CITY OF LOMITA



Cypress Water Production Facility Monthly Status Report

September 2018

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CITY COUNCIL

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



ADMINISTRATION

RYAN SMOOT
CITY MANAGER

October 10, 2018

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

<u>Subject: System No. 1910073 - Monthly Report for the Cypress Water Production Facility (CWPF) for the period of September 1 through September 30, 2018.</u>

Dear Mr. Ginzburg,

In accordance with the Department of Public Health temporary approval letter dated March 15, 2013 and Permit Amendment No. 1910073, I am submitting the following report for the Cypress Water Production Facility operations for the month of September 2018.

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

Sincerely,

Mark Andersen

Public Works Superintendent

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 September 2018 maintaining water levels inside the reservoir ranging from 7 feet to 10 feet. The average flow from Well No. 5 was 404 gpm and 601 gpm from MWD. The blend ratio for month was 41% Well water and 59% MWD water. See Table 1 below for production totals for the month of September 2018.

Table 1. Monthly Production Totals.

		oduction fo	or September 2018
Well No. 5	48.38	ac-ft	15,764,975 (gallons)
· · · · · · · · · · · · · · · · · · ·	71.00	aciji	23,135,000 (gallons)
Combined Total	119.38	ac-ft	38,899,975 (gallons)
Daily	3.98	ac-ft/day	1,296,666 (gailons/day)

C. OPERATIONAL INTERRUPTIONS

There were no operational interruptions during the month of September 2018. Routine and preventive maintenance was performed on various pieces of equipment as-needed. No major planned operational interruptions are anticipated for the following month.

D. SAMPLE LOCATIONS

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

E. WATER QUALITY MONITORING

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

E1. IRON, MANGANESE AND COLOR

See Table 2 below for a summary of the results for the compliance monitoring at the three sample locations SP1 through SP3. Color for raw water (SP1) was below the MCL level. Iron for raw water was below the MCL level and Manganese was above the MCL level for the month. 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 730 mg/L and 420 mg/L, respectively.

E3-2 HARDNESS

The sampling results for the month indicate the hardness levels of the blended water to be on average 270 mg/L. This hardness level is above 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 0.21 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 September 2018 in Appendix B.

E3-5 ODOR

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

E3-6 TOTAL PHOSPHATE AND ORTHOPHOPHATE

See Table 5 below for a summary of the results for the monitoring of Orthophosphate and Total Phosphate both in the distribution system and CWPF.

E3-7 1,2,3-TRICHLOROPROPANE QUARTERLY MONITORING

The 1,2,3 TCP levels at Well No. 5 show ND for the third guarter in 2018.

E4. NITRIFICATION MONITORING

Weekly nitrification sampling was performed during the month of September 2018 following the City's Nitrification Monitoring Plan. Refer to Appendix C for results.

F. TABLES

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

		SP1, V	Vell Raw	Water	Discha	arge		Pres	Combi sure F	ilter	SP3,		nloramin eservoii		tatic mi	xer;
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
9/4/2018											ND	300	ND	50	5	15
9/11/2018	200	300	150	50	10	15	Α	ND	ND	500	ND	ND 300	ND	50	5	15
9/18/2018											ND	300	ND	50	5	15
9/25/2018											ND	300	ND	50	ND	15

Notes:

Monthly- Orange; Weekly- Yellow

A – Absent

ND – Non Detect

*Per the SWRCB Drinking Water "Chemicals and Contaminants in Drinking Water" Regulations

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

Date,	SP2		SP3			SP4		17 15 Jug	SP5	
week of	Free CI	Free CI	Total CI	Total NH ₃	Free CI	Total CI	Total NH ₃	Free CI	Total CI	Total NH₃
9/4/2018	10.31	0.90	8.25	1.00	0.75	4.97	0.80	0.10	3.53	0.68
9/11/2018	9.31	1.00	10.18	1.08	0.82	4.97	0.88	0.08	3.64	0.77
9/18/2018	9.53	1.10	8.78	1.18	0.78	4.87	0.82	0.08	3.60	0.74
9/25/2018	8.79	0.95	9.05	1.10	0.81	5.29	0.93	0.07	3.64	0.78

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

		TD	S, mg/L		T.O.	N.		Hardn	ess, mç	g/L		hane r), 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
9/4/2018			590	500-750	1	3						0.23
9/11/2018	730	420	590	500-750	2	3	350	190	270	180-250	1.6	0.15
9/18/2018			570	500-750	2	3						0.23
9/25/2018			610	500-750	2	3						0.25
Average			590	500-750	1.8	3						0.22

Notes:

Monthly- Orange; Weekly- Yellow

ppm – parts per million mg/L – milligram per liter

T.O.N. - Threshold Odor Number

TDS - Total Dissolved Solids

Hardness - As total CaCO3

Methane (Water) - Methane dissolved in water

Table 5. Monitoring Requirements and Frequencies for Total Phosphate and Orthophosphate.

Sample Location	Date, week of	Total Phosphate, mg/L	Orthophosphate, mg/L
1948 W 252 nd St		0.36	0.48
24632 S Moon Ave		0.36	0.47
2450 W 247 th St	9/11/18	0.35	0.54
2052 Dawn St		0.34	0.50
CWPF SP5		0.34	

Notes:

Monthly- Orange;

mg/L - milligram per liter

Monthly CWPF Monitoring Report – September 2018 Cypress Water Production Facility City of Lomita; System No. 1910073

		AND DESCRIPTION OF THE PARTY OF	The state of the s	; System		CONTRACTOR OF THE PARTY OF THE PARTY.		The second secon
Sample Locations	Frequency	MCL/	9/4/18	9/11/18	9/18/18	9/25/18		Comments
and Parameters		Goal	1stWk	2 nd Wk	3rdWk	4 th Wk	5 th Wk	and/or
			control A A suc					Other Info.
			or Mo.					
	1		Result					
			(date)					
SP1 Also called								
TDS, ppm	Monthly	See SP5	730	Operations	Data/Inforn	nation:		*Chlorine injected after SP1, before entering
Hardness	Monthly	See SP5	9/11/18 350	CWPF opera	tion days			the greensand filter.
i lai uliess	Worlding		9/11/18	100 95400000 000 4				
CH4, ppm	Monthly	See SP5	1.6	On Well 5: L	Daily average t	low – 404 gpn	n; total prod.	
T	NA - m tip is	See SP3	9/11/18	Combined V	Vell 5/MWD da	ata: Average V	Vell 5: MWD	
Iron, ppb	Monthly	366 313	200 9/11/18		41% WELL: 5	59% MWD; tot	al prod	
Manganese, ppb	Monthly	See SP3	150	119.38 AF				
251 (# 51 # 5			9/11/18	Chlorine Do	sage: N/A*			
Color, units	Monthly	See SP3	10					
Total Coliform, P or A	Monthly	Α	9/11/18 A					
Total Comorni, T of 71	Mortany		9/11/18					
SP2 Also called	Filter Efflu	ent or Si	te#3.					
Total Coliform, P or A	Monthly	Α	Α					*Ammonia added after
HPC,MPN/100 ml	Monthly	500	ND		osage: N/A*	9		filter effluent
Free Cl Res, ppm	Continuous	THE RESERVE OF THE PERSON NAMED IN	Contract of the Contract of th	ge: <mark>8.79 – 1</mark>				
SP3 Also called	the Site Af	ter Chlor	ramination	n & Before	MWD BI	ending or	Site#4.	
Iron, ppb	Weekly	ND	ND	ND	ND	ND		
Manganese, ppb	Weekly	50	ND	ND	ND	ND]
Color	Weekly	15	5	5	5	ND		
Free and Total CI Res,	Continuous			Range: 0.				
ppm				6; Range: 8				
SP4 Also called	Posorvoir			.09; Range:		Bland Do	int/Dhoor	hote Injection
Phosphate Injection	Teser von		e Dosage: 0		VVD VValer	Dieliu FC	murnos	Tiale injection.
Free and Total Cl Res,	Continuous			0; Range: 0	75 - 0.82		-	CI/NH3 Ratio:
ppm				6; Range: 4.				5.81
				.87; Range:				100.00 ES T
SP5 Also called	Reservoir	Effluent	or Site#5.	SP5 disc	harges in	to Zone 1	of the dis	tribution system.
TDS, ppm	Weekly	SI Goal: 500-750ppm	590	590	570	610		
-		010	000		570	010		
Hardness	Monthly	SI Goal: 180-250ppm		270				
CH4, ppm	Weekly	Goal: from PA	0.23	0.15	0.23	0.25		% CH4 Removal: 86.6%
Odor, units	Monthly	1	1	2	2	2		55.576
Free and Total CI Res,	Continuous			8; Range: 0.	07 - 0.10	•	•	CI/NH3 Ratio:
ppm				1; Range: 3.				4.81
		A STREET WHEN THE PERSON NAMED IN	: Average: 0	. <mark>75</mark> ; Range: (0.68 – 0.78			
Headspace of the C	7							
¹ CH4 ppmv; using Portable Device	Daily (from log)	Goal - LEL		age: <mark>0.21%</mark> ige: <mark>0% - 1</mark> %				
SP 6 MWD Source						ributions	vetem or	Site #6
TDS, ppm	Monthly			420	l tile tilst		Jacon Or	Tite #0.
Hardness	Monthly			190				-
		1 500 750			-1.400.050	L		
Notes: 1Self-Imposed (SI) G ***This Report is de	oals: IDS Goa	hy the 1	Officer of the state of the sta	as CaCO3 Go	ai-180-250 ppi	m.		
Other Neter/Com	AG TO DDAA	by the I	o or trie	onowing	month.			

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

APPENDIX A

LABORATORY RESULTS



17 September 2018 Clinical Lab No.: 1810082

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

Project Name: Standard Analysis

Sub Project: CWPF 1st Week of Sept, 2018 Compliance Sampling

Enclosed are the results of the analyses for samples received at the laboratory on 09/04/18 . Samples were received within temperature range, in correct containers and preservation.

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

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

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

Sincerely,

Stu Styles

Client Services Manager

tistes



Lomita, City ofProjectStandard AnalysisWork Order:181008224373 Walnut AvenueSub Project:CWPF 1st Week of Sept, 2018 Compliance Sampling Received:09/04/18 14:55Lomita CA, 91717Project Manager:Mark AndersenReported:09/17/18

Reservoir Influent Site #3		1810082-0	1 (Water)		Sample Da	te: 09/04/18	8 9:40 Sa	mpler: P.1	М.
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	8.3		N/A	mg/L	09/04/18	09/04/18	1836035	
pH (Field)	Field	7.87		N/A	pH Units	09/04/18	09/04/18	1836035	
Temperature (Field)	Field	23.4		N/A	°C	09/04/18	09/04/18	1836035	
General Physical Analyses									
Apparent Color	SM 2120BM	5.0	3.0	15	Color Units	09/04/18	09/04/18	1836084	
<u>Metals</u>									
Iron (Fe)	EPA 200.7	ND	100	300	ug/L	09/12/18	09/12/18	1837061	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	09/12/18	09/12/18	1837061	
Reservoir Effluent Site #5		18I0082-0	2 (Water)		Sample Da	te: 09/04/18	8 9:10 Sa	mpler: P.1	M.
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	3.22		N/A	mg/L	09/04/18	09/04/18	1836035	
pH (Field)	Field	8.14		N/A	pH Units	09/04/18	09/04/18	1836035	
Temperature (Field)	Field	24		N/A	°C	09/04/18	09/04/18	1836035	
General Physical Analyses									
Apparent Color	SM 2120BM	ND	3.0	15	Color Units	09/04/18	09/04/18	1836084	
Odor Threshold	EPA 140.1-M	1	1	3	TON	09/04/18	09/04/18	1836084	
General Chemical Analyses									
Total Filterable Residue/TDS	SM 2540C	590	5.0	1000	mg/L	09/05/18	09/06/18	1836026	
ND Analyte NOT DETECTED at or a	above the reporting limit								



September 12, 2018

LA Cert #04140
EPA Methods T03, T014A, T015, 25C/3C,
RSK-175
TX Cert T104704450-14-6
EPA Methods T014A, T015

UT Cert CA0133332015-3 EPA Methods T03, T014A, T015, RSK-175

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

LABORATORY TEST RESULTS

Project Reference: 18I0082 Lab Number: J090502-01

Enclosed are results for sample(s) received 9/05/18 by Air Technology Laboratories. Samples were received intact and chilled to 4° C. 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 TNI 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 1810082

SENDING LABORATORY:

RECEIVING LABORATORY:

J090502-61

Clinical Laboratory of San Bernardino 21881 Barton Road Grand Terrace, CA 92313 Phone: 909.825.7693 Fax: 909.825.7696 Project Manager: Stu Styles	Air Technology Labs 18501 East Gale Avenue Suite 130 City of Industry, CA 91748 Phone:(626) 964-4032 Fax:	
Please email results to Project Manager: Stu Styles [] glaubig@clinical-lab.com [v] styles@clinical-lab	o com _ [] nelson@clinical-lah com	
California EDT transfer those samples with PS Water Trax Upload Client:	^	*1
Turn Around Time [] 10 Days [$\sqrt{5}$ Days [Subcontract Comments:	Other Days	
	and the second of the second o	
Analysis	Comments	
Sample ID: Reservoir Effluent Site #5 / 18I0082-02	Sampled: 09/04/18 09:10 PS Code: Water WTX ID:	
Methane RSK175	Report in mg/L	
Containers Supplied:		
40ml Amber Vial (B) 40ml Amber	er Vial (C)	
	1	a a
50 E		
		x w
		40
Released By Date / Time	16:30 9/5/1	8 835
1 00 //	Received By Date / Ti Received By Date / Ti	3 /022 me

Client:

Clinical Laboratory

Attn:

Stu Styles

Project Name:

NA

Project No.:

1810082

Date Received:

09/05/18

Matrix:

Water

Reporting Units: mg/L

RSK175

Lab No.:	J09050				
	Reservoir	Effluent			
Client Sample I.D.:	Site	#5/			
	181008	32-02			
Date/Time Sampled:	9/4/18	9:10			
Date/Time Analyzed:	9/6/18	14:40			
QC Batch No.:	1809060	GC8A1			
Analyst Initials:	AS	8			
Dilution Factor:	1.0)			
	Result	RL			
ANALYTE	mg/L	mg/L			
Methane	0.23	0.0010			

ND = Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By:

Operations Manager

Date $\frac{g}{12}/18$

The cover letter is an integral part of this analytical report

LCS/LCSD Recovery and RPD Summary Report

QC Batch #: 180906GC8A1

Matrix: Air Reporting Units: mg/L

RSK175 LABORATORY CONTROL SAMPLE SUMMARY

Lab No.:	METHOD	BLANK		L	CS	LO	CSD				
Date/Time Analyzed:	9/6/18 1	0:18		9/6/1	8 9:52	9/6/18	3 10:06				
Analyst Initials:	AS			Α	S	A	NS «				
Dilution Factor:	1.0			1	.0	1	.0				
ANALYTE	Result mg/L	RL mg/L	SPIKE AMT. mg/L	Result mg/L	% Rec.	Result mg/L	% Rec.	RPD	Low %Rec	High %Rec	Max. RPD
Methane	ND	0.0010	0.65	0.572	87.4	0.566	86.5	0.9	70	130	30.0

ND= Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By:

Mark Johnson

Operations Manager

Date 9/12/18

The cover letter is an integral part of this analytical report

Clinical Laboratory of San Bernardino, Inc.

18I0082

Client	City of Lomita	System No	umber		A	Analysis Requested	Redue	sted			
Address	24373 Walnut Avenue		1010	073							
	Lomita, CA 91717		6/00/6/	270			. N				
Phone #	(310)903-2243		Destination Laboratory	-aboratory			1eth				
Fax#			[X] Clinical Laboratory	-aboratory			ane				
Project	Standard Analysis		RWQCB Compliance	mpliance		l Diss	Co Co	0			
Sub Project	CWPF 1st week of September, 2018		yes		lang		ater olor	dor			
100011000	Compliance Sampling		ELAP#	#	l						
Comments	For TC/EC/BACT see weekly Distro CoC		700	00			SK				
Sampled by	P.M.	r	0001	0			175)				
Date Time	Sample Idenitification	Matrix Type	Preserv	pH Temp.	Total	4				Comments / P.S. Codes	
9/4/2018 094K	O 역사이 Reservoir Influent Site #3	DW IW	A/N	7.87 23,49	<u> </u>	×	×				
9/4/2018 OH/D	C9/O Reservoir Effluent Site #5	DW IW	N/A	8.14 240	322	×	×	×			
9/4/2018 0910	O9 i O Reservoir Effluent Site #5	MI MQ	7	30.42 71.3	377		×				
•							-				
							-				
	6,										
Preservatives: (1) Na ₂	Preservatives: (1) Na ₂ S ₂ O ₃ (2) HCl (3) HNO3 (4) NH4Cl	Matrix: DW-Drinking Water, WW-Waste Water, SW-Storm Water, GW- Ground Water, A-Air	ing Water, M	W-Waste Water,	SW-Storm Wat	er, GW- (Sround	Water,	A-Air	Type- 1-Routine, 2-Repeat, 3-	Repeat, 3-
(5) HZSO4 (6)	old (8) Other:				керіасє	ment, 4-	Special	W-We	Replacement, 4-Special W-Well D-Dist		
Relinquished By (Sign)			7	Date / Time		00	_	\	/-	Print Name / Company	
Ketine anche	\mathcal{C}	omita 9/4/2018	/ 8		54:21	B	7	1	1	This Martinez	
Mai Mach	Har Wartmer	1-15-6	8		5:2	ट	4		لد	Chris leaz / CLSB	
Comments:			San	Samples received: () On ice	l: () On ice	ل ر) Intact	' $\widehat{\ }$	Custody) Custody seals Temp $\mathcal{H} \leq \frac{1}{2}$	C
Shipped Via	Fed X Golden State	UPS Client	ient Other	her			P	age I	Page 1 of 1		
	1	1	1					0			



21 September 2018 Clinical Lab No.: 1810788

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

Project Name: Standard Analysis

Sub Project: CWPF Monthly Compliance Samples, 2nd Wk of Sept

Enclosed are the results of the analyses for samples received at the laboratory on 09/11/18 . Samples were received within temperature range, in correct containers and preservation.

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

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

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

Sincerely,

Stu Styles

Client Services Manager

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Lomita, City ofProject:Standard AnalysisWork Order:181078824373 Walnut AvenueSub Project:CWPF Monthly Compliance Samples, 2nd Wk of Sep Received:09/11/18 15:00Lomita CA, 91717Project Manager:Mark AndersenReported:09/21/18

Raw Water Site #1		1810788-0	1 (Water)		Sample Da	te: 09/11/18	3 9:50	Sampler:	Patrick McCue
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	0		N/A	mg/L	09/11/18	09/11/18	1837056	
pH (Field)	Field	7.83		N/A	pH Units	09/11/18	09/11/18	1837056	
Temperature (Field)	Field	23.4		N/A	°C	09/11/18	09/11/18	1837056	
Microbiology Analyses									
Total Coliform	SM 9223	A		N/A	P/A	09/11/18	09/12/18	1837084	
E. Coli	SM 9223	A		N/A	P/A	09/11/18	09/12/18	1837084	
Plate Count	SM9215B	160	1	500	CFU/ml	09/11/18	09/13/18	1837119	
General Physical Analyses									
Apparent Color	SM 2120BM	10.0	3.0	15	Color Units	09/11/18	09/11/18	1837094	
General Chemical Analyses									
Hardness, Total (as CaCO3)	Calculated	350	6.6	N/A	mg/L	09/18/18	09/18/18	[CALC]	
Total Filterable Residue/TDS	SM 2540C	730	5.0	1000	mg/L	09/11/18	09/13/18	1837029	
<u>Metals</u>									
Calcium (Ca)	EPA 200.7	93	1.0	N/A	mg/L	09/18/18	09/18/18	1838046	
Iron (Fe)	EPA 200.7	200	100	300	ug/L	09/19/18	09/19/18	1838074	
Magnesium (Mg)	EPA 200.7	28	1.0	N/A	mg/L	09/18/18	09/18/18	1838046	
Manganese (Mn)	EPA 200.7	150	20	50	ug/L	09/19/18	09/19/18	1838074	
Filter Effluent (Free Chlorine) Site #2		1810788-0	2 (Water)		Sample Da	te: 09/11/18	3 10:40	Sampler:	Patrick McCue
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	13.8		N/A	mg/L	09/11/18	09/11/18	1837056	
pH (Field)	Field	7.83		N/A	pH Units	09/11/18	09/11/18	1837056	
Temperature (Field)	Field	23.8		N/A	°C	09/11/18	09/11/18	1837056	
Microbiology Analyses									
Total Coliform	SM 9223	A		N/A	P/A	09/11/18	09/12/18	1837084	
E. Coli	SM 9223	A		N/A	P/A	09/11/18	09/12/18	1837084	
Plate Count	SM9215B	ND	1	500	CFU/ml	09/11/18	09/13/18	1837119	



Lomita, City ofProject:Standard AnalysisWork Order:181078824373 Walnut AvenueSub Project:CWPF Monthly Compliance Samples, 2nd Wk of Sep Received:09/11/18 15:00Lomita CA, 91717Project Manager:Mark AndersenReported:09/21/18

Filter Effluent (Total Chlorine) Site #3		1810788-0	3 (Water)		Sample Da	te: 09/11/18	8 10:48 S a	ımpler: P	atrick McCue
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	10.6		N/A	mg/L	09/11/18	09/11/18	1837056	
pH (Field)	Field	7.91		N/A	pH Units	09/11/18	09/11/18	1837056	
Temperature (Field)	Field	23.4		N/A	°C	09/11/18	09/11/18	1837056	
General Physical Analyses									
Apparent Color	SM 2120BM	5.0	3.0	15	Color Units	09/11/18	09/11/18	1837094	
<u>Metals</u>									
Iron (Fe)	EPA 200.7	ND	100	300	ug/L	09/19/18	09/19/18	1838074	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	09/19/18	09/19/18	1838074	
Zone #2 Site #6		1810788-0	4 (Water)		Sample Da	te: 09/11/18	8 10:50 S a	impler: P	atrick McCue
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	2.02		N/A	mg/L	09/11/18	09/11/18	1837056	
pH (Field)	Field	8.53		N/A	pH Units	09/11/18	09/11/18	1837056	
Temperature (Field)	Field	23.9		N/A	°C	09/11/18	09/11/18	1837056	
General Chemical Analyses									
Hardness, Total (as CaCO3)	Calculated	190	6.6	N/A	mg/L	09/18/18	09/18/18	[CALC]	
Total Filterable Residue/TDS	SM 2540C	420	5.0	1000	mg/L	09/11/18	09/13/18	1837029	
<u>Metals</u>									
Calcium (Ca)	EPA 200.7	46	1.0	N/A	mg/L	09/18/18	09/18/18	1838046	
Magnesium (Mg)	EPA 200.7	19	1.0	N/A		09/18/18	09/18/18	1838046	



Lomita, City of Project: Standard Analysis Work Order: 18I0788 Sub Project: CWPF Monthly Compliance Samples, 2nd Wk of SepReceived: 09/11/18 15:00 24373 Walnut Avenue Lomita CA, 91717

Project Manager: Mark Andersen

Reservoir Effluent Site #5		1810788-0	5 (Water)		Sample Da	ite: 09/11/1	8 10:15 Sa	mpler: Pa	atrick McCue
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	3.79		N/A	mg/L	09/11/18	09/11/18	1837056	
pH (Field)	Field	8.16		N/A	pH Units	09/11/18	09/11/18	1837056	
Temperature (Field)	Field	24		N/A	°C	09/11/18	09/11/18	1837056	
General Physical Analyses									
Odor Threshold	EPA 140.1-M	2	1	3	TON	09/11/18	09/11/18	1837094	
General Chemical Analyses									
Hardness, Total (as CaCO3)	Calculated	270	6.6	N/A	mg/L	09/18/18	09/18/18	[CALC]	
Total Filterable Residue/TDS	SM 2540C	590	5.0	1000	mg/L	09/11/18	09/13/18	1837029	
<u>Metals</u>									
Calcium (Ca)	EPA 200.7	69	1.0	N/A	mg/L	09/18/18	09/18/18	1838046	
Magnesium (Mg)	EPA 200.7	23	1.0	N/A	mg/L	09/18/18	09/18/18	1838046	



September 19, 2018

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

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: 18I0788

Lab Number:

J091202-01/02

Enclosed are results for sample(s) received 9/12/18 by Air Technology Laboratories. Samples were received intact and chilled to 7° C. 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 TNI 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 18I0788

	J091202
Tha	Page 2 of 4
001	12020002

SENDING LABORATO	DRY:	RECEIVI	NG LABORATORY	<u>/:</u>	k-d
Clinical Laboratory of 21881 Barton Road Grand Terrace, CA 923 Phone: 909.825.7693 Fax: 909.825.7696 Project Manager: Stu	13	18501 Eas City of Inc	ology Labs st Gale Avenue Suit dustry, CA 91748 26) 964-4032	te 130	
Please email results to l [] glaubig@clinical-la	Project Manager: Stu Style b.com [√] styles@clinic	s al-lab.com [] nelson@cl	inical-lab.com		a
California EDT Water Trax Upl		h PS codes provided [] Y			v (w
Turn Around Time Subcontract Comments	[] 10 Days	rs [] OtherDays			
Analysis				Comments	
Sample ID: Raw Water	Site #1 / 18I0788-01	Sampled: 09/11/18 Water		TX ID:	Ċ,
Methane RSK175		-		Report in mg/L	
ontainers Supplied: Oml Amber Vial (B)	40ml	Amber Vial (C)			
	ffluent Site #5 / 1810788-05	Sampled: 09/11/18	3 10:15 PS Code:		
52	for any	Water		TX ID:	
Methane RSK175				Report in mg/L	×
ontainers Supplied:		6.2			₩= ±±
0ml Amber Vial (B)	40ml A	Amber Vial (C)	-9		
			x e		
			1		70
	*				
BJ Oly Released By	09/12/18 Date / Time	e Received By	79	9/12/18 Date/ Time	841
4		1050 ()	1 1-	9/12/18	1050
Released By	Date / Time	e Received By	У	Date / Time	

Client:

Clinical Laboratory

Attn:

Stu Styles

Project Name:

NA

Project No.:

1810788

Date Received:

09/12/18

Matrix:

Water

Reporting Units: mg/L

RSK175

Lab No.:	J0912	02-01	J09120	02-02		
	Raw V	Vater	Reservoir	Effluent		
Client Sample I.D.:	Site	#1 /	Site	4 5 /		
	18107	88-01	181078	88-05		
Date/Time Sampled:	9/11/18	8 9:50	9/11/18	10:15		
Date/Time Analyzed:	9/19/18	14:05	9/19/18	13:52		
QC Batch No.:	1809190	GC8A1	1809190	GC8A1		
Analyst Initials:	A	S	AS	S		
Dilution Factor:	1.	0	1.0)		
	Result	RL	Result	RL		
ANALYTE	mg/L	mg/L	mg/L	mg/L		
Methane	1.6	0.0010	0.15	0.0010		
-						

ND = Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By: _

Operations Manager

Date _ 9/19/18

The cover letter is an integral part of this analytical report

QC Batch #: 180919GC8A1

Matrix: Air Reporting Units: mg/L

RSK175 LABORATORY CONTROL SAMPLE SUMMARY

Lab No.:	METHOD	BLANK		L	CS	LO	CSD				
Date/Time Analyzed:	9/19/18 1	13:38		9/19/1	8 12:45	9/19/1	8 13:01				
Analyst Initials:	AS			A	S	A	AS				
Dilution Factor:	1.0			1	.0	1	.0				
ANALYTE	Result mg/L	RL mg/L	SPIKE AMT. mg/L	Result mg/L	% Rec.	Result mg/L	% Rec.	RPD	Low %Rec	High %Rec	Max. RPD
Methane	ND	0.0010	0.65	0.790	121	0.824	126	4.2	70	130	30.0

ND= Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By:

Mark Johnson

Operations Manager

Date 9/19/12

The cover letter is an integral part of this analytical report

18IO188

Client		City of Lomita	Syste	System Num	mber				Anal	/sis F	Analysis Requested	sted						
Address		24373 Walnut Avenue			107	1010072				-								And the state of t
		Lomita, CA 91717			0	7 7 7 7									M			
Phone #		(310)903-2243		P	estinatio	Destination Laboratory	tory		T			Н			leth			
Fax #				٥	[X] Clinica	Clinical Laboratory	tory			Iro	T	eteti			ane			
Project		Standard Analysis			SWQCB (RWQCB Compliance	Çe								(W	н		
Sub Project		CWPF Monthly Compliance Samples;				YES	Visitation			E. C : Ma	l Co		Cole	Ode	ATI	ardı		
ons risject		2nd week of September, 2018			E	ELAP#									ER)	ness		
Comments					7	4001			Solid	nese	rm	e Cou			(RSI			
Sampled by	-	Patrick McCue			_				s			nt			K175			
Date	Time	Sample Idenitification	Matrix	Type	Preserv	Temp.	E	Total Chlorine)	<u>-</u>		
9/11/2018	0360	Raw Water Site #1	δW	<u>¥</u>	K/N	2346	7.83	Ø	×	×			×					
9/11/2018	0,560	Raw Water Site #1	ΔS	<u>*</u>	1, 2, 7					×	×	ż	_		>	· .		
3/11/2018 \C	1040	Filter Effluent (Free Chlorine) Sitc#2	NO.	<u> </u>	1,7	23.8	7.83	13.8		×	×××	>						
9/11/2018	1048	Filter Effluent (Total Chlorine) Site#3	DW	· 11	N/N	,૪٤૨	19.1	10.6		×			×	×				
9/11/2018	0501	Zone #2 Site #6	DW	=	V/N	239°	873	205	·X							×.		
		•																
9/11/2018	1015	Reservoir Effluent Site #5	DW	=	N/N	24.6	9.18	3.79	×					×		,		
9/11/2018	1015	Reservoir Effluent Site #5	DW	1D	2,7										×.			
Preservatives: ((1) Na ₂ S ₂ O ₃	(4) NH4CI	Matrix: DI	N-Drink	ing Wate	r, WW-W	aste Water,	Matrix: DW-Drinking Water, WW-Waste Water, SW-Storm Water, GW- Ground Water, A-Air	Storm Water, GW. Ground Water, A-Air	, GW.	Groun	y Water	, A-Aii	<u> </u>			Type- 1-Routine, 2-Repeat,	2-Repost,
(5) H2SO4	(b) Na25U3	oid (8) Other:						day-c	Jacetti		pecia	244-44	2	131.				
Relingui	Relinquished By (Sign)	Sign) Print Name / Company	,			Date / Time	Time				Rece	Received By (Sign)	žŠ.	C		_P	Print Name / Company	iun
Tatrick	MA	Patrick McCue /City of Lomita 9/11/2018	omita 9,	/11/201	∞	/	l.	90.	7	three	1		1/3			Cha	s Martin	nez
hais the	the state of the s	A Mris Martinez	<u>-</u>	9-11-18	89		(4)	3:00			7		V	ı		Chus.	Perce /	288
Comments:					Ž	ımples r	eccived:	Samples received: () On ice	_) Intact	tact) (v)	∫usto	Custody seals Temp	ıls Te	d _m	S S	Ç
Shipped Via		Fed X Golden State	I I UPS		Client	Other	ı.					Page	Page_1_of_	_I_				

"Your Water and Wastewater Analysis Solution"



02 October 2018 Clinical Lab No.: 18I1461

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

Project Name: Standard Analysis

Sub Project: CWPF 3rd Week of Sept, 2018 Compliance Sampling

Enclosed are the results of the analyses for samples received at the laboratory on 09/18/18 . Samples were received within temperature range, in correct containers and preservation.

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

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

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

Sincerely,

Stu Styles

Client Services Manager

tistes



Lomita, City ofProjectStandard AnalysisWork Order:181146124373 Walnut AvenueSub Project:CWPF 3rd Week of Sept, 2018 Compliance Sampling Received:09/18/18 16:15Lomita CA, 91717Project Manager:Mark AndersenReported:10/02/18

Reservoir Influent Site #3		18I1461-0	1 (Water)		Sample Da	te: 09/18/1	8 10:40 Sa	mpler: P.1	M.
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	11.2		N/A	mg/L	09/18/18	09/18/18	1838084	
pH (Field)	Field	7.94		N/A	pH Units	09/18/18	09/18/18	1838084	
Temperature (Field)	Field	23.5		N/A	°C	09/18/18	09/18/18	1838084	
General Physical Analyses									
Apparent Color	SM 2120BM	5.0	3.0	15	Color Units	09/18/18	09/18/18	1838094	
<u>Metals</u>									
Iron (Fe)	EPA 200.7	ND	100	300	ug/L	09/27/18	09/27/18	1839101	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	09/27/18	09/27/18	1839101	
Reservoir Effluent Site #5		18I1461-0	2 (Water)		Sample Da	te: 09/18/1	8 10:55 Sa	mpler: P.1	M.
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	3.79		N/A	mg/L	09/18/18	09/18/18	1838084	
pH (Field)	Field	8.22		N/A	pH Units	09/18/18	09/18/18	1838084	
Temperature (Field)	Field	24		N/A	°C	09/18/18	09/18/18	1838084	
General Physical Analyses									
Apparent Color	SM 2120BM	ND	3.0	15	Color Units	09/18/18	09/18/18	1838094	
Odor Threshold	EPA 140.1-M	2	1	3	TON	09/18/18	09/18/18	1838094	
General Chemical Analyses									
Total Filterable Residue/TDS	SM 2540C	570	5.0	1000	mg/L	09/19/18	09/25/18	1838078	
					U				



September 27, 2018

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

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

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

TX Cert T104704450-14-6

LABORATORY TEST RESULTS

Project Reference: 18I1461

Lab Number:

J092001-01

Enclosed are results for sample(s) received 9/20/18 by Air Technology Laboratories. Samples were received intact and chilled to 11° C. 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 TNI 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

-		J092001
100	12021	Page 2 of 4

18I1461

SENDING LABORATO	<u>RY:</u>	RECEIVING LABORATORY:	
Clinical Laboratory of S 21881 Barton Road Grand Terrace, CA 9231 Phone: 909.825.7693 Fax: 909.825.7696 Project Manager: Stu S	3	Air Technology Labs 18501 East Gale Avenue Suite 130 City of Industry, CA 91748 Phone :(626) 964-4032 Fax:	
Please email results to P [] glaubig@clinical-lat	roject Manager: Stu Styles o.com [/] styles@clinical-lab.com	[] nelson@clinical-lab.com	·
California EDT t Water Trax Uplo	ransfer those samples with PS codes ad Client:	s provided [] Yes [\(\sum \) No [] Yes [\(\sum \) No [\(\sum \)	* y
Turn Around Time Subcontract Comments:	[] 10 Days [v] 5 Days [] O	ther Days	
Analysis		Comments	
Analysis Sample ID: Reservoir E1	fluent Site #5 / 18I1461-02	Comments Sampled: 09/18/18 10:55 PS Code: Water WTX ID:	
Sample ID: Reservoir E1 Methane RSK175		Sampled: 09/18/18 10:55 PS Code:	
Sample ID: Reservoir E1 Methane RSK175 Containers Supplied:		Sampled: 09/18/18 10:55 PS Code: Water WTX ID: Report in mg/L	
Sample ID: Reservoir Ef		Sampled: 09/18/18 10:55 PS Code: Water WTX ID: Report in mg/L	
Sample ID: Reservoir E1 Methane RSK175 Containers Supplied:		Sampled: 09/18/18 10:55 PS Code: Water WTX ID: Report in mg/L	
Sample ID: Reservoir E1 Methane RSK175 Containers Supplied:		Sampled: 09/18/18 10:55 PS Code: Water WTX ID: Report in mg/L	

Received By Date / Time Date / Time Received By

Client:

Clinical Laboratory

Attn:

Stu Styles

Project Name:

NA

Project No.:

18I1461

Date Received:

09/20/18

Matrix:

Water

Reporting Units: mg/L

DOTZ	1 77
RSK	1/3
	1 / 0

			1		<u> </u>	
Lab No.:	J09200)1-01				
Client Sample I.D.:	Reservoir Site #5/18					
Date/Time Sampled:	9/18/18	10:55				
Date/Time Analyzed:	9/27/18	11:00				
QC Batch No.:	1809270	GC8A1				
Analyst Initials:	AS	S				n
Dilution Factor:	1.0)				
ANALYTE	Result mg/L	RL mg/L				
Methane	0.23	0.0010				
4						

ND = Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By:

Operations Manager

Date 9/2

The cover letter is an integral part of this analytical report

QC Batch #: 180927GC8A1

Matrix: Air Reporting Units: mg/L

RSK175 LABORATORY CONTROL SAMPLE SUMMARY

Lab No.:	METHOD I	BLANK		L	CS	LO	CSD				
Date/Time Analyzed:	9/27/18 1	0:47		9/27/1	8 10:12	9/27/1	8 10:26				
Analyst Initials:	AS			Α	S	A	AS				
Dilution Factor:	1.0			1	.0	1	1.0				
ANALYTE	Result mg/L	RL mg/L	SPIKE AMT. mg/L	Result mg/L	% Rec.	Result mg/L	% Rec.	RPD	Low %Rec	High %Rec	Max. RPD
Methane	ND	0.0010	0.65	0.713	109	0.694	106	2.6	70	130	30.0

ND= Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By:

Mark Johnson

Mell. **Operations Manager**

The cover letter is an integral part of this analytical report

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ın Bernardino,	
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y of San	
Sinical Laboratory of San Ber	
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Client		City of Lomita	S	System Nu	umber				Analy	sis R	Analysis Requested	sted			
Address		24373 Walnut Avenue			10,	1910072									
		Lomita, CA 91717			2	200					М				
Phone #		(310)903-2243			Destination	estination Laboratory	tory				eth				
Fax#					[X] Clinic	X] Clinical Laboratory	tory			Total	ane				
Project		Standard Analysis	187.187		RWQCB	RWQCB Compliance	e Ce		on / M	Co Diss	(Wa	0			
Sub Project	+	CWPF 3rd week of September, 2018				yes				olor olved		dor			
ado Ligier	,	Compliance Sampling			Ш	ELAP#				Soli	(R				
Comments		For TC/EC/BACT see weekly Distro CoC			7	4000				ids	SK1				
Sampled by	_	9.M.			-	000					75)				
Date	Time	Sample Idenitification	Matrix	Type	Preserv	Hd.	Temp.	Total Chlorine							Comments / P.S. Codes
9/18/2018	0 70	9/18/2018 10M © Reservoir Influent Site #3	DW	1W	N/A	7.94	1735	7.11	×	×					
							\rightarrow								
8/18/2018	1055	でんら Reservoir Effluent Site #5	DW	1W	N/A	8,22	240	3.79		$\mathbf{x} \mid \mathbf{x}$		X			
9/18/2018	5501	10ぐら Reservoir Effluent Site #5	WO	M.	2						X				
									-	<u> </u>	_				
		The state of the s													
									+-	_	_				
							F								
													-		
						-				-					
Preservatives	(1) Na	Preservatives: (1) Na ₂ S ₂ O ₃ (2) HCI (3) HNO3 (4) NH4CI	Matrix:	Matrix: DW-Drinkir		r, WW-Was	g Water, WW-Waste Water, SW-Storm Water, GW- Ground Water, A-Air	SW-Storm	Vater, C	3W- G	ound 1	Vater,	A-Air		Type- 1-Routine, 2-Repeat, 3-
(5) H2SC	N (9) 4C	(5) H2SO4 (6) Na2SO3 (7) Cold (8) Other:						Repl	acemer	1t, 4-St	pecial	W-Wei	Replacement, 4-Special W-Well D- Dist.		
Reling	puished	Relinquished By (Sign) Print Name / Company	,			Date / Time	Time			P .				v	Print Name / Company
Petrike one	Suc	Patrick Mcc. 2/City of 1	omita	9/18/201	/ 81			- 5°		1/1	1	100	<		11 Comes
(hour	The same of the sa	the Chas Wahne		818-6	33			51.14			B				IN CISB
Comments:	:;					Samples	Samples received: () On ice	:()On	ice (<u></u>	dinty ct		Custod	Custody seals Temp	$mp = \frac{1}{l}$ () F K) C
Shipped Via		Fed X Golden State	I I UPS	[] Client		Other_				1	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	nge_I	Page_1_ of_1_		



08 October 2018 Clinical Lab No.: 18I1992

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

Project Name: Standard Analysis

Sub Project: CWPF 4th Week of Sept, 2018 Compliance Sampling

Enclosed are the results of the analyses for samples received at the laboratory on 09/25/18 . Samples were received within temperature range, in correct containers and preservation.

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

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

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

Sincerely,

Stu Styles

Client Services Manager

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Lomita, City ofProjectStandard AnalysisWork Order:181199224373 Walnut AvenueSub Project:CWPF 4th Week of Sept, 2018 Compliance Sampling Received:09/25/18 14:40Lomita CA, 91717Project Manager:Mark AndersenReported:10/08/18

Reservoir Influent Site #3		18I1992-0	1 (Water)		Sample Da	te: 09/25/13	8 9:05 Sa	mpler: P.	M.
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	11.6		N/A	mg/L	09/25/18	09/25/18	1839067	
pH (Field)	Field	7.41		N/A	pH Units	09/25/18	09/25/18	1839067	
Temperature (Field)	Field	22.6		N/A	°C	09/25/18	09/25/18	1839067	
General Physical Analyses									
Apparent Color	SM 2120BM	ND	3.0	15	Color Units	09/25/18	09/25/18	1839087	
Metals									
Iron (Fe)	EPA 200.7	ND	100	300	ug/L	10/03/18	10/03/18	1840071	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	10/03/18	10/03/18	1840071	
Reservoir Effluent Site #5		18I1992-0	2 (Water)		Sample Da	te: 09/25/1	8 9:30 Sa	mpler: P.	M.
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	3.69		N/A	mg/L	09/25/18	09/25/18	1839067	
pH (Field)	Field	7.73		N/A	pH Units	09/25/18	09/25/18	1839067	
Temperature (Field)	Field	22.7		N/A	°C	09/25/18	09/25/18	1839067	
General Physical Analyses									
Apparent Color	SM 2120BM	ND	3.0	15	Color Units	09/25/18	09/25/18	1839087	
Odor Threshold	EPA 140.1-M	2	1	3	TON	09/25/18	09/25/18	1839087	
General Chemical Analyses									
Total Filterable Residue/TDS	SM 2540C	610	5.0	1000	mg/L	09/26/18	09/27/18	1839078	
ND Analyte NOT DETECTED at or	r above the reporting limit								



October 3, 2018

EPA Methods TO3, TO14A, TO15, 25C/3C, RSK-175

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: 18I1992 Lab Number:

J092602-01

Enclosed are results for sample(s) received 9/26/18 by Air Technology Laboratories. Samples were received intact and chilled to 8° C. 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 TNI 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

2 of 4 J092602

Clinical Laboratory of San Bernardino

18I199

CENDING I ADODATODY.	RECEIVING LABORATORY:	
SENDING 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 Fax: 909.825.7696	Phone :(626) 964-4032	
Project Manager: Stu Styles	Fax:	
Please email results to Project Manager: Stu Styles [] glaubig@clinical-lab.com [] styles@clinical-lab	b.com [] nelson@clinical-lab.com	
California EDT transfer those samples with PS of Water Trax Upload Client:	codes provided [] Yes [V] No	
Turn Around Time [] 10 Days [5 Days [Subcontract Comments:	Other Days	
Analysis	Comments	
Analysis Sample ID: Reservoir Effluent Site #5 / 18I1992-02	Comments Sampled: 09/25/18 09:30 PS Code: Water WTX ID:	-
	Sampled: 09/25/18 09:30 PS Code:	-
Sample ID: Reservoir Effluent Site #5 / 18I1992-02 Methane RSK175 containers Supplied:	Sampled: 09/25/18 09:30 PS Code: Water WTX ID:	-
Sample ID: Reservoir Effluent Site #5 / 18I1992-02 Methane RSK175	Sampled: 09/25/18 09:30 PS Code: Water WTX ID: Report in mg/L	
Sample ID: Reservoir Effluent Site #5 / 18I1992-02 Methane RSK175 ontainers Supplied:	Sampled: 09/25/18 09:30 PS Code: Water WTX ID: Report in mg/L	
Sample ID: Reservoir Effluent Site #5 / 18I1992-02 Methane RSK175 ontainers Supplied:	Sampled: 09/25/18 09:30 PS Code: Water WTX ID: Report in mg/L	
Sample ID: Reservoir Effluent Site #5 / 18I1992-02 Methane RSK175 ontainers Supplied:	Sampled: 09/25/18 09:30 PS Code: Water WTX ID: Report in mg/L	
Sample ID: Reservoir Effluent Site #5 / 18I1992-02 Methane RSK175 ontainers Supplied:	Sampled: 09/25/18 09:30 PS Code: Water WTX ID: Report in mg/L	
Sample ID: Reservoir Effluent Site #5 / 18I1992-02 Methane RSK175 ontainers Supplied:	Sampled: 09/25/18 09:30 PS Code: Water WTX ID: Report in mg/L	
Sample ID: Reservoir Effluent Site #5 / 18I1992-02 Methane RSK175 ontainers Supplied:	Sampled: 09/25/18 09:30 PS Code: Water WTX ID: Report in mg/L	
Sample ID: Reservoir Effluent Site #5 / 18I1992-02 Methane RSK175 ontainers Supplied:	Sampled: 09/25/18 09:30 PS Code: Water WTX ID: Report in mg/L	
Sample ID: Reservoir Effluent Site #5 / 18I1992-02 Methane RSK175 ontainers Supplied:	Sampled: 09/25/18 09:30 PS Code: Water WTX ID: Report in mg/L	
Sample ID: Reservoir Effluent Site #5 / 18I1992-02 Methane RSK175 ontainers Supplied:	Sampled: 09/25/18 09:30 PS Code: Water WTX ID: Report in mg/L	
Sample ID: Reservoir Effluent Site #5 / 18I1992-02 Methane RSK175 ontainers Supplied:	Sampled: 09/25/18 09:30 PS Code: Water WTX ID: Report in mg/L	
Sample ID: Reservoir Effluent Site #5 / 18I1992-02 Methane RSK175 ontainers Supplied:	Sampled: 09/25/18 09:30 PS Code: Water WTX ID: Report in mg/L	

80

Released By

09/26/18 07:45 Date / Time Received By

Received By

ORGLE 8:27

1/24/13

Date / Time

Client:

Clinical Laboratory

Attn:

Stu Styles

Project Name:

NA

Project No.: Date Received: 18I1992

Matrix:

09/26/18 Water

Reporting Units: mg/L

RSK175

Lab No.:	J09260	02-01			
Client Sample I.D.:	Reservoir Site #5/18	Effluent			
Date/Time Sampled:	9/25/18	9:30			
Date/Time Analyzed:	9/27/18	11:13			
QC Batch No.:	1809270	GC8A1			a
Analyst Initials:	AS				
Dilution Factor:	1.0)			
ANALYTE	Result mg/L	RL mg/L			
Methane	0.25	0.0010			

NID - Not	Detected	(halow	DI)
ND = Not	Detected	(Delow	KL)

RL = Reporting Limit

Daviawad/Annwayad Pyr	MADL. L	
Reviewed/Approved By:		_

Mark Johnson **Operations Manager** The cover letter is an integral part of this analytical report

LCS/LCSD Recovery and RPD Summary Report

QC Batch #: 180927GC8A1

Matrix: Air Reporting Units: mg/L

RSK175 LABORATORY CONTROL SAMPLE SUMMARY

Lab No.:	METHOD	BLANK		L	CS	LO	CSD				
Date/Time Analyzed:	9/27/18 1	0:47		9/27/1	8 10:12	9/27/1	8 10:26				
Analyst Initials:	AS			A	S	A	\S				
Dilution Factor:	1.0			1	.0	1	.0				
ANALYTE	Result mg/L	RL mg/L	SPIKE AMT. mg/L	Result mg/L	% Rec.	Result mg/L	% Rec.	RPD	Low %Rec	High %Rec	Max. RPD
Methane	ND	0.0010	0.65	0.713	109	0.694	106	2.6	70	130	30.0

ND= Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By:

Mark Johnson
Operations Manager

Date 4

The cover letter is an integral part of this analytical report

, Inc.
Laboratory of San Bernardino,
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boratory
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Clinical

Client		City of Lomita	Sy	System Nu	ımber				Analy	Analysis Requested	edne	sted					
Address		24373 Walnut Avenue			101	1910073											1
		Lomita, CA 91717			2						М						
Phone #		(310)903-2243		a	estinatio.	estination Laboratory	ory		J		eth						
Fax#]	X] Clinica	X] Clinical Laboratory	ory			Total	ane		***************************************				
Project		Standard Analysis			RWQCB (RWQCB Compliance	36		n / M	Co Disse	(Wa	O					
4		CWPF 4th week of September, 2018				yes				olor olve		dor					
Sub Project		Compliance Sampling			ᆸ	ELAP#				d Sol) (R						
Comments		For TC/EC/BACT see weekly Distro CoC			7	4000				ids	SK1						
Sampled by		P. N.				9					75)						
Date	Fime	Sample Idenitification	Matrix	Type	Preserv	ьн	Temp.	Total Chlorine							Comme	Comments / P.S. Codes	
9/25/2018	3905	9/25/2018 OOS Reservoir Influent Site #3	DW	1W	A/N	17.7	22.6		X	X	<u> </u>						
9/25/2018	0930	OP30 Reservoir Effluent Site #5	DW	1W	N/A	7.73	122.7	13.69		$\mathbf{x} \mid \mathbf{x}$)	X					
9/25/2018	0932	09 3 D Reservoir Effluent Site #5	MO	WI	2						X						
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									-	ļ			-				T
										1	_						J
										\dashv	_		+				Т
											+			+			
Proconvativos:	(1) Na	Precentatives: (1) No.S. O. (2) HCl (3) HNO3 (4) NH4Cl	Matrix: L	Matrix: DW-Drinkir		WW-Was	te Water. S	g Water, WW-Waste Water, SW-Storm Water, GW- Ground Water, A-Air	Water, C	3W- G	round	Water,	A-Air		į	Type- 1-Routine, 2-Repeat, 3-	14
(5) H2SO4	N (9) 40	(5) H2SO4 (6) Na2SO3 (7) Cold (8) Other:					,	Rep	lacemer	1t, 4-SI	pecial	W-We	Replacement, 4-Special W-Well D-Dist.	į.			
Relinqu	uished	Relinquished By (Sign) Print Name / Company				Date / Time	Time			1			\	· ·	Print	Print Name / Company	
Patrice Mich	Mi	Coll Notrick My, & City of Lomita		9/25/201	/ 8			06:21		Ž	71.1	1	The	16	Luis Cher	Linez	
Horn	N	and the	1	52-6	X)			2.4	2	3	the	T	1	Jack	#	CISB	П
Comments:	 				(3)	šamples	received	Samples received: () On ice) esi		Intact	7	Custo	Custody seals	Temp 9	€ OF &C	
Shipped Via		Fed X Golden State	Sdn 1	Clie	m	Other						'age_	Page_1_ of_1_				П
T. J.L.																	1



24 September 2018 Clinical Lab No.: 1810786

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

Project Name: Standard Analysis

Sub Project: Lomita Distribution Ortho, 2nd Week September 2018

Enclosed are the results of the analyses for samples received at the laboratory on 09/11/18. Samples were received within temperature range, in correct containers and preservation.

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

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

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

Sincerely,

Stu Styles

Client Services Manager

tistes



Lomita, City ofProject:Standard AnalysisWork Order:181078624373 Walnut AvenueSub Project:Lomita Distribution Ortho, 2nd Week September 2018Received:09/11/18 15:00Lomita CA, 91717Project Manager:Mark AndersenReported:09/24/18

1948 252nd St.		1810786-0	1 (Water)		Sample Da	ote: 09/11/18	8:00	Sampler: P.	M.
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	3.7		N/A	mg/L	09/11/18	09/11/18	1837056	
pH (Field)	Field	8.09		N/A	pH Units	09/11/18	09/11/18	1837056	
Temperature (Field)	Field	24.2		N/A	°C	09/11/18	09/11/18	1837056	
General Chemical Analyses									
Ortho-Phosphate (PO4)	HACH 8048	0.48	0.020	N/A	mg/L	09/12/18	09/12/18	1837064	
Phosphorus (Total as P)	HACH 8190	0.36	0.0067	N/A	mg/L	09/18/18	09/18/18	1838062	
24632 S. Moon		1810786-0	2 (Water)		Sample Da	ote: 09/11/18	8:40	Sampler: P.	M.
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
ield Analyses									
Cl Res Total (Field)	Field	2.9		N/A	mg/L	09/11/18	09/11/18	1837056	
pH (Field)	Field	8.09		N/A	pH Units	09/11/18	09/11/18	1837056	
Temperature (Field)	Field	24.1		N/A	°C	09/11/18	09/11/18	1837056	
General Chemical Analyses									
Ortho-Phosphate (PO4)	HACH 8048	0.47	0.020	N/A	mg/L	09/12/18	09/12/18	1837064	
Phosphorus (Total as P)	HACH 8190	0.36	0.0067	N/A	mg/L	09/18/18	09/18/18	1838062	
2450 W. 247th St.		1810786-0	3 (Water)		Sample Da	ote: 09/11/18	8:50	Sampler: P.	M.
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
<u> Field Analyses</u>									
Cl Res Total (Field)	Field	0.8		N/A	mg/L	09/11/18	09/11/18	1837056	
pH (Field)	Field	7.96		N/A	pH Units	09/11/18	09/11/18	1837056	
Temperature (Field)	Field	24.6		N/A	°C	09/11/18	09/11/18	1837056	
General Chemical Analyses									
Ortho-Phosphate (PO4)	HACH 8048	0.54	0.020	N/A	mg/L	09/12/18	09/12/18	1837064	
Phosphorus (Total as P)	HACH 8190	0.35	0.0067	N/A	mg/L	09/18/18	09/18/18	1838062	



Lomita, City ofProjectStandard AnalysisWork Order:181078624373 Walnut AvenueSub Project:Lomita Distribution Ortho, 2nd Week September 2018Received:09/11/18 15:00Lomita CA, 91717Project Manager:Mark AndersenReported:09/24/18

2052 Dawn St.		1810786-0	4 (Water)		Sample Da	ote: 09/11/18	8 8:15 Sa	mpler: P.M	M.
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	0.83		N/A	mg/L	09/11/18	09/11/18	1837056	
pH (Field)	Field	7.91		N/A	pH Units	09/11/18	09/11/18	1837056	
Temperature (Field)	Field	25.7		N/A	°C	09/11/18	09/11/18	1837056	
General Chemical Analyses									
Ortho-Phosphate (PO4)	HACH 8048	0.50	0.020	N/A	mg/L	09/12/18	09/12/18	1837064	
Phosphorus (Total as P)	HACH 8190	0.34	0.0067	N/A	mg/L	09/18/18	09/18/18	1838062	
CWPF SP5		1810786-0	5 (Water)		Sample Da	ote: 09/11/18	3 10:15 Sai	mpler: P.M	M.
Analyte									
<u> </u>	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
•	Method Field	Result	Rep. Limit	MCL N/A	Units mg/L	Prepared 09/11/18	Analyzed 09/11/18	Batch 1837056	Qualifier
Field Analyses			Rep. Limit						Qualifier
Field Analyses Cl Res Total (Field)	Field	3.79	Rep. Limit	N/A	mg/L	09/11/18	09/11/18	1837056	Qualifier
Field Analyses Cl Res Total (Field) pH (Field)	Field Field	3.79 8.16	Rep. Limit	N/A N/A	mg/L pH Units	09/11/18 09/11/18	09/11/18 09/11/18	1837056 1837056	Qualifier
Field Analyses Cl Res Total (Field) pH (Field) Temperature (Field)	Field Field	3.79 8.16	Rep. Limit	N/A N/A	mg/L pH Units	09/11/18 09/11/18	09/11/18 09/11/18	1837056 1837056	Qualifier
Field Analyses Cl Res Total (Field) pH (Field) Temperature (Field) General Chemical Analyses	Field Field Field	3.79 8.16 24	·	N/A N/A N/A	mg/L pH Units °C	09/11/18 09/11/18 09/11/18	09/11/18 09/11/18 09/11/18	1837056 1837056 1837056	Qualifier

Chain of Custody

Committee Comm	Comparison	Client	City of Lomita	Sy	System Number	umber					Anal	Analysis Requested	ted	
Company Lomita CA 91717 Lomita Destination Laboratory California Labor	Comita, CA 91717	ssa	24373 Walnut Avenue			•	0401	7.2						
Committee Comm	(310) 903-2243 (310) 325-3627 Standard Analysis Its Lomita Distribution Ortho, 2nd Week September, 2018 Iby Time Sample Idenitification Sample Idenitification September, 2018 P. M., Time Sample Idenitification Sample Idenitification September, 2018		Lomita, CA 91717				19100	2			C			
Sundard Analysis Freet Full Freet Full Freet Full Freet Full Freet Full Full Freet Full Ful	Standard Analysis Standard Analysis	ne #	(310) 903-2243			Dest	tination La	boratory			RTI	TOT		
108 Symptome Analysis	Dy	34.	(310) 325-3627			X	Clinical La	boratory			нон	`AL		
Time September, 2018 Sep	Dy	ct	Standard Analysis			RW	'QCB Com	oliance			РНО	РНС		
1088 1088	by	Project	Lomita Distribution Ortho, 2nd Week Sentember 2018				No FI AD				SPHAT)SPHA		
Time Sample Identiffication Natrix Type Preserv Bottle Temp. Chlorine pil E E E E	Dy	ments									È (0-	ГЕ (Р		
Time Sample Identification Murin Type Preserv Buttle Temp Chlorine Put	Time Sample Idenitification	pled by	\(\lambda\)				1088	~			PO4)	O4)		
8 080 40 24632 S. Moon 8 D85 C 2450 W. 247th ST. 8 D85 C 2450 W. 247th ST. 9 DN D1 N/A 4 24.7° 2.9 8.09 x x 1015 CWPF SPS 1016 CWPF SPS 1016 CWPF SPS 1017 CWPF SPS	8 O& 40 24632 S. MOON 8 D& 50 2450 W. 247th ST. 8 O& 1948 252ND ST. 8 D& 50 2450 W. 247th ST. 8 C& 5 2052 DAWN ST. 1015 CWPF SP5 1016 SP SP5 1017 Cold (8) Other: 1116 SP5 CWPF SP5 1017 Cold (8) Other: 1116 SP5 CWPF SP5 1018 SP5 CWPF SP5 1		Sample Idenitification	Matrix	Type	Preserv	Bottle Number	Temp.	Total Chlorine	Hd			Comir	Comments / P.S. Codes
8 QS 40 24632 S. MOON 8 DS 50 240 2453 S. MOON 8 DS 50 2450 W. 247th ST. 8 QS 40 24632 S. MOON 8 DS 50 2450 W. 247th ST. 9 DW DI N/A 4 244-6 2.9 8.09 X X X X X X X X X X X X X X X X X X X	8 OECO 1948 252ND ST. 8 OE 40 24632 S. MOON 8 DE 50 2450 W. 247th ST. 8 CE 5 2052 DAWN ST. 10 5 CWPF SP5 10 10 10 10 10 10 10 10													
8 QS VO 24632 S. MOON 8 DS S O 2450 W. 247th ST. 8 DS S O 2450 W. 247th ST. 9 DW DI N/A 6 ZY 6 O 0 0 7 9 C X X 1015 CWPF SP5 101	8 08 40 24632 S. MOON 8 08 50 2450 W. 247th ST. 10 5 CWPF SP5		1948 252ND ST.	DW	DI	N/A	3	24.70	3.7	8.09	×	×		
8 CBIS 2450 W. 247th ST. 1015 CWPF SP5 1015 CWPF	8 D&S O 2450 W. 247th ST. 1015 CWPF SP5 1015 CWPF SP5 1015 CWPF SP5 1018 CWPF		24632 S. MOON	DW	D1	N/A	4	24.10	6.2	80.09	×	×		
1015 CWPF SP5 DW D1 N/A 8 24 0 ^c 3.79 N/A	10 5 2052 DAWN ST. 10 5 CWPF SP5 10 5 CWPF SP5 10 5 CWPF SP5 10 5 CWPF SP5 CWP		2450 W. 247th ST.	DW	D1	N/A	<u></u> \9	<i>9</i> 0.42		261	×	×		
10 5 CWPF SP5 DW D1 N/A 8 ZH 0 ft 2 7 9 5 1 6 X X X X X X X X X	10 5 CWPF SP5 Ves: (1) Na ₂ S ₂ O ₃ (2) HCI (3) HNO3 (4) NH4CI 2SO4 (6) Na2SO3 (7) Cold (8) Other. inquished By (Sign.) Print Name / Company Portrici McLuc/City of Lom	8	2052 DAWN ST.	DW	D1	N/A	7	25.7"	0.83	166	×	×		
4) Na ₂ S ₂ O ₃ (2) HCI (3) HNO3 (4) NH4CI Sign Print Name / Company C. M. Chrick McLeCity of Lomita 9/11/2018 / 1:00 Matrix: DW-Drinking Water, WW-Waste Water, GW-Ground W Type-1-Routine, 2-Repeat, 3-Replacement, 4-Special W-Well D- Dist Date / Time C. M. Chrick McLeCity of Lomita 9/11/2018 / 1:00 Matrix: DW-Drinking Water, WW-Waste Water, GW-Ground W Type-1-Routine, 2-Repeat, 3-Replacement, 4-Special W-Well D- Dist Date / Time April 1-18 Samples received: () On ice () Infact () Optody scals F (A) F (A)	Preservatives: (1) Na ₃ S ₂ O ₃ (2) HCI (3) HNO3 (4) NH4CI (5) H2SO4 (6) Na2SO3 (7) Cold (8) Other: Relinquished By (Sign) Polymony	1 <u>0</u> 15	CWPF SP5	DW	DI	N/A	8	SO IN	3,79	و. ⊗:اد				
Signature Signature Substitute Subst	Preservatives: (1) Na ₂ S ₂ O ₃ (2) HCI (3) HNO3 (4) NH4CI (5) H2SO4 (6) Na2SO3 (7) Cold (8) Other. Relinquished By (Sign) Petrick McLielCity of Lomita Antisk Mathine													
Sign Cold (8) Other: Autiv: DW-Drinking Water, WW-Waste Water, GW-Ground Waste, GW-Ground	Preservatives: (1) Na ₂ S ₂ O ₃ (2) HCI (3) HNO3 (4) NH4CI (5) H2SO4 (6) Na ₂ SO3 (7) Cold (8) Other: Relinquished By (Signa) Petric McLielCity of Lomita Parix Mathi													
Source (a) Na ₂ S ₂ O ₃ (2) HCI (3) HNO3 (4) NH4CI Solution (6) Na ₂ S ₂ O ₃ (2) HCI (3) HNO3 (4) NH4CI Solution (6) Na ₂ S ₂ O ₃ (2) HCI (3) HNO3 (4) NH4CI Solution (6) Na ₂ S ₂ O ₃ (2) HCI (3) HNO3 (4) NH4CI Solution (6) Na ₂ S ₂ O ₃ (2) HCI (3) HNO3 (4) NH4CI Solution (6) Na ₂ S ₂ O ₃ (2) HCI (3) HNO3 (4) NH4CI Solution (6) Na ₂ S ₂ O ₃ (2) HCI (3) HNO3 (4) NH4CI Solution (6) Na ₂ S ₂ O ₃ (2) HCI (3) HNO3 (4) NH4CI Solution (6) Nh4CI Solution (7) NH4CI Solution	Preservatives: (1) Na ₂ S ₂ O ₃ (2) HCI (3) HNO3 (4) NH4CI (5) H2SO4 (6) Na2SO3 (7) Cold (8) Other: Relinquished By (Sign), Print Name / Company Polarich, McLudity of Lomita													
Sign	Preservatives: (1) Na ₂ S ₂ O ₃ (2) HCI (3) HNO3 (4) NH4CI (5) H2SO4 (6) Na2SO3 (7) Cold (8) Other: Relinquished By (Signs) Pellon Name / Company													
1) Na ₂ S ₂ O ₃ (2) HCI (3) HNO3 (4) NH4CI Matrix: DW-Drinking Water, WW-Waste Water, SW-Storm Water, GW- Ground W Type- 1-Routine, 2-Repeat, 3-Replacement, 4-Special W-Well D- Dist. Quished By (Sign) Portrick McLielCity of Lomita 9/11/2018 Date / Time Received By (Sign) Anti S Marking Company Date / Time Received By (Sign) Received By (Sign) Portrick McLielCity of Lomita 9/11/2018 Samples received: () On ice () Intact () Custody scals F ()	Preservatives: (1) Na ₂ S ₂ O ₃ (2) HCI (3) HNO3 (4) NH4CI (5) H2SO4 (6) Na2SO3 (7) Cold (8) Other: Relinquished By (Sign) Polytick McCidCity of Lomita Antis Mathre													
quished By (Sign) Print Name / Company Date / Time Print Name / Company Date / Time Date / Time Date / Time Print Name / Company Date /	(5) H2SO4 (6) NA2SO3 (7) Cold (8) Other. Relinquished By (Signs) Polytick McLielCity of Lomita Polytick McLielCity of Lomita Polytick McLielCity of Lomita	rvatives: (1) Na,S			N	latrix: DW	-Drinking	Nater, WW	-Waste W	ater, SW-S	torm V	Vater. GW- Gro	und Water, A-Air	
9. McConstant Name / Company Date / Time Received By (Sign) O. McConstant Name / Company Date / Time Received By (Sign) O. McConstant Name / No. 1.00 (Intia) Marking Samples received: () On ice () Intact () Custody seals of the constant	Shed By (Sign.)	(5) H2SO4 (6) Na2	151	T		1	ype- 1-Rou	utine, 2-Re	peat, 3-Re	placemen	t, 4-Sp	ecial W-Well I	D- Dist.	
Mathia McLedCity of Lomita 9/11/2018 / 1:00 Chris M. Marking 2 9-11-18 Simples received: () On ice () Intact () Custody seals F (x) C.	Milman	Relinquished B		,			Da	te / Time				Received By (Print Name / Company
Samples received: () On ice () Intact () Outloody seals F (x) C		Juich 900c	1 7			918	_		1.00			Christ A	Chrisa 1	Machai
Samples received: () On ice () Intact () Custody seals F () C		TOP			d-11-	8/			5.00				AN AN	75.8
CAN TOTAL PROBLEM CLARK		.				Sample	s receive)n ice () Intac) \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Castody s		\(\int \)
Fed A Golden State Client Cliner	Shipped Via	ed Via	Golden State	I UPS			Other			•	<u>`</u>	Page 1 of 1	1	

'Your Water and Wastewater Analysis Solution"



24 September 2018 Clinical Lab No.: 1810956

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

Project Name: Standard Analysis Sub Project: Well TCP Quarterly

Enclosed are the results of the analyses for samples received at the laboratory on 09/11/18. Samples were received within temperature range, in correct containers and preservation.

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

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

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

Sincerely,

Stu Styles

Client Services Manager



Lomita, City of Project: Standard Analysis Work Order: 18I0956 Sub Project: Well TCP Quarterly Received: 09/11/18 15:00 24373 Walnut Avenue Lomita CA, 91717 Reported: 09/24/18 Project Manager: Mark Andersen

CWPF SP1		1810956-0	1 (Water)		Sample Da	nte: 09/11/18	9:50 Sa	mpler: PM	Л
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	0		N/A	mg/L	09/11/18	09/11/18	1837102	
pH (Field)	Field	7.83		N/A	pH Units	09/11/18	09/11/18	1837102	
Temperature (Field)	Field	23.4		N/A	°C	09/11/18	09/11/18	1837102	
Synthetic Organic Analyses / 1,2,3-TCP									
1,2,3-Trichloropropane	SRL 524M-TCP	ND	0.0050	0.005	ug/L	09/19/18	09/20/18	1838099	
ND Analyte NOT DETECTED at or above	the reporting limi	it							

EDT Transfer Confirmation 1



Work Order: 18I0956 Report Date: 09/24/2018

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

LOMITA-CITY, WATER DEPT. User ID: 4TH System: 1910073

WELL 05 Station No.: 1910073-003 Sampled: 180911 09:50

1,2,3-TRICHLOROPROPANE Result: ND Units: UG/L Entry No.: 77443 Analyzed: 180920

JSF0758

Phone # Lamita Co. 91717 Designation Laboration Phone # Lamita Co. 91717 Designation Laboration Phone # Lamita Co. 91717 Designation Laboration Phone #	Client		City of Lomita	Syste	System Number	er			Anal	ysis R	Analysis Requested	9		
Commutation	Address		24373 Walnut Avenue			0400	7.2							
Standard Atnalysis			Lomita, CA 91717		_	3 100	? ?							
Time Sample Identification Main's From Item It	Phone #	_	(310)903-2243		Dest	ination Lal	oratory		1					
WELL TCP, QUARTERLY	Fax#) [x]	Slinical Lat	oratory							
WELL TCP, QUARTERLY	Project		Standard Analysis		RW	асв сот	oliance		T	•				
Well Top Quarterly	Sub Project		WEIL TCP, OHARTERLY			yes			CP					
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1000 Full	Comments		WELL TCP, QUARTERLY			7			Г					
Time Sample Identitification Murin 13ypc Preserv pit Temp Cabinate Committee Chinate Committee Chinate	Sampled by		MA			000	•							
OBSC CWPF SP1 1 1 1 1 1 1 1 1 1	-	Time	Sample Idenitification				-							Comments / P.S. Codes
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State Stat										+	+			
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Signature Company Print Name Pr										+				
Sign Patrick McCue City of Lomita 1 1 Fed X 1 Golden State 1 1 1 1 1 1 1 1 1										-	+			
Sign Patrick McCue / City of Lomita Patrick McCue /														
Signature Sign														
11 12 12 12 13 14 12 14 14 15 15 15 15 15 15									-					
Patrick McCue / City of Lomita 9/11/2018 / L'Oo Arai Market Marke	Preservatives:	(1) Na ₂ S ₂ O ₃ (2) HCI	(3) HNO3 (4) NH4CI	Matrix: DW-L	Drinking V	Vater, WW.	Waste Wate	r, SW-Storm	Water,	GW- Gr	ound Wa	er, A-Air		Type- 1-Routine, 2-Repeat,
Patrick McCue / City of Lomita 9/11/2018 1.00 Aray Marked	(5) H2SO	1 (6) Na2SO3 (7) Co	ld (8) Other:					Rep	Jaceme	nt, 4-Sp	ecial W-	Well D- Dist); _t	
Patrick McCue / City of Lomita 9/11/2018 1.00 1.00 Mathee 1.01 Mathee 1.00 M	Reling	ished By (Sign)	Print Name / Company			Da	te / Time			10		1		Print Name / Company
		1	Patrick McCue / City of L	I				1.00		2	1	who	3	is Mathres
Samples received: () On ice () Lukhet () Custody seals Temp 3	thus 1	tarther	Chais Mathiez	М	81-1			3.00		X	A A			
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Fed X Golden State UPS Chem Other		-			-			1			1	,		
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APPENDIX B

METHANE MONITORING LOG



CITY OF LOMITA PUBLIC WORKS DEPARTMENT

CYPRESS WATER PRODUCTION FACILITY HANDHELD METHANE LOG READINGS

			MBER 201	.8		
DATE	DAY		METHAN	E HANDHEI	.D	COMMENTS
9/1/2018	Sat					
9/2/2018	Sun					
9/3/2018	Mon	CH4-		Оху-		
9/4/2018	Tue	CH4-	1%	Оху-	20.9%	
9/5/2018	Wed	CH4-	1%	Оху-	20.9%	
9/6/2018	Thu	CH4-	0%	Оху-	20.9%	
9/7/2018	Fri	CH4-		Оху-		
9/8/2018	Sat					
9/9/2018	Sun					
9/10/2018	Mon	CH4-	0%	Оху-	20.3%	
9/11/2018	Tue	CH4-	1%	Оху-	20.8%	
9/12/2018	Wed	CH4-	1%	Оху-	20.9%	
9/13/2018	Thu	CH4-		Оху-		
9/14/2018	Fri	CH4-		Оху-		
9/15/2018	Sat					
9/16/2018	Sun					
9/17/2018	Mon	CH4-	1%	Оху-	20.8%	
9/18/2018	Tue	CH4-	0%	Оху-	20.9%	
9/19/2018	Wed	CH4-	1%	Оху-	20.8%	
9/20/2018	Thu	CH4-		Оху-		
9/21/2018	Fri	CH4-		Оху-		
9/22/2018	Sat					
9/23/2018	Sun					
9/24/2018	Mon	CH4-		Оху-		
9/25/2018	Tue	CH4-		Оху-		
9/26/2018	Wed	CH4-		Оху-		
9/27/2018	Thu	CH4-	0%	Оху-	20.9%	
9/28/2018	Fri	CH4-		Оху-		
9/29/2018	Sat					
9/30/2018	Sun					

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: <u>September 2018</u>

#	Code	Sample ID	Location	Sample Date	Temp	рН	Total Chlorine	Free Chlorine	Total Ammonia	Free Ammonia	Nitrite ³	Nitrate	Coliform ²	НРС	Zone	Comments
Un	its/O	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	9/4/2018	24.8	8.08	3.00	0.05	0.62	0.11	0.003	ND	Α	ND	1	Well/MWD Blend
2	D	S13-004	24632 S Moon Ave	9/4/2018	24.6	8.07	2.60	0.03	0.53	0.09	0.034	ND	Α	3	1	Well/MWD Blend
3	D	S13-008	25417 Pennsylvania Ave	9/4/2018	24.7	8.09	3.20	0.05	0.56	0.10	0.013	ND	Α	ND	1	Well/MWD Blend
4	D	Α	2052 Dawn St	9/4/2018	25.6	7.95	0.97	0.01	0.30	0.15	0.087	ND	Α	110	1	Well/MWD Blend
5	D		Reservoir SP5	9/4/2018	24.0	8.14	3.22	0.04	0.60	0.00	0.004	ND	Α	ND	1	Well/MWD Blend
6	D	S13-001	1912 W 259th St	9/4/2018	24.7	8.59	2.20	0.05	0.44	0.09	0.018	ND	Α	ND	2	MWD Only
7	D		26314 S Monte Vista Ave	9/4/2018	24.4	8.62	2.20	0.03	0.43	0.07	0.019	ND	Α	ND	3	MWD Only
8	D	S13-005	2500 PCH	9/4/2018	24.4	8.62	2.10	0.02	0.42	0.08	0.030	ND	Α	ND	2	MWD Only
- T	-	642.002	40.40 M 252 - 4 Ct	0/44/2040	24.2	0.00	2.70	0.05	0.72	0.12	0.010	ND		ND	1 4	NAV-II/AANA/D DII
1	D	S13-003	1948 W 252nd St	9/11/2018	24.2	8.09	3.70	0.05	0.72	0.12	0.010	ND	A	ND	1	Well/MWD Blend
3	D	S13-004	24632 S Moon Ave	9/11/2018	24.1	8.09	2.90	0.06	0.56	0.14	0.014	ND	A	3	1	Well/MWD Blend
3	D D	S13-008	25417 Pennsylvania Ave	9/11/2018	25.1	8.11	3.70	0.08	0.62	0.12	0.012	ND 0.45	A	ND 07	1	Well/MWD Blend
5		Α	2052 Dawn St	9/11/2018	25.7	7.91	0.83	0.03	0.31	0.15	0.087	0.45	A	87	1	Well/MWD Blend
6	D	C42 004	Reservoir SP5	9/11/2018	24.0	8.16	3.79	0.08	0.72	0.00	0.014	ND	A	1	2	Well/MWD Blend
7	D D	S13-001	1912 W 259th St	9/11/2018	23.5	8.54	2.30	0.05	0.52 0.45	0.06 0.05	0.009	ND	A	ND		MWD Only
8	D		26314 S Monte Vista Ave	9/11/2018	23.2 23.8	8.58 8.58	2.30 2.40	0.04		0.05	0.004	ND ND	A	ND ND	3	MWD Only
ŏ	U	S13-005	2500 PCH	9/11/2018	23.8	8.58	2.40	0.05	0.45	0.07	0.011	ND	Α	ND	2	MWD Only
1	D	S13-003	1948 W 252nd St	9/18/2018	24.4	8.07	3.40	0.06	0.72	0.05	0.010	ND	А	ND	1	Well/MWD Blend
2	D	S13-003	24632 S Moon Ave	9/18/2018	23.8	8.14	3.40	0.06	0.72	0.03	0.010	ND ND	A	6	1	Well/MWD Blend
3	D	S13-004 S13-008		9/18/2018	24.0	8.17	3.70	0.06	0.53	0.08	0.019	ND	A	ND	1	Well/MWD Blend
4	D	A A	25417 Pennsylvania Ave 2052 Dawn St	9/18/2018	25.5	7.91	0.89	0.07	0.30	0.03	0.016	0.41	A	130	1	Well/MWD Blend
5	D	А	Reservoir SP5	9/18/2018	24.0	8.22	3.79	0.04	0.30	0.11	0.006	ND	A	ND	1	Well/MWD Blend
6	D	S13-001	1912 W 259th St	9/18/2018	23.6	8.55	2.30	0.04	0.76	0.04	0.000	ND	A	ND ND	2	MWD Only
7	D	S13-001	26314 S Monte Vista Ave	9/18/2018	23.1	8.60	2.30	0.04	0.40	0.05	0.010	ND	A	ND	3	MWD Only
8	D		2500 PCH	9/18/2018	23.3	8.65	2.30	0.04	0.37	0.05	0.008	ND ND	A	ND ND	2	MWD Only
0	U	313-003	2300 PCH	9/10/2010	23.3	8.03	2.20	0.00	0.40	0.00	0.011	ND	A	ND		IVIVVD OIIIY
1	D	S13-003	1948 W 252nd St	9/25/2018	23.5	7.74	3.40	0.07	0.72	0.10	0.006	ND	Α	ND	1	Well/MWD Blend
2	D	S13-004	24632 S Moon Ave	9/25/2018	23.1	7.63	3.20	0.04	0.62	0.12	0.041	ND	A	ND	1	Well/MWD Blend
3	D	S13-008	25417 Pennsylvania Ave	9/25/2018	23.4	7.66	3.70	0.06	0.64	0.09	0.015	ND	A	ND	1	Well/MWD Blend
4	D	Α	2052 Dawn St	9/25/2018	23.6	7.55	1.03	0.05	0.32	0.14	0.182	0.40	A	180	1	Well/MWD Blend
5	D	.,	Reservoir SP5	9/25/2018	22.7	7.73	3.69	0.09	0.76	0.00	0.002	ND	A	ND	1	Well/MWD Blend
6	D	S13-001	1912 W 259th St	9/25/2018	23.4	8.17	2.20	0.05	0.47	0.03	0.004	ND	A	ND	2	MWD Only
7	D		26314 S Monte Vista Ave	9/25/2018	22.8	7.20	2.30	0.05	0.49	0.05	0.007	ND	A	ND	3	MWD Only
8	D	S13-005	2500 PCH	9/25/2018	23.0	8.09	2.20	0.06	0.45	0.05	0.026	ND	A	ND	2	MWD Only
<u> </u>				5, 25, 2525					0.10	0.00	0.020					<u></u>
1	D	S13-003	1948 W 252nd St												1	Well/MWD Blend
2	D		24632 S Moon Ave												1	Well/MWD Blend
3	D		25417 Pennsylvania Ave												1	Well/MWD Blend
4	D	Α	2052 Dawn St												1	Well/MWD Blend
5	D		Reservoir												1	Well/MWD Blend
6	D	S13-001	1912 W 259th St												2	MWD Only
7	D	S13-002	26314 S Monte Vista Ave												3	MWD Only
8	D	S13-005	2500 PCH												2	MWD Only

^{&#}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).

²Coliform results are part of weekly Bacti sampling results.

³The City is monitoring trends of Nitrite in Zone I, in accordance with the Nitrification Monitoring Plan. Hydrant flushing has been implemented.