



MONTHLY OPERATIONAL REPORT  
City of Broken Arrow Lynn Lane Wastewater Treatment Facility  
March-19

|      |      | WEATHER |      |                  | INFLUENT   |           |    |     |      |              |            | OXIDATION DITCH |               |                 |             |             | SLUDGE         |             |            |                 | FINAL EFFLUENT       |    |             |            |           |     |      |            |           |            |           |         |           |        | STREAM SURVEILLANCE |            |                          |           |             |             |           |           |             |             |                   |                   |        |  |  |
|------|------|---------|------|------------------|------------|-----------|----|-----|------|--------------|------------|-----------------|---------------|-----------------|-------------|-------------|----------------|-------------|------------|-----------------|----------------------|----|-------------|------------|-----------|-----|------|------------|-----------|------------|-----------|---------|-----------|--------|---------------------|------------|--------------------------|-----------|-------------|-------------|-----------|-----------|-------------|-------------|-------------------|-------------------|--------|--|--|
| Date | Day  | °F      | Rain | Cloud Conditions | Flow (MGD) | RAS (MGD) | °C | pH  | Alk. | Sett. Solids | TSS (mg/L) | BOD (mg/L)      | D.O. ( mg/L ) | 30 Min. Settlt. | SVI (ml/gm) | MLSS (mg/L) | Sl. Age (Days) | WAS ( MGD ) | CAKE ( % ) | LANDFILL (Tons) | LANDFILL (D.M. Tons) | °C | D.O. (mg/L) | TDS (mg/L) | TDS (lbs) | pH  | Alk. | TSS (mg/L) | TSS (lbs) | BOD (mg/L) | BOD (lbs) | Hg      | Hg (lbs.) | E.Coli | Cl2 Res             | Flow (MGD) | °C Upstr.                | °C Dnstr. | D.O. Upstr. | D.O. Dnstr. | pH Upstr. | pH Dnstr. | App. Upstr. | App. Dnstr. | Fec. Coli. Upstr. | Fec. Coli. Dnstr. | Hrdss. |  |  |
| 1    | Fri  | 37      | 0.00 | cloudy           | 4.505      | 4.206     | 14 | 7.5 | 269  | 21           | 284        | 331             | 0.3           | 450             | 176         | 2,560       | 8              | 0.219       | 15         | 45.35           | 6.60                 | 14 | 7.9         |            |           | 7.7 | 217  |            |           |            |           |         |           |        |                     | 0.03       | 2.971                    |           |             |             |           |           |             |             |                   |                   |        |  |  |
| 2    | sat  | 37      | 0.00 | cloudy           | 4.393      | 4.213     | 15 | 7.6 | 286  | 15           |            |                 | 0.6           | 520             |             |             |                | 0.206       |            |                 |                      | 14 | 8.0         |            |           | 7.5 | 212  |            |           |            |           |         |           |        |                     | 0.03       | 2.847                    |           |             |             |           |           |             |             |                   |                   |        |  |  |
| 3    | Sun  | 34      | 0.00 | cloudy           | 4.453      | 4.260     | 16 | 7.5 | 280  | 12           |            |                 | 0.5           | 490             |             |             |                | 0.210       |            |                 |                      | 16 | 8.5         | 560        | 13,549    | 7.4 | 182  | 7.00       | 169.36    | 26.00      | 629.05    | 0.00005 | 0.0012    |        | 0.03                | 2.901      |                          |           |             |             |           |           |             |             |                   |                   |        |  |  |
| 4    | Mon  | 25      | 0.00 | p. cloudy        | 4.680      | 4.153     | 13 | 7.4 | 270  | 22           | 366        | 353             | 0.8           | 400             | 161         | 2,486       | 6              | 0.208       | 14         |                 |                      | 12 | 8.5         |            |           | 7.3 | 180  | 15.00      | 384.81    | 22.00      | 564.38    |         |           |        | 0.03                | 3.076      |                          |           |             |             |           |           |             |             |                   |                   |        |  |  |
| 5    | Tue  | 41      | 0.00 | clear            | 4.597      | 4.020     | 14 | 7.4 | 242  | 18           | 276        | 359             | 0.4           | 460             | 207         | 2,225       | 7              | 0.214       | 15         | 43.83           | 6.38                 | 12 | 8.4         |            |           | 7.4 | 191  | 5.00       | 124.89    | 14.00      | 349.70    |         |           | 1.0    | 0.03                | 2.995      |                          |           |             |             |           |           |             |             |                   |                   |        |  |  |
| 6    | Wed  | 51      | 0.00 | p. cloudy        | 4.409      | 4.045     | 12 | 7.5 | 270  | 20           | 248        | 289             | 0.8           | 550             | 212         | 2,600       | 10             | 0.207       | 15         | 44.67           | 6.50                 | 13 | 8.5         |            |           | 7.3 | 195  | 5.00       | 120.47    | 17.00      | 409.60    |         |           |        | 0.03                | 2.889      |                          |           |             |             |           |           |             |             |                   |                   |        |  |  |
| 7    | Thur | 56      | 0.00 | cloudy           | 4.500      | 4.036     | 14 | 7.5 | 282  | 19           | 250        | 346             | 0.7           | 510             | 172         | 2,967       | 11             | 0.211       | 14         | 44.86           | 6.09                 | 14 | 8.2         |            |           | 7.5 | 187  | 6.00       | 149.12    | 19.00      | 472.21    |         |           |        | 0.03                | 2.980      |                          |           |             |             |           |           |             |             |                   |                   |        |  |  |
| 8    | Fri  | 57      | 0.01 | cloudy           | 4.433      | 4.398     | 15 | 7.6 | 280  | 19           | 226        | 352             | 0.3           | 420             | 177         | 2,370       | 9              | 0.204       | 14         | 44.69           | 6.07                 | 15 | 8.2         |            |           | 7.2 | 181  |            |           |            |           |         |           |        | 0.03                | 2.924      |                          |           |             |             |           |           |             |             |                   |                   |        |  |  |
| 9    | Sat  | 45      | 0.09 | cloudy           | 4.349      | 4.546     | 16 | 7.4 | 291  | 19           |            |                 | 0.3           | 380             |             |             |                | 0.216       |            |                 |                      | 16 | 7.7         |            |           | 7.4 | 189  |            |           |            |           |         |           |        | 0.03                | 2.813      |                          |           |             |             |           |           |             |             |                   |                   |        |  |  |
| 10   | Sun  | 46      | 0.00 | p. cloudy        | 5.173      | 4.592     | 15 | 7.5 | 293  | 7            |            |                 | 0.5           | 450             |             |             |                | 0.204       |            |                 |                      | 14 | 8.2         |            |           | 7.4 | 177  | 6.00       | 172.29    | 24.00      | 689.15    |         |           |        | 0.03                | 3.443      |                          |           |             |             |           |           |             |             |                   |                   |        |  |  |
| 11   | Mon  | 40      | 0.07 | cloudy           | 4.847      | 4.175     | 14 | 7.5 | 269  | 5            | 164        | 270             | 0.4           | 400             | 161         | 2,480       | 12             | 0.218       | 13         | 22.14           | 2.79                 | 15 | 8.1         |            |           | 7.4 | 191  | 6.00       | 161.38    | 18.00      | 484.14    |         |           |        | 0.03                | 3.225      |                          |           |             |             |           |           |             |             |                   |                   |        |  |  |
| 12   | Tue  | 58      | 0.17 | cloudy           | 4.830      | 4.209     | 16 | 7.5 | 275  | 8            | 174        | 316             | 0.2           | 440             | 175         | 2,510       | 12             | 0.220       | 14         | 42.53           | 5.78                 | 16 | 7.8         |            |           | 7.4 | 207  | 5.00       | 133.73    | 18.00      | 481.43    |         |           | 34.0   | 0.03                | 3.207      |                          |           |             |             |           |           |             |             |                   |                   |        |  |  |
| 13   | Wed  | 67      | 0.50 | cloudy           | 5.338      | 4.183     | 16 | 7.5 | 274  | 18           | 382        | 257             | 0.2           | 370             | 126         | 2,925       | 6              | 0.215       | 13         | 41.16           | 5.19                 | 16 | 7.7         |            |           | 7.5 | 216  | 47.00      | 1392.31   | 42.00      | 1244.19   |         |           |        | 0.03                | 3.552      |                          |           |             |             |           |           |             |             |                   |                   |        |  |  |
| 14   | Thur | 63      | 0.00 | cloudy           | 6.372      | 4.912     | 16 | 7.5 | 283  | 11           | 240        | 274             | 0.3           | 330             | 135         | 2,443       | 6              | 0.212       | 14         | 19.62           | 2.66                 | 15 | 7.8         |            |           | 7.4 | 180  | 6.00       | 210.17    | 16.00      | 560.45    |         |           |        | 0.03                | 4.200      |                          |           |             |             |           |           |             |             |                   |                   |        |  |  |
| 15   | Fri  | 55      | 0.00 | clear            | 5.481      | 5.148     | 15 | 7.5 | 268  | 18           | 232        | 402             | 0.3           | 420             | 170         | 2,467       | 8              | 0.201       | 14         | 43.99           | 5.98                 | 14 | 8.3         |            |           | 7.6 | 216  |            |           |            |           |         |           |        | 0.03                | 3.639      |                          |           |             |             |           |           |             |             |                   |                   |        |  |  |
| 16   | Sat  | 62      | 0.00 | clear            | 4.915      | 3.758     | 16 | 7.5 | 276  | 15           |            |                 | 0.5           | 550             |             |             |                | 0.225       |            |                 |                      | 15 | 8.0         |            |           | 7.4 | 196  |            |           |            |           |         |           |        | 0.03                | 3.254      |                          |           |             |             |           |           |             |             |                   |                   |        |  |  |
| 17   | Sun  | 69      | 0.00 | clear            | 4.864      | 3.626     | 16 | 7.5 | 285  | 16           |            |                 | 0.4           | 410             |             |             |                | 0.219       |            |                 |                      | 16 | 7.6         |            |           | 7.3 | 182  | 6.00       | 161.08    | 19.00      | 510.08    |         |           |        | 0.03                | 3.219      |                          |           |             |             |           |           |             |             |                   |                   |        |  |  |
| 18   | Mon  | 69      | 0.00 | clear            | 4.794      | 3.613     | 17 | 7.4 | 285  | 15           | 216        | 222             | 0.4           | 400             | 170         | 2,350       | 9              | 0.211       | 13         | 45.73           | 5.77                 | 17 | 8.4         |            |           | 7.4 | 185  | 5.00       | 132.06    | 18.00      | 475.43    |         |           |        | 0.03                | 3.167      |                          |           |             |             |           |           |             |             |                   |                   |        |  |  |
| 19   | Tue  | 71      | 0.00 | p. cloudy        | 4.589      | 3.761     | 16 | 7.4 | 271  | 18           | 270        | 237             | 1.2           | 360             | 129         | 2,800       | 9              | 0.213       | 13         | 22.33           | 2.82                 | 15 | 8.3         |            |           | 7.4 | 168  | 3.00       | 75.96     | 14.00      | 354.48    |         |           | 24.0   | 0.03                | 3.036      |                          |           |             |             |           |           |             |             |                   |                   |        |  |  |
| 20   | Wed  | 61      | 0.09 | cloudy           | 4.403      | 3.623     | 16 | 7.5 | 293  | 15           | 282        | 270             | 0.6           | 330             | 129         | 2,550       | 8              | 0.220       | 14         | 20.92           | 2.84                 | 15 | 8.0         |            |           | 7.4 | 181  | 3.00       | 72.13     | 12.00      | 288.53    |         |           |        | 0.03                | 2.883      |                          |           |             |             |           |           |             |             |                   |                   |        |  |  |
| 21   | Thur | 67      | 0.00 | clear            | 4.511      | 3.704     | 15 | 7.5 | 312  | 18           | 268        | 288             | 0.7           | 390             | 157         | 2,479       | 8              | 0.210       | 14         | 40.74           | 5.53                 | 15 | 8.2         |            |           | 7.4 | 184  | 3.00       | 73.31     | 15.00      | 366.54    |         |           |        | 0.03                | 2.930      |                          |           |             |             |           |           |             |             |                   |                   |        |  |  |
| 22   | Fri  | 72      | 0.00 | clear            | 4.469      | 3.767     | 15 | 7.5 | 288  | 20           | 230        | 313             | 0.8           | 360             | 161         | 2,236       | 9              | 0.205       | 12         | 46.33           | 5.39                 | 16 | 8.1         |            |           | 7.4 | 181  |            |           |            |           |         |           |        | 0.03                | 2.901      |                          |           |             |             |           |           |             |             |                   |                   |        |  |  |
| 23   | Sat  | 56      | 1.74 | cloudy           | 4.350      | 3.669     | 17 | 7.5 | 298  | 19           |            |                 | 1.9           | 350             |             |             |                | 0.209       |            |                 |                      | 16 | 8.2         |            |           | 7.4 | 174  |            |           |            |           |         |           |        | 0.03                | 2.821      |                          |           |             |             |           |           |             |             |                   |                   |        |  |  |
| 24   | Sun  | 68      | 0.00 | cloudy           | 6.018      | 4.467     | 16 | 7.4 | 195  | 18           |            |                 | 1.8           | 250             |             |             |                | 0.223       |            |                 |                      | 17 | 7.7         |            |           | 7.3 | 150  | 8.00       | 263.81    | 11.00      | 362.74    |         |           |        | 0.03                | 3.954      | PARTIAL WEEKLY AVG.NO.'s |           |             |             |           |           |             |             |                   |                   |        |  |  |
| 25   | Mon  | 59      | 0.00 | clear            | 6.636      | 4.772     | 16 | 7.5 | 272  | 13           | 192        | 199             | 0.3           | 270             | 104         | 2,584       | 8              | 0.218       | 14         | 44.53           | 6.05                 | 16 | 7.9         |            |           | 7.3 | 158  | 4.00       | 144.25    | 11.00      | 396.68    |         |           |        | 0.03                | 4.324      | Date                     | Week No.  | TSS         | BOD         |           |           |             |             |                   |                   |        |  |  |
| 26   | Tue  | 69      | 0.00 | clear            | 5.690      | 4.048     | 15 | 7.5 | 287  | 14           | 174        | 248             | 0.4           | 260             | 121         | 2,143       | 9              | 0.187       | 14         | 43.20           | 5.87                 | 16 | 8.2         |            |           | 7.4 | 168  | 5.00       | 157.08    | 6.00       | 188.50    |         |           | 13.0   | 0.03                | 3.767      |                          |           |             |             |           |           |             |             |                   |                   |        |  |  |
| 27   | Wed  | 72      | 0.00 | cloudy           | 5.306      | 4.170     | 16 | 7.5 | 298  | 15           | 218        | 203             | 0.4           | 290             | 132         | 2,200       | 8              | 0.195       | 13         | 44.80           | 5.65                 | 16 | 8.2         |            |           | 7.4 | 169  | 3.00       | 87.39     | 5.00       | 145.66    |         |           |        | 0.03                | 3.493      |                          |           |             |             |           |           |             |             |                   |                   |        |  |  |
| 28   | Thur | 75      | 0.00 | cloudy           | 5.055      | 4.105     | 16 | 7.5 | 300  | 14           | 262        | 222             | 0.2           | 260             | 106         | 2,450       | 7              | 0.213       | 15         | 18.94           | 2.76                 | 17 | 8.6         |            |           | 7.4 | 170  | 2.00       | 55.51     | 6.00       | 166.53    |         |           |        | 0.03                | 3.328      |                          |           |             |             |           |           |             |             |                   |                   |        |  |  |
| 29   | Fri  | 70      | 0.23 | cloudy           |            |           |    |     |      |              |            |                 |               |                 |             |             |                |             |            |                 |                      |    |             |            |           |     |      |            |           |            |           |         |           |        |                     |            |                          |           |             |             |           |           |             |             |                   |                   |        |  |  |