

Scientific Evidence That Pump Punku H-Blocks Are Artificial Geopolymer | Ancient Architects

<https://www.youtube.com/watch?v=0Q1f0YBm4ic>

Transcript: <https://dontveter.com/ec/pumapunku.pdf>

Hello everybody and welcome to Ancient Architects.

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Puma Punku is a large ancient structure that forms part of the Tiwanaku site in Western Bolivia.

Believed to date back to around 536 AD the name Puma Punku means the door of the Puma and in the later Inca tradition Tiwanaku is believed to be the site where the world was created.

At its peak, Puma Punku is thought to have been unimaginably wondrous.

The lack of a written record, it's current deteriorated state due to historic looting, stone mining for building and ballast, as well as natural weathering has made the site even more mysterious.

Nobody really knows anything about it. What we do know is that Puma Punku is a truly incredible feat of engineering.

Some blocks of stone are more than 7 metres long, weigh more than 130 tons.

Some are made from a type of red sandstone which would have had to have been transported up a steep incline to reach the site while most of the blocks, including the famous H blocks, are made from the volcanic rock, andesite.

The stones are finely cut and interlocked with perfection.

Stone faces are perfectly flat and corners are exactly right angles.

Details on the stone, whether the fitting function or ornamentation, are often complex yet are always perfect.

For the straight lines that are grooved into hard volcanic rock perfectly circular holes or irregular patterns as we can see here, the workmanship is always perfect.

The stones of Puma Punku all interlock.

It must have been like a giant puzzle to put the ancient structure together.

There was no room for error when they fashioned the individual stone blocks.

The ancient architects of Puma Punku were meticulous.

They created foundations, fitted stones directly to the bedrock and there is also evidence of irrigation systems, hydraulic mechanisms, and sewage lines.

This is a complex settlement and very advanced.

Back in December 2018 scientists actually restored the enormous structure to its former splendor as a 3D model.

Using a 3D printer, they recreated all of the individual blocks at 4% scale and [some name], an archaeologist with University of California worked with his team to fit them together through trial and error.

In the end they produced a near complete model of Puma Punku.

It was a sizable complex of plazas and ramps adjoining a massive T-shaped platform with his featured gateways and windows seemingly carved from single blocks of stone.

In 2006 experts did try to reconstruct the actual site but although well intended, they actually made things far worse and today not a single stone sits in its original place.

Every single block has been moved, several have been lost and most of them suffer heavy damage.

I will do a video on their full findings in the future but they were published on December 13, 2018 in the journal, Heritage Science.

Researcher and author, Brian Foster, has been to the site on many occasions and researched it in depth, and on his fantastic channel, linked in the description below, you can learn a great about Puma Punku and view anomalous structure in all its glory.

Not everybody believes that the work started on the site around 536 AD and that it actually goes back much further in antiquity, being the handiwork of a lost ancient civilization and being a truly ancient part of the later Tiwanaku site.

Whatever its age, what has never been fully explained, is just how the blocks were cut, transported from the quarries and then shaped.

But maybe we've been looking at it all wrong.

Thanks to an email I received from a Mr. Dave Ditso, I've just read a new fantastic scientific paper by Joseph Davidowitz, Lewis Human and Ralph Davidowitz called "Ancient Organo Mineral Geopolymer in South American Monuments: Organic Matter in Andesite Stone, SEM and Petrographic Evidence".

This paper, which is linked in the description below, is the basis for this video and I'll be presenting the findings of this groundbreaking new research.

As mentioned, there are many different aspects to Puma Punku but some of the most puzzling items are what are called the H-blocks.

They are made of a hard igneous rock known as andesite, but have an incredibly smooth finish, perfectly flat faces, with 90-degree right angles on the interior and exterior finishes and the detail is exquisite.

We are told they are made using simple stone tools but this really doesn't work for me.

Is it really the case? Not many alternative researchers believe the claim, but scientific or historical evidence to the contrary is hard to find.

They are mind boggling works of stone and nobody with any conviction knows how they're achieved but now the research team has analyzed samples of the andesite with a scanning electron microscope and the finds are surprising as they are intriguing.

The team discovered the presence of organic matter, carbon, nitrogen, and mineral elements inside the volcanic rock.

Having organic matter inside a volcanic rock is incredibly unusual, if not impossible, and points to the underside being a man-made geopolymer.

Back in 2018 the team undertook petrographic studies on the sandstone quarries and megalithic sandstone blocks and released a paper, also linked in the description below showing evidence that the sandstone blocks were molded with a geo-polymer mixture.

The makeup of the sandstone of Puma Punku was compared with three geological sandstone sites from the area.

The SEM, EDS, XRD and thin section results suggest that the sandstone megalithic blocks consist of sandstone grains from the [color marker?] geological site cemented with an amorphous [ferrocyanate?] geo-polymer matrix which was formed by human intervention.

Extra alkaline salt, known as natron, from the Laguna Cachi, in the Altiplano of Bolivia was also found to have been added to the mixture.

But even though this explained the incredibly large sandstone blocks of Puma Punku the andesite H-block still had us scratching our heads until now.

It has long been believed that the andesite blocks originated from the volcano Cerro Khapia in the southern part of Lake Titicaca.

But this has been taken for granted as no petrographic work has ever been carried out on samples of the Puma Punku andesites and the natural rock in situ.

The research team took andesite samples but they were sure to take them from outside of the protected monument area.

They then analyzed them with a scanning electron microscope.

Although the surface is very flat there was no trace of polishing, there were no abrasion marks or cutting marks on the crystals.

But the rock dotted with small holes approximately 0.5 to one millimeter in diameter and 0.2 to 0.5 millimeters deep, each having clear edges.

In thin sections the researchers identified a number of common andesite crystals such as plagioclase, [a type of] mica and pyroxene but there was also a strange amorphous substance, light brown in color, and faded to the edges.

Looking with a high magnification, this was certainly not a crystal and the researchers admitted it resembled something more like rubber.

The substance had a very high amount of carbon, nitrogen and mineral elements.

It had a clear signature of organic matter and that's discussed in the paper.

The scientists were able to rule out the possibility of surface pollution or contamination with further tests.

The fact was the scientists have discovered organic matter within the structure of a volcanic rock.

Geologically speaking it is not possible to have organic matter in a solid volcanic rock and it wasn't just one anomalous blob of organic matter.

It was seen throughout the samples, the only viable explanation from the researchers is that the andesite is actually a ceramic like man-made stone.

They claim the organic matter detected in the study suggests the reaction of ammonium organic compound from vegetal or animal origin with minerals to form an organo-mineral matrix to stick the geopolymer rock together.

It seems likely that the builders transported non-consolidated volcanic tuff which has the consistency of sand from the Carro Khapia region and added the organo mineral binder, manufacturing the stone with local biomass.

As Davidowitz, Human and Davidowitz say in their paper, their work demonstrates that the Puma Punku builders mastered two methods of geopolymer.

One for the sandstone megaliths as they outlined in an earlier paper and one for the andesite structures as discussed in this video.

That can prove scientifically that Puma Punku is a geopolymer site, a fact that is truly groundbreaking.

The H-blocks of Puma Punku are without doubt some of the strangest ancient megalithic artifacts in the world, displaying strange magnetic properties as shown by Brien Foerster.

And cut in such a precise and perfect way by a civilization we are told only had stone tools.

The only real explanation seems to be that the blocks are man-made and now we have evidence.

We know scientifically that the builders of Puma Punku were far more advanced than historians and archaeologists admit.

The andesite rocks include organic matter something [that is] geologically impossible.

And therefore that alone shows that the H-blocks are no ordinary volcanic rock, they are clearly man-made.

The next step of their study is to gather enough samples of the Puma Punku andesite to find out the exact makeup of the organic matter.

And then they will also be able to undertake carbon-14 dating.

Although not always reliable, the team are actually going to be able to carbon date a rock and then we may find out just how old Puma Punku really is.

Maybe history is on the verge of being rewritten.

I have just launched a new YouTube channel called Space and Planets which focuses on earth and space science news and the latest independent research from around the world.

Please subscribe now to get my new channel a head start.

I have placed a link in the description below.

Thank you very much for watching this episode of Ancient Architects.

If you enjoyed the video please subscribe to the channel, please like the video and please leave a comment below.

Thank you very much.