Measuring the Speed of Sound Data Sheet

Group members: _____, _____,_____,_____,

Date: _____, Temperature: _____, Barometric pressure: _____,

Field data from location #1

Distance from wall ?

Analysis of audio file.

Time of 1st sound_____
Echo of 1st sound ____
Difference _____

Time of 2nd sound ____
Echo of 2nd sound ____
Difference _____

Time of 3rd sound ____
Echo of 3rd sound ____
Difference _____

average
Difference _____

Speed of sound is equal to distance from wall times two divided by the average time difference between the main sound and the echo.

Rate = 2 x Distance / Time

Speed of Sound: Location #1 _____, feet per second

Field data from location #2

Distance from wall ?

Analysis of audio file.

Time of 1st sound _____
Echo of 1st sound _____
Difference _____

Time of 2nd sound_____
Echo of 2nd sound ____
Difference _____

Time of 3rd sound _____
Echo of 3rd sound _____
Difference _____

average
Difference _____

Speed of sound is equal to distance from wall times two divided by the average time difference between the main sound and the echo.

Rate = 2 x Distance / Time

Speed of Sound: Location #1 _____, feet per second

Field data from location #3

Distance from wall ?

Analysis of audio file.

Time of 1st sound_____
Echo of 1st sound ____
Difference _____

Time of 2nd sound ____
Echo of 2nd sound ____
Difference _____

Time of 3rd sound ____
Echo of 3rd sound ____
Difference _____

average
Difference _____

Speed of sound is equal to distance from wall times two divided by the average time difference between the main sound and the echo.

Rate = 2 x Distance / Time

Speed of Sound: Location #1 _____, feet per second