

SURFACE WATER MONTHLY OPERATING REPORT

FOR PUBLIC WATER SYSTEMS THAT ARE USING SURFACE WATER SOURCES
OR GROUND WATER SOURCES UNDER THE INFLUENCE OF SURFACE WATER

Summary Page

PUBLIC WATER SYSTEM NAME: City Of Corsicana

PLANT NAME OR NUMBER: Lake Halbert WTP

I certify that I am familiar with the information contained in this report and that, to the best of my knowledge, the information is true, complete, and accurate.

PWS ID No.: 1750002
Report for the Month of: May 2012

Operator's Signature: _____
Certificate No. & Grade: WO0012234, A Date: June 1, 2012

TREATMENT PLANT PERFORMANCE

| | | | |
|--|------------------|---|--------------|
| Total number of turbidity readings: | <u>161</u> | Number of 4-hour periods when plant was off-line: | <u>25</u> |
| Number of readings above 0.10 NTU: | <u>134</u> | Number of 4-hour periods when plant was on-line but turbidity data was not collected: | <u>0</u> |
| Number of readings above 0.3 NTU: | <u>0</u> | Number of days when plant was on-line but individual filter turbidity data was not collected: | <u>0</u> |
| Number of readings above 0.5 NTU: | <u>0</u> | Number of days with readings above 1.0 NTU: | <u>0</u> (2) |
| Number of readings above 1.0 NTU: | <u>0</u> | Number of days with readings above 5.0 NTU: | <u>0</u> (3) |
| Maximum allowable turbidity level: | <u>0.3</u> | | |
| Percentage of readings above this limit: | <u>0.0</u> % (1) | | |

Statistical Summary

| | | | |
|--|-----------------|----------------------------------|------------------|
| Maximum turbidity reading: | <u>0.25</u> NTU | Average turbidity value: | <u>0.13</u> NTU |
| Minimum turbidity reading: | <u>0.08</u> NTU | Standard deviation: | <u>0.024</u> NTU |
| CFE 95 th percentile value: | <u>0.17</u> NTU | IFE 95 th percentile: | <u>0.130</u> NTU |

| | | | |
|--|--------------|---|-----------|
| Number of days with a low CT for no more than 4.0 consecutive hours: | <u>0</u> | Average log inactivation for Giardia: | <u>NA</u> |
| | | Average log inactivation for viruses: | <u>NA</u> |
| Number of days with a low CT for more than 4.0 consecutive hours: | <u>0</u> (4) | Number of days when profiling data was not collected: | <u>31</u> |
| | | Number of days when CT data was not collected: | <u>31</u> |

| | | | |
|--|---|---|----------|
| Minimum disinfectant residual required leaving the plant: | <u>0.5</u> mg/L, measured as Total Chlorine | | |
| Number of days with a low residual for no more than 4.0 consecutive hours: | <u>0</u> | | |
| Number of days with a low residual for more than 4.0 consecutive hours: | <u>0</u> (5) | Number of days when disinfectant residual leaving the plant was not properly monitored: | <u>0</u> |

DISTRIBUTION SYSTEM

| | | | |
|--|---|--|-------------------|
| Minimum disinfectant residual required in distribution system: | <u>0.5</u> mg/L, measured as Total Chlorine | | |
| Total number of readings this month: | <u>61</u> (at least 31 required) (8) | Percentage of readings with a low residual this month: | <u>0.0</u> % (6A) |
| Average disinfectant residual value: | <u>1.88</u> | Percentage of readings with a low residual last month: | <u>0.0</u> % (6B) |
| Number of readings with a low residual: | <u>0</u> | | |
| Number of readings with no detectable residual: | <u>0</u> | | |

ADDITIONAL REPORTS & WORKSHEETS

The Page 1 Addendum (Public Notices) is required because there was at least one treatment technique or monitoring/reporting violation reported.

| | | | | |
|--|---------------------------------------|--|--|--------------------------------|
| Additional report(s) for individual filter monitoring required: | <input checked="" type="radio"/> NONE | <input type="radio"/> Filter Profile | <input type="radio"/> Filter Assessment | <input type="radio"/> CPE |
| Additional report(s) for individual filter monitoring submitted: | <input checked="" type="radio"/> NONE | <input type="radio"/> Filter Profile (9) | <input type="radio"/> Filter Assessment (10) | <input type="radio"/> CPE (11) |

No additional IFE Reports are required this month.

SURFACE WATER MONTHLY OPERATING REPORT
TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
WATER SUPPLY DIVISION/PUBLIC DRINKING WATER SECTION (MC-155)
P.O. BOX 13087, AUSTIN, TEXAS 78711-3087

SURFACE WATER MONTHLY OPERATING REPORT

FOR PUBLIC WATER SYSTEMS THAT ARE USING SURFACE WATER SOURCES
OR GROUND WATER SOURCES UNDER THE INFLUENCE OF SURFACE WATER (cont.)

Turbidity Data Page

PUBLIC WATER SYSTEM NAME: City Of Corsicana

PLANT NAME OR NUMBER: Lake Halbert WTP

PWS ID No.: 1750002

Connections: 10,856

Month: May Year: 2012

Population: 23,770

| PERFORMANCE DATA | | | | | | | | | | | | | | | | | | |
|------------------|-------------------------|-----------------------------|--------------------|------|---|---|---|---|---|---|------------------------|------|------|------|------|------|-----------------|------|
| Date | Raw Water Pumpage (MGD) | Treated Water Pumpage (MGD) | RAW WATER ANALYSES | | SETTLED WATER TURBIDITY (Optional Data) | | | | | | FINISHED WATER QUALITY | | | | | | | |
| | | | NTU | Alk. | Basin No. | | | | | | Turbidity | | | | | | Lowest Residual | Time |
| | | | | | 1 | 2 | 3 | 4 | 5 | 6 | NTU1 | NTU2 | NTU3 | NTU4 | NTU5 | NTU6 | | |
| 1 | 2.100 | 1.896 | 31 | 86 | | | | | | | 0.12 | 0.13 | 0.13 | 0.15 | 0.15 | 0.15 | 3.2 | |
| 2 | 2.050 | 1.971 | 12 | 78 | | | | | | | 0.17 | 0.13 | 0.19 | 0.14 | 0.14 | 0.12 | 2.8 | |
| 3 | 1.937 | 1.937 | 11 | 89 | | | | | | | 0.14 | 0.13 | 0.15 | 0.14 | 0.13 | 0.13 | 3.0 | |
| 4 | 0.610 | 0.400 | 12 | 96 | | | | | | | 0.12 | 0.12 | 0.12 | X | X | X | 3.8 | |
| 5 | 1.350 | 1.140 | 14 | 93 | | | | | | | X | X | X | 0.18 | 0.16 | 0.15 | 2.6 | |
| 6 | 1.838 | 1.838 | 13 | 91 | | | | | | | 0.13 | 0.13 | 0.13 | 0.12 | 0.12 | 0.12 | 3.3 | |
| 7 | 1.688 | 1.688 | 17 | 88 | | | | | | | 0.11 | 0.12 | 0.14 | 0.13 | 0.11 | 0.12 | 3.3 | |
| 8 | 1.002 | 0.830 | 12 | 93 | | | | | | | X | X | X | 0.14 | 0.13 | 0.14 | 1.0 | |
| 9 | 1.607 | 1.510 | 20 | 93 | | | | | | | X | X | X | 0.14 | 0.11 | 0.11 | 3.2 | |
| 10 | 1.800 | 1.629 | 20 | 98 | | | | | | | X | X | X | 0.19 | 0.12 | 0.11 | 1.8 | |
| 11 | 2.190 | 2.190 | 24 | 98 | | | | | | | 0.11 | 0.13 | 0.14 | 0.15 | 0.13 | 0.17 | 2.8 | |
| 12 | 1.770 | 1.721 | 33 | 91 | | | | | | | 0.17 | 0.16 | 0.13 | 0.11 | 0.11 | 0.11 | 3.2 | |
| 13 | 1.770 | 1.770 | 29 | 90 | | | | | | | 0.11 | 0.10 | 0.10 | 0.11 | 0.11 | 0.11 | 3.6 | |
| 14 | 1.720 | 1.429 | 28 | 89 | | | | | | | 0.10 | 0.11 | 0.11 | 0.13 | X | 0.10 | 3.1 | |
| 15 | 1.770 | 1.695 | 28 | 86 | | | | | | | 0.16 | 0.14 | 0.15 | 0.16 | 0.12 | 0.12 | 3.3 | |
| 16 | 1.770 | 1.713 | 49 | 91 | | | | | | | 0.21 | 0.15 | 0.13 | 0.14 | 0.12 | 0.12 | 3.3 | |
| 17 | 2.025 | 2.025 | 42 | 91 | | | | | | | 0.16 | 0.15 | 0.17 | 0.15 | 0.14 | X | 2.8 | |
| 18 | 1.659 | 1.659 | 23 | 95 | | | | | | | 0.15 | 0.12 | X | X | X | 0.13 | 3.2 | |
| 19 | 2.700 | 2.418 | 12 | 90 | | | | | | | 0.12 | 0.11 | 0.10 | 0.10 | 0.08 | 0.09 | 3.2 | |
| 20 | 2.100 | 1.891 | 12 | 85 | | | | | | | 0.10 | 0.10 | 0.10 | 0.09 | 0.10 | 0.10 | 3.0 | |
| 21 | 2.275 | 2.275 | 22 | 89 | | | | | | | 0.14 | 0.12 | 0.19 | 0.12 | 0.11 | 0.10 | 2.9 | |
| 22 | 2.100 | 1.920 | 17 | 90 | | | | | | | 0.11 | 0.12 | 0.13 | 0.12 | 0.13 | 0.11 | 2.4 | |
| 23 | 2.226 | 2.089 | 12 | 88 | | | | | | | 0.10 | 0.10 | 0.13 | 0.12 | 0.11 | 0.11 | 3.0 | |
| 24 | 2.200 | 2.210 | 9 | 86 | | | | | | | 0.12 | 0.11 | 0.08 | 0.10 | 0.09 | 0.09 | 2.8 | |
| 25 | 2.201 | 2.119 | 9 | 87 | | | | | | | 0.09 | 0.10 | 0.12 | 0.10 | 0.10 | 0.10 | 2.9 | |
| 26 | 2.190 | 1.945 | 8 | 90 | | | | | | | 0.10 | 0.11 | 0.12 | 0.13 | 0.11 | 0.12 | 2.8 | |
| 27 | 1.785 | 1.785 | 7 | 90 | | | | | | | 0.12 | 0.13 | 0.12 | 0.11 | 0.11 | 0.12 | 3.1 | |
| 28 | 1.422 | 1.420 | 7 | 86 | | | | | | | 0.13 | 0.11 | 0.11 | 0.12 | 0.12 | 0.11 | 2.7 | |
| 29 | 1.900 | 1.797 | 15 | 88 | | | | | | | 0.15 | 0.13 | X | 0.15 | 0.12 | 0.11 | 2.3 | |
| 30 | 2.010 | 1.337 | 11 | 88 | | | | | | | 0.12 | 0.12 | 0.13 | X | X | 0.13 | 2.8 | |
| 31 | 1.510 | 1.490 | 8 | 90 | | | | | | | 0.12 | X | X | 0.25 | 0.13 | 0.15 | 2.8 | |
| Total | 57.275 | 53.737 | | | | | | | | | | | | | | | | |
| Avg | 1.848 | 1.733 | | | | | | | | | | | | | | | | |
| Max | 2.700 | 2.418 | | | | | | | | | | | | | | | | |
| Min | 0.610 | 0.400 | | | | | | | | | | | | | | | | |

NOTE: ONLY use the "Time" column to show the length of time that the disinfectant residual entering the distribution system fell below the acceptable level.

SUBMITTED BY: _____ Certificate No. and Grade: WO0012234, A Date: June 1, 2012

SURFACE WATER MONTHLY OPERATING REPORT

FOR PUBLIC WATER SYSTEMS THAT ARE USING SURFACE WATER SOURCES
OR GROUND WATER SOURCES UNDER THE INFLUENCE OF SURFACE WATER (cont.)

Filter Data Page

PUBLIC WATER
SYSTEM NAME: City Of Corsicana
PWS ID No.: 1750002

PLANT NAME
OR NUMBER: Lake Halbert WTP
Month: May Year: 2012

PERFORMANCE DATA

INDIVIDUAL FILTER TURBIDITY

| Date | Filter No. 1 | | Filter No. 2 | | Filter No. 3 | | Filter No. 4 | | Filter No. 5 | | Filter No. 6 | | Filter No. 7 | | Filter No. 8 | | Filter No. 9 | | Filter No. 10 | | |
|------|--------------|-------|--------------|-------|--------------|-------|--------------|-------|--------------|-------|--------------|-------|--------------|-------|--------------|-------|--------------|-------|---------------|-------|--|
| | Max | 4 Hrs | Max | 4 Hrs | |
| 1 | 0.12 | 0.12 | 0.15 | 0.12 | 0.08 | X | 0.07 | X | | | | | | | | | | | | | |
| 2 | 0.06 | X | 0.07 | X | X | X | 0.06 | X | | | | | | | | | | | | | |
| 3 | 0.07 | X | 0.06 | X | X | X | 0.06 | X | | | | | | | | | | | | | |
| 4 | 0.06 | X | 0.05 | X | X | X | 0.06 | X | | | | | | | | | | | | | |
| 5 | 0.07 | 0.06 | 0.05 | 0.05 | X | X | 0.13 | 0.13 | | | | | | | | | | | | | |
| 6 | 0.06 | X | X | X | X | X | 0.09 | X | | | | | | | | | | | | | |
| 7 | 0.06 | X | X | X | X | X | 0.07 | X | | | | | | | | | | | | | |
| 8 | 0.07 | 0.07 | X | X | X | X | 0.09 | 0.09 | | | | | | | | | | | | | |
| 9 | 0.06 | 0.05 | 0.06 | 0.06 | 0.07 | 0.07 | 0.05 | 0.05 | | | | | | | | | | | | | |
| 10 | 0.09 | 0.06 | 0.10 | 0.06 | 0.12 | 0.06 | 0.04 | 0.04 | | | | | | | | | | | | | |
| 11 | 0.06 | X | 0.05 | X | 0.12 | X | 0.06 | X | | | | | | | | | | | | | |
| 12 | 0.06 | X | 0.05 | X | 0.05 | X | X | X | | | | | | | | | | | | | |
| 13 | 0.07 | X | 0.05 | X | 0.05 | X | X | X | | | | | | | | | | | | | |
| 14 | 0.08 | 0.08 | 0.08 | 0.08 | 0.06 | 0.06 | 0.15 | 0.14 | | | | | | | | | | | | | |
| 15 | 0.07 | X | 0.08 | X | X | X | 0.15 | X | | | | | | | | | | | | | |
| 16 | 0.07 | X | 0.07 | X | X | X | 0.11 | X | | | | | | | | | | | | | |
| 17 | 0.09 | 0.06 | 0.07 | 0.05 | X | X | 0.11 | 0.10 | | | | | | | | | | | | | |
| 18 | 0.05 | 0.03 | 0.05 | 0.04 | X | X | 0.09 | 0.06 | | | | | | | | | | | | | |
| 19 | 0.06 | 0.05 | 0.04 | X | 0.04 | 0.03 | 0.06 | X | | | | | | | | | | | | | |
| 20 | 0.06 | X | X | X | 0.06 | 0.04 | 0.04 | X | | | | | | | | | | | | | |
| 21 | 0.05 | X | 0.05 | 0.05 | 0.04 | X | 0.03 | 0.03 | | | | | | | | | | | | | |
| 22 | 0.05 | X | 0.05 | X | 0.05 | 0.05 | 0.04 | X | | | | | | | | | | | | | |
| 23 | 0.05 | 0.04 | 0.04 | X | 0.04 | X | 0.04 | X | | | | | | | | | | | | | |
| 24 | 0.05 | X | 0.03 | X | 0.04 | X | 0.04 | 0.03 | | | | | | | | | | | | | |
| 25 | 0.05 | X | X | X | 0.03 | X | 0.06 | X | | | | | | | | | | | | | |
| 26 | 0.06 | 0.06 | 0.09 | 0.09 | X | X | 0.08 | X | | | | | | | | | | | | | |
| 27 | 0.06 | X | 0.06 | X | X | X | 0.07 | X | | | | | | | | | | | | | |
| 28 | 0.06 | 0.06 | 0.06 | X | X | X | 0.07 | X | | | | | | | | | | | | | |
| 29 | 0.09 | 0.06 | 0.08 | 0.05 | 0.13 | 0.09 | 0.08 | X | | | | | | | | | | | | | |
| 30 | 0.05 | X | 0.10 | 0.10 | 0.08 | 0.07 | 0.08 | X | | | | | | | | | | | | | |
| 31 | 0.14 | 0.12 | 0.14 | 0.11 | 0.11 | 0.08 | X | X | | | | | | | | | | | | | |

| SUMMARY & COMPLIANCE ACTIONS | Criteria | Filter No. | | | | | | | | | | Plant | | | | | | | | | | |
|------------------------------|--|------------|---|---|---|---|---|---|---|---|----|-------|--|--|--|--|--|--|--|--|--|---|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | | | | | | | | | | | |
| | Number of days with event(s) above 0.5 NTU at 4.0 hrs this month | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | | | | |
| | Number of days with event(s) above 1.0 NTU this month | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | | | | |
| | Number of days with event(s) above 1.0 NTU last month | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | | | | |
| | Number of days with event(s) above 1.0 NTU two months ago | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | | | | |
| | Total number of days with event(s) above 1.0 NTU in three months | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | | | | |
| | Number of days with event(s) above 2.0 NTU this month | | | | | | | | | | | 0 | | | | | | | | | | |
| | Number of days with event(s) above 2.0 NTU last month | | | | | | | | | | | 0 | | | | | | | | | | |
| | Does the filter/plant have an approved Corrective Action Plan? | N | N | N | N | | | | | | | | | | | | | | | | | N |
| | Is the plant required to submit a Filter Profile Report? | N | N | N | N | | | | | | | | | | | | | | | | | |
| | Is the plant required to submit a Filter Assessment Report? | N | N | N | N | | | | | | | | | | | | | | | | | |
| | Is the plant required to submit a Request for Compliance CPE? | | | | | | | | | | | N | | | | | | | | | | |

SUBMITTED BY: _____ Certificate No. and Grade: WO0012234, A Date: June 1, 2012

SURFACE WATER MONTHLY OPERATING REPORT

FOR PUBLIC WATER SYSTEMS THAT ARE USING SURFACE WATER SOURCES
OR GROUND WATER SOURCES UNDER THE INFLUENCE OF SURFACE WATER (cont.)
Disinfection Data Page

PUBLIC WATER SYSTEM NAME: City Of Corsicana
PWS ID No.: 1750002

PLANT NAME OR NUMBER: Lake Halbert WTP
Month: May Year: 2012

| DISINFECTION PROCESS PARAMETERS | | | | | | | |
|---------------------------------|--------------------|-------|-------|----|-----------------------|-----------------------|---------|
| APPROVED CT STUDY PARAMETERS | | | | | PERFORMANCE STANDARDS | | |
| Parameters | Disinfection Zones | | | | | Log Inactivations | |
| | D1 | D2 | D3 | D4 | D5 | Giardia lamblia Cysts | Viruses |
| Flow Rate (MGD) | 4.000 | 4.000 | 4.000 | | | 0.5 | 2.0 |
| T ₁₀ (minutes) | 78.3 | 16.1 | 9.0 | | | | |

| PERFORMANCE DATA | | | | | | | | | |
|---------------------------|--------------|----------|------------|-----------|-----|-------------|-----------|--------------|-------------------|
| DISINFECTION PROCESS DATA | | | | | | | | | |
| Date | Disinfectant | C (mg/L) | Flow (MGD) | Temp (°C) | pH | Giardia Log | Virus Log | Inact. Ratio | Time ¹ |
| 1 | NA D1 | | | | | | | | |
| | FCL D2 | 1.4 | 2.200 | 24.0 | 7.0 | | | | |
| | CLA D3 | 3.6 | 2.200 | 24.0 | 7.6 | | | | |
| | D4 | | | | | | | | |
| | D5 | | | | | | | | |
| 2 | NA D1 | | | | | | | | |
| | FCL D2 | 1.2 | 2.400 | 21.0 | 7.2 | | | | |
| | CLA D3 | 3.1 | 2.400 | 21.0 | 8.2 | | | | |
| | D4 | | | | | | | | |
| | D5 | | | | | | | | |
| 3 | NA D1 | | | | | | | | |
| | FCL D2 | 1.4 | 2.400 | 22.0 | 6.8 | | | | |
| | CLA D3 | 3.4 | 2.400 | 23.0 | 7.1 | | | | |
| | D4 | | | | | | | | |
| | D5 | | | | | | | | |
| 4 | NA D1 | | | | | | | | |
| | FCL D2 | 1.6 | 2.400 | 23.0 | 6.9 | | | | |
| | CLA D3 | 3.8 | 2.400 | 22.0 | 7.2 | | | | |
| | D4 | | | | | | | | |
| | D5 | | | | | | | | |
| 5 | NA D1 | | | | | | | | |
| | FCL D2 | 1.4 | 2.200 | 23.0 | 6.6 | | | | |
| | CLA D3 | 3.9 | 2.200 | 23.0 | 7.0 | | | | |
| | D4 | | | | | | | | |
| | D5 | | | | | | | | |
| 6 | NA D1 | | | | | | | | |
| | FCL D2 | 1.5 | 2.000 | 23.0 | 6.9 | | | | |
| | CLA D3 | 4.0 | 2.000 | 24.0 | 7.3 | | | | |
| | D4 | | | | | | | | |
| | D5 | | | | | | | | |
| 7 | NA D1 | | | | | | | | |
| | FCL D2 | 1.3 | 2.000 | 23.0 | 6.8 | | | | |
| | CLA D3 | 3.4 | 2.000 | 24.0 | 7.2 | | | | |
| | D4 | | | | | | | | |
| | D5 | | | | | | | | |
| 8 | NA D1 | | | | | | | | |
| | FCL D2 | 1.0 | 1.800 | 23.0 | 7.4 | | | | |
| | CLA D3 | 1.0 | 1.800 | 24.0 | 8.0 | | | | |
| | D4 | | | | | | | | |
| | D5 | | | | | | | | |

| PERFORMANCE DATA | | | | | | | | | |
|---------------------------|--------------|----------|------------|-----------|-----|-------------|-----------|--------------|-------------------|
| DISINFECTION PROCESS DATA | | | | | | | | | |
| Date | Disinfectant | C (mg/L) | Flow (MGD) | Temp (°C) | pH | Giardia Log | Virus Log | Inact. Ratio | Time ¹ |
| 9 | NA D1 | | | | | | | | |
| | FCL D2 | 1.4 | 2.300 | 24.0 | 6.7 | | | | |
| | CLA D3 | 3.2 | 2.300 | 24.0 | 6.3 | | | | |
| | D4 | | | | | | | | |
| | D5 | | | | | | | | |
| 10 | NA D1 | | | | | | | | |
| | FCL D2 | 1.0 | 2.600 | 23.0 | 7.0 | | | | |
| | CLA D3 | 2.3 | 2.600 | 23.0 | 7.2 | | | | |
| | D4 | | | | | | | | |
| | D5 | | | | | | | | |
| 11 | NA D1 | | | | | | | | |
| | FCL D2 | 1.8 | 2.600 | 24.0 | 6.8 | | | | |
| | CLA D3 | 3.3 | 2.600 | 25.0 | 6.9 | | | | |
| | D4 | | | | | | | | |
| | D5 | | | | | | | | |
| 12 | NA D1 | | | | | | | | |
| | FCL D2 | 1.4 | 1.800 | 24.0 | 6.8 | | | | |
| | CLA D3 | 3.2 | 1.800 | 24.0 | 6.6 | | | | |
| | D4 | | | | | | | | |
| | D5 | | | | | | | | |
| 13 | NA D1 | | | | | | | | |
| | FCL D2 | 1.3 | 1.800 | 24.0 | 6.8 | | | | |
| | CLA D3 | 3.8 | 1.800 | 24.0 | 7.5 | | | | |
| | D4 | | | | | | | | |
| | D5 | | | | | | | | |
| 14 | NA D1 | | | | | | | | |
| | FCL D2 | 1.0 | 2.200 | 23.0 | 6.9 | | | | |
| | CLA D3 | 3.7 | 2.200 | 24.0 | 7.0 | | | | |
| | D4 | | | | | | | | |
| | D5 | | | | | | | | |
| 15 | NA D1 | | | | | | | | |
| | FCL D2 | 1.1 | 1.800 | 24.0 | 6.9 | | | | |
| | CLA D3 | 3.9 | 1.800 | 25.0 | 7.5 | | | | |
| | D4 | | | | | | | | |
| | D5 | | | | | | | | |
| 16 | NA D1 | | | | | | | | |
| | FCL D2 | 1.1 | 1.800 | 24.0 | 6.7 | | | | |
| | CLA D3 | 2.5 | 1.800 | 25.0 | 7.9 | | | | |
| | D4 | | | | | | | | |
| | D5 | | | | | | | | |

NOTE: ¹ = ONLY use the "Time=" column to show the length of time that the total inactivation ratio was less than 1.00.

SUBMITTED BY: _____ Certificate No. WO0012234, A and Grade: _____ Date: June 1, 2012

SURFACE WATER MONTHLY OPERATING REPORT

FOR PUBLIC WATER SYSTEMS THAT ARE USING SURFACE WATER SOURCES
OR GROUND WATER SOURCES UNDER THE INFLUENCE OF SURFACE WATER (cont.)
Disinfection Data Page (cont.)

PUBLIC WATER SYSTEM NAME: City Of Corsicana
PWS ID No.: 1750002

PLANT NAME OR NUMBER: Lake Halbert WTP
Month: May Year: 2012

| DISINFECTION PROCESS PARAMETERS | | | | | | | |
|---------------------------------|--------------------|-------|-------|----|-----------------------|-----------------------|-------|
| APPROVED CT STUDY PARAMETERS | | | | | PERFORMANCE STANDARDS | | |
| Parameters | Disinfection Zones | | | | | Log Inactivations | |
| | D1 | D2 | D3 | D4 | D5 | Giardia lamblia Cysts | Virus |
| Flow Rate (MGD) | 4.000 | 4.000 | 4.000 | | | 0.5 | 2.0 |
| T ₁₀ (minutes) | 78.3 | 15.1 | 9.0 | | | | |

| PERFORMANCE DATA | | | | | | | | | |
|---------------------------|--------------|----------|------------|-----------|-----|---------|-----|-------|------|
| DISINFECTION PROCESS DATA | | | | | | | | | |
| Date | Disinfectant | C (mg/L) | Flow (MGD) | Temp (°C) | pH | Giardia | | Virus | |
| | | | | | | Log | Log | Ratio | Time |
| 17 | NA D1 | | | | | | | | |
| | FCL D2 | 1.3 | 2.200 | 24.0 | 6.9 | | | | |
| | CLA D3 | 3.5 | 2.200 | 24.0 | 7.2 | | | | |
| | D4 | | | | | | | | |
| | D5 | | | | | | | | |
| 18 | NA D1 | | | | | | | | |
| | FCL D2 | 1.5 | 2.700 | 23.0 | 6.3 | | | | |
| | CLA D3 | 3.4 | 2.700 | 24.0 | 7.1 | | | | |
| | D4 | | | | | | | | |
| | D5 | | | | | | | | |
| 19 | NA D1 | | | | | | | | |
| | FCL D2 | 1.6 | 2.700 | 23.0 | 6.6 | | | | |
| | CLA D3 | 3.4 | 2.700 | 23.0 | 7.2 | | | | |
| | D4 | | | | | | | | |
| | D5 | | | | | | | | |
| 20 | NA D1 | | | | | | | | |
| | FCL D2 | 1.4 | 2.100 | 24.0 | 7.0 | | | | |
| | CLA D3 | 3.6 | 2.100 | 25.0 | 7.2 | | | | |
| | D4 | | | | | | | | |
| | D5 | | | | | | | | |
| 21 | NA D1 | | | | | | | | |
| | FCL D2 | 1.2 | 2.700 | 24.0 | 6.8 | | | | |
| | CLA D3 | 3.7 | 2.700 | 23.0 | 6.2 | | | | |
| | D4 | | | | | | | | |
| | D5 | | | | | | | | |
| 22 | NA D1 | | | | | | | | |
| | FCL D2 | 2.6 | 2.300 | 24.0 | 6.6 | | | | |
| | CLA D3 | 2.9 | 2.300 | 24.0 | 7.2 | | | | |
| | D4 | | | | | | | | |
| | D5 | | | | | | | | |
| 23 | NA D1 | | | | | | | | |
| | FCL D2 | 1.2 | 2.300 | 24.0 | 6.7 | | | | |
| | CLA D3 | 3.4 | 2.300 | 25.0 | 7.0 | | | | |
| | D4 | | | | | | | | |
| | D5 | | | | | | | | |
| 24 | NA D1 | | | | | | | | |
| | FCL D2 | 1.4 | 3.000 | 24.0 | 6.8 | | | | |
| | CLA D3 | 3.6 | 3.000 | 24.0 | 6.9 | | | | |
| | D4 | | | | | | | | |
| | D5 | | | | | | | | |

| PERFORMANCE DATA | | | | | | | | | |
|---------------------------|--------------|----------|------------|-----------|-----|---------|-----|-------|------|
| DISINFECTION PROCESS DATA | | | | | | | | | |
| Date | Disinfectant | C (mg/L) | Flow (MGD) | Temp (°C) | pH | Giardia | | Virus | |
| | | | | | | Log | Log | Ratio | Time |
| 25 | NA D1 | | | | | | | | |
| | FCL D2 | 1.1 | 2.300 | 22.0 | 6.7 | | | | |
| | CLA D3 | 3.2 | 2.300 | 24.0 | 7.2 | | | | |
| | D4 | | | | | | | | |
| | D5 | | | | | | | | |
| 26 | NA D1 | | | | | | | | |
| | FCL D2 | 1.6 | 2.300 | 25.0 | 6.7 | | | | |
| | CLA D3 | 3.1 | 2.300 | 25.0 | 7.4 | | | | |
| | D4 | | | | | | | | |
| | D5 | | | | | | | | |
| 27 | NA D1 | | | | | | | | |
| | FCL D2 | 1.3 | 1.800 | 24.0 | 6.9 | | | | |
| | CLA D3 | 3.1 | 1.800 | 24.0 | 7.4 | | | | |
| | D4 | | | | | | | | |
| | D5 | | | | | | | | |
| 28 | NA D1 | | | | | | | | |
| | FCL D2 | 1.4 | 1.900 | 24.0 | 6.7 | | | | |
| | CLA D3 | 3.5 | 1.900 | 25.0 | 7.6 | | | | |
| | D4 | | | | | | | | |
| | D5 | | | | | | | | |
| 29 | NA D1 | | | | | | | | |
| | FCL D2 | 1.1 | 3.600 | 24.0 | 6.6 | | | | |
| | CLA D3 | 2.5 | 3.600 | 25.0 | 7.2 | | | | |
| | D4 | | | | | | | | |
| | D5 | | | | | | | | |
| 30 | NA D1 | | | | | | | | |
| | FCL D2 | 2.4 | 2.100 | 24.0 | 6.7 | | | | |
| | CLA D3 | 2.8 | 2.100 | 25.0 | 7.5 | | | | |
| | D4 | | | | | | | | |
| | D5 | | | | | | | | |
| 31 | NA D1 | | | | | | | | |
| | FCL D2 | 1.0 | 2.200 | 24.0 | 6.5 | | | | |
| | CLA D3 | 2.8 | 2.200 | 26.0 | 7.0 | | | | |
| | D4 | | | | | | | | |
| | D5 | | | | | | | | |

| | | |
|-----|----|----|
| Max | NA | NA |
| Min | NA | NA |
| Avg | NA | NA |
| SD | NA | NA |

NOTE: = ONLY use the "Time=" column to show the length of time that the total inactivation ratio was less than 1.00.

SUBMITTED BY: _____ Certificate No. and Grade: WO0012234, A Date: June 1, 2012

MONTHLY TOTAL ORGANIC CARBON REMOVAL REPORT (TOCMOR) FOR SURFACE WATER OR GROUND WATER UNDER THE INFLUENCE OF SURFACE WATER SYSTEMS

PUBLIC WATER SYSTEM NAME: City Of Corsicana
PWS ID No.: 1750002

PLANT NAME OR NUMBER: Lake Halbert WTP
Month: May Year: 2012

Type of treatment: Conventional Unconventional explain:

Note: Systems are required to run one TOC Sample Set every month. Additional space is provided for those systems that do additional sampling

| Test No. | Test Date | Monthly TOC Sample Set | | | Actual % TOC Removed | Step 1 Required % Removal | Step 1 Removal Ratio | Optional data | | COMPLIANCE REMOVAL RATIO |
|----------|-----------|------------------------------|---------|-------------|----------------------|---------------------------|----------------------|---------------------------|-------------------------------|--------------------------|
| | | Raw Alkalinity | Raw TOC | Treated TOC | | | | Step 2 Required % Removal | Step 2 Removal Ratio | |
| | | Enter the Sample Set results | | | | | | <i>calculated</i> | <i>calculated from matrix</i> | |
| 1 | 5/1 | 91 | 5.59 | 3.46 | 38.1 | 35 | 1.09 | | | 1.09 |
| 2 | | | | | | | | | | |
| 3 | | | | | | | | | | |
| 4 | | | | | | | | | | |
| 5 | | | | | | | | | | |
| 6 | | | | | | | | | | |
| 7 | | | | | | | | | | |
| 8 | | | | | | | | | | |
| 9 | | | | | | | | | | |
| 10 | | | | | | | | | | |
| 11 | | | | | | | | | | |
| 12 | | | | | | | | | | |
| 13 | | | | | | | | | | |
| 14 | | | | | | | | | | |
| 15 | | | | | | | | | | |
| 16 | | | | | | | | | | |
| 17 | | | | | | | | | | |
| 18 | | | | | | | | | | |
| 19 | | | | | | | | | | |
| 20 | | | | | | | | | | |
| 21 | | | | | | | | | | |
| 22 | | | | | | | | | | |
| 23 | | | | | | | | | | |
| 24 | | | | | | | | | | |
| 25 | | | | | | | | | | |
| 26 | | | | | | | | | | |
| 27 | | | | | | | | | | |
| 28 | | | | | | | | | | |
| 29 | | | | | | | | | | |
| 30 | | | | | | | | | | |
| 31 | | | | | | | | | | |
| Avg | | 90.90 | 5.59 | 3.46 | 38.10 | | 1.09 | | | 1.09 |
| Max | | 90.90 | 5.59 | 3.46 | 38.10 | | 1.09 | | | 1.09 |
| Min | | 90.90 | 5.59 | 3.46 | 38.10 | | 1.09 | | | 1.09 |

TOTAL ORGANIC CARBON (TOC) REMOVAL SUMMARY

| TOC Summary | | | | | Monthly Compliance Ratio |
|----------------------|---------------|-------------------|---------------|------------|--------------------------|
| Raw Water Alkalinity | Raw Water TOC | Treated Water TOC | TOC % Removal | ACC # used | |
| 91 | 5.59 | 3.46 | 38.1 | NA | 1.09 |

I certify that I am familiar with the information contained in this report and that, to the best of my knowledge, the information is true, complete, and accurate.

Operator's Signature: _____

Certificate No. and Grade: WO0012234, A

Date: June 1, 2012

Submit the report by the 10th of the month following the reporting period to:

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
WATER SUPPLY DIVISION/PUBLIC DRINKING WATER SECTION (MC-155)
P.O. BOX 13087, AUSTIN, TEXAS 78711-3087

TOC ALTERNATIVE COMPLIANCE CRITERIA REPORT
FOR SURFACE WATER OR GROUND WATER UNDER THE INFLUENCE OF SURFACE WATER SYSTEMS

PUBLIC WATER SYSTEM NAME: City Of Corsicana
PWS ID No.: 1750002

PLANT NAME OR NUMBER: Lake Halbert WTP
Month: May Year: 2012

This Alternative Compliance Criteria (ACC) Report is being submitted to request the following ACC: (check one)
(Before you can begin entering data, you must put an "X" in the box that shows the number of the Alternative Compliance Criteria you are applying for.)

#1 #2 #3 #4 #5 #6 #7 #8

| | | | | | | | | | | | | | |
|--------|---|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| ACC #1 | Source Water TOC less than 2.0? (either based on most recent month's data OR calculated quarterly as a running annual average) | | | | | | | | | | | | |
| | Current Month TOC | | | | | | | | | | | | |
| | 5.59 | | | | | | | | | | | | |
| | Average Raw Water TOC | | | | | | | | | | | | |
| | Quarterly Average RAA | | | | | | | | | | | | |
| | Month/Year | Q1 | | | Q2 | | | Q3 | | | Q4 | | |
| | | 04/2011 | 05/2011 | 06/2011 | 07/2011 | 08/2011 | 09/2011 | 10/2011 | 11/2011 | 12/2011 | 01/2012 | 02/2012 | 03/2012 |

| | | | | | | | | | | | | | |
|--------|--|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| ACC #2 | Treated Water TOC less than 2.0? (either based on most recent month's data OR calculated quarterly as a running annual average) | | | | | | | | | | | | |
| | Current Month TOC | | | | | | | | | | | | |
| | 3.46 | | | | | | | | | | | | |
| | Average Treated Water TOC | | | | | | | | | | | | |
| | Quarterly Average RAA | | | | | | | | | | | | |
| | Month/Year | Q1 | | | Q2 | | | Q3 | | | Q4 | | |
| | | 04/2011 | 05/2011 | 08/2011 | 07/2011 | 08/2011 | 09/2011 | 10/2011 | 11/2011 | 12/2011 | 01/2012 | 02/2012 | 03/2012 |

| | | | | | | | | | | | | | |
|--------|---|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| ACC #3 | Source Water TOC less than 4.0? (calculated quarterly as a running annual average) AND Source water alkalinity over 60 mg/L (as CaCO3)? (calculated quarterly as a running annual average) | | | | | | | | | | | | |
| | Average Raw Water TOC | | | | | | | | | | | | |
| | Quarterly Average RAA | | | | | | | | | | | | |
| | Average Raw Water Alkalinity | | | | | | | | | | | | |
| | Quarterly Average RAA | | | | | | | | | | | | |
| | Month/Year | Q1 | | | Q2 | | | Q3 | | | Q4 | | |
| | | 04/2011 | 05/2011 | 06/2011 | 07/2011 | 08/2011 | 09/2011 | 10/2011 | 11/2011 | 12/2011 | 01/2012 | 02/2012 | 03/2012 |

AND TTHM and HAA5 no greater than 0.040 mg/L and 0.030 mg/L, respectively? (calculated as a running annual average of quarterly averages)
TTHM RAA for the 4 quarters that end March 2012: mg/L HAA5 RAA for the 4 quarter that end March 2012: mg/L

| | | | | | | | | | | | | | |
|--------|--|--|--|--|--|--|--|--|--|--|--|--|--|
| ACC #4 | TTHM and HAA5 no greater than 0.040 mg/L and 0.030 mg/L, respectively? (calculated as a running annual average of quarterly averages) | | | | | | | | | | | | |
| | TTHM RAA for the 4 quarters that end March 2012: <input type="text"/> mg/L HAA5 RAA for the 4 quarters that end March 2012: <input type="text"/> mg/L | | | | | | | | | | | | |
| | AND only chlorine is used in the whole plant and distribution system. Chlorine only?: <input type="text"/> | | | | | | | | | | | | |

I certify that for the last 12 months, only free chlorine was used as a disinfectant for primary disinfection and for maintenance of a residual in the distribution system. _____
Certified Operators Signature/ Certificate Number / Date

| | | | | | | | | | | | | | |
|--------|---|------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| ACC #5 | Source water SUVA less than or equal to 2.0 L/mg-m? (either based on most recent month's data OR calculated quarterly as a running annual average) (Source water SUVA is the dissolved organic carbon concentration divided by the ultraviolet light absorption at 254 nanometers in the source water before any treatment of any kind. Measure monthly.) | | | | | | | | | | | | |
| | Current Month SUVA | | | | | | | | | | | | |
| | Monthly Raw Water SUVA | | | | | | | | | | | | |
| | Quarterly Average RAA | | | | | | | | | | | | |
| | | Month/Year | Q1 | | | Q2 | | | Q3 | | | Q4 | |
| | | 04/2011 | 05/2011 | 06/2011 | 07/2011 | 08/2011 | 09/2011 | 10/2011 | 11/2011 | 12/2011 | 01/2012 | 02/2012 | 03/2012 |

| | | | | | | | | | | | | | |
|--------|--|---|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| ACC #6 | Treated water SUVA less than or equal to 2.0 L/mg-m? (either based on most recent month's data OR calculated quarterly as a running annual average) (Treated water SUVA is the dissolved organic carbon concentration divided by the ultraviolet light absorption at 254 nanometers in the finished water before any disinfection of any kind, or measured using a finished water SUVA jar test. (See the Instructions worksheet for more info.) Measure monthly.) | | | | | | | | | | | | |
| | Treated water SUVA measured: | <input type="checkbox"/> In Plant <input type="checkbox"/> By Finished Water SUVA Jar Test | | | | | | | | | | | |
| | Current Month SUVA | | | | | | | | | | | | |
| | Monthly Treated Water SUVA | | | | | | | | | | | | |
| | Quarterly Average RAA | | | | | | | | | | | | |
| | Month/Year | Q1 | | | Q2 | | | Q3 | | | Q4 | | |
| | | 04/2011 | 05/2011 | 06/2011 | 07/2011 | 08/2011 | 09/2011 | 10/2011 | 11/2011 | 12/2011 | 01/2012 | 02/2012 | 03/2012 |

I certify that an oxidant was used upstream of the Treated Water TOC monitoring point during the period for which treated water SUVA data is reported. _____
Certified Operators Signature / Certificate Number / Date

| | | | | | | | | | | | | | |
|--------|--|------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| ACC #7 | Treated water alkalinity less than 60 mg/L (as CaCO3)? (softening practiced) (either based on most recent month's data OR calculated quarterly as a running annual average) | | | | | | | | | | | | |
| | Current Month ALK | | | | | | | | | | | | |
| | Monthly Treated Alkalinity | | | | | | | | | | | | |
| | Quarterly Average RAA | | | | | | | | | | | | |
| | | Month/Year | Q1 | | | Q2 | | | Q3 | | | Q4 | |
| | | 04/2011 | 05/2011 | 06/2011 | 07/2011 | 08/2011 | 09/2011 | 10/2011 | 11/2011 | 12/2011 | 01/2012 | 02/2012 | 03/2012 |

| | | | | | | | | | | | | | |
|--------|---|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| ACC #8 | Magnesium hardness removal greater than or equal to 10 mg/L (as CaCO3)? (softening practiced) (either based on most recent month's data OR calculated quarterly as a running annual average) | | | | | | | | | | | | |
| | Current Month Mg Hardness | | | | | | | | | | | | |
| | Raw | | | | | | | | | | | | |
| | Treated | | | | | | | | | | | | |
| | Removal | | | | | | | | | | | | |
| | Month/Year | Q1 | | | Q2 | | | Q3 | | | Q4 | | |
| | | 04/2011 | 05/2011 | 06/2011 | 07/2011 | 08/2011 | 09/2011 | 10/2011 | 11/2011 | 12/2011 | 01/2012 | 02/2012 | 03/2012 |

I certify that I am familiar with the information contained in this report and that, to the best of my knowledge, the information is true, complete, and accurate.

Operator's Signature: _____ Certificate No. and Grade: WO0012234, A Date: June 1, 2012

STEP 2 JAR TEST REPORT

FOR SURFACE WATER OR GROUND WATER UNDER THE INFLUENCE OF SURFACE WATER SYSTEMS

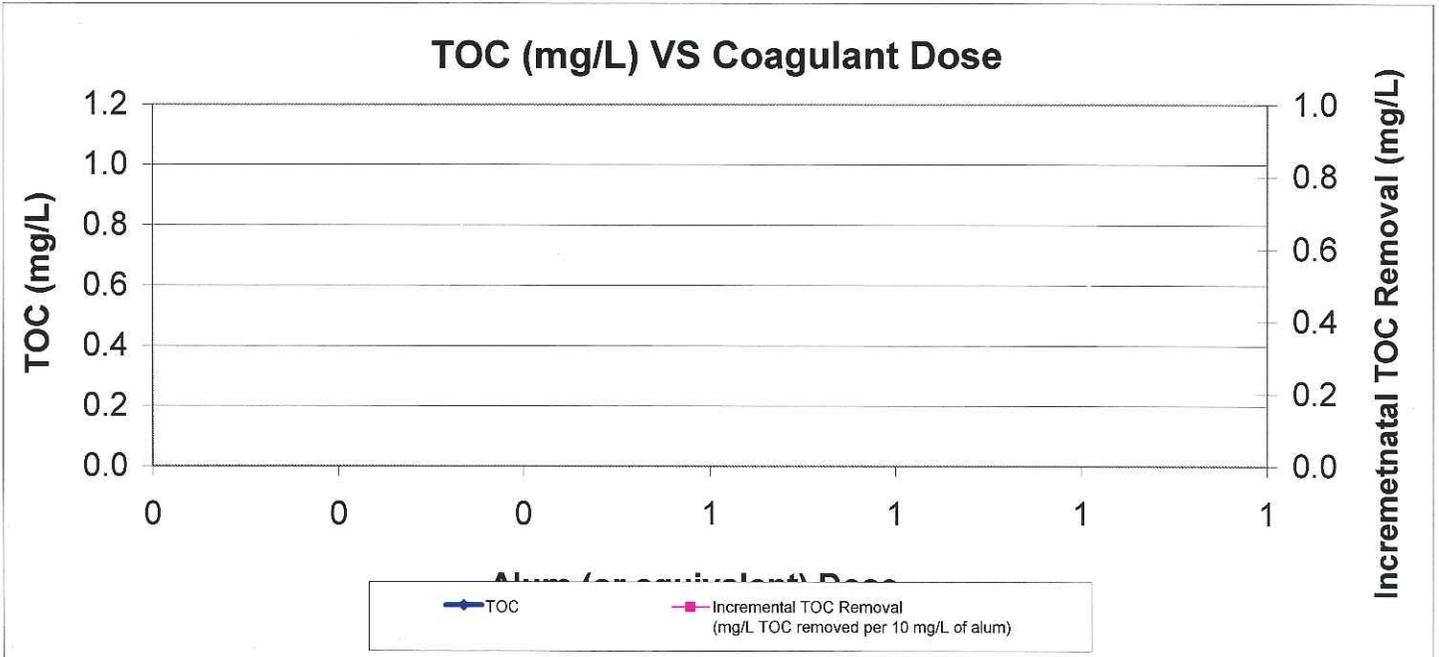
PUBLIC WATER SYSTEM NAME: City Of Corsicana
 PWS ID No.: 1750002

PLANT NAME OR NUMBER: Lake Halbert WTP
 DATE OF JAR TEST: _____

| PLANT CONDITIONS | | | | | | | | |
|---------------------|-----------|-------------|---------------|-------------|----------|-------------|---------------|-------------|
| RAW WATER SOURCE(s) | COAGULANT | | COAGULANT AID | | FLOC AID | | pH ADJUSTMENT | |
| | Type | Dose (mg/L) | Type | Dose (mg/L) | Type | Dose (mg/L) | Type | Dose (mg/L) |
| | | | | | | | | |

| STEP 2 JAR TEST PARAMETERS | | | | | | | | | |
|----------------------------|------------------------------------|------|------------------------------------|-----------------|---------------------|--------------------|--------------|--------------------|--------------------|
| COAGULANT | | BASE | | JAR SIZE | JAR TEST CONDITIONS | | | | |
| Type | Stock Solution Concentration (g/L) | Type | Stock Solution Concentration (g/L) | Volume (liters) | Rapid Mix | | Flocculation | | Settling |
| | | | | | Speed (rpm) | Duration (minutes) | Speed (rpm) | Duration (minutes) | Duration (minutes) |
| | | | | | | | | | |

| JAR TEST RESULTS | | | | | | | | | |
|---|------------------------|-------------|-------------|-------------|---|----|------------|--|----------------------------|
| Jar No. | COAGULANT | | BASE | | Alkalinity (mg/L as CaCO ₃) | pH | TOC (mg/L) | Incremental TOC Removal (mg/L TOC removed per 10 mg/L of alum) | Cumulative TOC Removal (%) |
| | Dose (Alum eq.) (mg/L) | Volume (mL) | Dose (mg/L) | Volume (mL) | | | | | |
| RAW | | | | | | | | | |
| 1 | | | | | | | | | |
| 2 | | | | | | | | | |
| 3 | | | | | | | | | |
| 4 | | | | | | | | | |
| 5 | | | | | Target pH (based on raw water alkalinity) | | | | |
| 6 | | | | | | | | | |
| 7 | | | | | | | | | |
| 8 | | | | | | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |
| Has the TCEQ approved this source as "Not Amenable" to Treatment even though Target pH was not reached? If "yes", provide the date of the TCEQ letter or e-mail. | | | | | TOC, % Removal at Apparent PODR: | | | | |



I certify that I am familiar with the information contained in this report and that, to the best of my knowledge, the information is true, complete, and accurate.

Operator's Signature: _____

Certificate No. and Grade: WO0012234, A