CITY OF LOMITA



Cypress Water Production Facility Monthly Status Report

NOVEMBER 2016

TABLE OF CONTENTS

| COVER LETTER | . 1 |
|--|-----|
| A. BACKGROUND | 2 |
| B. WELL PRODUCTION AND OPERATIONS | 2 |
| C. OPERATIONAL INTERRUPTIONS | 2 |
| D. SAMPLE LOCATIONS | 2 |
| E. WATER QUALITY MONITORING | . 3 |
| E1. IRON, MANGANESE AND COLOR | . 3 |
| E2. FREE AND TOTALCHLORINE RESIDUALS | . 3 |
| E3. TOTAL DISSOLVED SOLIDS (TDS), ODOR, HARDNESS AND METHANE | .3 |
| E3-1 TOTAL DISSOLVED SOLIDS (TDS) | . 3 |
| E3-2 HARDNESS | 3 |
| E3-3 DISSOLVED MATHANE (IN WATER) | .4 |
| E3-4 METHANE (IN AIR) | .4 |
| E3-5 ODOR | |
| E4. NITRIFICATION MONITORING | .4 |
| F. TABLES | . 5 |

CITY COUNCIL

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



ADMINISTRATION

RYAN SMOOT CITY MANAGER

CITY OF LOMITA

December 12, 2016

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

<u>Subject: System No. 1910073 - Monthly Report for the Cypress Water Production Facility (CWPF) for the period of November 1 through November 30, 2016.</u>

Dear Mr. Williams,

In accordance with the Department of Public Health temporary approval letter dated March 15, 2013 and Permit Amendment No. 1910073, I am submitting the following report for the Cypress Water Production Facility operations for the month of November 2016.

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

A. BACKGROUND

On March 15, 2013, the City of Lomita received conditional approval from the Department of Public Health (DPH) to distribute blended water from the Cypress Water Production Facility (CWPF) Well No. 5 to the City's customers.

The CWPF is an iron-manganese greensand filtration treatment system designed to remove primarily iron, manganese, and color. The CWPF was recently modified to enable aeration and blending with Metropolitan Water District (MWD) imported water to address the aesthetic secondary issues of Total Dissolved Solids (TDS), Hardness (as Calcium Carbonate), and Taste/Odor.

The CWPF came online on April 1, 2013. The first week of operations from April 1 to April 5, 2013 was utilized for conducting routine startup activities. The distribution of blended water to the City's residents began on April 5, 2013.

B. WELL PRODUCTION

The CWPF operated continuously for the month of November 2016 maintaining water levels inside the reservoir ranging from 7' to 10'. The average flow from Well No. 5 was 410 gpm and 552 gpm from MWD. The blend ratio for month was 43% Well water and 57% MWD water. See Table 1 below for production totals for the month of November 2016.

Table 1. Monthly Production Totals.

| | | Production | n for October 2016 |
|----------------|--------|------------|-------------------------|
| Well No. 5 | 47.19 | ac-ft | (15,377,287 gallons) |
| MWD | 61.38 | ac-ft | (19,998,000 gallons) |
| Combined Total | 108.57 | ac-ft | (35,375,274 gallons) |
| Daily | 3.62 | ac-ft/day | (5,053,611 gallons/day) |

C. OPERATIONAL INTERRUPTIONS

There were no operational interruptions during the month of November 2016. Routine and preventive maintenance was performed on various pieces of equipment as-needed. No major planned operational interruptions are anticipated for the following month.

D. SAMPLE LOCATIONS

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

E. WATER QUALITY MONITORING

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

E1. IRON, MANGANESE AND COLOR

See Table 2 below for a summary of the results for the compliance monitoring at the three sample locations SP1 through SP3. Color for raw water (SP1) was above the MCL. Iron and Manganese in the raw water (SP1) for the month were above and below the MCL, respectively. Iron and Manganese levels before entering the reservoir (SP3) show non-detect, indicating the greensand filtration system remains highly effective.

E2. FREE AND TOTAL CHLORINE RESIDUALS

Daily free chlorine residuals were monitored at SP2, SP3, SP4 and SP5. Daily total chlorine residuals were monitored at SP3, SP4 and SP5. Free chlorine and total chlorine residuals, at all respective sample points, were monitored using a combination of continuous chlorine analyzers and SCADA. See Table 3 below for a weekly summary of results.

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

See Table 4 below for a summary of the results for the monitoring of Total Dissolved Solids (TDS), Odor (as measured by the Threshold Odor No. - T.O.N.), Total Hardness as Calcium Carbonate, and Methane levels in water at three sample locations SP1, SP5 and SP6.

E3-1 TOTAL DISSOLVED SOLIDS (TDS)

The sampling results indicate the TDS levels of the effluent blended water to be on average 664 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 720 mg/L and 630 mg/L, respectively.

E3-2 HARDNESS

The sampling results for the month indicate the hardness levels of the blended water to be on average 310 mg/L. Although, this hardness level is in the upper range of the City's Water Quality Objective/Goal of 180 to 250 mg/L; staff continues to monitor hardness levels at the CWPF effluent (SP5) and within the water distribution system. The City has maintained a consistent blend ratio to ensure acceptable hardness levels are met.

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

E3-3 DISSOLVED METHANE (IN WATER)

The methane levels in the CWPF effluent after aeration treatment remain negligible averaging 0.36 mg/L.

E3-4 METHANE (IN AIR)

The methane levels in the reservoir headspace are monitored daily by staff using a handheld device. These readings have consistently read non-detect to low concentrations for methane in air. Available methane hand held monitoring instruments can only detect levels of 1% Lower Explosive Limit (LEL) or greater. The handheld methane readings during the month were below the 50,000 ppm LEL. See attached methane log for the month of November 2016 in Appendix B.

E3-5 ODOR

The odor levels at the CWPF effluent averaged 2 units for the month.

E4. NITRIFICATION MONITORING

Weekly Nitrification sampling was performed during the month of November 2016, see Appendix C.

F. TABLES

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

| | | SP1, V | Vell Rav | / Water | Discha | arge | | Pres | Comb sure f ffluen | ilter | SP3, / | | nloramin reservoir | | | xer; |
|---------------|------------|------------------|-----------------|----------------|-------------|---------|----------------|----------------|--------------------------|---------|------------|-----------------|-----------------------|----------------|-------|---------|
| Date, week of | Iron, ug/L | *MCL = 3 00 ug/L | Manganese, ug/L | *MCL = 50 ug/L | Color | *MCL=15 | Total Coliform | Total Coliform | HPC, MPN/100mL | MCL=500 | Iron, mg/L | *MCL = 300 ug/L | Manganese, mg/L | *MCL = 50 ug/L | Color | *MCL=15 |
| 11/2/2016 | 250 | 300 | 120 | 50 | 25 | 15 | Α | Α | A 500 | | ND | 300 | ND | 50 | ND | 15 |
| 11/9/2016 | | V STAN | | | | | | | | | ND | 300 | ND | 50 | ND | 15 |
| 11/16/2016 | | | | | | | | | | | ND | 300 | ND | 50 | 7.5 | 15 |
| 11/23/2016 | | | | | | | | | | | ND | 300 | ND | 50 | 5 | 15 |
| 11/30/2016 | | | C C | THE NAME OF | MACON STATE | | | | Store | | ND | 300 | ND | 50 | 5 | 15 |

Notes:

Monthly- Orange; Weekly- Yellow

A – Absent

ND – Non Detect

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

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

| Date, | SP2 | | SP3 | | | SP4 | | appropriate a | SP5 | |
|------------|---------|---------|----------|--------------|---------|----------|--------------------------|---------------|----------|--------------------------|
| week of | Free CI | Free CI | Total CI | Total NH₃ | Free CI | Total CI | Total NH ₃ | Free CI | Total CI | Total NH ₃ |
| 11/2/2016 | 4.44 | 0.41 | 4.10 | 0.60 | 0.07 | 2.94 | 0.62 | 0.04 | 2.16 | 0.50 |
| 11/9/2016 | 4.11 | 0.17 | 3.73 | 0.55 | 0.07 | 2.74 | 0.56 | 0.07 | 2.32 | 0.52 |
| 11/16/2016 | 3.82 | 0.54 | 3.90 | 0.60 | 0.01 | 3.10 | 0.59 | 0.05 | 1.99 | 0.48 |
| 11/23/2016 | 4.28 | 0.45 | 3.88 | 0.70 | 0.05 | 3.69 | 0.54 | 0.06 | 2.23 | 0.49 |
| 11/30/2016 | 4.19 | 0.43 | 4.80 | 0.78 | 0.25 | 3.18 | 0.57 | 0.05 | 2.01 | 0.49 |

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

| ¥£ | | TD | S, mg/L | | T.C | D.N. | | Hardr | ness, m | g/L | | thane r), mg/L |
|---------------|----------------------|-----------------|--------------------------|----------------------|--------------------------|--------|----------------------|-----------------|--------------------------|----------------------|----------------------|--------------------------|
| Date, week of | SP1 - Raw Well Water | SP6 - MWD Water | SP5 - Reservoir Effluent | Goal= 500 - 750 mg/L | SP5 - Reservoir Effluent | MCL= 3 | SP1 - Raw Well Water | SP6 - MWD Water | SP5 - Reservoir Effluent | Goal= 180 - 250 mg/L | SP1 - Raw Well Water | SP5 - Reservoir Effluent |
| 11/2/2016 | 720 | 330 | 690 | 500-750 | 2 | 3 | 330 | 300 | 310 | 180-250 | 1.6 | 0.23 |
| 11/9/2016 | | | 670 | 500-750 | 1 | 3 | | | | | | 0.29 |
| 11/16/2016 | | | 680 | 500-750 | 1 | 3 | | | | | | 0.43 |
| 11/23/2016 | | | 660 | 500-750 | 4 | 3 | | | | | 1 | 0.29 |
| 11/30/2016 | | | 620 | 500-750 | 1 | 3 | | | | | | 0.55 |
| Average | 720 | 330 | 664 | 500-750 | 2 | 3 | 330 | 300 | 310 | 180-250 | 1.6 | 0.36 |

Notes:

Monthly- <u>Orange</u>; Weekly- <u>Yellow</u> ppm – parts per million mg/L – milligram per liter T.O.N. - Threshold Odor Number TDS - Total Dissolved Solids

TDS - Total Dissolved Solids Hardness - As total CaCO3

Methane (Water) - Methane dissolved in water

Monthly CWPF Monitoring Report – NOVEMBER 2016 Cypress Water Production Facility City of Lomita; System No. 1910073

| Sample Locations and Parameters | Frequency | MCL/ Goal | 11/2 | 11/9 2 nd Wk | 11/16 | 11/23 | 11/30 5 th Wk | Comments |
|---|---|---|--|--|--|--|------------------------------------|---|
| and Farameters | | Joan | 1stWk |] Z VVK | 3rdWk | 4 th Wk | D VVK | and/or Other Info. |
| | | | or Mo. | | | | | Other into. |
| | | | Result | | | | | |
| | | | (date) | | | | | |
| SP1 Also called | Well 5 Ray | v Water o | or Site#1. | | | | | |
| TDS, ppm | Monthly | See SP5 | 720 11/2/16 | The state of the s | Data/Inform | nation: | | *Chlorine injected after SP1, before entering |
| Hardness | Monthly | See SP5 | 330 11/2/16 | CWPF opera | | | | the greensand filter. |
| CH4, ppm | Monthly | See SP5 | 1.6 11/2/16 | - 47.19 AF | | flow - 410 gpm | | |
| Iron, ppb | Monthly | See SP3 | 250 11/2/16 | | | ata: Average V 7% MWD; tota | | |
| Manganese, ppb | Monthly | See SP3 | 120 11/2/16 | Chlorine Do | sage: N/A* | | | |
| Color, units | Monthly | See SP3 | 25 11/2/16 | Official Bo | sage. WA | | | |
| Total Coliform, P or A | Monthly | Α | A 11/2/16 | | | W. | | |
| SP2 Also called | Filter Efflu | ent or Si | te#3. | | | | The Toyal House | # * |
| Total Coliform, P or A | Monthly | Α | Α | | | | | *Ammonia added afte |
| HPC,MPN/100 ml | Monthly | 500 | Α | Ammonia D | osage: N/A* | | | filter effluent |
| Free CI Res, ppm | Continuous | | | ge: 3.82 – 4 | | | | |
| SP3 Also called | the Site Af | ter Chlor | ramination | n & Before | MWD Ble | ending or | Site#4. | |
| Iron, ppb | Weekly | 300 | ND | ND | ND | ND | ND | |
| Manganese, ppb | Weekly | 50 | ND | ND | ND | ND | ND | |
| Color | Weekly | 15 | ND. | ND | 7.5 | 5 | 5 | |
| Free and Total CI Res, | Continuous | | | 0; Range: 0. | | | | |
| ppm | | | | 8; Range: 3. | | | | |
| SP4 Also called | Posonyoir | | | 65; Range: (| | Pland Da | int/Db con | |
| Phosphate Injection | IXESEI VOII | | e Dosage: 1 | | VD VValer | Dieliu Po | murnosp | nate injection. |
| Free and Total Cl Res, | Continuous | | | 9; Range: 0. | 01 _ 0.25 | | | CI/NH3 Ratio: |
| ppm | | | | 3; Range: 0. | | | | 5.43 |
| 108 | | | | 58; Range: (| | | | j . |
| SP5 Also called I | Reservoir | Effluent | or Site#5. | SP5 disc | harges int | o Zone 1 | of the dis | tribution system |
| | | | | | | | | |
| | Weekly | SI Goal: 500-750ppm | 690 | 670 | 680 | 660 | 620 | |
| TDS, ppm | | 500-750ppm SI Goal: | | 670 | | Name of the last o | 620 | |
| TDS, ppm Hardness | Weekly | 500-750ppm | 690 310 0.23 | 0.29 | | Name of the last o | 620 0.55 | % CH4 Removal: |
| TDS, ppm Hardness CH4, ppm | Weekly Monthly | SI Goal: 180-250ppm Goal: from | 310 | | 680 | 660 | | % CH4 Removal: 78% |
| TDS, ppm Hardness CH4, ppm Odor, units | Weekly Monthly Weekly | SI Goal: 180-250ppm Goal: from PA | 310 0.23 2 | | 0.43 | 0.29 | 0.55 | 78% |
| TDS, ppm Hardness CH4, ppm Odor, units Free and Total CI Res, | Weekly Monthly Weekly Monthly | SI Goal: 180-250ppm Goal: from PA 1 Free CI: A Total CI: A | 310 0.23 2 Average: 0.00 | 0.29 | 0.43 1 04 - 0.07 99 - 2.32 | 0.29 | 0.55 | |
| TDS, ppm Hardness CH4, ppm Odor, units Free and Total Cl Res, ppm | Monthly Weekly Monthly Continuous | SI Goal: 180-250ppm Goal: from PA 1 Free CI: A Ammonia: | 310 0.23 2 Average: 0.00 | 0.29 1 5; Range: 0. | 0.43 1 04 - 0.07 99 - 2.32 | 0.29 | 0.55 | 78% CI/NH3 Ratio: |
| TDS, ppm Hardness CH4, ppm Odor, units Free and Total Cl Res, ppm Headspace of the C CH4 ppmv; using | Monthly Weekly Monthly Continuous | SI Goal: 180-250ppm Goal: from PA 1 Free CI: A Ammonia: | 310 0.23 2 Average: 0.00 Average: 2.14 Average: 0. | 0.29 1 5; Range: 0. 4; Range: 1.9 50; Range: 0.57% | 0.43 1 04 - 0.07 99 - 2.32 0.48 - 0.52 | 0.29 | 0.55 | 78% CI/NH3 Ratio: |
| TDS, ppm Hardness CH4, ppm Odor, units Free and Total CI Res, ppm Headspace of the C 1CH4 ppmv; using Portable Device | Monthly Weekly Monthly Continuous Sypress Re Daily (from log) | SI Goal: 180-250ppm Goal: from PA 1 Free CI: A Total CI: A Ammonia: Servoir. Goal - LEL | 310 0.23 2 Average: 0.03 Average: 2.14 Average: 0. CH4 Avera | 0.29 1 5; Range: 0. 4; Range: 1.9 50; Range: 0 age: 0.57% ge: 0% - 3% | 0.43 1 04 - 0.07 99 - 2.32 0.48 - 0.52 | 0.29 | 0.55 | 78% CI/NH3 Ratio: 4.32 |
| TDS, ppm Hardness CH4, ppm Odor, units Free and Total CI Res, ppm Headspace of the C CH4 ppmv; using Portable Device SP 6 MWD Source | Monthly Weekly Monthly Continuous Eypress Re Daily (from log) Ce Feeding | SI Goal: 180-250ppm Goal: from PA 1 Free CI: A Total CI: A Ammonia: Servoir. Goal - LEL | 310 0.23 2 Average: 0.00 Average: 2.14 Average: 0. CH4 Avera CH4 Ran | 0.29 1 5; Range: 0. 4; Range: 1.9 50; Range: 0 age: 0.57% ge: 0% - 3% | 0.43 1 04 - 0.07 99 - 2.32 0.48 - 0.52 | 0.29 | 0.55 | 78% CI/NH3 Ratio: 4.32 |
| TDS, ppm Hardness CH4, ppm Odor, units Free and Total CI Res, ppm Headspace of the C 1CH4 ppmv; using Portable Device | Monthly Weekly Monthly Continuous Sypress Re Daily (from log) | SI Goal: 180-250ppm Goal: from PA 1 Free CI: A Total CI: A Ammonia: Servoir. Goal - LEL CWPF. | 310 0.23 2 Average: 0.03 Average: 2.14 Average: 0. CH4 Avera | 0.29 1 5; Range: 0. 4; Range: 1.9 50; Range: 0 age: 0.57% ge: 0% - 3% | 0.43 1 04 - 0.07 99 - 2.32 0.48 - 0.52 | 0.29 | 0.55 | 78% CI/NH3 Ratio: 4.32 |

APPENDIX A

LABORATORY RESULTS



17 November 2016 Clinical Lab No.: 16K0339

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

Project Name: Standard Analysis

Sub Project: Monthly Compliance / Weekly 1st Week November

Enclosed are the results of the analyses for samples received at the laboratory on 11/02/16. Samples were received within temperature range, in correct containers and preservation.

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

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

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

Sincerely,

Stu Styles

Client Services Manager

tistes



Lomita, City of Project: Standard Analysis Work Order: 16K0339 Sub Project: Monthly Compliance / Weekly 1st Week November Received: 11/02/16 15:50 24373 Walnut Avenue Lomita CA, 91717

Reported: 11/17/16 Project Manager: Mark Andersen

| Raw Water Site #1 | | 16K0339- | 01 (Water) | | Sample Da | te: 11/02/16 | 8:30 Sa | mpler: D | GM |
|---|------------|----------|------------|------|-------------|--------------|----------|-----------|-----------|
| Analyte | Method | Result | Rep. Limit | MCL | Units | Prepared | Analyzed | Batch | Qualifier |
| Field Analyses | | | | | | | | | |
| pH (Field) | Field | 7.55 | | N/A | pH Units | 11/02/16 | 11/02/16 | 1645353 | |
| Temperature (Field) | Field | 21.6 | | N/A | °C | 11/02/16 | 11/02/16 | 1645353 | |
| Microbiology Analyses | | | | | | | | | |
| Total Coliform | SM 9223 | A | | N/A | P/A | 11/02/16 | 11/03/16 | 1645385 | |
| E. Coli | SM 9223 | A | | N/A | P/A | 11/02/16 | 11/03/16 | 1645385 | |
| Plate Count | SM9215B | 33 | 1 | 500 | CFU/ml | 11/02/16 | 11/04/16 | 1646035 | HT-08 |
| General Physical Analyses | | | | | | | | | |
| Apparent Color | SM 2120B | 25.0 | 3.0 | 15 | Color Units | 11/02/16 | 11/02/16 | 1645330 | |
| General Chemical Analyses | | | | | | | | | |
| Hardness, Total (as CaCO3) | Calculated | 330 | 6.6 | N/A | mg/L | 11/08/16 | 11/08/16 | [CALC] | |
| Total Filterable Residue/TDS | SM 2540C | 720 | 5.0 | 1000 | mg/L | 11/08/16 | 11/10/16 | 1646088 | |
| <u>Metals</u> | | | | | | | | | |
| Calcium (Ca) | EPA 200.7 | 87 | 1.0 | N/A | mg/L | 11/08/16 | 11/08/16 | 1646053 | |
| Iron (Fe) | EPA 200.7 | 250 | 100 | 300 | ug/L | 11/09/16 | 11/09/16 | 1646169 | |
| Magnesium (Mg) | EPA 200.7 | 28 | 1.0 | N/A | mg/L | 11/08/16 | 11/08/16 | 1646053 | |
| Manganese (Mn) | EPA 200.7 | 120 | 20 | 50 | ug/L | 11/09/16 | 11/09/16 | 1646169 | |
| Filter Effluent (Free Chlorine) Site #2 | | 16K0339- | 02 (Water) | | Sample Da | te: 11/02/16 | 8:40 Sa | ampler: D | G M |
| Analyte | Method | Result | Rep. Limit | MCL | Units | Prepared | Analyzed | Batch | Qualifier |
| Field Analyses | | | | | | | | | |
| Cl Res Total (Field) | Field | 4.25 | | N/A | mg/L | 11/02/16 | 11/02/16 | 1645353 | |
| pH (Field) | Field | 7.66 | | N/A | pH Units | 11/02/16 | 11/02/16 | 1645353 | |
| Temperature (Field) | Field | 20.6 | | N/A | °C | 11/02/16 | 11/02/16 | 1645353 | |
| Microbiology Analyses | | | | | | | | | |
| Total Coliform | SM 9223 | A | | N/A | P/A | 11/02/16 | 11/03/16 | 1645385 | |
| E. Coli | SM 9223 | A | | N/A | P/A | 11/02/16 | 11/03/16 | 1645385 | |
| | | | | | | | | | |



Lomita, City ofProject:Standard AnalysisWork Order:16K033924373 Walnut AvenueSub Project:Monthly Compliance / Weekly 1st Week NovemberReceived:11/02/16 15:50Lomita CA, 91717Project Manager:Mark AndersenReported:11/17/16

| Filter Effluent (Total Chlorine) Site #3 | | 16K0339-0 | 03 (Water) | | Sample Da | te: 11/02/16 | 5 8:45 Sa : | mpler: D | G M |
|--|------------|-----------|------------|------|-------------|--------------|--------------------|----------|-----------|
| Analyte | Method | Result | Rep. Limit | MCL | Units | Prepared | Analyzed | Batch | Qualifier |
| Field Analyses | | | | | | | | | |
| Cl Res Total (Field) | Field | 4.01 | | N/A | mg/L | 11/02/16 | 11/02/16 | 1645353 | |
| pH (Field) | Field | 7.67 | | N/A | pH Units | 11/02/16 | 11/02/16 | 1645353 | |
| Temperature (Field) | Field | 22 | | N/A | °C | 11/02/16 | 11/02/16 | 1645353 | |
| General Physical Analyses | | | | | | | | | |
| Apparent Color | SM 2120B | ND | 3.0 | 15 | Color Units | 11/02/16 | 11/02/16 | 1645330 | |
| <u>Metals</u> | | | | | | | | | |
| Iron (Fe) | EPA 200.7 | ND | 100 | 300 | ug/L | 11/09/16 | 11/09/16 | 1646169 | |
| Manganese (Mn) | EPA 200.7 | ND | 20 | 50 | ug/L | 11/09/16 | 11/09/16 | 1646169 | |
| Zone #2 Site#6 | | 16K0339-0 | 04 (Water) | | Sample Da | te: 11/02/16 | 5 9:15 Sa | mpler: D | GM |
| Analyte | Method | Result | Rep. Limit | MCL | Units | Prepared | Analyzed | Batch | Qualifier |
| Field Analyses | | | | | | | | | |
| Cl Res Total (Field) | Field | 2.1 | | N/A | mg/L | 11/02/16 | 11/02/16 | 1645353 | |
| pH (Field) | Field | 8.21 | | N/A | pH Units | 11/02/16 | 11/02/16 | 1645353 | |
| Temperature (Field) | Field | 21.7 | | N/A | °C | 11/02/16 | 11/02/16 | 1645353 | |
| General Chemical Analyses | | | | | | | | | |
| Hardness, Total (as CaCO3) | Calculated | 300 | 6.6 | N/A | mg/L | 11/08/16 | 11/08/16 | [CALC] | |
| Total Filterable Residue/TDS | SM 2540C | 630 | 5.0 | 1000 | mg/L | 11/08/16 | 11/10/16 | 1646088 | |
| <u>Metals</u> | | | | | | | | | |
| Calcium (Ca) | EPA 200.7 | 75 | 1.0 | N/A | mg/L | 11/08/16 | 11/08/16 | 1646053 | |
| · · · · · · · · · · · · · · · · · · · | EPA 200.7 | 28 | | | - | 11/08/16 | | | |



Lomita, City ofProjectStandard AnalysisWork Order:16K033924373 Walnut AvenueSub Project:Monthly Compliance / Weekly 1st Week NovemberReceived:11/02/16 15:50Lomita CA, 91717Project Manager:Mark AndersenReported:11/17/16

| | 16K0339-0 | 05 (Water) | | Sample Da | ite: 11/02/16 | 5 9:00 Sa | mpler: De | GM |
|------------|--|--|---|--|--|--|--|---|
| Method | Result | Rep. Limit | MCL | Units | Prepared | Analyzed | Batch | Qualifier |
| | | | | | | | | |
| Field | 2.11 | | N/A | mg/L | 11/02/16 | 11/02/16 | 1645353 | |
| Field | 7.87 | | N/A | pH Units | 11/02/16 | 11/02/16 | 1645353 | |
| Field | 21.7 | | N/A | °C | 11/02/16 | 11/02/16 | 1645353 | |
| | | | | | | | | |
| EPA 140.1M | 2 | 1 | 3 | TON | 11/02/16 | 11/02/16 | 1645330 | |
| | | | | | | | | |
| Calculated | 310 | 6.6 | N/A | mg/L | 11/09/16 | 11/09/16 | [CALC] | |
| SM 2540C | 690 | 5.0 | 1000 | mg/L | 11/08/16 | 11/10/16 | 1646088 | |
| | | | | | | | | |
| EPA 200.7 | 79 | 1.0 | N/A | mg/L | 11/09/16 | 11/09/16 | 1646210 | |
| EPA 200.7 | 27 | 1.0 | N/A | mg/L | 11/09/16 | 11/09/16 | 1646210 | |
| | Field Field Field Field EPA 140.1M Calculated SM 2540C EPA 200.7 | Method Result Field 2.11 Field 7.87 Field 21.7 EPA 140.1M 2 Calculated 310 SM 2540C 690 EPA 200.7 79 | Field 2.11 Field 7.87 Field 21.7 EPA 140.1M 2 1 Calculated 310 6.6 SM 2540C 690 5.0 EPA 200.7 79 1.0 | Method Result Rep. Limit MCL Field 2.11 N/A Field 7.87 N/A Field 21.7 N/A EPA 140.1M 2 1 3 Calculated 310 6.6 N/A SM 2540C 690 5.0 1000 EPA 200.7 79 1.0 N/A | Method Result Rep. Limit MCL Units Field 2.11 N/A mg/L Field 7.87 N/A pH Units Field 21.7 N/A °C EPA 140.1M 2 1 3 TON Calculated 310 6.6 N/A mg/L SM 2540C 690 5.0 1000 mg/L EPA 200.7 79 1.0 N/A mg/L | Method Result Rep. Limit MCL Units Prepared Field 2.11 N/A mg/L 11/02/16 Field 7.87 N/A pH Units 11/02/16 Field 21.7 N/A °C 11/02/16 EPA 140.1M 2 1 3 TON 11/02/16 Calculated 310 6.6 N/A mg/L 11/09/16 SM 2540C 690 5.0 1000 mg/L 11/08/16 EPA 200.7 79 1.0 N/A mg/L 11/09/16 | Method Result Rep. Limit MCL Units Prepared Analyzed Field 2.11 N/A mg/L 11/02/16 11 | Method Result Rep. Limit MCL Units Prepared Analyzed Batch Field 2.11 N/A mg/L 11/02/16 11/02/16 1645353 Field 7.87 N/A pH Units 11/02/16 11/02/16 1645353 Field 21.7 N/A °C 11/02/16 11/02/16 1645353 EPA 140.1M 2 1 3 TON 11/02/16 11/02/16 1645330 Calculated 310 6.6 N/A mg/L 11/09/16 11/09/16 [CALC] SM 2540C 690 5.0 1000 mg/L 11/08/16 11/10/16 1646088 EPA 200.7 79 1.0 N/A mg/L 11/09/16 11/09/16 1646210 |

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



Certificate of Analysis

FINAL REPORT

Work Orders: 6K04019 **Report Date:** 11/17/2016

Received Date: 11/4/2016

Project: 16K0339 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 11/04/16 with the Chain-of-Custody document. The samples were received in good condition, at 1.8 °C and on ice. All analyses met the method criteria except as noted in the case narrative or in the report with data qualifiers.



Certificate of Analysis

FINAL REPORT

Sample Results NELAP #E87847

Sample: Raw Water Site #1 / 16K0339-01

6K04019-01 (Water)

Analyte Result MRL Units Dil Analyzed Qualifier

Dissolved Gases in Water by RSK-175

 Method:
 RSK-175
 Batch ID:
 W6K0969
 Prepared:
 11/02/16 08:30
 Analyst:
 sub

 Methane
 1.6
 0.0010
 mg/l
 1
 11/10/16
 S_AIR

6K04019 Page 2 of 4



Certificate of Analysis

FINAL REPORT

Sample Results NELAP #E87847

(Continued)

Sample: Reservoir Effluent Site #5 / 16K0339-05

6K04019-02 (Water)

Analyte Result MRL Units Dil Analyzed Qualifier

Dissolved Gases in Water by RSK-175

 Method: RSK-175
 Batch ID: W6K0969
 Prepared: 11/02/16 09:00
 Analyst: _sub

 Methane
 0.23
 0.0010
 mg/l
 1
 11/10/16
 S_AIR



Definition

Certificate of Analysis

FINAL REPORT



Notes and Definitions

| | = |
|--------|--|
| S_AIR | Analysis subcontracted to Air Technology Laboratories, Inc., NELAP Certificate # E87847 |
| ND | NOT DETECTED at or above the Method Reporting Limit (MRL). If Method Detection Limit (MDL) is reported, then ND means not detected at or above the MDL. |
| Dil | Dilution |
| dry | Sample results reported on a dry weight basis |
| RPD | Relative Percent Difference |
| % Rec | Percent Recovery |
| Source | Sample that was matrix spiked or duplicated. |
| MDL | Method Detection Limit |
| MRL | The minimum levels, concentrations, or quantities of a target variable (e.g., target analyte) that can be reported with a specified degree of confidence. The MRL is also known as Limit of Quantitation (LOQ) and Detection Limit for Reporting (DLR) |
| MDA | Minimum Detectable Activity |
| NR | Not Reportable |
| TIC | Tentatively Identified Compound (TIC) using mass spectrometry. The reported concentration is relative concentration based on the nearest internal standard. If the library search produces no matches at, or above 85%, the compound is reported as unknown. |

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

An Absence of Total Coliform meets the drinking water standards as established by the California State Water Resources Control Board (SWRCB)

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

All samples collected by Weck Laboratories have been sampled in accordance to laboratory SOP Number MIS 002.



Not Certified Analyses Summary

| Analyte | CAS# | Not Accredited By |
|------------------|---------|-------------------|
| RSK-175 in Water | | |
| Methane | 74-82-8 | NELAP |

Reviewed by:

Brandon Gee

Operations Manager/Senior PM









Dod-Elap #L15-366 • Elap-ca #1132 • Epa-ucmr #Ca00211 • HW-Doh # • ISO 17025 #L15-365 • Lacsd #10143 • Nelap-or #4047 • NJ-Dep #Ca015 • NV-Dep #NAC 445A

This is a complete final report. The information in this report applies to the samples analyzed in accordance with the chain-of-custody document. Weck Laboratories certifies that the test results meet all requirements of TNI unless noted by qualifiers or written in the Case Narrative. This analytical report must be reproduced in its entirety.

SUBCONTRACT ORDER

Clinical Laboratory of San Bernardino 16K0339

6K04019

SENDING LABORATORY: RECEIVING LABORATORY: Clinical Laboratory of San Bernardino Weck Lab, Analytical & Environmental 21881 Barton Road Analytical & Environmental Svc 14859 E Clark Ave Grand Terrace, CA 92313 Industry, CA 91745 Phone: 909.825.7693 Phone :(626) 336-2139 Fax: 909.825.7696 Fax: (626) 336-2634 Project Manager: Stu Styles Please email results to Project Manager: Stu Styles [] glaubig@clinical-lab.com [] ybarra@clinical-lab.com [] styles@clinical-lab.com [] nelson@clinical-lab.com California EDT transfer those samples with PS codes provided [] Yes [V] No Water Trax Upload Client: [] Yes [No Turn Around Time Subcontract Comments: Analysis Comments Sample ID: Raw Water Site #1 / 16K0339-01 Sampled: 11/02/16 08:30 PS Code: Water WTX ID: Methane RSK175 Report in mg/L Containers Supplied: 40mL Amber Vial w/ Na2S2O3 (B) 40mL Amber Vial w/ Na2S2O3 (C) Sample ID: Reservoir Effluent Site #5 / 16K0339-05 Sampled: 11/02/16 09:00 PS Code: Water WTX ID: Methane RSK175 Report in mg/L

Containers Supplied: 40ml Amber Vial (B)

Released By

Date / Time

Received By

Date / Time

Received By

Date / Time

Date / Time

Received By

Date / Time

40ml Amber Vial (C)

| C | inical Lat | boratory | Clinical Laboratory of San Bernardino. Inc. | <i>1</i> C. | | | | | |) | _ | \ | | | hain of Custody | |
|--------------------------|--|----------------------------------|---|-------------|------------|-------------------------|---|------------------------------------|---------------------------------------|-----------|--------------------|-----------------|----------|---------|---|-----|
| 1 | | ` | | | | | | | | | | | | 5 | 5 K C 3 3 9 | |
| Client | | | City of Lomita | Sy | stem N | System Number | | Analysis | | Requested | ted | | | | | |
| Address | | 2. | 24373 Walnut Avenue | | 7 | 27001 | | | _ | | | H | - | - | - | |
| | | | Lomita, CA 91717 | | <u>n</u> | 13 10075 | | | | | | | IVI | | | |
| Phone # | | | (310) 325-9830 | 2 | estination | Destination Laboratory | tory | Т | | | Н | | leth | | | |
| Fax# | | | (310) 325-3627 | | X] Clinic | [X] Clinical Laboratory | tory | | | T | etet | | ane | | | |
| Project | | | Standard Analysis | | RWQCB | RWQCB Compliance | es | | | ota | rop | | | | | |
| Sub Project | t | Monthly (| Monthly Compliance/ Weekly 1st week | | | YES | | | E. C | l Co | hic] | Col | Ode | ard | | |
| | 3 | | Nov | | Ē | ELAP# | | | | lifo | Plat | | | | | |
| Comments | 8 | | | | 7 | | | Soli | | rm | e Co | | (RS | | | |
| Sampled by | ۸c | | DGM | | | 2001 | | | | | unt | | K175 | | | |
| Date | Time | Sa | Sample Idenitification | Matrix | Type | Preserv | Total Chlorine | | | | | | o) | • | | |
| 11/2/16 | 4834 | | Raw Water Site #1 | δW | » | N/A | 4/14 | X | - | | | × | <u> </u> | | PH 755 TEMP 2 | 1.6 |
| 11/2/16 | #83¢ | | Raw Water Site #1 | Š | 3 | 2,7 | × | | × | × | × | \vdash | × | × | | : |
| · (| | | Raw Water Site #1 | αS | MΙ | 1,7 | | | | | | | | | | |
| 11/2/14 | 084C | Filter E1 | Filter Effluent (Free Chlorine) Sitc#2 | DW | MI | 1,7 | 4.25 | | × | × | × | | <u> </u> | | PH ZUG TEMP 20 | 2 |
| 11/2/16 | 0/845 | Filter Ef | Filter Effluent (Total Chlorine) Site#3 | DW | ΜI | N/A | 4.71 | × | - | | | × | <u> </u> | | TEMP 2 | N |
| 11/2/16 | 5130 | | Zone #2 Site #6 | DW | (H | N/A | 7.7 | × | | | | | | × | PH & Zí TEMP | 1 |
| ` | | | | | | | | | | | | | <u> </u> | | | |
| 11/2/10 | 2250 | Re | Reservoir Effluent Site #5 | DW | a e | N/A | 2.11 | × | - | | | | × | × | PH 787 TEMP Z | 7.1 |
| 11/2/16 | 16900 | Re | Reservoir Effluent Site #5 | DW | GI | 2,7 | `` | | | | | | × | | | |
| Preservatives: (5) H2SO4 | rvatives: (1) Na ₂ S ₂ O ₃ (2) HCI (3) HNO3 (5) H2SO4 (6) Na2SO3 (7) Cold (8) Other: | (2) HCI (3) HI 3 (7) Cold (8) | NO3 (4) NH4CI Other: | | Mati | rix: DW-Dr | Matrix: DW-Drinking Water, Type- 1-Routine | er, WW-Waste Water, SW-Storm Water | WW-Waste Water, 2-Repeat 3-Replace | Water | SW- | SW-Storm Water, | Water | 1.5 | GW- Ground Water, A-Air W-Well D- Dist | |
| Relin | Relinquished By (Sign) | Sign) | Print Name / Company | , | | Date / Time | Тіте | | R | eceiv | Received By (Sign) | (Sign) | | V 10 11 | | any |
| Daniel Mateik | A. C. | lus | City of Lomita, CA | | 11/2/2016 | 116 /): | 15 | | 1 | 16 | | | | | HW 80 /25B | |
| Q | J. | | J.WCOM) CIRE | B | 11-2-16 | - | 3:50 | \cup | \sum | | } | | | | 7 | |
| Comments: | is: | | | | | Sample | nples received: | (2) | On ice | <u>(</u> |) Ind | Intact) F (| ြပ္စ | Cus | Custody seals Temp D | 96 |
| Shipped Via | | | [Fed X Golden State | 110 | UPS | Client | Other | | | | | \ | | | Page_1_ of_1_ | |
| | | | | | | | | | | | | | | | | |

"Your Water and Wastewater Analysis Solution"



29 November 2016 Clinical Lab No.: 16K0948

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

Project Name: Standard Analysis

Sub Project: CWPF 2nd Week Nov Compliance Sampling

Enclosed are the results of the analyses for samples received at the laboratory on 11/09/16. Samples were received within temperature range, in correct containers and preservation.

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

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

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

Sincerely,

Stu Styles

Client Services Manager

tistes



Lomita, City ofProject:Standard AnalysisWork Order:16K094824373 Walnut AvenueSub Project:CWPF 2nd Week Nov Compliance SamplingReceived:11/09/16 15:40Lomita CA, 91717Project Manager:Mark AndersenReported:11/29/16

| Reservoir Influent Site #3 | | 16K0948- | 01 (Water) | | Sample Da | te: 11/09/1 | 6 9:38 Sa | mpler: D | GM |
|------------------------------|------------|----------|------------|------|-------------|-------------|------------------|----------|-----------|
| Analyte | Method | Result | Rep. Limit | MCL | Units | Prepared | Analyzed | Batch | Qualifier |
| Field Analyses | | | | | | | | | |
| Cl Res Total (Field) | Field | 3.7 | | N/A | mg/L | 11/09/16 | 11/09/16 | 1647012 | |
| pH (Field) | Field | 7.6 | | N/A | pH Units | 11/09/16 | 11/09/16 | 1647012 | |
| Temperature (Field) | Field | 22.1 | | N/A | °C | 11/09/16 | 11/09/16 | 1647012 | |
| General Physical Analyses | | | | | | | | | |
| Apparent Color | SM 2120B | ND | 3.0 | 15 | Color Units | 11/09/16 | 11/09/16 | 1646353 | |
| <u>Metals</u> | | | | | | | | | |
| Iron (Fe) | EPA 200.7 | ND | 100 | 300 | ug/L | 11/17/16 | 11/17/16 | 1647134 | |
| Manganese (Mn) | EPA 200.7 | ND | 20 | 50 | ug/L | 11/17/16 | 11/17/16 | 1647134 | |
| Reservoir Effluent Site #5 | | 16K0948- | 02 (Water) | | Sample Da | te: 11/09/1 | 6 10:00 Sa | mpler: D | GM |
| Analyte | Method | Result | Rep. Limit | MCL | Units | Prepared | Analyzed | Batch | Qualifier |
| Field Analyses | | | | | | | | | |
| Cl Res Total (Field) | Field | 2.09 | | N/A | mg/L | 11/09/16 | 11/09/16 | 1647012 | |
| pH (Field) | Field | 7.73 | | N/A | pH Units | 11/09/16 | 11/09/16 | 1647012 | |
| Temperature (Field) | Field | 22.2 | | N/A | °C | 11/09/16 | 11/09/16 | 1647012 | |
| General Physical Analyses | | | | | | | | | |
| Apparent Color | SM 2120B | ND | 3.0 | 15 | Color Units | 11/09/16 | 11/09/16 | 1646353 | |
| Odor Threshold | EPA 140.1M | 1 | 1 | 3 | TON | 11/09/16 | 11/09/16 | 1646353 | |
| General Chemical Analyses | | | | | | | | | |
| Total Filterable Residue/TDS | SM 2540C | 670 | 5.0 | 1000 | mg/L | 11/15/16 | 11/17/16 | 1647061 | |
| | | | | | | | | | |

EDT Transfer Confirmation 1



Entry No.: 01055 Analyzed: 161117

Work Order: 16K0948
Report Date: 11/29/2016

MANGANESE

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

Result: ND

LOMITA-CITY, WATER DEPT.

WELL 05 TREATMENT PLANT EFFLUENT

COLOR

IRON

User ID: 4TH

System: 1910073

Sampled: 161109 09:38

PROM Result: ND Units: UNITS Entry No.: 00081 Analyzed: 161109

Result: ND Units: UG/L Entry No.: 01045 Analyzed: 161117

Units: UG/L

Printed: 11/29/2016 09:56:49 AM Results of 16K0948 FINAL WRITEON 1910073-006

Post Office Box 329 San Bernardino, CA 92402 (909) 825-7693 Fax (909) 825-7696 ELAP Number 1088



November 17, 2016

ATTN: Stu Styles

21881 Barton Rd.

Grand Terrace, CA 92313



ADE-1461 EPA Methods TO3, TO14A, TO15 SIM & SCAN ASTM D1946



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

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

LABORATORY TEST RESULTS

Project Reference: 16K0948

16K0948 H111103-01

Lab Number:

Enclosed are **revised** results for sample(s) received 11/11/16 by Air Technology Laboratories. This revision replaces the report dated 11/16/16 in its entirety. Report was revised to display results in mg/L, per client's request. Samples were received intact and properly chilled. Analyses were performed according to specifications on the chain of custody provided with the sample(s).

Report Narrative:

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

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

Sincerely,

Mark Johnson

Operations Manager

MJohnson@AirTechLabs.com

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

SUBCONTRACT ORDER

Clinical Laboratory of San Bernardino 16K0948

H111103

SENDING LABORATORY:

Clinical Laboratory of San Bernardino

21881 Barton Road

Grand Terrace, CA 92313

Phone: 909.825.7693

RECEIVING LABORATORY:

Air Technology Labs

18501 East Gale Avenue Suite 130

City of Industry, CA 91748

Phone:(626) 964-4032

| Fax: 909.825.7696 Project Manager: Stu Styl | les | Fax: | |
|--|-------------------------------------|---|--|
| Please email results to Proj | ject Manager: Stu Styles | om [Votulos@alinical lab co | m [] nelson@clinical-lab.com |
| | | | |
| California EDT trai Water Trax Upload | | des provided [] Yes [V] No [] Yes [v] No |) |
| Turn Around Time [Subcontract Comments: |] 10 Days [v/ 5 Days [] | Other Days | |
| | | | |
| Analysis | d in | | Comments |
| Sample ID: Reservoir Efflu | rent Site #5 / 16K0948-02 | Sampled: 11/09/16 10:00 PS C Water | Code: WTX ID: |
| i, al. w | i de la reciona de | e a *** " o Amedicina (* 113 | |
| Methane RSK175 | | | Report in mg/L |
| Containers Supplied: | | ing or a start fact | |
| 10ml Amber Vial (B) | 40ml Amber V | Vial (C) | <u> </u> |
| ************************************** | | | |
| | | n n ga gan sa manangan na a n | . The second control of the second of the se |
| | | | |
| | 9 V R D O | | 2 |
| | | | |
| | | | |
| Tana ari a Nama ari ara | | | |
| | | | |
| | | | |
| | | | |
| | so to a second of the second of the | | |
| | | | 000 |
| | 20 6 7 7 20 7 70 7 70 2 | | 90Wills |
| | | | 95000 |
| end on the second of the secon | | | |
| | | | |
| 13d Dly | 1//11/16 08:15 | Received By | Mil 14 9200 |
| Keleased By | , , | \sim | (Date / Time |
| M Clak | 11/11/16 10:20 | 2 Adamoel | |
| Released By | Date / Time | Received By | Date / Time |

Client:

Clinical Laboratory

Attn:

Stu Styles

Project Name:

NA

Project No.:

16K0948

Date Received:

11/11/16

Matrix:

Water

Reporting Units: mg/L

RSK175

| Lab No.: | H1111 | 03-01 | | | | |
|---------------------|--------------------|---------------|--|--|--|---|
| | Reservoir Effluent | | | | | |
| Client Sample I.D.: | Site #5 / 16K0948- | | | | | |
| | 02 | 02 | | | | |
| Date/Time Sampled: | 11/9/16 | 11/9/16 10:00 | | | | |
| Date/Time Analyzed: | 11/15/1 | 11/15/16 9:56 | | | | |
| QC Batch No.: | 1611150 | 161115GC8A1 | | | | # |
| Analyst Initials: | AS | S | | | | × |
| Dilution Factor: | 1.0 |) | | | | |
| | Result | RL | | | | |
| ANALYTE | mg/L | mg/L | | | | |
| Methane | 0.29 | 0.0010 | | | | |
| | | | | | | |

RL = Reporting Limit

| Reviewed/Approved By: | MACH - I | |
|-----------------------|--------------|--|
| | Mark Johnson | |

Operations Manager

Date ________

The cover letter is an integral part of this analytical report

QC Batch No.:

161115GC8A1

Matrix:

Water

Units:

mg/L

QC for Dissolved Gases by EPA Procedure RSKSOP-175

| Lab | No.: | Metho | d Blank | I | LCS | L | CSD | | |
|--------------|-------------------|---------------|---------|--------|----------|---------------|----------|------|----------|
| Date/Time An | alyzed: | 11/15/16 9:15 | | 11/15 | /16 8:48 | 11/15/16 9:02 | | | p. |
| Analyst Init | Analyst Initials: | | | | AS | AS | | | |
| Data | file: | 15n | ov004 | 151 | 10v002 | 151 | 10v003 | | |
| Dilution Fac | ctor: | 1 | 1.0 | | 1.0 | | 1.0 | | |
| ANALYTE | PQL | RL | Results | % Rec. | Criteria | % Rec. | Criteria | %RPD | Criteria |
| Methane | 0.001 | 0.001 | ND | 113 | 70-130% | 106 | 70-130% | 7.0 | <30 |

PQL = **Practical Quantitation Limit**

ND = Not Detected (Below RL).

RL = PQL X Dilution Factor

| Reviewed/Approved By: | 11111- L | Date: 1/17/16 |
|-----------------------|--------------------|---------------|
| | Mark J. Johnson | |
| | Operations Manager | |

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

16K0948

| | | | | | 1 | | | | | | | | | I(| 4) | | |
|--------------|------------------------|---------------------------------------|----------------|----------------|--------------|-------------------|----------|-----------|------------------------|----------|------------------|---------------------------|--------------|--|-------------------------|---|--|
| Client | | City of Lomita | Sy | /stem N | umber | i | An | alysi | s Re | eque | ste | 1 | | | | | |
| Address | | 24373 Walnut Avenue | | 101 | 0072 | | T | | | Ţ | | | | | | 1 | |
| | | Lomita, CA 91717 | | 131 | 0073 | j | | | | | 3 | 1,0 | | | | | |
| Phone # | | (310) 325-9830 | | Destinatio | n Laborate | ory | | | د ا | | Methane | <u>tal</u> | | | | | |
| Fax# | | (310) 325-3627 | | [X] Clinica | al Laborato | ory | | | otal | | lne i | Haı | BA | | | | |
| Project | | Standard Analysis | | RWQCB | Complianc | e | | Man | Diss | C | (Wa |] di | | 0 | | | |
| Sub Proje | ct | CWPF 2nd Week NOV Compliance Sampling | , | | yes _AP # | | T Tag | Manganese | Total Dissolved Solids | Color | (Water) (RSK175) | Total Hardness (as CaCO3) | ВАСТ/ГС/НРС | Odor | | | |
| Comment | s | For TC/EC/BACT see weekly Distro CoC | | 4 | | | 1 | | lids | | SK | Cac | Č | | | | |
| Sampled I | by | DGM | | | 880 | i | | | | | 175 | 23 | | } | | | |
| Date | Time | Sample Idenitification | Matrix | Туре | Preserv | Total Chlorine | 1 | | | | | | | | Comments / P.S. Codes | | |
| 11/9/2016 | 089308 | Reservoir Influent Site #3 | DW | 1W | N/A | 3.7 | X | X | | X | | | | | ph 7.60 temp 22.1 | | |
| | | | | | | | | | | | | | | | |] | |
| 11/9/2016 | 7.000 | Reservoir Effluent Site #5 | DW | 1W | N/A | 2.09 | | | | X | | | | X | ph 7.73 temp 22.2 |] | |
| 11/9/2016 | 1000 | Reservoir Effluent Site #5 | DW | 1W | HCL | | . | | X | | X | | | | |] | |
| | <u> </u> | | | | | <u> </u> | ↓ | | | | ļ | ļ | | ., | | | |
| | ļ | | | | |) | ↓ | | | | | | | | | 1 | |
| | ļ | | | | ļ | | + | | | _ | _ | | | | | 4 | |
| | | | | · | | | \vdash | - | | | | - | <u> </u> | | | _ | |
| | | | | | | | - | | | <u> </u> | | ļ | _ | | | | |
| | | | | | | <u> </u> | ┼ | | | | | | - | | | | |
| | | | | | | | + | | | | | - | | | | 1 | |
| | + | | | | | 1 | + | \vdash | | | | | - | | | - | |
| Preservative | s: (1) Na ₂ | | | Matrix | : DW-Drink | king Water, | WW- | Waste | Wat | er, S | N-Sto | т И | /ater, | GW- | Ground Water, A-Air | 1 | |
| | | 2SO3 (7) Cold (8) Other: | | | Туре- | 1-Routine, | 2-Rep | eat, 3 | | | | | | W-W | ell D- Dist. | | |
| Relin | quished . | By (Sign) Print Name / Company | | | Date / T | 10.000 | 1 | | (R) | celly | ed By | (Sig | m) | | Print Name / Company | | |
| Daniel Matel | R) A | Example 2 City of Lomita | | 11/9/201 | 16/12:3 | 30 | | | H | | V | | , | | CICDINDUM.C | | |
| | 60 | W J. W. C. M. KUB | | 11-97 | 7/3 | 40 | | / | X | | | | | | AMCUSB |] | |
| Commen | s: | | | | | Samples | recei | _ | ∑ mp_ | • | ice). Y | |) Int | | () Custody seals ★C | | |
| Shipped Via | | [] Fed X [] Golden State | [] <i>UPS</i> | [] <i>Cli</i> | ient [] | Other | | | | | | | | P | age_1_ of _1_ | | |



06 December 2016 Clinical Lab No.: 16K1445

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

Project Name: Standard Analysis

Sub Project: CWPF 3rd Week NOV Compliance Sampling

Enclosed are the results of the analyses for samples received at the laboratory on 11/16/16. Samples were received within temperature range, in correct containers and preservation.

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

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

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

Sincerely,

Stu Styles

Client Services Manager

tistes



Lomita, City ofProjectStandard AnalysisWork Order:16K144524373 Walnut AvenueSub Project:CWPF 3rd Week NOV Compliance SamplingReceived:11/16/16 15:45Lomita CA, 91717Project Manager:Mark AndersenReported:12/06/16

| Reservoir Influent Site #3 | | 16K1445- | 01 (Water) | | Sample Da | te: 11/16/1 | 6 9:30 Sa | mpler: D | GM |
|---------------------------------|---------------------------|----------|------------|------|-------------|-------------|------------------|----------|-----------|
| Analyte | Method | Result | Rep. Limit | MCL | Units | Prepared | Analyzed | Batch | Qualifier |
| Field Analyses | | | | | | | | | |
| Cl Res Total (Field) | Field | 2.5 | | N/A | mg/L | 11/16/16 | 11/16/16 | 1647358 | |
| pH (Field) | Field | 7.59 | | N/A | pH Units | 11/16/16 | 11/16/16 | 1647359 | |
| Temperature (Field) | Field | 20.7 | | N/A | °C | 11/16/16 | 11/16/16 | 1647359 | |
| General Physical Analyses | | | | | | | | | |
| Apparent Color | SM 2120B | 7.5 | 3.0 | 15 | Color Units | 11/16/16 | 11/16/16 | 1647286 | |
| <u>Metals</u> | | | | | | | | | |
| Iron (Fe) | EPA 200.7 | ND | 100 | 300 | ug/L | 11/21/16 | 11/21/16 | 1648011 | |
| Manganese (Mn) | EPA 200.7 | ND | 20 | 50 | ug/L | 11/21/16 | 11/21/16 | 1648011 | |
| Reservoir Effluent Site #5 | | 16K1445- | 02 (Water) | | Sample Da | te: 11/16/1 | 6 10:00 Sa | mpler: D | GM |
| Analyte | Method | Result | Rep. Limit | MCL | Units | Prepared | Analyzed | Batch | Qualifier |
| Field Analyses | | | | | | | | | |
| Cl Res Total (Field) | Field | 1.5 | | N/A | mg/L | 11/16/16 | 11/16/16 | 1647358 | |
| pH (Field) | Field | 7.73 | | N/A | pH Units | 11/16/16 | 11/16/16 | 1647359 | |
| Temperature (Field) | Field | 21.5 | | N/A | °C | 11/16/16 | 11/16/16 | 1647359 | |
| General Physical Analyses | | | | | | | | | |
| Apparent Color | SM 2120B | ND | 3.0 | 15 | Color Units | 11/16/16 | 11/16/16 | 1647286 | |
| Odor Threshold | EPA 140.1M | 1 | 1 | 3 | TON | 11/16/16 | 11/16/16 | 1647286 | |
| General Chemical Analyses | | | | | | | | | |
| Total Filterable Residue/TDS | SM 2540C | 680 | 5.0 | 1000 | mg/L | 11/22/16 | 11/29/16 | 1648073 | |
| ND Analyte NOT DETECTED at or a | above the reporting limit | | | | - | | | | |

EDT Transfer Confirmation 1



Entry No.: 01055 Analyzed: 161121

Work Order: 16K1445 Report Date: 12/06/2016

MANGANESE

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

Result: ND

LOMITA-CITY, WATER DEPT.

WELL 05 TREATMENT PLANT EFFLUENT

COLOR

Result: 7.5 Units: UNITS Entry No.: 00081 Analyzed: 161116

IRON

Result: ND Units: UG/L Entry No.: 01045 Analyzed: 161121

Units: UG/L

Printed: 12/06/2016 07:12:21 AM Results of 16K1445 FINAL WRITEON 1910073-006



November 29, 2016



ADE-1461 EPA Methods TO3, TO14A, TO15 SIM & SCAN ASTM D1946



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

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

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

LABORATORY TEST RESULTS

Project Reference: 16K1445 Lab Number: H111801-01

Enclosed are results for sample(s) received 11/18/16 by Air Technology Laboratories. Samples were received intact and properly chilled. Analyses were performed according to specifications on the chain of custody provided with the sample(s).

Report Narrative:

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

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

Sincerely,

Mark Johnson

Operations Manager

MJohnson@AirTechLabs.com

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

SUBCONTRACT ORDER

Clinical Laboratory of San Bernardino 16K1445

4111801-81

Date / Time

| SENDING LABORATORY: | RECEIVING LABORATORY: |
|---|--|
| Clinical Laboratory of San Bernardino 21881 Barton Road Grand Terrace, CA 92313 | Air Technology Labs 18501 East Gale Avenue Suite 130 City of Industry, CA 91748 |
| Phone: 909.825.7693 Fax: 909.825.7696 Project Manager: Stu Styles | Phone :(626) 964-4032 Fax: |
| Please email results to Project Manager: Stu Styles [] glaubig@clinical-lab.com [] ybarra@clinical-lab.com [| styles@clinical-lab.com [] nelson@clinical-lab.com |
| California EDT transfer those samples with PS codes pro- Water Trax Upload Client: | |
| Turn Around Time [] 10 Days [√5 Days [] Other Subcontract Comments: | Days |
| | |
| Analysis | Comments |
| Sample ID: Reservoir Effluent Site #5 / 16K1445-02 Sam Water | ppled: 11/16/16 10:00 PS Code: er WTX ID: |
| Methane RSK175 | Report in mg/L |
| Containers Supplied: | |
| 40ml Amber Vial (B) 40ml Amber Vial (C) | |
| D(| |
| | |
| | |
| | |
| | |
| | |
| | de la companya de la |
| | |
| | 2°C |
| Released By Date / Time | M Clah 11/13/4 9:60 Reserved By Date / Time |
| Released By Date / Time Released By Date / Time | Received By Date / Time |
| | Z to / Time |

Date / Time

Client:

Clinical Laboratory

Attn:

Stu Styles

Project Name:

NA

Project No.:

16K1445

Date Received:

11/18/16

Matrix:

Water

Reporting Units: mg/L

RSK175

| Lab No.: | H1118 | 01-01 | | | | |
|---------------------|-------------|---------------------------------------|--|---|--|----|
| | Reservoir | Reservoir Effluent | | | | |
| Client Sample I.D.: | Site #5 / 1 | Site #5 / 16K1445- | | | | |
| | 02 | 02 | | | | |
| Date/Time Sampled: | 11/16/16 | 5 10:00 | | | | |
| Date/Time Analyzed: | 11/28/16 | 14:59 | | | | |
| QC Batch No.: | 1611280 | GC8A1 | | | | 10 |
| Analyst Initials: | AS | S | | | | |
| Dilution Factor: | 1.0 | 0 | | | | |
| | Result | RL | | | | |
| ANALYTE | mg/L | mg/L | | * | | |
| Ethene | ND | 0.0010 | | | | |
| Ethane | ND | 0.0010 | | | | |
| Methane | 0.43 | 0.0010 | | | | |
| | | · · · · · · · · · · · · · · · · · · · | | | | |

| | DIA |
|--------------------------|------|
| ND = Not Detected (below | KI A |

RL = Reporting Limit

| Reviewed/Approved By: | Mark Johnson | Date |
|-----------------------|--------------------|------|
| | Operations Manager | |

The cover letter is an integral part of this analytical report

QC Batch No.:

161128GC8A1

Matrix: Units:

Water mg/L

QC for Dissolved Gases by EPA Procedure RSKSOP-175

| Lab | No.: | Metho | d Blank | 1 | LCS | L | CSD | | 82 |
|--------------|---------|-------|----------|--------|-----------|--------|----------|------|----------|
| Date/Time An | alyzed: | 11/28 | /16 9:42 | 11/28 | 3/16 9:57 | 11/28/ | 16 10:12 | | |
| Analyst Init | ials: | 1 | AS | | AS | | AS | | |
| Data | file: | 28n | ov004 | 14 | feb001 | 14 | feb002 | | |
| Dilution Fac | ctor: | 1 | 1.0 | | 1.0 | | 1.0 | | |
| ANALYTE | PQL | RL | Results | % Rec. | Criteria | % Rec. | Criteria | %RPD | Criteria |
| Ethene | 0.001 | 0.001 | ND | 101 | 70-130% | 106 | 70-130% | 4.3 | <30 |
| Ethane | 0.001 | 0.001 | ND | 108 | 70-130% | 114 | 70-130% | 5.0 | <30 |
| Methane | 0.001 | 0.001 | ND | 116 | 70-130% | 121 | 70-130% | 4.1 | <30 |

| PQL = Practical | Quantitation | Limit |
|-----------------|--------------|-------|
|-----------------|--------------|-------|

ND = Not Detected (Below RL).

RL = PQL X Dilution Factor

| Reviewed/Approved By: | Mall. L | Date: 11/29/16 |
|-----------------------|--------------------|----------------|
| | Mark J. Johnson | |
| | Operations Manager | |

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

| • | | | | | | | | | | | | | | | _ | 1112 |
|------------------------|--|---------------------------------------|--------|---------------|------------------------|--|--|----------|----------|---------------|--------|--------------|------------|-------------------------|-----------------------|---|
| Client | $C_{\mathbf{i}}$ | City of Lomita | Sy | System Number | ımber | | Analysis Requested | sis R | edne | sted | | | | | | |
| Address | 2437. | 24373 Walnut Avenue | | 191 | 1910073 | | | | | | | | | | | |
| | Lon | Lomita, CA 91717 | | 2 | | | | | | | To | | | | | |
| Phone # | (3) | (310) 325-9830 | a | estination | estination Laboratory | ź, | | | | | | | | | | |
| Fax # | (3 | (310) 325-3627 | | X] Clinica | X] Clinical Laboratory | تy | | | | | | D 4 | | | | |
| Project | Sta | Standard Analysis | | RWQCB C | RWQCB Compliance | a | | | Co | | | | | | | |
| Sub Project | CWPF 3rd Week | CWPF 3rd Week NOV Compliance Sampling | | EL | yes ELAP# | | ron | olved So | olor | iter) (I | TC/HI | dor | | | | |
| Comments | For TC/EC/BACT | For TC/EC/BACT see weekly Distro CoC | | 76 | 000 | | | olids | | | | | | | | |
| Sampled by | | DGM | | - | 000 | | | | | | | · | | | | |
| Date Time | | Sample Idenitification | Matrix | Type | Preserv | Total Chlorine | | - | | |) | | ပိ —— | Comments / P.S. Codes | es | |
| 11/16/2016 | 11/16/2016 OF Reservoir Influent Site #3 | t Site #3 | DW | 1W | N/A | 2.50 | \ \ \ | N | N | | | | ph 7 | .59 temp 20.7 | | |
| | 3 | | | | | , | | | | | | | | | | |
| 11/16/2016 /00 | /OCO Reservoir Effluent Site #5 | t Site #5 | DW | 1 W | N/A | 1.50 | | | N | | _ | X | ph | 7.73 temp 21.5 | | |
| 11/16/2016 | il and Reservoir Effluent Site #5 | t Site #5 | DW | W I | HCL | " | | \ | | × | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | + | | | | + | | | | |
| | | | | | | | | | _ | | | | | | | |
| | | | | | | | | | | | ++ | ++ | | | | |
| Preservatives: (1) N | | 3 (4) NH4CI | | Matrix: | DW-Drink | Matrix: DW-Drinking Water, WW-Waste Water, SW-Storm Water, | | ste Wa | ter, SI | V-Ston | n Wate | 7, GK | - Groun | GW- Ground Water, A-Air | | |
| (5) H2SO4 (6) | (5) H2SO4 (6) Na2SO3 (7) Cold (8) Other: | her: | | | Type- 1 | Type- 1-Routine, | 2-Repeat, 3-Replacement, 4-Special W-Well D- Dist. | t, 3-Rej | Jacen | ent, 4- | Specie | 1-M /e | Vell D- | Dist | | • |
| Relinquished By (Sign) | d By (Sign) | Print Name / Company | | | Date / Time | ïme | (| R | drein | d By | (Sign) | | P | Print Name / Company | - (_a | * |
| Danter Watering A | | City of Lomita | | 11/16/2016 | 1/ 91 | 8 | X | 7 | 3 | X | 1 | | 17 | JW-0/0/10 | 7 | |
| 750 | 1 Jan | J. LECCIO CUN | | ار-اه | 2 | 1345 | 4 | T | Ø | A | 1 | 1 | 7 | Keny | | |
| domments: | | | | | \ | Samples received:X | receive | Temp. |) | <u>, 9</u> 2. | | Infract F | () () | Custody seals | | |
| Shipped Via | | Fed X Golden State | SUC | Client | - | Other | | 1 | | | | | Page 1 | of 1 | | |
| *** | | | | | 1 | | | | | | | | | | | |



09 December 2016 Clinical Lab No.: 16K1962

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

Project Name: Standard Analysis

Sub Project: CWPF 4th Week NOV Compliance Sampling

Enclosed are the results of the analyses for samples received at the laboratory on 11/23/16 . Samples were received within temperature range, in correct containers and preservation.

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

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

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

Sincerely,

Stu Styles

Client Services Manager

tistes



Lomita, City ofProject:Standard AnalysisWork Order:16K196224373 Walnut AvenueSub Project:CWPF 4th Week NOV Compliance SamplingReceived:11/23/16 16:15Lomita CA, 91717Project Manager:Mark AndersenReported:12/09/16

| Reservoir Influent Site #3 | | 16K1962- | 01 (Water) | | Sample Da | te: 11/23/1 | 6 9:30 Sa | mpler: D | GM |
|---|------------|----------|------------|------|-------------|-------------|------------------|----------|-----------|
| Analyte | Method | Result | Rep. Limit | MCL | Units | Prepared | Analyzed | Batch | Qualifier |
| Field Analyses | | | | | | | | | |
| Cl Res Total (Field) | Field | 3.88 | | N/A | mg/L | 11/23/16 | 11/23/16 | 1649038 | |
| pH (Field) | Field | 7.65 | | N/A | pH Units | 11/23/16 | 11/23/16 | 1649038 | |
| Temperature (Field) | Field | 21.1 | | N/A | °C | 11/23/16 | 11/23/16 | 1649038 | |
| General Physical Analyses | | | | | | | | | |
| Apparent Color | SM 2120B | 5.0 | 3.0 | 15 | Color Units | 11/23/16 | 11/23/16 | 1648306 | |
| Metals | | | | | | | | | |
| Iron (Fe) | EPA 200.7 | ND | 100 | 300 | ug/L | 11/29/16 | 11/29/16 | 1649118 | |
| Manganese (Mn) | EPA 200.7 | ND | 20 | 50 | ug/L | 11/29/16 | 11/29/16 | 1649118 | |
| Reservoir Effluent Site #5 | | 16K1962- | 02 (Water) | | Sample Da | te: 11/23/1 | 6 9:40 Sa | mpler: D | GM |
| Analyte | Method | Result | Rep. Limit | MCL | Units | Prepared | Analyzed | Batch | Qualifier |
| Field Analyses | | | | | | | | | |
| Cl Res Total (Field) | Field | 2.06 | | N/A | mg/L | 11/23/16 | 11/23/16 | 1649038 | |
| pH (Field) | Field | 7.85 | | N/A | pH Units | 11/23/16 | 11/23/16 | 1649038 | |
| Temperature (Field) | Field | 20.2 | | N/A | °C | 11/23/16 | 11/23/16 | 1649038 | |
| General Physical Analyses | | | | | | | | | |
| Apparent Color | SM 2120B | ND | 3.0 | 15 | Color Units | 11/23/16 | 11/23/16 | 1648306 | |
| Odor Threshold | EPA 140.1M | 4 | 1 | 3 | TON | 11/23/16 | 11/23/16 | 1648306 | |
| ~ | | | | | | | | | |
| General Chemical Analyses | | | | | | | | | |
| General Chemical Analyses Total Filterable Residue/TDS | SM 2540C | 660 | 5.0 | 1000 | mg/L | 11/30/16 | 12/02/16 | 1649242 | |



December 5, 2016



ADE-1461 EPA Methods TO3, TO14A, TO15 SIM & SCAN **ASTM D1946**



TX Cert T104704450-14-6 EPA Methods TO14A, TO15

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

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

LABORATORY TEST RESULTS

Project Reference: 16K1962 Lab Number:

H112801-01

Enclosed are results for sample(s) received 11/28/16 by Air Technology Laboratories. Samples were received intact and properly chilled. Analyses were performed according to specifications on the chain of custody provided with the sample(s).

Report Narrative:

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

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

Sincerely,

Mark Johnson

Operations Manager

MJohnson@AirTechLabs.com

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

SUBCONTRACT ORDER

Clinical Laboratory of San Bernardino 16K1962

H112801

SENDING LABORATORY:

Clinical Laboratory of San Bernardino

21881 Barton Road

RECEIVING LABORATORY:

Air Technology Labs 18501 East Gale Avenue Suite 130

| Grand Terrace, CA 92313 | | City of Industry | | | |
|--|---|---------------------------------|--------------------|-------------------------------------|-------------------|
| Phone: 909.825.7693 | | Phone :(626) 9 | 64-4032 | e v | |
| Fax: 909.825.7696 | | Fax: | | | |
| Project Manager: Stu Styl- | es | | | | |
| Please email results to Proj | ect Manager: Stu Styles om [] ybarra@clinical-lab. | com [v] styles@clinical | l-lab.com []n | elson@clinical-lab.com | , |
| California EDT trar Water Trax Upload | nsfer those samples with PS co | | [v] No [v] No | | |
| Turn Around Time [Subcontract Comments: |] 10 Days [v] 5 Days [] | Other Days | | | |
| , et | | | | | |
| Analysis | | | | Comments | |
| Sample ID: Reservoir Efflu | ent Site #5 / 16K1962-02 | Sampled: 11/23/16 09:4 Water | 10 PS Code: WTX | ID: | |
| ta vai "ty v | | | | | |
| Methane RSK175 | | 8 | | Report in mg/L | |
| Containers Supplied: | | | | | |
| 40ml Amber Vial (B) | 40ml Amber | Vial (C) | A * 1 | a . | 3 |
| 4.1 | , | | | 4 | |
| 6 | , we consider, all as | | | na agri na la anni al a la matemba. | erior to det week |
| | | | | | |
| | · Z | | | | |
| | a 1 a 1 a 1 a 1 a 1 a 1 a 1 a 1 a 1 a 1 | | | | |
| Market Lands | | | | | |

PD 11/28/16

WALL Received By

Released By

Date / Time

Received By

Date / Time

Client:

Clinical Laboratory

Attn:

Stu Styles

Project Name:

NA

Project No.:

16K1962

Date Received:

11/28/16

Matrix:

Water

Reporting Units: mg/L

| | ¥ | RS | K175 | (2) | | | | 17 22 |
|---------------------|---------------|--------------------|------|-----|---|---|---|----------|
| Lab No.: | H11280 | 01 01 | T T | | 1 | • | | |
| Lab No | Reservoir | | | | - | | ļ | |
| Client Sample I.D.: | | Site #5 / 16K1962- | | | | | | |
| | 02 | | | | | | | |
| Date/Time Sampled: | 11/23/16 9:40 | | | | | | | |
| Date/Time Analyzed: | 12/5/16 9:21 | | | | | | | |
| QC Batch No.: | 161205GC8A1 | | | | | | | 0 |
| Analyst Initials: | AS | S | | | | 4 | | 10 |
| Dilution Factor: | 1.0 |) | | | | | | |
| | Result | RL | | | | | | |
| ANALYTE | mg/L | mg/L | * | | | | | |
| Methane | 0.29 | 0.0010 | | | | | | |
| | | | | 721 | | | | |

| ND = Not Detected | (below RL) |
|-------------------|------------|
|-------------------|------------|

RL = **Reporting Limit**

| Reviewed/Approved By: | 11/100- |
|-----------------------|--------------|
| | Mark Johnson |

Operations Manager

The cover letter is an integral part of this analytical report

page 1 of 1

QC Batch No.:

161205GC8A1

Matrix:

Water

Units:

mg/L

QC for Dissolved Gases by EPA Procedure RSKSOP-175

| Lab | No.: | Method Blank | | LCS | | LCSD | | | |
|--------------|---------|--------------|---------|--------------|----------|--------------|----------|------|----------|
| Date/Time Ar | alyzed: | 12/5/16 9:08 | | 12/5/16 8:42 | | 12/5/16 8:55 | | | |
| Analyst Ini | tials: | , | AS | AS | | AS | | | OFF |
| Data | file: | 05d | lec003 | 056 | dec001 | 050 | dec002 | at . | |
| Dilution Fa | ctor: | | 1.0 | | 1.0 | | 1.0 | | |
| ANALYTE | PQL | RL | Results | % Rec. | Criteria | % Rec. | Criteria | %RPD | Criteria |
| Methane | 0.001 | 0.001 | ND | 119 | 70-130% | 125 | 70-130% | 4.5 | <30 |

PQL = Practical Quantitation Limit

ND = Not Detected (Below RL).

RL = PQL X Dilution Factor

| 1000 | | |
|-------------------|----------|-------|
| Reviewed | Anneogod | 12×70 |
| T/C / I C / C C C | ADDIOVEG | DV. |

Operations Manager

Date: 12/5/16

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

\$12-1 (S) Chain of

Chain of Custody

1619192 Comments / P.S. Codes Custody seals ph 7.65 temp 21.1 ph 7.85 temp 20.2 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. Intact × Odor BACT/TC/HP€ Total Hardness (as CaCO3) Analysis Requested Samples received: Toon ice Methane (Water) (RSKI 75) X Color **Total Dissolved Solids** إنحا Manganese Iron 3,88 2.06 | Other Date / Time Destination Laboratory [X] Clinical Laboratory RWQCB Compliance 1910073 HCL N/A Ν System Number ELAP# (C) (C) (C) 11/23/2016 11.23.11 | Client 3 -San Matrix MC MC ¥ 1 Print Name / Company | | Golden State City of Lomita CHTF 4TH Week NOV Compliance For TO/EC/BACT see weekly Distro CoC Sample Identification 24373 Walnut Avenue Lomita, CA 91717 Standard Analysi: City of Lomita (310) 325-9830 (310) 325-3627 Sampling Preservatives: (1) Na₂S₂O₃ (2) HCI (3) HNO3 (4) NH4CI (5) H2SO4 (6) Na₂SO3 (7) Cold (8) Other: Reservoir Influent Site #3 11/23/2016 (ダイン) Reservoir Effluent Site #5 11/23/2016 & 940 Reservoir Effluent Site #5 | | Fed.X Relinquished By (Sign) DE 3/2 Sub Project Sampled by **Convinents** Comments Shipped Via Address Phone # Project 0.00 Fax# Client

"Your Water and Wastewater Analysis Solution"



08 December 2016 Clinical Lab No.: 16L0075

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

Project Name: Standard Analysis

Sub Project: CWPF 4th Week NOV Compliance Sampling

Enclosed are the results of the analyses for samples received at the laboratory on 11/30/16 . Samples were received within temperature range, in correct containers and preservation.

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

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

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

Sincerely,

Stu Styles

Client Services Manager

tistes



Lomita, City ofProjectStandard AnalysisWork Order:16L007524373 Walnut AvenueSub Project:CWPF 4th Week NOV Compliance SamplingReceived:11/30/16 15:50Lomita CA, 91717Project Manager:Mark AndersenReported:12/08/16

| Reservoir Influent Site #3 | | 16L0075-0 | 01 (Water) | | Sample Da | te: 11/30/10 | 6 9:00 Sa | mpler: D | GM |
|-------------------------------|------------|-----------|------------|------|-------------|--------------|------------------|----------|-----------|
| Analyte | Method | Result | Rep. Limit | MCL | Units | Prepared | Analyzed | Batch | Qualifier |
| Field Analyses | | | | | | | | | |
| Cl Res Total (Field) | Field | 4.2 | | N/A | mg/L | 11/30/16 | 11/30/16 | 1649406 | |
| pH (Field) | Field | 7.96 | | N/A | pH Units | 11/30/16 | 11/30/16 | 1649406 | |
| Temperature (Field) | Field | 22 | | N/A | °C | 11/30/16 | 11/30/16 | 1649406 | |
| General Physical Analyses | | | | | | | | | |
| Apparent Color | SM 2120B | 5.0 | 3.0 | 15 | Color Units | 11/30/16 | 11/30/16 | 1649320 | |
| Metals | | | | | | | | | |
| Iron (Fe) | EPA 200.7 | ND | 100 | 300 | ug/L | 12/05/16 | 12/05/16 | 1650031 | |
| Manganese (Mn) | EPA 200.7 | ND | 20 | 50 | ug/L | 12/05/16 | 12/05/16 | 1650031 | |
| Reservoir Effluent Site #5 | | 16L0075-0 | 02 (Water) | | Sample Da | te: 11/30/10 | 6 9:30 Sa | mpler: D | GM |
| Analyte | Method | Result | Rep. Limit | MCL | Units | Prepared | Analyzed | Batch | Qualifier |
| Field Analyses | | | | | | | | | |
| Cl Res Total (Field) | Field | 2.2 | | N/A | mg/L | 11/30/16 | 11/30/16 | 1649406 | |
| pH (Field) | Field | 7.78 | | N/A | pH Units | 11/30/16 | 11/30/16 | 1649406 | |
| Temperature (Field) | Field | 21.9 | | N/A | °C | 11/30/16 | 11/30/16 | 1649406 | |
| General Physical Analyses | | | | | | | | | |
| Apparent Color | SM 2120B | ND | 15.0 | 15 | Color Units | 11/30/16 | 11/30/16 | 1649320 | |
| Odor Threshold | EPA 140.1M | 1 | 1 | 3 | TON | 11/30/16 | 11/30/16 | 1649320 | |
| General Chemical Analyses | | | | | | | | | |
| Total Filterable Residue/TDS | SM 2540C | 620 | 5.0 | 1000 | mg/L | 12/06/16 | 12/07/16 | 1650055 | |
| ND Analyte NOT DETECTED at or | -1 | | | | | | | | |



December 8, 2016



ADE-1461 EPA Methods TO3, TO14A, TO15 SIM & SCAN **ASTM D1946**



TX Cert T104704450-14-6 EPA Methods TO14A, TO15

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

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

LABORATORY TEST RESULTS

Project Reference: 16L0075

Lab Number:

H120201-01

Enclosed are results for sample(s) received 12/02/16 by Air Technology Laboratories. Samples were received intact and properly chilled. Analyses were performed according to specifications on the chain of custody provided with the sample(s).

Report Narrative:

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

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

Sincerely,

Mark Johnson

Operations Manager

MJohnson@AirTechLabs.com

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

SUBCONTRACT ORDER

Clinical Laboratory of San Bernardino 16L0075

4/20201-01

| SENDING LABORATORY: | RECEIVING LABORATORY: |
|--|---|
| Clinical Laboratory of San Bernardino 21881 Barton Road Grand Terrace, CA 92313 Phone: 909.825.7693 Fax: 909.825.7696 Project Manager: Stu Styles | Air Technology Labs 18501 East Gale Avenue Suite 130 City of Industry, CA 91748 Phone:(626) 964-4032 Fax: |
| Please email results to Project Manager: Stu Styles [] glaubig@clinical-lab.com [] ybarra@clinical-lab.con | n [√] styles@clinical-lab.com [] nelson@clinical-lab.com |
| California EDT transfer those samples with PS codes Water Trax Upload Client: | s provided [] Yes [v] No [] Yes [v] No |
| Turn Around Time [] 10 Days [5 Days [] O Subcontract Comments: | ther Days |
| Analysis | Comments |
| Sample ID: Reservoir Effluent Site #5 / 16L0075-02 | Sampled: 11/30/16 09:30 PS Code: Water WTX ID: |
| Methane RSK175 | Report in mg/L |
| Containers Supplied: 40ml Amber Vial (B) 40ml Amber Via | 1 (C) |
| | |
| | |
| | |
| | 3-6 |
| 12/02/16 07:15 Released By Date / Time Date / Date | Received By Date / Time Received By Date / Time |

Client:

Clinical Laboratory

Attn:

Stu Styles

Project Name:

NA

Project No.:

16L0075

Date Received:

12/02/16

Matrix:

Water

Reporting Units: mg/L

RSK175

| Lab No.: | H120201-01 | | | | | | | |
|---------------------|-------------|--------------------|--|---|---|---|--|--|
| | Reservoir | Effluent | | | | | | |
| Client Sample I.D.: | Site #5 / 1 | Site #5 / 16L0075- | | | | | | |
| 5000 | 02 | 02 | | | | | | |
| Date/Time Sampled: | 11/9/16 | 9:30 | | | | | | |
| Date/Time Analyzed: | 12/5/16 | 12/5/16 10:14 | | | | | | |
| QC Batch No.: | 161205GC8A1 | | | | * | | | |
| Analyst Initials: | AS | 8 | | | | | | |
| Dilution Factor: | 1.0 |) | | | | | | |
| | Result | RL | | | | | | |
| ANALYTE | mg/L | mg/L | | | | 3 | | |
| Methane | 0.55 | 0.0010 | | | | | | |
| | | | | M | | | | |

ND = Not Detected (below RL)

RL = **Reporting Limit**

Reviewed/Approved By:

Operations Manager

The cover letter is an integral part of this analytical report



QC Batch No.:

161205GC8A1

Matrix:

Water

Units:

mg/L

QC for Dissolved Gases by EPA Procedure RSKSOP-175

| I | ab No.: | Method Blank | | LCS | | LCSD | | | |
|-----------|-----------|--------------|---------|--------------|----------|--------------|----------|------|----------|
| Date/Time | Analyzed: | 12/5/16 9:08 | | 12/5/16 8:42 | | 12/5/16 8:55 | | | |
| Analyst | Initials: | | AS | | AS | | AS | | |
| Γ | atafile: | 050 | lec003 | 05dec001 | | 05dec002 | | | |
| Dilution | Factor: | | 1.0 | | 1.0 | | 1.0 | | |
| ANALYTE | PQL | RL | Results | % Rec. | Criteria | % Rec. | Criteria | %RPD | Criteria |
| Methane | 0.001 | 0.001 | ND | 119 | 70-130% | 125 | 70-130% | 4.5 | <30 |

PQL = Practical Quantitation Limit

ND = Not Detected (Below RL).

RL = PQL X Dilution Factor

| Reviewed/Approved By: | MACU. | Dat | te: 12 | 18/16 |
|-----------------------|--------------------|-----|--------|-------|
| 95.100 | Mark J. Johnson | | | |
| | Operations Managar | | | |

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

| Client | | City of Lomita | Ś | System Number | umber | | Anal | ysis | Regi | Analysis Requested | קַ | | | |
|-----------------|----------|---|---------|---------------|-------------------------|--|--------|---------|-------------------|--|--|--------|---------------|---|
| Address | | 24373 Walnut Avenue | | 107 | 2700 | | | | - | | | | | |
| | | Lomita, CA 91717 | _ | 2 | 1910015 | • | | | | M | | | | |
| Phone # | | (310) 325-9830 | | Destinatic | Destination Laboratory | tory | | | 1 | etha | | | | |
| Fax# | | (310) 325-3627 | | [X] Clinic | [X] Clinical Laboratory | tory | | | otal | ne | | B.A | | |
| Project | | Standard Analysis | | RWQCB | RWQCB Compliance | ce | | | | | | CT/ | 0 | |
| Sub Project | # | CWPF 5TH Week NOV Compliance | | | yes | | ron | ganes | olor olved | ater) olor | ess (a | TC/I | dor | |
| | | Sampling | | II | ELAP# | | | | Sol | (R | | IP(| | |
| Comments | | For TC/EC/BACT see weekly Distro CoC | | ₹ | 4000 | | | | lids | SK: | | C | | |
| Sampled by | <u>ح</u> | DGM | | - | 000 | | | | | 175) | | | | |
| Date | Time | Sample Idenitification | Matrix | Type | Preserv | Total | | | |) | | | | Comments / P.S. Codes |
| 11/30/2016 | 2000 | 11/30/2016 JGGO Reservoir Influent Site #3 | DW | N N | A/N | 71/2 | ~ | / | - | / | | | | ph 7.96 temp 22.0 |
| | | | | | | | | | | | | | | |
| 11/30/2016 | | # Reservoir Effluent Site #5 | DW | 1W | A/N | 7.28 | | | | <u>, </u> | _ | | / | ph 7.78 temp 21.9 |
| 11/30/2016 0930 | 8930 | Reservoir Effluent Site #5 | MC | 7X1 | HCL | / | | | X | X | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| Preservatives | (1) Na | Preservatives: (1) Na ₂ S ₂ O ₃ (2) HCI (3) HNO3 (4) NH4CI | ı | Matrix | K: DW-Drit | nking Water | WW.W | aste l | Nater, | SW-S | torm I | Vater, | -MS | Matrix: DW-Drinking Water, WW-Waste Water, SW-Storm Water, GW- Ground Water, A-Air Tring 4 Bouting 2 Bound 2 Bouleannest 4 Special W. McII D. Biot |
| (5) H2S | 04 (6) N | (5) H2SO4 (6) Na2SO3 (7) Cold (8) Other: | | | lype | Type- 1-Koutine, 4-Kepeat, 3-Keplacement | adau-7 | at, 3-r | repiac | emen | | eciai | 11-11 | Vell D-DISt. |
| Reling | uished | Relinquished By (Sign) Print Name / Company | | | Date / Time | Time | | | Pece | red ! | = | ign) | | Print Name / Company |
| Daniel Matei | 2 | City of Louhita | 1 | 11/30/2016 | 910 | 51:1 | 1 | 8 | K | \mathcal{V} | Y | 1 | | J. M. GOLLII |
| Comment | | | 2 | 4- 11 | 0 | Samples rece | | 1 | | 201 | $\begin{bmatrix} 0,2 \\ x \end{bmatrix}$ | 1 | Intact F 5 | () Custody scals |
| Shipped Via | | Fed X Golden State | [] UPS | Client | | Other | | | | | | | 12 | Page_1_ of_1_ |
| | | | | | | | | | | | | | | |

APPENDIX B

METHANE MONITORING LOG



CITY OF LOMITA PUBLIC WORKS DEPARTMENT

CYPRESS WATER PRODUCTION FACILITY HANDHELD METHANE LOG READINGS

| | | NOV | 'EMBER 2016 | |
|------------|-----|---------|-------------|----------------------|
| DATE | DAY | METHANE | HANDHELD | COMMENTS |
| 11/1/2016 | Т | CH4- 0% | Oxy- 20.1% | |
| 11/2/2016 | W | CH4- 0% | Oxy- 20.3% | |
| 11/3/2016 | TH | CH4- 1% | Oxy- 19.9% | |
| 11/4/2016 | F | CH4- 0% | Oxy- 20.3% | |
| 11/5/2016 | SA | CH4- 3% | Oxy- 19.7% | |
| 11/6/2016 | SU | CH4- 0% | Oxy- 20.3% | |
| 11/7/2016 | М | CH4- 0% | Oxy- 20.3% | |
| 11/8/2016 | Т | CH4- 3% | Oxy- 19.1% | |
| 11/9/2016 | W | CH4- 0% | Oxy- 20.3% | |
| 11/10/2016 | TH | CH4- 0% | Oxy- 20.8% | |
| 11/11/2016 | F | CH4- | Оху- | VETERANS DAY |
| 11/12/2016 | SA | CH4- 3% | Oxy- 19.1% | |
| 11/13/2016 | SU | CH4- 0% | Oxy- 20.3% | |
| 11/14/2016 | М | CH4- 0% | Oxy- 20.3% | |
| 11/15/2016 | Т | CH4- 2% | Oxy- 19.8% | |
| 11/16/2016 | W | CH4- 0% | Oxy- 20.9% | |
| 11/17/2016 | TH | CH4- 1% | Oxy- 20.1% | |
| 11/18/2016 | F | CH4- 0% | Oxy- 20.9% | |
| 11/19/2016 | SA | CH4- 0% | Oxy- 20.3% | |
| 11/20/2016 | SU | CH4- 0% | Oxy- 20.3% | |
| 11/21/2016 | М | CH4- 2% | Oxy- 19.9% | |
| 11/22/2016 | Т | CH4- 0% | Oxy- 20.3% | |
| 11/23/2016 | W | CH4- 0% | Oxy- 20.3% | |
| 11/24/2016 | TH | CH4- | Оху- | THANKSGIVING HOLIDAY |
| 11/25/2016 | F | CH4- | Оху- | THANKSGIVING HOLIDAY |
| 11/26/2016 | SA | CH4- 0% | Oxy- 20.1% | |
| 11/27/2016 | SU | CH4- 0% | Oxy- 20.3% | |
| 11/28/2016 | М | CH4- 0% | Oxy- 20.3% | |
| 11/29/2016 | Т | CH4- 2% | Oxy- 19.9% | |
| 11/30/2016 | W | CH4- 0% | Oxy- 20.9% | |

ND- Non Detect

CH4- Methane

Oxy- Oxygen

Day Off/Holiday- Red

APPENDIX C

NITRIFICATION MONITORING DATA SUMMARY

CITY OF LOMITA, System No. 1910073 --- Month, Year: November 2016 'MONTHLY NITRIFICATION MONITORING SUMMARY REPORT

| Comments | | Well/MWD Blend | Well/MWD Blend | Well/MWD Blend | Well/MWD Blend | Well/MWD Blend | MWD Only | MWD Only | MWD Only | Mell/MM/MODE | Well/MWD Blend | Well/MWD Blend | Well/MWD Blend | Well/MWD Blend | MWD Only | MWD Only | MWD Only | | Well/MWD Blend | Well/MWD Blend | Well/MWD Blend | Well/MWD Blend | Well/MWD Blend | MWD Only | MWD Only | MWD Only | | Well/MWD Blend | Well/MWD Blend | Well/MWD Blend | Well/MWD Blend | Well/MWD Blend | MWD Only | MAYO Only | MAND ONLY | Well/MWD Blend | Well/MWD Blend | Well/MWD Blend | Well/MWD Blend | Well/MWD Blend | MWD Only | MWD Only | MWD Only |
|---------------------------|---------------------------|------------------------------|-----------------|-----------------------|----------------|----------------|-----------------|--------------------|-----------|------------------------------|-----------------|-----------------------|----------------|----------------|------------------|--------------------|-----------|----------------|----------------|------------------|-----------------------|----------------|----------------|----------------|--------------------|------------|----------------------|----------------|------------------|----------------|----------------|------------------|-------------------|------------|-----------|------------------------------|-----------------|-----------------------|----------------|----------------|-----------------|--------------------|--|
| Nor | υ | 1 | 1 | 1 | 1 | 1 | 2 | m | 2 | 7 | | - | 1 | - | 2 | n | 2 | | 1 | 1 | 1 | 1 | 1 | 7 | က | 2 | | - | 1 | 1 | 1 | - | 7 | 2 0 | 7 | - | - | 1 | 1 | 1 | 2 | က | 2 |
| HPC | CFU/m/ | ND | DN | QN | ND | QN | QN | ND | ON | S | S | QV. | QV | QN | QV | ND | QN | | 16 | 9 | ND | 240 | ND | ND | ND | QN | | 15 | 7 | 1 | 66 | m : | 2 5 | 5 5 | 20 | QV | ND | QN | 130 | ND | ND | ND | ND |
| Coliform ² | P/A | A | 4 | A | A | A | A | A | A | 4 | < A | \ \ | A | A | 4 | A | A | | A | A | Ą | Ā | Ā | A | A | A | | A | A | A | 4 | Α. | 4 4 | τ < | Ţ | A | A | A | A | ٩ | A | А | A |
| Nitrate | ma/L | ND | ND | ND | ND | ND | ND | QN | ND | CN | N S | NO. | ND | QN | QN | ND | QN | | QV | ND | ND | ND | ND | ND | ND | ND | | QV | ND | QV | QN | Q. | S S | 2 5 | S | QN | QN | ND | ND | QN | 0.41 | ON | ND |
| Nitrite | mg/L | 0.001 | 0.004 | 900.0 | 0.003 | 0.022 | 0.024 | 0.015 | 0.008 | 2000 | 0.004 | 900.0 | 0.002 | 0.008 | 0.004 | 0.014 | 0.019 | | 0.010 | 0.007 | 0.009 | 0.009 | 0.008 | 0.011 | 0.014 | 0.005 | | 0.008 | 0.006 | 9000 | 0.005 | 0.007 | 0.003 | 0.00 | 600.0 | 0.023 | 0.016 | 900.0 | 0.019 | 0.004 | 0.032 | 0.020 | 0.008 |
| Free Ammonia | mg/L | 0.15 | 0.17 | 0.18 | 0.14 | 0.09 | 0.17 | 0.21 | 0.16 | 0.10 | 0.07 | 0.14 | 0.15 | 0.08 | 0.14 | 0.19 | 0.13 | | 0.09 | 0.08 | 0.14 | 0.04 | 0.04 | 90.0 | 0.09 | 0.04 | | 0.09 | 0.09 | 0.10 | 0.75 | 0.00 | 0.12 | 0.73 | 5 | 0.10 | 0.07 | 0.11 | 0.20 | 0.07 | 0.19 | 0.17 | 0.15 |
| <i>Total</i> Ammonia | mg/L | 0.35 | 0.38 | 0.34 | 0.41 | 0.43 | 0.49 | 0.46 | 0.39 | 0.39 | 0.36 | 0.31 | 0.38 | 0.48 | 0.37 | 0.41 | 0.33 | | 0.38 | 0.34 | 0.31 | 0.36 | 0.36 | 0.45 | 0.36 | 0.39 | | 0.39 | 0.38 | 0.33 | 0.38 | 0.49 | 0.37 | 0.31 | 200 | 0.36 | 0.38 | 0.33 | 0.37 | 0.48 | 0.39 | 0.41 | 0.31 |
| Free Chlorine | mg/L | 0 | 0.16 | 0.2 | 0.07 | 0.07 | 0.16 | 0.07 | 0.19 | 0.04 | 0.19 | 0.12 | 0.20 | 0.09 | 0.10 | 0.09 | 90.0 | , | 0 | 0.01 | 0 | 0 | 0.07 | 0.35 | 0.15 | 90.0 | | 0.04 | 0.04 | 0.24 | 0.08 | 0.37 | 0.53 | 0.19 | 2 | 0.16 | 0.04 | 0.8 | 0.04 | 0.14 | 0.09 | 0.2 | 90.0 |
| Total Chlorine | mg/L | 1.83 | 1.97 | 2 | 1.6 | 2.07 | 1.74 | 1.88 | 1.85 | 1.67 | 1.88 | 1.97 | 1.16 | 2.09 | 1.66 | 1.62 | 1.50 | | 0.62 | 0.76 | 1.26 | 0.20 | 1.52 | 2.07 | 2.20 | 1.04 | o c | 0.58 | 0.93 | 7.55 | 0.37 | 1 88 | 184 | 177 | | 0.55 | 0.63 | 1.35 | 0.143 | 2.2 | 1.72 | 1.72 | 1.95 |
| Н | | 8.05 | 7.95 | 2.96 | 8.05 | 7.87 | 8.23 | 8.23 | 8.22 | 7.95 | 7.93 | 7.90 | 7.96 | 7.73 | 8.22 | 8.24 | 8.22 | 000 | 8.00 | 7.97 | 7.96 | 1.14 | 7.92 | 8.34 | 8.38 | 8.24 | 100 | 86.7 | 20.02 | 200 | 60.7 | 20.02 | 8.37 | 8.34 | | 8.13 | 7.87 | 7.95 | 7.9 | 7.78 | 8.44 | 8.23 | 8.49 |
| lemp | ပွ | 18.4 | 19.7 | 20.5 | 19.9 | 21.7 | 22.1 | 22.6 | 21.4 | 21.3 | 21.8 | 23.3 | 20.9 | 22.2 | 23.4 | 23.4 | 22.8 | | 18.2 | 19.0 | 20.3 | 19.7 | 22.1 | 20.8 | 24.8 | 21.0 | 0,00 | 19.2 | 19.3 | 19.7 | 19.3 | 20.2 | 20.1 | 19.2 | | 18.6 | 17.0 | 10 | 20.3 | 21.9 | 18.4 | 18.2 | 16.9 |
| Sample Date (and Time) | MM/DD/YYYY Xx:xx am/pm | 11/2/2016 | 11/2/2016 | 11/2/2016 | 11/2/2016 | 11/2/2016 | 11/2/2016 | 11/2/2016 | 11/2/2016 | 11/9/2016 | 11/9/2016 | 11/9/2016 | 11/9/2016 | 11/9/2016 | 11/9/2016 | 11/9/2016 | 11/9/2016 | 0700007777 | 11/10/2010 | 11/10/2010 | 11/16/2016 | 11/16/2016 | 11/16/2016 | 11/16/2016 | 11/16/2016 | 11/16/2016 | 44/00/00/46 | 11/23/2010 | 44/00/0046 | 11/23/2010 | 11/23/2016 | 11/23/2016 | 11/23/2016 | 11/23/2016 | | 11/30/2016 | 11/30/2016 | 11/30/2016 | 11/30/2016 | 11/30/2016 | 11/30/2016 | 11/30/2016 | 11/30/2016 |
| Location | | 1948 W. 252 nd St | 24632 S Moon Av | 25417 Pennsylvania Av | 2052 Dawn St | Reservoir | 1912 W. 259" PI | 26314 S Monte Vta. | 2500 PCH | 1948 W. 252 nd St | 24632 S Moon Av | 25417 Pennsylvania Av | 2052 Dawn St | Reservoir | 1912 W. 259th PI | 26314 S Monte Vta. | 2500 PCH | o poso mi oron | 1946 W. 252 St | 24032 S MOOFF AV | 25411 Pennsylvania Av | ZUSZ Dawn St | Keservoir | 1912 W. 259 FI | 26314 S Monte Vta. | 2500 PCH | 40.40 14/ 25.2/1d C+ | 1946 W. 252 St | 24032 S MOUNT AV | 2062 Damis St | Posserioir | 1012 IV 250th PI | 26314 S Monte Vta | 2500 PCH | | 1948 W. 252 nd St | 24632 S Moon Av | 25417 Pennsylvania Av | 2052 Dawn St | Reservoir | 1912 W. 259" PI | 26314 S Monte Vta. | D S13-005 2500 PCH 11/30/2016 16.9 8.49 1. |
| sample I.D | Units/Others → | S13-003 | S13-004 | \$13-008 | A | | \$13-001 | \$13-002 | S13-005 | \$13-003 | S13-004 | \$13-008 | A | | \$13-001 | \$13-002 | \$13-005 | 000 | 513-003 | 513-004 | 513-008 | τ. | 700 070 | 513-001 | \$13-002 | \$13-005 | 000 000 | \$13-003 | 513-004 | 313-000 | τ | \$13-001 | \$13-002 | \$13-005 | | S13-003 | S13-004 | S13-008 | A | | \$13-001 | \$13-002 | 513-005 |
| φ σ ο C | Units/t | 1 D | 2 D | | - | - | Q 9 | - | 8 D | 1 D | 2 D | 3 D | - | - | Q 9 | - | 8 D | | 2 0 | + | - | + | 0 0 | 0 0 | 0 0 | 0 8 | · | 2 0 | + | + | 1 4 | + | +- | 8 D | - | 1 D | - | | - | | 0 0 | 7 0 | 0 8 |

'Notes: Report Due to DDW by the 10th of the following month. This Report can be used for the routine weekly monitoring (one Report per month) as well as for daily monitoring when there is actual and potential for nitrification (about four or five Reports per month, in this case).

²Coliform results are part of weekly Bacti sampling results.

³Dawn Street Total Chlorine residual during the first week of December is 0.21 mg/L. City is closely monitoring this location in accordance with the Nitrification Monitoring Plan.

8/2/4/12 Chain of Custody

| ### Preserv | PH HPC Nitrate General Physical Total Coliform/E.coli XES |
|--|--|
| Canita, CA 91717 (310) 325-9830 (310) 325-9830 (310) 325-3627 (310) 325 | PH HPC Nitrate General Physical Total Coliform/E.coli |
| (310) 325-9830 | PH HPC Nitrate General Physical Total Coliform/E.coli |
| Standard Analysis Distribution Weekly - Ist. Week December | PH HPC Nitrate General Physical tal Coliform/E.coli |
| Standard Analysis | PH HPC Nitrate eneral Physical Coliform/E.coli |
| Distribution Weekly - 1st. Week December | PH HPC Nitrate ral Physical iform/E.coli |
| CB Sample Identitification Matrix Preserv A-r | E.coli |
| CB Sample Identification Matrix Preserv A-r | out out |
| 1912 W. 259th St. (S13-001 Zone: 2) DW 1,7 | |
| 1912 W. 259th St. (S13-001 Zone: 2) DW 1,7 4-A 24632 S. Moon Ave. (S13-002 Zone: 1) DW 1,7 4-A 24632 S. Moon Ave. (S13-004 Zone: 1) DW 1,7 5-cm 2500 PCH (S-13-005 Zone: 2) DW 1,7 A. Reservoir SP5 Dow 1,7 A. Reservoir SP5 Dow 1,7 2052 Dawn St (A Zone: 1) DW 1,7 2052 Dawn St (A Zone: 1) DW 1,7 2053 (7) Cold (8) Other: 2053 (7) Cold (8) Other: 2054 Print Name / Company | Bottle # Temp C Chlorica Chicago |
| 26.314 Monte Vista (S13-002 Zone:3) DW 1,7 4.7 246.32 S. Moon Ave. (S13-004 Zone: 1) DW 1,7 4.8 Reservoir SP5 5.04 25417 Pennsylvania Ave (S13-008 Zone: 1) DW 1,7 6.7 2052 Dawn St (A Zone: 1) DW 1,7 7.0 HCl (3) HNO3 (4) NH4Cl 28.03 (7) Cold (8) Other: 28.03 (7) Cold (8) Other: | , (2/2 , , , |
| 4-A 24632 S. Moon Ave. (S13-003 Zone: 1) DW 1,7 4-A 24632 S. Moon Ave. (S13-004 Zone: 1) DW 1,7 4-A 2500 PCH (S-13-005 Zone: 2) DW 1,7 5-A 25417 Pennsylvania Ave (S13-008 Zone: 1) DW 1,7 6-A 2052 Dawn St (A Zone: 1) DW 1,7 7-A 2052 Dawn St (A Zone: 1) DW 1,7 7-A 2052 Dawn St (A Zone: 1) DW 1,7 7-A 2052 Dawn St (A Zone: 1) DW 1,7 7-A 2052 Dawn St (A Zone: 1) DW 1,7 7-A 2053 (7) Cold (8) Other: | 18 1 |
| 4 24632 S. Moon Ave. (\$13-004 Zone: 1) DW 1,7 4.0 2500 PCH (\$-13-005 Zone: 2) DW 1,7 A.0 Reservoir SP5 Son, 25417 Pennsylvania Ave (\$13-008 Zone: 1) DW 1,7 2052 Dawn St (A Zone: 1) DW 1,7 2052 Dawn St (A Zone: 1) DW 1,7 2053 (7) Cold (8) Other: 2053 (7) Cold (8) Other: 2054 Print Name / Company | 19.6 x x x 0/1/01. |
| A.P. 2500 PCH (S-13-005 Zone: 2) DW 1,7 A.P. Reservoir SP5 DW 1,7 Down 1 | N X X X X X X X X X X X X X X X X X X X |
| A.p. Reservoir SP5 DW 1,7 | X X X X X X X X X X X X X X X X X X X |
| Dow 25417 Pennsylvania Ave (S13-008 Zone: 1) DW 1,7 2052 Dawn St (A Zone: 1) DW 1,7 1,7 2052 Dawn St (A Zone: 1) DW 1,7 2003 (3) HNO3 (4) NH4C1 2803 (7) Cold (8) Other: Print Name / Company 6 (Sign) Print Name / Company Print Na | 10 12 12 X X X X X X X X X X X X X X X X X |
| 2052 Dawn St (A Zone: 1) DW 1,7 2052 Dawn St (A Zone: 1) DW 1,7 2003 (7) Cold (8) Other: 2003 (7) Cold (8) Other: 2003 (7) Cold (8) Other: | 7007 |
| 2803 (7) Cold (8) Other: Print Name / Company | 21.9 ,01 |
| 2503 (7) Cold (8) Other: Print Name / Company | |
| 2803 (7) Cold (8) Other: Print Name / Company | |
| 2803 (7) Cold (8) Other: Print Name / Company | Definition Man Water and American |
| of Isid | Type 1. Routing Nater, WWell D. Dist. |
| 10/4 | 1 |
| City of Lomita 12/9/2016 /12/2 | 1920 |
| | Jakes for a |
| Samples received: (| received: () On ice () Intact () Custody seals Temp () F () C |
| Shipped Via Fed X Golden State UPS Client Other | Page 1 of 1 |