

RADIUM, TRITIUM AND LUMINOVA GOLDSMITHWORKS.COM

AND

RADIUM DISCOVERED

THE SWARM OF LIGHTENING BUGS IN THE THE SWISS WINTER.

USA RADIUM STORY

THE TRUTH ABOUT RADIUM AND HEALTH IN 2014

TRITIUM OR LUMINOVA WHICH IS THE BEST

LUMINOVA & AF-LUMINOVA OUR FAVORITE

USE OF LUMINOVA

TO RESTORE YOUR DIAL OR NOT RESTORE YOUR DIAL

PICTURES OF THE RESTORATION

FREE FREE FREE

MOST WATCHES: AUTOMATICS AND MANUAL WIND WITH OR WITHOUT STANDARD DATE/DAY WINDOWS, COVERS DIVE, MILITARY, DRESS, SPORT, COLLECTIBLE WATCHES EARLY ANTIQUEM, VINTAGE & CLASSIC/ COLLECTIBLE. BOTH IN SWEEP SECONDS AND SUB-SECONDS PLUS WARRANTY AND PORTAL MEMBERSHIP **290.00 WATCH RESTORATION W/WARRANTY & LIFETIME LSYF MEMBERSHIP [175.00]** [click here](#)

COMPLICATED WATCHES: INCLUDES MANUAL AND AUTOMATIC COMPLICATED, ALARM, SINGLE, DOUBLE TRIPLE SUB REGISTER WATCHES AS WELL AS COMPLICATED WHICH INCLUDE SINGLE DATE POINTERS, MULTI-TASK VERSIONS AS WELL AS CHRONOGRAPH AND COMPLICATED WATCHES WITH CENTER SWEEP OR SUB SECONDS REGISTER PLUS WARRANTY AND PORTAL MEMBERSHIP **350.00 WATCH RESTORATION W/WARRANTY & LIFETIME LSYF MEMBERSHIP [250.00]** [click here](#)

RADIUM DISCOVERY

Radium

Atomic Weight 226[*note*]

Density 5 g/cm³

Melting Point 700 °C

Boiling Point 1737 °C

Radioluminescent paint

radioactive material mixed together with a luminescent crystalline powder.

first radioactive material to be used was radium-226 (Ra-226)

Radium-226 is an alpha emitter with a 1600 year half-life

RADIUM emits a gamma ray at 186 keV. Radium decays into a number of short lived decay products that can usually be expected to be present at, or close to, the same activity as the radium. These decay products emit alphas, betas and gamma rays. Radium was utilized in watches until app: 1965 -WITH A FEW TO 68- and in clocks till app: 1978. **Radium in high enough concentrations glows blue all the time. While Henri Becquerel discovered that radium mixed with zinc sulfide would fluoresce, and in 1902 William J Hammel developed Radioluminescent paint by mixing Radium, Zinc Sulfide with a Binder. IT WAS George Kunz, a gemologist at Tiffany & Company WHO would patent this invention and, along with chemist Charles Baskerville, made their paint by mixing radium-barium carbonate with zinc sulfide and linseed oil. While US manufacturers disregarded the radioluminescent paint, Europeans, especially the Swiss, began exploiting the market:**

[TOP](#)

THE SWARM OF LIGHTENING BUGS IN THE THE SWISS WINTER.



HISTORY

THERE IS THE TRUE STORY OF A US MANUFACTURER WHO, WHILE ON A BUSINESS TRIP TO SWITZERLAND, WENT TO THE SMALL VILLAGE OF TAVANNES WITH A SWISS PARTNER OF HIS TO RECEIVE A FIRST HAND LOOK AT WHY THE SWISS WATCH INDUSTRY, BOTH COTTAGE AND INDUSTRIAL, HAD GROWN FIVE FOLD IN ONE YEAR.

ARRIVING TOWARDS THE EARLY EVENING, THEY NOTED A MULTITUDE OF DIM YELLOW LIGHTS SPARKING TO LIFE FROM THE MANY HOMES AND COTTAGES THAT DOTTED THE LANDSCAPE AND THE LARGE TAVANNES WATCH CO. FACTORY. THEIR INVITATION BY WAY OF THE MAYOR MEANT THEY WOULD CALL ON HIM AT HIS HOME. THEY WERE GREETED BY A ROTUND JOLLY FELLOW WITH HANDLE BAR MOUSTACHE WHO SPOKE NO ENGLISH YET LEFT THE AMERICAN BUSINESSMAN WISHING HE COULD. AFTER DINNER, SNAPS AND INTERPRETED CONVERSATION IT HAD GOTTEN DARK OUTSIDE AND THE MAYOR, WITH A LARGE GRIN ON HIS FACE, MOTIONED FOR THEM TO FOLLOW HIM OUT DOORS.

THE AMERICAN BUSINESSMAN REACHED THE DOOR WAY AND FROZE SOLID--AS IF HE COULD NOT TAKE ANOTHER STEP. FOR, WITH IN THE ENTIRE LANDSCAPE WERE THOUSANDS OF BRIGHT BLUE- GREEN IRIDESCENT SPECS. LIKE A SWARM BLUE-GREEN IRIDESCENT LIGHTENING BUGS, THEY WERE EVERYWHERE. SOME LOOKED LIKE SLASHES OF COLOR OTHER TINY DOTS, YET THEY WERE EVERYWHERE. HIS FIRST SEVERAL CRUNCHING STEPS REMINDED HIM SNOW WAS EVERYWHERE AND BUGS SIMPLY COULD NOT SURVIVE IN THE TEMPERATURE..

IT WAS THEN THAT THE MAYOR FLIPPED A SWITCH BY THE DOOR AND A HALF DOZEN DULL BULBS REVEALED THAT ONLY THE LIVING CREATURES WERE THE VILLAGE CITIZENS LEAVING WORK TO GO HOME. RADIUM, THE MAYOR CRIED... RADIUM...AS HE JUMPED ABOUT POINTING TO THE PEOPLE PAYING NO MIND.

OPERATING FROM SMALL BUILDINGS, INDIVIDUAL "COTTAGE INDUSTRY" HOMES, AND THE FACTORIES, THE CITIZENS OF TAVANNES WERE PAINTING THEMSELVES TOWARDS PROFITS. PAINTING RADIUM ON DIALS, FILLING IN THE NEW CATHEDRAL HANDS WITH RADIUM HAD PRODUCED INCREDIBLE SALES. PAINTING CLOCK AND WATCH PARTS AND DIALS AND OTHER ITEMS, THE SWISS WERE THE FIRST TO PROFIT FROM THE NEW RADIUM THAT THE USA HAD INVENTED BUT FAILED TO TAKE ADVANTAGE.

THE BUSINESSMAN RETURNED TO THE US AND, AS IF HE HAD BEEN PRIVY OF THE FORMULA TO TURN DUNG INTO GOLD, THE USE OF RADIUM IN THE US WOULD STAGGER THE MAYOR BACK IN SWITZERLAND BY APRIL OF 1920, OVER 4,000,000 WATCHES AND CLOCKS WOULD BE PRODUCED IN THE US USING RADIOLUMINESCENT PAINT.

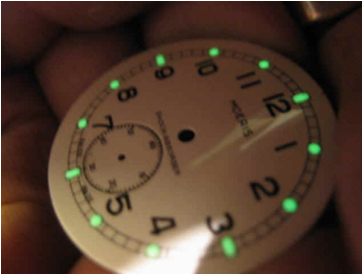
YES AND ALL SORTS OF "THINGS" AND THE EXCESS RADIUM THAT LANDED ON THEIR CLOTHING AND HANDS AND FEET LIT UP THE VILLAGE EVERY NIGHT. WITHIN 3 YEARS THIS RADIUM RAGE WOULD BURST FORTH BY THE MILLIONS FROM THE USA.

TOP

USA RADIUM STORY



The first company to produce radioluminescent paint in the US was in 1914 when the Radium Luminous Material Corporation in Newark New Jersey was founded. When the United States entered World War I the use of Luminance paint in watches, timers, clocks, on aircraft and ship instrument dials and other manly military items took off and the company began mining and producing radium. By 1921 they became the U.S. Radium Corporation and their Brand name was "Undark." Standard Chemical Company soon followed with "Luna" and the Cold Light Manufacturing Company made "Marvelite." **By April 1920. more than 4,000,000 watches and clocks had been produced using radium-containing radioluminescent paint.** In addition, radioluminescent paint was used in house numbers, keyhole locators, ship's compasses, telegraph dials, mine signs, steam gages, pistol sights, poison bottle indicators, bedroom slipper buttons, furniture locator buttons, theater seat numbers, automobile steering-wheel locks, luminous fish bait, and glowing eyes for toy dolls and animals. During the 1920s, the radium paint was applied to clock and watch components in a variety of ways: painting it on with a brush, painting it with a pen or stylus, applying it with a mechanical press, and dusting. This led to **the so-called practice of "tipping" or pointing the brush in the lips.** In some plants the brush was also tipped before painting a numeral. The paint so wiped off the brush was swallowed." As a result of the ingestion of the radium, many of the **dial painters developed medical problems of varying degrees of severity.** The first deaths occurred in the mid 1920s, and by 1926 the practice of tipping the brushes seems to have ended.

[TOP](#)**THE TRUTH ABOUT RADIUM AND HEALTH IN 2014**

SOME INTERNET PERSONAS LIKE TO INFORM THE PUBLIC OF WIVES TALES OR STORIES BASED ON THIN AIR LIKE A RECENT ARTICLE BY A SUPPOSED TO BE RESTORATION PERSONA:

FROM A RESTORATION PERSONA TRYING TO SCARE YOU WITH WIVES TALES, LIES AND BASELESS FACTS --NO OFFENSE TO THE WIVES

"I often avoid radium projects as much as I can because of the extra risk they pose when the dial is uncased and exposed. In some cases, I will work on them if I think the project merits it. In this case, I use gloves (you should always use gloves anyway) and an N95 mask."

FROM **ROCK WITH 75000 PICS [35000 ONLINE] OF COMPLETED RESTORES WITH 70% BEING RADIUM ORIGINALS**

I WILL NOT SAY RADIUM IS HARMLESS-- RATHER WHAT IS LEFT OF THE RADIUM AFTER DECADES IS HARMLESS AND IF THE ABOVE "I OFTEN" PLACED ONLINE BY A PURPORTED EXPERT, THEN HE MUST BE BROKE OR DOES NOT DO WHAT HE SAYS HE DOES, RESTORE WATCHES.. WHY??? READ IT AGAIN. 70% OF ALL VINTAGE FROM WWI THROUGH 1964 HAD RADIUM//

Over time, the intensity of the glow from RADIUM paint will decrease, not because of the decay of the radium, but due to the radium destroying the zinc [\[READ TOP OPEN\]](#). The higher the activity of the radium-226, the brighter the luminescence, AND the faster the deterioration. The amount of radium Vs the size and concentration of the zinc sulfide crystals made the difference as to how long the actual LUME lasted. After the glow ... radium continued to emit radiation REMEMBER, RADIUM DOES NOT REQUIRE A LIGHT CHARGE SOURCE - LIKE WITH LUMINOVA - RADIUM ALONG WITH ZINC SULFIDE AND A GLUE BINDER WILL GLOW 24/7 IN THE DAY AND ALL NIGHT. THE LAST USE OF RADIUM WAS 1964 AND A FEW COMPANIES TILL 1968. FINDING A RADIUM DIAL FROM THE 1960'S IS RARE.

RUN A GEIGER COUNTER OVER A HOST OF BURNED OUT RADIUM DIALS AND YOU WILL DISCOVER LEVELS THAT ARE EXTREMELY LOW AND ARE NOT CONSIDERED A HAZARD--- AT A DISTANCE OF 12 INCHES THE DOSE RATE IS APP. 0.008 mR/HOUR. AN AMOUNT OF RADIOACTIVE MATERIAL TOO SMALL TO WARRANT A NOTICE LABEL LET ALONE A HAZARD WARNING.

[TOP](#)**TRITIUM OR LUMINOVA WHICH IS THE BEST**

Tritium has a half-life of 12.3 years

light source will decline to half its initial value in that time



Currently, tritium is virtually the only radioisotope permitted to be used commercially as a radioluminescent light source. THERE are two ways it is utilized to add luminance to watches. Glass tubes with gas compound and painted. The tritium gas version is called GTLS for "gaseous tritium light source", GTLS is contained in small glass tubes coated with a phosphor on the inside. Beta particles emitted by the tritium strike the phosphor molecules and cause them to fluoresce, emitting light, usually yellow-green. Tritium paint on watches is a straight mixture of tritium and phosphor. The Tritium acts like its ancestor radium, it does not require light—which its competitor, LUMINOVA does. It is naturally radio-active and needs no external source of light or charge to work. As Tritium decays, beta radiation is emitted in the form of electrons that excite electrons in the phosphor atoms producing light, as they reverse the phosphor GLOWS. 80% of the tritium finished watches use the tritium-phosphorus mixture rather than glass tubes. Most Swiss, Japanese and other watches from the period after the radium knockout of 1965 through 1968 used a tritium/phosphorus paint. Tritium paint relies on tritium radioactivity to make the phosphor glow in the dark, not any charge from external light source.

Tritium was used as a replacement to radium because it was believed to pose a negligible threat to human health. Yet, in contrast to the previous facts as informed to the consumer -- that Tritium is safe-- unlike its brother the radioluminescent source, radium, the low-energy 5.7 keV beta particles emitted by tritium is only surely safe if it is encapsulated in glass! Tritium cannot pass through a glass tube. Now, they say, even if it could, it is not able to penetrate human skin. It is stated that Tritium is only a health threat if ingested. And since tritium is a gas, if a tritium tube breaks, the gas dissipates in the air and is diluted to safe concentrations. The problem with Tritium Paint, used in 80% to 90% of all watches that use tritium as a luminance, is the fact that previous figures OF radiation was found to be 50% off. that means Tritium is twice the maximum. In addition, with most tritium utilized in watches to be a paint, and the fact that some "T" labeled dials have the 25 number also, it becomes a serious issue. this is why i use LUMINOVA

Watches containing Tritium contain a radioactive substance, as I stated above, it was thought and told to be a self-powered lighting that does not pose a significant health concern, yet a sure 2007 report by the **UK government's Health Protection Agency Advisory Group on Ionizing Radiation declared the health risks of tritium exposure to be double that previously set by the International Commission on Radiological Protection**, Now do not take my word for this, after the above testing in 2007, only 7 years ago, though most watches were painted with the Tritium-Phosphorus Mix from 1964 through 2014, it was stated that this new?? finding concerning the health risks BEING that the tests were 50% off?? , the encapsulated tritium lighting devices, typically taking the form of a luminous glass tube embedded in a thick block of clear plastic, prevent the user from being exposed to the tritium at all unless the device is broken apart. Hello??? You read that??? Did we not say that hardly any of the time pieces then or now have glass tubes with gas. 80% to 90% are painted

[TOP](#)

LUMINOVA & AF-LUMINOVA OUR FAVORITE



LUMINOVA FACTS FICTION HISTORY. ILLUMINATION OF WATCHES BEGAN IN THE 1ST TO 2ND DECADE OF THE 19TH CENTURY UTILIZING RADIOACTIVE RADIUM AND BASE ADHESIVES RADIUM WAS BORN WATCHES GLOWED 24/7 WITH OR WITHOUT CHARGING. IT WAS ACTIVE 24/7 SOON IT WAS REALIZED THAT RADIUM WAS CAUSING CANCER OF THE MOUTH STOMACH AND THROATS OF WOMAN AND MEN WHO APPLIED IT USING PAINT BRUSHES THE DIAL PAINTERS WOULD WET THE TIPS OF BRUSHES WITH THEIR TONGUE AND LIPS. THIS LEAD TO CANCER YET THE INDUSTRY NEVER MISSED A BEAT. BY LATE FIFTIES EARLY 60'S TRITIUM WAS SUBSTITUTED FOR RADIUM TRITIUM ALSO "BURNED" 24/7. IT DID NOT REQUIRE A LIGHT SOURCE TO GLOW BUT TRITIUM ALSO WAS RADIO ACTIVE SO OTHER SOURCES WERE INVESTIGATED

THE GERMANS IN WWII USED A MIXTURE OF PHOSPHORUS AND ZINC TO CREATE GLOWING WATCHES AND TIMERS FOR THEIR U BOOTS [BOATS] THIS MIXTURE REQUIRED A LIGHT SOURCE SO THEY ADDED A CHARGING LIGHT TO EVERY SUB. THE WATCH OR TIMER ILLUMINATED WITH A MIXTURE OF PHOSPHORUS AND ZINC WITH A BASE ADHESIVE WOULD BE PLACED UNDER THE LAMP THE PHOSPHORUS WOULD ABSORB THE LIGHT AND WITH THE INTERACTION OF THE ZINC WOULD GLOW BRIGHTLY. TIME OF GLOW WAS A NARROW WINDOW YET IT WORKED WELL –READ "IRON COFFINS"

THUS, PHOSPHORUS WAS CHOSEN AND BY 1970, WATCHES BEGAN TO BE COATED WITH PHOSPHORUS AND ZINC MIXED WITH A BASE OF LACQUER MIXING A COLORED PHOSPHORUS AND ZINC POWDER, SUCH AS RED BLUE GREEN OR WHITE WITH LACQUER TO PROPER THICK NESS AND DENSITY IT IS THEN APPLIED WITH BRUSHES, TOOLS, TOOTH PICS AND OTHER DEVICES TO NUMERALS OR MARKERS. HANDS ARE COATED OR "WIDOWS" FILLED THE ONLY DRAWN BACK IS THE LENGTH OR TIME OF ILLUMINATION THIS MIXTURE REQUIRES A LIGHT SOURCE TO CHARGE AND ACTIVATE THIS MIXTURE LASTS A REASONABLE AMOUNT OF TOTAL TIME BUT WILL EVENTUALLY STOP ACCEPTING AND REFLECTING LIGHT AS THE ZINC IS WASTED THROUGH THE CHARGE AND REFLECTING OF LIGHT

[TOP](#)

USE OF LUMINOVA

FACT OF DURABILITY AND TRIALS AND TRIBULATIONS

1- ALL DIAL EDGES THAT ARE RE-ILLUMINATED BY GSW ARE COATED WITH A UNIQUE SILICONE BARRIER. THE SILICONE DOES NOT COME OFF OR SPREAD. IT IS A BARRIER THAT COLLECTS THE LUMINOVA THAT WILL FLAKE OFF OVER TIME. REMEMBER, THE LACQUER ADHERES THE LUMINOVA TO THE DIAL. BUT DIALS ARE FINISHED IN PAINT. WHICH MEANS SOME LOSS CAN OCCUR. ADDITIONALLY, HANDS THAT ARE COATED CAN EXPERIENCE LOSS, ESPECIALLY FROM THE WINDOWS IN HANDS.

2. IN THE EVENT THAT MORE THAN FLAKING OCCURS, LIKE A CHUNK OF LUMINOVA, RETURN THE WATCH AND WE WILL RE-ILLUMINATE THOSE AREAS OF ;LOSS

3- "I SEE SOME LUMINOVA AT BOTTOM OF DIAL". SOME MINUTE LUMINOVA MAY COMES LOOSE, IT WILL BREAK DOWN TO DUST WHICH WILL BE CAPTURED BY THE SILICONE RING AND NEVER SEE AGAIN.

SOME COOL RADIUM DIALS CAN BE RESTORED TO SOME DEGREE BY LIGHTLY RE-APPLYING LUMINOVA IN WHITE BASE COLOR.

90% OF DIALS THAT STILL LOOK GREAT, ONLY THE HANDS ARE RE-ILLUMINATED WITH LUMINOVA.

IF HANDS ARE THE ORANGE COLORED DEAD RADIUM, THEN YOU LEAVE IT ALL AS IS.

AS FAR AS NON-RADIUM DIALS. THE SAME SITUATION APPLIES. IF THE DIAL HAS CHARACTER, LEAVE IT ALONE ON DRESS WATCHES WITH RADIUM HANDS AND "DOTS" OR MARKERS SHOULD BE RE-ILLUMINATED.

WHEN NOT TO RE-ILLUMINATE A RADIUM DIAL

IF AN OLD RADIUM DIALED WATCH HAS OLD RADIUM THAT IS AN ORANGE COLOR, OR IS AWESOME LOOKING, THEN WE KEEP IT AS IS. SOMETIMES OVER LAYERING WITH LUMINOVA. BUT MOST RADIUM DIALS FOR MILITARY RELATED (AND OTHERS) FROM 1914 TO 1965, NOT ONLY HAVE DAMAGED RADIUM, BUT THE RADIUM IS USUALLY NOT CONSISTENT. THERE ARE THE LINKS BELOW THAT SHOW WHEN YOU SHOULD KEEP THE DIAL AS IS.

[WWII-WITTNAUER-OFFICERS-RADIUM-DIAL-MILITARY-WATCH](#)

[1940-ORIS-RADIUM-DIALED-MILITARY-WATCH](#)

[1917-WWI-LEONARD-WRIST-RADIUM-DIALED-WIRE-LUG-SHRAPNEL-GUARD-WATCH](#)

[bucherer-DIVE](#) SUPER HEAVY RADIUM 1960 THE MOST I HAVE EVER WORKED WITH STILL NO GLOW

[TOP](#)

TO RESTORE OR NOT RESTORE

VINTAGE WATCH DIALS

I like to say I am not a watchmaker .. rather a hacking master restoration expert restoring history. With over 35000 pictures, 1.2 mil GOOGLE requests every 15 days,+near 10,000 articles online. i am obsessive LOL. Thus I call upon only the best of the best.



When it comes to Dials, Tony The Tiger is perhaps, in my opinion, the best of the best. He is the one i count on to make plates,and provide the historical accuracy He is more than the key to the successful re-imaging of the original dials. which may require 5 plates! The plates necessary to restore vintage and classic dials, while maintaining accuracy. One doe not free hand a dial—though some parts of the work is free hands—the fact is plates matching the original dial must me utilized, such as brass plates with the names of brands,ink-paint is swiped over plate filling the recess, then excess scrapped off, a rubber “stamp” pressed over the ink filled brand name then transferred to dial.then there is the making of plates. utilizing computers. now, it is much more intense but you get the picture. First Lesson: no one “paints” dials.

Dial Restoration Is An Art:

1) *Restoring dials does not diminish price unless the time piece is rare or special. On a PATEK, VACHERON, ROLEX or other similar rare vintage models it matters. A Rolex oyster date? restore it. A Rolex dive from 1950? do not touch the original dial. if it is in terrible shape, say, a fractured patek pocket porcelain dial? store the old dial and have an exact to original one made, that way you can sell with both.

* You can always store the old dial.

2) for every ten buyers, 8 will invest in the watch with restored dial.

3) pricing on restored dial Vs worn out dial? 60% more

4) all watches with outlined raised numerals up to 1960 [some after] had radium. then tritium – now LUMINOVA.

5) radium life is 1000 years. radium glowed 24/7. on the other hand, modern non radioactive works off phosphorescence and zinc. it requires light to activate it.

6) 60% of old watches have radium dials!! But, after the glowing part dies, the only value is looks. and all radium ceased glowing decades ago. when the dial is mint and the old radium looks great (color wise) then it deserves to remain.

7) what vintage radium watches have collector value? mainly when the radium is orange color or some super thick high radium numerated watches like some pockets or look like the Bucherer i completed 5 years ago.

[TOP](#)

go links:

note: will open new windows so you do not lose your place

[WITNAUER MILITARY ORANGE W/HANDS](#)

[ORIS DIED -AS IN DEATH– ORANGE WWI](#)

[RADIUM CONVERSION WWI ORIGINAL ORANGE](#)

[BUCHERER DIVE AWESOME ORIGINAL DIAL](#)

RADIUM DIALED

NOW, IF A RADIUM DIALED WATCH HAS CHARACTER. DIAL IS 70% AS FAR AS WEAR. AND DEAD RADIUM, WHETHER WHITE OR ORANGE, IS AWESOME LOOKING, THEN KEEP IT AS IS. BUT MOST RADIUM DIALS FOR MILITARY RELATED (AND OTHERS) FROM 1914 TO 1965, NOT ONLY HAVE DAMAGE, BUT THE RADIUM IS USUALLY NOT CONSISTENT. THE LINKS ABOVE SHOW WHEN YOU SHOULD KEEP THE DIAL AS IS. ON DRESS WATCHES WITH RADIUM HANDS AND “DOTS” OR MARKERS SHOULD BE RE-ILLUMINATED.

SOME COOL RADIUM DIALS CAN BE RESTORED TO SOME DEGREE BY LIGHTLY RE-APPLYING LUMINOVA IN WHITE BASE COLOR. 90% OF DIALS THAT STILL LOOK GREAT, THE HANDS ARE RE-ILLUMINATED WITH LUMINOVA. IF HANDS ARE THE ORANGE COLORED DEAD RADIUM, THEN YOU LEAVE IT AL AS IS. AS FAR AS NON-RADIUM DIALS. THE SAME SITUATION APPLIES. IF THE DIAL HAS CHARACTER, LEAVE IT ALONE

IF IT IS DAMAGED. UNLESS IT MEETS THE RARE VINTAGE REQUIREMENTS, RESTORE IT! SO, IF YOU FIND AN ORANGE RADIUM LOOKING GREAT; INVEST!! BUT DO NOT LET A NICELY RESTORED DIAL DRESS OR MILITARY WATCH GET AWAY!

TO VIEW A FULLY RESTORED RARE ETERNA-MATIC 1949 MODEL -”THE ACTUAL FIRST BALL BEARING ROTOR

AUTOMATIC CALIBER MODEL FOR MEN” WHICH, BY MY FACTS HERE, IN THIS ARTICLE, WOULD SAY, THE WATCH IS WORTH MORE ORIGINAL, LOOK AT THE BEFORE AND AFTER. I AM SURE THE AFTER WAS CORRECT!