

# Rio Algom Mining LLC

October 4, 2012

Certified Mail (7010 1870 0000 3702 9696)

Mr. Tom McLaughlin  
United States Nuclear Regulatory Commission  
Mail Stop T-8F5  
Washington, DC 28555

Subject: MW 36-06 KD and MW 31-02 TRB Gross Alpha Results – 2<sup>nd</sup> Qtr 2012  
RIO ALGOM MINING LLC, AMBROSIA LAKE FACILITY  
Material License Number SUA-1473

Dear Mr. McLaughlin:

This letter represents the 2<sup>nd</sup> Quarter 2012 reporting on the gross alpha analytical results for ACL monitor wells 36-06 KD and 31-02 TRB. Sampling is performed according to the requirement of License Condition 34 of SUA-1473.

Monthly sampling with quarterly reporting was initiated when the gross alpha results obtained during the November 2010 sampling event exceeded the Ground Water Protection Standards (GWPS) set for these two wells.

Monitor Well 36-06 KD is in the Dakota Formation with a GWPS value of 56 pCi/L gross alpha. The gross alpha value obtained in November 2010 was 68.4 pCi/L.

Monitor Well 31-02 TRB is in the Tres Hermanos B Formation with a GWPS value of 21 pCi/L gross alpha. The gross alpha value obtained in November 2010 was 40.8 pCi/L.

The results for the second quarter of 2012 are show in the table below.

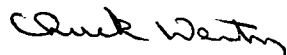
Sample Date	31-02 TRB		36-06 KD Gross Alpha pCi/L (Adj)
	Gross Alpha pCi/L (Adj)	Uranium mg/L	
(GWPS Limit)	<b>21</b>	<b>1.6</b>	<b>56</b>
04/24/12	-254	0.6775	319
05/08/12	N/A	N/A	208
05/22/12	-43.4	-0.2125	N/A
06/15/12	-6.15	0.845	-235

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The table above shows that the adjusted gross alpha values and the uranium values for monitor well MW 31-02TRB remained below the acceptable groundwater protection standard limits during the 2<sup>nd</sup> quarter of 2012. However, the adjusted gross alpha values for MW 36-06KD continued to be erratic during the 2<sup>nd</sup> quarter of 2012. Gross alpha values will continue to be monitored monthly for both monitor wells during the third quarter of 2012.

Rio Algom Mining LLC will also continue to monitor uranium analysis for MW 31-02TRB during the third quarter of 2012.

If you have comments or questions please contact me at 505-287-8851 ext 15.  
Sincerely,



Chuck Wentz

Environmental Department Supervisor/RSO

Rio Algom Mining LLC

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cc: Document Control