X-ray fluorescence trace element data of the following U. S. Bureau of Mines hard rock mineral pulp samples from the Colville Mining District:

West Kivliktort Mountain (CMD5601; AV91-20110.0) of Howard Pass Quad., Kady (CMD4183; AV91-20127.0) of Killik River Quadrangle, Kady (CMD5455; AV91-20110.0) of Killik River Quadrangle, and Story Creek (CMD5432; AV91-20109.0) of Howard Pass Quadrangle.
DATE: January 29, 1996

TO: Dr. John Reeder

FROM: Melanie Werdon


The following table shows the analytical results of X-ray fluorescence analyses I ran, compared to the values reported by the U. S. Bureau of Mines by ICP for various elements. The XRF analyses confirm my observation that there was interference between high Zn and Pb with the elements Mo and Bi. The Sb values are similar enough that there is likely no interference problem. Sn values are comparable except for sample 5455. The reason for this is not clear.

<table>
<thead>
<tr>
<th>Deposit</th>
<th>Sample #</th>
<th>Det. Lim.</th>
<th>Mo ppm</th>
<th>Mo ppm</th>
<th>Bi ppm</th>
<th>Bi ppm</th>
<th>Sb ppm</th>
<th>Sb ppm</th>
<th>Sn ppm</th>
<th>Sn ppm</th>
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</thead>
<tbody>
<tr>
<td>W.Kiv.Mtn.</td>
<td>5601</td>
<td>1</td>
<td>XRF</td>
<td>ICP*</td>
<td>XRF</td>
<td>ICP*</td>
<td>XRF</td>
<td>ICP*</td>
<td>XRF</td>
<td>ICP*</td>
</tr>
<tr>
<td>Kady</td>
<td>5455</td>
<td>5-2000</td>
<td>8</td>
<td>183</td>
<td>0</td>
<td>155</td>
<td>421</td>
<td>103</td>
<td>45</td>
<td>88</td>
</tr>
<tr>
<td>Kady</td>
<td>4183</td>
<td>20-2000</td>
<td>58</td>
<td>0</td>
<td>34</td>
<td>2000</td>
<td>3111</td>
<td>143</td>
<td>95</td>
<td>88</td>
</tr>
<tr>
<td>StoryCk.</td>
<td>5432</td>
<td>20-2000</td>
<td>14</td>
<td>311</td>
<td>0</td>
<td>247</td>
<td>1759</td>
<td>621</td>
<td>84</td>
<td>165</td>
</tr>
</tbody>
</table>

* ICP data from Meyer, 1994, USBM OFR 34-94

Also, as you requested, I reminded Mr. Dan McCoy and Dr. Rainer Newberry about sending you the sample interval information for the core samples they collected this past spring.

Thank you very much for sending the samples to me. I have returned all four samples with this letter.

Sincerely,

Melanie Werdon

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