

CITY OF LOMITA



# Cypress Water Production Facility Monthly Status Report

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September 2015

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**CITY COUNCIL**

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



**CITY OF LOMITA**

**ADMINISTRATION**

STEPHEN BURRELL  
INTERIM CITY MANAGER

October 8, 2015

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 September 1 through September 30, 2015.

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 September 2015.

If you should have any questions or concerns, please contact me at 310-325-7110 x124.

Sincerely,

For,   
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 AND OPERATIONS**

For the month of September 2015, the CWPF operated on a fill and draw cycle providing blended water with the reservoir level fluctuating with system demand. The Cypress Reservoir filled and drew for approximately 21 days and 9 days, respectively. The Cypress Reservoir effluent valve was closed the last two days of September 2015 in preparation for free chlorination of Zone I. The total production from Well No. 5 for the month was approximately 46.14 ac-ft (15,034,822 gallons) with a daily production of approximately 2.20 ac-ft. The total combined production from both MWD import water and Well No. 5 was approximately 110.17 ac-ft (35,896,810 gallons) for the month with a combined daily production of approximately 5.25 ac-ft.

The daily average flow from Well No. 5 was 417 gpm. The average flow from the Well was determined by taking an average of the daily reads provided on the Daily Monitoring logs used onsite. The blend ratio for this month was on average 42% Well water and 58% MWD water.

## **C. OPERATIONAL INTERRUPTIONS**

The Cypress Reservoir was isolated on September 29, 2015 and September 30, 2015 in preparation for free chlorination of Zone I. MWD served Zone I during the two days. Routine and preventive maintenance was performed on various pieces of equipment as-needed.

## **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 1 below for a summary of the results for the compliance monitoring at the three sample locations SP1 through SP3. Color in the raw water (SP1) for the month was below the Maximum Contaminant Level (MCL). Iron concentration in the raw water (SP1) was above the MCL. Manganese concentration in the raw water (SP1) was also above the MCL. Iron and Manganese levels entering the reservoir (SP3) were non-detect, indicating the greensand filtration system remains highly effective. Other additional bacteriological laboratory samples collected included Total Coliform and Heterotrophic Plate Count (HPC) levels on the effluent side of the greensand filter (SP2) showing absent for both.

### **E2. FREE AND TOTAL CHLORINE RESIDUALS**

Daily free chlorine residuals were monitored at SP2, SP3 and SP4. Daily total chlorine residuals were monitored at SP3 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 2 below for a weekly summary of results. **The CWPf was isolated on September 29, 2015 and September 30, 2015 in preparation for free chlorination of Zone I. MWD supplied Zone I during this short timeframe.**

### **E3. TOTAL DISSOLVED SOLIDS (TDS), ODOR, HARDNESS AND METHANE**

See Table 3 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 694 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 690 mg/L and 680 mg/L, respectively.

#### **E3-2 HARDNESS**

The sampling results for the month of September indicate the hardness levels of the blended water to be 310 mg/L. Although, this hardness level is in the upper

range of the City's Water Quality Objective/Goal of 180 to 250 mg/L; staff continues to monitor hardness levels at the CWPF effluent (SP5) and within the water distribution system. The City has maintained a consistent blend ratio to ensure acceptable hardness levels are met.

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

### **E3-3 DISSOLVED METHANE (IN WATER)**

The methane levels in the CWPF effluent after aeration treatment remain negligible averaging 0.57 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 2015 in Appendix B.

## **E4. NITRIFICATION MONITORING**

See attached Nitrification Monitoring Data Summary Report for the month of September 2015 in Appendix C. Daily Nitrification was submitted separately starting September 21, 2015.



## F. TABLES

Table 1. Monitoring Results for SP1, SP2, and SP3 Sample Locations.

Date, week of	SP1, Well Raw Water Discharge							SP2, Combined Pressure Filter Effluent			SP3, After chloramination static mixer; reservoir entry					
	Iron, ug/L	*MCL = 300 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
9/2/2015											ND	300	ND	50	ND	15
9/9/2015											ND	300	ND	50	ND	15
9/16/2015	330	300	120	50	10	15	A	A	A	500	ND	300	ND	50	ND	15
9/23/2015											ND	300	ND	50	ND	15
9/30/2015											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 2. Monitoring Results for Free and Total Chlorine at SP2, SP3, SP4 and SP5 Sample Locations.

Date, week of	SP2	SP3		SP4	SP5	
	Free Cl	Free Cl	Total Cl	Free Cl	Total Cl	MCL= 4 mg/L
9/2/2015	19.74	7.18	13.68	0.69	3.41	4
9/9/2015	21.81	4.83	12.51	0.77	3.16	4
9/16/2015	22.00	1.70	14.18	0.64	3.27	4
9/23/2015	22.86	5.44	10.44	0.77	3.08	4
9/30/2015**	12.16	12.08	x**	5.05	x**	4

\*\*CWPF Isolated on 9/29/15 and 9/30/15 in preparation of free chlorination.

Table 3. Monitoring Requirements and Frequencies for SP1, SP5, and SP6.

Date, week of	TDS, mg/L				T.O.N.		Hardness, mg/L		Methane (Water), mg/L	
	SP1 - Raw Well Water	SP6 - MWD Water	SP5 - Reservoir Effluent	Goal= 500 - 750 mg/L	SP5 - Reservoir Effluent	MCL= 3	SP5 - Reservoir Effluent	Goal= 180 - 250 mg/L	SP1 - Raw Well Water	SP5 - Reservoir Effluent
9/2/2015			730	500-750			310	180-250		0.30***
9/9/2015			710	500-750						0.66
9/16/2015	690	680	580	500-750	1	3			5.6	0.78
9/23/2015			680	500-750						0.69
9/30/2015			770	500-750						0.40
Average			694							0.57

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 CaCO<sub>3</sub>  
 Methane (Water) - Methane dissolved in water  
 \*\*\*Methane resampled on 9/29/15. Initial result read 49 mg/L which City determined to be an error.



## **APPENDIX A**

### **LABORATORY RESULTS**

# *Clinical Laboratory of San Bernardino, Inc.*



16 September 2015

Clinical Lab No.: 15I0407

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

Project Name: Standard Analysis  
Sub Project: Weekly Compliance

Enclosed are the results of the analyses for samples received at the laboratory on 09/02/15 . Samples were received within temperature range, in correct containers and preservation.

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

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

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

Sincerely,

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

Stu Styles  
Client Services Manager

# Clinical Laboratory of San Bernardino, Inc.



**Lomita, City of**  
24373 Walnut Avenue  
Lomita CA, 91717

Project: Standard Analysis  
Sub Project: Weekly Compliance  
Project Manager: Mark Andersen

Work Order: 1510407  
Received: 09/02/15 16:15  
Reported: 09/16/15

**Filter Effluent Site #3** **1510407-01 (Water)** **Sample Date:** 09/02/15 9:55 **Sampler:** Edward Duvivier

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
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## General Physical Analyses

Apparent Color	SM 2120B	ND	3.0	15	Color Units	09/03/15	09/03/15	1536570	
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## Metals

Iron (Fe)	EPA 200.7	ND	100	300	ug/L	09/09/15	09/10/15	1537104	
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Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	09/09/15	09/10/15	1537104	
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**Reservoir Effluent Site #5** **1510407-02 (Water)** **Sample Date:** 09/02/15 9:58 **Sampler:** Edward Duvivier

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
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## General Chemical Analyses

<b>Total Filterable Residue/TDS</b>	SM 2540C	<b>730</b>	5.0	1000	mg/L	09/03/15	09/04/15	1536410	
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ND Analyte NOT DETECTED at or above the reporting limit

# Clinical Laboratory of San Bernardino, Inc.

## EDT Transfer Confirmation 1



Work Order: 15I0407

Report Date: 09/16/2015

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

Page 1 of 1

LOMITA-CITY, WATER DEPT.

User ID: 4TH

System: 1910073

WELL 05 TREATMENT PLANT EFFLUENT

Station No.: 1910073-006

Sampled: 150902 09:55

COLOR

Result: ND

Units: UNITS

Entry No.: 00081

Analyzed: 150903

IRON

Result: ND

Units: UG/L

Entry No.: 01045

Analyzed: 150910

MANGANESE

Result: ND

Units: UG/L

Entry No.: 01055

Analyzed: 150910



## Certificate of Analysis

Project: 15I0407

Report Date: 09/15/15 14:57

Received Date: 09/04/15 10:20

Turnaround Time: 5 workdays

Phones: (909) 825-7693

Fax: (909) 825-7696

P.O. #:

Attn: John Styles

Client: Clinical Laboratory of San Bernardino, Inc.  
21881 Barton Road  
Grand Terrace, CA 92313

Dear John Styles :

Enclosed are the results of analyses for samples received 9/4/2015 with the Chain of Custody document. The samples were received in good condition, at 2.8 °C and on ice. All analysis met the method criteria except as noted below or in the report with data qualifiers.

Lab ID: 5I04024-01		Sample ID: Reservoir Effluent Site #5/ 15I0407-02							Matrix: Water	
Sampled by: Client		Sampled: 09/02/15 09:58								
Analyte	Result	MDL	MRL	Units	Dil	Method	Prepared	Analyzed	Batch	Qualifier
Methane .....	49		0.010	mg/l	1	RSK-175	9/11/15	9/11/15 18:24	W5I0644	E-01





## Certificate of Analysis

## Quality Control Section

## Dissolved Gases in Water by RSK-175 - Quality Control

## Batch W5I0644 - RSK-175

## Blank (W5I0644-BLK1)

Prepared: 09/11/15 Analyzed: 09/11/15 17:24

Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Methane .....		ND		mg/l					

## LCS (W5I0644-BS1)

Prepared: 09/11/15 Analyzed: 09/11/15 18:04

Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Methane .....		0.200		mg/l	0.198	101	85-115		

## Calibration Check (W5I0644-CCV1)

Prepared: 09/11/15 Analyzed: 09/11/15 17:44

Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Methane .....		0.00713		mg/l	0.00792	90	50-150		

## Calibration Check (W5I0644-CCV2)

Prepared: 09/11/15 Analyzed: 09/11/15 19:43

Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Methane .....		0.192		mg/l	0.198	97	85-115		

## Duplicate (W5I0644-DUP1)

Source: 5I11022-01

Prepared: 09/11/15 Analyzed: 09/11/15 19:03

Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Methane .....	0.661 .....	0.653		mg/l				1	20



## Certificate of Analysis

**Notes:**

The Chain of Custody document is part of the analytical report.

Any remaining sample(s) for testing will be disposed of one month from the final report date unless other arrangements are made in advance.

All results are expressed on wet weight basis unless otherwise specified.

An Absence of Total Coliform meets the drinking water standards as established by the State of California Department of Health Services.

The Reporting Limit (RL) is referenced as laboratory's Practical Quantitation Limit (PQL).

For Potable water analysis, the Reporting Limit (RL) is referenced as Detection Limit for reporting purposes (DLRs) defined by EPA.

If sample collected by Weck Laboratories, sampled in accordance to lab SOP MIS002

**Authorized Signature**

Contact: Brandon Gee  
(Project Manager)



ELAP # 1132  
LACSD # 10143  
NELAC #4047-002 ORELAP

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. Weck Laboratories certifies that the test results meet all requirements of NELAC unless noted in the Case Narrative. This analytical report must be reproduced in its entirety.*

**Flags for Data Qualifiers:**

<b>E-01</b>	The concentration indicated for this analyte is an estimated value above the calibration range.
ND	NOT DETECTED at or above the Reporting Limit. If J-value reported, then NOT DETECTED at or above the Method Detection Limit (MDL).
Sub	Subcontracted analysis, original report enclosed.
DL	Method Detection Limit
RL	Method Reporting Limit
MDA	Minimum Detectable Activity
NR	Not Reportable

SUBCONTRACT ORDER

Clinical Laboratory of San Bernardino

15I0407

5I04024

SENDING LABORATORY:

Clinical Laboratory of San Bernardino  
21881 Barton Road  
Grand Terrace, CA 92313  
Phone: 909.825.7693  
Fax: 909.825.7696  
Project Manager: Stu Styles

RECEIVING LABORATORY:

Weck Lab, Analytical & Environmental  
Analytical & Environmental Svc 14859 E Clark Ave  
Industry, CA 91745  
Phone : (626) 336-2139  
Fax: (626) 336-2634

Please email results to Project Manager: Stu Styles

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

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

Transfer File requested; log in with Element ID only [ ] Yes [x] No

Turn Around Time [ ] 10 Days [x] 5 Days [ ] Other \_\_\_ Days

Subcontract Comments:

Analysis

Comments

Sample ID: Reservoir Effluent Site #5 / 15I0407-02

Sampled: 09/02/15 09:58 PS Code:  
Water

WTX ID:  
UCMR ID:

Methane RSK175

Report in mg/L

Containers Supplied:

40mL Amber Vial HCl (B)

40mL Amber Vial HCl (C)

Released By

Date / Time

Received By

Date / Time

Released By

Date / Time

Received By

Date / Time

B. Shy

09/04/15 08:30

Shy

9.4.15/9:00

Shy

9.4.15/10:20

Samah

9/4/15 1020 28°C

Client		City of Lomita		System Number		Analysis Requested															
Address		24373 Walnut Avenue		1910073		Methane (AIR) (ASTM D1946)		Methane (WATER) (RSK175)		Color		Iron		Manganese		Total Dissolved Solids		Total Hardness		Total Alkalinity	
Phone #		(310) 325-9830		Destination Laboratory																	
Fax #		(310) 325-3627		[X] Clinical Laboratory																	
Project		Standard Analysis		CDHP Compliance																	
Sub Project		Weekly Compliance		YES																	
Comments				ELAP #																	
Sampled by		Edward DuVivier		1088																	
Date	Time	Sample Identification		Matrix	Type	Preserv	Total Chlorine														
		Raw Water Site #1		DW	1W	N/A															
		Raw Water Site #1		DW		2,7															
9/2/15	0955	Filter Effluent Site # (1)		DW	1W	N/A															
		Zone #2 Site #6		DW	1D	N/A															
9/2/15	0957	Reservoir Effluent Site #5 (1)		DW	1D	N/A															
9/2/15	0958	Reservoir Effluent Site #5 (2)		DW		2,7															
		Reservoir Headspace Level (a) _____		Air	1W	N/A															
Preservatives: (1) Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> (2) HCl (3) HNO <sub>3</sub> (4) NH <sub>4</sub> Cl (5) H <sub>2</sub> SO <sub>4</sub> (6) Na <sub>2</sub> SO <sub>3</sub> (7) Cold (8) Other: _____																					
Relinquished By (Sign)		Print Name / Company		Date / Time		Received By (Sign)		Print Name / Company													
		Edward DuVivier		9/2/2015 12:00				Steven J. C. S. D.													
		Steven J. C. S. D.		9-2-15 / 4:15																	
Comments:		Samples received: (X) On ice ( ) Intact ( ) Custody seals Temp 18-7 ( ) F (X) C																			
Shipped Via		Fed X		Golden State		UPS		Client		Other		Page 1 of 1									

# *Clinical Laboratory of San Bernardino, Inc.*



14 September 2015

Clinical Lab No.: 15I0284

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

Project Name: Standard Analysis  
Sub Project: CWPF Weekly Non-Comp Analysis

Enclosed are the results of the analyses for samples received at the laboratory on 09/02/15 . Samples were received within temperature range, in correct containers and preservation.

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

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

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

Sincerely,

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

Stu Styles  
Client Services Manager



# Clinical Laboratory of San Bernardino, Inc.



Lomita, City of  
24373 Walnut Avenue  
Lomita CA, 91717

Project: Standard Analysis  
Sub Project: CWPF Weekly Non-Comp Analysis  
Project Manager: Mark Andersen

Work Order: 1510284  
Received: 09/02/15 16:15  
Reported: 09/14/15

Reservoir Effluent Site #5      1510284-01 (Water)      Sample Date: 09/02/15 9:58      Sampler: Edward Duvivier

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
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## General Chemical Analyses

Hardness, Total (as CaCO <sub>3</sub> )	Calculated	310	6.6	N/A	mg/L	09/04/15	09/05/15	[CALC]	
Ortho-Phosphate (as P)	HACH 8048	0.34	0.0067	N/A	mg/L	09/03/15	09/03/15	1536490	
Phosphorus (Total as P)	HACH 8190	0.50	0.0067	N/A	mg/L	09/04/15	09/04/15	1536508	

## Metals

Calcium (Ca)	EPA 200.7	81	1.0	N/A	mg/L	09/04/15	09/05/15	1536548	
Magnesium (Mg)	EPA 200.7	27	1.0	N/A	mg/L	09/04/15	09/05/15	1536548	

ND      Analyte NOT DETECTED at or above the reporting limit

Ø1ϕ11 15I0284 Chain of Custody

*"Your Water and Wastewater Analysis Solution"*

*"Your Water and Wastewater Analysis Solution"*

# *Clinical Laboratory of San Bernardino, Inc.*



06 October 2015

Clinical Lab No.: 15I2433

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

Project Name: Standard Analysis  
Sub Project: Lomita Distribution Special Sample

Enclosed are the results of the analyses for samples received at the laboratory on 09/29/15 . Samples were received within temperature range, in correct containers and preservation.

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

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

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

Sincerely,

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

Stu Styles  
Client Services Manager

# Clinical Laboratory of San Bernardino, Inc.



**Lomita, City of**  
24373 Walnut Avenue  
Lomita CA, 91717

Project: Standard Analysis  
Sub Project: Lomita Distribution Special Sample  
Project Manager: Mark Andersen

Work Order: 1512433  
Received: 09/29/15 15:20  
Reported: 10/06/15

**1948 W 252nd St** **1512433-01 (Water)** **Sample Date:** 09/29/15 10:40 **Sampler:** Edward Duvivier

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

**Cl Res Total (Field)** Field **1.63** N/A mg/L 09/29/15 09/29/15 1540189

## Microbiology Analyses

**Plate Count** SM9215B **6** 1 500 CFU/ml 09/29/15 10/01/15 1540458

## General Chemical Analyses

**pH (Lab)** SM 4500HB **7.9** N/A pH Units 09/29/15 09/29/15 1540087

**24632 S Moon Ave** **1512433-02 (Water)** **Sample Date:** 09/29/15 10:25 **Sampler:** Edward Duvivier

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

## Field Analyses

**Cl Res Total (Field)** Field **0.34** N/A mg/L 09/29/15 09/29/15 1540189

## Microbiology Analyses

**Plate Count** SM9215B **1100** 1 500 CFU/ml 09/29/15 10/01/15 1540458 Note

## General Chemical Analyses

**pH (Lab)** SM 4500HB **7.6** N/A pH Units 09/29/15 09/29/15 1540087

**25417 Pennsylvania Ave.** **1512433-03 (Water)** **Sample Date:** 09/29/15 10:10 **Sampler:** Edward Duvivier

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

**Cl Res Total (Field)** Field **0.37** N/A mg/L 09/29/15 09/29/15 1540189

## Microbiology Analyses

**Plate Count** SM9215B **1300** 1 500 CFU/ml 09/29/15 10/01/15 1540458 Note

## General Chemical Analyses

**pH (Lab)** SM 4500HB **7.9** N/A pH Units 09/29/15 09/29/15 1540087

# Clinical Laboratory of San Bernardino, Inc.



**Lomita, City of**  
24373 Walnut Avenue  
Lomita CA, 91717

Project: Standard Analysis  
Sub Project: Lomita Distribution Special Sample  
Project Manager: Mark Andersen

Work Order: 1512433  
Received: 09/29/15 15:20  
Reported: 10/06/15

**2052 Dawn St** **1512433-04 (Water)** **Sample Date:** 09/29/15 10:55 **Sampler:** Edward Duvivier

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

**Cl Res Total (Field)** Field **1.17** N/A mg/L 09/29/15 09/29/15 1540189

## Microbiology Analyses

**Plate Count** SM9215B **4000** 1 500 CFU/ml 09/29/15 10/01/15 1540458 Note

## General Chemical Analyses

**pH (Lab)** SM 4500HB **8.0** N/A pH Units 09/29/15 09/29/15 1540087

**Reservoir Effluent Site #5** **1512433-05 (Water)** **Sample Date:** 09/29/15 9:30 **Sampler:** Edward Duvivier

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

**Cl Res Free (Field)** Field **0.28** N/A mg/L 09/29/15 09/29/15 1540213

## Microbiology Analyses

**Plate Count** SM9215B **ND** 1 500 CFU/ml 09/29/15 10/01/15 1540458

## General Chemical Analyses

**pH (Lab)** SM 4500HB **7.8** N/A pH Units 09/29/15 09/29/15 1540087

Note Notified Edward 10/2/15 0830

pH (Lab) was analyzed ASAP but received and analyzed past the 15 minute hold time.

ND Analyte NOT DETECTED at or above the reporting limit





## Certificate of Analysis

Project: 15I2433

Report Date: 10/07/15 09:43

Received Date: 09/30/15 11:25

Turnaround Time: 5 workdays

Phones: (909) 825-7693

Fax: (909) 825-7696

P.O. #:

Attn: John Styles

Client: Clinical Laboratory of San Bernardino, Inc.  
21881 Barton Road  
Grand Terrace, CA 92313

Dear John Styles :

Enclosed are the results of analyses for samples received 9/30/2015 with the Chain of Custody document. The samples were received in good condition, at 2.8 °C and on ice. All analysis met the method criteria except as noted below or in the report with data qualifiers.

Lab ID: 5I30025-01		Sample ID: Reservoir Effluent Site #5 / 15I2433-05		Matrix: Water						
Sampled by: Client		Sampled: 09/29/15 09:30								
Analyte	Result	MDL	MRL	Units	Dil	Method	Prepared	Analyzed	Batch	Qualifier
Methane	0.30		0.010	mg/l	1	RSK-175	10/5/15	10/5/15 16:47	W5J0292	



## Certificate of Analysis

## Quality Control Section

## Dissolved Gases in Water by RSK-175 - Quality Control

## Batch W5J0292 - RSK-175

Blank (W5J0292-BLK1)					Prepared: 10/05/15		Analyzed: 10/05/15 15:48		
Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Methane .....		ND		mg/l					
LCS (W5J0292-BS1)					Prepared: 10/05/15		Analyzed: 10/05/15 16:27		
Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Methane .....		0.179		mg/l	0.198	90	85-115		
Calibration Check (W5J0292-CCV1)					Prepared: 10/05/15		Analyzed: 10/05/15 16:07		
Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Methane .....		0.00785		mg/l	0.00792	99	50-150		
Calibration Check (W5J0292-CCV2)					Prepared: 10/05/15		Analyzed: 10/05/15 18:06		
Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Methane .....		0.190		mg/l	0.198	96	85-115		
Duplicate (W5J0292-DUP1)					Prepared: 10/05/15		Analyzed: 10/05/15 17:52		
Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Methane .....	0.675 .....	0.654		mg/l				3	20



## Certificate of Analysis

**Notes:**

The Chain of Custody document is part of the analytical report.

Any remaining sample(s) for testing will be disposed of one month from the final report date unless other arrangements are made in advance.

All results are expressed on wet weight basis unless otherwise specified.

An Absence of Total Coliform meets the drinking water standards as established by the State of California Department of Health Services.

The Reporting Limit (RL) is referenced as laboratory's Practical Quantitation Limit (PQL).

For Potable water analysis, the Reporting Limit (RL) is referenced as Detection Limit for reporting purposes (DLRs) defined by EPA.

If sample collected by Weck Laboratories, sampled in accordance to lab SOP MIS002

**Authorized Signature**

Contact: Brandon Gee  
(Project Manager)



ELAP # 1132  
LACSD # 10143  
NELAC #4047-002 ORELAP

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. Weck Laboratories certifies that the test results meet all requirements of NELAC unless noted in the Case Narrative. This analytical report must be reproduced in its entirety.*

**Flags for Data Qualifiers:**

ND	NOT DETECTED at or above the Reporting Limit. If J-value reported, then NOT DETECTED at or above the Method Detection Limit (MDL).
Sub	Subcontracted analysis, original report enclosed.
DL	Method Detection Limit
RL	Method Reporting Limit
MDA	Minimum Detectable Activity
NR	Not Reportable

SUBCONTRACT ORDER

Clinical Laboratory of San Bernardino

15I2433

5I30025

SENDING LABORATORY:

Clinical Laboratory of San Bernardino  
21881 Barton Road  
Grand Terrace, CA 92313  
Phone: 909.825.7693  
Fax: 909.825.7696  
Project Manager: Stu Styles

RECEIVING LABORATORY:

Weck Lab, Analytical & Environmental  
Analytical & Environmental Svc 14859 E Clark Ave  
Industry, CA 91745  
Phone : (626) 336-2139  
Fax: (626) 336-2634

Please email results to Project Manager: Stu Styles

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

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

Transfer File requested; log in with Element ID only [ ] Yes [x] No

Turn Around Time [ ] 10 Days [x] 5 Days [ ] Other \_\_\_ Days

Subcontract Comments:

Analysis

Comments

Sample ID: Reservoir Effluent Site #5 / 15I2433-05

Sampled: 09/29/15 09:30 PS Code:  
Water

WTX ID:  
UCMR ID:

Methane RSK175

Report in mg/L

Containers Supplied:

40ml Amber Vial (B)

40ml Amber Vial (C)

Released By

Date / Time

Received By

Date / Time

Released By

Date / Time

Received By

Date / Time

*B. J. Shing* 09/30/15 07:40 *Chris Williams* 9/30/15 10:00  
*Chris Williams* 9-30-15/11:25 *Janet* 9/30/15 11:25 2.8"  
*Chris Williams*



Client		City of Lomita		System Number		Analysis Requested							Comments / P.S. Codes				
Address		24373 Walnut Avenue		Lomita, CA 91717		1910073											
Phone #		(310) 325-9830		Destination Laboratory													
Fax #		(310) 325-3627		[X] Clinical Laboratory													
Project		Standard Analysis		RWQCB Compliance													
Sub Project		Lomita Distribution Special Sample		No		ELAP #											
Comments		Edward D. Viver		1088													
Sampled by		Edward D. Viver															
Date	Time	Sample Identification		Matrix	Type	Preserv	Total Chlorine										
9/29/2015	1040	1948 W. 252nd St.		DW	D4	1,7	1.63	X									
9/29/2015	1040	1948 W. 252nd St.		DW	D4	NA	1.63										
9/29/2015	1025	24632 S. Moon Ave.		DW	D4	1,7	0.34	X									
9/29/2015	1025	24632 S. Moon Ave.		DW	D4	NA	0.34										
9/29/2015	1010	25417 Pennsylvania Ave.		DW	D4	1,7	0.37	X									
9/29/2015	1010	25417 Pennsylvania Ave.		DW	D4	NA	0.37										
9/29/2015	1055	2052 Dawn St.		DW	D4	1,7	1.17	X									
9/29/2015	1055	2052 Dawn St.		DW	D4	NA	1.17										
9/29/2015	0925	Reservoir Effluent Site #5		DW	D4	1,7	Free	X									0.28 ppm free chlorine
9/29/2015	0925	Reservoir Effluent Site #5		DW	D4	NA	Free										0.28 ppm free chlorine
9/29/2015	0930	Reservoir Effluent Site #5		DW	DZ	1,2	-										
Preservatives: (1) Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> (2) HCl (3) HNO <sub>3</sub> (4) NH <sub>4</sub> Cl (5) H <sub>2</sub> SO <sub>4</sub> (6) Na <sub>2</sub> SO <sub>3</sub> (7) Cold (8) Other:				Matrix: DW-Drinking Water, WW-Waste Water, SW-Storm Water, GW-Ground Water, A-Air Type- 1-Routine, 2-Repeat, 3-Replacement, 4-Special W-Well D-Dist.													
Relinquished By (Sign)		Print Name / Company		Date / Time		Received By (Sign)		Print Name / Company									
<i>[Signature]</i>		Edward S. Viver		9/29/15 11:05		<i>[Signature]</i>		J. Viver									
<i>[Signature]</i>		J. Viver		9-29-15/3:30		<i>[Signature]</i>		J. Viver									
Comments:		Zone 1 all on MWD				Samples received		On ice ( ) Intact ( ) Custody seals									
		Reservoir Isolated (free chlorine)				Temp		15.5 ( ) F ( ) C									
Shipped Via		Fed X		Golden State		UPS		Client		Other		Page 1 of 1					

# *Clinical Laboratory of San Bernardino, Inc.*



21 September 2015

Clinical Lab No.: 15I0959

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

Project Name: Standard Analysis  
Sub Project: Weekly Compliance

Enclosed are the results of the analyses for samples received at the laboratory on 09/09/15 . Samples were received within temperature range, in correct containers and preservation.

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

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

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

Sincerely,

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

Stu Styles  
Client Services Manager

# Clinical Laboratory of San Bernardino, Inc.



**Lomita, City of**  
24373 Walnut Avenue  
Lomita CA, 91717

Project: Standard Analysis  
Sub Project: Weekly Compliance  
Project Manager: Mark Andersen

Work Order: 1510959  
Received: 09/09/15 14:45  
Reported: 09/21/15

**Filter Effluent Site #3** **1510959-01 (Water)** **Sample Date:** 09/09/15 11:03 **Sampler:** Edward Duvivier

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
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## General Physical Analyses

Apparent Color	SM 2120B	ND	3.0	15	Color Units	09/10/15	09/10/15	1537573	
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## Metals

Iron (Fe)	EPA 200.7	ND	100	300	ug/L	09/17/15	09/17/15	1538403	
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Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	09/17/15	09/17/15	1538403	
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**Reservoir Effluent Site #5** **1510959-02 (Water)** **Sample Date:** 09/09/15 11:00 **Sampler:** Edward Duvivier

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
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## General Chemical Analyses

<b>Total Filterable Residue/TDS</b>	SM 2540C	<b>710</b>	5.0	1000	mg/L	09/10/15	09/11/15	1537555	
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ND Analyte NOT DETECTED at or above the reporting limit



# Clinical Laboratory of San Bernardino, Inc.

## EDT Transfer Confirmation 1



Work Order: 15I0959

Report Date: 09/21/2015

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

Page 1 of 1

LOMITA-CITY, WATER DEPT.

User ID: 4TH

System: 1910073

WELL 05 TREATMENT PLANT EFFLUENT

Station No.: 1910073-006

Sampled: 150909 11:03

COLOR

Result: ND

Units: UNITS

Entry No.: 00081

Analyzed: 150910

IRON

Result: ND

Units: UG/L

Entry No.: 01045

Analyzed: 150917

MANGANESE

Result: ND

Units: UG/L

Entry No.: 01055

Analyzed: 150917



## Certificate of Analysis

Project: 15I0959

Report Date: 09/16/15 14:14

Received Date: 09/11/15 10:15

Turnaround Time: 5 workdays

Phones: (909) 825-7693

Fax: (909) 825-7696

P.O. #:

Attn: John Styles

Client: Clinical Laboratory of San Bernardino, Inc.  
21881 Barton Road  
Grand Terrace, CA 92313

Dear John Styles :

Enclosed are the results of analyses for samples received 9/11/2015 with the Chain of Custody document. The samples were received in good condition, at 3.1 °C and on ice. All analysis met the method criteria except as noted below or in the report with data qualifiers.

Lab ID: 5I11022-01

Sample ID: Reservoir Effluent Site #5 / 15I0959-02

Matrix: Water

Sampled by: Client

Sampled: 09/09/15 11:00

Analyte	Result	MDL	MRL	Units	Dil	Method	Prepared	Analyzed	Batch	Qualifier
Methane .....	0.66		0.010	mg/l	1	RSK-175	9/11/15	9/11/15 18:44	W5I0644	



## Certificate of Analysis

## Quality Control Section

## Dissolved Gases in Water by RSK-175 - Quality Control

## Batch W5I0644 - RSK-175

## Blank (W5I0644-BLK1)

Prepared: 09/11/15 Analyzed: 09/11/15 17:24

Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Methane .....		ND		mg/l					

## LCS (W5I0644-BS1)

Prepared: 09/11/15 Analyzed: 09/11/15 18:04

Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Methane .....		0.200		mg/l	0.198	101	85-115		

## Calibration Check (W5I0644-CCV1)

Prepared: 09/11/15 Analyzed: 09/11/15 17:44

Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Methane .....		0.00713		mg/l	0.00792	90	50-150		

## Calibration Check (W5I0644-CCV2)

Prepared: 09/11/15 Analyzed: 09/11/15 19:43

Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Methane .....		0.192		mg/l	0.198	97	85-115		

## Duplicate (W5I0644-DUP1)

Source: 5I11022-01

Prepared: 09/11/15 Analyzed: 09/11/15 19:03

Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Methane .....	0.661 .....	0.653		mg/l				1	20



## Certificate of Analysis

**Notes:**

The Chain of Custody document is part of the analytical report.

Any remaining sample(s) for testing will be disposed of one month from the final report date unless other arrangements are made in advance.

All results are expressed on wet weight basis unless otherwise specified.

An Absence of Total Coliform meets the drinking water standards as established by the State of California Department of Health Services.

The Reporting Limit (RL) is referenced as laboratory's Practical Quantitation Limit (PQL).

For Potable water analysis, the Reporting Limit (RL) is referenced as Detection Limit for reporting purposes (DLRs) defined by EPA.

If sample collected by Weck Laboratories, sampled in accordance to lab SOP MIS002

**Authorized Signature**

Contact: Brandon Gee  
(Project Manager)



ELAP # 1132  
LACSD # 10143  
NELAC #4047-002 ORELAP

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. Weck Laboratories certifies that the test results meet all requirements of NELAC unless noted in the Case Narrative. This analytical report must be reproduced in its entirety.*

**Flags for Data Qualifiers:**

ND	NOT DETECTED at or above the Reporting Limit. If J-value reported, then NOT DETECTED at or above the Method Detection Limit (MDL).
Sub	Subcontracted analysis, original report enclosed.
DL	Method Detection Limit
RL	Method Reporting Limit
MDA	Minimum Detectable Activity
NR	Not Reportable

**SUBCONTRACT ORDER**  
**Clinical Laboratory of San Bernardino**  
**15I0959**

5I11022

**SENDING LABORATORY:**

Clinical Laboratory of San Bernardino  
21881 Barton Road  
Grand Terrace, CA 92313  
Phone: 909.825.7693  
Fax: 909.825.7696  
Project Manager: Stu Styles

**RECEIVING LABORATORY:**

Weck Lab, Analytical & Environmental  
Analytical & Environmental Svc 14859 E Clark Ave  
Industry, CA 91745  
Phone : (626) 336-2139  
Fax: (626) 336-2634

Please email results to Project Manager: Stu Styles

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

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

Transfer File requested; log in with Element ID only [ ] Yes [x] No

Turn Around Time [ ] 10 Days [x] 5 Days [ ] Other \_\_\_ Days

Subcontract Comments:

**Analysis**

**Comments**

**Sample ID: Reservoir Effluent Site #5 / 15I0959-02**

**Sampled: 09/09/15 11:00 PS Code:**  
**Water**

**WTX ID:**  
**UCMR ID:**

Methane RSK175

Report in mg/L

Containers Supplied:

40mL Amber Vial HCl (B)

40mL Amber Vial HCl (C)

Released By

Date / Time

Received By

Date / Time

Released By

Date / Time

Received By

Date / Time

Bel Dwy  
M cell

09/11/15 08:00  
9/11/15 10:15

M cell  
Jaramila

9/11/15 10:15  
9/11/15 10:15 3.1"

*Clinical Laboratory of San Bernardino, Inc.*

*"Your Water and Wastewater Analysis Solution"*

# *Clinical Laboratory of San Bernardino, Inc.*



05 October 2015

Clinical Lab No.: 15I1600

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

Project Name: Standard Analysis  
Sub Project: CWPF Monthly Compliance Analysis

Enclosed are the results of the analyses for samples received at the laboratory on 09/16/15 . Samples were received within temperature range, in correct containers and preservation.

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

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

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

Sincerely,

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

Stu Styles  
Client Services Manager



# Clinical Laboratory of San Bernardino, Inc.



**Lomita, City of**  
24373 Walnut Avenue  
Lomita CA, 91717

Project: Standard Analysis  
Sub Project: CWP Monthly Compliance Analysis  
Project Manager: Mark Andersen

Work Order: 1511600  
Received: 09/16/15 17:15  
Reported: 10/05/15

**Raw Water Site #1** **1511600-01 (Water)** **Sample Date:** 09/16/15 11:12 **Sampler:** Edward Duvivier

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

Cl Res Total (Field)	Field	0		N/A	mg/L	09/16/15	09/16/15	1538475	
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## Microbiology Analyses

Total Coliform	SM 9223	A		N/A	P/A	09/16/15	09/17/15	1538500	
E. Coli	SM 9223	A		N/A	P/A	09/16/15	09/17/15	1538500	

## General Physical Analyses

Apparent Color	SM 2120B	10.0	3.0	15	Color Units	09/17/15	09/18/15	1538552	
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## General Chemical Analyses

Total Filterable Residue/TDS	SM 2540C	690	5.0	1000	mg/L	09/21/15	09/23/15	1539008	
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## Metals

Iron (Fe)	EPA 200.7	330	100	300	ug/L	09/23/15	09/23/15	1539371	
Manganese (Mn)	EPA 200.7	120	20	50	ug/L	09/23/15	09/23/15	1539371	

**Filter Effluent Site (Chloramine) #3** **1511600-02 (Water)** **Sample Date:** 09/16/15 10:50 **Sampler:** Edward Duvivier

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
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## General Physical Analyses

Apparent Color	SM 2120B	ND	3.0	15	Color Units	09/17/15	09/18/15	1538552	
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## Metals

Iron (Fe)	EPA 200.7	ND	100	300	ug/L	09/23/15	09/23/15	1539371	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	09/23/15	09/23/15	1539371	

**Filter Effluent (Free Chlorine) Site #2** **1511600-03 (Water)** **Sample Date:** 09/16/15 10:55 **Sampler:** Edward Duvivier

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

Cl Res Free (Field)	Field	31.32		N/A	mg/L	09/16/15	09/16/15	1538476	
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## Microbiology Analyses

Total Coliform	SM 9223	A		N/A	P/A	09/16/15	09/17/15	1538500	
E. Coli	SM 9223	A		N/A	P/A	09/16/15	09/17/15	1538500	
Plate Count	SM9215B	ND	1	500	CFU/ml	09/16/15	09/18/15	1538560	

# Clinical Laboratory of San Bernardino, Inc.



**Lomita, City of**  
24373 Walnut Avenue  
Lomita CA, 91717

Project: Standard Analysis  
Sub Project: CWPf Monthly Compliance Analysis  
Project Manager: Mark Andersen

Work Order: 1511600  
Received: 09/16/15 17:15  
Reported: 10/05/15

**Reservoir Effluent Site #5** **1511600-04 (Water)** **Sample Date:** 09/16/15 10:47 **Sampler:** Edward Duvivier

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

<b>Cl Res Total (Field)</b>	Field	<b>3.22</b>		N/A	mg/L	09/16/15	09/16/15	1538475	
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## General Physical Analyses

<b>Odor Threshold</b>	EPA 140.1M	<b>1</b>	1	3	TON	09/16/15	09/16/15	1538527	
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## General Chemical Analyses

<b>Total Filterable Residue/TDS</b>	SM 2540C	<b>580</b>	5.0	1000	mg/L	09/21/15	09/23/15	1539008	
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**Zone #2 Site #6** **1511600-05 (Water)** **Sample Date:** 09/16/15 10:42 **Sampler:** Edward Duvivier

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
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## General Chemical Analyses

<b>Total Filterable Residue/TDS</b>	SM 2540C	<b>680</b>	5.0	1000	mg/L	09/21/15	09/23/15	1539008	
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ND Analyte NOT DETECTED at or above the reporting limit

# Clinical Laboratory of San Bernardino, Inc.

## EDT Transfer Confirmation 1



Work Order: 15I1600

Report Date: 10/05/2015

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

Page 1 of 1

LOMITA-CITY, WATER DEPT.

User ID: 4TH

System: 1910073

WELL 05	Station No.: 1910073-003			Sampled: 150916 11:12
COLOR	Result: 10.0	Units: UNITS	Entry No.: 00081	Analyzed: 150918
IRON	Result: 330	Units: UG/L	Entry No.: 01045	Analyzed: 150923
MANGANESE	Result: 120	Units: UG/L	Entry No.: 01055	Analyzed: 150923
TOTAL DISSOLVED SOLIDS	Result: 690	Units: MG/L	Entry No.: 70300	Analyzed: 150923
WELL 05 TREATMENT PLANT EFFLUENT	Station No.: 1910073-006			Sampled: 150916 10:50
COLOR	Result: ND	Units: UNITS	Entry No.: 00081	Analyzed: 150918
IRON	Result: ND	Units: UG/L	Entry No.: 01045	Analyzed: 150923
MANGANESE	Result: ND	Units: UG/L	Entry No.: 01055	Analyzed: 150923



## Certificate of Analysis

Project: 1511600

Report Date: 09/29/15 13:16

Received Date: 09/18/15 11:18

Turnaround Time: 5 workdays

Phones: (909) 825-7693

Fax: (909) 825-7696

P.O. #:

Attn: John Styles

Client: Clinical Laboratory of San Bernardino, Inc.  
21881 Barton Road  
Grand Terrace, CA 92313

Dear John Styles :

Enclosed are the results of analyses for samples received 9/18/2015 with the Chain of Custody document. The samples were received in good condition, at 4.1 °C and on ice. All analysis met the method criteria except as noted below or in the report with data qualifiers.

Lab ID: 5118032-01      Sample ID: Raw Water Site #1 / 1511600-01      Matrix: Water  
Sampled by: Client      Sampled: 09/16/15 11:08

Analyte	Result	MDL	MRL	Units	Dil	Method	Prepared	Analyzed	Batch	Qualifier
Methane .....	5.6		0.20	mg/l	20	RSK-175	9/25/15	9/25/15 22:47	W511447	

Lab ID: 5118032-02      Sample ID: Reservoir Effluent Site #5 / 1511600-04      Matrix: Water  
Sampled by: Client      Sampled: 09/16/15 10:47

Analyte	Result	MDL	MRL	Units	Dil	Method	Prepared	Analyzed	Batch	Qualifier
Methane .....	0.78		0.010	mg/l	1	RSK-175	9/25/15	9/25/15 22:07	W511447	



## Certificate of Analysis

## Quality Control Section

## Dissolved Gases in Water by RSK-175 - Quality Control

## Batch W5I1447 - RSK-175

## Blank (W5I1447-BLK1)

Prepared: 09/25/15 Analyzed: 09/25/15 16:31

Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Methane .....		ND		mg/l					
Ethene .....		ND		mg/l					

## LCS (W5I1447-BS1)

Prepared: 09/25/15 Analyzed: 09/25/15 17:10

Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Methane .....		0.183		mg/l	0.198	93	85-115		
Ethene .....		0.558		mg/l	0.560	100	85-115		

## Calibration Check (W5I1447-CCV1)

Prepared: 09/25/15 Analyzed: 09/25/15 16:50

Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Methane .....		0.00680		mg/l	0.00792	86	50-150		
Ethene .....		0.00621		mg/l	0.00560	111	50-150		

## Calibration Check (W5I1447-CCV2)

Prepared: 09/25/15 Analyzed: 09/25/15 23:06

Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Methane .....		0.179		mg/l	0.198	90	85-115		
Ethene .....		0.530		mg/l	0.560	95	85-115		

## Duplicate (W5I1447-DUP1)

Source: 5I18032-02

Prepared: 09/25/15 Analyzed: 09/25/15 22:27

Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Methane .....	0.779 .....	0.731		mg/l				6	20



## Certificate of Analysis

**Notes:**

The Chain of Custody document is part of the analytical report.

Any remaining sample(s) for testing will be disposed of one month from the final report date unless other arrangements are made in advance.

All results are expressed on wet weight basis unless otherwise specified.

An Absence of Total Coliform meets the drinking water standards as established by the State of California Department of Health Services.

The Reporting Limit (RL) is referenced as laboratory's Practical Quantitation Limit (PQL).

For Potable water analysis, the Reporting Limit (RL) is referenced as Detection Limit for reporting purposes (DLRs) defined by EPA.

If sample collected by Weck Laboratories, sampled in accordance to lab SOP MIS002

**Authorized Signature**

Contact: Brandon Gee  
(Project Manager)



ELAP # 1132  
LACSD # 10143  
NELAC #4047-002 ORELAP

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. Weck Laboratories certifies that the test results meet all requirements of NELAC unless noted in the Case Narrative. This analytical report must be reproduced in its entirety.*

**Flags for Data Qualifiers:**

ND	NOT DETECTED at or above the Reporting Limit. If J-value reported, then NOT DETECTED at or above the Method Detection Limit (MDL).
Sub	Subcontracted analysis, original report enclosed.
DL	Method Detection Limit
RL	Method Reporting Limit
MDA	Minimum Detectable Activity
NR	Not Reportable

**SUBCONTRACT ORDER**  
**Clinical Laboratory of San Bernardino**  
**15I1600**

5I18032

**SENDING LABORATORY:**

Clinical Laboratory of San Bernardino  
21881 Barton Road  
Grand Terrace, CA 92313  
Phone: 909.825.7693  
Fax: 909.825.7696  
Project Manager: Stu Styles

**RECEIVING LABORATORY:**

Weck Lab, Analytical & Environmental  
Analytical & Environmental Svc 14859 E Clark Ave  
Industry, CA 91745  
Phone: (626) 336-2139  
Fax: (626) 336-2634

Please email results to Project Manager: Stu Styles

[ ] glaubig@clinical-lab.com [ ] ybarra@clinical-lab.com [ ☒ styles@clinical-lab.com [ ] cole@clinical-lab.com

California EDT transfer those samples with PS codes provided [ ] Yes ☒ No  
Transfer File requested; log in with Element ID only [ ] Yes ☒ No

Turn Around Time [ ] 10 Days ☒ 5 Days [ ] Other \_\_ Days

Subcontract Comments:

**Analysis**

**Comments**

**Sample ID: Raw Water Site #1 / 15I1600-01**

**Sampled: 09/16/15 11:08 PS Code:**  
**Water**

**WTX ID:**  
**UCMR ID:**

Methane RSK175

Report in mg/L

Containers Supplied:

40mL Amber Vial w/ Na2S2O3 (B)

40mL Amber Vial w/ Na2S2O3 (C)

**Sample ID: Reservoir Effluent Site #5 / 15I1600-04**

**Sampled: 09/16/15 10:47 PS Code:**  
**Water**

**WTX ID:**  
**UCMR ID:**

Methane RSK175

Report in mg/L

Containers Supplied:

40ml Amber Vial (B)

40ml Amber Vial (C)

Released By <i>Bl Dy</i>	Date / Time <i>09/18/15 08:00</i>	Received By <i>Ray Chapman</i>	Date / Time <i>9/18/15 9:15</i>
Released By <i>Ray Chapman</i>	Date / Time <i>9/18/15 11:18</i>	Received By <i>Samahen</i>	Date / Time <i>9/18/15 11:18 4.16</i>

151 1600

2/1/9

Client		City of Lomita		System Number		Analysis Requested												
Address		24373 Walnut Avenue		1910073														
		Lomita, CA 91717																
Phone #		(310) 325-9830		Destination Laboratory														
Fax #		(310) 325-3627		[X] Clinical Laboratory														
Project		Standard Analysis		CDWR Compliance														
Sub Project		CWPF / Compliance Analysis		YES														
Comments				ELAP #														
Sampled by		Edward D. Vivia		1088														
Date	Time	Sample Identification	Matrix	Type	Preserv	Chlorine	Free/Total	Iron	Manganese	Total Dissolved Solids	E. coli	ODOR	Color	Methane (WATER) (RSK175)	Heterotrophic Plate Count	Total Coliform	Comments / P.S. Codes	
9/16/15	1108	Raw Water Site #1	DW	1W	HCL	0.0 mg/L					X					X		
9/16/15	1112	Raw Water Site #1	DW	1W	N/A	0.0 mg/L		X		X			X					
9/16/15	1109	Raw Water Site #1	DW	1W	17	0.0 mg/L								X				
9/16/15	1050	Filter Effluent Site (Chloramine) #3	DW	1W	N/A	—		X	X				X					
9/16/15	1055	Filter Effluent Site #2 (Free chlorine)	DW	1W	17	31.32	Free								X	X	Free chlorine	
9/16/15	1045	Reservoir Effluent Site #5	DW	1D	N/A	3.22				X							Total chlorine	
9/16/15	1047	Reservoir Effluent Site #5	DW	1D	HCL	3.22								X			Total chlorine	
9/16/15	1046	Reservoir Effluent Site #5	DW	1D	N/A	3.22						X					Total chlorine	
9/16/15	1042	Zone #2 Site #6	DW	1D	N/A	—				X								
Preservatives: (1) Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> (2) HCl (3) HNO <sub>3</sub> (4) NH <sub>4</sub> Cl (5) H <sub>2</sub> SO <sub>4</sub> (6) Na <sub>2</sub> SO <sub>3</sub> (7) Cold (8) Other:		Matrix: DW-Drinking Water, WW-Waste Water, SW-Storm Water, GW-Ground Water, A-Air Type- 1-Routine, 2-Repeat, 3-Replacement, 4-Special W-Well D-Dist.																
Relinquished By (Sign)		Print Name / Company		Date / Time		Received By (Sign)		Print Name / Company										
Edward D. Vivia		City of Lomita		9/16/15 / 1140		J. M. C. / CSB		J. M. C. / CSB										
Comments:		City of Lomita		9/16/15 / 5:15		Samples received: X On ice ( ) Intact ( ) Custody seals Temp 19.7 ( ) F X C												
Shipped Via		Fed X		Golden State		UPS		Client		Other		Page 1 of 1						

"Your Water and Wastewater Analysis Solution"



# *Clinical Laboratory of San Bernardino, Inc.*



06 October 2015

Clinical Lab No.: 15I2067

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

Project Name: Standard Analysis  
Sub Project: CWPF Weekly Compliance Analysis

Enclosed are the results of the analyses for samples received at the laboratory on 09/23/15 . Samples were received within temperature range, in correct containers and preservation.

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

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

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

Sincerely,

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

Stu Styles  
Client Services Manager

# Clinical Laboratory of San Bernardino, Inc.



**Lomita, City of**  
24373 Walnut Avenue  
Lomita CA, 91717

Project: Standard Analysis  
Sub Project: CWPF Weekly Compliance Analysis  
Project Manager: Mark Andersen

Work Order: 1512067  
Received: 09/23/15 00:00  
Reported: 10/06/15

**Filter Effluent Site (Chloramine) #3**      **1512067-01 (Water)**      **Sample Date:** 09/23/15 10:19      **Sampler:** Edward Duvivier

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
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## General Physical Analyses

Apparent Color	SM 2120B	ND	3.0	15	Color Units	09/24/15	09/24/15	1539643	
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## Metals

Iron (Fe)	EPA 200.7	ND	100	300	ug/L	09/29/15	09/30/15	1540199	
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Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	09/29/15	09/30/15	1540199	
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**Reservoir Effluent Site #5**      **1512067-02 (Water)**      **Sample Date:** 09/23/15 10:23      **Sampler:** Edward Duvivier

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
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## General Chemical Analyses

<b>Total Filterable Residue/TDS</b>	SM 2540C	<b>680</b>	5.0	1000	mg/L	09/24/15	09/25/15	1539440	
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ND      Analyte NOT DETECTED at or above the reporting limit

# Clinical Laboratory of San Bernardino, Inc.

## EDT Transfer Confirmation 1



Work Order: 15I2067

Report Date: 10/06/2015

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

Page 1 of 1

LOMITA-CITY, WATER DEPT.

User ID: 4TH

System: 1910073

WELL 05 TREATMENT PLANT EFFLUENT

Station No.: 1910073-006

Sampled: 150923 10:19

COLOR

Result: ND

Units: UNITS

Entry No.: 00081

Analyzed: 150924

IRON

Result: ND

Units: UG/L

Entry No.: 01045

Analyzed: 150930

MANGANESE

Result: ND

Units: UG/L

Entry No.: 01055

Analyzed: 150930



## Certificate of Analysis

Project: 15I2067

Report Date: 09/29/15 16:10

Received Date: 09/24/15 13:15

Turnaround Time: 5 workdays

Phones: (909) 825-7693

Fax: (909) 825-7696

P.O. #:

Attn: John Styles

Client: Clinical Laboratory of San Bernardino, Inc.  
21881 Barton Road  
Grand Terrace, CA 92313

Dear John Styles :

Enclosed are the results of analyses for samples received 9/24/2015 with the Chain of Custody document. The samples were received in good condition, at 4.2 °C and on ice. All analysis met the method criteria except as noted below or in the report with data qualifiers.

Lab ID: 5I24056-01

Sample ID: Reservoir Effluent Site #5 / 15I2067-02

Matrix: Water

Sampled by: Client

Sampled: 09/23/15 10:23

Analyte	Result	MDL	MRL	Units	Dil	Method	Prepared	Analyzed	Batch	Qualifier
Methane .....	0.69		0.010	mg/l	1	RSK-175	9/25/15	9/25/15 21:47	W5I1447	



## Certificate of Analysis

## Quality Control Section

## Dissolved Gases in Water by RSK-175 - Quality Control

## Batch W5I1447 - RSK-175

## Blank (W5I1447-BLK1)

Prepared: 09/25/15 Analyzed: 09/25/15 16:31

Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Methane .....		ND		mg/l					
Ethene .....		ND		mg/l					

## LCS (W5I1447-BS1)

Prepared: 09/25/15 Analyzed: 09/25/15 17:10

Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Methane .....		0.183		mg/l	0.198	93	85-115		
Ethene .....		0.558		mg/l	0.560	100	85-115		

## Calibration Check (W5I1447-CCV1)

Prepared: 09/25/15 Analyzed: 09/25/15 16:50

Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Methane .....		0.00680		mg/l	0.00792	86	50-150		
Ethene .....		0.00621		mg/l	0.00560	111	50-150		

## Calibration Check (W5I1447-CCV2)

Prepared: 09/25/15 Analyzed: 09/25/15 23:06

Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Methane .....		0.179		mg/l	0.198	90	85-115		
Ethene .....		0.530		mg/l	0.560	95	85-115		

## Duplicate (W5I1447-DUP1)

Source: 5I18032-02

Prepared: 09/25/15 Analyzed: 09/25/15 22:27

Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Methane .....	0.779 .....	0.731		mg/l				6	20



## Certificate of Analysis

**Notes:**

The Chain of Custody document is part of the analytical report.

Any remaining sample(s) for testing will be disposed of one month from the final report date unless other arrangements are made in advance.

All results are expressed on wet weight basis unless otherwise specified.

An Absence of Total Coliform meets the drinking water standards as established by the State of California Department of Health Services.

The Reporting Limit (RL) is referenced as laboratory's Practical Quantitation Limit (PQL).

For Potable water analysis, the Reporting Limit (RL) is referenced as Detection Limit for reporting purposes (DLRs) defined by EPA.

If sample collected by Weck Laboratories, sampled in accordance to lab SOP MIS002

**Authorized Signature**

Contact: Brandon Gee  
(Project Manager)



ELAP # 1132  
LACSD # 10143  
NELAC #4047-002 ORELAP

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. Weck Laboratories certifies that the test results meet all requirements of NELAC unless noted in the Case Narrative. This analytical report must be reproduced in its entirety.*

**Flags for Data Qualifiers:**

ND	NOT DETECTED at or above the Reporting Limit. If J-value reported, then NOT DETECTED at or above the Method Detection Limit (MDL).
Sub	Subcontracted analysis, original report enclosed.
DL	Method Detection Limit
RL	Method Reporting Limit
MDA	Minimum Detectable Activity
NR	Not Reportable

SUBCONTRACT ORDER

Clinical Laboratory of San Bernardino

15I2067

5I24056

SENDING LABORATORY:

Clinical Laboratory of San Bernardino  
21881 Barton Road  
Grand Terrace, CA 92313  
Phone: 909.825.7693  
Fax: 909.825.7696  
Project Manager: Stu Styles

RECEIVING LABORATORY:

Weck Lab, Analytical & Environmental  
Analytical & Environmental Svc 14859 E Clark Ave  
Industry, CA 91745  
Phone : (626) 336-2139  
Fax: (626) 336-2634

Please email results to Project Manager: Stu Styles

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

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

Transfer File requested; log in with Element ID only [ ] Yes [x] No

Turn Around Time [ ] 10 Days [x] 5 Days [ ] Other \_\_\_ Days

Subcontract Comments:

Analysis

Comments

Sample ID: Reservoir Effluent Site #5 / 15I2067-02

Sampled: 09/23/15 10:23 PS Code:  
Water

WTX ID:  
UCMR ID:

Methane RSK175

Report in mg/L

Containers Supplied:

40ml Amber Vial (B)

40ml Amber Vial (C)

Released By

Date / Time

Received By

Date / Time

Released By

Date / Time

Received By

Date / Time

Clinical Laboratory of San Bernardino, Inc.

15I2007

0/0/3

Chain of Custody

Client		City of Lomita		System Number		Analysis Requested																	
Address		24373 Walnut Avenue Lomita, CA 91717		1910073		Methane (AIR) (ASTM D1946)		Methane (WATER) (RSK175)		Color		Phosphorus- Total as P		Phosphate- Ortho as P		Total Dissolved Solids		Manganese		Iron		Comments / P.S. Codes	
Phone #		(310) 325-9830		Destination Laboratory																			
Fax #		(310) 325-3627		[X] Clinical Laboratory																			
Project		Standard Analysis		CDWR Compliance																			
Sub Project		CWPF Weekly Compliance Analysis		YES		ELAP #																	
Comments		1088																					
Sampled by		Edward J. Davis																					
Date		Time		Sample Identification		Matrix		Type		Preserv		Total Chlorine											
				Raw Water Site #1		DW		1W		HCL													
				Raw Water Site #1		DW		1W		N/A													
9-23-15		1019		' Filter Effluent Site (Chloramine) #3		DW		1W		N/A		—		X		X						E13-005A	
9-23-15		1022		Reservoir Effluent Site #5		DW		1W		N/A		—											
9-23-15		1023		Reservoir Effluent Site #5		DW		1W		HCL		—											
				Zone #2 Site #6		DW		1W		N/A													
Preservatives: (1) Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> (2) HCl (3) HNO <sub>3</sub> (4) NH <sub>4</sub> Cl (5) H <sub>2</sub> SO <sub>4</sub> (6) Na <sub>2</sub> SO <sub>3</sub> (7) Cold (8) Other:																							
Relinquished By (Sign)		Print Name / Company		Date / Time		Received By (Sign)		Print Name / Company															
Edward J. Davis		City of Lomita		9-23-15 / 12:15		J. Davis		J. Davis															
Comments:		City of Lomita		9-23-15		J. Davis		J. Davis															
Shipped Via		Fed X		Golden State		UPS		Client		Other													

"Your Water and Wastewater Analysis Solution"



# *Clinical Laboratory of San Bernardino, Inc.*



07 October 2015

Clinical Lab No.: 15I2581

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

Project Name: Standard Analysis  
Sub Project: CWPF Weekly Compliance

Enclosed are the results of the analyses for samples received at the laboratory on 09/30/15 . Samples were received within temperature range, in correct containers and preservation.

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

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

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

Sincerely,

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

Stu Styles  
Client Services Manager

# Clinical Laboratory of San Bernardino, Inc.



**Lomita, City of**  
24373 Walnut Avenue  
Lomita CA, 91717

Project: Standard Analysis  
Sub Project: CWPF Weekly Compliance  
Project Manager: Mark Andersen

Work Order: 1512581  
Received: 09/30/15 14:45  
Reported: 10/07/15

## Filter Effluent Site #3

**1512581-01 (Water)**

**Sample Date:** 09/30/15 10:15 **Sampler:** Edward Duvivier

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
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### General Physical Analyses

Apparent Color	SM 2120B	ND	3.0	15	Color Units	09/30/15	09/30/15	1540487	
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### Metals

Iron (Fe)	EPA 200.7	ND	100	300	ug/L	10/02/15	10/02/15	1540463	
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Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	10/02/15	10/02/15	1540463	
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## Reservoir Effluent

**1512581-02 (Water)**

**Sample Date:** 09/30/15 12:00 **Sampler:** Edward Duvivier

Analyte	Method	Result	Rep. Limit	MCL	Units	Prepared	Analyzed	Batch	Qualifier
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### General Chemical Analyses

<b>Total Filterable Residue/TDS</b>	SM 2540C	<b>770</b>	5.0	1000	mg/L	09/30/15	10/02/15	1540319	
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ND Analyte NOT DETECTED at or above the reporting limit

# Clinical Laboratory of San Bernardino, Inc.

## EDT Transfer Confirmation 1



Work Order: 15I2581

Report Date: 10/07/2015

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

Page 1 of 1

LOMITA-CITY, WATER DEPT.

User ID: 4TH

System: 1910073

WELL 05 TREATMENT PLANT EFFLUENT

Station No.: 1910073-006

Sampled: 150930 10:15

COLOR

Result: ND

Units: UNITS

Entry No.: 00081

Analyzed: 150930

IRON

Result: ND

Units: UG/L

Entry No.: 01045

Analyzed: 151002

MANGANESE

Result: ND

Units: UG/L

Entry No.: 01055

Analyzed: 151002



## Certificate of Analysis

Project: 15I2581

Report Date: 10/07/15 09:44

Received Date: 10/01/15 13:55

Turnaround Time: 5 workdays

Phones: (909) 825-7693

Fax: (909) 825-7696

P.O. #:

Attn: John Styles

Client: Clinical Laboratory of San Bernardino, Inc.  
21881 Barton Road  
Grand Terrace, CA 92313

Dear John Styles :

Enclosed are the results of analyses for samples received 10/1/2015 with the Chain of Custody document. The samples were received in good condition, at 2.6 °C and on ice. All analysis met the method criteria except as noted below or in the report with data qualifiers.

Lab ID: 5J01038-01

Sample ID: Reservoir Effluent/ 15I2581-02

Matrix: Water

Sampled by: Client

Sampled: 09/30/15 12:00

Analyte	Result	MDL	MRL	Units	Dil	Method	Prepared	Analyzed	Batch	Qualifier
Methane .....	0.40		0.010	mg/l	1	RSK-175	10/5/15	10/5/15 17:07	W5J0292	



## Certificate of Analysis

## Quality Control Section

## Dissolved Gases in Water by RSK-175 - Quality Control

## Batch W5J0292 - RSK-175

Blank (W5J0292-BLK1)					Prepared: 10/05/15		Analyzed: 10/05/15 15:48		
Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Methane .....		ND		mg/l					
LCS (W5J0292-BS1)					Prepared: 10/05/15		Analyzed: 10/05/15 16:27		
Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Methane .....		0.179		mg/l	0.198	90	85-115		
Calibration Check (W5J0292-CCV1)					Prepared: 10/05/15		Analyzed: 10/05/15 16:07		
Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Methane .....		0.00785		mg/l	0.00792	99	50-150		
Calibration Check (W5J0292-CCV2)					Prepared: 10/05/15		Analyzed: 10/05/15 18:06		
Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Methane .....		0.190		mg/l	0.198	96	85-115		
Duplicate (W5J0292-DUP1)					Prepared: 10/05/15		Analyzed: 10/05/15 17:52		
Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Methane .....	0.675 .....	0.654		mg/l				3	20



## Certificate of Analysis

**Notes:**

The Chain of Custody document is part of the analytical report.

Any remaining sample(s) for testing will be disposed of one month from the final report date unless other arrangements are made in advance.

All results are expressed on wet weight basis unless otherwise specified.

An Absence of Total Coliform meets the drinking water standards as established by the State of California Department of Health Services.

The Reporting Limit (RL) is referenced as laboratory's Practical Quantitation Limit (PQL).

For Potable water analysis, the Reporting Limit (RL) is referenced as Detection Limit for reporting purposes (DLRs) defined by EPA.

If sample collected by Weck Laboratories, sampled in accordance to lab SOP MIS002

**Authorized Signature**

Contact: Brandon Gee  
(Project Manager)



ELAP # 1132  
LACSD # 10143  
NELAC #4047-002 ORELAP

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. Weck Laboratories certifies that the test results meet all requirements of NELAC unless noted in the Case Narrative. This analytical report must be reproduced in its entirety.*

**Flags for Data Qualifiers:**

ND	NOT DETECTED at or above the Reporting Limit. If J-value reported, then NOT DETECTED at or above the Method Detection Limit (MDL).
Sub	Subcontracted analysis, original report enclosed.
DL	Method Detection Limit
RL	Method Reporting Limit
MDA	Minimum Detectable Activity
NR	Not Reportable

**SUBCONTRACT ORDER**  
**Clinical Laboratory of San Bernardino**  
**15I2581**

5501038

**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

Weck Lab, Analytical & Environmental  
Analytical & Environmental Svc 14859 E Clark Ave  
Industry, CA 91745  
Phone : (626) 336-2139  
Fax: (626) 336-2634

Please email results to Project Manager: Stu Styles

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

California EDT transfer those samples with PS codes provided [ ] Yes [x] No  
Transfer File requested; log in with Element ID only [ ] Yes [x] No

Turn Around Time [ ] 10 Days [x] 5 Days [ ] Other \_\_\_ Days

Subcontract Comments:

**Analysis**

**Comments**

**Sample ID: Reservoir Effluent / 15I2581-02**

**Sampled: 09/30/15 12:00 PS Code:**  
**Water**

**WTX ID:**  
**UCMR ID:**

Methane RSK175

Report in mg/L

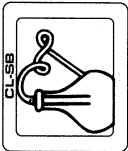
Containers Supplied:

40ml Amber Vial (B)

40ml Amber Vial (C)

Released By <i>BSJ</i>	Date / Time 10/01/15 07:30	Received By <i>Chris M...</i>	Date / Time 10-1-15 11:15
Released By <i>Chris M...</i>	Date / Time 10-1-15 13:55	Received By <i>Chris M...</i>	Date / Time 10-1-15 13:55

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# Clinical Laboratory of San Bernardino, Inc. CHAIN OF CUSTODY

01014

PAGE 1 OF 1

## CLIENT:

City of Lomita

Address: 24373 Walnut Ave

Lomita CA 91717

System Number: 1910073

Phone No.: 3103259830 Fax No.:

Project Name: CWP Weekly Compliance

Sampled By: Edward DuVivier

Comments:

5 Day Rush

CLIENT JOB NUMBER

1910073

(Company Use Only)

DESTINATION LABORATORY

☒ CLINICAL LABORATORY  
OF SAN BERNARDINO, INC.  
(909) 825-7693

☐ OTHER

## ANALYSIS REQUESTED

Methane  
TDS  
Color  
Manganese  
Iron

## PRESERVATIVES

MATRIX

NUMBER OF  
CONTAINERS

9/30/15 1015 Filter Effluent Site #3

9/30/15 1200 Reservoir Effluent

9/30/15 1200 Reservoir Effluent

WI

DI

DI

1

1

2

TURN AROUND TIME

5 Day

5 Day

5 Day

PRESERVATIVES:

(1)  $\text{Na}_2\text{S}_2\text{O}_3$

(2)  $\text{HNO}_3/\text{HCl}$

(3) COLD

(4)

TURN AROUND TIME:

(10) 10 DAY (5) 5 DAY RUSH

(2) 2 DAY RUSH

ALL TURN AROUND TIMES ARE EXPRESSED AS WORKING DAYS.

RELINQUISHED BY (SIGN)

PRINT NAME / COMPANY

DATE / TIME

RECEIVED BY (SIGN)

PRINT NAME / COMPANY

REC'D AT LAB BY:

DATE / TIME:

Edward DuVivier  
J. Lucero / CLSB

9/30/15 1210  
9/30/15 2:45

J. Lucero / CLSB  
J. Lucero / CLSB

17.9c  
17.9c

SHIPPED VIA

☐ FED X

☐ GOLDEN STATE

☐ GREYHOUND

☐ CLIENT

☒ OTHER



## **APPENDIX B**

### **METHANE MONITORING LOG**



CITY OF LOMITA  
PUBLIC WORKS DEPARTMENT

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

September 2015				
DATE	TIME	METHANE HANDHELD		COMMENTS
9/1/2015	3:30 PM	CH <sub>4</sub> - 0%	Oxy- 20.9%	
9/2/2015	3:30 PM	CH <sub>4</sub> - 0%	Oxy- 20.9%	
9/3/2015	3:00 PM	CH <sub>4</sub> - 0%	Oxy- 20.9%	
9/4/2015	7:30 AM	CH <sub>4</sub> - 0%	Oxy- 20.4%	
9/5/2015				
9/6/2015				
9/7/2015	9:00 AM	CH <sub>4</sub> - 0%	Oxy- 20.5%	
9/8/2015	2:00 PM	CH <sub>4</sub> - 0%	Oxy- 20.8%	
9/9/2015	7:40 AM	CH <sub>4</sub> - 0%	Oxy- 20.6%	
9/10/2015	7:25 AM	CH <sub>4</sub> - 0%	Oxy- 20.8%	
9/11/2015				
9/12/2015				
9/13/2015				
9/14/2015	1:00 PM	CH <sub>4</sub> - 0%	Oxy- 20.9%	
9/15/2015	1:30 PM	CH <sub>4</sub> - 0%	Oxy- 20.9%	
9/16/2015	2:00 PM	CH <sub>4</sub> - 0%	Oxy- 20.9%	
9/17/2015	5:20 PM	CH <sub>4</sub> - 0%	Oxy- 20.9%	
9/18/2015	2:00 PM	CH <sub>4</sub> - 0%	Oxy- 20.9%	
9/19/2015				
9/20/2015				
9/21/2015	3:30 PM	CH <sub>4</sub> - 0%	Oxy- 20.9%	
9/22/2015	3:45 PM	CH <sub>4</sub> - 0%	Oxy- 20.9%	
9/23/2015	1:15 PM	CH <sub>4</sub> - 0%	Oxy- 20.5%	
9/24/2015	2:45 PM	CH <sub>4</sub> - 0%	Oxy- 20.5%	
9/25/2015				
9/26/2015				
9/27/2015				
9/28/2015	3:00 PM	CH <sub>4</sub> - 0%	Oxy- 20.7%	
9/29/2015	2:00 PM	CH <sub>4</sub> - 0%	Oxy- 20.6%	
9/30/2015	10:00 AM	CH <sub>4</sub> - 0%	Oxy- 20.7%	

ND- Non Detect  
CH<sub>4</sub>- Methane  
Oxy- Oxygen  
Weekend/Day Off/Holiday- Red

## **APPENDIX C**

### **NITRIFICATION MONITORING DATA SUMMARY**

**<sup>1</sup>NITRIFICATION MONITORING DATA SUMMARY REPORT**  
**CITY OF LOMITA, System No. 1910073**  
**Month, Year: 9/23/2015**

#	<sup>2</sup> C	Sample I.D	Location	Sample Date	Collection Time	Temp	Combined Chlorine	Free Chlorine	Total Ammonia	Nitrite	PH	Comments/Corrective Actions/Others
Units -->				MM/DD/YYYY	am/pm	°C	mg/L	mg/L	mg/L	mg/L		
1	D	S13-003	1948 W. 252 <sup>nd</sup> St	9/23/2015	~1030Hrs	27.5	0.82	0.38	0.25	0.042	8.0	
2	D	S13-004	24632 S Moon Av	9/23/2015	~1050Hrs	27.4	1.66	0.31	0.17	0.055	8.2	
3	D	S13-008	25417 Pennsylvania Av	9/23/2015	~1045Hrs	27.9	0.43	0.24	0.31	0.090	8.2	
4	D	A	2052 Dawn St	9/23/2015	~1125Hrs	27.2	0.00	1.4	0.00	0.003	8.2	
5	D		Reservoir	9/23/2015	~1025Hrs	26.0	3.42	0.73	0.94	0.002	8.2	
6	D	13-1	1912 W. 259 <sup>th</sup> Pl	9/23/2015	~0750Hrs	27.0	2.20	0.52	0.46	0.004	8.2	
7	D	13-2	26314 S Monte Vta.	9/23/2015	~0805Hrs	26.7	2.20	0.40	0.48	0.006	8.3	
8	D	13-5	2500 PCH	9/23/2015	~0735Hrs	27.0	1.86	0.90	0.39	0.005	8.2	
Notes: <sup>2</sup> C for Sample Code; <sup>3</sup> Z for Zone.												

**<sup>1</sup>This Report needs to be submitted to the Drinking Water Division of the State Water Resources Control Board by the 10<sup>th</sup> of the month following sampling.**