

NOAH'S ARK; ORIGINAL THEORETICAL H₂O MOISTURE EXPANSION MOLECULAR COMPOSITION OF ITS HULL ALLOWED MAXIMUM EXPANSION (Vs) CONTRACTION DEPLETION PROPERTIES IN THE ONSET AND CONTINUED SILICAL AND PETRIFICATION PROCESSES - (PART-1)

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ABSTRACT

In this paper we study of the possible contraction/expansions mechanism processes that may have taken place on the (Aromatic cedar) that our data and evidence shows is what the ark's remains are made of. According to the Noah's Ark account in Genesis, when the ark was first built by Noah and his sons almost 4,400 years ago. When they evidently applied a (tar-based) bitumen) to the wood the ark was (allegedly) composed of. There were certain active/reactive processes that took place. It is the aims and goals of this paper to investigate these conditions.

Keywords: Noah's Ark, Ark, wood, petrified wood, bitumen

1.0 Introduction and Background Explanation/Description of Theoretical (Bitumen) and (Aromatic Cedar Wood) Properties Actions, Reaction, and Conditions After Noah Built The Ark, and Approximately 4,400 years Later After Noah's Ark landed Upon Greater Mount Ararat

This is a preliminary investigation based upon new Scripturally consistent scientific and other forms of evidence into a certain structure on the northeast side of today's Greater Mount Ararat at the (Ark-Quest) site. That meets the Scriptural measurements for Noah's Ark. An investigation into certain theoretical conditions have been and are (still being investigated) into this structure's (alleged) wood and petrified wood.

We first discuss the types of conditions that may have existed when Noah and his sons first built the ark out of (allegedly) (Aromatic Cedar). And based upon the current data/evidence in theory what took place between the properties of the (Aromatic Cedar wood) and the application of the (tarry based bitumen used) by Noah and his sons almost 4,400 years ago.

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***Very Important Note (if) You Do Not Agree With The Data and Evidence We Present** - If you do not agree with the diagnosis/analysis, on the total accumulative vast amount of new Scripturally consistent scientific and other forms of data/evidence that (I)/[Ronald Stewart] the Author, (Co-Authors), and/or the (Ark-Quest Noah's Ark Expedition Team) of this paper present and demonstrate, then we very strongly suggest the following. That (you) present and demonstrate in a professional/scholarly way, (enough counter-opposing data/evidence) that will "out-weigh" the (total vast accumulative ever growing) amount of data/evidence (I/we) present and demonstrate. And your larger body of Scripturally consistent scientific and other forms of data/evidence, must be presented and demonstrated in just not only scientific (peer-reviewed) papers/articles, but also as many accompanying scientific bibliographical references as well.. Based upon Scripturally consistent scientific disciplines, sub-disciplines, fields, sub-fields, of data and evidence. Such as: "known historical, unknown lost historical, biblical archaeological, archaeometry, dendrochronological-(includes any and all diagnostic/analytical (sub-analytical science applications such as-(wood/petrified-wood/permineralization analysis and cross-comparison diagnosis/analysis). Diagnosis and analysis in the geo-physical sciences, geological, planetary sciences, chemical, elemental, laboratory, microscopy, microscopy sciences, biological, micrographs, [and/or]- (cellular, molecular, atomic-structural/sub-atomic comparison diagnosis and analysis). (Including spectrographical/spectrometric analysis in near infrared, infrared, ultra-violet/infra red color spectrum diagnosis/analysis, and other applicable such like sciences/sub-sciences. and (AM)-(Angstrom-Microscope) technological/scientific applications. Scientific field, notes, written observations, photographic, videotape, scientific application diagnosis and analysis. You must explain/describe in full scientific detail in both (peer-reviewed papers) and in bibliographical references, as to: "why" your evidence is correct and "out-weighs" the total sum of the vast, accumulative data evidence that (I)-[Ronald Stewart]/we present

In theory when Noah and his sons built the ark almost (4,400) years ago there were certain actions and reactions between the (alleged) (Aromatic Cedar) compositional component properties of the ark's wood. And also of the (tarry based bitumen) properties. These actions/reactions helped to combine the properties of the ark's wood and bitumen set into motion a catalyst of events that would help to formulate and solidify the ark being totally water tight, waterproof, and added to the structural strength of the ark. And after the ark landed, these events would also help to preserve the ark's wood over many centuries of time. Preserving the ark's wood long enough, for it to eventually become petrified.

Natural woods especially involving resinous trees and specifically (in this case) when discussing the (Aromatic Cedar Tree wood) that the ark may have been made from, these types of wood and also bamboo contain two different forms of moisture. They are referred to as (Free-Water-Moisture) and (Bound-Water-Moisture). (Free water) harbors in the fiber structure of the wood. (Bound water) is found in the Hydroxyl molecule that is the sole make up of cellular compounds. A hydroxyl molecule has two tails. A hydrogen tail and an oxygen tail. The uptake of these two compounds creates H₂O or water. Expansion and contraction of wood is created when the hydroxyl molecules take on more or less airborne or liquid moisture. Where there is no moisture present in wood there are no issues: no rotting, carpenter ants, termites, mold, mildew, bending or warping of wood, the wood is considered dimensionally stable.¹

According to our investigation into what we believe to be the (alleged) remains of Noah's Ark on Greater Mount Ararat this (Aromatic Cedar) wood, petrified wood, and some carbonized wood, seems to be part of the conditions of the wood on the outside, inside, of the ark's remains. Including a number of the ancient animal wood carving relic/artifacts still available on the inside of the ark's remains today as well. All of these different types of wood conditions were originally responsive to the original conditions of what happened to the ark when it was first built and what took place between the properties of the (Aromatic cedar wood) and (tarry-based-bitumen) when it was applied by Noah and his sons when building the ark.

The actions, reactions, laws of physics mechanisms, that took place chemically at even the cellular and molecular levels between the properties of the (Aromatic cedar) and (the (tarry-applied-bitumen) used by Noah and his sons, may have applied to the ark's wood, has (similar to strikingly similar) reactions to at least one modern day commercially available wood treatment product. Known as: "*Petri-Wood(TM)*".¹ When this wood treatment product is applied to especially resinous wood, it has very striking similar actions/reactions to resinous wood that had (tarry-based-bitumen applied to it. Just like it was evidently done in Noah's day when he and his sons built the ark.

1). The Science Behind Petriwood Solutions- At- <http://www.cedaroilstore.com/v/vspfiles/pdf/all-woods-and-bamboo.pdf> .

Here is what happened to the ark's aromatic cedar wood when the tarry-based-bitumen was applied to it within a short period of time.

1). The modern day (*Petri-Wood*) product, duplicates at the cellular and molecular level, are the same type of conditions when a (tarry-based-bitumen is applied to a resinous wood. In this case specifically to aromatic cedar. Theoretically we are able to envision with evidence that this is the same thing that may have happened, when (allegedly) Noah and his sons built the ark. When applying a (tarry-based-bitumen) to the ark's (alleged) (Aromatic Cedar wood) almost (4,400) years ago.¹⁻⁴

2). The (*Petri-Wood*) product and when a (tarry based-bitumen) is applied to (Aromatic Cedar wood) the same scientific principles and actions, reactions, and ending results apply. Therefore, since our investigation of the current conditions of the ark's wood provides evidence that a tarry-based-bitumen was applied to the ark's (aromatic cedar wood that it was composed of, therefore this helps us to understand that the same conditions took place when Noah and his sons built the ark almost (4,400) years ago. Here is what happened. When the ark was built, there was an instant displacement of the (free water) from the fiber structure (aromatic cedar wood). Silanes properties may be found in (tarry-based-bitumen) and also in (aromatic cedar wood). Which are water scavengers. Since they are of extremely low molecular weight they are capable of penetrating the cell wall structure of the molecule and attacking the water inside the molecule. The water is then replaced with the preservative qualities of the bitumen properties. Similar to what would be seen today in a (Si-Jel Matrix), pliable silicone compound). Once the bitumen solidifies, it blends with and bonds with the (Aromatic Cedar Tree Wood) properties that the ark is made of. This phenomenon created is known as a catalytic conversion that uses the bound water to trigger a hydrophobic reaction inside the hydroxyl molecule. The un-utilized and excess water is released and exits the wood in the form of ethanol gas.¹⁻⁴

3). The (aromatic cedar oil component properties) after having mixed with the properties the bitumen applied to the (alleged) ark's wood almost 4,400 years ago, created a synergism formulation. Which allowed the solution to bond with the water. And subsequently water proofs the wood from the inside out. It further performs as a termiticide and a fungicide that provides additional protection to the wood. Some of these properties also exist in the molecular constituents found in resinous tree wood. However, the (aromatic cedar tree), also known as the (Red Cedar Tree) of all of the resinous trees has the most dominant properties to have enhanced the ark's wood. Especially, when combined with the cohesive, adhesive, emulsifying and preservative qualities of the (tar-like bitumen) applied to the ark's wood. It was the strongest water proof, water resistant, and structurally strongest ark wood possible under the laws of physics.

1-7). The Science Behind Petriwood Solutions- At- <http://www.cedaroilstore.com/v/vspfiles/pdf/all-woods-and-bamboo.pdf> .2). Petrified Museum.org- <http://petrifiedwoodmuseum.org/PDF/Permineralization.pdf> .3). Free patents Online. com- <http://www.freepatentsonline.com/4612050.pdf> .4).Orlandini, G.E.; Tempestini R; Lippi D; Paternostro F; Zecchi-Orlandini S; Villari N. (Jan–March 2007). "Bodies of stone: Girolamo Segato (1792-1836)". Italian Journal of Anatomy and Embryology 112 (1): 13–18. PMID 17580656. 5). Chemical Processing.com- <http://www.chemicalprocessing.com/articles/2005/512.html> .6). Ronald Stewart (2018). Entitled: "Noah's Ark, Understanding The Fundamentals To Ark Wood Petrification". 7). Ronald Stewart. (2018). Entitled: "Noah's Ark, Pitch or Bitumen Study On The (Alleged) Ark's Wood". These articles may be found at- <http://www.journals-of-science.com/ian-home.html> .

2.0 Petrification and Permineralization of The Ark's Wood

In geology, petrification or petrification is the process by which organic material is converted into stone through the replacement of the original material and the filling of the original pore spaces with minerals. Petrified wood is a common result of this process, but all organisms, from bacteria to vertebrates, can be petrified. Petrification takes place through a combination of two similar processes: permineralization and replacement. These processes create replicas of the original specimen that are similar down to the microscopic level.⁸

2.1 Permineralization

One of the processes involved in petrification is permineralization. The fossils created through this process tend to contain a large amount of the original material of the specimen. This process occurs when groundwater containing dissolved minerals (most commonly quartz, calcite, pyrite, siderite (iron carbonate), and apatite (calcium phosphate),⁸ fills pore spaces and cavities of specimens, particularly bone, shell or wood.⁹ However, in the case of the ark's wood, mineral sedimentation washing down over the ark for many centuries helped it to permineralize over time. Two common types of permineralization are silicification and pyritization

3.0 Silicification

Silicification is the process in which organic matter becomes saturated with silica. A common source of silica is volcanic material. Studies done by Sigleo and Mustoe have shown that in this process, most of the original organic matter is destroyed.¹⁰⁻¹¹ Silicification most often occurs in two environments—either the specimen is buried in sediments of deltas and flood plains or organisms are buried in volcanic ash. Water must be present for silicification to occur because it reduces the amount of oxygen present and therefore reduces the deterioration of the organism by fungi, maintains organism shape, and allows for the transportation and deposition of silica. The process begins when a specimen is permeated with an aqueous silica solution. The cell walls of the specimen are progressively dissolved and silica is deposited into the empty spaces. In wood samples, as the process proceeds, cellulose and lignin, two components of wood, are degraded and replaced with silica. The specimen is transformed to stone (a process called lithification) as water is lost. For silicification to occur, the geothermic conditions must include a neutral to slightly acidic pH.⁽¹²⁾ and a temperature and pressure similar to shallow-depth sedimentary environments; under these conditions, silicification can occur in 50,000 years or less.¹³

8-9). Babcock, Loren. "Permineralization". Access Science Encyclopedia. McGraw-Hill. 9). Perkins, Rogers. "Fossilization: How Do Fossils Form". Fossil Museum.

10). Sigleo, Anne (1978). Organic geochemistry of silicified wood, Petrified Forest National Park, Arizona. Arizona. pp. 1397–1405.

11). Mustoe, G (2008). Mineralogy and geochemistry of late Eocene silicified wood from Florissant Fossil Beds National Monument, Colorado. Geological Society of America. pp. 127–140.

12). Leo, R.F.; Barghoorn, E.S. (1976). Silicification of Wood. Harvard University. p. 27.

13). Viney, Mike. "Permineralization". The Petrified Wood Museum.

(Carbonized) wood is also known as (coalification) of wood. It seems that especially when it comes to carbonized wood that silicification has a much greater chance of causing wood to carbonize.¹⁴ However, just because wood may carbonize does not mean that the wood in the ark would be older. All it means is that some of the wood in the Ark's remains processes for petrification developed differently.¹⁵

4.0 Pyritization

Pyritization is a process similar to silicification, but instead involves the deposition of iron and sulfur in the pores and cavities of an organism. Pyritization can result in both solid fossils as well as preserved soft tissues. In marine environments, pyritization occurs when organisms are buried in sediments containing a high concentration of iron sulfides. Organisms release sulfide, which reacts with dissolved iron in the surrounding water, when they decay. This reaction between iron and sulfides forms pyrite (FeS₂). Carbonate shell material of the organism is then replaced with pyrite due to a higher concentration of pyrite and a lower concentration of carbonate in the surrounding water. Pyritization occurs to a lesser extent in plants in clay environments.¹⁶ It is important to note, that as aforementioned that the primary necessary components that will cause wood to carbonize as in the case we have observe in some cases dealing with the wood conditions on the outside, inside and on some of the ancient relic artifacts like the animal carvings on the inside of the (alleged) remains of Noah's Ark, that (silicification) is still the primary source and reason why some of these wood examples will carbonize. Although it is possible that at time some of the wood has carbonized because of pyritization.

5.0 Artificial Petrification

Recently, at the Pacific Northwest National Laboratory (PNNL), wood samples have successfully been artificially petrified, unlike what is obtained naturally though, by being infiltrated in acidic solutions, diffused internally with titanium and carbon and fired in a high temperature oven (circa 1400°C) in an inert atmosphere to yield an manmade ceramic matrix composite of titanium carbide and silicon carbide still showing the initial structure of wood. Future uses would see these artificially petrified wood ceramic materials eventually replace metal based super alloys (which are coated with ultra hard ceramics) in the tool industry. Other vegetal matter could be treated in a similar process and yield abrasive powders.¹⁷ Scientists have been attempting to artificially petrify organisms as early as the 18th century, when Girolamo Segato claimed to have supposedly "petrified" human remains. His methods were lost, but the bulk of his "pieces" are on display at the Museum of the Department of Anatomy in Florence, Italy.¹⁷ Hamilton Hicks of Greenwich, Connecticut, patented his "recipe" for rapid artificial petrification of wood under US patent 4,612,050.¹⁸

14). M Viney, (2012). Entitled: "Petrified Wood : The Silicification of Wood by Permineralization". At - https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=3&cad=rja&uact=8&ved=0ahUKewiNy7uixMzaAhUm8IMKHSbxB_0QFgg-MAI&url=http%3A%2F%2Fpetrifiedwoodmuseum.org%2Fpdf%2Fpermineralization.pdf&usq=AOvVaw1vQbPK8mww3ITtGEjv74i0

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17-18). Orlandini, G.E.; Tempestini R; Lippi D; Paternostro F; Zecchi-Orlandini S; Villari N. (Jan–March 2007). "Bodies of stone: Girolamo Segato (1792-1836)". Italian Journal of Anatomy and Embryology 112 (1): 13–18. PMID 17580656. 18). Free patents Online. com- <http://www.freepatentsonline.com/4612050.pdf> .

6.0 Discussion and Conclusion

We have investigated and have learned that when it comes to the (alleged) remains of Noah's Ark at the (Ark-Quest) site on the northeast side of Greater Mount Ararat, that according to Scripture that when Noah and his sons built the ark out of (aromatic cedar) and coated the inside and outside of it three times with a (tarry-based-bitumen). That by coating the ark this way allowed the (aromatic cedar) and (tarry-based-bitumen) properties to enhance each other so much to the point, to where the ark would become the most watertight, waterproof, and structurally strongest vessel it could become under the laws of physics and its empirical laws as well.

We also learned that by Noah and his sons first building the ark out of (aromatic cedar) and than coating the ark (3) times with a (tarry-based-bitumen) provided the ark's as hydroxyl group molecule is to be stabilized, and that the ark's wood would therefore be totally moisture free. *And that the hydrogen and oxygen tails of the molecule are sealed from liquid or air borne moisture and cannot expand or contract as they would in non-stabilized wood. Therefore the important equation to remember, is that, "it was not until Noah and his sons applied the (tarry-based-bitumen (3) times as Scripture states that would combine the (aromatic cedar wood properties) with that of the (tarry-based-bitumen). And as soon as this happened, it would only be at this point in building the ark, that the wood on the ark would become totally stabilized. And that the wood cannot move and therefore no cracking, splitting, cupping or warping would have taken place. Secondly, fastener rejection would also have been eliminated".*

Subsequently, later after the global flood, and after the ark landed according to our investigation and vast amount of new data and ever growing and accumulating evidence, that Noah's Ark landed upon Greater Mount Ararat on the northeast side of the mountain at the (Ark-Quest) site. And as the centuries passed because the ark's (aromatic cedar wood) was totally free of the absence of moisture, for many centuries, just the resilient (aromatic cedar wood) itself, just like (cypress tree wood), even if the (aromatic cedar wood would not have earlier been coated with bitumen (3) times, the wood itself could have lasted maybe as long as (1,800) to (almost (2,000) years. An example of (cypress wood) was discovered in (2012) that was about (1,800) years old). Therefore, just the (aromatic cedar wood by itself) could have also have survived just by itself.¹⁹ However, since the (aromatic edar wood) was coated by Noah and his sons when building the ark (3) times with a (tarry-based-bitumen) as the (Ark-quest's) investigation into the (alleged) ark's wood is still being researched, and verifying the Scripture at Genesis 6:14 this added to the ark's capability for the wood to last and be preserved for even a much longer period of time. However, the preservation of the ark's wood was additionally preserved even longer. How?

19). 1,800 Year Old Cypress Did Not Deterioate-In about 2012 a number of a approximate (1,800) year old cypress trees were discovered in the ground that where the wood was still organically alive. This in itself helps to prove, that the ark's wood just by itself could have survived a very long time, even if it would not had a (taryy-based-bitumen applied to it). You may read the story and see photos of the wood itself at - https://www.krantzrecoveredwoods.com/category/Ancient_Buried_Cypress_Wood.aspx?gclid=EAIaIQobChMI2JS9jqme1wIVyLjACh3Dt9kuEAMYAiAAEgLvD_BwE .

There are some additional points regarding the preservation of the ark's wood until it could start to harden. When the ark's wood started to harden, and kept hardening these would then be some of the first steps to where the ark's (aromatic cedar wood would become almost totally and completely petrified. However, one of the primary fundamental points that has been missed and not addressed before from a scientific perspective, is that since the (aromatic cedar wood's) properties when combined with the (tar-based-bitumen's) properties enhanced each so much to the point, that it resulted in making the ark's wood (totally and completely moisture free). This one component when added provided an extra incentive to help preserve the ark's wood for a much greater and longer period of time.

So much to the point, to where it allowed enough time to go by to where the ark's wood would start to harden. It is here, that when any wood reaches a point to when it starts to harden these are the beginning process of early petrification. And as more and more time goes by the ark's wood resists any and all forms of a digenic decay/deterioration. By making the ark's wood totally and completely moisture free, also provided the absence of issues as the early stages of wood petrification are triggered. Petrified wood is moisture free wood laced with silicone deposits. This is exactly what we see in the scientific examination, diagnosis, and analysis of the ark's (now almost completely (aromatic cedar petrified wood). The (aromatic cedar oil component properties, also created and provided a formulation, encapsulated in the (aromatic cedar wood). Providing an ongoing perpetual protection from insect and fungal organism attack.

To reiterate the importance of this factor, the (Encyclopedia Definition for Petrified Wood)- is the process by which organic material is converted into stone by impregnation with (Silica). A major ingredient in the cell walls of wood is cellulose. The silica binds to the cellulose; when it crystallizes, it preserves the microscopic structure of wood even after the cellulose is gone. And all of this seems to be the case for the possible/alleged current remains of Noah's Ark and the ongoing further studies of its (Aromatic cedar petrified wood).²⁰⁻²¹ However, as a final condition, the very fact that out of about (9-10) months out of every year that the ark's wood has been under ice and snow has also helped in preserving the ark's now almost totally and completely petrified (aromatic cedar) wood to have survived up until today! more of this will be revealed in our next paper entitled: "*Scientific Diagnosis, Analysis, and Examination of The First (Alleged) Discovery of (3) Wood Beams Inside of A Wooden Structure Fitting The Biblical Measurements For Noah's Ark*".²²

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20). Petrified Museum.org- <http://petrifiedwoodmuseum.org/PDF/Permineralization.pdf> .

21). The Science Behind Petriwood Solutions. This may be found at the following URL - <http://www.cedaroilstore.com/v/vspfiles/pdf/all-woods-and-bamboo.pdf> .

22). Ronald Stewart, (2018). Entitled: "*Scientific Diagnosis, Analysis, and Examination of The First (Alleged) Discovery of (3) Wood Beams Inside of A Wooden Structure Fitting The Biblical Measurements For Noah's Ark*". This paper/article may be read and studied at - <http://www.journals-of-science.com/ian-home.html> .

