

## Table of Contents

Introduction: The Water & the Fire.....	2
Set Forth for an Example.....	3
A Glimpse of Hell on Earth.....	4
Ashes, Brimstone, Salt, & Burning.....	6
What about the Dead Sea? .....	12
The Evidence, Archaeology, Excavation, & Chemistry.....	14
A Physical, Chemical, & Thermal Evolution of Suffering in the Hellish Firestorm of Divine Wrath.....	24
The Physical Effects of Raining Brimstone.....	24
The Chemical Effects of the Gases Produced by Burning Brimstone .....	27
The Thermal Effects of Raining Fire & Brimstone .....	29

# Sodom & Gomorrah

“...suffering the vengeance of eternal fire.” - Jude 1:7



## Introduction: The Water & the Fire

The divine judgments of history have left their mark. While observing the fall of angels and men, and the destruction of worlds, these two forms of divine judgment stand out among the rest: *the Water & the Fire*.

“...God spared not the angels that sinned, but cast them down to *Hell*, and delivered them into chains of darkness, to be reserved unto judgment;” - 2 Pet. 2:4

At the fall of angels, God created *the pit of Hell* in the deepest part of the earth (2 Pet. 2:4, Jude 1:6; Ezek. 31:14-15, 18, 32:18, 24, Ps. 63:9-10, Job 11:8, Eph. 4:9, Matt. 12:40). This is a cursed place that is specifically designed by God to punish sinners with “*everlasting fire*” (Matt. 25:41).

“And fear not them which *kill* the *body*, but are not able to *kill* the *soul*: but rather fear Him which is able to *destroy* both *soul* and *body* in *Hell*.” - Matt. 10:28

At the fall of men, the whole race of mankind was doomed to *die* because God imposed upon them a death sentence (Gen. 2:17, 3:19, Rom. 5:12-14, Ezek. 18:4, Heb. 9:27, Matt. 10:28, Rev. 21:8). There are various *degrees* of punishment in death: a *spiritual*, *physical*, and *eternal* death. Ultimately, sinning men are made to join sinning angels in that cursed place of “*everlasting fire*” – a place that was originally created for the angels (Matt. 18:8-9, Mk. 9:43-48; Matt. 25:41)! Therefore, it could be said that *Hell* has been enlarging herself more and more ever since the fall of mankind (Isa. 5:14). More and more people are going to *Hell* every day! Nevertheless, on one day in particular something extraordinary happened on earth that made so much noise in *Hell*, it could be said that *Hell* has a story to tell about what happened (Job 28:22). God emptied earth into *Hell*.

“And spared not *the old world*, but saved Noah the eighth person, a preacher of righteousness, bringing in *the flood* upon *the world* of the ungodly;” - 2 Pet. 2:5

Over four thousand years ago, in  $\approx 2273$  BC, “*the old world*” declined into a spiritual condition of lawlessness that made billions of souls unsavable reprobates. Deep remorse and regret filled the heart of the LORD (Gen. 6:5-6). Therefore, God devised a plan to remove all sinners from off the face of the earth (Ps. 104:35). Mountains were overturned (Job 9:5, 28:9)! Continents were shifted (Job 26:12)! Oceans were divided! The earth has been deeply wounded and scarred ever since. The canyons, trenches, and deep blue holes on land and under the ocean bear witness to this cataclysmic divine judgment of history.

“...*the world* that then was, being overflowed with *water*, perished: But *the heavens* and *the earth*, which are now, by the same word are kept in store, reserved unto *fire* against the day of judgment and perdition of ungodly men.” - 2 Pet. 3:6-7

It is inevitable. Divine judgment will run its course: *like water, like fire*. The old world was destroyed by *water*. The new world will be destroyed by *fire*! Speaking of this, Peter said, “*the heavens shall pass away with a great noise, and the elements shall melt with a fervent heat, the earth also and the works that are therein shall be burned up*” (2 Pet. 3:10). A *burning, melting, and dissolving* is coming! *Solids, liquids, and gases* on earth and in the heavens will be on *fire* and they will be rapidly *dissolving* because of the “*fervent heat*” in the End of the World.

“Seeing then that all these things shall be *dissolved*, what manner of persons ought ye to be in all holy conversation and godliness, Looking for and hasting unto the coming of the day of God, wherein *the heavens* being on *fire* shall be *dissolved*, and *the elements* shall *melt* with *fervent heat*?” - 2 Pet. 3:11-12

The *heat* required to accomplish this feat is comprehensible in modern times. Science teaches us that a very specific *temperature* is required to *burn, melt, and dissolve* the *solids, liquids, and gases* of the Periodic Table. However, in ancient times, when science had not yet explored the powers of “*fervent heat*”, the world was made to behold a signature event of divine judgment that revealed the incomprehensible. *Sodom & Gomorrah* was exhibit #1. This unique moment of history *exemplifies* the power of divine judgment coming in the form of *fire* (Jude 1:7, 2 Pet. 2:6).

## Set Forth for an Example

Marvelously, Jesus Christ spoke of *the fire* that befell *Sodom & Gomorrah* on numerous occasions. He was the first one to make the comparison of *water & fire* within the greater context of speaking about *the End of the World* (Lk. 17:22-37). Observe how our Lord first spoke about *the water* (Lk. 17:26-27) and then *the fire* (Lk. 17:28-29).

“And as it was in the days of Noe, so shall it be also in the days of the Son of man. They did eat, they drank, they married wives, they were given in marriage, until the day that Noe entered into the ark, and *the flood* came, and *destroyed them all*.” - Luke 17:26-27

“Likewise also as it was in the days of Lot; they did eat, they drank, they bought, they sold, they planted, they builded; But the same day that Lot went out of Sodom it rained *fire and brimstone* from heaven, and *destroyed them all*.” - Luke 17:28-29

“Even thus shall it be in the day when the Son of man is revealed. In that day, he which shall be upon the housetop, and his stuff in the house, let him not come down to take it away: and he that is in the field, let him likewise not return back. **Remember Lot's wife.** Whosoever shall seek to save his life shall lose it; and whosoever shall lose his life shall preserve it.” - Luke 17:30-33

The destroying power of the *water* & *fire* have one thing in common. There were no survivors among the targeted peoples! When the *water* and *fire* came... it “**destroyed them all**” (Lk. 17:27, 29)! Remarkably, Peter was compelled to make the same comparison (2 Pet. 2:5-6), and then Jude did something very similar (Jude 1:7). Peter and Jude are very bold to declare that *Sodom & Gomorrah* and *the Cities of the Plain* “**are set forth for an example**” (2 Pet. 2:6, Jude 1:7). All the focus of the warning is put upon *the fire*.

“Even as *Sodom and Gomorrah*, and *the Cities* about them in like manner, giving themselves over to fornication, and going after strange flesh, **are set forth for an example, SUFFERING THE VENGEANCE OF ETERNAL FIRE.**” - Jude 1:7

“And turning the cities of *Sodom and Gomorrah* into **ASHES** condemned them with an overthrow, **making them an ensample** unto those that after should live ungodly;” - 2 Pet. 2:6

Where did *the fire* come from? It came “*from the LORD out of heaven*” (Gen. 19:24). What kind of *fire*? Jesus said it was “**fire and brimstone**” (Lk. 17:29). Literally, this means that *the fire* was coming from *burning brimstone*. What did *the fire* destroy? Everyone and everything it targeted! Peter said the cities were turned into “*ashes*” (2 Pet. 2:6). However, when Jude spoke of it he emphasized the “*suffering*” (Jude 1:7). He spoke of the torment that would be endured because of a specific characteristic of *the fire*, calling it, “*the vengeance of eternal fire*” (Jude 1:7).

## A Glimpse of Hell on Earth

Hell is an “*everlasting fire*” (Matt. 25:41). It is a fire that shall “**never be quenched**” (Mk. 9:43-49). The Lake of Fire is an *eternal fire*. The **smoke** of it shall rise up “*forever and ever*” (Rev. 14:11). Categorically, this kind of *fire* is *the flame* that comes from *burning brimstone*.

“...and he shall be tormented with **fire and brimstone** in the presence of the holy angels, and **in the presence of the Lamb**: And the smoke of their torment ascendeth up for ever and ever: and they have no rest day nor night, who worship the beast and his image, and whosoever receiveth the mark of his name.” - Rev. 14:10-11

“...These both were cast alive into a **Lake of Fire** burning with **brimstone.**” - Rev 19:20

“And the devil that deceived them was cast into **the Lake of Fire and brimstone**, where the beast and the false prophet are, and shall be tormented *day and night for ever and ever.*” - Rev. 20:10

“...**the Lake** which *burneth* with **fire and brimstone**. which is the second death.” - Rev. 21:8

Where does this *fire* come from? Apparently, like *the fire* of Sodom & Gomorrah (Gen. 19:24), it comes “*from the presence of the Lord*” (2 Thess. 1:9, Rev. 14:10). Literally, *the fire* has a supernatural origin. There is no natural explanation. Look at *the eyes, lips, tongue, and breath* of THE LORD OF GLORY! What do you see? Do you see something that the Sodomites might have seen? *Let the reader understand* (Rev. 1:14, Isa. 30:27-28, 33, 2 Thess. 2:8, Isa. 11:4).

Sodom was *suddenly consumed* with *fire* because THE LORD made a visit to *the City* that day (Gen. 18:21, Ex. 33:1-6). The “*feet*” that Abraham washed in the early afternoon then walked through *the Cities of the Plain* in the evening time. It was then that *the Cities* they were lit up with an “*everlasting fire*” and heated like a “*furnace*” (Gen. 18:4, 19:28, Jude 1:7, Dan. 3:23-25).

*Sodom & Gomorrah* became *Hell* on earth! The same kind of *fire* that is *eternally burning* in *Hell* was employed by God to consume “*the Cities of the Plain*” in the days of Abraham & Lot (Gen. 13:12, 19:25, 29). Do you see it? This our chance as mortals to look into eternity! This is our moment in time where we can behold the wonders of an “*eternal fire*” (Jude 1:7). We will never comprehend what is happening below, in the infernal dungeon of *hellfire*, if we don’t look here, at *Sodom & Gomorrah*, to discover what it was like for them to *suffer the vengeance of eternal fire* in real time (Jude 1:7).

## Ashes, Brimstone, Salt, & Burning

All “*the Cities of the Plain*” were situated on very fertile land nearby *the Dead Sea* (Gen. 13:12, 19:25, 29). Therefore, they developed into strong and prosperous *Kingdoms*. The food was plentiful. The people were idle. Generally, no one was slavishly preoccupied with hard labor. In their prosperity, they became proud, selfish, curious, and mad (Ezek. 16:49-50). The *Kings* formed an alliance and competed for notoriety and fame (Gen. 14:1-4, 23). Naturally, in the process of time, the people in the surrounding region were attracted to the rich lifestyle of these *Kingdoms*, which then caused their societies to grow in population.

**Cemeteries of several million graves are reported to be in the region,  
with many of them having been dug up over time by looters.**



*The Cities of the Plain* were walled, fortified, and gated. Sinners felt a sense of peace and security in their walls. Somehow, even Lot was eventually absorbed into the walls of Sodom! This is not the kind of place where a righteous man should be residing (Ps. 1:1-3, 26:3-5; 2 Cor. 6:17-18).

Of course, Lot would like to think that he was making a difference in Sodom. He would tell you that he was making a good impact upon society (Gen. 19:1, 9). Clearly, Lot didn’t see the futility of his efforts. Nor did he realize that he and his family were in grave danger! Society there was governed by hedonistic pleasure and lawless recreation, and Lot wasn’t planning on going anywhere anytime soon. He had already given his two daughters in marriage to Sodomites (Gen. 19:14)! Lot wasn’t *changing* Sodom. In reality, Sodom was *changing* Lot! This much is clear in the testimony of Scripture.

Lot was outrageously *corrupt* in his convictions. His moral compass was broken. The unholy *City* that *deceived* him err long *defiled* him! No decent father would give his newly betrothed virgin daughters to a raging mob of lustful Sodomites, while saying to them, “*do ye to them as is good in your eyes*” (Gen. 19:8). This kind of thinking

comes from the toxic influence of bad company. “*Be not deceived: evil communications corrupt good manners.*” (1 Cor. 15:33).

First, Sodom *attracted* Lot. Then, Sodom *corrupted* Lot. Meanwhile, Sodom *enchanted* Lot’s wife and *perverted* Lot’s daughters. The man lost everything in the end! Lot’s wife died and his daughters got him drunk and raped him (Gen. 19:31-38). Lot’s misery didn’t end there! The incestuous grandchildren that would be born from this nightmare scenario were cursed (Gen. 19:37-38).

Think about it! It all began with one look towards Sodom and Gomorrah. The attraction was strong. The appeal was alluring. The Edenic scenery and the promise of prosperity was enough for Lot to willingly suffer the gross immorality of the people, even though they “*vexed his righteous soul from day to day with their unlawful deeds*” (2 Pet. 2:7-9).

“And Lot lifted up his eyes, and beheld *all the plain of Jordan*, that it was well watered every where, **before the LORD destroyed Sodom and Gomorrah**, even as *the Garden of the LORD*, like the land of Egypt, as thou comest unto Zoar.” - Gen. 13:10

Amazingly, the natural habitat of this area was comparable to *the Garden of Eden*. However, the narrator of Genesis emphasized that this was “*before the LORD destroyed Sodom and Gomorrah*” (Gen. 13:10). Something unique about this *fire* vanquished the *Cities* and permanently altered *the land* so that it continues to this day as a wasteland of *ashes*. Under inspiration, the Apostle Peter emphasized that *the Edenic Garden* was turned into “*ashes*” – and by this he meant that it was doomed to remain as “*ashes*” forever (2 Pet. 2:6; Isa. 13:19-22). As a Jew, and a native-born Israeli, the Apostle Peter would have had ample opportunity to personally visit the site in question to see it for himself. The same could be said of his contemporaries in the 1<sup>st</sup> Century.

“And turning the cities of *Sodom and Gomorrah* into *ashes* condemned them with an overthrow, **making them an ensample** unto those that after should live ungodly;” - 2 Peter 2:6

A Jewish historian of the 1<sup>st</sup> Century, *Flavius Josephus* by name, personally visited the *plains* nearby *the Dead Sea* and reported that *the ashes* were still there in heaps resembling the shadows of great cities. This was a well-known fact among the Jewish people. Josephus said, “*...and in fact vestiges of the divine fire and faint traces of five cities are still visible.*” Also, concerning Lot’s wife, Josephus boldly declared: “*I have seen this pillar which remains to this day.*” This is a noteworthy testimony by a credible historian. Nevertheless, we can know for sure, purely from Holy Scripture, that the *fire and brimstone* turned *the Cities of the Plain* into an uninhabitable wasteland.

“And that *the whole land* thereof is *brimstone*, and *salt*, and *burning*, that it is not sown, nor beareth, nor any grass groweth therein, **like the overthrow of Sodom, and Gomorrah, Admah, and Zeboim**, which the LORD overthrew in his anger, and in his wrath:” - Deut. 29:23

Still to this day it impossible for anything *green* to grow in *the Cities of the Plain*. The scenes of this wasteland have been broadcasted online by archaeologists and investigators for decades. You can see it for yourself!



Normally, when great fires reduce *cities* and *lands* into *ashes*, this contributes to the fertility of the soil for years to come. In fact, a farming technique was named after this phenomenon called “slash-and-burn”. Farmers know that they need to give their lands rest to replenish the nutrients of the soil. The *ashes* produced by normal *fires* are rich in the nutrients needed for fertilization.

The slash-and-burn farming technique leaves a layer of ash  
that fertilizes the farmland for years to come.



Normally, *ash* promotes the regrowth of *trees* and vegetation. Obviously, this wasn't the case for *Sodom & Gomorrah*. Otherwise, the Edenic region of *the Cities of the Plain* would have regrown into even greater gardens. Literally, *the ash* of *fire and brimstone* prevents the regrowth of anything in the soil. Not even “*grass*” can grow in this soil! A chemical reaction takes place that changes the composition of the *ash* turning it into *salt* ( $\text{CaSO}_4$ ).

*Remember Lot's wife?* She wasn't the only one who turned into “*salt*” on that dreadful day judgment (Gen. 19:26, Lk. 17:32). *The Cities of the Plain* were turned into the same thing! Of course, we are not talking about *Sodium Chloride*, commonly known as *Table Salt* ( $\text{NaCl}$ ). The “*salt*” in this case is *Calcium Sulfate* ( $\text{CaSO}_4$ ). This is what Moses was referring to in Deuteronomy 29:23 when he spoke of the “*brimstone, and salt, and burning*” that filled the terrain of *the Cities* around the Dead Sea.





This may seem illogical to someone who doesn't understand chemistry. According to Dr. Moses David, "*Burning sulfur will react with most materials turning them into sulfate salts.*". Partly, this is due to the extremely hot *fire* that is produced by *burning brimstone* (Deut. 29:24). *Sulfur* burns with a *blue* colored flame that can reach temperatures approaching 1600 °C. The *color* of fire changes with the increase of *heat* as follows: *red* (525-100 °C), *orange* (1100-1200 °C), *white* (1300-1500 °C), & *blue* (1400-1650 °C).

To put things in perspective, organic material *burns* and *vaporizes* at 600-650 °C. The crust of the earth *melts* at 1200 °C. The hotter it gets, the more things will *burn*, *melt*, and *dissolve*, and as a result more chemical reactions will take place.



Technically, the *ash* of something is the residue of matter that is left behind after a *fire* has fully *consumed* a combustible object. This *ash* normally appears as a gray powdery residue, but certain kinds of *fire* can produce a higher degree of *heat* that changes the constitution of the *ash*. Normal *ash* that is produced by wood, for example, has an elemental composition of *Carbon, Calcium, Potassium, Magnesium, Phosphorus, & Sodium*. A scientific analysis of the *ashes* that are produced by *fire and brimstone* will help us understand the wisdom of Holy Scripture.

“Sodom and Gomorrah and the cities of the plain were made up of buildings which were constructed from limestone. Limestone is a considered to be a rock. Normally, a rock doesn’t burn to produce ash. Organic materials such as wood burn in the presence of air to produce carbon dioxide, converting the carbon in the wood to carbon dioxide, leaving behind any inorganic material that is present in the wood as ash, which is primarily comprised of silica, calcium oxide, magnesia, and a lesser amount of other oxides. Limestone is calcium carbonate which when exposed to burning sulfur gas will react with the products of sulfur combustion, sulfur dioxide and sulfur trioxide.

First, the high temperature of sulfur combustion will result in calcination of the limestone, converting it to calcium oxide and carbon dioxide gas. At high temperatures, calcium oxide reacts with the oxides of sulfur (sulfur dioxide and sulfur trioxide) to produce calcium sulfate, which is the residue left behind in the combustion process. The ash left behind in the combustion of limestone is therefore calcium sulfate, which is a salt.” – Dr. Moses David, PhD in Chemical Engineering

The *ashes* left over from *Sodom & Gomorrah* are cursed! When this doomed *landscape* turned into a *hellscape*, the *fervent heat* of *the fire* made it impossible for anything to be *sown* or *reaped* in the land. Moses made this clear in Deuteronomy 29:23. Not even green *grass* could grow in this place! God made this place an example of eternal destruction. This is what Zephaniah called “*a perpetual desolation*” (Zeph. 2:9). The damage done wasn’t meant to be temporary.

“Plant life is not possible in the brimstone & salt terrains because of the destruction of organic residues by the fire that is produced by burning brimstone. Because of the high temperatures of sulfur combustion, all organic material will be converted into carbon dioxide gas and water vapor. Nitrogen containing organic matter will likewise be converted to NO<sub>2</sub>, and NO<sub>3</sub> gases by the high temperatures of sulfur combustion. Furthermore, the desiccant properties of the salt capture any water that would otherwise be used by plant life.

Calcium sulfate will absorb water in its solid form without actually dissolving in the water up to a point. This water is the water of hydration. The solid is not dissolved in water yet at this point. The solid remains as a solid, but it has moisture in it. There are different forms of calcium sulfate as follows: (1) Anhydrous calcium sulfate CaSO<sub>4</sub>, (2) Calcium sulfate dihydrate, or Gypsum CaSO<sub>4</sub>.2H<sub>2</sub>O, and (3) Calcium sulfate pentahydrate CaSO<sub>4</sub>.5H<sub>2</sub>O. Because every molecule of calcium sulfate can take up to five molecules of water in its solid form, it is very prone to suck up water into itself, thus it is called a desiccant.” – Dr. Moses David, PhD in Chemical Engineering

This was God’s plan all along. For millennia, men have gone and looked upon the destruction of *Sodom & Gomorrah*, and upon seeing it they began to ask questions, like, “*Wherefore hath the LORD done thus unto this land? What meaneth the heat of this great anger?*” (Deut. 29:24). Nearly 4,000 years have passed, and the divine message of this terrible destruction is still being broadcasted to all nations! The eternal doom of this *fire* is evident in the landscape. Moreover, *El-esh-oklah* isn’t finished! In the Last Days we will consider it perfectly.

“And Babylon, the glory of kingdoms, the beauty of the Chaldees’ excellency, *shall be as when God overthrew Sodom and Gomorrah. It shall never be inhabited, neither shall it be dwelt in from generation to generation: neither shall the Arabian pitch tent there; neither shall the shepherds make their fold there. But wild beasts of the desert shall lie there; and their houses shall be full of doleful creatures; and owls shall dwell there, and satyrs shall dance there. And the wild beasts of the islands shall cry in their desolate houses, and dragons in their pleasant palaces: and her time is near to come, and her days shall not be prolonged.*” - Isa. 13:19-22

History will repeat itself. Humanity will grow proud, curious, and perverse through *the wine of fornication* in Babylon. Cities will be overrun with immorality. A staggering number of Sodomites will arise and parade themselves in the streets once again! Even so, let the reader understand, one *fiery* divine judgment is passed... but another one is still yet to come. The examples of *history* will be eclipsed in *futurity*! It is then that “*the fervent heat*” of “*fiery indignation*” will be revealed to the whole world (2 Pet. 3:10-12, Heb. 10:27). This is the End of the World. It is in this context that our Lord gave an ominous warning: “*Remember Lot’s wife.*” (Lk. 17:32).

## What about the Dead Sea?

Many theories exist about how *the Dead Sea* became a Salt Sea. Many unlearned men suppose that this has something to do with the rainstorm of *fire and brimstone* poured out upon *the Cities of the Plain*.



*The Dead Sea* is located at the most depressed place on the face of the earth. Literally, it is sitting at the lowest point of elevation on the planet, more than 1,400 feet below sea level. *The Jordan river* flows into *the Dead Sea* from the north, bringing with it the minerals it has been carrying for about 170 miles from the Hermon Mountains in Lebanon, Syria, and it has been doing this for thousands of years.

Everything is emptied into *the Dead Sea*, and from there the minerals have nowhere else to go. The waters above or below land cannot travel upwards in elevation. There is no river or tributary flowing out of *the Dead Sea*. At the lowest place on earth the water is stuck in place. Moreover, all the runoff waters from the rainfall and especially the flashfloods in the region erode the rocks and bring a large influx of minerals into *the Dead Sea*.

The waters of *the Dead Sea* are still and quiet compared to oceans. This increases its vulnerability to evaporation. The intense heat of the desert sun rapidly evaporates the water and leaves behind the salt, steadily increasing the salt content of the entire Sea over time. It happens so fast that the Dead Sea is slowly disappearing, even despite

the steady inflow of the Jordan river. Given enough time it will eventually be gone. The *salt* content of *the Dead Sea* is the end product. It currently contains 50% Magnesium Chloride, 30% Sodium Chloride, 14% Calcium Chloride, and 4% Potassium Chloride. These are completely different kinds of *salts* than what is created by *fire and brimstone*, and *the salt* that is present in oceans.



## The Evidence, Archaeology, Excavation, & Chemistry

*“brimstone, and salt, and burning” – Deut. 29:23*

The *ashes* of *Sodom & Gomorrah* have a story to tell. Explorers and archaeologists have found evidence of manmade structures. The *ash* heaps resemble houses, temples, walls, gates, and statues. The geometric shapes and angles are visible to the naked eye. Such formations are not normal geological structures. These aren't the kinds of things that are naturally formed in nature.



How did Moses know that *the Cities of the Plain* and *Lot's wife* became "*salt*" (Deut. 29:23, Gen. 19:26)? Certainly, this could have been miraculously revealed to Moses through the *inspiration* of the Holy Spirit (2 Tim. 3:16); but there are alternative possibilities to this scenario. People in the bronze age would be able to recognize *Calcium Sulfate* as a *salt* by the *color*, *texture*, and *taste* of it after a close examination.

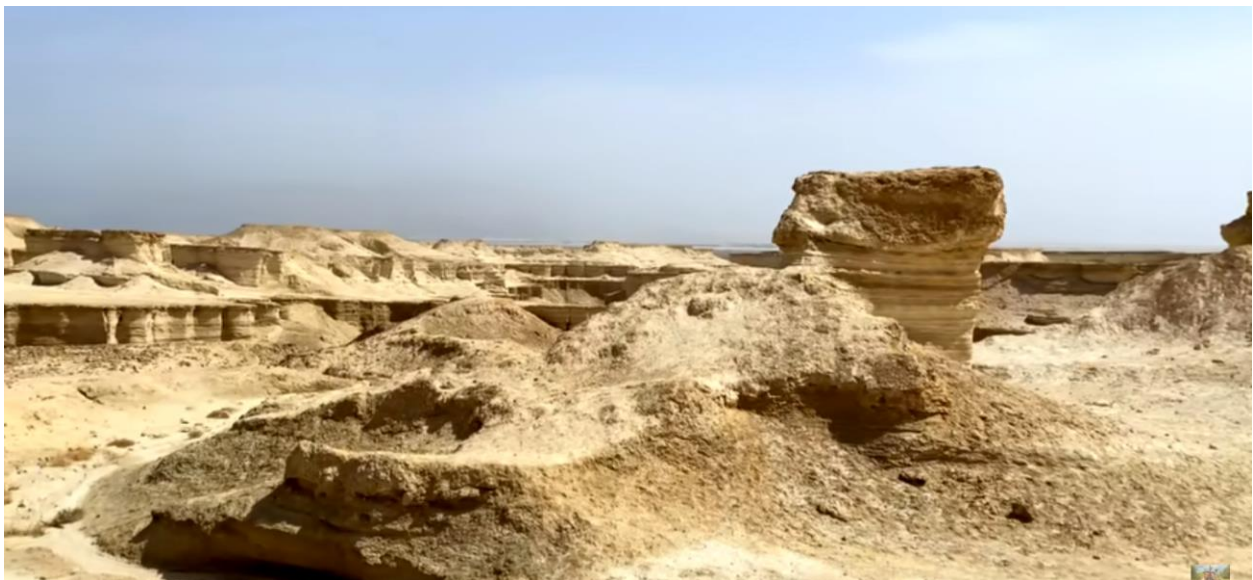
I'm sure many a pilgrim traveled far and wide to personally examine the infamous "*pillar of salt*" (Gen. 19:26)! Wouldn't you want to go and see it? People would have noticed that *the Cities of Ash* in the form of *Calcium Sulfate* resemble a *salt* that is *white* in color and *powdery* in texture. The explorers of the region have demonstrated how the stratified layers of *ash* do crumble into *powder* upon being taken with the hands.







A lot of the *ashes* in the area appear to be off color, where people today wouldn't easily recognize that this is *salt*. The weather changes things over time. The *winds* and *rains* of the region for nearly 4,000 years would have caused the *brown* dust from the surrounding terrain to alter the color of the top layer in *the Cities of Ash*. This would explain why many areas appear *tan* in color instead of *white*. However, as demonstrated in the photograph above, after a little digging a bright *white* power immediately appears.







A more extensive survey of the ruins would reveal innumerable balls of *brimstone* embedded in *the ash*. Amateur explorers without any equipment have found many fully preserved *brimstones* conspicuously appearing on the ashy grounds or in the stratified walls of the ash heaps. These are unique and fully preserved *brimstones* that cannot be found anywhere else in the world.







There has never been any geothermal activity observed in the area. There are no volcanoes. There is no explanation for how these stones of extremely pure *sulfur* got there except that God rained down *fire and brimstone* from heaven. This is not the kind of *sulfur* that can be found at volcanoes. Volcanic sulfur is *yellow* in color and is usually around 40% pure *sulfur*. The *brimstone* found at *the Cities of the Plain* is *white* in color and around 94-98% pure *sulfur*.



The flammability of the *brimstone* found at *Sodom & Gomorrah* is the visible proof of its purity. The *brimstones* found in the stratified walls of the ash heaps can be lit on *fire* without removing them from their embedded location. This has been repeatedly demonstrated by explorers in various documentary videos available online.





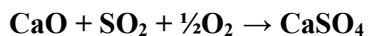
Even though the **brimstone** is on fire, *the flame* cannot be detected by the naked eye in the daytime because it is a very hot *blue* flame. The **brimstone** will burn until it *melts* into a liquid form, and then the liquid **brimstone** will burn until it *vaporizes*, unless the flame of the *burning* **brimstone** is somehow extinguished in the process of events taking place.





The amount of *burning brimstone* changes things for the Sodomites. Proportionately, the greater the quantity of *burning brimstone*, like in the case of a massive storm of *fire and brimstone*, the faster the temperature of the area would increase in heat. Fearfully, the entire atmosphere of *the Cities of the Plain* was turned into a fiery **furnace**! This much is clear (Gen. 19:28). Scientifically speaking, a heavy storm of *fire and brimstone* like this would have **burned, melted, and vaporized** *the Cities of the Plain*, and in the process it would have turned *the buildings* into *salt*.

“Ancient buildings are made from stone, mortar and limestone. Upon heating, calcium carbonate and calcium hydroxide will lose carbon dioxide and water, leaving behind calcium oxide. Calcium oxide reacts with burning sulfur to form calcium sulfate as follows:



Why not calcium sulfite? The other calcium salt, CaSO<sub>3</sub> is not thermodynamically stable above 727 C, thus the burning of buildings that have crumbled, and comprising calcium carbonate and calcium hydroxide, will result in an ash of calcium sulfate.” – Dr. Moses David, PhD in Chemical Engineering

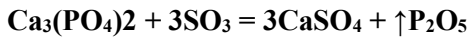
Cities can only be turned into *ashes* of *Calcium Sulfate* with a very special kind of *fire*. It must burn in an exceedingly hot flame! Furthermore, if the *heat* permeated the whole area like that of a **furnace**, and thus steadily increased in overall temperature, even *the bones* of the general population of people would have been turned into *salt*.

“And he looked toward *Sodom and Gomorrah*, and toward all the land of the plain, and beheld, and, lo, *the smoke* of the country went up as *the smoke of a furnace*.” - Gen. 19:28



*The buildings* of these Cities weren't the only things turned into *salt*. Lot's wife wasn't the only *person* turned into *salt*! A heavy storm of *fire and brimstone* like this would have **burned, melted, and vaporized** *the Cities of the Plain*, and in the process it would have turned the *Calcium Phosphate* of every person into *Calcium Sulfate*.

“Bone is comprised of Calcium Phosphate, which reacts with Sulfur Trioxide gas at elevated temperatures to form Calcium Sulfate and Phosphorous Pentoxide. Phosphorous Pentoxide sublimates at a rather low temperature of 360 °C, and thus will not remain with the bone but will be vaporized.



Sulfur Trioxide, or SO<sub>3</sub> is created by burning Sulfur to SO<sub>2</sub> followed with further oxidation to SO<sub>3</sub>, which reacts with Calcium Phosphate as per the above reaction.” – Dr. Moses David, PhD in Chemical Engineering

However, that being said, let the reader understand that the general population of the people in these Cities weren't being turned into a bunch of *pillars of salt*. Something extraordinary happened to Lot's wife! There is a scientific explanation for why the general population of sinners would have been turned into a *powdery* form of *salt* rather than *pillars of salt*. Once the people were turned into a *powdery* form of *salt*, their physical remains would have become virtually indistinguishable from *the ashes* of the rest of these Cities.

“The physical impact of the dense sulfur balls would have caused the buildings to crumble, causing the people in the cities of Sodom and Gomorrah to flee from the falling debris. Upon exiting their dwelling places, the people would have unknowingly run into the rainfall of burning brimstone, which would then burn the flesh of the people, and all organic matter from the bones, as the people fall down dead in the streets. The burning sulfur would have converted the Calcium Phosphate in the bones to *Calcium Sulfate*, which would cause the bones to lose their physical integrity and fall apart from further burning brimstone rainfall, and thus they would crumble into a Calcium Sulfate powder.” – Dr. Moses David, PhD in Chemical Engineering

Historically, only a few excavations have taken place in *the Dead Sea* region. There has been very little professional digging in the area. However, a few fragments of preserved bone were found underneath the rubble of collapsed buildings. This is due to the various responses of the people during the *rainstorm of fire*. Some people would have chosen to shelter in place inside buildings, while others would have fled outside for fear of the trembling, crumbling, and collapsing buildings. Others would have been unable to flee into the streets for various reasons. The preservation or transformation of *the bones* would depend upon their direct exposure to the *fire and brimstone*.

“The people who were injured from falling debris and rendered unable to flee the buildings, or those who took cover under fallen debris inside the buildings, would have been temporarily shielded from the fire and brimstone in the streets. Instead, they would have died from a chemical exposure to toxic sulfur containing gases. What happens to the bones from there depends upon on how much the consuming fire reached the bodies of these dead people, and how long it consumed them, before the buildings collapsed and buried them under the rubble. The bones could have then been protected from further physical damage through the fallen debris. The bones of these people would therefore remain intact instead of being crumbled into powder.” – Dr. Moses David, PhD in Chemical Engineering

The more we can understand about the situation the better. Comprehending the *sights, sounds, smells, and feelings* of the damned as they suffered “*the vengeance of eternal fire*” will help us fear God (Jude 1:7, Heb. 10:27). Specifically, we are learning to fear God because of the “*power*” that He alone possess to *torment* and *destroy* men with a “*devouring fire*” (Matt. 10:28, Isa. 33:14). This is biblical.



## A Physical, Chemical, & Thermal Evolution of Suffering in the Hellish Firestorm of Divine Wrath

Now we must begin a more detailed exploration of *the firestorm* from the vantage point of *the Sodomites* as they would have *experienced* it when they *suffered* through it *physically, chemically, and thermally* from start to finish. No “*suffering*” on earth at any time in history so resembles that of *hellfire* like the doom of *Sodom & Gomorrah* (Jude 1:7)! Therefore, this dreadful event of history sheds light on otherwise incomprehensible prophecies.

“The wicked shall be turned into *Hell*, and all the nations that forget God.” - Psalm 9:17

Behold, *the fire* of God! See how divine wrath is “*kindled*” (Ps. 2:12). Study and comprehend with all saints “*the heat*” of divine anger (Deut. 29:24). Only then will we understand exactly what happened to Lot’s wife in the extraordinary circumstances that made her turn into a *pillar of salt* rather than *powdery salt*. Even so, may we be helped on our journey to fully realize the divine commandment: “*Remember Lot’s wife.*” (Lk. 17:32). The pillar of salt was a divinely constructed memorial. Those beholden to it should remember the day that *Sodom & Gomorrah* became *Hell on Earth*.

### The Physical Effects of Raining Brimstone

The rainstorm of *fire and brimstone* was an evolving situation of *destruction* and *death* that intensified over time. In the beginning, before most people even *saw* or *felt* the *fire*, they would have *heard* and *felt* the **physical impact** of falling *brimstones* causing *the earth* to shake and *houses* to crumble. The sheer *weight* and *size* of *the brimstones* is staggering to behold.







Originally, *the brimstones* were even larger than those found by explorers in *the Cities of Ash*. The *fire* dramatically decreased the size of *the brimstones* before the flames were extinguished when *the stones* were embedded in ruins. Can you imagine the **physical effect** of the falling brimstone? Brimstone is comprised of elemental sulfur having a constituency of rock. These were like falling rocks from the sky! As a rule of thumb, the average range of size could have been like that of golf balls, tennis balls, baseballs, and softballs. Comparable sized *hailstones of ice* absolutely destroyed Egypt! Remember?

**Hailstorm of Ice:** Exodus 9:19, 22-26, Psalm 78:47-48, 105:32-33, Ps. 18:12-13, 2 Sam. 22:9, 13

Everyone without *shelter* died in that hailstorm! Both *men* and *animals* (Ex. 9:19). The hailstorm destroyed the tender *vegetation* of the land and even broke down *the trees* (Ex. 9:25)! Considering the circumstances, let the reader understand that the density of *sulfur* is about 2 g/cm<sup>3</sup>, which is twice that of water. This means that *hailstones of sulfur* are double the weight of comparably sized ice stones! Doubling the weight means double destruction. Can you imagine it?

*Hailstones of sulfur* weighing 10 lbs would reach a terminal velocity of 130 mph before striking *Sodom and Gomorrah*. *Hailstones of sulfur* weighing 30 lbs would reach a terminal velocity of 153 mph! *Brimstones* weighing 10 to 50 lbs would reach a terminal velocity ranging from 130 to 169 mph. The rainfall of heavy stones of this *density, weight, size, and velocity* would bring about a total catastrophe! This isn't like your average hailstorm of ice in modern times. This would be more like *the rain* of cannon balls from the sky, like those fired on the battlefield in ancient warfare! The *brimstones* would crush most things upon impact. Buildings constructed from bricks of limestone would crumble and collapse.

## The Chemical Effects of the Gases Produced by Burning Brimstone

Sinners fleeing outside would have to face the raw power of the hailstorm. If *the stones* didn't physically strike and kill them, and if *the fire* hadn't yet filled the *land* and *sky* to utterly consume them, then *the Sodomites* would have been arrested by the airborne *gases* produced by the *burning brimstone*. Literally, this would make it impossible to flee! No one can brave the storm of divine wrath.

Those who were too afraid to go outside, who found themselves hiding in the crevices of collapsing buildings, would then be *tormented* by the toxic *smoke* until *the liquid fire* of the storm increased overhead and they were eventually consumed in their places. The *gases* alone were capable of *paralyzing, overpowering, and killing* the entire population. The *smoke* produced by *burning sulfur* *tormented* everyone it touched! Why? Because a chemical reaction took place turning *the moisture* of the people into **sulfuric acid**.

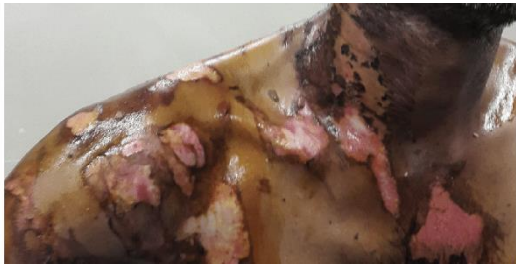
“Sulfur burns in air to form sulfur dioxide and sulfur trioxide **gases**, which are easily absorbed into human beings through the skin, eyes, nose, mouth, and lungs, entering into the bloodstream immediately. Sulfur dioxide reacts with water and oxygen in the presence of heat to form **sulfurous acid**. Sulfur trioxide reacts with water and oxygen in the presence of heat to produce **sulfuric acid**. Therefore, the moisture on the skin of the Sodomites would immediately turn into **sulfuric acid** all over the body in the conditions present at Sodom and Gomorrah. The moisture in the eyes would turn into sulfuric acid in the eyes! The moisture in the nose, mouth, and lungs would also turn into **sulfuric acid**!



It would be rapidly absorbed into the bloodstream within minutes according to scientific research (Dahl (1983)). The death of an average Sodomite was accompanied by much suffering due to the extreme **chemical effects** involving strong **acidic** reactions in all parts of the human body.” – Dr. Moses David, PhD in Chemical Engineering

“Upon the acid entering into the bloodstream through the lungs, the human heart would pump **sulfuric acid** to all parts of the body! These **acids** would cause severe **burning** and tissue damage in every conceivable place it touches, as the **acid** reacts violently with water to produce heat (approximately 60% of the body is composed of water), and the **burning sensation** would then be accompanied by headache, nausea, and vomiting. Upon contact, the **destruction** of bodily tissues is reported to take place in minutes and the **destruction** of bones within hours (Cadwell (2018)). Death of the brain cells leads to brain damage, blindness, incoordination, seizures, and death.” – Dr. Preethi Morris, PhD in Nutrition

There is something to be learned here about “*the smoke of their torment*” (Rev. 14:11, 18:18, 19:3, Isa. 34:10). Under the circumstances, the longer anyone lived the more *suffering* they would endure in *Sodom & Gomorrah*. Of course, just like anyone else, *the Sodomites* would have tried to survive for as long as possible! But this only perpetuated their *suffering*. This is a horrible way to die.







### The Thermal Effects of Raining Fire & Brimstone

By design, the Creator of heaven and earth made sulfur to have a very low *melting* and *boiling* point. The **melting point** of sulfur is 114 °C. The **boiling point** of sulfur is 444 °C. The implications of this are staggering when it comes to the creation of an unprecedented *firestorm* of destruction on earth. Meditatively, and prayerfully, let us imagine what the thermal evolution of the atmosphere must have been like during the rainstorm of *fire and brimstone*.

This is a rare “blue lava” volcanic eruption. It affords to mankind a small glimpse into what the sky above Sodom & Gomorrah might have looked like when it was illuminated with burning sulfur.



Amidst a constant downpour of *fire and brimstone* falling from the sky, let's say, from an altitude of 4000 to 6000 ft, the temperature of *the firestorm* would steadily increase with the presence of the *burning brimstone*. As *the brimstone* burns in freefall it would *melt* and *boil*, and because both the *liquid* and *vapor* form of sulfur are highly *flammable*, the sky itself would then appear to be on *fire*. The *solid*, *liquid*, and *vapor* form of sulfur would all be present in the atmosphere behaving like a rapidly expanding *conflagration*.

During freefall, *liquid droplets* of burning sulfur would increasingly be displaced from the falling *rocks*, as molecules of *vaporized* sulfur would increasingly be displaced from the boiling *liquid droplets*, and all of it would be on fire. In the presence of a rapidly expanding *firestorm*, the whole area would begin to behave like an enclosed *furnace* making the temperatures at the center of the storm – inside the engulfed Cities of destruction – the hottest part of *the Inferno of Hell*.

“Upon the wicked He shall *rain* snares, *fire and brimstone*, and an *horrible tempest*: this shall be the portion of their cup.” - Psalm 11:6

The LORD was majestically presiding over *the fiery furnace* of *Sodom and Gomorrah*. Every increase or decrease of temperature was under divine control. Practically, this means that God was controlling two things: firstly, *the amount* of burning brimstone in freefall during the storm; secondarily, the wind currents of *oxygen* that were feeding the fire. It is easy to imagine how a single jetstream of *oxygen* would excite and infuriate the fire! And of course this would radically increase the temperature. Similarly, depriving the firestorm of *oxygen* would decrease the fire and lower the temperature. Nevertheless, despite any fluctuations, we can be sure that the general

temperature of *the furnace* was exceedingly hot! Remember, *sulfur* burns with a *blue* colored flame that can reach temperatures approaching 1600 °C. The *color* of fire changes with the increase of *heat* as follows: *red* (525-100 °C), *orange* (1100-1200 °C), *white* (1300-1500 °C), & *blue* (1400-1650 °C).

The *sights* and *sounds* are still horrifying in the event that the firestorm was deprived of *oxygen*. Even if there wasn't enough *oxygen* to burn up *the trees* of various *edenic gardens* in some parts of a City, the *trees* and *plant life* of that area would melt. Literally, *the trees* in their entirety would melt into a black slimy *liquid* instead of *burning* into *ash*. Those beholden to this scene would find it looking eerily like *the pit of Hell*, because various pockets in the inferno would be mostly void of fire, albeit surrounded by fire, as melting *gardens* accumulating into *streams* of fiery *pitch* flowing on the ground.

“And *the streams* thereof shall be turned into *pitch*, and *the dust* thereof into *brimstone*, and *the land* thereof shall become *burning pitch*. It shall not be quenched night nor day; the smoke thereof shall go up for ever: from generation to generation it shall lie waste; none shall pass through it for ever and ever.” - Isa. 34:9-10

*Pitch* is formed through the *melting* of organic matter, like *leaves*, *stems*, *branches*, and *trees*, in an atmosphere of extreme heat that is void of sufficient *oxygen* to create flames. However, in the process, yet another *chemical reaction* takes place to create *pitch*! For the sake of simplicity, I have called it *melting*. Scientists would prefer to use more technical terms. They would call this process a *chemical conversion* under non-oxidative thermal conditions. Nevertheless, let the reader understand that *the mighty trees* of the *edenic gardens* in Sodom *liquified* because of *the fervent heat*, and this makes possible the chemical conversion.

Organic material *burns* and *vaporizes* at 600-650 °C. The crust of the earth *melts* at 1200 °C. Seeing that a *furnace* of *burning sulfur* can reach temperatures approaching 1600 °C, the activity described in Isaiah 34:9-10 would certainly be present in *the Cities of Destruction*. Now this brings us to Lot's wife.

“Remember Lot's Wife.” – Lk. 17:32

Why did Lot's wife turn into a *pillar of salt* instead of a pile of *powdery salt* like the rest of the population of *Sodom and Gomorrah*? There is a scientific and biblical explanation for this marvelous phenomenon.

“Then the LORD rained upon Sodom and upon Gomorrah *brimstone and fire* from the LORD out of heaven; And He overthrew those *Cities*, and *all the Plain*, and *all the inhabitants of the Cities*, and *that which grew upon the ground*. But his wife looked back from behind him, and she became a *pillar of salt*.” – Gen. 19:24-26

Firstly, during a rainstorm of *fire and brimstone*, the only way possible for Lot's wife to become a *pillar of salt* is through a process called *sintering*.

“Sintering is a process whereby the powdery constituents would fuse together to form a dense structure with good mechanical strength and integrity. It would take place when the melting and re-solidification of the calcium sulfate produced from her bones happen ultrafast, with her body in a standing position,

so that the sintered calcium sulfate would appear in the form of a pillar before there was a chance for her body to fall down.” – Dr. Moses David, PhD in Chemical Engineering

Secondarily, from a biblical perspective, let the reader understand that *pillars* were made to mark a special event in history to bring to remembrance something important. Those beholden to them understand the message being communicated.

Jacob did it to mark the place where God appeared to him in the wilderness (Gen. 28:18, 22). Jacob did it again, as a matter of life or death, to bring to *remembrance* the agreement of peace that he made with Laban (Gen. 31:45-55). Grieving spouses, like Abraham, mark the graves of their dead family members to bring to *remembrance* the location of their resting place (Gen. 35:20). Samuel did it to set up a *memorial* of victory, an *Ebenezer*, to bring to *remembrance* how the LORD helped Israel in battle against the Philistines (1 Sam. 7:12). The reprobate, Absalom, did it in a vain quest for immortal glory, wishing that his own name would be held in *remembrance* forever (2 Sam. 18:18).

Even so, when God made a *pillar*, it served as a signpost of salvation! The message being communicated is loud and clear: *Flee from the wrath to come!*

“*Remember Lot's wife.* Whosoever shall seek to save his life shall lose it; and whosoever shall lose his life shall preserve it.” – Luke 17:32-33

Why did God turn Lot's wife into a *pillar of salt*? You know. Those beholden to it know the message being communicated! The LORD did it to bring to *remembrance* the day when divine wrath turned *the Cities of the Plain* into an infernal dungeon of *Hell on Earth*. Now she serves as an omen, an eternal warning, bidding pilgrims of all ages to avoid her fate while fleeing the wrath to come in their generation.

How did God turn Lot's wife into a *pillar of salt*? Most materials will either *vaporize* or *sinter* together at these high temperatures. 550 °C is the minimum temperature that *vaporizes organic material*. 876 °C is the minimum temperature for *sintering* the calcium sulfate. 1,485 °C is an approximate temperature that would allow for *ultra-fast sintering* in the case of **Lot's Wife**.

Seeing that Lot's wife was outside of *the City of Sodom* at the exterior of the inferno as it was heating up, when she looked back, it was then that the LORD targeted her specifically with an especially intense downpour of *fire and brimstone*. A finger of fire proceeded out of the mighty storm and touched Lot's wife! It was a *tornado of fire*, a *frenado*, and it proceeded out of *the firestorm* and descended upon the head of Lot's wife. It whirled around her to *bury* and *burn* her in heat reaching 1,485 °C, and then it lifted off of her as quickly as it came upon her, and this allowed *the pillar* to cool down and solidify.

“A rain of burning sulfur would have vaporized all the organic matter, entombing her with the rainy deposits of burning sulfur, and converting her bones into a pillar of calcium sulfate salt, as a testimony to all mankind. Bone is comprised of calcium phosphate, along with collagen and marrow. Upon heating, the organic components will burn at 650-700 °C. Once the organic components of the bone are burned up, the bone normally becomes very porous and brittle, having a tendency to crumble. However,

if the temperatures are much higher, at 1,300-1,670 °C, the bone becomes harder because of the sintering of calcium sulfate.

The high temperatures and reactive atmosphere present during the exposure of the skeletal remains of Lot's wife create ideal conditions for the following: (1) the chemical reaction of bone material to form calcium sulfate, and (2) the melting and re-solidification leading to chemical sintering of calcium sulfate. This happens in the presence of calcium phosphate, a constituent of bone which acts as a sintering aid. Adjacent pieces of chemically converted bone fragments can likewise get sintered together when small amounts of additional material such as calcium phosphate or silica are present as sintering aids. Upon sintering, the chemically converted skeletal remains lose their form and turn into a pillar having a dense structure with excellent mechanical strength and integrity.

A heavy dose of brimstone rain must have been responsible for the extreme effect upon Lot's wife when compared to the general population of Sodom and Gomorrah. The impulsive, intense rain of brimstone would have increased the temperatures sufficiently enough to not only convert the bones to calcium sulfate, but also sinter the calcium sulfate due to the high instantaneous heat flux. This may be similar to the heat flux from a laser beam, which is frequently employed to sinter 3D printed powders. The impulse of brimstone rain would not have the sustained, moderate heating effect of a continuous brimstone rain which would have been the case in the cities of Sodom and Gomorrah. Upon sintering the calcium sulfate, her body would have rapidly cooled down because the rainfall was not sustained over a prolonged duration, but momentarily effected by the intense wrath of Almighty God.” – Dr. Moses David, PhD in Chemical Engineering

There is much more to this burden than what immediately appears. **Sodom** is explicitly mentioned a staggering 48 times in Holy Scripture! Herein, a full spectrum of topics is brought into view: Judgments in time (Jer. 49:18, Zeph. 2:9) & judgments in eternity (Matt. 10:15, 11:23-24, Mk. 6:11, Lk. 10:12)! However, that being said, the most frightening prophecies are those that foretell the judgment of God upon the backslidden Church through the Beast. Dreadful visions of a fiery divine majesty are associated with these prophecies. The prophets told us exactly what they saw: Micah (Micah 1:2-4), Isaiah (Isaiah 28:2, 17, 29:6, 32:19, 64:1-2), Ezekiel (Ezek. 1:2-28, 13:11), Nahum (Nahum 1:1-10), & Amos (Amos 9:5). Believe it or not, these visions align with the context of Luke 17:22-37.

When and if the Jews become *spiritual Sodomites* (Deut. 32:32, Isa. 1:10, 3:9, Jer. 23:14, Rev. 11:8), God will then be intensely provoked against them with a desire to *totally annihilate* them like **Sodom and Gomorrah** (Hos. 11:8-9). For, in reality, they have sinned worse than the **Samaritans** and **Sodomites** by virtue of sinning against a salvific influence of divine light (Ezek. 16:46-56). Nevertheless, it is written that God will not utterly destroy them for His own namesake. The annihilation of the Jews and the Holy Land will indeed be like the overthrow of **Sodom and Gomorrah** (Deut. 29:33)! However, a **small remnant** will be saved (Isa. 1:9-10, Rom. 9:29). A remnant will be engulfed by the fire and then plucked out of it before being utterly consumed by it (Amos 4:11, Zech. 3:2). In the latter days we will consider it perfectly.

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