

**TABLE 1D**  
**Screening of Inorganic Chemicals in RZ-E Using LBCLs and LSSLs**

| Parameter of Interest | Chemical Name    | Depth Interval | Count | Detection Count | Detection Frequency | Maximum Detection (mg/kg) | Count of Detections Above RBGC in Groundwater <sup>5</sup> | LBCL (DAF 1) <sup>3</sup> (mg/kg) | Detections > LBCL <sup>6</sup> (DAF 1) | LBCL (DAF 20) <sup>3</sup> (mg/kg) | Detections > LBCL <sup>6</sup> (DAF 20) | LSSL <sup>4</sup> (mg/kg) | Total Detections > LSSL <sup>6</sup> |
|-----------------------|------------------|----------------|-------|-----------------|---------------------|---------------------------|------------------------------------------------------------|-----------------------------------|----------------------------------------|------------------------------------|-----------------------------------------|---------------------------|--------------------------------------|
| <b>Metals</b>         | Arsenic          | 0 - 2 ft       | 19    | 19              | 100%                | 385                       | 96                                                         | 1.0E+00                           | 18                                     | 2.0E+01                            | 4                                       | 4.6E+01                   | 1                                    |
|                       | Arsenic          | 2 - 10 ft      | 17    | 17              | 100%                | 5                         |                                                            | 1.0E+00                           | 17                                     | 2.0E+01                            | 0                                       | 4.6E+01                   | 0                                    |
|                       | Barium           | 0 - 10 ft      | 36    | 36              | 100%                | 685                       | 0                                                          | 8.2E+01                           | 35                                     | 1.6E+03                            | 0                                       | 2.4E+04                   | 0                                    |
|                       | Boron            | 0 - 10 ft      | 36    | 17              | 47%                 | 113                       | 18                                                         | 2.3E+01                           | 8                                      | 4.7E+02                            | 0                                       | 4.0E+03                   | 0                                    |
|                       | Chromium (Total) | 0 - 2 ft       | 19    | 19              | 100%                | 1470                      | 48                                                         | 2.0E+00                           | 19                                     | 4.0E+01                            | 8                                       | 3.8E+03                   | 0                                    |
|                       | Chromium (Total) | 2 - 10 ft      | 17    | 17              | 100%                | 26.4                      |                                                            | 2.0E+00                           | 17                                     | 4.0E+01                            | 0                                       | 3.8E+03                   | 0                                    |
|                       | Chromium (VI)    | 0 - 10 ft      | 36    | 21              | 58%                 | 37                        | 46                                                         | 2.0E+00                           | 9                                      | 4.0E+01                            | 0                                       | 6.4E+02                   | 0                                    |
|                       | Cobalt           | 0 - 10 ft      | 36    | 36              | 100%                | 63                        | 6                                                          | 4.9E-01                           | 36                                     | 9.9E+00                            | 15                                      | 8.6E+01                   | 0                                    |
|                       | Copper           | 0 - 10 ft      | 36    | 36              | 100%                | 446                       | 0                                                          | 4.6E+01                           | 9                                      | 9.2E+02                            | 0                                       | NC                        | 0                                    |
|                       | Lead             | 0 - 10 ft      | 36    | 36              | 100%                | 2210                      | 2                                                          | 1.4E+01                           | 18                                     | 2.7E+02                            | 5                                       | 3.2E+03                   | 0                                    |
|                       | Magnesium        | 0 - 2 ft       | 19    | 19              | 100%                | 48000                     | 49                                                         | 9.7E+02                           | 19                                     | 1.9E+04                            | 4                                       | 6.0E+04                   | 0                                    |
|                       | Manganese        | 0 - 10 ft      | 36    | 36              | 100%                | 13800                     | 18                                                         | 3.3E+01                           | 36                                     | 6.7E+02                            | 12                                      | 2.4E+03                   | 5                                    |
|                       | Molybdenum       | 0 - 2 ft       | 19    | 19              | 100%                | 11                        | 2                                                          | 3.6E+00                           | 5                                      | 7.3E+01                            | 0                                       | 1.7E+03                   | 0                                    |
|                       | Nickel           | 0 - 10 ft      | 36    | 36              | 100%                | 85                        | 0                                                          | 7.0E+00                           | 36                                     | 1.4E+02                            | 0                                       | 3.0E+05                   | 0                                    |
|                       | Selenium         | 0 - 10 ft      | 36    | 8               | 22%                 | 4                         | 0                                                          | 3.0E-01                           | 8                                      | 6.0E+00                            | 0                                       | NC                        | 0                                    |
| Silver                | 0 - 10 ft        | 36             | 14    | 39%             | 3                   | 0                         | 1.6E+00                                                    | 2                                 | 3.1E+01                                | 0                                  | NC                                      | 0                         |                                      |
| Thallium              | 0 - 10 ft        | 36             | 32    | 89%             | 1                   | 0                         | 4.0E-01                                                    | 8                                 | 8.0E+00                                | 0                                  | 6.4E+01                                 | 0                         |                                      |
| <b>Perchlorate</b>    | Perchlorate      | 0 - 10 ft      | 36    | 35              | 97%                 | 22800                     | 84                                                         | 3.6E-03                           | 35                                     | 7.2E-02                            | 35                                      | 4.2E-02                   | 35                                   |
|                       | Perchlorate      | 10 ft - UMcF   | 15    | 15              | 100%                | 295                       |                                                            | 3.6E-03                           | 15                                     | 7.2E-02                            | 15                                      | 4.2E-02                   | 15                                   |

Notes:

- 1 - Shading indicates that the chemical is screened out from further evaluation.
- 2 - Metals shown for only the depth intervals which exceed background based on the comparison with the RZ-A dataset (see Attachment 2 Table 2D) and exceed the LBCL for DAF=1.
- 3 - The generic LBCL is used for chemicals without an established LBCL. Where applicable, the adjusted LBCL is used based on the NDEP approved hierarchy for RBGCs (See Attachment 3 Table 2A).
- 4 - LSSLs are calculated for chemicals with at least one detection greater than the LBCL (DAF=20) in any remediation zone. They are based on an infiltration=0.14 ft/y and an foc=0.001.
- 5 - Groundwater exceedances are based on the highest result from each well sampled during Site-wide Phase B investigations.
- 6 - Soil statistics use Phase A and Phase B investigation data. Normal environmental samples and field duplicates are treated as independent samples.

Abbreviations:

DAF = Dilution attenuation factor (NDEP, 2009)  
 LBCL = Leaching-based, basic comparison level (NDEP, 2009)  
 LSSL = Leaching-based, site-specific level (NDEP, 2009)  
 NC = LSSL not calculated  
 RBGC = Risk-based groundwater concentration  
 mg/kg = milligrams per kilogram