

CITY OF LOMITA



Cypress Water Production Facility Monthly Status Report

January 2018

CITY COUNCIL

MICHAEL G. SAVIDAN
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ADMINISTRATION

RYAN SMOOT
CITY MANAGER

CITY OF LOMITA

February 12, 2018

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 January 1 through January 31, 2018.

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 January 2018.

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

Sincerely,

A handwritten signature in blue ink, appearing to read "Mark Andersen", is written over a blue circular stamp.

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 January 2018 maintaining water levels inside the reservoir ranging from 7 feet to 10 feet. The average flow from Well No. 5 was 378 gpm and 349 gpm from MWD. The blend ratio for month was 52% Well water and 48% MWD water. See Table 1 below for production totals for the month of January 2018.

Table 1. Monthly Production Totals.

	Production for January 2018		
Well No. 5	47.68 ac-ft		15,536,581 (gallons)
MWD	43.43 ac-ft		14,151,000 (gallons)
Combined Total	91.11 ac-ft		29,687,581 (gallons)
Daily	2.94 ac-ft/day		957,664 (gallons/day)

C. OPERATIONAL INTERRUPTIONS

There were no operational interruptions during the month of January 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 CWPFF has been continuously monitored, maintained and inspected, per the CWPFF 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 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 600 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 770 mg/L and 250 mg/L, respectively.

E3-2 HARDNESS

The sampling results for the month indicate the hardness levels of the blended water to be on average 240 mg/L. This hardness level is slightly higher than the City's Water Quality Objective/Goal of 180 to 250 mg/L; staff continues to monitor hardness levels at the CWPFF 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 0.35 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 January 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 January 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
1/3/2018											ND	300	ND	50	5	15
1/10/2018	230	300	170	50	10	15	A	A	A	500	ND	300	ND	50	5	15
1/17/2018											ND	300	ND	50	5	15
1/24/2018											ND	300	ND	50	7.5	15
1/31/2018											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
1/3/2018	4.78	0.49	6.33	0.90	0.47	4.11	0.86	0.04	3.37	0.67
1/10/2018	6.17	0.83	5.87	1.05	0.48	4.82	0.91	0.06	3.47	0.75
1/17/2018	4.71	0.44	5.46	1.01	0.44	4.67	0.93	0.11	3.50	0.87
1/24/2018	5.37	0.62	4.97	1.03	0.40	4.75	0.94	0.11	3.40	0.71
1/31/2018	5.23	0.42	6.54	0.92	0.45	4.46	0.83	0.10	3.64	0.65

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
1/3/2018			570	500-750	2	3						0.30
1/10/2018	770	250	560	500-750	2	3	370	100	240	180-250	3.5	0.43
1/17/2018			620	500-750	2	3						0.32
1/24/2018			620	500-750	2	3						0.37
1/31/2018			630	500-750	2	3						0.31
Average			600	500-750	2	3						0.35

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 – JANUARY 2018
Cypress Water Production Facility
City of Lomita; System No. 1910073

Sample Locations and Parameters	Frequency	MCL/ Goal	1/3 1stWk or Mo. Result (date)	1/10 2 nd Wk	1/17 3rdWk	1/24 4 th Wk	1/31 5 th Wk	Comments and/or Other Info.
SP1 --- Also called Well 5 Raw Water or Site#1.								
TDS, ppm	Monthly	See SP5	770 1/10	Operations Data/Information: <u>CWPF operation days</u> On Well 5: Daily average flow – 378 gpm; total prod. – 47.68 AF Combined Well 5/MWD data: Average Well 5: MWD blend Ratio – 52% WELL: 48% MWD; total prod.- 91.11 AF Chlorine Dosage: N/A*				*Chlorine injected after SP1, before entering the greensand filter.
Hardness	Monthly	See SP5	370 1/10					
CH4, ppm	Monthly	See SP5	3.5 1/10					
Iron, ppb	Monthly	See SP3	230 1/10					
Manganese, ppb	Monthly	See SP3	170 1/10					
Color, units	Monthly	See SP3	10 1/10					
Total Coliform, P or A	Monthly	A	A 1/10					
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: 5.25 ; Range: 4.71 – 6.17						
SP3 --- Also called the Site After Chloramination & Before MWD Blending or Site#4.								
Iron, ppb	Weekly	ND	ND	ND	ND	ND	ND	
Manganese, ppb	Weekly	50	ND	ND	ND	ND	ND	
Color	Weekly	15	5	5	5	7.5	5	
Free and Total Cl Res, ppm	Continuous	Free Cl: Average: 0.56; Range: 0.42 – 0.83 Total Cl: Average: 5.83; Range: 4.97 - 6.54 Ammonia: Average:0.98; Range: 0.90 – 1.05						
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: 0.44; Range: 0.40 – 0.48 Total Cl: Average: 4.63; Range: 4.11 – 4.82 Ammonia: Average: 0.91; Range: 0.83 – 0.94						Cl/NH3 Ratio: 5.10
SP5 --- Also called Reservoir Effluent or Site#5. SP5 discharges into Zone 1 of the distribution system.								
TDS, ppm	Weekly	SI Goal: 500-750ppm	570	560	620	620	630	% CH4 Removal: 90.1%
Hardness	Monthly	SI Goal: 180-250ppm		240				
CH4, ppm	Weekly	Goal: from PA	0.30	0.43	0.32	0.37	0.31	
Odor, units	Monthly	1	2	3	2	2	2	
Free and Total Cl Res, ppm	Continuous	Free Cl: Average: 0.09; Range: 0.04 – 0.13 Total Cl: Average: 3.47; Range: 3.37 - 3.64 Ammonia: Average: 0.75; Range: 0.65 – 0.87						Cl/NH3 Ratio: 4.64
Headspace of the Cypress Reservoir.								
¹ CH4 ppmv; using Portable Device	Daily (from log)	Goal - LEL	CH4 Average: 0.0% CH4 Range: 0%					
SP 6 --- MWD Source Feeding CWPF. Also called Zone 2 of the distribution system or Site #6.								
TDS, ppm	Monthly	-----		250				
Hardness	Monthly	-----		100				
Notes: ¹ Self-Imposed (SI) Goals: TDS Goal-500-750 ppm; Hardness as CaCO3 Goal-180-250 ppm. ***This Report is due to DDW by the 10 th of the following month.								

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

APPENDIX A

LABORATORY RESULTS

Clinical Laboratory of San Bernardino, Inc.



18 January 2018

Clinical Lab No.: 18A0346

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

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

Enclosed are the results of the analyses for samples received at the laboratory on 01/03/18 . 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 Jan, 2018 Compliance Sampling
Project Manager: Mark Andersen

Work Order: 18A0346
Received: 01/03/18 14:00
Reported: 01/18/18

Reservoir Influent Site #3 **18A0346-01 (Water)** **Sample Date:** 01/03/18 8:30 **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	6.33		N/A	mg/L	01/03/18	01/03/18	1801121	
pH (Field)	Field	7.51		N/A	pH Units	01/03/18	01/03/18	1801121	
Temperature (Field)	Field	20.4		N/A	°C	01/03/18	01/03/18	1801121	

General Physical Analyses

Apparent Color	SM 2120BM	5.0	3.0	15	Color Units	01/03/18	01/03/18	1801102	
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Metals

Iron (Fe)	EPA 200.7	ND	100	300	ug/L	01/11/18	01/11/18	1802097	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	01/11/18	01/11/18	1802097	

Reservoir Effluent Site #5 **18A0346-02 (Water)** **Sample Date:** 01/03/18 8:35 **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	3.43		N/A	mg/L	01/03/18	01/03/18	1801121	
pH (Field)	Field	7.89		N/A	pH Units	01/03/18	01/03/18	1801121	
Temperature (Field)	Field	18.3		N/A	°C	01/03/18	01/03/18	1801121	

General Physical Analyses

Apparent Color	SM 2120BM	ND	3.0	15	Color Units	01/03/18	01/03/18	1801102	
Odor Threshold	EPA 140.1-M	2	1	3	TON	01/03/18	01/03/18	1801102	

General Chemical Analyses

Total Filterable Residue/TDS	SM 2540C	570	5.0	1000	mg/L	01/10/18	01/12/18	1802078	
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ND Analyte NOT DETECTED at or above the reporting limit



January 11, 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 CA013332015-3
EPA Methods TO3, TO14A, TO15, RSK-175

LABORATORY TEST RESULTS

Project Reference: 18A0346
Lab Number: J010504-01

Enclosed are results for sample(s) received 1/05/18 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
18A0346

J010504-01

SENDING LABORATORY:

RECEIVING 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

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 / 18A0346-02

Sampled: 01/03/18 08:35 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.: 18A0346
Date Received: 01/05/18
Matrix: Water
Reporting Units: mg/L

RSK175

Lab No.:	J010504-01						
Client Sample I.D.:	Reservoir Effluent Site #5/18A0346- 02						
Date/Time Sampled:	1/3/18 8:35						
Date/Time Analyzed:	1/10/18 10:28						
QC Batch No.:	180110GC8A1						
Analyst Initials:	AS						
Dilution Factor:	1.0						
ANALYTE	Result mg/L	RL mg/L					
Methane	0.30	0.0010					

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

Reviewed/Approved By: Mark Johnson
Mark Johnson
Operations Manager

Date 1/11/18

The cover letter is an integral part of this analytical report



QC Batch No.: 180110GC8A1
Matrix: Water
Units: mg/L

QC for Dissolved Gases by EPA Procedure RSKSOP-175


Lab No.:		Method Blank		LCS		LCSD			
Date/Time Analyzed:		1/10/18 10:14		1/10/18 9:48		1/10/18 10:01			
Analyst Initials:		AS		AS		AS			
Datafile:		10jan008		10jan006		10jan007			
Dilution Factor:		1.0		1.0		1.0			
ANALYTE	PQL	RL	Results	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Methane	0.0010	0.0010	ND	101	70-130%	104	70-130%	2.4	<30

PQL = Practical Quantitation Limit

ND = Not Detected (Below RL).

RL = PQL X Dilution Factor

Reviewed/Approved By: _____


Mark J. Johnson
Operations Manager

Date: _____

1/11/18

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.



24 January 2018

Clinical Lab No.: 18A0894

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

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

Enclosed are the results of the analyses for samples received at the laboratory on 01/10/18 . Samples were received within temperature range, in correct containers and preservation.

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

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

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

Sincerely,

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

Stu Styles
Client Services Manager

Clinical Laboratory of San Bernardino, Inc.



Lomita, City of
24373 Walnut Avenue
Lomita CA, 91717

Project: Standard Analysis
Sub Project: CWPf Monthly Compliance / 2nd Week of Jan, 2018
Project Manager: Mark Andersen

Work Order: 18A0894
Received: 01/10/18 15:30
Reported: 01/24/18

Raw Water Site #1

18A0894-01 (Water)

Sample Date: 01/10/18 8:55 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	01/10/18	01/10/18	1802116	
pH (Field)	Field	7.48		N/A	pH Units	01/10/18	01/10/18	1802116	
Temperature (Field)	Field	21.5		N/A	°C	01/10/18	01/10/18	1802116	

Microbiology Analyses

Total Coliform	SM 9223	A		N/A	P/A	01/10/18	01/11/18	1802123	
E. Coli	SM 9223	A		N/A	P/A	01/10/18	01/11/18	1802123	
Plate Count	SM9215B	85	1	500	CFU/ml	01/10/18	01/12/18	1802172	

General Physical Analyses

Apparent Color	SM 2120BM	10.0	3.0	15	Color Units	01/10/18	01/10/18	1802127	
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General Chemical Analyses

Hardness, Total (as CaCO3)	Calculated	370	6.6	N/A	mg/L	01/16/18	01/16/18	[CALC]	
Total Filterable Residue/TDS	SM 2540C	770	5.0	1000	mg/L	01/12/18	01/16/18	1802144	

Metals

Calcium (Ca)	EPA 200.7	95	1.0	N/A	mg/L	01/16/18	01/16/18	1803057	
Iron (Fe)	EPA 200.7	230	100	300	ug/L	01/17/18	01/17/18	1803072	
Magnesium (Mg)	EPA 200.7	31	1.0	N/A	mg/L	01/16/18	01/16/18	1803057	
Manganese (Mn)	EPA 200.7	170	20	50	ug/L	01/17/18	01/17/18	1803072	

Filter Effluent (Free Chlorine) Site #2

18A0894-02 (Water)

Sample Date: 01/10/18 9:00 Sampler: DGM

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

Cl Res Total (Field)	Field	6.42		N/A	mg/L	01/10/18	01/10/18	1802116	
pH (Field)	Field	7.46		N/A	pH Units	01/10/18	01/10/18	1802116	
Temperature (Field)	Field	21.5		N/A	°C	01/10/18	01/10/18	1802116	

Microbiology Analyses

Total Coliform	SM 9223	A		N/A	P/A	01/10/18	01/11/18	1802123	
E. Coli	SM 9223	A		N/A	P/A	01/10/18	01/11/18	1802123	
Plate Count	SM9215B	ND	1	500	CFU/ml	01/10/18	01/12/18	1802172	

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 Jan, 2018
Project Manager: Mark Andersen

Work Order: 18A0894
Received: 01/10/18 15:30
Reported: 01/24/18

Filter Effluent (Total Chlorine) Site #3

18A0894-03 (Water)

Sample Date: 01/10/18 9:05 **Sampler:** DGM

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

Cl Res Total (Field)	Field	6.72		N/A	mg/L	01/10/18	01/10/18	1802116	
pH (Field)	Field	7.5		N/A	pH Units	01/10/18	01/10/18	1802116	
Temperature (Field)	Field	22		N/A	°C	01/10/18	01/10/18	1802116	

General Physical Analyses

Apparent Color	SM 2120BM	5.0	3.0	15	Color Units	01/10/18	01/10/18	1802127	
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Metals

Iron (Fe)	EPA 200.7	ND	100	300	ug/L	01/17/18	01/17/18	1803072	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	01/17/18	01/17/18	1803072	

Zone #2 Site #6

18A0894-04 (Water)

Sample Date: 01/10/18 9:07 **Sampler:** DGM

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

Cl Res Total (Field)	Field	2.56		N/A	mg/L	01/10/18	01/10/18	1802116	
pH (Field)	Field	8.54		N/A	pH Units	01/10/18	01/10/18	1802116	
Temperature (Field)	Field	16.5		N/A	°C	01/10/18	01/10/18	1802116	

General Chemical Analyses

Hardness, Total (as CaCO3)	Calculated	100	6.6	N/A	mg/L	01/16/18	01/16/18	[CALC]	
Total Filterable Residue/TDS	SM 2540C	250	5.0	1000	mg/L	01/12/18	01/16/18	1802144	

Metals

Calcium (Ca)	EPA 200.7	22	1.0	N/A	mg/L	01/16/18	01/16/18	1803057	
Magnesium (Mg)	EPA 200.7	11	1.0	N/A	mg/L	01/16/18	01/16/18	1803057	

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 Jan, 2018
Project Manager: Mark Andersen

Work Order: 18A0894
Received: 01/10/18 15:30
Reported: 01/24/18

Reservoir Effluent Site #5 **18A0894-05 (Water)** **Sample Date:** 01/10/18 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	3.43		N/A	mg/L	01/10/18	01/10/18	1802116	
pH (Field)	Field	7.78		N/A	pH Units	01/10/18	01/10/18	1802116	
Temperature (Field)	Field	18.5		N/A	°C	01/10/18	01/10/18	1802116	

General Physical Analyses

Odor Threshold	EPA 140.1-M	2	1	3	TON	01/10/18	01/10/18	1802127	
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General Chemical Analyses

Hardness, Total (as CaCO₃)	Calculated	240	6.6	N/A	mg/L	01/16/18	01/16/18	[CALC]	
Total Filterable Residue/TDS	SM 2540C	560	5.0	1000	mg/L	01/12/18	01/16/18	1802144	

Metals

Calcium (Ca)	EPA 200.7	60	1.0	N/A	mg/L	01/16/18	01/16/18	1803057	
Magnesium (Mg)	EPA 200.7	22	1.0	N/A	mg/L	01/16/18	01/16/18	1803057	

ND Analyte NOT DETECTED at or above the reporting limit



January 18, 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: 18A0894
Lab Number: J011102-01/02

Enclosed are results for sample(s) received 1/11/18 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 light blue, wavy 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
J011102Clinical Laboratory of San Bernardino
18A0894

J011102-01/02

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

Please email results to Project Manager: Stu Styles

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

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

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

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

Subcontract Comments:

Analysis

Comments

Sample ID: Raw Water Site #1 / 18A0894-01

Sampled: 01/10/18 08:55 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 / 18A0894-05

Sampled: 01/10/18 09:10 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

Client: Clinical Laboratory
Attn: Stu Styles
Project Name: NA
Project No.: 18A0894
Date Received: 01/11/18
Matrix: Water
Reporting Units: mg/L


RSK175

Lab No.:	J011102-01	J011102-02		
Client Sample I.D.:	Raw Water Site #1 / 18A0894-01	Reservoir Effluent Site #5 / 18A0894-05		
Date/Time Sampled:	1/10/18 8:55	1/10/18 9:10		
Date/Time Analyzed:	1/16/18 11:00	1/16/18 11:27		
QC Batch No.:	180116GC8A1	180116GC8A1		
Analyst Initials:	AS	AS		
Dilution Factor:	1.0	1.0		
ANALYTE	Result mg/L	RL mg/L	Result mg/L	RL mg/L
Methane	3.5	0.0010	0.43	0.0010

ND = Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By: _____


Mark Johnson
Operations Manager

Date


1/18/18

The cover letter is an integral part of this analytical report



QC Batch No.: 180116GC8A1
Matrix: Water
Units: mg/L

QC for Dissolved Gases by EPA Procedure RSKSOP-175

Lab No.:		Method Blank		LCS		LCSD				
Date/Time Analyzed:		1/16/18 9:34		1/16/18 10:30		1/16/18 10:45				
Analyst Initials:		AS		AS		AS				
Datafile:		16jan004		16jan008		16jan009				
Dilution Factor:		1.0		1.0		1.0				
ANALYTE		PQL	RL	Results	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Methane		0.0010	0.0010	ND	105	70-130%	97	70-130%	7.7	<30

PQL = Practical Quantitation Limit

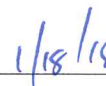
ND = Not Detected (Below RL).

RL = PQL X Dilution Factor

Reviewed/Approved By: _____


Mark J. Johnson
Operations Manager

Date: _____


1/18/18

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

18A0894

$$\frac{3}{2}$$

"Your Water and Wastewater Analysis Solution"

Clinical Laboratory of San Bernardino, Inc.



01 February 2018

Clinical Lab No.: 18A1631

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

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

Enclosed are the results of the analyses for samples received at the laboratory on 01/17/18 . 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 Jan, 2018 Compliance Sampling
Project Manager: Mark Andersen

Work Order: 18A1631
Received: 01/17/18 15:30
Reported: 02/01/18

Reservoir Influent Site #3 **18A1631-01 (Water)** **Sample Date:** 01/17/18 9:38 **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	7.3		N/A	mg/L	01/17/18	01/17/18	1803125	
pH (Field)	Field	7.58		N/A	pH Units	01/17/18	01/17/18	1803125	
Temperature (Field)	Field	21.3		N/A	°C	01/17/18	01/17/18	1803125	

General Physical Analyses

Apparent Color	SM 2120BM	5.0	3.0	15	Color Units	01/17/18	01/17/18	1803153	
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Metals

Iron (Fe)	EPA 200.7	ND	100	300	ug/L	01/23/18	01/23/18	1804051	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	01/23/18	01/23/18	1804051	

Reservoir Effluent Site #5 **18A1631-02 (Water)** **Sample Date:** 01/17/18 9:45 **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	3.49		N/A	mg/L	01/17/18	01/17/18	1803125	
pH (Field)	Field	7.82		N/A	pH Units	01/17/18	01/17/18	1803125	
Temperature (Field)	Field	19.8		N/A	°C	01/17/18	01/17/18	1803125	

General Physical Analyses

Apparent Color	SM 2120BM	5.0	3.0	15	Color Units	01/17/18	01/17/18	1803153	
Odor Threshold	EPA 140.1-M	2	1	3	TON	01/17/18	01/17/18	1803153	

General Chemical Analyses

Total Filterable Residue/TDS	SM 2540C	620	5.0	1000	mg/L	01/22/18	01/24/18	1804023	
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ND Analyte NOT DETECTED at or above the reporting limit



January 26, 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: 18A1631
Lab Number: J011902-01

Enclosed are results for sample(s) received 1/19/18 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
18A1631

J011902-01

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

01 Sample ID: Reservoir Effluent Site #5 / 18A1631-02

Sampled: 01/17/18 09:45 PS Code:
Water

WTX ID:

Methane RSK175

Report in mg/L

Containers Supplied:

40ml Amber Vial (B)

40ml Amber Vial (C)

5°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.: 18A1631
Date Received: 01/19/18
Matrix: Water
Reporting Units: mg/L

RSK175

Lab No.:	J011902-01						
Client Sample I.D.:	Reservoir Effluent Site #5/18A1631-02						
Date/Time Sampled:	1/17/18 9:45						
Date/Time Analyzed:	1/26/18 10:06						
QC Batch No.:	180126GC8A1						
Analyst Initials:	AS						
Dilution Factor:	1.0						
ANALYTE	Result mg/L	RL mg/L					
Methane	0.32	0.0010					

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

Reviewed/Approved By: _____


 Mark Johnson
 Operations Manager

Date _____

1/26/18

The cover letter is an integral part of this analytical report



QC Batch No.: 180126GC8A1
Matrix: Water
Units: mg/L

QC for Dissolved Gases by EPA Procedure RSKSOP-175

Lab No.:		Method Blank		LCS		LCSD			
Date/Time Analyzed:		1/26/18 9:51		1/26/18 9:26		1/26/18 9:38			
Analyst Initials:		AS		AS		AS			
Datafile:		26jan004		26jan002		26jan003			
Dilution Factor:		1.0		1.0		1.0			
ANALYTE	PQL	RL	Results	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Methane	0.0010	0.0010	ND	119	70-130%	120	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: _____


1/26/18

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

18A1631

[illegible]

Clinical Laboratory of San Bernardino, Inc.



08 February 2018

Clinical Lab No.: 18A2096

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

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

Enclosed are the results of the analyses for samples received at the laboratory on 01/24/18 . 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 Jan, 2018 Compliance Sampling
Project Manager: Mark Andersen

Work Order: 18A2096
Received: 01/24/18 16:00
Reported: 02/08/18

Reservoir Influent Site #3 **18A2096-01 (Water)** **Sample Date:** 01/24/18 9:43 **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	6.3		N/A	mg/L	01/24/18	01/24/18	1804116	
pH (Field)	Field	7.5		N/A	pH Units	01/24/18	01/24/18	1804116	
Temperature (Field)	Field	21.5		N/A	°C	01/24/18	01/24/18	1804116	

General Physical Analyses

Apparent Color	SM 2120BM	7.5	3.0	15	Color Units	01/24/18	01/24/18	1804125	
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Metals

Iron (Fe)	EPA 200.7	ND	100	300	ug/L	01/29/18	01/29/18	1805007	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	01/29/18	01/29/18	1805007	

Reservoir Effluent Site #5 **18A2096-02 (Water)** **Sample Date:** 01/24/18 9:46 **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	3.53		N/A	mg/L	01/24/18	01/24/18	1804116	
pH (Field)	Field	7.79		N/A	pH Units	01/24/18	01/24/18	1804116	
Temperature (Field)	Field	19.2		N/A	°C	01/24/18	01/24/18	1804116	

General Physical Analyses

Apparent Color	SM 2120BM	ND	3.0	15	Color Units	01/24/18	01/24/18	1804125	
Odor Threshold	EPA 140.1-M	2	1	3	TON	01/24/18	01/24/18	1804125	

General Chemical Analyses

Total Filterable Residue/TDS	SM 2540C	620	5.0	1000	mg/L	01/29/18	01/30/18	1805011	
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ND Analyte NOT DETECTED at or above the reporting limit



February 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: 18A2096
Lab Number: J012507-01

Enclosed are results for sample(s) received 1/25/18 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".

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
18A2096

J012507-01

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 / 18A2096-02

Sampled: 01/24/18 09:46 PS Code:
Water

WTX ID:

Methane RSK175

Report in mg/L

Containers Supplied:

40ml Amber Vial (B)

40ml Amber Vial (C)

70C

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.: 18A2096
Date Received: 01/25/18
Matrix: Water
Reporting Units: mg/L

RSK175

Lab No.:	J012507-01						
Client Sample I.D.:	Reservoir Effluent Site #5/ 18A2096-02						
Date/Time Sampled:	1/24/18 9:46						
Date/Time Analyzed:	1/26/18 10:22						
QC Batch No.:	180126GC8A1						
Analyst Initials:	AS						
Dilution Factor:	1.0						
ANALYTE	Result mg/L	RL mg/L					
Methane	0.37	0.0010					

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

Reviewed/Approved By: _____

Mark Johnson
 Mark Johnson
 Operations Manager

Date

2/1/18

The cover letter is an integral part of this analytical report



QC Batch No.: 180126GC8A1
Matrix: Water
Units: mg/L

QC for Dissolved Gases by EPA Procedure RSKSOP-175


Lab No.:	Method Blank		LCS		LCSD				
Date/Time Analyzed:	1/26/18 9:51		1/26/18 9:26		1/26/18 9:38				
Analyst Initials:	AS		AS		AS				
Datafile:	26jan004		26jan002		26jan003				
Dilution Factor:	1.0		1.0		1.0				
ANALYTE	PQL	RL	Results	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Methane	0.0010	0.0010	ND	119	70-130%	120	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: _____


2/1/18

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



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

18. A2096

[illegible]

Clinical Laboratory of San Bernardino, Inc.



08 February 2018

Clinical Lab No.: 18A2623

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

Project Name: Standard Analysis
Sub Project: CWPF 5th Week of Jan, 2018 Compliance Sampling

Enclosed are the results of the analyses for samples received at the laboratory on 01/31/18 . 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 5th Week of Jan, 2018 Compliance Sampling
Project Manager: Mark Andersen

Work Order: 18A2623
Received: 01/31/18 15:30
Reported: 02/08/18

Reservoir Influent Site #3 **18A2623-01 (Water)** **Sample Date:** 01/31/18 8:30 **Sampler:** Patrick McCue

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

Field Analyses

Cl Res Total (Field)	Field	6.54		N/A	mg/L	01/31/18	01/31/18	1805126	
pH (Field)	Field	7.53		N/A	pH Units	01/31/18	01/31/18	1805126	
Temperature (Field)	Field	21.3		N/A	°C	01/31/18	01/31/18	1805126	

General Physical Analyses

Apparent Color	SM 2120BM	5.0	3.0	15	Color Units	01/31/18	01/31/18	1805125	
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Metals

Iron (Fe)	EPA 200.7	ND	100	300	ug/L	02/01/18	02/01/18	1805110	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	02/01/18	02/01/18	1805110	

Reservoir Effluent Site #5 **18A2623-02 (Water)** **Sample Date:** 01/31/18 8:35 **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	3.64		N/A	mg/L	01/31/18	01/31/18	1805126	
pH (Field)	Field	7.79		N/A	pH Units	01/31/18	01/31/18	1805126	
Temperature (Field)	Field	19		N/A	°C	01/31/18	01/31/18	1805126	

General Physical Analyses

Apparent Color	SM 2120BM	ND	3.0	15	Color Units	01/31/18	01/31/18	1805125	
Odor Threshold	EPA 140.1-M	2	1	3	TON	01/31/18	01/31/18	1805125	

General Chemical Analyses

Total Filterable Residue/TDS	SM 2540C	630	5.0	1000	mg/L	02/02/18	02/06/18	1805157	
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ND Analyte NOT DETECTED at or above the reporting limit



February 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: 18A2623
Lab Number: J020103 -01

Enclosed are results for sample(s) received 2/01/18 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 "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
18A2623

J020103-01

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 / 18A2623-02

Sampled: 01/31/18 08:35 PS Code:
Water

WTX ID:

Methane RSK175

Report in mg/L

Containers Supplied:

40ml Amber Vial (B)

40ml Amber Vial (C)

5°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.: 18A2623
Date Received: 02/01/18
Matrix: Water
Reporting Units: mg/L


RSK175

Lab No.:	J020103-01						
Client Sample I.D.:	Reservoir Effluent Site #5/18A2623- 02						
Date/Time Sampled:	1/31/18 8:35						
Date/Time Analyzed:	2/6/18 10:33						
QC Batch No.:	180206GC8A1						
Analyst Initials:	AS						
Dilution Factor:	1.0						
ANALYTE	Result mg/L	RL mg/L					
Methane	0.31	0.0010					

ND = Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By: _____


Mark Johnson
Operations Manager

Date _____



The cover letter is an integral part of this analytical report



QC Batch No.: 180206GC8A1
Matrix: Water
Units: mg/L

QC for Dissolved Gases by EPA Procedure RSKSOP-175

Lab No.:		Method Blank		LCS		LCSD				
Date/Time Analyzed:		2/6/18 10:20		2/6/18 9:40		2/6/18 9:53				
Analyst Initials:		AS		AS		AS				
Datafile:		06feb006		06feb003		06feb004				
Dilution Factor:		1.0		1.0		1.0				
ANALYTE		PQL	RL	Results	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Methane		0.0010	0.0010	ND	111	70-130%	114	70-130%	2.2	<30

PQL = Practical Quantitation Limit

ND = Not Detected (Below RL).

RL = PQL X Dilution Factor

Reviewed/Approved By: _____


Mark J. Johnson
Operations Manager

Date: _____



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



013

18A2623

[illegible]

APPENDIX B

METHANE MONITORING LOG



CITY OF LOMITA
PUBLIC WORKS DEPARTMENT

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

JANUARY 2018				
DATE	DAY	METHANE HANDHELD		COMMENTS
1/1/2018	Mon	CH ₄ -	Oxy-	NEW YEAR'S DAY
1/2/2018	Tue	CH ₄ - 0%	Oxy- 19.2%	
1/3/2018	Wed	CH ₄ - 0%	Oxy- 19.1%	
1/4/2018	Thu	CH ₄ - 0%	Oxy- 19.3%	
1/5/2018	Fri	CH ₄ - 0%	Oxy- 19.2%	
1/6/2018	Sat	CH ₄ - 0%	Oxy- 19.2%	
1/7/2018	Sun	CH ₄ - 0%	Oxy- 19.1%	
1/8/2018	Mon	CH ₄ - 0%	Oxy- 19.0%	
1/9/2018	Tue	CH ₄ - 0%	Oxy- 19.1%	
1/10/2018	Wed	CH ₄ - 0%	Oxy- 19.0%	
1/11/2018	Thu	CH ₄ - 0%	Oxy- 19.1%	
1/12/2018	Fri	CH ₄ - 0%	Oxy- 19.2%	
1/13/2018	Sat	CH ₄ - 0%	Oxy- 19.3%	
1/14/2018	Sun	CH ₄ - 0%	Oxy- 19.2%	
1/15/2018	Mon	CH ₄ -	Oxy-	MARTIN LUTHER KING HOLIDAY
1/16/2018	Tue	CH ₄ - 0%	Oxy- 19.1%	
1/17/2018	Wed	CH ₄ - 0%	Oxy- 19.1%	
1/18/2018	Thu	CH ₄ - 0%	Oxy- 19.1%	
1/19/2018	Fri	CH ₄ - 0%	Oxy- 19.2%	
1/20/2018	Sat	CH ₄ - 0%	Oxy- 19.2%	
1/21/2018	Sun	CH ₄ - 0%	Oxy- 19.0%	
1/22/2018	Mon	CH ₄ - 0%	Oxy- 19.0%	
1/23/2018	Tue	CH ₄ - 0%	Oxy- 19.1%	
1/24/2018	Wed	CH ₄ - 0%	Oxy- 19.3%	
1/25/2018	Thu	CH ₄ - 0%	Oxy- 19.0%	
1/26/2018	Fri	CH ₄ - 0%	Oxy- 19.2%	
1/27/2018	Sat	CH ₄ - 0%	Oxy- 19.2%	
1/28/2018	Sun	CH ₄ - 0%	Oxy- 19.3%	
1/29/2018	Mon	CH ₄ - 0%	Oxy- 18.7%	
1/30/2018	Tue	CH ₄ - 0%	Oxy- 19.1%	
1/31/2018	Wed	CH ₄ - 0%	Oxy- 18.8%	
ND- Non Detect CH ₄ - Methane Oxy- Oxygen Day Off/Holiday- Red				

APPENDIX C

NITRIFICATION MONITORING DATA SUMMARY

1 MONTHLY NITRIFICATION MONITORING SUMMARY REPORT
CITY OF LOMITA, System No. 1910073 — Month, Year: **JANUARY 2018**

#	Code	Sample ID	Location	Sample Date	Temp	pH	Total Chlorine	Free Chlorine	Total Ammonia	Free Ammonia	Nitrite ³	Nitrate	Coliform ²	HPC	Zone	Comments
Units/Others →				MM/DD/YYYY	°C		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	P/A	CFU/ml		
1	D	S13-003	1948 W 252nd St	1/3/2018	18.0	7.84	2.80	0.18	0.68	0.13	0.007	ND	A	ND	1	Well/MWD Blend
2	D	S13-004	24632 S Moon Ave	1/3/2018	18.4	7.64	1.05	0.05	0.23	0.12	0.059	0.43	A	ND	1	Well/MWD Blend
3	D	S13-008	25417 Pennsylvania Ave	1/3/2018	18.0	7.75	2.80	0.15	0.56	0.12	0.012	ND	A	ND	1	Well/MWD Blend
4	D	A	2052 Dawn St	1/3/2018	16.4	8.42	2.03	0.05	0.54	0.06	0.007	0.47	A	ND	1	Well/MWD Blend
5	D		Reservoir SP5	1/3/2018	18.3	7.89	3.43	0.08	0.82	0.00	0.005	ND	A	ND	1	Well/MWD Blend
6	D	S13-001	1912 W 259th St	1/3/2018	16.7	8.47	2.30	0.08	0.48	0.04	0.004	0.45	A	ND	2	MWD Only
7	D	S13-002	26314 S Monte Vista Ave	1/3/2018	16.6	8.46	2.30	0.06	0.47	0.01	0.006	0.45	A	ND	3	MWD Only
8	D	S13-005	2500 PCH	1/3/2018	16.1	8.45	2.40	0.09	0.44	0.00	0.006	0.46	A	ND	2	MWD Only
1	D	S13-003	1948 W 252nd St	1/10/2018	17.0	7.80	2.80	0.12	0.70	0.08	0.011	ND	A	ND	1	Well/MWD Blend
2	D	S13-004	24632 S Moon Ave	1/10/2018	17.1	7.36	0.85	0.12	0.23	0.16	0.183	0.44	A	2	1	Well/MWD Blend
3	D	S13-008	25417 Pennsylvania Ave	1/10/2018	18.7	7.79	2.70	0.08	0.64	0.07	0.024	ND	A	ND	1	Well/MWD Blend
4	D	A	2052 Dawn St	1/10/2018	15.5	7.49	2.07	0.07	0.50	0.03	0.010	0.51	A	ND	1	Well/MWD Blend
5	D		Reservoir SP5	1/10/2018	18.5	7.78	3.43	0.09	0.82	0.00	0.008	ND	A	ND	1	Well/MWD Blend
6	D	S13-001	1912 W 259th St	1/10/2018	16.7	8.59	2.40	0.09	0.54	0.07	0.010	0.5	A	ND	2	MWD Only
7	D	S13-002	26314 S Monte Vista Ave	1/10/2018	16.9	8.65	2.30	0.04	0.48	0.03	0.011	0.52	A	ND	3	MWD Only
8	D	S13-005	2500 PCH	1/10/2018	16.9	8.58	2.30	0.50	0.50	0.03	0.006	0.51	A	ND	2	MWD Only
1	D	S13-003	1948 W 252nd St	1/17/2018	17.7	7.85	2.90	0.04	0.86	0.22	0.009	ND	A	1	1	Well/MWD Blend
2	D	S13-004	24632 S Moon Ave	1/17/2018	18.0	7.64	0.60	0.00	0.48	0.20	0.045	0.46	A	11	1	Well/MWD Blend
3	D	S13-008	25417 Pennsylvania Ave	1/17/2018	17.1	7.79	2.90	0.00	0.70	0.24	0.022	0.4	A	2	1	Well/MWD Blend
4	D	A	2052 Dawn St	1/17/2018	16.4	8.59	2.09	0.14	0.53	0.07	0.009	0.54	A	ND	1	Well/MWD Blend
5	D		Reservoir SP5	1/17/2018	19.8	7.82	3.49	0.11	0.96	0.18	0.007	ND	A	ND	1	Well/MWD Blend
6	D	S13-001	1912 W 259th St	1/17/2018	15.0	8.63	2.40	0.11	0.54	0.02	0.006	0.53	A	ND	2	MWD Only
7	D	S13-002	26314 S Monte Vista Ave	1/17/2018	14.9	8.60	2.40	0.05	0.52	0.08	0.009	0.53	A	ND	3	MWD Only
8	D	S13-005	2500 PCH	1/17/2018	14.5	8.64	2.40	0.00	0.56	0.06	0.005	0.53	A	ND	2	MWD Only
1	D	S13-003	1948 W 252nd St	1/24/2018	15.5	7.77	3.1	0.06	0.84	0.10	0.011	ND	A	ND	1	Well/MWD Blend
2	D	S13-004	24632 S Moon Ave	1/24/2018	16.5	7.73	1.15	0.01	0.40	0.18	0.090	0.51	A	ND	1	Well/MWD Blend
3	D	S13-008	25417 Pennsylvania Ave	1/24/2018	17.3	7.90	2.90	0.04	0.90	0.27	0.070	ND	A	3	1	Well/MWD Blend
4	D	A	2052 Dawn St	1/24/2018	15.0	8.01	2.40	0.07	0.55	0.07	0.008	0.42	A	ND	1	Well/MWD Blend
5	D		Reservoir SP5	1/24/2018	19.2	7.79	3.53	0.08	1.14	0.12	0.012	ND	A	ND	1	Well/MWD Blend
6	D	S13-001	1912 W 259th St	1/24/2018	16.4	8.49	2.30	0.06	0.55	0.08	0.008	ND	A	ND	2	MWD Only
7	D	S13-002	26314 S Monte Vista Ave	1/24/2018	16.4	8.52	2.40	0.05	0.50	0.07	0.010	ND	A	ND	3	MWD Only
8	D	S13-005	2500 PCH	1/24/2018	16.1	8.42	2.20	0.04	0.53	0.04	0.009	0.42	A	ND	2	MWD Only
1	D	S13-003	1948 W 252nd St	1/31/2018	16.0	7.90	3.10	0.05	0.68	0.16	0.012	ND	A	ND	1	Well/MWD Blend
2	D	S13-004	24632 S Moon Ave	1/31/2018	16.3	7.35	1.10	0.02	0.28	0.18	0.073	0.43	A	8	1	Well/MWD Blend
3	D	S13-008	25417 Pennsylvania Ave	1/31/2018	16.7	7.60	2.90	0.07	0.64	0.13	0.059	ND	A	7	1	Well/MWD Blend
4	D	A	2052 Dawn St	1/31/2018	14.0	7.81	2.17	0.05	0.55	0.11	0.003	0.50	A	3	1	Well/MWD Blend
5	D		Reservoir	1/31/2018	19.0	7.79	3.64	0.07	0.88	0.07	0.003	ND	A	ND	1	Well/MWD Blend
6	D	S13-001	1912 W 259th St	1/31/2018	15.1	8.54	2.40	0.04	0.56	0.13	0.004	0.49	A	ND	2	MWD Only
7	D	S13-002	26314 S Monte Vista Ave	1/31/2018	15.4	8.43	2.40	0.04	0.54	0.08	0.004	0.49	A	2	3	MWD Only
8	D	S13-005	2500 PCH	1/31/2018	14.7	8.60	2.40	0.06	0.56	0.08	0.008	0.5	A	ND	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.