



# Rio Algom

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**Certified Mail - 7001 2510 0008 1945 3930**  
**Return Receipt Requested**

May 10, 2002

Mr. Steve Ingle  
WDEQ/LQD  
Herschler Building  
122 West 25<sup>th</sup> Street  
Cheyenne, WY 82002

**RE: Corrective Action Report 4, West & East Evaporation Pond Leak  
Permit to Mine 633, License SUA-1548, Docket 40-8964**

Dear Mr. Ingle:

### **West Pond Status**

By way of background, on January 4, 2002, during a routine inspection, it was discovered that the water level in the west evaporation pond sump exceeded six (6) inches. The water level in the pond, three feet two inches at the time of the discovery, was lowered to two feet ten inches in order to stop the leak. The sump water was analyzed for chloride, specific conductance, bicarbonate,  $U_{nat}$ , and sulfate with the results shown below:

<b>Chemical</b>	<b>Concentration</b>
Chloride	5,100 mg/l
Specific Conductance @ 25 °C	3,941 u Siemens
Bicarbonate	396 mg/l
$U_{nat}$ as $U_3O_8$	36 mg/l
Sulfate	4,700 mg/l

Upon receipt of the confirming analysis, both Steve Ingle of WDEQ and John Lusher of NRC were notified via telephone on January 11, 2002.

During this report period, April 12<sup>th</sup> through May 10<sup>th</sup>, repairs were made to the liner and the water level was slowly raised to 3' 6". Additional work will be performed during the next reporting period before the pond level is raised again. No samples were collected during this reporting period because the sump did not collect water. However, the results from the last monthly sample collected on April 11<sup>th</sup> are: conductivity 11,400 MicroS, pH 7.51, chloride 3,416 mg/l, bicarbonate 17 mg/l, sulfate 3,100 mg/l, and Unat 27 mg/l.

*NMSSO1  
Public  
Add: John Lusher*

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**East Pond Status**

By way of background, on January 9, 2002, during a routine inspection, it was discovered that the water level in the east evaporation pond sump exceeded six (6) inches. The water level in the pond, four feet seven inches at the time of the discovery, was lowered to three feet six inches in order to stop the leak. The sump water was analyzed for chloride, specific conductance, bicarbonate, U<sub>nat</sub>, and sulfate with the results shown below:

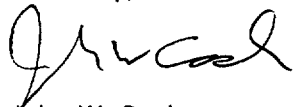
<b>Chemical</b>	<b>Concentration</b>
Chloride	2,900 mg/l
Specific Conductance @ 25 °C	2,857 u Siemens
Bicarbonate	244 mg/l
U <sub>nat</sub> as U <sub>3</sub> O <sub>8</sub>	23 mg/l
Sulfate	5,300 mg/l

Upon receipt of the confirming analysis, both Steve Ingle of WDEQ and John Lusher of NRC were notified via telephone on January 11, 2002.

During this reporting period, April 12<sup>th</sup> through May 10<sup>th</sup>, the water level in the east pond was raised to 4' 5", without leakage. Therefore, no samples were collected. The cause of the leak is still being sought.

Additional monthly reports will be submitted until correction of the situation is confirmed. If you have any questions or comments regarding the submittal, please feel free to contact me at (307) 358-3744, ext. 62.

Sincerely,



John W. Cash  
Manager EHS and Regulatory Affairs

xc: ✓ J. Lusher-U.S. NRC (Div. of Low Level Waste Mgt. & Dec.) Rockville, MD  
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