

CITY OF LOMITA



Cypress Water Production Facility Monthly Status Report

August 2018

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CITY COUNCIL

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



ADMINISTRATION

RYAN SMOOT
CITY MANAGER

September 10, 2018

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

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

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 August 2018.

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 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 August 2018 maintaining water levels inside the reservoir ranging from 7 feet to 10 feet. The average flow from Well No. 5 was 436 gpm and 615 gpm from MWD. The blend ratio for month was 40% Well water and 60% MWD water. See Table 1 below for production totals for the month of August 2018.

Table 1. Monthly Production Totals.

	Production for August 2018		
Well No. 5	60.65 ac-ft		19,760,589 (gallons)
MWD	89.79 ac-ft		29,268,000 (gallons)
Combined Total	150.44 ac-ft		49,018,589 (gallons)
Daily	4.85 ac-ft/day		1,581,245 (gallons/day)

C. OPERATIONAL INTERRUPTIONS

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

D. SAMPLE LOCATIONS

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

E. WATER QUALITY MONITORING

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

E1. IRON, MANGANESE AND COLOR

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

E2. FREE AND TOTAL CHLORINE RESIDUALS

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

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

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

E3-1 TOTAL DISSOLVED SOLIDS (TDS)

The sampling results indicate the TDS levels of the effluent blended water to be on average 557.5 mg/L. The TDS level of the effluent water meets the City's Water Quality Objective/Goal of 500 to 750 mg/L. The sampling results indicate the TDS levels in the raw water and MWD water source to be 780 mg/L and 460 mg/L, respectively.

E3-2 HARDNESS

The sampling results for the month indicate the hardness levels of the blended water to be on average 260 mg/L. This hardness level is above the City's Water Quality Objective/Goal of 180 to 250 mg/L; staff continues to monitor hardness levels at the CWPF effluent (SP5) and within the water distribution system. The City has maintained a consistent blend ratio to ensure acceptable hardness levels are met.

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

E3-3 DISSOLVED METHANE (IN WATER)

The methane levels in the CWPF effluent after aeration treatment remain negligible averaging 0.21 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 August 2018 in Appendix B.

E3-5 ODOR

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

E3-6 TOTAL PHOSPHATE AND ORTHOPHOSPHATE

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.

E4. NITRIFICATION MONITORING

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

F. TABLES

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

Date, week of	SP1, Well Raw Water Discharge							SP2, Combined Pressure Filter Effluent			SP3, After chloramination static mixer; reservoir entry					
	Iron, ug/L	*MCL = 300 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
8/8/2018											ND	300	ND	50	5	15
8/14/2018	240	300	190	50	10	15	A	A	ND	500	ND	300	ND	50	5	15
8/21/2018											ND	300	ND	50	7.5	15
8/28/2018											ND	300	ND	50	5	15

Notes:

Monthly- Orange; Weekly- Yellow

A – Absent

ND – Non Detect

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

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

Date, 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
8/8/2018	6.83	1.03	6.49	0.80	0.69	4.48	0.73	0.14	3.54	0.68
8/14/2018	7.10	1.00	9.20	1.10	0.75	5.17	0.86	0.06	3.58	0.71
8/21/2018	7.74	0.90	8.93	1.00	0.70	4.94	0.84	0.10	3.72	0.73
8/28/2018	7.35	1.03	8.93	1.01	0.91	4.28	0.76	0.09	3.68	0.71

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
8/8/2018			570	500-750	2	3						0.15
8/14/2018	780	460	600	500-750	2	3	350	200	260	180-250	2.2	0.15
8/21/2018			540	500-750	2	3						0.26
8/28/2018			520	500-750	2	3						0.27
Average			557.5	500-750	2	3						0.21

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 252 nd St	8/14/18	0.35	0.86
24632 S Moon Ave	8/14/18	0.32	0.44
2450 W 247 th St	8/14/18	0.35	0.56
2052 Dawn St	8/14/18	0.36	0.47
CWPF SP5	8/14/18	0.38	-

Notes:

Monthly- Orange;
 mg/L – milligram per liter

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

Sample Locations and Parameters	Frequency	MCL/ Goal	8/8/18 1stWk or Mo. Result (date)	8/14/18 2 nd Wk	8/21/18 3rdWk	8/28/18 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	780 8/14/18	Operations Data/Information: CWPf operation days On Well 5: Daily average flow – 436 gpm; total prod. – 60.65 AF Combined Well 5/MWD data: Average Well 5: MWD blend Ratio – 40% WELL: 60% MWD; total prod.- 150.44 AF Chlorine Dosage: N/A*				*Chlorine injected after SP1, before entering the greensand filter.
Hardness	Monthly	See SP5	350 8/14/18					
CH4, ppm	Monthly	See SP5	2.2 8/14/18					
Iron, ppb	Monthly	See SP3	240 8/14/18					
Manganese, ppb	Monthly	See SP3	190 8/14/18					
Color, units	Monthly	See SP3	10 8/14/18					
Total Coliform, P or A	Monthly	A	A 8/14/18					
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	ND					
Free Cl Res, ppm	Continuous	Average: 7.26 ; Range: 6.83 – 7.74						
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	5	7.5	5		
Free and Total Cl Res, ppm	Continuous	Free Cl: Average: 0.99; Range: 0.90 – 1.03 Total Cl: Average: 8.39; Range: 6.49 – 9.20 Ammonia: Average: 0.98; Range: 0.80 – 1.10						
SP4 --- Also called Reservoir Influent or the Site Well 5/MWD Water Blend Point/Phosphate Injection.								
Phosphate Injection		Phosphate Dosage: 0.48 mg/L						
Free and Total Cl Res, ppm	Continuous	Free Cl: Average: 0.76; Range: 0.69 – 0.91 Total Cl: Average: 4.76; Range: 4.28 – 5.17 Ammonia: Average: 0.79; Range: 0.73 – 0.86						Cl/NH3 Ratio: 5.99
SP5 --- Also called Reservoir Effluent or Site#5. SP5 discharges into Zone 1 of the distribution system.								
TDS, ppm	Weekly	SI Goal: 500-750ppm	570	600	540	520		% CH4 Removal: 90.6%
Hardness	Monthly	SI Goal: 180-250ppm		280				
CH4, ppm	Weekly	Goal: from PA	0.15	0.15	0.26	0.27		
Odor, units	Monthly	1	2	2	2	2		
Free and Total Cl Res, ppm	Continuous	Free Cl: Average: 0.10; Range: 0.06 – 0.14 Total Cl: Average: 3.64; Range: 3.48 - 3.73 Ammonia: Average: 0.67; Range: 0.67 – 0.74						Cl/NH3 Ratio: 5.13
Headspace of the Cypress Reservoir.								
¹ CH4 ppmv; using Portable Device	Daily (from log)	Goal - LEL	CH4 Average: 0.09% CH4 Range: 0% - 2%					
SP 6 --- MWD Source Feeding CWPf. Also called Zone 2 of the distribution system or Site #6.								
TDS, ppm	Monthly	-----		460				
Hardness	Monthly	-----		200				
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.



24 August 2018

Clinical Lab No.: 18H0836

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

Project Name: Standard Analysis
Sub Project: CWPF 1st Week of August, 2018 Compliance Sampling

Enclosed are the results of the analyses for samples received at the laboratory on 08/08/18 . Samples were received within temperature range, in correct containers and preservation.

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

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

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

Sincerely,

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 1st Week of August, 2018 Compliance Sampling
Project Manager: Mark Andersen

Work Order: 18H0836
Received: 08/08/18 14:45
Reported: 08/24/18

Reservoir Influent Site #3 **18H0836-01 (Water)** **Sample Date:** 08/08/18 8:35 **Sampler:** P.M.

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

Cl Res Total (Field)	Field	11		N/A	mg/L	08/08/18	08/08/18	1832142	
pH (Field)	Field	7.77		N/A	pH Units	08/08/18	08/08/18	1832142	
Temperature (Field)	Field	23.5		N/A	°C	08/08/18	08/08/18	1832142	

General Physical Analyses

Apparent Color	SM 2120BM	5.0	3.0	15	Color Units	08/08/18	08/08/18	1832165	
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Metals

Iron (Fe)	EPA 200.7	ND	100	300	ug/L	08/21/18	08/21/18	1834046	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	08/21/18	08/21/18	1834046	

Reservoir Effluent Site #5 **18H0836-02 (Water)** **Sample Date:** 08/08/18 8:40 **Sampler:** P.M.

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

Cl Res Total (Field)	Field	3.45		N/A	mg/L	08/08/18	08/08/18	1832142	
pH (Field)	Field	8.26		N/A	pH Units	08/08/18	08/08/18	1832142	
Temperature (Field)	Field	24.4		N/A	°C	08/08/18	08/08/18	1832142	

General Physical Analyses

Apparent Color	SM 2120BM	ND	3.0	15	Color Units	08/08/18	08/08/18	1832165	
Odor Threshold	EPA 140.1-M	2	1	3	TON	08/08/18	08/08/18	1832165	

General Chemical Analyses

Total Filterable Residue/TDS	SM 2540C	570	5.0	1000	mg/L	08/15/18	08/17/18	1833092	
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ND Analyte NOT DETECTED at or above the reporting limit



August 17, 2018

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: 18H0836
Lab Number: J081002-01

Enclosed are results for sample(s) received 8/10/18 by Air Technology Laboratories. Samples were received intact and chilled to 5° C. Analyses were performed according to specifications on the chain of custody provided with the sample(s).

Report Narrative:

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

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

Sincerely,

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
18H0836

J081002-01

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 [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 / 18H0836-02

Sampled: 08/08/18 08:40 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

5°C

Client: Clinical Laboratory
Attn: Stu Styles
Project Name: NA
Project No.: 18H0836
Date Received: 08/10/18
Matrix: Water
Reporting Units: mg/L

RSK175

Lab No.:	J081002-01						
Client Sample I.D.:	Reservoir Effluent Site #5/ 18H0836-02						
Date/Time Sampled:	8/8/18 8:40						
Date/Time Analyzed:	8/13/18 10:31						
QC Batch No.:	180813GC8A1						
Analyst Initials:	AS						
Dilution Factor:	1.0						
ANALYTE	Result mg/L	RL mg/L					
Methane	0.15	0.0010					

ND = Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By: _____


Mark Johnson
Operations Manager

Date _____

8/17/18

The cover letter is an integral part of this analytical report



LCS/LCSD Recovery and RPD Summary Report

QC Batch #: 180813GC8A1

Matrix: Air

Reporting Units: mg/L

RSK175 LABORATORY CONTROL SAMPLE SUMMARY											
Lab No.:		METHOD BLANK		LCS		LCSD					
Date/Time Analyzed:		8/13/18 9:47		8/13/18 9:19		8/13/18 9:34					
Analyst Initials:		AS		AS		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	0.65	0.684	105	0.668	102	2.3	70	130	30.0

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



18H0836

"Your Water and Wastewater Analysis Solution"

Clinical Laboratory of San Bernardino, Inc.



31 August 2018

Clinical Lab No.: 18H1262

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

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

Enclosed are the results of the analyses for samples received at the laboratory on 08/14/18 . Samples were received within temperature range, in correct containers and preservation.

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

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

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

Sincerely,

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

Work Order: 18H1262
Received: 08/14/18 16:00
Reported: 08/31/18

Raw Water Site #1

18H1262-01 (Water)

Sample Date: 08/14/18 10:00 Sampler: Patrick McCue

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

Cl Res Total (Field)	Field	0		N/A	mg/L	08/14/18	08/14/18	1833080	
pH (Field)	Field	7.82		N/A	pH Units	08/14/18	08/14/18	1833080	
Temperature (Field)	Field	23.7		N/A	°C	08/14/18	08/14/18	1833080	

Microbiology Analyses

Total Coliform	SM 9223	A		N/A	P/A	08/14/18	08/15/18	1833096	
E. Coli	SM 9223	A		N/A	P/A	08/14/18	08/15/18	1833096	
Plate Count	SM9215B	220	1	500	CFU/ml	08/14/18	08/16/18	1833146	

General Physical Analyses

Apparent Color	SM 2120BM	10.0	3.0	15	Color Units	08/14/18	08/14/18	1833127	
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General Chemical Analyses

Hardness, Total (as CaCO ₃)	Calculated	350	6.6	N/A	mg/L	08/28/18	08/28/18	[CALC]	
Total Filterable Residue/TDS	SM 2540C	780	5.0	1000	mg/L	08/21/18	08/24/18	1834057	

Metals

Calcium (Ca)	EPA 200.7	92	1.0	N/A	mg/L	08/28/18	08/28/18	1835038	
Iron (Fe)	EPA 200.7	240	100	300	ug/L	08/27/18	08/27/18	1835021	
Magnesium (Mg)	EPA 200.7	29	1.0	N/A	mg/L	08/28/18	08/28/18	1835038	
Manganese (Mn)	EPA 200.7	190	20	50	ug/L	08/27/18	08/27/18	1835021	

Filter Effluent (Free Chlorine) Site #2

18H1262-02 (Water)

Sample Date: 08/14/18 10:05 Sampler: Patrick McCue

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

Cl Res Total (Field)	Field	11.8		N/A	mg/L	08/14/18	08/14/18	1833080	
pH (Field)	Field	7.77		N/A	pH Units	08/14/18	08/14/18	1833080	
Temperature (Field)	Field	23.7		N/A	°C	08/14/18	08/14/18	1833080	

Microbiology Analyses

Total Coliform	SM 9223	A		N/A	P/A	08/14/18	08/15/18	1833096	
E. Coli	SM 9223	A		N/A	P/A	08/14/18	08/15/18	1833096	
Plate Count	SM9215B	ND	1	500	CFU/ml	08/14/18	08/16/18	1833146	

Clinical Laboratory of San Bernardino, Inc.



Lomita, City of
24373 Walnut Avenue
Lomita CA, 91717

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

Work Order: 18H1262
Received: 08/14/18 16:00
Reported: 08/31/18

Filter Effluent (Total Chlorine) Site #3

18H1262-03 (Water)

Sample Date: 08/14/18 10:10 **Sampler:** Patrick McCue

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

Cl Res Total (Field)	Field	10.9		N/A	mg/L	08/14/18	08/14/18	1833080	
pH (Field)	Field	7.76		N/A	pH Units	08/14/18	08/14/18	1833080	
Temperature (Field)	Field	23.8		N/A	°C	08/14/18	08/14/18	1833080	

General Physical Analyses

Apparent Color	SM 2120BM	5.0	3.0	15	Color Units	08/14/18	08/14/18	1833127	
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Metals

Iron (Fe)	EPA 200.7	ND	100	300	ug/L	08/27/18	08/27/18	1835021	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	08/27/18	08/27/18	1835021	

Zone #2 Site #6

18H1262-04 (Water)

Sample Date: 08/14/18 10:10 **Sampler:** Patrick McCue

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

Cl Res Total (Field)	Field	2.09		N/A	mg/L	08/14/18	08/14/18	1833080	
pH (Field)	Field	8.55		N/A	pH Units	08/14/18	08/14/18	1833080	
Temperature (Field)	Field	25.2		N/A	°C	08/14/18	08/14/18	1833080	

General Chemical Analyses

Hardness, Total (as CaCO3)	Calculated	200	6.6	N/A	mg/L	08/28/18	08/28/18	[CALC]	
Total Filterable Residue/TDS	SM 2540C	460	5.0	1000	mg/L	08/21/18	08/24/18	1834057	

Metals

Calcium (Ca)	EPA 200.7	48	1.0	N/A	mg/L	08/28/18	08/28/18	1835038	
Magnesium (Mg)	EPA 200.7	20	1.0	N/A	mg/L	08/28/18	08/28/18	1835038	

Clinical Laboratory of San Bernardino, Inc.



Lomita, City of
24373 Walnut Avenue
Lomita CA, 91717

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

Work Order: 18H1262
Received: 08/14/18 16:00
Reported: 08/31/18

Reservoir Effluent Site #5 **18H1262-05 (Water)** **Sample Date:** 08/14/18 10:12 **Sampler:** Patrick McCue

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

Cl Res Total (Field)	Field	3.7		N/A	mg/L	08/14/18	08/14/18	1833080	
pH (Field)	Field	8.25		N/A	pH Units	08/14/18	08/14/18	1833080	
Temperature (Field)	Field	24.8		N/A	°C	08/14/18	08/14/18	1833080	

General Physical Analyses

Odor Threshold	EPA 140.1-M	2	1	3	TON	08/14/18	08/14/18	1833127	
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General Chemical Analyses

Hardness, Total (as CaCO₃)	Calculated	260	6.6	N/A	mg/L	08/28/18	08/28/18	[CALC]	
Total Filterable Residue/TDS	SM 2540C	600	5.0	1000	mg/L	08/21/18	08/24/18	1834057	

Metals

Calcium (Ca)	EPA 200.7	66	1.0	N/A	mg/L	08/28/18	08/28/18	1835038	
Magnesium (Mg)	EPA 200.7	23	1.0	N/A	mg/L	08/28/18	08/28/18	1835038	

ND Analyte NOT DETECTED at or above the reporting limit



August 22, 2018

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: 18H1262
Lab Number: J081501-01/02

Enclosed are results for sample(s) received 8/15/18 by Air Technology Laboratories. Samples were received intact and chilled to 8° 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,

A handwritten signature in blue ink, appearing to read "Mark Johnson", is written over a light blue horizontal line.

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
18H1262

J081501-01/02

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 [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: Raw Water Site #1 / 18H1262-01****Sampled: 08/14/18 10:00 PS Code:**
Water**WTX ID:**

Methane RSK175

Report in mg/L

Containers Supplied:

40ml Amber Vial (B)

40ml Amber Vial (C)

Sample ID: Reservoir Effluent Site #5 / 18H1262-05**Sampled: 08/14/18 10:12 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

Client: Clinical Laboratory
Attn: Stu Styles
Project Name: NA
Project No.: 18H1262
Date Received: 08/15/18
Matrix: Water
Reporting Units: mg/L

RSK175

Lab No.:	J081501-01	J081501-02		
Client Sample I.D.:	Raw Water Site #1 / 18H1262-01	Reservoir Effluent Site #5 / 18H1262- 05		
Date/Time Sampled:	8/14/18 10:00	8/14/18 10:12		
Date/Time Analyzed:	8/21/18 9:53	8/21/18 10:06		
QC Batch No.:	180821GC8A1	180821GC8A1		
Analyst Initials:	AS	AS		
Dilution Factor:	1.0	1.0		
ANALYTE	Result mg/L	RL mg/L	Result mg/L	RL mg/L
Methane	2.2	0.0010	0.15	0.0010

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

Reviewed/Approved By: 

Mark Johnson
Operations Manager

Date

8-22-18

The cover letter is an integral part of this analytical report



LCS/LCSD Recovery and RPD Summary Report

QC Batch #: 180821GC8A1

Matrix: Air

Reporting Units: mg/L

RSK175 LABORATORY CONTROL SAMPLE SUMMARY												
Lab No.:		METHOD BLANK			LCS		LCSD					
Date/Time Analyzed:		8/21/18 9:16			8/21/18 8:46		8/21/18 9:00					
Analyst Initials:		AS			AS		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		0.65	0.800	122	0.797	122	0.4	70	130	30.0

ND= Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By: _____

Mark Johnson
Operations Manager

Date

8-22-18

The cover letter is an integral part of this analytical report



Client		City of Lomita		System Number		Analysis Requested													
Address		24373 Walnut Avenue		1910073															
Phone #		Lomita, CA 91717		Destination Laboratory															
Fax #		(310)903-2243		[X] Clinical Laboratory															
Project		Standard Analysis		RWQCB Compliance															
Sub Project		CWPF Monthly Compliance Samples; 2nd week of August, 2018		YES															
Comments				ELAP #															
Sampled by		Patrick McCue		1088															
Date	Time	Sample Identification	Matrix	Type	Preserv	Temp.	pH	Total Chlorine	Total Dissolved Solids	Iron & Manganese	E. Coli	Total Coliform	Heterotrophic Plate Count	Nitrate	Color	Odor	Methane (WATER) (RSK175)	Hardness	
8/14/2018	1000	Raw Water Site #1	GW	IW	N/A	23.7	7.82	0	X	X					X				
8/14/2018	1000	Raw Water Site #1	GW	IW	1, 2, 7						X	X	X				X		
8/14/2018	1005	Filter Effluent (Free Chlorine) Site#2	DW	IW	1, 7	23.7	7.77	11.8			X	X	X						
8/14/2018	1010	Filter Effluent (Total Chlorine) Site#3	DW	IW	N/A	23.8	7.76	10.9		X					X				
8/14/2018	1010	Zone #2 Site #6	DW	ID	N/A	25.2	8.55	2.09	X								X		
8/14/2018	1012	Reservoir Effluent Site #5	DW	ID	N/A	24.8	8.25	3.70	X						X			X	
8/14/2018	1012	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) Gold (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-Routine, 2-Repeat, 3-Replacement, 4-Special W-Well D- Dist.				
Patrick McCue			Patrick McCue / City of Lomita			8/14/2018 1:30			Chris Martinez			Chris Martinez							
Chris Martinez			Chris Martinez			8-14-18 4:00			Chris Martinez			Chris Martinez							
Comments:						Samples received: () On ice () Intact () Custody Seals Temp 7 () F 80 C													
Shipped Via			Fed X Golden State			UPS Client Other			Page 1 of 1										

Clinical Laboratory of San Bernardino, Inc.



07 September 2018

Clinical Lab No.: 18H2004

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

Project Name: Standard Analysis
Sub Project: CWPF 3rd Week of July, 2018 Compliance Sampling

Enclosed are the results of the analyses for samples received at the laboratory on 08/21/18 . Samples were received within temperature range, in correct containers and preservation.

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

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

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

Sincerely,

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, 2018 Compliance Sampling
Project Manager: Mark Andersen

Work Order: 18H2004
Received: 08/21/18 14:15
Reported: 09/07/18

Reservoir Influent Site #3

18H2004-01 (Water)

Sample Date: 08/21/18 9:10 **Sampler:** P.M.

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

Cl Res Total (Field)	Field	10.4		N/A	mg/L	08/21/18	08/21/18	1834112	
pH (Field)	Field	7.79		N/A	pH Units	08/21/18	08/21/18	1834112	
Temperature (Field)	Field	23.9		N/A	°C	08/21/18	08/21/18	1834112	

General Physical Analyses

Apparent Color	SM 2120BM	7.5	3.0	15	Color Units	08/21/18	08/21/18	1834105	
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Metals

Iron (Fe)	EPA 200.7	ND	100	300	ug/L	08/30/18	08/31/18	1835131	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	08/30/18	08/31/18	1835131	

Reservoir Effluent Site #5

18H2004-02 (Water)

Sample Date: 08/21/18 10:25 **Sampler:** P.M.

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

Cl Res Total (Field)	Field	3.58		N/A	mg/L	08/21/18	08/21/18	1834112	
pH (Field)	Field	8.26		N/A	pH Units	08/21/18	08/21/18	1834112	
Temperature (Field)	Field	24.6		N/A	°C	08/21/18	08/21/18	1834112	

General Physical Analyses

Apparent Color	SM 2120BM	ND	3.0	15	Color Units	08/21/18	08/21/18	1834105	
Odor Threshold	EPA 140.1-M	2	1	3	TON	08/21/18	08/21/18	1834105	

General Chemical Analyses

Total Filterable Residue/TDS	SM 2540C	540	5.0	1000	mg/L	08/28/18	08/30/18	1835032	
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ND Analyte NOT DETECTED at or above the reporting limit



August 30, 2018

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: 18H2004
Lab Number: J082304-01

Enclosed are results for sample(s) received 8/23/18 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,

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
18H2004

J082304-01

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 [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 / 18H2004-02

Sampled: 08/21/18 10:25 PS Code:
Water

WTX ID:

Methane RSK175

Report in mg/L

Containers Supplied:

40ml Amber Vial (B)

40ml Amber Vial (C)

Released By

08/23/18 07:30

Date / Time

Received By

8/23/18 - 9:00

Date / Time

Released By

8/23/18 11:38

Date / Time

Received By

8/23/18 1:28

Date / Time

7°C

Client: Clinical Laboratory
Attn: Stu Styles
Project Name: NA
Project No.: 18H2004
Date Received: 08/23/18
Matrix: Water
Reporting Units: mg/L

RSK175

Lab No.:	J082304-01						
Client Sample I.D.:	Reservoir Effluent Site #5/ 18H2004-02						
Date/Time Sampled:	8/21/18 10:25						
Date/Time Analyzed:	8/28/18 13:55						
QC Batch No.:	180828GC8A2						
Analyst Initials:	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:



Mark Johnson
Operations Manager

Date

8-30-18

The cover letter is an integral part of this analytical report



LCS/LCSD Recovery and RPD Summary Report

QC Batch #: 180828GC8A2

Matrix: Air

Reporting Units: mg/L

RSK175
LABORATORY CONTROL SAMPLE SUMMARY

Lab No.:	METHOD BLANK			LCS		LCSD						
Date/Time Analyzed:	8/28/18 13:38			8/28/18 12:13		8/28/18 12:28						
Analyst Initials:	AS			AS		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	0.65	0.759	116	0.757	116	0.3	70	130	30.0

ND= Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By: _____

Mark Johnson
Operations Manager

Date

8-30-18

The cover letter is an integral part of this analytical report



Page 1 of 1

Clinical Laboratory of San Bernardino, Inc.



07 September 2018

Clinical Lab No.: 18H2435

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

Project Name: Standard Analysis
Sub Project: CWPF 4th Week of August, 2018 Compliance Sampling

Enclosed are the results of the analyses for samples received at the laboratory on 08/28/18 . Samples were received within temperature range, in correct containers and preservation.

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

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

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

Sincerely,

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 4th Week of August, 2018 Compliance Sampling
Project Manager: Mark Andersen
Work Order: 18H2435
Received: 08/28/18 15:15
Reported: 09/07/18

Reservoir Influent Site #3 **18H2435-01 (Water)** **Sample Date:** 08/28/18 9:25 **Sampler:** P.M.

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

Cl Res Total (Field)	Field	9		N/A	mg/L	08/28/18	08/28/18	1835060	
pH (Field)	Field	7.89		N/A	pH Units	08/28/18	08/28/18	1835060	
Temperature (Field)	Field	23.5		N/A	°C	08/28/18	08/28/18	1835060	

General Physical Analyses

Apparent Color	SM 2120BM	5.0	3.0	15	Color Units	08/28/18	08/28/18	1835083	
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Metals

Iron (Fe)	EPA 200.7	ND	100	300	ug/L	08/30/18	08/31/18	1835131	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	08/30/18	08/31/18	1835131	

Reservoir Effluent Site #5 **18H2435-02 (Water)** **Sample Date:** 08/28/18 9:40 **Sampler:** P.M.

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

Field Analyses

Cl Res Total (Field)	Field	3.9		N/A	mg/L	08/28/18	08/28/18	1835060	
pH (Field)	Field	8.21		N/A	pH Units	08/28/18	08/28/18	1835060	
Temperature (Field)	Field	23.8		N/A	°C	08/28/18	08/28/18	1835060	

General Physical Analyses

Apparent Color	SM 2120BM	ND	3.0	15	Color Units	08/28/18	08/28/18	1835083	
Odor Threshold	EPA 140.1-M	2	1	3	TON	08/28/18	08/28/18	1835083	

General Chemical Analyses

Total Filterable Residue/TDS	SM 2540C	520	5.0	1000	mg/L	08/31/18	09/05/18	1835147	
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ND Analyte NOT DETECTED at or above the reporting limit



September 6, 2018

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: 18H2435
Lab Number: J082903-01

Enclosed are results for sample(s) received 8/29/18 by Air Technology Laboratories. Samples were received intact and chilled to 8° 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,

A handwritten signature in blue ink, appearing to read "M. 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
18H2435

J082903-01

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 [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 / 18H2435-02

Sampled: 08/28/18 09:40 PS Code:
Water

WTX ID:

Methane RSK175

Report in mg/L

Containers Supplied:

40ml Amber Vial (B)

40ml Amber Vial (C)

8°C

Released By

Date / Time

Received By

Date / Time

Released By

Date / Time

Received By

Date / Time

08/29/18 07:30

8/29/18 8:18

8/29/18 9:53

8/29/18 09:53

Client: Clinical Laboratory
Attn: Stu Styles
Project Name: NA
Project No.: 18H2435
Date Received: 08/29/18
Matrix: Water
Reporting Units: mg/L

RSK175

Lab No.:	J082903-01						
Client Sample I.D.:	Reservoir Effluent Site #5/ 18H2435-02						
Date/Time Sampled:	8/28/18 9:40						
Date/Time Analyzed:	9/5/18 9:37						
QC Batch No.:	180904GC8A2						
Analyst Initials:	AS						
Dilution Factor:	1.0						
ANALYTE	Result mg/L	RL mg/L					
Methane	0.27	0.0010					

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

Reviewed/Approved By: _____

Mark Johnson
 Mark Johnson
 Operations Manager

Date 9/6/18

The cover letter is an integral part of this analytical report



LCS/LCSD Recovery and RPD Summary Report

QC Batch #: 180904GC8A2

Matrix: Air

Reporting Units: mg/L

RSK175
LABORATORY CONTROL SAMPLE SUMMARY

Lab No.:	METHOD BLANK			LCS		LCSD					
Date/Time Analyzed:	9/4/18 16:22			9/4/18 15:56		9/4/18 16:09					
Analyst Initials:	AS			AS		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	0.65	0.624	95.4	0.610	93.2	2.4	70	130	30.0

ND= Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By: _____

Mark Johnson
Operations Manager

Date

9/6/18

The cover letter is an integral part of this analytical report



1842435

"Your Water and Wastewater Analysis Solution"

Clinical Laboratory of San Bernardino, Inc.



30 August 2018

Clinical Lab No.: 18H1258

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

Project Name: Standard Analysis
Sub Project: Lomita Distribution Ortho, 2nd Week August 2018

Enclosed are the results of the analyses for samples received at the laboratory on 08/14/18 . Samples were received within temperature range, in correct containers and preservation.

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

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

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

Sincerely,

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: Lomita Distribution Ortho, 2nd Week August 2018
Project Manager: Mark Andersen

Work Order: 18H1258
Received: 08/14/18 16:00
Reported: 08/30/18

1948 252nd St.

18H1258-01 (Water)

Sample Date: 08/14/18 7:35 **Sampler:** P.M.

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

Cl Res Total (Field)	Field	3.4		N/A	mg/L	08/14/18	08/14/18	1833080	
pH (Field)	Field	8.22		N/A	pH Units	08/14/18	08/14/18	1833080	
Temperature (Field)	Field	25.9		N/A	°C	08/14/18	08/14/18	1833080	

General Chemical Analyses

Ortho-Phosphate (PO4)	HACH 8048	0.86	0.020	N/A	mg/L	08/15/18	08/15/18	1833113	
Phosphorus (Total as P)	HACH 8190	0.35	0.0067	N/A	mg/L	08/24/18	08/29/18	1835070	

24632 S. Moon

18H1258-02 (Water)

Sample Date: 08/14/18 8:25 **Sampler:** P.M.

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

Cl Res Total (Field)	Field	2.9		N/A	mg/L	08/14/18	08/14/18	1833080	
pH (Field)	Field	8.16		N/A	pH Units	08/14/18	08/14/18	1833080	
Temperature (Field)	Field	25.2		N/A	°C	08/14/18	08/14/18	1833080	

General Chemical Analyses

Ortho-Phosphate (PO4)	HACH 8048	0.44	0.020	N/A	mg/L	08/15/18	08/15/18	1833113	
Phosphorus (Total as P)	HACH 8190	0.32	0.0067	N/A	mg/L	08/24/18	08/29/18	1835070	

2450 W. 247th St.

18H1258-03 (Water)

Sample Date: 08/14/18 8:45 **Sampler:** P.M.

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

Cl Res Total (Field)	Field	1.21		N/A	mg/L	08/14/18	08/14/18	1833080	
pH (Field)	Field	8.07		N/A	pH Units	08/14/18	08/14/18	1833080	
Temperature (Field)	Field	26.6		N/A	°C	08/14/18	08/14/18	1833080	

General Chemical Analyses

Ortho-Phosphate (PO4)	HACH 8048	0.56	0.020	N/A	mg/L	08/15/18	08/15/18	1833113	
Phosphorus (Total as P)	HACH 8190	0.35	0.0067	N/A	mg/L	08/24/18	08/29/18	1835070	

Clinical Laboratory of San Bernardino, Inc.



Lomita, City of 24373 Walnut Avenue Lomita CA, 91717	Project: Standard Analysis Sub Project: Lomita Distribution Ortho, 2nd Week August 2018 Project Manager: Mark Andersen	Work Order: 18H1258 Received: 08/14/18 16:00 Reported: 08/30/18
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2052 Dawn St. **18H1258-04 (Water)** **Sample Date:** 08/14/18 8:00 **Sampler:** P.M.

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

CI Res Total (Field)	Field	1.08		N/A	mg/L	08/14/18	08/14/18	1833080
pH (Field)	Field	8.06		N/A	pH Units	08/14/18	08/14/18	1833080
Temperature (Field)	Field	27.4		N/A	°C	08/14/18	08/14/18	1833080

General Chemical Analyses

Ortho-Phosphate (PO4)	HACH 8048	0.47	0.020	N/A	mg/L	08/15/18	08/15/18	1833113
Phosphorus (Total as P)	HACH 8190	0.36	0.0067	N/A	mg/L	08/24/18	08/29/18	1835070

CWPF SP5 **18H1258-05 (Water)** **Sample Date:** 08/14/18 10:12 **Sampler:** P.M.

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

CI Res Total (Field)	Field	3.7		N/A	mg/L	08/14/18	08/14/18	1833080
pH (Field)	Field	8.25		N/A	pH Units	08/14/18	08/14/18	1833080
Temperature (Field)	Field	24.8		N/A	°C	08/14/18	08/14/18	1833080

General Chemical Analyses

Phosphorus (Total as P)	HACH 8190	0.38	0.0067	N/A	mg/L	08/24/18	08/29/18	1835070
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ND Analyte NOT DETECTED at or above the reporting limit

"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**

AUGUST 2018					
DATE	DAY	METHANE HANDHELD			COMMENTS
8/1/2018	Wed	CH4-	0%	Oxy-	20.9%
8/2/2018	Thu	CH4-	0%	Oxy-	20.8%
8/3/2018	Fri	CH4-	0%	Oxy-	20.9%
8/4/2018	Sat				
8/5/2018	Sun				
8/6/2018	Mon	CH4-	0%	Oxy-	20.7%
8/7/2018	Tue	CH4-	0%	Oxy-	20.9%
8/8/2018	Wed	CH4-	0%	Oxy-	20.9%
8/9/2018	Thu	CH4-	0%	Oxy-	20.9%
8/10/2018	Fri	CH4-	0%	Oxy-	20.8%
8/11/2018	Sat				
8/12/2018	Sun				
8/13/2018	Mon	CH4-	0%	Oxy-	20.9%
8/14/2018	Tue	CH4-	0%	Oxy-	20.9%
8/15/2018	Wed	CH4-	0%	Oxy-	20.9%
8/16/2018	Thu	CH4-	0%	Oxy-	20.6%
8/17/2018	Fri	CH4-	0%	Oxy-	20.7%
8/18/2018	Sat				
8/19/2018	Sun				
8/20/2018	Mon	CH4-	0%	Oxy-	20.9%
8/21/2018	Tue	CH4-	0%	Oxy-	20.9%
8/22/2018	Wed	CH4-	0%	Oxy-	20.9%
8/23/2018	Thu	CH4-	0%	Oxy-	20.9%
8/24/2018	Fri	CH4-	0%	Oxy-	20.8%
8/25/2018	Sat				
8/26/2018	Sun				
8/27/2018	Mon	CH4-	0%	Oxy-	20.9%
8/28/2018	Tue	CH4-	0%	Oxy-	20.9%
8/29/2018	Wed	CH4-	0%	Oxy-	20.8%
8/30/2018	Thu	CH4-	0%	Oxy-	20.8%
8/31/2018	Fri	CH4-	2%	Oxy-	20.8%
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: August 2018

#	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	8/8/2018	26.4	8.19	3.30	0.06	0.60	0.07	0.006	ND	A	1	1	Well/MWD Blend
2	D	S13-004	24632 S Moon Ave	8/8/2018	25.9	8.12	2.80	0.10	0.51	0.10	0.020	ND	A	8	1	Well/MWD Blend
3	D	S13-008	25417 Pennsylvania Ave	8/8/2018	29.3	8.13	3.30	0.09	0.53	0.06	0.010	ND	A	ND	1	Well/MWD Blend
4	D	A	2052 Dawn St	8/8/2018	27.3	8.06	1.24	0.06	0.24	0.09	0.040	ND	A	35	1	Well/MWD Blend
5	D		Reservoir SP5	8/8/2018	24.4	8.26	3.45	0.06	0.61	0.05	0.006	ND	A	3.0	1	Well/MWD Blend
6	D	S13-001	1912 W 259th St	8/8/2018	27.0	8.53	2.40	0.08	0.50	0.08	0.006	ND	A	ND	2	MWD Only
7	D	S13-002	26314 S Monte Vista Ave	8/8/2018	24.8	8.53	2.30	0.09	0.48	0.08	0.006	ND	A	ND	3	MWD Only
8	D	S13-005	2500 PCH	8/8/2018	28.0	8.48	1.80	0.08	0.46	0.09	0.009	ND	A	ND	2	MWD Only

1	D	S13-003	1948 W 252nd St	8/14/2018	25.9	8.22	3.40	0.07	0.62	0.10	0.007	ND	A	ND	1	Well/MWD Blend
2	D	S13-004	24632 S Moon Ave	8/14/2018	25.2	8.16	2.90	0.04	0.56	0.09	0.019	ND	A	7	1	Well/MWD Blend
3	D	S13-008	25417 Pennsylvania Ave	8/14/2018	27.4	8.17	3.30	0.07	0.62	0.01	0.013	ND	A	ND	1	Well/MWD Blend
4	D	A	2052 Dawn St	8/14/2018	27.4	8.06	1.08	0.03	0.33	0.21	0.061	ND	A	56	1	Well/MWD Blend
5	D		Reservoir SP5	8/14/2018	24.8	8.25	3.70	0.06	0.78	0.11	0.006	ND	A	ND	1	Well/MWD Blend
6	D	S13-001	1912 W 259th St	8/14/2018	26.4	8.54	2.00	0.05	0.44	0.09	0.011	ND	A	ND	2	MWD Only
7	D	S13-002	26314 S Monte Vista Ave	8/14/2018	24.6	8.56	2.04	0.04	0.50	0.09	0.007	ND	A	ND	3	MWD Only
8	D	S13-005	2500 PCH	8/14/2018	26.0	8.55	2.01	0.05	0.47	0.11	0.017	ND	A	ND	2	MWD Only

1	D	S13-003	1948 W 252nd St	8/21/2018	26.5	8.23	3.10	0.08	0.58	0.11	0.005	ND	A	ND	1	Well/MWD Blend
2	D	S13-004	24632 S Moon Ave	8/21/2018	25.6	8.15	2.80	0.06	0.53	0.11	0.013	ND	A	4	1	Well/MWD Blend
3	D	S13-008	25417 Pennsylvania Ave	8/21/2018	26.5	8.20	3.30	0.06	0.59	0.03	0.008	ND	A	ND	1	Well/MWD Blend
4	D	A	2052 Dawn St	8/21/2018	27.3	8.06	1.07	0.08	0.32	0.11	0.063	ND	A	45	1	Well/MWD Blend
5	D		Reservoir SP5	8/21/2018	24.6	8.26	3.58	0.08	0.68	0.03	0.008	ND	A	ND	1	Well/MWD Blend
6	D	S13-001	1912 W 259th St	8/21/2018	27.8	8.55	2.30	0.06	0.48	0.03	0.009	ND	A	ND	2	MWD Only
7	D	S13-002	26314 S Monte Vista Ave	8/21/2018	24.7	8.61	2.30	0.05	0.49	0.09	0.005	ND	A	ND	3	MWD Only
8	D	S13-005	2500 PCH	8/21/2018	25.6	8.60	2.20	0.05	0.43	0.06	0.016	ND	A	ND	2	MWD Only

1	D	S13-003	1948 W 252nd St	8/28/2018	24.8	8.16	3.60	0.06	0.66	0.05	0.007	ND	A	ND	1	Well/MWD Blend
2	D	S13-004	24632 S Moon Ave	8/28/2018	23.8	8.13	3.10	0.09	0.62	0.10	0.013	ND	A	ND	1	Well/MWD Blend
3	D	S13-008	25417 Pennsylvania Ave	8/28/2018	25.3	8.15	3.60	0.07	0.66	0.07	0.011	ND	A	ND	1	Well/MWD Blend
4	D	A	2052 Dawn St	8/28/2018	25.6	8.00	1.08	0.07	0.30	0.10	0.040	ND	A	22	1	Well/MWD Blend
5	D		Reservoir SP5	8/28/2018	23.8	8.21	3.90	0.06	0.78	0.01	0.008	ND	A	ND	1	Well/MWD Blend
6	D	S13-001	1912 W 259th St	8/28/2018	24.2	8.68	2.30	0.09	0.49	0.07	0.009	ND	A	ND	2	MWD Only
7	D	S13-002	26314 S Monte Vista Ave	8/28/2018	23.4	8.70	2.30	0.04	0.49	0.03	0.006	ND	A	ND	3	MWD Only
8	D	S13-005	2500 PCH	8/28/2018	23.7	8.70	2.40	0.09	0.47	0.04	0.011	ND	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 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

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 trends of Nitrite in Zone I, in accordance with the Nitrification Monitoring Plan. Hydrant flushing has been implemented.