## Very Old Rocks

## By Paul Nethercott <br> August 2012

## Comparison of African and Canadian Diamonds

Table 1

| Congo | Leslie | Grizzly | Fox | Koala | Jwaneng |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{5 , 5 0 0}$ | $\mathbf{7 , 5 0 0}$ | $\mathbf{7 , 5 0 0}$ | $\mathbf{6 , 5 0 0}$ | $\mathbf{6 , 5 0 0}$ | $\mathbf{5 , 0 0 0}$ |
| $\mathbf{5 , 5 0 0}$ | $\mathbf{7 , 5 0 0}$ | $\mathbf{7 , 5 0 0}$ | $\mathbf{7 , 5 0 0}$ | $\mathbf{7 , 0 0 0}$ | $\mathbf{5 , 0 0 0}$ |
| $\mathbf{5 , 5 0 0}$ | $\mathbf{8 , 0 0 0}$ |  | $\mathbf{8 , 3 0 0}$ | $\mathbf{7 , 5 0 0}$ | $\mathbf{5 , 0 0 0}$ |
| $\mathbf{6 , 5 0 0}$ |  |  |  |  | $\mathbf{5 , 0 0 0}$ |
| $\mathbf{6 , 5 0 0}$ |  |  |  |  |  |
| $\mathbf{6 , 5 0 0}$ |  |  |  |  |  |

(Ages in millions of years)
These samples were dated in the year $2000{ }^{1}$ by scientists from the University of Manchester, University College London and the University of Glasgow in Scotland. Samples were taken from Canada (Fox, Grizzly, Leslie and Koala), the Democratic Republic of Congo and from Botswana (Jwaneng). The article states that "apparent ages for most diamonds are greater than the age of the Earth." ${ }^{2}$ Twenty one dates in this table ${ }^{2}$ are indeed older than the theory of evolution would allow. Fourteen are over six billion years old. The article admits that many dates are meaningless: "all apparent ages are higher than the host kimberlite eruption ages and most are higher than the 4.5 Ga geochron." ${ }^{3}$

Standard evolutionist geology views the Earth as being 4.5 billion years old. Here are some quotes from popular text: "The age of the Earth is $4.54 \pm 0.05$ billion years." " "The Solar System, formed between 4.53 and 4.58 billion years ago." "The age of 4.54 billion years found for the Solar System and Earth." "A valid age for the Earth of 4.55 billion years." ${ }^{6,7}$

Geochimica et Cosmochimica Acta, 1994, Volume 58, Pages 761-771.
Geochimica et Cosmochimica Acta, 1996, Volume 60, Pages 4711-4724.

## Laser argon-40-argon-39 age determinations

This dating on Moon rocks was done in 1998 by scientists from the University of Manchester in England. "The Luna 24 mission returned 160 cm of core $(0.17 \mathrm{~kg})$ from the south eastern rim of Mare Crisium in August 1976." ${ }^{8}$ Nineteen samples from this Russian space probe were dates by Argon dating as being older than the evolutionist age of the Moon. " "The presence of trapped Ar components is evident from the anomalously high apparent ages determined from the measured $40 \mathrm{Ar} / 39 \mathrm{Ar}$ values for the initial $30-40 \%$ of K release." $\mathbf{1 0}$ "Interpretation of the apparent ages is problematic because neither the clast composition nor the proportions of clast and matrix in the analysed splits could be determined." ${ }^{11}$ The current consensus among evolutionists is that the true age of the Moon is 4.5 billion years old. ${ }^{12}$

Table 2

| Sample Number | Age, Million Years |
| :---: | :---: |
| lc_1 | 5,700 |
| 3_1 | 4,810 |
| 5_1 | 5,760 |
| 5_2 | 5,320 |
| 5_3 | 5,060 |
| 7a_1 | 6,930 |
| 7a_2 | 6,240 |
| 7a_3 | 5,760 |
| 7a_4 | 5,180 |
| 7a_7 | 4,810 |
| 7a_8 | 5,250 |
| 7a_9 | 4,880 |
| 7a_14 | 5,180 |
| 7b_1 | 5,400 |
| 7b_2 | 5,110 |
| 7c_1 | 6,080 |
| 7c_2 | 5,330 |
| 7c_4 | 4,990 |
| 7c_5 | 4,770 |

## Meteorite: Northwest Africa 482

"Northwest Africa 482 (NWA 482) is the second largest lunar meteorite and the fifth found in the Sahara. The complete stone had a mass of 1.015 kg before cutting" ${ }^{13}$ In 2002 it was dated by scientists from the Lunar and Planetary Laboratory, University of Arizona. The results of the dating ${ }^{14}$ are summarised below in table 3 .

Table 3

| Bulk Sample | Age, Million Years |
| :---: | :---: |
|  | $\mathbf{9 , 6 7 0}$ |
|  | $\mathbf{8 , 5 6 0}$ |
|  | $\mathbf{8 , 1 2 7}$ |
|  | $\mathbf{6 , 2 5 6}$ |
| Glass Sample | Age, Million Years |
|  | $\mathbf{9 , 9 0 5}$ |
|  | $\mathbf{7 , 3 8 8}$ |
|  | $\mathbf{5 , 7 0 8}$ |

The author of the article explains why he thinks that the ages are so absurd: "We believe that this ${ }^{40} \mathrm{Ar}$ is probably dominated by terrestrial contamination." ${ }^{15}$

## Rhenium-Osmium Isotopic Composition in Diamonds

These rock samples from the King Leopold ranges in Western Australia were dated in 2010 by scientists from the Department of Geological Sciences, University of Cape Town, South Africa and the Department of Terrestrial Magnetism, Carnegie Institution of Washington. ${ }^{16}$ The difference between the oldest and youngest dates ${ }^{17}$ as shown in table 4 is 16,254 million years. The author of the article explains why he thinks that the ages are so absurd: "The chalcopyrite inclusion from EL57 gives a model age older than the age of the Earth, evidence, perhaps, that this sulphide has suffered Re loss." ${ }^{18}$

Table 4

| Sample Name | Age, Million Years |
| :---: | :---: |
| EL10 | 1,658 |
| EL26 | 430 |
| EL57 | 7,457 |
| EL61 | 847 |
| EL23 | 1,264 |
| EL50 | 1,171 |
| EL54_1 | $-8,281$ |
| EL54_3 | -362 |
| EL55_1 | 7,973 |
| EL55_2 | -104 |
| EL65 | $-5,773$ |

## K-Ar Dating of Diamonds

This dating was done in 1983 by scientists from the Geophysical Institute, University of Tokyo, Tokyo. ${ }^{19}$ Eight dates are older than the evolutionist age of the Earth. ${ }^{20}$ The author blames Argon contamination for the bizarre dates that were obtained: "Because of the extremely small amount of argon, the hot blank corrections were similar to or even larger than the argon in the diamonds, resulting in a large uncertainty in the experimental results." ${ }^{20}$ The author admits that the dates are absolutely meaningless: "The apparent $\mathrm{K}-\mathrm{Ar}$ ages range from 150 million to nine billion years, indicating that the non radiogenic ${ }^{40} \mathrm{Ar}$ is significant. Since we have no way to make a correction for the non-radiogenic 40 Ar , the apparent $\mathrm{K}-\mathrm{Ar}$ age does not offer useful information on the age of the diamonds." ${ }^{21}$ Whichever date the author accepts is simply an arbitrary choice. Any date is just as good as any other date.

Table 5

| Sample Number | Age |
| :---: | :---: |
| Premier Mine | Million Years |
| 82701N | 5,800 |
| 827021 | 5,200 |
| 82703A | 8,200 |
| 8270413 | 3,300 |
| Unidentified Origin |  |
| 821104N | 4,800 |
| 821105H | 5,700 |
| 821106N | 4,400 |
| 821107N | 5,000 |
| 8211083 | 4,500 |
| 8211091 | 9,100 |


| 821110 N | 6,600 |
| :---: | :---: |
| 821111 N | $\mathbf{1 5 0}$ |

## Isotopic And Petrographic Evidence

This dating was done in 2008 by scientists from the Department of Earth \& Atmospheric Sciences, University of Alberta, Canada and from the Department of Earth Sciences, The Open University, England. ${ }^{22}$ Two meteorites (Allan Hills and Northwest Africa) were dated and fourteen dates are older than the evolutionist age of the Earth. ${ }^{23}$ The article admits that the dates are meaningless: "The most striking observation is that all of NWA 1950 shock melt data, and more than half of the ages derived from ALH 77005 shock melts, are impossibly ancient, older than the Solar System itself (4.567 Ga; Fig. 6). Moreover, ancient ages ( $>4.567 \mathrm{Ga}$ ) from shock melts are known in meteorites, in articular the Peace River L6 chondrite, studied by $\mathrm{Ar}-\mathrm{Ar}$ stepped heating and localized outgassing by a laser probe (McConville et al., 1988)." ${ }^{24}$ The article concludes with the following remarks: "Our Ar-Ar results for shock melts-ages in $>4.567 \mathrm{Ga}$ and $40 \mathrm{Ar} / 36 \mathrm{Ar}$ ratios that overlap with previous measurements of the Martian atmosphere-indicate that shock melt 'ages' are meaningless in terms of any real event." ${ }^{25}$

Table 6

| Sample | Age |
| :---: | :---: |
| Number | Million Years |
| 1 | $\mathbf{8 , 0 6 4}$ |
| 2 | $\mathbf{7 , 1 9 2}$ |
| 3 | 7,064 |
| 4 | $\mathbf{6 , 8 7 2}$ |
| 5 | $\mathbf{6 , 6 7 9}$ |
| 6 | $\mathbf{6 , 4 2 3}$ |
| 7 | $\mathbf{6 , 2 0 5}$ |
| 8 | $\mathbf{6 , 1 7 9}$ |
| 9 | $\mathbf{6 , 1 0 3}$ |
| 0 | 5,346 |
| 11 | 5,103 |
| 12 | 5,103 |
| 13 | 5,026 |
| 14 | 4,654 |

## Rhenium-Osmium Systematics Of Diamond-Bearing Eclogites

Scientists from the Department of Geological Sciences, University of Cape Town, South Africa and the Department of Terrestrial Magnetism, Carnegie Institution of Washington, preformed this dating in 2003. ${ }^{26}$ There is a 31,600 million years between the oldest and youngest dates. ${ }^{27}$ "Thus, the Re-Os model ages, when calculated relative to a mantle undergoing chondritic Os isotopic evolution, are considerably older, varying from 3.1 to 18.5 Ga (seeTable 3 for calculation parameters). Model ages older than the age of the Earth are a clear indication that at least some of the samples have not experienced the simple single-stage Re-Os evolution
required by the model age calculation. The unrealistically old $\mathrm{Re}-\mathrm{Os}$ model ages reflect $\mathrm{Re} / \mathrm{Os}$ ratios too low to account for the high measured ${ }^{187} \mathrm{Os} /{ }^{188} \mathrm{Os} .{ }^{, 28}$ The author concluded the article with the following remarks: "The scatter in Re-Os systematics reflects a complex history for these eclogites that makes it impossible to define a precise age." ${ }^{29}$

Table 7

| Sample Name | Age, Billion Years |
| :---: | :---: |
| AHM-C5 | -13.1 |
| AHM-K1/1 | 5.86 |
| AHM-K4/2 | 4.24 |
| AHM-K5/2 | 4.47 |
| AHM-K6/1 | 5.12 |
| AHM-K6/2 | 5.14 |
| AHM-K13 | 18.5 |
| AHM-K14 | 4.09 |
| AHM-K15 | 13.8 |

## A Study Of Northern Canadian Cordillera Xenoliths

These samples were dated in the year 2000 by Geologists from the University Of Montreal, Canada and from the Earth and Planetary Sciences Department, McGill University, Canada. ${ }^{30}$ The samples were taken from mountain ranges near the Canadian/Alaskan border. ${ }^{31}$ The data ${ }^{32}$ in table 8 contrasts model age versus minimum age. "The decoupling of ${ }^{187} \mathrm{Re} /{ }^{188} \mathrm{Os}$ and ${ }^{187} \mathrm{Os} /{ }^{188} \mathrm{Os}$ observed in the Canadian Cordillera xenolith data also affects the calculation of Os model ages, and leads to "future" ages or ages older than the Earth (Table 1)." ${ }^{33}$ Because the data is so bad the author admits: "Because of the apparent perturbation of the $\mathrm{Re} / \mathrm{Os}$ ratios, age information cannot be obtained from an isochron diagram." ${ }^{33}$ How can a rock that exists in the present have formed million of years in the future? Such a proposition is illogical.

Table 8

| Sample | Model Age | Minimum Age |
| :---: | :---: | :---: |
| Name | Billion Years | Billion Years |
| AL-42 | Less Than Zero | 0.46 |
| AL-46 |  | Less Than Zero |
| AL-75 | Less Than Zero | 0.43 |
| AL-76 | Less Than Zero | 0.10 |
| AL-86 | Less Than Zero | 0.52 |
| AL-88 | 0.32 | Less Than Zero |
| AL-41 | Less Than Zero | 0.48 |
| AL-52 | Less Than Zero | 0.22 |
| XLG-29A | Less Than Zero | 0.92 |
| XLG-12A | Less Than Zero | Less Than Zero |
| XLG-25A | 0.54 | Less Than Zero |
| KLX-47 | Less Than Zero | 0.33 |
| BTX-26 | Less Than Zero | Less Than Zero |

## Ar-Ar Chronology Of The Martian Meteorite

The Department of Earth Sciences, University of Manchester, dated these meteorite samples in 1997. ${ }^{34}$ The samples are believed to be material ejected from the surface of Mars billion so years ago. ${ }^{34}$ If we look at the data in table 9 we see that there is a 24,648 million difference between the oldest and youngest date. ${ }^{35}$ If we look at the dates and error margins in Table 2 in the original article we see that the maximum age is 6,047 million years and the minimum is 257 million years. ${ }^{36}$

Table 9

| Sample | Age | Age |
| :---: | :---: | :---: |
| Number | Minimum | Maximum |
| ALH84001,110 |  |  |
| 1,300 | 4,626 | 5,236 |
| 1,450 | 4,345 | 5,013 |
|  |  |  |
| ALH84001,111 |  |  |
| 1,200 | 5,138 | $\mathbf{7 , 9 8 0}$ |
| 1,300 | $\mathbf{3 , 9 0 4}$ | 5,694 |
| 1,450 | $\mathbf{4 , 1 5 1}$ | $\mathbf{6 , 3 7 3}$ |
|  |  |  |
| ALH84001,127 |  |  |
| 400 | 2,660 | 5,062 |
| 450 | 4,106 | 5,018 |
| 500 | 4,012 | 4,550 |
| 550 | 4,442 | 4,614 |
| 700 | 4,036 | 4,942 |
| 800 | 4,179 | $\mathbf{4 , 8 4 7}$ |
| 1,200 | $\mathbf{3 , 1 7 1}$ | 21,477 |
| 1,400 | 4,920 | $\mathbf{7 , 3 5 4}$ |

## The Slave Craton, Canada

These samples from Canada were dated in 2010 by scientists from the Earth \& Atmospheric Sciences, University of Alberta, Edmonton, Canada. ${ }^{37}$ Some of the specimens were dated to be over 5.5 billion years old. ${ }^{38}$ The author tells how the isochron gave absurd ages:"In contrast, the most radiogenic sulphides in sample 1636 plot about an impossible 5 Ga model isochron." ${ }^{39}$ The admission is that the dates are impossible and meaningless:"The Re-Os isotope systematics of sulphides in sample 1636 are disturbed (Fig. 6e), with three of four samples falling on an impossible 5 Ga model isochron." ${ }^{40}$

## U-Th-Pb Systematics In Lunar Highland Samples

California Institute of Technology, (Pasadena, California) dated these Lunar rocks in 1972. ${ }^{41}$ Eighty one dates are older than the evolutionist age of the Solar System. Sixty three are over five billion years old. Seven are over six billion years old. ${ }^{42}$

Table 10

| Space Probe/Sample | ${ }^{207} \mathbf{P b}$ | ${ }^{206} \mathbf{P b}$ | ${ }^{207} \mathbf{P b}$ | ${ }^{208} \mathbf{P b}$ |
| :---: | :---: | :---: | :---: | :---: |
| Luna 20 | ${ }^{206} \mathbf{P b}$ | ${ }^{238} \mathrm{U}$ | ${ }^{235} \mathrm{U}$ | ${ }^{232} \mathbf{T h}$ |
| $22001,1 \mathrm{~A}-2$ | 4.94 | 5.83 | 5.19 | 5.87 |
|  | 5.00 | 5.20 | 5.06 | 5.01 |
|  | 4.92 | 6.09 | 5.24 | $\mathbf{6 . 2 4}$ |
| $22001,1 \mathrm{~A}-2$ | 4.96 | 5.78 | 5.19 | 6.08 |
|  | 5.01 | 5.25 | 5.08 | 5.30 |
|  | 4.95 | 5.83 | 5.20 | 6.14 |
| 67481,26 | 4.92 | 5.49 | 5.08 | 5.80 |
|  | 4.94 | 5.29 | 5.04 | 5.52 |
|  | 4.92 | 5.51 | 5.09 | 5.84 |
| 64421,29 | 4.91 | 5.41 | 5.05 | 5.47 |
|  | 4.94 | 5.00 | 4.96 | 4.91 |
|  | 4.90 | 5.43 | 5.06 | 5.50 |
| 60501,31 | 4.98 | 5.35 | 5.08 | 5.26 |
|  | 4.99 | 5.23 | 5.06 | 5.10 |
|  | 4.97 | 5.36 | 5.09 | 5.28 |
| 68501,52 | 5.05 | 5.61 | 5.21 | 5.55 |
|  | 5.06 | 5.48 | 5.18 | 5.37 |
|  | 5.05 | 5.62 | 5.21 | 5.56 |
| 60025,65 | 4.64 | 6.64 | 5.18 | 5.64 |
|  | 4.75 | 3.75 | 4.42 | 2.51 |
|  | 4.62 | 7.83 | 5.45 | 7.21 |

If we run the Lead 207/206 ratios ${ }^{43}$ through Isoplot we get the following ages as listed in Table 11:
Table 11

| Pb-207/206 | Age |
| :---: | :---: |
| Ratio | Ma |
| $\mathbf{0 . 8 1 6 6}$ | $\mathbf{4 , 9 5 1}$ |
| $\mathbf{0 . 8 1 9 6}$ | $\mathbf{4 , 9 5 6}$ |
| $\mathbf{0 . 8 1 8 9}$ | $\mathbf{4 , 9 5 5}$ |
| $\mathbf{0 . 8 1 9 0}$ | $\mathbf{4 , 9 5 5}$ |
| $\mathbf{0 . 7 8 0 4}$ | $\mathbf{4 , 8 8 6}$ |
| $\mathbf{0 . 7 8 0 0}$ | $\mathbf{4 , 8 8 6}$ |
| $\mathbf{0 . 7 8 8 3}$ | $\mathbf{4 , 9 0 1}$ |
| $\mathbf{0 . 7 8 8 6}$ | $\mathbf{4 , 9 0 1}$ |
| $\mathbf{0 . 8 0 0 6}$ | $\mathbf{4 , 9 2 3}$ |
| $\mathbf{0 . 8 0 0 8}$ | $\mathbf{4 , 9 2 3}$ |
| $\mathbf{0 . 8 4 1 7}$ | $\mathbf{4 , 9 9 4}$ |
| $\mathbf{0 . 8 4 1 7}$ | $\mathbf{4 , 9 9 4}$ |
| $\mathbf{0 . 7 9 8 9}$ | $\mathbf{4 , 9 2 0}$ |
| $\mathbf{0 . 8 0 1 5}$ | $\mathbf{4 , 9 2 4}$ |

The author comments on the major problems with dating these samples: "The data for all highland soils analyzed here are shown in fig. 4. All five data points lie far above the concordia curve and give ages for a
single stage model which are in excess of 4.6 AE (see table 5). The $206 \mathrm{~Pb}-238 \mathrm{U}$ ages range up to 5.83 AE . The $207 \mathrm{~Pb}-206 \mathrm{~Pb}$ ages are also very high." ${ }^{44}$ His calculations confirm the wrong ages radiometric dating gives: "Inspection of rows D and E in table 5 shows the extreme limits of the $207 \mathrm{~Pb}-206 \mathrm{~Pb}$ ages. All highland soils analyzed have $207 \mathrm{~Pb}-206 \mathrm{~Pb}$ model ages in excess of 4.90 AE . These are the highest values observed so far for samples of 'total lunar soil'., 45

## A 40Ar/39Ar Geochronological Study

Rock samples from the Lower Onverwacht Volcanics in Barberton Mountain Land, South Africa were dated in 1992 by geologists from the Department of Physics, University of Toronto, and the Department of Geological Sciences, Queen's University, Kingston, Ontario, Canada. ${ }^{46}$ The youngest date was $4.5 \times 10^{-16}$ years. ${ }^{47}$ How can a rock that exists in the present have formed 4,500 trillion years in the future? Such a proposition is illogical.

Table 12

| Sample Number | Age, Million Years |
| :---: | :---: |
| B40-A, Third Run | $\begin{gathered} -45,000,000,000 \\ -310,000 \\ \hline \end{gathered}$ |
| B40-E | $\begin{gathered} \hline-56,112 \\ \mathbf{3 8 6} \\ 2,663 \\ 2,667 \\ 2,672 \\ 2,943 \\ \mathbf{3 , 3 2 1} \\ \mathbf{3 , 3 1 3} \\ \mathbf{3 , 2 9 9} \end{gathered}$ |
| KT-17B, FIRST RUN | $\begin{aligned} & \mathbf{6 , 5 5 5} \\ & \mathbf{6 , 2 9 6} \\ & \mathbf{4 , 9 6 9} \\ & \mathbf{5 , 1 1 7} \\ & \mathbf{6 , 1 6 4} \\ & \mathbf{5 , 2 2 8} \end{aligned}$ |
| KT-17B, SECOND RUN | $\begin{aligned} & \mathbf{6 , 8 4 8} \\ & \mathbf{6 , 4 7 9} \\ & \mathbf{5 , 7 3 1} \end{aligned}$ |
| KT-17B, Plagioclase Concentrate | $\begin{aligned} & \mathbf{6 , 2 2 4} \\ & \mathbf{6 , 9 0 4} \\ & \mathbf{6 , 5 6 0} \\ & \mathbf{6 , 5 4 4} \\ & \mathbf{5 , 1 , 5 5} \end{aligned}$ |
| B56-A, First Run | $\begin{aligned} & \mathbf{7 , 8 1 0} \\ & \mathbf{4 , 8 6 4} \\ & \mathbf{4 , 8 9 0} \end{aligned}$ |

## The Archaean Barberton Greenstone Belt

In 1998 diamond samples were dated by scientist from the Johannes Gutenberg University, Mainz, Germany, the Max-Planck Institute Chemistry, and the Centre Geochemistry, Strasbourg, France. ${ }^{48}$ According to the author the true ages is 2.7 billion years: "All three isotopic systems of whole rocks indicate ages of $\sim 2.7 \mathrm{Ga}$, much younger than the depositional age of the successions." "By treating the primary isochron slope of the Pb-isotopic data of sample OG 1 as a secondary isochron, an additional recalculation of the $208 \mathrm{~Pb} / 204 \mathrm{~Pb}$ isotopic values indicates that the $232 \mathrm{Th} / 238 \mathrm{U}(\mathrm{k})$ isotopic ratio of sample OG 1 has had a value of 4.78 from $\sim 2.7 \mathrm{Ga}$, which is slightly higher than the typical k value of $\sim 4$ (Taylor and McLennan, 1985)." ${ }^{50}$ When we run the $207 \mathrm{~Pb} / 206 \mathrm{~Pb}$ ratios listed ${ }^{51}$ in the essay through Isoplot we get dates almost 2 billion years older. A radically different answer!

Table 13

| Sample | 207Pb/206Pb | Sample | 207Pb/206Pb |
| :---: | :---: | :---: | :---: |
| Number | Million Years | Number | Million Years |
| OG-1-a | 4,557 | OG-1-x | 4,557 |
| OG-1-b | 4,544 | OG-1-y | 4,544 |
| OG-1-c | 4,554 | OG-1-z | 4,554 |
| OG-1-d | 4,476 | OG-1-aa | 4,476 |
| OG-1-e | 4,596 | OG-1-1a | 4,596 |
| OG-1-f | 4,560 | OG-1-1b | 4,560 |
| OG-1-g | 4,566 | OG-1-2a | 4,566 |
| OG-1-h | 4,499 | OG-1-2b | 4,499 |
| OG-1-i | 4,495 | OG-1-3a | 4,495 |
| OG-1-j | 4,507 | OG-1-3b | 4,507 |
| OG-1-k | 4,514 | OG-1-7a | 4,514 |
| OG-1-I | 4,518 | OG-1-7b | 4,518 |
| OG-1-m | 4,454 | OG-1-8a | 4,454 |
| OG-1-n | 4,570 | OG-1-8b | 4,570 |
| OG-1-0 | 4,477 | OG-1-9a | 4,477 |
| OG-1-p | 4,517 | OG-1-9b | 4,517 |
| OG-1-q | 4,534 | OG-1-12a | 4,534 |
| OG-1-r | 4,563 | OG-1-12b | 4,563 |
| OG-1-s | 4,510 | OG-1-13a | 4,510 |
| OG-1-t | 4,535 | OG-1-13b | 4,535 |
| OG-1-u | 4,458 | OG-1-14a | 4,458 |
| OG-1-v | 4,587 | OG-1-14b | 4,587 |
| OG | 4,488 |  |  |

## Zircon U-Pb Ages Of Guyana Greenstone

These mineral samples were dated in 1982 by scientists from the Department of Geological Sciences, Cornell University, New York and the Department of Earth Sciences, University of New Hampshire ${ }_{54}{ }^{52}$ According to the article the true age of the specimen is 2250 Million years old. ${ }^{53}$ If we run the isotopic ratios ${ }^{54}$ through Isoplot we find that there is a 43,364 million difference between the oldest and youngest date.

Table 14

| Sample | 207Pb/206Pb | 206Pb/238U | 207Pb/235U |
| :---: | :---: | :---: | :---: |
| Number | Million Years | Million Years | Million Years |
| 1a | $\mathbf{2 , 2 2 6}$ | $\mathbf{2 , 2 1 8}$ | $\mathbf{4 4 , 2 4 2}$ |
| 1b | $\mathbf{2 , 2 1 7}$ | $\mathbf{2 , 0 2 1}$ | $\mathbf{4 2 , 1 9 9}$ |
| 1d | $\mathbf{2 , 2 1 0}$ | $\mathbf{1 , 8 0 6}$ | $\mathbf{3 9 , 8 3 9}$ |
| 1e | $\mathbf{2 , 1 7 7}$ | $\mathbf{1 , 8 3 8}$ | $\mathbf{3 9 , 8 6 1}$ |
| 3a | $\mathbf{2 , 2 4 9}$ | $\mathbf{1 , 8 3 5}$ | $\mathbf{4 0 , 5 6 1}$ |
| 3b | $\mathbf{2 , 2 3 6}$ | $\mathbf{8 7 8}$ | $\mathbf{2 7 , 1 4 2}$ |
| 4a | $\mathbf{2 , 2 0 6}$ | $\mathbf{1 , 6 1 7}$ | $\mathbf{3 7 , 6 4 0}$ |
| 4c | $\mathbf{2 , 1 5 5}$ | $\mathbf{1 , 3 2 7}$ | $\mathbf{3 3 , 4 4 7}$ |
| 4d | $\mathbf{2 , 1 8 3}$ | $\mathbf{1 , 3 3 9}$ | $\mathbf{3 3 , 8 7 1}$ |
| 5a | $\mathbf{2 , 2 4 2}$ | $\mathbf{1 , 7 7 6}$ | $\mathbf{3 9 , 8 3 3}$ |

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