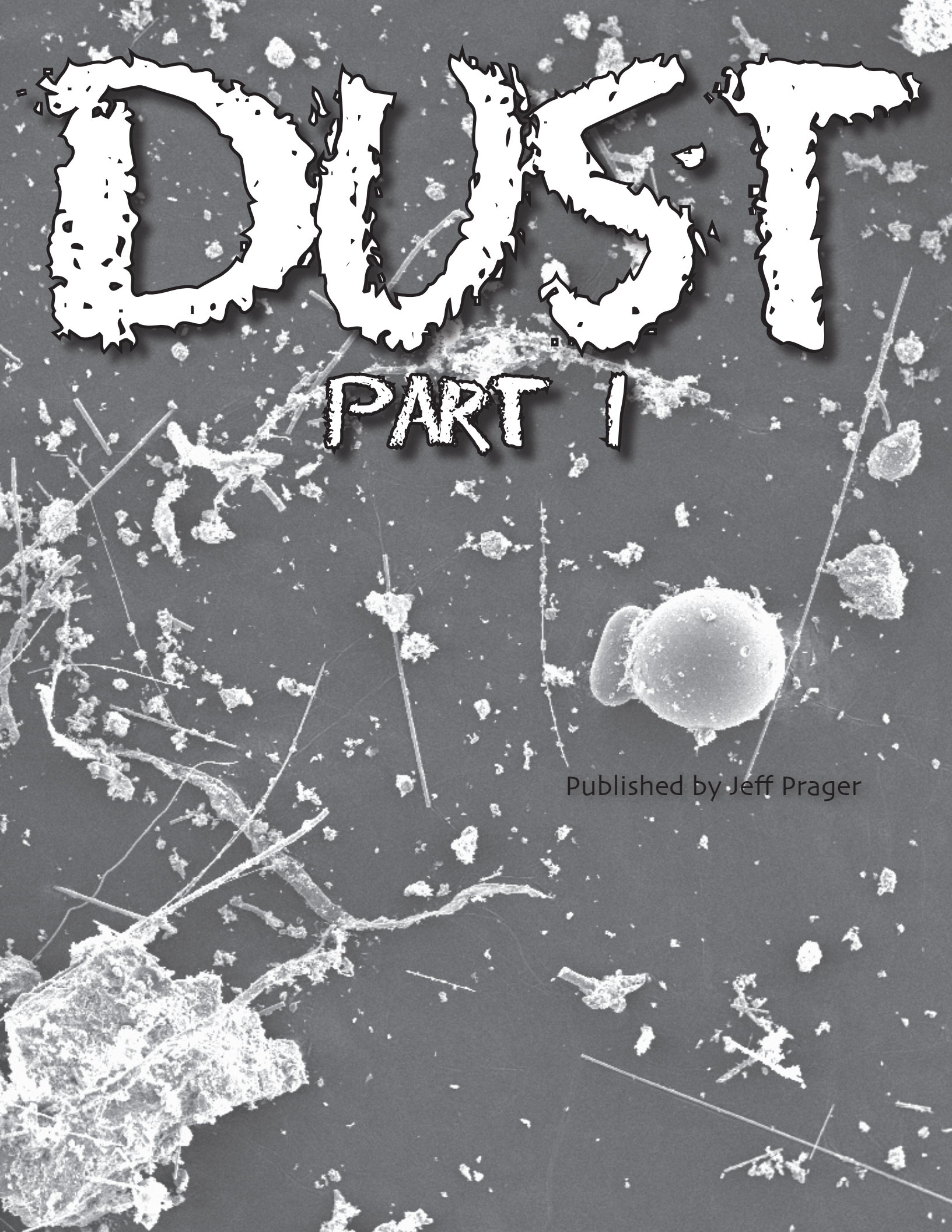
DUST

PART 1



Published by Jeff Prager

OWNING TIME:

It's important to own and properly manage as much of your time as possible. All we ever have is time; we're born with time, we're provided with time and we call it a 'lifetime', and when we die what we always leave behind is time. Our time, and the time of those before and those after. We never have a thing, besides time and death takes that away.

It wasn't about the dishes, or the iPod. It wasn't about any of it. It wasn't about paying taxes, (*which I oppose*) and it wasn't about driving below the speed limit, it was only about what you did with the time, your time, the 'time' that's under your personal management. It was only about how you managed your time.

It's not about the house, the car, the clothes you wear or how you wear your hair. It's not about WalMart, KMart, Walgreens, or Wally World (*a place children should be prevented from attending at all costs*). It is about being the director of the play, your play, your script, and it's about managing the components so as to reduce the personal responsibility load to a minimum and thus to maximize the ownership of your time.

Own your time

Happiness is a relative thing. It's attached at the hip to '*how you manage your time.*' I believe that if you're happy with how you manage your time you learn that you have an overwhelming, consistent and regular type of contentedness that flows like a gently caressing warmth through your soul. Everything is OK.

It's critical to explore the world and try to understand your surroundings. Someone said to me recently, speaking of himself, "I'm a very simple person," and my reply was that I was the same, that I was a very simple person too. The only difference between us is the amount of time we've devoted to this one subject and that subject is not 911, it's reading and I devote my time to reading. It wouldn't be wrong to portray it as, "My Dad can read more books then your Dad," because it's a rather accurate description of this Dad and grandfather. So, as always, the truth won't be televised, so you should read.

My senses, my rather dry logic, my naturally suspicious but always creative intuition, my intellect, all of my senses and the smell, the taste, the sight, the sound, every part and parcel of my being all scream out that this book is the truth.

WINNING THE WAR:

THE WAR BETWEEN THE CLASSES
~ Classical Class Warfare ~

Everyone discusses this as a war between ‘us’ and ‘them’ and that’s accurate for now.

These people educate their children in Class Warfare. That’s what this is. It’s just another part of the Class Warfare that’s been with us, never waning, from the beginning of civilization.

We have to shop for food, raise children, do the laundry, cook, pump gasoline and yes, we also have to work. This leaves us little time left over to think, explore, be creative and learn. Very little.

We have to raise up a society that understands the arts, the humanities, the philosophies of our thinkers, one that has interest in global finance, science, history, technology, geopolitical and sociopolitical strategies and especially, always and fundamentally, Class Warfare.

We, the civilian population of the world, need to raise children that are smart, enjoy reading and understand Class Warfare. Otherwise, we’re just spinning wheels. We, you and me, can’t change a damn thing. That’s why we’re where we are today and that’s why we have what we have. We can’t change anything of any significance. We need to begin operating generationally.

Our children and their children, our grandchildren, and even their children are the ones that will have to win this War Between the Classes. This will be, as it always has been, a generational affair. It may never end but we’ve been losing vast tracts of ground since the beginning and there isn’t much more to lose, and we need to gain that lost ground back again.

We can only do that by raising System Warriors. Armed with the sophisticated weaponry of science, technology and global finance, having a foundation in history, art, humanities and philosophies, all structured by Class Warfare; we can raise multi-generations of combat-ready, real-world warriors that can use the system to eliminate what drives it now.

Lust, pure greed, self-aggrandizement and self-satisfaction leading to outrageous criminal behavior now permeate the system and are it’s driving force. The system is drenched in a shameful cloak of deceit and treachery. These things ARE the system.

We can only impact the system generationally and we can only do that by raising well-equipped Class Warriors. Otherwise the dreams will all slowly fade away until there’s nothing left at all.

Preface

The chemistry, math and physics in this report are not mine. However, I've spent weeks and months studying this data, sending the proof to people that are capable of confirming or denying its truthfulness and reading about physics, chemistry and the decay paths of the elements involved in the process of fission. This report is accurate, unequivocal and true.

This book is dedicated to all the people that read books.

Jeff Prager • February 28, 2011

To The Physicists That Promote The • Energetic Nano Compound • Theory Only

If you are a physicist then you are far better able to understand the concepts promoted and outlined within these pages then the average person regardless of your specialty. Your basic training covers everything within these pages and much more in regard to this subject. This means, to me, that if you are standing firmly behind the theory that Energetic Nano Compounds or Metastable Intermolecular Sol Gels (*odd that I've never heard this term mentioned*) were capable of demolishing the Twin Towers and Building 7, alone, that they are responsible for the high heat we know existed for days and weeks in the "pile" as it's referred to and that they caused the Molten Metal that so many people have testified to and whose testimony is now public record, then you are in fact a fraud and your purpose is to protect the nuclear secret and prevent the public from understanding the truth.

This is called a Limited Hangout. Victor Marchetti wrote: "A 'limited hangout' is spy jargon for a favorite and frequently used gimmick of the clandestine professionals. When their veil of secrecy is shredded and they can no longer rely on a phony cover story to misinform the public, they resort to admitting – sometimes even volunteering – some of the truth while still managing to withhold the key and damaging facts in the case. The public, however, is usually so intrigued by the new information that it never thinks to pursue the matter further."

The key and damaging facts in this case are that the Twin Towers and Building 7 were demolished in a controlled, well conceived and pre-planned underground nuclear demolition. Three of them. One for each building. The atomic bombs dropped on Hiroshima and Nagasaki were in the 12-22 kiloton range based on public records. They were above ground detonations. The science behind carefully planned underground nuclear detonations is known. It's well known. I believe the nuclear detonations used to demolish the Twin Towers and Building 7 were in the 150 kiloton range, more or less, but since the general public has little knowledge as regards underground nuclear detonations and the knowledge they do have is based wholly on television, here-say and misinformation, they don't know. As physicists you do.

This is a complicated subject and requires significant study but any layman can use publicly available data to easily understand underground nuclear detonations, the "crush" zone, the "damage" zone, the shock wave, the intense heat and how these components of an underground nuclear detonation worked to bring down these buildings. The physicists are the ones that should be promoting this theory, not me. The physicists are the ones with intimate understandings of nuclear mechanics and the chemistry of fission. One has to wonder what motivates a physicist to promote an energetic nano compound theory, alone, while completely overlooking the obvious nuclear secret held until now. One has to wonder.

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 extremely toxic elements. Elements such as Barium, Strontium, Cerium, Lanthanum and Yttrium. Even some elements that only exist in radioactive form, like Thorium.

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.

Ternary Nuclear Fission More Likely.

Very Likely Quaternary Nuclear Fission.

This eMagazine will prove, with US government documentation, that the Twin Towers were demolished in a pre-planned thermonuclear demolition which was then scrubbed and cleaned, albeit ineffectively for the thousands of innocent civilians, by Controlled Demolition, Inc., the company hired by the US government to destroy evidence and conceal the crime. This act committed 1000s upon 1000s of New Yorkers; innocent Police, Fire and Rescue workers and civilians to shortened lives and certain death from a variety of related illnesses. This event is causing certain and needless misery for 1000s of civilians who may never know what hit them. This report will, hopefully, enlighten a few of them.

It is my assumption that in facing death
knowing the horror is far better then not knowing.

Cover photo - US Geological Service - Secondary Electron Microscope (SEM) image of a representative portion of sample 22, one block west and slightly north of Building One. The round object at the right side of the image is a glass sphere with a composition similar to the fibers. The image shows abundant glass fibers and other materials as described in the detailed SEM report. The full Open Source public version of that report is found here:

http://pubs.usgs.gov/of/2001/ofr-01-0429/

This eMagazine is about Dust. All about dust. We'll examine all of the dust with a specific interest in radioactive isotopes and elements related to nuclear fission.

I am convinced, beyond any doubt whatsoever, that the Twin Towers and Building 7 were brought down in a pre-planned controlled demolition that used nuclear devices. Let's see if the data can convince you. Believing otherwise would be akin to denying gravity or that the earth circles the sun.

Who Is The USGS?

The USGS is a science organization that provides impartial information on the health of our ecosystems and environment, the natural hazards that threaten us, the natural resources we rely on, the impacts of climate and land-use change, and the core science systems that help us provide timely, relevant, and usable information.

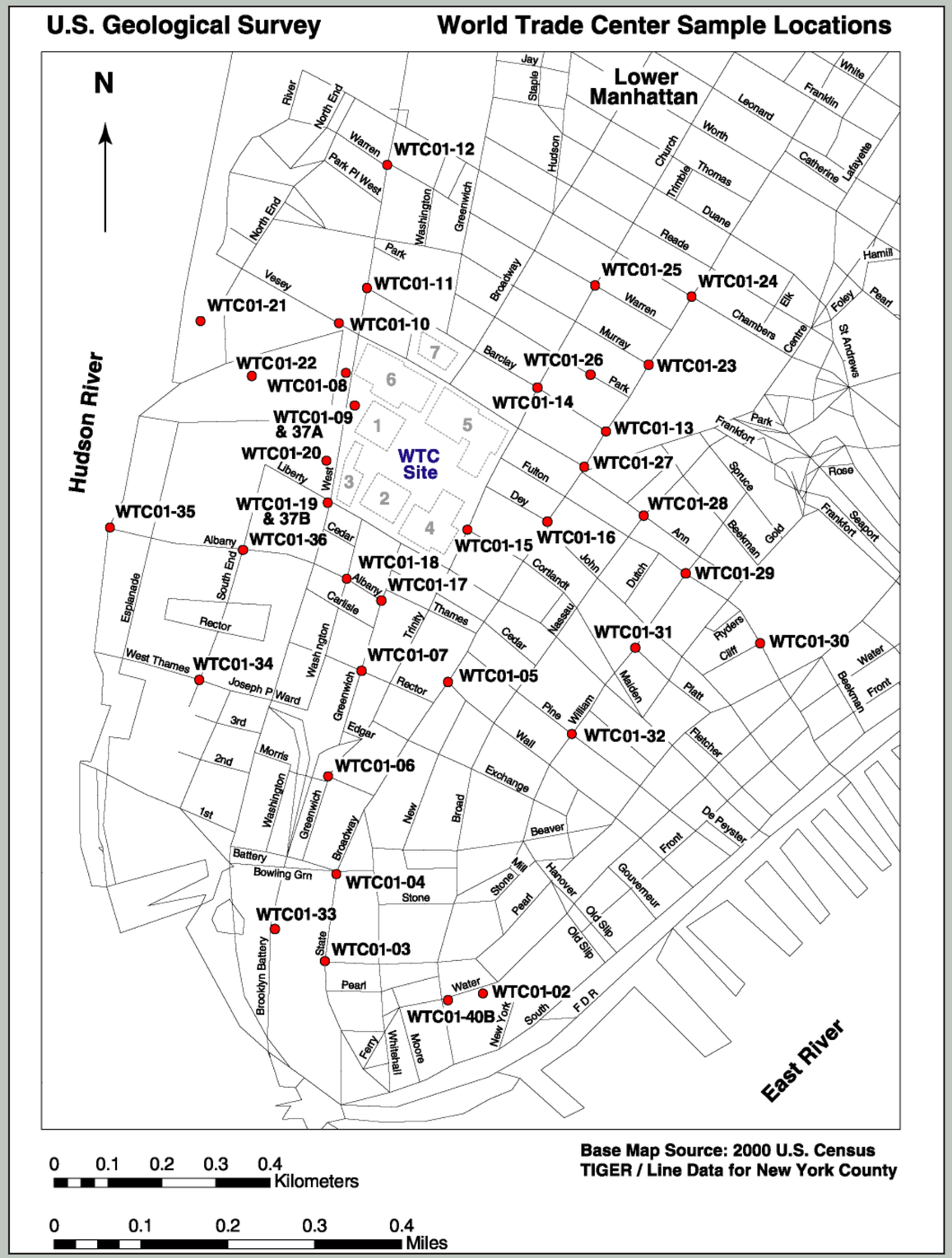
The USGS employs the best and the brightest experts who bring a range of earth and life science disciplines to bear on problems. By integrating our diverse scientific expertise, the USGS is able to understand complex natural science phenomena and provide scientific products that lead to solutions. Every day the 10,000 scientists, technicians, and support staff of the USGS are working for you in more than 400 locations throughout the United States.

What We Do

As the Nation's largest water, earth, and biological science and civilian mapping agency, the U.S. Geological Survey (USGS) collects, monitors, analyzes, and provides scientific understanding about natural resource conditions, issues, and problems. The diversity of our scientific expertise enables us to carry out large-scale, multi-disciplinary investigations and provide impartial scientific information to resource managers, planners, and other customers.

The US Geological Survey was an impartial (sort of) investigative agency tasked with examining the dust at the World Trade Center after the buildings were demolished, during the clean-up. They collected about 40 samples of dust from across Lower Manhattan and used those samples and sophisticated scientific methods to make clear determinations regarding what the dust was made of, what it contained, and it's level of danger to the civilian population. I am skeptical about their evidence and findings in some respects. We all know that you can't find what you aren't looking for. Let's see exactly what they found, OK?

At right is the map detailing all samples taken by USGS and each location that those samples were taken from.



Legend

This report will use certain figures and designations explained here. You'll need to first make yourself familiar with the map on the preceding page. This map uses the designation WTC01 for all samples taken and further numbers those samples starting at -01 and proceeding from there, -02, -03 and so forth, as in WTC01-08 which is directly west of and behind World Trade Center Building One. The charts on the following pages will use those designations to describe various elements, toxins and other materials found in and around Ground Zero and it will describe the ppm, or parts per million of the elements found. Major elements are listed in percent concentration and trace elements are listed in parts per million (ppm) concentration. One ppm = 0.0001% or 1% = 10,000ppm. Percent (%) means percentage of the sample by weight.

The designation "nm" stands for "Not Measured" and there is no data for that sample location. If a numbered sample location is missing from the data, it's missing from the data and there is no further explanation provided. Naturally I have suspicions where my government is concerned. Had we not been given lies to cover up what was surely a nuclear event I wouldn't have to entertain those suspicions.

http://dl.dropbox.com/u/16017306/Dimitri_Khalezov_Book_Third_Truth_911_free_11chapters_v2.pdf

What Are We Looking For?

For fission of Uranium-235, and the predominant radioactive fission products include isotopes of Iodine, Caesium, Strontium, Xenon and Barium. It is important to understand that the size of the threat becomes smaller with the passage of time. Locations where radiation fields once posed immediate mortal threats, such as much of the Chernobyl Power Plant on day one of the accident and the ground zero sites of Japanese atomic bombings, 6 hours after detonation, are now safe as the radioactivity has decayed to a very low level.

The USGS did not test for Iodine, Caesium and Xenon but the proof that the Twin Towers were demolished in a controlled thermonuclear demolition is in the presence of very high concentrations of the elements Strontium and Barium in the dust samples taken in Lower Manhattan after the collapse. There are other products whose presence clearly indicates nuclear fission and their presence corroborates the assertions in this report. More importantly, Strontium and Barium found together in these concentrations and correlated variances is the signature of nuclear fission. There simply is no other explanation for the presence of these various elements, the large quantities of Strontium and Barium, that were found at the site of the World Trade Center controlled demolition.

Unlike other similar reports whose conclusions may differ (*there are reports that attribute the demolition to a nuclear reactor under the towers that went out of control which I assert might be incorrect*), this report asserts that the thermonuclear devices (a minimum of 3) were activated in a controlled demolition by people known to certain City Of New York executives and many related state and federal government entities. These devices were used to collapse each of the Twin Towers and Building 7 simultaneously. This was pre-planned controlled demolition. This report will present the evidence necessary for the reader to understand that the Twin Towers were clearly demolished using thermonuclear devices very likely somewhere in the neighborhood of 150 kilotons as stipulated by Dimitri Khalezov in his groundbreaking book, a link for which can be found under the image at left. Either way, they were surely between 25 and 150 kilotons, perhaps slightly more. Read Dimitri's book.

Nuclear fission is a complicated and complex subject and this report will not try to explain this process. I recommend that the reader at least explore nuclear fission on her or his own but it is not necessary to understanding the assertions presented herein. The essential idea relative to the data presented in this report is that Uranium turns into other elements in a very unique and distinctive manner during the fission process and these other elements, in this case Strontium, Barium and Yttrium (and many others) were found in Lower Manhattan in sufficient quantities to prove, beyond doubt, that thermonuclear fission occurred on September 11th, 2001.

This report uses factual data and does not try to express an opinion or theory. Whether the reader believes the factual data, or not, is of course beyond my control and it is anticipated that their will be those individuals who have an allegiance to a particular unproven theory that will attempt to debunk the facts provided within this report. Facts can not be debunked. This report does not discard the evidence that energetic nano compounds may have been used in conjunction with thermonuclear devices. On the contrary, this writer believes that energetic nano compounds and specifically energetic metastable intermolecular nano sol gels were used to cut certain core columns, but that would not have been enough. Proof comes in the following comment from "Engineering News-Record" on April 2, 1964, regarding the construction of the Twin Towers:

"Live loads on these [perimeter] columns can be increased more than 2,000% before failure occurs. One could cut away all the first-story columns on one side of the building, and part way from the corners of the perpendicular sides, and the building could still withstand design loads and a 100-mph wind force from any direction."

Energetic nano compounds produce high heat in milliseconds and cool very quickly; in 15-30 minutes. Very simply, energetic nano compounds would not have produced the molten metals, the high heat seen for many days and weeks, nor would they have been enough, alone, to bring down these structures. These other theories do not account for almost 1000 dead rescue workers and many 1000s more severely ill. The factual evidence in this report does.

The USGS and 911

First we'll look at several images not related to the basic proposition held by this report, that controlled nuclear demolition was the cause of the collapse of the Twin Towers. This is just to allow the reader to become familiar with the detail achieved and attended to by the USGS which may help to explain, further on, when that detail is simply missing completely, this writers cautious position. However, that certain evidence is missing from the USGS reports does not mean that the evidence isn't available to prove thermonuclear fission. It just means that certain evidence is missing and one should wonder, why?

The image at right is a Scanning Electron Microscopy (SEM) image of a chrysotile bundle (center) and glass fibers from sample WTC01-08 at the corner of West and Vesey on the Southwest corner of Building 6. Similar bundles have been identified at trace levels in several of the dust samples.

Chrysotile or white asbestos is the most commonly encountered form of asbestos, accounting for approximately 95% of the asbestos in place in the United States and a similar proportion in other countries. It is a soft, fibrous silicate mineral in the serpentine group of phyllosilicates; as such, it is distinct from other asbestiform minerals in the amphibole group.

Three polytypes of chrysotile are known. These are very difficult to distinguish in hand specimens, and polarized light microscopy must normally be used. Some older publications refer to chrysotile as a group of minerals — the three polytypes, Clinochrysotile, Orthochrysotile and Parachrysotile and sometimes pecoraite as well — but the 2006 recommendations of the International Mineralogical Association prefer to treat it as a single mineral with a certain variation in its naturally-occurring forms.

Needless to say, the City of New York contained a good deal of what we commonly refer to as Asbestos after 911 and it would be safe to say that this toxic fiber will effect the lives of people there for years to come. This is the nature and result of breathing dangerous toxins, especially toxins in this family.

Interestingly, the USGS data goes a long way towards proving that the massive efforts to wash all trucks leaving ground zero to remove Asbestos is a fraud since the Asbestos was distributed across the city and very little, if any, remained at Ground Zero. Washing all vehicles leaving Ground Zero was an attempt to remove the elements producing radiation, not to remove Asbestos.

At right is a (SEM) Secondary Electron Microscope image of a representative portion of sample WTC01-20, at the corner of West and Liberty directly behind Building 3. The image shows gypsum and/or anhydrite crystals.

Gypsum, also called hydrated calcium sulphate ($CaSO4 \cdot 2H2O$) and anhydrite ($CaSO4$), also called hydrous calcium sulphate are the major minerals in the sedimentary rocks of rock gypsum and rock anhydrite respectively. Gypsum consists of calcium, sulfur and water while anhydrite consists of calcium, sulfur and oxygen. The rocks are commonly referred to as evaporates. Gypsum is monoclinic and usually occurs as twinned tabular crystals. Gypsum also forms fine granular masses, at times coarse. In its typical form, gypsum is colorless or white but if impurities are present then it may be red, brown or orange and it cleaves into plates that can be bent but are not flexible. Gypsum has a soft texture and it can be easily scratched. Its crystals are very flexible and slim crystals can be slightly bent. Sometimes, gypsum forms in sandy places and sand may be trapped inside the crystals when they are forming, causing the gypsum specimen to become brown and opaque. It is a very common mineral and it can be found in numerous localities.

Anhydrite is orthorhombic and does not react with hydrochloric acid. Anhydrite is a hard crystal with a hardness rating of 3.5 and approximate density of 3.0. Anhydrite usually occurs in arid places forming from the dehydration of gypsum. When exposed to water, anhydrite slowly turns into gypsum. It is sometimes used as an ornamental stone or as a soil conditioner. It has industrial uses too, for instance as a drying agent or as a cement additive.

These elements are common to Wallboard or Drywall and other construction related ornamental building products.

The Twin Towers contained tons of Wallboard, 4 acres of marble and other related building materials including an estimated 100,000 computer terminals, monitors and related hardware. There were 68,159 regular office floors at 749 tons (average), 42,874 heavy floors at 1649 tons (average), 7,166 core foundations and 4,181 perimeter foundations.

From the contracts list and our calculations above, we have a steel inventory (tons per Tower) as follows:

27,900 exterior columns and spandrels, 9th to 107th floor; 12,950 rolled columns and beams above 9th floor, in cores; also exterior wall steel above 107th floor; 3,400 perimeter bifurcation columns (trees) 4th to 9th floor; 6,800 perimeter box columns below the bifurcation columns to 4th floor; 6,500 core box columns below the 9th floor; 15,550 core box columns above 9th floor and built-up beams; 6,000 supports for slabs below grade; 3,023 steel deckings; 4,949 grillages

and 11,261 floor trusses. These figures are tonnages and the total steel tonnage per building is approximately 98,333 tons. The steel, as you may know, most anyway, is gone.

At right is the secondary electron microscopy (SEM) image of a representative portion of sample WTC01-03 collected from Battery Park at the corner of State Street and Pearl. The image shows abundant glass fibers and other materials.

Glass-reinforced plastic (GRP), also known as glass fiber-reinforced plastic (GFRP), is a fiber reinforced polymer made of a plastic matrix reinforced by fine fibers made of glass. It is also known as GFK (for Glasfaserverstärkter Kunststoff), or simply by the name of the reinforcing fibers themselves: fiberglass.

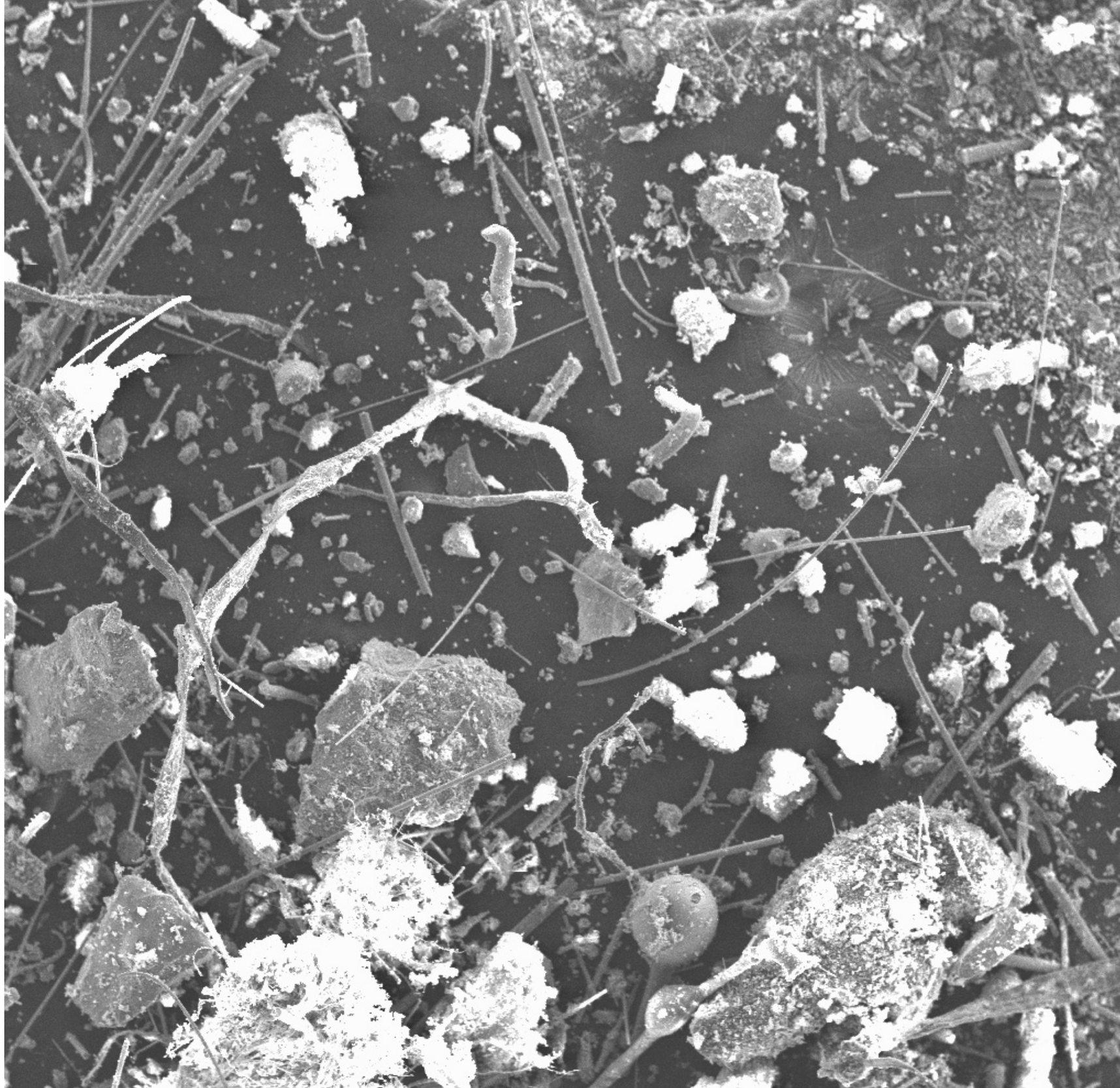
GRP is a lightweight, strong material with many uses, including boats, automobiles, water tanks, roofing, pipes, cladding and more. The plastic matrix may be epoxy, a thermosetting plastic (most often polyester or vinylester) or thermoplastic.

Residential and commercial fiberglass batt insulation contains about 5% resin binder that is capable of outgassing formaldehyde fumes into the air. The pink colored insulation manufactured by Owens-Corning Fiberglas Corporation contains, in addition, about 1% dye that has its own outgassing characteristics. The resin used in insulation is usually a phenol-formaldehyde product, but Manville Corporation uses a urea-extended phenol-formaldehyde resin, which outgasses at a faster rate. Of the major insulation manufacturers, the batt insulation produced by Certainteed Corporation, with 4% phenolformaldehyde resin and no dye, is probably the least potent from an outgassing standpoint, however, it can still bother people sensitive to formaldehyde.

When resin coated fiberglass enters the sinuses or the lungs, there is the possibility that the resin could react with the soft tissues and cause inflammation or damage. It is known that formaldehyde based resins decompose when exposed to heat and humidity, yet no research has been done to explore this mode of exposure.

These are not the types of things people would choose to breathe if they were able to make the choice. The problem created by the controlled demolition of the Twin Towers and Building 7 is that innocent civilians weren't given that choice. In a rush to get Wall Street up and running the future health of the civilian population was sacrificed.

Essentially, this means we have elected and appointed politicians that failed the civilian population in every way and who also failed to live up to their responsibilities as human beings. Even worse, it is this writers belief that the lies constitute a criminal act and actually are composed of numerous and repeated criminal acts.



Assessing The USGS

I hope you're familiar with the layout of the World Trade Center collapse and demolition site by now. This image shows a photo taken by NASA - AVIRIS on September 16th, 2001 at 16:21 GMT by an Imaging Spectroscopy Tetracorder, which produces images of certain minerals. The image shows the distribution, in red, of Serpentines. These are a fibrous form of the mineral serpentine, also called white asbestos, as seen in the images on the previous pages.

One pixel is equal to 1.7 meters. I've increased this image size by several hundred percent because in its original size the red pixels are invisible. The USGS uses the words "possible" when describing what this image shows. For example, this is "possible" Serpentines or possible Chrysolite. This image shows dust particles as small as 2.3 microns.

As you can see from this image and the images on the preceding pages, the USGS pays close attention to detail and has the equipment and experience to perform a total study of any and all chemical compounds, trace elements and naturally occurring or man-made materials. This is the type of research they normally do and they're obviously quite good at it.

I wonder why a total study wasn't performed. As mentioned previously, certain elements weren't tested for and you can't find what you don't look for. Still, we do have enough data to prove Nuclear Fission in New York City on 911, conclusively.

The Limited Hangout

The Fancy Name For A Lie

A limited hangout typically is a response to lower the pressure felt from inquisitive investigators pursuing clues that threaten to expose everything, and the disclosure is often combined with red herrings or propaganda elements that lead to false trails, distractions, or ideological disinformation; thus allowing covert or criminal elements to continue in their improper activities.

Victor Marchetti wrote (as stated earlier): “A ‘limited hangout’ is spy jargon for a favorite and frequently used gimmick of the clandestine professionals. When their veil of secrecy is shredded and they can no longer rely on a phony cover story to misinform the public, they resort to admitting - sometimes even volunteering - some of the truth while still managing to withhold the key and damaging facts in the case. The public, however, is usually so intrigued by the new information that it never thinks to pursue the matter further.”

The Limited Hangout for 911 is Energetic Nano Compounds.

These materials have been used since the 1940s in the mining industry to excavate for minerals, gas and petroleum products. They are not a new concept or a new material. Nano sized or micron-sized materials are relatively new, designed in the last 20 or 30 years or so, but again, they aren’t new. They are only new to the general public because we aren’t miners and petroleum drillers.

Remember, “*they resort to admitting - sometimes even volunteering - some of the truth*” and they know we all know it was controlled demolition. That is something they can’t hide. “Some of the truth” is that energetic compounds of some sort were very likely used.

Energetic Nano Compounds (ENCs) are specifically designed to be efficient burners. The chemistry of their design is such that they heat to maximum temperature in milliseconds and burn themselves out. They are designed to burn all of themselves in milliseconds. This is how they reach such high temperatures but when they do this their fuel is then gone. They also cool in 15-30 minutes. This is the chemistry of ENCs. This is how they’re designed to work. They aren’t capable of creating “burning” or “melting” steel after an hour, or even a minute. Everything used as fuel is gone.

They also aren’t capable of demolishing a 100+ story steel structured building designed to withstand more then one airplane crashing into it and able to endure 2000% of design loads. If “one could cut away all the first-story columns on one side of the building, and part way from the corners of the perpendicular sides” and still withstand 100mph winds because of design load over-compensation, a standard feature easily designed into these structures, then thermate and explosives are losers. They can’t account for the anomalies we see and only nuclear fission can account for all of them perfectly, using chemistry, physics and math.

But the public is enamored with thermate. It answered all of their questions and ended the search for the truth. Or did it. Does the public really understand the science? But the public is “*so intrigued by the new information that it never thinks to pursue the matter further.*” If you’re reading this report and have succeeded in getting this far maybe you didn’t catch the “thermate flu” and leave your brain at the door.

Energetic Compounds are incapable of doing what we saw on 911 and producing the after-effects ALONE and it is this writers opinion that it’s unlikely that they were necessary to the destruction of the Twin Towers and Building 7 on September 11th. They may have been used, but they were not necessary.

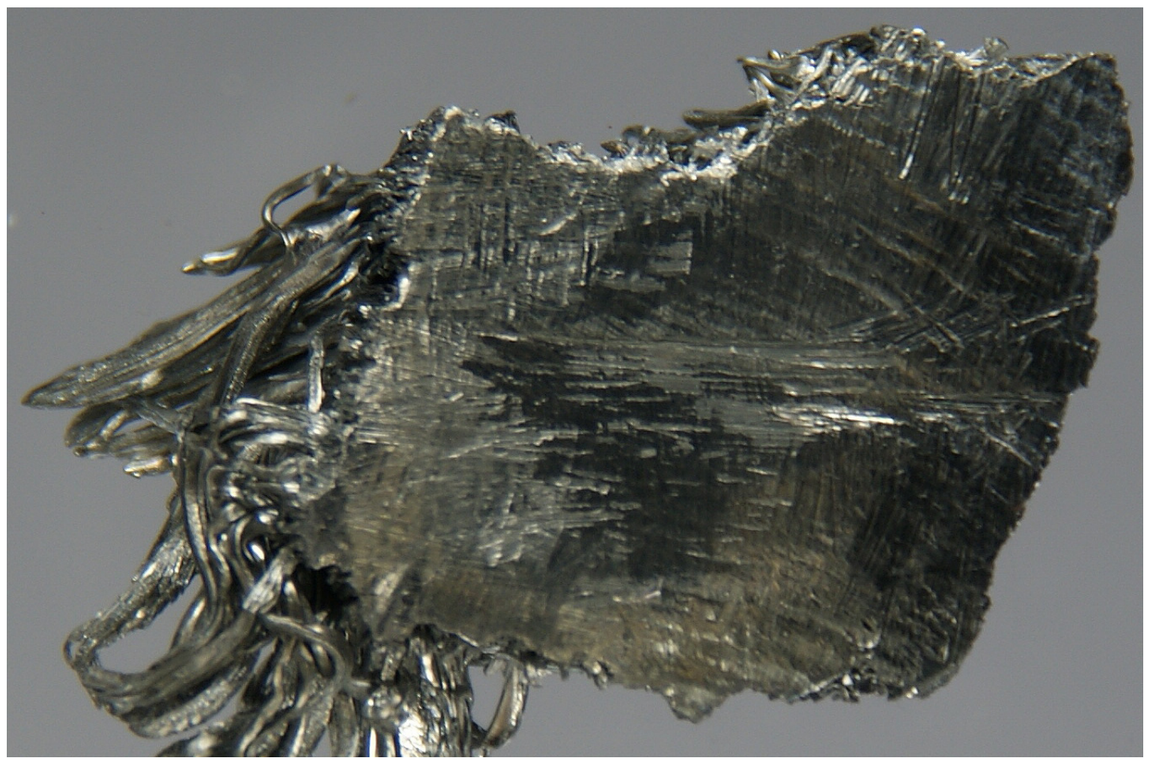
Underground Nuclear Demolition is the ONLY method of demolition that explains all anomalies, every single one of them, bar none, with accuracy and conclusiveness.

Yttrium

Yttrium is normally found at 30ppm (Parts Per Million) in its natural state in the earths crust.

Yttrium is a chemical element with the symbol Y. Yttrium is a silver-metallic, lustrous rare earth metal that is relatively stable in air, strongly resembles Scandium in appearance, and chemically resembles the Lanthanides, and can appear to gain a slight pink luster on exposure to light. Shavings or turnings of the metal can ignite in air when they exceed 400°C. When Yttrium is finely divided, it is very unstable in air. The metal has a low neutron cross-section for nuclear capture. Yttrium oxides are a component of the phosphors used to produce the red color in television picture tubes. The oxides have potential use in ceramics and glass. Yttrium oxides have high melting points and impart shock resistance and low expansion to glass. Yttrium iron garnets are used to filter microwaves and as transmitters and transducers of acoustic energy. Yttrium aluminum garnets, with a hardness of 8.5, are used to simulate diamond gemstones. Small quantities of yttrium may be added to reduce the grain size in chromium, molybdenum, zirconium, and titanium, and to increase strength of aluminum and magnesium alloys. Yttrium is used as a deoxidizer for vanadium and other nonferrous metals. It is used as a catalyst in the polymerization of ethylene. The melting point of Yttrium is 2779°F.

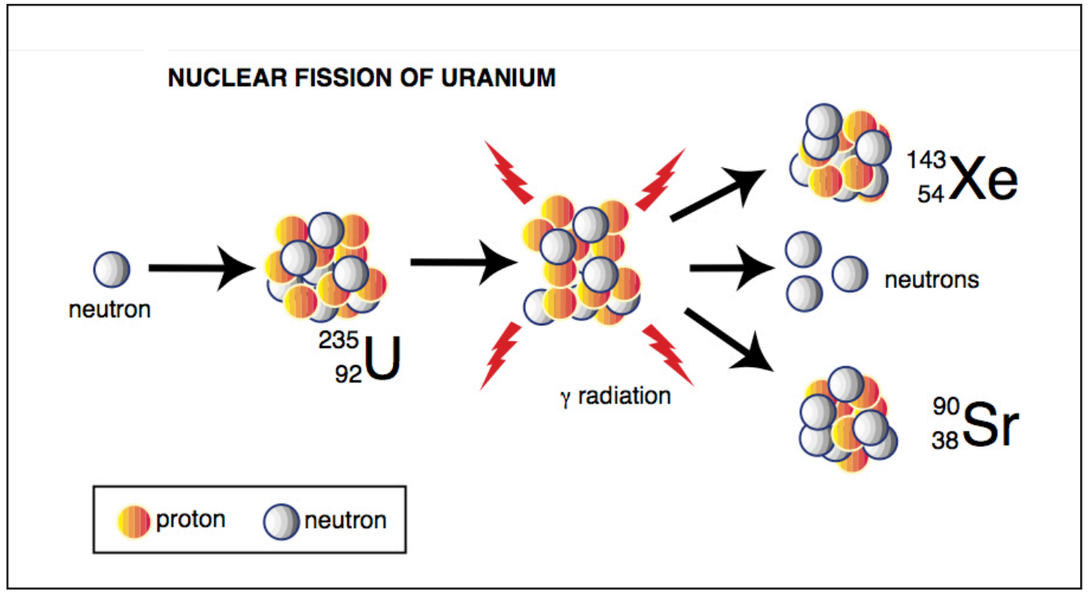
Compounds that contain this element are rarely encountered by most people but should be considered to be highly toxic. Yttrium salts may be carcinogenic. This element is not normally found in human tissue and plays no known biological role. Powdered samples and turnings from machining can burst into flame. The high level in the Girder Coatings (right) are significant.



Yttrium and the USGS Survey in Lower Manhattan

Yttrium was found at the following levels at the following locations in Lower Manhattan

Outdoor Samples		Indoor Samples		Girder Coatings	
WTC01-02	58.9	WTC01-20	44.1	WTC01-20	134
WTC01-03	30.2	WTC01-36	52.6	WTC01-36	243
WTC01-05	nm				
WTC01-06	nm				
WTC01-14	46.5				
WTC01-15	46.1				
WTC01-16	31.4				
WTC01-17	nm				
WTC01-21	54.5				
WTC01-22	47.6				
WTC01-25	61.6				
WTC01-27	54.9				
WTC01-28	53.8				
WTC01-30	nm				
WTC01-34	nm				



In the image above we see a Uranium molecule being bombarded by a neutron which creates radiation and the result is two new elements, Xe, or Xenon, and Sr, or Strontium.

Strontium

Strontium is a chemical element with the symbol Sr and the atomic number 38. An alkaline earth metal, strontium is a soft silver-white or yellowish metallic element that is highly reactive chemically. The metal turns yellow when exposed to air. It occurs naturally in the minerals Celestine and Strontianite. The 90-Sr isotope is present in radioactive fallout and has a half-life of 28.90 years. Strontium is a silvery metal found naturally as a non-radioactive element. About 99% of the strontium in the human body is concentrated in the bones.

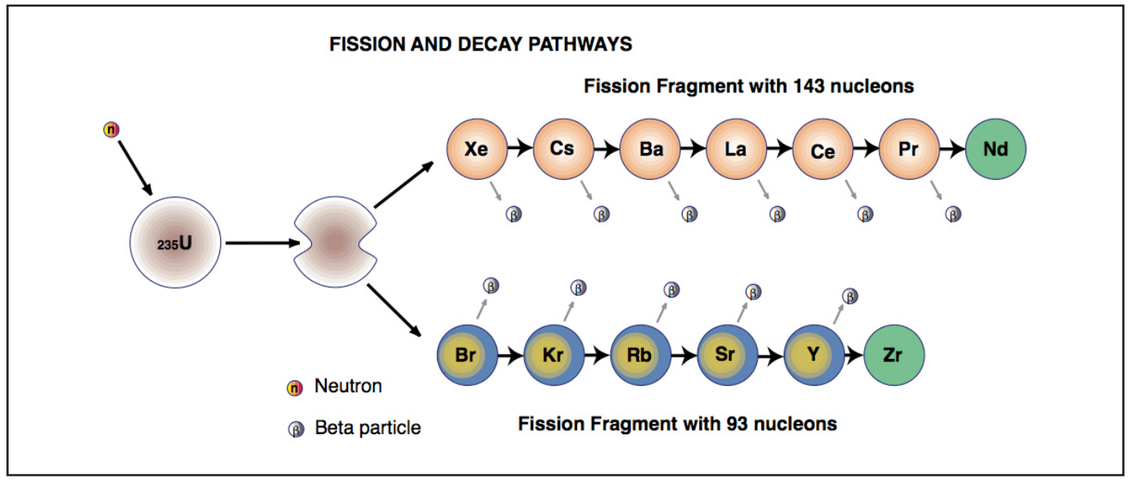
Several different forms of strontium are used as medicine. Scientists are testing strontium ranelate to see if it can be taken by mouth to treat thinning bones (osteoporosis). Radioactive strontium-89 is given intravenously (by IV) for prostate cancer and advanced bone cancer. Strontium chloride hexahydrate is added to toothpaste to reduce pain in sensitive teeth. Strontium chloride is the most common form of strontium found in dietary supplements. People use supplements for building bones. But there isn't much scientific information about the safety or effectiveness of strontium chloride when taken by mouth. A special form of strontium called strontium ranelate can increase bone formation and prevent bone loss when used in postmenopausal women with osteoporosis. It's not known if strontium contained in dietary supplements has these effects. A radioactive form of strontium may kill some cancer cells. This type of strontium is not available in dietary supplements. There is some interest in using strontium for osteoarthritis because developing research suggests it might boost the formation of collagen and cartilage in joints.

There is also interest in studying Strontium for preventing tooth decay because researchers have noticed fewer dental caries in some population groups who drink public water that contains relatively high levels of Strontium. Strontium has four stable, naturally occurring isotopes: 84Sr (0.56%), 86Sr (9.86%), 87Sr (7.0%) and 88Sr (82.58%). Only 87Sr is radiogenic; it is produced by decay from the radioactive alkali metal 87Rb, which has a half-life of 4.88 × 1010 years. Thus, there are two sources of 87Sr in any material: that formed in stars along with 84Sr, 86Sr and 88Sr, as well as that formed by radioactive decay of 87Rb, or nuclear fission.

Strontium and the USGS Survey in Lower Manhattan

Strontium was found at the following levels at the following locations in Lower Manhattan

Outdoor Samples		Indoor Samples		Girder Coatings	
WTC01-02	1000	WTC01-20	706	WTC01-20	444
WTC01-03	409	WTC01-36	823	WTC01-36	378
WTC01-05	nm				
WTC01-06	nm				
WTC01-14	643				
WTC01-15	736				
WTC01-16	3130				
WTC01-17	nm				
WTC01-21	787				
WTC01-22	710				
WTC01-25	695				
WTC01-27	701				
WTC01-28	711				
WTC01-30	nm				
WTC01-34	nm				



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 decay more slowly and persist in fallout for some time. Over a longer period of time the Barium and Strontium will decay into a more stable isotope of Neodymium and Zirconium and then radioactive decay ceases. The Barium and Strontium will be radioactive although the radioactivity may be, in this case, very difficult to measure accurately based on dust dispersal across a major metropolitan area. However, the significant dilemma in this case is that if the US government did measure for radioactivity that data is being withheld. If there were measurements taken, and I suspect there were, any future releases of data will of course be suspect. Once the lies began, they were obviously impossible to stop. Even worse, the lies grew a life of their own and became larger and larger as each day passed. As a result of these lies, 900 First Responders are now dead, many from various cancers. Some of these people had more then one cancer and some had as many as three rare and unusual cancers. More are going to die. In ten, maybe 20 years, perhaps longer, we will see the effects of low level radiation in New York City.

Barium

Barium is a chemical element with the symbol Br. Barite is a common mineral and makes very attractive specimens. It often is an accessory mineral to other minerals and can make a nice backdrop to brightly colored crystals. At times bladed or tabular crystals of Barite form a concentric pattern of increasingly larger crystals outward. This has the appearance of a flower and when colored red by iron stains, these formations are called “Desert Roses”.

Because Barite is so common, it can be confused for other minerals. Celestite (SrSO4) has the same structure as barite and forms very similar crystals. The two are indistinguishable by ordinary methods, but a flame test can distinguish them. By scraping the dust of the crystals into a gas flame the color of the flame will confirm the identity of the crystal. If the flame is a pale green it is barite, but if the flame is red it is celestite. The flame test works because the elements Barium (Ba) and Strontium (Sr) react in the flame and produce those colors.

A thermonuclear device can be devastating and is based on the principle of uncontrolled nuclear fission reaction. When the Uranium 235 nucleus is hit by a slow neutron it splits into Barium and Krypton nuclei and three neutrons and a large amount of heat energy is released. These three neutrons cause three more fissions of Uranium.

Barium and the USGS Survey in Lower Manhattan

Barium was found at the following levels at the following locations in Lower Manhattan

Outdoor Samples		Indoor Samples		Girder Coatings	
WTC01-02	765	WTC01-20	390	WTC01-20	317
WTC01-03	376	WTC01-36	438	WTC01-36	472
WTC01-05	nm				
WTC01-06	nm				
WTC01-14	461				
WTC01-15	405				
WTC01-16	3670				
WTC01-17	nm				
WTC01-21	460				
WTC01-22	452				
WTC01-25	624				
WTC01-27	470				
WTC01-28	491				
WTC01-30	nm				
WTC01-34	nm				

Barium and Strontium and other elements produced by the thermonuclear controlled demolition of the Twin Towers and Building 7 were themselves radioactive and remain so today. In the decaying process they convert to other elements which will provide additional forensic evidence fully confirming the assertions in this report. The dust samples provide a “signature” of the nuclear decay process which shows the daughter products of Barium, which are Lanthanum and Cerium and the daughter product of Strontium, which is Yttrium, all present in the dust in significant quantities and their variations and correlations across numerous sample locations prove fission.

The Twin Towers were demolished in a Controlled Demolition, a thermonuclear demolition possibly combined with the use of energetic nano compounds, very likely Metastable Intermolecular Nano Sol Gels, used to cut the core columns at critical places within the structure. Remember, no building has ever been demolished in a controlled demolition that was constructed in the same manner as the Twin Towers. Much older buildings, and very large buildings have been demolished using controlled demolition methods. None were built the same way the Twin Towers and Building 7 were built. They were much older commercial building technologies, far shorter, and far easier to bring down. It is my considered opinion that all of the people that use the “thermite/thermate” theory ONLY are frauds working for the US government producing what we call a “Limited Hangout.” As such, it is their objective to conceal the thermonuclear demolition of the Twin Towers. It is their job to conceal the nuclear component at all costs. This does not mean that the “thermite/thermate” theory is in error, just that it’s being used to obfuscate the truth. This is the classic definition of a Limited Hangout.

Other elements produced by the decay process include Antimony, Tellurium, Krypton, Xenon and still others. Naturally, as I mentioned previously, not all of these elements were tested for. That doesn’t mean the data is inconclusive, quite the contrary, it is unequivocally conclusive. By examining the data carefully there sometimes appears to be two relationships between the elements in the dust – as one element increases in concentration another appears to both increase and decrease. This is explained by these various opposing radioactive decay mechanisms and the reader is urged to explore the fission process on her or his own, using this eMagazine and the data contained within along with further intensive research.

Lanthanum

Lanthanum is a chemical element with the symbol La and atomic number 57. Lanthanum is a silvery white metallic element that belongs to group 3 of the periodic table and is the first element of the Lanthanide series. It is found in some rare-earth minerals, usually in combination with Cerium and other rare earth elements. Lanthanum is a malleable, ductile, and soft metal that oxidizes rapidly when exposed to air. It is produced from the minerals Monazite and Bastnäsite using a complex multistage extraction process. Lanthanum compounds have numerous applications as catalysts, additives in glass, carbon lighting for studio lighting and projection, ignition elements in lighters and torches, electron cathodes, scintillators, and others. Lanthanum carbonate was approved as a medication against renal failure.

Lanthanum forms colorless compounds similar to those of aluminum. It has yet to find much importance in use. It is usually found in nature with Scandium and Yttrium and the fourteen members of the Lanthanide series.

The mineral Monazite is a source of Lanthanum. Lanthanum is found in the fluorides Parisite and Bastnaesite. It is found in the silicate mineral Allanite.

Naturally occurring lanthanum (La) is composed of one stable (139La) and one radioactive (138La) isotope, with the stable isotope, 139La, being the most abundant (99.91% natural abundance). 38 radioisotopes have been characterized with the most stable being 138La with a half-life of 105×109 years, and 137La with a half-life of 60,000 years. Most of the remaining radioactive isotopes have half-lives that are less than 24 hours and the majority of these have half lives that are less than 1 minute.

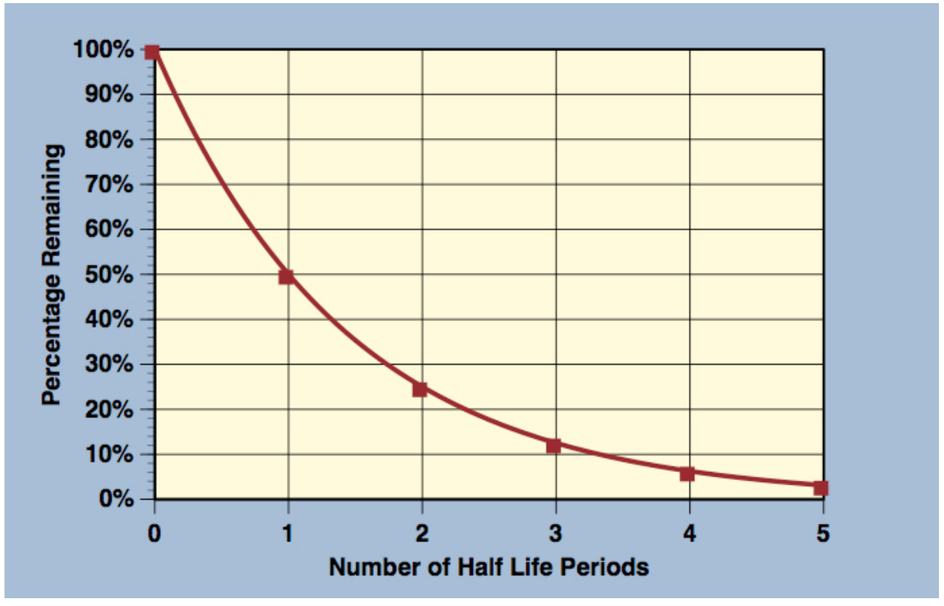
Lanthanum and the USGS Survey in Lower Manhattan

Lanthanum was found at the following levels at the following locations in Lower Manhattan

Outdoor Samples		Indoor Samples		Girder Coatings	
WTC01-02	51	WTC01-20	31.3	WTC01-20	102
WTC01-03	25.8	WTC01-36	35.6	WTC01-36	175
WTC01-05	nm				
WTC01-06	nm				
WTC01-14	34.8				
WTC01-15	32.7				
WTC01-16	69.9				
WTC01-17	nm				
WTC01-21	38.6				
WTC01-22	35.4				
WTC01-25	43.5				
WTC01-27	39.5				
WTC01-28	38.4				
WTC01-30	nm				
WTC01-34	nm				

Radioactive Half-Life Decay

Different radioactive isotopes take varying amounts of time to decay away into the next element along the chain. So the time it takes for half the atoms in a particular sample isotope to decay is called the Half Life of that isotope. Strontium 90, for example, has a Half Life of 28 years. This is illustrated in the graph below. After one Half Life period, 50% of the original amount remains, after two Half Life periods, 25% of the original amount remains and so on.



Antimony

Like arsenic, which sits directly above it in the periodic table, the toxicity of antimony and its compounds varies according to the chemical state of the element. Many of the salts are carcinogenic. The metallic form is considered to be less active whereas Stibine (SbH3) and Antimony Trioxide are extremely toxic. Antimony is toxic and immediately dangerous to life or health at 50 mg/m3 or above.

Exposure to 9 milligrams per cubic meter of air (mg/m3) of Antimony as Stibnite for a long time can irritate your eyes, skin, and lungs. Breathing 2 mg/m3 of Antimony for a long time can cause problems with the lungs (pneumoconiosis) heart problems (altered electrocardiograms), stomach pain, diarrhoea, vomiting and stomach ulcers. People who drank over 19ppm of antimony once, vomited. All of the readings at right for Indoor and Outdoor Antimony sampling are well above 19ppm.

The major use of Antimony is in lead alloys - mainly for use in batteries - adding hardness and smoothness of finish. The higher the proportion of Antimony in the alloy, the harder and more brittle it will be. Alloys made with Antimony expand on cooling, retaining the finer details of molds. Antimony alloys are therefore used in making typefaces for clear, sharp printing.

Antimony and the USGS Survey in Lower Manhattan

Antimony was found at the following levels at the following locations in Lower Manhattan

Outdoor Samples		Indoor Samples		Girder Coatings	
WTC01-02	52.1	WTC01-20	38.9	WTC01-20	0.56
WTC01-03	26.3	WTC01-36	33.9	WTC01-36	1.20
WTC01-05	nm				
WTC01-06	nm				
WTC01-14	40.2				
WTC01-15	30.2				
WTC01-16	148				
WTC01-17	nm				
WTC01-21	33.1				
WTC01-22	27.5				
WTC01-25	65.8				
WTC01-27	50.4				
WTC01-28	51.8				
WTC01-30	nm				
WTC01-34	nm				

Understanding The USGS Data

The incontrovertible evidence that the World Trade Center was brought down by thermonuclear controlled demolition is contained in the analysis of the dust from the buildings carried out by the United States Geological Survey carefully outlined in this report.

In the aftermath of the collapse, a USGS team took representative samples of the dust from 35 locations in Lower Manhattan near and around the site of the World Trade Center, ground zero. This included samples from two indoor sites in local buildings and two samples from the insulation coatings of the steel girders used in the construction of the towers, before those steel girders were quietly hauled away for safe disposal.

The USGS report that this data is taken from is titled, “Environmental Studies of the World Trade Center Area After the September 11, 2001 Attack” and was published to the USGS web site as Open Source with the Open File Report Number, OFR-01-0429, Version 1.1. It was published on November 27th, 2001.

The introduction to the report describes its context as follows:

“The information in this report describes the results of an interdisciplinary environmental characterization of the World Trade Center (WTC) area following requests from other Federal agencies after the attack on September 11, 2001. The scientific investigation included two main aspects: 1) imaging spectroscopy mapping of materials to cover a large area around the World Trade Center and 2) laboratory analysis of samples collected in the World Trade Center area.”

The spectroscopic imaging was carried out by the airborne infrared system known as AVIRIS which you've seen on a previous page.

Sample Collection Procedure

"A 2-person USGS crew collected grab samples from 35 localities within a 0.5-1 km radius circle centered on the World Trade Center site on the evenings of September 17 and 18, 2001.

Many of the streets bordering the collection locations were cleaned or were in the process of being cleaned at the time of sample collection. Given this limitation, collection of dust samples was restricted to undisturbed window ledges, car windshields, flower pots, protected areas in door entry ways, and steps. Occasionally, samples were collected from the sidewalk adjacent to walls that were afforded some degree of protection from the elements and cleanup process. In many cases the samples formed compact masses suggestive of having been dampened by rain and having dried in the intervening 3-4 days. Two samples of an insulation coating (WTC01-8 and 9) were collected from steel girders recently removed from the debris pile of the WTC. Samples were gathered by nitrile-gloved hand and put into doubled plastic sample bags (sample bag in another sample bag). Initially, Global Position Satellite (GPS) locations were collected for the sample collection locations, but this approach was abandoned because of difficulty in acquiring a satellite signal between tall buildings. Instead, sample locations were identified using road intersections where road signs remained intact. All but two of the samples were collected outdoors and had been subjected to wind and water during a rain storm the night of September 14th. One sample (WTC01-20) was collected indoors near the gymnasium in the World Trade Center Financial Center directly across West Street from the World Trade Center. Samples of concrete (WTC01-37A and 37B) were collected from the World Trade Center debris at the same location as WTC01-09. A sample of dust (WTC01-36) blown by the collapse into an open window of an apartment located 30 floors up and 0.4 km from the center of the World Trade Center site was also acquired a few days later."

This report then provides a rather detailed chemical analysis of the dust samples. The minimum, maximum and mean or averages appear at the table at the right, a photographic image taken directly from the web site. The web site has numerous charts and various analyses of the collected data and that's what we'll be using here to demonstrate very basically, that thermonuclear demolition did, in fact, take place.

Dissecting the Data
What Does It All Mean?

The USGS data was divided into two basic categories; Major Elements and Trace Elements.

The major elements are classified as those elements found in high enough quantities to be measured in percentage terms by weight. This method included the very common everyday elements expected to be found in the rubble of demolished buildings and also includes some less common elements.

The trace elements are less common elements that are either found in very small quantities or should be found in very small quantities if they're found at all. They're shown in parts per million by weight or 1ppm = 1mg/kg.

The summary tables show Maximum, Minimum and Mean or average values over all of the sample locations. The girder coatings had very different values as compared to the indoor and outdoor samples. The full, complete and original charts are linked at the end of Part 4 of this report and the individual parts per million are what is used in this critical analysis of decay paths.

Chemistry Table 1, continued

	minimum	maximum	mean*	
Silicon %	11.4	26.3	14.8	
Calcium %	9.58	26.01	18.36	
Magnesium %	1.79	6.94	2.88	
Sulfur %	0.87	5.77	3.11	
Iron %	0.55	4.13	1.63	
Aluminum %	2.27	4.13	2.90	
Carbon, organic %	0.98	4.02	2.48	
Carbon, Carbonate %	1.24	1.89	1.55	
Sodium %	0.12	1.16	0.57	
Potassium %	0.28	0.69	0.50	
Titanium %	0.21	0.39	0.26	
Manganese %	0.07	0.19	0.11	
Phosphorous %	0.01	0.05	0.02	
Loss on Ignition %	7.96	22.8	16.35	
Barium ppm	317	3670	533.38	
Strontium ppm	378	3130	726.61	
Zinc ppm	57.4	2990	1004.70	
Lead ppm	9.13	756	166.75	
Copper ppm	10.3	438	136.31	
Cerium ppm	50.9	356	91.23	
Yttrium ppm	30.2	243	57.45	
Chromium ppm	86.5	224	116.61	
Nickel ppm	22.6	202	37.77	
Lanthanum ppm	25.8	175	45.96	
Antimony ppm	0.56	148	24.84	
Vanadium ppm	24.9	42.5	30.67	
Molybdenum ppm	0.85	42	11.34	
Lithium ppm	17.4	36.4	24.00	
Thorium ppm	5.36	30.7	9.31	
Rubidium ppm	8	25.2	19.01	
Cobalt ppm	1.7	13.9	6.36	
Niobium ppm	4.4	11	8.34	
Scandium ppm	4.4	9.8	6.63	
Uranium ppm	1.96	7.57	3.29	
Cadmium ppm	0.11	7.5	2.80	
Arsenic ppm	3.5	6.8	***	
Gallium ppm	2.8	6	4.15	
Beryllium ppm	1.8	4.2	2.96	
Silver ppm	0.96	3.8	1.66	
Cesium ppm	0.18	0.88	0.64	
Bismuth ppm	0.008	0.82	0.28	
Thallium ppm	0.02	0.13	0.08	

The Major Elements

The most abundant elements were Silicon and Calcium as would be expected from normal building rubble and city dust. Concrete is 44% Calcium Oxide and 15% Silicon Dioxide (sand) with smaller percentages of Aluminum Oxide, Ferric Oxide, Magnesium Oxide and Gypsum (Calcium Sulphate). Plaster is also made from Gypsum. The major elements discovered at over 1% concentration correlate with this assertion.

However, the levels of Sodium and Potassium are unusual. Sodium and Potassium are not “rare” elements but the levels measured correlate strongly with some of the anomalous Trace elements from the samples. This will be looked at more carefully in the Trace element section in comparison to the findings on Zinc.

While the USGS includes Titanium and Manganese as percent measurements indicating they’re considered Major elements they are more accurately described as Trace elements. The Titanium measured as 0.26% of the dust or 2600ppm on average and is present across nearly all sample locations at 0.25-0.3% except for the sample taken as WTC01-02, at the intersection of York and Water Streets, where Titanium measured 3900ppm. This is high and will also be discussed further in the section that follows on Trace elements.

Titanium Oxide is often added to cement and concrete to lighten the color and for very white cement and concrete as much as 5% Titanium Oxide can be added to the mixture. Since Titanium Oxide is expensive and the Twin Towers were 30% glass and 70% aluminum cladding, Titanium Oxide would have been used minimally.

The levels of Manganese average 0.11% or 1100ppm and this is high for Manganese since there aren’t any building applications for it. There are interesting correlations regarding Manganese that will be discussed further.

So, thus far, Sodium and Potassium are unusually high and Titanium at an average of 2600ppm or 0.26% and Manganese at an average of 1100ppm or 0.11% are high and should be found in Trace quantities but were found in the Major Elements section of the USGS report. The levels of Sodium, Potassium, Titanium and Manganese are anomalous and deviate from what would be considered normal and standard and we’ll discuss these momentarily.

The Trace Elements

A concentration of 1% is 1 part per 100 or 10,000 parts per million (ppm). Therefore, 1 part per million is 1 ten thousandth of a percent. Let’s examine the top ten Trace Elements as they were classified by the USGS (chart at right).

While these elements in these samples at these levels don’t jump out at us we also need to understand, we aren’t scientists and we aren’t familiar with data such as this but, this sample data will stand out to anyone knowledgeable in this field. The figures for Barium, Strontium and Zinc literally leap off the page. Barium, Strontium and Zinc have the highest levels, the highest concentrations across ALL of the sampling locations.

We can see that the figures for Zinc and Strontium at location WTC01-02, New York and Water Streets, are extremely high and at sample location WTC01-16, Broadway and John Streets, the sample figures for Barium and Strontium are even higher, exceeding 3000ppm. The Zinc concentration exceeds 1000ppm for all samples taken except the girder coatings which were very likely buried and not exposed to the atmosphere.

The highest concentrations discovered were for Barium, Strontium and Zinc followed closely by Lead, Copper and Chromium. These concentrations far exceed what would normally be considered to be Trace amounts. There is between 1g/kg and 3g/kg of Zinc in the World Trade Center dust. There is more then 0.7g/kg of Strontium with over 3g/kg at one location. These quantities are unprecedented. To begin with, a Trace amount would be considered to be less then 10ppm but that doesn’t mean that even 10ppm of some substances would be acceptable or normal. The following pages will examine this data in more detail.

Table 1 • Top Ten Trace Elements

	Dust Samples (ppm)									
Outdoor Dust	**Ba**	**Sr**	**Zn**	**Pb**	**Cu**	**Ce**	**Y**	**Cr**	**Ni**	**La**
WTC 01-02	765	1000	2990	710	438	108	58.9	224	88.4	51
WTC 01-03	376	409	1200	176	142	50.9	30.2	98	30.8	25.8
WTC 01-14	461	643	1570	276	242	68.8	46.5	116	28.6	34.8
WTC 01-15	405	736	1110	152	367	64.9	46.1	129	32.9	32.7
WTC 01-16	3670	3130	1410	208	307	132	31.4	95.2	31.4	69.9
WTC 01-21	460	787	1500	278	153	77	54.5	104	31.2	38.6
WTC 01-22	452	710	1380	452	130	72	47.6	111	30.6	35.4
WTC 01-25	624	695	1910	756	251	85	61.6	134	39.2	43.5
WTC 01-27	470	701	1650	204	188	77.7	54.9	126	39.4	39.5
WTC 01-28	491	711	1720	234	218	75	53.8	106	26.1	38.4
Indoor Dust	**Ba**	**Sr**	**Zn**	**Pb**	**Cu**	**Ce**	**Y**	**Cr**	**Ni**	**La**
WTC 01-20	390	706	1330	153	176	61.6	44.1	94	29.8	31.3
WTC 01-36	438	823	1400	159	95	70.2	52.6	107	28.5	35.6
Girder Coating	**Ba**	**Sr**	**Zn**	**Pb**	**Cu**	**Ce**	**Y**	**Cr**	**Ni**	**La**
WTC 01-08	317	444	57.4	9.13	10.3	202	134	153	202	102
WTC 01-09	472	378	101	11.7	12.8	356	243	86.5	22.6	175

Ba	Barium
Sr	Strontium
Zn	Zinc
Pb	Lead
Cu	Copper
Ce	Cerium
Y	Yttrium
Cr	Chromium
Ni	Nickel
La	Lanthanum

Barium & Strontium

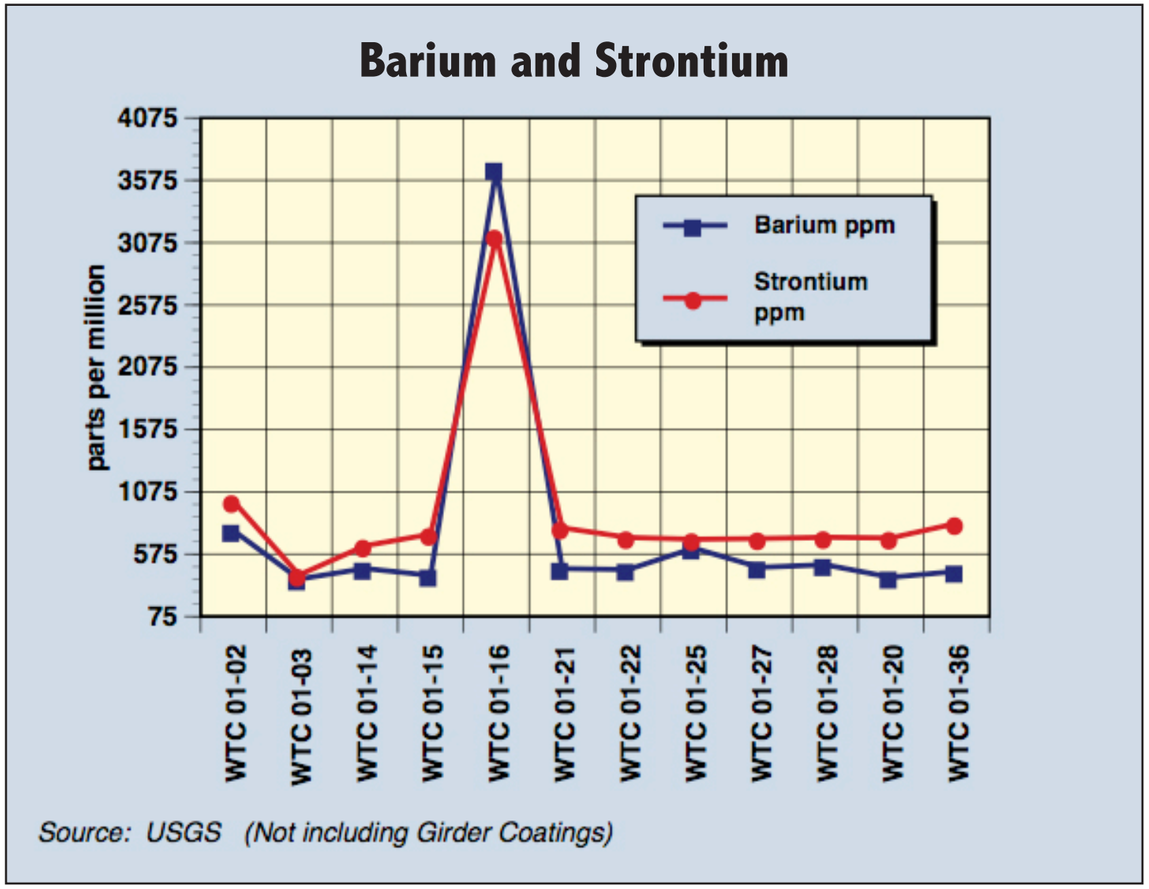
These elements are wholly out of place and do not belong in these samples at these levels. In fact, they don't belong in these samples at all, really. But, accounting for the fact that there are always disbelievers we'll plot these elements and discover their intimate relationships based on all various levels across all sampling locations.

The levels never fall below 400ppm for Barium and they never drop below 700ppm for Strontium and they reach over 3000ppm for both of them at WTC01-16, Broadway and John Streets. Why? Barium and Strontium are rare Trace elements with limited industrial uses. Strontium salts are mainly used to produce the red color in fireworks and Barium is used in some paints, in the manufacture of some glass products (CRT screens) and in vacuum tubes. Both elements are highly toxic, their levels are unprecedented, neither have building applications and shouldn't be present in building rubble and neither are valid in even Trace amounts, which would be less then 10ppm or 10mg/kg.

The enormous peak in Barium and Strontium concentration at WTC01-16 is readily apparent (chart at right). The concentration of the two elements reaches 3670ppm for Strontium and 3130 for Barium 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, WTC01-16, Broadway and John Streets. This is higher then the Titanium concentration at WTC01-16 of 0.25% or 2500ppm and higher then the Titanium Mean or average of 0.26% or 2600ppm.

Quite simply, this is astronomical. Barium and Strontium compounds are not valid constituents of concrete or any other building material including glass, aluminum, plaster and steel. They should not be there at these levels. Even at the other sampling locations the concentration does not fall below 400ppm for either Barium or Strontium, which is still an astronomically high level for these elements.

The Mean concentration for Barium including the very low girder coating samples is 533ppm and for Strontium it's 727ppm. These are not Trace amounts. They are highly dangerous and extremely toxic amounts. They are also critical components of nuclear fission and the decay process.



The Correlation Between Barium & Strontium

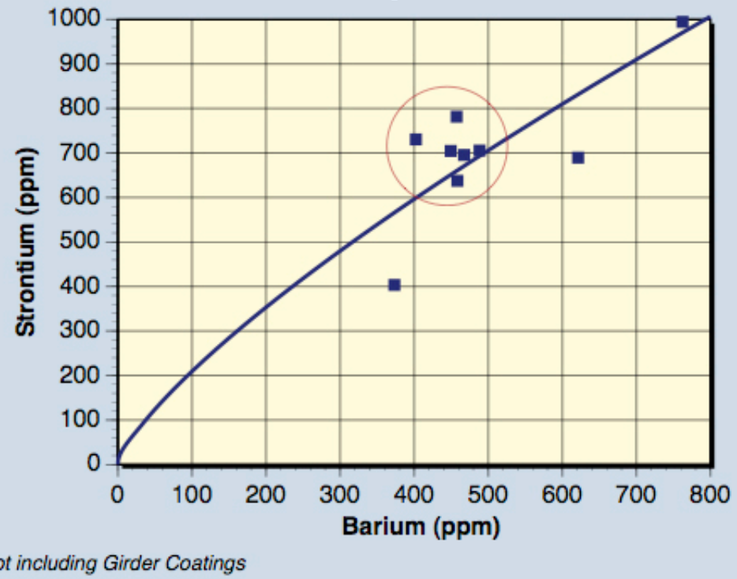
Produced By A Common Process

Here we're plotting the concentration of Barium at each location against the Strontium concentration. The correlation between the concentrations of the two elements, Barium and Strontium is very strong. The graph on the left shows just the first 9 locations, where the concentration of both Barium and Strontium was below 1000ppm and the graph on the right adds the 10th data point at WTC01-16 where the concentration of Barium and Strontium both spiked over 3000ppm.

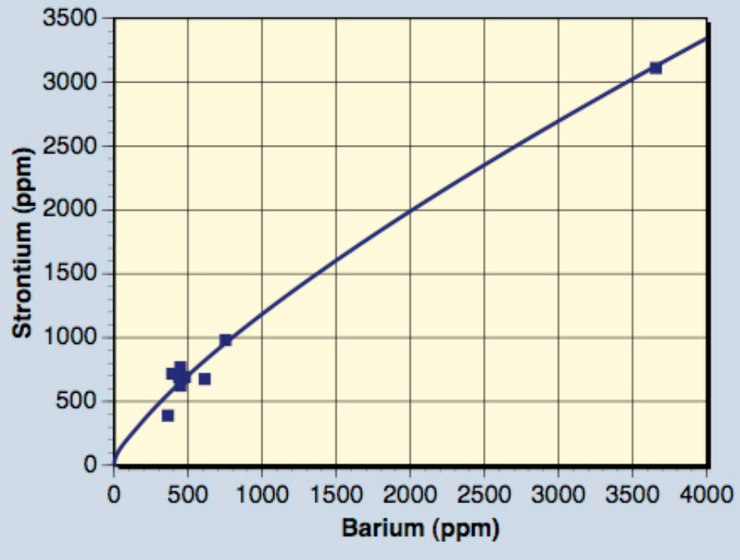
We can see that the data lies on an asymptotic curve. Looking at the left hand graph most of the points form a very tight cluster (circled in red), where the Barium concentration was between 400-500ppm and the Strontium concentration was between 700-800ppm. This is telling, that such a high number of samples had very similar concentration profiles. This shows a fairly homogenous dispersal of the radionucleides by the blast (with the exception of one data point at WTC01-16) and that the Barium and Strontium concentrations are related in a fairly distinct and narrow band – they were produced by a common process. The very high concentration at WTC01-16 tells us even more and fits the correlation perfectly – evidently the process that produced the Barium and Strontium was still ongoing at that location, leading to an extremely high concentration there.

WTC Dust Samples • Concentration of Barium vs Strontium

The First 9 Sample Locations



WTC01-16 Added



Not including Girder Coatings

Correlation Coefficient

The quality of this correlation can be quantified statistically using what's known as the Product Moment Correlation Coefficient. Correlation Coefficients are used to estimate how strong the relationship is between two different things – e.g. between smoking and lung disease. If there is a high correlation coefficient the two things might be related or linked.

Using this method, the Coefficient of Correlation between the concentration of Barium and Strontium at the outdoor and indoor sampling locations is 0.99 to 2 decimal places (0.9897 to 4 decimal places). The Correlation Coefficient between the concentration of Barium and the concentration of Strontium is 0.9897. The maximum Correlation Coefficient that is mathematically possible is 1.0 and this would mean we have a perfect match between the two factors we're examining and the data points would lie on a straight line with no variation between them.

To obtain a Correlation Coefficient of 0.9897 with this number of measurements around Lower Manhattan is very, very significant indeed. What this means is that we can say that there's a 99% correlation in the variation in the concentration between these two elements. They vary in lockstep; they vary together, similarly. When one varies, so does the other. We can state with absolute mathematical certainty that any change in the concentration of one of these elements, either the Barium or Strontium, is matched by the same change in the concentration of the other.

Whatever process gave rise to the presence of the Barium or the Strontium must have produced the other as well.

There is only one process that can account for this and produces both. A very well known process indeed that this report discusses intimately.

Nuclear Fission.

But just to be sure, we can use another statistical procedure to test whether this correlation between the two values could have arisen by chance. For example, if there are only two data points one would invariably obtain a very good correlation between them, a correlation of 1 in fact, a prefect correlation. This is because if you only have two data points you can only draw a straight line to join them together.

The USGS took 12 measurements for Barium and Strontium. Using what is called a *t* test statistic, another statistical technique, we obtain a *t* value of 21.83 for the correlation coefficient of 0.99 with 12 data points. Without explaining this in detail, what this tells us is that the chance that such a high correlation coefficient could have arisen by chance with 12 measurements is vanishingly small. Nuclear Fission, confirmed.

The Girder Coatings

We know beyond doubt that the only process that can cause Barium and Strontium to be present in related or correlated quantities and any process that can also cause Barium and Strontium to have such strong relational concentrations across different samples, is nuclear fission. We know that if nuclear fission had occurred that Barium and Strontium would be present and a strong statistical correlation between the quantities of each would be found, and we have that, in spades. What else do we have? Quite a lot.

About 400ppm of Barium and Strontium were measured in two samples of insulation girder coatings (WTC01-08 and 01-09). The concentration of Strontium actually falls somewhat below that of Barium in the second girder sample, WTC01-09, as at WTC01-16, whereas in every other sample the level of Strontium discovered was higher then Barium. Given the elevated levels of Barium daughter products found in the second girder and even the highest level of Uranium found (7.57ppm just West of and behind Tower One) this shows that active fission was still ongoing in the second girder coating, in the very same way as at WTC01-16 and therefore more Barium was found then Strontium. In other samples where the rate of fission had slowed down to give way to decay, the concentrations of Barium and Strontium reverse, due to the different half lives. Barium isotopes have a shorter half life then Strontium isotopes so they decay more quickly and after a period of time when no new Barium or Strontium has been deposited, Strontium will exceed Barium. The fact that more Barium then Strontium was still found at WTC01-16 and WTC01-09 shows that the overall nuclear processes taking place were somewhat favoring Barium over Strontium – and hence Zinc as well, and we will explore this shortly.

The tighter cluster of Barium (400-500ppm) and Strontium (700-800ppm) concentrations across widely separated sampling locations in Lower Manhattan is cast iron proof that Nuclear Fission occurred. We know that Barium and Strontium are the characteristic signature of fission; they are formed by two of the most common Uranium fission pathways. The fact that their concentrations are so tightly coupled means that their source was at the very epicenter of the event which created the dust cloud that enveloped Manhattan. This was not a localized pre-existing chemical source which would only have contaminated a few closely spaced samples and left the remaining samples untouched.

The very high concentrations of Barium and Strontium at location WTC01-16 shows that active nuclear fission was still ongoing at that spot; the dust was still “hot” and new Barium and new Strontium were being actively generated, actively created by transmutation from their parent nuclei.

Zinc

Looking at the data for Zinc we see that the Zinc concentration for WTC01-02, Water Street at the intersection of New York, is 2990ppm and this immediately stands out. In fact, for the outdoor samples, Zinc is the most common Trace element at all sampling locations, with generally between 1000ppm and 2000ppm except for this spike of nearly 3000ppm at WTC01-02.

This equates to an enormous concentration of Zinc. 0.1% to 0.2% of Zinc in the dust overall and at WTC01-02, 0.299% of the dust was Zinc. This exceeds the concentration of the supposed “non-Trace” element Manganese and Phosphorous and almost equals the elevated Titanium concentration of 0.39% at that same location.

Where Does All The Zinc Come From?

In the chart at the far right we add the Zinc plot line in comparison with Barium and Strontium. The peak in Zinc concentration at WTC01-02 is also accompanied by a higher Barium and Strontium concentration for those elements than at any of the other locations except WTC01-16, but the concentrations of Zinc, Strontium and Barium all vary together in a similar way at all locations, except at WTC01-16 and in the girder coatings, which are the last two data points at the far right of the chart (at far right), WTC01-08 and WTC01-09.

If we include the data for WTC01-16, the Correlation Coefficient between the Zinc and Barium concentration is 0.007 to 3 decimal places, from which we can conclude that there is absolutely no correlation at all. But if we exclude that one sampling location, where Barium and Strontium concentrations peaked, the correlation coefficient between Zinc and Barium is 0.96 to two decimal places and between Zinc and Strontium, 0.66 to two decimal places. So what happened?

This shows that the Zinc and Barium concentrations are closely related and if we exclude what must have been an extraordinary event at WTC01-16 as an outlier, the correlation is very good. The Product Moment Correlation Coefficient is 0.96. We’ll discuss why WTC01-16 might be so different momentarily. The concentration of Zinc is now 3 times the concentration of Barium but the correlation between Zinc and Strontium is not so clear, showing that the relationship must be more indirect. This is to be expected since Barium and Strontium are produced by different nuclear fission pathways.

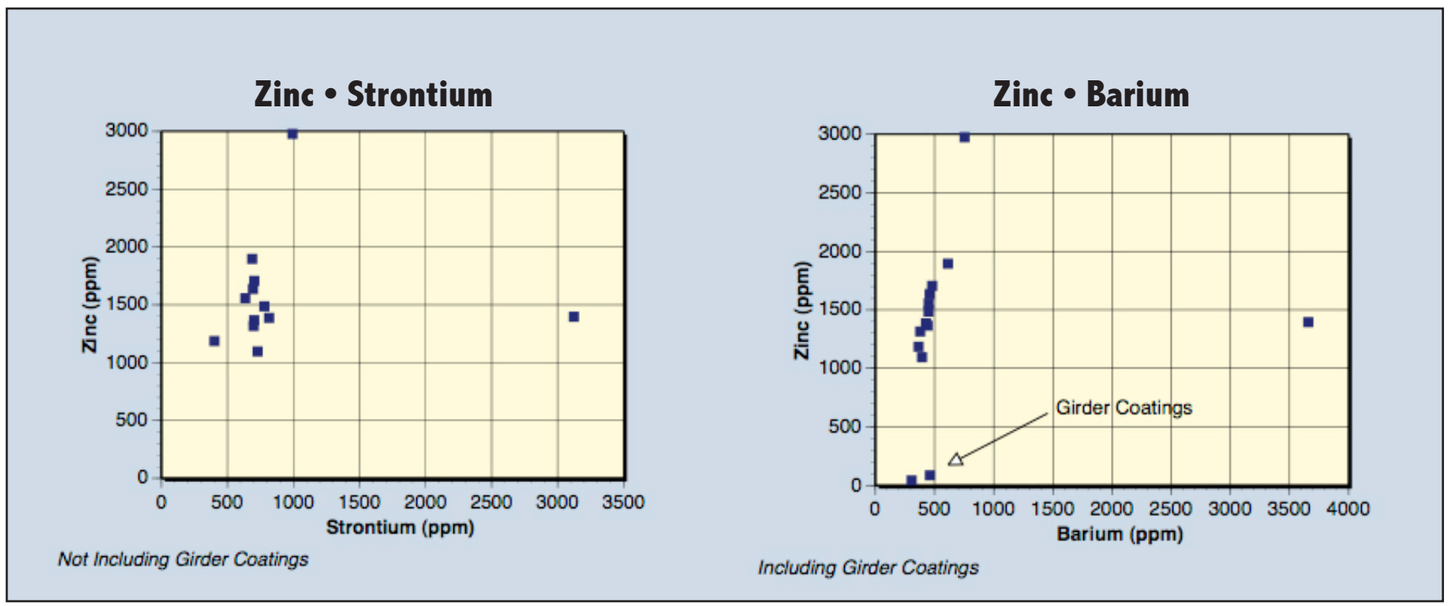
In spent nuclear fuel, Strontium is found as Strontium Oxide (SrO) – the Strontium produced by the nuclear fission explosion under the Twin Towers will certainly have been oxidized to SrO by the heat. SrO is extremely soluble in water, so some of the Strontium concentration results obtained may have been distorted by the rain water which fell on New York a few days after the towers were destroyed.

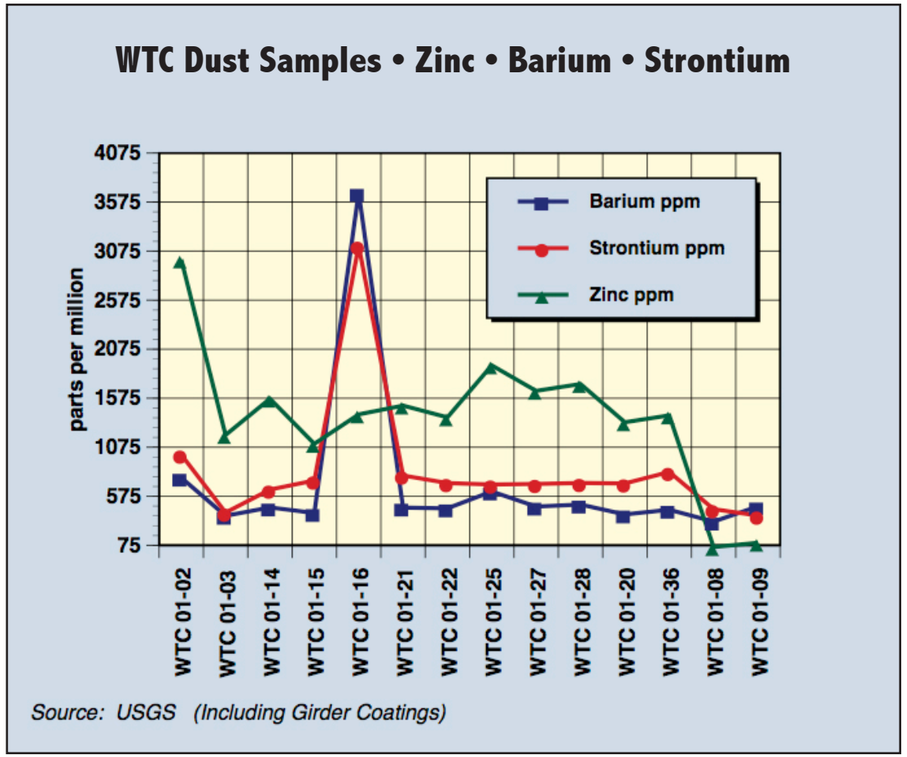
There is a very strong linear relationship between Barium and Zinc found at the World Trade Center. This may indicate that a closely related nuclear sub-process gave rise to them, which produced 3 times as much Zinc as Barium by weight. If so, that would be a very unusual nuclear event.

There is a lesser known nuclear process accounts for this, which would be indicative of very high energies indeed. This process is known as Ternary Fission.

Ternary Fission

In Ternary Fission, an atom of uranium splits not into two atoms but three. One of the well-known by-products of atomic bombs is Carbon-14 and it is known that Carbon-14 is also a Ternary Fission product of nuclear reactors. So if a nuclear fission process produces Carbon-14, what are the other two products produced?





In the first step, Uranium fissions into Radon, the heaviest of the inert or noble gases plus Carbon-14 plus a large burst of excess neutrons. We have seen that Uranium "likes" to use noble gas pathways, so the production of Radon and therefore the complementary fission fragment Carbon-14 must occur, accounting for the Carbon-14 produced by nuclear bombs.

In the second step, the Radon further fissions into Barium and Zinc with a further large release of neutrons.

This process would certainly partially account for the high levels of Zinc detected, in close correlation to Barium. Other interrelated processes must also have been at work to produce almost exactly three times the concentration of Zinc to Barium. This might lead into classified domains of nuclear engineering and testing but one conclusion can be drawn; the high levels of Zinc indicate that the World Trade Center nuclear explosions might have characteristics akin to a neutron bomb.

Girder Coatings

It's also very interesting to note that the concentration of Zinc in the indoor and outdoor dust samples is over 1000ppm but an order of magnitude lower than that in the girder coating samples, where only 50-100ppm Zinc was found. Whatever caused the elevated levels of Zinc in the dust, did not penetrate into the girder insulation coatings.

The Barium and particularly the Strontium levels in the girder coatings are also lower than in the dust but still fairly high, comparable to their levels in the dust. So this discrepancy between Barium and Zinc in the girder coatings, along with WTC01-16, suggests that there was not just one direct process at work for the generation of Zinc and Barium but a number of parallel processes – as one would expect from the different fission pathways that occur.

Very interestingly, the levels of further fission daughter nuclei of Barium and Strontium such as Cerium, Yttrium and Lanthanum are all an order of magnitude higher in the girder coatings then in the dust.

So we have an inverse relationship between the levels of Zinc, Barium and Strontium and the levels of further decay nuclei in the girder coatings.

This indicates that fission products, Barium and Strontium, were initially forced into girder coatings by the proximate force of the blast. These fission products had partially decayed into Cerium, Lanthanum and Yttrium by the time the samples were collected but no new Barium or Strontium had been deposited in the meantime. The girder coatings therefore trapped high levels of Cerium, Lanthanum and Yttrium but some of the oxides of these elements in the dust exposed to the weather were leached out by the rain. However, in the dust itself, spread out across Manhattan, more Barium, Strontium and Zinc was still being deposited from the decay of the heavy radioactive inert gases present and from new fission products being continually generated under the site.

These are not rare elements as such and the USGS classified them as "Major Elements" due to the high levels found. However, the variations in concentration of these two elements at the different sampling locations is very revealing and we have compared them to Zinc in the following analysis.

This graph (right) shows that (*apart from the very high peak in Sodium levels for one of the indoor dust samples*) the Sodium and Potassium concentrations both display this now characteristic peak at location WTC01-16, the

Sodium & Potassium

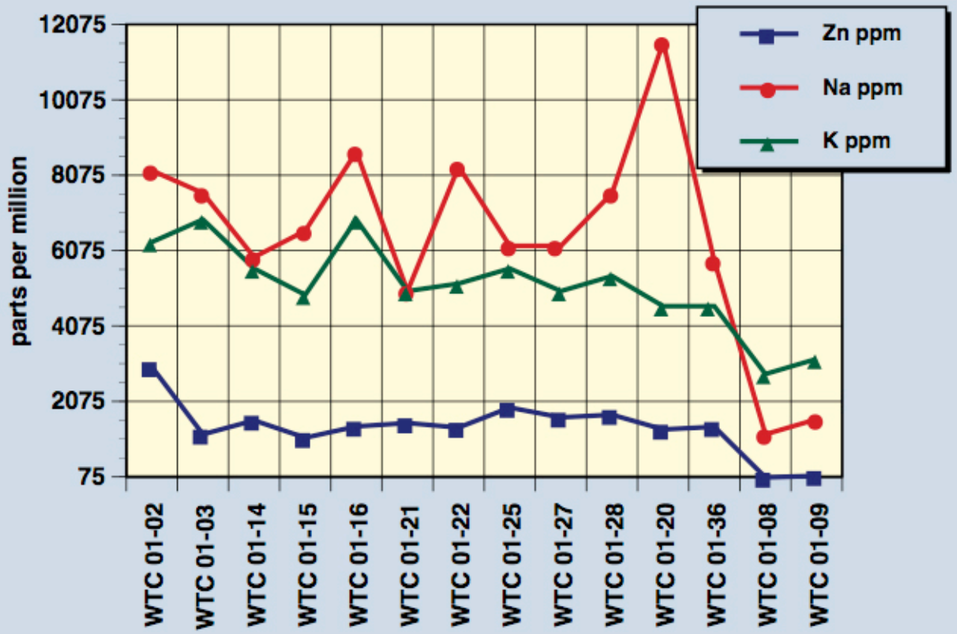
corner of Broadway and John Street. Sodium has the same peak as Zinc at WTC01-12, the corner of Warren and West, and like Zinc, falls to a minimum in the girder coatings – far below the concentrations found in the dust. Potassium is very similar except its concentration was not a peak at WTC01-02 Water and New York Streets, but somewhat lower then the next location, WTC01-03, State and Pearl Streets.

There are clear correlations and relationships here which show that the Potassium and Sodium concentrations did not arise at random. If they are products of radioactive decay, where did they come from?

Remember that Strontium is produced by a fission pathway that proceeds through the Noble Gas Krypton and then the Alkali Metal Rubidium. Similarly, Barium is produced through Xenon and the Alkali Metal Caesium. We know that Uranium fission favors these pathways through the Noble Gases – we will see later proof that Neon was produced along with the balancing Lead – we would also expect Argon.

Just as radioactive isotopes of Krypton and Xenon decay by beta particle emission to produce Rubidium and Caesium, radioactive isotopes of Neon and Argon also decay by beta emission to produce Sodium and Potassium. We would indeed expect to find anomalous levels of these elements present – what was found is again consistent with the occurrence of nuclear fission.

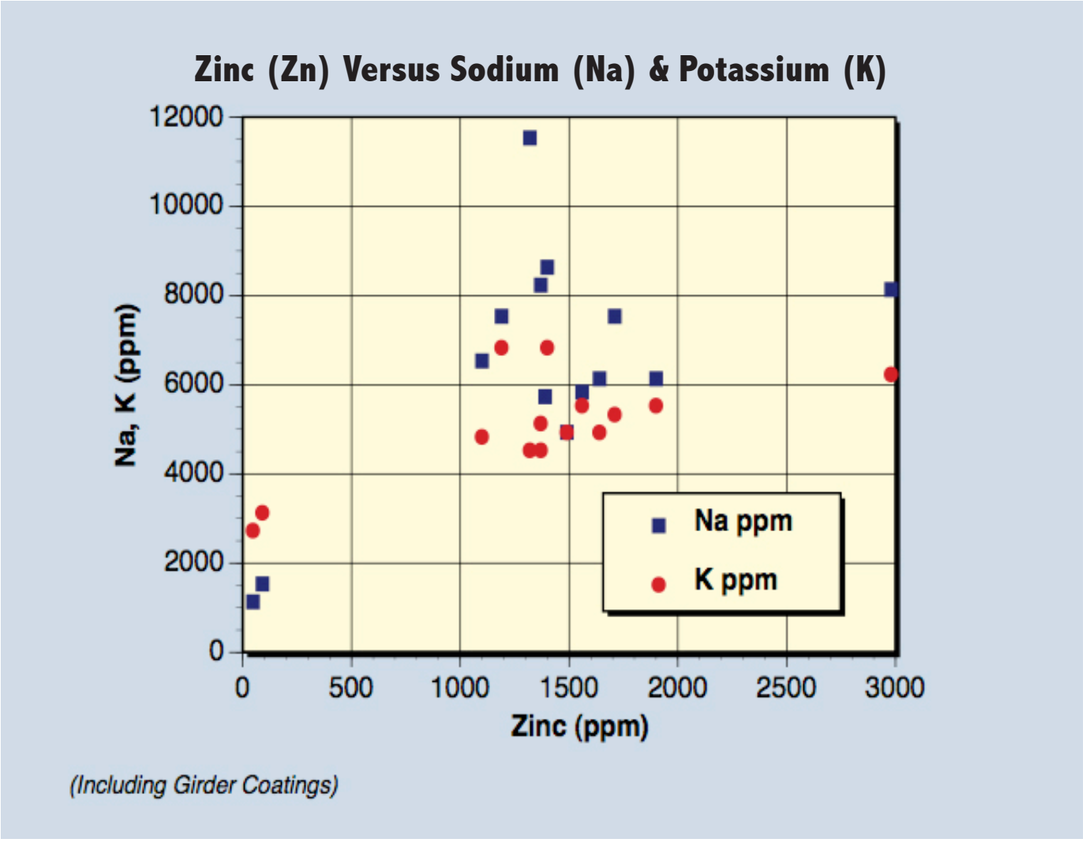
Zinc (Zn) • Sodium (Na) • Potassium (K)



Source: USGS (Including Girder Coatings)

Just as radioactive isotopes of Krypton and Xenon decay by beta particle emission to produce Rubidium and Caesium, radioactive isotopes of Neon and Argon also decay by beta emission to produce Sodium and Potassium. We would indeed expect to find anomalous levels of these elements present – what was found is again consistent with the occurrence of nuclear fission.

If we plot Xenon against Sodium and Potassium in rank order, we obtain the following graph:



There is a very strong correlation between Zinc and Potassium. Between Zinc and Potassium there almost appear to be two relationships. On the one hand, as the concentration of Zinc increases, we see a linear increase in the level of Sodium, but on the other hand, as the level of Zinc approaches the 1500ppm level, the concentration of Sodium takes another route to shoot up past 8,000ppm to over 11,000ppm in one of the indoor dust samples. Is there a way of accounting for this?

Yes, there is. Potassium has 5 radioactive isotopes, which all decay in a similar time-scale, i.e. very quickly in a matter of hours or minutes. 4 of them decay by beta emission – which means the majority of Potassium will transmute into Calcium which in turn will change into Scandium and Titanium. This is generally going towards Zinc and we will see momentarily the strong correlation between Titanium and Zinc. We could have equally used Titanium here in comparison to Sodium and Potassium, but we want to show the clear relationship with an element classified by the USGS as a Trace element, since Titanium was classified as a "Major Element" by the USGS. However, Sodium has only two radioactive isotopes; one decays by beta emission with a long 15 year half life to form Magnesium, Aluminum, etc., while the other decays by positron emission back to Neon with a 2.6 year half life. This means that as the concentration of this Sodium isotope increases it will anti-correlate with heavier elements such as Titanium, Zinc, etc. – it is decaying back towards Neon and lighter elements while the other Sodium isotope, decaying much more slowly and therefore having relatively less impact on the production of its heavier element daughter products, will correlate with the occurrence of heavier elements.

This is exactly what we see in the chart at the left – there appears to be two Sodiums, one that correlates with Zinc (heavier elements) and one that goes towards inverse proportionality – Zinc actually decreases as Sodium increases. This fits the behavior we would expect from the two Sodium isotopes.

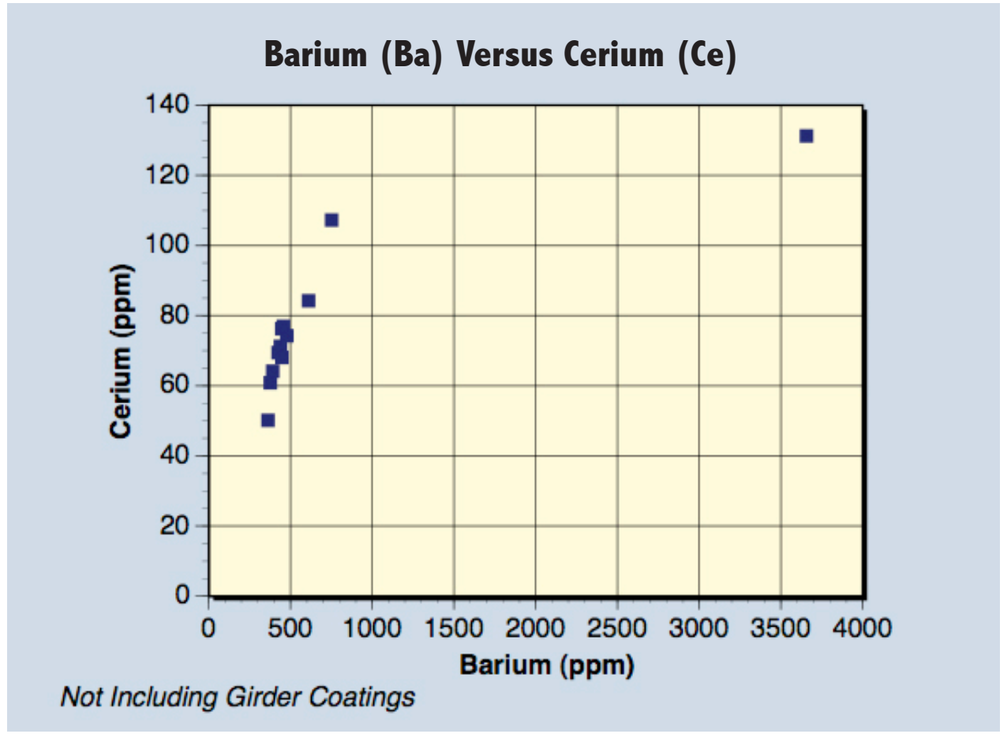
Other Trace Elements

We now examine the other Top Ten Trace Elements, many of which are well known decay products of the nuclear fission pathways. Their presence in such high quantities in the World Trade Center dust cannot be explained by any other mechanism.

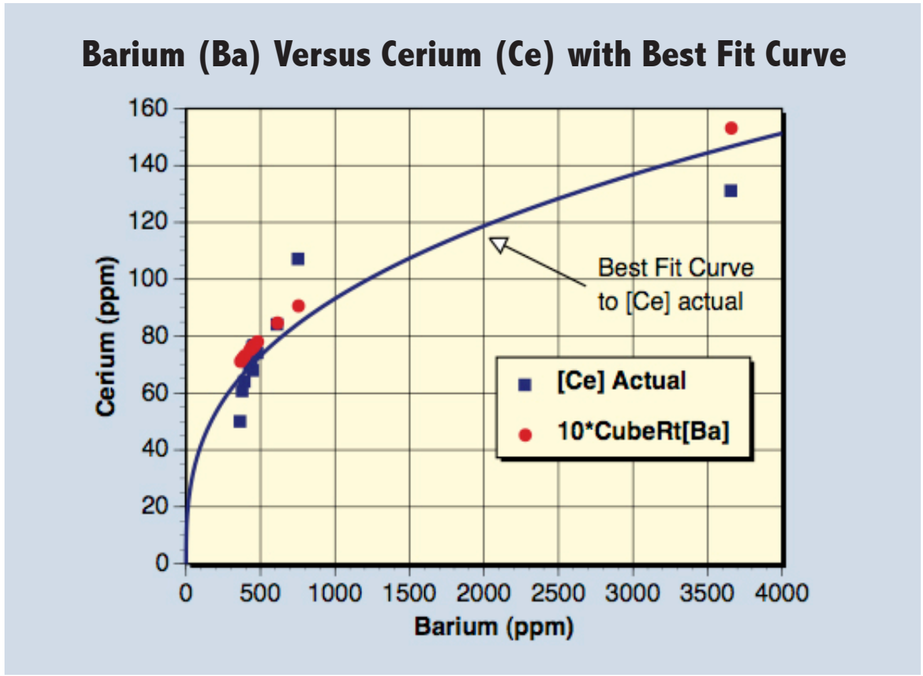
Cerium

In looking at Table 1 (on earlier page) of the trace elements, we see peaks in the concentration of Cerium at WTC01-02 and 01-16, i.e. at the same two locations as the Barium and Strontium peaks. Cerium is a very rare element – yet over 100ppm was discovered at WTC01-02 and 01-16, which again is an extraordinarily high level for that element. Cerium is the second daughter product of Barium in that disintegration pathway, coming after Lanthanum. The Coefficient of Correlation between Barium and Cerium is 0.84, very high.

Below we plot the concentration of Barium against Cerium:



The data points in fact fit a cubic relationship in which the concentration of Cerium is approximately equal to 10 times the cube root of the Barium concentration. We show the data in the graph below with the actual Barium concentration now also plotted against the Cerium value calculated by the 'cube root' formula and a best fit curve to the actual data. The correlation between the actual Cerium values and the values predicted by this model is clearly of the same order. What does this tell us?



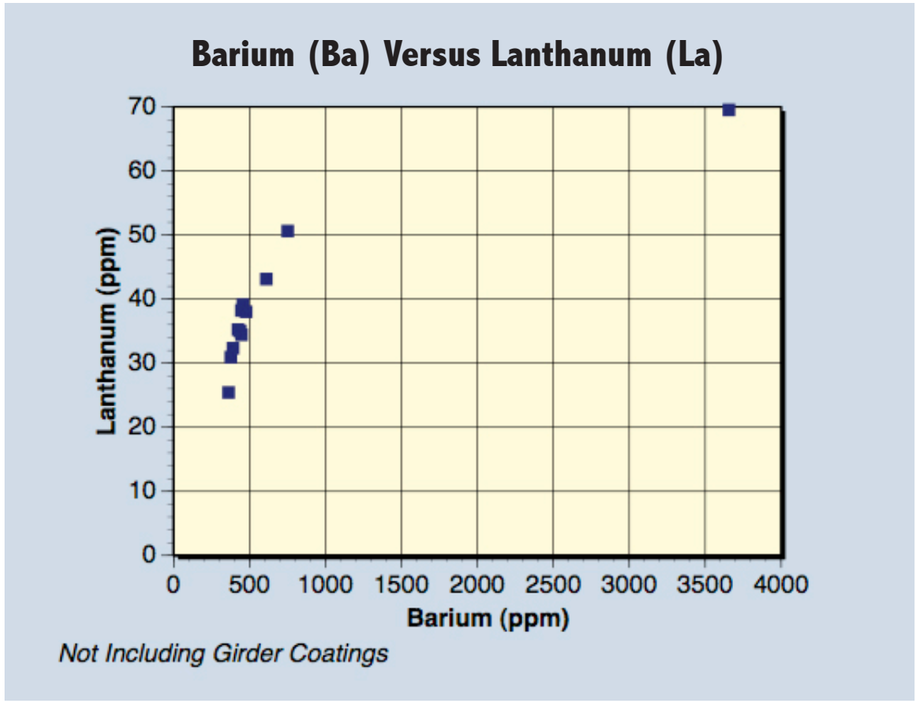
Since Cerium is the second daughter product of decay of Barium, we would expect the amount of Cerium present to increase linearly with the concentration of Barium. The first part of the curve, for Barium less then 1000ppm is more or less linear as expected. Why then does the relative concentration of Cerium fall at WTC01-16, Broadway and John Streets, where Barium was so high, at 3670ppm? This shows that at that location new Barium was still being actively produced, with intense nuclear fission and decay of intermediate products still ongoing.

There was not yet enough time for the Barium being produced to decay into its daughter products. The concentration of Uranium at this location was not the highest found though, which supports what we conjectured before; the Barium and Zinc was not just produced by direct fission of Uranium but by Ternary fission and other intermediate decay steps from the other elements that were produced. Another factor that has to be taken into consideration is the presence of different isotopes of the fission products; Barium and Strontium, discussed momentarily.

Since Cerium is the daughter product of Barium, this high correlation between Barium and Cerium concentrations in the expected exponential relationship is further evidence that Nuclear Fission has taken place. More proof follows.

Lanthanum

Lanthanum is the next element in the disintegration pathway of Barium, situated between Barium and Cerium. The concentration of Barium versus Lanthanum is plotted below.

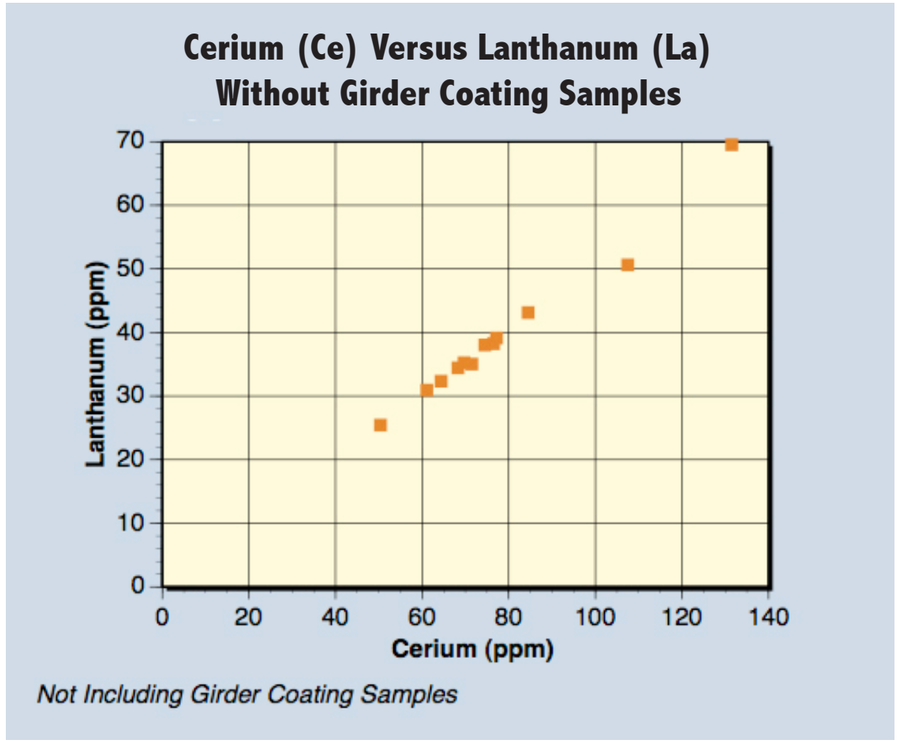


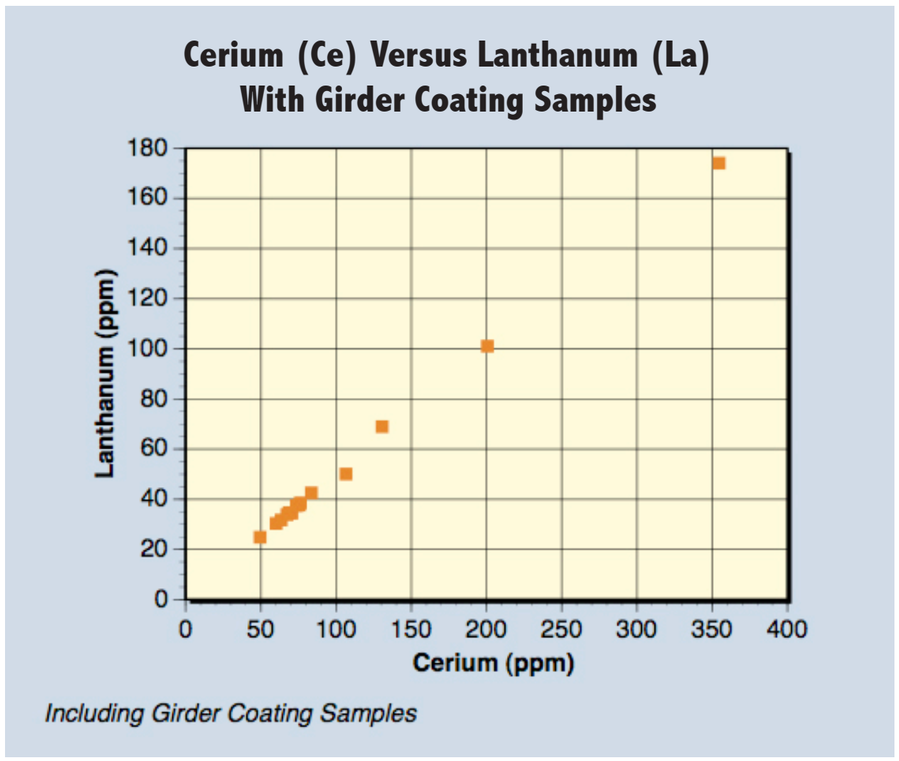
This graph is almost identical in form to the relationship between Barium and Cerium. A similar inverse exponential (cubic) relationship is clearly visible. In this case, Lanthanum is approximately equal to 5 times the cube root of Barium.

Lanthanum has a much shorter half life then Cerium; most of its isotopes have a half life of only a few hours whereas beta decay by Cerium is measured in half life periods of a month to 10 months. Ceriums beta decay going back to Lanthanum occurs more quickly but Lanthanum's beta decay going back to Barium occurs in a similar time-scale to that – a few hours, so we are left with the net effect of Lanthanums beta decay being much quicker than that of Cerium, so the concentration of Cerium remaining was higher than that of Lanthanum.

Cerium Versus Lanthanum

Next we show the relationship between Lanthanum and Cerium. We have an almost perfect linear correlation between the two. The graph (next page, top, left) confirms our two cubic models, which predict that the concentration of Lanthanum produced should be half the concentration of Cerium. Or, Cerium = two times Lanthanum. Given that Cerium follows Lanthanum in the fission pathway, that both elements are extremely rare except in nuclear events and the concentration of Lanthanum is almost perfectly correlated with the concentration of Cerium, the occurrence of Nuclear Fission of Uranium is the only possible explanation.



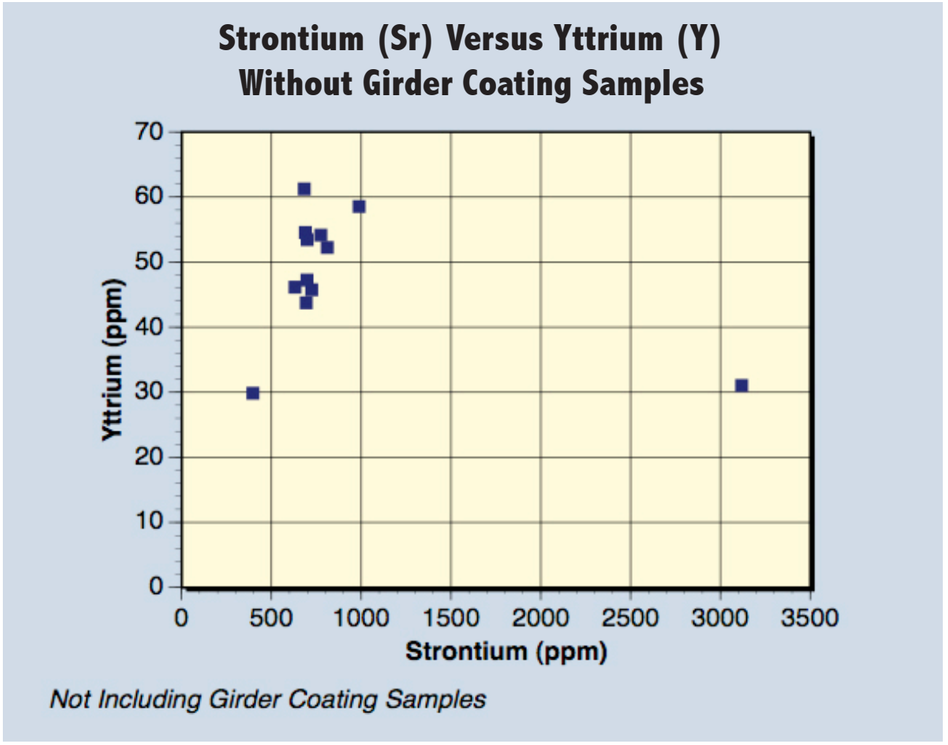


This data is shown again (in the graph at left) and includes the Girder Coatings (lower graph, two very high values based on Table 1 data.

These relationships in the data provide further overwhelming proof that Nuclear Fission of Uranium has taken place, with characteristic statistical relationships between the quantities of the different elements present that are indicative of the fission pathways of Uranium.

Yttrium

Yttrium is also a very rare element and should not be present in dust from a collapsed office building. Yttrium is the next decay element after Strontium. If we plot concentration of Strontium against Yttrium, we see what happens in the graph below.



Strontium 90 has a much longer half life (28.78 years) than most Barium isotopes so we would not expect to see as high a concentration of Strontium's daughter products as those that are produced from Barium. This is in fact what we see – the concentration of Cerium (next daughter product to Barium) is higher then Yttrium, the next daughter product to Strontium.

Another factor is that different isotopes of these daughter elements are produced with different half lives and, as before, they decay by different mechanisms – electron (beta particle) emission and electron capture (EC). The USGS of course have not analyzed which isotopes and what proportions were present for each element – Barium, Strontium, Zinc, Cerium, etc.

Although Strontium 90 is the main Strontium isotope produced which decays by emission, some Strontium 82, 83 and 85 is produced as well which decay by EC into Rubidium. Different Yttrium isotopes also decay by emission and EC both into Zirconium and back into Strontium. Examining the graph on the previous page we see what may look like two separate and distinct relationships between Yttrium and Strontium. One set of points seems to indicate a linear increasing relationship between the Strontium and Yttrium concentration, while another set shows Strontium reaching a maximum and decreasing again as Yttrium increases (ignoring the outlier with >3000ppm Strontium). We have seen this pattern with Sodium and we will see it again; the relationship where Strontium decreases as Yttrium increases can be explained by the influence of Yttrium isotopes decaying by electron emission into elements of higher atomic number – i.e, Zirconium while the other line is formed by those Yttrium isotopes that decay by EC back into Strontium – boosting the amount of Strontium present.

Also, if there was a significant time difference between the analysis of the samples, it would affect the comparison results because Yttrium 90 has a half life of only 2.67 days while Yttrium 91 has a half life of 58.5 days.

We know that some samples were collected on the evening of the 17th of September and some 24 hours later on the 18th of September, which may have had an effect on Yttrium 90 levels in the two sets of dust samples by removing them from the influence of the nuclear processes continuing in the environment. A time delay in the analysis of the samples would also have a significant effect. 24 hours is 3/8ths of the half life period, so some 23% of the Strontium 90 present in the dust will decay away in this time. Any Strontium 89 present would not be greatly effected by a time delay of 1 day since its half life is 52 days, so the corresponding Strontium made up of Sr89 and Sr90 would not show a noticeable difference; Yttrium made up of Y89 and Y90 would show a noticeable difference.

This may explain why in the graph on the previous page in the central cluster some of the Yttrium concentrations were lower than others for a similar Strontium concentration – maybe there was a significant delay between the times the analyses were performed.

Overall, we can see that there is a marked correlation between Strontium and Yttrium, with one outlier – WTC01-16 where the concentration of Strontium (and Barium) peaked. This was as we have said, evidently a location where energetic nuclear processes were still ongoing. New Strontium was being actively produced and therefore the concentration of Yttrium was relatively lower.

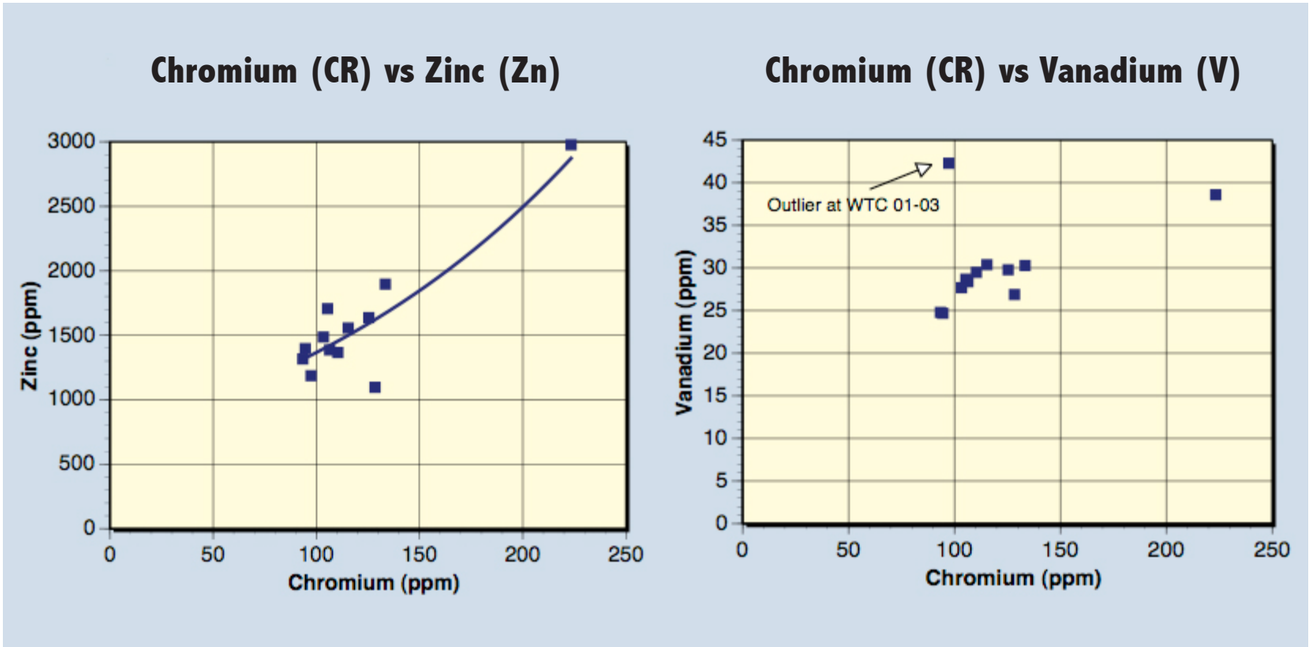
Chromium

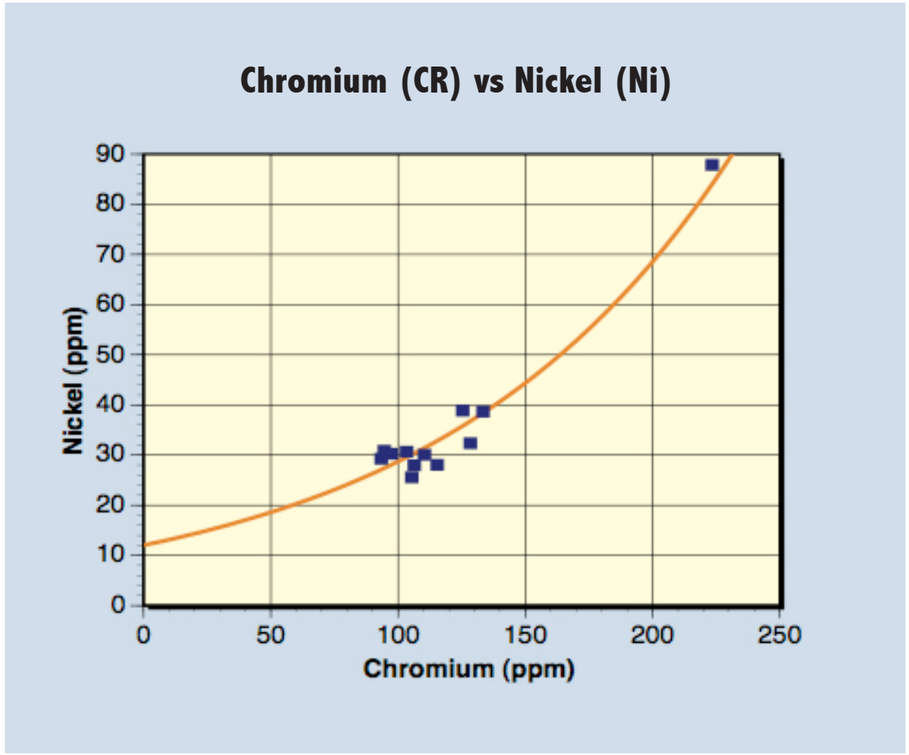
The presence of Chromium is also a tell tale signature of a nuclear detonation. It's concentration is shown plotted against Zinc and Vanadium in the graphs at the top of the page at right.

There is a strong correlation between the Zinc and the Chromium concentration. The Coefficient of Correlation is high, 0.89.

There is also an indication of strong correlation between Chromium and Vanadium with 6 points of lying on an almost perfect exponential curve, with one outlier, WTC01-03, the corner of State and Pearl Streets, of 42.5ppm where the Vanadium concentration reached its highest level.

The third graph at right plots Chromium against Nickel. There is a strong cluster in the two concentrations showing a very homogenous distribution in these elements.





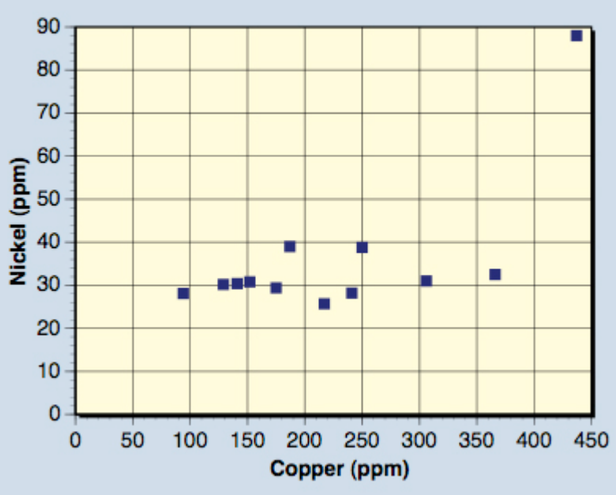
Copper

This element is also indicative. If we plot the concentration of Copper against Zinc and Nickel, we obtain the graphs seen below. The concentration of Nickel was almost the same everywhere, except for the peak of 88ppm matched by the Copper peak of 450ppm.

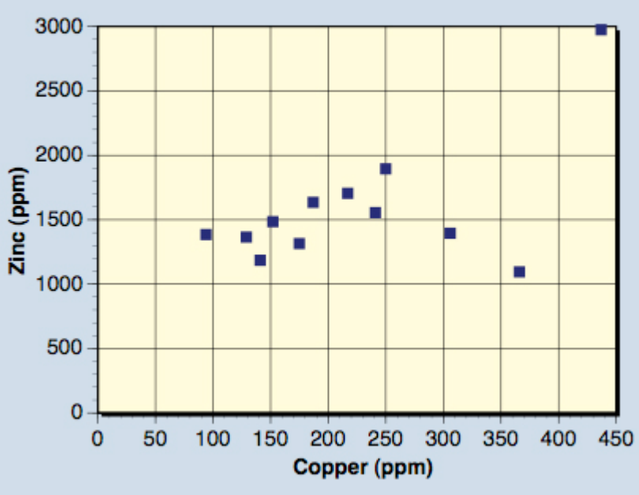
The Copper - Zinc relationship is very interesting, showing in fact two distinct relationships again depending on isotopic composition. There are two radioactive isotopes of Copper (Cu 64 and Cu 67) with short half lives of 12.7 hours and 2.58 days respectively which decay into Zinc isotopes. The other two isotopes (Cu 60 and Cu 61) decay the other way by positron emission into Nickel – and in fact Cu 64 goes both ways, into both Nickel and Zinc. This would explain why there strongly appear to be two Copper - Zinc relationships.

The decay of radioactive Copper by beta particle emission into Zinc would have been another source of the Zinc found in the World Trade Center Dust.

Copper (Cu) vs Nickel (Ni)



Copper (Cu) vs Zinc (Zn)

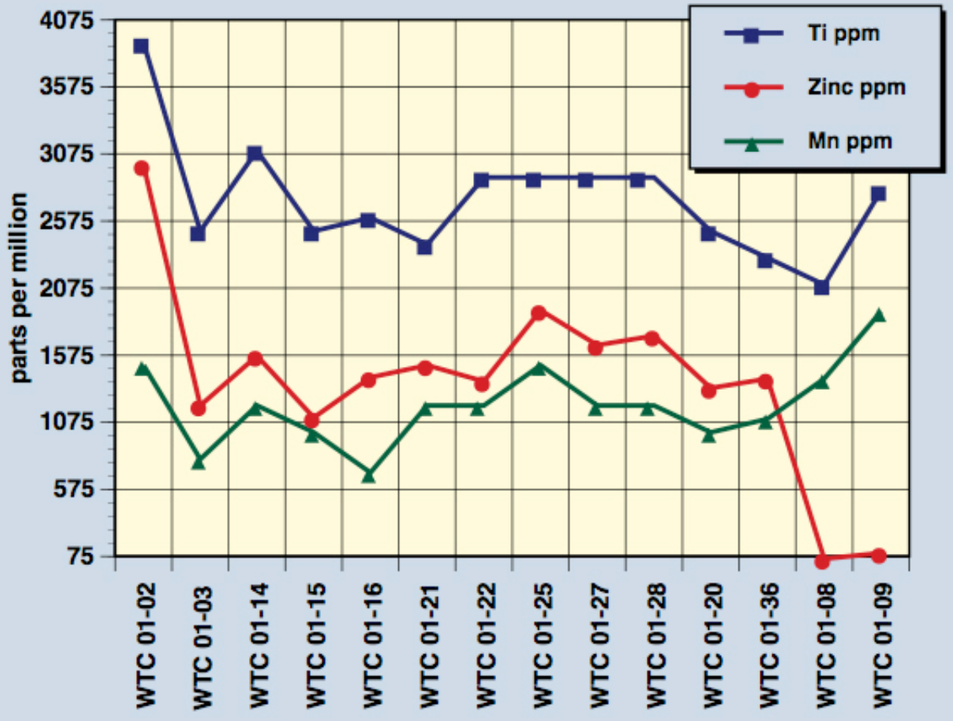


Titanium & Manganese

Titanium and Manganese are not present in Trace quantities but in quite high concentrations and as we have discussed earlier, even if Titanium had been included as a pigment (TiO) in some of the concrete when it was made this would be far from sufficient to account for the high levels of Titanium found in the dust. However, it is interesting that there is a peak in Titanium concentration of 3900ppm at location WTC01-02, the corners of Water and New York Streets, where the Zinc reached its maximum of 2990ppm and many other elements also peaked. Manganese also peaks with 1500ppm at WTC01-02 and WTC01-25, the corners of Warren and Church Streets, which correlates with the two Zinc peaks of 2990ppm and 1900ppm.

The chart below shows that once again, the high levels of Titanium and Manganese detected were not naturally occurring; the correlations with each other are too marked. The main pathway we would expect for the production of Titanium would be by beta decay of Argon, through Potassium, Calcium and Scandium. This is fission.

Titanium (Ti) • Zinc (Zn) • Manganese (Mn)



Source: USGS

Titanium

Another possible mechanism for the production of the Titanium (right) would be by ternary fission of Plutonium. Ordinary thermal nuclear reactions always produce Plutonium when the non-fissile U238 in the fuel (which is the majority of the Uranium in the device) absorbs neutrons: this produces Uranium 239 which then undergoes beta decay into Plutonium, with atomic number 94.

Plutonium would then undergo ternary fission into Xenon, Argon and Titanium.

While this reports central theme is conclusive nuclear fission in NYC on 911, there is another theoretical possibility and that is that the devices under the Twin Towers and Building 7 were of the Fast Fission Breeder type. In this type of nuclear device the fuel is made of a central Plutonium core surrounded by Uranium 238. As the central Plutonium core is fissioned to produce energy, the U238 jacket also captures neutrons and is converted into yet more Plutonium: the device "breeds" more fuel then it uses.

One advantage of this type of fission process is that since the Plutonium can only be fissioned by fast neutrons, no moderator is required to slow them down to produce slow neutrons as ordinarily required. This means the device size can be much smaller. This may have been a significant advantage if this were a clandestine underground installation under the Twin Towers and this report does not hypothesize this issue. This report confirms nuclear fission in NYC on 911 but does not seek to understand who was responsible, why this occurred or specifically whether this was a built-in part of the building construction or a covert operation.

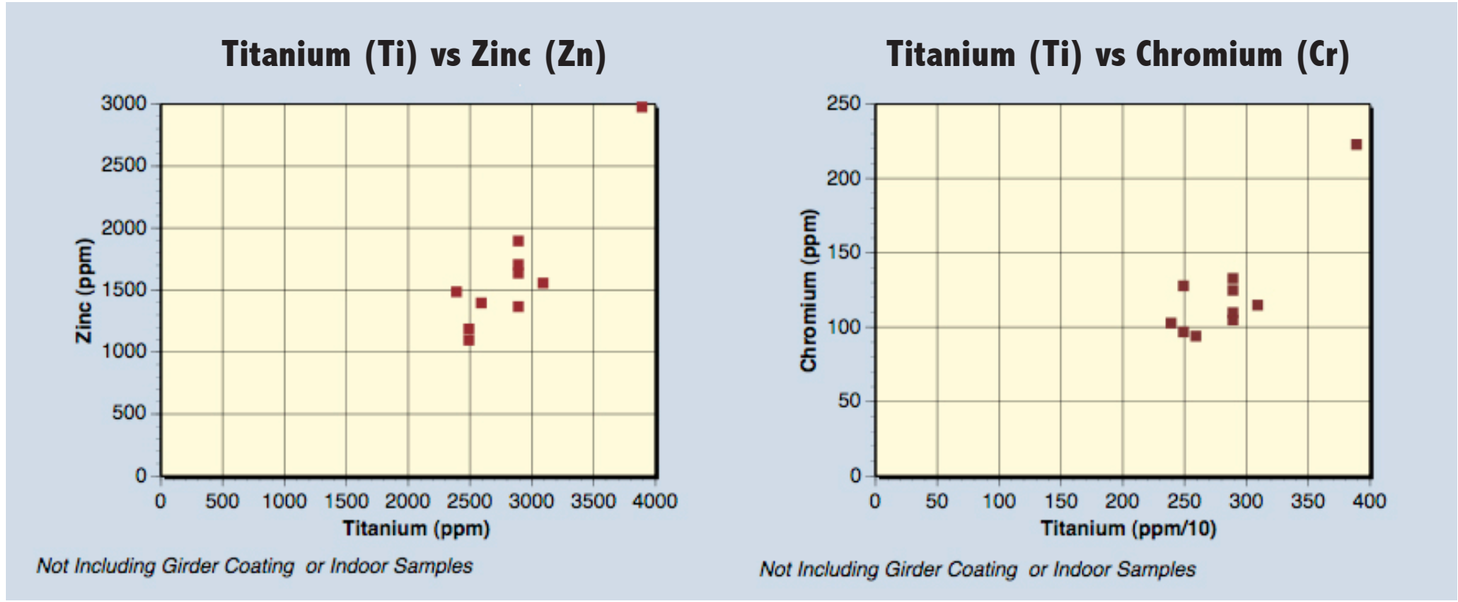
Uranium could also undergo ternary fission into Xenon, Argon and Calcium – with the Calcium then undergoing decay (which is it's primary mode) into Titanium: in fact it would also form from normal binary fission of Uranium into Argon and Tungsten, with the Argon then decaying to Potassium, Calcium, Scandium and Titanium as was said before.

Looking at an extract from the Periodic Table of Elements below, starting with Titanium at the atomic number 22, we have the sequence Ti V Cr Mn Fe Co Ni Cu Zn.

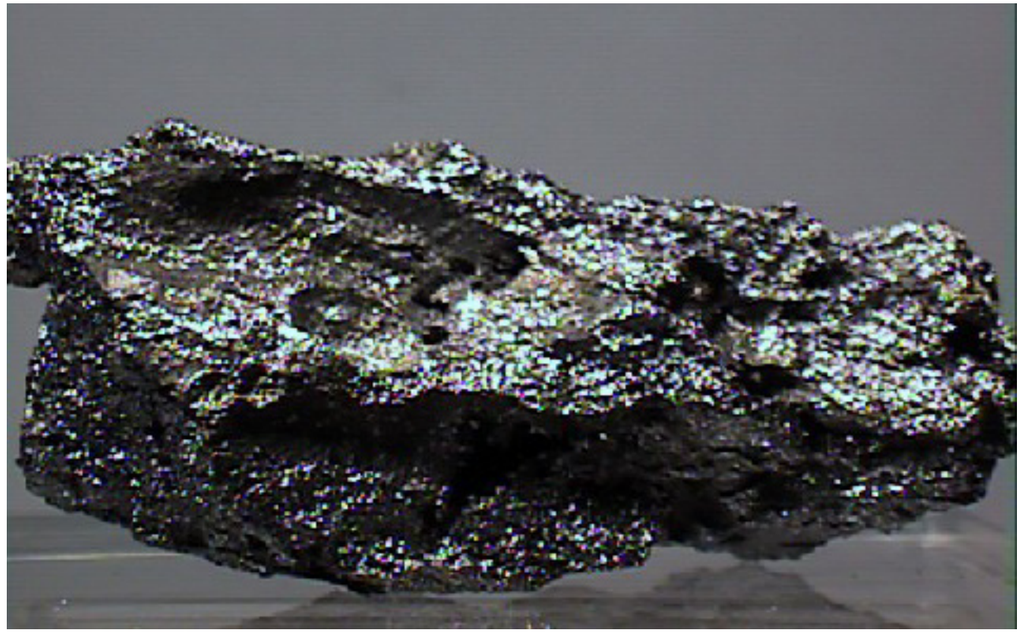
This transmutation of Titanium into the succeeding elements would occur by emission of beta particles, as shown previously for the decay paths of Bromine and Xenon. We see many of the elements found in anomalous quantities in this part of the Periodic Table, where the radioactive isotopes of these "transition elements" as they are called interact complex decay patterns.

22	23	24	25	26	27	28	29	30
Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn

Ti	Titanium
V	Vanadium
Cr	Chromium
Mn	Manganese
Fe	Iron
Co	Cobalt
Ni	Nickel
Cu	Copper
Zn	Zinc

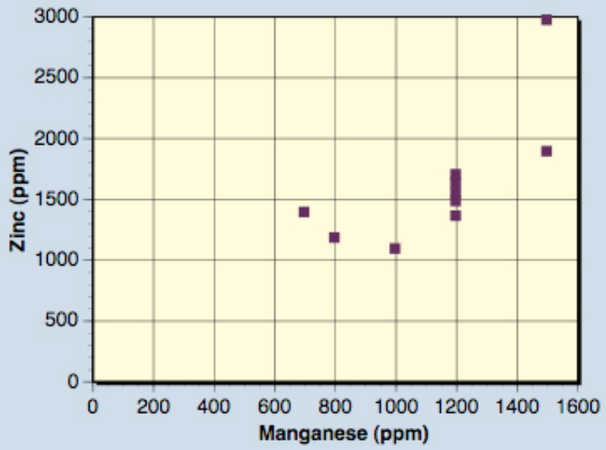


Again, there is a distinct correlation, with the concentration of all three metals peaking at a location WTC01-02, the corners of Water and New York Streets, which we have seen was a peak for many of the metals found, even common ones such as Iron and Aluminum. Again, proof of nuclear fission.

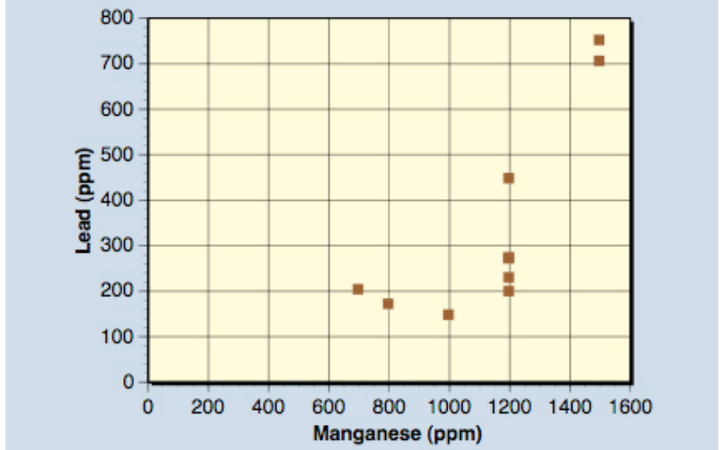


Manganese

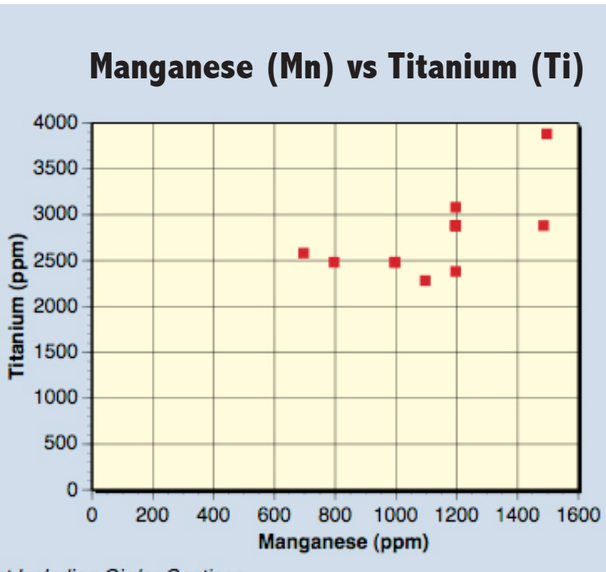
The concentration of Manganese plotted against Zinc, Lead and Titanium is shown in the following graphs.



Not Including Girder Coating Samples



Not Including Girder Coating Samples



Not Including Girder Coatings

In all three cases we see an absolutely identical pattern. First, a decrease in Zinc, Lead and Titanium as Manganese (below) increases, then at 1200ppm of Manganese (0.12%) there is an extraordinary increase in the quantity of Zinc, Lead and Titanium present in the dust. Finally, an asymptotic leveling off of even higher levels of Manganese.

It is therefore very indicative indeed that we have these complex correlations and relationships between these different metals. Data of this type has probably never before seen the light of day, revealing the complex fission events processes that take place in an energetic nuclear explosion. We can surmise that in the confined space of the nuclear blast, indeed not only ternary but quaternary and further levels of fission have taken place, with daughter nuclei not just decaying by ordinary alpha, beta or gamma radiation emission but literally being fissioned again by the intense neutron radiation, to create a complete smorgasbord of the Periodic Table. Combined with the data from the previous 55 pages the reader should clearly see that we've proven Nuclear Fission in NYC on 911, perhaps Ternary Fission and likely even Quaternary Fission but Fission nevertheless and there's much more.

Lead

Lead is yet another product of nuclear fission. We would not expect to see lead piping in a building of 1960s vintage, certainly not in quantities sufficient to produce the high concentrations of Lead that were seen and detected in the World Trade Center dust.

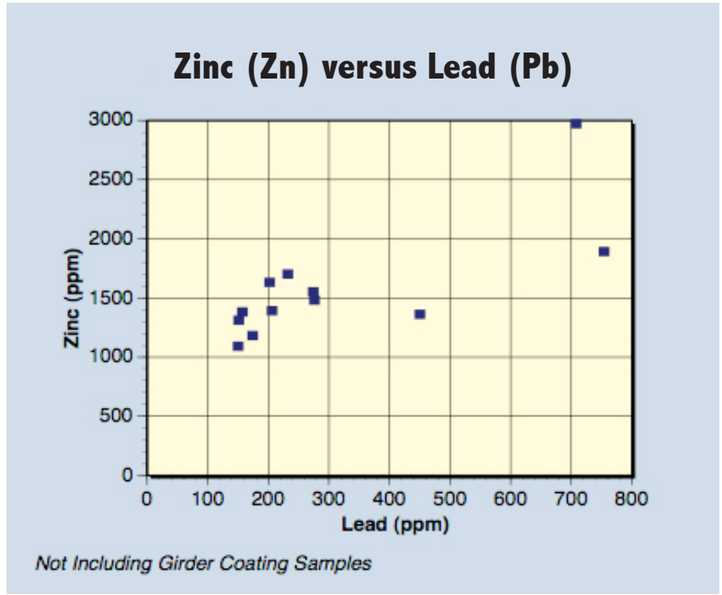
One of the frequent pathways for nuclear fission of Uranium is to a Noble Gas and the balancing element, which together add up to the 92 protons in Uranium. This is what occurs with Barium and Strontium, where the balancing Noble Gas is Krypton and Xenon. Lead has an atomic number of 82. The balancing element with an atomic number of 10 is Neon - a Noble Gas. Radioactive Lead is a well known product from nuclear fission and we would not be surprised to find it in the fallout.

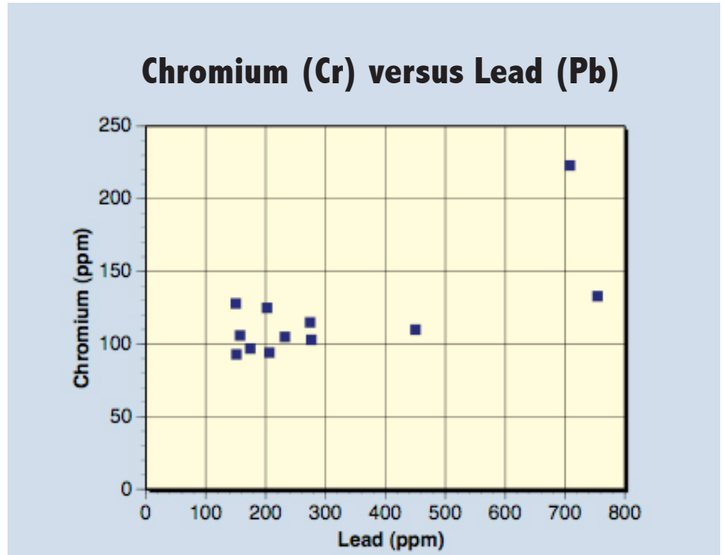
The nuclear equation for fission of Uranium to Lead follows a preferred Noble Gas pathway:

$$235/92U + 1/0Ne + 210/82Pb + 2\ 1/0\ n$$

There were two spikes (graphs at right) measured in the concentration of Lead of over 700ppm, at WTC01-02 and WTC01-25; these two locations also had the highest concentrations of Zinc (2990ppm and 1920ppm), Chromium (224ppm and 134ppm) and Manganese (1500ppm and 1500ppm).

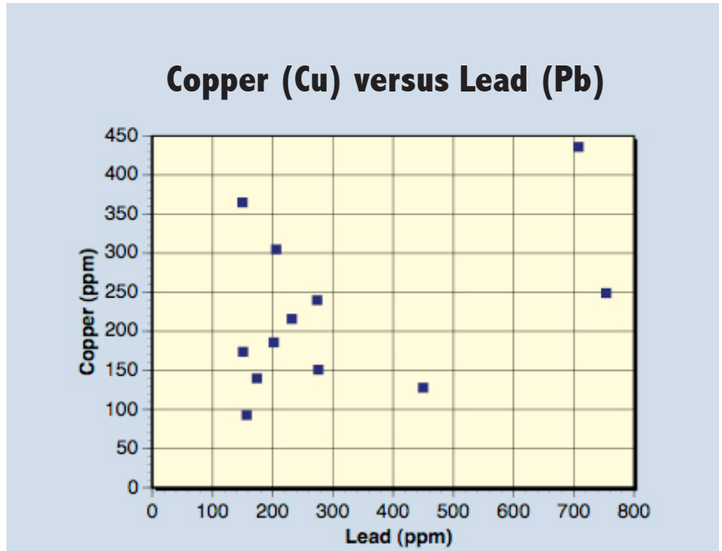
By inspection we can see that there is a power relationship between the concentration of Lead (right) and Zinc (right) and perhaps a linear relationship between Lead and Chromium. Referring back to the charts on the previous page we know that there must be a close relationship between Lead and Zinc because they both have an identical relationship to Manganese.

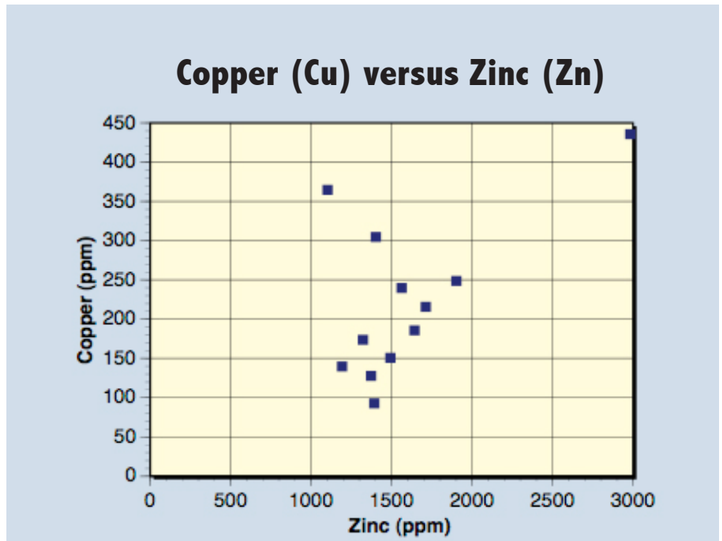




Copper, Zinc & Lead

Here we plot Copper against Lead and Copper against Zinc again for a comparion (below)

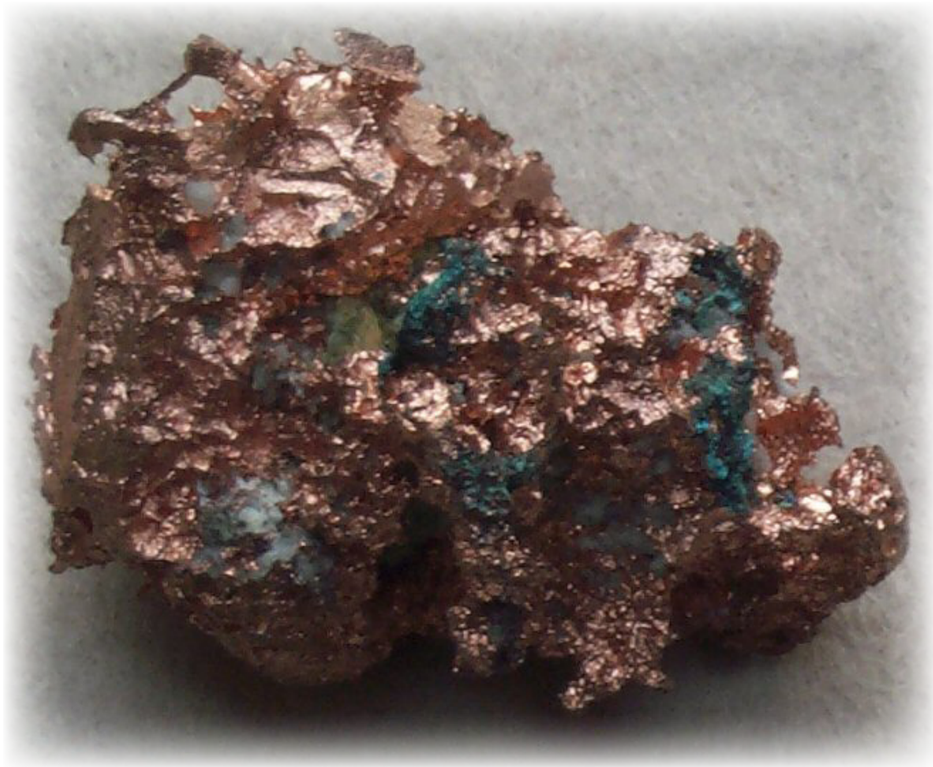




We can see clearly that Zinc and Lead both have exactly the same relationship to Copper.

These correlations also show that the presence of Lead is also indicative that a nuclear explosion occurred.

Earlier we commented that Copper (below) transmutes into Zinc by beta decay. If we plot the concentration of Zinc, Lead and Copper together by location, the correlations can be seen in a different way. Particularly interesting is the dramatic fall in concentration of all of these elements in the Girder Coatings.



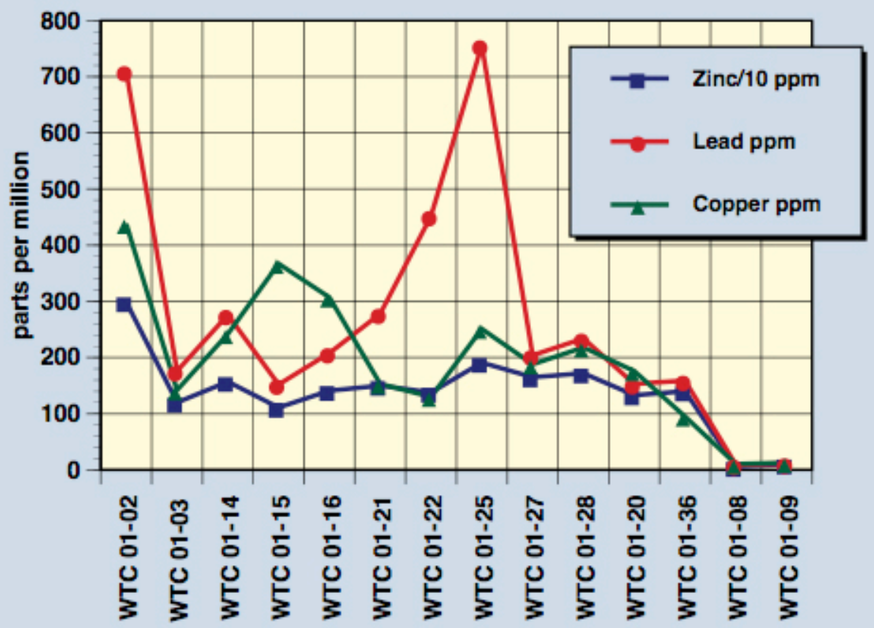
Concentrations Of Copper, Zinc & Lead

In this graph Zinc has been divided by a factor of 10 to avoid losing all the detail in the scaling if the 'Y' axis instead went up to 3000ppm. The variation in Lead is matched by the variation in Zinc almost perfectly across all sampling locations, including the Indoor and Girder Coating samples.

The concentration of Copper follows that of Zinc (image at right) with one distinct exception at WTC01-15, Trinity and Cortlandt Streets, just several hundred feet East of Building 4. As we have already seen in the graphs for Copper/Nickel/Zinc, there seem to be two Copper-Zinc relationships. If some of the Zinc was being formed by beta decay of Copper, then the high Copper at WTC01-15 could reduce Zinc, since formation of Zinc by that decay pathway would be retarded by material being held up at the Copper stage, before decaying on to Zinc. Therefore this graph along with the lower curve in the right-hand graph on the Copper page, does confirm that some of the Zinc was indeed being formed by beta decay of Copper.

These would at least be a very small mercy for the civilian population exposed in this event since the Zinc isotopes formed from Copper are stable – i.e. they are not radioactive.

Concentrations of
Zinc (Zn), Lead (Pb) and Copper (Cu)



Source: USGS

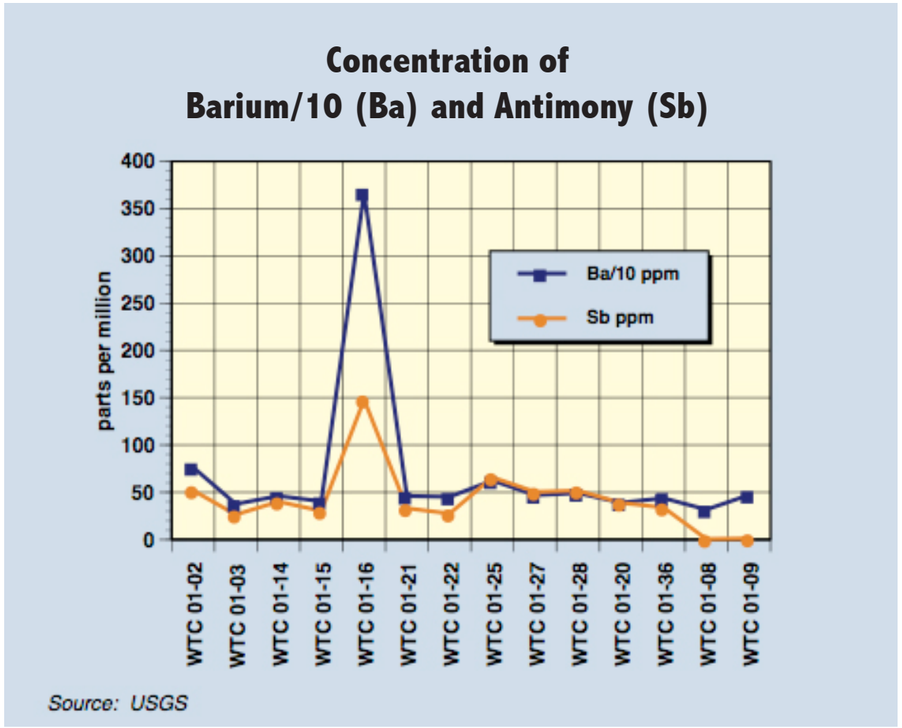
Antimony

Antimony is a rare exotic metal used in engineering in small quantities for hardening other metals (e.g. bearings). The variation in concentration of Antimony (Sb) found in the dust very closely mirrors the level of Barium but then falls to practically nothing in the Girder Coatings. The graph at right (top) shows the levels on Antimony measured at each location against the Barium concentration divided by 10.

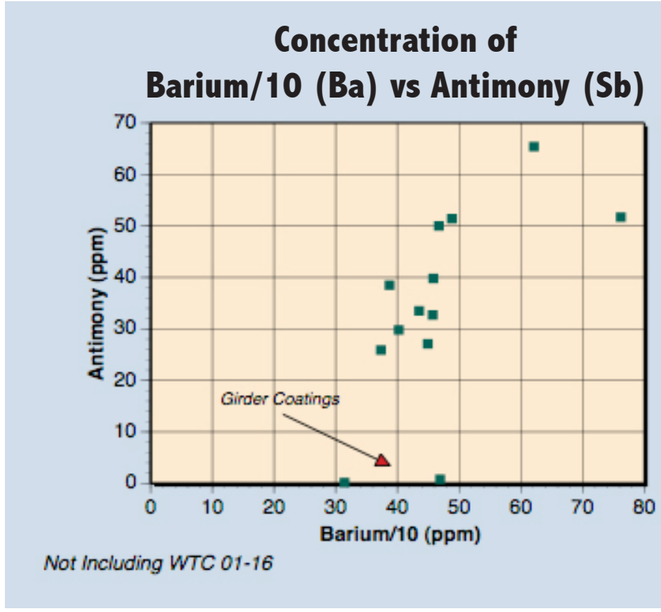
The next two graphs, arranged in rank order, both include and do not include the the massive spike in concentration at WTC01-16, the corners of Dey and Broadway.

Antimony (below) has an atomic number of 51 and atomic weights ranging from 119 to 127. Barium has an atomic number of 56 with atomic weights ranging from 128 to 140. Some radioactive Xenon isotopes could transmute to Antimony via Iodine and Tellurium by electron capture, whereas as we know, Barium is formed from Xenon by electron (beta particle) emission – so we would expect a common source, isotopes of Xenon, for both the Barium and Antimony. The evident close correlation between Barium and Antimony in the graphs on the previous page is therefore very logical and can be explained by the nuclear chemistry of the equation below:

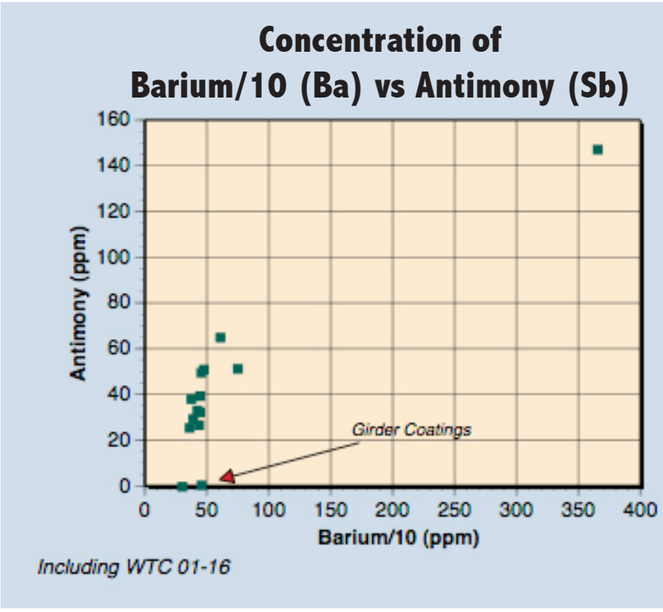
$^{125}_{54}Xe + e \rightarrow {}^{125}_{53}I$
$^{125}_{53}I + e \rightarrow {}^{125}_{52}Te$
$^{125}_{52}Te + e \rightarrow {}^{125}_{51}Sb$



Source: USGS



Not Including WTC 01-16



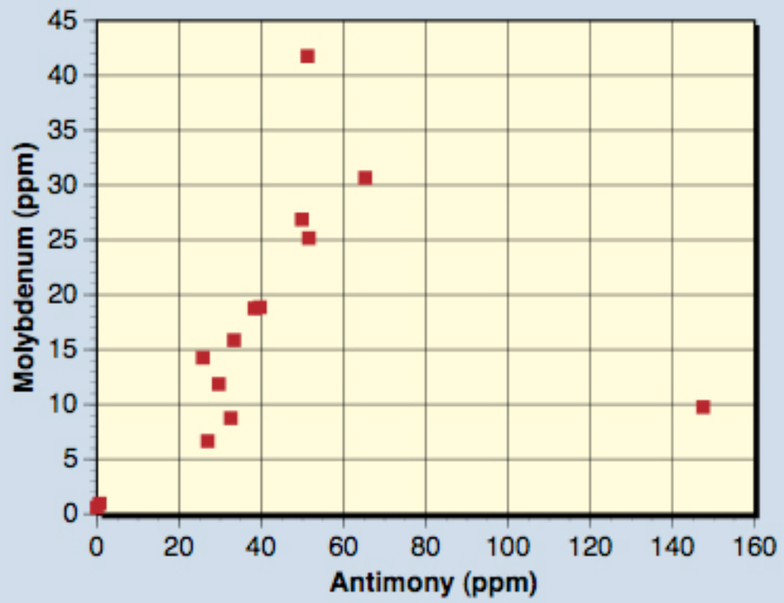
Including WTC 01-16

Molybdenum

There is a very interesting relationship between Antimony and Molybdenum. This is clearly not a random distribution – there is in fact an almost perfect linear relationship between Antimony and Molybdenum, with the usual exception of one sample where the Antimony concentration was exceedingly high at 148ppm, WTC01-16 again.

The atomic number of Antimony is 51; the atomic number of Molybdenum (below) is 42. Together this adds up to 93 while Uranium has an atomic number of 92. Tin and Molybdenum are well known fission products. It seems that some of the Uranium indeed fissioned into Tin (with atomic number 50) and Molybdenum (42) and the Tin then decayed by beta emission into Antimony. The graph below is a very telling graph in the fission process that certainly occurred in New York City on September 11th, 2001.

Concentration of
Molybdenum (Mo) vs Antimony (Sb)



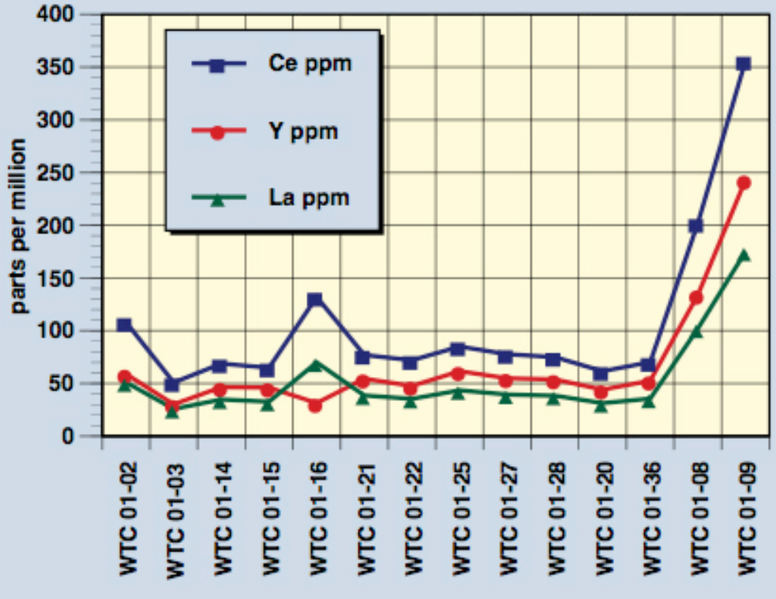
Including Girder Coatings

The Girder Coatings

In earlier graphs Zinc, Lead and Copper are all much lower in the Girder Coatings then in the dust, both indoor and outdoor. Referring to the Girder Coating chart (next page) we can see that a number of other elements also had their lowest levels in the girder coating samples: Antimony, Molybdenum and Cadmium.

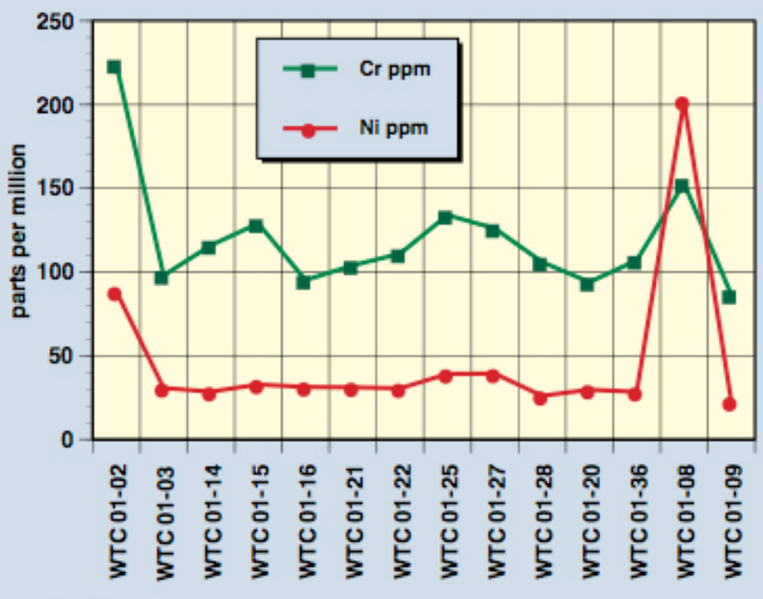
On the other hand, we saw earlier that the concentration of Cerium, Yttrium and Lanthanum are all in order of magnitude higher in the girder insulation coatings than in the dust. In fact, in the second girder at WTC01-09, West of and behind what was Building One, Cerium, Yttrium and Lanthanum at 356ppm, 243ppm and 175ppm respectively are 6 times as high as the lowest levels recorded for these elements in the dust, far exceeding "Trace" levels. Some other elements also recorded their highest levels in the girder coatings: Nickel in particular with 202ppm at WTC01-08, at the Southwest corner of what was left of Building Six, about 10 times as high as all the other measurements for Nickel – but then Nickel falls back again in the second girder coating, WTC01-09, West of and behind what was Building 1. This is illustrated in the two charts below.

Dust Samples
Cerium • Yttrium • Lanthanum



Source: USGS

Dust Samples
Concentration of Cerium (Cr) and Nickel (Ni)



Source: USGS

Indoor Samples & Girder Coating Chart

	Indoor dust samples		Girder coatings	
	WTC 01-20	WTC 01-36	WTC 01-08	WTC 01-09
Silicon %	14.2	11.7	15.0	15.5
Calcium %	19.44	21.30	20.73	26.01
Magnesium %	2.59	2.88	6.94	3.23
Sulfur %	5.51	5.77	1.39	1.23
Iron %	1.25	1.38	1.25	0.55
Aluminum %	2.55	2.86	2.92	3.56
C (organic) %	2.68	2.32	2.48	2.45
C (CO_3)%	1.27	1.50	1.89	1.86
Sodium %	1.16	0.58	0.12	0.16
Potassium %	0.46	0.46	0.28	0.32
Titanium %	0.25	0.23	0.21	0.28
Mn %	0.10	0.11	0.14	0.19
P %	0.02	0.02	0.01	0.01
Ignition Loss%	15.7	16.9	15.8	13
Barium ppm	390	438	317	472
Strontium ppm	706	823	444	378
Zinc ppm	1330	1400	57.4	101
Lead ppm	153	159	9.13	11.7
Copper ppm	176	95	10.3	12.8
Cerium ppm	61.6	70.2	202	356
Yttrium ppm	44.1	52.6	134	243
Cr ppm	94	107	153	86.5

	Indoor dust samples		Girder coatings	
Nickel ppm	29.8	28.5	202	22.6
La ppm	31.3	35.6	102	175
Antimony ppm	38.9	33.9	0.56	1.2
Vanadium ppm	25	28.6	30.5	40.1
Mo ppm	19	16.1	0.85	1.2
Lithium ppm	21.9	24.9	25.2	36.4
Thorium ppm	7.25	8.64	17.9	30.7
Rubidium ppm	18.9	21.1	8	8.2
Cobalt ppm	5	5.3	12.3	1.7
Niobium ppm	8	9	4.4	6.3
Scandium ppm	5.4	6.4	9.2	9.8
Uranium ppm	2.7	3.23	4.7	7.57
Cadmium ppm	4.2	5.8	0.11	0.21
Arsenic ppm	3.5	3.8	< 2	< 2
Gallium ppm	3.6	4	2.8	4.2
Beryllium ppm	2.5	3.1	4	4.2
Silver ppm	3.5	1.6	1.8	0.96
Cesium ppm	0.72	0.78	0.18	0.22
Bismuth ppm	0.64	0.82	0.008	0.01
Thallium ppm	0.09	0.09	0.02	0.02

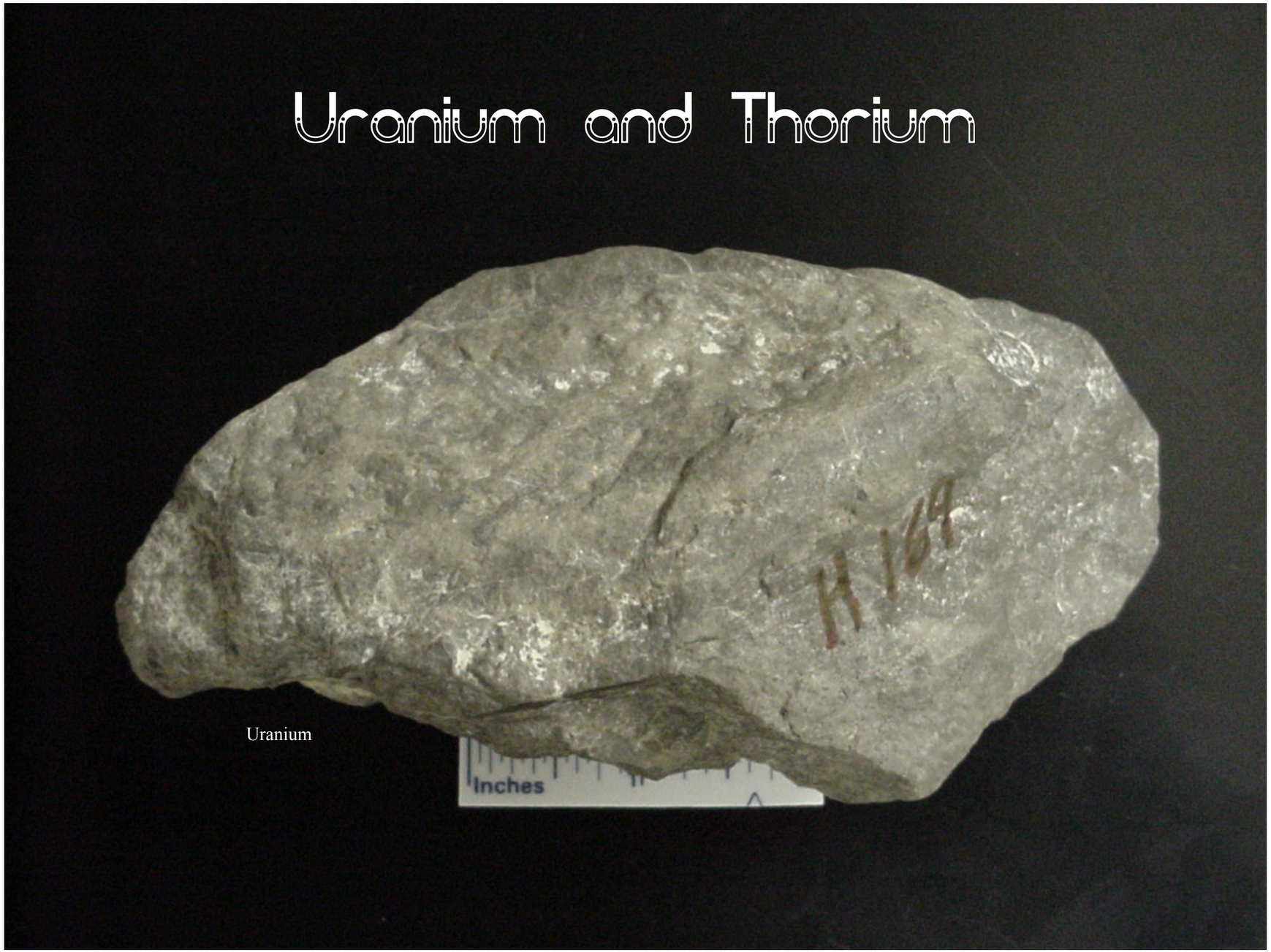
Judging from the USGS map at the beginning of this report, location WTC01-09 was the closest sampling location to the Twin Towers. It is situated approximately 20 meters to the West of the North Tower, World Trade Center One.

As we have already shown, a nuclear blast very likely impregnated the girder coatings with the initial fission products Barium and Strontium. These would then have partially decayed away so that by the time of the analysis, high concentrations of their rare daughter products, Cerium, Yttrium and Lanthanum were trapped in the coating. Looking back at the graphs for the concentrations of Barium, Strontium and Zinc, we see that there are two places where Zinc is lower then Strontium and Barium; at location WTC01-16, Broadway and John Streets, and in the girder coatings. The high levels of Cerium, Lanthanum and Yttrium found in the girder coatings are also consistent with the still fairly high Strontium and Barium levels in the girders: so why should the level of Zinc be lower in the girders and at WTC01-16, given that otherwise Zinc is closely linked to Barium.

The answer is that Bromine, a fission fragment produced as you will remember by the initial fission of Uranium, decays by emission into Strontium by only 3 decay steps – and we know that Strontium is tightly coupled to Barium, since Barium is produced from the other fission fragment Xenon – while Zinc is produced from the Bromine fragment the other way by emission in 5 steps. Therefore depending upon the isotopic mixture produced and the half lives of all intermediary products, when very active decay is still ongoing in a sample which recently still had a high Uranium concentration, we are seeing a lot of Barium and Strontium being produced while Zinc has not yet formed: but later on (or in samples which are not as “hot”) as the Barium and Strontium decay away, whatever pathways led to Zinc now predominate and create a high level of Zinc in the dust.

In fact, the analysis should be done the other way around: there is very little if any public data available on what mixture of fallout, fission products, isotopes and stable end products are produced when an atomic bomb explodes. The data is showing us what did happen. Another intriguing fact is that the concentration of Nickel and Chromium peaked in the first girder coating, WTC01-08, just meters west of Building 6 on West Street, particularly the Nickel, but fell again in the second girder coating. This could be explained by speculating that the first girder was contaminated with stainless steel, which contains Nickel and Chromium, but the second girder was not.

Whatever the physical mechanisms might be which account for these findings, the underlying mathematical correlations are self evident and lead ineluctably to the deduction that a nuclear explosion occurred in Manhattan on September 11th, 2001, in order to account for the presence of these elements. There is no other explanation. None.



Uranium

Uranium and Thorium

Finally we come to the detection of measurable quantities of Thorium and Uranium in the dust from the World Trade Center, elements which only exist in radioactive form. The graph below plots the concentration of Thorium and Uranium detected at each sampling location. Again, the last two locations, WTC01-08 and WTC01-09, are for the two girder coating samples.

The Uranium concentration follows the same pattern as Thorium, although the graph scale does not show this markedly. Uranium follows the dip at WTC01-03 and WTC01-16 but the highest concentration of Uranium also matches Thorium in the second girder coating, WTC01-09, at 7.57ppm.

7.57 greatly exceeds normal Trace element levels.

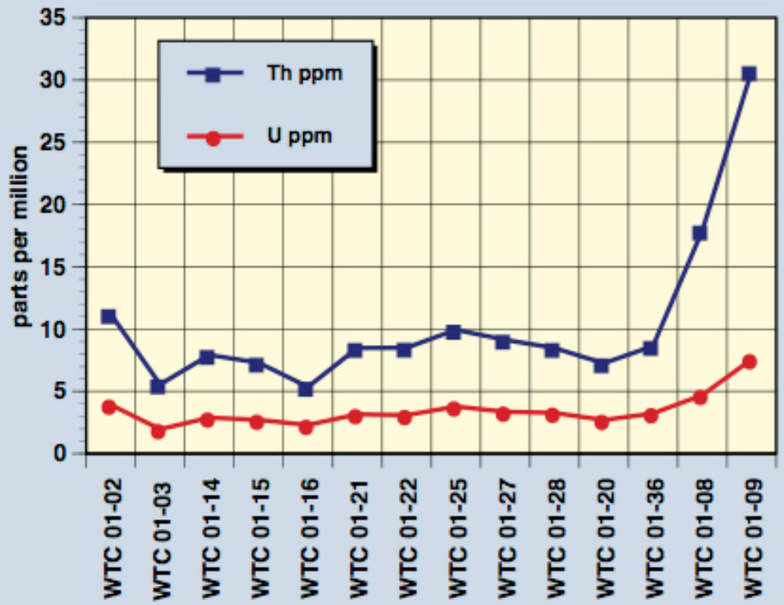
The second girder contained 30.7ppm of Thorium, 6 times as high as the lowest level of that element detected. Thorium is a radioactive element formed from Uranium by decay. It is very rare and should not be present in building rubble, ever.

The Thorium picture also mirrors that found for Yttrium. The concentration of both elements dips at WTC01-03 and WTC01-16 *(where so many other elements peaked*) but in the two girder coatings (WTC01-08 and 09) is nearly an order of magnitude higher than in the dust samples. The high correlation between Thorium and Uranium is self evident. The presence of these two elements in such high concentrations (*particularly in the two girder coatings at WTC01-08 and 01-09*) in such a close mathematical relationship is further incontrovertible evidence that a nuclear fission event has taken place.

As we said earlier, Thorium (image at right) is formed from Uranium be alpha decay. An alpha particle is the same as a Helium nucleus, so this means we have one of the favored fission pathways: Uranium fissioning into a Noble Gas and the balancing element, in this case Helium and Thorium.

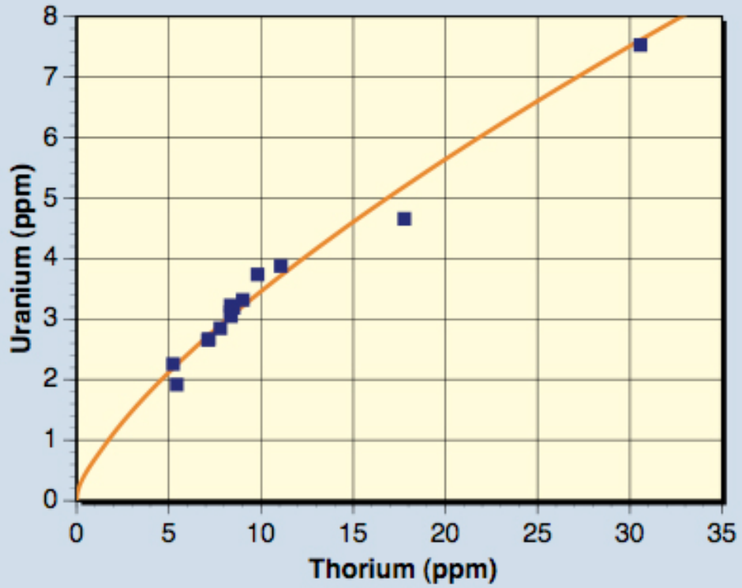
If the Helium formed follows the same pattern as Krypton and Xenon (*which decay by beta emission through Strontium and Barium*), then we would expect to find Lithium and Beryllium, the next elements after Helium in the Periodic Table, in quantities that correlate with Thorium. The USGS did measure the Lithium concentration in the dust: Thorium is plotted against Lithium on the next page, both including and excluding the two girder coating samples.

Dust Samples
Concentration of Thorium (Th) and Uranium (U)



Source: USGS

Dust Samples
Concentration of Thorium (Th) versus Uranium (U)



Including Girder Coatings

Conclusion

The graph of Thorium versus Lithium including the Girder Coatings has exactly the same form as the graph showing Thorium versus Uranium, also including the Girder Coatings. Without the two Girder Coatings the correlation of Thorium to Lithium in the dust is completely linear.

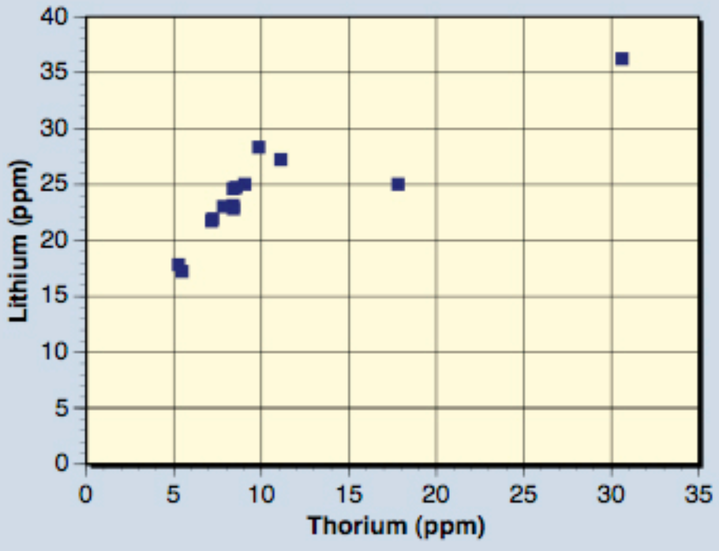
We therefore have compelling evidence that this fission pathway of Uranium to Thorium and Helium, with subsequent decay of the Helium into Lithium, has indeed taken place.

It is out of the question that all of these correlations which are the signature of a nuclear explosion could have occurred by chance. This is impossible.

The presence of rare Trace elements such as Cerium, Yttrium and Lanthanum is enough to raise eyebrows in themselves, let alone in quantities of 50ppm to well over 100ppm. When the quantities then vary widely from place to place but still correlate with each other according to the relationships expected from nuclear fission, it is beyond ALL doubt that the variations in concentration are due to that same common process of nuclear fission.

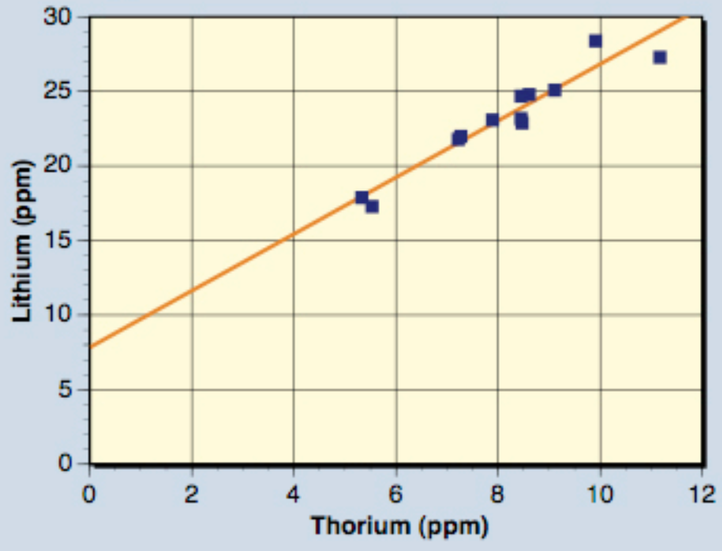
When we find Barium and Strontium present, in absolutely astronomical concentrations of over 400ppm to over 3000ppm, varying from place to place but varying in lockstep and according to known nuclear relationships – the implications are of the utmost seriousness.

Dust Samples
Concentration of Thorium (Th) versus Lithium (Li)
Including Girder Coatings



Including Girder Coatings

Dust Samples
Concentration of Thorium (Th) versus Lithium (Li)
Excluding Girder Coatings



Not including Girder Coatings

The presence of Thorium and Uranium correlated to each other by a clear mathematical power relationship – and to other radionucleide daughter products – leaves nothing more to be said.

This type of data has probably never been available to the public before. It is an unprecedented insight into the action of a nuclear device. Nuclear weapon scientists around the world will have seized this data to analyze it and try and determine exactly what type of device produced it.

September 11th, 2001, was the first Nuclear event within a major United States city and a global financial center of the world and this is the biggest secret of this century, until now.

Conclusions And Thoughts On Radiation Fission And Known WTC Demolition Anomalies . . .

Nuclear Energy

Barium is not widely known as a radioactive element, whereas it is much more common knowledge that Strontium is a product of nuclear explosions. A global program to monitor Strontium 90 levels in the milk teeth of children was started in the 1960s to monitor the effects of fallout from the nuclear testing of that period. Most countries have now stopped testing for Sr90 but a renewed disturbing increase in Strontium 90 levels in teeth of US children since the beginning of the 1990s has recently been made public.

The implication of this is that nuclear fission products are again being released into the environment from an unacknowledged source or sources but that discussion is not relevant to this report.

In their discussion of the chemical analysis results the USGS makes the following statement:

“With the exception of one sample that is high in Barium (WTC01-16), the trace metals Barium, Lead, Copper and Chromium are present in concentrations of hundreds of parts per million”

For any chemist the use of the word “Barium” by itself would set off alarm bells ringing but the USGS omit the fact that the Strontium concentration at WTC01-16 was almost as high as the Barium concentration, both were in fact over 3000ppm and that at every other location the Strontium concentration in fact exceeded the Barium concentration.

These remarks are therefore disingenuous since a concentration of “hundreds of parts per million” for Barium is in any case astronomical – again, to a knowledgeable person, this sentence rings a loud alarm bell.

It is clear from this that the USGS intentionally omitted to mention the word “Strontium” anywhere in the text of their report or on the main graphic “Chemistry Figure 4” which presents the predominant Trace Metal analysis. This would have immediately drawn attention to the fact that there had been a nuclear explosion, while as stated above, less attention is likely to be drawn to the word “Barium”.

The only places the word “Strontium” appears are in the body of the data table itself – where one has to look down into the trace elements to see it – and buried as column 13 in “Chemistry Figure 1”. So to a quick glance through, the word “Strontium” with its strong psychological overtones is very likely to be missed by most.

The USGS also fails to mention on their discussion of the Trace Elements Analysis the presence of not hundreds but thousands of parts per million of Zinc. The Zinc concentration is shown on “Chemistry Figure 4” where it might be noted by the astute observer but it is not discussed. The location of the scale on the graph makes it difficult to read any data from this graph at all – it raises more questions then it answers.

One cannot criticize the USGS for not stating that the World Trade Center had been subjected to a nuclear demolition or for not drawing attention to the Strontium in their report. They would probably have been immediately censored or intimidated if they had tried to do so. Perhaps they were censored. We don’t know. In any case, any chemist reading the report can easily see the Barium highlighted and would be immediately alerted by its presence. In fact, it is known that the EPA was heavily intimidated and interfered with to stop them responding properly to the disaster. It was impossible for the USGS to do any more then they did.

On the contrary, the USGS has done humanity a great service by having the courage to publish the data, in plain sight, Open Source, for those who know what they are looking at and know how to interpret it. Drawing attention to the Barium but not the Strontium was actually a more subtle way of motivating anybody reading the report to look in more detail at the underlying data.

Fallout Characteristics

It is clear from this reports analysis that the source of the Barium and Strontium in the World Trade Center dust cannot be due to a general presence in building material since in this case the concentrations would not show enormous spikes at a few locations. The concentration would be fairly similar across all locations, as it is for the common elements. Indeed, any building with these concentrations of the highly toxic and in this case radioactive elements Strontium and Barium in its structure could never have been built in the first place because the construction crew would have become seriously ill first.

Equally, the presence of these greatly elevated levels of Strontium and Barium cannot be due to some unknown chemical stockpile in the building. In that case, there would be no widespread dispersal, just localized deposits of wherever the stockpile came to rest. The relationships across the locations and the decay paths tracked would not have indicated fission with conclusive results. In any case, the hypothesis of a secret chemical hoard of Barium and Strontium in a commercial office building, of the size required to produce these high concentrations, would be an outrageous breach of health and safety regulations and is preposterous in its own right. The correlated concentrations of Barium and Strontium enable that impossible hypothesis to be roundly discounted.

In addition to the Barium and Strontium, so many rare radionucleides are present in specific amounts that are characteristic products of nuclear fission that nothing can explain them away.

The final analysis showing the presence of Thorium and Uranium in correlated levels is superfluous but adds absolutely definitive corroboration.

Nuclear Fission in New York City on September 11th, 2001

The only explanation that is possible – and indeed the scientifically inescapable conclusion – is that a large scale fission chain reaction of Uranium 235 took place in the locality, releasing Strontium, Barium and many other radionucleides into the environment as daughter products of Uranium fission.

In other words – A Nuclear Explosion

We can see that the initial quantity of Uranium 235 present in the nuclear device underwent fission, including the two most well known pathways to the first relatively long lived daughter nuclei of Barium and Strontium. The concentrations would not be equal since the two fission pathways are not followed equally; however the concentrations would be directly proportional to each other since a certain proportion of the Uranium will follow the Strontium pathway and another proportion will follow the Barium pathway. This is what the data shows.

The presence of large quantities of other well known daughter products in correlated quantities makes the case secure beyond any shadow of a doubt whatsoever that a nuclear explosion occurred. The complexity of the other relationships are also what we would expect from a high energy nuclear explosion rather then the low energy fission in a controlled reactor. Fission did not stop with two fission fragments – many of these elements were fissioned in turn into smaller atoms by the intense concentrated neutron radiation in and underneath the building.

The Nuclear Demolition of the World Trade Center on September 11th, 2001

The Enhanced Radiation Bomb

These two sampling locations had the highest concentrations of radionucleides. WTC01-12 is at the tip of Manhattan on the East River side. WTC01-16 is about 0.15 miles east of Tower One, behind Building Seven.

The debris map produced by the USGS shows that most of the dust was blown west, covering Manhattan between the World Trade Center and the Hudson River. Why these two locations should show such high peaks we cannot say – but the fact that they do and and that so many radionucleides peaked at these locations is a major part of the evidence that the correlations do not come out by chance. Whatever nuclear processes were going on at those locations, it affected all the fission products as we would expect.

Permitted exposure levels to toxic substances in the building industry are regulated in the USA by OSHA. The permitted levels of exposure to various substances for building and construction workers is specified in "Contaminants for Construction - Section: 1926.55 – Gases, vapors, fumes, dusts and mists."

http://www.osha.gov/Publications/Homebuilders/Homebuilders.html

The limit for Barium exposure is listed at 0.5 mg per cubic meter of air (*since it comes beneath the permitted 0.5ppm level in dust and is therefore shown volumetrically*) with permitted maximum combined content of 15ppm of dust. Therefore anything above 0.5 mg per cubic meter is a contaminant and protective equipment and/or clothing must be employed.

Therefore the maximum permitted level of Barium in a building or construction environment is 15ppm in dust – and less then 0.5ppm in a cubic meter of air. The dust from the World Trade Center contained 400ppm to 800ppm of Barium with one sample at 3670ppm.

The OSHA rules list over 400 hazardous substances to which building workers might be exposed. It does not even list Strontium because it is so unlikely that one would ever come across it in a normal building environment.

If Strontium were listed, it would have a safety limit lower than Barium because of its particularly dangerous effects. Strontium replaces Calcium in the bones and teeth. Prolonged exposure leads to brittle bones and replacement of the bone structure with a radioactive substance.

The Enhanced Radiation Bomb

An aspect of great concern is the high concentration of Zinc that was present in the dust. Where did it come from – and why does the variation of its concentration vary linearly in relationship with the concentration of Barium? Clearly, the source of the Strontium and Barium is a nuclear explosion, then the source of the Zinc is that same nuclear explosion and it can be seen that the variation in Zinc mirrors the variation in Barium concentration.

Do nuclear devices produce Zinc?

Nuclear devices do produce some Zinc 65 and though it's not a major fission product there is not a great deal of data available on what happens during some of these newer processes regarding nuclear explosions and any of the variations in the characteristics of the fission products that are produced compared with the normal controlled chain reaction. However, there is a class of nuclear device that would produce a large quantity of Zinc. That would be the Enhanced Radiation Bomb.

Somewhere in the world there were people watching this, responsible for this; they knew what was happening and they are heartless, cold and calculating. This is the sad and needless destruction and death wrought by those who lack empathy for innocent civilians and it is not the work of Muslim terrorists. I can't say for sure who did this but it wasn't Islamic Terrorists.

In 1950, the physicist Leo Szilard pointed out the theoretical possibility of building an atomic bomb that would be partially lethal and has been called the “Doomsday Device,” or the Cobalt Bomb.

In this type of weapon, the nuclear device is “salted” with a coating or jacket of another element. When the bomb explodes, the coating is subjected to intense radiation and is transmuted into a highly radioactive isotope of the element, which is then dispersed throughout the fallout zone of the bomb. The radiation produced by the device is enhanced, so that in addition to its explosive effects, the radiation damage to life is also magnified. Different effects can be produced by adding different salting agents,

In the Cobalt Bomb, a coating of Cobalt 59 would be used. This is transmuted into radioactive Cobalt 60 by the intense radiation of the blast. With a half life of 5.26 years, the area affected by the fallout would be dangerously radioactive for many years. To some degree the entire globe might be affected by the fallout.

Gold can be used to produce a high radiation zone for a few days, while Tantalum and Zinc produce a radiation zone that lasts for a few months. Zinc 64 is seen as the “ideal” military salting agent, since it’s cheap and produces intense radiation for only a few months. Some 48% of natural Zinc is composed of Zinc 64, the rest having atomic weights 66 and above which is not useful for this application. When the bomb explodes, the Zn 64 is transmuted into highly radioactive Zn 65 to contaminate the fallout zone.

From The Nuclear Weapons Facts by Cary Sublette

“*Zinc has been proposed as an alternative candidate for the “doomsday” role.” The advantage of a Zn-64 is that its faster decay leads to a greater initial intensity. Disadvantages are that since it makes up only half of natural Zinc, it must be isotopically enriched or the yield will be cut in half; that it is a weaker gamma emitter than Cobalt 60, putting out one fourth as many gammas for the same molar quantity; and that substantial amounts will decay during the world wide dispersal process*.”

“*Assuming pure Zinc 64 is used, the radiation intensity of Zinc 65, would initially be twice as much as Cobalt 60. This would decline to being equal in 8 months and in 5 years the Cobalt 60 would be 110 times as intense. Militarily useful radiological weapons would use a more localized contamination zone and high initial intensities for rapid effects. Prolonged contamination is also undesirable. In this light Zinc 64 is possibly better suited to military applications then cobalt, but probably inferior to Tantalum or Gold. As noted, ordinary ‘dirty’ fusion-fission bombs have very high initial radiation intensities and must also be considered radiological weapons.*”

Where Could The Zinc Have Come From?

If the Zinc in the World Trade Center dust was produced by the nuclear explosion itself – i.e. as part of the fission of Uranium, it would in fact be largely radioactive Zinc 65 that was produced

However, there is far more Zinc in the World Trade Center dust than any of the other usual fission products; Strontium, Barium, et. al. Therefore, if that much Zinc was normally produced by an atomic bomb, there would be no need to salt them with more. In addition to the ratio of Zinc present compared with other fission products is the absolute quantity of Zinc (*and indeed, the other fission products*). Therefore, the presence of so much Zinc – between 1000ppm and 2000ppm and up to 3000ppm – indicates that indeed either a salted nuclear bomb was used or some other nuclear process we are not necessarily familiar with, was used to produce a very large amount of Zinc, as well as very large amounts of Strontium and Barium.

While the normal radioactive fission from a detonation does produce Zinc 65, it is not a major product and the USGA discovered more Zinc present than any other trace element. At a minimum of 1000ppm of Zinc in the dust, with an estimated mass of concrete of 100,000 tons minimum per tower and a mass of steel estimated at the same, that would place Zinc on the order of at least 100 tons. Where could such a large quantity of Zinc have come from? We put forth here three possibilities for consideration.

1. Radon Fission (or Ternary Fission)
2. Zinc Injection
3. Liquid Zinc Coolant

Radon Fission

We saw before that the concentration of Zinc in the World Trade Center dust correlated very closely with the concentration of Barium. The relationship was almost linear, with an equation relating the two of:

[Zn] = 4.4[Ba] - 538 or [Zn] = 3[Ba] to a close approximation or, Zinc equals three times Barium.

The fact that the Barium and Zinc concentrations are linearly related indicates that they have a common source – that they were produced largely by a common process. The atomic number of Barium is 56 and the atomic number of Zinc is 30. If an atom of Radon, with atomic number 86 was to fission, it could split into Barium and Zinc.

Radon is a Noble Gas and we know that when Uranium fissions, it favors pathways that pass through the Noble Gases. If Uranium with atomic number 92 splits into Radon with atomic number 86 the balancing atom will be Carbon with atomic number 6. Carbon 14 is a well known radioisotopic produced by nuclear fission, and Radon is also definitely produced by fission of Uranium.

Radon is a naturally radioactive gas – all of its isotopes are radioactive and they all have short half lives under 4 days at the most. Since it is only 6 protons and 13 or 14 nuclear particles lighter then Uranium, is may also undergo fission like Uranium if subjected to neuron bombardment. This would be Ternary Fission of Uranium and would be expected under the intense energetic conditions of an underground nuclear blast.

So in the confined space of a nuclear device it is possible that the Radon gas produced did not simply decay but underwent further fission itself, into Barium and Zinc. That process would look like this:

$$^{235}_{92}U + {}^{1}_{0}n \dashrightarrow {}^{221}_{}Rn + {}^{14}C$$
$$^{221}_{86}Rn + {}^{1}_{0}n \dashrightarrow {}^{?}_{56}Ba + {}^{?}_{30}Zn + {}^{?1}_{0}n + ?MeV$$

There would probably be a very large energy release from the fission of Radon and many excess neutrons would be produced – maybe 15 or more. If Zinc 65 and Barium 140 were produced, 16 spare neutrons would be released. This or a similar mechanism might be used in a neutron bomb. If the large quantities of Zinc detected in the World Trade Center dust were produced in this way, the Zinc would certainly have been composed of radioactive isotopes.

It is difficult to comprehend the mind-set of those who would wish to design a nuclear weapon to do this. Not only would it be an enhanced radiation weapon designed to produce large quantities of neutron radiation – i.e. a Neutron Bomb – it would be a doubly enhanced radiation weapon that added high intensity Zinc 65 radiation to its overall effects. How much Uranium would be required to produce 100 tons of Zinc?

Without going through the lengthy equations, 1000 to 2000 tons of Uranium would be required. This means, to me, that the devices were likely of a very advanced design and probably bombs rather then reactors. Maybe.

Liquid Metal Coolant

It is well known that the civilian Fast Breeder Reactors (FBRs) under development all over the world at the moment use liquid sodium as the main coolant, which in turn heats water to drive the steam turbine. So another more speculative possibility is that certain experimental fast breeder reactions might be using Zinc as the coolant.

The Russians have used molten Lead (Pb) to cool their nuclear submarine reactors since the 1950s. What developments have been made in this field since then one can only imagine.

SSTAR

The Russians are currently developing a new reactor design based on BREST technology. BREST is a nuclear power plant with a lead-cooled fast reactor fuelled with uranium-plutonium mononitride and using a two-circuit heat transport system to deliver heat to a supercritical steam turbine.

http://www.nikiet.ru/eng/structure/mr-innovative/brest.html

This technology includes the SSTAR, Small Sealed Transportable Autonomous Reactor, which would be a small liquid Lead cooled reactor producing less than 200MW of power. The physical size of the SSTAR units is said to be 15m high by 5m in diameter, about 15 feet across and 45 feet high. This of course means, again, that it's unlikely this was a reactor explosion but rather an advanced type of nuclear device. Maybe.

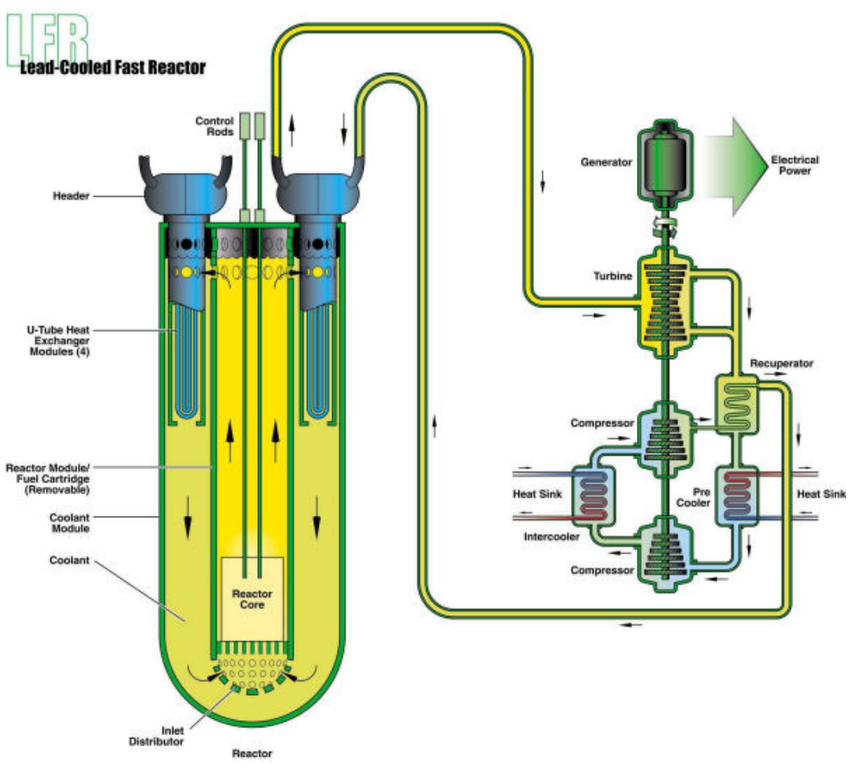
The LFR system has excellent materials management capabilities since it operates in the fast-neutron spectrum and uses a closed fuel cycle for efficient conversion of fertile Uranium. It can also be used as a burner to consume actinides from spent LWR fuel and as a burner/breeder with Thorium matrices. An important feature of the LFR is the enhanced safety that results from the choice of molten lead as a relatively inert coolant. In terms of sustainability, lead is abundant and hence available, even in case of deployment of a large number of reactors. More importantly, as with other fast systems, fuel sustainability is greatly enhanced by the conversion capabilities of the LFR fuel cycle. With the high levels of Zinc, we may never know the source exactly but the evidence that nuclear fission occurred is conclusive.

The Lead-Cooled Fast Reactor (LFR) system features a fast-spectrum lead or lead/bismuth eutectic liquid metal-cooled reactor and a closed fuel cycle for efficient conversion of fertile uranium and management of actinides.

The lead (Pb) coolant exhibits very low parasitic absorption of fast neutrons, and this enables the sustainability and fuel cycle benefits traditionally associated with liquid metal-cooled fast spectrum reactors. Pb does not react readily with air, water/steam, or carbon dioxide, eliminating concerns about vigorous exothermic reactions. It has a high boiling temperature (1,740 C), so the need to operate under high pressure and the prospect of boiling or flashing in case of pressure reduction are eliminated.

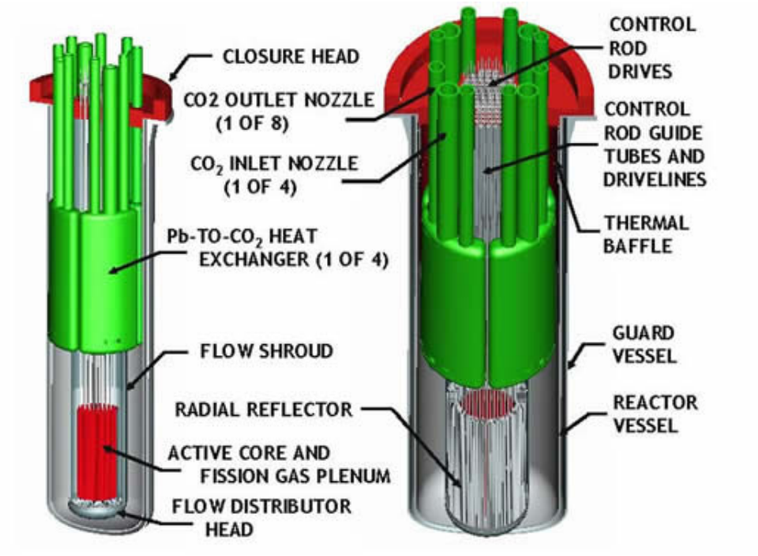
The LFR is mainly envisioned for electricity and hydrogen production and actinide management. Options for the LFR include a range of plant ratings and sizes from small modular systems to multi-hundred megawatt sized plants. Two key technical aspects of the LFR that offer the prospect for achieving non-proliferation, sustainability, safety and reliability, and economics goals are the use of Pb coolant and a long-life, cartridge-core architecture in a small, modular system intended for deployment with small grids or remote locations. Some technologies for the LFR have already been successfully demonstrated internationally.

https://inlportal.inl.gov/portal/server.pt?open=514&objID=2254&parentname=CommunityPage&parentid=13&mode=2&in_hi_userid=291&cached=true



The presence of nuclear fission fallout in the World Trade Center dust is sufficient in itself to prove that the Twin Towers and Building 7 of the World Trade Center were subjected to nuclear explosions.

The presence in high quantities of rare nucleides that are characteristic of nuclear fission and which should not be present in building material at all, let alone in such high levels, and where the concentrations statistically and mathematically relate to each other as would be expected from nuclear chemistry, means that no other conclusion can be reached: the towers were brought down by the blast of a nuclear device.



The presence of extremely high levels of Zinc is a cause for major and serious concern, as if ordinary Zinc fission was not serious enough. The presence of such high quantities of Zinc shows that these nuclear explosions may have had the same effect as an enhanced radiation bomb, specifically designed to maximise the radiation exposure to the target population. If this Zinc was produced by the fission of the nuclear material itself or came from another source of natural Zinc which was then subjected to the nuclear blast, the damaging effects will be severe. If it was originally from a source of 'depleted' Zinc then the presence of so much Zinc fallout would not be as serious.

As was stated earlier the linear correlation of the Zinc concentration to the Barium concentration (and other fission products) does tend to indicate that the Zinc in the dust was indeed a fission product and would therefore have been composed of dangerous radioactive isotopes. This is certainly not a well known fission pathway as compared to the normal mechanics of a nuclear device.

This report speculates the possibility on the type of bomb and suggests it may have been a "Radon Bomb" that could account for the linear correlation between the Zinc and Barium in the dust. If the Zinc was indeed a fission product, the device that produced it must have been specially engineered to produce it and this report speculates that it may have been an exotic design for a nuclear weapon, not as well known perhaps. This may well be the signature of a very 'advanced' nuclear device set up to produce maximum radiation damage.

Bechtel Eyewitness Accounts

The following extracts are quoted from a web page written by three Safety, Health and Emergency experts from Bechtel who at great personal risk assisted in the recovery efforts at the World Trade Center. These three men were Stewart Burkhammer, Norman Black, and Jeffrey Vincoli. Their testimony provides a very important insight into the extraordinary temperatures under the rubble of the towers.

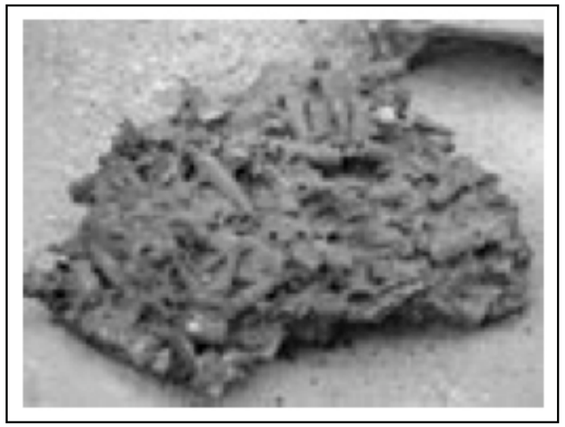
On September 12, 2001, a small group of SH&E professionals from Bechtel Group, Inc., led by Stewart Burkhammer, a professional member of ASSE's National Chapter, arrived in New York City to assist the city and state of New York in the emergency recovery effort after the alleged terrorist attacks on the World Trade Center. The sights and experiences of the days and weeks that followed are described here in order to provide fellow SH&E professionals a brief account of the extraordinary challenges encountered at Ground Zero."

"With the stability of the debris pile unknown, subsurface fires burned continuously... "

"World Trade Center Building Six housed several federal agencies and a shooting range with inventory of more then 1.2 million rounds and "the ammunition was finally located on October 24, 2001, melted together into large 'bullet balls' (image below) that were dangerous to handle and dispose of properly. At one point, a discharge of a bullet, due to heat in the area, caused a shrapnel wound to the face of one worker."

"The ammunition was located on October 24th, Forty-Three (43) days after the collapse and the temperature was still hot enough to cause the discharge of a bullet."

"The debris pile at Ground Zero was always tremendously hot. Thermal measurements taken by helicopter each day showed underground temperatures ranging from 400 degrees to more then 2,800 degrees Fahrenheit. The surface was so hot that standing too long in one spot softened (and even melted) the soles of our safety shoes. Steel toes would often heat up and become intolerable. This heat was also a concern for the search and rescue dogs used at the site. Many were not properly outfitted with protective boots. More then one suffered injuries and at least three died while working at Ground Zero. The underground fire burned for exactly 100 days and was finally declared extinguished on December 19th, 2001."



Bullet Balls

Nuclear Shadow

The Bechtel people say that the helicopter measurements showed underground temperatures of more then 2800 degrees Fahrenheit. However any thermal imaging measurements taken from a helicopter might only indicate surface temperatures and not those deep below the ground. Therefore, this must have been an extrapolation or estimate of the underground temperatures. However, 2800 degrees Fahrenheit is extraordinarily hot; it's over 1500C and higher than the melting point of steel.

This testimony raises the obvious question: what intense heat source under the rubble could maintain underground temperatures of 1500C for such a long period of time?

Pools Of Molten Steel

There were several eyewitness accounts of the discovery of pools of molten steel under the rubble when the debris pile was reduced and taken away from the excavation site. What heat source could have melted structural steel and kept it molten for 6 weeks under the rubble of the Twin Towers?

The Melting Point Of Steel Is Approximately 1500C

The most well known account is that by Peter Tully and Marc Loizeaux in the American Free Press. According to both Peter Tully, president of Tully Construction and Marc Loizeaux, President of Controlled Demolition Inc., who was called in by Tully Construction to help remove the rubble, pools of molten steel were discovered 6 weeks after the collapse of the towers.

In the AFP article, Tully says that he saw the pools. In a later communication to the Libertypost.org website, Mr. Loizeaux clarified that he had not personally seen the molten steel but had been told about it by other contractors.

One of the most authoritative reports of the presence of molten steel that has been quoted was made by Dr. Keith Eaton, Chief Executive of the Institution of Structural Engineers.

Based in London, the IoSE is the largest professional body dedicated to structural engineering in the world. In 2002, Dr. Eaton and colleague Professor David Blockley visited New York and were given a guided tour of "Ground Zero". In the report which appeared in, "The Structural Engineer," Dr. Eaton was quoted as saying:

"They showed us many fascinating slides, ranging from molten metal which was still red hot weeks after the event, to 4-inch thick steel plates sheared and bent in the disaster,"

Other reports have also appeared stating that steel members had been literally evaporated by intense heat and there are several other reports of molten steel that are now extensively quoted.

This could not have been achieved by 10,000 gallons of kerosene much of which was expended in the initial fireball outside of the towers and energetic compounds are equally incapable of creating these various conditions. Thermate is the hangout.

Energy Balance Calculation

To illustrate this, here is a simple calculation.

The central core of the World Trade Center consisted of 47 regular steel box columns. These measured 36 by 90 centimeters and had a wall thickness of 10cms at the base, tapering to 6cms at the top (400 meters above). There were also 236 smaller exterior steel columns which we will not consider.

- The total volumes of steel is 7,874 kgm cubed.
- Therefore the mass of steel in the central column is:
- 3333.8 x 7,874 = 26,290 tons.
- The specific heat capacity for steel is 470J/kg.K

Therefore the amount of thermal energy that would be required to raise this amount of steel to 800 degrees Centigrade from room temperature to soften it so that it might lose structural rigidity (*which is extremely unlikely in any event*) would be:

- (800 - 25) C x 470K/kg. C x 26,290,000kg = 9.6×10^{12} J

The amount of thermal energy available from the 10,000 gallons of JetA in the alleged B767 aircraft is calculated as appears on the following page.

You can see the heat shadows and the wave of destruction in the wreckage of the buildings. This was a nuclear event.

• The heat of combustion of JetA is 42.8 MJ/kg.

• JetA has a mass of 6.75 lb/USG or 3.07kg/USG.

• (10,000 x 3.07)kg x 42.8 MJ = 1.3 x 10^{12} J

This is only 13% of the energy required to soften the steel of the central core columns, even assuming an impossible 100% efficiency of heat transfer from fuel to steel. In reality, the efficiency of transfer would be very low – a few percent at best.

As another indicator, the thermal energy in the fuel could melt a total of 1300 tons of steel if all of its thermal energy was transferred to the steel without losses. The steel would soften and then immediately resolidify, lacking any further heat energy to maintain it in the molten state.

This is calculated as follows:

• Thermal Energy Avaialble from Fuel = 1.3 x 10^{12}J.

• Specific Heat Capacity of Steel is 470 J/kg.K

• Melting Point of Steel = 1538 degrees C.

• Latent Heat of Fusion of Steel = 277kJ/kg

• Energy to raise 1kg of steel to melting point and then melt it is (470 x (1538 - 25) + 277,00) J
= 988.1kJ

• Mass of steel that can be raised from room temperature (25C) to 1538C and then melted by 1.3 x 10^{12}J is:

• 1.3 x 1012J / 988.1 x 103J

= 1,315 tonnes.

With a realistic conversion efficiency of only a fraction of a percent, it would be unlikely for even a few tons of the central steel support columns to have melted.

Most of the pictures that remain are missing the Ground Zero dust which assimilated quickly into into the environment, riding bus tires, peoples shoes, the rats, the roaches and the winds. The dust across the city found homes in vents and sewers, cracks and crevices, nooks and crannies. It settled. Radioactive. For a while.

Without doing the same calculations for energetic compounds, which I believe are very likely a well planned and carefully conceived Limited Hangout, I think it’s easy to see these poor excuses for reality are nothing short of scientific lies. It’s obvious that only nuclear energy, not some secretive space weapon, not “thermate,” and not conventional explosives nor all of them combined, but an advanced science we’ve been working with diligently for almost 60 years since it was developed. Because of this that science, today, is sophisticated and honed. It’s a science wholly misunderstood by most and many have erroneous perceptions. It’s complicated but it explains every anomaly we’ve seen. It’s obvious that the official story that the steel supports of the towers were melted by burning jet fuel is woefully inadequate. Various internet sites have shown pictures of steel framed buildings that have not collapsed even after being subjected to intense fire for days. Fire has no effect whatsoever on the steel structure of buildings. The earth is round, it circles the sun, we understand gravity and this event was nuclear.

VAPORIZED

The Boiling Point Of Silicon Dioxide

We will look at this in more detail in the next section. However, an aerosol and air quality monitoring program set up by the University of California at Davis monitored particulate emissions from the World Trade Center site for a number of weeks after the collapse. The program was run by a world expert in atmospheric sciences, Professor Thomas Cahill.

A report on this monitoring appeared in a California newspaper. An extract is as follows:

"*The September 11th collapse of the 110-story skyscrapers crushed concrete, glass, computers, electrical wiring, carpeting, furniture and everything else in the buildings, then burned and broiled the compressed, pulverized mass for weeks. In the super-heated rubble the material disintegrated into extremely small particles, which were released into the air for weeks. "It's like having a large power plant at ground level with no stack,*" Cahill said.

In their press release on what the study revealed, the UC Davis team comment:

"There was also an unusual, very fine, silicon-containing aerosol. The latter type of aerosol can be produced only by very high temperatures, including vaporization of soil and glass."

The boiling point of silicon dioxide (glass) is about 2500C. The underground temperature must therefore have been at least 2500C to vaporize glass and soil.

2500°