

CITY OF LOMITA



# Cypress Water Production Facility Monthly Status Report

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June 2015

**CITY COUNCIL**

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



**CITY OF LOMITA**

**ADMINISTRATION**

MICHAEL ROCK  
CITY MANAGER

July 10, 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 June 1 through June 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 June 2015.

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

Sincerely,

Mark A. McAvoy, P.E.  
Public Works Director/City Engineer

## **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.

## **Well Production and Operations**

For the month of June 2015, the CWPF operated for approximately 30 days, providing blended water on a fill and draw cycle with the reservoir level fluctuating with system demand. The total production from Well No. 5 for the month was approximately 55.69 ac-ft (18,145,044 gallons) with a daily production of approximately 1.86 ac-ft. The total combined production from both MWD import water and Well No. 5 was approximately 110.86 ac-ft (36,122,033 gallons) for the month with a combined daily production of approximately 3.70 ac-ft.

The daily average flow from Well No. 5 was 685 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 50% Well water and 50% MWD water.

## **Operational Interruptions**

There were no operational interruptions during the month of June 2015. Routine and preventive maintenance was performed on various pieces of equipment as-needed. No major planned operational interruptions are anticipated for the following month.

## **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.

## 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.

### A. 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 at the MCL. Manganese concentration in the raw water (SP1) was 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.

**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
6/3/2015	230	300	110	50	10	15	A	A	A	500	ND*	300	ND	50	ND**	15
6/10/2015											ND	300	ND	50	ND	15
6/17/2015											ND	300	ND	50	ND	15
6/24/2015											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

\*Iron sample taken on 6/3/15 was resampled on 6/25/15, see report 15F2323

\*\*Color sample missed during week of 6/3/15. Additional sample was taken week of 6/10/15 to make up for this, see report 15F1090.

## B. 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.

**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
6/3/2015	8.21	8.56	9.39	0.57	3.79	4
6/10/2015	9.46	10.02	12.54	0.61	3.33	4
6/17/2015	15.84	13.31	18.53	0.66	2.97	4
6/24/2015	14.88	11.38	13.44	1.18	3.16	4

## C. 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.

**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
6/3/2015	700	660	690	500-750	1	3			6.1	0.67
6/10/2015			680	500-750			330	180-250		1.30
6/17/2015			670	500-750						0.81
6/24/2015			700	500-750						0.83
<b>Average</b>			<b>685</b>							<b>0.90</b>

**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

**D. Total Dissolved Solids (TDS)**

The sampling results indicate the TDS levels of the effluent blended water to be on average 685 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 700 mg/L and 660 mg/L, respectively.

**E. Hardness**

The sampling results for the month of June indicate the hardness levels of the blended water to be 330 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.

**F. Dissolved Methane (in Water)**

The methane levels in the CWPF effluent after aeration treatment remain negligible averaging 0.90 mg/L.

**G. 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 June 2015 in Appendix B.

Appendix A

Laboratory Results

# *Clinical Laboratory of San Bernardino, Inc.*



08 July 2015

Clinical Lab No.: 15F2323

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

Project Name: Standard Analysis  
Sub Project: Lomita Sample Non-Compliance

Enclosed are the results of the analyses for samples received at the laboratory on 06/26/15 . 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 Sample Non-Compliance  
Project Manager: Mark Andersen

Work Order: 15F2323  
Received: 06/26/15 15:35  
Reported: 07/08/15

## Filter Effluent Chloramine Site #3

**15F2323-01 (Water)**

**Sample Date:** 06/25/15 8:17

**Sampler:** Edward Duvivier

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

Iron (Fe)	EPA 200.7	ND	100	300	ug/L	07/02/15	07/02/15	1527532	
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ND Analyte NOT DETECTED at or above the reporting limit

Page 1 of 1

# *Clinical Laboratory of San Bernardino, Inc.*



07 July 2015

Clinical Lab No.: 15F2203

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 06/24/15 . 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: 15F2203  
Received: 06/24/15 17:15  
Reported: 07/07/15

**Filter Effluent Site (Chloramine) #3**      **15F2203-01 (Water)**      **Sample Date:** 06/24/15 10:02      **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	06/24/15	06/24/15	1526412	
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## Metals

Iron (Fe)	EPA 200.7	ND	100	300	ug/L	07/02/15	07/02/15	1527507	
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Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	07/02/15	07/02/15	1527507	
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**Reservoir Effluent Site #5**      **15F2203-02 (Water)**      **Sample Date:** 06/24/15 9:57      **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>700</b>	5.0	1000	mg/L	06/26/15	06/29/15	1526473	
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ND      Analyte NOT DETECTED at or above the reporting limit



## Certificate of Analysis

Project: 15F2203

Report Date: 07/02/15 16:20

Received Date: 06/26/15 10:37

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 6/26/2015 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: 5F26034-01

Sample ID: Reservoir Effluent Site #5 / 15F2203-02

Matrix: Water

Sampled by: Client

Sampled: 06/24/15 09:57

Analyte	Result	MDL	MRL	Units	Dil	Method	Prepared	Analyzed	Batch	Qualifier
Methane .....	0.83		0.010	mg/l	1	RSK-175	7/1/15	7/1/15 14:21	W5G0051	



## Certificate of Analysis

## Quality Control Section

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

## Batch W5G0051 - RSK-175

## Blank (W5G0051-BLK1)

Prepared: 07/01/15 Analyzed: 07/01/15 13:49

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

## LCS (W5G0051-BS1)

Prepared: 07/01/15 Analyzed: 07/01/15 14:11

Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Methane .....		0.185		mg/l	0.198	93	85-115		

## Calibration Check (W5G0051-CCV1)

Prepared: 07/01/15 Analyzed: 07/01/15 14:00

Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Methane .....		0.00707		mg/l	0.00792	89	50-150		

## Calibration Check (W5G0051-CCV2)

Prepared: 07/01/15 Analyzed: 07/01/15 13:38

Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Methane .....		0.184		mg/l	0.198	93	85-115		

## Duplicate (W5G0051-DUP1)

Source: 5F26034-01

Prepared: 07/01/15 Analyzed: 07/01/15 14:32

Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Methane .....	0.833 .....	0.782		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

**15F2203**

**5F26034**

**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: Reservoir Effluent Site #5 / 15F2203-02**

**Sampled: 06/24/15 09:57 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

<i>BS Styles</i>	<i>06/20/15 07:55</i>	<i>Dennis Chapman</i>	<i>6/26/15 945</i>
<i>Dennis Chapman</i>	<i>6/26/15 1037</i>	<i>Samuel</i>	<i>6/26/15 1037 4.12</i>



Client		City of Lomita		System Number		Analysis Requested																
Address		24373 Walnut Avenue Lomita, CA 91717		1910073																		
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																		
Comments		Edward DuVivier		ELAP #																		
Sampled by		Edward DuVivier		1088																		
Date	Time	Sample Identification		Matrix	Type	Preserv	Total Chlorine															
		Raw Water Site #1		DW	1W	HCL	-															
		Raw Water Site #1		DW	1W	N/A	-															
6/27	1002	Filter Effluent Site (Chloramine) #3		DW	1W	N/A	-	X	X												E13-005A 1 plastic, 1 glass	
6/27	0956	Reservoir Effluent Site #5		DW	1W	N/A	3.6															1 plastic
6/27	0957	Reservoir Effluent Site #5		DW	1W	HCL	3.6															2 vials
		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														
[Signature]		Edward DuVivier		6/27/2013/12:30		[Signature]		J. W. C. / CWSB														
[Signature]		City of Lomita		6-24-15/15:15		[Signature]		u by CWSB														
Comments:		J. W. C. / CWSB				Samples received: [X] On ice ( ) Intact ( ) Custody seals		Temp 17.8 ( ) F ( ) C														
Shipped Via		[ ] Fed X [ ] Golden State [ ] UPS [ ] Client [ ] Other								Page 1 of 1												

# *Clinical Laboratory of San Bernardino, Inc.*



19 June 2015

Clinical Lab No.: 15F1082

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 06/10/15 . 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: 15F1082  
Received: 06/10/15 16:00  
Reported: 06/19/15

**Filter Effluent Site (Chloramine) #3**      **15F1082-01 (Water)**      **Sample Date:** 06/10/15 11:30      **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	06/10/15	06/10/15	1524476	
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## Metals

Iron (Fe)	EPA 200.7	ND	100	300	ug/L	06/12/15	06/12/15	1524542	
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Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	06/12/15	06/12/15	1524542	
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**Reservoir Effluent Site #5**      **15F1082-02 (Water)**      **Sample Date:** 06/10/15 8:52      **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	06/12/15	06/15/15	1524539	
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ND      Analyte NOT DETECTED at or above the reporting limit



## Certificate of Analysis

Project: 15F1082

Report Date: 06/19/15 11:23

Received Date: 06/12/15 11:26

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 6/12/2015 with the Chain of Custody document. The samples were received in good condition, at 5.3 °C and on ice. All analysis met the method criteria except as noted below or in the report with data qualifiers.

Lab ID: 5F12044-01

Sample ID: Reservoir Effluent Site #5 / 15F1082-02

Matrix: Water

Sampled by: Client

Sampled: 06/10/15 08:52

Analyte	Result	MDL	MRL	Units	Dil	Method	Prepared	Analyzed	Batch	Qualifier
Methane .....	1.3		0.010	mg/l	1	RSK-175	6/16/15	6/16/15 15:36	W5F0901	



## Certificate of Analysis

## Quality Control Section

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

## Batch W5F0901 - RSK-175

Blank (W5F0901-BLK1)					Prepared: 06/16/15		Analyzed: 06/16/15 15:04		
Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Methane .....		ND		mg/l					
LCS (W5F0901-BS1)					Prepared: 06/16/15		Analyzed: 06/16/15 15:26		
Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Methane .....		0.223		mg/l	0.198	113	85-115		
Calibration Check (W5F0901-CCV1)					Prepared: 06/16/15		Analyzed: 06/16/15 15:15		
Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Methane .....		0.00675		mg/l	0.00792	85	0-200		
Calibration Check (W5F0901-CCV2)					Prepared: 06/16/15		Analyzed: 06/16/15 14:53		
Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Methane .....		0.180		mg/l	0.198	91	0-200		
Duplicate (W5F0901-DUP1)					Prepared: 06/16/15		Analyzed: 06/16/15 15:47		
Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Methane .....	1.27 .....	1.32		mg/l				4	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**  
**15F1082**

5F12044

**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 [ ] glenney@clinical-lab.com [x] styles@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 [ ] No

UCMR 3 CDX Transfer [ ] Yes [x] No

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

Subcontract Comments:

**Analysis**

**Comments**

**Sample ID: Reservoir Effluent Site #5 / 15F1082-02**

**Sampled: 06/10/15 08:52 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

Released By: *BJ Shy* Date / Time: *06/12/15 07:50* Received By: *Dy Aguirre* Date / Time: *6/12/15 9:17*  
Released By: *Dy Aguirre* Date / Time: *6/12/15 11:26* Received By: *Jamahan celizis* Date / Time: *11:26 5:37*

15f1082 0113

15f1082 0113

*"Your Water and Wastewater Analysis Solution"*

*"Your Water and Wastewater Analysis Solution"*



# *Clinical Laboratory of San Bernardino, Inc.*



26 June 2015

Clinical Lab No.: 15F1630

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 06/17/15 . 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: 15F1630  
Received: 06/17/15 16:15  
Reported: 06/26/15

**Filter Effluent Site (Chloramine) #3**      **15F1630-01 (Water)**      **Sample Date:** 06/17/15 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	06/17/15	06/17/15	1525446	
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## Metals

Iron (Fe)	EPA 200.7	ND	100	300	ug/L	06/22/15	06/22/15	1526031	
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Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	06/22/15	06/22/15	1526031	
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**Reservoir Effluent Site #5**      **15F1630-02 (Water)**      **Sample Date:** 06/17/15 10:58      **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>670</b>	5.0	1000	mg/L	06/18/15	06/22/15	1525432	
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ND      Analyte NOT DETECTED at or above the reporting limit



## Certificate of Analysis

Project: 15F1630

Report Date: 06/29/15 09:41

Received Date: 06/19/15 10:10

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 6/19/2015 with the Chain of Custody document. The samples were received in good condition, at 4.7 °C and on ice. All analysis met the method criteria except as noted below or in the report with data qualifiers.

Lab ID: 5F19009-01

Sample ID: Reservoir Effluent Site #5 / 15F1630-02

Matrix: Water

Sampled by: Client

Sampled: 06/17/15 10:58

Analyte	Result	MDL	MRL	Units	Dil	Method	Prepared	Analyzed	Batch	Qualifier
Ethene .....	ND		0.010	mg/l	1	RSK-175	6/23/15	6/23/15 22:19	W5F1376	
Methane .....	0.81		0.010	mg/l	1	RSK-175	6/23/15	6/23/15 22:19	W5F1376	



## Certificate of Analysis

## Quality Control Section

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

## Batch W5F1376 - RSK-175

Blank (W5F1376-BLK1)					Prepared: 06/23/15		Analyzed: 06/23/15 17:42		
Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Methane .....		ND		mg/l					
Ethene .....		ND		mg/l					
Blank (W5F1376-BLK2)					Prepared: 06/23/15		Analyzed: 06/25/15 14:51		
Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Ethane .....		ND		mg/l					
LCS (W5F1376-BS1)					Prepared: 06/23/15		Analyzed: 06/23/15 18:03		
Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Methane .....		0.197		mg/l	0.198	100	85-115		
Ethene .....		0.537		mg/l	0.560	96	85-115		
LCS (W5F1376-BS2)					Prepared: 06/23/15		Analyzed: 06/25/15 15:12		
Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Ethane .....		0.568		mg/l	0.660	86	85-115		
Calibration Check (W5F1376-CCV1)					Prepared: 06/23/15		Analyzed: 06/23/15 17:53		
Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Methane .....		0.00690		mg/l	0.00792	87	50-150		
Ethene .....		0.00362		mg/l	0.00560	65	50-150		
Calibration Check (W5F1376-CCV2)					Prepared: 06/23/15		Analyzed: 06/23/15 17:31		
Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Methane .....		0.222		mg/l	0.198	112	85-115		
Ethene .....		0.595		mg/l	0.560	106	85-115		
Calibration Check (W5F1376-CCV3)					Prepared: 06/23/15		Analyzed: 06/25/15 15:02		
Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Ethane .....		0.0114	Q-08	mg/l	0.00660	172	50-150		
Calibration Check (W5F1376-CCV4)					Prepared: 06/23/15		Analyzed: 06/25/15 14:40		
Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Ethane .....		0.692		mg/l	0.660	105	85-115		
Duplicate (W5F1376-DUP1)					Source: 5F22082-01		Prepared: 06/23/15		Analyzed: 06/23/15 22:41
Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Methane .....	0.0211	0.0261	Q-ME	mg/l				21	20
Ethane .....	ND	ND		mg/l					
Ethene .....	ND	ND		mg/l					



## 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>Q-08</b>	High bias in the QC sample does not affect sample result since analyte was not detected or below the reporting limit.
<b>Q-ME</b>	Acceptable QC with marginal exceedance
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**

**15F1630**

5F19009

**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 [ ] glenney@clinical-lab.com [x] styles@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

UCMR 3 CDX Transfer [ ] Yes [x] No

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

Subcontract Comments:

**Analysis**

**Comments**

**Sample ID: Reservoir Effluent Site #5 / 15F1630-02**

**Sampled: 06/17/15 10:58 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

BS Styles

06/18/15 15:00

Jamethma Celalis 10:10 4.72

## Chain of Custody

*"Your Water and Wastewater Analysis Solution"*

# *Clinical Laboratory of San Bernardino, Inc.*



19 June 2015

Clinical Lab No.: 15F1090

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 06/10/15 . 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 Weekly Non-Comp Analysis  
Project Manager: Mark Andersen

Work Order: 15F1090  
Received: 06/10/15 16:00  
Reported: 06/19/15

## Filter Effluent Site #3

15F1090-01 (Water)

Sample Date: 06/09/15 10:05

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	06/10/15	06/10/15	1524476	
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## Reservoir Effluent Site #5

15F1090-02 (Water)

Sample Date: 06/10/15 8:50

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	330	6.6	N/A	mg/L	06/17/15	06/17/15	[CALC]	
Ortho-Phosphate (as P)	HACH 8048	0.16	0.0067	N/A	mg/L	06/11/15	06/11/15	1524502	
Phosphorus (Total as P)	HACH 8190	0.45	0.0067	N/A	mg/L	06/11/15	06/11/15	1524408	

## Metals

Calcium (Ca)	EPA 200.7	88	1.0	N/A	mg/L	06/17/15	06/17/15	1525208	
Magnesium (Mg)	EPA 200.7	28	1.0	N/A	mg/L	06/17/15	06/17/15	1525208	

ND Analyte NOT DETECTED at or above the reporting limit

## Chain of Custody

55.1090

*"Your Water and Wastewater Analysis Solution"*

# *Clinical Laboratory of San Bernardino, Inc.*



12 June 2015

Clinical Lab No.: 15F0470

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 06/03/15. 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 Weekly Compliance Analysis  
Project Manager: Mark Andersen

Work Order: 15F0470  
Received: 06/03/15 17:00  
Reported: 06/12/15

**Raw Water Site #1** **15F0470-01 (Water)** **Sample Date:** 06/03/15 7:58 **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	06/03/15	06/03/15	1523530	
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## Microbiology Analyses

Total Coliform (Density)	SM 9223	ND	1.0	N/A	MPN/100 mL	06/03/15	06/04/15	1523495	
E. Coli (Density)	SM 9223	ND	1.0	N/A	MPN/100 mL	06/03/15	06/04/15	1523495	

## General Physical Analyses

Apparent Color	SM 2120B	10.0	3.0	15	Color Units	06/04/15	06/04/15	1523576	
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## General Chemical Analyses

Total Filterable Residue/TDS	SM 2540C	700	5.0	1000	mg/L	06/04/15	06/05/15	1523415	
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## Metals

Iron (Fe)	EPA 200.7	230	100	300	ug/L	06/09/15	06/09/15	1524121	
Manganese (Mn)	EPA 200.7	110	20	50	ug/L	06/09/15	06/09/15	1524121	

**Filter Effluent Site (Chloramine) #3** **15F0470-02 (Water)** **Sample Date:** 06/03/15 7:36 **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	7.84		N/A	mg/L	06/03/15	06/03/15	1523530	
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## Metals

Iron (Fe)	EPA 200.7	430	100	300	ug/L	06/09/15	06/09/15	1524121	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	06/09/15	06/09/15	1524121	

**Filter Effluent (Free Chlorine) Site #2** **15F0470-03 (Water)** **Sample Date:** 06/03/15 7:42 **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	8.56		N/A	mg/L	06/03/15	06/03/15	1523534	
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## Microbiology Analyses

Total Coliform	SM 9223	A		N/A	P/A	06/03/15	06/04/15	1523493	
E. Coli	SM 9223	A		N/A	P/A	06/03/15	06/04/15	1523493	
Plate Count	SM9215B	ND	1	500	CFU/ml	06/03/15	06/05/15	1523613	HT-08

# 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: 15F0470  
Received: 06/03/15 17:00  
Reported: 06/12/15

**Reservoir Effluent Site #5** **15F0470-04 (Water)** **Sample Date:** 06/03/15 7:50 **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 **3.82** N/A mg/L 06/03/15 06/03/15 1523530

## General Physical Analyses

Apparent Color SM 2120B ND 3.0 15 Color Units 06/03/15 06/03/15 1523502

**Odor Threshold** EPA 140.1M **1** 1 3 TON 06/03/15 06/03/15 1523502

## General Chemical Analyses

**Total Filterable Residue/TDS** SM 2540C **690** 5.0 1000 mg/L 06/04/15 06/05/15 1523415

**Zone #2 Site #6** **15F0470-05 (Water)** **Sample Date:** 06/03/15 7:29 **Sampler:** Edward Duvivier

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

**Total Filterable Residue/TDS** SM 2540C **660** 5.0 1000 mg/L 06/04/15 06/05/15 1523415

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

# Clinical Laboratory of San Bernardino, Inc.

## EDT Transfer Confirmation 1



Work Order: 15F0470

Report Date: 06/12/2015

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: 150603 07:58	
COLOR	Result: 10.0	Units: UNITS	Entry No.: 00081	Analyzed: 150604	
IRON	Result: 230	Units: UG/L	Entry No.: 01045	Analyzed: 150609	
MANGANESE	Result: 110	Units: UG/L	Entry No.: 01055	Analyzed: 150609	
TOTAL DISSOLVED SOLIDS	Result: 700	Units: MG/L	Entry No.: 70300	Analyzed: 150605	
MWD CONNECTION WB-8A & WB-8B/TREATED		Station No.: 1910073-005		Sampled: 150603 07:29	
TOTAL DISSOLVED SOLIDS	Result: 660	Units: MG/L	Entry No.: 70300	Analyzed: 150605	
WELL 05 TREATMENT PLANT EFFLUENT		Station No.: 1910073-006		Sampled: 150603 07:36	
IRON	Result: 430	Units: UG/L	Entry No.: 01045	Analyzed: 150609	
MANGANESE	Result: ND	Units: UG/L	Entry No.: 01055	Analyzed: 150609	



## Certificate of Analysis

Project: 15F0470

Report Date: 06/12/15 15:57

Received Date: 06/05/15 08:50

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 6/5/2015 with the Chain of Custody document. The samples were received in good condition, at 5.5 °C and on ice. All analysis met the method criteria except as noted below or in the report with data qualifiers.

Lab ID: 5F05005-01      Sample ID: Raw Water Site #1/ 15F0470-01      Matrix: Water  
Sampled by: Client      Sampled: 06/03/15 07:58

Analyte	Result	MDL	MRL	Units	Dil	Method	Prepared	Analyzed	Batch	Qualifier
Methane .....	6.1		0.20	mg/l	20	RSK-175	6/5/15	6/5/15 14:11	W5F0341	

Lab ID: 5F05005-02      Sample ID: Reservoir Effluent Site #5/ 15F0470-04      Matrix: Water  
Sampled by: Client      Sampled: 06/03/15 07:50

Analyte	Result	MDL	MRL	Units	Dil	Method	Prepared	Analyzed	Batch	Qualifier
Methane .....	0.67		0.010	mg/l	1	RSK-175	6/5/15	6/5/15 14:32	W5F0341	



## Certificate of Analysis

## Quality Control Section

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

## Batch W5F0341 - RSK-175

## Blank (W5F0341-BLK1)

Prepared: 06/05/15 Analyzed: 06/05/15 13:39

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

## LCS (W5F0341-BS1)

Prepared: 06/05/15 Analyzed: 06/05/15 14:00

Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Methane .....		0.211		mg/l	0.198	106	85-115		

## Calibration Check (W5F0341-CCV1)

Prepared: 06/05/15 Analyzed: 06/05/15 13:49

Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Methane .....		0.00745		mg/l	0.00792	94	50-150		

## Calibration Check (W5F0341-CCV2)

Prepared: 06/05/15 Analyzed: 06/05/15 13:28

Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Methane .....		0.211		mg/l	0.198	106	85-115		

## Duplicate (W5F0341-DUP1)

Source: 5F05005-02

Prepared: 06/05/15 Analyzed: 06/05/15 14:42

Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Methane .....	0.671 .....	0.634		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

15F0470

5F05005

**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 [ ] glenney@clinical-lab.com [x] styles@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 [ ] No  
UCMR 3 CDX Transfer [ ] Yes [x] No

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

Subcontract Comments:

**Analysis****Comments****Sample ID: Raw Water Site #1 / 15F0470-01****Sampled: 06/03/15 07:58 PS Code: 1910073-003**  
**Water****WTX ID:**  
**UCMR ID:**

Methane RSK175

Report in mg/L

Containers Supplied:

40mL Amber Vial w/ Na2S / 40mL Amber Vial w/ Na2S

**Sample ID: Reservoir Effluent Site #5 / 15F0470-04****Sampled: 06/03/15 07:50 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

06/04/15 13:00

Date / Time

Received By

6.5.15 / 8:00

Date / Time

Released By

6.5.15 /

Date / Time

Received By

6/5/15 08:10

Date / Time

5-52

COPY

Clinical Laboratory of San Bernardino, Inc.

2/1/4 15F0470  
Chain of Custody

Client		City of Lomita		System Number		Analysis Requested									
Address		24373 Walnut Avenue		1910073		Iron	Manganese	Total Dissolved Solids	E. Coli	Total Coliform	Color	Methane (WATER) (RSK175)	Tasted odor	Comments / P.S. Codes	
Lomita, CA 91717															
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 DuVivier											
Date	Time	Sample Identification	Matrix	Type	Preserv	Total Chlorine									
6-2-15	0758	Raw Water Site #1	GW	1W	HCL	0 mg/L						X		W13-005	
6-3-15	0749	Raw Water Site #1	GW	1W	N/A	0 mg/L	X	X	X			X		W13-005	
6-3-15	0740	Raw Water Site #1	GW	1W	1,7	0 mg/L				X	X				
6-2-15	0736	Filter Effluent Site (Chloramine) #3	DW	1W	N/A	7.84	X	X				X (1)		E13-005A	
6-3-15	0742	Filter Effluent Site (Free Chlorine) #2	DW	1W	1,7	8.56					X			[X] Hetrophic Plate Count (APC)	
6-3-15	0749	Reservoir Effluent Site #5	DW	1D	N/A	3.82			X						
6-3-15	0738	Reservoir Effluent Site #5	DW	1D	HCL	3.82						X			
6-3-15	0750	Reservoir Effluent Site #5									X		X	SAVE	
6-3-15	0729	Zone #2 Site #6	DW	1D	N/A	-			X						
		(1) Color bottle not received; no color analysis performed													
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							
[Signature]		Edward DuVivier		6-2-2015 / 11:30		[Signature]		J. Lucero / CLS							
[Signature]		City of Lomita		6-3-15 / 5:00		[Signature]									
Comments				Samples received: [X] On ice ( ) Intact ( ) Custody seals Temp 16.9 ( ) F (X) C											
Shipped Via		[ ] Fed X [ ] Golden State [ ] UPS [ ] Client [ ] Other Page 1 of 1													

"Your Water and Wastewater Analysis Solution"

## Appendix B

### Methane Monitoring Log



CITY OF LOMITA  
PUBLIC WORKS DEPARTMENT

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

JUNE 2015				
DATE	TIME	METHANE HANDHELD		COMMENTS
6/1/2015	3:00 PM	CH <sub>4</sub> - 0%	Oxy- 19.8%	
6/2/2015	3:20 PM	CH <sub>4</sub> - 2%	Oxy- 19.7%	
6/3/2015	3:00 PM	CH <sub>4</sub> - 0%	Oxy- 20.0%	
6/4/2015	12:00 PM	CH <sub>4</sub> - 0%	Oxy- 20.0%	
6/5/2015				
6/6/2015				
6/7/2015				
6/8/2015	2:20 PM	CH <sub>4</sub> - 1%	Oxy- 19.8%	
6/9/2015	2:15 PM	CH <sub>4</sub> - 0%	Oxy- 19.7%	
6/10/2015	9:10 AM	CH <sub>4</sub> - 0%	Oxy- 20.0%	
6/11/2015	3:30 PM	CH <sub>4</sub> - 0%	Oxy- 20.0%	
6/12/2015	11:35 AM	CH <sub>4</sub> - 0%	Oxy- 19.7%	
6/13/2015				
6/14/2015				
6/15/2015	3:00 PM	CH <sub>4</sub> - 0%	Oxy- 19.9%	
6/16/2015	3:15 PM	CH <sub>4</sub> - 1%	Oxy- 19.7%	
6/17/2015	3:15 PM	CH <sub>4</sub> - 0%	Oxy- 19.8%	
6/18/2015	3:30 PM	CH <sub>4</sub> - 0%	Oxy- 19.8%	
6/19/2015				
6/20/2015				
6/21/2015				
6/22/2015	10:30 AM	CH <sub>4</sub> - 0%	Oxy- 19.7%	
6/23/2015	1:25 PM	CH <sub>4</sub> - 0%	Oxy- 19.7%	
6/24/2015	3:15 PM	CH <sub>4</sub> - 0%	Oxy- 19.7%	
6/25/2015	3:00 PM	CH <sub>4</sub> - 0%	Oxy- 19.7%	
6/26/2015	2:30 PM	CH <sub>4</sub> - 0%	Oxy- 19.7%	
6/27/2015				
6/28/2015				
6/29/2015	3:00 PM	CH <sub>4</sub> - 0%	Oxy- 19.7%	
6/30/2015	7:00 AM	CH <sub>4</sub> - 0%	Oxy- 19.7%	

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