

# Illinois EPA/Indian Creek Landfill 2 Groundwater Results

13 February 2018

Parameters	Interwell	Intrawell R31D	G18D					G30D			R31D	
			IEPA Prim.	IEPA Dupe	IEPA Prim./ Dupe RPD	ICL2	RPD	IEPA	ICL2	RPD	IEPA	ICL2
Ammonia, dissolved (mg/L)	8.0	—	5.15	5.38	4.37%	4.6	13.48%	3.76	3.5	7.16%	2.36	2.3
Arsenic, dissolved (µg/L)	150	—	118	120	1.68%	120	-0.84%	36.9	37	-0.27%	2.33	2.5
Boron, dissolved (µg/L)	410	—	197	202	2.51%	160	21.97%	186	150	21.43%	195	150
Cadmium, dissolved (µg/L)	1	—	<3	<3	N/C	<1	N/C	<3	<1	N/C	<3	<1
Chloride, dissolved (mg/L)	6.2	—	2.56	2.57	0.39%	3.3	-25.06%	2.73	3.3	-18.91%	1.90	2.6
Chromium, dissolved (µg/L)	4	—	<5	<5	N/C	<4	N/C	<5	<4	N/C	<5	<4
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
Lead, dissolved (µg/L)	406.6	—	<5	<5	N/C	<1	N/C	<5	<1	N/C	<5	<1
Magnesium, dissolved (mg/L)**	59	101.3	37.5	38.5	2.63%	35	8.22%	41.1	39	5.24%	46.4	43
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
Nitrate, dissolved (mg/L)*	0.38	—	<0.1	<0.1	N/C	<0.03	N/C	<0.1	<0.03	N/C	<0.1	0.05
pH	6.60–7.90	—	7.4	7.4	0.00%	7.4	0.00%	7.3	7.34	-0.55%	7.2	7.17
Spec. Cond. (µmhos/cm)**	1100	1891	678	683	0.73%	692.8	-1.79%	761	753.1	1.04%	842	841.6
Sulfate, dissolved (mg/L)**	16	244.4	<10	<10	N/C	<1	N/C	<10	1	N/C	<10	4.9
Total Dissolved Solids (mg/L)**	590	1126	362	366	1.10%	320	12.87%	412	380	8.08%	476	420
Zinc, dissolved (µg/L)	44	—	<25	<25	N/C	7.4	N/C	<25	<6	N/C	<25	<6

Ave RPD, IEPA Prim./Dupe: 1.68%

Parameters	Interwell	Intrawell G32D	G32D		
			IEPA	ICL2	RPD
Ammonia, dissolved (mg/L)	8.0	—	2.15	2.1	2.35%
Arsenic, dissolved (µg/L)	150	—	16.1	16	0.62%
Boron, dissolved (µg/L)	410	—	199	150	28.08%
Cadmium, dissolved (µg/L)	1	—	<3	<1	N/C
Chloride, dissolved (mg/L)	6.2	—	1.62	2.4	-38.81%
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	—	42.3	40	5.59%
Mercury, dissolved (µg/L)	0.2	—	<0.06	<0.2	N/C
Nitrate, dissolved (mg/L)*	0.38	—	<0.1	0.07	N/C
pH	6.60–7.90	—	7.0	7.05	-0.71%
Spec. Cond. (µmhos/cm)	1100	—	886	882.1	0.44%
Sulfate, dissolved (mg/L) †	16	29.3	<10	3.6	N/C
Total Dissolved Solids (mg/L)	590	—	496	440	11.97%
Zinc, dissolved (µg/L)	44	—	<25	<6	N/C

## Illinois EPA/PDC Labs Comparison

total RPDs	32
Abs RPDs ≤10%	20
Abs RPDs ≤20%	25
Abs RPDs > 25%	5
RPDs > 0	21
RPDs < 0	10
RPDs = 0	1
Ave Abs RPD	10.09%
Ave RPD w/negatives	2.27%

N/C = Not calculated

IEPA prim. = IEPA primary sample of that well

IEPA Dupe = field duplicate of that well

RPD = Relative Percent Difference

<# = Below indicated reporting limit

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