

# Rio Algom Mining Corp.

## Smith Ranch Uranium Facility

**Certified Mail – Z 780 870 642**  
**Return Receipt Requested**

November 18, 1999

Mr. John Surmeier  
Acting Branch Chief  
U.S. Nuclear Regulatory Commission  
Uranium Recovery Branch  
Division of Low Level Waste Management & Decommissioning  
Mail Stop T7J8  
11555 Rockville Pike  
Rockville, MD 20850

**RE: Corrective Action Report, West Evaporation Pond**  
**License No. SUA-1548 Docket No. 40-8964**  
**Smith Ranch Facility**

Dear Mr. Surmeier:

Please find attached a report describing the corrective action taken upon discovery of a leak in the west evaporation pond on October 23, 1999. This is the final report as the leak has been repaired and water is no longer seeping into the sump.

Please feel free to contact me at (307) 358-3744, ext. 62, if you have any questions or comments.

Sincerely,



John Cash  
Supervisor, Environmental Safety &  
Regulatory Affairs

cc: NRC, Region IV (Division of Nuclear Materials Safety), Arlington, TX  
Certified Mail – Z 780 870 643, Return Receipt Requested  
B. Ferdinand  
M. Freeman  
P. Goranson  
file

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**RIO ALGOM MINING CORP.  
 PERMIT TO MINE #633  
 LICENSE SUA-1548 DOCKET NO. 40-8964  
 Smith Ranch Facility**

**WEST EVAPORATION POND STATUS REPORT  
 November 18, 1999**

During a routine inspection at 8:00 p.m. on October 23<sup>rd</sup>, a wellfield operator discovered that the west evaporation pond was leaking into the sump. Samples were collected at 10:30 p.m. on October 23<sup>rd</sup> to determine the source of the water. The analytical results, listed below, confirmed the source as the west evaporation pond.

**West Evaporation Pond**

<b>Sample Location</b>	<b>U<sub>Nat</sub></b>	<b>Chloride</b>	<b>Specific Cond.</b>
West Evap. Pond	75 mg/l	8,540 mg/l	32,050 micro-Siemens
West Sump	193 mg/l	9,050 mg/l	33,100 micro-Siemens

Mr. John Lusher of the Nuclear Regulatory Commission and Ms. Paula Cutillo of the Wyoming Department of Environmental Quality-Land Quality Division were contacted by telephone on October 25, 1999.

The contents of the west evaporation pond were evacuated to prevent further leakage and to aid in finding the leak. The hole in the pond liner is thought to have been created by a camlock end on a transfer hose that was being used to send water from the east pond to the west pond. The leak was fixed on November 16<sup>th</sup> but the water level will not be returned to above the leak until around November 29<sup>th</sup> due to an impending falloff test. When the water level is raised again the integrity of the patch will be confirmed.

Because the flow rate decreased quickly, the required monthly sample was taken on October 29, 1999, while the sump still contained water. The results are listed below.

**Monthly West Evap. Pond Sump Sample**

<b>Chloride</b>	<b>U<sub>Nat</sub></b>	<b>Sulfate</b>	<b>Bicarbonate</b>	<b>Specific Cond.</b>
8,300 mg/l	150 mg/l	6,800 mg/l	500 mg/l	32,000 micro-Siemens

Water ceased flowing into the west evaporation pond sump on November 3, 1999 and the sump has been dry since.

To prevent this type of incident from reoccurring, pumps have been installed in each of the evaporation ponds so transfer hoses will no longer be required.