

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)