

Illinois EPA/Indian Creek Landfill 2 Groundwater Results

8 August 2017

Parameters	Interwell	G17D					G01D			G04D		
		IEPA Prim.	IEPA Dupe	IEPA Prim./ Dupe RPD	ICL2	RPD	IEPA	ICL2	RPD	IEPA	ICL2	RPD
Ammonia, dissolved (mg/L)	8.0	4.76	5.03	5.52%	4.9	-0.10%	1.88	1.9	-1.06%	1.41	1.4	0.71%
Arsenic, dissolved (µg/L)	150	64.6	64.3	0.47%	67	-3.88%	36	34	5.71%	38.3	37	3.45%
Boron, dissolved (µg/L)	410	190	209	9.52%	210	-5.13%	174	190	-8.79%	218	230	-5.36%
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	3.06	3.05	0.33%	4.1	-29.21%	2.99	3.8	-23.86%	2.48	3.3	-28.37%
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	38.6	37.7	2.36%	41	-7.20%	36.4	38	-4.30%	36.3	40	-9.70%
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	<0.03	N/C	<0.1	<0.03	N/C	<0.1	<0.03	N/C
pH	6.60-7.90	7.3	7.3	0.00%	6.91	5.49%	7.4	7.13	3.72%	7.2	7.00	2.82%
Spec. Cond. (µmhos/cm)	1100	738	739	0.14%	727	1.57%	661	645	2.45%	695	676	2.77%
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	414	402	2.94%	320	24.18%	372	260	35.44%	406	310	26.82%
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: 2.66%

Parameters	Interwell	Intrawell G07D	G07D		
			IEPA	ICL2	RPD
Ammonia, dissolved (mg/L)	8.0	—	1.66	1.7	-2.38%
Arsenic, dissolved (µg/L)	150	—	12.2	12	1.65%
Boron, dissolved (µg/L)	410	—	226	230	-1.75%
Cadmium, dissolved (µg/L)	1	—	<3	<1	N/C
Chloride, dissolved (mg/L)	6.2	—	2.26	3.4	-40.28%
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	77	52.2	55	-5.22%
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	—	7.1	6.97	1.85%
Spec. Cond. (µmhos/cm)	1100	—	914	918	-0.44%
Sulfate, dissolved (mg/L)	16	—	<10	1.5	N/C
Total Dissolved Solids (mg/L)	590	—	536	440	19.67%
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	15
RPDs <0	17
RPD = 0	0
Ave RPD	-1.21%
Ave Abs RPD	9.85%

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