

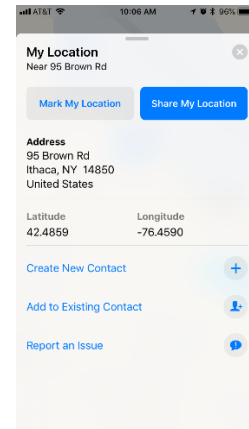
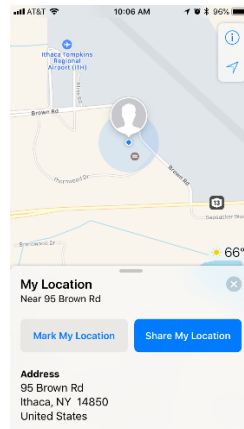
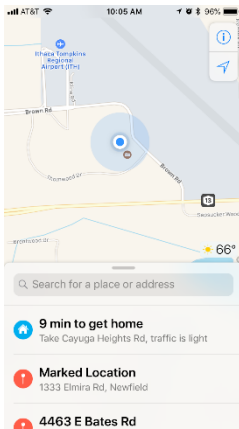
Directions for getting GPS Coordinates

After you collect a sample and take pictures it's very important that you document the location. The best way to do this is with GPS coordinates. There are three commonly used formats for expressing latitude and longitude: Degrees, Minutes, Seconds (DMS) (41°24'12.2"N 2°10'26.5"E), Degrees and Decimal Minutes (DDM) (41 24.2028, 2 10.4418), and Decimal Degrees (DD) (41.40338, 2.17403). **I prefer coordinates be in DD format.** How GPS coordinates are calculated and how the formats differ is actually pretty interesting. You can learn more here:

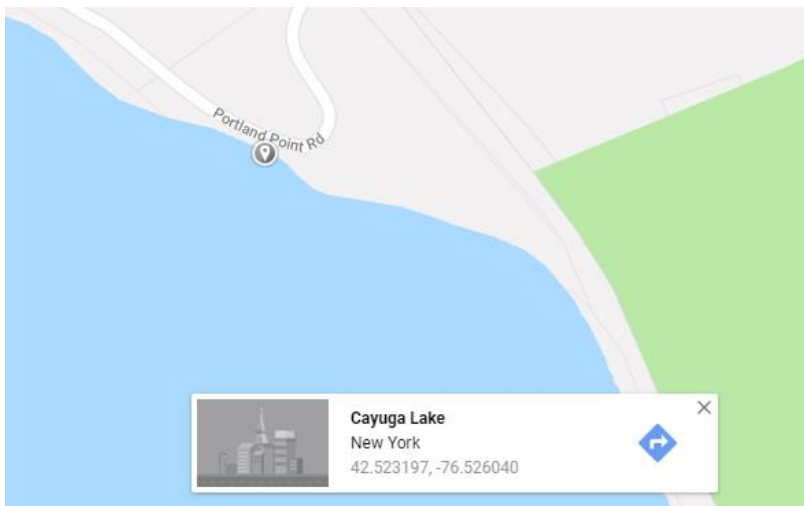
<http://www.ubergizmo.com/how-to/read-gps-coordinates/>

Steps for retrieving GPS coordinates using your smart phone or computer:

1. Using Maps on iPhone
 - a. First, make sure location services is on.
 - i. Settings → Privacy → location services should be on and under Maps it should say "while using"
 - b. Click on Maps
 - c. Click on blue blinking dot (that's your location)
 - d. Scroll down. The Lat-Long will be listed in DD format.



2. Google Maps on a computer
 - a. Go to google maps and click on the approximate point where you collected the sample/where you took the pictures.
 - b. The lat-long will pop up at the bottom of the screen in DD format.



3. Google Maps on your phone
 - a. Open app and press and hold where you collected sample/took photos
 - b. Lat-long will pop up at the top of the screen in DD format
4. iPhone compass
 - a. Open the app. The coordinates will be listed at the bottom of the screen in DMS format.

Note: Conversion between coordinate formats is not as easy as changing the formatting.

- 42.3467 -76.4589 **does not** equal 42°34'67" 76°45'89"
- You can convert coordinates here: <https://www.gpscoordinates.eu/convert-gps-coordinates.php>