

CITY OF LOMITA



Cypress Water Production Facility Monthly Status Report

April 2015

CITY COUNCIL

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



ADMINISTRATION

MICHAEL ROCK
CITY MANAGER

CITY OF LOMITA

May 7, 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 April 1 through April 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 April 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 April 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 54.96 ac-ft (17,907,524 gallons) with a daily production of approximately 1.83 ac-ft. The total combined production from both MWD import water and Well No. 5 was approximately 111.47 ac-ft (36,318,513 gallons) for the month with a combined daily production of approximately 3.72 ac-ft.

The daily average flow from Well No. 5 was 498 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 49% Well water and 51% MWD water.

Operational Interruptions

There were no major operational interruptions during the month of April 2015. Routine and preventive maintenance was performed on various pieces of equipment as-needed. In early May 2015, the Cypress Reservoir is planned to be isolated for the first few days of the month to monitor pressures within the distribution system from using only MWD as the primary source.

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 and Manganese concentrations in the raw water (SP1) were below and above the MCL, respectively. 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 = 3 00 ug/L	Manganese, ug/L	*MCL = 50 ug/L	Color	*MCL=15	Total Coliform	Total Coliform	HPC, MPN/100mL	MCL=500	Iron, mg/L	*MCL = 300 ug/L	Manganese, mg/L	*MCL = 50 ug/L	Color	*MCL=15
4/1/2015	250	300	100	50	15	15	A	A	A	500	ND	300	ND	50	ND**	15
4/8/2015											ND	300	ND	50	ND	15
4/15/2015											ND	300	ND	50	ND	15
4/22/2015											ND	300	ND	50	ND	15
4/29/2015											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

** Additional Color sample taken on 4/15/15 to take place of the sample taken on 4/1/15 used in the March report (see report 15D1370).

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 the 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
4/1/2015	6.53	6.44	7.17	2.72	3.70	4
4/8/2015	7.60	8.09	7.41		3.29	4
4/15/2015	14.43	6.67	9.12	3.80	3.15	4
4/22/2015	8.00	6.56	8.40	2.68	3.85	4
4/29/2015	7.92	7.92	8.64	4.32	3.98	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
4/1/2015	650	650	660	500-750	5	3			6.1	0.55
4/8/2015			680	500-750						0.44
4/15/2015			680	500-750			290	180-250		1.00
4/22/2015			710	500-750						0.71
4/29/2015			640	500-750						0.49
Average			674							0.64

Notes: Monthly- Orange Weekly- Yellow
 ppm – parts per million
 mg/L – milligram per liter
 T.O.N. - Threshold Odor Number
 TDS - Total Dissolved Solids
 Hardness - As total CaCO₃
 Methane (Water) - Methane dissolved in water

D. Total Dissolved Solids (TDS)

The sampling results indicate the TDS levels of the effluent blended water to be on average 674 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 650 mg/L and 650 mg/L, respectively.

E. Hardness

The sampling results for the month of April indicate the hardness levels of the blended water to be 290 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 0.64 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 April 2015 in Appendix B.

Appendix A

Laboratory Results

Clinical Laboratory of San Bernardino, Inc.



07 May 2015

Clinical Lab No.: 15D2415

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 04/29/15 . 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: CWPF Weekly Compliance Analysis
Project Manager: Mark Andersen

Work Order: 15D2415
Received: 04/29/15 16:30
Reported: 05/07/15

Filter Effluent Site (Chloramine) #3 **15D2415-01 (Water)** **Sample Date:** 04/29/15 6:45 **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	04/29/15	04/29/15	1518373	
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Metals

Iron (Fe)	EPA 200.7	ND	100	300	ug/L	05/01/15	05/01/15	1518455	
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Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	05/01/15	05/01/15	1518455	
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Reservoir Effluent Site #5 **15D2415-02 (Water)** **Sample Date:** 04/29/15 6:49 **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	640	5.0	1000	mg/L	04/30/15	05/04/15	1518286	
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ND Analyte NOT DETECTED at or above the reporting limit



Certificate of Analysis

Project: 15D2415

Report Date: 05/07/15 08:31

Received Date: 04/30/15 13:29

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 4/30/2015 with the Chain of Custody document. The samples were received in good condition, at 4.9 °C and on ice. All analysis met the method criteria except as noted below or in the report with data qualifiers.

Lab ID: 5D30037-01

Sample ID: Reservoir Effluent Site #5 / 15D2415-02

Matrix: Water

Sampled by: Client

Sampled: 04/29/15 06:49

Analyte	Result	MDL	MRL	Units	Dil	Method	Prepared	Analyzed	Batch	Qualifier
Methane	0.49		0.010	mg/l	1	RSK-175	5/5/15	5/5/15 16:40	W5E0229	



Certificate of Analysis

Quality Control Section

Dissolved Gases in Water by RSK-175 - Quality Control

Batch W5E0229 - RSK-175

Blank (W5E0229-BLK1)

Prepared: 05/05/15 Analyzed: 05/05/15 16:08

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

LCS (W5E0229-BS1)

Prepared: 05/05/15 Analyzed: 05/05/15 15:57

Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Methane		0.212		mg/l	0.198	107	85-115		

Calibration Check (W5E0229-CCV1)

Prepared: 05/05/15 Analyzed: 05/05/15 15:46

Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Methane		0.00721		mg/l	0.00792	91	0-200		

Calibration Check (W5E0229-CCV2)

Prepared: 05/05/15 Analyzed: 05/05/15 15:25

Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Methane		0.212		mg/l	0.198	107	0-200		

Duplicate (W5E0229-DUP1)

Source: 5D30037-01

Prepared: 05/05/15 Analyzed: 05/05/15 16:51

Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Methane	0.489	0.517		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 # 04229CA



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
15D2415

JD30037

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 / 15D2415-02

Sampled: 04/29/15 06:49 PS Code:
Water

WTX ID:
UCMR ID:

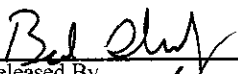


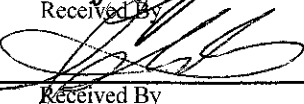
Methane RSK175

Report in mg/L

Containers Supplied:

40ml Amber Vial (A) 40ml Amber Vial (B)

4.7

Released By 	Date / Time 04/30/15 08:15	Received By 	Date / Time 4-30-15 / 11:00
Released By 	Date / Time 4-30-15 / 1:28	Received By 	Date / Time 4/30/15 1329

Clinical Laboratory of San Bernardino, Inc.



01 May 2015

Clinical Lab No.: 15D1904

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 04/22/15 . 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: 15D1904
Received: 04/22/15 16:00
Reported: 05/01/15

Filter Effluent Site (Chloramine) #3 **15D1904-01 (Water)** **Sample Date:** 04/22/15 11:10 **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	04/22/15	04/22/15	1517313	
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Metals

Iron (Fe)	EPA 200.7	ND	100	300	ug/L	04/26/15	04/27/15	1518018	
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Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	04/26/15	04/27/15	1518018	
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Reservoir Effluent Site #5 **15D1904-02 (Water)** **Sample Date:** 04/22/15 11:23 **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	710	5.0	1000	mg/L	04/27/15	04/29/15	1518031	
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ND Analyte NOT DETECTED at or above the reporting limit



Certificate of Analysis

Project: 15D1904

Report Date: 04/29/15 14:22

Received Date: 04/23/15 12:55

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 4/23/2015 with the Chain of Custody document. The samples were received in good condition, at 3.8 °C and on ice. All analysis met the method criteria except as noted below or in the report with data qualifiers.

Lab ID: 5D23042-01

Sample ID: Reservoir Effluent Site #5 / 15D1904-02

Matrix: Water

Sampled by: Client

Sampled: 04/22/15 11:23

Analyte	Result	MDL	MRL	Units	Dil	Method	Prepared	Analyzed	Batch	Qualifier
Methane	0.71		0.010	mg/l	1	RSK-175	4/22/15	4/23/15 14:43	W5D1286	



Certificate of Analysis

Quality Control Section

Dissolved Gases in Water by RSK-175 - Quality Control

Batch W5D1286 - RSK-175

Blank (W5D1286-BLK1)					Prepared: 04/22/15		Analyzed: 04/22/15 13:41		
Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Methane		ND		mg/l					
LCS (W5D1286-BS1)					Prepared: 04/22/15		Analyzed: 04/22/15 13:30		
Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Methane		0.212		mg/l	0.198	107	85-115		
LCS Dup (W5D1286-BSD1)					Prepared: 04/22/15		Analyzed: 04/22/15 12:58		
Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Methane		0.229		mg/l	0.198	115	85-115	8	20
Calibration Check (W5D1286-CCV1)					Prepared: 04/22/15		Analyzed: 04/22/15 13:19		
Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Methane		0.00704		mg/l	0.00792	89	50-150		



Certificate of Analysis

Notes:

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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.

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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 # 04229CA



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
15D1904

5D23042

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 / 15D1904-02

Sampled: 04/22/15 11:23 PS Code:
Water

WTX ID:
UCMR ID:

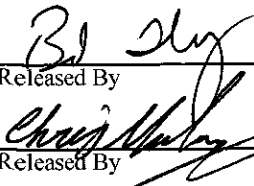
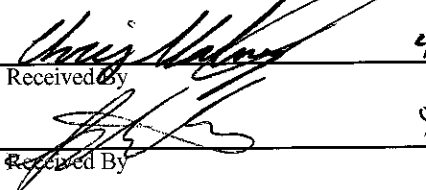
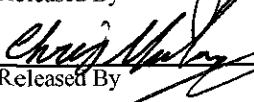
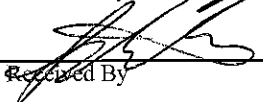
Methane RSK175

Report in mg/L

Containers Supplied:

40ml Amber Vial (A) 40ml Amber Vial (B)

38

Released By	04/22/15 17:00	Received By	4-23-15/10:30
	Date / Time		Date / Time
Released By	4-23-15/12:55	Received By	4/23/15 12:55
	Date / Time		Date / Time

Clinical Laboratory of San Bernardino, Inc.



23 April 2015

Clinical Lab No.: 15D1365

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 04/15/15 . Samples were received within temperature range, in correct containers and preservation.

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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: 15D1365
Received: 04/15/15 16:30
Reported: 04/23/15

Filter Effluent Site (Chloramine) #3 **15D1365-01 (Water)** **Sample Date:** 04/15/15 7:55 **Sampler:** Edward Duvivier

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

General Physical Analyses

Apparent Color	SM 2120B	ND	3.0	15	Color Units	04/16/15	04/16/15	1516602	
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Metals

Iron (Fe)	EPA 200.7	ND	100	300	ug/L	04/21/15	04/21/15	1517089	
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Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	04/21/15	04/21/15	1517089	
----------------	-----------	----	----	----	------	----------	----------	---------	--

Reservoir Effluent Site #5 **15D1365-02 (Water)** **Sample Date:** 04/15/15 7:58 **Sampler:** Edward Duvivier

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

General Chemical Analyses

Total Filterable Residue/TDS	SM 2540C	680	5.0	1000	mg/L	04/16/15	04/20/15	1516485	
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ND Analyte NOT DETECTED at or above the reporting limit



Certificate of Analysis

Project: 15D1365

Report Date: 04/24/15 11:06

Received Date: 04/16/15 12:40

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 4/16/2015 with the Chain of Custody document. The samples were received in good condition, at 2.4 °C and on ice. All analysis met the method criteria except as noted below or in the report with data qualifiers.

Lab ID: 5D16029-01

Sample ID: Reservoir Effluent Site #5 / 15D1365-02

Matrix: Water

Sampled by: Client

Sampled: 04/15/15 07:58

Analyte	Result	MDL	MRL	Units	Dil	Method	Prepared	Analyzed	Batch	Qualifier
Methane	1.0		0.010	mg/l	1	RSK-175	4/22/15	4/22/15 13:52	W5D1286	



Certificate of Analysis

Quality Control Section

Dissolved Gases in Water by RSK-175 - Quality Control

Batch W5D1286 - RSK-175

Blank (W5D1286-BLK1)					Prepared: 04/22/15		Analyzed: 04/22/15 13:41		
Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Methane		ND		mg/l					
LCS (W5D1286-BS1)					Prepared: 04/22/15		Analyzed: 04/22/15 13:30		
Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Methane		0.212		mg/l	0.198	107	85-115		
LCS Dup (W5D1286-BSD1)					Prepared: 04/22/15		Analyzed: 04/22/15 12:58		
Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Methane		0.229		mg/l	0.198	115	85-115	8	20
Calibration Check (W5D1286-CCV1)					Prepared: 04/22/15		Analyzed: 04/22/15 13:19		
Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Methane		0.00704		mg/l	0.00792	89	50-150		



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 # 04229CA



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

15D1365

52116029

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:

Week 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 ☐ glemmey@clinical-lab.com ☒ styles@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

UCMR 3 CDX Transfer

☐ Yes ☒ No

Turn Around Time ☐ 10 Days ☒ 5 Days ☐ Other ___ Days

Subcontract Comments:

Analysis

Comments

Sample ID: Reservoir Effluent Site #5 / 15D1365-02

Sampled: 04/15/15 07:58 PS Code:
Water

WTX ID:

UCMR ID:

Methane RSK 175

Report in mg/L

Containers Supplied:

40ml Amber Vial (A) 40ml Amber Vial (B)

Released By	<i>Chris Kelly</i>	Date / Time	4/16/15 08:20	Received By	<i>Chris Kelly</i>	Date / Time	4-16-15/11:00
Released By	<i>Chris Kelly</i>	Date / Time	4-16-15/12:40	Received By	<i>James</i>	Date / Time	4/16/15 1240 2:41

SD|365 Chain of Custody

Page 1 of 1

Clinical Laboratory of San Bernardino, Inc.



24 April 2015

Clinical Lab No.: 15D1370

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 04/15/15 . 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: 15D1370
Received: 04/15/15 16:30
Reported: 04/24/15

Filter Effluent Site #3

15D1370-01 (Water)

Sample Date: 04/15/15 12:18 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	04/15/15	04/15/15	1516551	
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Reservoir Effluent Site #5

15D1370-02 (Water)

Sample Date: 04/15/15 7:57 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 ₃)	Calculated	290	6.6	N/A	mg/L	04/21/15	04/21/15	[CALC]	
Ortho-Phosphate (as P)	HACH 8048	0.18	0.0067	N/A	mg/L	04/16/15	04/16/15	1516537	
Phosphorus (Total as P)	HACH 8190	0.65	0.0067	N/A	mg/L	04/23/15	04/23/15	1517283	

Metals

Calcium (Ca)	EPA 200.7	74	1.0	N/A	mg/L	04/21/15	04/21/15	1517096	
Magnesium (Mg)	EPA 200.7	25	1.0	N/A	mg/L	04/20/15	04/20/15	1517015	

ND Analyte NOT DETECTED at or above the reporting limit

1110

Chain of Custody

[illegible]

"Your Water and Wastewater Analysis Solution"

Clinical Laboratory of San Bernardino, Inc.



20 April 2015

Clinical Lab No.: 15D0787

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 04/08/15 . 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: 15D0787
Received: 04/08/15 17:15
Reported: 04/20/15

Filter Effluent Site (Chloramine) #3

15D0787-01 (Water)

Sample Date: 04/08/15 8:45

Sampler: Not Listed

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	04/08/15	04/08/15	1515485	
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Metals

Iron (Fe)	EPA 200.7	ND	100	300	ug/L	04/14/15	04/14/15	1516168	
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Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	04/14/15	04/14/15	1516168	
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ND Analyte NOT DETECTED at or above the reporting limit



Certificate of Analysis

Report Date: 04/17/15 10:53

Received Date: 04/10/15 11:00

Turnaround Time: 5 workdays

Project: 15D0787

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 4/10/2015 with the Chain of Custody document. The samples were received in good condition, at 3.3 °C and on ice. All analysis met the method criteria except as noted below or in the report with data qualifiers.

Lab Sample ID: 5D10030-01		Sample ID: Reservoir Effluent Site #5 / 15D0787-02							Matrix: Water	
Sampled by: Client		Sampled: 04/08/15 08:45								
Analyte	Result	MDL	MRL	Units	Dil	Method	Prepared	Analyzed	Batch	Qualifier
Methane	0.44		0.010	mg/l	1	RSK-175	4/15/15	4/15/15 18:08	W5D0684	



Certificate of Analysis

Quality Control Section

Dissolved Gases in Water by RSK-175 - Quality Control

Batch W5D0684 - RSK-175

Blank (W5D0684-BLK1)					Prepared: 04/16/15		Analyzed: 04/16/15 11:43		
Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Ethene		ND		mg/l					
Blank (W5D0684-BLK2)					Prepared: 04/15/15		Analyzed: 04/15/15 15:39		
Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Methane		ND		mg/l					
LCS (W5D0684-BS1)					Prepared: 04/16/15		Analyzed: 04/16/15 12:25		
Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Ethene		0.624		mg/l	0.560	111	85-115		
LCS (W5D0684-BS2)					Prepared: 04/15/15		Analyzed: 04/15/15 16:00		
Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Methane		0.208		mg/l	0.198	105	85-115		
Ethane		0.697		mg/l	0.660	106	85-115		
Calibration Check (W5D0684-CCV1)					Prepared: 04/16/15		Analyzed: 04/16/15 11:53		
Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Ethene		0.00492		mg/l	0.00560	88	0-200		
Calibration Check (W5D0684-CCV2)					Prepared: 04/16/15		Analyzed: 04/16/15 10:58		
Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Ethene		0.499		mg/l	0.560	89	0-200		
Calibration Check (W5D0684-CCV3)					Prepared: 04/15/15		Analyzed: 04/15/15 15:49		
Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Methane		0.00723		mg/l	0.00792	91	0-200		
Ethane		0.00765		mg/l	0.00660	116	0-200		
Calibration Check (W5D0684-CCV4)					Prepared: 04/15/15		Analyzed: 04/15/15 15:28		
Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Methane		0.199		mg/l	0.198	100	0-200		
Ethane		0.755		mg/l	0.660	114	0-200		
Duplicate (W5D0684-DUP1)					Source: 5D10030-01		Prepared: 04/15/15		Analyzed: 04/15/15 18:19
Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Methane	0.444	0.412		mg/l				7	20
Ethane	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 # 04229CA



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

15D0787

5d10030

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:

AnalysisComments

Sample ID: Reservoir Effluent Site #5 / 15D0787-02

Sampled: 04/08/15 08:45 PS Code:
WaterWTX ID:
UCMR ID:

✓

Methane RSK175

Report in mg/L

Containers Supplied:

40ml Amber Vial (A) 40ml Amber Vial (B)

Released By

Date / Time

Received By

Date / Time

Released By

Date / Time

Received By

Date / Time

By Stu 04/14/15 13:20 Ray Rogers 4-10-15 900
Ray Rogers 4-10-15 1100 Sanchez 4-10-15 1100 338

1500787

8/1/12

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																			
Comments				ELAP #																			
Sampled by				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													
4-8-15 0845				Filter Effluent Site (Chloramine) #3		DW		1W		N/A				X								SP3 / E13 - 005A	
4-8-15 0845				Filter Effluent Site (Chloramine) #3		DW		1W		N/A												SP3 / E13 - 005A	
4-8-15 0845				Reservoir Effluent Site #5		DW		1W		N/A													
4-8-15 0845				Reservoir Effluent Site #5		DW		1W		HCL												X	
5				Zone #2 Site #6		DW		1W		N/A													

Clinical Laboratory of San Bernardino, Inc.



16 April 2015

Clinical Lab No.: 15D0897

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 04/09/15 . 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: CWP Weekly Compliance Analysis
Project Manager: Mark Andersen

Work Order: 15D0897
Received: 04/09/15 19:30
Reported: 04/16/15

Reservoir Effluent Site #5 **15D0897-01 (Water)** **Sample Date:** 04/09/15 10:15 **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	680	5.0	1000	mg/L	04/10/15	04/13/15	1515598	
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ND Analyte NOT DETECTED at or above the reporting limit

150897

Chain of Custody

Clinical Laboratory of San Bernardino, Inc.

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																			
Comments				ELAP #																			
Sampled by		Edward D. V. V. V.		1088																			
Date		Sample Identification		Matrix		Type		Preserv		Total Chlorine													
		Raw Water Site #1		DW		1W		HCL														W13-005	
		Raw Water Site #1		DW		1W		N/A														W13-005	
		Filter Effluent Site (Chloramine) #3		DW		1W		N/A														E13-005A	
4-9-15 1015		Reservoir Effluent Site #5		DW		1W		N/A															
		Reservoir Effluent Site #5		DW		1W		HCL															
		Zone #2 Site #6		DW		1W		N/A															
Preservatives: (1) Na ₂ S ₂ O ₃ (2) HCl (3) HNO ₃ (4) NH ₄ Cl (5) H ₂ SO ₄ (6) Na ₂ SO ₃ (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. V. V. V.		City of Lomita		4-9-15 406		M. C. C. B.		C. C. S. B.															
M. C. C. B.		City of Lomita		4-9-15 7:30		B. J. D. J. / H. F.		Bob Glaxia / C. S. B.															
Comments: Container showed w/ other COC				Samples received: (X) On Ice () Intact () Custody seals Temp () F () 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.



13 April 2015

Clinical Lab No.: 15D0181

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 04/01/15 . 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,

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 Monthly Compliance Analysis
Project Manager: Mark Andersen

Work Order: 15D0181
Received: 04/01/15 17:00
Reported: 04/13/15

Raw Water Site #1 **15D0181-01 (Water)** **Sample Date:** 04/01/15 11:16 **Sampler:** Edward Duvivier

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

Total Coliform	SM 9223	A		N/A	P/A	04/01/15	04/02/15	1514403	
E. Coli	SM 9223	A		N/A	P/A	04/01/15	04/02/15	1514403	

General Physical Analyses

Apparent Color	SM 2120B	15.0	3.0	15	Color Units	04/01/15	04/01/15	1514421	
Odor Threshold	EPA 140.1M	> 5	1	3	TON	04/01/15	04/01/15	1514421	

General Chemical Analyses

Total Filterable Residue/TDS	SM 2540C	650	5.0	1000	mg/L	04/02/15	04/06/15	1514368	
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Metals

Iron (Fe)	EPA 200.7	250	100	300	ug/L	04/06/15	04/07/15	1515080	
Manganese (Mn)	EPA 200.7	100	20	50	ug/L	04/06/15	04/07/15	1515080	

Filter Effluent (Free Chlorine) Site #2 **15D0181-02 (Water)** **Sample Date:** 04/01/15 11:18 **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	7.36		N/A	mg/L	04/01/15	04/01/15	1514371	
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Microbiology Analyses

Total Coliform	SM 9223	A		N/A	P/A	04/01/15	04/02/15	1514403	
E. Coli	SM 9223	A		N/A	P/A	04/01/15	04/02/15	1514403	
Plate Count	SM9215B	ND	1	500	CFU/ml	04/01/15	04/03/15	1514466	

Filter Effluent Site (Chloramine) #3 **15D0181-03 (Water)** **Sample Date:** 04/01/15 11:20 **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	8.16		N/A	mg/L	04/01/15	04/01/15	1514371	
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General Physical Analyses

Apparent Color	SM 2120B	7.5	3.0	15	Color Units	04/01/15	04/01/15	1514421	
Odor Threshold	EPA 140.1M	5	1	3	TON	04/01/15	04/01/15	1514421	

Metals

Iron (Fe)	EPA 200.7	ND	100	300	ug/L	04/06/15	04/07/15	1515080	
Manganese (Mn)	EPA 200.7	ND	20	50	ug/L	04/06/15	04/07/15	1515080	

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: 15D0181
Received: 04/01/15 17:00
Reported: 04/13/15

Reservoir Effluent Site #5 **15D0181-04 (Water)** **Sample Date:** 04/01/15 11:26 **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 **3.7** N/A mg/L 04/01/15 04/01/15 1514371

General Physical Analyses

Apparent Color SM 2120B ND 3.0 15 Color Units 04/01/15 04/01/15 1514421

Odor Threshold EPA 140.1M **5** 1 3 TON 04/01/15 04/01/15 1514421

General Chemical Analyses

Total Filterable Residue/TDS SM 2540C **660** 5.0 1000 mg/L 04/02/15 04/06/15 1514368

Zone #2 Site #6 **15D0181-05 (Water)** **Sample Date:** 04/01/15 11:21 **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 **2.12** N/A mg/L 04/01/15 04/01/15 1514371

General Chemical Analyses

Total Filterable Residue/TDS SM 2540C **650** 5.0 1000 mg/L 04/02/15 04/06/15 1514368

ND Analyte NOT DETECTED at or above the reporting limit



Certificate of Analysis

Project: 15D0181

Report Date: 04/08/15 16:53

Received Date: 04/02/15 13:10

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 4/2/2015 with the Chain of Custody document. The samples were received in good condition, at 3.5 °C and on ice. All analysis met the method criteria except as noted below or in the report with data qualifiers.

Lab Sample ID: 5D02028-01	Sample ID: Raw Water Site #1 / 15D0181-01	Matrix: Water
Sampled by: Client	Sampled: 04/01/15 11:16	

Analyte	Result	MDL	MRL	Units	Dil	Method	Prepared	Analyzed	Batch	Qualifier
Methane	6.1		0.20	mg/l	20	RSK-175	4/6/15	4/7/15 13:26	W5D0346	

Lab Sample ID: 5D02028-02	Sample ID: Reservoir Effluent Site #5 / 15D0181-04	Matrix: Water
Sampled by: Client	Sampled: 04/01/15 11:26	

Analyte	Result	MDL	MRL	Units	Dil	Method	Prepared	Analyzed	Batch	Qualifier
Methane	0.55		0.010	mg/l	1	RSK-175	4/6/15	4/6/15 17:21	W5D0346	



Certificate of Analysis

Quality Control Section

Dissolved Gases in Water by RSK-175 - Quality Control

Batch W5D0346 - RSK-175

LCS (W5D0346-BS1)

Prepared: 04/06/15 Analyzed: 04/06/15 16:59

Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Methane		0.207		mg/l	0.198	104	85-115		

Calibration Check (W5D0346-CCV1)

Prepared: 04/06/15 Analyzed: 04/06/15 16:48

Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Methane		0.00691		mg/l	0.00792	87	0-200		

Calibration Check (W5D0346-CCV2)

Prepared: 04/06/15 Analyzed: 04/06/15 16:27

Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Methane		0.201		mg/l	0.198	102	0-200		

Duplicate (W5D0346-DUP1)

Source: 5D02028-02

Prepared: 04/06/15 Analyzed: 04/06/15 17:31

Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Methane	0.546	0.658		mg/l				19	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 # 04229CA



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
15D0181

5d02028

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

☐ gladbig@clinical-lab.com ☐ glenney@clinical-lab.com ☒ styles@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
UCMR 3 CDX Transfer ☐ Yes ☒ No

Turn Around Time ☐ 10 Days ☒ 5 Days ☐ Other ___ Days

Subcontract Comments:

AnalysisComments

Sample ID: Raw Water Site #1 / 15D0181-01

Sampled: 04/01/15 11:16 PS Code:
Water

WTX ID:

UCMR ID:

Report in mg/L

Methane RSK175

Containers Supplied:

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

Sample ID: Reservoir Effluent Site #5 / 15D0181-04

Sampled: 04/01/15 11:26 PS Code:
Water

WTX ID:

UCMR ID:

Report in mg/L

Methane RSK175

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

- 4 plastic bottles
- 3 glass bottles - 2 Part-bottles
- 4 glass vials

Chain of Custody

"Your Water and Wastewater Analysis Solution"

Ice
on

Appendix B

Methane Monitoring Log



**CITY OF LOMITA
CPWF HANDHELD METHANE LOG READINGS**

April 2015			
Date	Time	Methane Handheld	Comments
4/1/2015	3:00 PM	CH4-3%	
		Oxy-20.1%	
4/2/2015	2:45 PM	CH4-3%	
		Oxy-20.1%	
4/3/2015	1:45 PM	CH4-0%	
		Oxy-20.2%	
4/4/2015			
4/5/2015			
4/6/2015	9:00 AM	CH4-0%	
		Oxy-20.1%	
4/7/2015	0800 AM	CH4-0%	
		Oxy-20.4%	
4/8/2015	2:40 PM	CH4-1%	
		Oxy-20.4%	
4/9/2015	3:35 PM	CH4-0%	
		Oxy-20.1%	
4/10/2015			
4/11/2015			
4/12/2015			
4/13/2015	7:45 AM	CH4 - 0%	
		Oxy - 20.4%	
4/14/2015	2:00 PM	CH4-0%	
		Oxy-20.0%	
4/15/2015	2:20 PM	CH4-1%	
		Oxy-20.3%	
4/16/2015	3:30 PM	CH4-0%	
		Oxy-20.4%	
4/17/2015	2:20 PM	CH4-0%	
		Oxy-20.6%	
4/18/2015			
4/19/2015			
4/20/2015	3:30 PM	CH4-0%	
		Oxy-20.6%	
4/21/2015	3:00 PM	CH4-2%	
		Oxy-20.4%	
4/22/2015	2:45 PM	CH4-4%	
		Oxy-20.2%	
4/23/2015	12:00 PM	CH4-0%	
		Oxy-20.3%	
4/24/2015			
4/25/2015			
4/26/2015			
4/27/2015	2:00 PM	CH4-0%	
		Oxy-20.3%	
4/28/2015	1:45 PM	CH4-0%	
		Oxy-20.3%	
4/29/2015	12:30 PM	CH4-0%	
		Oxy-20.0%	
4/30/2015	3:25 PM	CH4-0%	
		Oxy-20.1%	

ND- Non Detect
CH4- Methane
Oxy-Oxygen
Weekend/Day OFF/Holiday- Green