

Strategies for Comparing to Standards

Here's a way to look at environmental test results, to figure out which are the most severe.

1. Choose just one contaminant in one sample. (Here, it's the arsenic level in sample SB-08.)
2. What level of the contaminant did they find in the sample? Write it on a sticky note.
3. What is the health-based standard for that contaminant? Write it on your sticky note.
4. Divide the sample level by the level of concern. Write the result on your note. Circle it.
5. Repeat the steps above for other contaminants and other samples.
6. Put the sticky notes in order from low to high on the wall or table.

SAMPLE LOCATION	SB-08	EPA R3
SAMPLE NUMBER	R01-081020GL-0020	Residential Soil Screening Levels *
SAMPLE DEPTH	12 inches	
PARAMETER		
Aluminum	6,800	77,000
Arsenic	5.0	0.39
Barium	20	15,000
Cadmium	ND	70
Calcium	590	NL
Chromium	16	280
Cobalt	5.8	23
Copper	13	3,100
Iron	15,000	55,000
Lead	18	400
Magnesium	2,600	NL
Manganese	400	NL
Nickel	20	1,600
Silver	ND	390
Vanadium	14	550
Zinc	41	23,000
Mercury	ND	6.7

All results in milligrams per kilogram (mg/kg)

SB-08:
Arsenic
Found: 5.0 mg/kg
RSSL: 0.39 mg/kg
 $5.0 \div 0.39 =$
12.8x the RSSL



SS-04 Arsenic 16.2x

SS-17 Arsenic 15.6x

SS-02 Arsenic 14.9x

SB-08 Arsenic 12.8x

SS-09 Arsenic 11.3x

SB-10 Arsenic 9.7x

SS-24 Arsenic 8.2x