## CITY OF LOMITA



# Cypress Water Production Facility Monthly Status Report

**August 2017** 

#### **TABLE OF CONTENTS**

COVER LETTER	. 1
A. BACKGROUND	2
B. WELL PRODUCTION AND OPERATIONS	2
C. OPERATIONAL INTERRUPTIONS	2
D. SAMPLE LOCATIONS	2
E. WATER QUALITY MONITORING	. 3
E1. IRON, MANGANESE AND COLOR	. 3
E2. FREE AND TOTALCHLORINE RESIDUALS	. 3
E3. TOTAL DISSOLVED SOLIDS (TDS), ODOR, HARDNESS AND METHANE	.3
E3-1 TOTAL DISSOLVED SOLIDS (TDS)	. 3
E3-2 HARDNESS	3
E3-3 DISSOLVED MATHANE (IN WATER)	.4
E3-4 METHANE (IN AIR)	.4
E3-5 ODOR	4
E4. NITRIFICATION MONITORING	.4
F. TABLES	5

#### **CITY COUNCIL**

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



#### **ADMINISTRATION**

RYAN SMOOT
CITY MANAGER

**CITY OF LOMITA** 

September 11, 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</u> (CWPF) for the period of August 1 through August 31, 2017.

Dear Mr. Williams,

In accordance with the Department of Public Health temporary approval letter dated March 15, 2013 and Permit Amendment No. 1910073, I am submitting the following report for the Cypress Water Production Facility operations for the month of August 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 August 2017 maintaining water levels inside the reservoir ranging from 7 feet to 10 feet. The average flow from Well No. 5 was 523 gpm and 444 gpm from MWD. The blend ratio for month was 54% Well water and 46% MWD water. See Table 1 below for production totals for the month of August 2017.

Table 1. Monthly Production Totals.

	Production for August 2017							
Well No. 5	68.16	ac-ft	(22,209,010 gallons)					
MWD	57.51	ac-ft	(18,741,000 gallons)					
Combined Total	125.68	ac-ft	(40,950,010 gallons)					
Daily	4.05	ac-ft/day	(1,320,968 gallons/day)					

#### C. OPERATIONAL INTERRUPTIONS

There were no operational interruptions during the month of August 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 590 mg/L. The TDS level of the effluent water meets the City's Water Quality Objective/Goal of 500 to 750 mg/L. The sampling results indicate the TDS levels in the raw water and MWD water source to be 760 mg/L and 340 mg/L, respectively.

#### E3-2 HARDNESS

The sampling results for the month indicate the hardness levels of the blended water to be on average 250 mg/L. This hardness level is within 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 0.41 mg/L.

#### E3-4 METHANE (IN AIR)

The methane levels in the reservoir headspace are monitored daily by staff using a handheld device. These readings have consistently read non-detect to low concentrations for methane in air. Available methane hand held monitoring instruments can only detect levels of 1% Lower Explosive Limit (LEL) or greater. The handheld methane readings during the month were below the 50,000 ppm LEL. See attached methane log for the month of August 2017 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 August 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
8/2/2017		in a sign									ND	300	ND	50	5	15
8/9/2017	230	300	190	50	10	15	Α	Α	Α	500	ND	300	ND	50	ND	15
8/17/2017				AMERICAN NUMBER			120.00				ND	300	ND	50	ND	15
8/23/2017											ND	300	ND	50	5	15
8/30/2017					7 7/05		100				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,	SP2 SP3		SP3			SP4		SP5			
week of	Free CI	Free CI	Total CI	Total NH <sub>3</sub>	Free CI	Total CI	Total NH <sub>3</sub>	Free CI	Total CI	Total NH <sub>3</sub>	
8/2/2017	4.66	0.60	5.18	1.02	0.45	3.99	0.80	0.06	3.66	0.80	
8/9/2017	4.69	0.34	5.00	0.96	0.52	4.20	0.88	0.07	3.70	0.86	
8/17/2017	4.82	0.58	5.08	0.82	0.52	4.21	0.78	0.08	3.68	0.79	
8/23/2017	5.42	0.62	5.07	0.92	0.60	4.73	0.85	0.07	3.58	0.83	
8/30/2017	4.83	0.73	5.11	1.16	0.57	4.42	0.78	0.08	3.49	0.77	

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

		TDS, mg/L						Hardness, mg/L				Methane (Water), mg/L	
Date, week of	SP1 - Raw Well Water	SP6 - MWD Water	SP5 - Reservoir Effluent	Goal= 500 - 750 mg/L	SP5 - Reservoir Effluent	MCL= 3	SP1 - Raw Well Water	SP6 - MWD Water	SP5 - Reservoir Effluent	Goal= 180 - 250 mg/L	SP1 - Raw Well Water	SP5 - Reservoir Effluent	
8/2/2017			570	500-750	2	3						0.26	
8/9/2017	760	340	580	500-750	2	3	380	130	250	180-250	3.3	0.42	
8/17/2017			600	500-750	2	3						0.36	
8/23/2017			590	500-750	2	3						0.53	
8/30/2017			610	500-750	2	3						0.50	
Average			590	500-750	2	3			g Arr			0.41	

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 – August 2017 Cypress Water Production Facility City of Lomita; System No. 1910073

Sample Locations Frequency MCL/ 8/9 8/17 8/23 8/30 8/2 Comments and Parameters Goal 2<sup>nd</sup>Wk 4<sup>th</sup>Wk 5<sup>th</sup>Wk 1stWk 3rdWk and/or Other Info. or Mo. Result (date) SP1 --- Also called Well 5 Raw Water or Site#1. See SP5 TDS, ppm Monthly Operations Data/Information: Chlorine injected after 760 SP1, before entering 8/9/17 **CWPF** operation days See SP5 the greensand filter. Hardness Monthly 380 8/9/17 On Well 5: Daily average flow - 523 gpm; total prod. Monthly See SP5 CH4, ppm 3.3 -66.62 AF 8/9/17 Combined Well 5/MWD data: Average Well 5: MWD See SP3 Iron, ppb Monthly 230 blend Ratio - 54% WELL: 46% MWD; total prod.-8/9/17 125.68 AF See SP3 Monthly Manganese, ppb 190 8/9/17 Chlorine Dosage: N/A\* See SP3 Color, units Monthly 10 8/9/17 Total Coliform, P or A Monthly A Α 8/9/17 SP2 --- Also called Filter Effluent or Site#3. Total Coliform, P or A Monthly \*Ammonia added after filter effluent Ammonia Dosage: N/A\* HPC,MPN/100 ml Monthly 500 A Continuous Free CI Res, ppm Average: 4.89; Range: 4.66 - 5.42 SP3 --- Also called the Site After Chloramination & Before MWD Blending or Site#4. Iron, ppb Weekly 300 ND ND ND ND ND Manganese, ppb Weekly 50 ND ND ND ND ND Weekly Color 15 ND ND 5 5 Free and Total CI Res, Continuous Free CI: Average: 0.57; Range: 0.34 - 0.73 Total CI: Average: 5.09; Range: 5.00 - 5.18 ppm Ammonia: Average: 0.98; Range: 0.82 - 1.16 SP4 --- Also called Reservoir Influent or the Site Well 5/MWD Water Blend Point/Phosphate Injection. Phosphate Injection Phosphate Dosage: 0.36 mg/L Free CI: Average: 0.53; Range: 0.45 - 0.60 Continuous Free and Total CI Res. CI/NH3 Ratio: Total CI: Average: 4.31; Range: 3.99 - 4.73 5.28 mqq Ammonia: Average: 0.82; Range: 0.78 - 0.88 SP5 --- Also called Reservoir Effluent or Site#5. SP5 discharges into Zone 1 of the distribution system. SI Goal: 500-750ppm TDS, ppm Weekly 570 580 600 590 610 SI Goal: Hardness Monthly 250 180-250ppm Goal: from % CH4 Removal: CH4, ppm Weekly 0.26 0.42 0.36 0.53 0.50 87.5 Monthly 2 Odor, units 2 Continuous Free CI: Average: 0.07; Range: 0.06 - 0.08 Free and Total CI Res. CI/NH3 Ratio: Total CI: Average: 3.62; Range: 3.49 - 3.70 mag 4.46 Ammonia: Average: 0.81; Range: 0.77 - 0.86 Headspace of the Cypress Reservoir. <sup>1</sup>CH4 ppmv; using Daily Goal -CH4 Average: 0% Portable Device (from log) LEL CH4 Range: 0% SP 6 --- MWD Source Feeding CWPF. Also called Zone 2 of the distribution system or Site #6. Monthly TDS, ppm 340 Monthly Hardness 130 Notes: '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<sup>th</sup> of the following month.

#### **APPENDIX A**

LABORATORY RESULTS



16 August 2017 Clinical Lab No.: 17H0309

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

Project Name: Standard Analysis

Sub Project: CWPF 1st Week August, 2017 Compliance Sampling

Enclosed are the results of the analyses for samples received at the laboratory on 08/02/17 . 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:17H030924373 Walnut AvenueSub Project:CWPF 1st Week August, 2017 Compliance SamplingReceived:08/02/17 15:45Lomita CA, 91717Project Manager:Mark AndersenReported:08/16/17

Reservoir Influent Site #3		17Н0309-	01 (Water)		Sample Da	<b>te:</b> 08/02/17	9:05 <b>S</b>	ampler: P	atrick McCue
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	5.49		N/A	mg/L	08/02/17	08/02/17	1731137	
pH (Field)	Field	7.79		N/A	pH Units	08/02/17	08/02/17	1731137	
Temperature (Field)	Field	24.1		N/A	°C	08/02/17	08/02/17	1731137	
General Physical Analyses									
Apparent Color	SM 2120BM	5.0	3.0	15	Color Units	08/02/17	08/02/17	1731161	
<u>Metals</u>									
Iron (Fe)	EPA 200.7	ND	100	300	ug/L	08/11/17	08/11/17	1732158	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	08/11/17	08/11/17	1732158	
Reservoir Effluent Site #5		17Н0309-	02 (Water)		Sample Da	te: 08/02/17	8:50 <b>S</b>	ampler: P	atrick McCue
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	3.701		N/A	mg/L	08/02/17	08/02/17	1731137	
pH (Field)	Field	8.13		N/A	pH Units	08/02/17	08/02/17	1731137	
Temperature (Field)	Field	21.3		N/A	°C	08/02/17	08/02/17	1731137	
General Physical Analyses									
Apparent Color	SM 2120BM	ND	3.0	15	Color Units	08/02/17	08/02/17	1731161	
Odor Threshold	EPA 140.1-M	2	1	3	TON	08/02/17	08/02/17	1731161	
General Chemical Analyses									
Total Filterable Residue/TDS	SM 2540C	570	5.0	1000	mg/L	08/09/17	08/10/17	1732085	
ND Analyte NOT DETECTED at or	above the reporting limit								



August 10, 2017



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

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: 17H0309

Lab Number:

1080306-01

Enclosed are results for sample(s) received 8/03/17 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** 

Mrch-1

MJohnson@AirTechLabs.com

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

#### SUBCONTRACT ORDER

## Clinical Laboratory of San Bernardino 17H0309

I080306-01

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	
Please email results to Project Manager: Stu Sta [ ] glaubig@clinical-lab.com [ ] ybarra@clinical-lab.com [ ] ybar	inical-lab.com [v] styles@clinical-lab.com [] nelson@clinical-lab.com
Analysis	Comments
Sample ID: Reservoir Effluent Site #5 / 17H030	9-02 Sampled: 08/02/17 08:50 PS Code: Water WTX ID:
The second second	
Methane RSK175	Report in mg/L
Containers Supplied:	
40ml Amber Vial (B) 40	ml Amber Vial (C)
The services of the services o	
a faile i	
St. Opening and the control of the c	
Bs Dly 08/03/	77 08:15 (C) (S) (17) 932 Time Received By Pate / Time
/ / ////	(1)
1/15 Chagan 8/3/17	Time Received By Date / Time
Released By Date	Time Received By Date / Time

Client:

**Clinical Laboratory** 

Attn:

Stu Styles

**Project Name:** 

NA

Project No.:

17H0309

Date Received:

08/03/17

Matrix:

Water

Reporting Units: mg/L

#### **RSK175**

Lab No.:	I08030	6-01			
	Reservoir Effluent				
Client Sample I.D.:	Site #5/17H0309-				
	02				
Date/Time Sampled:	8/2/17 8:50				1
Date/Time Analyzed:	8/9/17	13:26			
QC Batch No.:	170809GC8A2				
Analyst Initials:	AS	S			
Dilution Factor:	1.0	)			
	Result	RL			
ANALYTE	mg/L	mg/L			
Methane	0.26	0.0010			

ND = Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By:	MARI.	L
	Mark Johnson	

Date 8/0/17

**Operations Manager** 

The cover letter is an integral part of this analytical report

QC Batch No.:

170809GC8A2

Matrix:

Water

Units:

mg/L

	. ~			~ .	DOMOOD 188
<b>QC</b> for Dissolve	d Gases	by	EPA	Procedure	RSKSOP-1/5

Lab	Lab No.:		Method Blank		LCS		CSD		Calendaria
Date/Time Ar	Date/Time Analyzed:		8/9/17 11:25		8/9/17 12:07		8/9/17 12:44		
Analyst Ini	Analyst Initials:		AS		AS		AS		4
Data	Datafile:		09aug024		09aug027		09aug028		1 200
Dilution Fa	ctor:	1.0		1.0		1.0			
ANALYTE	PQL	RL	Results	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Methane	0.0010	0.0010	ND	121	70-130%	107	70-130%	12.1	<30

**PQL** = Practical Quantitation Limit

ND = Not Detected (Below RL).

RL = PQL X Dilution Factor

Reviewed/Approved By:	andl.	+	Date: 8 (1)	
	Mark J. Johnson			
	<b>Operations Manager</b>			

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

	Analysis Requested				Ha	CT ardn	Odor /TC// aness (a /ater)	as (	CaC					×	X						.:	matis. De Comment votes, were vaste water, see John Water, obe John 4 Charlet, A-All John Pist Bonsat 3-Bansat 3-Bansat 4 Charlet Wilder Dist		Print Name / Company	10 10 10 10 10 10 10 10 10 10 10 10 10 1	with themore with cisis	t ( ) Custody seals Temp 11.5 ( ) F (XC
	sis R	-					Color					×	_	×								- N - 1	11, 4-		X	14	Intact
	nalys	┡					solved ——— Manga					×	_	×				_		+	-   3	vater,	- L	7	J	7	7
	<b>A</b>					<b>on</b> / 1	vianga	nes	se	-	Total	5,49		3.701							N Ctoke	SVV-Storm V	peat, 3-hepia				On ice
			_	tory	tony	)ce					Temp.	24.1		21.30							Section Material	rasie waler. Po		1me			Samples received:
		4007	27001.61	Destination Laboratory	[X] Clinical Laboratory	RWQCB Compliance	yes	ELAP#	000	000	hq v	7.79		1,8,13							otor MAZIV	a.c., 1111-		Date / Hime	ングに	3.45	ımples re
	Number	7	2	Destinat	[X] Clini	RWQCE			`		Preserv	N/A		N/A	2						rinking W	A Simum			17	14	
	System										x Type	1W		1W	1W						riy: DW.D				8/2/20	2-8	)
$\tilde{2}$											Matrix	DW		DW	DW						Mai					4	)
1746369	City of Lomita	24373 Walnut Avenue	Lomita, CA 91717	(310) 325-9830	(310) 325-3627	Standard Analysis	CWPF 1st week of August, 2017 Compliance	Samping	For TC/EC/BACT see weekly Distro CoC	Patrick McCue	Sample Idenitification	sent Site #3		uent Site #5	uent Site #5						ANO3 (4) NH4CI	Other:	Daire America	Tring Name / Company	City of Lomita	J. W. (20) (45 p.	
		2,					CWPF 1st we		For TC/EC/BA			C つらく Reservoir Influent Site #3		Oとりら Reservoir Effluent Site #5	0850 Reservoir Effluent Site #5			-			Na. S.O. (2) HCI (3) H	(5) H2SO4 (6) Na2SO3 (7) Cold (8) Other	d By (Sign)	(ngic) fa na		Marie	Err P
•	Client	Address		Phone #	Fax#	Project	Sub Project	1	Comments	Sampled by	Date Time	8/2/2017 C 9C		8/2/2017 084	8/2/2017 085						Preservatives: (1)	(5) H2SO4 (6)	Rolingishod R. (Cian)	wennyaisuc	Patrick McCue	10/2000	Comment

Page\_1\_ of\_1\_

| | Client | | Other

| | Golden State | | UPS

| Fed X

Shipped Via



25 August 2017 Clinical Lab No.: 17H1055

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

Project Name: Standard Analysis

Sub Project: Monthly Compliance / Monthly 2nd Week August

Enclosed are the results of the analyses for samples received at the laboratory on 08/09/17 . 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:17H105524373 Walnut AvenueSub Project:Monthly Compliance / Monthly 2nd Week AugustReceived:08/09/17 16:00Lomita CA, 91717Project Manager:Mark AndersenReported:08/25/17

Raw Water Site #1		17H1055-	01 (Water)		Sample Da	te: 08/09/17	8:35 Sa	ımpler: 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	08/09/17	08/09/17	1732151	
pH (Field)	Field	7.57		N/A	pH Units	08/09/17	08/09/17	1732151	
Temperature (Field)	Field	22.5		N/A	°C	08/09/17	08/09/17	1732151	
Microbiology Analyses									
Total Coliform	SM 9223	A		N/A	P/A	08/09/17	08/10/17	1732145	
E. Coli	SM 9223	A		N/A	P/A	08/09/17	08/10/17	1732145	
Plate Count	SM9215B	140	1	500	CFU/ml	08/09/17	08/11/17	1732187	HT-08
General Physical Analyses									
Apparent Color	SM 2120BM	10.0	3.0	15	Color Units	08/09/17	08/09/17	1732148	
General Chemical Analyses									
Hardness, Total (as CaCO3)	Calculated	380	6.6	N/A	mg/L	08/18/17	08/18/17	[CALC]	
Total Filterable Residue/TDS	SM 2540C	760	5.0	1000	mg/L	08/15/17	08/16/17	1733043	
<u>Metals</u>									
Calcium (Ca)	EPA 200.7	99	1.0	N/A	mg/L	08/18/17	08/18/17	1733163	
Iron (Fe)	EPA 200.7	230	100	300	ug/L	08/18/17	08/18/17	1733161	
Magnesium (Mg)	EPA 200.7	32	1.0	N/A	mg/L	08/18/17	08/18/17	1733163	
Manganese (Mn)	EPA 200.7	190	20	50	ug/L	08/18/17	08/18/17	1733161	
Filter Effluent (Free Chlorine) Site #2		17H1055-	02 (Water)		Sample Da	<b>te:</b> 08/09/17	8:23 Sa	mpler: D	GM
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									<u> </u>
Cl Res Total (Field)	Field	4.5		N/A	mg/L	08/09/17	08/09/17	1732151	
pH (Field)	Field	7.54		N/A	pH Units	08/09/17	08/09/17	1732151	
Temperature (Field)	Field	22.8		N/A	°C	08/09/17	08/09/17	1732151	
Microbiology Analyses									
Total Coliform	SM 9223	A		N/A	P/A	08/09/17	08/10/17	1732145	
E. Coli	SM 9223	A		N/A	P/A	08/09/17	08/10/17	1732145	
Plate Count	SM9215B	ND							HT-08



Lomita, City ofProject:Standard AnalysisWork Order:17H105524373 Walnut AvenueSub Project:Monthly Compliance / Monthly 2nd Week AugustReceived:08/09/17 16:00Lomita CA, 91717Project Manager:Mark AndersenReported:08/25/17

Filter Effluent (Total Chlorine) Site #3		17H1055-0	03 (Water)		Sample Da	<b>te:</b> 08/09/17	8:25 Sa	mpler: D	GM
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	5.075		N/A	mg/L	08/09/17	08/09/17	1732151	
pH (Field)	Field	7.74		N/A	pH Units	08/09/17	08/09/17	1732151	
Temperature (Field)	Field	23		N/A	°C	08/09/17	08/09/17	1732151	
General Physical Analyses									
Apparent Color	SM 2120BM	ND	3.0	15	Color Units	08/09/17	08/09/17	1732148	
<u>Metals</u>									
Iron (Fe)	EPA 200.7	ND	100	300	ug/L	08/17/17	08/17/17	1733132	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	08/17/17	08/17/17	1733132	
Zone #2 Site #6		17H1055-0	04 (Water)		Sample Da	te: 08/09/17	8:25 <b>Sa</b>	mpler: D	GM
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	2.34		N/A	mg/L	08/09/17	08/09/17	1732151	
pH (Field)	Field	8.58		N/A	pH Units	08/09/17	08/09/17	1732151	
Temperature (Field)	Field	18.8		N/A	°C	08/09/17	08/09/17	1732151	
General Chemical Analyses									
Hardness, Total (as CaCO3)	Calculated	130	6.6	N/A	mg/L	08/18/17	08/18/17	[CALC]	
Total Filterable Residue/TDS	SM 2540C	340	5.0	1000	mg/L	08/15/17	08/16/17	1733043	
<u>Metals</u>									
Calcium (Ca)	EPA 200.7	28	1.0	N/A	mg/L	08/18/17	08/18/17	1733163	
Magnesium (Mg)	EPA 200.7	14	1.0	N/A	mg/L	08/18/17	08/18/17	1733163	



Lomita, City ofProjectStandard AnalysisWork Order:17H105524373 Walnut AvenueSub Project:Monthly Compliance / Monthly 2nd Week AugustReceived:08/09/17 16:00Lomita CA, 91717Project Manager:Mark AndersenReported:08/25/17

	17H1055-0	05 (Water)		Sample Da	ate: 08/09/17	7 8:30 <b>Sa</b>	mpler: D	GM
Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field	3.774		N/A	mg/L	08/09/17	08/09/17	1732151	
Field	7.83		N/A	pH Units	08/09/17	08/09/17	1732151	
Field	21.2		N/A	°C	08/09/17	08/09/17	1732151	
EPA 140.1-M	2	1	3	TON	08/09/17	08/09/17	1732148	
Calculated	250	6.6	N/A	mg/L	08/18/17	08/18/17	[CALC]	
SM 2540C	580	5.0	1000	mg/L	08/15/17	08/16/17	1733043	
EPA 200.7	62	1.0	N/A	mg/L	08/18/17	08/18/17	1733163	
EPA 200.7	23	1.0	N/A	mg/L	08/18/17	08/18/17	1733163	
	Field Field Field  EPA 140.1-M  Calculated SM 2540C  EPA 200.7	Method         Result           Field         3.774           Field         7.83           Field         21.2           EPA 140.1-M         2           Calculated         250           SM 2540C         580           EPA 200.7         62	Field 3.774 Field 7.83 Field 21.2  EPA 140.1-M 2 1  Calculated 250 6.6 SM 2540C 580 5.0  EPA 200.7 62 1.0	Method         Result         Rep. Limit         MCL           Field         3.774         N/A           Field         7.83         N/A           Field         21.2         N/A           EPA 140.1-M         2         1         3           Calculated         250         6.6         N/A           SM 2540C         580         5.0         1000           EPA 200.7         62         1.0         N/A	Method         Result         Rep. Limit         MCL         Units           Field         3.774         N/A         mg/L           Field         7.83         N/A         pH Units           Field         21.2         N/A         °C           EPA 140.1-M         2         1         3         TON           Calculated         250         6.6         N/A         mg/L           SM 2540C         580         5.0         1000         mg/L           EPA 200.7         62         1.0         N/A         mg/L	Method         Result         Rep. Limit         MCL         Units         Prepared           Field         3.774         N/A         mg/L         08/09/17           Field         7.83         N/A         pH Units         08/09/17           Field         21.2         N/A         °C         08/09/17           EPA 140.1-M         2         1         3         TON         08/09/17           Calculated         250         6.6         N/A         mg/L         08/18/17           SM 2540C         580         5.0         1000         mg/L         08/15/17           EPA 200.7         62         1.0         N/A         mg/L         08/18/17	Method         Result         Rep. Limit         MCL         Units         Prepared         Analyzed           Field         3.774         N/A         mg/L         08/09/17         08/09/17           Field         7.83         N/A         pH Units         08/09/17         08/09/17           Field         21.2         N/A         °C         08/09/17         08/09/17           EPA 140.1-M         2         1         3         TON         08/09/17         08/09/17           Calculated         250         6.6         N/A         mg/L         08/18/17         08/18/17           SM 2540C         580         5.0         1000         mg/L         08/15/17         08/16/17           EPA 200.7         62         1.0         N/A         mg/L         08/18/17         08/18/17	Method         Result         Rep. Limit         MCL         Units         Prepared         Analyzed         Batch           Field         3.774         N/A         mg/L         08/09/17         08/09/17         1732151           Field         7.83         N/A         pH Units         08/09/17         08/09/17         1732151           Field         21.2         N/A         °C         08/09/17         08/09/17         1732151           EPA 140.1-M         2         1         3         TON         08/09/17         08/09/17         1732148           Calculated         250         6.6         N/A         mg/L         08/18/17         08/18/17         [CALC]           SM 2540C         580         5.0         1000         mg/L         08/15/17         08/16/17         1733043           EPA 200.7         62         1.0         N/A         mg/L         08/18/17         08/18/17         1733163

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



August 18, 2017

EPA Methods TO3, TO14A, TO15, 25C/3C,

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: 17H1055

Lab Number:

I081101-01/02

Enclosed are results for sample(s) received 8/11/17 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

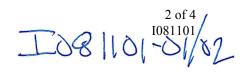
**Operations Manager** 

MJohnson@AirTechLabs.com

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

#### SUBCONTRACT ORDER

## Clinical Laboratory of San Bernardino 17H1055



SENDING LABORATORY:	RECEIVING LABORATORY:
Clinical Laboratory of San Bernardino 21881 Barton Road Grand Terrace, CA 92313 Phone: 909.825.7693 Fax: 909.825.7696	Air Technology Labs 18501 East Gale Avenue Suite 130 City of Industry, CA 91748 Phone: (626) 964-4032 Fax:
Project Manager: Stu Styles	
Please email results to Project Manager: Stu Styles [ ] glaubig@clinical-lab.com [ ] ybarra@clinical	PS codes provided [] Yes [] No [] Yes [] No
Analysis	Comments
Sample ID: Raw Water Site #1 / 17H1055-01	Sampled: 08/09/17 08:35 PS Code: Water WTX ID:
Methane RSK175	Report in mg/L
Containers Supplied:	nber Vial (C)
Sample ID: Reservoir Effluent Site #5 / 17H1055-05	Sampled: 08/09/17 08:30 PS Code: Water WTX ID:
Methane RSK175 Containers Supplied:	Report in mg/L
	nber Vial (C)
Section 1980 11 Control of the Contr	300
	9D 8/11/17
Released By O8/11/17  Date / Time	07:30 MCQal 3/11/7 8/30  Received By Date / Time
Released By 8(1)(1)  Oate / Time	Received By Date / Time

Client:

**Clinical Laboratory** 

Attn:

Stu Styles

**Project Name:** 

NA

Project No.:

17H1055

Date Received:

08/11/17

Matrix:

Water

Reporting Units: mg/L

#### **RSK175**

Lab No.:	I08110	1-01	108110	5115 500			
Client Sample I.D.:	Raw Wa		Reservoir Site #5/17				
1	#1/1 <b>7H</b> 1	055-01	02				
Date/Time Sampled:	8/9/17	8:35	8/9/17	8:30			_
Date/Time Analyzed:	8/18/17	9:51	8/18/17	9:38			74
QC Batch No.:	1708180	170818GC8A2		GC8A2			
Analyst Initials:	AS	5	AS	S		_	
Dilution Factor:	1.0	)	1.0	)			
	Result	RL	Result	RL			
ANALYTE	mg/L	mg/L	mg/L	mg/L			
Methane	3.3	0.0010	0.42	0.0010			

ND = Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By:

Mark Johnson **Operations Manager** 

Date 8-18-17

The cover letter is an integral part of this analytical report

Date: 8-18-17

QC Batch No.:

170818GC8A2

Matrix:

Water mg/L

Units:

#### QC for Dissolved Gases by EPA Procedure RSKSOP-175

Lab	No.:	Metho	d Blank	I	LCS	L	CSD		
Date/Time An	alyzed:	8/18/	17 9:23	8/18/	17 8:51	8/18/	17 9:08		
Analyst Init	ials:	F	AS		AS		AS		
Data	file:	18a	ug003	188	nug001	182	nug002		
Dilution Fa	ctor:	1	1.0		1.0		1.0		
ANALYTE	PQL	RL	Results	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Methane	0.0010	0.0010	ND	115	70-130%	104	70-130%	10.2	<30

**PQL = Practical Quantitation Limit** 

ND = Not Detected (Below RL).

RL = PQL X Dilution Factor

Reviewed/Approved By:

Mark J. Johnson

**Operations Manager** 

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

CHP F Monthly Compliance Sample Identitication   Sam	City of Lomita	Svs		104m				V TV				-				
Figure   CHPP Month Avenue   1910073   Figure   CHPP Month   Chapter   CHPP Month   CHPP Mo	•	5		HEIDEL				Ana		Kedn	estec	-				
Companies   Comp	24373 Walnut Avenue			10,	10072	_										
10   10   10   10   10   10   10   10	Lomita, CA 91717			0	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7								IVIO	M		
Chief   Chie	(310) 325-9830		7	Destinati	on Labora	tory		Т			He		etiia			
108   Sample   Gentle   Chip   Marris   Chip   Marris   Chip   Marris   Chip   Marris   Chip   Marris   Chip   Marris   Chip	(310) 325-3627			[X] Clinic	sal Labora	tory		otal	Iro	<u>T</u>			ine			
1088   10   10   10   10   10   10   1	Standard Analysis			RWQCB	Complian	ce		Di				(				
1088   1088	VPF Monthly Compliance Samples;				YES			ssol				Colo				
1088   10   10   10   10   10   10   1	2nd week of August			Ш	LAP#			ved		-		or				
1000   Freety   Temp   pi1   Total				7	000			Solid	nese	rm			(KSI	(DCI		
flee#1         GW         IW         175         7         8         X	DGM			<del>-</del>	000			s		*	nt		X1/3)	Z 1 7 5 )		
ite #1 GW 1W N/A 225° 7,5° 7 R X X X X X X X X X X X X X X X X X X	Sample Idenitification	Matrix	Type	Preserv	Тетр.	Ιď	Total Chlorine						<u> </u>			
ite #1 Gw   IW   2.7	Raw Water Site #1	GŴ	W.	N.N.	225°	7.5.7	Ø	×	×			×				
hlorine  Site#2   DW   IW   1.7   22.6°   7.5° 4   4.5° 6   N   N   N   23.0°   7.74   5.075   N   N   N   N   23.0°   7.74   5.075   N   N   N   N   N   N   N   N   N	Raw Water Site #1	GW	<u>*</u>	2,7												
hlorine) Site#2 DW 1W 1.7 22.6° 7.74 4.50 X X X X X X X X X X X X X X X X X X X	Raw Water Site #1	,C	<u>×</u>	1,7												
thorine) Site#3	Filter Effluent (Free Chlorine) Site#2	DW	<u>*</u>	1,7	32.9°	156	4.50	~								
tt Site #5  to Site #5  bw 1D N/A 21.2° 7.83 3.774 X  tt Site #5  bw 1D N/A 21.2° 7.83 3.774 X  tt Site #5  bw 1D N/A 21.2° 7.83 3.774 X  matrix: Dw. Drinking Water, ww. Waste Water, Sw. Storm Water, Gw. Ground Water, A-Air  Routine, 2-Repeat, 3-Replacement, 4-Special w-Well D- Dist.  Name / Company  of Lomita, CA 8/9/2017  Samples received: (\$\times\$) On ice (\$\times\$) Intact (\$\times\$) Custody-seals Temp   C	filter Effluent (Total Chlorine) Site#3	NG	<b>*</b>	N/A	23.0°	41.6	5,076	1.	×			×				
It Site #5  It Sit	Zone #2 Site #6	DW	1D	N/N	18.8	8.58	2.34							_		
it Site #5  DW  1D  2,7  Matrix: DW-Drinking Water, WW-Waste Water, SW-Storm Water, GW-Ground Water, A-Air  Routine, 2-Repeat, 3-Replacement, 4-Special W-Well D- Dist.  Name / Company  of Lomita, CA  8/9/2017  Samples received: (X) On ice (X) Intact (X) Custody-seals Temp  C  C  Name / County (15)  Samples received: (X) On ice (X) Intact (X) Custody-seals Temp  C																
1   1   2,7	Reservoir Effluent Site #5	DW	9	N/N	21.2°	7.83	3.774						X			
Matrix: DW-Drinking Water, WW-Waste Water, SW-Storm Water, Ground Water, A-Air  Routine, 2-Repeat, 3-Replacement, 4-Special W-Well D-Dist.  Of Lomita, CA  8/9/2017  Date / Time  Received By (Sign)  Print  Of Lomita, CA  Samples received: (X) On ice (X) Intact (X) Custody-Seals Temp	Reservoir Effluent Site #5	DW	EI	2,7										×		-
rquished By (Sign)  City of Lomita, CA  8/9/2017  City of Lowita,	ICI (3) HNO3 (4) NH4CI	Matrix		nking W.	ater, WW-L	Vaste Wate	er, SW-Stc	rm Wa	ter, Gl	V- Gro	W Dun	ater, A	-Air D- Dist			Type- 1-
City of Lomita, CA 8/9/2017  City of Lomita, CA 8/9/2017  Samples received: (X) On ice (X) Intact (X) Custody seals Temp (C)		]4			Date /	١.	î		\	Recei	yed B	(Sign		-		Ompany
Samples received: (X) Intact (X) Custody-Seals Temp (C) (15)			8/9/201	7					1/	M		M		+-		1 )
ts:  Samples received: (X) On ice (X) Intact (X) Custody seals Temp (O) ()	J. B. Bonney (	1.5B	8/6	117		0	c	7			1	19	1/		Z	
TOTAL TOTAL TOTAL AND A AND A				Samp	les receiv	ed: (X)	On ice	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	ntact	<b>∑</b> 0	Cus	tod	eals	Temp		<b>X</b>
Fed A     Golden State   OFS     Client     Office   Fage			1-	Client	Othe						Pa	ge 1	of 1			
Shipped Via		Lomita, CA 91717  (310) 325-9830  (310) 325-9830  (310) 325-9830  Standard Analysis  PPF Monthly Compliance Samples;  2nd week of August  Baw Water Site #1  Raw Water Site #1  Coole (8) Other:  Coold (8) Other:  Define Effluent Site #5  Reservoir Effluent Site #5  Reservoir Effluent Site #5  Coold (8) Other:  Define Manuel Companical Coole (8) Other:  Coold (8) Other:  Define Manuel Companical Coole (8) Other:  Coold (8) Other:  Coold (8) Other:  Define Manuel Companical Coole (8) Other:  Coold (8) Othe	### ### ##############################	1717   830   627	1717   830   627	1717   830   627	1717   830   627	1717   830   627	1717   830   627	1717   830   627	1910U/3   1910	1910    1910	1910    1910	1910   1910	1910U   330   33	1910/13   1910



31 August 2017 Clinical Lab No.: 17H1742

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

Project Name: Standard Analysis

Sub Project: CWPF 3rd Week August, 2017 Compliance Sampling

Enclosed are the results of the analyses for samples received at the laboratory on 08/17/17 . 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:17H174224373 Walnut AvenueSub Project:CWPF 3rd Week August, 2017 Compliance Sampling Received:08/17/17 16:25Lomita CA, 91717Project Manager:Mark AndersenReported:08/31/17

Reservoir Influent Site #3		17H1742-	01 (Water)		Sample Da	<b>te:</b> 08/17/17	7:20 Sa	mpler: I	Patrick McCue
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	5.45		N/A	mg/L	08/17/17	08/17/17	1733152	
pH (Field)	Field	7.74		N/A	pH Units	08/17/17	08/17/17	1733152	
Temperature (Field)	Field	22.9		N/A	°C	08/17/17	08/17/17	1733152	
General Physical Analyses									
Apparent Color	SM 2120BM	ND	3.0	15	Color Units	08/17/17	08/17/17	1734014	
Metals _									
Iron (Fe)	EPA 200.7	ND	100	300	ug/L	08/28/17	08/29/17	1735026	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	08/28/17	08/29/17	1735026	
Reservoir Effluent Site #5		17H1742-	02 (Water)		Sample Da	te: 08/17/17	7:30 Sa	mpler: I	Patrick McCue
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	3.691		N/A	mg/L	08/17/17	08/17/17	1733152	
pH (Field)	Field	7.88		N/A	pH Units	08/17/17	08/17/17	1733152	
Temperature (Field)	Field	21.4		N/A	°C	08/17/17	08/17/17	1733152	
General Physical Analyses									
Apparent Color	SM 2120BM	ND	3.0	15	Color Units	08/17/17	08/17/17	1734014	
Odor Threshold	EPA 140.1-M	2	1	3	TON	08/17/17	08/17/17	1734014	
General Chemical Analyses									
Total Filterable Residue/TDS	SM 2540C	600	5.0	1000	mg/L	08/24/17	08/25/17	1734131	
ND Analyte NOT DETECTED at or	above the reporting limit								



August 25, 2017



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

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: 17H1742 Lab Number:

1081802-01

Enclosed are results for sample(s) received 8/18/17 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 17H1742

# 1081802 1081802

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	
Please email results to Project Manager: Stu Styles [ ] glaubig@clinical-lab.com [ ] ybarra@clinical-lab.com	ab.com [ ] styles@clinical-lab.com [ ] nelson@clinical-lab.com
California EDT transfer those samples with PS Water Trax Upload Client:	S codes provided [ ] Yes [ ] No [ ] Yes [ ] No
Turn Around Time [ ] 10 Days Subcontract Comments:	[ ] Other Days
	Comments
Analysis	Comments
Sample ID: Reservoir Effluent Site #5 / 17H1742-02	Sampled: 08/17/17 07:30 PS Code: Water WTX ID:
Methane RSK175	Report in mg/L
Containers Supplied:	
	per Vial (C)
	6°C
Released By Date / Time	Received By Date Time

Client:

**Clinical Laboratory** 

Attn:

Stu Styles

**Project Name:** 

NA

Project No.:

17H1742

Date Received:

08/18/17

Matrix:

Water

Reporting Units: mg/L

<b>RSK175</b>		

Lab No.:	108180	2-01				
	Reservoir	Effluent	_			
Client Sample I.D.:	Site #5/17	H1742-				
	02					
Date/Time Sampled:	8/17/17	7:30				
Date/Time Analyzed:	8/21/17	8/21/17 11:09				
QC Batch No.:	1708210	C8A1				
Analyst Initials:	AS	S				
Dilution Factor:	1.0	)				
	Result	RL				
ANALYTE	mg/L	mg/L				
Methane	0.36	0.0010				

ND = Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By:

Mark Johnson

**Operations Manager** 

Date 8-25-17

The cover letter is an integral part of this analytical report

QC Batch No.:

170821GC8A1

Matrix:

Water

Units: mg/L

QC for Dissolv	ed Gases l	by EPA	Procedure	RSKSOP-175
OC 101 DISSUIT	cu Gases i	Uy LII IX	1 loccuule	INDIADOI 175

Lab No.:		Method Blank		LCS		LCSD			
Date/Time Analyzed:		8/21/17 10:43		8/21/17 9:28		8/21/17 15:07			
Analyst Initials:		AS		AS		AS			
Datafile:		21aug006		21aug003		21aug025			
Dilution Factor:		1.0		1.0		1.0			
ANALYTE	PQL	RL	Results	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Methane	0.0010	0.0010	ND	94	70-130%	105	70-130%	11.6	<30

**PQL** = Practical Quantitation Limit

ND = Not Detected (Below RL).

RL = PQL X Dilution Factor

Reviewed/Approved By:

**Operations Manager** 

Date: 8-25-17

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

77H+1H+1



08 September 2017 Clinical Lab No.: 17H2247

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

Project Name: Standard Analysis

Sub Project: CWPF 4th Week August, 2017 Compliance Sampling

Enclosed are the results of the analyses for samples received at the laboratory on 08/23/17 . 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:17H224724373 Walnut AvenueSub Project:CWPF 4th Week August, 2017 Compliance Sampling Received:08/23/17 16:00Lomita CA, 91717Project Manager:Mark AndersenReported:09/08/17

Reservoir Influent Site #3		17Н2247-	01 (Water)		Sample Da	te: 08/23/17	8:32 <b>S</b>	ampler: I	Patrick McCue
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	5.125		N/A	mg/L	08/23/17	08/23/17	1734132	
pH (Field)	Field	7.45		N/A	pH Units	08/23/17	08/23/17	1734132	
Temperature (Field)	Field	23.3		N/A	°C	08/23/17	08/23/17	1734132	
General Physical Analyses									
Apparent Color	SM 2120BM	5.0	3.0	15	Color Units	08/23/17	08/23/17	1734159	
Metals									
Iron (Fe)	EPA 200.7	ND	100	300	ug/L	09/01/17	09/01/17	1735132	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	09/01/17	09/01/17	1735132	
Reservoir Effluent Site #5		17Н2247-	02 (Water)		Sample Da	te: 08/23/17	8:40 S	ampler: I	Patrick McCue
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	3.652		N/A	mg/L	08/23/17	08/23/17	1734132	
pH (Field)	Field	7.71		N/A	pH Units	08/23/17	08/23/17	1734132	
Temperature (Field)	Field	22.2		N/A	°C	08/23/17	08/23/17	1734132	
<b>General Physical Analyses</b>									
Apparent Color	SM 2120BM	5.0	3.0	15	Color Units	08/23/17	08/23/17	1734159	
Odor Threshold	EPA 140.1-M	2	1	3	TON	08/23/17	08/23/17	1734159	
General Chemical Analyses									
Total Filterable Residue/TDS	SM 2540C	590	5.0	1000	mg/L	08/29/17	08/31/17	1735038	
ND Analyte NOT DETECTED at or	above the reporting limit								



August 31, 2017



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

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: 17H2247 Lab Number:

I082501-01

Enclosed are results for sample(s) received 8/25/17 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

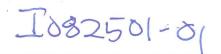
**Operations Manager** 

MJohnson@AirTechLabs.com

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

#### SUBCONTRACT ORDER

# Clinical Laboratory of San Bernardino 17H2247



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	
Please email results to Project Manager: Stu Styles [ ] glaubig@clinical-lab.com [ ] ybarra@clinical- California EDT transfer those samples with P	PS codes provided [] Yes [V] No
Water Trax Upload Client:	[] Yes [V] No
Turn Around Time [ ] 10 Days Subcontract Comments:	[ ] Other Days
Analysis	Comments
	C
Sample ID: Reservoir Effluent Site #5 / 17H2247-02	Sampled: 08/23/17 08:40 PS Code: Water WTX ID:
Methane RSK175	Report in mg/L
Containers Supplied:	
a contract of the contract of	aber Vial (C)
A. 42	
Self in the control of the control o	ransana orași ne re
THE REPORT OF THE PARTY OF THE	
Macata 1011 with the control of public ex	100
A Committee of the contract of	
0.01/	
Released By Date / Time	1 15:40 Received By Carping Bate / Time 8/25/17 90
Date / Time	17 954 Day 2000 Day 8175/17 (907)
Released By Date / Time	Received By Date / Time
Dute / Time	Trooting p

Client:

**Clinical Laboratory** 

Attn:

Stu Styles

**Project Name:** 

Project No.:

17H2247

NA

Date Received:

08/25/17

Matrix:

Water

Reporting Units: mg/L

## RSK175

Lab No.:	I08250				
	Reservoir	Effluent			
Client Sample I.D.:	Site #5/17	H2247-			
	02				
Date/Time Sampled:	8/23/17	8:40			
Date/Time Analyzed:	8/28/17	9:57			
QC Batch No.:	1708280	GC8A1			
Analyst Initials:	AS	S			
Dilution Factor:	1.0	)			
	Result	RL			
ANALYTE	mg/L	mg/L	,		
Methane	0.53	0.0010			

MIN - NI	ot Dotoot	ad (halay	DIA
14D - 140	ot Detect	ed (belov	V INL)

RL = Reporting Limit

Reviewed/Approved By:	11/10l - 1	
	Wark Johnson	

**Operations Manager** 

The cover letter is an integral part of this analytical report

QC Batch No.:

170828GC8A1

Matrix:

Water mg/L

Units:

### QC for Dissolved Gases by EPA Procedure RSKSOP-175

Lab	No.:	Metho	d Blank	I	LCS	L	CSD		
Date/Time An	alyzed:	8/28/	17 9:14	8/28/	17 9:27	8/28/	17 9:40		
Analyst Init	tials:	I	AS		AS		AS		
Data	file:	28a	ug003	288	nug004	282	aug005		
Dilution Fac	ctor:	1	1.0		1.0		1.0		
ANALYTE	PQL	RL	Results	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Methane	0.0010	0.0010	ND	115	70-130%	109	70-130%	5.3	<30

**PQL** = **Practical Quantitation Limit** 

ND = Not Detected (Below RL).

RL = PQL X Dilution Factor

Reviewed/Approved By:	111/60/-	Date:	831/7
	Mark J. Johnson		
	Operations Manager		

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

Clinical Laboratory of San Bernardino, Inc.

9/3

. Chain of Custody

L 722KC1

1.0	13 750						-					
Cilent	City of Lomita	Systen	System Number			7	Analys	sis Re	Analysis Requested	pe		
Address	24373 Walnut Avenue		7	1010072	_							
	Lomita, CA 91717		<u> </u>	, , , , , , ,	^					nr		
Phone #	(310) 325-9830		Destina	Destination Laboratory	ıtory		1			otc!		
Fax#	(310) 325-3627		[X] Clin	[X] Clinical Laboratory	tony							
Project	Standard Analysis		RWQC	RWQCB Compliance	)ce						O	
Sub Project	CWPF 4th week of August, 2017 Compliance			yes			Solve Mang	olor		/TC	dor	
300[0.1.000	Sampling			ELAP#								
Comments	For TC/EC/BACT see weekly Distro CoC			000								
Sampled by	Patrick McCue			990			-		175	:03		
Date Time	Sample Idenitification	Matrix Type	e Preserv	r pH	Temp.	Total				<u> </u>		Comments / P.S. Codes
8-23-17 0832	○\$32 Reservoir Influent Site #3	DW 1W	V N/A	745	23,30	<del> </del>	×	×		-		
5												
2-53-C1-62-8	기이어님이 Reservoir Effluent Site #5	DW 1W	v N/A	1771	22.25	3,652	X	X			×	
8-23-17 10840	O원사이 Reservoir Effluent Site #5	MI MO	v 2						×	_		
										-		
							-			_		
								١,	$\vdash$	-		
								1		$\dashv$		
				-			+			+		
Preservatives: (1) Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> (2) HCl (3) HNO <sub>3</sub>	25 <sub>2</sub> 0 <sub>3</sub> (2) HCI (3) HNO3 (4) NH4CI	Matrix: DW-Dri	Drinking W	ater, WW-V	inking Water, WW-Waste Water, SW-Storm Water, GW- Ground Water, A-Air	SW-Storm	Water,	GW-G	round	Nater,	4-Air	Type- 1-Routine, 2-
(5) H2SO4 (6) Na	(5) H2SO4 (6) Na2SO3 (7) Cold (8) Other:				Re	Repeat, 3-Replacement, 4-Special W-Well D- Dist.	laceme	nt, 4-81	oecial 1	W-Well	D-Di	
Relinquished By (Sign)	By (Sign) Print Name / Company			, Date / Time	Time		7					Print Name / Company
Patrick McCue	City of Lomita	δ,	23-17	7210	Q	K	K	H	3			J. J
Patric 18-2	M. C.	7		1	V	-	7	3	¥	4	7	J. 4 6 15 13
Comments	John Dilumanyeis 8-13	(565 %.	<u>2</u>	amples received:	ceived: (	) On ice	\	Intact		Cust	ody s	Intact ( ) Custody seals Temp 10.5 ( ) F X C
Shipped Via	Fed X     Golden State	UPS	Client	Other					Page_I_	I_ of_		

# Clinical Laboratory of San Bernardino, Inc.



08 September 2017 Clinical Lab No.: 17H2711

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

Project Name: Standard Analysis

Sub Project: CWPF 5th Week August, 2017 Compliance Sampling

Enclosed are the results of the analyses for samples received at the laboratory on 08/30/17 . 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

# Clinical Laboratory of San Bernardino, Inc.



Lomita, City ofProjectStandard AnalysisWork Order:17H271124373 Walnut AvenueSub Project:CWPF 5th Week August, 2017 Compliance Sampling Received:08/30/17 15:20Lomita CA, 91717Project Manager:Mark AndersenReported:09/08/17

Reservoir Influent Site #3		17H2711-	01 (Water)		Sample Da	<b>te:</b> 08/30/17	6:50 <b>S</b>	ampler: F	atrick McCue
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	5.7		N/A	mg/L	08/30/17	08/30/17	1735099	
pH (Field)	Field	7.52		N/A	pH Units	08/30/17	08/30/17	1735099	
Temperature (Field)	Field	23.8		N/A	°C	08/30/17	08/30/17	1735099	
General Physical Analyses									
Apparent Color	SM 2120BM	5.0	3.0	15	Color Units	08/30/17	08/30/17	1735125	
Metals									
Iron (Fe)	EPA 200.7	ND	100	300	ug/L	09/05/17	09/05/17	1736017	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	09/05/17	09/05/17	1736017	
Reservoir Effluent Site #5		17H2711-	02 (Water)		Sample Da	te: 08/30/17	7:00 S	ampler: F	atrick McCue
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	3.42		N/A	mg/L	08/30/17	08/30/17	1735099	
pH (Field)	Field	7.73		N/A	pH Units	08/30/17	08/30/17	1735099	
Temperature (Field)	Field	22.3		N/A	°C	08/30/17	08/30/17	1735099	
General Physical Analyses									
Apparent Color	SM 2120BM	ND	3.0	15	Color Units	08/30/17	08/30/17	1735125	
Odor Threshold	EPA 140.1-M	2	1	3	TON	08/30/17	08/30/17	1735125	
General Chemical Analyses									
Total Filterable Residue/TDS	SM 2540C	610	5.0	1000	mg/L	08/30/17	09/01/17	1735092	
ND Analyte NOT DETECTED at or	above the reporting limit								



September 8, 2017



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

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: 17H2711 Lab Number:

1083101-01

Enclosed are results for sample(s) received 8/31/17 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 17H2711

2093101-01

SENDING LABORATORY:			
	SENDING	I.A ROI	RATORY.

Clinical Laboratory of San Bernardino

21881 Barton Road

Grand Terrace, CA 92313

Phone: 909.825.7693

#### **RECEIVING LABORATORY:**

Air Technology Labs

18501 East Gale Avenue Suite 130

City of Industry, CA 91748

Phone :(626) 964-4032

Fax: 909.825.7696 Project Manager: Stu Styles		Fax:	
Please email results to Project [ ] glaubig@clinical-lab.com	et Manager: Stu Styles n [] ybarra@clinical-lab.co	om [v styles@clinical-lab.com	[ ] nelson@clinical-lab.com
California EDT trans Water Trax Upload C	fer those samples with PS code	es provided [ ] Yes [/] No [ ] Yes [/] No	
Turn Around Time [ ] Subcontract Comments:	10 Days [ <b>y</b> 5 Days [ ] 0	Other Days	
Analysis		· · · · · · · · · · · · · · · · · · ·	Comments
Sample ID: Reservoir Effluen	t Site #5 / 17H2711-02	Sampled: 08/30/17 07:00 PS Code Water	WTX ID:
Methane RSK175		6 1	Report in mg/L
Containers Supplied:			
40ml Amber Vial (B)	40ml Amber Vi	ial (C)	

Released By

Received By

Date // Time

Received By

Date / Time

Client:

**Clinical Laboratory** 

Attn:

Stu Styles

**Project Name:** 

NA

Project No.:

17H2711

Date Received:

08/31/17

Matrix:

Water

Reporting Units: mg/L

#### **RSK175**

Lab No.:	108310	1-01			
	Reservoir	Effluent			
Client Sample I.D.:	Site #5/17	H2711-			
	02				
Date/Time Sampled:	8/30/17	7:00			
Date/Time Analyzed:	9/5/17	13:48			
QC Batch No.:	1709050	GC8A1			
Analyst Initials:	AS	3			
Dilution Factor:	1.0	)			
	Result	RL			
ANALYTE	mg/L	mg/L			
Methane	0.50	0.0010			

ATTO _ ATO 4	Detected	(halave	DII
V  =  V	Detected	chelow	KLI

RL = Reporting Limit

Reviewed/Approved By:

Mark Johnson

**Operations Manager** 

Date 9-8-17

The cover letter is an integral part of this analytical report

QC Batch No.:

170905GC8A1

Matrix: Units:

Water

mg/L

#### QC for Dissolved Gases by EPA Procedure RSKSOP-175

I	Lab No.:			l	LCS LCSD				
Date/Time	Analyzed:	9/5/1	7 10:57	9/5/1	7 10:17	9/5/1	7 10:30		
Analyst	Analyst Initials:				AS		AS		
E	Datafile:			05sep006 05sep003 05sep004		sep004			
Dilution	Dilution Factor:				1.0		1.0		
ANALYTE	ANALYTE PQL		Results	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Methane	Iethane 0.0010		ND	102	70-130%	114	70-130%	10.9	<30

**PQL = Practical Quantitation Limit** 

ND = Not Detected (Below RL).

RL = PQL X Dilution Factor

Reviewed/Approved By:

Mark J. Johnson

**Operations Manager** 

Date: 9-8-17

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

Client	City of Lomita	System Number	A	nalysis	Analysis Requested	ted		
Address	24373 Walnut Avenue	1910073						
	Lomita, CA 91717	5 100161				To		
Phòne #	(310) 325-9830	Destination Laboratory		Т				
Fax #	(310) 325-3627	[X] Clinical Laboratory						
Project	Standard Analysis	RWQCB Compliance		Diss	(Wa		O	
Sub Broject	CWPF 5th week of August, 2017 Compliance	yes		olved		TC/	dor	
oup rioject	Sampling	ELAP#						
Comments	For TC/EC/BACT see weekly Distro CoC	8807	-					
Sampled by	Patrick McCue	9901			175)	O3)		
Date Time	ne Sample Idenitification	Matrix Type Preserv pH Temp.	mp. Chlorine	1,	1		Comme	Comments / P.S. Codes
8/30/2017 O.C.	$ \mathcal{S}_{G,\mathcal{G}}O $ Reservoir Influent Site #3	DW IW N/A 7.52 23.8	15.7	X	X			
		t.	٠ ر	ļ	1		-	
8/30/2017 67	C700 Reservoir Effluent Site #5	DW IW NIA 7,73 22.3	.3 3.42	Х	×		Х	
8/30/2017	O 700 Reservoir Effluent Site #5	DW 1W 2			X			
						-		Time 4 Bendine 2
Preservatives: (1)	Preservatives: (1) Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> (2) HCI (3) HNO3 (4) NH4CI	Matrix: DW-Drinking Water, WW-Waste Water, 5W-510111 Water, GW- Ground Water, A-All Repeat, 3-Replacement, 4-Special W-Well D- L	Water, SW-Stoffil Water, GW- Ground Water, A-All Repeat, 3-Replacement, 4-Special W-Well D- Dist.	evaler, Gr acement,	4-Special	i W-Wei	A-All I D- Dist.	
Relinanish	Relinauished By (Sign) Print Name / Company	Date / Time		(			Print Name	lame ACompany
Patrick McCue		8/30/17 /12:00		D	I	7	2.1. E	960/CLSS
Pring.	Molin			Ď	及	<b>X</b>	こならって	/હડા
Commens	Logue J. Lucello) CLSB 8.3	56 8.30-1) Samples received: (20n ice	d: ( n ice	) (Jan	Antact (	) Cus	) Custody seals Temp	16.5 ()FXC
Shipped Via	Fed X     Golden State	UPS       Client     Other			Page	Page_l_of_		

## **APPENDIX B**

METHANE MONITORING LOG



# CITY OF LOMITA PUBLIC WORKS DEPARTMENT

# CYPRESS WATER PRODUCTION FACILITY HANDHELD METHANE LOG READINGS

		AUGUST 2017		
DATE	DAY	METHAN	IE HANDHELD	COMMENTS
8/1/2017	Tue	CH4- 0%	Oxy- 20.2%	
8/2/2017	Wed	CH4- 0%	Oxy- 20.3%	
8/3/2017	Thu	CH4- 0%	Oxy- 20.3%	8
8/4/2017	Fri	CH4- 0%	Oxy- 20.2%	
8/5/2017	Sat	CH4- 0%	Oxy- 20.2%	
8/6/2017	Sun	CH4- 0%	Oxy- 19.9%	
8/7/2017	Mon	CH4- 0%	Oxy- 20.3%	
8/8/2017	Tue	CH4- 0%	Oxy- 20.8%	
8/9/2017	Wed	CH4- 0%	Oxy- 21.1%	
8/10/2017	Thu	CH4- 0%	Oxy- 20.9%	
8/11/2017	Fri	CH4- 0%	Oxy- 21.2%	
8/12/2017	Sat	CH4- 0%	Oxy- 20.4%	
8/13/2017	Sun	CH4- 0%	Oxy- 20.8%	
8/14/2017	Mon	CH4- 0%	Oxy- 20.9%	
8/15/2017	Tue	CH4- 0%	Oxy- 20.9%	
8/16/2017	Wed	CH4- 0%	Oxy- 20.1%	
8/17/2017	Thu	CH4- 0%	Oxy- 20.9%	
8/18/2017	Fri	CH4- 0%	Oxy- 19.5%	
8/19/2017	Sat	CH4- 0%	Oxy- 20.2%	
8/20/2017	Sun	CH4- 0%	Oxy- 20.2%	
8/21/2017	Mon	CH4- 0%	Oxy- 20.9%	
8/22/2017	Tue	CH4- 0%	Oxy- 19.9%	
8/23/2017	Wed	CH4- 0%	Oxy- 20.9%	
8/24/2017	Thu	CH4- 0%	Oxy- 20.9%	
8/25/2017	Fri	CH4- 0%	Oxy- 20.1%	
8/26/2017	Sat	CH4- 0%	Oxy- 20.4%	
8/27/2017	Sun	CH4- 0%	Oxy- 20.9%	
8/28/2017	Mon	CH4- 0%	Oxy- 20.3%	
8/29/2017	Tue	CH4- 0%	Oxy- 20.5%	
8/30/2017	Wed	CH4- 0%	Oxy- 19.9%	
8/31/2017	Thu	CH4- 0%	Oxy- 20.9%	

ND- Non Detect

CH4- Methane

Oxy- Oxygen

Day Off/Holiday- Red

## **APPENDIX C**

NITRIFICATION MONITORING DATA SUMMARY

# <sup>1</sup> MONTHLY NITRIFICATION MONITORING SUMMARY REPORT CITY OF LOMITA, System No. 1910073 --- Month, Year: <u>August 2017</u>

# Co	de Sample ID	Location	Sample Date	Temp	рН	Total Chlorine	Free Chlorine	Total Ammonia	Free Ammonia	Nitrite	Nitrate	Coliform <sup>2</sup>	НРС	Zone	Comments
Units	Others $\longrightarrow$		MM/DD/YYYY	°C		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	P/A	CFU/ml		
1 [	S13-003	1948 W 252nd St	8/2/2017	24.3	8.00	2.40	0.27	0.68	0.00	0.018	ND	Α	ND	1	Well/MWD Blend
2 [	S13-004	24632 S Moon Ave	8/2/2017	22.5	7.90	3.00	0.11	0.60	0.06	0.018	ND	Α	ND	1	Well/MWD Blend
3 [		25417 Pennsylvania Ave	8/2/2017	20.5	8.08	3.20	0.12	0.78	0.00	0.015	ND	Α	ND	1	Well/MWD Blend
4 [		2052 Dawn St	8/2/2017	25.8	7.85	1.09	0.06	0.32	0.09	0.120	0.47	Α	6	1	Well/MWD Blend
5 [		Reservoir SP5	8/2/2017	21.3	8.12	3.70	0.09	0.78	0.03	0.010	ND	Α	ND	1	Well/MWD Blend
6 [		1912 W 259th St	8/2/2017	19.7	8.75	2.40	0.07	0.47	0.03	0.011	0.6	Α	ND	2	MWD Only
7 [		26314 S Monte Vista Ave	8/2/2017	19.5	8.80	2.40	0.09	0.52	0.00	0.009	0.60	Α	ND	3	MWD Only
8 [	S13-005	2500 PCH	8/2/2017	19.2	8.60	2.50	0.05	0.49	0.04	0.011	0.60	A	ND	2	MWD Only
		L	1 0/0/0017	20.0			T I								T
1 [		1948 W 252nd St	8/9/2017	23.9	7.96	3.10	0.08	0.76	0.17	0.022	0.40	Α	ND	1	Well/MWD Blend
2 [		24632 S Moon Ave	8/9/2017	23.9	7.89	3.00	0.08	0.66	0.22	0.026	0.44	Α	2	1	Well/MWD Blend
3 [		25417 Pennsylvania Ave	8/9/2017	25.4 23.9	7.85 7.86	3.20	0.17	0.80	0.15 0.17	0.018	ND	A	ND	1	Well/MWD Blend
-		2052 Dawn St Reservoir SP5	8/9/2017 8/9/2017	23.9	8.50	1.15 3.70	0.12	0.32	0.17	0.200	0.56	A	57	1	Well/MWD Blend
5 E		1912 W 259th St	8/9/2017	25.9	8.52	2.80	0.04	0.84	0.08	0.012	ND 0.64	. A	ND 4	2	Well/MWD Blend
7 [		26314 S Monte Vista Ave	8/9/2017	23.3	8.63	2.70	0.08	0.48	0.08	0.014	0.63	A	220	3	MWD Only MWD Only
8 [		2500 PCH	8/9/2017	23.3	8.44	2.80	0.06	0.52	0.05	0.010	0.63	A	ND	2	
0 1	313-003	2300 FCH	8/3/2017	23.3	0.44	2.80	0.00	0.51	0.06	0.011	0.03	А	ND		MWD Only
1 (	S13-003	1948 W 252nd St	8/17/2017	22.1	8.05	3.10	0.08	0.60	0.08	0.014	ND	A	ND	1	Well/MWD Blend
2 [		24632 S Moon Ave	8/17/2017	21.7	7.97	3.10	0.12	0.60	0.10	0.014	0.43	A	ND	1	Well/MWD Blend
3 [		25417 Pennsylvania Ave	8/17/2017	22.3	7.90	3.30	0.12	0.66	0.05	0.017	ND	A	ND	1	Well/MWD Blend
4 [	Toronto do do de la composición dela composición de la composición dela composición de la composición dela composición dela composición dela composición de la composición de la composición dela composici	2052 Dawn St	8/17/2017	21.1	791	1.16	0.08	0.26	0.12	0.140	0.55	A	ND	1	Well/MWD Blend
5 [		Reservoir SP5	8/17/2017	21.4	7.88	3.60	0.10	0.70	0.00	0.010	ND	A	ND	1	Well/MWD Blend
6 [		1912 W 259th St	8/17/2017	21.0	8.56	2.60	0.05	0.45	0.04	0.012	0.65	A	ND	2	MWD Only
6 [ 7 [	S13-002	26314 S Monte Vista Ave	8/17/2017	20.7	8.58	2.60	0.06	0.44	0.04	0.017	0.66	Α	ND	3	MWD Only
8 [	S13-005	2500 PCH	8/17/2017	20.4	8.59	2.70	0.02	0.45	0.00	0.010	0.66	Α	ND	2	MWD Only
1 [	S13-003	1948 W 252nd St	8/24/2017	23.1	8.00	2.50	0.07	0.64	0.12	0.022	ND	А	ND	1	Well/MWD Blend
2 [ 3 [	S13-004	24632 S Moon Ave	8/24/2017	23.1	8.10	2.60	0.12	0.68	0.17	0.022	ND	А	ND	1	Well/MWD Blend
3 [	S13-008	25417 Pennsylvania Ave	8/24/2017	23.6	8.06	3.00	0.12	0.66	0.08	0.016	ND	Α	ND	1	Well/MWD Blend
4 [	Α	2052 Dawn St	8/24/2017	21.8	8.62	1.98	0.10	0.36	0.06	0.014	0.70	Α	ND	1	Well/MWD Blend
5 [	)	Reservoir SP5	8/24/2017	22.2	7.71	3.60	0.06	0.83	0.00	0.015	ND	Α	ND	1	Well/MWD Blend
6 [	S13-001	1912 W 259th St	8/24/2017	21.3	8.63	2.60	0.07	0.45	0.01	0.009	0.65	Α	ND	2	MWD Only
7 [	S13-002	26314 S Monte Vista Ave	8/24/2017	21.6	8.61	2.70	0.06	0.49	0.01	0.008	0.66	Α	ND	3	MWD Only
8 [	S13-005	2500 PCH	8/24/2017	21.2	8.64	2.50	0.07	0.43	0.04	0.008	0.65	Α	1	2	MWD Only
														_	
1 [	010 000	1948 W 252nd St	8/31/2017	24.8	7.88	2.70	0.14	0.62	0.12	0.025	ND	Α	55	1	Well/MWD Blend
2 1		24632 S Moon Ave	8/31/2017	23.8	7.87	2.50	0.20	0.62	0.09	0.021	ND	Α	ND	1	Well/MWD Blend
3 1	E PROPERTY OF STREET	25417 Pennsylvania Ave	8/31/2017	24.2	8.01	2.70	0.12	0.62	0.12	0.021	ND	A	ND	1	Well/MWD Blend
4 1		2052 Dawn St	8/31/2017	23.4	7.42	1.97	0.06	0.39	0.12	0.013	0.61	A	ND	1	Well/MWD Blend
5 1		Reservoir	8/31/2017	22.3	7.73	3.42	0.06	0.62	0.01	0.014	ND	A	ND	1	Well/MWD Blend
6 1		1912 W 259th St	8/31/2017	22.7	8.76	2.50	0.07	0.46	0.00	0.012	0.66	A	66	2	MWD Only
7 1		26314 S Monte Vista Ave	8/31/2017	21.4	8.81	2.60	0.06	0.49	0.00	0.013	0.66	A	ND	3	MWD Only
8	S13-005	2500 PCH	8/31/2017	22.6	8.59	2.40	0.11	0.44	0.00	0.014	0.66	A	ND	2	MWD Only

<sup>&#</sup>x27;Notes: 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).

<sup>&</sup>lt;sup>2</sup>Coliform results are part of weekly Bacti sampling results.

<sup>&</sup>lt;sup>3</sup>The City is monitoring the trend of Nitrite on Dawn St in accordance with the Nitrification Monitoring Plan.