

Table 15. Some constituents of rocks and soils

(20)
R290
7072-200

Rocks

Soils

Constituent	Rocks				Soils				
	Lion 4	Lion 1	Clarabelle	Sheep Canyon	Lion 4	Lion 1	Clarabelle	Sheep Canyon	Pabst 3
Arsenic	3/ 4/10 to 800 ppm 100 ppm	5/[22] <10 to 600 ppm 20 ppm [133]			<10 to 250 ppm 40 ppm [48]	<10 to 30 ppm 23 ppm [5]		<10 to 100 ppm <10 to 10 ppm [126]	<10 to 150 ppm 10 ppm [153]
Copper	<10 to 20 ppm <10 ppm [22]	<20 to 300 ppm <20 ppm [129]		<20 to 100 ppm 50 ppm [8]	<10 to 50 ppm 40 ppm [48]	<20 to 35 ppm <20 ppm [5]			<20 to 150 ppm 20 ppm [153]
Equivalent uranium		<0.001 to .81% 0.005% [137]			0.001 to 0.004% 0.002% [34]	0.001 to 0.006% 0.004% [5]			
Field radiometry					0.004 to 0.014 Mr/hr 0.0075 Mr/hr [34]			0.01 to 0.044 Mr/hr 0.015 Mr/hr [126]	0.008 to 0.08 Mr/hr 0.0165 Mr/hr [120]
Iron	0.4 to 17.4% 2.0% [22]	0.05 to 19.00% 0.6% [128]	0.1 to 5.3% 0.7% [35][350]	0.1 to 8.5% 2.2% [8]	0.8 to 7.3% 1.6% [48]	0.4 to 1.1% 0.73% [5]		0.7 to 4.5% 1.8% [126]	0.6 to 4.5% 1.5% [153]
Lead	<10 to 20 ppm 10 ppm [3]	<10 to 50 ppm <10 ppm [24]				<10 to 10 ppm <10 ppm [3]			
Manganese	60 to 50,000 ppm 400 ppm [22]	<250 to 100,000 ppm 5,000 ppm [130]			100 to 15,000 ppm 500 ppm [48]	800 to 6,300 ppm 1,900 ppm [5]	<50 to 500 ppm 100 ppm [78]	<50 to 600 ppm 150 ppm [126]	<50 to 750 ppm 250 ppm [153]
pH	5.5 to 8.2 7.4 [22]	7.5 to 9.2 8.2 [28]			5.5 to 7.7 6.7 [34]	7.5 to 8.2 7.8 [3]	4.8 to 8.0 6.9 [151]	5.2 to 7.9 7.0 [120]	4.9 to 8.4 6.7 [153]
Selenium	<2 to 10 ppm <2 ppm [22]				<2 to 20 ppm 3 ppm [48]				
Titanium dioxide		<0.5 to 0.7% <0.5% [13]				<0.5 to 0.5% 0.5% [3]			
Vanadium	<0.03 to 2.0% 0.12% [22]	<0.03 to 2.4% 0.15% [133]	<0.03 to 0.4% <0.03% [350]	<0.03 to 0.15% 0.03% [7]	0.06 to 0.50% 0.15% [48]	0.03 to 0.13% 0.07% [5]		0.03 to 0.5% 0.1% [126]	<0.03 to 0.5% 0.06% [153]
Uranium		3 to 6,000 ppm 50 ppm [73]	<2 to 10,000 ppm <2 [891]	8 to 900 ppm 345 ppm [8]	0.5 to 8.4 ppm 1.6 ppm [34]	10 to 85 ppm 18 ppm [5]	0.1 to 5,600 ppm ^{6/} 0.7 ppm [353]		0.4 to 175 ppm 1.2 ppm [69]
Zinc	10 to 70 ppm 20 ppm [22]	<10 to 250 ppm 20 ppm [129]		<20 to 50 ppm 10 ppm [8]	<10 to 130 ppm 50 ppm [48]	<20 to 50 ppm <20 ppm [15]		20 to 80 ppm 50 ppm [126]	<10 to 80 ppm 40 ppm [153]

1/ Molybdenum ranges from 12 to 20 ppm, median 14 ppm [4]; tungsten ranges from <20 to 80 ppm, median <20 to 60 ppm [4]

2/ Cobalt ranges from <10 to 10 ppm, median <10 ppm, [11]; CO₂ ranges from 0.02 to 5.83% [11]; molybdenum ranges from <1 to 8 ppm, median <1 ppm, [11]; nickel ranges from <10 to 50 ppm, median 15 ppm, [11]; tungsten <10 ppm [11]

3/ Range in various units.

4/ Median value.

5/ Number of samples.

6/ The high value is due to a spillage of carnotite on the soil.

