



MONTHLY OPERATIONAL REPORT

City of Broken Arrow Lynn Lane Wastewater Treatment Facility

January-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. Sett. | 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    | Tues | 33      | 0.00 | cloudy           | 7.170      | 5.643     | 15 | 7.4 | 258  | 10           | 215        | 238             | 2.0           | 320           |             |             |                | 0.212       |            |                 |                      |    | 14          | 8.6        |           |        | 7.1  | 128        | 7.00      | 268.96     | 15.00     | 576.34 |                     |        |         | 0.03       | 4.607                    |           |             |             |           |           |             |             |                   |                   |        |  |  |  |
| 2    | Wed  | 31      | 0.01 | cloudy           | 5.866      | 3.662     | 16 | 7.3 | 276  | 13           | 236        | 239             | 0.5           | 370           | 123         | 3,007       | 9              | 0.205       | 13         | 42.81           | 5.40                 | 14 | 8.4         |            |           | 7.2    | 147  | 3.00       | 97.05     | 8.00       | 258.81    |        |                     | 8.0    | 0.03    | 3.879      |                          |           |             |             |           |           |             |             |                   |                   |        |  |  |  |
| 3    | Thur | 34      | 1.08 | cloudy           | 5.462      | 3.362     | 16 | 7.3 | 285  | 14           | 132        | 209             | 0.3           | 350           | 113         | 3,100       | 17             | 0.222       | 13         | 36.73           | 4.63                 | 15 | 8.3         |            |           | 7.3    | 160  | 8.00       | 241.79    | 13.00      | 392.91    |        |                     |        | 0.03    | 3.624      |                          |           |             |             |           |           |             |             |                   |                   |        |  |  |  |
| 4    | Fri  | 55      | 0.40 | cloudy           | 7.476      | 4.926     | 14 | 7.1 | 147  | 15           | 316        | 304             | 3.0           | 240           | 109         | 2,200       | 4              | 0.222       | 13         | 43.11           | 5.44                 | 13 | 8.0         |            |           | 7.0    | 96   |            |           |            |           |        |                     |        | 0.03    | 4.812      |                          |           |             |             |           |           |             |             |                   |                   |        |  |  |  |
| 5    | Sat  | 66      | 0.00 | clear            | 6.418      | 5.630     | 15 | 7.4 | 249  | 9            |            |                 | 3.0           | 260           |             |             |                | 0.220       |            |                 |                      |    | 14          | 8.7        |           |        | 7.1  | 117        |           |            |           |        |                     |        |         | 0.03       | 4.199                    |           |             |             |           |           |             |             |                   |                   |        |  |  |  |
| 6    | Sun  | 65      | 0.00 | cloudy           | 5.815      | 4.886     | 16 | 7.2 | 269  | 11           |            |                 | 2.0           | 190           |             |             |                | 0.222       |            |                 |                      |    | 16          | 8.9        | 528       | 16,936 | 7.2  | 123        | 3.00      | 96.23      | 8.00      | 256.61 | 0.00005             | 0.0016 |         | 0.03       | 3.846                    |           |             |             |           |           |             |             |                   |                   |        |  |  |  |
| 7    | Mon  | 70      | 0.01 | clear            | 5.595      | 3.796     | 17 | 7.1 | 275  | 13           | 284        | 217             | 0.3           | 200           | 60          | 3,307       | 8              | 0.224       | 16         | 22.55           | 3.50                 | 17 | 8.4         |            |           | 7.1    | 133  | 3.00       | 91.60     | 8.00       | 244.26    |        |                     |        | 0.03    | 3.661      |                          |           |             |             |           |           |             |             |                   |                   |        |  |  |  |
| 8    | Tues | 59      | 0.00 | clear            | 5.108      | 3.547     | 17 | 7.2 | 266  | 13           | 150        | 226             | 0.4           | 240           | 106         | 2,272       | 12             | 0.196       | 17         | 19.12           | 3.15                 | 16 | 8.5         |            |           | 7.1    | 132  | 3.00       | 88.22     | 8.00       | 235.25    |        |                     | 10.0   | 0.03    | 3.526      |                          |           |             |             |           |           |             |             |                   |                   |        |  |  |  |
| 9    | Wed  | 52      | 0.00 | clear            | 4.771      | 3.314     | 16 | 7.2 | 290  | 17           | 326        | 295             | 0.7           | 270           | 112         | 2,410       | 6              | 0.220       | 16         | 42.27           | 6.56                 | 14 | 9.0         |            |           | 7.1    | 110  | 2.00       | 55.28     | 7.00       | 193.47    |        |                     |        | 0.03    | 3.314      |                          |           |             |             |           |           |             |             |                   |                   |        |  |  |  |
| 10   | Thur | 44      | 0.01 | p cloudy         | 4.552      | 2.979     | 16 | 7.2 | 294  | 14           | 216        | 280             | 0.8           | 320           | 111         | 2,872       | 12             | 0.220       | 15         | 41.65           | 6.06                 | 15 | 8.8         |            |           | 7.1    | 106  | 2.00       | 49.69     | 6.00       | 149.07    |        |                     |        | 0.03    | 2.979      |                          |           |             |             |           |           |             |             |                   |                   |        |  |  |  |
| 11   | Fri  | 40      | 1.17 | cloudy           | 4.563      | 3.331     | 16 | 7.2 | 291  | 14           | 270        | 287             | 1.0           | 270           | 109         | 2,470       | 8              | 0.222       | 18         | 37.75           | 6.59                 | 14 | 8.7         |            |           | 7.1    | 117  |            |           |            |           |        |                     |        | 0.03    | 2.914      |                          |           |             |             |           |           |             |             |                   |                   |        |  |  |  |
| 12   | Sat  | 40      | 0.25 | cloudy           | 5.319      | 4.307     | 15 | 7.3 | 153  | 10           |            |                 | 4.9           | 240           |             |             |                | 0.227       |            |                 |                      |    | 14          | 8.8        |           |        | 7.1  | 92         |           |            |           |        |                     |        |         | 0.03       | 4.483                    |           |             |             |           |           |             |             |                   |                   |        |  |  |  |
| 13   | Sun  | 35      | 0.00 | cloudy           | 7.996      | 4.132     | 15 | 7.4 | 241  | 6            |            |                 | 4.2           | 250           |             |             |                | 0.222       |            |                 |                      |    | 14          | 9.5        |           |        | 7.2  | 115        | 2.00      | 68.92      | 5.00      | 172.30 |                     |        |         | 0.03       | 4.132                    |           |             |             |           |           |             |             |                   |                   |        |  |  |  |
| 14   | Mon  | 38      | 0.00 | cloudy           | 5.632      | 3.889     | 16 | 7.2 | 260  | 11           | 160        | 164             | 1.1           | 200           | 100         | 1,994       | 9              | 0.220       | 18         | 22.12           | 3.86                 | 14 | 8.9         |            |           | 7.2    | 128  | 2.00       | 62.40     | 6.00       | 187.20    |        |                     |        | 0.03    | 3.741      |                          |           |             |             |           |           |             |             |                   |                   |        |  |  |  |
| 15   | Tues | 50      | 0.00 | p cloudy         | 5.501      | 3.852     | 15 | 7.2 | 260  | 10           | 194        | 212             | 1.3           | 250           | 93          | 2,680       | 10             | 0.216       | 17         | 40.16           | 6.62                 | 13 | 8.9         |            |           | 7.1    | 129  | 2.00       | 60.50     | 6.00       | 181.50    |        |                     | 6.0    | 0.03    | 3.627      |                          |           |             |             |           |           |             |             |                   |                   |        |  |  |  |
| 16   | Wed  | 50      | 0.03 | cloudy           | 5.215      | 3.587     | 16 | 7.2 | 270  | 11           | 292        | 250             | 1.0           | 280           | 123         | 2,275       | 6              | 0.228       | 16         | 21.21           | 3.29                 | 14 | 8.5         |            |           | 7.2    | 137  | 2.00       | 56.90     | 6.00       | 170.69    |        |                     |        | 0.03    | 3.411      |                          |           |             |             |           |           |             |             |                   |                   |        |  |  |  |
| 17   | Thur | 48      | 0.03 | cloudy           | 5.058      | 3.550     | 16 | 7.3 | 253  | 14           | 528        | 278             | 0.7           | 270           | 110         | 2,450       | 4              | 0.223       | 17         | 44.03           | 7.26                 | 16 | 8.6         |            |           | 7.2    | 143  | 2.00       | 55.18     | 7.00       | 193.12    |        |                     |        | 0.03    | 3.308      |                          |           |             |             |           |           |             |             |                   |                   |        |  |  |  |
| 18   | Fri  | 62      | 0.55 | cloudy           | 5.025      | 3.613     | 16 | 7.2 | 269  | 15           | 346        | 295             | 1.0           | 280           | 127         | 2,200       | 5              | 0.220       | 16         | 43.49           | 6.75                 | 15 | 8.2         |            |           | 7.2    | 152  |            |           |            |           |        |                     |        | 0.03    | 3.307      |                          |           |             |             |           |           |             |             |                   |                   |        |  |  |  |
| 19   | Sat  | 44      | 0.00 | cloudy           | 5.857      | 3.567     | 13 | 6.9 | 155  | 13           |            |                 | 2.5           | 290           |             |             |                | 0.219       |            |                 |                      |    | 15          | 7.9        |           |        | 6.8  | 130        |           |            |           |        |                     |        |         | 0.03       | 3.859                    |           |             |             |           |           |             |             |                   |                   |        |  |  |  |
| 20   | Sun  | 40      | 0.00 | clear            | 6.336      | 3.540     | 13 | 7.4 | 261  | 11           |            |                 | 3.2           | 310           |             |             |                | 0.222       |            |                 |                      |    | 17          | 9.1        |           |        | 7.4  | 125        | 2.00      | 68.52      | 8.00      | 274.09 |                     |        |         | 0.03       | 4.108                    |           |             |             |           |           |             |             |                   |                   |        |  |  |  |
| 21   | Mon  | 50      | 0.00 | clear            | 5.584      | 3.636     | 15 | 7.4 | 257  | 12           | 156        | 238             | 2.4           | 270           |             |             |                | 0.224       |            |                 |                      |    | 16          | 8.8        |           |        | 7.3  | 126        | 3.00      | 89.62      | 9.00      | 268.86 |                     |        |         | 0.03       | 3.582                    |           |             |             |           |           |             |             |                   |                   |        |  |  |  |
| 22   | Tues | 53      | 0.08 | cloudy           | 5.490      | 3.528     | 16 | 7.2 | 254  | 11           | 224        | 280             | 0.9           | 250           | 118         | 2,120       | 7              | 0.210       | 16         | 20.05           | 3.11                 | 15 | 8.4         |            |           | 7.2    | 139  | 2.00       | 59.68     | 7.00       | 208.88    |        |                     | 3.0    | 0.03    | 3.578      |                          |           |             |             |           |           |             |             |                   |                   |        |  |  |  |
| 23   | Wed  | 39      | 0.00 | p cloudy         | 5.083      | 3.637     | 15 | 7.3 | 258  | 14           | 274        | 282             | 0.8           | 360           | 145         | 2,490       | 7              | 0.203       | 16         | 42.45           | 6.59                 | 13 | 8.6         |            |           | 7.3    | 146  | 5.00       | 139.82    | 7.00       | 195.75    |        |                     |        | 0.03    | 3.353      |                          |           |             |             |           |           |             |             |                   |                   |        |  |  |  |
| 24   | Thur | 43      | 0.00 | p cloudy         | 5.043      | 3.656     | 15 | 7.3 | 263  | 13           | 226        | 286             | 0.3           | 350           | 146         | 2,390       | 8              | 0.220       | 16         | 44.24           | 6.87                 | 14 | 8.4         |            |           | 7.2    | 126  | 2.00       | 55.08     | 5.00       | 137.69    |        |                     |        | 0.03    | 3.302      | PARTIAL WEEKLY AVG.NO.'s |           |             |             |           |           |             |             |                   |                   |        |  |  |  |
| 25   | Fri  | 32      | 0.00 | p cloudy         | 4.822      | 3.158     | 14 | 7.2 | 253  | 15           | 274        | 331             | 0.7           | 380           | 158         | 2,400       | 7              | 0.227       | 16         | 40.68           | 6.31                 | 12 | 8.5         |            |           | 7.1    | 140  |            |           |            |           |        |                     |        | 0.03    | 3.158      | Date                     | Week No.  | TSS         | BOD         |           |           |             |             |                   |                   |        |  |  |  |
| 26   | Sat  | 56      | 0.00 | clear            | 4.590      | 3.062     | 16 | 7.3 | 257  | 16           |            |                 | 2.0           | 360           |             |             |                | 0.222       |            |                 |                      |    | 15          | 8.6        |           |        | 7.3  | 143        |           |            |           |        |                     |        |         | 0.03       | 3.062                    | 12/30     | 1           | 4.00        | 12.00     |           |             |             |                   |                   |        |  |  |  |
| 27   | Sun  | 57      | 0.00 | clear            | 4.630      | 3.061     | 17 | 7.4 | 262  | 16           |            |                 | 2.0           | 350           |             |             |                | 0.220       |            |                 |                      |    | 17          | 8.4        |           |        | 7.3  | 161        | 4.00      | 102.11     | 12.00     | 306.34 |                     |        |         | 0.03       | 3.061                    | 12/31     | 1           | 7.00        | 14.00     |           |             |             |                   |                   |        |  |  |  |
| 28   | Mon  | 47      | 0.00 | cloudy           | 4.734      | 3.552     | 15 | 7.2 | 269  | 14           | 300        | 350             | 0.2           | 380           | 155         | 2,450       | 7              | 0.216       | 15         | 22.63           | 3.29                 | 15 | 8.0         |            |           | 7.2    | 148  | 2.00       | 51.56     | 5.00       | 128.89    |        |                     |        | 0.03    | 3.091      |                          |           |             |             |           |           |             |             |                   |                   |        |  |  |  |
| 29   | Tues | 46      | 0.00 | clear            | 4.517      | 3.686     | 15 | 7.3 | 269  | 16           | 352        | 284             |               |               |             |             |                |             |            |                 |                      |    |             |            |           |        |      |            |           |            |           |        |                     |        |         |            |                          |           |             |             |           |           |             |             |                   |                   |        |  |  |  |