Appendix B:
SEM/AVS Calculations
Appendix B - Table List

Table B-1. Springbrook Creek Basin Sediment SEM/AVS Calculations
Table B-2. Newaukum Creek Basin Sediment SEM/AVS Calculations
Table B-3. Soos Creek Basin Sediment SEM/AVS Calculations
Table B-4. Green River Basin Sediment SEM/AVS Calculations 2012

List of Lab and Data Qualifying Acronyms

<RDL> Less than reporting detection limit
<MDL> Less than method detection limit
J   Estimated value
JG  Estimated value, probable low bias
U   Not detected
### Appendix B: Example SEM/AVS Calculations

Simultaneously Extracted Metals (SEM) and Acid Volatile Sulfides (AVS) Ratio Calculations

\[
\text{SEM/AVS} = \frac{(\text{Cd} + \text{Cu} + \text{Pb} + \text{Ni} + 2\text{Ag}^a + \text{Zn}) \text{ Molar Concentration}}{\text{AVS Molar Concentration}}
\]

*\text{Moles of silver are multiplied by two because silver binds twice to AVS.}

Metal Concentration ÷ Molecular Weight = Molar Concentration

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
<th>Lab Qual</th>
<th>MDL</th>
<th>RDL</th>
<th>Units</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cadmium, Extractable, SEM</td>
<td></td>
<td>&lt;MDL</td>
<td>0.11</td>
<td>0.575</td>
<td>mg/Kg</td>
<td>Concentration found</td>
</tr>
<tr>
<td>Cadmium, Molecular Weight</td>
<td>112.41</td>
<td></td>
<td></td>
<td></td>
<td>mg/mmol</td>
<td>Molecular Weight</td>
</tr>
<tr>
<td>Cadmium, Extractable, SEM</td>
<td>ND</td>
<td></td>
<td>0.00098</td>
<td>0.00512</td>
<td>mmol/Kg</td>
<td>Calculated Molar Concentration</td>
</tr>
<tr>
<td>Copper, Extractable, SEM</td>
<td>17.2</td>
<td></td>
<td>0.23</td>
<td>1.15</td>
<td>mg/Kg</td>
<td>&quot;</td>
</tr>
<tr>
<td>Copper, Molecular Weight</td>
<td>63.55</td>
<td></td>
<td></td>
<td></td>
<td>mg/mmol</td>
<td>&quot;</td>
</tr>
<tr>
<td>Copper, Extractable, SEM</td>
<td>0.271</td>
<td></td>
<td>0.0036</td>
<td>0.0181</td>
<td>mmol/Kg</td>
<td>&quot;</td>
</tr>
<tr>
<td>Lead, Extractable, SEM</td>
<td>6.3</td>
<td></td>
<td>1.1</td>
<td>5.75</td>
<td>mg/Kg</td>
<td>&quot;</td>
</tr>
<tr>
<td>Lead, Molecular Weight</td>
<td>207.2</td>
<td></td>
<td></td>
<td></td>
<td>mg/mmol</td>
<td>&quot;</td>
</tr>
<tr>
<td>Lead, Extractable, SEM</td>
<td>0.030</td>
<td></td>
<td>0.0053</td>
<td>0.0278</td>
<td>mmol/Kg</td>
<td>&quot;</td>
</tr>
<tr>
<td>Nickel, Extractable, SEM</td>
<td>5.38</td>
<td></td>
<td>0.28</td>
<td>1.44</td>
<td>mg/Kg</td>
<td>&quot;</td>
</tr>
<tr>
<td>Nickel, Molecular Weight</td>
<td>58.69</td>
<td></td>
<td></td>
<td></td>
<td>mg/mmol</td>
<td>&quot;</td>
</tr>
<tr>
<td>Nickel, Extractable, SEM</td>
<td>0.0917</td>
<td></td>
<td>0.0048</td>
<td>0.0245</td>
<td>mmol/Kg</td>
<td>&quot;</td>
</tr>
<tr>
<td>Silver, Extractable, SEM</td>
<td></td>
<td>&lt;MDL</td>
<td>0.23</td>
<td>1.15</td>
<td>mg/Kg</td>
<td>&quot;</td>
</tr>
<tr>
<td>Silver, Molecular Weight</td>
<td>107.87</td>
<td></td>
<td></td>
<td></td>
<td>mg/mmol</td>
<td>&quot;</td>
</tr>
<tr>
<td>Silver, Extractable, SEM</td>
<td>ND</td>
<td></td>
<td>0.0021</td>
<td>0.0107</td>
<td>mmol/Kg</td>
<td>&quot;</td>
</tr>
<tr>
<td>Zinc, Extractable, SEM</td>
<td>25.6</td>
<td></td>
<td>0.28</td>
<td>1.44</td>
<td>mg/Kg</td>
<td>&quot;</td>
</tr>
<tr>
<td>Zinc, Molecular Weight</td>
<td>65.38</td>
<td></td>
<td></td>
<td></td>
<td>mg/mmol</td>
<td>&quot;</td>
</tr>
<tr>
<td>Zinc, Extractable, SEM</td>
<td>0.392</td>
<td></td>
<td>0.0043</td>
<td>0.0220</td>
<td>mmol/Kg</td>
<td>&quot;</td>
</tr>
<tr>
<td>Total SEM</td>
<td>0.78</td>
<td></td>
<td></td>
<td></td>
<td>mmol/Kg</td>
<td>Summed Total Molar Concentration</td>
</tr>
<tr>
<td>Acid Volatile Sulfide (AVS)</td>
<td>39.9</td>
<td>JG</td>
<td>3.7</td>
<td>14.2</td>
<td>mg/Kg</td>
<td>Concentration found</td>
</tr>
<tr>
<td>Sulfide, Molecular Weight</td>
<td>32.06</td>
<td></td>
<td></td>
<td></td>
<td>mg/mmol</td>
<td>Molecular Weight</td>
</tr>
<tr>
<td>Acid Volatile Sulfide (AVS)</td>
<td>1.24</td>
<td></td>
<td>0.12</td>
<td>0.443</td>
<td>mmol/Kg</td>
<td>Calculated Molar Concentration</td>
</tr>
</tbody>
</table>

\[
\text{SEM/AVS} = \frac{(\text{Cd} + \text{Cu} + \text{Pb} + \text{Ni} + 2\text{Ag}^a + \text{Zn}) \text{ Molar Concentration}}{\text{AVS Molar Concentration}}
\]

White rows are measured values, blue rows are conversion factors and green rows are calculated values.

- If SEM/AVS > 1, there is not enough AVS to sequester all metals. **Metals are bioavailable.**
- If SEM/AVS < 1, there is enough AVS to sequester all metals. **Metals are NOT bioavailable.**

NOTE:
If AVS is below detection limits (MDL), then metals are assumed bioavailable as they are not sequestered by AVS.
Table B-1: Springbrook Creek Basin Sediment SEM/AVS Calculations

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Value</th>
<th>Lab Qual</th>
<th>MDL</th>
<th>RDL</th>
<th>Units</th>
<th>Value</th>
<th>Lab Qual</th>
<th>MDL</th>
<th>RDL</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cadmium, Extractable, SEM</td>
<td>1.11</td>
<td>—</td>
<td>0.082</td>
<td>0.412</td>
<td>mg/Kg</td>
<td>1.82</td>
<td>—</td>
<td>0.12</td>
<td>0.598</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Cadmium, Molecular Weight</td>
<td>112.41</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>112.41</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Cadmium, Extractable, SEM</td>
<td>0.00987</td>
<td>—</td>
<td>0.00073</td>
<td>0.00367</td>
<td>mmol/Kg</td>
<td>0.0162</td>
<td>—</td>
<td>0.0011</td>
<td>0.00532</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Copper, Extractable, SEM</td>
<td>17.9</td>
<td>—</td>
<td>0.16</td>
<td>0.825</td>
<td>mg/Kg</td>
<td>25</td>
<td>—</td>
<td>0.24</td>
<td>1.2</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Copper, Molecular Weight</td>
<td>63.55</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>63.55</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Copper, Extractable, SEM</td>
<td>0.282</td>
<td>—</td>
<td>0.0025</td>
<td>0.0130</td>
<td>mmol/Kg</td>
<td>0.39</td>
<td>—</td>
<td>0.0038</td>
<td>0.0189</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Lead, Extractable, SEM</td>
<td>19.4</td>
<td>—</td>
<td>0.82</td>
<td>4.12</td>
<td>mg/Kg</td>
<td>22.2</td>
<td>—</td>
<td>2.4</td>
<td>12</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Lead, Molecular Weight</td>
<td>207.2</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>207.2</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Lead, Extractable, SEM</td>
<td>0.0936</td>
<td>—</td>
<td>0.0040</td>
<td>0.0199</td>
<td>mmol/Kg</td>
<td>0.107</td>
<td>—</td>
<td>0.012</td>
<td>0.058</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Nickel, Extractable, SEM</td>
<td>5.11</td>
<td>—</td>
<td>0.21</td>
<td>1.03</td>
<td>mg/Kg</td>
<td>4.11</td>
<td>—</td>
<td>0.6</td>
<td>2.99</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Nickel, Molecular Weight</td>
<td>58.69</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>58.69</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Nickel, Extractable, SEM</td>
<td>0.0871</td>
<td>—</td>
<td>0.0036</td>
<td>0.0175</td>
<td>mmol/Kg</td>
<td>0.0700</td>
<td>—</td>
<td>0.01</td>
<td>0.0509</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Silver, Extractable, SEM</td>
<td>0.27</td>
<td>&lt;RDL</td>
<td>0.16</td>
<td>0.825</td>
<td>mg/Kg</td>
<td>0.33</td>
<td>&lt;RDL</td>
<td>0.24</td>
<td>1.2</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Silver, Molecular Weight</td>
<td>107.87</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>107.87</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Silver, Extractable, SEM</td>
<td>0.0025</td>
<td>—</td>
<td>0.0015</td>
<td>0.00765</td>
<td>mmol/Kg</td>
<td>0.0031</td>
<td>—</td>
<td>0.0022</td>
<td>0.011</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Zinc, Extractable, SEM</td>
<td>109</td>
<td>—</td>
<td>0.21</td>
<td>1.03</td>
<td>mg/Kg</td>
<td>267</td>
<td>—</td>
<td>0.3</td>
<td>1.5</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Zinc, Molecular Weight</td>
<td>65.38</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>65.38</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Zinc, Extractable, SEM</td>
<td>1.67</td>
<td>—</td>
<td>0.0032</td>
<td>0.0158</td>
<td>mmol/Kg</td>
<td>4.08</td>
<td>—</td>
<td>0.005</td>
<td>0.023</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Total SEM</td>
<td>2.1</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mmol/Kg</td>
<td>4.68</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Acid Volatile Sulfide (AVS)</td>
<td>326</td>
<td>JG</td>
<td>13</td>
<td>51.5</td>
<td>mg/Kg</td>
<td>30.5</td>
<td>JG</td>
<td>0.76</td>
<td>3.02</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Sulfide, Molecular Weight</td>
<td>32.06</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>32.06</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Acid Volatile Sulfide (AVS)</td>
<td>10.2</td>
<td>—</td>
<td>0.41</td>
<td>1.61</td>
<td>mmol/Kg</td>
<td>0.951</td>
<td>—</td>
<td>0.024</td>
<td>0.0942</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>SEM/AVS</td>
<td>0.21</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>4.92</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>
Table B-1: Springbrook Creek Basin Sediment SEM/AVS Calculations

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Value</th>
<th>Lab Qual</th>
<th>MDL</th>
<th>RDL</th>
<th>Units</th>
<th>Value</th>
<th>Lab Qual</th>
<th>MDL</th>
<th>RDL</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cadmium, Extractable, SEM</td>
<td>3.78</td>
<td>—</td>
<td>0.21</td>
<td>1.06</td>
<td>mg/Kg</td>
<td>2.45</td>
<td>—</td>
<td>0.37</td>
<td>1.84</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Cadmium, Molecular Weight</td>
<td>112.41</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>112.41</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Cadmium, Extractable, SEM</td>
<td>0.0336</td>
<td>—</td>
<td>0.0019</td>
<td>0.00943</td>
<td>mmol/Kg</td>
<td>0.0218</td>
<td>—</td>
<td>0.0033</td>
<td>0.0164</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Copper, Extractable, SEM</td>
<td>42.1</td>
<td>—</td>
<td>0.43</td>
<td>2.12</td>
<td>mg/Kg</td>
<td>106</td>
<td>—</td>
<td>0.73</td>
<td>3.69</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Copper, Molecular Weight</td>
<td>63.55</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>63.55</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Copper, Extractable, SEM</td>
<td>0.662</td>
<td>—</td>
<td>0.0068</td>
<td>0.0334</td>
<td>mmol/Kg</td>
<td>1.67</td>
<td>—</td>
<td>0.011</td>
<td>0.0581</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Lead, Extractable, SEM</td>
<td>46.2</td>
<td>—</td>
<td>2.1</td>
<td>10.6</td>
<td>mg/Kg</td>
<td>70.7</td>
<td>—</td>
<td>3.7</td>
<td>18.4</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Lead, Molecular Weight</td>
<td>207.2</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>207.2</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Lead, Extractable, SEM</td>
<td>0.223</td>
<td>—</td>
<td>0.010</td>
<td>0.0512</td>
<td>mmol/Kg</td>
<td>0.341</td>
<td>—</td>
<td>0.018</td>
<td>0.0888</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Nickel, Extractable, SEM</td>
<td>7.82</td>
<td>—</td>
<td>0.53</td>
<td>2.65</td>
<td>mg/Kg</td>
<td>16.2</td>
<td>—</td>
<td>0.92</td>
<td>4.61</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Nickel, Molecular Weight</td>
<td>58.69</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>58.69</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Nickel, Extractable, SEM</td>
<td>0.133</td>
<td>—</td>
<td>0.0090</td>
<td>0.0452</td>
<td>mmol/Kg</td>
<td>0.276</td>
<td>—</td>
<td>0.016</td>
<td>0.0785</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Silver, Extractable, SEM</td>
<td>0.48</td>
<td>&lt;RDL</td>
<td>0.43</td>
<td>2.12</td>
<td>mg/Kg</td>
<td>2.4</td>
<td>&lt;RDL</td>
<td>0.73</td>
<td>3.69</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Silver, Molecular Weight</td>
<td>107.87</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>107.87</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Silver, Extractable, SEM</td>
<td>0.0044</td>
<td>—</td>
<td>0.0040</td>
<td>0.0197</td>
<td>mmol/Kg</td>
<td>0.022</td>
<td>—</td>
<td>0.0068</td>
<td>0.0342</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Zinc, Extractable, SEM</td>
<td>478</td>
<td>—</td>
<td>0.53</td>
<td>2.65</td>
<td>mg/Kg</td>
<td>806</td>
<td>—</td>
<td>0.92</td>
<td>4.61</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Zinc, Molecular Weight</td>
<td>65.38</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>65.38</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Zinc, Extractable, SEM</td>
<td>7.31</td>
<td>—</td>
<td>0.0081</td>
<td>0.0405</td>
<td>mmol/Kg</td>
<td>12.3</td>
<td>—</td>
<td>0.014</td>
<td>0.0705</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Total SEM</td>
<td>8.4</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mmol/Kg</td>
<td>14.7</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Acid Volatile Sulfide (AVS)</td>
<td>430</td>
<td>JG</td>
<td>34</td>
<td>133</td>
<td>mg/Kg</td>
<td>121</td>
<td>JG</td>
<td>12</td>
<td>45.9</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Sulfide, Molecular Weight</td>
<td>32.06</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>32.06</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Acid Volatile Sulfide (AVS)</td>
<td>13.4</td>
<td>—</td>
<td>1.1</td>
<td>4.15</td>
<td>mmol/Kg</td>
<td>3.77</td>
<td>—</td>
<td>0.37</td>
<td>1.43</td>
<td>mmol/Kg</td>
</tr>
</tbody>
</table>

**SEM/AVS** 0.62 — — — 3.89 — — —
Table B-1: Springbrook Creek Basin Sediment SEM/AVS Calculations

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Value</th>
<th>Lab Qual</th>
<th>MDL</th>
<th>RDL</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cadmium, Extractable, SEM</td>
<td>1.05</td>
<td>—</td>
<td>0.19</td>
<td>0.943</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Cadmium, Molecular Weight</td>
<td>112.41</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Cadmium, Extractable, SEM</td>
<td>0.00934</td>
<td>—</td>
<td>0.0017</td>
<td>0.00839</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Copper, Extractable, SEM</td>
<td>35</td>
<td>—</td>
<td>0.38</td>
<td>1.89</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Copper, Molecular Weight</td>
<td>63.55</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Copper, Extractable, SEM</td>
<td>0.55</td>
<td>—</td>
<td>0.0060</td>
<td>0.0297</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Lead, Extractable, SEM</td>
<td>39.3</td>
<td>—</td>
<td>1.9</td>
<td>9.43</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Lead, Molecular Weight</td>
<td>207.2</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Lead, Extractable, SEM</td>
<td>0.190</td>
<td>—</td>
<td>0.0092</td>
<td>0.0455</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Nickel, Extractable, SEM</td>
<td>11.3</td>
<td>—</td>
<td>0.47</td>
<td>2.36</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Nickel, Molecular Weight</td>
<td>58.69</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Nickel, Extractable, SEM</td>
<td>0.193</td>
<td>—</td>
<td>0.0080</td>
<td>0.0402</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Silver, Extractable, SEM</td>
<td>—</td>
<td>&lt;MDL</td>
<td>0.38</td>
<td>1.89</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Silver, Molecular Weight</td>
<td>107.87</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Silver, Extractable, SEM</td>
<td>ND</td>
<td>—</td>
<td>0.0035</td>
<td>0.0175</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Zinc, Extractable, SEM</td>
<td>323</td>
<td>—</td>
<td>0.47</td>
<td>2.36</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Zinc, Molecular Weight</td>
<td>65.38</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Zinc, Extractable, SEM</td>
<td>4.94</td>
<td>—</td>
<td>0.0072</td>
<td>0.0361</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Total SEM</td>
<td>5.88</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Acid Volatile Sulfide (AVS)</td>
<td>1140</td>
<td>JG</td>
<td>30</td>
<td>118</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Sulfide, Molecular Weight</td>
<td>32.06</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Acid Volatile Sulfide (AVS)</td>
<td>35.6</td>
<td>—</td>
<td>0.94</td>
<td>3.68</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>SEM/AVS</td>
<td>0.165</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

ND - Nondetect
Table B-2: Newaukum Creek Basin Sediment SEM/AVS Calculations

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Value</th>
<th>Lab Qual</th>
<th>MDL</th>
<th>RDL</th>
<th>Units</th>
<th>Value</th>
<th>Lab Qual</th>
<th>MDL</th>
<th>RDL</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cadmium, Extractable, SEM</td>
<td>—</td>
<td>&lt;MDL</td>
<td>0.067</td>
<td>0.333</td>
<td>mg/Kg</td>
<td>0.16</td>
<td>&lt;RDL</td>
<td>0.11</td>
<td>0.565</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Cadmium, Molecular Weight</td>
<td>112.41</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>112.41</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Cadmium, Extractable, SEM</td>
<td>ND</td>
<td>—</td>
<td>0.00060</td>
<td>0.00296</td>
<td>mmol/Kg</td>
<td>0.0014</td>
<td>—</td>
<td>0.0010</td>
<td>0.00503</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Copper, Extractable, SEM</td>
<td>4.63</td>
<td>0.13</td>
<td>0.666</td>
<td>mg/Kg</td>
<td>7.2</td>
<td>—</td>
<td>0.23</td>
<td>1.13</td>
<td>mg/Kg</td>
<td></td>
</tr>
<tr>
<td>Copper, Molecular Weight</td>
<td>63.55</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>63.55</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Copper, Extractable, SEM</td>
<td>0.0729</td>
<td>0.0020</td>
<td>0.0105</td>
<td>mmol/Kg</td>
<td>0.11</td>
<td>—</td>
<td>0.0036</td>
<td>0.0178</td>
<td>mmol/Kg</td>
<td></td>
</tr>
<tr>
<td>Lead, Extractable, SEM</td>
<td>1.7</td>
<td>&lt;RDL</td>
<td>0.67</td>
<td>3.33</td>
<td>mg/Kg</td>
<td>5.1</td>
<td>&lt;RDL</td>
<td>1.1</td>
<td>5.65</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Lead, Molecular Weight</td>
<td>207.2</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>207.2</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Lead, Extractable, SEM</td>
<td>0.0082</td>
<td>0.0032</td>
<td>0.0161</td>
<td>mmol/Kg</td>
<td>0.025</td>
<td>—</td>
<td>0.0053</td>
<td>0.0273</td>
<td>mmol/Kg</td>
<td></td>
</tr>
<tr>
<td>Nickel, Extractable, SEM</td>
<td>1.92</td>
<td>0.17</td>
<td>0.831</td>
<td>mg/Kg</td>
<td>1.92</td>
<td>—</td>
<td>0.28</td>
<td>1.42</td>
<td>mg/Kg</td>
<td></td>
</tr>
<tr>
<td>Nickel, Molecular Weight</td>
<td>58.69</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>58.69</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Nickel, Extractable, SEM</td>
<td>0.0327</td>
<td>0.0029</td>
<td>0.0142</td>
<td>mmol/Kg</td>
<td>0.0327</td>
<td>—</td>
<td>0.0048</td>
<td>0.0242</td>
<td>mmol/Kg</td>
<td></td>
</tr>
<tr>
<td>Silver, Extractable, SEM</td>
<td>—</td>
<td>&lt;MDL</td>
<td>0.13</td>
<td>0.666</td>
<td>mg/Kg</td>
<td>—</td>
<td>&lt;MDL</td>
<td>0.23</td>
<td>1.13</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Silver, Molecular Weight</td>
<td>107.87</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>107.87</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Silver, Extractable, SEM</td>
<td>ND</td>
<td>—</td>
<td>0.0012</td>
<td>0.00617</td>
<td>mmol/Kg</td>
<td>ND</td>
<td>—</td>
<td>0.0021</td>
<td>0.00105</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Zinc, Extractable, SEM</td>
<td>12.2</td>
<td>0.17</td>
<td>0.831</td>
<td>mg/Kg</td>
<td>34.7</td>
<td>—</td>
<td>0.28</td>
<td>1.42</td>
<td>mg/Kg</td>
<td></td>
</tr>
<tr>
<td>Zinc, Molecular Weight</td>
<td>65.38</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>65.38</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Zinc, Extractable, SEM</td>
<td>0.187</td>
<td>0.0026</td>
<td>0.0127</td>
<td>mmol/Kg</td>
<td>0.531</td>
<td>—</td>
<td>0.0043</td>
<td>0.0217</td>
<td>mmol/Kg</td>
<td></td>
</tr>
<tr>
<td>Total SEM</td>
<td>0.300</td>
<td>—</td>
<td>—</td>
<td>nmol/Kg</td>
<td>0.70</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>nmol/Kg</td>
<td></td>
</tr>
<tr>
<td>Sulfide, Acid Volatile</td>
<td>—</td>
<td>&lt;MDL,JG</td>
<td>0.42</td>
<td>1.66</td>
<td>mg/Kg</td>
<td>—</td>
<td>&lt;MDL,JG</td>
<td>0.71</td>
<td>2.82</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Sulfide, Molecular Weight</td>
<td>32.06</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>32.06</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Sulfide, Acid Volatile</td>
<td>ND</td>
<td>—</td>
<td>0.013</td>
<td>0.0518</td>
<td>mmol/Kg</td>
<td>ND</td>
<td>—</td>
<td>0.022</td>
<td>0.0880</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>SEM/AVS</td>
<td>*</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>*</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

ND - Nondetect; * No detected AVS - metals bioavailable
Table B-2: Newaukum Creek Basin Sediment SEM/AVS Calculations

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Value</th>
<th>Lab Qual</th>
<th>MDL</th>
<th>RDL</th>
<th>Units</th>
<th>Value</th>
<th>Lab Qual</th>
<th>MDL</th>
<th>RDL</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cadmium, Extractable, SEM</td>
<td>0.16</td>
<td>&lt;RDL</td>
<td>0.13</td>
<td>0.662</td>
<td>mg/Kg</td>
<td>0.16</td>
<td>&lt;RDL</td>
<td>0.13</td>
<td>0.662</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Cadmium, Molecular Weight</td>
<td>112.41</td>
<td>—</td>
<td>0.065</td>
<td>0.324</td>
<td>mg/mmol</td>
<td>112.41</td>
<td>—</td>
<td>0.065</td>
<td>0.324</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Cadmium, Extractable, SEM</td>
<td>0.0014</td>
<td>—</td>
<td>0.0012</td>
<td>0.00589</td>
<td>mmol/Kg</td>
<td>0.0208</td>
<td>—</td>
<td>0.0041</td>
<td>0.00589</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Copper, Extractable, SEM</td>
<td>5.1</td>
<td>—</td>
<td>0.26</td>
<td>1.32</td>
<td>mg/Kg</td>
<td>5.1</td>
<td>—</td>
<td>0.26</td>
<td>1.32</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Copper, Molar Weight</td>
<td>63.55</td>
<td>—</td>
<td>0.16</td>
<td>0.809</td>
<td>mg/Kg</td>
<td>63.55</td>
<td>—</td>
<td>0.16</td>
<td>0.809</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Copper, Extractable, SEM</td>
<td>0.080</td>
<td>—</td>
<td>0.0041</td>
<td>0.0208</td>
<td>mmol/Kg</td>
<td>0.080</td>
<td>—</td>
<td>0.0041</td>
<td>0.0208</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Lead, Extractable, SEM</td>
<td>207.2</td>
<td>—</td>
<td>&lt;RDL</td>
<td>1.3</td>
<td>6.62</td>
<td>mg/Kg</td>
<td>207.2</td>
<td>—</td>
<td>&lt;RDL</td>
<td>1.3</td>
</tr>
<tr>
<td>Lead, Molar Weight</td>
<td>0.02</td>
<td>—</td>
<td>0.0063</td>
<td>0.0319</td>
<td>mmol/Kg</td>
<td>0.02</td>
<td>—</td>
<td>0.0063</td>
<td>0.0319</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Nickel, Extractable, SEM</td>
<td>1.5</td>
<td>&lt;RDL</td>
<td>0.33</td>
<td>1.65</td>
<td>mg/Kg</td>
<td>1.5</td>
<td>&lt;RDL</td>
<td>0.33</td>
<td>1.65</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Nickel, Molar Weight</td>
<td>58.69</td>
<td>—</td>
<td>0.26</td>
<td>1.32</td>
<td>mg/Kg</td>
<td>58.69</td>
<td>—</td>
<td>0.26</td>
<td>1.32</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Nickel, Extractable, SEM</td>
<td>0.026</td>
<td>—</td>
<td>0.0056</td>
<td>0.0281</td>
<td>mmol/Kg</td>
<td>0.026</td>
<td>—</td>
<td>0.0056</td>
<td>0.0281</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Silver, Extractable, SEM</td>
<td>107.87</td>
<td>—</td>
<td>&lt;MDL</td>
<td>0.26</td>
<td>1.32</td>
<td>mg/Kg</td>
<td>107.87</td>
<td>—</td>
<td>&lt;MDL</td>
<td>0.26</td>
</tr>
<tr>
<td>Silver, Molar Weight</td>
<td>ND</td>
<td>—</td>
<td>0.0024</td>
<td>0.0122</td>
<td>mmol/Kg</td>
<td>ND</td>
<td>—</td>
<td>0.0024</td>
<td>0.0122</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Silver, Extractable, SEM</td>
<td>41.4</td>
<td>—</td>
<td>0.33</td>
<td>1.65</td>
<td>mg/Kg</td>
<td>41.4</td>
<td>—</td>
<td>0.33</td>
<td>1.65</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Zinc, Extractable, SEM</td>
<td>65.38</td>
<td>—</td>
<td>0.0050</td>
<td>0.0252</td>
<td>mmol/Kg</td>
<td>0.76</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Zinc, Molar Weight</td>
<td>0.633</td>
<td>—</td>
<td>0.0050</td>
<td>0.0252</td>
<td>mmol/Kg</td>
<td>0.633</td>
<td>—</td>
<td>0.0050</td>
<td>0.0252</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Total SEM</td>
<td>0.348</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mmol/Kg</td>
<td>0.348</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Sulfide, Acid Volatile</td>
<td>0.86</td>
<td>&lt;RDL,JG</td>
<td>0.83</td>
<td>3.3</td>
<td>mg/Kg</td>
<td>0.86</td>
<td>&lt;RDL,JG</td>
<td>0.83</td>
<td>3.3</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Sulfide, Molar Weight</td>
<td>32.06</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>32.06</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Sulfide, Acid Volatile</td>
<td>0.027</td>
<td>—</td>
<td>0.026</td>
<td>0.10</td>
<td>mmol/Kg</td>
<td>0.027</td>
<td>—</td>
<td>0.026</td>
<td>0.10</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>SEM/AVS</td>
<td>29</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>29</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

ND - Nondetect; * No detected AVS - metals bioavailable
Table B-2: Newaukum Creek Basin Sediment SEM/AVS Calculations

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Value</th>
<th>Lab Qual</th>
<th>MDL</th>
<th>RDL</th>
<th>Units</th>
<th>Value</th>
<th>Lab Qual</th>
<th>MDL</th>
<th>RDL</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cadmium, Extractable, SEM</td>
<td>0.12</td>
<td>&lt;RDL</td>
<td>0.067</td>
<td>0.331</td>
<td>mg/Kg</td>
<td>0.24</td>
<td>&lt;RDL</td>
<td>0.15</td>
<td>0.727</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Cadmium, Molecular Weight</td>
<td>112.41</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>112.41</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Cadmium, Extractable, SEM</td>
<td>0.0011</td>
<td>—</td>
<td>0.00060</td>
<td>0.00294</td>
<td>mmol/Kg</td>
<td>0.0021</td>
<td>—</td>
<td>0.0013</td>
<td>0.00647</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Copper, Extractable, SEM</td>
<td>4.27</td>
<td>—</td>
<td>0.13</td>
<td>0.663</td>
<td>mg/Kg</td>
<td>12.4</td>
<td>—</td>
<td>0.29</td>
<td>1.46</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Copper, Molecular Weight</td>
<td>63.55</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>63.55</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Copper, Extractable, SEM</td>
<td>0.0672</td>
<td>—</td>
<td>0.0020</td>
<td>0.0104</td>
<td>mmol/Kg</td>
<td>0.195</td>
<td>—</td>
<td>0.0046</td>
<td>0.0230</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Lead, Extractable, SEM</td>
<td>3.47</td>
<td>—</td>
<td>0.67</td>
<td>3.31</td>
<td>mg/Kg</td>
<td>9.6</td>
<td>—</td>
<td>1.5</td>
<td>7.27</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Lead, Molecular Weight</td>
<td>207.2</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>207.2</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Lead, Extractable, SEM</td>
<td>0.0167</td>
<td>—</td>
<td>0.0032</td>
<td>0.0160</td>
<td>mmol/Kg</td>
<td>0.046</td>
<td>—</td>
<td>0.0072</td>
<td>0.0351</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Nickel, Extractable, SEM</td>
<td>0.985</td>
<td>—</td>
<td>0.17</td>
<td>0.828</td>
<td>mg/Kg</td>
<td>2.45</td>
<td>—</td>
<td>0.36</td>
<td>1.82</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Nickel, Molecular Weight</td>
<td>58.69</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>58.69</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Nickel, Extractable, SEM</td>
<td>0.0168</td>
<td>—</td>
<td>0.0029</td>
<td>0.0141</td>
<td>mmol/Kg</td>
<td>0.0417</td>
<td>—</td>
<td>0.0061</td>
<td>0.0310</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Silver, Extractable, SEM</td>
<td>—</td>
<td>&lt;MDL</td>
<td>0.13</td>
<td>0.663</td>
<td>mg/Kg</td>
<td>—</td>
<td>&lt;MDL</td>
<td>0.29</td>
<td>1.46</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Silver, Molecular Weight</td>
<td>107.87</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>107.87</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Silver, Extractable, SEM</td>
<td>ND</td>
<td>—</td>
<td>0.0012</td>
<td>0.00615</td>
<td>mmol/Kg</td>
<td>ND</td>
<td>—</td>
<td>0.0027</td>
<td>0.0135</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Zinc, Extractable, SEM</td>
<td>21</td>
<td>—</td>
<td>0.17</td>
<td>0.828</td>
<td>mg/Kg</td>
<td>48.4</td>
<td>—</td>
<td>0.36</td>
<td>1.82</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Zinc, Molecular Weight</td>
<td>65.38</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>65.38</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Zinc, Extractable, SEM</td>
<td>0.32</td>
<td>—</td>
<td>0.0026</td>
<td>0.0127</td>
<td>mmol/Kg</td>
<td>0.740</td>
<td>—</td>
<td>0.0055</td>
<td>0.0278</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Total SEM</td>
<td>0.42</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mmol/Kg</td>
<td>1.026</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Sulfide, Acid Volatile</td>
<td>16.6</td>
<td>JG</td>
<td>0.42</td>
<td>1.66</td>
<td>mg/Kg</td>
<td>—</td>
<td>&lt;MDL,JG</td>
<td>0.91</td>
<td>3.64</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Sulfide, Molecular Weight</td>
<td>32.06</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>32.06</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Sulfide, Acid Volatile</td>
<td>0.518</td>
<td>—</td>
<td>0.013</td>
<td>0.0518</td>
<td>mmol/Kg</td>
<td>ND</td>
<td>—</td>
<td>0.028</td>
<td>0.114</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>SEM/AVS</td>
<td>0.82</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

ND - Nondetect; * No detected AVS - metals bioavailable
**Table B-2: Newaukum Creek Basin Sediment SEM/AVS Calculations**

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Value</th>
<th>Lab Qual</th>
<th>MDL</th>
<th>RDL</th>
<th>Units</th>
<th>Value</th>
<th>Lab Qual</th>
<th>MDL</th>
<th>RDL</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cadmium, Extractable, SEM</td>
<td>ND</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/Kg</td>
<td>0.012</td>
<td>—</td>
<td>—</td>
<td>0.0086</td>
<td>0.00433 mmol/Kg</td>
</tr>
<tr>
<td>Cadmium, Molecular Weight</td>
<td>2.15</td>
<td>—</td>
<td>0.12</td>
<td>0.619</td>
<td>mg/Kg</td>
<td>5.6</td>
<td>—</td>
<td>0.19</td>
<td>0.971</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Cadmium, Extractable, SEM</td>
<td>0.0338</td>
<td>—</td>
<td>0.0019</td>
<td>0.00974</td>
<td>nmol/Kg</td>
<td>0.088</td>
<td>—</td>
<td>0.0030</td>
<td>0.0153</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Lead, Extractable, SEM</td>
<td>2.2</td>
<td>&lt;RDL</td>
<td>0.62</td>
<td>3.09</td>
<td>mg/Kg</td>
<td>4.4</td>
<td>&lt;RDL</td>
<td>0.97</td>
<td>4.87</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Lead, Molecular Weight</td>
<td>207.2</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>207.2</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Nickel, Extractable, SEM</td>
<td>0.65</td>
<td>&lt;RDL</td>
<td>0.15</td>
<td>0.773</td>
<td>mg/Kg</td>
<td>1.1</td>
<td>&lt;RDL</td>
<td>0.24</td>
<td>1.21</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Nickel, Molecular Weight</td>
<td>58.69</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>58.69</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Nickel, Extractable, SEM</td>
<td>0.011</td>
<td>—</td>
<td>0.0026</td>
<td>0.0132</td>
<td>nmol/Kg</td>
<td>0.019</td>
<td>—</td>
<td>0.0041</td>
<td>0.0206</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Silver, Extractable, SEM</td>
<td>—</td>
<td>&lt;MDL</td>
<td>0.12</td>
<td>0.619</td>
<td>mg/Kg</td>
<td>—</td>
<td>&lt;MDL</td>
<td>0.97</td>
<td>4.87</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Silver, Molecular Weight</td>
<td>107.87</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>107.87</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Silver, Extractable, SEM</td>
<td>ND</td>
<td>—</td>
<td>0.0011</td>
<td>0.00574</td>
<td>nmol/Kg</td>
<td>ND</td>
<td>—</td>
<td>0.0090</td>
<td>0.0451</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Zinc, Extractable, SEM</td>
<td>17.3</td>
<td>—</td>
<td>0.15</td>
<td>0.773</td>
<td>mg/Kg</td>
<td>29</td>
<td>—</td>
<td>0.24</td>
<td>1.21</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Zinc, Molecular Weight</td>
<td>65.38</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>65.38</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Zinc, Extractable, SEM</td>
<td>0.265</td>
<td>—</td>
<td>0.0023</td>
<td>0.0118</td>
<td>nmol/Kg</td>
<td>0.44</td>
<td>—</td>
<td>0.0037</td>
<td>0.0185</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Total SEM</td>
<td>0.320</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mmol/Kg</td>
<td>0.57</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Sulfide, Acid Volatile</td>
<td>—</td>
<td>&lt;MDL,JG</td>
<td>0.39</td>
<td>1.54</td>
<td>mg/Kg</td>
<td>—</td>
<td>&lt;MDL,JG</td>
<td>0.61</td>
<td>2.43</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Sulfide, Molecular Weight</td>
<td>32.06</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>32.06</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Sulfide, Acid Volatile</td>
<td>ND</td>
<td>—</td>
<td>0.012</td>
<td>0.0480</td>
<td>nmol/Kg</td>
<td>ND</td>
<td>—</td>
<td>0.019</td>
<td>0.0758</td>
<td>mmol/Kg</td>
</tr>
</tbody>
</table>

**SEM/AVS**

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Value</th>
<th>Lab Qual</th>
<th>MDL</th>
<th>RDL</th>
<th>Units</th>
</tr>
</thead>
</table>
| ND - Nondetect; * No detected AVS - metals bioavailable
### Table B-2: Newaukum Creek Basin Sediment SEM/AVS Calculations

**Project:** 421240C  
**Locator:** QQ322  
**Descrip:** SE 416TH -QUARRY  
**Sample:** L48629-9  
**Matrix:** SE FRSHWTRSED  
**ColDate:** 8/10/09 15:15  
**TotalSolid:** 20.6

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Value</th>
<th>Lab Qual</th>
<th>MDL</th>
<th>RDL</th>
<th>Units</th>
<th>Value</th>
<th>Lab Qual</th>
<th>MDL</th>
<th>RDL</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cadmium, Extractable, SEM</td>
<td>0.28</td>
<td>&lt;RDL</td>
<td>0.19</td>
<td>0.971</td>
<td>mg/Kg</td>
<td>0.12</td>
<td>&lt;RDL</td>
<td>0.1</td>
<td>0.499</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Cadmium, Molecular Weight</td>
<td>112.41</td>
<td></td>
<td></td>
<td></td>
<td>mg/mmol</td>
<td>112.41</td>
<td></td>
<td></td>
<td></td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Cadmium, Extractable, SEM</td>
<td>0.0025</td>
<td></td>
<td>0.0017</td>
<td>0.00864</td>
<td>mmol/Kg</td>
<td>0.0011</td>
<td></td>
<td>0.0009</td>
<td>0.00444</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Copper, Extractable, SEM</td>
<td>15.8</td>
<td></td>
<td>0.39</td>
<td>1.95</td>
<td>mg/Kg</td>
<td>8.82</td>
<td></td>
<td>0.2</td>
<td>0.997</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Copper, Molecular Weight</td>
<td>63.55</td>
<td></td>
<td></td>
<td></td>
<td>mg/mmol</td>
<td>63.55</td>
<td></td>
<td></td>
<td></td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Copper, Extractable, SEM</td>
<td>0.249</td>
<td></td>
<td>0.0061</td>
<td>0.0307</td>
<td>mmol/Kg</td>
<td>0.139</td>
<td></td>
<td>0.003</td>
<td>0.0157</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Lead, Extractable, SEM</td>
<td>6.8</td>
<td>&lt;RDL</td>
<td>1.9</td>
<td>9.71</td>
<td>mg/Kg</td>
<td>3.8</td>
<td>&lt;RDL</td>
<td>1</td>
<td>4.99</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Lead, Molecular Weight</td>
<td>207.2</td>
<td></td>
<td></td>
<td></td>
<td>mg/mmol</td>
<td>207.2</td>
<td></td>
<td></td>
<td></td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Lead, Extractable, SEM</td>
<td>0.033</td>
<td></td>
<td>0.0092</td>
<td>0.0469</td>
<td>mmol/Kg</td>
<td>0.018</td>
<td></td>
<td></td>
<td>0.005</td>
<td>0.0241</td>
</tr>
<tr>
<td>Nickel, Extractable, SEM</td>
<td>2.87</td>
<td></td>
<td>0.49</td>
<td>2.43</td>
<td>mg/Kg</td>
<td>3.16</td>
<td></td>
<td>0.25</td>
<td>1.25</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Nickel, Molecular Weight</td>
<td>58.69</td>
<td></td>
<td></td>
<td></td>
<td>mg/mmol</td>
<td>58.69</td>
<td></td>
<td></td>
<td></td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Nickel, Extractable, SEM</td>
<td>0.0489</td>
<td></td>
<td>0.0083</td>
<td>0.0414</td>
<td>mmol/Kg</td>
<td>0.0538</td>
<td></td>
<td>0.0043</td>
<td>0.0213</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Silver, Extractable, SEM</td>
<td></td>
<td>&lt;MDL</td>
<td>0.39</td>
<td>1.95</td>
<td>mg/Kg</td>
<td></td>
<td>&lt;MDL</td>
<td>0.2</td>
<td>0.997</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Silver, Molecular Weight</td>
<td>107.87</td>
<td></td>
<td></td>
<td></td>
<td>mg/mmol</td>
<td>107.87</td>
<td></td>
<td></td>
<td></td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Silver, Extractable, SEM</td>
<td>ND</td>
<td></td>
<td>0.0036</td>
<td>0.0181</td>
<td>mmol/Kg</td>
<td>ND</td>
<td></td>
<td>0.002</td>
<td>0.00924</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Zinc, Extractable, SEM</td>
<td>54.4</td>
<td></td>
<td>0.49</td>
<td>2.43</td>
<td>mg/Kg</td>
<td>26.6</td>
<td></td>
<td>0.25</td>
<td>1.25</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Zinc, Molecular Weight</td>
<td>65.38</td>
<td></td>
<td></td>
<td></td>
<td>mg/mmol</td>
<td>65.38</td>
<td></td>
<td></td>
<td></td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Zinc, Extractable, SEM</td>
<td>0.832</td>
<td></td>
<td>0.0075</td>
<td>0.0372</td>
<td>mmol/Kg</td>
<td>0.407</td>
<td></td>
<td>0.0038</td>
<td>0.0191</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Total SEM</td>
<td>1.165</td>
<td></td>
<td></td>
<td></td>
<td>mmol/Kg</td>
<td>0.619</td>
<td></td>
<td></td>
<td></td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Sulfide, Acid Volatile</td>
<td>17.6</td>
<td>JG</td>
<td>1.2</td>
<td>4.85</td>
<td>mg/Kg</td>
<td>—</td>
<td>&lt;MDL,JG</td>
<td>0.63</td>
<td>2.49</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Sulfide, Molecular Weight</td>
<td>32.06</td>
<td></td>
<td></td>
<td></td>
<td>mg/mmol</td>
<td>32.06</td>
<td></td>
<td></td>
<td></td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Sulfide, Acid Volatile</td>
<td>0.549</td>
<td></td>
<td>0.037</td>
<td>0.151</td>
<td>mmol/Kg</td>
<td>ND</td>
<td></td>
<td>0.020</td>
<td>0.0777</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>SEM/AVS</td>
<td>2.12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

ND - Nondetect; * No detected AVS - metals bioavailable
Table B-3: Soos Creek Basin Sediment SEM/AVS Calculations

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Value</th>
<th>Lab Qual</th>
<th>MDL (mg/Kg)</th>
<th>RDL (mg/Kg)</th>
<th>Units</th>
<th>Value</th>
<th>Lab Qual</th>
<th>MDL (mg/Kg)</th>
<th>RDL (mg/Kg)</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cadmium, Extractable, SEM</td>
<td>—</td>
<td>&lt;MDL</td>
<td>0.051</td>
<td>0.257</td>
<td>mg/Kg</td>
<td>—</td>
<td>&lt;MDL</td>
<td>0.06</td>
<td>0.304</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Cadmium, Molecular Weight</td>
<td>112.41</td>
<td>—</td>
<td>—</td>
<td>0.0023</td>
<td>mmol/Kg</td>
<td>112.41</td>
<td>—</td>
<td>0.0005</td>
<td>0.00270</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Copper, Extractable, SEM</td>
<td>1.92</td>
<td>—</td>
<td>0.1</td>
<td>0.514</td>
<td>mg/Kg</td>
<td>3.62</td>
<td>—</td>
<td>0.12</td>
<td>0.607</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Copper, Molecular Weight</td>
<td>63.55</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>63.55</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Nickel, Extractable, SEM</td>
<td>1.27</td>
<td>—</td>
<td>0.13</td>
<td>0.644</td>
<td>mg/Kg</td>
<td>2.77</td>
<td>—</td>
<td>0.15</td>
<td>0.758</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Nickel, Molecular Weight</td>
<td>58.69</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>58.69</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Silver, Extractable, SEM</td>
<td>0.0216</td>
<td>—</td>
<td>0.0022</td>
<td>0.0110</td>
<td>mmol/Kg</td>
<td>0.0472</td>
<td>—</td>
<td>0.0026</td>
<td>0.0129</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Silver, Molecular Weight</td>
<td>107.87</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>107.87</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Zinc, Extractable, SEM</td>
<td>4.77</td>
<td>—</td>
<td>0.13</td>
<td>0.644</td>
<td>mg/Kg</td>
<td>9.2</td>
<td>—</td>
<td>0.15</td>
<td>0.758</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Zinc, Molecular Weight</td>
<td>65.38</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>65.38</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Total SEM</td>
<td>0.13</td>
<td>&lt;MDL,JG</td>
<td>0.0020</td>
<td>0.00985</td>
<td>mmol/Kg</td>
<td>0.26</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Sulfide, Acid Volatile</td>
<td>—</td>
<td>&lt;MDL,JG</td>
<td>0.33</td>
<td>1.29</td>
<td>mg/Kg</td>
<td>—</td>
<td>&lt;MDL,JG</td>
<td>0.39</td>
<td>1.52</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Sulfide, Molecular Weight</td>
<td>32.06</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>32.06</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Sulfide, Acid Volatile</td>
<td>ND</td>
<td>—</td>
<td>0.010</td>
<td>0.0402</td>
<td>mmol/Kg</td>
<td>ND</td>
<td>—</td>
<td>0.012</td>
<td>0.0474</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>SEM/AVS</td>
<td>*</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>*</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

ND - Nondetect; * No detected AVS - metals bioavailable
<table>
<thead>
<tr>
<th>Parameters</th>
<th>Value</th>
<th>Lab Qual</th>
<th>MDL</th>
<th>RDL</th>
<th>Units</th>
<th>Value</th>
<th>Lab Qual</th>
<th>MDL</th>
<th>RDL</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cadmium, Extractable, SEM</td>
<td>—</td>
<td>&lt;MDL</td>
<td>0.052</td>
<td>0.26</td>
<td>mg/Kg</td>
<td>0.2</td>
<td>&lt;RDL</td>
<td>0.11</td>
<td>0.526</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Cadmium, Molecular Weight</td>
<td>112.41</td>
<td>—</td>
<td></td>
<td></td>
<td></td>
<td>112.41</td>
<td>—</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cadmium, Extractable, SEM</td>
<td>ND</td>
<td>0.00046</td>
<td>0.0023</td>
<td>mg/mmol</td>
<td>0.002</td>
<td>—</td>
<td>0.00010</td>
<td>0.00468</td>
<td>mmol/Kg</td>
<td></td>
</tr>
<tr>
<td>Copper, Extractable, SEM</td>
<td>2.6</td>
<td>—</td>
<td>0.1</td>
<td>0.521</td>
<td>mg/Kg</td>
<td>5.63</td>
<td>—</td>
<td>0.21</td>
<td>1.05</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Copper, Molecular Weight</td>
<td>63.55</td>
<td>—</td>
<td></td>
<td></td>
<td>mg/mmol</td>
<td>63.55</td>
<td>—</td>
<td></td>
<td></td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Copper, Extractable, SEM</td>
<td>0.041</td>
<td>—</td>
<td>0.002</td>
<td>0.0082</td>
<td>mmol/Kg</td>
<td>0.0886</td>
<td>—</td>
<td>0.0033</td>
<td>0.0165</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Lead, Extractable, SEM</td>
<td>1.7</td>
<td>&lt;RDL</td>
<td>0.52</td>
<td>2.6</td>
<td>mg/Kg</td>
<td>11.1</td>
<td>—</td>
<td>1.1</td>
<td>5.26</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Lead, Molecular Weight</td>
<td>207.2</td>
<td>—</td>
<td></td>
<td></td>
<td>mg/mmol</td>
<td>207.2</td>
<td>—</td>
<td></td>
<td></td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Lead, Extractable, SEM</td>
<td>0.0082</td>
<td>—</td>
<td>0.0025</td>
<td>0.013</td>
<td>mmol/Kg</td>
<td>0.0536</td>
<td>—</td>
<td>0.0053</td>
<td>0.0254</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Nickel, Extractable, SEM</td>
<td>4.25</td>
<td>—</td>
<td>0.13</td>
<td>0.652</td>
<td>mg/Kg</td>
<td>2.27</td>
<td>—</td>
<td>0.26</td>
<td>1.32</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Nickel, Molecular Weight</td>
<td>58.69</td>
<td>—</td>
<td></td>
<td></td>
<td>mg/mmol</td>
<td>58.69</td>
<td>—</td>
<td></td>
<td></td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Nickel, Extractable, SEM</td>
<td>0.0724</td>
<td>—</td>
<td>0.0022</td>
<td>0.0111</td>
<td>mmol/Kg</td>
<td>0.0387</td>
<td>—</td>
<td>0.0044</td>
<td>0.0225</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Silver, Extractable, SEM</td>
<td>—</td>
<td>&lt;MDL</td>
<td>0.1</td>
<td>0.521</td>
<td>mg/Kg</td>
<td>0.24</td>
<td>&lt;RDL</td>
<td>0.21</td>
<td>1.05</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Silver, Molecular Weight</td>
<td>107.87</td>
<td>—</td>
<td></td>
<td></td>
<td>mg/mmol</td>
<td>107.87</td>
<td>—</td>
<td></td>
<td></td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Silver, Extractable, SEM</td>
<td>ND</td>
<td>0.0009</td>
<td>0.00483</td>
<td>mmol/Kg</td>
<td>0.0022</td>
<td>—</td>
<td>0.0019</td>
<td>0.00973</td>
<td>mmol/Kg</td>
<td></td>
</tr>
<tr>
<td>Zinc, Extractable, SEM</td>
<td>7.34</td>
<td>—</td>
<td>0.13</td>
<td>0.652</td>
<td>mg/Kg</td>
<td>36.4</td>
<td>—</td>
<td>0.26</td>
<td>1.32</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Zinc, Molecular Weight</td>
<td>65.38</td>
<td>—</td>
<td></td>
<td></td>
<td>mg/mmol</td>
<td>65.38</td>
<td>—</td>
<td></td>
<td></td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Zinc, Extractable, SEM</td>
<td>0.112</td>
<td>—</td>
<td>0.0020</td>
<td>0.0100</td>
<td>mmol/Kg</td>
<td>0.557</td>
<td>—</td>
<td>0.0040</td>
<td>0.0202</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Total SEM</td>
<td>0.234</td>
<td>—</td>
<td></td>
<td></td>
<td>mmol/Kg</td>
<td>0.744</td>
<td>—</td>
<td></td>
<td></td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Sulfide, Acid Volatile</td>
<td>—</td>
<td>&lt;MDL,JG</td>
<td>0.33</td>
<td>1.3</td>
<td>mg/Kg</td>
<td>—</td>
<td>&lt;MDL,JG</td>
<td>0.65</td>
<td>2.63</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Sulfide, Molecular Weight</td>
<td>32.06</td>
<td>—</td>
<td></td>
<td></td>
<td>mg/mmol</td>
<td>32.06</td>
<td>—</td>
<td></td>
<td></td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Sulfide, Acid Volatile</td>
<td>ND</td>
<td>0.010</td>
<td>0.041</td>
<td>mmol/Kg</td>
<td>0.020</td>
<td>0.0820</td>
<td>mmol/Kg</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SEM/AVS</td>
<td>*</td>
<td>—</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>—</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

ND - Nondetect; * No detected AVS - metals bioavailable
Table B-3: Soos Creek Basin Sediment SEM/AVS Calculations

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Value</th>
<th>Lab Qual</th>
<th>MDL</th>
<th>RDL</th>
<th>Units</th>
<th>Value</th>
<th>Lab Qual</th>
<th>MDL</th>
<th>RDL</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cadmium, Extractable, SEM</td>
<td>0.69</td>
<td>&lt;RDL</td>
<td>0.44</td>
<td>2.21</td>
<td>mg/Kg</td>
<td>0.15</td>
<td>&lt;RDL</td>
<td>0.11</td>
<td>0.529</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Cadmium, Molecular Weight</td>
<td>112.41</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>112.41</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Cadmium, Extractable, SEM</td>
<td>0.0061</td>
<td>—</td>
<td>0.0039</td>
<td>0.0197</td>
<td>mmol/Kg</td>
<td>0.0013</td>
<td>—</td>
<td>0.0010</td>
<td>0.00471</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Copper, Extractable, SEM</td>
<td>16.3</td>
<td>—</td>
<td>0.88</td>
<td>4.41</td>
<td>mg/Kg</td>
<td>5.48</td>
<td>—</td>
<td>0.21</td>
<td>1.06</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Copper, Molecular Weight</td>
<td>63.55</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>63.55</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Copper, Extractable, SEM</td>
<td>0.256</td>
<td>—</td>
<td>0.014</td>
<td>0.0694</td>
<td>mmol/Kg</td>
<td>0.0862</td>
<td>—</td>
<td>0.0033</td>
<td>0.0167</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Lead, Extractable, SEM</td>
<td>35.5</td>
<td>—</td>
<td>4.4</td>
<td>22.1</td>
<td>mg/Kg</td>
<td>9.47</td>
<td>—</td>
<td>1.1</td>
<td>5.29</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Lead, Molecular Weight</td>
<td>207.2</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>207.2</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Lead, Extractable, SEM</td>
<td>0.171</td>
<td>—</td>
<td>0.021</td>
<td>0.107</td>
<td>mmol/Kg</td>
<td>0.0457</td>
<td>—</td>
<td>0.0053</td>
<td>0.0255</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Nickel, Extractable, SEM</td>
<td>6.81</td>
<td>—</td>
<td>1.1</td>
<td>5.51</td>
<td>mg/Kg</td>
<td>2.07</td>
<td>—</td>
<td>0.26</td>
<td>1.32</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Nickel, Molecular Weight</td>
<td>58.69</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>58.69</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Nickel, Extractable, SEM</td>
<td>0.116</td>
<td>—</td>
<td>0.019</td>
<td>0.0939</td>
<td>mmol/Kg</td>
<td>0.0353</td>
<td>—</td>
<td>0.0044</td>
<td>0.0225</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Silver, Extractable, SEM</td>
<td>0.91</td>
<td>&lt;RDL</td>
<td>0.88</td>
<td>4.41</td>
<td>mg/Kg</td>
<td>—</td>
<td>&lt;MDL</td>
<td>0.21</td>
<td>1.06</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Silver, Molecular Weight</td>
<td>107.87</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>107.87</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Silver, Extractable, SEM</td>
<td>0.0084</td>
<td>—</td>
<td>0.0082</td>
<td>0.0409</td>
<td>mmol/Kg</td>
<td>ND</td>
<td>—</td>
<td>0.0019</td>
<td>0.00983</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Zinc, Extractable, SEM</td>
<td>121</td>
<td>—</td>
<td>1.1</td>
<td>5.51</td>
<td>mg/Kg</td>
<td>40.2</td>
<td>—</td>
<td>0.26</td>
<td>1.32</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Zinc, Molecular Weight</td>
<td>65.38</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>65.38</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Zinc, Extractable, SEM</td>
<td>1.85</td>
<td>—</td>
<td>0.017</td>
<td>0.0843</td>
<td>mmol/Kg</td>
<td>0.615</td>
<td>—</td>
<td>0.0040</td>
<td>0.0202</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Total SEM</td>
<td>2.42</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mmol/Kg</td>
<td>0.783</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Sulfide, Acid Volatile</td>
<td>—</td>
<td>&lt;MDL</td>
<td>2.8</td>
<td>11</td>
<td>mg/Kg</td>
<td>5.96</td>
<td>JG</td>
<td>0.66</td>
<td>2.64</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Sulfide, Molecular Weight</td>
<td>32.06</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>32.06</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Sulfide, Acid Volatile</td>
<td>ND</td>
<td>—</td>
<td>0.087</td>
<td>0.34</td>
<td>mmol/Kg</td>
<td>0.186</td>
<td>—</td>
<td>0.021</td>
<td>0.0823</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>SEM/AVS</td>
<td>*</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>4.21</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

ND - Nondetect; * No detected AVS - metals bioavailable
Table B-3: Soos Creek Basin Sediment SEM/AVS Calculations

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Value</th>
<th>Lab Qual</th>
<th>MDL</th>
<th>RDL</th>
<th>Units</th>
<th>Value</th>
<th>Lab Qual</th>
<th>MDL</th>
<th>RDL</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cadmium, Extractable, SEM</td>
<td>0.088</td>
<td>&lt;RDL</td>
<td>0.059</td>
<td>0.293</td>
<td>mg/Kg</td>
<td>0.13</td>
<td>&lt;RDL</td>
<td>0.12</td>
<td>0.59</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Cadmium, Molecular Weight</td>
<td>112.41</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>112.41</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Cadmium, Extractable, SEM</td>
<td>0.00078</td>
<td>—</td>
<td>0.00052</td>
<td>0.00261</td>
<td>mmol/Kg</td>
<td>0.0012</td>
<td>—</td>
<td>0.0011</td>
<td>0.0052</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Copper, Extractable, SEM</td>
<td>2.43</td>
<td>—</td>
<td>0.12</td>
<td>0.587</td>
<td>mg/Kg</td>
<td>11</td>
<td>—</td>
<td>0.24</td>
<td>1.18</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Copper, Molecular Weight</td>
<td>63.55</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>63.55</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Copper, Extractable, SEM</td>
<td>0.0382</td>
<td>—</td>
<td>0.0019</td>
<td>0.00924</td>
<td>mmol/Kg</td>
<td>0.17</td>
<td>—</td>
<td>0.0038</td>
<td>0.0186</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Lead, Extractable, SEM</td>
<td>3.88</td>
<td>—</td>
<td>0.59</td>
<td>2.93</td>
<td>mg/Kg</td>
<td>13.7</td>
<td>—</td>
<td>1.2</td>
<td>5.9</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Lead, Molecular Weight</td>
<td>207.2</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>207.2</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Lead, Extractable, SEM</td>
<td>0.0187</td>
<td>—</td>
<td>0.0028</td>
<td>0.0141</td>
<td>mmol/Kg</td>
<td>0.0661</td>
<td>—</td>
<td>0.0058</td>
<td>0.028</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Nickel, Extractable, SEM</td>
<td>1.13</td>
<td>—</td>
<td>0.15</td>
<td>0.733</td>
<td>mg/Kg</td>
<td>6.71</td>
<td>—</td>
<td>0.29</td>
<td>1.47</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Nickel, Molecular Weight</td>
<td>58.69</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>58.69</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Nickel, Extractable, SEM</td>
<td>0.0193</td>
<td>—</td>
<td>0.0026</td>
<td>0.0125</td>
<td>mmol/Kg</td>
<td>0.114</td>
<td>—</td>
<td>0.0049</td>
<td>0.0250</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Silver, Extractable, SEM</td>
<td>—</td>
<td>&lt;MDL</td>
<td>0.12</td>
<td>0.587</td>
<td>mg/Kg</td>
<td>—</td>
<td>&lt;MDL</td>
<td>0.24</td>
<td>1.18</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Silver, Molecular Weight</td>
<td>107.87</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>107.87</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Silver, Extractable, SEM</td>
<td>ND</td>
<td>0.0011</td>
<td>0.00544</td>
<td>mmol/Kg</td>
<td>ND</td>
<td>—</td>
<td>0.0022</td>
<td>0.0109</td>
<td>mmol/Kg</td>
<td></td>
</tr>
<tr>
<td>Zinc, Extractable, SEM</td>
<td>13.8</td>
<td>—</td>
<td>0.15</td>
<td>0.733</td>
<td>mg/Kg</td>
<td>26</td>
<td>—</td>
<td>0.29</td>
<td>1.47</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Zinc, Molecular Weight</td>
<td>65.38</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>65.38</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Zinc, Extractable, SEM</td>
<td>0.211</td>
<td>—</td>
<td>0.0023</td>
<td>0.0112</td>
<td>mmol/Kg</td>
<td>0.40</td>
<td>—</td>
<td>0.0044</td>
<td>0.0225</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Total SEM</td>
<td>0.288</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mmol/Kg</td>
<td>0.75</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Sulfide, Acid Volatile</td>
<td>32.8</td>
<td>JG</td>
<td>1.8</td>
<td>7.33</td>
<td>mg/Kg</td>
<td>32.8</td>
<td>JG</td>
<td>0.75</td>
<td>2.95</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Sulfide, Molecular Weight</td>
<td>32.06</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>32.06</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Sulfide, Acid Volatile</td>
<td>1.02</td>
<td>—</td>
<td>0.056</td>
<td>0.229</td>
<td>mmol/Kg</td>
<td>ND</td>
<td>—</td>
<td>0.023</td>
<td>0.0920</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>SEM/AVS</td>
<td>0.282</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>0.282</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

ND - Nondetect; * No detected AVS - metals bioavailable
<table>
<thead>
<tr>
<th>Parameters</th>
<th>Value</th>
<th>Lab Qual</th>
<th>MDL</th>
<th>RDL</th>
<th>Units</th>
<th>Value</th>
<th>Lab Qual</th>
<th>MDL</th>
<th>RDL</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cadmium, Extractable, SEM</td>
<td>0.087</td>
<td>&lt;RDL</td>
<td>0.074</td>
<td>0.373</td>
<td>mg/Kg</td>
<td>—</td>
<td>&lt;MDL</td>
<td>0.054</td>
<td>0.268</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Cadmium, Molecular Weight</td>
<td>112.41</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>112.41</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Cadmium, Extractable, SEM</td>
<td>0.00077</td>
<td>—</td>
<td>0.00066</td>
<td>0.00332</td>
<td>mmol/Kg</td>
<td>0</td>
<td>—</td>
<td>0.00048</td>
<td>0.00238</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Copper, Extractable, SEM</td>
<td>7.22</td>
<td>—</td>
<td>0.15</td>
<td>0.744</td>
<td>mg/Kg</td>
<td>0.905</td>
<td>—</td>
<td>0.11</td>
<td>0.537</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Copper, Molecular Weight</td>
<td>63.55</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mmol/Kg</td>
<td>63.55</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Copper, Extractable, SEM</td>
<td>0.114</td>
<td>—</td>
<td>0.0024</td>
<td>0.0117</td>
<td>mmol/Kg</td>
<td>0.0142</td>
<td>—</td>
<td>0.0017</td>
<td>0.00845</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Lead, Extractable, SEM</td>
<td>19.3</td>
<td>—</td>
<td>0.74</td>
<td>3.73</td>
<td>mg/Kg</td>
<td>3.88</td>
<td>—</td>
<td>0.54</td>
<td>2.68</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Lead, Molecular Weight</td>
<td>207.2</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>207.2</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Lead, Extractable, SEM</td>
<td>0.0931</td>
<td>—</td>
<td>0.0036</td>
<td>0.0180</td>
<td>mmol/Kg</td>
<td>0.0187</td>
<td>—</td>
<td>0.0026</td>
<td>0.0129</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Nickel, Extractable, SEM</td>
<td>1.91</td>
<td>—</td>
<td>0.19</td>
<td>0.93</td>
<td>mg/Kg</td>
<td>0.38</td>
<td>&lt;RDL</td>
<td>0.13</td>
<td>0.671</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Nickel, Molecular Weight</td>
<td>58.69</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mmol/Kg</td>
<td>58.69</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Nickel, Extractable, SEM</td>
<td>0.0325</td>
<td>—</td>
<td>0.0032</td>
<td>0.016</td>
<td>mmol/Kg</td>
<td>0.0065</td>
<td>—</td>
<td>0.0022</td>
<td>0.00114</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Silver, Extractable, SEM</td>
<td>—</td>
<td>&lt;MDL</td>
<td>0.15</td>
<td>0.744</td>
<td>mg/Kg</td>
<td>—</td>
<td>&lt;MDL</td>
<td>0.11</td>
<td>0.537</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Silver, Molecular Weight</td>
<td>107.87</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>107.87</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Silver, Extractable, SEM</td>
<td>ND</td>
<td>—</td>
<td>0.0014</td>
<td>0.00690</td>
<td>mmol/Kg</td>
<td>ND</td>
<td>—</td>
<td>0.0010</td>
<td>0.00498</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Zinc, Extractable, SEM</td>
<td>14.9</td>
<td>—</td>
<td>0.19</td>
<td>0.93</td>
<td>mg/Kg</td>
<td>12.1</td>
<td>—</td>
<td>0.13</td>
<td>0.671</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Zinc, Molecular Weight</td>
<td>65.38</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>65.38</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Zinc, Extractable, SEM</td>
<td>0.228</td>
<td>—</td>
<td>0.0029</td>
<td>0.014</td>
<td>mmol/Kg</td>
<td>0.185</td>
<td>—</td>
<td>0.0020</td>
<td>0.0103</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Total SEM</td>
<td>0.468</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mmol/Kg</td>
<td>0.225</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Sulfide, Acid Volatile</td>
<td>4.15</td>
<td>JG</td>
<td>0.47</td>
<td>1.86</td>
<td>mg/Kg</td>
<td>0.45</td>
<td>&lt;RDL</td>
<td>0.34</td>
<td>1.34</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Sulfide, Molecular Weight</td>
<td>32.06</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>32.06</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Sulfide, Acid Volatile</td>
<td>0.129</td>
<td>—</td>
<td>0.015</td>
<td>0.0580</td>
<td>mmol/Kg</td>
<td>0.014</td>
<td>—</td>
<td>0.011</td>
<td>0.0418</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>SEM/AVS</td>
<td>3.62</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>16</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

ND - Nondetect
### Table B-3: Soos Creek Basin Sediment SEM/AVS Calculations

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Value</th>
<th>Lab Qual</th>
<th>MDL</th>
<th>RDL</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cadmium, Extractable, SEM</td>
<td></td>
<td>&lt;MDL</td>
<td>0.051</td>
<td>0.256</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Cadmium, Molecular Weight</td>
<td>112.41</td>
<td></td>
<td></td>
<td></td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Cadmium, Extractable, SEM</td>
<td>0</td>
<td></td>
<td>0.000454</td>
<td>0.00228</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Copper, Extractable, SEM</td>
<td>1.52</td>
<td></td>
<td>0.1</td>
<td>0.512</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Copper, Molecular Weight</td>
<td>63.55</td>
<td></td>
<td></td>
<td></td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Copper, Extractable, SEM</td>
<td>0.0239</td>
<td></td>
<td>0.002</td>
<td>0.00806</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Lead, Extractable, SEM</td>
<td>5.67</td>
<td></td>
<td>0.51</td>
<td>2.56</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Lead, Molecular Weight</td>
<td>207.2</td>
<td></td>
<td></td>
<td></td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Lead, Extractable, SEM</td>
<td>0.0274</td>
<td></td>
<td>0.0025</td>
<td>0.0124</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Nickel, Extractable, SEM</td>
<td>0.647</td>
<td></td>
<td>0.13</td>
<td>0.641</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Nickel, Molecular Weight</td>
<td>58.69</td>
<td></td>
<td></td>
<td></td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Nickel, Extractable, SEM</td>
<td>0.0110</td>
<td></td>
<td>0.0022</td>
<td>0.0109</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Silver, Extractable, SEM</td>
<td></td>
<td>&lt;MDL</td>
<td>0.1</td>
<td>0.512</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Silver, Molecular Weight</td>
<td>107.87</td>
<td></td>
<td></td>
<td></td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Silver, Extractable, SEM</td>
<td>ND</td>
<td></td>
<td>0.0009</td>
<td>0.00475</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Zinc, Extractable, SEM</td>
<td>9.74</td>
<td></td>
<td>0.13</td>
<td>0.641</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Zinc, Molecular Weight</td>
<td>65.38</td>
<td></td>
<td></td>
<td></td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Zinc, Extractable, SEM</td>
<td>0.149</td>
<td></td>
<td>0.0020</td>
<td>0.0098</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Total SEM</td>
<td>0.211</td>
<td></td>
<td></td>
<td></td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Sulfide, Acid Volatile</td>
<td>9.48</td>
<td>JG</td>
<td>0.33</td>
<td>1.28</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Sulfide, Molecular Weight</td>
<td>32.06</td>
<td></td>
<td></td>
<td></td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Sulfide, Acid Volatile</td>
<td>0.296</td>
<td></td>
<td>0.010</td>
<td>0.0399</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>SEM/AVS</td>
<td>0.715</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

ND - Nondetect
### Table B-4: Green River Basin Sediment SEM/AVS Calculations 2012

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Value</th>
<th>Lab Qual</th>
<th>Val Qual</th>
<th>MDL</th>
<th>RDL</th>
<th>Units</th>
<th>Value</th>
<th>Lab Qual</th>
<th>Val Qual</th>
<th>MDL</th>
<th>RDL</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cadmium, Extractable, SEM</td>
<td>0.11</td>
<td>&lt;RDL</td>
<td>J</td>
<td>0.078</td>
<td>0.388</td>
<td>mg/Kg</td>
<td>0.594</td>
<td>—</td>
<td>—</td>
<td>0.082</td>
<td>0.408</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Cadmium, Molecular Weight</td>
<td>112.41</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>112.41</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Cadmium, Extractable, SEM</td>
<td>0.0010</td>
<td>—</td>
<td>—</td>
<td>0.00069</td>
<td>0.00345</td>
<td>mmol/Kg</td>
<td>0.00528</td>
<td>—</td>
<td>—</td>
<td>0.00073</td>
<td>0.00363</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Copper, Extractable, SEM</td>
<td>9.72</td>
<td>—</td>
<td>—</td>
<td>0.15</td>
<td>0.777</td>
<td>mg/Kg</td>
<td>17.8</td>
<td>—</td>
<td>—</td>
<td>0.16</td>
<td>0.819</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Copper, Molecular Weight</td>
<td>63.55</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>63.55</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Copper, Extractable, SEM</td>
<td>0.153</td>
<td>—</td>
<td>—</td>
<td>0.0024</td>
<td>0.0122</td>
<td>mmol/Kg</td>
<td>0.280</td>
<td>—</td>
<td>—</td>
<td>0.0025</td>
<td>0.0129</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Lead, Extractable, SEM</td>
<td>6.18</td>
<td>—</td>
<td>—</td>
<td>0.78</td>
<td>3.88</td>
<td>mg/Kg</td>
<td>37.1</td>
<td>—</td>
<td>—</td>
<td>0.82</td>
<td>4.08</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Lead, Molecular Weight</td>
<td>207.2</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>207.2</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Lead, Extractable, SEM</td>
<td>0.0298</td>
<td>—</td>
<td>—</td>
<td>0.0038</td>
<td>0.0187</td>
<td>mmol/Kg</td>
<td>0.179</td>
<td>—</td>
<td>—</td>
<td>0.0040</td>
<td>0.0197</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Nickel, Extractable, SEM</td>
<td>1.87</td>
<td>—</td>
<td>—</td>
<td>0.19</td>
<td>0.97</td>
<td>mg/Kg</td>
<td>5.52</td>
<td>—</td>
<td>—</td>
<td>0.2</td>
<td>1.02</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Nickel, Molecular Weight</td>
<td>58.69</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>58.69</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Nickel, Extractable, SEM</td>
<td>0.0319</td>
<td>—</td>
<td>—</td>
<td>0.0032</td>
<td>0.017</td>
<td>mmol/Kg</td>
<td>0.0941</td>
<td>—</td>
<td>—</td>
<td>0.003</td>
<td>0.0174</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Silver, Extractable, SEM</td>
<td>—</td>
<td>&lt;MDL</td>
<td>U</td>
<td>0.15</td>
<td>0.777</td>
<td>mg/Kg</td>
<td>—</td>
<td>&lt;MDL</td>
<td>U</td>
<td>0.16</td>
<td>0.819</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Silver, Molecular Weight</td>
<td>107.87</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>107.87</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Silver, Extractable, SEM</td>
<td>ND</td>
<td>—</td>
<td>—</td>
<td>0.0014</td>
<td>0.00720</td>
<td>mmol/Kg</td>
<td>ND</td>
<td>—</td>
<td>—</td>
<td>0.0015</td>
<td>0.00759</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Zinc, Extractable, SEM</td>
<td>21.7</td>
<td>—</td>
<td>—</td>
<td>0.19</td>
<td>0.97</td>
<td>mg/Kg</td>
<td>134</td>
<td>—</td>
<td>—</td>
<td>0.2</td>
<td>1.02</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Zinc, Molecular Weight</td>
<td>65.38</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>65.38</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Zinc, Extractable, SEM</td>
<td>0.332</td>
<td>—</td>
<td>—</td>
<td>0.0029</td>
<td>0.015</td>
<td>mmol/Kg</td>
<td>2.05</td>
<td>—</td>
<td>—</td>
<td>0.003</td>
<td>0.0156</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Total SEM</td>
<td>0.55</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mmol/Kg</td>
<td>2.61</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Sulfide, Acid Volatile</td>
<td>10.2</td>
<td>JG</td>
<td>—</td>
<td>0.48</td>
<td>1.94</td>
<td>mg/Kg</td>
<td>84.4</td>
<td>JG</td>
<td>—</td>
<td>2.5</td>
<td>10.2</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Sulfide, Molecular Weight</td>
<td>32.06</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>32.06</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Sulfide, Acid Volatile</td>
<td>0.318</td>
<td>—</td>
<td>—</td>
<td>0.015</td>
<td>0.0605</td>
<td>mmol/Kg</td>
<td>2.63</td>
<td>—</td>
<td>—</td>
<td>0.078</td>
<td>0.318</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>SEM/AVS</td>
<td>1.7</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>0.99</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

**Locator:** A315

**Descrip:** HILL CREEK (MILL) / MILL CRK AT W.VALL

**Sample:** L56024-1

**Matrix:** SE FRSHWTRSED

**ColDate:** 8/13/12 11:35

**TotalSolid:** 49.7

**Locator:** SD315

**Descrip:** MILL CRK AT W.VALL

**Sample:** L56024-2

**Matrix:** SE FRSHWTRSED

**ColDate:** 8/13/12 12:20

**TotalSolid:** 47.5
Table B-4: Green River Basin Sediment SEM/AVS Calculations 2012

<table>
<thead>
<tr>
<th>Locator</th>
<th>Description</th>
<th>Sample</th>
<th>Matrix</th>
<th>ColDate</th>
<th>TotalSolid</th>
<th>DRY Weight Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>FR315</td>
<td>MILL CRK ON FRONTA</td>
<td>L56024-3</td>
<td>SE FRSHWTRSED</td>
<td>8/29/12 11:30</td>
<td>21.9</td>
<td></td>
</tr>
<tr>
<td>TS315</td>
<td>MILL CRK NEAR 1ST</td>
<td>L56024-4</td>
<td>SE FRSHWTRSED</td>
<td>8/13/12 13:25</td>
<td>20.4</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Value</th>
<th>Lab Qual</th>
<th>Val Qual</th>
<th>MDL</th>
<th>RDL</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cadmium, Extractable, SEM</td>
<td>0.45</td>
<td>&lt;RDL</td>
<td>J</td>
<td>0.18</td>
<td>0.904</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Cadmium, Molecular Weight</td>
<td>112.41</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Cadmium, Extractable, SEM</td>
<td>0.0040</td>
<td>—</td>
<td>—</td>
<td>0.0016</td>
<td>0.00804</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Copper, Extractable, SEM</td>
<td>16.4</td>
<td>—</td>
<td>—</td>
<td>0.36</td>
<td>1.81</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Copper, Molecular Weight</td>
<td>63.55</td>
<td>—</td>
<td>—</td>
<td>18</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Copper, Extractable, SEM</td>
<td>0.258</td>
<td>—</td>
<td>—</td>
<td>0.0057</td>
<td>0.0285</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Lead, Extractable, SEM</td>
<td>21.0</td>
<td>—</td>
<td>—</td>
<td>1.8</td>
<td>9.04</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Lead, Molecular Weight</td>
<td>207.2</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Nickel, Extractable, SEM</td>
<td>4.12</td>
<td>—</td>
<td>—</td>
<td>0.45</td>
<td>2.26</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Nickel, Molecular Weight</td>
<td>58.69</td>
<td>—</td>
<td>—</td>
<td>4</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Nickel, Extractable, SEM</td>
<td>0.0702</td>
<td>—</td>
<td>—</td>
<td>0.0077</td>
<td>0.0385</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Silver, Extractable, SEM</td>
<td>—</td>
<td>&lt;MDL</td>
<td>U</td>
<td>0.36</td>
<td>1.81</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Silver, Molecular Weight</td>
<td>107.87</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Silver, Extractable, SEM</td>
<td>ND</td>
<td>—</td>
<td>—</td>
<td>0.0033</td>
<td>0.0168</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Zinc, Extractable, SEM</td>
<td>148</td>
<td>—</td>
<td>—</td>
<td>0.45</td>
<td>2.26</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Zinc, Molecular Weight</td>
<td>65.38</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Zinc, Extractable, SEM</td>
<td>2.26</td>
<td>—</td>
<td>—</td>
<td>0.0069</td>
<td>0.0346</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Total SEM</td>
<td>2.70</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Sulfide, Acid Volatile</td>
<td>77.6</td>
<td>JG</td>
<td>—</td>
<td>5.5</td>
<td>22.6</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Sulfide, Molecular Weight</td>
<td>32.06</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Sulfide, Acid Volatile</td>
<td>2.42</td>
<td>—</td>
<td>—</td>
<td>0.17</td>
<td>0.705</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>SEM/AVS</td>
<td>1.1</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td></td>
</tr>
</tbody>
</table>

ND - Nondetect
<table>
<thead>
<tr>
<th>Parameters</th>
<th>Value</th>
<th>Lab Qual</th>
<th>Val Qual</th>
<th>MDL</th>
<th>RDL</th>
<th>Units</th>
<th>Value</th>
<th>Lab Qual</th>
<th>Val Qual</th>
<th>MDL</th>
<th>RDL</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cadmium, Extractable, SEM</td>
<td>0.23</td>
<td>&lt;RDL</td>
<td>J</td>
<td>0.1</td>
<td>0.528</td>
<td>mg/Kg</td>
<td>0.16</td>
<td>&lt;RDL</td>
<td>J</td>
<td>0.059</td>
<td>0.292</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Cadmium, Molecular Weight</td>
<td>112.41</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>112.41</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Copper, Extractable, SEM</td>
<td>6.64</td>
<td>—</td>
<td>—</td>
<td>0.21</td>
<td>1.06</td>
<td>mg/Kg</td>
<td>12.3</td>
<td>—</td>
<td>—</td>
<td>0.12</td>
<td>0.583</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Copper, Molecular Weight</td>
<td>63.55</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>63.55</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Lead, Extractable, SEM</td>
<td>7.82</td>
<td>—</td>
<td>—</td>
<td>1</td>
<td>5.28</td>
<td>mg/Kg</td>
<td>8.81</td>
<td>—</td>
<td>—</td>
<td>0.59</td>
<td>2.92</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Lead, Molecular Weight</td>
<td>207.2</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>207.2</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Nickel, Extractable, SEM</td>
<td>2.17</td>
<td>—</td>
<td>—</td>
<td>0.27</td>
<td>1.32</td>
<td>mg/Kg</td>
<td>2.48</td>
<td>—</td>
<td>—</td>
<td>0.15</td>
<td>0.729</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Nickel, Molecular Weight</td>
<td>58.69</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>58.69</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Nickel, Extractable, SEM</td>
<td>0.0370</td>
<td>—</td>
<td>—</td>
<td>0.0046</td>
<td>0.0225</td>
<td>mmol/Kg</td>
<td>0.0423</td>
<td>—</td>
<td>—</td>
<td>0.0026</td>
<td>0.0124</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Silver, Extractable, SEM</td>
<td>—</td>
<td>&lt;MDL</td>
<td>U</td>
<td>0.21</td>
<td>1.06</td>
<td>mg/Kg</td>
<td>—</td>
<td>&lt;MDL</td>
<td>U</td>
<td>0.12</td>
<td>0.583</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Silver, Molecular Weight</td>
<td>107.87</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>107.87</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Zinc, Extractable, SEM</td>
<td>62.7</td>
<td>—</td>
<td>—</td>
<td>0.27</td>
<td>1.32</td>
<td>mg/Kg</td>
<td>71.5</td>
<td>—</td>
<td>—</td>
<td>0.15</td>
<td>0.729</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Zinc, Molecular Weight</td>
<td>65.38</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>65.38</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Zinc, Extractable, SEM</td>
<td>0.959</td>
<td>—</td>
<td>—</td>
<td>0.0041</td>
<td>0.0202</td>
<td>mmol/Kg</td>
<td>1.09</td>
<td>—</td>
<td>—</td>
<td>0.0023</td>
<td>0.0112</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Total SEM</td>
<td>1.14</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mmol/Kg</td>
<td>1.37</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Sulfide, Acid Volatile</td>
<td>112</td>
<td>JG</td>
<td>—</td>
<td>3.4</td>
<td>13.2</td>
<td>mg/Kg</td>
<td>2.96</td>
<td>JG</td>
<td>—</td>
<td>0.37</td>
<td>1.46</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Sulfide, Molecular Weight</td>
<td>32.06</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>32.06</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Sulfide, Acid Volatile</td>
<td>3.49</td>
<td>—</td>
<td>—</td>
<td>0.11</td>
<td>0.412</td>
<td>mmol/Kg</td>
<td>0.0923</td>
<td>—</td>
<td>—</td>
<td>0.012</td>
<td>0.0455</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>SEM/AVS</td>
<td>0.33</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>15</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>
### Table B-4: Green River Basin Sediment SEM/AVS Calculations 2012

<table>
<thead>
<tr>
<th>Locator:</th>
<th>PC315</th>
<th>UH315</th>
</tr>
</thead>
<tbody>
<tr>
<td>Descrip:</td>
<td>MILL CRK ON PEASLE</td>
<td>MILL CRK AT 321ST</td>
</tr>
<tr>
<td>Sample:</td>
<td>L56024-8</td>
<td>L56024-9</td>
</tr>
<tr>
<td>Matrix:</td>
<td>SE FRSHWTRSED</td>
<td>SE FRSHWTRSED</td>
</tr>
<tr>
<td>ColDate:</td>
<td>8/14/12 11:40</td>
<td>8/14/12 12:25</td>
</tr>
<tr>
<td>TotalSolid:</td>
<td>75.1</td>
<td>15.2</td>
</tr>
</tbody>
</table>

#### DRY Weight Basis

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Value</th>
<th>Lab Qual</th>
<th>Val Qual</th>
<th>MDL</th>
<th>RDL</th>
<th>Units</th>
<th>Value</th>
<th>Lab Qual</th>
<th>Val Qual</th>
<th>MDL</th>
<th>RDL</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cadmium, Extractable, SEM</td>
<td>0.088</td>
<td>&lt;RDL</td>
<td>J</td>
<td>0.052</td>
<td>0.257</td>
<td>mg/Kg</td>
<td>0.79</td>
<td>&lt;RDL</td>
<td>J</td>
<td>0.26</td>
<td>1.27</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Cadmium, Molecular Weight</td>
<td>112.41</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>112.41</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Cadmium, Extractable, SEM</td>
<td>0.00078</td>
<td>—</td>
<td>—</td>
<td>0.00046</td>
<td>0.00029</td>
<td>mmol/Kg</td>
<td>0.0070</td>
<td>—</td>
<td>—</td>
<td>0.0023</td>
<td>0.00113</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Copper, Extractable, SEM</td>
<td>1.13</td>
<td>—</td>
<td>—</td>
<td>0.1</td>
<td>0.514</td>
<td>mg/Kg</td>
<td>16.8</td>
<td>—</td>
<td>—</td>
<td>0.51</td>
<td>2.54</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Copper, Molecular Weight</td>
<td>63.55</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>63.55</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Copper, Extractable, SEM</td>
<td>0.0178</td>
<td>—</td>
<td>—</td>
<td>0.002</td>
<td>0.00809</td>
<td>mmol/Kg</td>
<td>0.264</td>
<td>—</td>
<td>—</td>
<td>0.0080</td>
<td>0.0400</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Lead, Extractable, SEM</td>
<td>5.17</td>
<td>—</td>
<td>—</td>
<td>0.52</td>
<td>2.57</td>
<td>mg/Kg</td>
<td>45.9</td>
<td>—</td>
<td>—</td>
<td>2.6</td>
<td>12.7</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Lead, Molecular Weight</td>
<td>207.2</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>207.2</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Lead, Extractable, SEM</td>
<td>0.0250</td>
<td>—</td>
<td>—</td>
<td>0.0025</td>
<td>0.0124</td>
<td>mmol/Kg</td>
<td>0.222</td>
<td>—</td>
<td>—</td>
<td>0.013</td>
<td>0.0613</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Nickel, Extractable, SEM</td>
<td>1.24</td>
<td>—</td>
<td>—</td>
<td>0.13</td>
<td>0.642</td>
<td>mg/Kg</td>
<td>6.16</td>
<td>—</td>
<td>—</td>
<td>0.64</td>
<td>3.18</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Nickel, Molecular Weight</td>
<td>58.69</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>58.69</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Nickel, Extractable, SEM</td>
<td>0.0211</td>
<td>—</td>
<td>—</td>
<td>0.0022</td>
<td>0.0109</td>
<td>mmol/Kg</td>
<td>0.105</td>
<td>—</td>
<td>—</td>
<td>0.011</td>
<td>0.0542</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Silver, Extractable, SEM</td>
<td>—</td>
<td>&lt;MDL</td>
<td>U</td>
<td>0.1</td>
<td>0.514</td>
<td>mg/Kg</td>
<td>—</td>
<td>&lt;MDL</td>
<td>U</td>
<td>0.51</td>
<td>2.54</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Silver, Molecular Weight</td>
<td>107.87</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>107.87</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Silver, Extractable, SEM</td>
<td>ND</td>
<td>—</td>
<td>—</td>
<td>0.0009</td>
<td>0.00476</td>
<td>mmol/Kg</td>
<td>ND</td>
<td>—</td>
<td>—</td>
<td>0.0047</td>
<td>0.0235</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Zinc, Extractable, SEM</td>
<td>28.2</td>
<td>—</td>
<td>—</td>
<td>0.13</td>
<td>0.642</td>
<td>mg/Kg</td>
<td>130</td>
<td>—</td>
<td>—</td>
<td>0.64</td>
<td>3.18</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Zinc, Molecular Weight</td>
<td>65.38</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>65.38</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Zinc, Extractable, SEM</td>
<td>0.431</td>
<td>—</td>
<td>—</td>
<td>0.0020</td>
<td>0.00982</td>
<td>mmol/Kg</td>
<td>1.99</td>
<td>—</td>
<td>—</td>
<td>0.0098</td>
<td>0.0486</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Total SEM</td>
<td>0.50</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mmol/Kg</td>
<td>2.59</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Sulfide, Acid Volatile</td>
<td>—</td>
<td>&lt;MDL</td>
<td>JG</td>
<td>0.32</td>
<td>1.28</td>
<td>mg/Kg</td>
<td>200</td>
<td>JG</td>
<td>—</td>
<td>7.9</td>
<td>31.8</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Sulfide, Molecular Weight</td>
<td>32.06</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>32.06</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Sulfide, Acid Volatile</td>
<td>ND</td>
<td>—</td>
<td>—</td>
<td>0.010</td>
<td>0.0399</td>
<td>mmol/Kg</td>
<td>6.24</td>
<td>—</td>
<td>—</td>
<td>0.25</td>
<td>0.992</td>
<td>mmol/Kg</td>
</tr>
</tbody>
</table>

**SEM/AVS**

<table>
<thead>
<tr>
<th>Value</th>
<th>Lab Qual</th>
<th>Val Qual</th>
<th>MDL</th>
<th>RDL</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.41</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

ND - Nondetect; * No detected AVS - metals bioavailable
Table B-4: Green River Basin Sediment SEM/AVS Calculations 2012

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Value</th>
<th>Lab Qual</th>
<th>Val Qual</th>
<th>MDL</th>
<th>RDL</th>
<th>Units</th>
<th>Value</th>
<th>Lab Qual</th>
<th>Val Qual</th>
<th>MDL</th>
<th>RDL</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cadmium, Extractable, SEM</td>
<td>3.41</td>
<td>—</td>
<td>—</td>
<td>0.11</td>
<td>0.562</td>
<td>mg/Kg</td>
<td>1.47</td>
<td>—</td>
<td>—</td>
<td>0.1</td>
<td>0.522</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Cadmium, Molecular Weight</td>
<td>112.41</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>112.41</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Cadmium, Extractable, SEM</td>
<td>0.0303</td>
<td>—</td>
<td>—</td>
<td>0.00098</td>
<td>0.00500</td>
<td>mmol/Kg</td>
<td>0.0131</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>0.0009</td>
<td>0.00464</td>
</tr>
<tr>
<td>Copper, Extractable, SEM</td>
<td>31.8</td>
<td>—</td>
<td>—</td>
<td>0.22</td>
<td>1.12</td>
<td>mg/Kg</td>
<td>31.2</td>
<td>—</td>
<td>—</td>
<td>0.21</td>
<td>1.04</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Copper, Molecular Weight</td>
<td>63.55</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>63.55</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Copper, Extractable, SEM</td>
<td>0.500</td>
<td>—</td>
<td>—</td>
<td>0.0035</td>
<td>0.0176</td>
<td>mmol/Kg</td>
<td>0.491</td>
<td>—</td>
<td>—</td>
<td>0.0033</td>
<td>0.0164</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Lead, Extractable, SEM</td>
<td>35.9</td>
<td>—</td>
<td>—</td>
<td>1.1</td>
<td>5.62</td>
<td>mg/Kg</td>
<td>29.5</td>
<td>—</td>
<td>—</td>
<td>1</td>
<td>5.22</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Lead, Molecular Weight</td>
<td>207.2</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>207.2</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Lead, Extractable, SEM</td>
<td>0.173</td>
<td>—</td>
<td>—</td>
<td>0.0053</td>
<td>0.0271</td>
<td>mmol/Kg</td>
<td>0.142</td>
<td>—</td>
<td>—</td>
<td>0.005</td>
<td>0.0252</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Nickel, Extractable, SEM</td>
<td>6.24</td>
<td>—</td>
<td>—</td>
<td>0.28</td>
<td>1.4</td>
<td>mg/Kg</td>
<td>4.63</td>
<td>—</td>
<td>—</td>
<td>0.26</td>
<td>1.3</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Nickel, Molecular Weight</td>
<td>58.69</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>58.69</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Nickel, Extractable, SEM</td>
<td>0.106</td>
<td>—</td>
<td>—</td>
<td>0.0048</td>
<td>0.024</td>
<td>mmol/Kg</td>
<td>0.0789</td>
<td>—</td>
<td>—</td>
<td>0.0044</td>
<td>0.022</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Silver, Extractable, SEM</td>
<td>0.25</td>
<td>&lt;RDL</td>
<td>J</td>
<td>0.22</td>
<td>1.12</td>
<td>mg/Kg</td>
<td>—</td>
<td>&lt;MDL</td>
<td>U</td>
<td>0.21</td>
<td>1.04</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Silver, Molecular Weight</td>
<td>107.87</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>107.87</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Silver, Extractable, SEM</td>
<td>0.0023</td>
<td>—</td>
<td>—</td>
<td>0.0020</td>
<td>0.0104</td>
<td>mmol/Kg</td>
<td>ND</td>
<td>—</td>
<td>—</td>
<td>0.0019</td>
<td>0.00964</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Zinc, Extractable, SEM</td>
<td>368</td>
<td>—</td>
<td>—</td>
<td>0.28</td>
<td>1.4</td>
<td>mg/Kg</td>
<td>284</td>
<td>—</td>
<td>—</td>
<td>0.26</td>
<td>1.3</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Zinc, Molecular Weight</td>
<td>65.38</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>65.38</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Zinc, Extractable, SEM</td>
<td>5.63</td>
<td>—</td>
<td>—</td>
<td>0.0043</td>
<td>0.021</td>
<td>mmol/Kg</td>
<td>4.34</td>
<td>—</td>
<td>—</td>
<td>0.0040</td>
<td>0.020</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Total SEM</td>
<td>6.44</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mmol/Kg</td>
<td>5.07</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Sulfide, Acid Volatile</td>
<td>84.4</td>
<td>JG</td>
<td>—</td>
<td>7.1</td>
<td>28</td>
<td>mg/Kg</td>
<td>90.4</td>
<td>JG</td>
<td>—</td>
<td>3.4</td>
<td>13</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Sulfide, Molecular Weight</td>
<td>32.06</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>32.06</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Sulfide, Acid Volatile</td>
<td>2.63</td>
<td>—</td>
<td>—</td>
<td>0.22</td>
<td>0.87</td>
<td>mmol/Kg</td>
<td>2.82</td>
<td>—</td>
<td>—</td>
<td>0.11</td>
<td>0.41</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>SEM/AVS</td>
<td>2.4</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>1.8</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>
Table B-4: Green River Basin Sediment SEM/AVS Calculations 2012

<table>
<thead>
<tr>
<th>Locator: FS318</th>
<th>CS318</th>
</tr>
</thead>
<tbody>
<tr>
<td>Descrip: EMILL CRK NEAR 72N</td>
<td>EMILL CRK NEAR 222</td>
</tr>
<tr>
<td>Sample: L56024-13</td>
<td>L56024-14</td>
</tr>
<tr>
<td>Matrix: SE FRSHWTRSED</td>
<td>SE FRSHWTRSED</td>
</tr>
<tr>
<td>ColDate: 8/28/12 15:00</td>
<td>8/28/12 14:40</td>
</tr>
<tr>
<td>TotalSolid: 49.5</td>
<td>32.7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Value</th>
<th>Lab Qual</th>
<th>Val Qual</th>
<th>MDL</th>
<th>RDL</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cadmium, Extractable, SEM</td>
<td>0.705</td>
<td>—</td>
<td>—</td>
<td>0.081</td>
<td>0.4</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Cadmium, Molecular Weight</td>
<td>112.41</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Cadmium, Extractable, SEM</td>
<td>0.00627</td>
<td>—</td>
<td>—</td>
<td>0.00072</td>
<td>0.004</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Copper, Extractable, SEM</td>
<td>9.43</td>
<td>—</td>
<td>—</td>
<td>0.16</td>
<td>0.798</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Copper, Molecular Weight</td>
<td>63.55</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Copper, Extractable, SEM</td>
<td>0.148</td>
<td>—</td>
<td>—</td>
<td>0.0025</td>
<td>0.0126</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Lead, Extractable, SEM</td>
<td>13.2</td>
<td>—</td>
<td>—</td>
<td>0.81</td>
<td>4</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Lead, Molecular Weight</td>
<td>207.2</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Lead, Extractable, SEM</td>
<td>0.0637</td>
<td>—</td>
<td>—</td>
<td>0.0039</td>
<td>0.02</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Nickel, Extractable, SEM</td>
<td>2.28</td>
<td>—</td>
<td>—</td>
<td>0.2</td>
<td>0.998</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Nickel, Molecular Weight</td>
<td>58.69</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Nickel, Extractable, SEM</td>
<td>0.0388</td>
<td>—</td>
<td>—</td>
<td>0.003</td>
<td>0.0170</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Silver, Extractable, SEM</td>
<td>—</td>
<td>&lt;MDL</td>
<td>U</td>
<td>0.16</td>
<td>0.798</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Silver, Molecular Weight</td>
<td>107.87</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Silver, Extractable, SEM</td>
<td>ND</td>
<td>—</td>
<td>—</td>
<td>0.0015</td>
<td>0.00740</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Zinc, Extractable, SEM</td>
<td>105</td>
<td>—</td>
<td>—</td>
<td>0.2</td>
<td>0.998</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Zinc, Molecular Weight</td>
<td>65.38</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Zinc, Extractable, SEM</td>
<td>1.61</td>
<td>—</td>
<td>—</td>
<td>0.003</td>
<td>0.0153</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Total SEM</td>
<td>1.86</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Sulfide, Acid Volatile</td>
<td>151</td>
<td>JG</td>
<td>—</td>
<td>5.1</td>
<td>20</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Sulfide, Molecular Weight</td>
<td>32.06</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Sulfide, Acid Volatile</td>
<td>4.71</td>
<td>—</td>
<td>—</td>
<td>0.16</td>
<td>0.62</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>SEM/AVS</td>
<td>0.40</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

ND - Nondetect
### Table B-4: Green River Basin Sediment SEM/AVS Calculations 2012

<table>
<thead>
<tr>
<th>Locator:</th>
<th>AA318</th>
<th>EP318</th>
</tr>
</thead>
<tbody>
<tr>
<td>Descrip:</td>
<td>EMILL CRK NOVAK LN</td>
<td>EMILL CRK AT EARTH</td>
</tr>
<tr>
<td>Sample:</td>
<td>L56024-15</td>
<td>L56024-16</td>
</tr>
<tr>
<td>Matrix:</td>
<td>SE FRSHWTRSE</td>
<td>SE FRSHWTRSE</td>
</tr>
<tr>
<td>ColDate:</td>
<td>8/28/12 12:00</td>
<td>8/28/12 10:00</td>
</tr>
<tr>
<td>TotalSolid:</td>
<td>36.7</td>
<td>31.6</td>
</tr>
</tbody>
</table>

#### DRY Weight Basis

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Value (DRY Weight Basis)</th>
<th>Lab Qual</th>
<th>Val Qual</th>
<th>MDL</th>
<th>RDL</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cadmium, Extractable, SEM</td>
<td>0.616</td>
<td>—</td>
<td>—</td>
<td>0.1</td>
<td>0.507</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Cadmium, Molecular Weight</td>
<td>112.41</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Cadmium, Extractable, SEM</td>
<td>0.0055</td>
<td>—</td>
<td>—</td>
<td>0.0009</td>
<td>0.00451</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Copper, Extractable, SEM</td>
<td>38.1</td>
<td>—</td>
<td>—</td>
<td>0.2</td>
<td>1.01</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Copper, Molecular Weight</td>
<td>63.55</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Copper, Extractable, SEM</td>
<td>0.600</td>
<td>—</td>
<td>—</td>
<td>0.003</td>
<td>0.0159</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Lead, Extractable, SEM</td>
<td>54.0</td>
<td>—</td>
<td>—</td>
<td>1</td>
<td>5.07</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Lead, Molecular Weight</td>
<td>207.2</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Nickel, Extractable, SEM</td>
<td>4.85</td>
<td>—</td>
<td>—</td>
<td>0.25</td>
<td>1.27</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Nickel, Molecular Weight</td>
<td>58.69</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Nickel, Extractable, SEM</td>
<td>0.0826</td>
<td>—</td>
<td>—</td>
<td>0.0043</td>
<td>0.0216</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Silver, Extractable, SEM</td>
<td>—</td>
<td>&lt;MDL</td>
<td>U</td>
<td>0.2</td>
<td>1.01</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Silver, Molecular Weight</td>
<td>107.87</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Silver, Extractable, SEM</td>
<td>ND</td>
<td>—</td>
<td>—</td>
<td>0.002</td>
<td>0.00936</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Zinc, Extractable, SEM</td>
<td>275.0</td>
<td>—</td>
<td>—</td>
<td>0.25</td>
<td>1.27</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Zinc, Molecular Weight</td>
<td>65.38</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Zinc, Extractable, SEM</td>
<td>4.21</td>
<td>—</td>
<td>—</td>
<td>0.0038</td>
<td>0.0194</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Total SEM</td>
<td>5.15</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Sulfide, Acid Volatile</td>
<td>27.2</td>
<td>JG</td>
<td>—</td>
<td>3.3</td>
<td>12.7</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Sulfide, Molecular Weight</td>
<td>32.06</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Sulfide, Acid Volatile</td>
<td>0.848</td>
<td>—</td>
<td>—</td>
<td>0.10</td>
<td>0.396</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>SEM/AVS</td>
<td>6.1</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

#### DRY Weight Basis

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Value (DRY Weight Basis)</th>
<th>Lab Qual</th>
<th>Val Qual</th>
<th>MDL</th>
<th>RDL</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cadmium, Extractable, SEM</td>
<td>0.28</td>
<td>&lt;RDL</td>
<td>J</td>
<td>0.12</td>
<td>0.592</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Cadmium, Molecular Weight</td>
<td>112.41</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Cadmium, Extractable, SEM</td>
<td>0.0025</td>
<td>—</td>
<td>—</td>
<td>0.0011</td>
<td>0.00527</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Copper, Extractable, SEM</td>
<td>19.6</td>
<td>—</td>
<td>—</td>
<td>0.24</td>
<td>1.18</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Copper, Molecular Weight</td>
<td>63.55</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Copper, Extractable, SEM</td>
<td>0.308</td>
<td>—</td>
<td>—</td>
<td>0.0038</td>
<td>0.0186</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Lead, Extractable, SEM</td>
<td>32.3</td>
<td>—</td>
<td>—</td>
<td>1.2</td>
<td>5.92</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Lead, Molecular Weight</td>
<td>207.2</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Lead, Extractable, SEM</td>
<td>0.156</td>
<td>—</td>
<td>—</td>
<td>0.0058</td>
<td>0.0286</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Nickel, Extractable, SEM</td>
<td>4.46</td>
<td>—</td>
<td>—</td>
<td>0.3</td>
<td>1.48</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Nickel, Molecular Weight</td>
<td>58.69</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Nickel, Extractable, SEM</td>
<td>0.0760</td>
<td>—</td>
<td>—</td>
<td>0.005</td>
<td>0.0252</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Silver, Extractable, SEM</td>
<td>—</td>
<td>&lt;MDL</td>
<td>U</td>
<td>0.24</td>
<td>1.18</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Silver, Molecular Weight</td>
<td>107.87</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Silver, Extractable, SEM</td>
<td>ND</td>
<td>—</td>
<td>—</td>
<td>0.0022</td>
<td>0.0109</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Zinc, Extractable, SEM</td>
<td>162.0</td>
<td>—</td>
<td>—</td>
<td>0.3</td>
<td>1.48</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Zinc, Molecular Weight</td>
<td>65.38</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Zinc, Extractable, SEM</td>
<td>2.48</td>
<td>—</td>
<td>—</td>
<td>0.005</td>
<td>0.0226</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Total SEM</td>
<td>3.02</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Sulfide, Acid Volatile</td>
<td>1.1</td>
<td>&lt;RDL</td>
<td>JG</td>
<td>0.73</td>
<td>2.96</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Sulfide, Molecular Weight</td>
<td>32.06</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Sulfide, Acid Volatile</td>
<td>0.034</td>
<td>—</td>
<td>—</td>
<td>0.023</td>
<td>0.0923</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>SEM/AVS</td>
<td>88</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

ND - Nondetect
## Table B-4: Green River Basin Sediment SEM/AVS Calculations 2012

<table>
<thead>
<tr>
<th>Locator:</th>
<th>EG318</th>
<th>SH318</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
<td>EMILL CRK AT 104TH</td>
<td>EMILL CRK NEAR SCE</td>
</tr>
<tr>
<td>Sample:</td>
<td>L56024-17</td>
<td>L56024-19</td>
</tr>
<tr>
<td>Matrix:</td>
<td>SE FRSHWTRSED</td>
<td>SE FRSHWTRSED</td>
</tr>
<tr>
<td>Collector:</td>
<td>8/28/12 11:00</td>
<td>8/28/12 13:20</td>
</tr>
<tr>
<td>Total Solid</td>
<td>31.4</td>
<td>35</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Value</th>
<th>Lab Qual</th>
<th>Val Qual</th>
<th>MDL</th>
<th>RDL</th>
<th>Units</th>
<th>Value</th>
<th>Lab Qual</th>
<th>Val Qual</th>
<th>MDL</th>
<th>RDL</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cadmium, Extractable, SEM</td>
<td>0.31</td>
<td>&lt;RDL</td>
<td>J</td>
<td>0.12</td>
<td>0.605</td>
<td>mg/Kg</td>
<td>0.19</td>
<td>&lt;RDL</td>
<td>J</td>
<td>0.11</td>
<td>0.523</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Cadmium, Molecular Weight</td>
<td>112.41</td>
<td>—</td>
<td>—</td>
<td>0.0011</td>
<td>0.00538</td>
<td>mMol/Kg</td>
<td>112.41</td>
<td>—</td>
<td>—</td>
<td>0.00098</td>
<td>0.00465</td>
<td>mMol/Kg</td>
</tr>
<tr>
<td>Copper, Extractable, SEM</td>
<td>13.2</td>
<td>—</td>
<td>—</td>
<td>0.24</td>
<td>1.21</td>
<td>mg/Kg</td>
<td>8.63</td>
<td>—</td>
<td>—</td>
<td>0.21</td>
<td>1.04</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Copper, Molecular Weight</td>
<td>63.55</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>63.55</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Lead, Extractable, SEM</td>
<td>28.2</td>
<td>—</td>
<td>—</td>
<td>1.2</td>
<td>6.05</td>
<td>mg/Kg</td>
<td>18.9</td>
<td>—</td>
<td>—</td>
<td>1.1</td>
<td>5.23</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Lead, Molecular Weight</td>
<td>207.2</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>207.2</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Nickel, Extractable, SEM</td>
<td>1.74</td>
<td>—</td>
<td>—</td>
<td>0.3</td>
<td>1.51</td>
<td>mg/Kg</td>
<td>2.27</td>
<td>—</td>
<td>—</td>
<td>0.26</td>
<td>1.31</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Nickel, Molecular Weight</td>
<td>58.69</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>58.69</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Nickel, Extractable, SEM</td>
<td>0.0296</td>
<td>—</td>
<td>—</td>
<td>0.005</td>
<td>0.0257</td>
<td>mMol/Kg</td>
<td>0.0387</td>
<td>—</td>
<td>—</td>
<td>0.0044</td>
<td>0.0223</td>
<td>mMol/Kg</td>
</tr>
<tr>
<td>Silver, Extractable, SEM</td>
<td>—</td>
<td>&lt;MDL</td>
<td>U</td>
<td>0.24</td>
<td>1.21</td>
<td>mg/Kg</td>
<td>—</td>
<td>&lt;MDL</td>
<td>U</td>
<td>0.21</td>
<td>1.04</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Silver, Molecular Weight</td>
<td>107.87</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>107.87</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Silver, Extractable, SEM</td>
<td>ND</td>
<td>—</td>
<td>—</td>
<td>0.0022</td>
<td>0.0112</td>
<td>mMol/Kg</td>
<td>ND</td>
<td>—</td>
<td>—</td>
<td>0.0019</td>
<td>0.00964</td>
<td>mMol/Kg</td>
</tr>
<tr>
<td>Zinc, Extractable, SEM</td>
<td>132</td>
<td>—</td>
<td>—</td>
<td>0.3</td>
<td>1.51</td>
<td>mg/Kg</td>
<td>136</td>
<td>—</td>
<td>—</td>
<td>0.26</td>
<td>1.31</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Zinc, Molecular Weight</td>
<td>65.38</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>65.38</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Zinc, Extractable, SEM</td>
<td>2.02</td>
<td>—</td>
<td>—</td>
<td>0.005</td>
<td>0.0231</td>
<td>mMol/Kg</td>
<td>2.08</td>
<td>—</td>
<td>—</td>
<td>0.0040</td>
<td>0.0200</td>
<td>mMol/Kg</td>
</tr>
<tr>
<td>Total SEM</td>
<td>2.40</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mMol/Kg</td>
<td>2.35</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mMol/Kg</td>
</tr>
<tr>
<td>Sulfide, Acid Volatile</td>
<td>7.74</td>
<td>JG</td>
<td>—</td>
<td>0.76</td>
<td>3.02</td>
<td>mg/Kg</td>
<td>3.54</td>
<td>JG</td>
<td>J</td>
<td>0.66</td>
<td>2.61</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Sulfide, Molecular Weight</td>
<td>32.06</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>32.06</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Sulfide, Acid Volatile</td>
<td>0.241</td>
<td>—</td>
<td>—</td>
<td>0.024</td>
<td>0.0942</td>
<td>mMol/Kg</td>
<td>0.110</td>
<td>—</td>
<td>—</td>
<td>0.021</td>
<td>0.0814</td>
<td>mMol/Kg</td>
</tr>
</tbody>
</table>

**SEM/AVS**

<table>
<thead>
<tr>
<th>Value</th>
<th>Lab Qual</th>
<th>Val Qual</th>
<th>MDL</th>
<th>RDL</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.9</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>21</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

ND - Nondetect
Table B-4: Green River Basin Sediment SEM/AVS Calculations 2012

<table>
<thead>
<tr>
<th>Locator:</th>
<th>Value</th>
<th>Lab Qual</th>
<th>Val Qual</th>
<th>MDL</th>
<th>RDL</th>
<th>Units</th>
<th>Value</th>
<th>Lab Qual</th>
<th>Val Qual</th>
<th>MDL</th>
<th>RDL</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cadmium, Extractable, SEM</td>
<td>—</td>
<td>&lt;MDL</td>
<td>U</td>
<td>0.063</td>
<td>0.321</td>
<td>mg/Kg</td>
<td>—</td>
<td>&lt;MDL</td>
<td>U</td>
<td>0.048</td>
<td>0.242</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Cadmium, Molecular Weight</td>
<td>112.41</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>112.41</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Copper, Extractable, SEM</td>
<td>2.25</td>
<td>—</td>
<td>—</td>
<td>0.13</td>
<td>0.639</td>
<td>mg/Kg</td>
<td>1.20</td>
<td>—</td>
<td>—</td>
<td>0.097</td>
<td>0.483</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Copper, Molecular Weight</td>
<td>63.55</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>63.55</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Lead, Extractable, SEM</td>
<td>1.7</td>
<td>&lt;RDL</td>
<td>J</td>
<td>0.63</td>
<td>3.21</td>
<td>mg/Kg</td>
<td>1.8</td>
<td>&lt;RDL</td>
<td>J</td>
<td>0.48</td>
<td>2.42</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Lead, Molecular Weight</td>
<td>207.2</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>207.2</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Nickel, Extractable, SEM</td>
<td>0.856</td>
<td>—</td>
<td>—</td>
<td>0.16</td>
<td>0.8</td>
<td>mg/Kg</td>
<td>0.37</td>
<td>&lt;RDL</td>
<td>J</td>
<td>0.12</td>
<td>0.604</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Nickel, Molecular Weight</td>
<td>58.69</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>58.69</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Silver, Extractable, SEM</td>
<td>0.0146</td>
<td>—</td>
<td>—</td>
<td>0.0027</td>
<td>0.01</td>
<td>mmol/Kg</td>
<td>0.0063</td>
<td>—</td>
<td>—</td>
<td>0.020</td>
<td>0.0103</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Silver, Molecular Weight</td>
<td>107.87</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>107.87</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Zinc, Extractable, SEM</td>
<td>6.54</td>
<td>—</td>
<td>—</td>
<td>0.16</td>
<td>0.8</td>
<td>mg/Kg</td>
<td>3.84</td>
<td>—</td>
<td>—</td>
<td>0.12</td>
<td>0.604</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Zinc, Molecular Weight</td>
<td>65.38</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>65.38</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Total SEM</td>
<td>0.16</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mmol/Kg</td>
<td>0.09</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Sulfide, Acid Volatile</td>
<td>3.71</td>
<td>JG</td>
<td>—</td>
<td>0.4</td>
<td>1.6</td>
<td>mg/Kg</td>
<td>—</td>
<td>&lt;MDL, JG</td>
<td>U</td>
<td>0.3</td>
<td>1.21</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Sulfide, Molecular Weight</td>
<td>32.06</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>32.06</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Sulfide, Acid Volatile</td>
<td>0.116</td>
<td>—</td>
<td>—</td>
<td>0.01</td>
<td>0.050</td>
<td>mmol/Kg</td>
<td>ND</td>
<td>—</td>
<td>—</td>
<td>0.009</td>
<td>0.0377</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td><strong>SEM/AVS</strong></td>
<td><strong>1.4</strong></td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td><strong>ND</strong></td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

ND - Nondetect; * No detected AVS - metals bioavailable
Table B-4: Green River Basin Sediment SEM/AVS Calculations 2012

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Value</th>
<th>Lab Qual</th>
<th>Val Qual</th>
<th>MDL</th>
<th>RDL</th>
<th>Units</th>
<th>Value</th>
<th>Lab Qual</th>
<th>Val Qual</th>
<th>MDL</th>
<th>RDL</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cadmium, Extractable, SEM</td>
<td>—</td>
<td>&lt;MDL</td>
<td>U</td>
<td>0.089</td>
<td>0.448</td>
<td>mg/Kg</td>
<td>—</td>
<td>&lt;MDL</td>
<td>U</td>
<td>0.079</td>
<td>0.398</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Cadmium, Molecular Weight</td>
<td>112.41</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>112.41</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Cadmium, Extractable, SEM</td>
<td>ND</td>
<td>—</td>
<td>—</td>
<td>0.0079</td>
<td>0.00399</td>
<td>mmol/Kg</td>
<td>ND</td>
<td>—</td>
<td>—</td>
<td>0.00070</td>
<td>0.00354</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Copper, Extractable, SEM</td>
<td>4.57</td>
<td>—</td>
<td>—</td>
<td>0.18</td>
<td>0.895</td>
<td>mg/Kg</td>
<td>2.71</td>
<td>—</td>
<td>—</td>
<td>0.16</td>
<td>0.794</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Copper, Molecular Weight</td>
<td>63.55</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>63.55</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Copper, Extractable, SEM</td>
<td>0.0719</td>
<td>—</td>
<td>—</td>
<td>0.0028</td>
<td>0.0141</td>
<td>mmol/Kg</td>
<td>0.0426</td>
<td>—</td>
<td>—</td>
<td>0.0025</td>
<td>0.0125</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Lead, Extractable, SEM</td>
<td>5.36</td>
<td>—</td>
<td>—</td>
<td>0.89</td>
<td>4.48</td>
<td>mg/Kg</td>
<td>3.3</td>
<td>&lt;RDL</td>
<td>J</td>
<td>0.79</td>
<td>3.98</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Lead, Molecular Weight</td>
<td>207.2</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>207.2</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Lead, Extractable, SEM</td>
<td>0.0259</td>
<td>—</td>
<td>—</td>
<td>0.0043</td>
<td>0.0216</td>
<td>mmol/Kg</td>
<td>0.016</td>
<td>—</td>
<td>—</td>
<td>0.0038</td>
<td>0.0192</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Nickel, Extractable, SEM</td>
<td>0.65</td>
<td>&lt;RDL</td>
<td>J</td>
<td>0.22</td>
<td>1.12</td>
<td>mg/Kg</td>
<td>0.65</td>
<td>&lt;RDL</td>
<td>J</td>
<td>0.2</td>
<td>0.992</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Nickel, Molecular Weight</td>
<td>58.69</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>58.69</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Nickel, Extractable, SEM</td>
<td>0.011</td>
<td>—</td>
<td>—</td>
<td>0.0037</td>
<td>0.0191</td>
<td>mmol/Kg</td>
<td>0.011</td>
<td>—</td>
<td>—</td>
<td>0.0030</td>
<td>0.0169</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Silver, Extractable, SEM</td>
<td>—</td>
<td>&lt;MDL</td>
<td>U</td>
<td>0.18</td>
<td>0.895</td>
<td>mg/Kg</td>
<td>—</td>
<td>&lt;MDL</td>
<td>U</td>
<td>0.16</td>
<td>0.794</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Silver, Molecular Weight</td>
<td>107.87</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>107.87</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Silver, Extractable, SEM</td>
<td>ND</td>
<td>—</td>
<td>—</td>
<td>0.0017</td>
<td>0.00830</td>
<td>mmol/Kg</td>
<td>ND</td>
<td>—</td>
<td>—</td>
<td>0.0015</td>
<td>0.00736</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Zinc, Extractable, SEM</td>
<td>11.7</td>
<td>—</td>
<td>—</td>
<td>0.22</td>
<td>1.12</td>
<td>mg/Kg</td>
<td>9.33</td>
<td>—</td>
<td>—</td>
<td>0.2</td>
<td>0.992</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Zinc, Molecular Weight</td>
<td>65.38</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>65.38</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Zinc, Extractable, SEM</td>
<td>0.179</td>
<td>—</td>
<td>—</td>
<td>0.0034</td>
<td>0.0171</td>
<td>mmol/Kg</td>
<td>0.143</td>
<td>—</td>
<td>—</td>
<td>0.0030</td>
<td>0.015</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Total SEM</td>
<td>0.29</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mmol/Kg</td>
<td>0.21</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Sulfide, Acid Volatile</td>
<td>39.4</td>
<td>JG</td>
<td>—</td>
<td>2.8</td>
<td>11.2</td>
<td>mg/Kg</td>
<td>38.8</td>
<td>JG</td>
<td>—</td>
<td>2.5</td>
<td>9.92</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Sulfide, Molecular Weight</td>
<td>32.06</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>32.06</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Sulfide, Acid Volatile</td>
<td>1.23</td>
<td>—</td>
<td>—</td>
<td>0.087</td>
<td>0.349</td>
<td>mmol/Kg</td>
<td>1.21</td>
<td>—</td>
<td>—</td>
<td>0.078</td>
<td>0.309</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>SEM/AVS</td>
<td>0.23</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>0.18</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

ND - Nondetect
### Table B-4: Green River Basin Sediment SEM/AVS Calculations 2012

<table>
<thead>
<tr>
<th>Locator:</th>
<th>PT320</th>
<th>Z320</th>
</tr>
</thead>
<tbody>
<tr>
<td>Descrip:</td>
<td>COVINGTON CRK NEAR</td>
<td>COVINGTON CREEK BE</td>
</tr>
<tr>
<td>Sample:</td>
<td>L56024-24</td>
<td>L56024-25</td>
</tr>
<tr>
<td>Matrix:</td>
<td>SE FRSHWTRSED</td>
<td>SE FRSHWTRSED</td>
</tr>
<tr>
<td>ColDate:</td>
<td>8/15/12 12:15</td>
<td>8/15/12 12:45</td>
</tr>
<tr>
<td>TotalSolid:</td>
<td>44.2</td>
<td>43.1</td>
</tr>
</tbody>
</table>

#### DRY Weight Basis

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Value</th>
<th>Lab Qual</th>
<th>Val Qual</th>
<th>MDL</th>
<th>RDL</th>
<th>Units</th>
<th>Value</th>
<th>Lab Qual</th>
<th>Val Qual</th>
<th>MDL</th>
<th>RDL</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cadmium, Extractable, SEM</td>
<td></td>
<td>&lt;MDL</td>
<td>U</td>
<td>0.088</td>
<td>0.437</td>
<td>mg/Kg</td>
<td></td>
<td>&lt;MDL</td>
<td>U</td>
<td>0.088</td>
<td>0.443</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Cadmium, Molecular Weight</td>
<td>112.41</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>112.41</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Cadmium, Extractable, SEM</td>
<td>ND</td>
<td>—</td>
<td>—</td>
<td>0.00078</td>
<td>0.00389</td>
<td>mmol/Kg</td>
<td>ND</td>
<td>—</td>
<td>—</td>
<td>0.00078</td>
<td>0.00394</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Copper, Extractable, SEM</td>
<td>3.05</td>
<td>—</td>
<td>—</td>
<td>0.17</td>
<td>0.876</td>
<td>mg/Kg</td>
<td>2.15</td>
<td>—</td>
<td>—</td>
<td>0.18</td>
<td>0.884</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Copper, Molecular Weight</td>
<td>63.55</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>63.55</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Copper, Extractable, SEM</td>
<td>0.0480</td>
<td>—</td>
<td>—</td>
<td>0.0027</td>
<td>0.0138</td>
<td>mmol/Kg</td>
<td>0.0338</td>
<td>—</td>
<td>—</td>
<td>0.0028</td>
<td>0.0139</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Lead, Extractable, SEM</td>
<td>6.45</td>
<td>—</td>
<td>—</td>
<td>0.88</td>
<td>4.37</td>
<td>mg/Kg</td>
<td>3.9</td>
<td>&lt;RDL</td>
<td>J</td>
<td>0.88</td>
<td>4.43</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Lead, Molecular Weight</td>
<td>207.2</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>207.2</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Lead, Extractable, SEM</td>
<td>0.0311</td>
<td>—</td>
<td>—</td>
<td>0.0042</td>
<td>0.0211</td>
<td>mmol/Kg</td>
<td>0.019</td>
<td>—</td>
<td>—</td>
<td>0.0042</td>
<td>0.0214</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Nickel, Extractable, SEM</td>
<td>0.75</td>
<td>&lt;RDL</td>
<td>J</td>
<td>0.22</td>
<td>1.1</td>
<td>mg/Kg</td>
<td>0.30</td>
<td>&lt;RDL</td>
<td>J</td>
<td>0.22</td>
<td>1.11</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Nickel, Molecular Weight</td>
<td>58.69</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>58.69</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Nickel, Extractable, SEM</td>
<td>0.013</td>
<td>—</td>
<td>—</td>
<td>0.0037</td>
<td>0.019</td>
<td>mmol/Kg</td>
<td>0.0051</td>
<td>—</td>
<td>—</td>
<td>0.0037</td>
<td>0.0189</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Silver, Extractable, SEM</td>
<td></td>
<td>&lt;MDL</td>
<td>U</td>
<td>0.17</td>
<td>0.876</td>
<td>mg/Kg</td>
<td></td>
<td>&lt;MDL</td>
<td>U</td>
<td>0.18</td>
<td>0.884</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Silver, Molecular Weight</td>
<td>107.87</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>107.87</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Silver, Extractable, SEM</td>
<td>ND</td>
<td>—</td>
<td>—</td>
<td>0.0016</td>
<td>0.00812</td>
<td>mmol/Kg</td>
<td>ND</td>
<td>—</td>
<td>—</td>
<td>0.0017</td>
<td>0.00820</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Zinc, Extractable, SEM</td>
<td>18.8</td>
<td>—</td>
<td>—</td>
<td>0.22</td>
<td>1.1</td>
<td>mg/Kg</td>
<td>18.8</td>
<td>—</td>
<td>—</td>
<td>0.22</td>
<td>1.11</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Zinc, Molecular Weight</td>
<td>65.38</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>65.38</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Zinc, Extractable, SEM</td>
<td>0.288</td>
<td>—</td>
<td>—</td>
<td>0.0034</td>
<td>0.017</td>
<td>mmol/Kg</td>
<td>0.288</td>
<td>—</td>
<td>—</td>
<td>0.0034</td>
<td>0.0170</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Total SEM</td>
<td>0.38</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mmol/Kg</td>
<td>0.35</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Sulfide, Acid Volatile</td>
<td>24.9</td>
<td>JG</td>
<td>—</td>
<td>2.7</td>
<td>11</td>
<td>mg/Kg</td>
<td>271</td>
<td>JG</td>
<td>—</td>
<td>14</td>
<td>55.2</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Sulfide, Molecular Weight</td>
<td>32.06</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>32.06</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Sulfide, Acid Volatile</td>
<td>0.777</td>
<td>—</td>
<td>—</td>
<td>0.084</td>
<td>0.34</td>
<td>mmol/Kg</td>
<td>8.45</td>
<td>—</td>
<td>—</td>
<td>0.44</td>
<td>1.72</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>SEM/AVS</td>
<td>0.49</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>0.04</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

ND - Nondetect
<table>
<thead>
<tr>
<th>Locator: S320</th>
<th>D320</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Descrip:</strong> COVINGTON CR. ON H</td>
<td>JENKINS CREEK//BRI</td>
</tr>
<tr>
<td><strong>Sample:</strong> L56024-26</td>
<td>L56024-27</td>
</tr>
<tr>
<td><strong>Matrix:</strong> SE FRSHWTRSED</td>
<td>SE FRSHWTRSED</td>
</tr>
<tr>
<td><strong>ColDate:</strong> 8/15/12 14:00</td>
<td>8/15/12 14:50</td>
</tr>
<tr>
<td><strong>TotalSolid:</strong> 30.5</td>
<td>30.4</td>
</tr>
</tbody>
</table>

### Parameters

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Value</th>
<th>Lab Qual</th>
<th>Val Qual</th>
<th>MDL</th>
<th>RDL</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cadmium, Extractable, SEM</td>
<td>0.18</td>
<td>&lt;RDL</td>
<td>J</td>
<td>0.12</td>
<td>0.607</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Cadmium, Molecular Weight</td>
<td>112.41</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Cadmium, Extractable, SEM</td>
<td>0.0016</td>
<td>—</td>
<td>—</td>
<td>0.0011</td>
<td>0.00540</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Copper, Extractable, SEM</td>
<td>4.92</td>
<td>—</td>
<td>—</td>
<td>0.24</td>
<td>1.21</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Copper, Molecular Weight</td>
<td>63.55</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Copper, Extractable, SEM</td>
<td>0.0774</td>
<td>—</td>
<td>—</td>
<td>0.0038</td>
<td>0.0190</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Lead, Extractable, SEM</td>
<td>10.4</td>
<td>—</td>
<td>—</td>
<td>1.2</td>
<td>6.07</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Lead, Molecular Weight</td>
<td>207.2</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Lead, Extractable, SEM</td>
<td>0.0502</td>
<td>—</td>
<td>—</td>
<td>0.0058</td>
<td>0.0293</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Nickel, Extractable, SEM</td>
<td>0.66</td>
<td>&lt;RDL</td>
<td>J</td>
<td>0.3</td>
<td>1.51</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Nickel, Molecular Weight</td>
<td>58.69</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Nickel, Extractable, SEM</td>
<td>0.011</td>
<td>—</td>
<td>—</td>
<td>0.005</td>
<td>0.0257</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Silver, Extractable, SEM</td>
<td>—</td>
<td>&lt;MDL</td>
<td>U</td>
<td>0.24</td>
<td>1.21</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Silver, Molecular Weight</td>
<td>107.87</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Silver, Extractable, SEM</td>
<td>ND</td>
<td>—</td>
<td>—</td>
<td>0.0022</td>
<td>0.0112</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Zinc, Extractable, SEM</td>
<td>10.9</td>
<td>—</td>
<td>—</td>
<td>0.3</td>
<td>1.51</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Zinc, Molecular Weight</td>
<td>65.38</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Zinc, Extractable, SEM</td>
<td>0.167</td>
<td>—</td>
<td>—</td>
<td>0.005</td>
<td>0.0231</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Total SEM</td>
<td>0.31</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Sulfide, Acid Volatile</td>
<td>11.1</td>
<td>JG</td>
<td>—</td>
<td>0.75</td>
<td>3.03</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Sulfide, Molecular Weight</td>
<td>32.06</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Sulfide, Acid Volatile</td>
<td>0.346</td>
<td>—</td>
<td>—</td>
<td>0.023</td>
<td>0.0945</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td><strong>SEM/AVS</strong></td>
<td>0.89</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

**Units:**
- mg/Kg
- mg/mmol
- mmol/Kg
- mg/mmol

**Notes:**
- ND - Nondetect
<table>
<thead>
<tr>
<th>Parameters</th>
<th>Value</th>
<th>Lab Qual</th>
<th>Val Qual</th>
<th>MDL</th>
<th>RDL</th>
<th>Units</th>
<th>Value</th>
<th>Lab Qual</th>
<th>Val Qual</th>
<th>MDL</th>
<th>RDL</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cadmium, Extractable, SEM</td>
<td>0.53</td>
<td>&lt;RDL</td>
<td>J</td>
<td>0.3</td>
<td>1.51</td>
<td>mg/Kg</td>
<td>0.47</td>
<td>&lt;RDL</td>
<td>J</td>
<td>0.24</td>
<td>1.21</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Cadmium, Molecular Weight</td>
<td>112.41</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>112.41</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Cadmium, Extractable, SEM</td>
<td>0.0047</td>
<td>—</td>
<td>—</td>
<td>0.003</td>
<td>0.0134</td>
<td>mmol/Kg</td>
<td>0.0042</td>
<td>—</td>
<td>—</td>
<td>0.0021</td>
<td>0.0108</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Copper, Extractable, SEM</td>
<td>14.2</td>
<td>—</td>
<td>—</td>
<td>0.61</td>
<td>3.02</td>
<td>mg/Kg</td>
<td>13.6</td>
<td>—</td>
<td>—</td>
<td>0.49</td>
<td>2.42</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Copper, Molecular Weight</td>
<td>63.55</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>63.55</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Copper, Extractable, SEM</td>
<td>0.223</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>0.0096</td>
<td>0.0475</td>
<td>mg/Kg</td>
<td>0.214</td>
<td>—</td>
<td>—</td>
<td>0.0077</td>
<td>0.0381</td>
</tr>
<tr>
<td>Lead, Extractable, SEM</td>
<td>63.0</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>3</td>
<td>mg/Kg</td>
<td>16.4</td>
<td>—</td>
<td>—</td>
<td>2.4</td>
<td>12.1</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Lead, Molecular Weight</td>
<td>207.2</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>207.2</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Lead, Extractable, SEM</td>
<td>0.304</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>0.01</td>
<td>0.0729</td>
<td>mg/Kg</td>
<td>0.0792</td>
<td>—</td>
<td>—</td>
<td>0.012</td>
<td>0.0584</td>
</tr>
<tr>
<td>Nickel, Extractable, SEM</td>
<td>3.5</td>
<td>&lt;RDL</td>
<td>J</td>
<td>0.75</td>
<td>3.77</td>
<td>mg/Kg</td>
<td>3.51</td>
<td>—</td>
<td>—</td>
<td>0.61</td>
<td>3.03</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Nickel, Molecular Weight</td>
<td>58.69</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>58.69</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Nickel, Extractable, SEM</td>
<td>0.060</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>0.013</td>
<td>0.0642</td>
<td>mg/Kg</td>
<td>0.0598</td>
<td>—</td>
<td>—</td>
<td>0.010</td>
<td>0.0516</td>
</tr>
<tr>
<td>Silver, Extractable, SEM</td>
<td>—</td>
<td>&lt;MDL</td>
<td>U</td>
<td>0.61</td>
<td>3.02</td>
<td>mg/Kg</td>
<td>—</td>
<td>&lt;MDL</td>
<td>U</td>
<td>0.49</td>
<td>2.42</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Silver, Molecular Weight</td>
<td>107.87</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>107.87</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Silver, Extractable, SEM</td>
<td>ND</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>0.0057</td>
<td>0.0280</td>
<td>mg/Kg</td>
<td>ND</td>
<td>—</td>
<td>—</td>
<td>0.0045</td>
<td>0.0224</td>
</tr>
<tr>
<td>Zinc, Extractable, SEM</td>
<td>105</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>0.75</td>
<td>3.77</td>
<td>mg/Kg</td>
<td>61.3</td>
<td>—</td>
<td>—</td>
<td>0.61</td>
<td>3.03</td>
</tr>
<tr>
<td>Zinc, Molecular Weight</td>
<td>65.38</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>65.38</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Zinc, Extractable, SEM</td>
<td>1.61</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>0.01</td>
<td>0.0577</td>
<td>mg/Kg</td>
<td>0.938</td>
<td>—</td>
<td>—</td>
<td>0.0093</td>
<td>0.0463</td>
</tr>
<tr>
<td>Total SEM</td>
<td>2.20</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/Kg</td>
<td>1.29</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Sulfide, Acid Volatile</td>
<td>22.6</td>
<td>JG</td>
<td>—</td>
<td>1.9</td>
<td>7.53</td>
<td>mg/Kg</td>
<td>39.0</td>
<td>JG</td>
<td>—</td>
<td>1.5</td>
<td>6.06</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Sulfide, Molecular Weight</td>
<td>32.06</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>32.06</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Sulfide, Acid Volatile</td>
<td>0.705</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>0.059</td>
<td>0.235</td>
<td>mmol/Kg</td>
<td>1.22</td>
<td>—</td>
<td>—</td>
<td>0.047</td>
<td>0.189</td>
</tr>
<tr>
<td>SEM/AVS</td>
<td>3.1</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>1.1</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

ND - Nondetect
Table B-4: Green River Basin Sediment SEM/AVS Calculations 2012

<table>
<thead>
<tr>
<th>Locator:</th>
<th>FR320</th>
<th>LW320</th>
</tr>
</thead>
<tbody>
<tr>
<td>Descrip:</td>
<td>JENKINS CRK AT FRO</td>
<td>JENKINS LK. WILDER</td>
</tr>
<tr>
<td>Sample:</td>
<td>L56024-30</td>
<td>L56024-33</td>
</tr>
<tr>
<td>Matrix:</td>
<td>SE FRSHWTRSED</td>
<td>SE FRSHWTRSED</td>
</tr>
<tr>
<td>ColDate:</td>
<td>8/27/12 12:30</td>
<td>8/27/12 11:45</td>
</tr>
<tr>
<td>TotalSolid:</td>
<td>14.9</td>
<td>13.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Value</th>
<th>Lab Qual</th>
<th>Val Qual</th>
<th>MDL</th>
<th>RDL</th>
<th>Units</th>
<th>Value</th>
<th>Lab Qual</th>
<th>Val Qual</th>
<th>MDL</th>
<th>RDL</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cadmium, Extractable, SEM</td>
<td>0.46</td>
<td>&lt;RDL</td>
<td>J</td>
<td>0.26</td>
<td>1.32</td>
<td>mg/Kg</td>
<td>0.43</td>
<td>&lt;RDL</td>
<td>J</td>
<td>0.28</td>
<td>1.42</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Cadmium, Molecular Weight</td>
<td>112.41</td>
<td>—</td>
<td>—</td>
<td>0.0023</td>
<td>0.0117</td>
<td>mmol/Kg</td>
<td>112.41</td>
<td>—</td>
<td>—</td>
<td>0.0025</td>
<td>0.0126</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Copper, Extractable, SEM</td>
<td>18.6</td>
<td>—</td>
<td>—</td>
<td>0.53</td>
<td>2.65</td>
<td>mg/Kg</td>
<td>20.8</td>
<td>—</td>
<td>—</td>
<td>0.57</td>
<td>2.85</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Copper, Molecular Weight</td>
<td>63.55</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>63.55</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Lead, Extractable, SEM</td>
<td>0.0041</td>
<td>—</td>
<td>—</td>
<td>0.0083</td>
<td>0.0417</td>
<td>mmol/Kg</td>
<td>0.0038</td>
<td>—</td>
<td>—</td>
<td>0.0090</td>
<td>0.0448</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Lead, Molecular Weight</td>
<td>0.0026</td>
<td>—</td>
<td>—</td>
<td>0.013</td>
<td>0.0637</td>
<td>mmol/Kg</td>
<td>0.0140</td>
<td>—</td>
<td>—</td>
<td>0.0685</td>
<td>3.56</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Nickel, Extractable, SEM</td>
<td>0.0047</td>
<td>—</td>
<td>—</td>
<td>0.0023</td>
<td>0.0117</td>
<td>mmol/Kg</td>
<td>0.0038</td>
<td>—</td>
<td>—</td>
<td>0.0025</td>
<td>0.0126</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Nickel, Molecular Weight</td>
<td>0.0676</td>
<td>—</td>
<td>—</td>
<td>0.0011</td>
<td>0.0564</td>
<td>mmol/Kg</td>
<td>0.0056</td>
<td>—</td>
<td>—</td>
<td>0.012</td>
<td>0.0607</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Silver, Extractable, SEM</td>
<td>0.0676</td>
<td>—</td>
<td>—</td>
<td>0.0011</td>
<td>0.0564</td>
<td>mmol/Kg</td>
<td>0.0056</td>
<td>—</td>
<td>—</td>
<td>0.012</td>
<td>0.0607</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Silver, Molecular Weight</td>
<td>0.0047</td>
<td>—</td>
<td>—</td>
<td>0.0023</td>
<td>0.0117</td>
<td>mmol/Kg</td>
<td>0.0038</td>
<td>—</td>
<td>—</td>
<td>0.0025</td>
<td>0.0126</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Zinc, Extractable, SEM</td>
<td>0.0026</td>
<td>—</td>
<td>—</td>
<td>0.013</td>
<td>0.0637</td>
<td>mmol/Kg</td>
<td>0.0140</td>
<td>—</td>
<td>—</td>
<td>0.0685</td>
<td>3.56</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Zinc, Molecular Weight</td>
<td>0.0047</td>
<td>—</td>
<td>—</td>
<td>0.0011</td>
<td>0.0564</td>
<td>mmol/Kg</td>
<td>0.0056</td>
<td>—</td>
<td>—</td>
<td>0.012</td>
<td>0.0607</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Total SEM</td>
<td>1.24</td>
<td>—</td>
<td>—</td>
<td>0.010</td>
<td>0.0506</td>
<td>mmol/Kg</td>
<td>1.45</td>
<td>—</td>
<td>—</td>
<td>0.011</td>
<td>0.0545</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Sulfide, Acid Volatile</td>
<td>23.0</td>
<td>JG</td>
<td>—</td>
<td>1.7</td>
<td>6.62</td>
<td>mg/Kg</td>
<td>1210</td>
<td>JG</td>
<td>—</td>
<td>44</td>
<td>179</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Sulfide, Molecular Weight</td>
<td>32.06</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>32.06</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Sulfide, Acid Volatile</td>
<td>0.717</td>
<td>—</td>
<td>—</td>
<td>0.053</td>
<td>0.206</td>
<td>mmol/Kg</td>
<td>37.7</td>
<td>—</td>
<td>—</td>
<td>1.4</td>
<td>5.58</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>SEM/AVS</td>
<td>1.7</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>0.05</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

ND - Nondetect
### Table B-4: Green River Basin Sediment SEM/AVS Calculations 2012

<table>
<thead>
<tr>
<th>Locator:</th>
<th>FL319</th>
<th>'0318</th>
</tr>
</thead>
<tbody>
<tr>
<td>Descrip:</td>
<td>GREEN RIVER, DOWNS</td>
<td>GREEN RIVER/EAST V</td>
</tr>
<tr>
<td>Sample:</td>
<td>L56024-34</td>
<td>L56024-35</td>
</tr>
<tr>
<td>Matrix:</td>
<td>SE FRSHWTRSED</td>
<td>SE FRSHWTRSED</td>
</tr>
<tr>
<td>ColDate:</td>
<td>8/29/12 10:10</td>
<td>8/29/12 12:40</td>
</tr>
<tr>
<td>TotalSolid:</td>
<td>74</td>
<td>61.4</td>
</tr>
</tbody>
</table>

#### Parameters

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Value</th>
<th>Lab Qual</th>
<th>Val Qual</th>
<th>MDL</th>
<th>RDL</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cadmium, Extractable, SEM</td>
<td></td>
<td>&lt;MDL</td>
<td>U</td>
<td>0.054</td>
<td>0.27</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Cadmium, Molecular Weight</td>
<td>112.41</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Cadmium, Extractable, SEM</td>
<td>ND</td>
<td>—</td>
<td>—</td>
<td>0.0048</td>
<td>0.0024</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Copper, Extractable, SEM</td>
<td>2.27</td>
<td>—</td>
<td>—</td>
<td>0.11</td>
<td>0.539</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Copper, Molecular Weight</td>
<td>63.55</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Copper, Extractable, SEM</td>
<td>0.0357</td>
<td>—</td>
<td>—</td>
<td>0.0017</td>
<td>0.00848</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Lead, Extractable, SEM</td>
<td>1.5</td>
<td>&lt;RDL</td>
<td>J</td>
<td>0.54</td>
<td>2.7</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Lead, Molecular Weight</td>
<td>207.2</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Nickel, Extractable, SEM</td>
<td>0.0072</td>
<td>—</td>
<td>—</td>
<td>0.0026</td>
<td>0.013</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Nickel, Molecular Weight</td>
<td>0.728</td>
<td>—</td>
<td>—</td>
<td>0.14</td>
<td>0.674</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Nickel, Extractable, SEM</td>
<td>0.0124</td>
<td>—</td>
<td>—</td>
<td>0.0024</td>
<td>0.0115</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Silver, Extractable, SEM</td>
<td></td>
<td>&lt;MDL</td>
<td>U</td>
<td>0.11</td>
<td>0.539</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Silver, Molecular Weight</td>
<td>107.87</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Silver, Extractable, SEM</td>
<td>ND</td>
<td>—</td>
<td>—</td>
<td>0.0010</td>
<td>0.00500</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Zinc, Extractable, SEM</td>
<td>8.09</td>
<td>—</td>
<td>—</td>
<td>0.14</td>
<td>0.674</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Zinc, Molecular Weight</td>
<td>65.38</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Zinc, Extractable, SEM</td>
<td>0.124</td>
<td>—</td>
<td>—</td>
<td>0.0021</td>
<td>0.0103</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Total SEM</td>
<td>0.18</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Sulfide, Acid Volatile</td>
<td>—</td>
<td>&lt;MDL,JG</td>
<td>U</td>
<td>0.34</td>
<td>1.35</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Sulfide, Molecular Weight</td>
<td>32.06</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Sulfide, Acid Volatile</td>
<td>ND</td>
<td>—</td>
<td>—</td>
<td>0.011</td>
<td>0.0421</td>
<td>mmol/Kg</td>
</tr>
</tbody>
</table>

| SEM/AVS | * | — | — | — | — |

<table>
<thead>
<tr>
<th>Value</th>
<th>Lab Qual</th>
<th>Val Qual</th>
<th>MDL</th>
<th>RDL</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&lt;MDL</td>
<td>U</td>
<td>0.054</td>
<td>0.27</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>112.41</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>ND</td>
<td>—</td>
<td>—</td>
<td>0.0005</td>
<td>0.00270</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>5.91</td>
<td>—</td>
<td>—</td>
<td>0.12</td>
<td>0.606</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>63.55</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>0.0930</td>
<td>—</td>
<td>—</td>
<td>0.0019</td>
<td>0.00954</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>2.1</td>
<td>&lt;RDL</td>
<td>J</td>
<td>0.6</td>
<td>3.03</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>207.2</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>0.010</td>
<td>—</td>
<td>—</td>
<td>0.003</td>
<td>0.0146</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>1.73</td>
<td>—</td>
<td>—</td>
<td>0.15</td>
<td>0.757</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>58.69</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>0.0295</td>
<td>—</td>
<td>—</td>
<td>0.0026</td>
<td>0.0129</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>—</td>
<td>&lt;MDL</td>
<td>U</td>
<td>0.12</td>
<td>0.606</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>107.87</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>ND</td>
<td>—</td>
<td>—</td>
<td>0.0011</td>
<td>0.00562</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>10.3</td>
<td>—</td>
<td>—</td>
<td>0.15</td>
<td>0.757</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>65.38</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>0.158</td>
<td>—</td>
<td>—</td>
<td>0.0023</td>
<td>0.0116</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>0.29</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>0.68</td>
<td>&lt;RDL,JG</td>
<td>J</td>
<td>0.37</td>
<td>1.51</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>32.06</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>0.021</td>
<td>—</td>
<td>—</td>
<td>0.012</td>
<td>0.0471</td>
<td>mmol/Kg</td>
</tr>
</tbody>
</table>

* ND - Nondetect;  * No detected AVS - metals bioavailable
<table>
<thead>
<tr>
<th>Parameters</th>
<th>Value</th>
<th>Lab Qual</th>
<th>Val Qual</th>
<th>MDL</th>
<th>RDL</th>
<th>Units</th>
<th>Value</th>
<th>Lab Qual</th>
<th>Val Qual</th>
<th>MDL</th>
<th>RDL</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cadmium, Extractable, SEM</td>
<td>—</td>
<td>&lt;MDL</td>
<td>U</td>
<td>0.08</td>
<td>0.403</td>
<td>mg/Kg</td>
<td>—</td>
<td>&lt;MDL</td>
<td>U</td>
<td>0.06</td>
<td>0.303</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Cadmium, Molecular Weight</td>
<td>112.41</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>112.41</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Cadmium, Extractable, SEM</td>
<td>ND</td>
<td>—</td>
<td>—</td>
<td>0.0007</td>
<td>0.00359</td>
<td>mmol/Kg</td>
<td>ND</td>
<td>—</td>
<td>—</td>
<td>0.0005</td>
<td>0.00270</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Copper, Extractable, SEM</td>
<td>7.24</td>
<td>—</td>
<td>—</td>
<td>0.16</td>
<td>0.806</td>
<td>mg/Kg</td>
<td>5.17</td>
<td>—</td>
<td>—</td>
<td>0.12</td>
<td>0.606</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Copper, Molecular Weight</td>
<td>63.55</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>63.55</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Copper, Extractable, SEM</td>
<td>0.114</td>
<td>—</td>
<td>—</td>
<td>0.0025</td>
<td>0.0127</td>
<td>mmol/Kg</td>
<td>0.0814</td>
<td>—</td>
<td>—</td>
<td>0.0019</td>
<td>0.00954</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Lead, Extractable, SEM</td>
<td>4.09</td>
<td>&lt;RDL</td>
<td>J</td>
<td>0.8</td>
<td>4.03</td>
<td>mg/Kg</td>
<td>2.4</td>
<td>&lt;RDL</td>
<td>J</td>
<td>0.6</td>
<td>3.03</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Lead, Molecular Weight</td>
<td>207.2</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>207.2</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Nickel, Extractable, SEM</td>
<td>2.21</td>
<td>—</td>
<td>—</td>
<td>0.2</td>
<td>1.01</td>
<td>mg/Kg</td>
<td>1.28</td>
<td>—</td>
<td>—</td>
<td>0.15</td>
<td>0.757</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Nickel, Molecular Weight</td>
<td>58.69</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>58.69</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Nickel, Extractable, SEM</td>
<td>0.0377</td>
<td>—</td>
<td>—</td>
<td>0.003</td>
<td>0.0172</td>
<td>mmol/Kg</td>
<td>0.0218</td>
<td>—</td>
<td>—</td>
<td>0.0026</td>
<td>0.0129</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Silver, Extractable, SEM</td>
<td>—</td>
<td>&lt;MDL</td>
<td>U</td>
<td>0.16</td>
<td>0.806</td>
<td>mg/Kg</td>
<td>—</td>
<td>&lt;MDL</td>
<td>U</td>
<td>0.12</td>
<td>0.606</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Silver, Molecular Weight</td>
<td>107.87</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>107.87</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Silver, Extractable, SEM</td>
<td>ND</td>
<td>—</td>
<td>—</td>
<td>0.0015</td>
<td>0.00747</td>
<td>mmol/Kg</td>
<td>ND</td>
<td>—</td>
<td>—</td>
<td>0.0011</td>
<td>0.00562</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Zinc, Extractable, SEM</td>
<td>13.3</td>
<td>—</td>
<td>—</td>
<td>0.2</td>
<td>1.01</td>
<td>mg/Kg</td>
<td>9.37</td>
<td>—</td>
<td>—</td>
<td>0.15</td>
<td>0.757</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Zinc, Molecular Weight</td>
<td>65.38</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>65.38</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Zinc, Extractable, SEM</td>
<td>0.203</td>
<td>—</td>
<td>—</td>
<td>0.003</td>
<td>0.0154</td>
<td>mmol/Kg</td>
<td>0.143</td>
<td>—</td>
<td>—</td>
<td>0.0023</td>
<td>0.0116</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td>Total SEM</td>
<td>0.37</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mmol/kg</td>
<td>0.26</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mmol/kg</td>
</tr>
<tr>
<td>Sulfide, Acid Volatile</td>
<td>1.3</td>
<td>&lt;RDL,JG</td>
<td>J</td>
<td>0.51</td>
<td>2.01</td>
<td>mg/Kg</td>
<td>—</td>
<td>&lt;MDL,JG</td>
<td>U</td>
<td>0.38</td>
<td>1.51</td>
<td>mg/Kg</td>
</tr>
<tr>
<td>Sulfide, Molecular Weight</td>
<td>32.06</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
<td>32.06</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mg/mmol</td>
</tr>
<tr>
<td>Sulfide, Acid Volatile</td>
<td>0.041</td>
<td>—</td>
<td>—</td>
<td>0.016</td>
<td>0.0627</td>
<td>mmol/Kg</td>
<td>ND</td>
<td>—</td>
<td>—</td>
<td>0.012</td>
<td>0.0471</td>
<td>mmol/Kg</td>
</tr>
<tr>
<td><strong>SEM/AVS</strong></td>
<td>9.2</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>4.8</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

ND - Nondetect; * No detected AVS - metals bioavailable