CITY OF LOMITA

Cypress Water Production Facility Monthly Status Report

March 2019

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April 10, 2019

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

Subject: System No. 1910073 - Monthly Report for the Cypress Water Production Facility (CWPF) for the period of March 1 through March 31, 2019.

Dear Mr. Ginzburg,

In accordance with the Department of Public Health temporary approval letter dated March 15, 2013 and Permit Amendment No. 1910073, I am submitting the following report for the Cypress Water Production Facility operations for the month of March 2019.

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

Sincerely,

Mark Andersen
Public Works Superintendent

A. BACKGROUND

On May 30, 2018, the City of Lomita received its Domestic Water Supply Permit Amendment from the State Water Resources Control Board, Division of Drinking Water to distribute blended water from the Cypress Water Production Facility (CWPF) Well No. 5 to the City's customers.

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

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

B. WELL PRODUCTION

The CWPF operated continuously during the month of March 2019 maintaining water levels inside the reservoir ranging from 7 feet to 10 feet. The average flow from Well No. 5 was 365 gpm and 562 gpm from MWD. The blend ratio for month was 39% Well water and 61% MWD water. See Table 1 below for production totals for the month of March 2019.

Table 1. Monthly Production Totals.

	Production for March 2019		
Well No. 5	39.58	ac-ft	12,896,679 (gallons)
MWD	60.69	ac-ft	19,776,000 (gallons)
Combined Total	100.27	ac-ft	32,672,679 (gallons)
Daily	3.23	ac-ft/day	1,053,957 (gallons/day)

C. OPERATIONAL INTERRUPTIONS

There were no operational interruptions during this month. Routine and preventive maintenance was performed on various pieces of equipment as-needed. During this month, the greensand filter media was tested and results came back indicating the media is in good condition, see attached results in Appendix D.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 above the MCL level. Iron for raw water was below the MCL level and Manganese was above the MCL level for the month. Iron and Manganese levels before entering the reservoir (SP3) show non-detect, indicating the greensand filtration system remains highly effective.

E2. FREE AND TOTAL CHLORINE RESIDUALS

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

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

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

E3-1 TOTAL DISSOLVED SOLIDS (TDS)

The sampling results indicate the TDS levels of the effluent blended water to be on average 565 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 810 mg/L and 390 mg/L, respectively.

E3-2 HARDNESS

The sampling results for the month indicate the hardness levels of the blended water to be on average 210 mg/L. This hardness level meets 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 0.31 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 March 2019 in Appendix B.

E3-5 ODOR

The odor levels at the CWPF effluent averaged 2.0 units for the month. Odor levels within the distribution system averaged 1.5 units for the month.

E3-6 TOTAL PHOSPHATE AND ORTHOPHOPHATE

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

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

The 1,2,3 TCP levels at Well No. 5 show ND for the first quarter in 2019.

E4. NITRIFICATION MONITORING

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

F. TABLES

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

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
3/5/2019											ND	300	ND	50	5	15
3/12/2019	180	300	150	50	20	15	A	A	ND	500	ND	300	ND	50	10	15
3/19/2019											ND	300	ND	50	7.5	15
3/27/2019											ND	300	ND	50	10	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
3/5/2019	11.00	1.90	7.40	0.63	0.30	5.80	0.88	0.07	3.77	0.69
3/12/2019	10.90	0.90	10.20	0.90	0.50	5.20	0.80	0.06	3.35	0.63
3/19/2019	10.20	1.00	7.20	1.89	0.40	5.70	0.74	0.11	3.33	0.60
3/27/2019	9.90	0.93	8.55	0.95	0.34	4.95	0.75	0.08	3.94	0.66

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
3/5/2019			610	500-750	2	3						0.26
3/12/2019	810	390	580	500-750	2	3	360	160	210	180-250	2.8	0.33
3/19/2019			530	500-750	2	3						0.38
3/27/2019			540	500-750	2	3						0.28
Average			**565**	500-750	**2**	3						**0.31**

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

Table 5. Monitoring Requirements and Frequencies for Total Phosphate and Orthophosphate.

Sample Location	Date, week of	Total Phosphate, mg/L	Orthophosphate, mg/L
1948 W 252nd St	3/12/19	0.45	0.78
24632 S Moon Ave		0.45	0.77
2450 W 247th St		0.45	0.70
2052 Dawn St		0.48	0.76
CWPF SP5		0.42	-

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

Monthly CWPF Monitoring Report – MARCH 2019
Cypress Water Production Facility
City of Lomita; System No. 1910073

Sample Locations and Parameters	Frequency	MCL/ Goal	3/5/19 1st Wk or Mo. Result (date)	3/12/19 2nd Wk	3/19/19 3rd Wk	3/27/19 4th Wk	5th Wk	Comments and/or Other Info.
SP1 --- Also called Well 5 Raw Water or Site#1.								
TDS, ppm	Monthly	See SP5	810 3/12/19	**Operations Data/Information:**				*Chlorine injected after SP1, before entering the greensand filter.
Hardness	Monthly	See SP5	360 3/12/19	**CWPF operation days**				
CH4, ppm	Monthly	See SP5	2.8 3/12/19	**On Well 5:** Daily average flow – 365 gpm; total prod. – 39.58 AF				
Iron, ppb	Monthly	See SP3	180 3/12/19	**Combined Well 5/MWD data:** Average Well 5: MWD blend Ratio – 39% WELL: 61% MWD; total prod.- 100.27 AF				
Manganese, ppb	Monthly	See SP3	150 3/12/19					
Color, units	Monthly	See SP3	20 3/12/19	Chlorine Dosage: N/A*				
Total Coliform, P or A	Monthly	A	A 3/12/19					
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	ND	Ammonia Dosage: N/A*				
Free Cl Res, ppm	Continuous	Average: 10.50 ; Range: 9.90 – 11.00						
SP3 --- Also called the Site After Chloramination & Before MWD Blending or Site#4.								
Iron, ppb	Weekly	ND	ND	ND	ND	ND		
Manganese, ppb	Weekly	50	ND	ND	ND	ND		
Color	Weekly	15	5	10	7.5	10		
Free and Total Cl Res, ppm	Continuous	Free Cl: Average: 1.18; Range: 0.90 – 1.90 Total Cl: Average: 8.34; Range: 7.20 – 10.20 Ammonia: Average: 1.09; Range: 0.63 – 1.89						
SP4 --- Also called Reservoir Influent or the Site Well 5/MWD Water Blend Point/Phosphate Injection.								
Phosphate Injection		Phosphate Dosage: 0.55 mg/L						
Free and Total Cl Res, ppm	Continuous	Free Cl: Average: 0.39; Range: 0.30 – 0.50 Total Cl: Average: 5.43; Range: 4.95 – 5.80 Ammonia: Average: 0.80; Range: 0.74 – 0.88						Cl/NH3 Ratio: 6.77
SP5 --- Also called Reservoir Effluent or Site#5. SP5 discharges into Zone 1 of the distribution system.								
TDS, ppm	Weekly	SI Goal: 500-750ppm	610	580	530	540		
Hardness	Monthly	SI Goal: 180-250ppm		210				
CH4, ppm	Weekly	Goal: from PA	0.26	0.33	0.38	0.28		% CH4 Removal: 88.8%
Odor, units	Monthly	1	2	2	2	2		
Free and Total Cl Res, ppm	Continuous	Free Cl: Average: 0.08; Range: 0.06 – 0.12 Total Cl: Average: 3.60; Range: 3.33 – 3.94 Ammonia: Average: 0.64; Range: 0.59 – 0.69						Cl/NH3 Ratio: 5.66
Headspace of the Cypress Reservoir.								
[1]CH4 ppmv; using Portable Device	Daily (from log)	Goal - LEL	CH4 Average: 0.0% CH4 Range: 0% - 0%					
SP 6 --- MWD Source Feeding CWPF. Also called Zone 2 of the distribution system or Site #6.								
TDS, ppm	Monthly	-----		390				
Hardness	Monthly	------		160				

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.

15 March 2019

Clinical Lab No.: 19C0461

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

Project Name: Standard Analysis
Sub Project: CWPF 1st Week of March, 2019

Enclosed are the results of the analyses for samples received at the laboratory on 03/05/19 . Samples were received within temperature range, in correct containers and preservation.

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

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

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

Sincerely,

Stu Styles
Client Services Manager

Clinical Laboratory of San Bernardino, Inc.

Lomita, City of	Project: Standard Analysis	Work Order: 19C0461
24373 Walnut Avenue	Sub Project: CWPF 1st Week of March, 2019	Received: 03/05/19 17:47
Lomita CA, 91717	Project Manager: Mark Andersen	Reported: 03/15/19

Reservoir Influent Site #3 **19C0461-01 (Water)** **Sample Date:** 03/05/19 6:05 **Sampler:** P.M.

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	**10.2**		N/A	mg/L	03/05/19	03/05/19	1910147	
pH (Field)	Field	**7.8**		N/A	pH Units	03/05/19	03/05/19	1910147	
Temperature (Field)	Field	**20.3**		N/A	°C	03/05/19	03/05/19	1910147	
General Physical Analyses									
Apparent Color	SM 2120BM	**5.0**	3.0	15	Color Units	03/05/19	03/05/19	1910106	
Metals									
Iron (Fe)	EPA 200.7	ND	100	300	ug/L	03/08/19	03/08/19	1910180	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	03/08/19	03/08/19	1910180	

Reservoir Effluent Site #5 **19C0461-02 (Water)** **Sample Date:** 03/05/19 11:30 **Sampler:** P.M.

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	**3.26**		N/A	mg/L	03/05/19	03/05/19	1910147	
pH (Field)	Field	**8.07**		N/A	pH Units	03/05/19	03/05/19	1910147	
Temperature (Field)	Field	**18.1**		N/A	°C	03/05/19	03/05/19	1910147	
General Physical Analyses									
Apparent Color	SM 2120BM	ND	3.0	15	Color Units	03/05/19	03/05/19	1910106	
Odor Threshold	EPA 140.1-M	**2**	1	3	TON	03/05/19	03/05/19	1910106	
General Chemical Analyses									
Total Filterable Residue/TDS	SM 2540C	**610**	5.0	1000	mg/L	03/11/19	03/12/19	1911019	

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.

March 14, 2019

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: 19C0461
Lab Number: K030701-01

Enclosed are results for sample(s) received 3/07/19 by Air Technology Laboratories. Samples were received intact and chilled to 4° C. Analyses were performed according to specifications on the chain of custody provided with the sample(s).

Report Narrative:

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

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

Sincerely,

Mark Johnson
Operations Manager
MJohnson@AirTechLabs.com

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

K030701-01

SUBCONTRACT ORDER

Clinical Laboratory of San Bernardino

19C0461

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 [√] styles@clinical-lab.com [ ] bernstein@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 / 19C0461-02 **Sampled: 03/05/19 11:30 PS Code: Water WTX ID:**	
01	
Methane RSK175	Report in mg/L

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

4°C

[signature]	03/07/19 07:36	[signature]	03/7/19 9:00
Released By	Date / Time	Received By	Date / Time
[signature]	03/7/19 10:52	[signature]	3/7/19 1052
Released By	Date / Time	Received By	Date / Time

Client: Clinical Laboratory
Attn: Stu Styles
Project Name: NA
Project No.: 19C0461
Date Received: 03/07/19
Matrix: Water
Reporting Units: mg/L

RSK175

Lab No.:	K030701-01							
Client Sample I.D.:	Reservoir Effluent Site #5 / 19C0461-02							
Date/Time Sampled:	3/5/19 11:30							
Date/Time Analyzed:	3/11/19 11:25							
QC Batch No.:	190311GC8A1							
Analyst Initials:	CM/AS							
Dilution Factor:	1.0							
ANALYTE	Result mg/L	RL mg/L						
Methane	0.26	0.0010						

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

Reviewed/Approved By: _____ Date 3/14/19
Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

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

LCS/LCSD Recovery and RPD Summary Report

QC Batch #: 190311GC8A1

Matrix: Air

Reporting Units: mg/L

RSK175
LABORATORY CONTROL SAMPLE SUMMARY

Lab No.:	METHOD BLANK			LCS		LCSD					
Date/Time Analyzed:	3/11/19 10:26			3/11/19 9:51		3/11/19 10:07					
Analyst Initials:	CM/AS			CM/AS		CM/AS					
Dilution Factor:	1.0			1.0		1.0					
ANALYTE	Result mg/L	RL mg/L	SPIKE AMT. mg/L	Result mg/L	% Rec.	Result mg/L	% Rec.	RPD	Low %Rec	High %Rec	Max. RPD
Methane	ND	0.0010	0.654	0.708	108	0.725	111	2.3	70	130	30

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

Reviewed/Approved By: _____ Date 3/14/19
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

Clinical Laboratory of San Bernardino, Inc.

19C0461

Chain of Custody

9/3/4

Client	*City of Lomita*	System Number	Analysis Requested
Address	24373 Walnut Avenue Lomita, CA 91717	**1910073**	
Phone #	(310)903-2243	*Destination Laboratory*	
Fax #		[X] Clinical Laboratory	
Project	*Standard Analysis*	*RWQCB Compliance*	
Sub Project	*CWPF 1st week of March, 2019 Compliance Sampling*	*yes*	
Comments	*For TC/EC/BACT see weekly Distro CoC*	ELAP #	
Sampled by	*P.M.*	**1088**	

Date	Time	Sample Idenitification	Matrix	Type	Preserv	pH	Temp.	Total Chlorine	Iron / Manganese	Total Dissolved Solids	Color	Methane (Water) (RSK175)	Odor					Comments / P.S. Codes
3/5/2019	0605	Reservoir Influent Site #3	DW	1W	N/A	7.8	20.3°	10.2	X		X							
3/5/2019	1130	Reservoir Effluent Site #5	DW	1W	N/A	8.07	18.1°	3.26		X	X		X					
3/5/2019	1130	Reservoir Effluent Site #5	DW	1W	2							X						

Preservatives: (1) $Na_2S_2O_3$ (2) HCl (3) HNO_3 (4) NH_4Cl (5) H_2SO_4 (6) Na_2SO_3 (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*		*Print Name / Company*
Patrick McCue	Patrick McCue / City of Lomita	3/5/2019	130	D Chaparro / LSB
D Chaparro	D Chaparro / LSB	"	547	Rebecca McLean / LSB

Comments:

Samples received: (X) On ice (X) Intact ( ) Custody seals Temp 8.2 ( ) F ( ) 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.

26 March 2019 Clinical Lab No.: 19C1056

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

Project Name: Standard Analysis
Sub Project: CWPF Monthly Compliance Samples, 2nd Wk of March

Enclosed are the results of the analyses for samples received at the laboratory on 03/12/19 . Samples were received within temperature range, in correct containers and preservation.

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

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

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

Sincerely,

Stu Styles
Client Services Manager

Lomita, City of
24373 Walnut Avenue
Lomita CA, 91717

Project: Standard Analysis
Sub Project: CWPF Monthly Compliance Samples, 2nd Wk of Mar
Project Manager: Mark Andersen

Work Order: 19C1056
Received: 03/12/19 18:40
Reported: 03/26/19

Raw Water Site #1 **19C1056-01 (Water)** **Sample Date:** 03/12/19 6:05 **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	03/12/19	03/12/19	1911143	
pH (Field)	Field	**7.77**		N/A	pH Units	03/12/19	03/12/19	1911143	
Temperature (Field)	Field	**20**		N/A	°C	03/12/19	03/12/19	1911143	
Microbiology Analyses									
Total Coliform	SM 9223	A		N/A	P/A	03/12/19	03/13/19	1911126	
E. Coli	SM 9223	A		N/A	P/A	03/12/19	03/13/19	1911126	
Plate Count	SM9215B	**65**	1	500	CFU/ml	03/12/19	03/14/19	1911163	HT-08
General Physical Analyses									
Apparent Color	SM 2120BM	**20.0**	3.0	15	Color Units	03/12/19	03/12/19	1911159	
General Chemical Analyses									
Hardness, Total (as CaCO3)	Calculated	**360**	6.6	N/A	mg/L	03/19/19	03/19/19	[CALC]	
Total Filterable Residue/TDS	SM 2540C	**810**	5.0	1000	mg/L	03/14/19	03/18/19	1911144	
Metals									
Calcium (Ca)	EPA 200.7	**95**	1.0	N/A	mg/L	03/19/19	03/19/19	1912046	
Iron (Fe)	EPA 200.7	**180**	100	300	ug/L	03/20/19	03/20/19	1912092	
Magnesium (Mg)	EPA 200.7	**29**	1.0	N/A	mg/L	03/19/19	03/19/19	1912046	
Manganese (Mn)	EPA 200.7	**150**	20	50	ug/L	03/20/19	03/20/19	1912092	

Filter Effluent (Free Chlorine) Site #2 **19C1056-02 (Water)** **Sample Date:** 03/12/19 6:07 **Sampler:** Patrick McCue

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	**10.9**		N/A	mg/L	03/12/19	03/12/19	1911143	
pH (Field)	Field	**7.82**		N/A	pH Units	03/12/19	03/12/19	1911143	
Temperature (Field)	Field	**20**		N/A	°C	03/12/19	03/12/19	1911143	
Microbiology Analyses									
Total Coliform	SM 9223	A		N/A	P/A	03/12/19	03/13/19	1911126	
E. Coli	SM 9223	A		N/A	P/A	03/12/19	03/13/19	1911126	
Plate Count	SM9215B	ND	1	500	CFU/ml	03/12/19	03/14/19	1911163	HT-08

Lomita, City of
24373 Walnut Avenue
Lomita CA, 91717

Project: Standard Analysis
Sub Project: CWPF Monthly Compliance Samples, 2nd Wk of Mar
Project Manager: Mark Andersen

Work Order: 19C1056
Received: 03/12/19 18:40
Reported: 03/26/19

Filter Effluent (Total Chlorine) Site #3 **19C1056-03 (Water)** **Sample Date:** 03/12/19 6:10 **Sampler:** Patrick McCue

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	**10**		N/A	mg/L	03/12/19	03/12/19	1911143	
pH (Field)	Field	**7.89**		N/A	pH Units	03/12/19	03/12/19	1911143	
Temperature (Field)	Field	**20**		N/A	°C	03/12/19	03/12/19	1911143	
General Physical Analyses									
Apparent Color	SM 2120BM	**10.0**	3.0	15	Color Units	03/12/19	03/12/19	1911159	
Metals									
Iron (Fe)	EPA 200.7	ND	100	300	ug/L	03/20/19	03/20/19	1912092	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	03/20/19	03/20/19	1912092	

Zone #2 Site #6 **19C1056-04 (Water)** **Sample Date:** 03/12/19 6:15 **Sampler:** Patrick McCue

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	**2.09**		N/A	mg/L	03/12/19	03/12/19	1911143	
pH (Field)	Field	**8.38**		N/A	pH Units	03/12/19	03/12/19	1911143	
Temperature (Field)	Field	**16.4**		N/A	°C	03/12/19	03/12/19	1911143	
General Chemical Analyses									
Hardness, Total (as CaCO3)	Calculated	**160**	6.6	N/A	mg/L	03/19/19	03/19/19	[CALC]	
Total Filterable Residue/TDS	SM 2540C	**390**	5.0	1000	mg/L	03/14/19	03/18/19	1911144	
Metals									
Calcium (Ca)	EPA 200.7	**37**	1.0	N/A	mg/L	03/19/19	03/19/19	1912046	
Magnesium (Mg)	EPA 200.7	**16**	1.0	N/A	mg/L	03/19/19	03/19/19	1912046	

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: CWPF Monthly Compliance Samples, 2nd Wk of Mar
Project Manager: Mark Andersen

Work Order: 19C1056
Received: 03/12/19 18:40
Reported: 03/26/19

Reservoir Effluent Site #5 **19C1056-05 (Water)** **Sample Date:** 03/12/19 9:05 **Sampler:** Patrick McCue

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	**3**		N/A	mg/L	03/12/19	03/12/19	1911143	
pH (Field)	Field	**8.04**		N/A	pH Units	03/12/19	03/12/19	1911143	
Temperature (Field)	Field	**17**		N/A	°C	03/12/19	03/12/19	1911143	
General Physical Analyses									
Odor Threshold	EPA 140.1-M	**2**	1	3	TON	03/12/19	03/12/19	1911159	
General Chemical Analyses									
Hardness, Total (as CaCO3)	Calculated	**210**	6.6	N/A	mg/L	03/19/19	03/19/19	[CALC]	
Total Filterable Residue/TDS	SM 2540C	**580**	5.0	1000	mg/L	03/14/19	03/18/19	1911144	
Metals									
Calcium (Ca)	EPA 200.7	**53**	1.0	N/A	mg/L	03/19/19	03/19/19	1912046	
Magnesium (Mg)	EPA 200.7	**20**	1.0	N/A	mg/L	03/19/19	03/19/19	1912046	

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

Air TECHNOLOGY
Laboratories, Inc.

March 21, 2019

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: 19C1056
Lab Number: K031403-01

Enclosed are results for sample(s) received 3/14/19 by Air Technology Laboratories. Samples were received intact and chilled to 4° C. Analyses were performed according to specifications on the chain of custody provided with the sample(s).

Report Narrative:

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

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

Sincerely,

Mark Johnson
Operations Manager
MJohnson@AirTechLabs.com

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

K031403-01/02

SUBCONTRACT ORDER

Clinical Laboratory of San Bernardino

19C1056

SENDING LABORATORY:	**RECEIVING LABORATORY:**
Clinical Laboratory of San Bernardino	Air Technology Labs
21881 Barton Road	18501 East Gale Avenue Suite 130
Grand Terrace, CA 92313	City of Industry, CA 91748
Phone: 909.825.7693	Phone :(626) 964-4032
Fax: 909.825.7696	Fax:
Project Manager: Stu Styles	

Please email results to Project Manager: Stu Styles
[ ] glaubig@clinical-lab.com [✓] styles@clinical-lab.com [ ] bernstein@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 / 19C1056-01	**Sampled: 03/12/19 06:05 PS Code: Water** **WTX ID:**	
Methane RSK175		Report in mg/L
01 *Containers Supplied:*		
40mL Amber Vial pH<2 w/HCl (A)	40mL Amber Vial pH<2 w/HCl (B)	
Sample ID: Reservoir Effluent Site #5 / 19C1056-05	**Sampled: 03/12/19 09:05 PS Code: Water** **WTX ID:**	
Methane RSK175		Report in mg/L
02 *Containers Supplied:*		
40mL Amber Vial pH<2 w/HCl (B)	40mL Amber Vial pH<2 w/HCl (C)	

4°C

[signature]	03/14/19 07:30	Michael Salazar	3/14/19 8:00
Released By	Date / Time	Received By	Date / Time
Michael Salazar	3/14/19 11:11	[signature]	3/14/19 11:11
Released By	Date / Time	Received By	Date / Time

Client:	**Clinical Labs**
Attn:	**Stu Styles**
Project Name:	**NA**
Project No.:	**19C1056**
Date Received:	**03/14/19**
Matrix:	**Water**
Reporting Units:	**mg/L**

RSK175

Lab No.:	K031403-01		K031403-02					
Client Sample I.D.:	Raw Water Site #1/19C1056-01		Reservoir Effluent Site #5/19C1056-05					
Date/Time Sampled:	3/12/19 6:05		3/12/19 9:05					
Date/Time Analyzed:	3/21/19 10:50		3/21/19 11:06					
QC Batch No.:	190321GC8A1		190321GC8A1					
Analyst Initials:	CM/AS		CM/AS					
Dilution Factor:	1.0		1.0					
ANALYTE	**Result mg/L**	**RL mg/L**	**Result mg/L**	**RL mg/L**				
Methane	2.8	0.0010	0.33	0.0010				

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

Reviewed/Approved By: _____ Date 3-21-19

Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

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

LCS/LCSD Recovery and RPD Summary Report

QC Batch #: 190321GC8A1

Matrix: Air

Reporting Units: mg/L

RSK175
LABORATORY CONTROL SAMPLE SUMMARY

Lab No.:	METHOD BLANK			LCS		LCSD					
Date/Time Analyzed:	3/21/19 10:36			3/21/19 10:05		3/21/19 10:20					
Analyst Initials:	CM/AS			CM/AS		CM/AS					
Dilution Factor:	1.0			1.0		1.0					
ANALYTE	Result mg/L	RL mg/L	SPIKE AMT. mg/L	Result mg/L	% Rec.	Result mg/L	% Rec.	RPD	Low %Rec	High %Rec	Max. RPD
Methane	ND	0.0010	0.654	0.704	108	0.710	108	0.8	70	130	30

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

Reviewed/Approved By: _____ Date 3-21-19

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

Clinical Laboratory of San Bernardino, Inc.

1910056

Chain of Custody

2/3/12

Client	*City of Lomita*	System Number	Analysis Requested
Address	24373 Walnut Avenue Lomita, CA 91717	**1910073**	
Phone #	(310)903-2243	*Destination Laboratory*	
Fax #		[X] Clinical Laboratory	
Project	*Standard Analysis*	*RWQCB Compliance*	
Sub Project	*CWPF Monthly Compliance Samples; 2nd week of March, 2019*	*YES*	
Comments		ELAP #	
Sampled by	*Patrick McCue*	**1088**	

Date	Time	Sample Identification	Matrix	Type	Preserv	Temp.	pH	Total Chlorine	Total Dissolved Solids	Iron & Manganese	Total Coliform / E. Coli P-A / HPC	Hardness	Methane (Water) (RSK175)	Nitrate	Color	Odor			
3/12/2019	0605	Raw Water Site #1	GW	1W	N/A	20.0°	7.77	Ø	X	X					X				
3/12/2019	0605	Raw Water Site #1	GW	1W	1, 2, 7	20.0°	7.77	Ø			X	X	X						
3/12/2019	0607	Filter Effluent (Free Chlorine) Site#2	DW	1W	1,7	20.0°	7.82	10.9			X								
3/12/2019	0610	Filter Effluent (Total Chlorine) Site#3	DW	1W	N/A	20.0°	7.87	10.0		X					X				
3/12/2019	0615	Zone #2 Site #6	DW	1D	N/A	16.4°	8.38	2.09	X			X							
3/12/2019	0905	Reservoir Effluent Site #5	DW	1D	N/A	17.0°	8.04	3.0	X			X				X			
3/12/2019	0905	Reservoir Effluent Site #5	DW	1D	2,7	17.0°	8.04	3.0					X						

Preservatives: (1) $Na_2S_2O_3$ (2) HCl (3) HNO_3 (4) NH_4Cl (5) H_2SO_4 (6) Na_2SO_3 (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	Patrick McCue /City of Lomita	3/12/2019 2:45		
		3/12/19 4:40	HF/Jeanette Hernandez	CLSB

Comments:

Samples received: (X) On ice (X) Intact ( ) Custody seals Temp 6.1 ( ) F ( ) 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.

01 April 2019 Clinical Lab No.: 19C1497

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

Project Name: Standard Analysis
Sub Project: CWPF 3rd Week of March, 2019

Enclosed are the results of the analyses for samples received at the laboratory on 03/19/19 . Samples were received within temperature range, in correct containers and preservation.

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

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

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

Sincerely,

Stu Styles
Client Services Manager

Lomita, City of
24373 Walnut Avenue
Lomita CA, 91717

Project: Standard Analysis
Sub Project: CWPF 3rd Week of March, 2019
Project Manager: Mark Andersen

Work Order: 19C1497
Received: 03/19/19 16:50
Reported: 04/01/19

Reservoir Influent Site #3 **19C1497-01 (Water)** **Sample Date:** 03/19/19 6:05 **Sampler:** P.M.

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	**10.4**		N/A	mg/L	03/19/19	03/19/19	1912089	
pH (Field)	Field	**7.84**		N/A	pH Units	03/19/19	03/19/19	1912089	
Temperature (Field)	Field	**21.1**		N/A	°C	03/19/19	03/19/19	1912089	
General Physical Analyses									
Apparent Color	SM 2120BM	**7.5**	3.0	15	Color Units	03/19/19	03/19/19	1912104	
Metals									
Iron (Fe)	EPA 200.7	ND	100	300	ug/L	03/22/19	03/22/19	1912162	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	03/22/19	03/22/19	1912162	

Reservoir Effluent Site #5 **19C1497-02 (Water)** **Sample Date:** 03/19/19 9:10 **Sampler:** P.M.

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	**3.17**		N/A	mg/L	03/19/19	03/19/19	1912089	
pH (Field)	Field	**8.1**		N/A	pH Units	03/19/19	03/19/19	1912089	
Temperature (Field)	Field	**17.4**		N/A	°C	03/19/19	03/19/19	1912089	
General Physical Analyses									
Apparent Color	SM 2120BM	**5.0**	3.0	15	Color Units	03/19/19	03/19/19	1912104	
Odor Threshold	EPA 140.1-M	**2**	1	3	TON	03/19/19	03/19/19	1912104	
General Chemical Analyses									
Total Filterable Residue/TDS	SM 2540C	**530**	5.0	1000	mg/L	03/21/19	03/26/19	1912127	

ND Analyte NOT DETECTED at or above the reporting limit

Air TECHNOLOGY
Laboratories, Inc.

March 27, 2019

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: 19C1497
Lab Number: K032003-01

Enclosed are results for sample(s) received 3/20/19 by Air Technology Laboratories. Samples were received intact and chilled to 6° C. Analyses were performed according to specifications on the chain of custody provided with the sample(s).

Report Narrative:

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

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

Sincerely,

Mark Johnson
Operations Manager
MJohnson@AirTechLabs.com

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

SUBCONTRACT ORDER

Clinical Laboratory of San Bernardino

19C1497

K032003-01

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 [√] styles@clinical-lab.com [ ] bernstein@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 / 19C1497-02 **Sampled: 03/19/19 09:10 PS Code: Water** **WTX ID:**	
01	
Methane RSK175	Report in mg/L

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

6°C

Released By	Date / Time	Received By	Date / Time
BJ	03/20/19 07:30	Chris Martinez	3/20/19 9:30
Chris Martinez	3/20/19 10:37		3/20/19 1037

Client:	**Clinical Laboratory**
Attn:	**Stu Styles**
Project Name:	**NA**
Project No.:	**19C1497**
Date Received:	**03/20/19**
Matrix:	**Water**
Reporting Units:	**mg/L**

RSK175

Lab No.:	K032003-01							
Client Sample I.D.:	Reservoir Effluent Site #5 / 19C1497-02							
Date/Time Sampled:	3/19/19 9:10							
Date/Time Analyzed:	3/21/19 11:20							
QC Batch No.:	190321GC8A1							
Analyst Initials:	CM/AS							
Dilution Factor:	1.0							
ANALYTE	**Result mg/L**	**RL mg/L**						
Methane	0.38	0.0010						

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

Reviewed/Approved By: _____ Date 3/27/19

Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

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

LCS/LCSD Recovery and RPD Summary Report

QC Batch #: 190321GC8A1

Matrix: Air

Reporting Units: mg/L

RSK175
LABORATORY CONTROL SAMPLE SUMMARY

Lab No.:	METHOD BLANK			LCS		LCSD					
Date/Time Analyzed:	3/21/19 10:36			3/21/19 10:05		3/21/19 10:20					
Analyst Initials:	CM/AS			CM/AS		CM/AS					
Dilution Factor:	1.0			1.0		1.0					
ANALYTE	Result mg/L	RL mg/L	SPIKE AMT. mg/L	Result mg/L	% Rec.	Result mg/L	% Rec.	RPD	Low %Rec	High %Rec	Max. RPD
Methane	ND	0.0010	0.654	0.704	108	0.710	108	0.8	70	130	30

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

Reviewed/Approved By: _____ Date 3/27/19
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

Clinical Laboratory of San Bernardino, Inc.

1910497 *Chain of Custody* 1

0/3/4

Client	*City of Lomita*	System Number	Analysis Requested
Address	24373 Walnut Avenue Lomita, CA 91717	**1910073**	
Phone #	(310)903-2243	*Destination Laboratory*	
Fax #		[X] Clinical Laboratory	
Project	*Standard Analysis*	*RWQCB Compliance*	
Sub Project	*CWPF 3rd week of March, 2019 Compliance Sampling*	*yes*	
Comments	*For TC/EC/BACT see weekly Distro CoC*	**ELAP #**	
Sampled by	*P.M.*	**1088**	

Date	Time	Sample Idenitification	Matrix	Type	Preserv	pH	Temp.	Total Chlorine	Iron / Manganese	Total Dissolved Solids	Color	Methane (Water) (RSK175)	Odor				Comments / P.S. Codes
3/19/2019	0605	Reservoir Influent Site #3	DW	1W	N/A	7.84	21.1°	10.4	X		X						
3/19/2019	0910	Reservoir Effluent Site #5	DW	1W	N/A	8.10	17.4°	3.17		X	X		X				
3/19/2019	0910	Reservoir Effluent Site #5	DW	1W	2							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*		*Print Name / Company*
Patrick McCue	Patrick McCue / City of Lomita	3/19/2019	130	D Chaparro / CLSB
D Chaparro	D Chaparro / CLSB	"	450	Jeanette Hernandez / CLSB

Comments:

Samples received: (X) On ice (X) Intact ( ) Custody seals Temp 6.7 ( ) F ( ) 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.

05 April 2019 Clinical Lab No.: 19C2237

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

Project Name: Standard Analysis
Sub Project: CWPF 4th Week of March, 2019

Enclosed are the results of the analyses for samples received at the laboratory on 03/27/19 . Samples were received within temperature range, in correct containers and preservation.

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

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

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

Sincerely,

Stu Styles
Client Services Manager

Lomita, City of
24373 Walnut Avenue
Lomita CA, 91717

Project: Standard Analysis
Sub Project: CWPF 4th Week of March, 2019
Project Manager: Mark Andersen

Work Order: 19C2237
Received: 03/27/19 15:00
Reported: 04/05/19

Reservoir Influent Site #3 **19C2237-01 (Water)** **Sample Date:** 03/27/19 6:15 **Sampler:** P.M.

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	**10.2**		N/A	mg/L	03/27/19	03/27/19	1913109	
pH (Field)	Field	**7.9**		N/A	pH Units	03/27/19	03/27/19	1913109	
Temperature (Field)	Field	**21.4**		N/A	°C	03/27/19	03/27/19	1913109	
General Physical Analyses									
Apparent Color	SM 2120BM	**10.0**	3.0	15	Color Units	03/27/19	03/27/19	1913099	
Metals									
Iron (Fe)	EPA 200.7	ND	100	300	ug/L	04/01/19	04/02/19	1914032	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	04/01/19	04/02/19	1914032	

Reservoir Effluent Site #5 **19C2237-02 (Water)** **Sample Date:** 03/27/19 9:20 **Sampler:** P.M.

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	**4**		N/A	mg/L	03/27/19	03/27/19	1913109	
pH (Field)	Field	**8.2**		N/A	pH Units	03/27/19	03/27/19	1913109	
Temperature (Field)	Field	**17.9**		N/A	°C	03/27/19	03/27/19	1913109	
General Physical Analyses									
Apparent Color	SM 2120BM	**7.5**	3.0	15	Color Units	03/27/19	03/27/19	1913099	
Odor Threshold	EPA 140.1-M	**2**	1	3	TON	03/27/19	03/27/19	1913099	
General Chemical Analyses									
Total Filterable Residue/TDS	SM 2540C	**540**	5.0	1000	mg/L	03/29/19	04/02/19	1913134	

ND Analyte NOT DETECTED at or above the reporting limit

Air TECHNOLOGY
Laboratories, Inc.

April 4, 2019

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: 19C2237
Lab Number: K032902-01

Enclosed are results for sample(s) received 3/29/19 by Air Technology Laboratories. Samples were received intact and chilled to 7° C. Analyses were performed according to specifications on the chain of custody provided with the sample(s).

Report Narrative:

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

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

Sincerely,

Mark Johnson
Operations Manager
MJohnson@AirTechLabs.com

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

SUBCONTRACT ORDER

Clinical Laboratory of San Bernardino

19C2237

K032902-01

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 [√] styles@clinical-lab.com [ ] bernstein@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 / 19C2237-02 **Sampled: 03/27/19 09:20 PS Code: Water** **WTX ID:**	
01	
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]	03/28/19 12:30	[signature]	3/29/19 830
[signature]	3/29/19 947	[signature]	3/29/19 0947

Client:	**Clinical Laboratory**
Attn:	**Stu Styles**
Project Name:	**NA**
Project No.:	**19C2237**
Date Received:	**03/29/19**
Matrix:	**Water**
Reporting Units:	**mg/L**

RSK175

Lab No.:	K032902-01							
Client Sample I.D.:	Reservoir Effluent Site #5 / 19C2237-02							
Date/Time Sampled:	3/27/19 9:20							
Date/Time Analyzed:	4/1/19 13:45							
QC Batch No.:	190401GC8A1							
Analyst Initials:	CM/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 4/3/19

Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

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

LCS/LCSD Recovery and RPD Summary Report

QC Batch #: 190401GC8A1

Matrix: Air

Reporting Units: mg/L

RSK175
LABORATORY CONTROL SAMPLE SUMMARY

Lab No.:	METHOD BLANK			LCS		LCSD					
Date/Time Analyzed:	4/1/19 10:27			4/1/19 10:55		4/1/19 11:48					
Analyst Initials:	CM/AS			CM/AS		CM/AS					
Dilution Factor:	1.0			1.0		1.0					
ANALYTE	Result mg/L	RL mg/L	SPIKE AMT. mg/L	Result mg/L	% Rec.	Result mg/L	% Rec.	RPD	Low %Rec	High %Rec	Max. RPD
Methane	ND	0.0010	0.654	0.625	95.5	0.660	101	5.4	70	130	30

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

Reviewed/Approved By: _____ Date 4/3/19

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

Clinical Laboratory of San Bernardino, Inc.

ϕ13

Chain of Custody

9C2237

Client	City of Lomita
Address	24373 Walnut Avenue
	Lomita, CA 91717
Phone #	(310)903-2243
Fax #	
Project	Standard Analysis
Sub Project	CWPF 4th week of March, 2019 Compliance Sampling
Comments	For TC/EC/BACT see weekly Distro CoC
Sampled by	P.M.

System Number	
1910073	
Destination Laboratory	[X] Clinical Laboratory
RWQCB Compliance	yes
ELAP #	1088

Analysis Requested

Date	Time	Sample Identification	Matrix	Type	Preserv	pH	Temp.	Total Chlorine	Iron / Manganese	Total Dissolved Solids	Color	Methane (Water) (RSK175)	Odor	Comments / P.S. Codes
3/27/2019	0615	Reservoir Influent Site #3	DW	1W	N/A	7.90	21.4°	10.2	X		X			
3/27/2019	0920	Reservoir Effluent Site #5	DW	1W	N/A	8.20	17.9°	4.0		X	X		X	
3/27/2019	0920	Reservoir Effluent Site #5	DW	1W	2							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	Patrick McCue / City of Lomita	3/27/2019 / 10:00	[signature]	J. Lucero/CASB
[signature]	J. Lucero/CASB	3.27.19 / 15 00	[signature]	Rebecca McLearn/CASB

Comments:

Samples received: (X) On ice ( ) Intact ( ) Custody seals Temp 6.1 ( ) F (X) C

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

"Your Water and Wastewater Analysis Solution"

Clinical Laboratory of San Bernardino, Inc.

28 March 2019 Clinical Lab No.: 19C0934

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

Project Name: Standard Analysis
Sub Project: Lomita Distribution Ortho, 2nd Week March 2019

Enclosed are the results of the analyses for samples received at the laboratory on 03/12/19 . Samples were received within temperature range, in correct containers and preservation.

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

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

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

Sincerely,

Stu Styles
Client Services Manager

Lomita, City of
24373 Walnut Avenue
Lomita CA, 91717

Project: Standard Analysis
Sub Project: Lomita Distribution Ortho, 2nd Week March 2019
Project Manager: Mark Andersen

Work Order: 19C0934
Received: 03/12/19 18:40
Reported: 03/28/19

1948 252nd St. **19C0934-01 (Water)** **Sample Date:** 03/12/19 7:40 **Sampler:** P.M.

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	**2.7**		N/A	mg/L	03/12/19	03/12/19	1911097	
pH (Field)	Field	**8.04**		N/A	pH Units	03/12/19	03/12/19	1911097	
Temperature (Field)	Field	**16.6**		N/A	°C	03/12/19	03/12/19	1911097	
General Chemical Analyses									
Ortho-Phosphate (PO4)	HACH 8048	**0.78**	0.020	N/A	mg/L	03/13/19	03/13/19	1911084	
Phosphorus (Total as P)	HACH 8190	**0.45**	0.0067	N/A	mg/L	03/19/19	03/28/19	1912059	

24632 S. Moon **19C0934-02 (Water)** **Sample Date:** 03/12/19 8:05 **Sampler:** P.M.

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	**2.6**		N/A	mg/L	03/12/19	03/12/19	1911097	
pH (Field)	Field	**7.99**		N/A	pH Units	03/12/19	03/12/19	1911097	
Temperature (Field)	Field	**17.2**		N/A	°C	03/12/19	03/12/19	1911097	
General Chemical Analyses									
Ortho-Phosphate (PO4)	HACH 8048	**0.77**	0.020	N/A	mg/L	03/13/19	03/13/19	1911084	
Phosphorus (Total as P)	HACH 8190	**0.45**	0.0067	N/A	mg/L	03/19/19	03/28/19	1912059	

2450 W. 247th St. **19C0934-03 (Water)** **Sample Date:** 03/12/19 8:15 **Sampler:** P.M.

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	**0.64**		N/A	mg/L	03/12/19	03/12/19	1911097	
pH (Field)	Field	**7.93**		N/A	pH Units	03/12/19	03/12/19	1911097	
Temperature (Field)	Field	**17.7**		N/A	°C	03/12/19	03/12/19	1911097	
General Chemical Analyses									
Ortho-Phosphate (PO4)	HACH 8048	**0.70**	0.020	N/A	mg/L	03/13/19	03/13/19	1911084	
Phosphorus (Total as P)	HACH 8190	**0.45**	0.0067	N/A	mg/L	03/19/19	03/28/19	1912059	

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

Clinical Laboratory of San Bernardino, Inc.

Lomita, City of	Project: Standard Analysis	Work Order: 19C0934
24373 Walnut Avenue	Sub Project: Lomita Distribution Ortho, 2nd Week March 2019	Received: 03/12/19 18:40
Lomita CA, 91717	Project Manager: Mark Andersen	Reported: 03/28/19

2052 Dawn St. **19C0934-04 (Water)** **Sample Date:** 03/12/19 7:55 **Sampler:** P.M.

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	**1.76**		N/A	mg/L	03/12/19	03/12/19	1911097	
pH (Field)	Field	**8.01**		N/A	pH Units	03/12/19	03/12/19	1911097	
Temperature (Field)	Field	**17.1**		N/A	°C	03/12/19	03/12/19	1911097	
General Chemical Analyses									
Ortho-Phosphate (PO4)	HACH 8048	**0.76**	0.020	N/A	mg/L	03/13/19	03/13/19	1911084	
Phosphorus (Total as P)	HACH 8190	**0.48**	0.0067	N/A	mg/L	03/19/19	03/28/19	1912059	

CWPF SP5 **19C0934-05 (Water)** **Sample Date:** 03/12/19 9:05 **Sampler:** P.M.

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	**3**		N/A	mg/L	03/12/19	03/12/19	1911097	
pH (Field)	Field	**8.04**		N/A	pH Units	03/12/19	03/12/19	1911097	
Temperature (Field)	Field	**17**		N/A	°C	03/12/19	03/12/19	1911097	
General Chemical Analyses									
Ortho-Phosphate (PO4)	HACH 8048	**0.67**	0.020	N/A	mg/L	03/13/19	03/13/19	1911084	
Phosphorus (Total as P)	HACH 8190	**0.42**	0.0067	N/A	mg/L	03/19/19	03/28/19	1912059	

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

Clinical Laboratory of San Bernardino, Inc.

19C09314

Chain of Custody

0/0/5

Client	*City of Lomita*	System Number	Analysis Requested
Address	24373 Walnut Avenue	**1910073**	
	Lomita, CA 91717	*Destination Laboratory*	
Phone #	(310) 903-2243	[X] Clinical Laboratory	
Fax #	(310) 325-3627	*RWQCB Compliance*	
Project	*Standard Analysis*	*No*	
Sub Project	*Lomita Distribution Ortho, 2nd Week March, 2019*	ELAP #	
Comments		**1088**	
Sampled by	*P.M.*		

Date	Time	Sample Idenitification	Matrix	Type	Preserv	Bottle Number	Temp.	Total Chlorine	pH	ORTHO PHOSPHATE (o-PO4)	TOTAL PHOSPHATE (PO4)				Comments / P.S. Codes
3/12/2019	0740	1948 252ND ST.	DW	D1	N/A	3	16.6°	2.7	8.04	X	X				
3/12/2019	0805	24632 S. MOON	DW	D1	N/A	4	17.2°	2.6	7.99	X	X				
3/12/2019	0815	2450 W. 247th ST.	DW	D1	N/A	6	17.7°	0.64	7.93	X	X				
3/12/2019	0755	2052 DAWN ST.	DW	D1	N/A	7	17.1°	1.76	8.01	X	X				
3/12/2019	0905	CWPF SP5	DW	D1	N/A	8	17.0°	3.0	8.04	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	Patrick McCue / City of Lomita	3/12/2019 845	D Chapparro	D Chapparro / CLSB
D Chapparro	D Chapparro / CLSB	" 1640	[illegible]	Bob Glenn / CLSB

Samples received: (X) On ice (X) Intact ( ) Custody seals Temp 9.2 ( ) F ( ) 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.

19 March 2019

Clinical Lab No.: 19C1052

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

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

Enclosed are the results of the analyses for samples received at the laboratory on 03/12/19 . Samples were received within temperature range, in correct containers and preservation.

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

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

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

Sincerely,

Stu Styles
Client Services Manager

Lomita, City of	Project: Standard Analysis	Work Order: 19C1052
24373 Walnut Avenue	Sub Project: Well TCP, Quarterly	Received: 03/12/19 18:40
Lomita CA, 91717	Project Manager: Mark Andersen	Reported: 03/19/19

CWPF SP1 **19C1052-01 (Water)** **Sample Date:** 03/12/19 6:05 **Sampler:** PM

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	0		N/A	mg/L	03/12/19	03/12/19	1911143	
pH (Field)	Field	**7.77**		N/A	pH Units	03/12/19	03/12/19	1911143	
Temperature (Field)	Field	**20**		N/A	°C	03/12/19	03/12/19	1911143	
Synthetic Organic Analyses / 1,2,3-TCP									
1,2,3-Trichloropropane	SRL 524M-TCP	ND	0.0050	0.005	ug/L	03/13/19	03/15/19	1911154	

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

Clinical Laboratory of San Bernardino, Inc.

EDT Transfer Confirmation 1

Work Order: 19C1052
Report Date: 03/19/2019
Analyzing Lab: Clinical Laboratory of San Bernardino, Inc. ELAP 1088

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

WELL 05 Station No.: 1910073-003 Sampled: 190312 06:05

1,2,3-TRICHLOROPROPANE	Result: ND	Units: UG/L	Entry No.: 77443	Analyzed: 190315

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

Clinical Laboratory of San Bernardino, Inc.

19C1052

Chain of Custody

0/0/2

Client	*City of Lomita*	System Number	Analysis Requested
Address	24373 Walnut Avenue	**1910073**	TCP
	Lomita, CA 91717		
Phone #	(310)903-2243	*Destination Laboratory*	
Fax #		[X] Clinical Laboratory	
Project	*Standard Analysis*	*RWQCB Compliance*	
Sub Project	*WELL TCP, QUARTERLY*	*yes*	
		ELAP #	
Comments	*WELL TCP, 2nd quarter 2019*	**1088**	
Sampled by	*PM*		

Date	Time	Sample Identification	Matrix	Type	Preserv	pH	Temp.	Total Chlorine	TCP	Comments / P.S. Codes
3/12/2019	0605	CWPF SP1	DW	1W	2	7.77	20.0°	Ø	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*		*Print Name / Company*
Patrick McCue	Patrick McCue / City of Lomita	03/12/2018 /	245	DChaparro CLSB
DChaparro	DChaparro/CLSB	"	640	Leonette Hernandez CLA CLSB

Comments:

Samples received: ( ) On ice ( ) Intact ( ) Custody seals Temp 6.1 ( ) F ( ) C

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

*Page _1_ of _1_*

"Your Water and Wastewater Analysis Solution"

APPENDIX B

METHANE MONITORING LOG

CITY OF LOMITA
PUBLIC WORKS DEPARTMENT

CYPRESS WATER PRODUCTION FACILITY
HANDHELD METHANE LOG READINGS

MARCH 2019				
DATE	DAY	METHANE HANDHELD		COMMENTS
3/1/2019	Fri	CH_4- 0%	Oxy- 20.9%	
3/2/2019	Sat	CH_4-	Oxy-	
3/3/2019	Sun	CH_4-	Oxy-	
3/4/2019	Mon	CH_4- 0%	Oxy- 20.9%	
3/5/2019	Tue	CH_4-	Oxy-	
3/6/2019	Wed	CH_4-	Oxy-	
3/7/2019	Thu	CH_4- 0%	Oxy- 20.9%	
3/8/2019	Fri	CH4-	Oxy-	
3/9/2019	Sat	CH_4-	Oxy-	
3/10/2019	Sun	CH_4-	Oxy-	
3/11/2019	Mon	CH_4- 0%	Oxy- 20.9%	
3/12/2019	Tue	CH_4- 0%	Oxy- 20.9%	
3/13/2019	Wed	CH_4- 0%	Oxy- 20.9%	
3/14/2019	Thu	CH_4- 0%	Oxy- 20.9%	
3/15/2019	Fri	CH_4- 0%	Oxy- 20.9%	
3/16/2019	Sat	CH_4-	Oxy-	
3/17/2019	Sun	CH_4-	Oxy-	
3/18/2019	Mon	CH_4-	Oxy-	
3/19/2019	Tue	CH_4-	Oxy-	
3/20/2019	Wed	CH_4- 0%	Oxy- 20.9%	
3/21/2019	Thu	CH_4- 0%	Oxy- 20.9%	
3/22/2019	Fri	CH_4-	Oxy-	
3/23/2019	Sat	CH_4-	Oxy-	
3/24/2019	Sun	CH_4-	Oxy-	
3/25/2019	Mon	CH_4-	Oxy-	
3/26/2019	Tue	CH_4-	Oxy-	
3/27/2019	Wed	CH_4- 0%	Oxy- 20.9%	
3/28/2019	Thu	CH_4- 0%	Oxy- 20.9%	
3/29/2019	Fri	CH_4- 0%	Oxy- 20.9%	
3/30/2019	Sat	CH_4-	Oxy-	
3/31/2019	Sun	CH_4-	Oxy-	

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: **MARCH 2019**

#	Code	Sample ID	Location	Sample Date	Temp	pH	Total Chlorine	Free Chlorine	Total Ammonia	Free Ammonia	Nitrite [3]	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	3/5/2019	16.9	8.03	2.80	0.04	0.53	0.00	0.006	ND	A	ND	1	Well/MWD Blend
2	D	S13-004	24632 S Moon Ave	3/5/2019	17.8	7.93	2.20	0.08	0.41	0.00	0.007	ND	A	3	1	Well/MWD Blend
3	D	S13-008	25417 Pennsylvania Ave	3/5/2019	18.0	8.03	3.60	0.05	0.60	0.00	0.007	ND	A	2	1	Well/MWD Blend
4	D	A	2052 Dawn St	3/5/2019	17.8	7.99	1.81	0.04	0.33	0.00	0.009	ND	A	52	1	Well/MWD Blend
5	D		Reservoir SP5	3/5/2019	18.1	8.07	3.26	0.06	0.65	0.00	0.004	ND	A	ND	1	Well/MWD Blend
6	D	S13-001	1912 W 259th St	3/5/2019	14.9	8.54	2.01	0.08	0.47	0.00	0.006	ND	A	ND	2	MWD Only
7	D	S13-002	26314 S Monte Vista Ave	3/5/2019	15.1	8.43	2.02	0.07	0.37	0.00	0.005	ND	A	ND	3	MWD Only
8	D	S13-005	2500 PCH	3/5/2019	16.7	8.30	2.02	0.07	0.45	0.00	0.005	ND	A	ND	2	MWD Only
1	D	S13-003	1948 W 252nd St	3/12/2019	16.6	8.04	2.70	0.07	0.43	0.00	0.007	ND	A	1	1	Well/MWD Blend
2	D	S13-004	24632 S Moon Ave	3/12/2019	17.2	7.99	2.60	0.04	0.36	0.00	0.009	ND	A	5	1	Well/MWD Blend
3	D	S13-008	25417 Pennsylvania Ave	3/12/2019	17.4	8.01	3.00	0.10	0.46	0.02	0.007	ND	A	ND	1	Well/MWD Blend
4	D	A	2052 Dawn St	3/12/2019	17.1	8.01	1.76	0.02	0.39	0.09	0.007	ND	A	30	1	Well/MWD Blend
5	D		Reservoir SP5	3/12/2019	17.0	8.04	3.00	0.06	0.47	0.00	0.003	ND	A	ND	1	Well/MWD Blend
6	D	S13-001	1912 W 259th St	3/12/2019	15.0	8.43	2.01	0.05	0.40	0.04	0.007	ND	A	ND	2	MWD Only
7	D	S13-002	26314 S Monte Vista Ave	3/12/2019	15.4	8.41	1.84	0.06	0.46	0.06	0.011	ND	A	ND	3	MWD Only
8	D	S13-005	2500 PCH	3/12/2019	15.8	8.46	1.98	0.06	0.50	0.05	0.011	ND	A	ND	2	MWD Only
1	D	S13-003	1948 W 252nd St	3/19/2019	17.3	8.10	2.10	0.06	0.49	0.00	0.004	ND	A	ND	1	Well/MWD Blend
2	D	S13-004	24632 S Moon Ave	3/19/2019	18.6	7.93	1.76	0.07	0.49	0.00	0.010	ND	A	2	1	Well/MWD Blend
3	D	S13-008	25417 Pennsylvania Ave	3/19/2019	18.7	8.05	3.10	0.05	0.47	0.00	0.008	ND	A	1	1	Well/MWD Blend
4	D	A	2052 Dawn St	3/19/2019	18.1	7.97	1.30	0.02	0.29	0.13	0.011	ND	A	110	1	Well/MWD Blend
5	D		Reservoir SP5	3/19/2019	17.4	8.10	3.17	0.04	0.60	0.00	0.008	ND	A	ND	1	Well/MWD Blend
6	D	S13-001	1912 W 259th St	3/19/2019	15.4	8.87	2.07	0.07	0.53	0.03	0.008	0.45	A	ND	2	MWD Only
7	D	S13-002	26314 S Monte Vista Ave	3/19/2019	15.3	8.86	2.12	0.05	0.45	0.04	0.010	0.47	A	1	3	MWD Only
8	D	S13-005	2500 PCH	3/19/2019	16.7	8.79	2.09	0.05	0.46	0.06	0.010	0.45	A	ND	2	MWD Only
1	D	S13-003	1948 W 252nd St	3/27/2019	17.7	8.15	3.10	0.04	0.68	0.09	0.004	ND	A	2	1	Well/MWD Blend
2	D	S13-004	24632 S Moon Ave	3/27/2019	18.6	8.10	3.60	0.10	0.61	0.07	0.010	ND	A	ND	1	Well/MWD Blend
3	D	S13-008	25417 Pennsylvania Ave	3/27/2019	18.9	8.12	3.90	0.09	0.64	0.01	0.009	ND	A	3	1	Well/MWD Blend
4	D	A	2052 Dawn St	3/27/2019	18.9	8.05	1.94	0.03	0.45	0.13	0.008	0.41	A	47	1	Well/MWD Blend
5	D		Reservoir SP5	3/27/2019	17.9	8.20	4.00	0.07	0.80	0.00	0.000	ND	4	ND	1	Well/MWD Blend
6	D	S13-001	1912 W 259th St	3/27/2019	15.9	8.58	2.10	0.04	0.47	0.10	0.006	ND	A	ND	2	MWD Only
7	D	S13-002	26314 S Monte Vista Ave	3/27/2019	16.0	8.55	2.05	0.05	0.45	0.09	0.004	0.45	A	2	3	MWD Only
8	D	S13-005	2500 PCH	3/27/2019	17.3	8.64	2.01	0.10	0.46	0.07	0.007	0.44	A	11	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 St												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 trends of Nitrite in Zone I, in accordance with the Nitrification Monitoring Plan. Due to elevated reads additional hydrant flushing has been implemented.

APPENDIX D

RESULTS FOR TESTING OF GREENSAND FILTER MEDIA

Inversand Company
SINCE 1925
ORIGINAL DEVELOPERS OF
MANGANESE GREENSAND AND GREENSAND PLUS
P.O. BOX 650 • CLAYTON, NEW JERSEY 08312
(856) 881-2345 FAX (856) 881-6859
Email: mail@inversand.com

March 12, 2019

Loprest Water Treatment Co.
2825 Franklin Canyon Road
Rodeo, CA 94572

Order # X7186L
Phone: 888-228-5982
Fax: 510-799-7433

Attention: Brad Davidson (brad@loprest.com)

Reference: Media Sample

Dear Mr. Davidson,

We have completed our evaluation on the received core samples of GreensandPlus. The chart below compares the results with the known standards of new material.

Our Results:

Test Performed	Standard	Filter #1
Effective Size	**0.30 – 0.35**	0.36 mm
Uniformity Coefficient	**</=1.60**	1.44
Grain Hardness	**Excellent**	Good
Coating	**Like New**	Almost like new

The media is in good condition in regard to size, uniformity, hardness, and coating. The sample, as received, was clean with no clumps, mudballs, or any foreign debris. Under microscopic examination, the media's coating was intact with evidence of some very minor iron-staining. In conclusion, as long as you are getting good water quality and satisfactory run lengths without high pressure differentials, the media is suitable for future service.

Very truly yours,
INVERSAND COMPANY

S. Mackay

Steve Mackay
Technical Department