

CITY OF LOMITA



Cypress Water Production Facility Monthly Status Report

February 2018

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CITY COUNCIL

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



CITY OF LOMITA

ADMINISTRATION

RYAN SMOOT
CITY MANAGER

March 12, 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 February 7 through February 28, 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 February 2018.

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

Sincerely,

A handwritten signature in black ink, appearing to read "Mark Andersen", is written over a large, stylized, handwritten "M" that serves as a background for the signature.

Mark Andersen
Field Operations Manager

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 February 2018 maintaining water levels inside the reservoir ranging from 7 feet to 10 feet. The average flow from Well No. 5 was 419 gpm and 428 gpm from MWD. The blend ratio for month was 47% Well water and 53% MWD water. See Table 1 below for production totals for the month of February 2018.

Table 1. Monthly Production Totals.

Production for February 2018			
Well No. 5	39.72 ac-ft	12,942,390 (gallons)	
MWD	45.61 ac-ft	14,861,000 (gallons)	
Combined Total	85.33 ac-ft	27,803,390 (gallons)	
Daily	3.05 ac-ft/day	992,978 (gallons/day)	

C. OPERATIONAL INTERRUPTIONS

There were no operational interruptions during the month of February 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. 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 602.5 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 830 mg/L and 380 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 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 0.30 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 February 2018 in Appendix B.

E3-5 ODOR

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

E4. NITRIFICATION MONITORING

Weekly nitrification sampling was performed during the month of February 2018 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 = 3 00 ug/L	Manganese, ug/L	*MCL = 50 ug/L	Color	*MCL=15	Total Coliform	Total Coliform	HPC, MPN/100mL	MCL=500	Iron, mg/L	*MCL = 300 ug/L	Manganese, mg/L	*MCL = 50 ug/L	Color	*MCL=15
2/7/2018											ND	300	ND	50	5	15
2/14/2018	220	300	180	50	10	15	A	A	ND	500	ND	300	ND	50	5	15
2/21/2018											ND	300	ND	50	5	15
2/28/2018											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
2/7/2018	5.49	0.47	5.16	0.85	0.48	4.79	0.76	0.06	3.41	0.63
2/14/2018	8.45	0.37	6.97	0.83	0.37	4.91	0.78	0.07	3.49	0.67
2/21/2018	12.60	0.36	11.00	1.40	0.26	6.80	1.02	0.07	3.60	0.62
2/28/2018	10.00	0.26	10.50	1.64	0.16	6.40	1.02	0.14	3.39	0.77

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
2/7/2018			610	500-750	2	3						0.35
2/14/2018	830	380	590	500-750	2	3	380	150	260	180-250	2.2	0.28
2/21/2018			620	500-750	2	3						0.23
2/28/2018			590	500-750	2	3						0.34
Average			602.5	500-750	2	3						0.30

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

City of Lomita; System No. 1910073

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

APPENDIX A

LABORATORY RESULTS

Clinical Laboratory of San Bernardino, Inc.



23 February 2018

Clinical Lab No.: 18B0715

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

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

Enclosed are the results of the analyses for samples received at the laboratory on 02/07/18 . 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 Feb, 2018 Compliance Sampling
Project Manager: Mark Andersen

Work Order: 18B0715
Received: 02/07/18 16:00
Reported: 02/23/18

Reservoir Influent Site #3 **18B0715-01 (Water)** **Sample Date:** 02/07/18 7:55 **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	6.57		N/A	mg/L	02/07/18	02/07/18	1806160	
pH (Field)	Field	7.65		N/A	pH Units	02/07/18	02/07/18	1806160	
Temperature (Field)	Field	20.8		N/A	°C	02/07/18	02/07/18	1806160	

General Physical Analyses

Apparent Color	SM 2120BM	5.0	3.0	15	Color Units	02/07/18	02/07/18	1806152	
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Metals

Iron (Fe)	EPA 200.7	ND	100	300	ug/L	02/16/18	02/16/18	1807147	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	02/16/18	02/16/18	1807147	

Reservoir Effluent Site #5 **18B0715-02 (Water)** **Sample Date:** 02/07/18 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	3.75		N/A	mg/L	02/07/18	02/07/18	1806160	
pH (Field)	Field	7.67		N/A	pH Units	02/07/18	02/07/18	1806160	
Temperature (Field)	Field	18.1		N/A	°C	02/07/18	02/07/18	1806160	

General Physical Analyses

Apparent Color	SM 2120BM	5.0	3.0	15	Color Units	02/07/18	02/07/18	1806152	
Odor Threshold	EPA 140.1-M	2	1	3	TON	02/07/18	02/07/18	1806152	

General Chemical Analyses

Total Filterable Residue/TDS	SM 2540C	610	5.0	1000	mg/L	02/14/18	02/16/18	1807071	
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ND Analyte NOT DETECTED at or above the reporting limit



February 16, 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: 18B0715
Lab Number: J020901-01

Enclosed are results for sample(s) received 2/09/18 by Air Technology Laboratories. Samples were received intact and properly chilled. Analyses were performed according to specifications on the chain of custody provided with the sample(s).

Report Narrative:

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

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

Sincerely,

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

Mark Johnson
Operations Manager
MJohnson@AirTechLabs.com

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

SUBCONTRACT ORDER
Clinical Laboratory of San Bernardino
18B0715

2 of 4
J020901

J020901-01

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 / 18B0715-02

Sampled: 02/07/18 08:20 PS Code:
Water

WTX ID:

Methane RSK175

Report in mg/L

Containers Supplied:

40ml Amber Vial (B)

40ml Amber Vial (C)

1°C

Released By Bj Sty Date / Time 02/09/18 07:45

Received By [Signature] Date / Time 2/9/18 345

Released By [Signature] Date / Time 2/9/18 930

Received By [Signature] Date / Time 2/9/18 0930


Client: Clinical Laboratory
Attn: Stu Styles
Project Name: NA
Project No.: 18B0715
Date Received: 02/09/18
Matrix: Water
Reporting Units: mg/L

RSK175

Lab No.:	J020901-01				
Client Sample I.D.:	Reservoir Effluent Site #5/ 18B0715-02				
Date/Time Sampled:	2/7/18 8:20				
Date/Time Analyzed:	2/15/18 14:02				
QC Batch No.:	180215GC8A1				
Analyst Initials:	AS				
Dilution Factor:	1.0				
ANALYTE	Result mg/L	RL mg/L			
Methane	0.35	0.0010			

ND = Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By: 
Mark Johnson
Operations Manager

Date 2-16-18

The cover letter is an integral part of this analytical report



QC Batch No.: 180215GC8A1
Matrix: Water
Units: mg/L

QC for Dissolved Gases by EPA Procedure RSKSOP-175

Lab No.:	Method Blank		LCS		LCSD				
Date/Time Analyzed:	2/15/18 13:33		2/15/18 13:17		2/15/18 13:48				
Analyst Initials:	AS		AS		AS				
Datafile:	15feb008		15feb007		15feb009				
Dilution Factor:	1.0		1.0		1.0				
ANALYTE	PQL	RL	Results	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Methane	0.0010	0.0010	ND	112	70-130%	105	70-130%	6.4	<30

PQL = Practical Quantitation Limit

ND = Not Detected (Below RL).

RL = PQL X Dilution Factor

Reviewed/Approved By:



Mark J. Johnson
Operations Manager

Date:

2-16-18

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

[illegible]

Clinical Laboratory of San Bernardino, Inc.



01 March 2018

Clinical Lab No.: 18B1284

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

Project Name: Standard Analysis
Sub Project: CWPF Monthly Compliance / 2nd Week of Feb, 2018

Enclosed are the results of the analyses for samples received at the laboratory on 02/14/18 . 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: CWP Monthly Compliance / 2nd Week of Feb, 2018
Project Manager: Mark Andersen

Work Order: 18B1284
Received: 02/14/18 16:45
Reported: 03/01/18

Raw Water Site #1

18B1284-01 (Water)

Sample Date: 02/14/18 9:10 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	02/14/18	02/14/18	1807117	
pH (Field)	Field	7.39		N/A	pH Units	02/14/18	02/14/18	1807117	
Temperature (Field)	Field	21.2		N/A	°C	02/14/18	02/14/18	1807117	

Microbiology Analyses

Total Coliform	SM 9223	A		N/A	P/A	02/14/18	02/15/18	1807114	
E. Coli	SM 9223	A		N/A	P/A	02/14/18	02/15/18	1807114	
Plate Count	SM9215B	5	1	500	CFU/ml	02/14/18	02/16/18	1807162	HT-08

General Physical Analyses

Apparent Color	SM 2120BM	10.0	3.0	15	Color Units	02/14/18	02/14/18	1807115	
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General Chemical Analyses

Hardness, Total (as CaCO ₃)	Calculated	380	6.6	N/A	mg/L	02/22/18	02/22/18	[CALC]	
Total Filterable Residue/TDS	SM 2540C	830	5.0	1000	mg/L	02/19/18	02/20/18	1808022	

Metals

Calcium (Ca)	EPA 200.7	99	1.0	N/A	mg/L	02/22/18	02/22/18	1808102	
Iron (Fe)	EPA 200.7	220	100	300	ug/L	02/20/18	02/20/18	1808037	
Magnesium (Mg)	EPA 200.7	32	1.0	N/A	mg/L	02/22/18	02/22/18	1808102	
Manganese (Mn)	EPA 200.7	180	20	50	ug/L	02/20/18	02/20/18	1808037	

Filter Effluent (Free Chlorine) Site #2

18B1284-02 (Water)

Sample Date: 02/14/18 9:15 Sampler: DGM

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

Cl Res Total (Field)	Field	11		N/A	mg/L	02/14/18	02/14/18	1807117	
pH (Field)	Field	7.41		N/A	pH Units	02/14/18	02/14/18	1807117	
Temperature (Field)	Field	22.1		N/A	°C	02/14/18	02/14/18	1807117	

Microbiology Analyses

Total Coliform	SM 9223	A		N/A	P/A	02/14/18	02/15/18	1807114	
E. Coli	SM 9223	A		N/A	P/A	02/14/18	02/15/18	1807114	
Plate Count	SM9215B	ND	1	500	CFU/ml	02/14/18	02/16/18	1807162	HT-08

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 Feb, 2018
Project Manager: Mark Andersen

Work Order: 18B1284
Received: 02/14/18 16:45
Reported: 03/01/18

Filter Effluent (Total Chlorine) Site #3

18B1284-03 (Water)

Sample Date: 02/14/18 9:18 **Sampler:** DGM

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

Cl Res Total (Field)	Field	7.1		N/A	mg/L	02/14/18	02/14/18	1807117	
pH (Field)	Field	7.44		N/A	pH Units	02/14/18	02/14/18	1807117	
Temperature (Field)	Field	22.2		N/A	°C	02/14/18	02/14/18	1807117	

General Physical Analyses

Apparent Color	SM 2120BM	5.0	3.0	15	Color Units	02/14/18	02/14/18	1807115	
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Metals

Iron (Fe)	EPA 200.7	ND	100	300	ug/L	02/20/18	02/20/18	1808037	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	02/20/18	02/20/18	1808037	

Zone #2 Site #6

18B1284-04 (Water)

Sample Date: 02/14/18 9:17 **Sampler:** DGM

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

Cl Res Total (Field)	Field	2.03		N/A	mg/L	02/14/18	02/14/18	1807117	
pH (Field)	Field	8.2		N/A	pH Units	02/14/18	02/14/18	1807117	
Temperature (Field)	Field	16.1		N/A	°C	02/14/18	02/14/18	1807117	

General Chemical Analyses

Hardness, Total (as CaCO3)	Calculated	150	6.6	N/A	mg/L	02/22/18	02/22/18	[CALC]	
Total Filterable Residue/TDS	SM 2540C	380	5.0	1000	mg/L	02/19/18	02/20/18	1808022	

Metals

Calcium (Ca)	EPA 200.7	34	1.0	N/A	mg/L	02/22/18	02/22/18	1808102	
Magnesium (Mg)	EPA 200.7	16	1.0	N/A	mg/L	02/22/18	02/22/18	1808102	

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 Feb, 2018
Project Manager: Mark Andersen

Work Order: 18B1284
Received: 02/14/18 16:45
Reported: 03/01/18

Reservoir Effluent Site #5 **18B1284-05 (Water)** **Sample Date:** 02/14/18 9:25 **Sampler:** DGM

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

Cl Res Total (Field)	Field	3.48		N/A	mg/L	02/14/18	02/14/18	1807117	
pH (Field)	Field	7.7		N/A	pH Units	02/14/18	02/14/18	1807117	
Temperature (Field)	Field	17.5		N/A	°C	02/14/18	02/14/18	1807117	

General Physical Analyses

Odor Threshold	EPA 140.1-M	2	1	3	TON	02/14/18	02/14/18	1807115	
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General Chemical Analyses

Hardness, Total (as CaCO₃)	Calculated	260	6.6	N/A	mg/L	02/22/18	02/22/18	[CALC]	
Total Filterable Residue/TDS	SM 2540C	590	5.0	1000	mg/L	02/19/18	02/20/18	1808022	

Metals

Calcium (Ca)	EPA 200.7	66	1.0	N/A	mg/L	02/22/18	02/22/18	1808102	
Magnesium (Mg)	EPA 200.7	23	1.0	N/A	mg/L	02/22/18	02/22/18	1808102	

HT-08 Analysis performed outside of recommended 8 hour hold time but within required 24 hour hold time.

ND Analyte NOT DETECTED at or above the reporting limit



February 23, 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: 18B1284
Lab Number: J021602-01/02

Enclosed are results for sample(s) received 2/16/18 by Air Technology Laboratories. Samples were received intact and properly chilled. Analyses were performed according to specifications on the chain of custody provided with the sample(s).

Report Narrative:

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

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

Sincerely,

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

Mark Johnson
Operations Manager
MJohnson@AirTechLabs.com

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

SUBCONTRACT ORDER
Clinical Laboratory of San Bernardino
18B1284

J021602-01/02

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 / 18B1284-01****Sampled: 02/14/18 09:10 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 / 18B1284-05**Sampled: 02/14/18 09:25 PS Code:****Water****WTX ID:**

Methane RSK175

Report in mg/L

Containers Supplied:

40ml Amber Vial (B)

40ml Amber Vial (C)

2°C

Released By

Date / Time

Received By

Date / Time

Released By

Date / Time

Received By

Date / Time

Client: Clinical Laboratory
Attn: Stu Styles
Project Name: NA
Project No.: 18B1284
Date Received: 02/16/18
Matrix: Water
Reporting Units: mg/L

RSK175

Lab No.:	J021602-01	J021602-02		
Client Sample I.D.:	Raw Water Site #1 / 18B1284-01	Reservoir Effluent Site #5 / 18B1284-05		
Date/Time Sampled:	2/14/18 9:10	2/14/18 9:25		
Date/Time Analyzed:	2/21/18 12:21	2/21/18 12:08		
QC Batch No.:	180221GC8A2	180221GC8A2		
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	0.28	0.0010

ND = Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By: _____

Mark Johnson
Operations Manager

Date 2-23-18

The cover letter is an integral part of this analytical report



QC Batch No.: 180221GC8A2
Matrix: Water
Units: mg/L

QC for Dissolved Gases by EPA Procedure RSKSOP-175

Lab No.:		Method Blank		LCS		LCSD			
Date/Time Analyzed:		2/21/18 11:52		2/21/18 11:23		2/21/18 11:38			
Analyst Initials:		AS		AS		AS			
Datafile:		21feb024		21feb022		21feb023			
Dilution Factor:		1.0		1.0		1.0			
ANALYTE	PQL	RL	Results	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Methane	0.0010	0.0010	ND	118	70-130%	110	70-130%	7.2	<30

PQL = Practical Quantitation Limit

ND = Not Detected (Below RL).

RL = PQL X Dilution Factor

Reviewed/Approved By:


Mark J. Johnson
Operations Manager

Date:

2-23-18

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

18B1284

Client		City of Lomita		System Number		Analysis Requested												
Address		24373 Walnut Avenue Lomita, CA 91717		1910073														
Phone #		(310) 325-9830		Destination Laboratory														
Fax #		(310) 325-3627		[X] Clinical Laboratory														
Project		Standard Analysis		RWQCB Compliance														
Sub Project		CWPF Monthly Compliance Samples; 2nd week of Feb., 2018		YES														
Comments				ELAP #														
Sampled by		DGM		1088														
Date	Time	Sample Identification	Matrix	Type	Preserv	Temp.	pH	Total Chlorine	Total Dissolved Solids	Iron & Manganese	E. Coli	Total Coliform	Heterotrophic Plate Count	Color	Odor	Methane (WATER) (RSK175)	Hardness	
2/14/2018	0900	Raw Water Site #1	GW	IW	N/A	21.2°	7.39	0	X	X	X	X		X				
2/14/2018	0910	Raw Water Site #1	GW	IW	1, 2, 7						X	X	X			X	X	
2/14/2018	0915	Filter Effluent (Free Chlorine) Site#2	DW	IW	1, 7	22.1°	7.41	11.0			X	X	X					
2/14/2018	0918	Filter Effluent (Total Chlorine) Site#3	DW	IW	N/A	22.2°	7.44	7.1		X				X				
2/14/2018	0917	Zone #2 Site #6	DW	ID	N/A	16.1°	8.20	2.03	X							X		
2/14/2018	0925	Reservoir Effluent Site #5	DW	ID	N/A	17.5°	7.70	3.48	X					X		X		
2/14/2018	0925	Reservoir Effluent Site #5	DW	ID	2, 7											X		
Preservatives: (1) Na ₂ S ₂ O ₃ (2) HCl (3) HNO ₃ (4) NH ₄ Cl (5) H ₂ SO ₄ (6) Na ₂ SO ₃ (7) Cold (8) Other:		Matrix: DW-Drinking Water, WW-Waste Water, SW-Storm Water, GW-Ground Water, A-Air																
Relinquished By (Sign)		Print Name / Company		Date / Time		Received By (Sign)		Print Name / Company		Type- 1-								
Patrick McCue		City of Lomita, CA		2/14/2018 11:00		[Signature]		J. Luceno/CLSB										
[Signature]		J. Luceno/CLSB		2-14-18/4:45		[Signature]		J. Luceno/CLSB										
Comments: [Signature]						Samples received: [X] On ice () Intact () Custody seals Temp 6.0 () F X												
Shipped Via		Fed X Golden State UPS Client Other		Page 1 of 1														

Clinical Laboratory of San Bernardino, Inc.



07 March 2018

Clinical Lab No.: 18B1748

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

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

Enclosed are the results of the analyses for samples received at the laboratory on 02/21/18 . 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 Feb, 2018 Compliance Sampling
Project Manager: Mark Andersen

Work Order: 18B1748
Received: 02/21/18 14:43
Reported: 03/07/18

Reservoir Influent Site #3 **18B1748-01 (Water)** **Sample Date:** 02/21/18 7:12 **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	9.7		N/A	mg/L	02/21/18	02/21/18	1808101	
pH (Field)	Field	7.88		N/A	pH Units	02/21/18	02/21/18	1808101	
Temperature (Field)	Field	19.2		N/A	°C	02/21/18	02/21/18	1808101	

General Physical Analyses

Apparent Color	SM 2120BM	5.0	3.0	15	Color Units	02/21/18	02/21/18	1808116	
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Metals

Iron (Fe)	EPA 200.7	ND	100	300	ug/L	02/27/18	02/28/18	1809059	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	02/27/18	02/28/18	1809059	

Reservoir Effluent Site #5 **18B1748-02 (Water)** **Sample Date:** 02/21/18 7:19 **Sampler:** Patrick McCue

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

Field Analyses

Cl Res Total (Field)	Field	3.71		N/A	mg/L	02/21/18	02/21/18	1808101	
pH (Field)	Field	7.85		N/A	pH Units	02/21/18	02/21/18	1808101	
Temperature (Field)	Field	16.2		N/A	°C	02/21/18	02/21/18	1808101	

General Physical Analyses

Apparent Color	SM 2120BM	ND	3.0	15	Color Units	02/21/18	02/21/18	1808116	
Odor Threshold	EPA 140.1-M	2	1	3	TON	02/21/18	02/21/18	1808116	

General Chemical Analyses

Total Filterable Residue/TDS	SM 2540C	620	5.0	1000	mg/L	02/27/18	02/28/18	1809057	
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ND Analyte NOT DETECTED at or above the reporting limit



March 1, 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: 18B1748
Lab Number: J022205-01

Enclosed are results for sample(s) received 2/22/18 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
18B1748

J022205-81

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 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:

-1°C

Analysis

Comments

Sample ID: Reservoir Effluent Site #5 / 18B1748-02

Sampled: 02/21/18 07:19 PS Code:

Water WTX ID:

01 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

Released By: Bal Sty Date / Time: 02/21/18 17:00 Received By: Michael Salas Date / Time: 2/22/18 8:00
Released By: Michael Salas Date / Time: 2/22/18 12:13 Received By: J. King Date / Time: 2/22/18 12:13

Client: Clinical Laboratory
Attn: Stu Styles
Project Name: NA
Project No.: 18B1748
Date Received: 02/22/18
Matrix: Water
Reporting Units: mg/L

RSK175

Lab No.:	J022205-01						
Client Sample I.D.:	Reservoir Effluent Site #5/ 18B1748-02						
Date/Time Sampled:	2/21/18 7:19						
Date/Time Analyzed:	2/27/18 11:18						
QC Batch No.:	180227GC8A2						
Analyst Initials:	AS						
Dilution Factor:	1.0						
ANALYTE	Result mg/L	RL mg/L					
Methane	0.23	0.0010					

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

Reviewed/Approved By: _____


 Mark Johnson
 Operations Manager

Date

2/1/18

The cover letter is an integral part of this analytical report



QC Batch No.: 180227GC8A2
Matrix: Water
Units: ug/L

QC for Dissolved Gases by EPA Procedure RSKSOP-175

Lab No.:		Method Blank		LCS		LCSD			
Date/Time Analyzed:		2/27/18 11:05		2/27/18 10:39		2/27/18 10:52			
Analyst Initials:		AS		AS		AS			
Datafile:		27feb016		27feb014		27feb015			
Dilution Factor:		1.0		1.0		1.0			
ANALYTE	PQL	RL	Results	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Methane	1.0	1.0	ND	112	70-130%	121	70-130%	8.1	<30

PQL = Practical Quantitation Limit

ND = Not Detected (Below RL).

RL = PQL X Dilution Factor

Reviewed/Approved By: _____


Mark J. Johnson
Operations Manager

Date: _____

3/1/18

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



i8B1748

"Your Water and Wastewater Analysis Solution"

Clinical Laboratory of San Bernardino, Inc.



08 March 2018

Clinical Lab No.: 18B2322

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

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

Enclosed are the results of the analyses for samples received at the laboratory on 02/28/18 . 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 Feb, 2018 Compliance Sampling
Project Manager: Mark Andersen

Work Order: 18B2322
Received: 02/28/18 15:30
Reported: 03/08/18

Reservoir Influent Site #3 **18B2322-01 (Water)** **Sample Date:** 02/28/18 7:33 **Sampler:** Patrick McCue

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

Cl Res Free (Field)	Field	0.77		N/A	mg/L	02/28/18	02/28/18	1809128	
Cl Res Total (Field)	Field	9.7		N/A	mg/L	02/28/18	02/28/18	1809128	
pH (Field)	Field	7.83		N/A	pH Units	02/28/18	02/28/18	1809128	
Temperature (Field)	Field	19.5		N/A	°C	02/28/18	02/28/18	1809128	

General Physical Analyses

Apparent Color	SM 2120BM	5.0	3.0	15	Color Units	02/28/18	02/28/18	1809127	
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Metals

Iron (Fe)	EPA 200.7	ND	100	300	ug/L	03/02/18	03/02/18	1809150	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	03/02/18	03/02/18	1809150	

Reservoir Effluent Site #5 **18B2322-02 (Water)** **Sample Date:** 02/28/18 7:33 **Sampler:** Patrick McCue

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

Field Analyses

Cl Res Free (Field)	Field	0.21		N/A	mg/L	02/28/18	02/28/18	1809128	
Cl Res Total (Field)	Field	3.96		N/A	mg/L	02/28/18	02/28/18	1809128	
pH (Field)	Field	8.1		N/A	pH Units	02/28/18	02/28/18	1809128	
Temperature (Field)	Field	17.7		N/A	°C	02/28/18	02/28/18	1809128	

General Physical Analyses

Apparent Color	SM 2120BM	ND	3.0	15	Color Units	02/28/18	02/28/18	1809127	
Odor Threshold	EPA 140.1-M	2	1	3	TON	02/28/18	02/28/18	1809127	

General Chemical Analyses

Total Filterable Residue/TDS	SM 2540C	590	5.0	1000	mg/L	03/05/18	03/06/18	1810014	
-------------------------------------	----------	------------	-----	------	------	----------	----------	---------	--

ND Analyte NOT DETECTED at or above the reporting limit



March 7, 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: 18B2322
Lab Number: J030106-01

Enclosed are results for sample(s) received 3/01/18 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 "M. Johnson", followed by a small checkmark.

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
18B2322

J030106
Page 2 of 4

J030106-01

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

[] glaugbig@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 / 18B2322-02

Sampled: 02/28/18 07:33 PS Code:
Water

WTX ID:

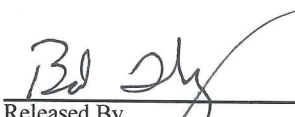
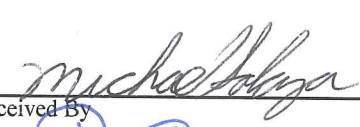

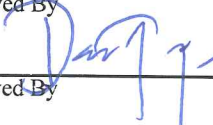
01

Methane RSK175 Report in mg/L

Containers Supplied:

40ml Amber Vial (B) 40ml Amber Vial (C)

4°C

	03/01/18 07:30		3/1/18 8:00
Released By	Date / Time	Received By	Date / Time
	3/1/18 1:37		3/1/18 1:37
Released By	Date / Time	Received By	Date / Time

Client: Clinical Laboratory
Attn: Stu Styles
Project Name: NA
Project No.: 18B2322
Date Received: 03/01/18
Matrix: Water
Reporting Units: mg/L

J030106
Page 3 of 4

RSK175

Lab No.:	J030106-01						
Client Sample I.D.:	Reservoir Effluent Site #5/18B2322- 02						
Date/Time Sampled:	2/28/18 7:33						
Date/Time Analyzed:	3/5/18 12:27						
QC Batch No.:	180305GC8A2						
Analyst Initials:	AS						
Dilution Factor:	1.0						
ANALYTE	Result mg/L	RL mg/L					
Methane	0.34	0.0010					

ND = Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By: 

Mark Johnson
Operations Manager

Date

3-6-18

The cover letter is an integral part of this analytical report



QC Batch No.: 180305GC8A2
Matrix: Water
Units: mg/L

QC for Dissolved Gases by EPA Procedure RSKSOP-175


Lab No.:		Method Blank		LCS		LCSD			
Date/Time Analyzed:		3/5/18 12:13		3/5/18 11:47		3/5/18 12:00			
Analyst Initials:		AS		AS		AS			
Datafile:		05mar019		05mar017		05mar018			
Dilution Factor:		1.0		1.0		1.0			
ANALYTE	PQL	RL	Results	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Methane	0.0010	0.0010	ND	112	70-130%	110	70-130%	2.0	<30

PQL = Practical Quantitation Limit

ND = Not Detected (Below RL).

RL = PQL X Dilution Factor

Reviewed/Approved By:


Mark J. Johnson
Operations Manager

Date:

3-6-18

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



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

18B2322

"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**

FEBRUARY 2018					
DATE	DAY	METHANE HANDHELD			COMMENTS
2/1/2018	Thu	CH4-	0%	Oxy- 18.9%	
2/2/2018	Fri	CH4-	0%	Oxy- 19.0%	
2/3/2018	Sat	CH4-	0%	Oxy- 19.1%	
2/4/2018	Sun	CH4-	0%	Oxy- 19.2%	
2/5/2018	Mon	CH4-	0%	Oxy- 18.9%	
2/6/2018	Tue	CH4-	0%	Oxy- 19.0%	
2/7/2018	Wed	CH4-	0%	Oxy- 18.8%	
2/8/2018	Thu	CH4-	0%	Oxy- 19.0%	
2/9/2018	Fri	CH4-	0%	Oxy- 19.1%	
2/10/2018	Sat	CH4-	0%	Oxy- 19.0%	
2/11/2018	Sun	CH4-	0%	Oxy- 18.9%	
2/12/2018	Mon	CH4-	0%	Oxy- 19.0%	
2/13/2018	Tue	CH4-	0%	Oxy- 19.0%	
2/14/2018	Wed	CH4-	0%	Oxy- 18.8%	
2/15/2018	Thu	CH4-	0%	Oxy- 19.1%	
2/16/2018	Fri	CH4-	0%	Oxy- 19.2%	
2/17/2018	Sat	CH4-	0%	Oxy- 19.2%	
2/18/2018	Sun	CH4-	0%	Oxy- 18.9%	
2/19/2018	Mon	CH4-		Oxy-	President's day
2/20/2018	Tue	CH4-	0%	Oxy- 19.0%	
2/21/2018	Wed	CH4-	0%	Oxy- 19.2%	
2/22/2018	Thu	CH4-	0%	Oxy- 19.1%	
2/23/2018	Fri	CH4-	0%	Oxy- 19.0%	
2/24/2018	Sat	CH4-	0%	Oxy- 19.1%	
2/25/2018	Sun	CH4-	0%	Oxy- 19.2%	
2/26/2018	Mon	CH4-	0%	Oxy- 19.2%	
2/27/2018	Tue	CH4-	0%	Oxy- 19.1%	
2/28/2018	Wed	CH4-	0%	Oxy- 19.2%	

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: **FEBRUARY 2018**

#	Code	Sample ID	Location	Sample Date	Temp	pH	Total Chlorine	Free Chlorine	Total Ammonia	Free Ammonia	Nitrite ¹	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	2/7/2018	16.4	7.85	2.70	0.09	0.50	0.05	0.007	ND	A	ND	1	Well/MWD Blend
2	D	S13-004	24632 S Moon Ave	2/7/2018	17.1	7.69	0.78	0.03	0.39	0.07	0.029	0.47	A	15	1	Well/MWD Blend
3	D	S13-008	25417 Pennsylvania Ave	2/7/2018	17.9	7.79	2.70	0.03	0.48	0.07	0.019	ND	A	ND	1	Well/MWD Blend
4	D	A	2052 Dawn St	2/7/2018	14.5	8.28	2.16	0.05	0.51	0.05	0.003	0.52	A	2	1	Well/MWD Blend
5	D		Reservoir SP5	2/7/2018	18.1	7.67	3.75	0.08	0.70	0.00	0.004	ND	A	ND	1	Well/MWD Blend
6	D	S13-001	1912 W 259th St	2/7/2018	15.4	8.39	2.20	0.19	0.53	0.07	0.007	0.56	A	ND	2	MWD Only
7	D	S13-002	26314 S Monte Vista Ave	2/7/2018	15.8	8.36	2.20	0.04	0.50	0.10	0.006	0.54	A	ND	3	MWD Only
8	D	S13-005	2500 PCH	2/7/2018	15.7	8.30	2.20	0.12	0.50	0.09	0.007	0.52	A	ND	2	MWD Only
1	D	S13-003	1948 W 252nd St	2/14/2018	17.8	7.62	2.70	0.14	0.53	0.16	0.010	ND	A	ND	1	Well/MWD Blend
2	D	S13-004	24632 S Moon Ave	2/14/2018	17.6	7.76	1.46	0.10	0.24	0.15	0.040	0.45	A	ND	1	Well/MWD Blend
3	D	S13-008	25417 Pennsylvania Ave	2/14/2018	19.1	7.78	2.80	0.15	0.49	0.10	0.020	0.43	A	ND	1	Well/MWD Blend
4	D	A	2052 Dawn St	2/14/2018	17.4	7.16	0.68	0.03	0.17	0.10	0.022	0.57	A	2	1	Well/MWD Blend
5	D		Reservoir SP5	2/14/2018	17.5	7.70	3.48	0.50	0.65	0.00	0.004	ND	A	ND	1	Well/MWD Blend
6	D	S13-001	1912 W 259th St	2/14/2018	18.2	8.28	2.30	0.08	0.49	0.11	0.006	0.5	A	ND	2	MWD Only
7	D	S13-002	26314 S Monte Vista Ave	2/14/2018	17.0	8.33	2.20	0.08	0.47	0.06	0.015	0.50	A	ND	3	MWD Only
8	D	S13-005	2500 PCH	2/14/2018	17.2	8.31	2.60	0.17	0.49	0.08	0.006	0.53	A	ND	2	MWD Only
1	D	S13-003	1948 W 252nd St	2/21/2018	16.6	7.74	2.80	0.11	0.58	0.05	0.009	0.44	A	ND	1	Well/MWD Blend
2	D	S13-004	24632 S Moon Ave	2/21/2018	15.6	7.68	1.47	0.01	0.25	0.12	0.042	0.58	A	ND	1	Well/MWD Blend
3	D	S13-008	25417 Pennsylvania Ave	2/21/2018	15.1	7.59	3.60	0.11	0.55	0.13	0.012	0.46	A	ND	1	Well/MWD Blend
4	D	A	2052 Dawn St	2/21/2018	14.5	7.96	2.09	0.12	0.58	0.24	0.020	0.57	A	ND	1	Well/MWD Blend
5	D		Reservoir SP5	2/21/2018	16.2	7.85	3.71	0.11	0.61	0.00	0.007	ND	A	ND	1	Well/MWD Blend
6	D	S13-001	1912 W 259th St	2/21/2018	14.4	8.46	2.20	0.04	0.53	0.14	0.008	0.52	A	ND	2	MWD Only
7	D	S13-002	26314 S Monte Vista Ave	2/21/2018	13.6	8.48	2.30	0.08	0.49	0.14	0.006	0.56	A	ND	3	MWD Only
8	D	S13-005	2500 PCH	2/21/2018	13.8	8.35	2.10	0.08	0.49	0.06	0.007	0.48	A	ND	2	MWD Only
1	D	S13-003	1948 W 252nd St	2/28/2018	14.9	7.90	2.80	0.06				0.4	A	ND	1	Well/MWD Blend
2	D	S13-004	24632 S Moon Ave	2/28/2018	15.9	7.83	1.57	0.00			0.022	0.5	A	1	1	Well/MWD Blend
3	D	S13-008	25417 Pennsylvania Ave	2/28/2018	15.1	7.94	3.60	0.11				0.42	A	ND	1	Well/MWD Blend
4	D	A	2052 Dawn St	2/28/2018	15.1	8.19	2.12	0.04				0.54	A	ND	1	Well/MWD Blend
5	D		Reservoir SP5	2/28/2018	17.7	8.10	3.90	0.07				ND	A	ND	1	Well/MWD Blend
6	D	S13-001	1912 W 259th St	2/28/2018	14.2	8.49	2.60	0.04				0.53	A	ND	2	MWD Only
7	D	S13-002	26314 S Monte Vista Ave	2/28/2018	14.2	8.74	2.50	0.05				0.54	A	ND	3	MWD Only
8	D	S13-005	2500 PCH	2/28/2018	14.4	8.41	2.20	0.06				0.54	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.