

Illinois EPA/Indian Creek Landfill 2 Groundwater Results

6 February 2019

Parameters	Interwell	G17D					G14D			G27D		
		IEPA Prim.	IEPA Dupe	IEPA Prim./ Dupe RPD	ICL2	RPD	IEPA	ICL2	RPD	IEPA	ICL2	RPD
Ammonia, dissolved (mg/L)	8.0	4.77	4.82	1.04%	4.9	-2.17%	5.79	6.0	-3.56%	1.64	1.6	2.47%
Arsenic, dissolved (µg/L)	150	61.8	61.8	0.00%	67	-8.07%	32.0	41	-24.66%	37.1	41	-9.99%
Boron, dissolved (µg/L)	410	174	167	4.11%	190	-10.82%	216	230	-6.28%	184	210	-13.20%
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	3.29	2.77	17.16%	3.9	-25.11%	1.77	2.5	-34.19%	3.03	3.9	-25.11%
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	38.2	38	0.52%	44	-14.37%	38.2	42	-9.48%	32.7	39	-17.57%
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	0.04	N/C	<0.1	0.07	N/C	<0.1	0.03	N/C
pH	6.60-7.90	7.4	7.5	1.34%	7.30	2.03%	7.6	7.58	0.26%	7.7	7.65	0.65%
Spec. Cond. (µmhos/cm)	1100	745	748	0.40%	717.8	3.92%	750	735.3	1.98%	652	633.6	2.86%
Sulfate, dissolved (mg/L)	16	<10	<10	N/C	<1	N/C	<10	3.6	N/C	<10	1.2	N/C
Total Dissolved Solids (mg/L)	590	382	338	12.22%	405	-11.76%	386	400	-3.56%	348	350	-0.57%
Zinc, dissolved (µg/L)	44	<25	<25	N/C	<6	N/C	<25	<6	N/C	<25	6.5	N/C

Ave RPD, IEPA Prim./Dupe: 4.60%

Parameters	Interwell	G28D		
		IEPA	ICL2	RPD
Ammonia, dissolved (mg/L)	8.0	3.44	3.6	-4.55%
Arsenic, dissolved (µg/L)	150	63.8	67	-4.89%
Boron, dissolved (µg/L)	410	176	190	-7.65%
Cadmium, dissolved (µg/L)	1	<3	<1	N/C
Chloride, dissolved (mg/L)	6.2	2.96	4.3	-36.91%
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	34.8	38	-8.79%
Mercury, dissolved (µg/L)	0.2	<0.06	<0.2	N/C
Nitrate, dissolved (mg/L)*	0.38	<0.1	<0.03	N/C
pH	6.60-7.90	7.6	7.24	4.85%
Spec. Cond. (µmhos/cm)	1100	687	674.4	1.85%
Sulfate, dissolved (mg/L)	16	<10	1.3	N/C
Total Dissolved Solids (mg/L)	590	354	395	-10.95%
Zinc, dissolved (µg/L)	44	<25	<6	N/C

Illinois EPA/PDC Labs Comparison

total RPDs	32
Abs RPDs ≤10%	21
Abs RPDs ≤20%	27
Abs RPDs > 25%	4
RPDs > 0	9
RPDs < 0	23
Ave Abs RPD	9.85%
Ave RPD w/negatives	-8.54%

N/C = Not calculated

IEPA prim. = IEPA primary sample of that well

IEPA Dupe = 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

Italic result = exceeds interwell (and intrawell, if applicable)