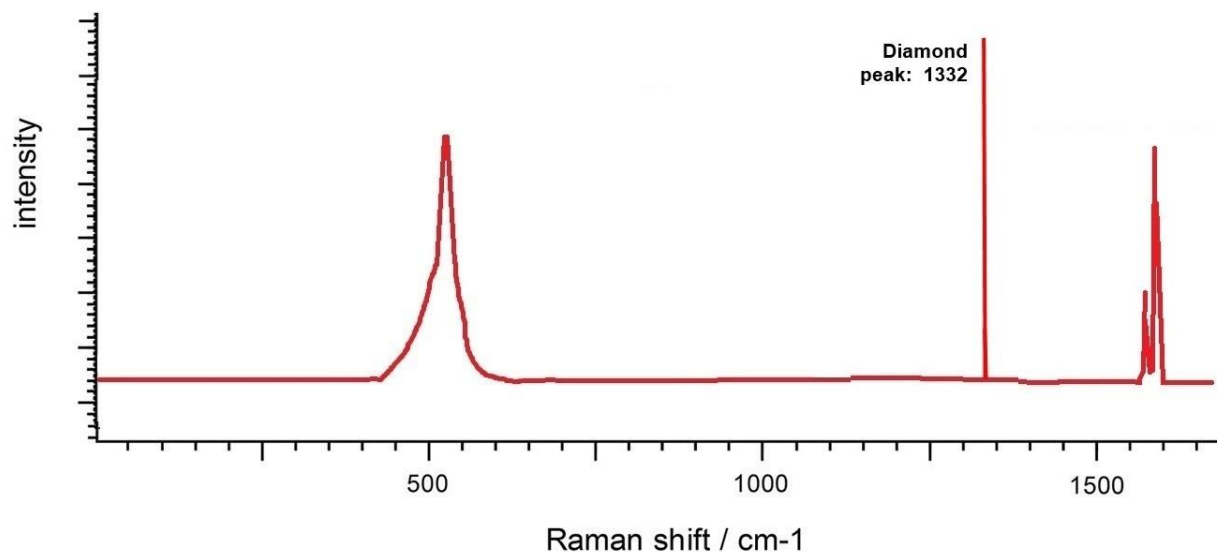


2020 MATE ROV Competition

Raman spectrum chart

Chemical contaminant	Main Peak (cm ⁻¹)	Sub Peak(s) (cm ⁻¹)
Arsenic Sulfide	385	420
Cadmium Sulfide	520 to 540	
Copper Oxide	297	
Diamond	1332	
Lead	1054	
Mercury	547	435
Polyflouroalkyl	1560 to 1580	1325
PCBs	1590	1575

Note: Diamonds are used as reference peaks in spectra from unknown sources. The spectra will have a diamond spike for reference purposes.



Raman spectrum of sediment contaminated with CdS (520-540 cm⁻¹) and PCBs (1590 and 1575). Note the diamond peak (1332 cm⁻¹).