

WHAT IS THE LATITUDE OF POST MARKED WEST?

By Robert Mentzer

Post marked west is not on any state boundary line so no permanent stone was placed there. Over time the wooden post decayed and the position was lost. In 1952 a William Mahoney of Delaware began a project to find the location of PMW.

Mason's journal says, "The Point 15 miles south of the southernmost part of the City of Philadelphia is situated in Mill Creek Hundred in the County of New Castle in a plantation belonging to Mr. Alexander Bryan. It is close by the east side of a small run, the head of which is due North distant 5 chains. From the Point to the middle of the Rivulet called Muddy Run, on a due south course is 7.15 chains. The Middle of the front of Mr. Bryan's house bears from the Point $37^{\circ} 52'$ northwesterly, distance 23.38 chains." Mahoney and others located the head of the small run and dropped due south 5 chains and placed a stake. A line was run from here at $37^{\circ} 52'$ for 23.38 chains. Mr. Mahoney says "No house is now standing but all the visual evidence points to the conclusion that it must have been the site of a house at that time." A permanent stone now exists at the spot of the stake. The land is now part of a Delaware park.

The haunting question is: Is the stone at the right location?

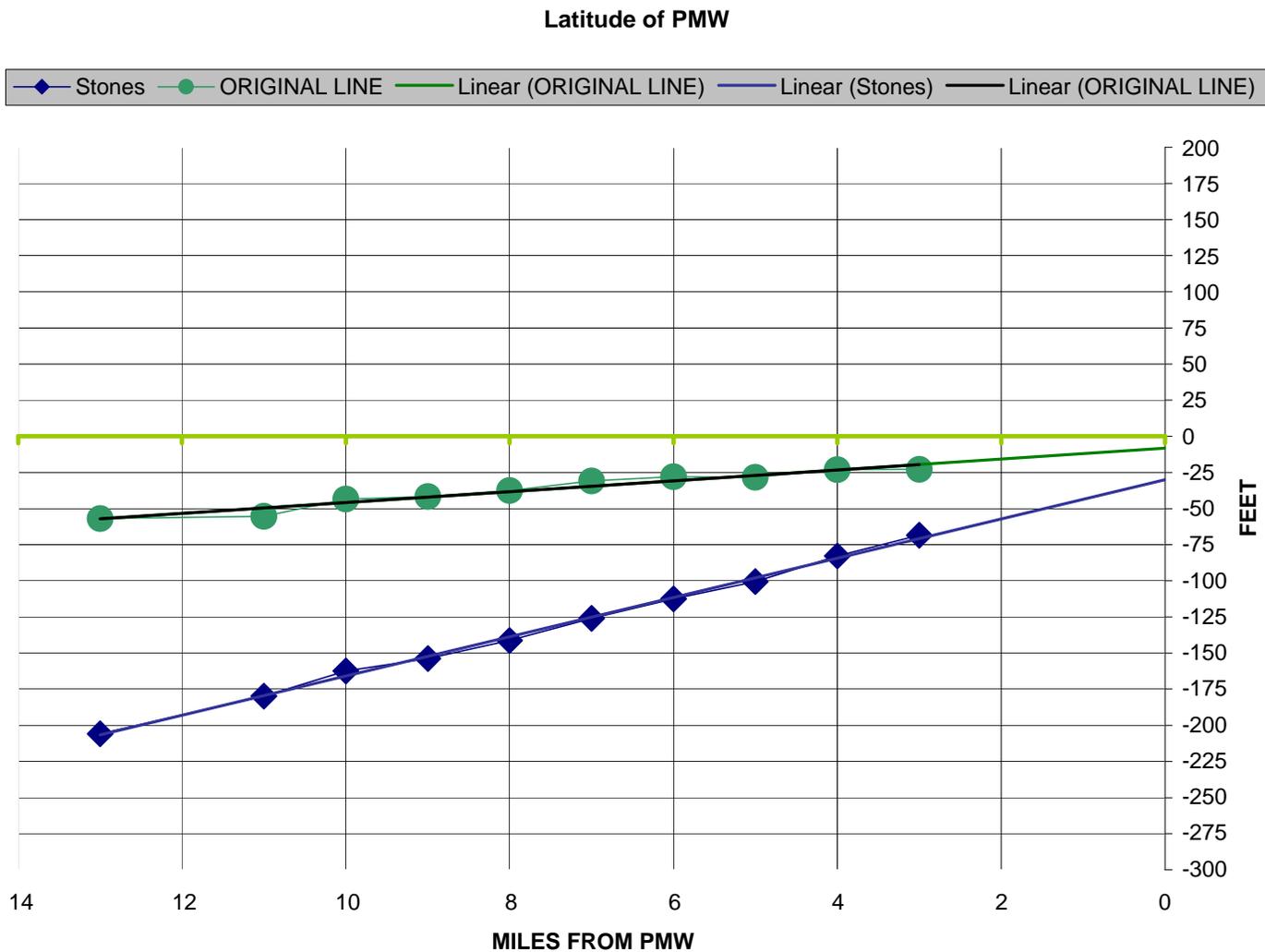
Mahoney makes no mention of any latitude and longitude measurement.

In Mason's journal he calculates the latitude from the star measurements and gives a latitude of $39^{\circ} 43' 18.2''$. He uses only the declinations for the 3 brightest stars in this calculation. I believe he did not have declinations for the two dimmest. The yearly reports of the Royal Observatory in the 1760's give declinations for the 3 brightest stars but not for the other two. The spread in latitude values from the 3 brightest stars is 540 feet, so the $18.2''$ value has a large potential error.

This value seems to have been ignored by later workers. One of the problems is that Mason's journal was not available before about 1860. Another was that the copies they left with PA and MD were pale imitations of the original. Human nature being what it is they submitted the minimum they thought they could get away with. For instance there is no trig calculations in the copies and no calculation of the latitude of PMW. I think some later workers used only the copies assuming they were the same as the original.

The GPS value for the present stone is $39^{\circ} 43' 20.6''$. This is 240 feet north of Mason stated value. This is within the spread of 540 feet in the star data.

The attached graph shows a plot of 10 stone locations out to 13 miles from PMW. The line extrapolates back to -30 feet. A second line on the graph shows the corresponding values for the location of the original line. It extrapolates back to about -5 feet from PMW. Neither of these values is contaminated with problems like NAD27 or NAD83 or gravity deflections. They are pure extrapolations of lines run and are solid evidence that the current PMW stone is within 30 feet and maybe within 5 feet of the original post.



References

“The Post Marked West on the Mason-Dixon Survey” by William T. Mahoney
 Delaware History Vol 6 Sept 1955 p 299