

CITY OF LOMITA



Cypress Water Production Facility Monthly Status Report

October 2017

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CITY COUNCIL

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



CITY OF LOMITA

ADMINISTRATION

RYAN SMOOT
CITY MANAGER

November 13, 2017

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

Subject: System No. 1910073 - Monthly Report for the Cypress Water Production Facility (CWPF) for the period of October 1 through October 31, 2017.

Dear Mr. Williams,

In accordance with the Department of Public Health temporary approval letter dated March 15, 2013 and Permit Amendment No. 1910073, I am submitting the following report for the Cypress Water Production Facility operations for the month of October 2017.

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

Sincerely,

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

A. BACKGROUND

On March 15, 2013, the City of Lomita received conditional approval from the Department of Public Health (DPH) to distribute blended water from the Cypress Water Production Facility (CWPF) Well No. 5 to the City's customers.

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

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

B. WELL PRODUCTION

The CWPF operated continuously during the month of October 2017 maintaining water levels inside the reservoir ranging from 7 feet to 10 feet. The average flow from Well No. 5 was 491 gpm and 268 gpm from MWD. The blend ratio for month was 62% Well water and 38% MWD water. See Table 1 below for production totals for the month of October 2017.

Table 1. Monthly Production Totals.

	Production for October 2017		
Well No. 5	55.37	ac-ft	18,041,274 (gallons)
MWD	34.17	ac-ft	11,133,000 (gallons)
Combined Total	89.54	ac-ft	29,174,274 (gallons)
Daily	3.32	ac-ft/day	1,080,529 (gallons/day)

C. OPERATIONAL INTERRUPTIONS

During the month of October 2017, CWPF was placed offline for approximately four (4) days and water was supplied by the City's West Basin 8 MWD interconnection with no interruption of service to customers. Routine preventive maintenance and overall system checks were performed at this time. No major planned operational interruptions are anticipated for the following month.

D. SAMPLE LOCATIONS

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

E. WATER QUALITY MONITORING

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

E1. IRON, MANGANESE AND COLOR

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

E2. FREE AND TOTAL CHLORINE RESIDUALS

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

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

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

E3-1 TOTAL DISSOLVED SOLIDS (TDS)

The sampling results indicate the TDS levels of the effluent blended water to be on average 655 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 760 mg/L and 310 mg/L, respectively.

E3-2 HARDNESS

The sampling results for the month indicate the hardness levels of the blended water to be on average 280 mg/L. This hardness level is slightly higher than 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 0.45 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 October 2017 in Appendix B.

E3-5 ODOR

The odor levels at the CWPF effluent averaged 2.3 units for the month.

E4. NITRIFICATION MONITORING

Weekly nitrification sampling was performed during the month of October 2017 following the City's Nitrification Monitoring Plan. Refer to Appendix C for results. During this month, additional hydrant flushing was implemented due to elevated Nitrite reads.

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
10/4/2017											ND	300	ND	50	5	15
10/11/2017	240	300	190	50	10	15	A	A	A	500	ND	300	ND	50	5	15
10/18/2017											ND	300	ND	50	5	15
10/25/2017											ND	300	ND	50	ND	15

Notes:

Monthly- Orange; Weekly- Yellow

A – Absent

ND – Non Detect

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

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

Date, week of	SP2	SP3			SP4			SP5		
	Free Cl	Free Cl	Total Cl	Total NH ₃	Free Cl	Total Cl	Total NH ₃	Free Cl	Total Cl	Total NH ₃
10/4/2017	2.58	0.59	4.67	0.86	0.60	4.46	0.81	0.09	3.60	0.86
10/11/2017	4.43	0.79	5.00	0.75	0.74	4.90	0.75	0.06	3.65	0.84
10/18/2017	4.16	0.64	5.37	0.92	0.77	4.59	0.81	0.10	3.34	0.77
10/25/2017	5.56	0.70	6.90	1.06	0.77	4.35	0.86	0.15	2.77	0.62

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
10/4/2017			670	500-750	2	3						0.61
10/11/2017	760	310	640	500-750	2	3	370	120	280	180-250	2.8	0.35
10/18/2017			680	500-750	3	3						0.36
10/25/2017			630	500-750	2	3						0.48
Average			655	500-750	2.3	3						0.45

Notes:

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

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

Sample Locations and Parameters	Frequency	MCL/ Goal	10/4 1stWk or Mo. Result (date)	10/11 2 nd Wk	10/18 3rdWk	10/25 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	760 10/11/17	Operations Data/Information: CWPf operation days On Well 5: Daily average flow – 491 gpm; total prod. – 55.37 AF Combined Well 5/MWD data: Average Well 5: MWD blend Ratio – 62% WELL: 38% MWD; total prod.- 89.54 AF Chlorine Dosage: N/A*				*Chlorine injected after SP1, before entering the greensand filter.
Hardness	Monthly	See SP5	370 10/11/17					
CH4, ppm	Monthly	See SP5	2.8 10/11/17					
Iron, ppb	Monthly	See SP3	240 10/11/17					
Manganese, ppb	Monthly	See SP3	190 10/11/17					
Color, units	Monthly	See SP3	10 10/11/17					
Total Coliform, P or A	Monthly	A	A 10/11/17					
SP2 --- Also called Filter Effluent or Site#3.								
Total Coliform, P or A	Monthly	A	A	Ammonia Dosage: N/A*				*Ammonia added after filter effluent
HPC,MPN/100 ml	Monthly	500	A					
Free Cl Res, ppm	Continuous	Average: 4.36 ; Range: 2.58 - 5.56						
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	5	ND		
Free and Total Cl Res, ppm	Continuous	Free Cl: Average: 0.68; Range: 0.59 – 0.79 Total Cl: Average: 5.40; Range: 4.67 - 6.90 Ammonia: Average: 0.89; Range: 0.75 – 1.06						
SP4 --- Also called Reservoir Influent or the Site Well 5/MWD Water Blend Point/Phosphate Injection.								
Phosphate Injection		Phosphate Dosage: 0.92 mg/L						
Free and Total Cl Res, ppm	Continuous	Free Cl: Average: 0.72; Range: 0.60 – 0.77 Total Cl: Average: 4.60; Range: 4.35 – 4.90 Ammonia: Average: 0.81; Range: 0.75 – 0.86						Cl/NH3 Ratio: 5.66
SP5 --- Also called Reservoir Effluent or Site#5. SP5 discharges into Zone 1 of the distribution system.								
TDS, ppm	Weekly	SI Goal: 500-750ppm	670	640	680	630		
Hardness	Monthly	SI Goal: 180-250ppm		280				
CH4, ppm	Weekly	Goal: from PA	0.61	0.35	0.36	0.48		% CH4 Removal: 84%
Odor, units	Monthly	1	2	2	3	2		
Free and Total Cl Res, ppm	Continuous	Free Cl: Average: 0.09; Range: 0.04 – 0.15 Total Cl: Average: 3.06; Range: 1.92 - 3.65 Ammonia: Average: 0.76; Range: 0.62 – 0.86						Cl/NH3 Ratio: 4.03
Headspace of the Cypress Reservoir.								
1CH4 ppmv; using Portable Device	Daily (from log)	Goal - LEL	CH4 Average: 0.38% CH4 Range: 0-3%					
SP 6 --- MWD Source Feeding CWPf. Also called Zone 2 of the distribution system or Site #6.								
TDS, ppm	Monthly	-----		310				
Hardness	Monthly	-----		120				
Notes: 1Self-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.



19 October 2017

Clinical Lab No.: 17J0421

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

Project Name: Standard Analysis
Sub Project: CWPF 1st Week of Oct, 2017 Compliance Sampling

Enclosed are the results of the analyses for samples received at the laboratory on 10/04/17. Samples were received within temperature range, in correct containers and preservation.

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

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

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

Sincerely,

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

Stu Styles
Client Services Manager

Clinical Laboratory of San Bernardino, Inc.



Lomita, City of
24373 Walnut Avenue
Lomita CA, 91717

Project: Standard Analysis
Sub Project: CWPf 1st Week of Oct, 2017 Compliance Sampling
Project Manager: Mark Andersen

Work Order: 17J0421
Received: 10/04/17 15:30
Reported: 10/19/17

Reservoir Influent Site #3 **17J0421-01 (Water)** **Sample Date:** 10/04/17 8:10 **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	4.35		N/A	mg/L	10/04/17	10/04/17	1740134	
pH (Field)	Field	7.37		N/A	pH Units	10/04/17	10/04/17	1740134	
Temperature (Field)	Field	22.1		N/A	°C	10/04/17	10/04/17	1740134	

General Physical Analyses

Apparent Color	SM 2120BM	5.0	3.0	15	Color Units	10/04/17	10/04/17	1740143	
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Metals

Iron (Fe)	EPA 200.7	ND	100	300	ug/L	10/09/17	10/10/17	1741031	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	10/09/17	10/10/17	1741031	

Reservoir Effluent Site #5 **17J0421-02 (Water)** **Sample Date:** 10/04/17 8:20 **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	3.06		N/A	mg/L	10/04/17	10/04/17	1740134	
pH (Field)	Field	7.68		N/A	pH Units	10/04/17	10/04/17	1740134	
Temperature (Field)	Field	21.2		N/A	°C	10/04/17	10/04/17	1740134	

General Physical Analyses

Apparent Color	SM 2120BM	ND	3.0	15	Color Units	10/04/17	10/04/17	1740143	
Odor Threshold	EPA 140.1-M	2	1	3	TON	10/04/17	10/04/17	1740143	

General Chemical Analyses

Total Filterable Residue/TDS	SM 2540C	670	5.0	1000	mg/L	10/11/17	10/13/17	1741081	
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ND Analyte NOT DETECTED at or above the reporting limit



October 12, 2017

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



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

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

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

LABORATORY TEST RESULTS

Project Reference: 17J0421
Lab Number: I100506-01

Enclosed are results for sample(s) received 10/05/17 by Air Technology Laboratories. Samples were received intact and properly chilled. Analyses were performed according to specifications on the chain of custody provided with the sample(s).

Report Narrative:

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

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

Sincerely,

A handwritten signature in blue ink, appearing to read "Mark Johnson", is written over a 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
17J0421

2 of 4
1100506
I100506-01

SENDING LABORATORY:

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

RECEIVING LABORATORY:

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

Please email results to Project Manager: Stu Styles

[] glaubig@clinical-lab.com [] ybarra@clinical-lab.com [✓] styles@clinical-lab.com [] nelson@clinical-lab.com

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

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

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

Subcontract Comments:

Analysis

Comments

Sample ID: Reservoir Effluent Site #5 / 17J0421-02

Sampled: 10/04/17 08:20 PS Code:

Water

WTX ID:

Methane RSK175

Report in mg/L

Containers Supplied:

40ml Amber Vial (B)

40ml Amber Vial (C)

4°C

Released By

Date / Time

Received By

Date / Time

Released By

Date / Time

Received By

Date / Time

Client: Clinical Laboratory
Attn: Stu Styles
Project Name: NA
Project No.: 17J0421
Date Received: 10/05/17
Matrix: Water
Reporting Units: mg/L

RSK175

Lab No.:	I100506-01						
Client Sample I.D.:	Reservoir Effluent Site #5/17J0421-02						
Date/Time Sampled:	10/4/17 8:20						
Date/Time Analyzed:	10/5/17 15:51						
QC Batch No.:	171005GC8A2						
Analyst Initials:	AS						
Dilution Factor:	1.0						
ANALYTE	Result mg/L	RL mg/L					
Methane	0.61	0.0010					

ND = Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By:



Mark Johnson
Operations Manager

Date 10-11-17

The cover letter is an integral part of this analytical report



QC Batch No.: 171005GC8A2
Matrix: Water
Units: mg/L

QC for Dissolved Gases by EPA Procedure RSKSOP-175


Lab No.:		Method Blank		LCS		LCSD			
Date/Time Analyzed:		10/5/17 14:31		10/5/17 13:43		10/5/17 13:56			
Analyst Initials:		AS		AS		AS			
Datafile:		05oct024		05oct022		05oct023			
Dilution Factor:		1.0		1.0		1.0			
ANALYTE	PQL	RL	Results	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Methane	0.0010	0.0010	ND	97	70-130%	98	70-130%	1.5	<30

PQL = Practical Quantitation Limit

ND = Not Detected (Below RL).

RL = PQL X Dilution Factor

Reviewed/Approved By: _____


Mark J. Johnson
Operations Manager

Date: 10-11-17

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



AirTECHNOLOGY Laboratories, Inc.

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

$$\frac{3}{0}$$

17/04/21

"Your Water and Wastewater Analysis Solution"

Clinical Laboratory of San Bernardino, Inc.



26 October 2017

Clinical Lab No.: 17J1023

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

Project Name: Standard Analysis
Sub Project: CWPF Monthly Compliance / 2nd Week of Oct, 2017

Enclosed are the results of the analyses for samples received at the laboratory on 10/11/17. Samples were received within temperature range, in correct containers and preservation.

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

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

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

Sincerely,

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

Stu Styles
Client Services Manager

Clinical Laboratory of San Bernardino, Inc.



Lomita, City of
24373 Walnut Avenue
Lomita CA, 91717

Project: Standard Analysis
Sub Project: CWPf Monthly Compliance / 2nd Week of Oct, 2017
Project Manager: Mark Andersen

Work Order: 17J1023
Received: 10/11/17 15:00
Reported: 10/26/17

Raw Water Site #1

17J1023-01 (Water)

Sample Date: 10/11/17 8:25 Sampler: DGM

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	10/11/17	10/11/17	1741110	
pH (Field)	Field	7.65		N/A	pH Units	10/11/17	10/11/17	1741110	
Temperature (Field)	Field	21.3		N/A	°C	10/11/17	10/11/17	1741110	

Microbiology Analyses

Total Coliform	SM 9223	A		N/A	P/A	10/11/17	10/12/17	1741126	
E. Coli	SM 9223	A		N/A	P/A	10/11/17	10/12/17	1741126	
Plate Count	SM9215B	61	1	500	CFU/ml	10/11/17	10/13/17	1741168	

General Physical Analyses

Apparent Color	SM 2120BM	10.0	3.0	15	Color Units	10/11/17	10/11/17	1741128	
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General Chemical Analyses

Hardness, Total (as CaCO3)	Calculated	370	6.6	N/A	mg/L	10/24/17	10/24/17	[CALC]	
Total Filterable Residue/TDS	SM 2540C	760	5.0	1000	mg/L	10/18/17	10/20/17	1742104	

Metals

Calcium (Ca)	EPA 200.7	98	1.0	N/A	mg/L	10/24/17	10/24/17	1743044	
Iron (Fe)	EPA 200.7	240	100	300	ug/L	10/24/17	10/24/17	1743035	
Magnesium (Mg)	EPA 200.7	31	1.0	N/A	mg/L	10/24/17	10/24/17	1743044	
Manganese (Mn)	EPA 200.7	190	20	50	ug/L	10/24/17	10/24/17	1743035	

Filter Effluent (Free Chlorine) Site #2

17J1023-02 (Water)

Sample Date: 10/11/17 8:15 Sampler: DGM

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

Cl Res Total (Field)	Field	6.1		N/A	mg/L	10/11/17	10/11/17	1741110	
pH (Field)	Field	7.48		N/A	pH Units	10/11/17	10/11/17	1741110	
Temperature (Field)	Field	21.7		N/A	°C	10/11/17	10/11/17	1741110	

Microbiology Analyses

Total Coliform	SM 9223	A		N/A	P/A	10/11/17	10/12/17	1741126	
E. Coli	SM 9223	A		N/A	P/A	10/11/17	10/12/17	1741126	
Plate Count	SM9215B	ND	1	500	CFU/ml	10/11/17	10/13/17	1741168	

Clinical Laboratory of San Bernardino, Inc.



Lomita, City of
24373 Walnut Avenue
Lomita CA, 91717

Project: Standard Analysis
Sub Project: CWPf Monthly Compliance / 2nd Week of Oct, 2017
Project Manager: Mark Andersen

Work Order: 17J1023
Received: 10/11/17 15:00
Reported: 10/26/17

Filter Effluent (Total Chlorine) Site #3

17J1023-03 (Water)

Sample Date: 10/11/17 8:17 Sampler: DGM

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

Cl Res Total (Field)	Field	4.9		N/A	mg/L	10/11/17	10/11/17	1741110	
pH (Field)	Field	7.8		N/A	pH Units	10/11/17	10/11/17	1741110	
Temperature (Field)	Field	21.7		N/A	°C	10/11/17	10/11/17	1741110	

General Physical Analyses

Apparent Color	SM 2120BM	5.0	3.0	15	Color Units	10/11/17	10/11/17	1741128	
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Metals

Iron (Fe)	EPA 200.7	ND	100	300	ug/L	10/24/17	10/24/17	1743035	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	10/24/17	10/24/17	1743035	

Zone #2 Site #6

17J1023-04 (Water)

Sample Date: 10/11/17 8:12 Sampler: DGM

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

Field Analyses

Cl Res Total (Field)	Field	2.17		N/A	mg/L	10/11/17	10/11/17	1741110	
pH (Field)	Field	8.55		N/A	pH Units	10/11/17	10/11/17	1741110	
Temperature (Field)	Field	18.5		N/A	°C	10/11/17	10/11/17	1741110	

General Chemical Analyses

Hardness, Total (as CaCO3)	Calculated	120	6.6	N/A	mg/L	10/24/17	10/24/17	[CALC]	
Total Filterable Residue/TDS	SM 2540C	310	5.0	1000	mg/L	10/18/17	10/20/17	1742104	

Metals

Calcium (Ca)	EPA 200.7	28	1.0	N/A	mg/L	10/24/17	10/24/17	1743044	
Magnesium (Mg)	EPA 200.7	13	1.0	N/A	mg/L	10/24/17	10/24/17	1743044	

Clinical Laboratory of San Bernardino, Inc.



Lomita, City of 24373 Walnut Avenue Lomita CA, 91717	Project: Standard Analysis Sub Project: CWPf Monthly Compliance / 2nd Week of Oct, 2017 Project Manager: Mark Andersen	Work Order: 17J1023 Received: 10/11/17 15:00 Reported: 10/26/17
---	--	---

Reservoir Effluent Site #5 **17J1023-05 (Water)** **Sample Date:** 10/11/17 8:07 **Sampler:** DGM

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

Field Analyses

Cl Res Total (Field)	Field	3.486		N/A	mg/L	10/11/17	10/11/17	1741110	
pH (Field)	Field	7.85		N/A	pH Units	10/11/17	10/11/17	1741110	
Temperature (Field)	Field	20.8		N/A	°C	10/11/17	10/11/17	1741110	

General Physical Analyses

Odor Threshold	EPA 140.1-M	2	1	3	TON	10/11/17	10/11/17	1741128	
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General Chemical Analyses

Hardness, Total (as CaCO₃)	Calculated	280	6.6	N/A	mg/L	10/24/17	10/24/17	[CALC]	
Total Filterable Residue/TDS	SM 2540C	640	5.0	1000	mg/L	10/18/17	10/20/17	1742104	

Metals

Calcium (Ca)	EPA 200.7	72	1.0	N/A	mg/L	10/24/17	10/24/17	1743044	
Magnesium (Mg)	EPA 200.7	25	1.0	N/A	mg/L	10/24/17	10/24/17	1743044	

ND Analyte NOT DETECTED at or above the reporting limit



October 19, 2017

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



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

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

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

LABORATORY TEST RESULTS

Project Reference: 17J1023
Lab Number: I101201-01/02

Enclosed are results for sample(s) received 10/12/17 by Air Technology Laboratories. Samples were received intact and properly chilled. Analyses were performed according to specifications on the chain of custody provided with the sample(s).

Report Narrative:

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

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

Sincerely,

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

Mark Johnson
Operations Manager
MJohnson@AirTechLabs.com

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

SUBCONTRACT ORDER
Clinical Laboratory of San Bernardino
17J1023

2 of 4
1101201

I 101201-01/02

SENDING LABORATORY:

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

RECEIVING LABORATORY:

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

Please email results to Project Manager: Stu Styles

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

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

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

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

Subcontract Comments:

Analysis

Comments

Sample ID: Raw Water Site #1 / 17J1023-01

Sampled: 10/11/17 08:25 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 / 17J1023-05

Sampled: 10/11/17 08:07 PS Code:
Water

WTX ID:

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

Released By

Date / Time

Received By

Date / Time

10/12/17 07:50

10/12/17 905

10/12/17

10/12/17 1029

Client: Clinical Laboratory
Attn: Stu Styles
Project Name: NA
Project No.: 17J1023
Date Received: 10/12/17
Matrix: Water
Reporting Units: mg/L

RSK175

Lab No.:	I101201-01	I101201-02		
Client Sample I.D.:	Raw Water Site #1 / 17J1023-01	Reservoir Effluent Site #5 / 17J1023-05		
Date/Time Sampled:	10/11/17 8:25	10/11/17 8:07		
Date/Time Analyzed:	10/18/17 9:54	10/18/17 10:07		
QC Batch No.:	171018GC8A1	171018GC8A1		
Analyst Initials:	AS	AS		
Dilution Factor:	1.0	1.0		
ANALYTE	Result mg/L	RL mg/L	Result mg/L	RL mg/L
Methane	2.8	0.0010	0.35	0.0010

ND = Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By: Mark Johnson
Mark Johnson
Operations Manager

Date 10/19/17

The cover letter is an integral part of this analytical report



QC Batch No.: 171018GC8A1
Matrix: Water
Units: mg/L

QC for Dissolved Gases by EPA Procedure RSKSOP-175

Lab No.:		Method Blank		LCS		LCSD			
Date/Time Analyzed:		10/18/17 9:26		10/18/17 9:00		10/18/17 9:13			
Analyst Initials:		AS		AS		AS			
Datafile:		18oct004		18oct002		18oct003			
Dilution Factor:		1.0		1.0		1.0			
ANALYTE	PQL	RL	Results	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Methane	0.0010	0.0010	ND	126	70-130%	120	70-130%	4.6	<30

PQL = Practical Quantitation Limit


ND = Not Detected (Below RL).

RL = PQL X Dilution Factor

Reviewed/Approved By: _____


Mark J. Johnson
Operations Manager

Date: _____


10/19/17

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



AirTECHNOLOGY Laboratories, Inc.

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

1751023

Client		City of Lomita		System Number		Analysis Requested																					
Address		24373 Walnut Avenue		1910073		Destination Laboratory				Hardness		Methane (WATER) (RSK175)		Odor		Color		Heterotrophic Plate Count		Total Coliform		E. Coli		Iron & Manganese		Total Dissolved Solids	
Phone #		(310) 325-9830				[X] Clinical Laboratory																					
Fax #		(310) 325-3627				RWQCB Compliance																					
Project		Standard Analysis				YES																					
Sub Project		CWPFC Monthly Compliance Samples;				ELAP #																					
Comments		2nd week of Oct, 2017				1088																					
Sampled by		DGM																									
Date	Time	Sample Identification		Matrix	Type	Preserv	Temp.	pH	Total Chlorine																		
10/11/2017	0820	Raw Water Site #1		GW	1W	N/A	21.3°	7.65	0																		
10/11/2017	0825	Raw Water Site #1		GW	1W	1,2,7																					
10/11/2017	0815	Filter Effluent (Free Chlorine) Site#2		DW	1W	1,7	21.7°	7.48	6.1																		
10/11/2017	0817	Filter Effluent (Total Chlorine) Site#3		DW	1W	N/A	21.7°	7.80	4.9																		
10/11/2017	0812	Zone #2 Site #6		DW	ID	N/A	18.5°	8.55	2.17																		
10/11/2017	0807	Reservoir Effluent Site #5		DW	ID	N/A	20.8°	7.85	3.486																		
10/11/2017	0807	Reservoir Effluent Site #5		DW	ID	2,7																					
Preservatives: (1) Na ₂ S ₂ O ₃ (2) HCl (3) HNO ₃ (4) NH ₄ Cl (5) H ₂ SO ₄ (6) Na ₂ SO ₃ (7) Cold (8) Other:										Matrix: DW-Drinking Water, WW-Waste Water, SW-Storm Water, GW-Ground Water, A-Air Routine, 2-Repeat, 3-Replacement, 4-Special W-Well D-Dist.																	
Relinquished By (Sign)		Print Name / Company		Date / Time		Received By (Sign)		Print Name / Company																			
Patrick McCue		City of Lomita, CA		10/11/2017 12:50		J. Wu		J. Wu																			
J. Wu		J. Wu		10/11/2017 3:00		J. Wu		J. Wu																			
Comments		J. Wu		J. Wu		J. Wu		J. Wu																			
Shipped Via		Fed X		Golden State		UPS		Client		Other																	

Page 1 of 1

Clinical Laboratory of San Bernardino, Inc.



02 November 2017

Clinical Lab No.: 17J1619

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

Project Name: Standard Analysis
Sub Project: CWPF 3rd Week of Oct, 2017 Compliance Sampling

Enclosed are the results of the analyses for samples received at the laboratory on 10/18/17 . Samples were received within temperature range, in correct containers and preservation.

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

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

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

Sincerely,

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

Stu Styles
Client Services Manager

Clinical Laboratory of San Bernardino, Inc.



Lomita, City of
24373 Walnut Avenue
Lomita CA, 91717

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

Work Order: 17J1619
Received: 10/18/17 15:30
Reported: 11/02/17

Reservoir Influent Site #3 **17J1619-01 (Water)** **Sample Date:** 10/18/17 8:08 **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	4.625		N/A	mg/L	10/18/17	10/18/17	1742159	
pH (Field)	Field	7.6		N/A	pH Units	10/18/17	10/18/17	1742159	
Temperature (Field)	Field	22.5		N/A	°C	10/18/17	10/18/17	1742159	

General Physical Analyses

Apparent Color	SM 2120BM	5.0	3.0	15	Color Units	10/18/17	10/18/17	1742144	
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Metals

Iron (Fe)	EPA 200.7	ND	100	300	ug/L	10/26/17	10/27/17	1743144	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	10/26/17	10/27/17	1743144	

Reservoir Effluent Site #5 **17J1619-02 (Water)** **Sample Date:** 10/18/17 8:12 **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	3.341		N/A	mg/L	10/18/17	10/18/17	1742159	
pH (Field)	Field	7.79		N/A	pH Units	10/18/17	10/18/17	1742159	
Temperature (Field)	Field	21.7		N/A	°C	10/18/17	10/18/17	1742159	

General Physical Analyses

Apparent Color	SM 2120BM	ND	3.0	15	Color Units	10/18/17	10/18/17	1742144	
Odor Threshold	EPA 140.1-M	3	1	3	TON	10/18/17	10/18/17	1742144	

General Chemical Analyses

Total Filterable Residue/TDS	SM 2540C	680	5.0	1000	mg/L	10/25/17	10/27/17	1743089	
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ND Analyte NOT DETECTED at or above the reporting limit



October 26, 2017

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



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

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

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

LABORATORY TEST RESULTS

Project Reference: 17J1619
Lab Number: I101902-01

Enclosed are results for sample(s) received 10/19/17 by Air Technology Laboratories. Samples were received intact and properly chilled. Analyses were performed according to specifications on the chain of custody provided with the sample(s).

Report Narrative:

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

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

Sincerely,

A handwritten signature in blue ink, appearing to read "Mark Johnson", with a stylized flourish at the end.

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
17J1619

I/101902-01

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

Please email results to Project Manager: Stu Styles

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

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

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

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

Subcontract Comments:

Analysis**Comments**

Sample ID: Reservoir Effluent Site #5 / 17J1619-02

Sampled: 10/18/17 08:12 PS Code:

Water

WTX ID:

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

Released By

Date / Time

Received By

Date / Time

Client: Clinical Laboratory
Attn: Stu Styles
Project Name: NA
Project No.: 17J1619
Date Received: 10/19/17
Matrix: Water
Reporting Units: mg/L

RSK175

Lab No.:	I101902-01						
Client Sample I.D.:	Reservoir Effluent Site #5/17J1619-02						
Date/Time Sampled:	10/18/17 8:12						
Date/Time Analyzed:	10/25/17 12:33						
QC Batch No.:	171025GC8A1						
Analyst Initials:	AS						
Dilution Factor:	1.0						
ANALYTE	Result mg/L	RL mg/L					
Methane	0.36	0.0010					

ND = Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By: _____


Mark Johnson
Operations Manager

Date _____

10/26/17

The cover letter is an integral part of this analytical report



QC Batch No.: 171025GC8A1
Matrix: Water
Units: mg/L

QC for Dissolved Gases by EPA Procedure RSKSOP-175


Lab No.:		Method Blank		LCS		LCSD			
Date/Time Analyzed:		10/25/17 12:20		10/25/17 13:18		10/25/17 13:37			
Analyst Initials:		AS		AS		AS			
Datafile:		24oct081		24oct083		24oct084			
Dilution Factor:		1.0		1.0		1.0			
ANALYTE	PQL	RL	Results	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Methane	0.0010	0.0010	ND	107	70-130%	108	70-130%	0.7	<30

PQL = Practical Quantitation Limit


ND = Not Detected (Below RL).

RL = PQL X Dilution Factor

Reviewed/Approved By: _____


Mark J. Johnson
Operations Manager

Date: _____

 10/26/17

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



AirTECHNOLOGY Laboratories, Inc.

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

101215F1

[illegible]

Clinical Laboratory of San Bernardino, Inc.



08 November 2017

Clinical Lab No.: 17J2119

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

Project Name: Standard Analysis
Sub Project: CWPF 4th Week of Oct, 2017 Compliance Sampling

Enclosed are the results of the analyses for samples received at the laboratory on 10/25/17. Samples were received within temperature range, in correct containers and preservation.

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

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

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

Sincerely,

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

Stu Styles
Client Services Manager

Clinical Laboratory of San Bernardino, Inc.



Lomita, City of
24373 Walnut Avenue
Lomita CA, 91717

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

Work Order: 17J2119
Received: 10/25/17 15:15
Reported: 11/08/17

Reservoir Influent Site #3 **17J2119-01 (Water)** **Sample Date:** 10/25/17 8:05 **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	4.18		N/A	mg/L	10/25/17	10/25/17	1743107	
pH (Field)	Field	7.63		N/A	pH Units	10/25/17	10/25/17	1743107	
Temperature (Field)	Field	22.4		N/A	°C	10/25/17	10/25/17	1743107	

General Physical Analyses

Apparent Color	SM 2120BM	ND	3.0	15	Color Units	10/25/17	10/25/17	1743137	
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Metals

Iron (Fe)	EPA 200.7	ND	100	300	ug/L	10/30/17	10/31/17	1744033	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	10/30/17	10/31/17	1744033	

Reservoir Effluent Site #5 **17J2119-02 (Water)** **Sample Date:** 10/25/17 8:10 **Sampler:** Patrick McCue

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

Field Analyses

Cl Res Total (Field)	Field	2.02		N/A	mg/L	10/25/17	10/25/17	1743107	
pH (Field)	Field	7.94		N/A	pH Units	10/25/17	10/25/17	1743107	
Temperature (Field)	Field	22		N/A	°C	10/25/17	10/25/17	1743107	

General Physical Analyses

Apparent Color	SM 2120BM	ND	3.0	15	Color Units	10/25/17	10/25/17	1743137	
Odor Threshold	EPA 140.1-M	2	1	3	TON	10/25/17	10/25/17	1743137	

General Chemical Analyses

Total Filterable Residue/TDS	SM 2540C	630	5.0	1000	mg/L	10/27/17	10/30/17	1743177	
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ND Analyte NOT DETECTED at or above the reporting limit



November 2, 2017

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



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

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

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

LABORATORY TEST RESULTS

Project Reference: 17J2119
Lab Number: I102603-01

Enclosed are results for sample(s) received 10/26/17 by Air Technology Laboratories. Samples were received intact and properly chilled. Analyses were performed according to specifications on the chain of custody provided with the sample(s).

Report Narrative:

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

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

Sincerely,

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

Mark Johnson
Operations Manager
MJohnson@AirTechLabs.com

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

SUBCONTRACT ORDER

2 of 4
1102603Clinical Laboratory of San Bernardino
17J2119

I102603-81

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

Please email results to Project Manager: Stu Styles

☐ glaubig@clinical-lab.com ☐ ybarra@clinical-lab.com ☒ styles@clinical-lab.com ☐ nelson@clinical-lab.comCalifornia EDT transfer those samples with PS codes provided ☐ Yes ☒ NoWater Trax Upload Client: ☐ Yes ☒ NoTurn Around Time ☐ 10 Days ☒ 5 Days ☐ Other ___ Days

Subcontract Comments:

AnalysisComments

Sample ID: Reservoir Effluent Site #5 / 17J2119-02

Sampled: 10/25/17 08:10 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

7°C

Client: Clinical Laboratory
Attn: Stu Styles
Project Name: NA
Project No.: 17J2119
Date Received: 10/26/17
Matrix: Water
Reporting Units: mg/L

RSK175

Lab No.:	I102603-01						
Client Sample I.D.:	Reservoir Effluent Site #5/17J2119-02						
Date/Time Sampled:	10/25/17 8:10						
Date/Time Analyzed:	10/31/17 9:58						
QC Batch No.:	171031GC8A1						
Analyst Initials:	AS						
Dilution Factor:	1.0						
ANALYTE	Result mg/L	RL mg/L					
Methane	0.48	0.0010					

ND = Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By: Mark Johnson
 Mark Johnson
 Operations Manager

Date 11/2/17

The cover letter is an integral part of this analytical report



QC Batch No.: 171031GC8A1
Matrix: Water
Units: mg/L

QC for Dissolved Gases by EPA Procedure RSKSOP-175


Lab No.:		Method Blank		LCS		LCSD			
Date/Time Analyzed:		10/31/17 9:43		10/31/17 9:15		10/31/17 9:28			
Analyst Initials:		AS		AS		AS			
Datafile:		31oct003		31oct001		31oct002			
Dilution Factor:		1.0		1.0		1.0			
ANALYTE	PQL	RL	Results	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Methane	0.0010	0.0010	ND	106	70-130%	107	70-130%	0.8	<30

PQL = Practical Quantitation Limit

ND = Not Detected (Below RL).

RL = PQL X Dilution Factor

Reviewed/Approved By: _____


Mark J. Johnson
Operations Manager

Date: _____

11/2/17

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



AirTECHNOLOGY Laboratories, Inc.

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

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APPENDIX B

METHANE MONITORING LOG



CITY OF LOMITA
PUBLIC WORKS DEPARTMENT

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

OCTOBER 2017					
DATE	DAY	METHANE HANDHELD			COMMENTS
10/1/2017	Sun	CH4-	1%	Oxy-	19.3%
10/2/2017	Mon	CH4-	0%	Oxy-	19.3%
10/3/2017	Tue	CH4-	0%	Oxy-	19.3%
10/4/2017	Wed	CH4-	1%	Oxy-	19.2%
10/5/2017	Thu				OFFLINE
10/6/2017	Fri				OFFLINE
10/7/2017	Sat				OFFLINE
10/8/2017	Sun				OFFLINE
10/9/2017	Mon	CH4-	0%	Oxy-	19.3%
10/10/2017	Tue	CH4-	0%	Oxy-	19.5%
10/11/2017	Wed	CH4-	3%	Oxy-	19.3%
10/12/2017	Thu	CH4-	0%	Oxy-	20.0%
10/13/2017	Fri	CH4-	0%	Oxy-	19.8%
10/14/2017	Sat	CH4-	0%	Oxy-	19.9%
10/15/2017	Sun	CH4-	1%	Oxy-	19.6%
10/16/2017	Mon	CH4-	1%	Oxy-	19.3%
10/17/2017	Tue	CH4-	0%	Oxy-	19.9%
10/18/2017	Wed	CH4-	0%	Oxy-	19.3%
10/19/2017	Thu	CH4-	0%	Oxy-	19.0%
10/20/2017	Fri	CH4-	0%	Oxy-	19.9%
10/21/2017	Sat	CH4-	0%	Oxy-	19.9%
10/22/2017	Sun	CH4-	1%	Oxy-	19.3%
10/23/2017	Mon	CH4-	2%	Oxy-	19.3%
10/24/2017	Tue	CH4-	0%	Oxy-	23.3%
10/25/2017	Wed	CH4-	0%	Oxy-	19.9%
10/26/2017	Thu	CH4-	0%	Oxy-	19.8%
10/27/2017	Fri	CH4-	0%	Oxy-	19.9%
10/28/2017	Sat	CH4-	0%	Oxy-	19.8%
10/29/2017	Sun	CH4-	0%	Oxy-	19.7%
10/30/2017	Mon	CH4-	0%	Oxy-	19.7%
10/31/2017	Tue	CH4-	0%	Oxy-	19.7%

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

APPENDIX C

NITRIFICATION MONITORING DATA SUMMARY

MONTHLY NITRIFICATION MONITORING SUMMARY REPORT
CITY OF LOMITA, System No. 1910073 --- Month, Year: **October 2017**

#	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	10/4/2017	20.6	8.04	1.27	0.09	0.28	0.17	0.136	ND	A	5	1	Well/MWD Blend
2	D	S13-004	24632 S Moon Ave	10/4/2017	20.6	8.08	0.84	0.18	0.19	0.09	0.249	ND	A	ND	1	Well/MWD Blend
3	D	S13-008	25417 Pennsylvania Ave	10/4/2017	21.6	7.70	1.65	0.16	0.32	0.11	0.090	ND	A	ND	1	Well/MWD Blend
4	D	A	2052 Dawn St	10/4/2017	18.3	8.99	2.40	0.07	0.46	0.19	0.017	0.57	A	ND	1	Well/MWD Blend
5	D		Reservoir SP5	10/4/2017	21.2	7.68	3.06	0.05	0.55	0.00	0.004	ND	A	ND	1	Well/MWD Blend
6	D	S13-001	1912 W 259th St	10/4/2017	20.9	8.94	2.40	0.12	0.46	0.00	0.008	0.60	A	ND	2	MWD Only
7	D	S13-002	26314 S Monte Vista Ave	10/4/2017	20.9	8.90	2.50	0.07	0.47	0.00	0.008	0.64	A	ND	3	MWD Only
8	D	S13-005	2500 PCH	10/4/2017	20.7	8.54	2.50	0.07	0.46	0.00	0.008	0.56	A	ND	2	MWD Only
1	D	S13-003	1948 W 252nd St	10/11/2017	20.1	8.19	2.60	0.18	0.47	0.04	0.007	ND	A	ND	1	Well/MWD Blend
2	D	S13-004	24632 S Moon Ave	10/11/2017	21.9	8.21	1.50	0.18	0.27	0.10	0.181	0.46	A	ND	1	Well/MWD Blend
3	D	S13-008	25417 Pennsylvania Ave	10/11/2017	22.4	8.81	2.30	0.14	0.51	0.10	0.021	0.66	A	ND	1	Well/MWD Blend
4	D	A	2052 Dawn St	10/11/2017	18.7	8.62	1.80	0.12	0.42	0.06	0.022	0.42	A	ND	1	Well/MWD Blend
5	D		Reservoir SP5	10/11/2017	20.8	7.85	3.48	0.10	0.76	0.00	0.007	ND	A	ND	1	Well/MWD Blend
6	D	S13-001	1912 W 259th St	10/11/2017	19.3	9.12	2.20	0.10	0.48	0.00	0.006	0.71	A	ND	2	MWD Only
7	D	S13-002	26314 S Monte Vista Ave	10/11/2017	18.3	9.04	2.50	0.06	0.50	0.00	0.006	0.66	A	ND	3	MWD Only
8	D	S13-005	2500 PCH	10/11/2017	24.0	8.10	3.10	0.08	0.46	0.00	0.006	0.40	A	ND	2	MWD Only
1	D	S13-003	1948 W 252nd St	10/18/2017	22.4	8.23	3.00	0.15	0.66	0.06	0.014	ND	A	ND	1	Well/MWD Blend
2	D	S13-004	24632 S Moon Ave	10/18/2017	23.1	8.02	1.19	0.04	0.34	0.14	0.273	0.43	A	ND	1	Well/MWD Blend
3	D	S13-008	25417 Pennsylvania Ave	10/18/2017	23.9	8.20	3.10	0.15	0.80	0.03	0.035	ND	A	ND	1	Well/MWD Blend
4	D	A	2052 Dawn St	10/18/2017	21.4	8.77	1.84	0.11	0.41	0.02	0.038	0.48	A	ND	1	Well/MWD Blend
5	D		Reservoir SP5	10/18/2017	21.7	7.79	3.34	0.05	0.94	0.00	0.007	ND	A	ND	1	Well/MWD Blend
6	D	S13-001	1912 W 259th St	10/18/2017	22.8	8.91	2.50	0.06	0.62	0.00	0.014	0.61	A	ND	2	MWD Only
7	D	S13-002	26314 S Monte Vista Ave	10/18/2017	22.9	8.87	2.60	0.06	0.46	0.00	0.010	0.61	A	ND	3	MWD Only
8	D	S13-005	2500 PCH	10/18/2017	22.3	8.96	2.40	0.07	0.49	0.00	0.009	0.61	A	ND	2	MWD Only
1	D	S13-003	1948 W 252nd St	10/25/2017	22.8	7.78	1.3	0.08	0.28	0.00	0.010	ND	A	ND	1	Well/MWD Blend
2	D	S13-004	24632 S Moon Ave	10/25/2017	21.4	7.32	0.74	0.15	0.14	0.06	0.106	ND	A	39	1	Well/MWD Blend
3	D	S13-008	25417 Pennsylvania Ave	10/25/2017	22.0	7.64	1.53	0.13	0.27	0.00	0.021	ND	A	ND	1	Well/MWD Blend
4	D	A	2052 Dawn St	10/25/2017	22.7	8.24	1.83	0.15	0.40	0.06	0.033	ND	A	ND	1	Well/MWD Blend
5	D		Reservoir SP5	10/25/2017	22.0	7.94	2.02	0.08	0.36	0.00	0.012	ND	A	ND	1	Well/MWD Blend
6	D	S13-001	1912 W 259th St	10/25/2017	19.9	8.54	2.60	0.11	0.50	0.02	0.009	0.58	A	ND	2	MWD Only
7	D	S13-002	26314 S Monte Vista Ave	10/25/2017	19.9	8.56	2.50	0.10	0.52	0.00	0.007	0.58	A	ND	3	MWD Only
8	D	S13-005	2500 PCH	10/25/2017	19.9	8.48	2.60	0.05	0.50	0.06	0.018	0.59	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. Due to elevated reads additional hydrant flushing has been implemented.