQL	RL	Results	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Methane	0.0010	0.0010	ND	108	70-130%	109	70-130%	1.0	<30

PQL = Practical Quantitation Limit

ND = Not Detected (Below RL).

RL = PQL X Dilution Factor

Reviewed/Approved By:



Mark J. Johnson
Operations Manager

Date:

7-24-17

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

17G1201

2/3
12/8+4

Client		City of Lomita		System Number		Analysis Requested												
Address		24373 Walnut Avenue		1910073														
Phone #		Lomita, CA 91717		Destination Laboratory														
Fax #		(310) 325-9830		[X] Clinical Laboratory														
Project		(310) 325-3627		RWQCB Compliance														
Sub Project		Standard Analysis		YES														
Comments		Monthly Compliance/ Monthly 2nd week of July		ELAP #														
Sampled by		DGM		1088														
Date	Time	Sample Identification	Matrix	Type	Preserv	Temp.	pH	Total Chlorine	Total Dissolved Solids	Iron & Manganese	E. Coli	Total Coliform	Heterotrophic Plate Count	Color	Odor	Methane (WATER) (RSK175)	Hardness	
7-12-17	0859	Raw Water Site #1	GW	IW	N/A	23.0°	7.42	0	X	X	X	X	X	X				
7-12-17	0859	Raw Water Site #1	GW	IW	2,7													
7-12-17	0859	Raw Water Site #1	GW	IW	1,7													
7-12-17	0855	Filter Effluent (Free Chlorine) Site#2	DW	IW	1,7	23.2°	7.43	6.51			X	X	X					
7-12-17	0850	Filter Effluent (Total Chlorine) Site#3	DW	IW	N/A	23.3°	7.54	5.82		X				X				
7-12-17	0840	Zone #2 Site #6	DW	ID	N/A	18.6°	8.30	2.54	X									
7-12-17	0845	Reservoir Effluent Site #5	DW	ID	N/A	21.5°	7.69	3.45	X					X				
7-12-17	0845	Reservoir Effluent Site #5	DW	ID	2,7													
Preservatives: (1) Na ₂ S ₂ O ₃ (2) HCl (3) HNO ₃ (4) NH ₄ Cl (5) H ₂ SO ₄ (6) Na ₂ SO ₃ (7) Cold (8) Other:		Matrix: DW-Drinking Water, WW-Waste Water, SW-Storm Water, GW- Ground Water, A-Air																
Relinquished By (Sign)		Print Name / Company		Date / Time		Received By (Sign)		Print Name / Company		Type- 1-								
Patrick McCue		City of Lomita, CA		7/12/17 / 1:30		[Signature]		J. Lucero/ASB										
[Signature]		J. Lucero/CWS		7-12-17 / 3:25		[Signature]		Olga Brnby 01ga #										
Comments:		Samples received: <input checked="" type="checkbox"/> On ice () Intact () Custody seals Temp 10.5 () F <input checked="" type="checkbox"/> C																
Shipped Via		Fed X		Golden State		UPS		Client		Other		Page 1 of 1						

Clinical Laboratory of San Bernardino, Inc.



02 August 2017

Clinical Lab No.: 17G1752

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

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

Enclosed are the results of the analyses for samples received at the laboratory on 07/19/17. 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,

A handwritten signature in black ink, appearing to read 'Stu Styles', with a stylized flourish at the end.

Stu Styles
Client Services Manager

Clinical Laboratory of San Bernardino, Inc.



Lomita, City of
24373 Walnut Avenue
Lomita CA, 91717

Project: Standard Analysis
Sub Project: CWPf 3rd week of July, 2017 Compliance Sampling
Project Manager: Mark Andersen
Work Order: 17G1752
Received: 07/19/17 15:35
Reported: 08/02/17

Reservoir Influent Site #3 **17G1752-01 (Water)** **Sample Date:** 07/19/17 7:40 **Sampler:** Patrick McCue

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
---------	--------	--------	------------	-----	-------	----------	----------	-------	-----------

Field Analyses

Cl Res Total (Field)	Field	4.85		N/A	mg/L	07/19/17	07/19/17	1729142	
pH (Field)	Field	7.58		N/A	pH Units	07/19/17	07/19/17	1729142	
Temperature (Field)	Field	23.2		N/A	°C	07/19/17	07/19/17	1729142	

General Physical Analyses

Apparent Color	SM 2120BM	ND	3.0	15	Color Units	07/19/17	07/19/17	1729163	
----------------	-----------	----	-----	----	-------------	----------	----------	---------	--

Metals

Iron (Fe)	EPA 200.7	ND	100	300	ug/L	07/31/17	07/31/17	1731040	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	07/31/17	07/31/17	1731040	

Reservoir Influent Site #1 **17G1752-02 (Water)** **Sample Date:** 07/19/17 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	07/19/17	07/19/17	1729142	
pH (Field)	Field	7.5		N/A	pH Units	07/19/17	07/19/17	1729142	
Temperature (Field)	Field	22.8		N/A	°C	07/19/17	07/19/17	1729142	

Microbiology Analyses

Total Coliform	SM 9223	A		N/A	P/A	07/19/17	07/20/17	1729147	
E. Coli	SM 9223	A		N/A	P/A	07/19/17	07/20/17	1729147	
Plate Count	SM9215B	190	1	500	CFU/ml	07/19/17	07/21/17	1730046	HT-08

Reservoir Effluent Site #5 **17G1752-03 (Water)** **Sample Date:** 07/19/17 7:45 **Sampler:** Patrick McCue

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
---------	--------	--------	------------	-----	-------	----------	----------	-------	-----------

Field Analyses

Cl Res Total (Field)	Field	3.377		N/A	mg/L	07/19/17	07/19/17	1729142	
pH (Field)	Field	7.84		N/A	pH Units	07/19/17	07/19/17	1729142	
Temperature (Field)	Field	21.2		N/A	°C	07/19/17	07/19/17	1729142	

General Physical Analyses

Apparent Color	SM 2120BM	ND	3.0	15	Color Units	07/19/17	07/19/17	1729163	
Odor Threshold	EPA 140.1-M	2	1	3	TON	07/19/17	07/19/17	1729163	

General Chemical Analyses

Total Filterable Residue/TDS	SM 2540C	570	5.0	1000	mg/L	07/26/17	07/28/17	1730099	
------------------------------	----------	-----	-----	------	------	----------	----------	---------	--

Clinical Laboratory of San Bernardino, Inc.



Lomita, City of
24373 Walnut Avenue
Lomita CA, 91717

Project: Standard Analysis
Sub Project: CWPf 3rd week of July, 2017 Compliance Sampling
Project Manager: Mark Andersen

Work Order: 17G1752
Received: 07/19/17 15:35
Reported: 08/02/17

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



July 28, 2017

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



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

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

UT Cert CA013332015-3
EPA Methods TO3, TO14A, TO15, RSK-175

LABORATORY TEST RESULTS

Project Reference: 17G1752
Lab Number: I072102-01

Enclosed are results for sample(s) received 7/21/17 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,

A handwritten signature in blue ink that reads "Mark Johnson".

Mark Johnson
Operations Manager
MJohnson@AirTechLabs.com

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

SUBCONTRACT ORDER

2 of 4
1072102Clinical Laboratory of San Bernardino
17G1752

1072102-01

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 StylesRECEIVING 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 [x] styles@clinical-lab.com [] nelson@clinical-lab.com

California EDT transfer those samples with PS codes provided [] Yes [x] No

Water Trax Upload Client: [] Yes [x] No

Turn Around Time [] 10 Days [x] 5 Days [] Other ___ Days

Subcontract Comments:

AnalysisComments

Sample ID: Reservoir Effluent Site #5 / 17G1752-03

Sampled: 07/19/17 07:45 PS Code:
Water

WTX ID:

Methane (Air) ASTM D1946

Containers Supplied:

40ml Amber Vial (B)

40ml Amber Vial (C)

2°C

Released By

Date / Time

Received By

Date / Time

Released By

Date / Time

Received By

Date / Time

Client: Clinical Laboratory
Attn: Stu Styles
Project Name: NA
Project No.: 17G1752
Date Received: 07/21/17
Matrix: Water
Reporting Units: mg/L

RSK175

Lab No.:	I072102-01						
Client Sample I.D.:	Reservoir Effluent Site #5/17G1752-03						
Date/Time Sampled:	7/19/17 7:45						
Date/Time Analyzed:	7/24/17 10:29						
QC Batch No.:	170724GC8A1						
Analyst Initials:	AS						
Dilution Factor:	1.0						
ANALYTE	Result mg/L	RL mg/L					
	Methane	0.53	0.0010				

ND = Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By: _____


Mark Johnson
Operations Manager

Date _____



The cover letter is an integral part of this analytical report



QC Batch No.: 170724GC8A1
Matrix: Water
Units: mg/L

QC for Dissolved Gases by EPA Procedure RSKSOP-175

Lab No.:		Method Blank		LCS		LCSD			
Date/Time Analyzed:		7/24/17 9:31		7/24/17 8:56		7/24/17 9:18			
Analyst Initials:		AS		AS		AS			
Datafile:		24jul004		24jul002		24jul003			
Dilution Factor:		1.0		1.0		1.0			
ANALYTE	PQL	RL	Results	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Methane	0.0010	0.0010	ND	108	70-130%	109	70-130%	1.0	<30

PQL = Practical Quantitation Limit

ND = Not Detected (Below RL).

RL = PQL X Dilution Factor

Reviewed/Approved By: _____


Mark J. Johnson
Operations Manager

Date: _____

7/28/17

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

7575

[illegible]

"Your Water and Wastewater Analysis Solution"

Clinical Laboratory of San Bernardino, Inc.



04 August 2017

Clinical Lab No.: 17G2238

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

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

Enclosed are the results of the analyses for samples received at the laboratory on 07/26/17 . 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,

A handwritten signature in black ink, appearing to read "Stu Styles", is written over a light blue horizontal line.

Stu Styles
Client Services Manager

Clinical Laboratory of San Bernardino, Inc.



Lomita, City of
24373 Walnut Avenue
Lomita CA, 91717

Project: Standard Analysis
Sub Project: CWPf 4th week of July, 2017 Compliance Sampling
Project Manager: Mark Andersen
Work Order: 17G2238
Received: 07/26/17 15:25
Reported: 08/04/17

Reservoir Influent Site #3 **17G2238-01 (Water)** **Sample Date:** 07/26/17 7:45 **Sampler:** Patrick McCue

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
---------	--------	--------	------------	-----	-------	----------	----------	-------	-----------

Field Analyses

Cl Res Total (Field)	Field	5.2		N/A	mg/L	07/26/17	07/26/17	1730135	
pH (Field)	Field	6.79		N/A	pH Units	07/26/17	07/26/17	1730135	
Temperature (Field)	Field	23.6		N/A	°C	07/26/17	07/26/17	1730135	

General Physical Analyses

Apparent Color	SM 2120BM	ND	3.0	15	Color Units	07/26/17	07/26/17	1730149	
----------------	-----------	----	-----	----	-------------	----------	----------	---------	--

Metals

Iron (Fe)	EPA 200.7	ND	100	300	ug/L	07/31/17	07/31/17	1731040	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	07/31/17	07/31/17	1731040	

Reservoir Influent Site #1 **17G2238-02 (Water)** **Sample Date:** 07/26/17 7:58 **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	07/26/17	07/26/17	1730135	
pH (Field)	Field	6.69		N/A	pH Units	07/26/17	07/26/17	1730135	
Temperature (Field)	Field	23.8		N/A	°C	07/26/17	07/26/17	1730135	

Microbiology Analyses

Total Coliform	SM 9223	A		N/A	P/A	07/26/17	07/27/17	1730141	
E. Coli	SM 9223	A		N/A	P/A	07/26/17	07/27/17	1730141	
Plate Count	SM9215B	76	1	500	CFU/ml	07/26/17	07/28/17	1730187	HT-08

Reservoir Effluent Site #5 **17G2238-03 (Water)** **Sample Date:** 07/26/17 7:50 **Sampler:** Patrick McCue

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
---------	--------	--------	------------	-----	-------	----------	----------	-------	-----------

Field Analyses

Cl Res Total (Field)	Field	3.533		N/A	mg/L	07/26/17	07/26/17	1730135	
pH (Field)	Field	7.05		N/A	pH Units	07/26/17	07/26/17	1730135	
Temperature (Field)	Field	21.5		N/A	°C	07/26/17	07/26/17	1730135	

General Physical Analyses

Apparent Color	SM 2120BM	ND	3.0	15	Color Units	07/26/17	07/26/17	1730149	
Odor Threshold	EPA 140.1-M	2	1	3	TON	07/26/17	07/26/17	1730149	

General Chemical Analyses

Total Filterable Residue/TDS	SM 2540C	540	5.0	1000	mg/L	07/27/17	07/31/17	1730148	
-------------------------------------	----------	------------	-----	------	------	----------	----------	---------	--

Clinical Laboratory of San Bernardino, Inc.



Lomita, City of
24373 Walnut Avenue
Lomita CA, 91717

Project: Standard Analysis
Sub Project: CWPf 4th week of July, 2017 Compliance Sampling
Project Manager: Mark Andersen

Work Order: 17G2238
Received: 07/26/17 15:25
Reported: 08/04/17

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



August 3, 2017

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



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

LABORATORY TEST RESULTS

Project Reference: 17G2238
Lab Number: I072708-01

Enclosed are results for sample(s) received 7/27/17 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,

A handwritten signature in blue ink, appearing to read "Mark Johnson".

Mark Johnson
Operations Manager
MJohnson@AirTechLabs.com

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

Client: Clinical Laboratory
Attn: Stu Styles
Project Name: NA
Project No.: 17G2238
Date Received: 07/27/17
Matrix: Water
Reporting Units: mg/L

RSK175

Lab No.:	I072708-01						
Client Sample I.D.:	Reservoir Effluent Site #5/17G2238- 03						
Date/Time Sampled:	7/26/17 7:50						
Date/Time Analyzed:	8/1/17 11:33						
QC Batch No.:	170801GC8A1						
Analyst Initials:	AS						
Dilution Factor:	1.0						
ANALYTE	Result mg/L	RL mg/L					
Methane	0.44	0.0010					

ND = Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By: Mark Johnson
Mark Johnson
Operations Manager

Date 8/3/17

The cover letter is an integral part of this analytical report



QC Batch No.: 170801GC8A1
Matrix: Water
Units: mg/L

QC for Dissolved Gases by EPA Procedure RSKSOP-175


Lab No.:		Method Blank		LCS		LCSD			
Date/Time Analyzed:		8/1/17 10:24		8/1/17 11:06		8/1/17 11:20			
Analyst Initials:		AS		AS		AS			
Datafile:		01Aug002		01Aug004		01Aug005			
Dilution Factor:		1.0		1.0		1.0			
ANALYTE	PQL	RL	Results	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Methane	0.0010	0.0010	ND	109	70-130%	101	70-130%	7.1	<30

PQL = Practical Quantitation Limit

ND = Not Detected (Below RL).

RL = PQL X Dilution Factor

Reviewed/Approved By: _____


Mark J. Johnson
Operations Manager

Date: _____

8/3/17

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

76238

[illegible]

APPENDIX B

METHANE MONITORING LOG



CITY OF LOMITA
PUBLIC WORKS DEPARTMENT

**CYPRESS WATER PRODUCTION FACILITY
HANDHELD METHANE LOG READINGS**

JULY 2017					
DATE	DAY	METHANE HANDHELD			COMMENTS
7/1/2017	SA	CH4-	0%	Oxy- 20.2%	
7/2/2017	SU	CH4-	0%	Oxy- 20.3%	
7/3/2017	M	CH4-	0%	Oxy- 20.3%	
7/4/2017	T	CH4-	0%	Oxy- 20.2%	
7/5/2017	W	CH4-	0%	Oxy- 20.2%	
7/6/2017	TH	CH4-	0%	Oxy- 19.9%	
7/7/2017	F	CH4-	0%	Oxy- 20.3%	
7/8/2017	SA	CH4-	0%	Oxy- 20.4%	
7/9/2017	SU	CH4-	0%	Oxy- 19.9%	
7/10/2017	M	CH4-	0%	Oxy- 20.5%	
7/11/2017	T	CH4-	0%	Oxy- 20.1%	
7/12/2017	W	CH4-	0%	Oxy- 20.4%	
7/13/2017	TH	CH4-	0%	Oxy- 20.3%	
7/14/2017	F	CH4-	0%	Oxy- 20.1%	
7/15/2017	SA	CH4-	0%	Oxy- 19.9%	
7/16/2017	SU	CH4-	0%	Oxy- 20.1%	
7/17/2017	M	CH4-	0%	Oxy- 20.2%	
7/18/2017	T	CH4-	0%	Oxy- 20.1%	
7/19/2017	W	CH4-	0%	Oxy- 20.2%	
7/20/2017	TH	CH4-	0%	Oxy- 20.2%	
7/21/2017	F	CH4-	0%	Oxy- 20.2%	
7/22/2017	SA	CH4-	0%	Oxy- 19.9%	
7/23/2017	SU	CH4-	0%	Oxy- 19.9%	
7/24/2017	M	CH4-	0%	Oxy- 20.2%	
7/25/2017	T	CH4-	0%	Oxy- 20.1%	
7/26/2017	W	CH4-	0%	Oxy- 20.4%	
7/27/2017	TH	CH4-	0%	Oxy- 20.2%	
7/28/2017	F	CH4-	0%	Oxy- 20.3%	
7/29/2017	SA	CH4-	0%	Oxy- 20.4%	
7/30/2017	SU	CH4-	0%	Oxy- 19.9%	
7/31/2017	M	CH4-	0%	Oxy- 20.2%	

ND- Non Detect
CH4- Methane
Oxy- Oxygen
Day Off/Holiday- Red

APPENDIX C

NITRIFICATION MONITORING DATA SUMMARY

1 MONTHLY NITRIFICATION MONITORING SUMMARY REPORT
CITY OF LOMITA, System No. 1910073 --- Month, Year: **July 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	7/5/2017	22.4	7.99	3.10	0.14	0.57	0.07	0.008	ND	A	ND	1	Well/MWD Blend
2	D	S13-004	24632 S Moon Ave	7/5/2017	21.2	7.88	3.00	0.11	0.62	0.02	0.008	ND	A	ND	1	Well/MWD Blend
3	D	S13-008	25417 Pennsylvania Ave	7/5/2017	21.0	7.94	3.30	0.10	0.64	0.06	0.004	ND	A	ND	1	Well/MWD Blend
4	D	A	2052 Dawn St	7/5/2017	21.2	7.91	1.48	0.23	0.34	0.14	0.075	0.5	A	1	1	Well/MWD Blend
5	D		Reservoir SP5	7/5/2017	21.0	7.77	3.51	0.09	0.70	0.00	0.014	ND	A	ND	1	Well/MWD Blend
6	D	S13-001	1912 W 259th Pl	7/5/2017	19.9	8.46	2.40	0.18	0.47	0.09	0.005	0.53	A	ND	2	MWD Only
7	D	S13-002	26314 S Monte Vista Ave	7/5/2017	19.3	8.42	2.40	0.04	0.52	0.04	0.002	0.60	A	ND	3	MWD Only
8	D	S13-005	2500 PCH	7/5/2017	19.5	8.39	2.50	0.07	0.42	0.02	0.004	0.58	A	ND	2	MWD Only

1	D	S13-003	1948 W 252nd St	7/12/2017	22.8	7.84	3.20	0.17	0.55	0.00	0.016	ND	A	ND	1	Well/MWD Blend
2	D	S13-004	24632 S Moon Ave	7/12/2017	22.1	7.30	3.20	0.10	0.50	0.14	0.015	ND	A	ND	1	Well/MWD Blend
3	D	S13-008	25417 Pennsylvania Ave	7/12/2017	23.2	7.85	3.30	0.17	0.58	0.00	0.013	ND	A	ND	1	Well/MWD Blend
4	D	A	2052 Dawn St	7/12/2017	23.1	7.83	1.54	0.12	0.29	0.11	0.070	0.47	A	11	1	Well/MWD Blend
5	D		Reservoir SP5	7/12/2017	18.6	8.30	3.45	0.18	0.60	0.00	0.014	ND	A	ND	1	Well/MWD Blend
6	D	S13-001	1912 W 259th Pl	7/12/2017	21.9	8.34	2.50	0.09	0.49	0.01	0.010	0.62	A	ND	2	MWD Only
7	D	S13-002	26314 S Monte Vista Ave	7/12/2017	20.1	8.28	2.40	0.14	0.47	0.00	0.009	0.61	A	ND	3	MWD Only
8	D	S13-005	2500 PCH	7/12/2017	21.6	8.33	2.50	0.04	0.47	0.02	0.009	0.62	A	ND	2	MWD Only

1	D	S13-003	1948 W 252nd St	7/19/2017	23.1	7.87	3.00	0.18	0.51	0.06	0.015	ND	A	ND	1	Well/MWD Blend
2	D	S13-004	24632 S Moon Ave	7/19/2017	21.8	7.89	3.00	0.12	0.58	0.00	0.017	ND	A	ND	1	Well/MWD Blend
3	D	S13-008	25417 Pennsylvania Ave	7/19/2017	24.9	7.98	3.20	0.14	0.29	0.00	0.017	ND	A	ND	1	Well/MWD Blend
4	D	A	2052 Dawn St	7/19/2017	23.1	7.73	1.45	0.08	0.30	0.09	0.079	0.50	A	ND	1	Well/MWD Blend
5	D		Reservoir SP5	7/19/2017	21.2	7.84	3.37	0.10	0.62	0.06	0.014	ND	A	ND	1	Well/MWD Blend
6	D	S13-001	1912 W 259th Pl	7/19/2017	20.7	8.54	2.60	0.08	0.47	0.00	0.010	0.62	A	ND	2	MWD Only
7	D	S13-002	26314 S Monte Vista Ave	7/19/2017	19.3	8.58	2.40	0.10	0.48	0.00	0.010	0.62	A	ND	3	MWD Only
8	D	S13-005	2500 PCH	7/19/2017	23.0	8.40	2.50	0.13	0.54	0.04	0.009	0.62	A	ND	2	MWD Only

1	D	S13-003	1948 W 252nd St	7/26/2017	22.8	7.94	3.20	0.17	0.43	0.15	0.016	ND	A	ND	1	Well/MWD Blend
2	D	S13-004	24632 S Moon Ave	7/26/2017	23.5	7.79	3.00	0.08	0.62	0.01	0.016	ND	A	ND	1	Well/MWD Blend
3	D	S13-008	25417 Pennsylvania Ave	7/26/2017	24.9	7.84	3.40	0.14	0.58	0.00	0.016	ND	A	ND	1	Well/MWD Blend
4	D	A	2052 Dawn St	7/26/2017	24.1	7.89	1.28	0.06	0.27	0.08	0.112	0.43	A	ND	1	Well/MWD Blend
5	D		Reservoir SP5	7/26/2017	21.5	7.05	3.50	0.06	0.65	0.00	0.009	ND	A	ND	1	Well/MWD Blend
6	D	S13-001	1912 W 259th Pl	7/26/2017	22.2	8.54	2.50	0.10	0.49	0.00	0.009	0.57	A	ND	2	MWD Only
7	D	S13-002	26314 S Monte Vista Ave	7/26/2017	20.8	8.46	2.60	0.04	0.47	0.00	0.008	0.58	A	ND	3	MWD Only
8	D	S13-005	2500 PCH	7/26/2017	22.6	8.46	2.50	0.04	0.47	0.00	0.006	0.57	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

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

²Coliform results are part of weekly Bacti sampling results.

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