

## Alset Energy (ION.V): To Be or Not To Be



*It's not a lie if you believe it. - George Constanza*

In this installment I will start by reminding you a few of the things that I have said about Alset's Mexican 'lithium salars':

- Due to their geology these salars are not supposed to host important quantities of brines (if any);
- The brine would be characterized by low lithium grades (< 100 mg/L in average);
- In their previous press releases Alset management was misleading the investors by not clearly indicating that they are sampling and assaying two different lithium bearing mediums: hard rock and brine.

It is highly unlikely that an economic lithium deposit would be delineated in any of those salars but it is my duty to remind you that each and any of the mediums (hardrock and brine) would have a different cut-off grade, different minimum deposit size, very different processing methods and costs, and different permitting challenges. This is why it is important that investors know when the company talks about one or the other type of lithium deposits/samples/assays.

In this installment I will only discuss a couple of issues that are readily apparent in Alset's latest press release <https://goo.gl/k4Xu6q>

I do not need to wait for 'brine' assay results to discuss them.



*Captain Canada declares "We are making good progress towards an assessment of the potential of our salars in Mexico."*

Un dos tres. So they have finally drilled one of their most prospective salars - the La Salada salar located in Zacatecas, Mexico.

First of all they have drilled one diamond drill hole and according to their nr "due to slow drilling and poor recovery the first hole ended at a depth of 53.15 meters (m) in limestone".

Whoa! Roll back a little bit, gringo.

Was the drill rig powered by mules? Why the slow drilling? Or was it because of Coronas?

And why the poor recovery? Oh, I am having second thoughts and I might have a theory about that.

So here's the thing and hear it well as it will be useful when analyzing the other red flags.

This La Salada, same as all other Zacatecas salars, is nothing but a **small bowl**/depression/ topographic low in the ground in a region characterized by gently undulating relief.

There have never been high mountains surrounding the bowls and as a consequence most of the infill material should be represented by silt, loess, maybe volcanic ash but less sand and/or gravel material (representing alluvial material derived from the surrounding high energy relief).

Diamond drilling through that kind of material might result in poor recoveries, indeed.

Ba, bu, but ... what has the limestone to do with Captain Canada's decision to stop drilling that hole?

Nada.

Other than the fact that as I have expected and mentioned in previous installments these bowls that Captain Canada call a game changer for Tesla are nothing but shallow depressions less than 70 m in depth. That's why our lithium hero stopped them. There was no reason to continue drilling them as **they have hit ... bedrock. At 53 m in depth!**

To remind you, the **true continental lithium salars that host immense quantities of brines** are ....well, they are **HUGE!** They all have depths of over 1,000 m in their central part.

[SPACE INTENTIONALLY LEFT BLANK FOR YOU TO IMAGINE ..... COJONES]

Speaking of forward looking statements **you have to have cojones** bigger than your little tiny bowl to declare that the little one might contain enough/economic lithium and potassium brines and *'that a by-product from our lithium focus may become a domestic source of fertilizer chemicals'* and *'our Mexican salars are characterized by high-grade lithium, along with high-grade potassium and other fertilizer components'*. But hey, it's Captain Canada that we are talking about, so who am I to doubt his word?

Back to our silly bowl. Sorry, silty. Because silt it is.

So, they have hired a few muchachos to do some augering.



They've drilled those small diameter holes to an average depth of 18 m. And cased them with some perforated casings.

Then they have waited.

And then they have waited some more.

Then they have waited waited a few more hours but the miracle did not happen. No liquid was filling the tiny holes. Disappointed they've left the salar. I know where they went but I am not saying it here.



But 24 hours later when they've finally managed to get back to their holes in the ground (Hangover, Hangover - PSY feat. Snoop Dogg), Ave Maria! There was some liquid in all their five frickin' holes!

'It's brine!' decreed Captain Canada, so 'we've found brine' made its way into a big splash press release.

One (not me) might dare to ask how did they manage to figure out that it is brine? Did they stick a finger into the hole and performed a good finger licking job? How does it tastes, bro?

It is always a good idea to tell the public the field method that you have employed to test the liquid that was secreted by the bowels of that silly bowl. Especially when the bowl is surrounded by elevated agricultural land where campesinos use fertilizers rich in potassium and other chemical or natural goodies (like good ol' manure) that not only that enhance their crops but also seep in the underground and end up being collected in topographic lows (gravity to blame). Whoops! The little bowl IS a topographic low, so I better change the subject before I get Captain Canada's attention.

They say that time is the fourth dimension so better pay attention to the amount of **time** necessary for the mystery liquid to fill up the little auger holes. It varied **in between one to three days**.

Now, I am going to ask you to go down the memory lane to the happy sunny days when we as half naked kids were building sand castles on the beach. We picked a location close to the ocean and we started digging, right?

What we needed was wet sand as we could not build anything durable with dry sand (lack of cohesion). But as our project became larger we kept digging deeper and deeper. About one foot down we would hit water. We scooped out the wet sand and water but in less than a second the water was back in our little hole.

No Ave Maria involved but some basic science. We were digging immediately below the water table and the layer of sand that was hosting the water (the aquifer) allowed the water to move at relatively high speed in the space in between the sand grains.

In hydrogeology it is called transmissivity - the rate at which groundwater flows horizontally through an aquifer. It depends upon the physical characteristics of the host rock. Sand permits a high flow rate but silt and other argillaceous rocks would only allow a trickle of water (or brine) to travel through the aquifer.

Now, I have asked you to remember that the silly bowl (elevated to the rank of salar) is actually infilled with silt and other pretty impervious materials. By analyzing **the amount of time necessary for the 'brine' to fill up the La Salada auger holes (1-3 days)** and comparing it with our memories (1-3 seconds to have our beach sand hole filled with brine from the ocean) we can definitely say that even if it would be the world's best brine to fill up the dirty little bowl we won't be able to use it as we wouldn't be able to recover it.

To recap some of the conclusions derived from this press release.

The bowl is shallow/small therefore it cannot host too much brine to allow the project to reach a critical mass and become economic. That is if there is any quality brine in there.

The aquifers either don't hold enough 'brine' or have an extremely low transmissivity rate.

And our conclusion:

