

Table 1. ²³⁸Uranium concentration in the air and surface water samples

| Sample | Weight (g) | ²³⁸ U Conc (µg/g) | RSD (%) | ²³⁸ U activity (Bq/g) |
|---------|------------|------------------------------|---------|----------------------------------|
| Air-1 | 11.9347 | 0.0154 | 0.22 | 1.91E-04 |
| Air-2 | 11.9071 | 0.0204 | 0.54 | 2.54E-04 |
| Air-3 | 12.0610 | 0.0087 | 0.47 | 1.08E-04 |
| Air-4 | 11.9987 | 0.0092 | 1.31 | 1.14E-04 |
| Air-5 | 12.0453 | 0.0062 | 1.88 | 7.75E-05 |
| Air-6 | 12.0314 | 0.0038 | 1.52 | 4.74E-05 |
| Air-7 | 12.1036 | 0.0077 | 1.76 | 9.53E-05 |
| Air-8 | 12.0370 | 0.0038 | 2.40 | 4.67E-05 |
| Air-9 | 12.0093 | 0.0039 | 1.53 | 4.84E-05 |
| Air-10 | 12.0198 | 0.0051 | 0.78 | 6.35E-05 |
| Water-1 | 20.0000 | 0.0335 | 2.77 | 4.17E-04 |
| Water-2 | 20.0000 | 0.0281 | 2.59 | 3.49E-04 |
| Water-3 | 20.0000 | 0.0057 | 1.43 | 7.11E-05 |
| Water-4 | 20.0000 | 0.020 | 0.38 | 2.49E-04 |
| Water-5 | 20.0000 | 0.006 | 1.75 | 7.43E-05 |

Table 2. ²³⁸Uranium concentration in the cement samples

| Sample | ²³⁸ U Conc (µg/g) | RSD (%) | ²³⁸ U activity (Bq/g) |
|---------|------------------------------|---------|----------------------------------|
| 2-top | 0.8420 | 2.66 | 1.0E-02 |
| 3-top | 0.6228 | 3.23 | 7.7E-03 |
| 4-top | 0.7364 | 0.74 | 9.1E-03 |
| 5-top | 0.9785 | 2.65 | 1.2E-02 |
| 6-top | 0.7389 | 1.88 | 9.1E-03 |
| 8-top | 0.7607 | 2.20 | 9.4E-03 |
| 9-1 top | 0.6177 | 0.89 | 7.6E-03 |
| 9-2 top | 0.5972 | 1.36 | 7.4E-03 |
| 9-3 top | 0.5714 | 0.28 | 7.1E-03 |
| 10-top | 0.9793 | 2.75 | 1.2E-02 |
| 12-top | 1.2717 | 2.75 | 1.6E-02 |
| 13-top | 0.6152 | 2.68 | 7.6E-03 |
| 14-top | 0.6405 | 1.91 | 7.9E-03 |
| 15-top | 1.1742 | 1.87 | 1.4E-02 |
| 18-top | 0.8649 | 3.20 | 1.1E-02 |
| 19-top | 0.9120 | 3.96 | 1.1E-02 |
| 20-top | 1.0644 | 3.58 | 1.3E-02 |

Table 3. ²³⁴, ²⁴⁵, ²³⁸ Uranium concentration in the soil samples

| Sample | ²³⁸ U Conc (µg/g) | ²³⁴ U Ratio (%) | ²³⁵ U Ratio (%) | ²³⁸ U Ratio (%) | ²³⁴ U activity (Bq/g) | ²³⁵ U activity (Bq/g) | ²³⁸ U activity (Bq/g) | Contamination rate (times) |
|-----------|------------------------------|----------------------------|----------------------------|----------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------|
| STD | - | 0.0055 | 0.720 | 99.275 | - | - | - | - |
| 1-top | 2.8020 | 0.006 | 0.68 | 99.32 | 4.0E-02 | 1.5E-03 | 3.5E-02 | 0.14 |
| 1-bottom | 2.4329 | 0.006 | 0.70 | 99.30 | 3.3E-02 | 1.4E-03 | 3.0E-02 | 0.09 |
| 2-bottom | 0.4791 | 0.009 | 0.72 | 99.27 | 1.0E-02 | 2.8E-04 | 5.9E-03 | 0.05 |
| 3-bottom | 0.7093 | 0.008 | 0.67 | 99.32 | 1.3E-02 | 3.8E-04 | 8.8E-03 | 0.16 |
| 4-bottom | 0.4100 | 0.011 | 0.72 | 99.27 | 1.0E-02 | 2.4E-04 | 5.1E-03 | 0.05 |
| 5-bottom | 0.6724 | 0.009 | 0.72 | 99.27 | 1.4E-02 | 3.9E-04 | 8.3E-03 | 0.05 |
| 6-bottom | 0.6074 | 0.010 | 0.73 | 99.27 | 1.3E-02 | 3.5E-04 | 7.5E-03 | 0.03 |
| 7-top | 1.3769 | 0.003 | 0.35 | 99.64 | 1.1E-02 | 3.9E-04 | 1.7E-02 | 2.63 |
| 7-bottom | 0.7505 | 0.006 | 0.50 | 99.50 | 1.1E-02 | 3.0E-04 | 9.3E-03 | 0.82 |
| 8-bottom | 0.9112 | 0.008 | 0.69 | 99.30 | 1.7E-02 | 5.0E-04 | 1.1E-02 | 0.11 |
| 9-bottom | 0.6219 | 0.009 | 0.70 | 99.29 | 1.2E-02 | 3.5E-04 | 7.7E-03 | 0.09 |
| 10-bottom | 0.6323 | 0.007 | 0.73 | 99.26 | 9.7E-03 | 3.7E-04 | 7.8E-03 | 0.03 |
| 11-top | 9.9945 | 0.002 | 0.25 | 99.75 | 4.6E-02 | 2.0E-03 | 1.2E-01 | 9.94 |
| 11-bottom | 0.5894 | 0.008 | 0.68 | 99.31 | 1.1E-02 | 3.2E-04 | 7.3E-03 | 0.14 |
| 12-bottom | 0.7387 | 0.008 | 0.72 | 99.27 | 1.4E-02 | 4.2E-04 | 9.1E-03 | 0.05 |
| 13-bottom | 0.5367 | 0.009 | 0.69 | 99.30 | 1.1E-02 | 3.0E-04 | 6.6E-03 | 0.11 |
| 14-bottom | 0.7893 | 0.007 | 0.74 | 99.25 | 1.3E-02 | 4.7E-04 | 9.7E-03 | 0.01 |
| 15-bottom | 0.5869 | 0.007 | 0.72 | 99.28 | 9.9E-03 | 3.4E-04 | 7.2E-03 | 0.05 |
| 16-top | 10.9251 | 0.001 | 0.23 | 99.77 | 2.5E-02 | 2.0E-03 | 1.4E-01 | 17.32 |
| 16-bottom | 6.4610 | 0.002 | 0.24 | 99.76 | 3.0E-02 | 1.3E-03 | 8.0E-02 | 12.70 |
| 17-top | 6.1386 | 0.002 | 0.25 | 99.75 | 2.8E-02 | 1.2E-03 | 7.6E-02 | 9.94 |
| 17-bottom | 0.9417 | 0.007 | 0.54 | 99.46 | 1.5E-02 | 4.0E-04 | 1.2E-02 | 0.60 |
| 18-bottom | 0.2193 | 0.012 | 0.73 | 99.26 | 5.8E-03 | 1.3E-04 | 2.7E-03 | 0.03 |
| 19-bottom | 1.2182 | 0.003 | 0.40 | 99.60 | 8.7E-03 | 3.9E-04 | 1.5E-02 | 1.72 |
| 20-bottom | 0.4533 | 0.008 | 0.71 | 99.28 | 8.1E-03 | 2.6E-04 | 5.6E-03 | 0.07 |