CITY OF LOMITA



Cypress Water Production Facility Monthly Status Report

March 2017

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CITY COUNCIL

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



ADMINISTRATION

RYAN SMOOT
CITY MANAGER

CITY OF LOMITA

April 10, 2017

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

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

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 March 2017.

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

Sincerely,

Mark A. McAvoy, P.E.

Public Works Director/City Engineer

A. BACKGROUND

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

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

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

B. WELL PRODUCTION

The CWPF operated continuously during the month of March 2017 maintaining water levels inside the reservoir ranging from 7 feet to 10 feet. The average flow from Well No. 5 was 462 gpm and 543 gpm from MWD. The blend ratio for month was 45% Well water and 55% MWD water. See Table 1 below for production totals for the month of March 2017.

Table 1. Monthly Production Totals.

	Production for March 2017							
Well No. 5	47.18	ac-ft	(15,373,173 gallons)					
MWD	56.54	ac-ft	(18,421,000 gallons)					
Combined Total	103.72	ac-ft	(33,794,161 gallons)					
Daily	3.35	ac-ft/day	(1,090,134 gallons/day)					

C. OPERATIONAL INTERRUPTIONS

There were no operational interruptions during the month of March 2017. 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 512 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 720 mg/L and 300 mg/L, respectively.

E3-2 HARDNESS

The sampling results for the month indicate the hardness levels of the blended water to be on average 210 mg/L. This hardness level is in the upper range of 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 0.37 mg/L.

E3-4 METHANE (IN AIR)

The methane levels in the reservoir headspace are monitored daily by staff using a handheld device. These readings have consistently read non-detect to low concentrations for methane in air. Available methane hand held monitoring instruments can only detect levels of 1% Lower Explosive Limit (LEL) or greater. The handheld methane readings during the month were below the 50,000 ppm LEL. See attached methane log for the month of March 2017 in Appendix B.

E3-5 ODOR

The odor levels at the CWPF effluent averaged 1.8 unit for the month.

E4. NITRIFICATION MONITORING

Weekly Nitrification sampling was performed during the month of March 2017, see Appendix C.

F. TABLES

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

		SP1, Well Raw Water Discharge					SP2, Combined Pressure Filter Effluent			SP3, After chloramination static mixer; reservoir entry						
Date, week of	Iron, ug/L	*MCL = 3 00 ug/L	Manganese, ug/L	*MCL = 50 ug/L	Color	*MCL=15	Total Coliform	Total Coliform	HPC, MPN/100mL	MCL=500	Iron, mg/L	*MCL = 300 ug/L	Manganese, mg/L	*MCL = 50 ug/L	Color	*MCL=15
3/1/2017											ND	300	ND	50	ND	15
3/8/2017	220	300	120	50	10	15	А	Α	Α	500	ND	300	ND	50	7.5	15
3/15/2017							70.15		777.13		ND	300	ND	50	7.5	15
3/22/2017						T.					ND	300	ND	50	5.0	15
3/29/2017					16.00					THE COLUMN	ND	300	ND	50	5.0	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 CI	Free CI	Total CI	Total NH ₃	Free CI	Total CI	Total NH₃	Free CI	Total CI	Total NH₃	
3/1/2017	6.09	0.31	5.92	1.34	0.37	4.13	0.89	0.05	3.40	0.74	
3/8/2017	6.05	0.29	5.33	1.07	0.38	3.96	0.74	0.06	3.40	0.74	
3/15/2017	5.74	0.54	5.13	1.13	0.40	3.96	0.83	0.06	3.33	0.70	
3/22/2017	4.64	0.35	4.76	0.92	0.39	3.79	0.74	0.06	3.24	0.73	
3/29/2017	4.39	0.25	4.40	0.96	0.40	3.68	0.72	0.14	2.95	0.62	

Table 4. Monitoring Requirements and Frequencies for SP1, SP5, and SP6.

Date, week of		TDS, mg/L).N.		Hardness, mg/L				Methane (Water), mg/L	
	SP1 - Raw Well Water	SP6 - MWD Water	SP5 - Reservoir Effluent	Goal= 500 - 750 mg/L	SP5 - Reservoir Effluent	MCL= 3	SP1 - Raw Well Water	SP6 - MWD Water	SP5 - Reservoir Effluent	Goal= 180 - 250 mg/L	SP1 - Raw Well Water	SP5 - Reservoir Effluent	
3/1/2017			500	500-750	2	3						0.46	
3/8/2017	720	300	510	500-750	2	3	300	110	210	180-250	4	0.36	
3/15/2017			540	500-750	1	3					- 630	0.29	
3/22/2017			530	500-750	2	3		168				0.30	
3/29/2017			480	500-750	2	3						0.45	
Average	720	300	512	500-750	1.8	3	300	110	210	180-250	4	0.37	

Notes:

Monthly- <u>Orange</u>; Weekly- <u>Yellow</u> 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 – March 2017 Cypress Water Production Facility City of Lomita; System No. 1910073

Frequency Sample Locations MCL/ Comments 3/1 3/15 3/22 3/29 and Parameters Goal $2^{nd}Wk$ 4thWk 5thWk 1stWk 3rdWk and/or Other Info. or Mo. Result (date) SP1 --- Also called Well 5 Raw Water or Site#1. See SP5 Monthly **Operations Data/Information:** *Chlorine injected after TDS, ppm 720 SP1, before entering 3/8/17 **CWPF** operation days the greensand filter. See SP5 Hardness Monthly 300 3/8/17 On Well 5: Daily average flow - 462 gpm; total prod. See SP5 CH4, ppm Monthly 4 47.18 AF 3/8/17 Combined Well 5/MWD data: Average Well 5: MWD See SP3 Monthly Iron, ppb 220 blend Ratio - 45% WELL:55% MWD; total prod.-3/8/17 103.72 AF See SP3 Monthly Manganese, ppb 120 3/8/17 Chlorine Dosage: N/A* See SP3 Color, units Monthly 10 3/8/17 Total Coliform, P or A Monthly Α Α 3/8/17 SP2 --- Also called Filter Effluent or Site#3. Total Coliform, P or A Monthly *Ammonia added after Α filter effluent Ammonia Dosage: N/A* HPC.MPN/100 ml Monthly 500 Continuous Average: 5.38; Range: 4.39 - 6.09 Free CI Res, ppm SP3 --- Also called the Site After Chloramination & Before MWD Blending or Site#4. Iron, ppb Weekly 300 ND ND ND ND ND Manganese, ppb 50 ND ND ND ND ND Weekly Color Weekly 15 ND 7.5 5 5 Continuous Free and Total CI Res. Free CI: Average: 0.35; Range: 0.25 - 0.54 ppm Total CI: Average: 5.11; Range: 4.40 - 5.92 Ammonia: Average: 1.08; Range: 0.92 - 1.34 SP4 --- Also called Reservoir Influent or the Site Well 5/MWD Water Blend Point/Phosphate Injection. Phosphate Dosage: 0.77 mg/L Phosphate Injection Continuous Free Cl: Average: 0.39; Range: 0.37 - 0.40 Free and Total CI Res. CI/NH3 Ratio: Total CI: Average: 3.90; Range: 3.68 - 4.13 4.99 Ammonia: Average: 0.78; Range: 0.72 - 0.89 SP5 --- Also called Reservoir Effluent or Site#5. SP5 discharges into Zone 1 of the distribution system. SI Goal: 500-750ppm TDS, ppm Weekly 500 510 540 530 480 SI Goal: Monthly Hardness 210 180-250ppm Goal: from % CH4 Removal: CH4, ppm Weekly 0.36 PΑ 0.46 0.29 0.30 0.45 90.7% Odor, units Monthly 2 2 Free and Total CI Res, Continuous Free Cl: Average: 0.07; Range: 0.05 - 0.14 CI/NH3 Ratio: Total CI: Average: 3.27; Range: 2.95 - 3.40 ppm 4.62 Ammonia: Average: 0.71; Range: 0.62 - 0.74 Headspace of the Cypress Reservoir. ¹CH4 ppmv; using Daily Goal -CH4 Average: 0.13% (from loa) LEL Portable Device CH4 Range: 0% - 1% SP 6 --- MWD Source Feeding CWPF. Also called Zone 2 of the distribution system or Site #6. TDS, ppm Monthly 300 Hardness Monthly Notes: 1Self-Imposed (SI) Goals: TDS Goal-500-750 ppm; Hardness as CaCO3 Goal-180-250 ppm. ***This Report is due to DDW by the 10th of the following month.

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

APPENDIX A

LABORATORY RESULTS



16 March 2017 Clinical Lab No.: 17C0124

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

Project Name: Standard Analysis

Sub Project: CWPF 1st week March Compliance Analysis

Enclosed are the results of the analyses for samples received at the laboratory on 03/01/17 . Samples were received within temperature range, in correct containers and preservation.

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

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

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

Sincerely,

Stu Styles

Client Services Manager

tistes



Lomita, City ofProject:Standard AnalysisWork Order:17C012424373 Walnut AvenueSub Project:CWPF 1st week March Compliance AnalysisReceived:03/01/17 16:00Lomita CA, 91717Project Manager:Mark AndersenReported:03/16/17

Filter Effluent (Total Chlorine) Site #3		17C0124-0	01 (Water)		Sample Da	te: 03/01/17	7 9:45 Sa	mpler: D	GM
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	6.11		N/A	mg/L	03/01/17	03/01/17	1709125	
pH (Field)	Field	7.77		N/A	pH Units	03/01/17	03/01/17	1709125	
Temperature (Field)	Field	20		N/A	°C	03/01/17	03/01/17	1709125	
General Physical Analyses									
Apparent Color	SM 2120B-M	ND	3.0	15	Color Units	03/01/17	03/01/17	1709148	
<u>Metals</u>									
Iron (Fe)	EPA 200.7	ND	100	300	ug/L	03/03/17	03/06/17	1709188	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	03/03/17	03/06/17	1709188	
Reservoir Effluent Site #5		17C0124-0	02 (Water)		Sample Da	te: 03/01/17	7 9:45 Sa	mpler: D	GM
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	3.2		N/A	mg/L	03/01/17	03/01/17	1709125	
pH (Field)	D: 11	7.98		N/A	pH Units	03/01/17	03/01/17	1709125	
	Field	7.70		1 1/2 1	pri ciiio				
Temperature (Field)	Field	16.4		N/A	°C	03/01/17	03/01/17	1709125	
Temperature (Field)					•		03/01/17	1709125	
Temperature (Field)			1		•		03/01/17	1709125 1709148	
Temperature (Field) General Physical Analyses Odor Threshold	Field	16.4	1	N/A	°C	03/01/17			
Temperature (Field) General Physical Analyses	Field	16.4	1 5.0	N/A	°C	03/01/17			

EDT Transfer Confirmation 1



Entry No.: 01055 Analyzed: 170306

Work Order: 17C0124
Report Date: 03/16/2017

MANGANESE

Analyzing Lab: Clinical Laboratory of San Bernardino, Inc. ELAP 1088

Result: ND

LOMITA-CITY, WATER DEPT.

WELL 05 TREATMENT PLANT EFFLUENT

COLOR

Result: ND

Units: UNITS

Entry No.: 01045

Analyzed: 170301

Result: ND

Units: UG/L

Entry No.: 01045

Analyzed: 170306

Units: UG/L

March 9, 2017



ADE-1461 EPA Methods TO3, TO14A, TO15 SIM & SCAN ASTM D1946



TX Cert T104704450-14-6 EPA Methods T014A, T015

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

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

LABORATORY TEST RESULTS

Project Reference: 17C0124 Lab Number: 1030207-01

Enclosed are results for sample(s) received 3/02/17 by Air Technology Laboratories. Samples were received intact and properly chilled. Analyses were performed according to specifications on the chain of custody provided with the sample(s).

Report Narrative:

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

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

Sincerely,

Mark Johnson

Operations Manager

Whel. A

MJohnson@AirTechLabs.com

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

SUBCONTRACT ORDER

Clinical Laboratory of San Bernardino 17C0124

TAZ02X-	1030207 Page 2 of 4
102050	Page 2 of 4

Clinical Laboratory of San Bernardino 21831 Barton Road 31850 East Gale Avenue Suite 130 City of Industry, CA 91748 Phone: 909.825.7693 Project Manager: Stu Styles Please email results to Project Manager: Stu Styles Please email results to Project Manager: Stu Styles California EDT trans Frubose samples with PS codes provided [] Yes [v] No Water Trax Upload Client: Turn Around Time [] 10 Days [v] 5 Days [] Other Days Subcontract Comments: Analysis Comments Sample D: Reservoir Effluent Site #5 / 17C0124-02 Methane RSK175 Containers Supplied: 10ml Amber Vial (B) 40ml Amber Vial (C) Referesed By Date / Time Date / Time Received By Date / Time	SENDING LABORATORY:		RECEIVING LABORATORY:
2188 Barton Road Grand Terrace, CA 92313 City of Industry, CA 91748 Phone: 909.825,7693 Fax: 909.825,7696 Fax: Project Manager: Stu Styles Please email results to Project Manager: Stu Styles [] glaubig@clinical-lab.com [] ybarra@clinical-lab.com [] ystyles@clinical-lab.com [] nelson@clinical-lab.com California EDT transfer those samples with PS codes provided [] Yes [v] No Water Trax Upload Client: [] Yes [v] No Subcontract Comments: Analysis Comments Sample ID: Reservoir Effluent Site #8 / 170124-02 Sample ID: Reservoir ID: Report in mg/L Ontoniers Supplied: Ontoniers Suppl	Clinical Laboratory of San Bernarding	0	Air Technology Labs
Grand Errace, CA 92313 City of Industry, CA 91748 Phone: 909.825,7696 Fax: 909.825,7			
Phone: 909.825.7693 Fux: 909.825.7696 Fux: 909.825.7696 Fux: 909.825.7696 Project Manager: Stu Styles Please email results to Project Manager: Stu Styles [] glaubig@elinical-lab.com			
Fax: 909.825,7696 Project Manager: Stu Styles Please email results to Project Manager: Stu Styles [] glaubig@clinical-lab.com [] ybarra@clinical-lab.com [] ystyles@clinical-lab.com [] nelson@clinical-lab.com California EDT transfer those samples with PS codes provided [] Yes [v] yo Water Trax Upload Client: Turn Around Time [] 10 Days [v] S Days [] OtherDays Subcontract Comments: Analysis			
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Sample ID: Reservoir Effluent Site #5/17C0124-02 Methane RSK175 Containers Supplied: 40ml Amber Vial (B) Analysis Comments Sampled: 03/01/17 09:45 PS Code: Water WIX ID: Report in mg/L Analysis Report in mg/L O3/02/17 07:46 Released By Date/Time Received By Date/Time Received By Date/Time Received By Date/Time Received By Date/Time Received By Date/Time		samples with PS codes	
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	Released By	Date / Time	Received By Date / Time

Client:

Clinical Laboratory

Attn:

Stu Styles

Project Name: Project No.:

NA

17C0124

Date Received:

03/02/17

Matrix:

Water

Reporting Units: mg/L

RSK175

Lab No.:	103020	1030207-01				
	Reservoir	Reservoir Effluent				
Client Sample I.D.:	Site #5 / 1	Site #5 / 17C0124-				
	02	02				
Date/Time Sampled:	3/1/17	9:45				
Date/Time Analyzed:	3/9/17 10:49					
QC Batch No.:	170309GC8A1					
Analyst Initials:	AS	S				
Dilution Factor:	1.0	0				
	Result	RL				
ANALYTE	mg/L	mg/L				
Methane	0.46	0.0010				

ND:	= Not	Detected (helow	RL
1 1 1	1100	Detected	(DCION	111

RL = Reporting Limit

Reviewed/Approved By:	Mall. 1
	Mark Johnson

Operations Manager

Date 3/9/17

The cover letter is an integral part of this analytical report

1030207

Page 3 of 4

QC Batch No.:

170309GC8A1

Matrix: Units:

Water mg/L

1030207 Page 4 of 4

QC for Dissolved Gases by EPA Procedure RSKSOP-175

	L	Method Blank		ı	LCS 3/9/17 9:34 AS 09mar001 1.0		CSD			
	Date/Time	Date/Time Analyzed:		3/9/17 10:36 AS 09mar005 1.0			3/9/17 9:47 AS 09mar002			
	Analyst Initials:									
	D	Datafile:								
	Dilution Factor:						1.0			
	ANALYTE	PQL	RL	Results	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Methane		0.001	0.001	ND	93	70-130%	97	70-130%	4.0	<30

PQL = **Practical Quantitation Limit**

ND = Not Detected (Below RL).

RL = PQL X Dilution Factor

Reviewed/Approved By:	Mall.	f	Date: 3(9(17	
	Mark Lohnson			

Mark J. Johnson Operations Manager

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

				•			-					1 _	Chain C	Chair of Castoay
Ćlient			City of Lomita	Sy	System Number	umber	7	Analysis	is Rec	Requested	77			
Address		2.	24373 Walnut Avenue		707	0010		-		<u> </u>				
			Lomita, CA 91717	-	191	9100 <i>l</i> 3				*		M		
Phone #			(310) 325-9830	a	estinatic	Destination Laboratory	tory		7			leth		
Fax#			(310) 325-3627	٥	X] Clinic	[X] Clinical Laboratory	tory	Ir	Γota			ane		
Project			Standard Analysis		3WQCB	RWQCB Compliance	e							
Sub Project	ct	CWPF N	CWPF WEEKLY Compliance Analysis IST WEEK MARCH			YES ELAP#		ardnes Manga	ssolved	nic Plat	Odor Color	ATER:		
Comments	v.											(RS		
Sampled by	ķ		DGM		_	1088			ds			SK175		
Date	Time	Š	Sample Identification	Matrix	Type	Preserv	Total					5)	Comments / P.S.	S / P S. Codes
3/1/2017			Raw Water Site #1	R.	<u>¥</u> 1	N/A						-		
			Raw Water Site #1	GW	¥1	2,7								
			-											
3/1/2017	MEMES Jane		Filter Effluent (Free Chlorine) Site#2	DW	WI	1,7								
3/1/2017	9245 A.A		Filter Effluent (Total Chlorine) Site#3	DW	WI	N/A	6.11	×			×		77.7	D. B. 20,0
3/1/2017	9.45 A.M		Reservoir Effluent Site #5	DW	QI	N/A	276		×			×	862 Hd	Trus 11. 4
3/1/2017	9:45 A.m		Reservoir Effluent Site #5	DW	I.D	2,7						×		
3/1/2017			Zone #2 Site #6	MQ	1D	N/A								
Preservative	Preservatives: (1) Na ₂ S ₂ O ₃ (2) HCI (3) HNO ₃ (5) H2SO ₄ (6) Na ₂ SO ₃ (7) Cold (8) Other-	(2) HCI (3) H	INO3 (4) NH4CI		M	atrix: DW.	Drinking W.	ater, Wi	V-Wast	Water,	SW-Stor	m Water,	Matrix: DW-Drinking Water, WW-Waste Water, SW-Storm Water, GW- Ground Water, A-Air	r, A-Air
Relin	Relinquished By (Sign)	Sign)	Print Name / Company			Date / Time	Time		Z Z	xeived.	Received By (Sign)	1)	Print Nan	Print Name / Company
DGM (A	Jest & J	1	City of Lomita		3/1/2017		2:00	Y	X	1	1		mm 5	210/2118
	S Mer)	T. Lucero / CLS B	3	2.1.7		φ:h)_	8	H			S WY	28
Comments						Sample	Samples received:	. Y	Don ice		Intact		Custody seals Temp	np 4.5 ()
Shipped Via			Fed X Golden State	I UPS		Client	Other				\ 		Page_1_ of_1_	

'Your Water and Wastewater Analysis Solution"



24 March 2017 Clinical Lab No.: 17C0823

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

Project Name: Standard Analysis

Sub Project: Monthly Compliance / Monthly 2nd Week March

Enclosed are the results of the analyses for samples received at the laboratory on 03/08/17 . Samples were received within temperature range, in correct containers and preservation.

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

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

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

Sincerely,

Stu Styles

Client Services Manager

tistes



Lomita, City ofProject:Standard AnalysisWork Order:17C082324373 Walnut AvenueSub Project:Monthly Compliance / Monthly 2nd Week MarchReceived:03/08/17 16:00Lomita CA, 91717Project Manager:Mark AndersenReported:03/24/17

Raw Water Site #1		17C0823-0	01 (Water)		Sample Da	te: 03/08/17	9:05 S	ampler: D	GM
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	0		N/A	mg/L	03/08/17	03/08/17	1710135	
pH (Field)	Field	7.6		N/A	pH Units	03/08/17	03/08/17	1710135	
Temperature (Field)	Field	21.4		N/A	°C	03/08/17	03/08/17	1710135	
Microbiology Analyses									
Total Coliform	SM 9223	A		N/A	P/A	03/08/17	03/09/17	1710130	
E. Coli	SM 9223	A		N/A	P/A	03/08/17	03/09/17	1710130	
Plate Count	SM9215B	37	1	500	CFU/ml	03/08/17	03/10/17	1710181	HT-08
General Physical Analyses									
Apparent Color	SM 2120B-M	10.0	3.0	15	Color Units	03/08/17	03/08/17	1710141	
General Chemical Analyses									
Hardness, Total (as CaCO3)	Calculated	300	6.6	N/A	mg/L	03/13/17	03/13/17	[CALC]	
Total Filterable Residue/TDS	SM 2540C	720	5.0	1000	mg/L	03/14/17	03/17/17	1711035	
<u>Metals</u>									
Calcium (Ca)	EPA 200.7	80	1.0	N/A	mg/L	03/13/17	03/13/17	1710180	
Iron (Fe)	EPA 200.7	220	100	300	ug/L	03/14/17	03/14/17	1711031	
Magnesium (Mg)	EPA 200.7	25	1.0	N/A	mg/L	03/13/17	03/13/17	1710180	
Manganese (Mn)	EPA 200.7	120	20	50	ug/L	03/14/17	03/14/17	1711031	
Filter Effluent (Free Chlorine) Site #2		17C0823-0	02 (Water)		Sample Da	te: 03/08/17	9:10 S	ampler: D	G M
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	7.2		N/A	mg/L	03/08/17	03/08/17	1710135	
pH (Field)	Field	7.62		N/A	pH Units	03/08/17	03/08/17	1710135	
Temperature (Field)	Field	22.1		N/A	°C	03/08/17	03/08/17	1710135	
Microbiology Analyses									
Total Coliform	SM 9223	A		N/A	P/A	03/08/17	03/09/17	1710130	
E. Coli	SM 9223	A		N/A	P/A	03/08/17	03/09/17	1710130	



Lomita, City ofProject:Standard AnalysisWork Order:17C082324373 Walnut AvenueSub Project:Monthly Compliance / Monthly 2nd Week MarchReceived:03/08/17 16:00Lomita CA, 91717Project Manager:Mark AndersenReported:03/24/17

Filter Effluent (Total Chlorine) Site #3		17C0823-0	3 (Water)		Sample Da	te: 03/08/17	8:40 Sa r	mpler: D	G M
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	7.2		N/A	mg/L	03/08/17	03/08/17	1710135	
pH (Field)	Field	7.78		N/A	pH Units	03/08/17	03/08/17	1710135	
Temperature (Field)	Field	22.2		N/A	°C	03/08/17	03/08/17	1710135	
General Physical Analyses									
Apparent Color	SM 2120B-M	7.5	3.0	15	Color Units	03/08/17	03/08/17	1710141	
<u>Metals</u>									
Iron (Fe)	EPA 200.7	ND	100	300	ug/L	03/14/17	03/14/17	1711031	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	03/14/17	03/14/17	1711031	
Zone #2 Site #6		17C0823-0	04 (Water)		Sample Da	te: 03/08/17	8:45 Sa ı	mpler: De	GM
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	1.94		N/A	mg/L	03/08/17	03/08/17	1710135	
Cl Res Total (Field) pH (Field)	Field Field	1.94 8.59		N/A N/A	mg/L pH Units	03/08/17 03/08/17	03/08/17 03/08/17	1710135 1710135	
` '					·				
pH (Field)	Field	8.59		N/A	pH Units	03/08/17	03/08/17	1710135	
pH (Field) Temperature (Field)	Field	8.59	6.6	N/A	pH Units	03/08/17	03/08/17	1710135	
pH (Field) Temperature (Field) General Chemical Analyses	Field Field	8.59 17.1	6.6 5.0	N/A N/A	pH Units °C	03/08/17 03/08/17	03/08/17 03/08/17	1710135 1710135	
pH (Field) Temperature (Field) General Chemical Analyses Hardness, Total (as CaCO3) Total Filterable Residue/TDS	Field Field Calculated	8.59 17.1		N/A N/A	pH Units °C mg/L	03/08/17 03/08/17 03/13/17	03/08/17 03/08/17 03/13/17	1710135 1710135 [CALC]	
pH (Field) Temperature (Field) General Chemical Analyses Hardness, Total (as CaCO3)	Field Field Calculated	8.59 17.1		N/A N/A	pH Units °C mg/L	03/08/17 03/08/17 03/13/17	03/08/17 03/08/17 03/13/17	1710135 1710135 [CALC]	



Lomita, City ofProjectStandard AnalysisWork Order:17C082324373 Walnut AvenueSub Project:Monthly Compliance / Monthly 2nd Week MarchReceived:03/08/17 16:00Lomita CA, 91717Project Manager:Mark AndersenReported:03/24/17

	17C0823-0	05 (Water)		Sample Da	ate: 03/08/1	7 8:50 Sa	mpler: D	GM
Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field	2.9		N/A	mg/L	03/08/17	03/08/17	1710135	
Field	8.14		N/A	pH Units	03/08/17	03/08/17	1710135	
Field	17.7		N/A	°C	03/08/17	03/08/17	1710135	
EPA 140.1-M	2	1	3	TON	03/08/17	03/08/17	1710141	
Calculated	210	6.6	N/A	mg/L	03/14/17	03/14/17	[CALC]	
SM 2540C	510	5.0	1000	mg/L	03/14/17	03/17/17	1711035	
EPA 200.7	52	1.0	N/A	mg/L	03/14/17	03/14/17	1711037	
EPA 200.7	18	1.0	N/A	mg/L	03/14/17	03/14/17	1711037	
	Field Field Field EPA 140.1-M Calculated SM 2540C EPA 200.7	Method Result Field 2.9 Field 8.14 Field 17.7 EPA 140.1-M 2 Calculated 210 SM 2540C 510 EPA 200.7 52	Field 2.9 Field 8.14 Field 17.7 EPA 140.1-M 2 1 Calculated 210 6.6 SM 2540C 510 5.0 EPA 200.7 52 1.0	Method Result Rep. Limit MCL Field 2.9 N/A Field 8.14 N/A Field 17.7 N/A EPA 140.1-M 2 1 3 Calculated 210 6.6 N/A SM 2540C 510 5.0 1000 EPA 200.7 52 1.0 N/A	Method Result Rep. Limit MCL Units Field 2.9 N/A mg/L Field 8.14 N/A pH Units Field 17.7 N/A °C EPA 140.1-M 2 1 3 TON Calculated 210 6.6 N/A mg/L SM 2540C 510 5.0 1000 mg/L EPA 200.7 52 1.0 N/A mg/L	Method Result Rep. Limit MCL Units Prepared Field 2.9 N/A mg/L 03/08/17 Field 8.14 N/A pH Units 03/08/17 Field 17.7 N/A °C 03/08/17 EPA 140.1-M 2 1 3 TON 03/08/17 Calculated 210 6.6 N/A mg/L 03/14/17 SM 2540C 510 5.0 1000 mg/L 03/14/17 EPA 200.7 52 1.0 N/A mg/L 03/14/17	Method Result Rep. Limit MCL Units Prepared Analyzed Field 2.9 N/A mg/L 03/08/17 03/	Method Result Rep. Limit MCL Units Prepared Analyzed Batch Field 2.9 N/A mg/L 03/08/17 03/08/17 1710135 Field 8.14 N/A pH Units 03/08/17 03/08/17 1710135 Field 17.7 N/A °C 03/08/17 03/08/17 1710135 EPA 140.1-M 2 1 3 TON 03/08/17 03/08/17 1710141 Calculated 210 6.6 N/A mg/L 03/14/17 03/14/17 [CALC] SM 2540C 510 5.0 1000 mg/L 03/14/17 03/17/17 1711035 EPA 200.7 52 1.0 N/A mg/L 03/14/17 03/14/17 1711037

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



March 17, 2017



ADE-1461 EPA Methods TO3, TO14A, TO15 SIM & SCAN **ASTM D1946**



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

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

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

LABORATORY TEST RESULTS

Project Reference: 17C0823

Lab Number:

1031001-01/02

Enclosed are results for sample(s) received 3/10/17 by Air Technology Laboratories. Samples were received intact and properly chilled. Analyses were performed according to specifications on the chain of custody provided with the sample(s).

Report Narrative:

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

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

Sincerely,

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 17C0823

ISpoj-01/02

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: [] glaubig@clinical-lab.com [] ybar California EDT transfer those sar	clinical-lab.com [v] styles@clinical-lab.com [] nelson@clinical-lab.com
Water Trax Upload Client:	[] Yes [No
	Days [] Other Days
Turn Around Time [] 10 Days Subcontract Comments:	
	Comments
Subcontract Comments:	Sampled: 03/08/17 09:05 PS Code:
Subcontract Comments: Analysis	
Subcontract Comments: Analysis	Sampled: 03/08/17 09:05 PS Code:
Subcontract Comments: Analysis Sample ID: Raw Water Site #1 / 17C0823	Sampled: 03/08/17 09:05 PS Code: Water WTX ID:
Analysis Sample ID: Raw Water Site #1 / 17C0823 Methane RSK175 Containers Supplied:	Sampled: 03/08/17 09:05 PS Code: Water WTX ID:
Subcontract Comments: Analysis Sample ID: Raw Water Site #1 / 17C0823	Sampled: 03/08/17 09:05 PS Code: Water WTX ID: Report in mg/L 40mL Amber Vial w/ Na2S2O3 (C)
Analysis Sample ID: Raw Water Site #1 / 17C0823 D Methane RSK175 Containers Supplied: 40mL Amber Vial w/ Na2S2O3 (B) Sample ID: Reservoir Effluent Site #5 / 1	Sampled: 03/08/17 09:05 PS Code: Water WTX ID: Report in mg/L 40mL Amber Vial w/ Na2S2O3 (C)
Analysis Sample ID: Raw Water Site #1 / 17C0823 D Methane RSK175 Containers Supplied: 40mL Amber Vial w/ Na2S2O3 (B)	Sampled: 03/08/17 09:05 PS Code: Water WTX ID: Report in mg/L 40mL Amber Vial w/ Na2S2O3 (C) Sampled: 03/08/17 08:50 PS Code: Water WTX ID:
Analysis Sample ID: Raw Water Site #1 / 17C0823 D Methane RSK175 Containers Supplied: 40mL Amber Vial w/ Na2S2O3 (B) Sample ID: Reservoir Effluent Site #5 / 14	Sampled: 03/08/17 09:05 PS Code: Water WTX ID: Report in mg/L 40mL Amber Vial w/ Na2S2O3 (C) Sampled: 03/08/17 08:50 PS Code:
Analysis Sample ID: Raw Water Site #1 / 17C0823 D Methane RSK175 Containers Supplied: 40mL Amber Vial w/ Na2S2O3 (B) Sample ID: Reservoir Effluent Site #5 / 1	Sampled: 03/08/17 09:05 PS Code: Water WTX ID: Report in mg/L 40mL Amber Vial w/ Na2S2O3 (C) Sampled: 03/08/17 08:50 PS Code: Water WTX ID:

Red 200 3/10/17

BJ Dlay 03/09/17 16:00 Loy Company 3/10/17 900

Released By Date / Time Received By Date / Time

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.:

17C0823

Date Received:

03/10/17

Matrix:

Water

Reporting Units: mg/L

RSK175

Lab No.:	I03100	01-01	I03100	1-02		
	Raw Wate	r Sita #1	Reservoir	Effluent		
Client Sample I.D.:	/ 17C08		Site #5 / 1	7C0823-		
	/1/008	23-01	05	5		
Date/Time Sampled:	3/8/17	9:05	3/8/17	8:50		
Date/Time Analyzed:	3/14/17	15:54	3/14/17	16:07		
QC Batch No.:	170314GC8A1		1703140	GC8A1		
Analyst Initials:	AS	S	AS			-
Dilution Factor:	1.0	0	1.0			
	Result	RL	Result	RL		
ANALYTE	mg/L	mg/L	mg/L	mg/L		
Methane	4.0	0.0010	0.36	0.0010		

ND = Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By:

Mark Johnson

Operations Manager

Date 3-17-17

The cover letter is an integral part of this analytical report

QC Batch No.:

170314GC8A1

Matrix:

Water

Units:

mg/L

QC for Dissolved Gases by EPA Procedure RSKSOP-175

Lab	No.:	Metho	d Blank	I	LCS	L	CSD		
Date/Time An	alyzed:	3/14/1	7 15:41	3/15/	17 8:11	3/15/	17 8:25		
Analyst Ini	tials:		AS		AS	0	AS		
Data	file:	14m	14mar031		nar035	14n	nar036		
Dilution Fa	ctor:	1	1.0	1.0		1.0		1	
ANALYTE	PQL	RL	Results	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Methane	0.001	0.001	ND	103	70-130%	105	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: 3-17-17

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

"Your Water and Wastewater Analysis Solution"



30 March 2017 Clinical Lab No.: 17C1363

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

Project Name: Standard Analysis

Sub Project: CWPF 3rd week of Mar Compliance Sampling

Enclosed are the results of the analyses for samples received at the laboratory on 03/15/17 . Samples were received within temperature range, in correct containers and preservation.

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

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

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

Sincerely,

Stu Styles

Client Services Manager

tistes



Lomita, City ofProjectStandard AnalysisWork Order:17C136324373 Walnut AvenueSub Project:CWPF 3rd week of Mar Compliance SamplingReceived:03/15/17 15:10Lomita CA, 91717Project Manager:Mark AndersenReported:03/30/17

Reservoir Influent Site #3		17C1363-0	01 (Water)		Sample Da	te: 03/15/1′	7 7:30 Sa	mpler: Pl	M
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	4.71		N/A	mg/L	03/15/17	03/15/17	1711148	
pH (Field)	Field	7.59		N/A	pH Units	03/15/17	03/15/17	1711148	
Temperature (Field)	Field	21.2		N/A	°C	03/15/17	03/15/17	1711148	
General Physical Analyses									
Apparent Color	SM 2120B-M	5.0	3.0	15	Color Units	03/15/17	03/15/17	1711132	
<u>Metals</u>									
Iron (Fe)	EPA 200.7	ND	100	300	ug/L	03/20/17	03/20/17	1711145	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	03/20/17	03/20/17	1711145	
Reservoir Effluent Site #5		17C1363-0	02 (Water)		Sample Da	te: 03/15/1′	7 7:35 Sa	mpler: Pl	M
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	2.98		N/A	mg/L	03/15/17	03/15/17	1711148	
pH (Field)	Field	7.91		N/A	pH Units	03/15/17	03/15/17	1711148	
Temperature (Field)	Field	18.6		N/A	°C	03/15/17	03/15/17	1711148	
General Physical Analyses									
Apparent Color	SM 2120B-M	ND	3.0	15	Color Units	03/15/17	03/15/17	1711132	
Odor Threshold	EPA 140.1-M	1	1	3	TON	03/15/17	03/15/17	1711132	
General Chemical Analyses									
Total Filterable Residue/TDS	SM 2540C	540	5.0	1000	mg/L	03/22/17	03/27/17	1712085	
ND Analyte NOT DETECTED at or	aharra tha ranartina limit								



March 24, 2017



ADE-1461 EPA Methods TO3, TO14A, TO15 SIM & SCAN ASTM D1946



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: 17C1363

ATTN: Stu Styles

21881 Barton Rd.

Grand Terrace, CA 92313

Lab Number:

I031704-01

Enclosed are results for sample(s) received 3/17/17 by Air Technology Laboratories. Samples were received intact and properly chilled. Analyses were performed according to specifications on the chain of custody provided with the sample(s).

Report Narrative:

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

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

Sincerely,

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 17C1363

I031704-01

SENDING LABORATORY:	RECEIVING LABORATORY:
Clinical Laboratory of San Bernardino	Air Technology Labs
21881 Barton Road	18501 East Gale Avenue Suite 130
Grand Terrace, CA 92313	City of Industry, CA 91748
Phone: 909.825.7693	Phone :(626) 964-4032
Fax: 909.825.7696	Fax:
Project Manager: Stu Styles	
	@clinical-lab.com [√] styles@clinical-lab.com [] nelson@clinical-lab.com
California EDT transfer those samp Water Trax Upload Client:	les with PS codes provided [] Yes [] No [] Yes [] No
Turn Around Time [] 10 Days [V] Subcontract Comments:	5 Days [] Other Days
Analysis	Comments
Sample ID: Reservoir Effluent Site #5 / 17C	1363-02 Sampled: 03/15/17 07:35 PS Code:
	Water WTX ID:
N. d. DOVIES	Report in mg/L
Methane RSK175	Report in ing E
Containers Supplied: 10ml Amber Vial (B)	40ml Amber Vial (C)
VIIII Allioci Viai (B)	40mi Amber viai (C)
the second of th	9 M
*	
	10
, and the same	A C
B.1 2hm 03	17/17 08:10 Janus Rosano 3/57/17 915
Released By D	tte / Time Received By Date / Time

Received By

Client:

Clinical Laboratory

Attn:

Stu Styles

Project Name:

NA

Project No.:

17C1363

Date Received:

03/17/17

Matrix:

Water

Reporting Units: mg/L

RSK175

Lab No.:	I03170	4-01			
	Reservoir	Effluent			
Client Sample I.D.:	Site #5 / 1'	7C1363-			
	02				
Date/Time Sampled:	3/15/17	7:35			
Date/Time Analyzed:	3/23/17	8:58			
QC Batch No.:	170323GC8A1				
Analyst Initials:	AS	5			
Dilution Factor:	1.0)			
	Result	RL			
ANALYTE	mg/L	mg/L			
Methane	0.29	0.0010			

ND = Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By:

Mark Johnson

Operations Manager

The cover letter is an integral part of this analytical report

QC Batch No.:

170323GC8A1

Matrix:

Water

Units:

mg/L

QC for Dissolved Gases by EPA Procedure RSKSOP-175

	Lab No.:			d Blank]	LCS	LCSD			
	Date/Time An	alyzed:	3/23/	17 8:45	3/23	/17 9:11	3/23/	17 9:24		
	Analyst Init	ials:	I	AS		AS		AS		
	Data	file:	23m	nar002	231	nar004	231	nar005		
	Dilution Fac	ctor:	1	0.0		1.0	1.0			
AN	ANALYTE PQL		RL	Results	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Methane	hane 0.0010		0.0010	ND	108	70-130%	100	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: 3-24-17

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

6 3 @ Chain of Custody

24373 Walnut Avenue Lomita, CA 91717 (310) 325-9830					•		,,,,,,	3				
a, CA 91717		707	1010072					\vdash		_		
) 325-9830		12	000						To			
	D	estination	Destination Laboratory	ιγ		7						
(310) 325-3627]	X] Clinica	[X] Clinical Laboratory	J.								
Standard Analysis		RWQCB C	RWQCB Compliance	6.			Co					
CWPF 3rd Week Mar Compliance Sampling -		EL	yes ELAP#		ganese ron	olved So	olor	nter) (F	TC/HF ess (as	dor		
For TC/EC/BACT see weekly Distro CoC		7	000			olids						
PM		_	000						(03)			
Sample Idenitification	Matrix	Type	Preserv	Total Chlorine							Comments / P.S. C	Codes
0730 Reservoir Influent Site #3	DW	1W	ΑX	4.71	X	×	X	H			ph 7.59 temp 2.1	، ک
0739 Reservoir Effluent Site #5	DW	1W	N/A	2.98			Х			X	t ph 7.91 temp 18	9
0735 Reservoir Effluent Site #5	DW	1W	HCL	2.98		X		X				
										_		-
									\dashv			
						-		1	-			
						-			-	+		
					+	+		+	+	\perp		
OFFINAL CO.		Matrix !	JW. Drinki	Mator V	WW.W/2	10///21			- Wate		M. Ground Water A.Air	
(+) INT-4CI			Type- 1-	Routine, 2-	Repeat	3-Rep	lacem	ent, 4-	Specia		Well D- Dist.	
Print Name / Company			Date / T.	me	\vdash	×	geine	É	Sign)		Print Name / Compan	pany
City of Lomita		3/15/201	6 /2:	N	u	4		1			Thurst	UK K
J. WWW CY	2	3-15	11/2	10							Amase	
-				Samples 1	eceive	d: 🗗 Temp) <u>5</u> 3		1 ()	ntact F	t () Custody seals	
Fed X Golden State	l UPS	Clie		Hher							oage_1_of_1_	
rvatives: (1) Na ₂ S ₂ O ₃ (2) HCl (3) HNO3 (6) H2SO4 (6) Na ₂ S ₂ O ₃ (7) Cold (8) Other. Relinquished By (Sign) ICK McCUE ATTICK THE	int Name / Company City of Lomita City Of Lomita CLOS (CLOS)	int Name / Company City of Lonita City of Lonita City Of Lonita CITY Of Lonita	int Name / Company City of Lornita 3/	1 Golden State UPS Client	1 Golden State UPS Client		1 Golden State UPS Client				1 Golden State UPS Client Other	Matrix: DW-Drinking Water, WW-Waste Water, SW-Storm Water, GW-Ground Water, A-Type-1-Routine, 2-Repeat, 3-Replacement, 4-Special W-Well D- Dist. Type-1-Routine, 2-Repeat, 3-Replacement, 4-Special W-Well D- Dist. Type-1-Routine, 2-Repeat, 3-Replacement, 4-Special W-Well D- Dist. City of Longita 3/15/2016 2.35 College 3/15/2016 Samples received: College C



07 April 2017 Clinical Lab No.: 17C1854

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

Project Name: Standard Analysis

Sub Project: CWPF 4th Week MAR Compliance Sampling

Enclosed are the results of the analyses for samples received at the laboratory on 03/22/17 . Samples were received within temperature range, in correct containers and preservation.

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

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

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

Sincerely,

Stu Styles

Client Services Manager

tistes



Lomita, City ofProjectStandard AnalysisWork Order:17C185424373 Walnut AvenueSub Project:CWPF 4th Week MAR Compliance SamplingReceived:03/22/17 14:40Lomita CA, 91717Project Manager:Mark AndersenReported:04/07/17

Reservoir Influent Site #3		17C1854-0	01 (Water)		Sample Da	te: 03/22/17	7 8:30 Sa	mpler: D	GM
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	3.7		N/A	mg/L	03/22/17	03/22/17	1712127	
pH (Field)	Field	7.9		N/A	pH Units	03/22/17	03/22/17	1712127	
Temperature (Field)	Field	17.5		N/A	°C	03/22/17	03/22/17	1712127	
General Physical Analyses									
Apparent Color	SM 2120B-M	5.0	3.0	15	Color Units	03/22/17	03/22/17	1712126	
<u>Metals</u>									
Iron (Fe)	EPA 200.7	ND	100	300	ug/L	03/27/17	03/28/17	1713027	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	03/27/17	03/28/17	1713027	
Reservoir Effluent Site #5		17C1854-0	02 (Water)		Sample Da	te: 03/22/17	7 8:45 Sa	mpler: D	GM
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	3.4		N/A	mg/L	03/22/17	03/22/17	1712127	
pH (Field)	Field	7.98		N/A	pH Units	03/22/17	03/22/17	1712127	
Temperature (Field)	Field	18.6		N/A	°C	03/22/17	03/22/17	1712127	
General Physical Analyses									
Apparent Color	SM 2120B-M	ND	3.0	15	Color Units	03/22/17	03/22/17	1712126	
Odor Threshold	EPA 140.1-M	2	1	3	TON	03/22/17	03/22/17	1712126	
General Chemical Analyses									
Total Filterable Residue/TDS	SM 2540C	530	5.0	1000	mg/L	03/28/17	03/30/17	1713041	
ND Analyte NOT DETECTED at or	ahara tha ranartina limit								

EDT Transfer Confirmation 1



Work Order: 17C1854
Report Date: 04/07/2017

Analyzing Lab: Clinical Laboratory of San Bernardino, Inc. ELAP 1088

System: 1910073 LOMITA-CITY, WATER DEPT. User ID: 4TH WELL 05 TREATMENT PLANT EFFLUENT Station No.: 1910073-006 Sampled: 170322 08:30 Result: 5.0 Units: UNITS Entry No.: 00081 Analyzed: 170322 Entry No.: 01045 Analyzed: 170328 IRON Result: ND Units: UG/L MANGANESE Entry No.: 01055 Analyzed: 170328 Result: ND Units: UG/L



March 30, 2017



ADE-1461 EPA Methods TO3, TO14A, TO15 SIM & SCAN **ASTM D1946**



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: 17C1854

ATTN: Stu Styles

21881 Barton Rd.

Grand Terrace, CA 92313

Lab Number:

I032305-01

Enclosed are results for sample(s) received 3/23/17 by Air Technology Laboratories. Samples were received intact and properly chilled. Analyses were performed according to specifications on the chain of custody provided with the sample(s).

Report Narrative:

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

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

Sincerely,

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 17C1854

I032305-01

SENDING LABORATORY:	RECEIVING LABORATORY:
Clinical Laboratory of San Bernardino	Air Technology Labs
21881 Barton Road	18501 East Gale Avenue Suite 130
Grand Terrace, CA 92313	City of Industry, CA 91748
Phone: 909.825.7693	Phone :(626) 964-4032
Fax: 909.825.7696	Fax:
Project Manager: Stu Styles	I da.
Troject Manager. Sta Styles	
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 pr Water Trax Upload Client:	rovided [] Yes [M] No [] Yes [V] No
Turn Around Time [] 10 Days 5 Days [] Othe	r Days
Subcontract Comments:	_ ,
Analysis	Comments
Sample ID: Reservoir Effluent Site #5 / 17C1854-02 Sa	impled: 03/22/17 08:45 PS Code:
	ater WTX ID:
Methane RSK175	Report in mg/L
Containers Supplied:	
40ml Amber Vial (B) 40ml Amber Vial (G	~)
	-)
	n
	7

Client:

Clinical Laboratory

Attn:

Stu Styles

Project Name:

NA

Project No.:

17C1854

Date Received:

03/23/17

Matrix:

Water

Reporting Units: mg/L

		RS	K175				
Lab No.:	103230	5-01				I	
Lab 110	Reservoir						
Client Sample I.D.:	Site #5 / 1'	7C1854-					
	02						
Date/Time Sampled:	3/22/17	8:45					
Date/Time Analyzed:	3/27/17	13:28					
QC Batch No.:	1703276	GC8A1		5			
Analyst Initials:	AS	8					
Dilution Factor:	1.0)					
	Result	RL					
ANALYTE	mg/L	mg/L					
Methane	0.30	0.0010					
						- 4100	

ND = Not Detected (below RL)
---------------------	-----------

RL = Reporting Limit

Date 3/30/17

Operations Manager

The cover letter is an integral part of this analytical report

QC Batch No.:

170327GC8A1

Matrix:

Water

Units:

mg/L

QC for Dissolved Gases by EPA Procedure RSKSOP-175

Lab	No.:	Metho	d Blank	I	LCS	L	CSD		
Date/Time An	alyzed:	3/27/	17 9:10	3/27/	17 8:56	3/27/	17 14:09		
Analyst Ini	tials:	1	AS	2	AS		AS		
Data	file:	27m	ar004	27 r	nar003	27r	mar021		
Dilution Fa	ctor:	1	1.0		1.0		1.0		
ANALYTE	PQL	RL	Results	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Methane	0.001	0.001	ND	78	70-130%	74	70-130%	5.7	<30

PQL = Practical Quantitation Limit

ND = Not Detected (Below RL).

RL = PQL X Dilution Factor

Reviewed/Approved By: ____

Mark J. Johnson//
Operations Manager

Date:

3/30/17

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

18/0

Chain of Custody

Odoc 1910073 10111 1010073 10207 10111 1010073 10111 1010073 10111 1010073 10111 1010073 10111 10111 10111 101111 1011	HS817C1										Comments / P.S. Codes	FW temp 17.5	98 temp 18,6								Air Tune 1-	ist.	Print Name & Company	CY) MODY	~ (25 B)	Custody seals Temp 10.5 () F	
Note the Computer Number Analysis Requested 1910073 Note that I a control to the control of the	(f)											12 ya	12 ya								Vator A.	V-Well I		(-)	À	ustody	
Nenue 1910073 Nenue 1910073 Nenue 1910073 S30 Destination Laboratory A Clinical Laboratory A Clinical Laboratory A Chinical Lab							0	dor													N Paris	cial V				ا ا _ ر	، [ر
1910073	_					BA	CT	TC/H	PC							_					- K	4-Spe	gn)			_z\	
Nenue 1910073 Nenue 1910073 Nenue 1910073 S30 Destination Laboratory A Clinical Laboratory A Clinical Laboratory A Chinical Lab		Б													_					_	- - - -	ment,	is) V	J		Inta	
Nenue 1910073 Nenue 1910073 Nenue 1910073 S30 Destination Laboratory A Clinical Laboratory A Clinical Laboratory A Chinical Lab		este		M	etha	ane	_		RSK	175))	×	X	X	-			-			Mat	place	i de	3	$\uparrow \uparrow$	X	
1910073		Redu				Γotal			olids			_	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	X							Stor	, 3-Re	B	1	1	. <u>e</u>	
1910073		ysis										X									- N.	Repeat	(Ź	
1910073		Anal					I	ron				X									Wate	e, 2-F		X			
Avenue 11717 830 627 4ysis npliance Sampling If Distro CoC If Distro CoC If Of Jomita CIty of Jomita	•				γ	^					Total Chlorine	3.7		"							WW-Waste	Routin	1 !	36	52	receive	
Avenue 11717 830 627 tysis npliance Sampling If Distro CoC It Name / Company City of Lomita		mber	2700	000	Laborato	Laborator	ompliance	es AP#	00	0	Preserv	N/A	N/A	HCL							ing Water	ing race)		1 11	10	Samples	-
Avenue 11717 830 627 tysis npliance Sampling If Distro CoC It Name / Company City of Lomita		stem Nu	101	121	estination	X] Clinical	RWQCB C	EL	7	2	Type	1W	1W	1W							DW-Drink			3/22/201	3.72.		
Avenue 11717 830 627 4ysis npliance Sampling If Distro CoC If Distro CoC If Ompany City of Jomita		Sy			7						Matrix	DW	DW	DW							Matrix:						
		City of Lomita	24373 Walnut Avenue	Lomita, CA 91717	(310) 325-9830	(310) 325-3627	Standard Analysis	CWPF 4TH Week MAR Compliance Sampling	For TC/EC/BACT see weekly Distro CoC	DGM	Sample Idenitification	ある3 d Reservoir Influent Site #3	Reservoir Effluent Site #5	Reservoir Effluent Site #5							CONT.	8) Other:		City of Lomita	J. 4000 000		
								+		_	Ţ	683	188D	11								7 (9) 4	uishec	EM	Q		
e # roject		Client	Address		Phone #	Fax#	Project	Sub Project	Comments	Sampled by	Date	3/22/2017	3/22/2017	3/22/2017							Drocorvativos	(5) H2S(Reling	DANJELMATEM	1	Comments)

"Your Water and Wastewater Analysis Solution"



06 April 2017 Clinical Lab No.: 17C2342

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

Project Name: Standard Analysis

Sub Project: CWPF 5th Week March 2017 Compliance Sampling

Enclosed are the results of the analyses for samples received at the laboratory on 03/29/17 . Samples were received within temperature range, in correct containers and preservation.

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

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

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

Sincerely,

Stu Styles

Client Services Manager

tistes



Lomita, City of Project: Standard Analysis Work Order: 17C2342 Sub Project: CWPF 5th Week March 2017 Compliance Sampling Received: 03/29/17 16:00 24373 Walnut Avenue Lomita CA, 91717

Reported: Project Manager: Mark Andersen

Reservoir Influent Site #3		17C2342-0	01 (Water)		Sample Da	te: 03/29/17	7 7:15 Sa	mpler: PI	LM
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	4.55		N/A	mg/L	03/29/17	03/29/17	1713106	
pH (Field)	Field	7.73		N/A	pH Units	03/29/17	03/29/17	1713106	
Temperature (Field)	Field	21.8		N/A	°C	03/29/17	03/29/17	1713106	
General Physical Analyses									
Apparent Color	SM 2120B-M	5.0	3.0	15	Color Units	03/29/17	03/29/17	1713120	
<u>Metals</u>									
Iron (Fe)	EPA 200.7	ND	100	300	ug/L	03/30/17	03/30/17	1713095	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	03/30/17	03/30/17	1713095	
Reservoir Effluent Site #5		17C2342-0	02 (Water)		Sample Da	te: 03/29/17	7 7:25 Sa	mpler: PI	LM
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	2.9		N/A	mg/L	03/29/17	03/29/17	1713106	
pH (Field)	Field	7.88		N/A	pH Units	03/29/17	03/29/17	1713106	
Temperature (Field)	Field	19.7		N/A	°C	03/29/17	03/29/17	1713106	
General Physical Analyses									
	SM	ND	3.0	15	Color Units	03/29/17	03/29/17	1713120	
Apparent Color	2120B-M	ND	5.0						
Apparent Color Odor Threshold		2	1	3	TON	03/29/17	03/29/17	1713120	
	2120B-M			3	TON	03/29/17	03/29/17	1713120	
Odor Threshold	2120B-M			3 1000	TON mg/L	03/29/17	03/29/17	1713120 1713121	

EDT Transfer Confirmation 1



Entry No.: 01055 Analyzed: 170330

Work Order: 17C2342 Report Date: 04/06/2017

MANGANESE

Analyzing Lab: Clinical Laboratory of San Bernardino, Inc. ELAP 1088

Result: ND

LOMITA-CITY, WATER DEPT.

WELL 05 TREATMENT PLANT EFFLUENT

COLOR

IRON

User ID: 4TH

System: 1910073

Sampled: 170329 07:15

PROM Result: 5.0 Units: UNITS Entry No.: 00081 Analyzed: 170329

Result: ND Units: UG/L Entry No.: 01045 Analyzed: 170330

Units: UG/L



April 6, 2017



ADE-1461 EPA Methods TO3, TO14A. TO15 SIM & SCAN **ASTM D1946**



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

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

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

LABORATORY TEST RESULTS

Project Reference: 17C2342 Lab Number: I033005-01

Enclosed are results for sample(s) received 3/30/17 by Air Technology Laboratories. Samples were received intact and properly chilled. Analyses were performed according to specifications on the chain of custody provided with the sample(s).

Report Narrative:

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

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

Sincerely,

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 17C2342

IS33005-01

SENDING LABORATORY:		RECEIVING LABORATORY:
Clinical Laboratory of San Berri 21881 Barton Road Grand Terrace, CA 92313 Phone: 909.825.7693 Fax: 909.825.7696 Project Manager: Stu Styles	ardino	Air Technology Labs 18501 East Gale Avenue Suite 130 City of Industry, CA 91748 Phone :(626) 964-4032 Fax:
Please email results to Project M [] glaubig@clinical-lab.com	/Ianager: Stu Styles []ybarra@clinical-lab.com [\	styles@clinical-lab.com [] nelson@clinical-lab.com
California EDT transfer Water Trax Upload Clie	those samples with PS codes provint:	ided []Yes []No []Yes []No
Turn Around Time [] 10 Subcontract Comments:	Days 5 Days [] Other	Days
	and a	
Analysis	15. Vir. 15.	Comments
Sample ID: Reservoir Effluent S	ite #5 / 17C2342-02 Samp Wate	oled: 03/29/17 07:25 PS Code: r WTX ID:
Methane RSK175		Report in mg/L
Containers Supplied:		
0ml Amber Vial (B)	40ml Amber Vial (C)	
150 Dly	03/30/17 07:50	3/30/17 853
Released By	03/36/17 07:50 Date/Time	Received By Date Time 3/3 (7)

Received By

Date / Time

Date / Time

Released By

Client:

Clinical Laboratory

Attn:

Stu Styles

Project Name:

NA

Project No.:

17C2342

Date Received:

03/30/17

Matrix:

Water

Reporting Units: mg/L

RSK175

Lab No.:	I03300				
	Reservoir	Effluent			
Client Sample I.D.:	Site #5/17	C2342-			
	02				
Date/Time Sampled:	3/29/17	7:25			
Date/Time Analyzed:	4/5/17	9:36			
QC Batch No.:	1704050	GC8A1			
Analyst Initials:	AS	S			
Dilution Factor:	1.0)			
	Result	RL			
ANALYTE	mg/L	mg/L			
Methane	0.45	0.0010			

ND = Not Detected (b)	elow	RL)
-----------------------	------	-----

RL = Reporting Limit

Reviewed/Approved By:

Operations Manager

The cover letter is an integral part of this analytical report

QC Batch No.:

170405GC8A1

Matrix:

Water

Units: mg/L

OC for	Dissolved	Gases	hv	EPA	Procedure	RSKSOP-175
UC IUI	DISSUIVEU	Uascs	UY		TIUCCUUIC	

Lab	No.:	Metho	d Blank	I	LCS	L	CSD		
Date/Time An	alyzed:	4/5/1	7 9:22	4/5/	17 8:55	4/5/	17 9:08		
Analyst Init	ials:	1	48		AS		AS		
Data	file:	05a	pr003	05a	apr001	05a	pr002		
Dilution Fac	ctor:	1	1.0		1.0		1.0		
ANALYTE	PQL	RL	Results	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Methane	0.001	0.001	ND	107	70-130%	112	70-130%	4.1	<30

PQL = Practical Quantitation Limit

ND = Not Detected (Below RL).

RL = PQL X Dilution Factor

Reviewed/Approved By:

Operations Manager

1 Date: 4/6/17

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

0 (3 (4) Fenain of custody 1767342

Client		City of Lomita	á	14 240	1					-	,			\ \ \ \ \ \ \		Γ
Adroso		Tay of Louisian	2	Jacelli MulliDer	niinei		Analysis		Rednested			-				٦
Address		243/3 Walnut Avenue		191	1910073											
:		Lomita, CA 91/1/							_	_						
Phone #		(310) 325-9830		Destinatio	Destination Laboratory	Ŋ										
Fax#		(310) 325-3627		[X] Clinica	[X] Clinical Laboratory	2		Tota								
Project		Standard Analysis		RWQCB (RWQCB Compliance							(
Sub Project	+	CWPF 5th week of March, 2017 Compliance			ves		ngar Iron		Colo		r/ T (Odo				_
ano Lucier	,	Sampling		E	ELAP#							r				
Comments		For TC/EC/BACT see weekly Distro CoC			000			olids								
Sampled by	λ	ЬГМ		Ĕ	1088				× = / <	CO3						
Date	Time	Sample Idenitification	Matrix	Type	Preserv	Total			·)				2		6	
3/29/2017	2110	Reservoir Influent Site #3	DW	1W	A/N	727	×		×				173 Ly	temn 7		Т
							+		+	-		2	1 .	dina	٥	Т
3/29/2017	3220	()725 Reservoir Effluent Site #5	DW	NI WI	A/A	29			×			×	D0740	temp 19	70	Т
3/29/2017	2220	0725 Reservoir Effluent Site #5	MG	<u>*</u>	HCI	2.0		>	╁			1	00.1	dungs		Т
						717	+	!	+	+		†				Т
							+		+	+		1				Т
									1	-						
																Т
										_						Т
										_						Т
										-						Т
										-		-				Т
							+			-						Т
Preservatives	: (1) Na ₂ ;	S ₂ O ₃ (2) HCI (3) HNO3 (4) NH4CI	Matrix:	DW-Drink	DW-Drinking Water, WW-Waste Water, SW-Storm Water, GW- Ground Water, A-Air	WW-Waste	Water	SW-Sto	rm Wa	ter. GM	- Grot	nd W	ater A-Air		Time- 1-	Т
(5) H2SC	34 (6) Na.	(5) H2SO4 (6) Na2SO3 (7) Cold (8) Other:				Routin	Routine, 2-Repeat,	veat, 3-1	Replace	pent,	4-Spec	ial W	3-Replacement, 4-Special W-Well D- Dist.		- I Abe- I	
Reling	uished l	Relinquished By (Sign) Print Name / Company			Date / Time	ı	-	u ~	eived	(Sign)	\(u_a	-	Prin	nt Mume / Co	трату	T
Patrick McCue		City of Lomita		3/29/17	1/3,2	71-62	33	J	Z)	N		TI LICOTE			Т
1 object	r m	When I weeke as	_	329.	7/4	Co			4	1111	4	}	7 2010) 0	T-
Commente	7	2			Samples	Samples received:		On ice		Intact	, , , , , , , , , , , , , , , , , , ,	ŭ ~	Custody seals	Temn	\frac{1}{2}	7
					•		1		-		X					
Shipped Via		Fed X Golden State	UPS	Client	nt Other	her						Page	1 of 1			T
												0	П			\neg

APPENDIX B

METHANE MONITORING LOG



CITY OF LOMITA PUBLIC WORKS DEPARTMENT

CYPRESS WATER PRODUCTION FACILITY HANDHELD METHANE LOG READINGS

MARCH 2017											
DATE	DAY	METHAN	COMMENTS								
3/1/2017	W	CH4- 1%	Оху- 19.9%								
3/2/2017	TH	CH4- 0%	Оху- 20.1%								
3/3/2017	F	CH4- 0%	Oxy- 20.1%								
3/4/2017	S	CH4- 0%	Оху- 20.2%								
3/5/2017	SU	CH4- 0%	Oxy- 20.1%								
3/6/2017	М	CH4- 0%	Oxy- 20.3%								
3/7/2017	Т	CH4- 0%	Oxy- 20.1%								
3/8/2017	W	CH4- 0%	Oxy- 20.2%								
3/9/2017	TH	CH4- 0%	Oxy- 20.0%								
3/10/2017	F	CH4- 0%	Oxy- 20.1%								
3/11/2017	S	CH4- 0%	Оху- 20.0%								
3/12/2017	SU	CH4- 0%	Оху- 19.2%								
3/13/2017	М	CH4- 0%	Oxy- 19.2%								
3/14/2017	Т	CH4- 0%	Оху- 20.3%								
3/15/2017	W	CH4- 0%	Оху- 20.1%								
3/16/2017	TH	CH4- 0%	Oxy- 20.9%								
3/17/2017	F	CH4- 0%	Оху- 19.9%								
3/18/2017	S	CH4- 1%	Оху- 19.9%								
3/19/2017	SU	CH4- 0%	Оху- 20.1%								
3/20/2017	М	CH4- 0%	Оху- 20.2%								
3/21/2017	Т	CH4- 0%	Oxy- 20.1%								
3/22/2017	W	CH4- 0%	Оху- 19.9%								
3/23/2017	TH	CH4- 0%	Оху- 20.3%								
3/24/2017	F	CH4- 0%	Oxy- 20.2%								
3/25/2017	S	CH4- 0%	Oxy- 20.1%								
3/26/2017	SU	CH4- 0%	Oxy- 20.3%								
3/27/2017	М	CH4- 0%	Оху- 18.3%								
3/28/2017	Т	CH4- 0%	Oxy- 20.1%								
3/29/2017	W	CH4- 1%	Оху- 19.9%								
3/30/2017	TH	CH4- 0%	Оху- 20.3%								
3/31/2017	F	CH4- 1%	Оху- 19.9%								

ND- Non Detect

CH4- Methane

Oxy- Oxygen

Day Off/Holiday- Red

APPENDIX C

NITRIFICATION MONITORING DATA SUMMARY

¹ MONTHLY NITRIFICATION MONITORING SUMMARY REPORT CITY OF LOMITA, System No. 1910073 --- Month, Year: March 2017

# Code	Sample ID	Location	Sample Date	Temp	рН	Total Chlorine	Free Chlorine	Total Ammonia	Free Ammonia	Nitrite	Nitrate	Coliform ²	НРС	Zone	Comments
Units/C	thers $ ightarrow$		MM/DD/YYYY	°C		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	P/A	CFU/ml		
1 D	S13-003	1948 W 252nd St	3/1/2017	17.0	7.43	2.80	0.13	0.62	0.00	0.013	0.45	А	ND	1	Well/MWD Blend
2 D	S13-004	24632 S Moon Ave	3/1/2017	18.7	7.90	3.00	0.11	0.62	0.00	0.012	0.45	А	ND	1	Well/MWD Blend
3 D	S13-008	25417 Pennsylvania Ave	3/1/2017	19.6	7.92	3.20	0.08	0.62	0.00	0.011	0.45	Α	ND	1	Well/MWD Blend
4 D	Α	2052 Dawn St	3/1/2017	18.2	7.76	2.40	0.19	0.52	0.00	0.014	0.48	Α	ND	1	Well/MWD Blend
5 D		Reservoir	3/1/2017	16.4	7.98	3.2	0.06	0.62	0.02	0.013	0.44	А	ND	1	Well/MWD Blend
6 D	S13-001	1912 W 259th PI	3/1/2017	15.7	8.72	2.30	0.11	0.44	0.00	0.015	0.75	А	ND	2	MWD Only
7 D	S13-002	26314 S Monte Vista Ave	3/1/2017	13.3	8.53	2.00	0.14	0.41	0.00	0.019	0.70	А	ND	3	MWD Only
8 D	S13-005	2500 PCH	3/1/2017	19.4	8.45	2.80	0.11	0.43	0.00	0.012	0.75	А	ND	2	MWD Only
1 D	S13-003	1948 W 252nd St	3/8/2017	16.5	7.68	2.70	0.10	0.66	0.01	0.015	ND	A	ND	T 1	Well/MWD Blend
2 D	S13-004	24632 S Moon Ave	3/8/2017	16.6	8.06	2.70	0.09	0.50	0.00	0.010	0.40	A	ND	1	Well/MWD Blend
3 D	S13-008	25417 Pennsylvania Ave	3/8/2017	18.6	8.01	2.80	0.19	0.44	0.00	0.008	ND	A	ND	1	Well/MWD Blend
4 D	А	2052 Dawn St	3/8/2017	17.5	7.21	2.01	0.16	0.72	0.00	0.013	ND	A	3	1	Well/MWD Blend
5 D		Reservoir	3/8/2017	18.7	8.17	2.91	0.05	0.52	0.02	0.009	ND	Α	ND	1	Well/MWD Blend
6 D	S13-001	1912 W 259th Pl	3/8/2017	17.4	8.54	1.41	0.03	0.50	0.03	0.011	0.61	А	ND	2	MWD Only
7 D	S13-002	26314 S Monte Vista Ave	3/8/2017	17.7	8.54	1.97	0.08	0.45	0.00	0.013	0.61	А	ND	3	MWD Only
8 D	S13-005	2500 PCH	3/8/2017	17.5	8.38	2.10	0.02	0.49	0.04	0.009	0.73	А	ND	2	MWD Only
						1			,						
1 D	S13-003	1948 W 252nd St	3/15/2017	18.4	7.50	3.10	0.06	0.58	0.00	0.012	ND	А	ND	1	Well/MWD Blend
2 D	S13-004	24632 S Moon Ave	3/15/2017	18.0	7.93	3.20	0.03	0.58	0.00	0.016	ND	Α	ND	1	Well/MWD Blend
3 D	S13-008	25417 Pennsylvania Ave	3/15/2017	18.9	8.03	3.10	0.13	0.62	0.00	0.016	ND	Α	ND	1	Well/MWD Blend
4 D	А	2052 Dawn St	3/15/2017	19.1	7.22	2.80	0.11	0.54	0.00	0.015	ND	Α	ND	1	Well/MWD Blend
5 D	C42 004	Reservoir	3/15/2017	18.6	7.91	3.3	0.14	0.62	0.04	0.012	ND	A	ND	1	Well/MWD Blend
6 D		1912 W 259th Pl	3/15/2017	16.5	8.43	2.50	0.04	0.44	0.02	0.012	0.51	A	ND	2	MWD Only
7 D 8 D	S13-002	26314 S Monte Vista Ave	3/15/2017	16.4	8.36	2.40	0.05	0.45	0.00	0.017	0.51	A	ND	3	MWD Only
[8] D	S13-005	2500 PCH	3/15/2017	17.9	8.37	2.30	0.05	0.47	0.04	0.018	0.51	A	ND	2	MWD Only
1 D	S13-003	1948 W 252nd St	3/22/2017	18.3	7.96	3.30	0.06	0.62	0.00	0.012	ND	A	ND	1	Well/MWD Blend
2 D	S13-004	24632 S Moon Ave	3/22/2017	17.8	7.96	3.40	0.08	0.62	0.00	0.013	ND	A	ND	1	Well/MWD Blend
3 D	S13-008	25417 Pennsylvania Ave	3/22/2017	18.6	7.99	3.60	0.14	0.64	0.00	0.013	ND	A	ND	1	Well/MWD Blend
4 D	А	2052 Dawn St	3/22/2017	17.1	8.00	2.70	0.15	0.62	0.00	0.013	ND	A	2	1	Well/MWD Blend
5 D		Reservoir	3/22/2017	18.6	7.98	3.40	0.07	0.64	0.02	0.011	ND	А	ND	1	Well/MWD Blend
6 D	S13-001	1912 W 259th Pl	3/22/2017	17.5	8.75	2.40	0.08	0.43	0.00	0.005	0.71	А	ND	2	MWD Only
7 D	S13-002	26314 S Monte Vista Ave	3/22/2017	17.4	8.78	2.20	0.09	0.44	0.00	0.012	0.70	А	ND	3	MWD Only
8 D	S13-005	2500 PCH	3/22/2017	17.1	8.53	2.20	0.08	0.45	0.01	0.009	0.70	А	ND	2	MWD Only
	C12 002	1040 14/252 - 15:	2/20/2017	10.5	7	1 2:2	1		Incompagne	E-10-2-2				_	
1 D	S13-003	1948 W 252nd St	3/29/2017	18.6	7.63	3.10	0.16	0.68	0.00	0.011	0.41	Α	ND	1	Well/MWD Blend
2 D	S13-004	24632 S Moon Ave	3/29/2017	18.4	7.77	3.00	0.15	0.70	0.00	0.014	0.41	A	ND	1	Well/MWD Blend
3 D	S13-008	25417 Pennsylvania Ave	3/29/2017	18.8	7.91	3.10	0.09	0.72	0.00	0.013	ND	A	ND	1	Well/MWD Blend
4 D	A	2052 Dawn St	3/29/2017	17.4	7.33	2.40	0.06	0.62	0.00	0.015	0.43	Α	ND	1	Well/MWD Blend
5 D	S13-001	Reservoir	3/29/2017	19.7	7.88	3.20	0.05	0.74	0.09	0.013	0.40	A	ND	1	Well/MWD Blend
6 D	S13-001 S13-002	1912 W 259th PI 26314 S Monte Vista Ave	3/29/2017	19.2 19.4	8.41 8.55	2.20	0.11	0.54	0.00	0.014	0.62	A	1	2	MWD Only
8 D		2500 PCH	3/29/2017 3/29/2017	19.4	8.35	2.20	0.08	0.53	0.06	0.011	0.62	A	ND	3	MWD Only
Tol D	313-003	2300 PCF	3/29/201/	10.4	8.35	2.20	0.08	0.50	0.03	0.009	0.62	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.