

Illinois EPA/Indian Creek Landfill 2 Groundwater Results

14 February 2017

| Parameters | Interwell | G02D | | | | | G06D | | | G18D | | |
|-------------------------------|-----------|------------|-----------|-------------------------|--------|---------|--------|--------|---------|--------|--------|---------|
| | | IEPA Prim. | IEPA Dupe | IEPA Prim./ Dupe RPD | ICL2 | RPD | IEPA | ICL2 | RPD | IEPA | ICL2 | RPD |
| Ammonia, dissolved (mg/L) | 8.0 | 1.68 | 1.62 | 3.64% | 1.8 | -8.70% | 0.75 | 0.82 | -8.92% | 4.22 | 4.6 | -8.62% |
| Arsenic, dissolved (µg/L) | 150 | 48.3 | 48 | 0.62% | 47 | 2.42% | 28.4 | 28 | 1.42% | 119 | 120 | -0.84% |
| Boron, dissolved (µg/L) | 410 | 192 | 204 | 6.06% | 190 | 4.12% | 210 | 200 | 4.88% | 204 | 190 | 7.11% |
| Cadmium, dissolved (µg/L) | 1 | <3 | <3 | N/C | <1 | N/C | <3 | <1 | N/C | <3 | <1 | N/C |
| Chloride, dissolved (mg/L) | 6.2 | 1.91 | 1.93 | 1.04% | 3.1 | -47.01% | 2.93 | 4.1 | -33.29% | 2.67 | 3.6 | -29.67% |
| Chromium, dissolved (µg/L) | 4 | <5 | <5 | N/C | <4 | N/C | <5 | <4 | N/C | <5 | <4 | N/C |
| Cyanide, total (mg/L) | 0.005 | <0.005 | <0.005 | N/C | <0.005 | N/C | <0.005 | <0.005 | N/C | <0.005 | <0.005 | N/C |
| Lead, dissolved (µg/L) | 406.6 | <5 | <5 | N/C | <1 | N/C | <5 | <1 | N/C | <5 | <1 | N/C |
| Magnesium, dissolved (mg/L) | 59 | 33.5 | 35.5 | 5.80% | 36 | -4.26% | 35 | 38 | -8.22% | 35.9 | 36 | -0.28% |
| Mercury, dissolved (µg/L) | 0.2 | <0.06 | <0.06 | N/C | <0.2 | N/C | <0.06 | <0.2 | N/C | <0.06 | <0.2 | N/C |
| Nitrate, dissolved (mg/L)* | 0.38 | <0.1 | <0.1 | N/C | <0.02 | N/C | <0.1 | 0.04 | N/C | <0.1 | <0.02 | N/C |
| pH | 6.60-7.90 | 7.5 | 7.4 | 1.34% | 7.23 | 3.00% | 7.2 | 6.92 | 3.97% | 7.5 | 7.02 | 6.61% |
| Spec. Cond. (µmhos/cm) | 1100 | 653 | 653 | 0.00% | 648 | 0.77% | 754 | 749 | 0.67% | 665 | 666 | -0.15% |
| Sulfate, dissolved (mg/L) | 16 | <10 | <10 | N/C | <1 | N/C | <10 | <1 | N/C | <10 | <1 | N/C |
| Total Dissolved Solids (mg/L) | 590 | 370 | 364 | 1.63% | 340 | 7.64% | 430 | 400 | 7.23% | 362 | 320 | 12.32% |
| Zinc, dissolved (µg/L) | 44 | <25 | <25 | N/C | <6 | N/C | <25 | <6 | N/C | <25 | <6 | N/C |

Ave RPD, IEPA Prim./Dupe: 2.52%

| Parameters | Interwell | G29D | | |
|-------------------------------|-----------|--------|--------|---------|
| | | IEPA | ICL2 | RPD |
| Ammonia, dissolved (mg/L) | 8 | 4.53 | 4.9 | -7.85% |
| Arsenic, dissolved (µg/L) | 150 | 68.2 | 68 | 0.29% |
| Boron, dissolved (µg/L) | 410 | 238 | 230 | 3.42% |
| Cadmium, dissolved (µg/L) | 1 | <3 | <1 | N/C |
| Chloride, dissolved (mg/L) | 6.2 | 3.16 | 4.3 | -30.56% |
| Chromium, dissolved (µg/L) | 4 | <5 | <4 | N/C |
| Cyanide, total (mg/L) | 0.005 | <0.005 | <0.005 | N/C |
| Lead, dissolved (µg/L) | 406.6 | <5 | <1 | N/C |
| Magnesium, dissolved (mg/L) | 59 | 45.9 | 49 | -6.53% |
| Mercury, dissolved (µg/L) | 0.2 | <0.06 | <0.2 | N/C |
| Nitrate, dissolved (mg/L)* | 0.38 | <0.1 | <0.02 | N/C |
| pH | 6.60-7.90 | 7.2 | 7.07 | 1.82% |
| Spec. Cond. (µmhos/cm) | 1100 | 883 | 876 | 0.80% |
| Sulfate, dissolved (mg/L) | 16 | <10 | <1 | N/C |
| Total Dissolved Solids (mg/L) | 590 | 494 | 480 | 2.87% |
| Zinc, dissolved (µg/L) | 44 | <25 | <6 | N/C |

Illinois EPA/PDC Labs Comparison

| | |
|-------------|--------|
| total RPDs | 32 |
| ≤10% | 27 |
| ≤20% | 28 |
| > 25% | 4 |
| RPDs > 0 | 18 |
| RPDs < 0 | 14 |
| RPD = 0 | 0 |
| Ave RPD | -3.86% |
| Ave Abs RPD | 8.32% |

N/C = Not calculated

IEPA Prim. = IEPA primary sample of that well

Dupe = IEPA field duplicate of that well

RPD = Relative Percent Difference

*IEPA result is for nitrate + nitrite, so not necessarily comparable to facility result or permitted standards

<# = Below indicated reporting limit

Bold italic result = exceeds interwell (and intrawell, if applicable)