CITY OF LOMITA



Cypress Water Production Facility Monthly Status Report

November 2017

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CITY COUNCIL

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



ADMINISTRATION

RYAN SMOOT
CITY MANAGER

December 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

Subject: System No. 1910073 - Monthly Report for the Cypress Water Production Facility (CWPF) for the period of November 1 through November 30, 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 November 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 November 2017 maintaining water levels inside the reservoir ranging from 7 feet to 10 feet. The average flow from Well No. 5 was 414 gpm and 351 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 November 2017.

Table 1. Monthly Production Totals.

	Pi		or November 2017
Well No. 5	49.27	ac-ft	16,053,142 (gallons)
* MWD	41/31	ac-ff-	13,460,000 (gallons)
Combined Total	90.58	ac-ft	29,513,142 (gallons)
Daily	3.02	ac-ft/day	983,771 (gallons/day)

C. OPERATIONAL INTERRUPTIONS

During the month of November 2017, CWPF was placed offline for approximately ½ a day and water was supplied by the City's West Basin 8 MWD interconnection with no interruption of service to customers. Routine preventive maintenance and overall system checks were performed at this time. 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 534 mg/L. The TDS level of the effluent water meets the City's Water Quality Objective/Goal of 500 to 750 mg/L. The sampling results indicate the TDS levels in the raw water and MWD water source to be 770 mg/L and 280 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 slightly higher than the City's Water Quality Objective/Goal of 180 to 250 mg/L; staff continues to monitor hardness levels at the CWPF effluent (SP5) and within the water distribution system. The City has maintained a consistent blend ratio to ensure acceptable hardness levels are met.

Staff continues to use an orthophosphate/polyphosphate additive to sequester calcium hardness. Orthophosphate/Polyphosphate is a food grade National Sanitation Foundation (NSF 60) approved additive which decreases iron tuberculation, diminishes calcium scale deposits, minimizes corrosion, reduces discoloration, reduces staining and mineral build-up resulting in fewer customer complaints.

E3-3 DISSOLVED METHANE (IN WATER)

The methane levels in the CWPF effluent after aeration treatment remain negligible averaging 0.37 mg/L.

E3-4 METHANE (IN AIR)

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

E3-5 ODOR

The odor levels at the CWPF effluent averaged 2.6 units for the month.

E4. NITRIFICATION MONITORING

Weekly nitrification sampling was performed during the month of November 2017 following the City's Nitrification Monitoring Plan. Refer to Appendix C for results. During this month, additional hydrant flushing was implemented due to elevated Nitrite reads.

F. TABLES

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

		SP1, V	Vell Raw	Water	Discha	irge		Pres	Comb sure F ffluen	ilter	SP3, /		nloramin reservoii		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
11/1/2017											ND	300	ND	50	5	15
11/8/2017	240	300	190	50	7.5	15	А	Α	А	500	ND	300	ND	50	ND	15
11/15/2017											ND	300	ND	50	5	15
11/22/2017											ND	300	ND	50	5	15
11/29/2017											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			SP4			SP5	
week of	Free CI	Free CI	Total CI	Total NH ₃	Free CI	Total CI	Total NH ₃	Free CI	Total CI	Total NH ₃
11/1/2017	4.20	-	5.36	0.74	0.51	4.77	0.78	0.07	3.55	0.77
11/8/2017	4.12	-	5.10	0.91	0.46	4.52	0.88	0.08	3.43	0.80
11/18/2017	6.23	141	5.96	0.88	0.55	5.16	0.88	0.07	3.48	0.92
11/22/2017	5.46	-	6.06	0.90	0.56	4.65	0.89	0.06	3.67	0.87
11/29/2017	3.97	-	5.33	0.92	0.50	4.76	1.04	0.06	3.98	0.97

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

		TD	S, mg/L		T.O).N.		Hardn	iess, m	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
11/1/2017			490	500-750	2	3						0.31
11/8/2017	770	280	570	500-750	2	3	380	120	270	180-250	3.8	0.43
11/15/2017			560	500-750	4	3						0.42
11/22/2017			540	500-750	2	3						0.46
11/29/2017			510	500-750	3	3						0.24
Average			534	500-750	2.6	3						0.37

Notes

Monthly- Orange; Weekly- Yellow

ppm – parts per million mg/L – milligram per liter T.O.N. - Threshold Odor Number

TDS - Total Dissolved Solids Hardness - As total CaCO3

Methane (Water) - Methane dissolved in water

Monthly CWPF Monitoring Report – November 2017 Cypress Water Production Facility City of Lomita; System No. 1910073

	Frequency	MCL/	11/1	11/8	11/15	11/22	11/29	Commonto
Sample Locations and Parameters	rrequericy	Goal		2 nd Wk		4 th Wk	5 th Wk	Comments
and Farameters		Guai	1stWk	ZWVK	3rdWk	4"VVK	5 VVK	and/or
			or Mo.	1				Other Info.
			Result					
			(date)					
SP1 Also called	Well 5 Raw	Water o	The second secon					
TDS, ppm	Monthly	See SP5	770	Operations	Data/Inforn	nation:	g-weath-sac-sac-manage-ex-	*Chlorine injected afte
11		See SP5	11/8/17	CWPF opera	ation days			SP1, before entering the greensand filter.
Hardness	Monthly		380 11/8/17		Daily average	low 414 app	a: total prod	the greensand liker.
CH4, ppm	Monthly	See SP5	3.8 11/8/17	- 49.27 AF	Vell 5/MWD da		65 51	
Iron, ppb	Monthly	See SP3	240 11/8/17	blend Ratio - 90.58 AF	- 54% WELL: 4	16% MWD; tot	al prod	
Manganese, ppb	Monthly	See SP3	190 11/8/17		b1/A*			
Color, units	Monthly	See SP3	7.5	Chlorine Do	sage: N/A*			
Total Coliform, P or A	Monthly	A	11/8/17 A					
			11/8/17					
SP2 Also called	Filter Efflu	ent or Si	te#3.					
Total Coliform, P or A	Monthly	Α	Α					*Ammonia added afte
HPC,MPN/100 ml	Monthly	500	Α	Ammonia D	osage: N/A*			filter effluent
Free Cl Res, ppm	Continuous	Average:	: <mark>4.89</mark> ; Rar	ige: 3.97 -	7.02			
SP3 Also called	the Site Af	ter Chlor	raminatio	n & Before	MWD BI	ending or	Site#4.	
Iron, ppb	Weekly	ND	ND	ND	ND	ND	ND	
Manganese, ppb	Weekly	50	ND	ND	ND	ND	ND	1
	Weekly	15	5	ND	5	5	5	
Free and Total CI Res,	Weekly Continuous	Free CI: A	verage: -; F	Range: -		5	5	
Free and Total CI Res,		Free CI: A	Average: -; F Average: 5.5	Range: - <mark>6</mark> ; Range: 5	.10 - 6.06	5	5	
Free and Total CI Res, ppm	Continuous	Free CI: A Total CI: A Ammonia	Average: -; F Average: 5.5 : Average:0.	Range: - <mark>6; Range: 5</mark> 8 7 ; Range: (.10 - 6.06).74 – 0.92			hate Injection
Free and Total CI Res, ppm SP4 Also called	Continuous	Free CI: A Total CI: A Ammonia Influent	Average: -; FAverage: 5.5 : Average:0. or the Site	Range: - 6; Range: 5 87; Range: 0 • Well 5/M	.10 - 6.06).74 – 0.92			phate Injection.
Phosphate Injection	Continuous Reservoir	Free CI: A Total CI: A Ammonia Influent of Phosphat	Average: -; F Average: 5.5 : Average:0. or the Site e Dosage: (Range: - 6; Range: 5 87; Range: 0 • Well 5/M 0.76 mg/L	.10 - 6.06 0.74 – 0.92 WD Water			
Free and Total CI Res, ppm SP4 Also called Phosphate Injection Free and Total CI Res,	Continuous	Free CI: A Total CI: A Ammonia Influent of Phosphat Free CI: A	Average: -; F Average: 5.5 : Average:0. or the Site de Dosage: (Average: 0.5	Range: - 6; Range: 5 87; Range: 0 • Well 5/M 0.76 mg/L 62; Range: 0	.10 - 6.06 0.74 - 0.92 WD Water			CI/NH3 Ratio:
Free and Total CI Res, ppm SP4 Also called Phosphate Injection Free and Total CI Res,	Continuous Reservoir	Free CI: A Total CI: A Ammonia Influent (Phosphat Free CI: A Total CI: A	Average: -; F Average: 5.5 : Average:0. or the Site e Dosage: (Average: 0.5 Average: 4.7	Range: - 6; Range: 5 87; Range: 0 • Well 5/M 0.76 mg/L	0.10 - 6.06 0.74 - 0.92 WD Water 0.46 - 0.56 52 - 5.16			
Free and Total CI Res, ppm SP4 Also called Phosphate Injection Free and Total CI Res, ppm SP5 Also called	Reservoir Continuous	Free CI: A Total CI: A Ammonia Influent Phosphat Free CI: A Total CI: A Ammonia Effluent	Average: -; FAverage: 5.5 : Average: 0.0 or the Site e Dosage: (Average: 0.5 Average: 4.7 : Average: 0	Range: - 6; Range: 5 87; Range: (• Well 5/M).76 mg/L 12; Range: 0 7; Range: 4 .89; Range:	.10 - 6.06 .74 - 0.92 WD Water .46 - 0.56 .52 - 5.16 0.78 - 1.04	Blend Po	bint/Phosp	CI/NH3 Ratio: 5.35
Free and Total CI Res, ppm SP4 Also called Phosphate Injection Free and Total CI Res, ppm SP5 Also called	Reservoir Continuous	Free CI: A Total CI: A Ammonia Influent Phosphat Free CI: A Total CI: A Ammonia	Average: -; FAverage: 5.5 : Average: 0.0 or the Site e Dosage: (Average: 0.5 Average: 4.7 : Average: 0	Range: - 6; Range: 5 87; Range: (• Well 5/M).76 mg/L 12; Range: 0 7; Range: 4 .89; Range:	.10 - 6.06 .74 - 0.92 WD Water .46 - 0.56 .52 - 5.16 0.78 - 1.04	Blend Po	bint/Phosp	CI/NH3 Ratio: 5.35
Free and Total CI Res, ppm SP4 Also called Phosphate Injection Free and Total CI Res, ppm SP5 Also called TDS, ppm Hardness	Reservoir Continuous Reservoir Weekly Monthly	Free CI: A Total CI: A Ammonia Influent (Phosphat Free CI: A Total CI: A Ammonia Effluent SI Goal: 500-750ppm SI Goal: 180-250ppm	Average: -; FAverage: 5.5 : Average: 0.5 cor the Site e Dosage: (Average: 0.5 Average: 4.7 : Average: 0 or Site#5.	Range: - 6; Range: 5 87; Range: 6 • Well 5/M 0.76 mg/L 12; Range: 0 7; Range: 4 1.89; Range:	.10 - 6.06 0.74 - 0.92 WD Water .46 - 0.56 52 - 5.16 0.78 - 1.04 charges in	Blend Po	of the dis	CI/NH3 Ratio: 5.35 Stribution system
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Free and Total CI Res, ppm SP4 Also called Phosphate Injection Free and Total CI Res, ppm SP5 Also called TDS, ppm Hardness CH4, ppm	Reservoir Continuous Reservoir Weekly Monthly Weekly Monthly	Free CI: A Total CI: A Ammonia Influent Phosphat Free CI: A Total CI: A Ammonia Effluent SI Goal: 500-750ppm SI Goal: 180-250ppm Goal: from	Average: -; F Average: 5.5 : Average: 0.0 or the Site e Dosage: (Average: 0.5 Average: 4.7 : Average: 0 or Site#5.	Range: - 6; Range: 5 87; Range: 6 • Well 5/M 0.76 mg/L 12; Range: 0 7; Range: 4 89; Range: 5 570 270	.10 - 6.06 0.74 - 0.92 WD Water .46 - 0.56 .52 - 5.16 0.78 - 1.04 charges in	to Zone 1	of the dis	CI/NH3 Ratio: 5.35 stribution system % CH4 Removal:
Free and Total CI Res, ppm SP4 Also called Phosphate Injection Free and Total CI Res, ppm SP5 Also called TDS, ppm Hardness CH4, ppm Odor, units Free and Total CI Res,	Reservoir Continuous Reservoir Weekly Monthly Weekly	Free CI: A Total CI: A Ammonia Influent Phosphat Free CI: A Total CI: A Ammonia Effluent SI Goal: 500-750ppm SI Goal: 180-250ppm Goal: from PA 1 Free CI: A	Average: -; FAverage: 5.5 : Average: 0.0 or the Site e Dosage: (Average: 0.5 Average: 0.5 Average: 4.7 : Average: 0 or Site#5. 490 0.31 2 Average: 0.0	Range: - 6; Range: 5 87; Range: 6 • Well 5/M 0.76 mg/L 62; Range: 0 7; Range: 4 .89; Range: 5 570 270 0.43 2 07; Range: 0.	.10 - 6.06 0.74 - 0.92 WD Water .46 - 0.56 .52 - 5.16 0.78 - 1.04 charges in 560 0.42 4 06 - 0.08	to Zone 1 540 0.46	of the dis	CI/NH3 Ratio: 5.35 Stribution system % CH4 Removal: 90.2% CI/NH3 Ratio:
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Free and Total CI Res, ppm SP4 Also called Phosphate Injection Free and Total CI Res, ppm SP5 Also called TDS, ppm Hardness CH4, ppm Odor, units Free and Total CI Res, ppm Headspace of the C CH4 ppmv; using	Reservoir Continuous Reservoir Weekly Monthly Weekly Monthly Continuous Cypress Re Daily (from log)	Free CI: A Total CI: A Ammonia Influent of Phosphat Free CI: A Ammonia Effluent SI Goal: 500-750ppm SI Goal: 180-250ppm Goal: from PA 1 Free CI: A Ammonia Effective Coal: Coal-LEL	Average: -; FAverage: 5.5 : Average: 5.5 : Average: 0.0 or the Site e Dosage: (Average: 0.5 Average: 4.7 : Average: 0 or Site#5. 490 0.31 2 Average: 0.6 Average: 3.6 :: Average: 0 CH4 Average: 0 CH4 Rar	Range: - 6; Range: 5 87; Range: 6 • Well 5/M 0.76 mg/L 12; Range: 0 7; Range: 4 89; Range: 5 570 270 0.43 2 07; Range: 0 2; Range: 3 87; Range: 4 10 10 10 10 10 10 10 10 10 10 10 10 10	0.10 - 6.06 0.74 - 0.92 WD Water 0.46 - 0.56 52 - 5.16 0.78 - 1.04 0.42 4 06 - 0.08 43 - 3.98 0.77 - 0.97	to Zone 1 540 0.46 2	of the dis	CI/NH3 Ratio: 5.35 Stribution system % CH4 Removal 90.2% CI/NH3 Ratio: 4.17
Free and Total CI Res, ppm SP4 Also called Phosphate Injection Free and Total CI Res, ppm SP5 Also called TDS, ppm Hardness CH4, ppm Odor, units Free and Total CI Res, ppm Headspace of the C CH4 ppmv; using Portable Device SP 6 MWD Source	Reservoir Continuous Reservoir Weekly Monthly Weekly Monthly Continuous Cypress Re Daily (from log)	Free CI: A Total CI: A Ammonia Influent of Phosphat Free CI: A Ammonia Effluent SI Goal: 500-750ppm SI Goal: 180-250ppm Goal: from PA 1 Free CI: A Ammonia Effective Coal: Coal-LEL	Average: -; FAverage: 5.5 : Average: 5.5 : Average: 0.0 or the Site e Dosage: (Average: 0.5 Average: 4.7 : Average: 0 or Site#5. 490 0.31 2 Average: 0.6 Average: 3.6 :: Average: 0 CH4 Average: 0 CH4 Rar	Range: - 6; Range: 5 87; Range: 6 • Well 5/M 0.76 mg/L 12; Range: 0 7; Range: 4 89; Range: 5 570 270 0.43 2 07; Range: 0 2; Range: 3 87; Range: 4 10 10 10 10 10 10 10 10 10 10 10 10 10	0.10 - 6.06 0.74 - 0.92 WD Water 0.46 - 0.56 52 - 5.16 0.78 - 1.04 0.42 4 06 - 0.08 43 - 3.98 0.77 - 0.97	to Zone 1 540 0.46 2	of the dis	CI/NH3 Ratio: 5.35 Stribution system % CH4 Removal: 90.2% CI/NH3 Ratio: 4.17
Free and Total CI Res, ppm SP4 Also called Phosphate Injection Free and Total CI Res, ppm SP5 Also called TDS, ppm Hardness CH4, ppm Odor, units Free and Total CI Res, ppm Headspace of the C CH4 ppmv; using Portable Device	Reservoir Continuous Reservoir Weekly Monthly Weekly Monthly Continuous Cypress Re Daily (from log) Ce Feeding	Free CI: A Total CI: A Ammonia Influent Phosphat Free CI: A Total CI: A Ammonia Effluent SI Goal: 500-750ppm Goal: from PA 1 Free CI: A Ammonia eservoir. Goal - LEL CWPF.	Average: -; FAverage: 5.5 : Average: 5.5 : Average: 0.0 or the Site e Dosage: (Average: 0.5 Average: 4.7 : Average: 0 or Site#5. 490 0.31 2 Average: 0.6 Average: 3.6 :: Average: 0 CH4 Average: 0 CH4 Rar	Range: - 6; Range: 5 87; Range: 6 • Well 5/M 0.76 mg/L 12; Range: 0 7; Range: 4 1.89; Range: 5 570 270 0.43 2 17; Range: 0 2; Range: 0 2; Range: 0 12; Range: 0 13; Range: 0 14; Range: 0 15; Range: 0 16; Range: 0 17; Range: 0 18; Range: 0 19; Range: 0	0.10 - 6.06 0.74 - 0.92 WD Water 0.46 - 0.56 52 - 5.16 0.78 - 1.04 0.42 4 06 - 0.08 43 - 3.98 0.77 - 0.97	to Zone 1 540 0.46 2	of the dis	CI/NH3 Ratio: 5.35 Stribution system % CH4 Removal 90.2% CI/NH3 Ratio: 4.17

APPENDIX A

LABORATORY RESULTS



15 November 2017 Clinical Lab No.: 17K0126

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

Project Name: Standard Analysis

Sub Project: CWPF 1st Week of Nov, 2017 Compliance Sampling

Enclosed are the results of the analyses for samples received at the laboratory on 11/01/17. Samples were received within temperature range, in correct containers and preservation.

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

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

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

Sincerely,

Stu Styles

Client Services Manager

tistes



Lomita, City ofProjectStandard AnalysisWork Order:17K012624373 Walnut AvenueSub Project:CWPF 1st Week of Nov, 2017 Compliance SamplingReceived:11/01/17 15:25Lomita CA, 91717Project Manager:Mark AndersenReported:11/15/17

Reservoir Influent Site #3		17K0126-	01 (Water)		Sample Da	te: 11/01/17	8:38 Sa	mpler: Pa	atrick McCue
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	6.06		N/A	mg/L	11/01/17	11/01/17	1744120	
pH (Field)	Field	7.63		N/A	pH Units	11/01/17	11/01/17	1744120	
Temperature (Field)	Field	22.1		N/A	°C	11/01/17	11/01/17	1744120	
General Physical Analyses									
Apparent Color	SM 2120BM	5.0	3.0	15	Color Units	11/01/17	11/01/17	1744128	
<u>Metals</u>									
Iron (Fe)	EPA 200.7	ND	100	300	ug/L	11/03/17	11/06/17	1744175	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	11/03/17	11/06/17	1744175	
Reservoir Effluent Site #5		17K0126-	02 (Water)		Sample Da	te: 11/01/17	8:40 Sa	mpler: Pa	atrick McCue
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	3.71		N/A	mg/L	11/01/17	11/01/17	1744120	
pH (Field)	Field	7.95		N/A	pH Units	11/01/17	11/01/17	1744120	
Temperature (Field)	Field	21		N/A	°C	11/01/17	11/01/17	1744120	
General Physical Analyses									
Apparent Color	SM 2120BM	5.0	3.0	15	Color Units	11/01/17	11/01/17	1744128	
Odor Threshold	EPA 140.1-M	2	1	3	TON	11/01/17	11/01/17	1744128	
General Chemical Analyses									
Total Filterable Residue/TDS	SM 2540C	490	5.0	1000	mg/L	11/08/17	11/10/17	1745084	
ND Analyte NOT DETECTED at o	r above the reporting limit								



November 9, 2017



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

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

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

LABORATORY TEST RESULTS

Project Reference: 17K0126 Lab Number: 1110205-01

Enclosed are results for sample(s) received 11/02/17 by Air Technology Laboratories. Samples were received intact and properly chilled. Analyses were performed according to specifications on the chain of custody provided with the sample(s).

Report Narrative:

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

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

Sincerely,

Mark Johnson Operations Manager

MJohnson@AirTechLabs.com

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

SUBCONTRACT ORDER

Clinical Laboratory of San Bernardino 17K0126

I110205-01

		1/120120	
SENDING LABORATORY:		RECEIVING LABORA	TORY:
Clinical Laboratory of San Be	rnardino	Air Technology Labs	
21881 Barton Road		18501 East Gale Avenu	e Suite 130
Grand Terrace, CA 92313		City of Industry, CA 91	748
Phone: 909.825.7693		Phone :(626) 964-4032	
Fax: 909.825.7696		Fax:	
Project Manager: Stu Styles			
Please email results to Project [] glaubig@clinical-lab.com		.com [v] styles@clinical-lab.con	n [] nelson@clinical-lab.com
California EDT transfe Water Trax Upload Cl		odes provided [] Yes [V] No [] Yes [V] No	
Turn Around Time [] 19 Subcontract Comments:	0 Days 5 Days [Other Days	
Analysis	28.20	Laterberg at a constitue star.	Comments
Sample ID: Reservoir Effluent	Site #5 / 17K0126-02	Sampled: 11/01/17 08:40 PS Co	de:
			WTX ID:
U			
Methane RSK175			Report in mg/L
ontainers Supplied:			
0ml Amber Vial (B)	40ml Amber	Vial (C)	
		that guid	-
* * *		egar yak ayas, siyarasay sames no meningsa k	
		aw jaykt me e	
		Lynn March	
	a vis g sa je	* y - * 1	
		* _ * _ 4.7°	

Date / Time 1075

Released By

11/2/17 07:43

Received By

Date / Tim

Date / Time

Received By

Released By

Client:

Clinical Laboratory

Attn:

Stu Styles

Project Name:

NA

Project No.:

17K0126

Date Received:

11/02/17

Matrix:

Water

Reporting Units: mg/L

RSK175

			,			
Lab No.:	I11020	05-01				
	Reservoir	Effluent				
Client Sample I.D.:	Site #5/17	7K0126-				
	02	2				
Date/Time Sampled:	11/1/17	8:40				
Date/Time Analyzed:	11/9/17	11:01				
QC Batch No.:	1711090	GC8A1				
Analyst Initials:	AS	S				
Dilution Factor:	1.0	0				
	Result	RL				
ANALYTE	mg/L	mg/L			4	
Methane	0.31	0.0010				

ND = Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By:

Mark Johnson

Operations Manager

The cover letter is an integral part of this analytical report

Date 11-9-17

QC Batch No.:

171109GC8A1

Matrix:

Water

Units:

mg/L

QC for Dissolved Gases by EPA Procedure RSKSOP-175

Lab	No.:	Metho	d Blank	I	LCS	L	CSD		
Date/Time An	alyzed:	11/9/	17 8:44	11/9/	17 9:58	11/9/	17 10:12		
Analyst Init	ials:	I	AS		AS		AS		
Data	file:	09n	ov001	091	10v006	091	10v007		
Dilution Fac	ctor:	1	0.1		1.0		1.0		
ANALYTE	PQL	RL	Results	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Methane	0.0010	0.0010	ND	108	70-130%	101	70-130%	6.9	<30

PQL = Practical Quantitation Limit

ND = Not Detected (Below RL).

RL = PQL X Dilution Factor

Reviewed/Approved By:

Mark J. Johnson

Operations Manager

Date: 11-9-17

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

Chain of Custody

17K012L6	Lomita System Number Analysis Requested	Inut Avenue 1040072	M C JOOLE I	Destination Laboratory	[X] Clinical Laboratory	CT/ rdna (W: CD Diss		RSK Golids	880L	Matrix Type Preserv pll Temp. Chlorine	DW IW N/A 7.6.3 22.1° (#5 DW IW N/A 795 21.0° 3.71 x x x x	#5 DW IW 2				6.	Manager Day County Makes Wilder Clark County Makes		Print Name / Company Date / Time An Print Name Y Company	City of Lomita 11/1/2017 1.12:45	951		1X Golden State UPS Client Other Page 1 of 1
X-1	City of Lomita Sys	24373 Walnut Avenue	Lomita, CA 91717	(310) 325-9830	(310) 325-3627	Standard Analysis	CWPF 1st week of November, 2017	For TC/EC/BACT see weekly Distro CoC	Patrick McCue	Sample Idenitification Matrix												9317		
	Client	Address 2.		Phone #	Fax#	Project	ject	Comments For TC/EC/B/	Sampled by	Date Time Sa	11/1/2017 (CR 38) Reservoir Influent Site #3	11/1/2017 OS 4O Reservoir Effluent Site #5	11/1/2017 OSHO Reservoir Effluent Site #5		£,				Freservatives: (1) Na ₂ S ₂ O ₃ (2) HCl (3) HNO3 (4) NH4Cl (5) H2SO4 (6) Na ₂ SO3 (7) Cold (8) Other:	Relinquished By (Sign)	Patrick McCue	Petwel Mess	Congregation	Shipped Via



27 November 2017 Clinical Lab No.: 17K0760

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

Project Name: Standard Analysis

Sub Project: CWPF Monthly Compliance / 2nd Week of Nov, 2017

Enclosed are the results of the analyses for samples received at the laboratory on 11/08/17 . Samples were received within temperature range, in correct containers and preservation.

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

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

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

Sincerely,

Stu Styles

Client Services Manager

tistes



Lomita, City ofProject:Standard AnalysisWork Order:17K076024373 Walnut AvenueSub Project:CWPF Monthly Compliance / 2nd Week of Nov, 2017Received:11/08/17 15:15Lomita CA, 91717Project Manager:Mark AndersenReported:11/27/17

Raw Water Site #1		17K0760-	01 (Water)		Sample Da	te: 11/08/17	7:57 Sa	ampler: D	OGM
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	0		N/A	mg/L	11/08/17	11/08/17	1745102	
pH (Field)	Field	7.52		N/A	pH Units	11/08/17	11/08/17	1745102	
Temperature (Field)	Field	21.9		N/A	°C	11/08/17	11/08/17	1745102	
Microbiology Analyses									
Total Coliform	SM 9223	A		N/A	P/A	11/08/17	11/09/17	1745126	
E. Coli	SM 9223	A		N/A	P/A	11/08/17	11/09/17	1745126	
Plate Count	SM9215B	160	1	500	CFU/ml	11/08/17	11/10/17	1745176	HT-08
General Physical Analyses									
Apparent Color	SM 2120BM	7.5	3.0	15	Color Units	11/08/17	11/08/17	1745135	
General Chemical Analyses									
Hardness, Total (as CaCO3)	Calculated	380	6.6	N/A	mg/L	11/17/17	11/17/17	[CALC]	
Total Filterable Residue/TDS	SM 2540C	770	5.0	1000	mg/L	11/15/17	11/17/17	1746101	
<u>Metals</u>									
Calcium (Ca)	EPA 200.7	100	1.0	N/A	mg/L	11/17/17	11/17/17	1746167	
Iron (Fe)	EPA 200.7	240	100	300	ug/L	11/16/17	11/16/17	1746112	
Magnesium (Mg)	EPA 200.7	31	1.0	N/A	mg/L	11/17/17	11/17/17	1746167	
Manganese (Mn)	EPA 200.7	190	20	50	ug/L	11/16/17	11/16/17	1746112	
Filter Effluent (Free Chlorine) Site #2		17K0760-	02 (Water)		Sample Da	te: 11/08/17	7:39 Sa	ampler: D	OGM
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	5.7		N/A	mg/L	11/08/17	11/08/17	1745102	
pH (Field)	Field	7.47		N/A	pH Units	11/08/17	11/08/17	1745102	
Temperature (Field)	Field	22.3		N/A	°C	11/08/17	11/08/17	1745102	
Microbiology Analyses									
Total Coliform	SM 9223	A		N/A	P/A	11/08/17	11/09/17	1745126	
E. Coli	SM 9223	A		N/A	P/A	11/08/17	11/09/17	1745126	
Plate Count	SM9215B	ND	1	500	CFU/ml	11/08/17	11/10/17	1745176	HT-08



Lomita, City ofProject:Standard AnalysisWork Order:17K076024373 Walnut AvenueSub Project:CWPF Monthly Compliance / 2nd Week of Nov, 2017Received:11/08/17 15:15

Lomita CA, 91717 Project Manager: Mark Andersen Reported: 11/27/17

Filter Effluent (Total Chlorine) Site #3		17K0760-	03 (Water)		Sample Da	te: 11/08/17	7:43 Sa	mpler: D	GM
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	5.37		N/A	mg/L	11/08/17	11/08/17	1745102	
pH (Field)	Field	7.51		N/A	pH Units	11/08/17	11/08/17	1745102	
Temperature (Field)	Field	22.7		N/A	°C	11/08/17	11/08/17	1745102	
General Physical Analyses									
Apparent Color	SM 2120BM	ND	3.0	15	Color Units	11/08/17	11/08/17	1745135	
<u>Metals</u>									
Iron (Fe)	EPA 200.7	ND	100	300	ug/L	11/16/17	11/16/17	1746112	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	11/16/17	11/16/17	1746112	
Zone #2 Site #6		17K0760-	04 (Water)		Sample Da	te: 11/08/17	7:45 Sa	mpler: D	GM
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	2.44		N/A	mg/L	11/08/17	11/08/17	1745102	
pH (Field)	Field	8.58		N/A	pH Units	11/08/17	11/08/17	1745102	
Temperature (Field)	Field	20		N/A	°C	11/08/17	11/08/17	1745102	
General Chemical Analyses									
Hardness, Total (as CaCO3)	Calculated	120	6.6	N/A	mg/L	11/17/17	11/17/17	[CALC]	
Total Filterable Residue/TDS	SM 2540C	280	5.0	1000	mg/L	11/15/17	11/17/17	1746101	
<u>Metals</u>									
Calcium (Ca)	EPA 200.7	27	1.0	N/A	mg/L	11/17/17	11/17/17	1746167	
Magnesium (Mg)	EPA 200.7	12	1.0	N/A	mg/L	11/17/17	11/17/17	1746167	



Lomita, City ofProject:Standard AnalysisWork Order:17K076024373 Walnut AvenueSub Project:CWPF Monthly Compliance / 2nd Week of Nov, 2017Received:11/08/17 15:15Lomita CA, 91717Project Manager:Mark AndersenReported:11/27/17

11/08/17 7:52 Reservoir Effluent Site #5 17K0760-05 (Water) **Sample Date:** DGM Sampler: Analyte Method Result Rep. Limit MCL Units Prepared Analyzed Batch Qualifier Field Analyses Field 11/08/17 11/08/17 1745102 Cl Res Total (Field) 3.46 N/A mg/LpH (Field) Field 7.83 N/A pH Units 11/08/17 11/08/17 1745102 Field 20.9 °C 11/08/17 11/08/17 1745102 Temperature (Field) N/A **General Physical Analyses** EPA 140.1-M **Odor Threshold** 2 TON 11/08/17 11/08/17 1745135 3 **General Chemical Analyses** [CALC] Hardness, Total (as CaCO3) Calculated 270 11/17/17 11/17/17 6.6 N/Amg/L SM 2540C 11/15/17 11/17/17 1746101 **Total Filterable Residue/TDS** 570 1000 5.0 mg/LMetals Calcium (Ca) EPA 200.7 11/17/17 11/17/17 1746167 71 1.0 N/A mg/L EPA 200.7 11/17/17 Magnesium (Mg) 24 11/17/17 1746167 1.0 N/A mg/L

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



November 16, 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: 17K0760

Lab Number:

I110901-01/02

Enclosed are results for sample(s) received 11/09/17 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 17K0760

I110901-01/02

SENDING LABORATORY:	RECEIVING LABORATORY:	1
Clinical Laboratory of San Bernardino 21881 Barton Road Grand Terrace, CA 92313 Phone: 909.825.7693 Fax: 909.825.7696 Project Manager: Stu Styles	Air Technology Labs 18501 East Gale Avenue Suite 130 City of Industry, CA 91748 Phone :(626) 964-4032 Fax:	
Please email results to Project Manager: Stu Styles [] glaubig@clinical-lab.com [] ybarra@clinical-lab.com [] ybarra@clinical-lab.com [] water Trax Upload Client: Turn Around Time [] 10 Days	,	
Subcontract Comments:		
	Comments	
Subcontract Comments:	Comments Sampled: 11/08/17 07:57 PS Code: Water WTX ID:	
Subcontract Comments: Analysis Sample ID: Raw Water Site #1 / 17K0760-01	Sampled: 11/08/17 07:57 PS Code:	
Analysis Sample ID: Raw Water Site #1 / 17K0760-01	Sampled: 11/08/17 07:57 PS Code: Water WTX ID:	
Analysis Sample ID: Raw Water Site #1 / 17K0760-01 Methane RSK175 Containers Supplied:	Sampled: 11/08/17 07:57 PS Code: Water WTX ID:	
Analysis Sample ID: Raw Water Site #1 / 17K0760-01 Methane RSK175 Containers Supplied:	Sampled: 11/08/17 07:57 PS Code: Water WTX ID: Report in mg/L	
Analysis Sample ID: Raw Water Site #1 / 17K0760-01 Methane RSK175 Containers Supplied: 40ml Amber Vial (B) 40ml Am	Sampled: 11/08/17 07:57 PS Code: Water WTX ID: Report in mg/L mber Vial (C) Sampled: 11/08/17 07:52 PS Code:	
Analysis Sample ID: Raw Water Site #1 / 17K0760-01 Methane RSK175 Containers Supplied: 40ml Amber Vial (B) Sample ID: Reservoir Effluent Site #5 / 17K0760-05	Sampled: 11/08/17 07:57 PS Code: Water WTX ID: Report in mg/L mber Vial (C) Sampled: 11/08/17 07:52 PS Code: Water WTX ID:	

Released By

Date / Time

Received By

Date / Time

Received By

Date / Time

Date / Time

Date / Time

Client:

Clinical Laboratory

Attn:

Stu Styles

Project Name:

NA

Project No.:

17K0760

Date Received:

11/09/17

Matrix:

Water

Reporting Units: mg/L

RSK175

		-					
Lab No.:	I11090	1-01	I11090	1-02			
Client Sample I.D.:	Raw Wate / 17K07		Reservoir Site #5 / 1' 05	7K0760-			
Date/Time Sampled:	11/8/17 7:57		11/8/17	7:52			
Date/Time Analyzed:	11/9/17 12:01		11/9/17 11:46				
QC Batch No.:	171109GC8A1		171109GC8A1		И		
Analyst Initials:	AS	S	AS				
Dilution Factor:	1.0)	1.0				
	Result	RL	Result	RL			
ANALYTE	mg/L	mg/L	mg/L	mg/L			
Methane	3.8	0.0010	0.43	0.0010			

ND = Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By:	MDU.
	Mark Johnson
	Operations Manager

The cover letter is an integral part of this analytical report

QC Batch No.:

171109GC8A1

Matrix:

Water mg/L

Units:

00 C D' 1 1	0	1	EDA	D	DCIZCOD 175
QC for Dissolved	Gases	Dy	EPA	Procedure	K3K3UP-1/5

Lab	No.:	Metho	d Blank	I	LCS	L	CSD		
Date/Time An	alyzed:	11/9/	17 8:44	11/9/	17 9:58	11/9/	17 10:12		
Analyst Ini	tials:	A	AS	AS			AS		
Data	file:	09n	ov001	091	10v006	091	10v007		
Dilution Fa	ctor:	1	0.0		1.0		1.0		
ANALYTE	PQL	RL	Results	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Methane	0.0010	0.0010	ND	108	70-130%	101	70-130%	6.9	<30

PQL = **Practical Quantitation Limit**

ND = Not Detected (Below RL).

RL = PQL X Dilution Factor

Reviewed/Approved By:	(1) Ald	(,)	Date: ((6)7
	Mark J. Johnson		

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

•			1+	0	19 19 19	•											
Client		City of Lomita	Sy	System Number	lumber	•			Analysis		Requested	ted					
Address		24373 Walnut Avenue			10	1910073	•										
		Lomita, CA 91717			- 5	, , , ,								Me			
Phone #		(310) 325-9830			Destinat	Destination Laboratory	tory					He		etha			
Fax#		(310) 325-3627			[X] Clini	[X] Clinical Laboratory	tony				Т	tetr		ne	- 		
Project		Standard Analysis			RWQCE	RWQCB Compliance	e o				otal			(W A	На		
40	•	CWPF Monthly Compliance Samples;	S;			YES				. C	Co	Cole	Odo	ΛTΙ	ırdı		
one Project		2nd week of Nov., 2017			ш	ELAP#					lifo			ER)	ness		
Comments						000			nese Solid		rm	e Cou		(RSI			
Sampled by	^	DGM				900			s			nt		K175)	· · · · · · · · · · · · · · · · · · ·		
Date	Time	Sample Idenitification	Matrix	Type	Preserv	Temp.	Hd	Total Chlorine)			
11/8/2017	3460	Raw Water Site #1	. W	18	N/A	51.9	7.52	Ø	X			×					
11/8/2017	1250	Raw Water Site #1	CW	1W	1, 2, 7					×	×	×		X	X		
			-								,						
11/8/2017 1739	139	Filter Effluent (Free Chlorine) Site#2	DW	№	1,7	22.3	747	5.7		×	X	X					
11/8/2017	0743	Filter Effluent (Total Chlorine) Site#3	3 DW	18	N/A	22.7	15.6	5.37	,	X		Х					
11/8/2017	0745	Zone #2 Site #6	DW	ID	N/A	20.02	8.58	hh'2	X						X		
11/8/2017	0752	Reservoir Effluent Site #5	DW	1D	N/A	20.9°	7.83	3,46	×				X		X		
11/8/2017	2510	Reservoir Effluent Site #5	DW	OI	2,7					k,				×			
Preservatives	5: (1) Na ₂ S ₂ O ₃	Preservatives: (1) Na ₂ S ₂ O ₃ (2) HCl (3) HNO3 (4) NH4Cl	Matri	ix: DW-D	rinking W	ater, WW-I	Matrix: DW-Drinking Water, WW-Waste Water, SW-Storm Water, GW- Ground Water, A-Air Routine 2-Reneat 3-Renlacement 4-Special W-Well D. D	Vater, SW-Storm Water, GV	n Wate	', GW-	Ground	V- Ground Water, A-A	, A-Air	ir Dist		Type- 1-	
milod	Polinguished By (Cian)	(1) cold (e) Other.	- 1			Data / Tima	:	chear, o		, a	o iso	Pacainad By (Sign)	i ani			Drint Nama / Comman.	Τ.
Wenn	duisneu Dy (r		(im)		,982) ama	200		+			C) fa	(Ru)	1	+	rim rume / compun.	T
Patrick McCue	je Je	City of Lomita, CA	CA	11/8/2017	017	12,75			\not	7		3	1	h	3	CON COLOR	
Post	Taken D	Man J. Luceno 1,	CLSA	11.8	1	3.15					100	-	-2	- Z	X	JA/OISP	~~
Commonts:)	•	Samp	hples receiveds	∇	On ice () Inta	T C) (0	ustody		seals Tem		6.5 () F	*
Shipped Via		Fed X Golden State		SAN	Client	[] Other).					Page	I_ of_				T
]



04 December 2017 Clinical Lab No.: 17K1525

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

Project Name: Standard Analysis

Sub Project: CWPF 3rd Week of Nov, 2017 Compliance Sampling

Enclosed are the results of the analyses for samples received at the laboratory on 11/15/17 . Samples were received within temperature range, in correct containers and preservation.

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

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

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

Sincerely,

Stu Styles

Client Services Manager

tistes



Lomita, City ofProjectStandard AnalysisWork Order:17K152524373 Walnut AvenueSub Project:CWPF 3rd Week of Nov, 2017 Compliance Sampling Received:11/15/17 15:30Lomita CA, 91717Project Manager:Mark AndersenReported:12/04/17

Reservoir Influent Site #3		17K1525-	01 (Water)		Sample Da	te: 11/15/1′	7 9:28 Sa	mpler: P	atrick McCue
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	5.64		N/A	mg/L	11/15/17	11/15/17	1746145	
pH (Field)	Field	7.71		N/A	pH Units	11/15/17	11/15/17	1746145	
Temperature (Field)	Field	22.8		N/A	°C	11/15/17	11/15/17	1746145	
General Physical Analyses									
Apparent Color	SM 2120BM	5.0	3.0	15	Color Units	11/15/17	11/15/17	1746138	
<u>Metals</u>									
Iron (Fe)	EPA 200.7	ND	100	300	ug/L	11/28/17	11/28/17	1748025	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	11/28/17	11/28/17	1748025	
Reservoir Effluent Site #5		17K1525-	02 (Water)		Sample Da	te: 11/15/17	7 9:25 Sa	mpler: P	atrick McCue
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	3.38		N/A	mg/L	11/15/17	11/15/17	1746145	
pH (Field)	Field	7.75		N/A	pH Units	11/15/17	11/15/17	1746145	
Temperature (Field)	Field	20.8		N/A	°C	11/15/17	11/15/17	1746145	
General Physical Analyses									
Apparent Color	SM 2120BM	5.0	3.0	15	Color Units	11/15/17	11/15/17	1746138	
Odor Threshold	EPA 140.1-M	4	1	3	TON	11/15/17	11/15/17	1746138	
General Chemical Analyses									
Total Filterable Residue/TDS	SM 2540C	560	5.0	1000	mg/L	11/22/17	11/27/17	1747074	
ND Analyte NOT DETECTED at o	r above the reporting limit								



November 22, 2017



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: 17K1525

Lab Number:

I111701-01

Enclosed are results for sample(s) received 11/17/17 by Air Technology Laboratories. Samples were received intact and properly chilled. Analyses were performed according to specifications on the chain of custody provided with the sample(s).

Report Narrative:

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

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

Sincerely,

Mark Johnson

Operations Manager

MJohnson@AirTechLabs.com

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

SUBCONTRACT ORDER

Clinical Laboratory of San Bernardino 17K1525

I11701-01

SENDING LABORATO	RY:	RECEIVING LABOR	RATORY:
Clinical Laboratory of S	San Bernardino	Air Technology Lab	S
21881 Barton Road		18501 East Gale Ave	
Grand Terrace, CA 923	13	City of Industry, CA	
Phone: 909.825.7693		Phone :(626) 964-40	
Fax: 909.825.7696	8	Fax:	
Project Manager: Stu S	Styles	rax.	
Troject Wanager. Start			
	Project Manager: Stu Styles b.com [] ybarra@clinical-lab.	com [A styles@clinical-lah (com [] nelson@clinical-lab.com
California EDT Water Trax Uplo	transfer those samples with PS co oad Client:	odes provided [] Yes []) [] Yes []] N	vo No
Turn Around Time	[] 10 Days [\sqrt{5 Days} []		
Subcontract Comments:		Other Days	
		. Carona el al Salari	
Analysis		w Supplied Table 10 to 1	Comments
Sample ID: Reservoir E	ffluent Site #5 / 17K1525-02	Sampled: 11/15/17 09:25 PS	Code:
\$		Water	WTX ID:
Methane RSK175		x =	Report in mg/L
Containers Supplied:			, 5 ₃ - 5, 6
10ml Amber Vial (B)	40ml Amber	Vial (C)	
Ya. 1 2 2 3 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5			
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			લ કેંગ્ર પ્ર
		5 106 G. R. O. S	
			3
	e Bassa	V	1
13, Dla	11/16/17 15:00	m clal	11/2/2 8/32
Released By	1//16/17 /S:00 Date / Time	Received By	Date/Time
100 00 V	,		11/17/17 1971
M Clay	11/17/17 9:26		- 111111
Released By	Date / Time	Received By	Date / Time

Client:

Clinical Laboratory

Attn:

Stu Styles

Project Name:

NA

Project No.:

17K1525

Date Received:

11/17/17

Matrix:

Water

Reporting Units: mg/L

RSK175			

Lab No.:	I11170					
	Reservoir	Effluent				
Client Sample I.D.:	Site #5/17	K1525-				
	02					
Date/Time Sampled:	11/15/17 9:25			9		
Date/Time Analyzed:	11/20/17 9:24					
QC Batch No.:	171120GC8A1					
Analyst Initials:	AS	8				
Dilution Factor:	1.0)				
	Result	RL				
ANALYTE	mg/L	mg/L				
Methane	0.42	0.0010				
	1		· ·		5.	

NID.	- Not	Detected	(halow	DII
IND.	- MUL	Detecteu	(DCIOW	

RL = Reporting Limit

Reviewed/Approved By:

Mark Johnson

Operations Manager

Date 11-22-17

The cover letter is an integral part of this analytical report

QC Batch No.:

171120GC8A1

Matrix:

Water

Units:

mg/L

QC for Dissolved Gases by EPA Procedure RSKSOP-175

Lab	No.:	Metho	Method Blank		LCS	L	CSD		
Date/Time An	alyzed:	11/20/17 9:11		11/20	/17 8:42	11/20/17 8:55			
Analyst Init	tials:	A	AS		AS		AS		
Data	Datafile:		20nov003		nov001	20nov002			
Dilution Fa	ctor:	1	1.0		1.0		1.0		
ANALYTE	ANALYTE PQL		Results	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Methane	0.0010	0.0010	ND	106	70-130%	105	70-130%	0.6	<30

PQL = Practical Quantitation Limit

ND = Not Detected (Below RL).

RL = PQL X Dilution Factor

Reviewed/Approved By:

Mark J. Johnson

Operations Manager

Date: _ 11-22-17

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

 \mathcal{O} | 3 Chain of Custody

													14Ki675
Client	City of Lomita	Sys	System Nun	Number			'	Analys	Analysis Requested	heste	p		
Address	24373 Walnut Avenue			1910073	2700								
	Lomita, CA 91717												
Phone #	(310) 325-9830		De	stination	Destination Laboratory	,		T					
Fax #	(310) 325-3627		X]	Clinical	[X] Clinical Laboratory	,							
Project	Standard Analysis		R	NQCB C	RWQCB Compliance				C			О	
	CWPF 3rd week of November, 2017			X	yes				oloi			dor	
Sub Project	Compliance Sampling			EL/	ELAP#			d So ganes	r		/HP	•	
Comments	For TC/EC/BACT see weekly Distro CoC			7	4088					CaC SK1			
Sampled by	Patrick McCue			2	2								
Date Time	Sample Idenitification	Matrix	Type	Preserv	Hd	Temp.	Total Chlorine						Comments / P.S. Codes
95/0 11/15/2011	Reservoir Influent Site #3	DW .	WI	N/A	7.71	72.8"	۲9°,	×	×				
17/15/2017 09/2/	11/15/2017 0926 Reservoir Effluent Site #5	DW	1W	N/A	7.75	208	3.38	X	X			X	
5260 11/18/2011	(分2分 Reservoir Effluent Site #5	DW	1W	2						×			
											+		
			-					╁	1	+	-		
								╁		t	+		
	£ ,							+	-	+	-		
								+	1	\dagger	+		
								+	1	+	4		
								+	1	+	4		
								+	1	k,	+		
		Matrix	Acir O WIO	14/040	Marin: DIM Deinking Mater 1994 Mater SW Storm Water GM, Ground Water A-Air	- 10/2/N 04	CIA/ Ctorm	- W	V		//stor		Tune 1-Bourine 3-
Preservatives: (1) Na (5) H2SO4 (6) N	Preservatives: (1) Na ₂ S ₂ O ₃ (2) HCl (3) HNO3 (4) NH4Cl (5) H2SO4 (6) Na2SO3 (7) Cold (8) Other:	Matrix	-W-	ng water	, www.	Rep	ter, SVF-Storm Water, GVF- Ground Water, A-All Repeat, 3-Replacement, 4-Special W-Well D- Dist.	rrater, Iaceme	nt, 4-S	ecial 1	N-Well	D-Dist.	
Relinquished By (Sign)	By (Sign) Print Name / Company			-	Date / Time	ne	1	7					Print Name Company
Patrick McCue	City of Lômita	-	11/15/2017	1	15			+	7	Į́	[3]		7. W. W. / CLSB
1 ctrace D.M.	SIJ WOMIL POR	X	1-12-1	5/1	50			K			K	K	ol. H. COSK
Comments:)		Sam	Samples received:	ived:	On ice		Total I	2^{2}	Cust	Custody seals	als Temp 99 () F (XC
Shipped Fin	Fed X Golden State	I I UPS	Client	Other	ther					Page_1_of	_fo_l		
-													



07 December 2017 Clinical Lab No.: 17K2000

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

Project Name: Standard Analysis

Sub Project: CWPF 4th Week of Nov, 2017 Compliance Sampling

Enclosed are the results of the analyses for samples received at the laboratory on 11/22/17 . Samples were received within temperature range, in correct containers and preservation.

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

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

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

Sincerely,

Stu Styles

Client Services Manager

tistes



Lomita, City ofProjectStandard AnalysisWork Order:17K200024373 Walnut AvenueSub Project:CWPF 4th Week of Nov, 2017 Compliance Sampling Received:11/22/17 15:30Lomita CA, 91717Project Manager:Mark AndersenReported:12/07/17

Reservoir Influent Site #3		17K2000-	01 (Water)		Sample Da	te: 11/22/17	7 7:35 Sa	mpler: P	atrick McCue
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	6.06		N/A	mg/L	11/22/17	11/22/17	1748033	
pH (Field)	Field	7.57		N/A	pH Units	11/22/17	11/22/17	1748033	
Temperature (Field)	Field	22.2		N/A	°C	11/22/17	11/22/17	1748033	
General Physical Analyses									
Apparent Color	SM 2120BM	5.0	3.0	15	Color Units	11/22/17	11/22/17	1747112	
<u>Metals</u>									
Iron (Fe)	EPA 200.7	ND	100	300	ug/L	11/29/17	11/30/17	1748084	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	11/29/17	11/30/17	1748084	
Reservoir Effluent Site #5		17K2000-	02 (Water)		Sample Da	te: 11/22/17	7 7:40 Sa	mpler: P	atrick McCue
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	3.791		N/A	mg/L	11/22/17	11/22/17	1748033	
pH (Field)	Field	7.89		N/A	pH Units	11/22/17	11/22/17	1748033	
Temperature (Field)	Field	20.6		N/A	°C	11/22/17	11/22/17	1748033	
General Physical Analyses									
Apparent Color	SM 2120BM	ND	3.0	15	Color Units	11/22/17	11/22/17	1747112	
Odor Threshold	EPA 140.1-M	2	1	3	TON	11/22/17	11/22/17	1747112	
General Chemical Analyses									
Total Filterable Residue/TDS	SM 2540C	540	5.0	1000	mg/L	11/28/17	11/29/17	1748052	
ND Analyte NOT DETECTED at or above the reporting limit									



December 4, 2017



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: 17K2000

Lab Number:

I112701-01

Enclosed are results for sample(s) received 11/27/17 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 17K2000



SENDING LABORATORY:	RECEIVING LABORATORY:
Clinical Laboratory of San Bo 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 Projec	Manager: Stu Styles [] ybarra@clinical-lab.com [√] styles@clinical-lab.com [] nelson@clinical-lab.com
	r those samples with PS codes provided [] Yes [V] No
	Days [v] 5 Days [] Other _ Days
	5 = n 4 = 4 =
Analysis	Comments
Sample ID: Reservoir Effluen	Site #5 / 17K2000-02 Sampled: 11/22/17 07:40 PS Code: Water WTX ID:
Methane RSK175	Report in mg/L
Containers Supplied:	
Oml Amber Vial (B)	40ml Amber Vial (C)
	District the second sec
H.	
	22 32 E 32 E 32 E E E E E
,	
	700
Bo Sh	11/27/17 07:50
Released By	Date / Time Date / Time
111/11/	11/21/17 10:28 Goan Dela \$ 11/27/17 1028
Released By	Date / Time Received By Date / Time

Client:

Clinical Laboratory

Attn:

Stu Styles

Project Name:

NA

Project No.:

17K2000

Date Received:

11/27/17

Matrix:

Water

Reporting Units: mg/L

RSK175

L					
Lab No.:	I11270	1-01			
	Reservoir				
Client Sample I.D.:	Site #5/17				
	02				
Date/Time Sampled:	11/22/17	7 7:40			
Date/Time Analyzed:	11/28/17 8:15				
QC Batch No.:	171127G	C8A1			
Analyst Initials:	AS	3			
Dilution Factor:	1.0)			
	Result	RL			
ANALYTE	mg/L	mg/L		_	
Methane	0.46	0.0010			

ND	= Not	Detected (helow	RLA
עוו	- 1101	Dettetta	DCION	ILL

RL = Reporting Limit

Reviewed/Approved By:	MMcM.
	Mark Johnson
	Operations Manager

Date 12/4/17

The cover letter is an integral part of this analytical report

QC Batch No.:

171127GC8A1

Matrix:

Water

Units:

mg/L

QC for Dissolved Gases by EPA Procedure RSKSOP-175

L	ab No.:	Metho	d Blank	l	LCS	L	CSD		
Date/Time	Analyzed:	11/27/	17 11:42	11/27	/17 11:55	11/27/	/17 12:08		
Analyst	Analyst Initials:		AS		AS		AS		
D	atafile:	27n	10v001	271	nov002	271	10v003		
Dilution	Factor:		1.0		1.0		1.0		
ANALYTE	PQL	RL	Results	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Methane	0.0010	0.0010	ND	111	70-130%	109	70-130%	2.3	<30

PQL = Practical Quantitation Limit

ND = Not Detected (Below RL).

RL = PQL X Dilution Factor

Reviewed/Approved By:	MAN.	1	Date:	12/4/17	
=	Mark J. Johnson	/			
	Operations Manager				

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

行体ラロDD Chain of Custody

Client		City of Lomita	.,	System N	Number				Analysis		Requested	ted			
Address		24373 Walnut Avenue			101	1040073									
		Lomita, CA 91717			<u> </u>	00/00/					М	To			
Phone #		(310) 325-9830			Destinatic	Destination Laboratory	tory			 1	etha				
Fax#		(310) 325-3627			[X] Clinic	[X] Clinical Laboratory	ory				ane		D A		
Project		Standard Analysis			RWQCB	RWQCB Compliance									
Sub Broice	_	CWPF 4th week of November, 2017				yes			lang	olor			dor TC		
ann Liolec		Compliance Sampling			Ī	ELAP#									
Comments		For TC/EC/BACT see weekly Distro CoC			*	4000				lids	RSK				
Sampled by	-	Patrick McCue			_	000					175)	(O3)			
Date	Time	Sample Idenitification	Matrix	Type	Preserv	Hd	Temp.	Total Chlorine						Comments / P.S. Codes	P.S. Codes
11/22/2017	0735	11/22/2017 0735 Reservoir Influent Site #3	DW	1W	N/A	7.57	222	30°9	×	×			_		
11/22/2017	0740	○74 ○ Reservoir Effluent Site #5	DW	NI N	Α/N	63.6	20.6°	3.79;		X			×		
11/22/2017	0740	11/22/2017 〇 74〇 Reservoir Effluent Site #5	ΝG	NI N	7						×				
												_			
													-		
		f ,													
													_		
											ł,				
Preservatives	: (1) Na,	Preservatives: (1) Na ₂ S ₂ O ₃ (2) HCI (3) HNO3 (4) NH4CI	Mat	rix: DW-Dr	inking Wa	ter, WW-N	Vaste Wate	Matrix: DW-Drinking Water, WW-Waste Water, SW-Storm Water, GW- Ground Water, A-Air	n Wate	r, GW-	Groun	J Wate	r, A-Aii		Type- 1-Routine, 2-
(5) H2SC	34 (6) N _k	(5) H2SO4 (6) Na2SO3 (7) Cold (8) Other:	_				Ř.	Repeat, 3-Replacement, 4-Special W-Well D-Dist.	placen	ent, 4-	Specia	M-W	7-0 II	Dist.	
Reling	uished	Relinquished By (Sign) Print Name / Company	ų			Date / Time	Time		/		4			Print Name / Company	Company
Patrick McCue	و ا	City of Lonlita		11/22/2	2017 / /	12.3	0	4	1	X	MA	4	١	J. W. CM	CL 38
Lather	V. P.	MC. T. MC011010	<u>5</u> 15	11:22	1111:	2.50	0			KOV			الح تالك	Nodex JAY	CLSR
Confirments	美) m	,	•		Samples received:	ceived:			The state of the s		. Cu	stody	Custody seals Temp 7.5	$(\mathbf{F} \mathbf{X}^{c})$
	7	1 Fod X Golden State	20/1	1011	<u> </u>	Other)				Page	Page 1 of 1	1		
Suppea via			1								38,1	-1-9	,		

Clinical Laboratory of San Bernardino, Inc.



07 December 2017 Clinical Lab No.: 17K2374

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

Project Name: Standard Analysis

Sub Project: CWPF 5th Week of Nov, 2017 Compliance Sampling

Enclosed are the results of the analyses for samples received at the laboratory on 11/29/17 . Samples were received within temperature range, in correct containers and preservation.

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

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

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

Sincerely,

Stu Styles

Client Services Manager

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Clinical Laboratory of San Bernardino, Inc.



Lomita, City ofProjectStandard AnalysisWork Order:17K237424373 Walnut AvenueSub Project:CWPF 5th Week of Nov, 2017 Compliance Sampling Received:11/29/17 15:00Lomita CA, 91717Project Manager:Mark AndersenReported:12/07/17

Reservoir Influent Site #3		17K2374-	01 (Water)		Sample Da	te: 11/29/17	9:45 Sa	mpler: I	Patrick McCue
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	5.325		N/A	mg/L	11/29/17	11/29/17	1748090	
pH (Field)	Field	7.53		N/A	pH Units	11/29/17	11/29/17	1748090	
Temperature (Field)	Field	21.3		N/A	°C	11/29/17	11/29/17	1748090	
General Physical Analyses									
Apparent Color	SM 2120BM	5.0	3.0	15	Color Units	11/29/17	11/29/17	1748122	
Metals _									
Iron (Fe)	EPA 200.7	ND	100	300	ug/L	12/01/17	12/01/17	1748140	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	12/01/17	12/01/17	1748140	
Reservoir Effluent Site #5		17K2374-	02 (Water)		Sample Da	te: 11/29/17	9:48 Sa	mpler: I	Patrick McCue
Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
Field Analyses									
Cl Res Total (Field)	Field	3.72		N/A	mg/L	11/29/17	11/29/17	1748090	
pH (Field)	Field	7.89		N/A	pH Units	11/29/17	11/29/17	1748090	
Temperature (Field)	Field	21		N/A	°C	11/29/17	11/29/17	1748090	
General Physical Analyses									
Apparent Color	SM 2120BM	ND	3.0	15	Color Units	11/29/17	11/29/17	1748122	
Odor Threshold	EPA 140.1-M	3	1	3	TON	11/29/17	11/29/17	1748122	
General Chemical Analyses									
Total Filterable Residue/TDS	SM 2540C	510	5.0	1000	mg/L	12/01/17	12/04/17	1748161	
ND Analyte NOT DETECTED at o	r above the reporting limit								



December 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: 17K2374

Lab Number:

I113003-01

Enclosed are results for sample(s) received 11/30/17 by Air Technology Laboratories. Samples were received intact and properly chilled. Analyses were performed according to specifications on the chain of custody provided with the sample(s).

Report Narrative:

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

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

Sincerely,

Mark Johnson

Operations Manager

MJohnson@AirTechLabs.com

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

SUBCONTRACT ORDER

Clinical Laboratory of San Bernardino 17K2374

I113003-01

SENDING LABORATORY:	RECEIVING LABORATORY:
Clinical Laboratory of San Bernardino 21881 Barton Road Grand Terrace, CA 92313 Phone: 909.825.7693 Fax: 909.825.7696 Project Manager: Stu Styles	Air Technology Labs 18501 East Gale Avenue Suite 130 City of Industry, CA 91748 Phone :(626) 964-4032 Fax:
Please email results to Project Manager: Stu S [] glaubig@clinical-lab.com [] ybarra@c	
California EDT transfer those samples Water Trax Upload Client:	
	Days [] Other Days
Analysis	Comments
Sample ID: Reservoir Effluent Site #5 / 17K237	74-02 Sampled: 11/29/17 09:48 PS Code: Water WTX ID:
Methane RSK175	Report in mg/L
Containers Supplied:	Oml Amber Vial (C)
n en la companya de la companya de La companya de la co	
	and the second s
*	
	60
Released By Date	/17 8:15 11/30/12 856 /Time Received By Date/Time/
la 11/3/	Time Received By Date / Time Received By Date / Time
	1131

Client:

Clinical Laboratory

Attn:

Stu Styles

Project Name:

NA

Project No.:

17K2374

Date Received:

11/30/17

Matrix:

Water

Reporting Units: mg/L

RSK175

Lab No.:	I11300	03-01			Si 80	
	Reservoir					
Client Sample I.D.:	Site #5/17					
	02					
Date/Time Sampled:	11/29/1	7 9:48				
Date/Time Analyzed:	12/7/17 10:28					
QC Batch No.:	171207GC8A1		8			
Analyst Initials:	AS	3				
Dilution Factor:	1.0)				
	Result	RL				
ANALYTE	mg/L	mg/L				
Methane	0.24	0.0010				
	<u> </u>					3

ND =	Not	Detected	(below	RL))

RL = Reporting Limit

Reviewed/Approved By:

Operations Manager

The cover letter is an integral part of this analytical report

QC Batch No.:

171207GC8A1

Matrix:

Water

Units:

mg/L

QC for Dissolved Gases by EPA Procedure RSKSOP-175

Lab	No.:	Metho	d Blank	I	LCS	L	CSD		
Date/Time Ar	alyzed:	12/7/	17 9:46	12/7/	17 13:31	12/7/	17 13:46		
Analyst Ini	tials:	als: AS			AS		AS		
Data	file:	07d	ec004	070	dec018	070	dec019		
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	97	70-130%	91	70-130%	5.8	<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.

8 3

S Chain of Custody

Client	City of Lomita	Ś	System Number	ımber				Anal	Analysis I	Sedu	Requested			
Address	24373 Walnut Avenue			101	4040072				-	<u> </u>				
	Lomita, CA 91717			131	0013					M	To			
Phone #	(310) 325-9830		7	estinatio	Destination Laboratory	ory				eth	otal			
Fax #	(310) 325-3627			X] Clinica	[X] Clinical Laboratory	ory		Iro	Total	ane	Ha	BA		
Project	Standard Analysis			RWQCB (RWQCB Compliance	g,		n / N			rdn	CT		
Sub Broject	CWPF 5th week of November, 2017				,es			lang	solve	ater oloi	ess	тс	dor	
ans Light	Compliance Sampling			ᆸ	ELAP#			anes			(as	/H P	•	
Comments	For TC/EC/BACT see weekly Distro CoC			7.6	000			se	lids	RSK	CaC	·C		
Sampled by	Patrick McCue			=	000					175)	C O3)			
Date Time	ne Sample Idenitification	Matrix	Type	Preserv	Hd	Temp.	Total Chlorine						Comments / P.S.	.S. Codes
11/29/2017 (3945	Seservoir Influent Site #3	DW	1W	A/N	7.53	25.3	6.36	×		×				
										_				
11/29/2017 CG	C分化 Reservoir Effluent Site #5	DW	1W	A/A	1.89	्र	3,72		×	X			X	
1/29/2017	O9나오J Reservoir Effluent Site #5	DW	MΙ	7		21.00				×				
										-				
	ί,													
									\dashv	-				
		Motor	, W.O.	line Mak	14/14/14/		014/ 040							
Freservatives: (1) (5) H2SO4 (6)	Preservatives: (1) Na ₂ S ₂ O ₃ (2) HCI (3) HNO3 (4) NH4CI (5) H2SO4 (6) Na ₂ SO3 (7) Cold (8) Other:		X. DW-DIII	INIII WAL	or, vvv-vv	asie waler Re	matrix: DVV-Dillikirig Water, VVV-Vaste Water, SVV-Storiff Water, GVV-Ground Water, A-Ali Repeąt, 3-Replacement, 4-Special W-Well D- Dist.	п ууац рІасеп	ir, GW nent, 4	- Spec	no wa ial W-	ver, A. Well I	Air - Dist.	ı ype- 1-koutine, 2-
Relinquish	Relinquished By (Sign) Print Name / Company	, v			Date / 1	June /				,		١,	Print Name / Company	Company
Patrick McCue			11/29/2017	17 /1	00:2	1	N N	1	þ	Z	3	9	CCC	
Randi	MAKE J. WYPELC	UR	11.29.	11/1	300	1			100	Neth	6	3	als JA CUS	B
Commens				San	Samples received:\	eived:	On ice	0	∬nts	Intact (usto	Custody seals Temp 5.6	()F (
Shipped Via	Fed X Golden State	I I UPS	Client		Other					Pa	Page_I_	of 1		•

APPENDIX B

METHANE MONITORING LOG



CITY OF LOMITA PUBLIC WORKS DEPARTMENT

CYPRESS WATER PRODUCTION FACILITY HANDHELD METHANE LOG READINGS

		NOVEMBI	R 2017	
DATE	DAY	METHANI	E HANDHELD	COMMENTS
11/1/2017	Wed	CH4- 0%	Oxy- 19.5%	
11/2/2017	Thu	CH4- 0%	Oxy- 19.7%	
11/3/2017	Fri	CH4- 0%	Oxy- 20.3%	
11/4/2017	Sat	CH4- 0%	Oxy- 19.5%	
11/5/2017	Sun	CH4- 0%	Oxy- 19.7%	
11/6/2017	Mon	CH4- 0%	Oxy- 19.5%	
11/7/2017	Tue	CH4- 0%	Oxy- 19.5%	
11/8/2017	Wed	CH4- 0%	Oxy- 19.7%	
11/9/2017	Thu	CH4- 0%	Oxy- 20.3%	
11/10/2017	Fri	CH4- 0%	Oxy- 20.5%	
11/11/2017	Sat	CH4- 0%	Oxy- 19.7%	
11/12/2017	Sun	CH4- 0%	Oxy- 19.5%	
11/13/2017	Mon	CH4- 0%	Oxy- 19.5%	
11/14/2017	Tue	CH4- 0%	Oxy- 19.7%	
11/15/2017	Wed	CH4- 0%	Oxy- 19.7%	
11/16/2017	Thu	CH4- 0%	Oxy- 19.7%	
11/17/2017	Fri	CH4- 0%	Oxy- 19.5%	
11/18/2017	Sat	CH4- 0%	Oxy- 19.5%	
11/19/2017	Sun	CH4- 0%	Oxy- 19.3%	
11/20/2017	Mon	CH4- 0%	Oxy- 19.7%	
11/21/2017	Tue	CH4- 0%	Oxy- 19.5%	*
11/22/2017	Wed	CH4- 0%	Oxy- 19.5%	
11/23/2017	Thu			Thanksgiving Holiday
11/24/2017	Fri	CH4- 0%	Oxy- 19.3%	
11/25/2017	Sat	CH4- 0%	Oxy- 19.5%	
11/26/2017	Sun	CH4- 0%	Oxy- 19.3%	
11/27/2017	Mon	CH4- 0%	Oxy- 19.7%	
11/28/2017	Tue	CH4- 0%	Oxy- 19.7%	
11/29/2017	Wed	CH4- 0%	Oxy- 19.7%	
11/30/2017	Thu	CH4- 0%	Oxy- 19.7%	

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: **November 2017**

# Code	Sample ID	Location	Sample Date	Тетр	рН	Total Chlorine	Free Chlorine	Total Ammonia	Free Ammonia	Nitrite ³	Nitrate	Coliform ²	HPC	Zone	Comments
Units/0	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	11/1/2017	20.8	7.90	3.00	0.08	0.56	0.12	0.006	0.42	Α	ND	1	Well/MWD Blend
2 D	\$13-004	24632 S Moon Ave	11/1/2017	20.6	7.81	2.00	0.05	0.38	0.16	0.078	0.52	Α	2	1	Well/MWD Blend
3 D	\$13-008	25417 Pennsylvania Ave	11/1/2017	20.9	7.85	3.40	0.05	○ - 0.66 🦠	-0.10	0.012	0.43	Α	ND	1	Well/MWD Blend
4 D	Α	2052 Dawn St	11/1/2017	20.4	8.26	1.70	0.13	0.38	0.10	0.011	ND	Α	ND	1	Well/MWD Blend
5 D		Reservoir SP5	11/1/2017	21.0	7.95	3.71	0.08	0.76	0.00	0.003	ND .	Α	ND	1	Well/MWD Blend
6 D	S13-001	1912 W 259th St	11/1/2017	20.1	8.36	2.60	80.0	0.47	0.02	0.010	0.56	Α	ND	2	MWD Only
7 D	S13-002	26314 S Monte Vista Ave	11/1/2017	19.9	8.35	2.60	0.05	0.49	0.07	0:007	0.54	Α	ND	3	MWD Only
8 D	S13-005	2500 PCH	11/1/2017	19.9	8.30	2.50	0.06	0.50	0.04	0.009	0.55	Α	ND	2	MWD Only
								I	daining or or second	**************************************			ı		
1 D	S13-003	1948 W 252nd St	11/8/2017	19.5	7.85	2.90	0.08	0.62	0.01	0.010	NĐ	Α	ND	1_	Well/MWD Blend
2 D	S13-004	24632 S Moon Ave	11/8/2017	19.1	7.76	1.73	0.11	0.44		0.083	ND	Α	NĐ	1_	Well/MWD Blend
3 D	S13-008	25417 Pennsylvania Ave	11/8/2017	21.7	7.83	3.30	0.17	7. 0.70 de	0.00	0.009	ND	Α	NĐ	1	Well/MWD Blend
4 D	Α	2052 Dawn St	11/8/2017	19.9	8.41	1.83	0.05	0.49	0.00	0.017	0.45	Α	NĐ	1	Well/MWD Blend
5 D		Reservoir SP5	11/8/2017	20.9	7.83	3.46	0.05	0.80	0.00	0.007	ND	A	ND	1	Well/MWD Blend
6 D	S13-001	1912 W 259th St	11/8/2017	20.2	8.56	2.60	0.07	0.49	0.00	0.007	0.44	Α	ND_	2	MWD Only
7 D	S13-002	26314 S Monte Vista Ave	11/8/2017	21.2	8.53	.2.40	0.12	0.49	0.02	0.013	0.45	Α	ND	3	MWD Only
8 D	S13-005	2500 PCH	11/8/2017	20.8	8.48	2.50	0.09	0.47	0.04	0.014	0.42	Α	ND	2	MWD Only
								1		War and a second					
1 D	S13-003	1948 W 252nd St	11/15/2017	19.0	7.90	2.80	0.10	0.57	0.00	0.007	ND	A	ND		Well/MWD Blend
2 D	S13-004	24632 S Moon Ave	11/15/2017	20.9	7.73	1.55	0.06	0.35	0.06	*>0.151	ND	Α	ND	1	Well/MWD Blend
3 D	S13-008	25417 Pennsylvania Ave	11/15/2017	21.7	7.79	3.00	0.18	∴0.58	0.01	0.019	ND	Α	ND	1	Well/MWD Blend
4 D	A	2052 Dawn St	11/15/2017	19.5	8.51	2.14	0.08	0.49	0.04	. 0.023∵	0.44	Α	11	1	Well/MWD Blend
5 D		Reservoîr SP5	11/15/2017	20.8	7.75	3.38	0.06	0.70	0.00	0.005	ND	A	ND	1	Well/MWD Blend
6 D	S13-001	1912 W 259th St	11/15/2017	10.5	8.88	2.50	80.0	0.50	0:02	0.009	0.43	Α	ND	2	MWD Only
7 D	S13-002	26314 S Monte Vista Ave	11/15/2017	16.5	8.68	2.50	0.07	0.56	0:01	0.014	0.42	Α	ND _	3	MWD Only
8 D	S13-005	2500 PCH	11/15/2017	21.1	8.61	2.50	0.05	0.53	0.02	0.010	0.41	Α	1	2	MWD Only
								Lange to the second							
1 D	S13-003	1948 W 252nd St	11/22/2017	19	7.47	2.9	0.06	0.57	. ≗0.04	0.006	ND	A	ND	_ 1	Well/MWD Blend
2 D	S13-004	24632 S Moon Ave	11/22/2017	19.7	7.74	1.55	0.15	0.30	0.08	D.164	ND	Α	NĐ NĐ	1	Well/MWD Blend
3 D	S13-008	25417 Pennsylvania Ave	11/22/2017	19.9	7.87	3.00	0.10	€0.51 -⊱	0.00	0.020	ND_	Α	ND	1	Well/MWD Blend
4 D	Α	2052 Dawn St	11/22/2017	18.4	8.64	2.01	0.10	.0.39		0.038	0.41	Α	4	1	Well/MWD Blend
5 D		Reservoir SP5	11/22/2017	20.6	7.89	3.79	0.08	0.68	0.00	0.008	ND	Α	ND _	1	Well/MWD Blend
6 D	S13-001	1912 W 259th St	11/22/2017	21.3	8.77	2.50	0.15	0.48	0.06	0.010	ND	A	ND	2	MWD Only
7 D	S13-002	26314 S Monte Vista Ave	11/22/2017	20.0	8.76	2.40	0.11	0.46	0.07	≥ 0.016	ND	Α	ND	3	MWD Only
8 D	S13-005	2500 PCH	11/22/2017	19.5	8.68	2.70	0.06	0.50	0:02	0.013	ND	Α	ND	2	MWD Only
							,		Name of the State	I know was server a reserve					
1 D	S13-003	1948 W 252nd St	11/29/2017	17.9	8.01	3.60	0.18	1.10	. 0.17	0.007	ND	Α	ND	1	Well/MWD Blend
2 D	\$13-004	24632 S Moon Ave	11/29/2017	18.1	7.80	1.71	0.06	0.47	0.55	0.252	0.41	A	3	1	Well/MWD Blend
3 D	S13-008	25417 Pennsylvania Ave	11/29/2017	18.4	7.93	3.60	0.10	1.10	0.07	0.027	ND	A	ND	1	Well/MWD Blend
4 D	Α	2052 Dawn St	11/29/2017	15.9	8.72	1.93	0.09	0.45	0.00	0.022	0.40	Α	2	1	Well/MWD Blend
5 D_		Reservoir	11/29/2017	21.0	7.89	3.72	0.05	1.04	-0.10	.// 0,005	ND ND	A	1	1	Well/MWD Blend
6 D	S13-001	1912 W 259th St	11/29/2017	19.1	8.96	2.40	0.06	0:50	0.01	0.010	ND	A	1	2	MWD Only
7 D	S13-002	26314 S Monte Vista Ave	11/29/2017	19.7	8.94	2.40	0.04	0.49	0.00	0.007	ND	Α	, ND	3	MWD Only
8 D	\$13-005	2500 PCH	11/29/2017	18.4	8.78	2.30	0.13	0.51	.∵∵0.00	0.013	ND	Α	ND ND	2	MWD Only

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. Due to elevated reads additional hydrant flushing has been implemented.