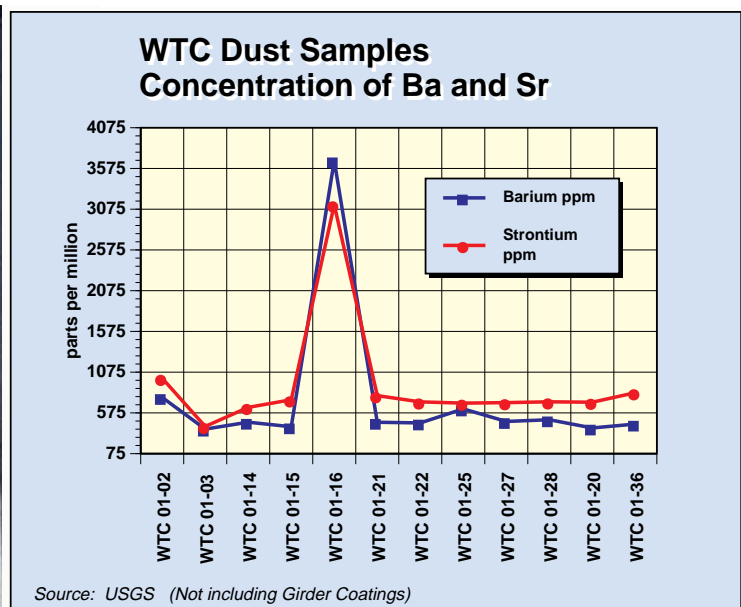


---

# Ground Zero: The Nuclear Demolition of The World Trade Centre

---

Incontrovertible Proof that the World Trade Centre was destroyed by  
Underground Nuclear Explosions



by

**William Tahil, B.A.**

*Ground Zero: the point on the ground directly under the explosion of a nuclear weapon.*

---

William Tahil asserts his moral right to be identified as the author of this work.

Copyright © William Tahil 2006. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission of the author.

---

# **Contents**

---

## **Preface**

<b>1</b>	<b>Introduction</b>	<b>1</b>
<b>2</b>	<b>Sources of Information</b>	<b>3</b>
<b>3</b>	<b>Evidence of Radioactive Fallout</b>	<b>5</b>
	Introduction	5
	The Chemistry of Nuclear Fission	5
	Isotopes	5
	Fission and Decay Pathways	7
	Decay Mechanisms	9
	Half Life	12
	The USGS Data	13
	Sample Collection Procedure	13
	Chemical Analysis	14
	Notes on these Tables	21
	The Major Elements	22
	The Trace Elements	23
	Overall Impression	23
	Barium and Strontium	24
	Zinc	29
	Sodium and Potassium	32
	Other Trace Elements	35
	The Girder Coatings	50
	Uranium and Thorium	53
	Conclusion	55
	The USGS Interpretation	56
	Discussion and Analysis	60
	The Fallout Characteristics	60
	WTC 01-16 and 01-02	61
	The Enhanced Radiation Bomb	62
	Conclusion	70

<b>4</b>	<b>The Seismographic Evidence</b>	<b>73</b>
	Introduction	73
	What are Seismic Waves	73
	What is the Difference between an Earthquake and an Explosion?	74
	P Waves vs S Waves	74
	Surface Wave Pattern	76
	Seismographic Analysis of the WTC Collapse	76
	Further Commentary on The WTC Seismogram	82
	P Wave vs S Wave Profile	83
	Comparison with Nuclear Test Seismograms	85
	Discriminating Between Explosions and Earthquakes	87
	Energy Balance	88
	Gravitational Potential Energy of WTC	88
	Seismic Magnitude and TNT Equivalent	91
	Miscellaneous Points	93
	Summary	94
	Conclusion	94
	Appendix: Extracts from Articles and Web Sites	95
<b>5</b>	<b>Residual Heat and Aerosol Information</b>	<b>97</b>
	Introduction	97
	The Residual Heat of the Rubble	97
	The AVIRIS Hot Spots	98
	Eyewitness Account by Bechtel	100
	The Pools of Molten Steel	101
	UC Davis - Broiled and Superheated Rubble	104
	Caustic Dust	105
	Energy Comparison	106
	Other Caustic Sources	107
	Conclusion	107
	University of California at Davis Aerosol Analysis	108
	Stainless Steel	112
	Diphenyl	113
	Appendix: Extracts from Articles and Web Sites	113
	N.Y.Air Hazards Found EPA Assurances Contradicted by UCD Scientists	115
	New Seismic Data Refutes Official WTC Explanation	116
	Letter from Mr. Mark Loizeaux to Mr. Gary Bryan of the Libertypost.org Website	119
	New York Visit Reveals Extent of WTC Disaster	119
	How Strong Is The Evidence For A Controlled Demolition?	120

**6**                    **The Blast Signature    121**

Introduction    121  
The Nuclear Blast Sequence    124  
Conclusion    125  
The Effects of an Underground  
Nuclear Explosion    126  
Pulverisation of the WTC    128  
Pyroclastic Flow    129  
Conclusion    130  
  
Appendix: Extracts from Articles  
and Web Sites    130  
Explosions in the Basement    130  
Comments by Mark Loizeaux    134  
Baltimore Blasters    134

**7**                    **The China Syndrome    139**

Introduction    139  
The SADM    140  
  
Evidence for a Core Meltdown    141  
The WTC Light Memorial    141  
Residual Heat and Molten Steel    144  
Quantity of Fallout    144  
The Explosive Power of a Critical Reactor    146  
Conclusion    148  
  
The China Syndrome    149  
Loss of Coolant Accident    149  
Transient    151  
The 1993 WTC Truck Bomb    153  
The WTC Memorial    154  
  
Effects of A Nuclear Explosion on  
New York    155  
  
Historical Radiation Exposure  
Experiments    157

**8**                    **Conclusion    159**

**Appendix A:  
The Complexity of Fission    161**

Quantity of Uranium in Reactor Core    162

---

# Preface

---

On the 11th September 2001 at 09:59 and 10:28 EDT, two enormous explosions pulverised to dust the Twin Towers of the World Trade Centre in New York. The 400 metre high towers disintegrated in a volcanic eruption of dust and rubble before the eyes of the entire world.

The buildings were “smulched into a smouldering pit” where temperatures remained so hot that soil, concrete and glass continued to be vaporised for over 6 weeks.

Never before or since in the history of modern construction has a steel framed building collapsed due to a fire.

In the aftermath of the collapse, a team of US Geological Survey scientists collected samples of dust from 35 locations in Lower Manhattan where it came to rest from the enormous pyroclastic dust cloud that enveloped the city.

In the dust, they found high levels of chemical elements that had no business being there. Extremely rare and toxic elements. Elements such as Barium, Strontium, Thorium, Cerium, Lanthanum, Yttrium. Even some elements that only exist in radioactive form.

These elements are forensic evidence of the event that caused the disintegration of the towers. They form a distinctive hallmark and signature of a certain well known chemical process.

Nuclear Fission.

What was the enormous source of energy that caused the destruction of the WTC? It was not a few thousand gallons of jet fuel. It was not even a few thousand pounds of conventional explosives. It was a Nuclear Explosion. Two Nuclear Explosions.

But even more than that, these were not just atomic bombs. The explosions were caused by the deliberate core meltdown of two clandestine nuclear reactors buried deep beneath the towers.

The true perpetrators of this heinous act of terrorism must be brought to justice. Lest we forget, not one person has yet been held to account for their involvement in this act. Not only were 3,000 people vaporised that day - thousands of others were subjected to intense radioactive fallout and the entire population of New York is being callously used as unwitting guinea pigs in a massive radiation exposure "experiment".

The existence of these crimes against humanity and the planet must be exposed and the real perpetrators apprehended.

New York, 9/11/01 was just one in a sequence of these deliberate radiation exposure crimes. Kosovo, Afghanistan and Iraq have all been heavily contaminated with Depleted Uranium weaponry. The very genetic future of the peoples of these regions is under attack and in some cases destroyed.

Where will be the next target of this Nuclear Madness if they are not stopped?

Protons are *positively* charged, neutrons are *neutral* and electrons are *negatively* charged.

We will see how this accounts for what was found in the WTC dust later.

### Fission and Decay Pathways

Unlike a standard chemical reaction in a test tube, a whole range of elements is produced when an atom of Uranium undergoes fission. However, nuclear fission tends to favour certain “pathways” over others and much more of some distinctive elements is created than others. Two of the most common and distinctive elements produced are Barium and Strontium.

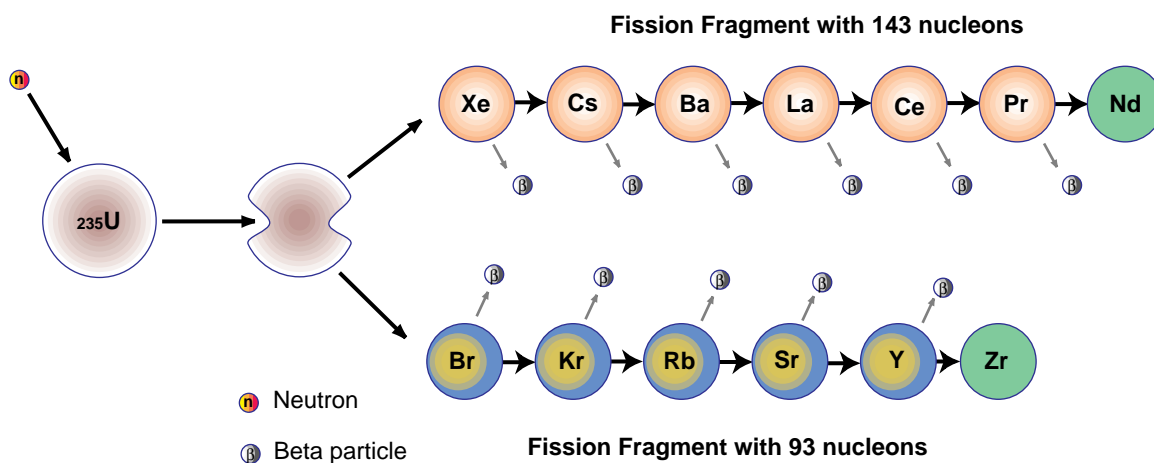
These two elements are the signature of Nuclear Fission.

Therefore the two most important “pathways” for Uranium fission lead to Barium and Strontium. Nuclear fission was in fact first discovered by Otto Hahn in the 1930s because he found Barium in a Uranium sample after he had bombarded it with neutrons. The uptake of Strontium into children’s milk teeth has been used to monitor the fallout from atmospheric atomic bomb tests since the 1960s. Strontium displaces Calcium in teeth and bones.

The diagram below shows these two major pathways in more detail.

FIGURE 2

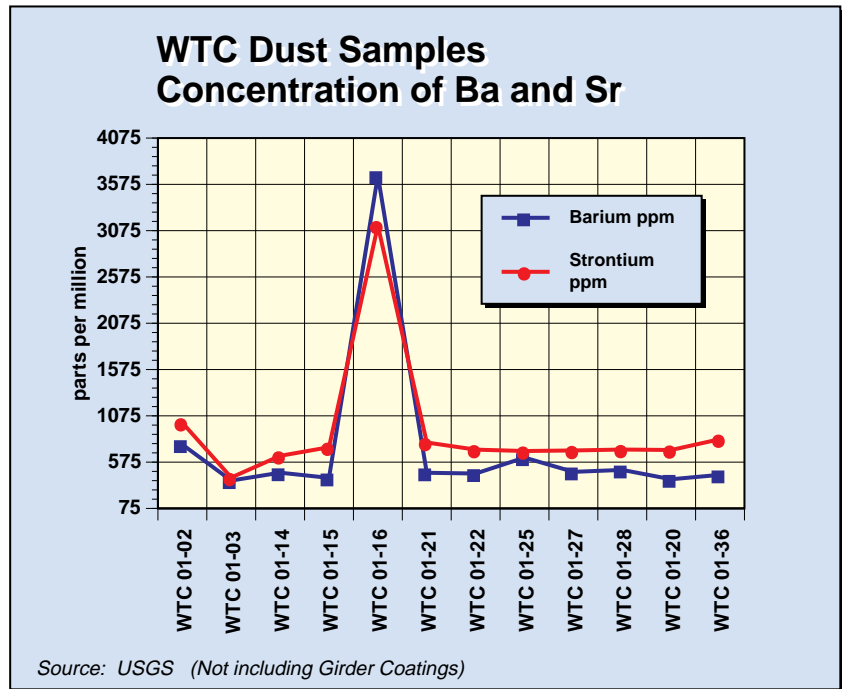
FISSION AND DECAY PATHWAYS



When a Uranium atom is hit with a neutron, it *fissions* or splits into two "Fission Fragments" - unstable isotopes of Xenon and Bromine. These in turn *decay* relatively quickly to Barium and Strontium. Barium and Strontium in turn have longer half lives and decay relatively slowly, so they will persist in fallout for some time. Over a longer period, the Barium and Strontium will then decay until a stable isotope of Neodymium and Zirconium is reached, when radioactive decay stops.



FIGURE 5



The enormous peak in Strontium and Barium concentration at WTC 01-16 is readily apparent. The concentration of the two elements reaches 3670ppm and 3130ppm respectively or over 0.3% by weight of the dust. This means that 0.37% of the sample was Barium and 0.31% of the sample was Strontium by weight at that location.

This is higher than even the Titanium concentration at WTC 01-16 of 0.25%.

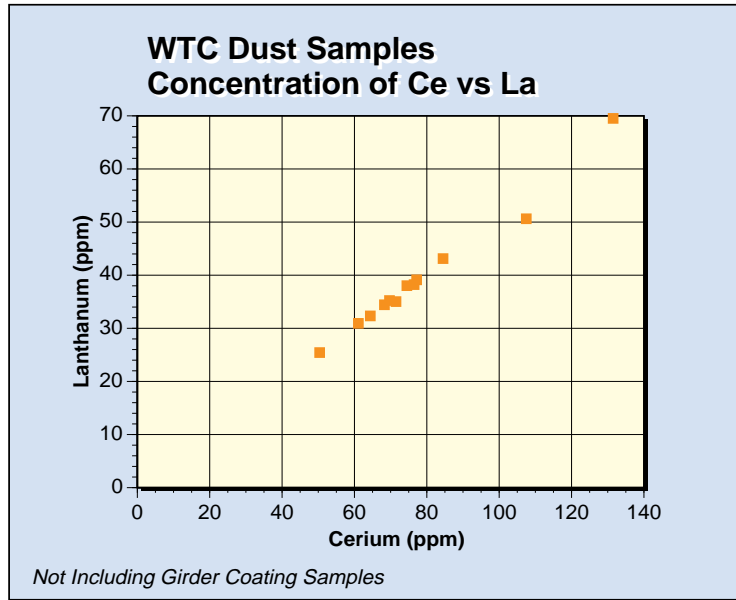
This is quite simply astronomical. Barium and Strontium compounds are not valid constituents of concrete or any other building material such as glass, aluminium, plaster and steel. They should not be there. Even at the other sampling locations the Barium and Strontium concentration does not fall below 400ppm, which is still an astronomically high level to detect for these elements.

The mean concentration of Barium including the low girder coating readings is 533ppm and for Strontium, 727ppm.

These are not trace amounts. They are highly dangerous and toxic amounts.

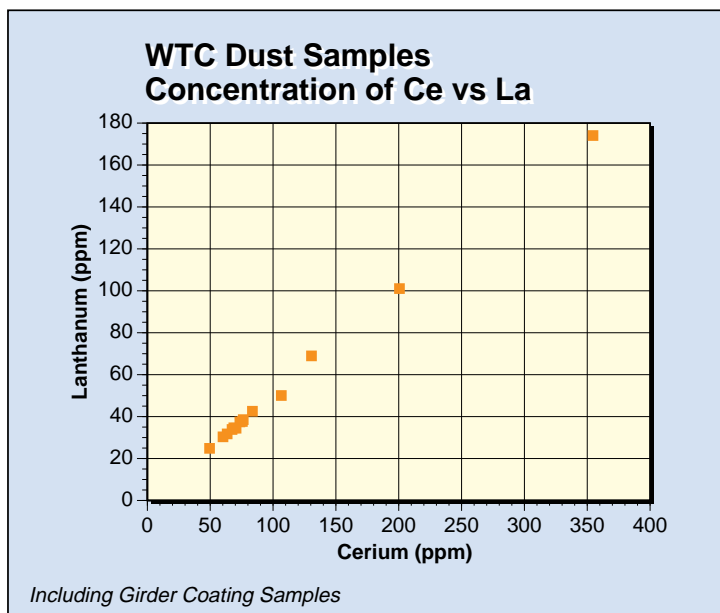
concentration of Lanthanum is almost perfectly correlated with the concentration of Cerium, the occurrence of Nuclear Fission of Uranium is the only possible explanation.

FIGURE 14



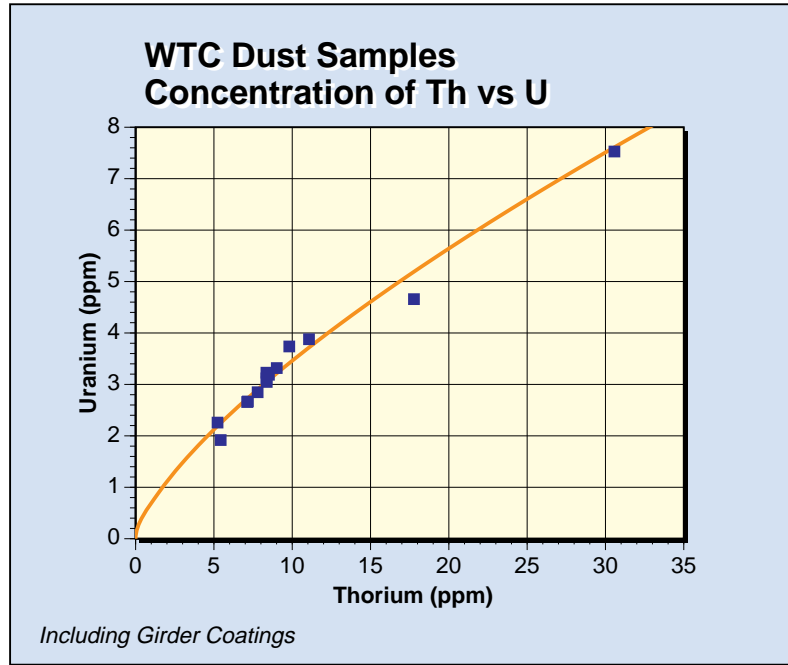
We show this data again below, including additionally the two very high Girder Coating values.

FIGURE 15



[Th] is plotted against [U] below.

FIGURE 32

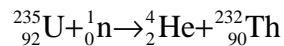


The high correlation between [Th] and [U] is self evident.

The presence of these two elements in such high concentrations (particularly in the two girder coatings at WTC 01-08 and 01-09) in such a close mathematical relationship is further incontrovertible evidence that a nuclear event has taken place.

As we said earlier, Thorium is formed from Uranium by  $\alpha$  decay. An  $\alpha$  particle is the same as a Helium nucleus, so this means we have one of the favoured fission pathways: Uranium fissioning into a Noble Gas and the balancing element, in this case Helium and Thorium:

(EQ 10)



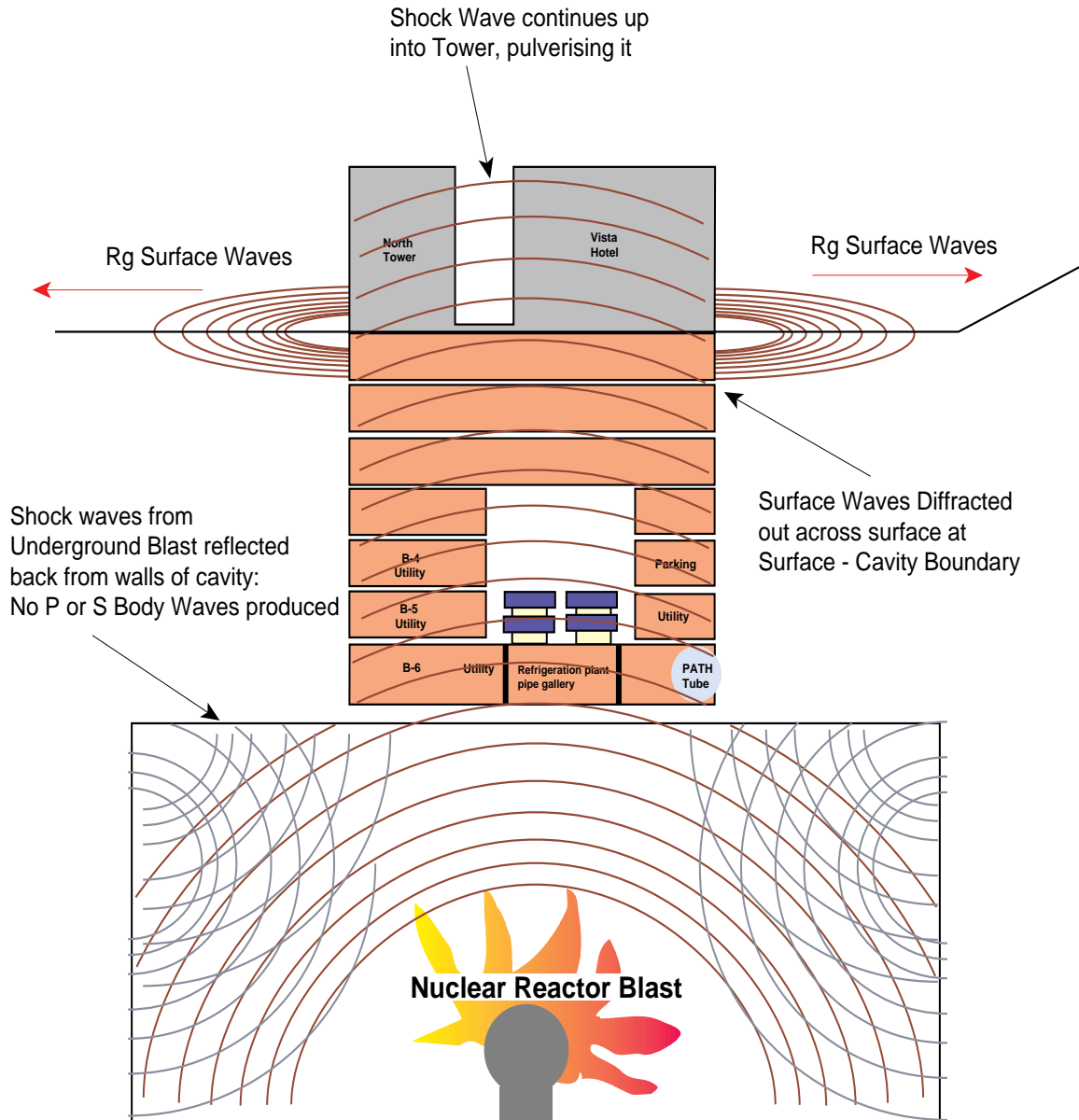
If the Helium formed follows the same pattern as Krypton and Xenon (which decay by beta emission through Strontium and Barium), then we would expect to find Lithium and Beryllium, the next elements after Helium in the Periodic Table, in quantities that correlate with Thorium.

The USGS did measure the Lithium concentration in the dust: [Th] is plotted against [Li] below in Figure 33, both including and excluding the two girder coating samples.

This scenario is illustrated in the schematic below.

FIGURE 39

SEISMIC WAVE PROPAGATION AT THE WTC



A nuclear reactor situated another 50 metres below the B-6 level would have better coupling to the ground than an explosive in the middle of the basement cavity. Therefore the central supporting columns of the tower would be well coupled to the explosive shock and conduct it up to the top of the tower. The blast would also follow the line of least resistance up through the relatively flimsy concrete floors of the basement levels and into the tower and then be propagated out in ripples across the surface of the Earth by the foundations of the tower as they were hit by the shock wave.

## 4.6 Summary

---

We summarise here the key points:

1. The timescale of the impulsive event which produced the seismic waves was of the same order as an explosion, 5 to 6 seconds.
2. The seismogram itself is identical with that produced by an underground explosion and the timescale was similar.
3. The Surface Waves produced were High Frequency Waves, typical of an explosion and similar to those produced by a quarry blast or seismic surveying charge, not the Low Frequency Waves associated with an impact.
4. The source of the seismic energy was at or not far below the surface.
5. Collapsing rubble is an impact source that would produce Low Frequency Surface Waves, not the High Frequency Waves detected that are typical of an explosion.
6. Another explosion in the vicinity at a Newark petroleum depot did produce P and S Body Waves. But the 1993 explosion under the WTC did not produce any measurable P or S Body Waves. The collapse of the WTC on 9th September 2001 did not produce any measurable P or S Body Waves. This is consistent with the lack of P or S Body Waves in 1993 and we therefore have an explanation for why the Newark explosion did produce Body Waves but the WTC collapse explosions did not.
7. The towers had insufficient Potential Energy to produce seismic waves of the intensity detected.
8. The large spikes of  $M_L$  2.3 and 2.1 are equivalent to at least 2 to 5 tonnes of TNT with good coupling and definitely much more at the WTC, maybe tens of tonnes of TNT, given the already known poor coupling of an explosion in the WTC basement cavity to the surrounding earth.
9. 5 other impulsive seismic events were measured by the observatory between 08:46 and 11:30. What was their source?

## 4.7 Conclusion

---

To conclude, the seismograms of the seismic waves produced by the WTC collapse are consistent with the hypothesis that they were produced by a nuclear explosion. By themselves, they show that a very large underground explosion took place.

The only seismic waves detected from the WTC on the 9th September 2001 were High Frequency Surface Waves. These can only be produced by an explosion.

It would not be possible to say whether that was a nuclear explosion without other evidence, but we can say it would have had to have had a TNT equivalence of at least 5 tonnes. Indeed, it must have been much more, due to the known poor coupling between explosions and the ground at the WTC site. The effect of this much TNT on a concrete structure would be to pulverise it into dust and gravel. This will be discussed in a later section.

*“There are no established safe limits for inhaled very fine particles. The closest reference is the U.S. EPA “PM2.5” standard, which limits the allowable mass of airborne particles in the size range 2.5 micrometers to 0 micrometers. That standard is based on health studies of typical air samples, in which very fine particles are a small fraction of the total mass.*

*In contrast, in the World Trade Center samples analysed at UC Davis, the **very fine particles** are a **large fraction** of the total mass.”*

So we can understand that Prof. Cahill would want to draw attention to the fine particulates for health and safety reasons. But is there anything more to it?

Thomas Cahill also explained the meaning of the generation of the particles to reporters more clearly.

*“The presence of coarse particles immediately after days of rain indicated that they were being continually re-generated from a dry, hot source, not re-suspended from roadways and other surfaces.*

*“The very fine particles were high in a number of species generally associated with combustion of fuel oil - such as sulfur, vanadium, and nickel, and incineration of plastics and other organic matter.*

*“There was also an unusual, very fine, silicon-containing aerosol. This latter type of aerosol can be produced only by **very high temperatures**, including **vaporisation of soil and glass**.*

*“We had seen this previously, but at much lower concentrations, in the plumes of coal-fired power plants in the EPA BRAVO study in Texas, the burning oil fields of Kuwait, and Beijing during the winter coal heating season.*

*“In the case of metals, we saw many different species in the very fine particles. Most, including lead and mercury, were at low concentrations at our site, but some, such as **vanadium**, were the **highest that we have seen recorded**”.*

This is very important. Cahill was saying that the ground under Ground Zero was so hot that the soil itself was vaporised. Glass was not just being melted, but boiled away - and this was still happening weeks later. Even after rain had dampened down the site, these aerosols were being regenerated by the intense underground heat source.

The presence of Vanadium is very interesting. Cahill's comment about Vanadium and Nickel being associated with the combustion of fuel oil, plastics or organic matter is completely incorrect and draws attention to this incongruity. Where would this Vanadium have come from - the highest concentrations they had ever seen? Vanadium is not a common element and certainly not a common component of skyscrapers.

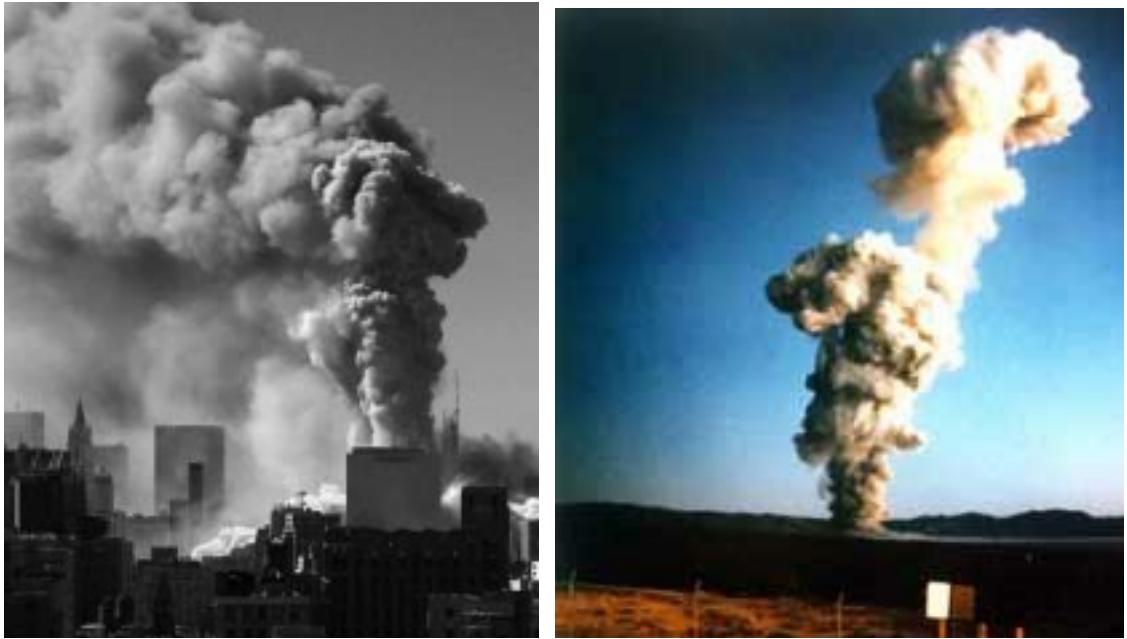
Compare the WTC plume to the plume from a shallow underground nuclear burst.

A powerful source of heat can be seen at work in the WTC event, continuing to force dust up into the air in a pillar of rising smoke.

---

FIGURE 53

WTC PLUME vs NUCLEAR PLUME



### Conclusion

It is plain to see from the most cursory inspection of the photographs of the WTC, that the collapse started with an extremely violent and high energy eruption of material from the building.

Figure 50 in particular shows that this ejection of material is comparable to a volcanic eruption.

The pyroclastic flow of dust after the collapse is also typical of certain volcanic eruptions.

The building did not simply collapse and implode as occurs during a controlled demolition. It certainly did not collapse as one would expect if the central supporting columns had simply buckled and given way.

The building in fact exploded violently and ejected pulverised concrete and rubble in all directions, followed by pyroclastic flow of hot dust following the same pattern as the base surge of an underground nuclear explosion.

Clearly, the energy source responsible for this was enormous and far greater than that required to carry out a conventional controlled demolition by implosion.

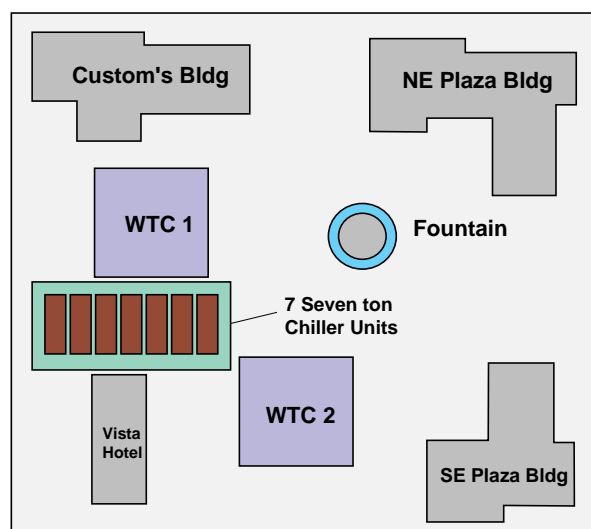
Apparently, the peak cooling load<sup>1</sup> of the WTC complex was 29,000 tons leaving 25,000 tons for “standby”. This seems rather high, particularly since air conditioning is only required in the summer. A separate auxiliary condenser water cooling system with a capacity of 3600 tons was used to supply year round air conditioning for the permanent loads such as mainframe computers etc.

Therefore, for half the year 54,000 tons of water chilling capacity was standing idle and during the summer, the peak load - not the continuous load - only used 54% of the system’s capacity.

It seems possible that this refrigeration plant had at least some spare capacity and would be ideally situated to provide chilled coolant water for the thermal Light Water Reactors beneath the WTC.

FIGURE 56

LOCATION OF HVAC REFRIGERATION UNITS



It seems that other office buildings in the USA use about 3000 tons of centrifugal chiller capacity<sup>2</sup> per 1 million square feet of office space, when using a small number of large capacity units rather than a large number of small capacity units. One modern installation (First Union Tower, Orlando) uses two 230 ton units for 292,000 square feet or the equivalent of only 2000 tons per million square feet. Very approximately, one would expect the WTC Complex with 10 million square feet to have about 30,000 tons of chiller capacity. This correlates with the peak load of 29,000 tons.

After the February 1993 attack, a temporary chiller installation of only 21,000 tons was designed and set up to cool the complex. This proved

1. “The WTC: One Year After the Bomb”, HPAC Engineering, February 1994  
 Tonnage refers to cooling capacity, not the weight of the chiller units  
 2. Case studies at [www.trane.com](http://www.trane.com)



---

# 7

---

## The China Syndrome

---

*“If the radiance of a thousand suns*

*“Were to burst at once into the sky*

*“That would be like the splendour of the Mighty One*

*“I am become Shiva*

*“The Destroyer of Worlds”.*

The words spoken by Robert Oppenheimer after the Trinity Test, the first atomic bomb of the modern age. Alamogordo, New Mexico, 5:29:45, 16th July 1945: Ground Zero of the Manhattan Project.

### 7.1 Introduction

---

What type of nuclear devices could have been used to individually demolish the two WTC towers, and perhaps Building No 7 without destroying half of New York at the same time?

Our initial assumption was that the device must have been a “micro-nuke” or more technically a Small Atomic Demolition Munition (SADM).

However, it appears that in fact the Twin Towers were brought down by the deliberate explosion of a clandestine nuclear reactor installed under each building. This was associated with a core meltdown - the China Syndrome.

It is interesting to note that the church at the WTC was called Trinity Church.

The program to develop the atomic bomb was of course called the Manhattan Project. One of the main project planning and control offices was located in Manhattan. The name of the first atomic bomb test itself was Operation Trinity.

Did the original or a later Manhattan Project involve the installation of nuclear reactors under Manhattan?

One can see that the devices are certainly small enough to be installed without too much difficulty in the basement of a building if required.

There is a certain ironic twist to the fact that SADM sounds like "Saddam".

However, as we have discussed earlier, if the Twin Towers had been brought down by a purpose designed nuclear weapon - a small atomic bomb - there would have been no residual heat left persisting for months after the blast. In addition, the sheer quantity of fallout produced points towards a much larger source of fissile material than would be found in a small atomic bomb, which would contain less than 10kg to 20kg of uranium or plutonium.

### **7.3 Evidence for a Core Meltdown**

---

What factors lead us to the conclusion that the nuclear device which destroyed the Twin Towers was a nuclear reactor rather than an atomic bomb?

This section presents and discusses the main indicators.

#### **The WTC Light Memorial**

When a nuclear fission chain reaction occurs, a very distinctive signature is produced which shows that an extra-ordinary chemical reaction is underway.

That signature is the emission of an intense blue light, known as Cerenkov Radiation.

This is an extremely intense and dangerous radiation, though also eerily beautiful.

A well known example of Cerenkov Radiation occurs when cosmic rays enter the atmosphere from outer space. Travelling at high speed, the cosmic rays can exceed the local speed of light in the atmosphere itself. If radiation travelling in a medium (air, water, glass for instance) exceeds the speed of light in that medium, then this blue Cerenkov light is emitted.

Cerenkov Radiation is therefore a signature of highly energetic intense radiation.

When the Chernobyl nuclear power plant exploded in 1986, causing a core meltdown, the lid of the reactor weighing 2000 tonnes was blown clean off. The reactor core was exposed. An interview with the eyewitness Alexander Yuvchenko was published by New Scientist on the 21st August 2004, a month after the interview with Mark Loizeaux.

Yuvchenko described the sight when he went outside to try and obtain a clearer idea of what had happened to reactor number 4:

and the violent nature of the explosions detected, both seismically and in the visual characteristics of the blast, akin to an underground nuclear explosion.

In the case of Chernobyl, it was an event like this which blew the 2000 tonne lid off the core and contaminated much of western Europe with radioactive fallout.

There have been several other known core meltdowns with nuclear reactors: Chernobyl in 1986, Three Mile Island in 1979, SL-1 at the reactor test station in Idaho in 1961, EBR-1 at the same place in 1955, the Fermi fast breeder reactor in 1966 which it is said almost destroyed Detroit. Brown's Ferry nearly melted in 1985. How many there have been outside the USA where information is almost impossible to obtain is anyone's guess, not counting the host of lesser nuclear accidents that have occurred.

To this, we now have to add the certainty of further clandestine nuclear reactors, unknown to the IAEA or national regulatory bodies.

### **The 1993 WTC Truck Bomb**

Earlier in this report, we commented on the location of the centrifugal chiller units at the bottom of the WTC basement. These produced chilled water for the air conditioning system in the WTC complex. We noted that the amount of cooling equipment seemed to be almost twice as much as would be expected for the area of office space it had to serve.

In 1993 a truck filled with urea nitrate was exploded in the car park on the B-2 level under the WTC. This caused extensive damage and put out of commission the 7 seven thousand tonne centrifugal chillers, located in the three floor high space from level B-3 to B-6 (see Figure 54 on page 132).

It is possible that this was an earlier attempt to destroy the entire WTC site by destroying the coolant system for the nuclear reactors further below. By instantly destroying the cooling system, an emergency would be created giving the reactor personnel perhaps only seconds in which to react to prevent a catastrophic power excursion. The fact that this did not occur indicates that there may have been a separate emergency cooling system, also sourced from the Hudson River - or perhaps the reactor was shut down for maintenance, giving them more time to react. We will probably never know.

During the second attack in 2001, the explosions in the basement which went off when the plane hit may have been used to make sure of the job, destroying both the primary cooling system and the backup ECCS and decay heat cooling systems.

The question is - who would have had knowledge concerning the existence of this clandestine nuclear power station and its security arrangements and would be able to penetrate that presumed security to