	SERVICE FABRICATION	
	TYPICAL COMPOSITION OF SPENT ALUMINA	
Ref: BEC.10.60 Typical composition of spent Alumina-En.doc		

To: M. Marc Laroche - STOBEC Inc

Find below the typical composition range of the spent alumina produced
Note we are using only fresh alumina from ALCAN AA130MS
and during the utilization in our process there no contamination with halogen derivatives or heavy metals.

Characteristics	Unit	Typical values
Loss at 105 °C *	% Weight	7 - 10
Loss between 105 °C and 900 °C *	% Weight	15 -22
Sodium as Na_2O	% Weight	2.8 -3.5
Alumina Al_2O_3	% Weight	Complement at 100

* Note:

- The losses at 105 °C are assimilated as free water content
- The losses between 105 °C and 900 °C are the total of organic molecules adsorbed in the alumina and the water linked in the alumina structure. These organic products are organic solvents and quinone derivatives

Alumina Mix - Typical values

Chemical analysis

Analysis	Units	Result
Na_2O	%	3
Al_2O_3	%	70
As	mg/l	0.20
B	mg/l	1.4
Cd	mg/l	< 0.005
Cr	mg/l	0.18
Cu	mg/l	<0.01
F	mg/l	<1.0
Hg	mg/l	<0.0002
Ni	mg/l	0.14
NO_2 (as N)	mg/l	<0.01
NO_2-NO_3 (as N)	mg/l	<0.2
Pb	mg/l	<0.05
Se	mg/l	<0.01
U	mg/l	<0.005
Zn	mg/l	0.07
HCN	mg/l	<0.3
Phenol (4AAP)	mg/l	0.060
Total Oils and greases	mg/l	36
C10-C50	mg/kg	300

Physical analysis

Test	Units	Result
Loss on dry	%	5
Loss on ignition	%	22
Particles size (US Standards)		
On 7 mesh	%	6.2
On 14 mesh	%	93.33
On 16 mesh	%	0.28
On 20 mesh	%	0.02
Through 20 mesh	%	0.01