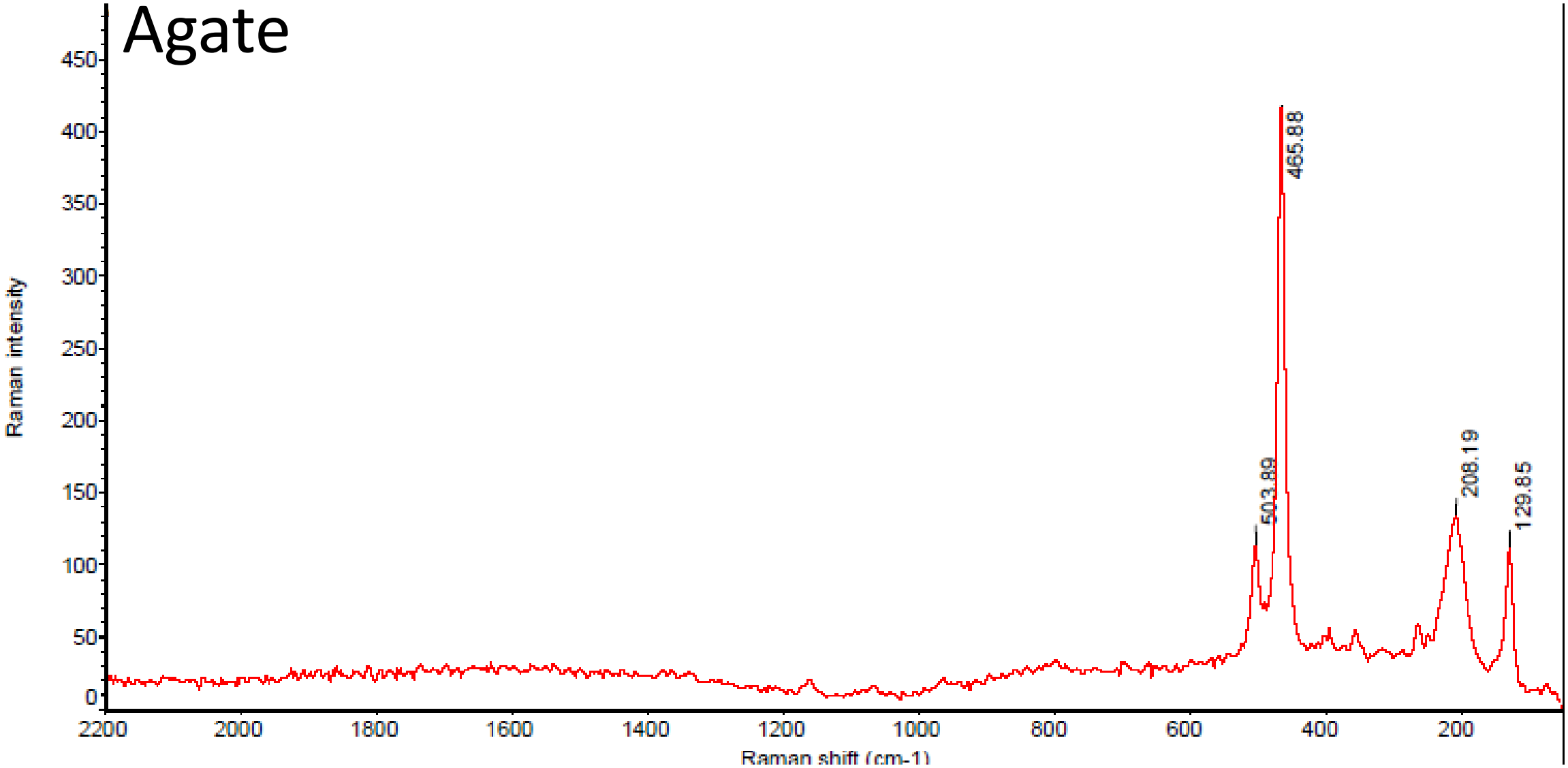
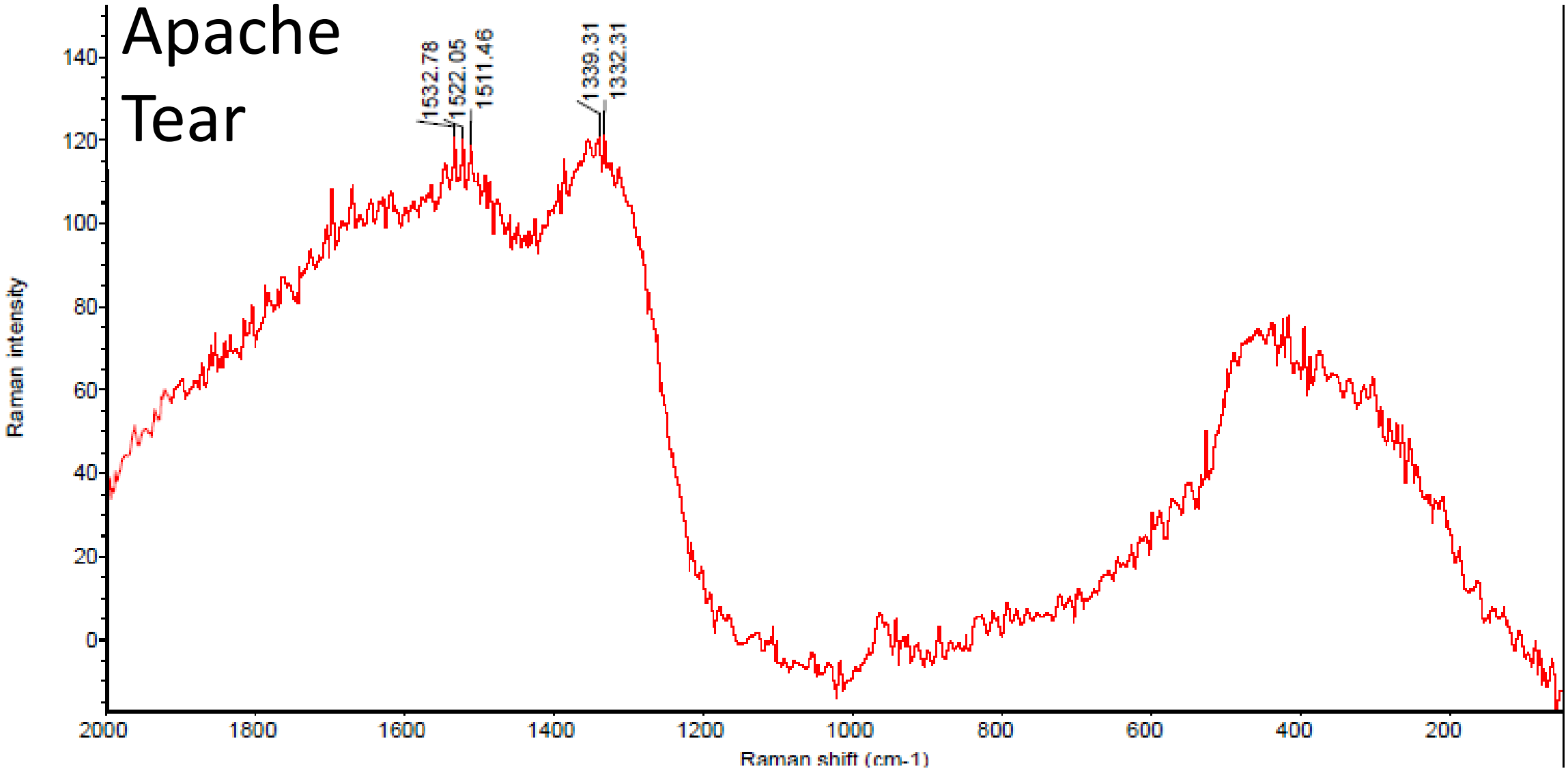
Mineral Database

Index

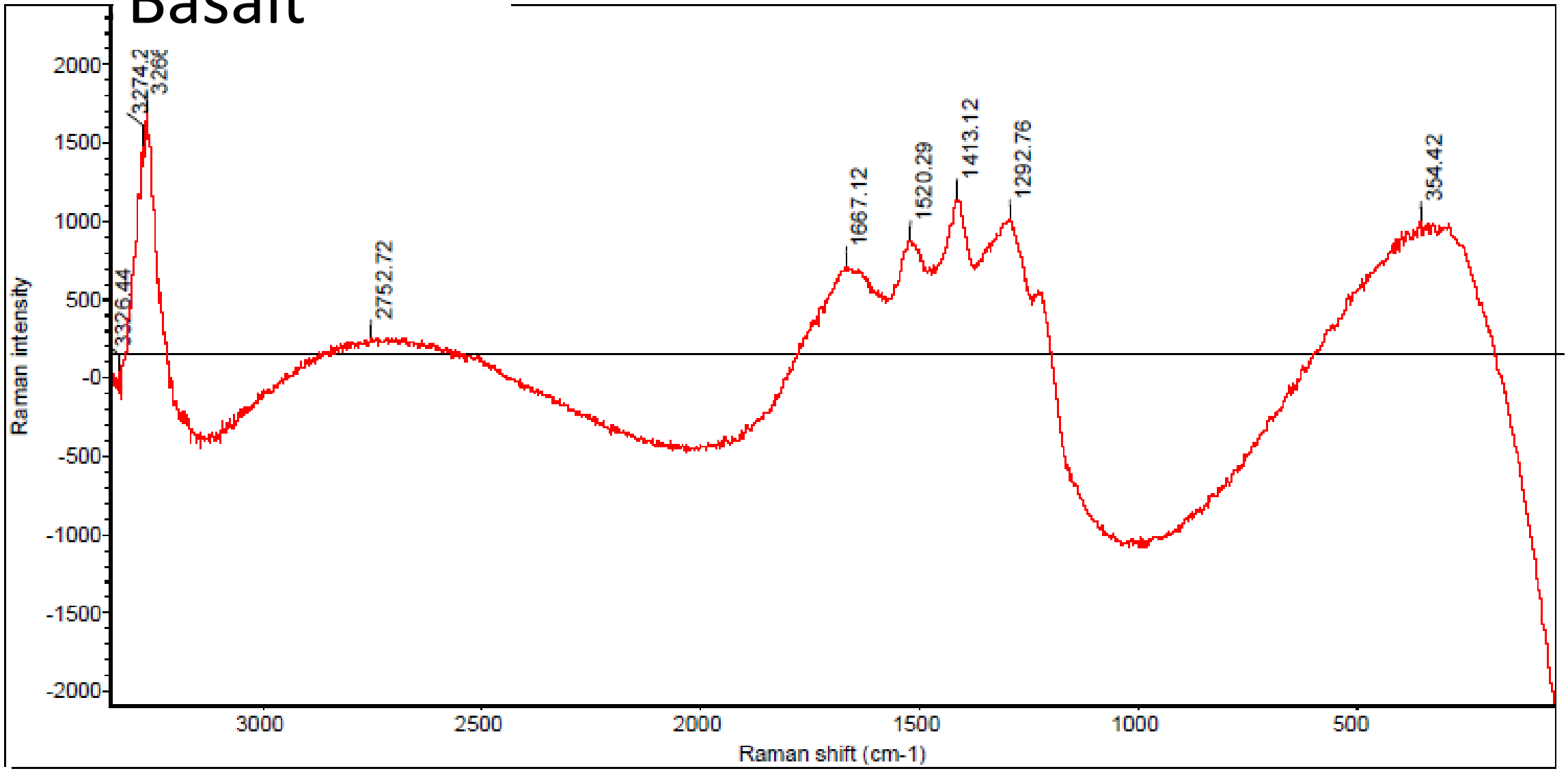
1. Agate
2. Apache Tear
3. Basalt
4. Calcite
5. Chalcopyrite
6. Copper Ore
7. Diabase
8. Feldspar
9. Fluorite
10. Galena
11. Garnet
12. Granite
13. Jasper
14. Lava Rocks
15. Limestone
16. Magnesite
17. Marble
18. Milky Quartz
19. Muscovite
20. Olivine
21. Onyx
22. Petrified Wood
23. Pyrite
24. Rhyolite
25. Rose Quartz
26. Sandstone
27. Schist
28. Serpentine
29. Sulphur
30. Talc
31. Topaz
32. Tuff

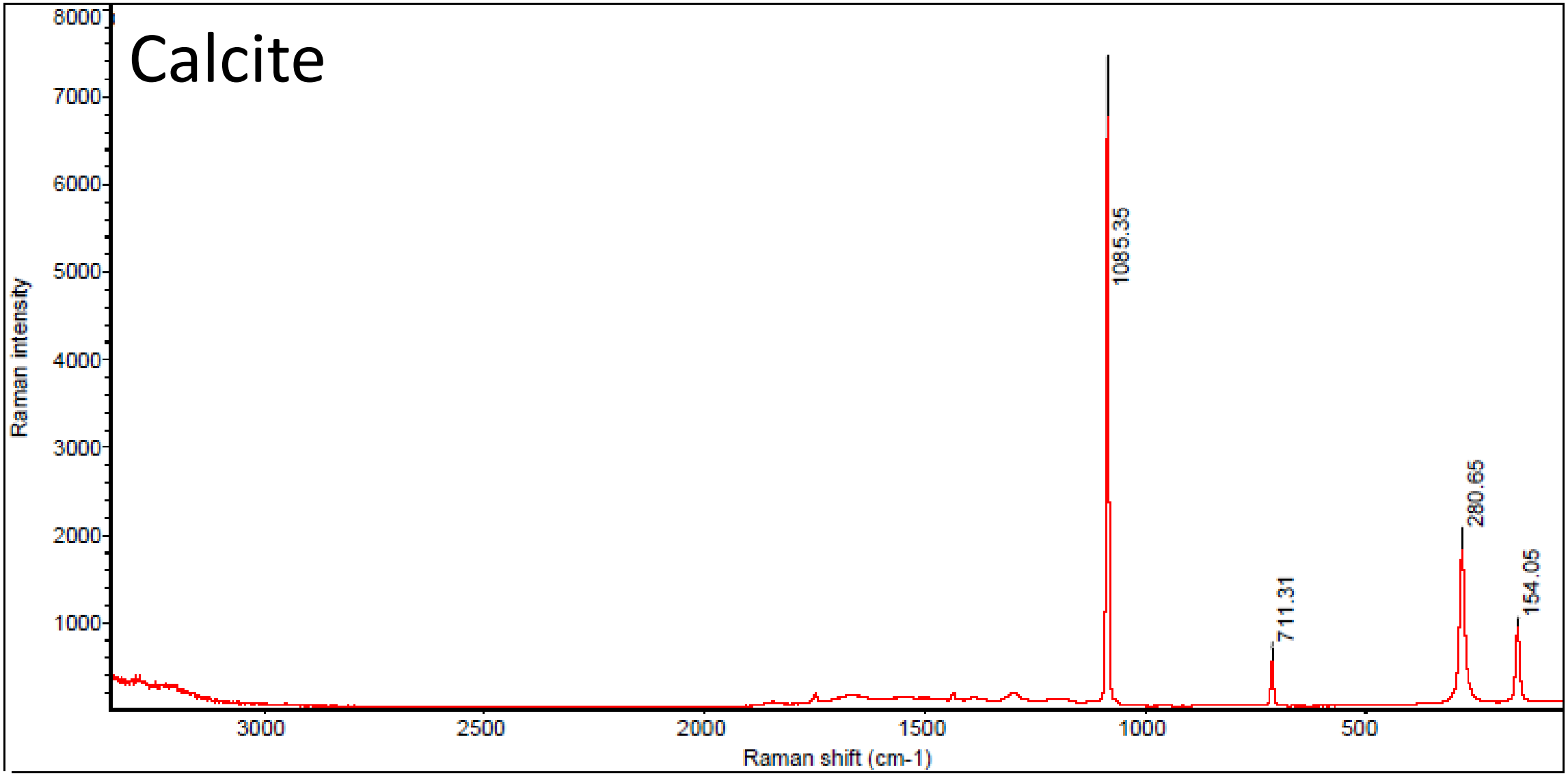
Agate


Raman intensity
450
400
350
300
250
200
150
100
50
0
2200
2000
1800
1600
1400
1200
1000
800
600
400
200
Raman shift (cm-1)
503.89
465.88
208.19
129.85

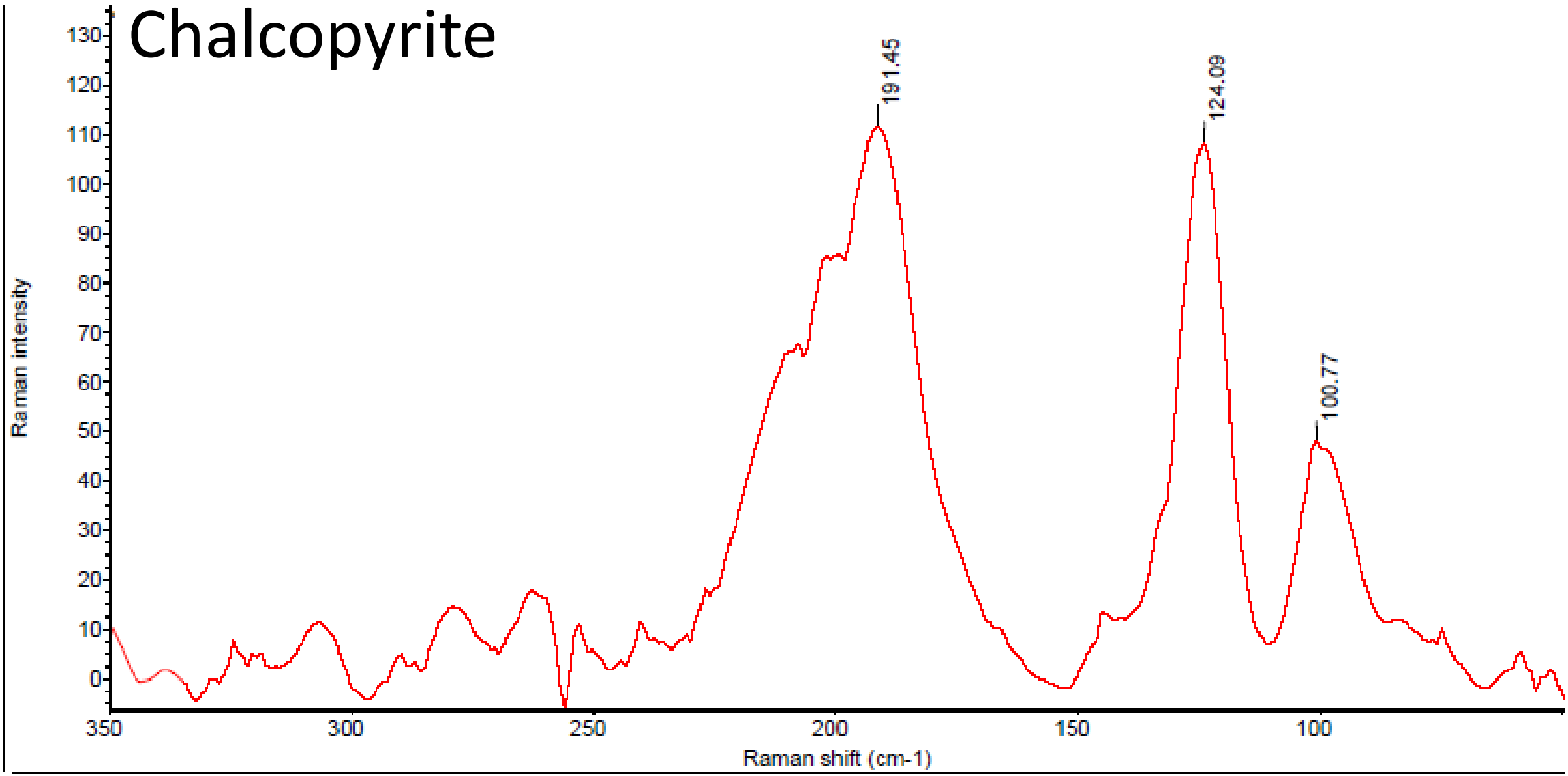

Apache
Tear
1532.78
1522.05
1511.46
1339.31
1332.31
Raman intensity
140
120
100
80
60
40
20
0
2000
1800
1600
1400
1200
1000
800
600
400
200
Raman shift (cm-1)

Basalt

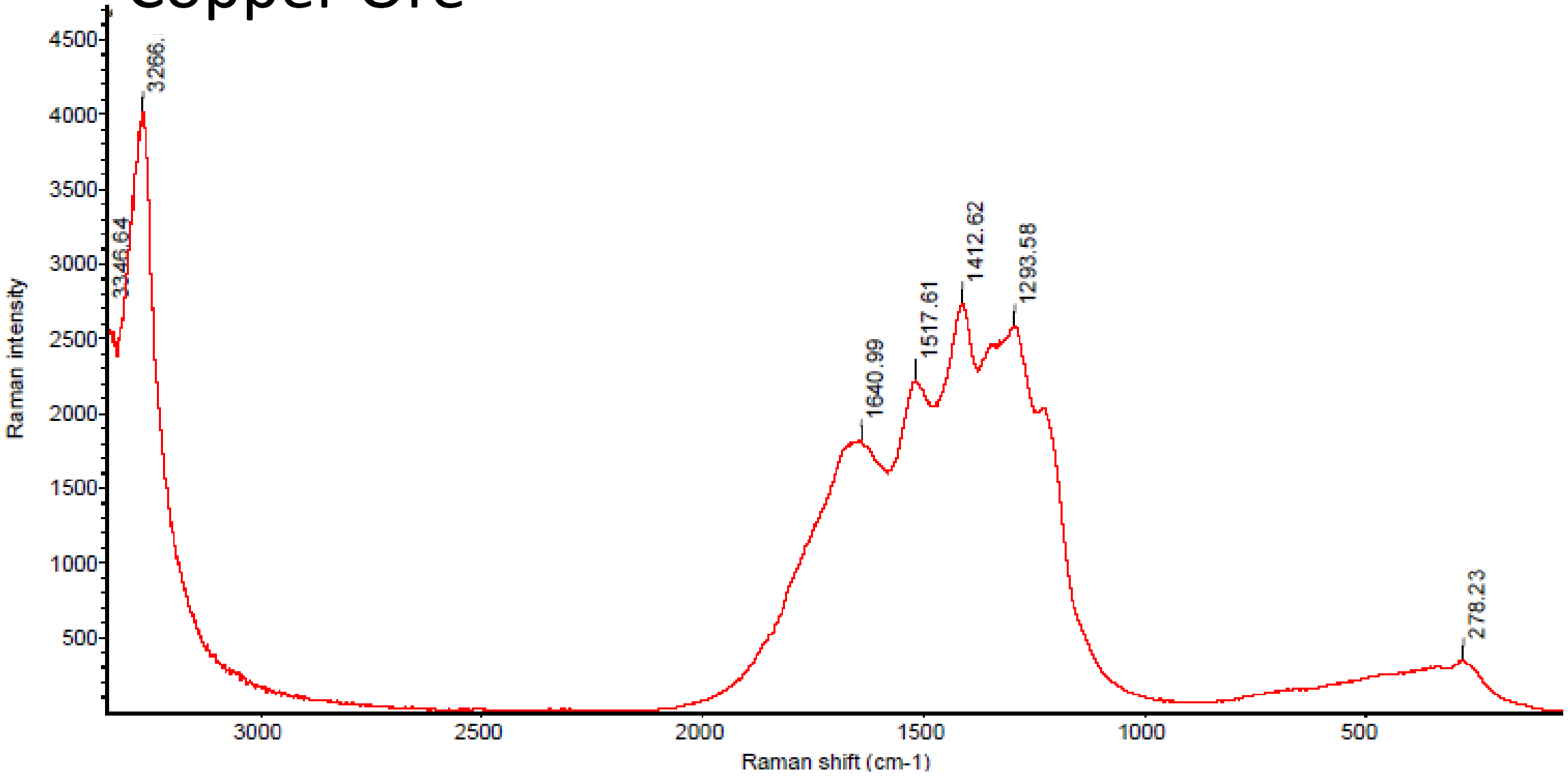

Raman intensity
2000
1500
1000
500
-0
-500
-1000
-1500
-2000
3274.2
3326.44
2752.72
1667.12
1520.29
1413.12
1292.76
354.42
3000
2500
2000
1500
1000
500
Raman shift (cm-1)


Calcite
Raman intensity
8000
7000
6000
5000
4000
3000
2000
1000
1085.35
711.31
280.65
154.05
3000
2500
2000
1500
1000
500
Raman shift (cm-1)

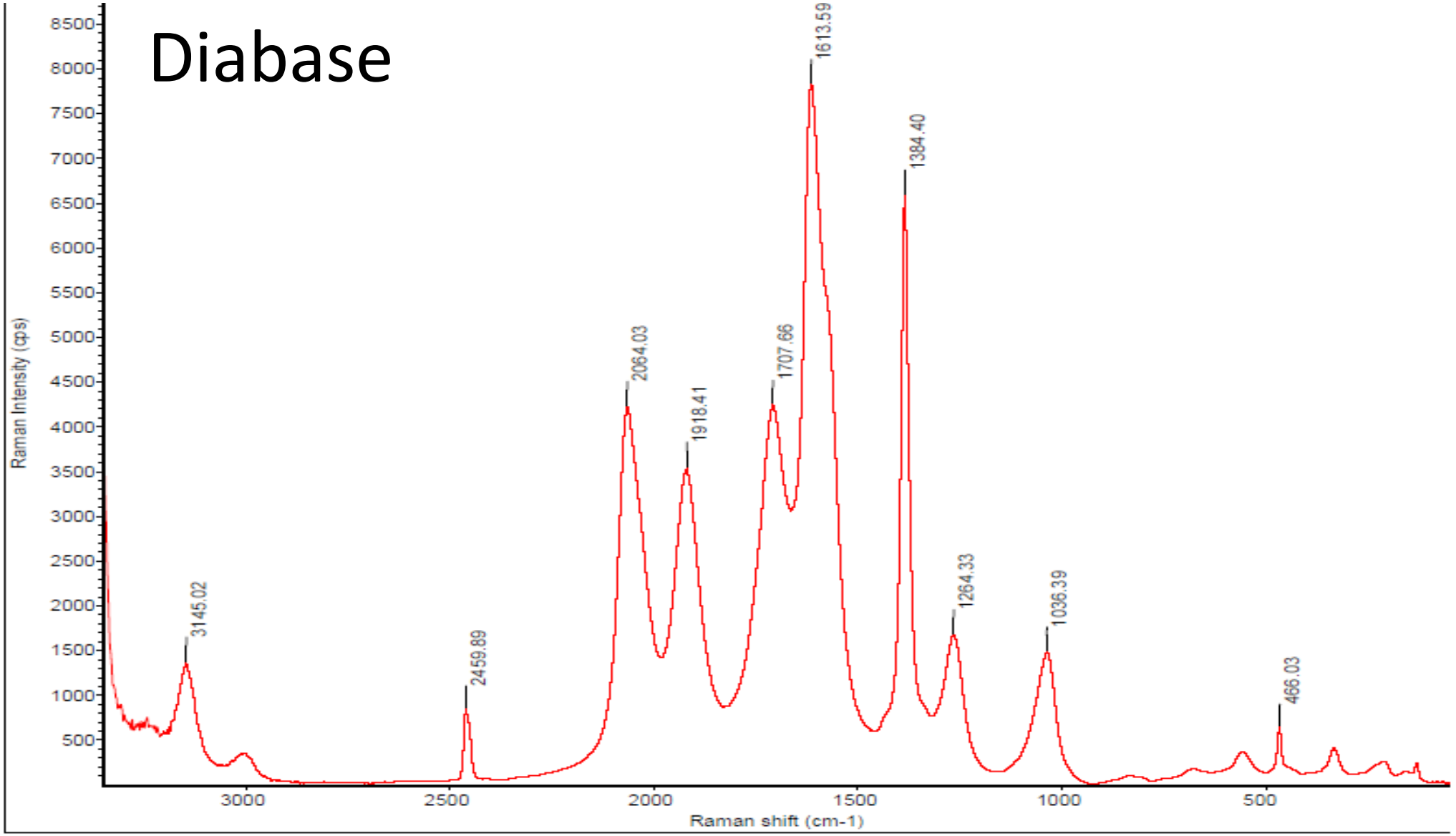
Chalcopyrite



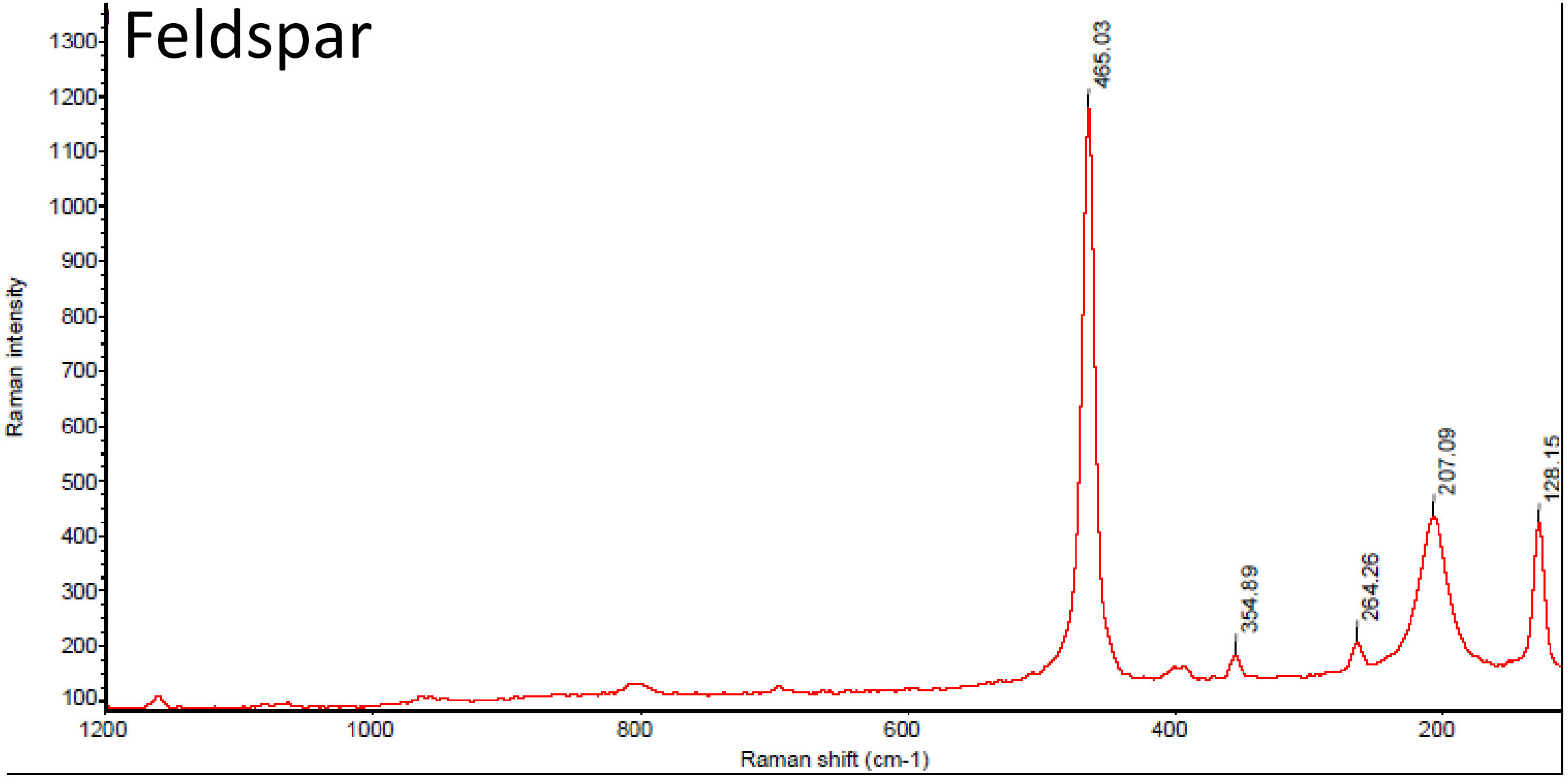
Copper Ore


Raman intensity
4500
4000
3500
3000
2500
2000
1500
1000
500
3266.
3346.64
1640.99
1517.61
1412.62
1293.58
278.23
3000
2500
2000
1500
1000
500
Raman shift (cm-1)

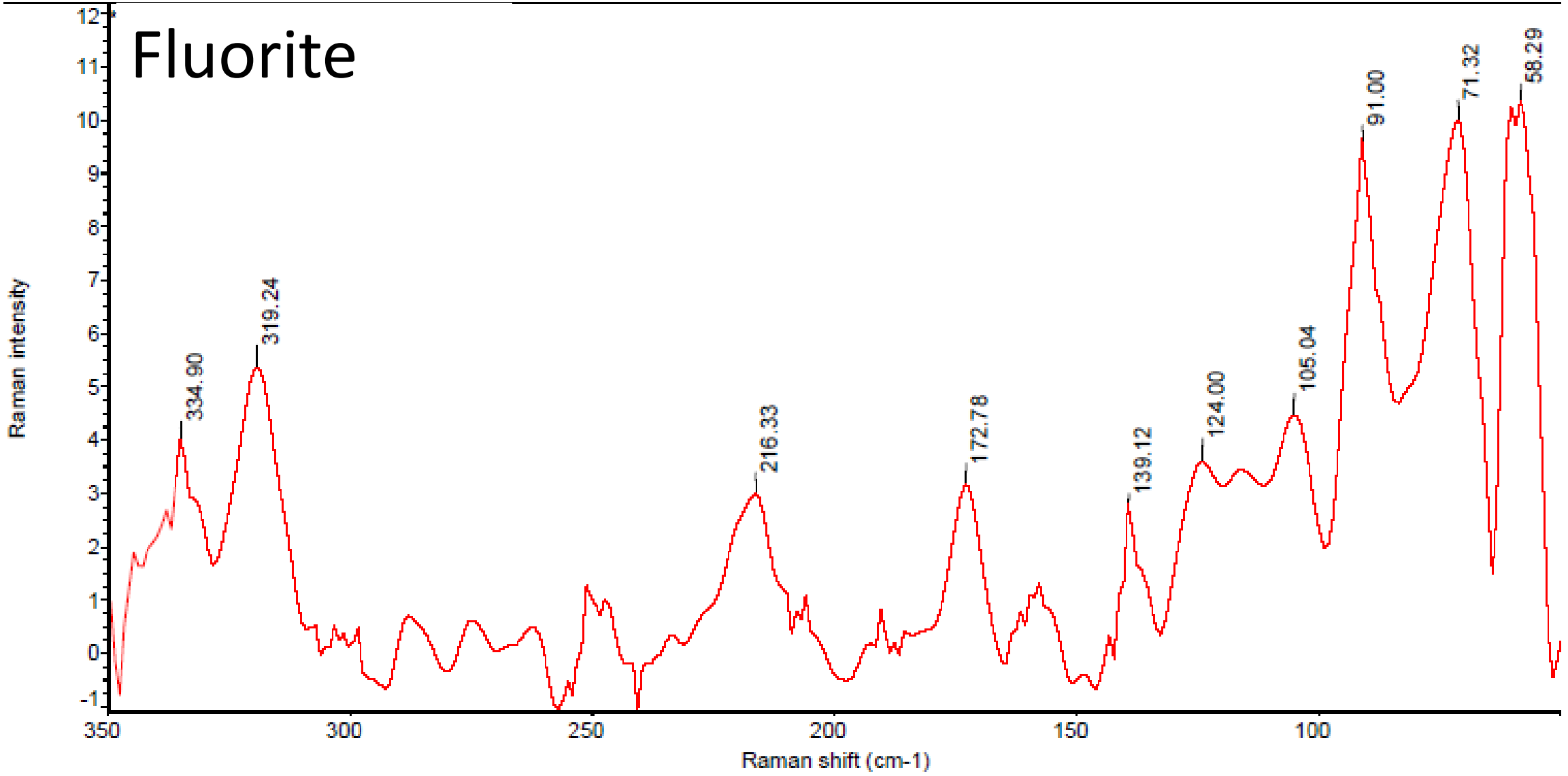
Diabase


Raman Intensity (cps)
8500
8000
7500
7000
6500
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500
1000
500
3145.02
2459.89
2064.03
1918.41
1707.66
1613.59
1384.40
1264.33
1036.39
466.03
3000
2500
2000
1500
1000
500
Raman shift (cm-1)

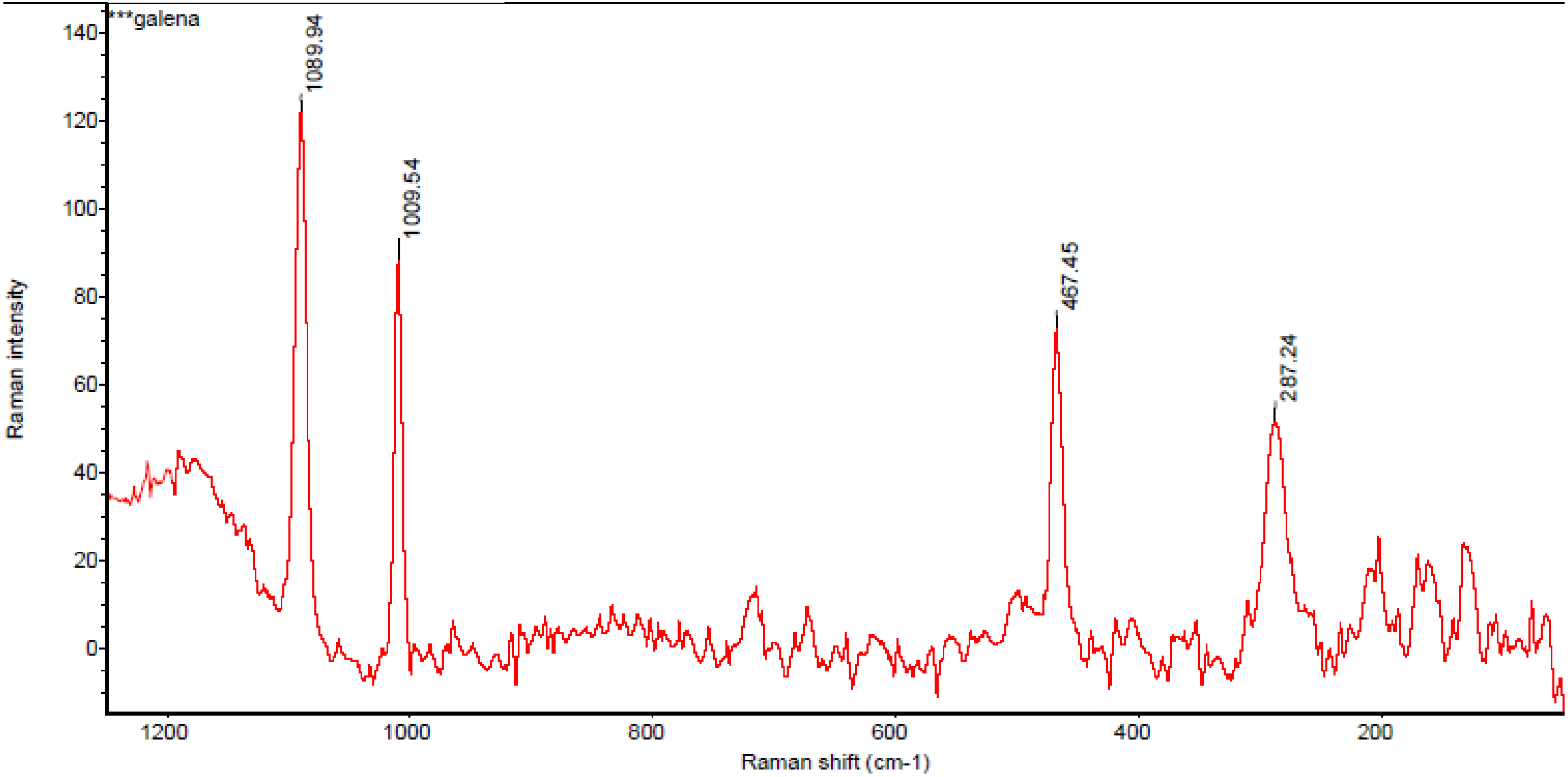
Feldspar


Raman intensity
1300
1200
1100
1000
900
800
700
600
500
400
300
200
100
1200
1000
800
600
400
200
Raman shift (cm-1)
465.03
354.89
264.26
207.09
128.15

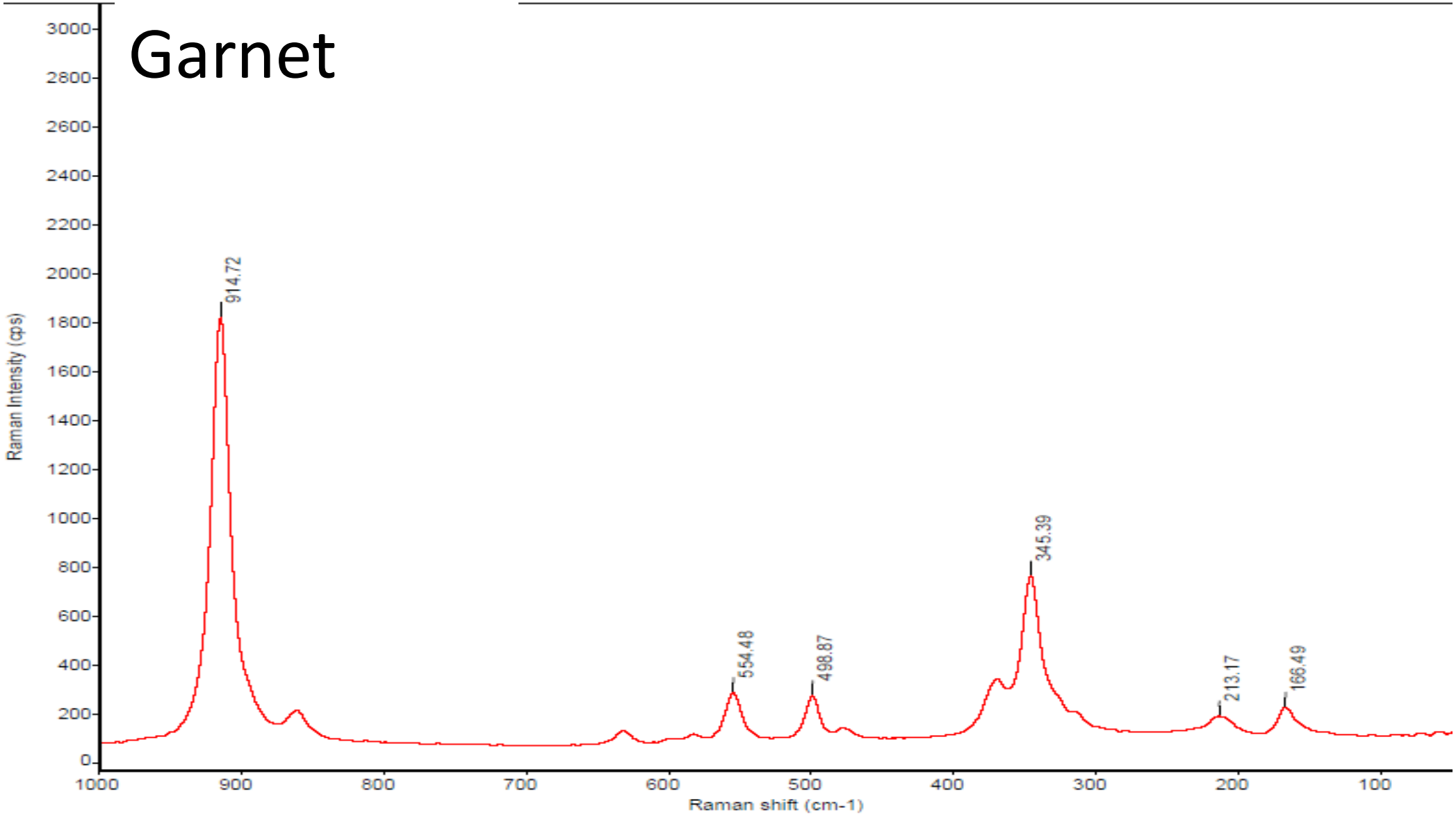
Fluorite


Raman intensity
Raman shift (cm-1)
334.90
319.24
216.33
172.78
139.12
124.00
105.04
91.00
71.32
58.29

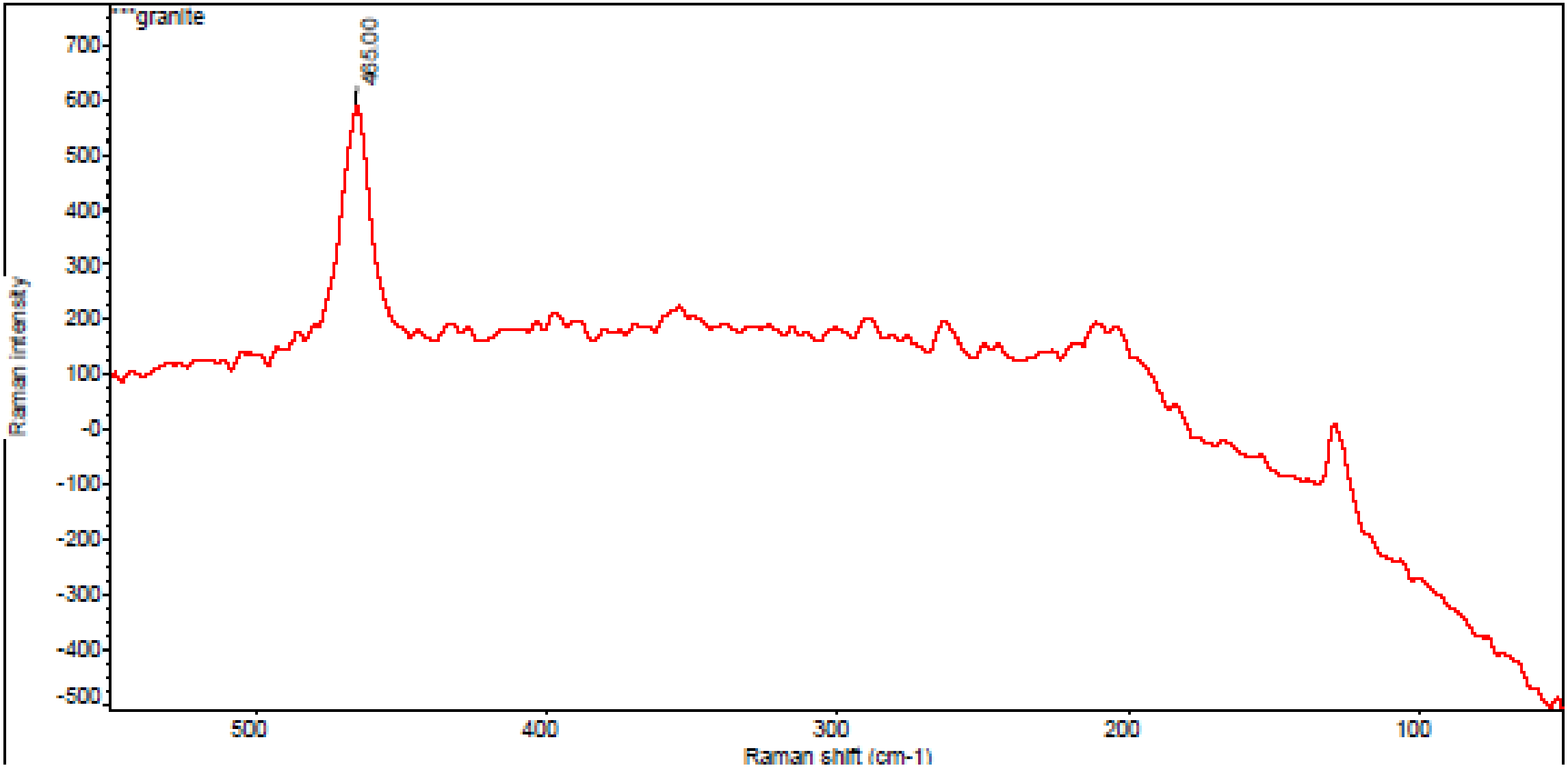
Galena


***galena
1089.94
1009.54
467.45
287.24
Raman intensity
Raman shift (cm-1)
140
120
100
80
60
40
20
0
1200
1000
800
600
400
200

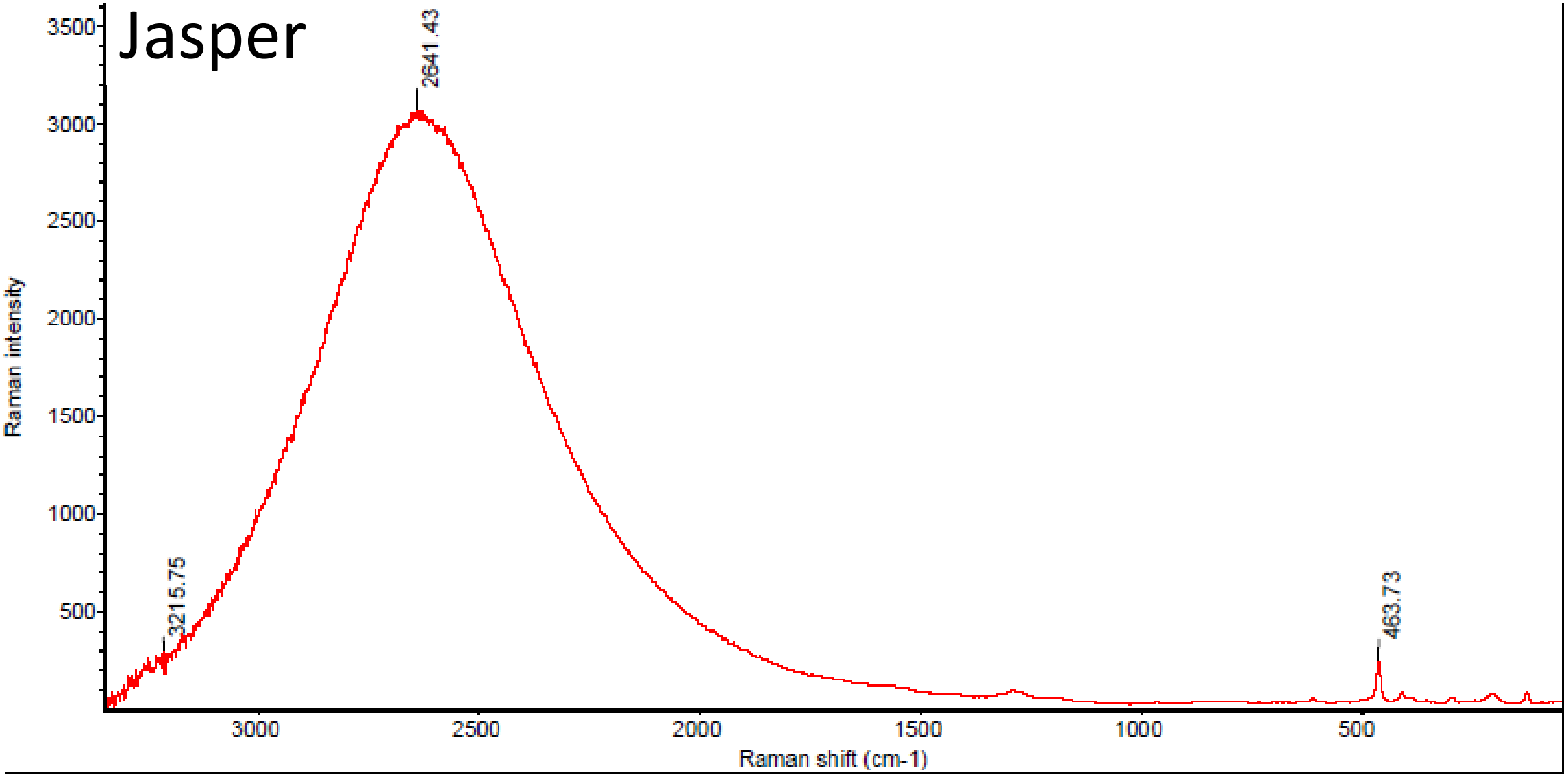
Garnet


Raman Intensity (cps)
3000
2800
2600
2400
2200
2000
1800
1600
1400
1200
1000
800
600
400
200
0
914.72
554.48
498.87
345.39
213.17
166.49
1000
900
800
700
600
500
400
300
200
100
Raman shift (cm-1)

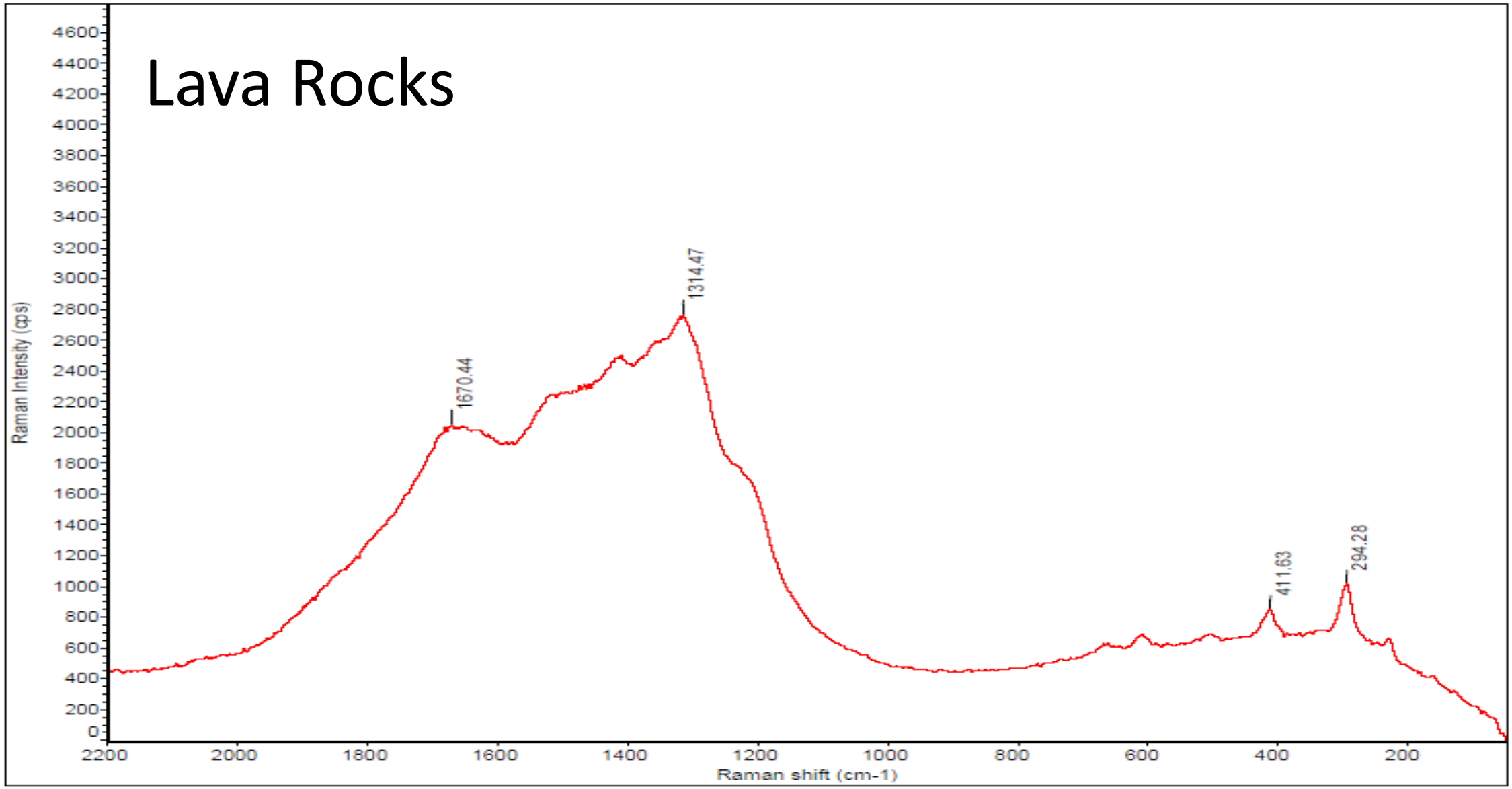
Granite


granite
465.00
700
600
500
400
300
200
100
-0
-100
-200
-300
-400
-500
Raman intensity
500
400
300
200
100
Raman shift (cm-1)

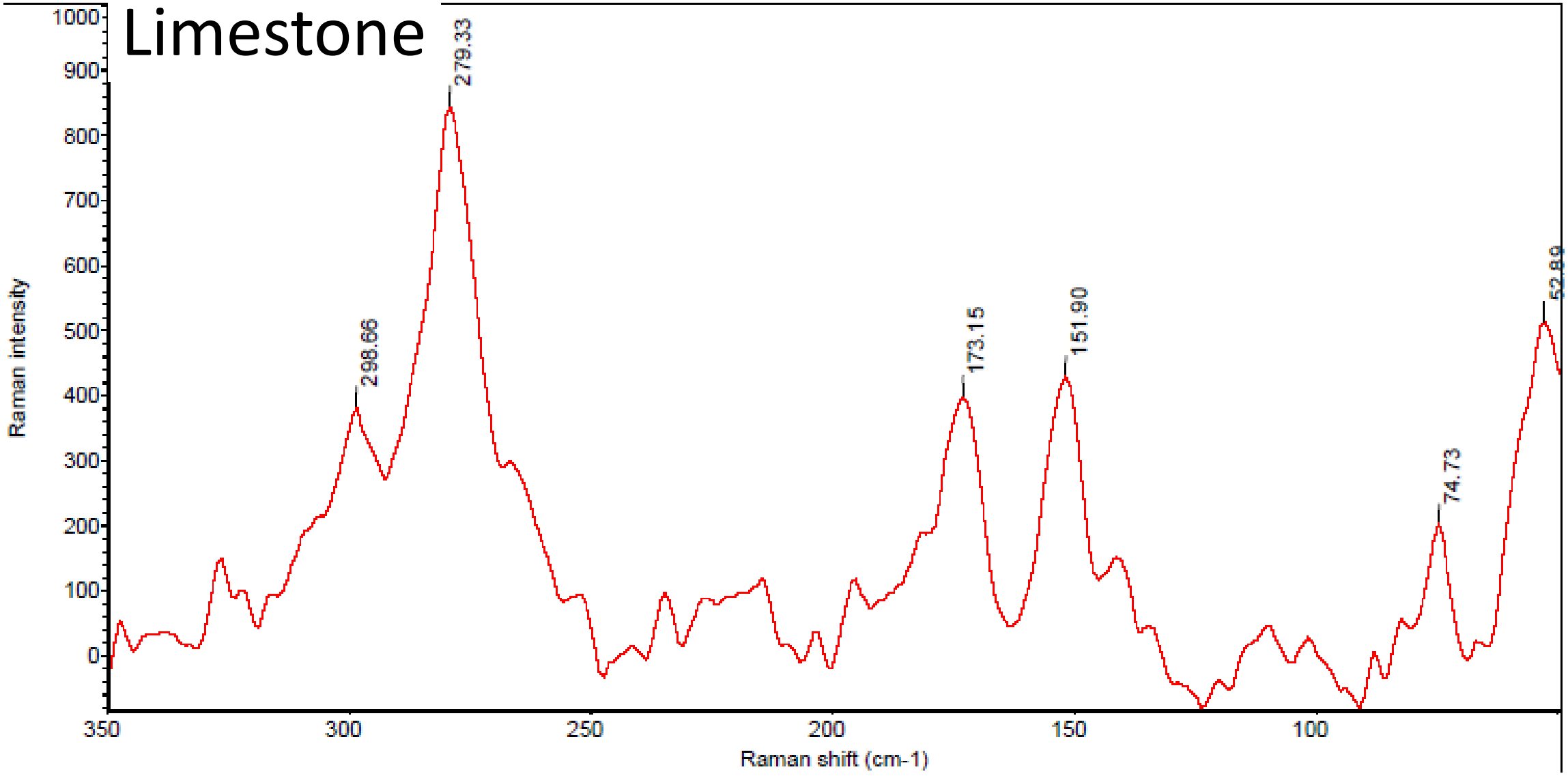
Jasper


2641.43
3215.75
463.73
Raman intensity
Raman shift (cm-1)
3500
3000
2500
2000
1500
1000
500
3000
2500
2000
1500
1000
500

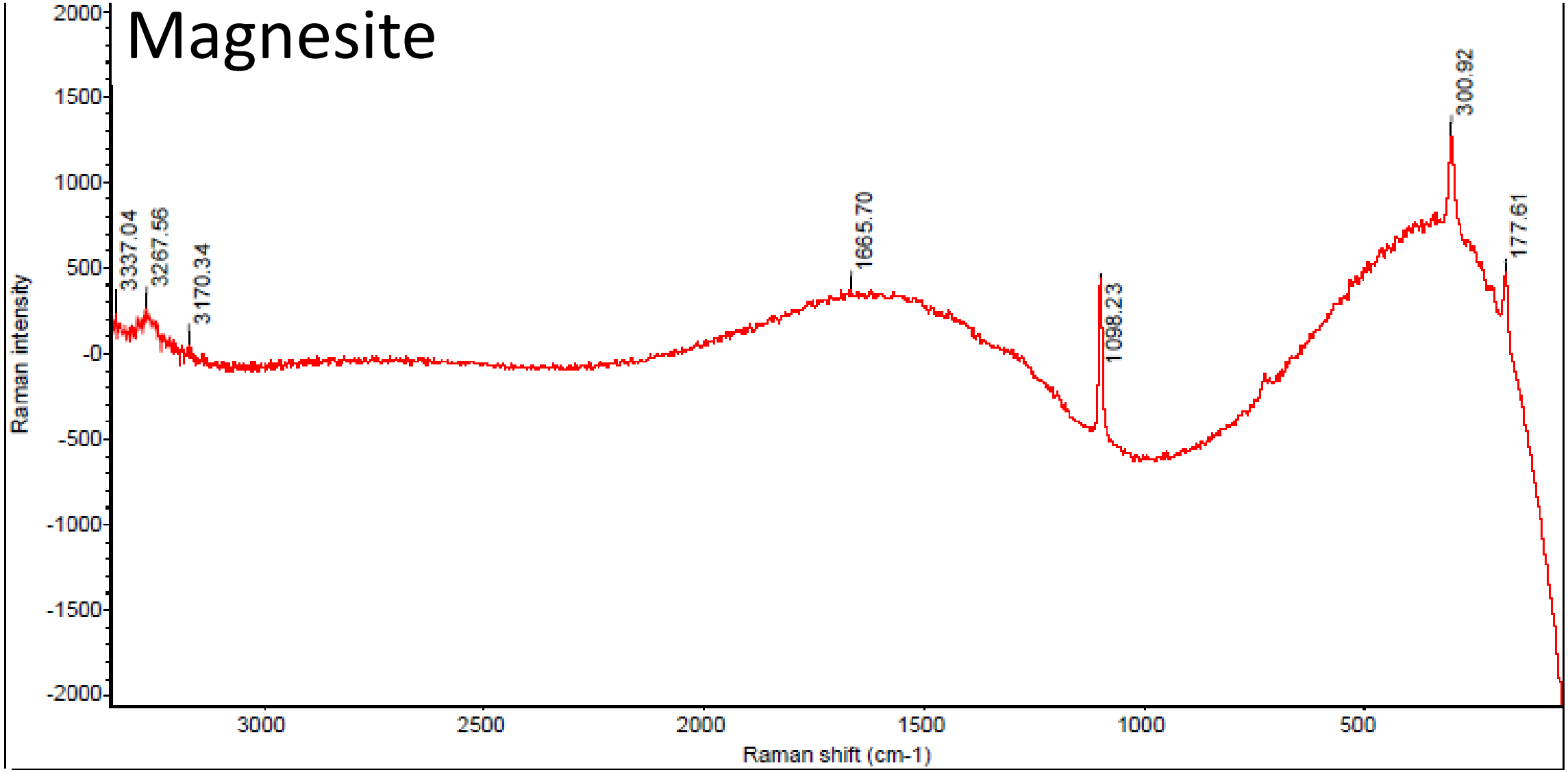
Lava Rocks


Raman Intensity (cps)
4600
4400
4200
4000
3800
3600
3400
3200
3000
2800
2600
2400
2200
2000
1800
1600
1400
1200
1000
800
600
400
200
0
1670.44
1314.47
411.63
294.28
2200
2000
1800
1600
1400
1200
1000
800
600
400
200
Raman shift (cm-1)

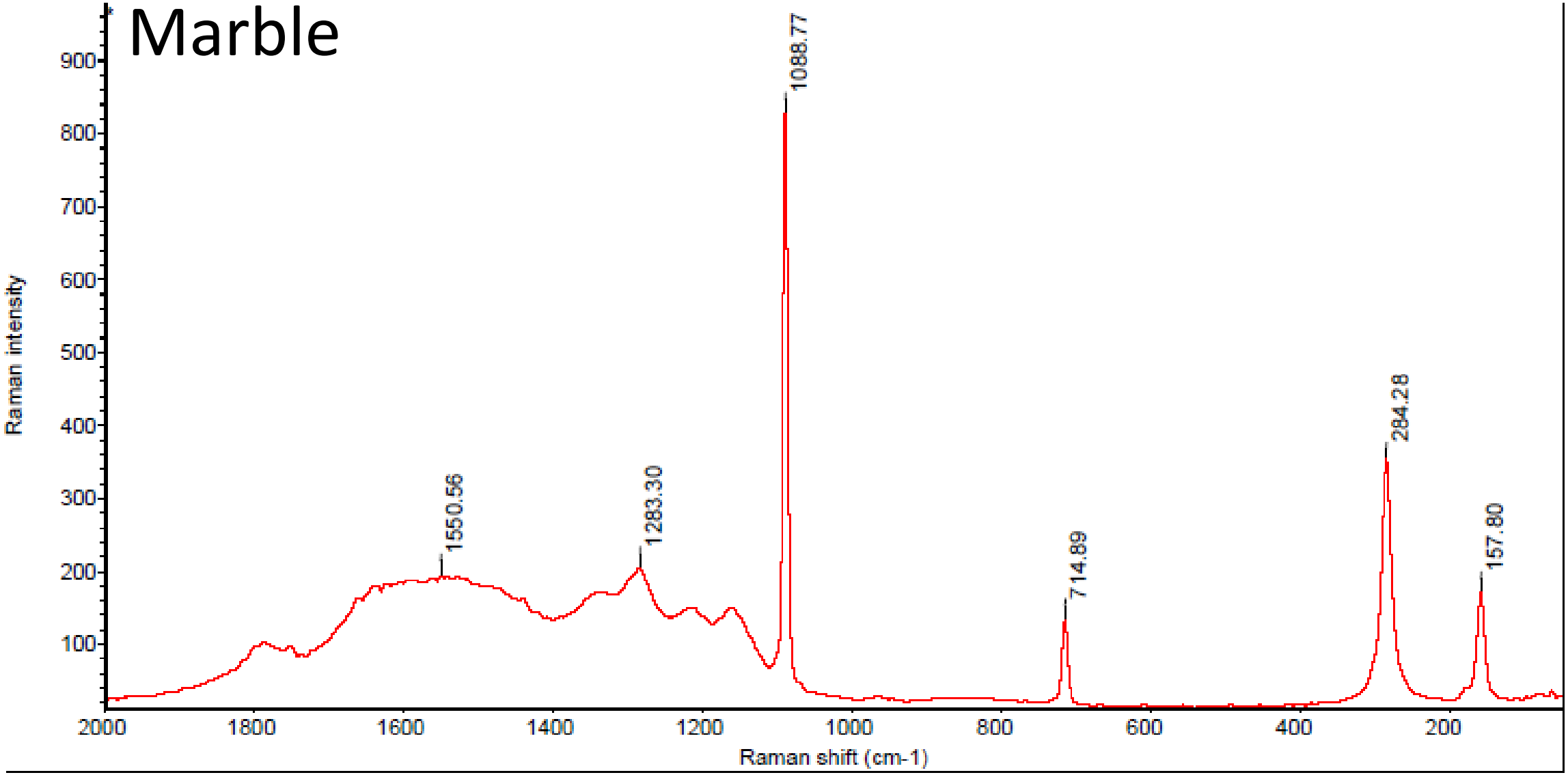
Limestone


Raman intensity
1000
900
800
700
600
500
400
300
200
100
0
279.33
298.66
173.15
151.90
74.73
52.89
350
300
250
200
150
100
Raman shift (cm-1)

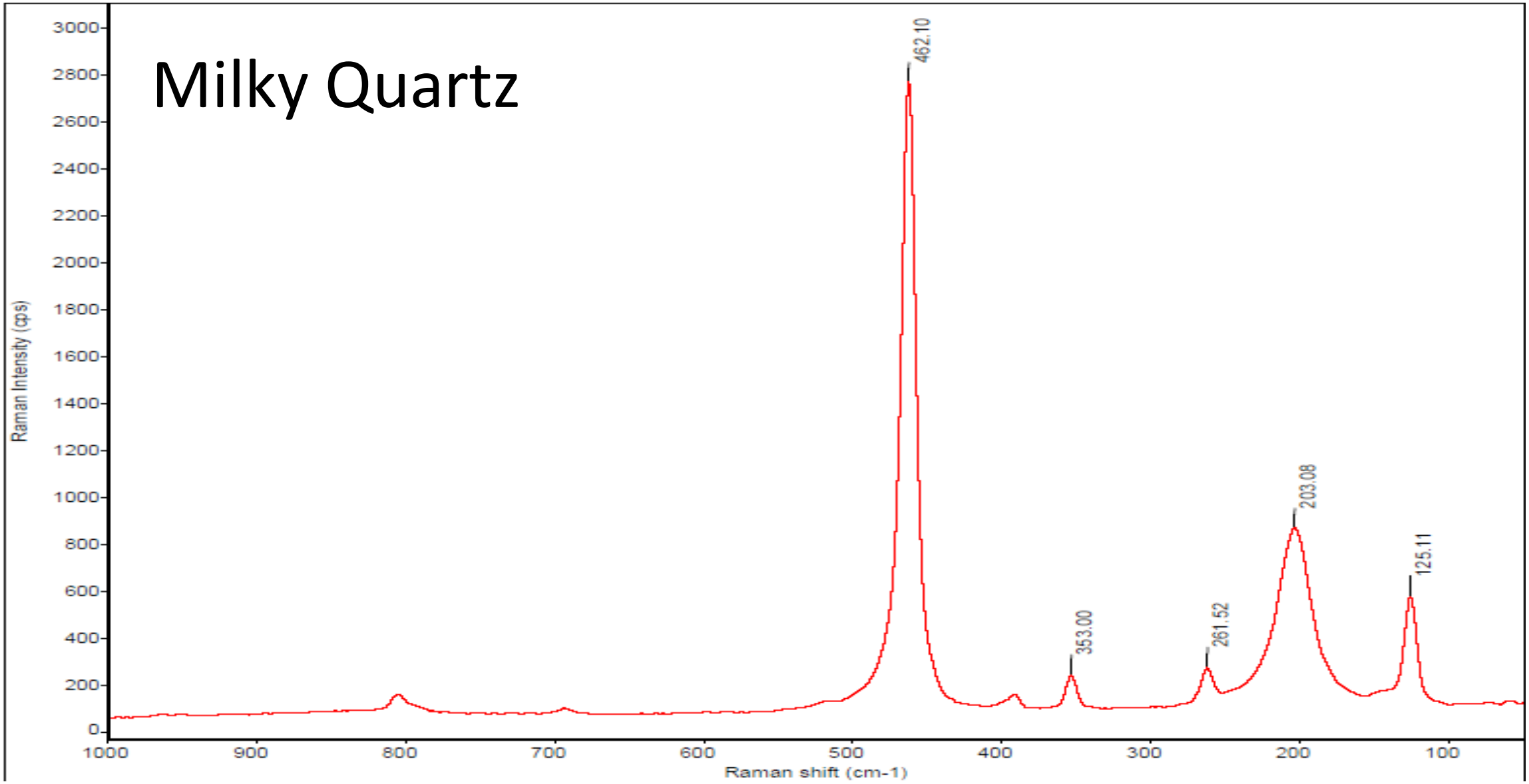
Magnesite


Raman intensity
2000
1500
1000
500
-0
-500
-1000
-1500
-2000
3337.04
3267.56
3170.34
1665.70
1098.23
300.92
177.61
3000
2500
2000
1500
1000
500
Raman shift (cm-1)

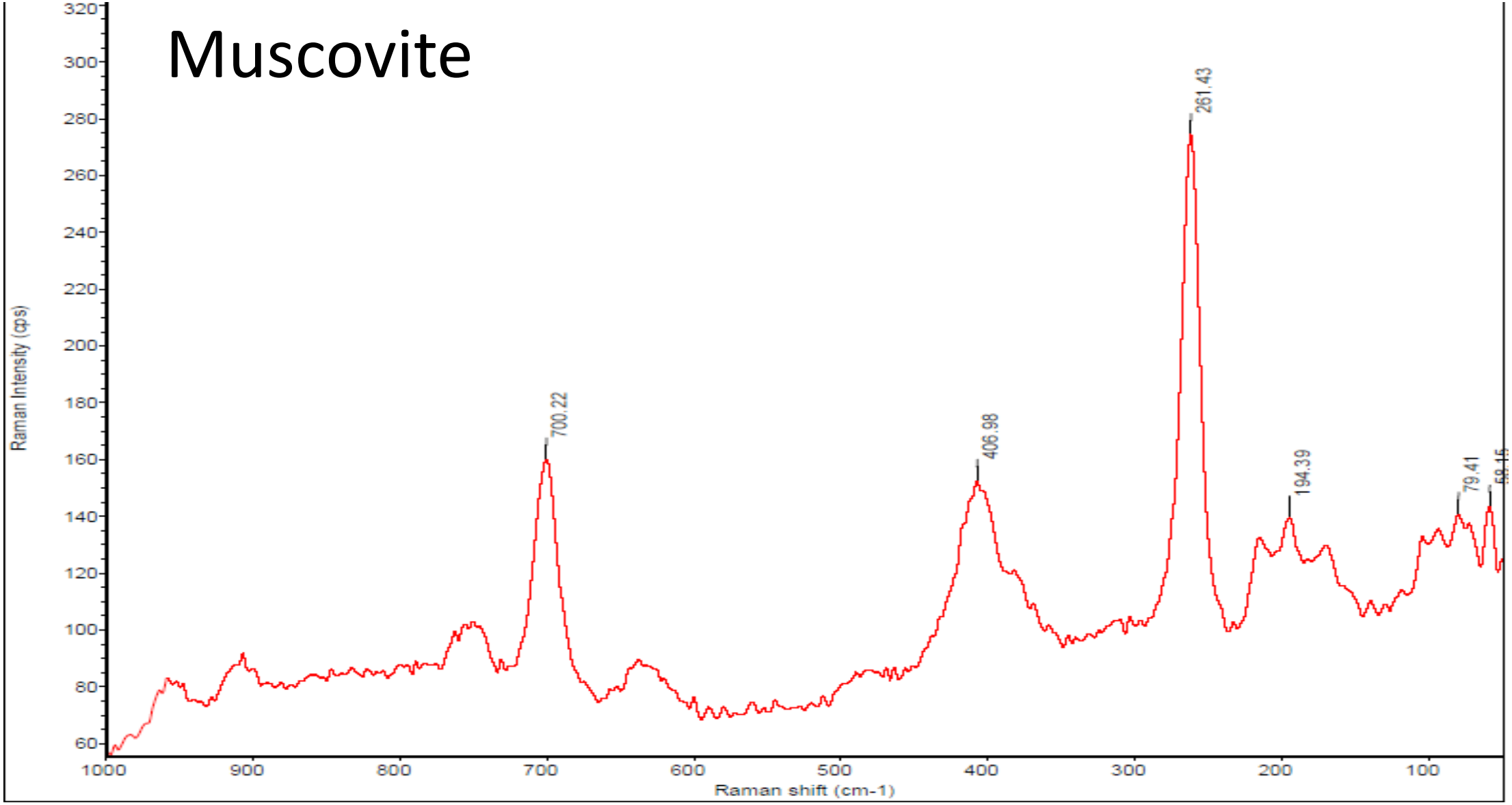
Marble


Raman intensity
900
800
700
600
500
400
300
200
100
1088.77
1550.56
1283.30
714.89
284.28
157.80
2000
1800
1600
1400
1200
1000
800
600
400
200
Raman shift (cm-1)

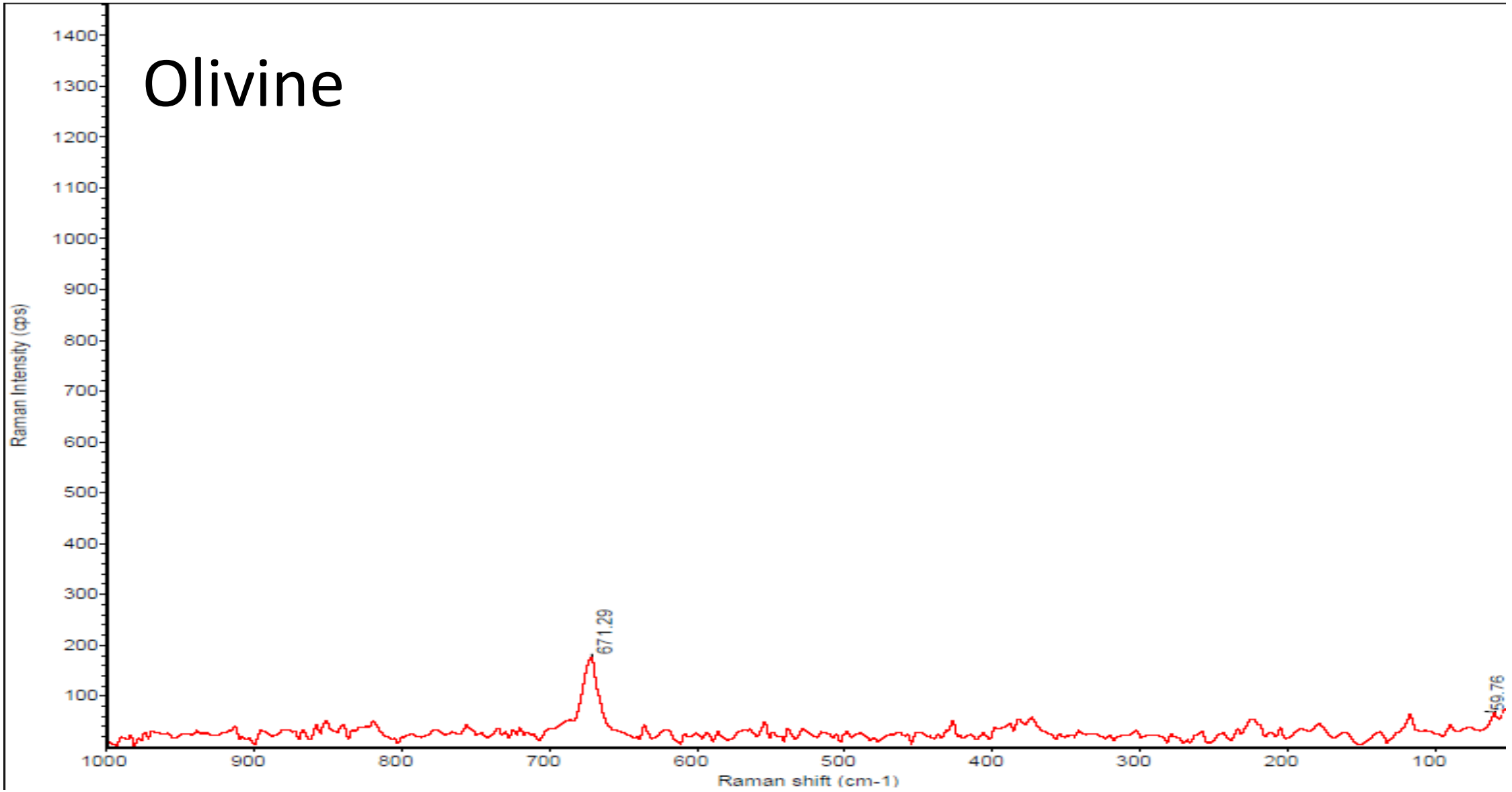
Milky Quartz



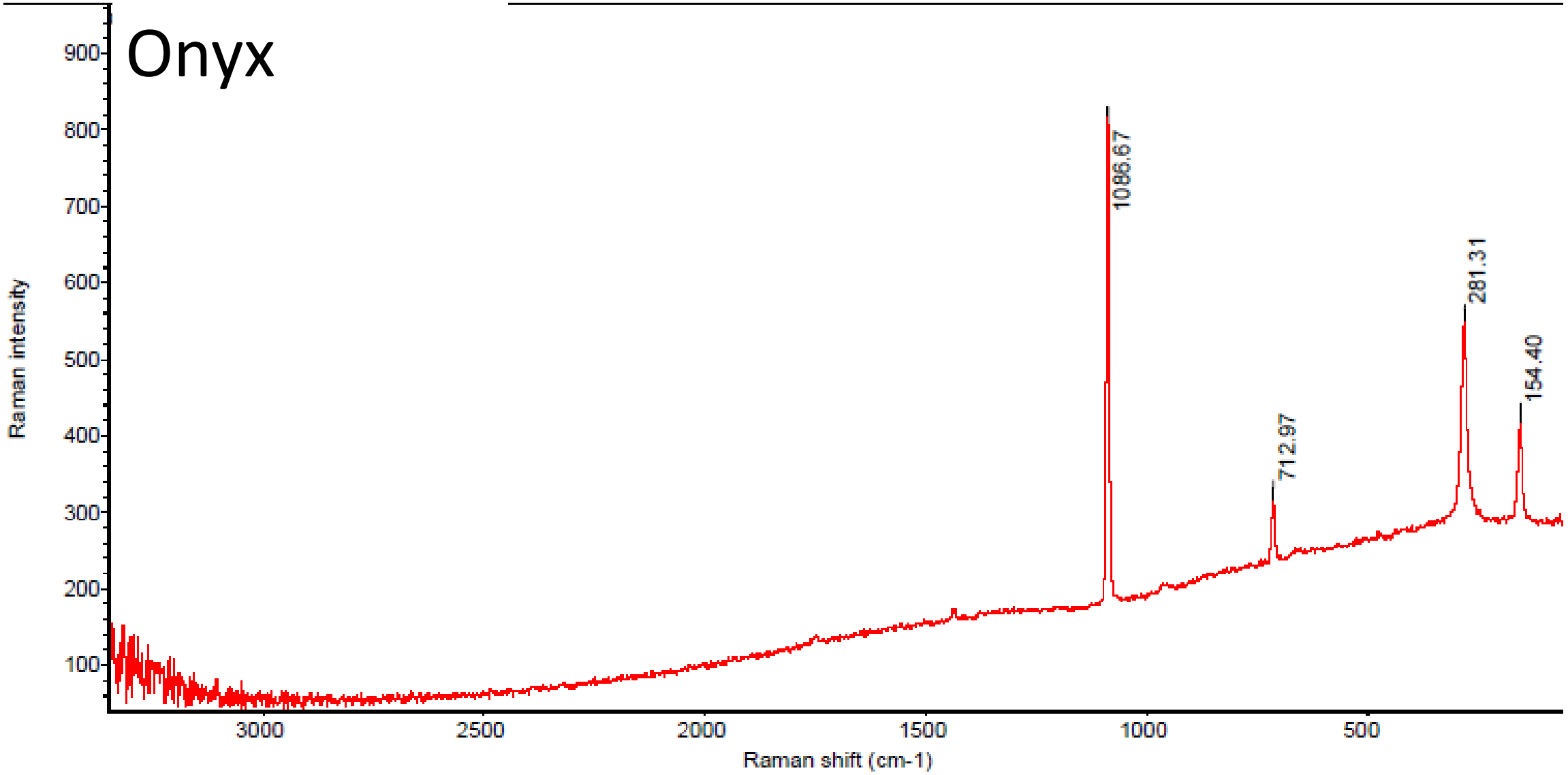
Muscovite


Raman Intensity (cps)
320
300
280
260
240
220
200
180
160
140
120
100
80
60
700.22
406.98
261.43
194.39
79.41
1000
900
800
700
600
500
400
300
200
100
Raman shift (cm-1)

Olivine

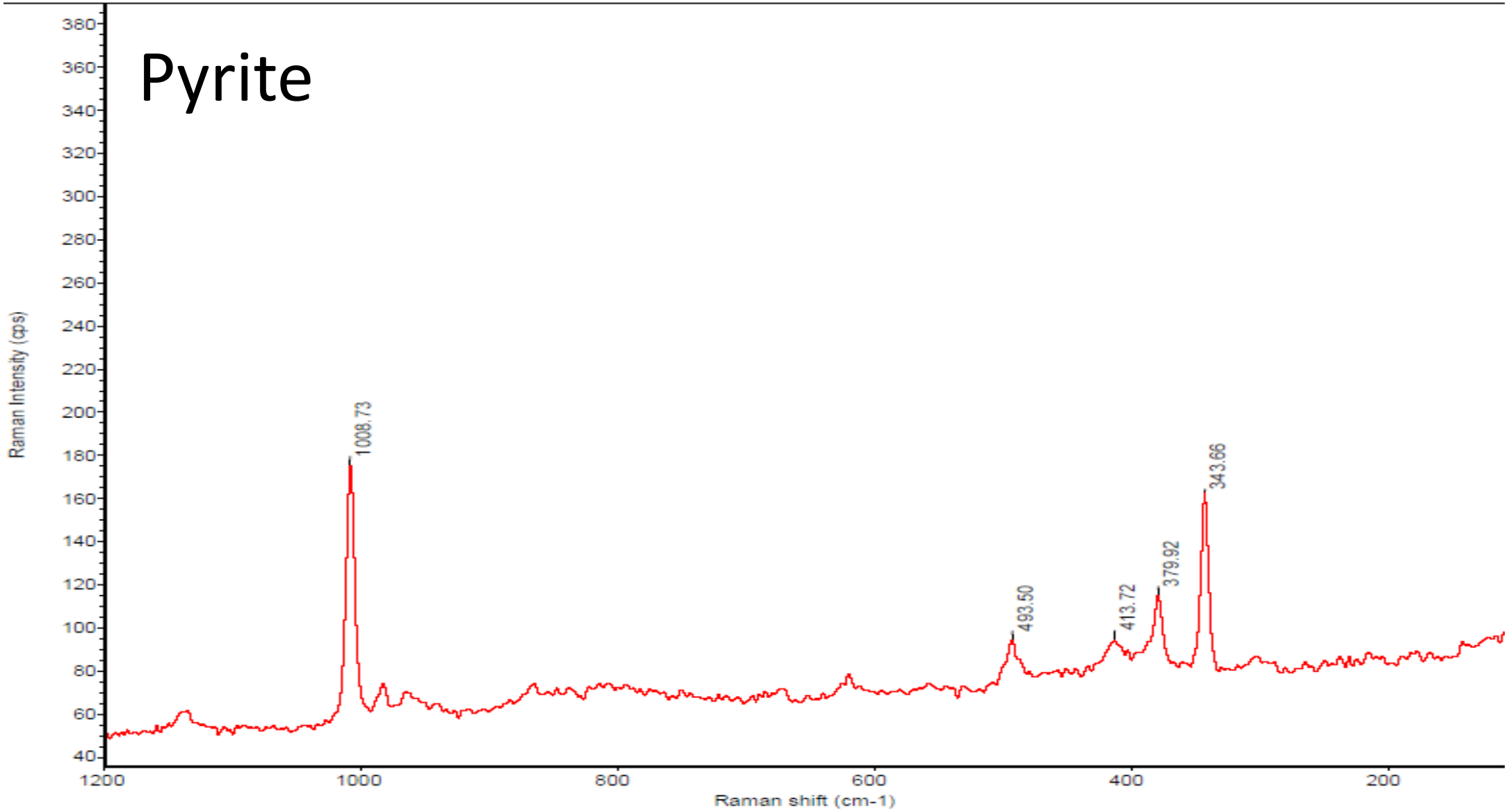

Raman Intensity (cps)
1400
1300
1200
1100
1000
900
800
700
600
500
400
300
200
100
671.29
459.76
1000
900
800
700
600
500
400
300
200
100
Raman shift (cm-1)

Onyx

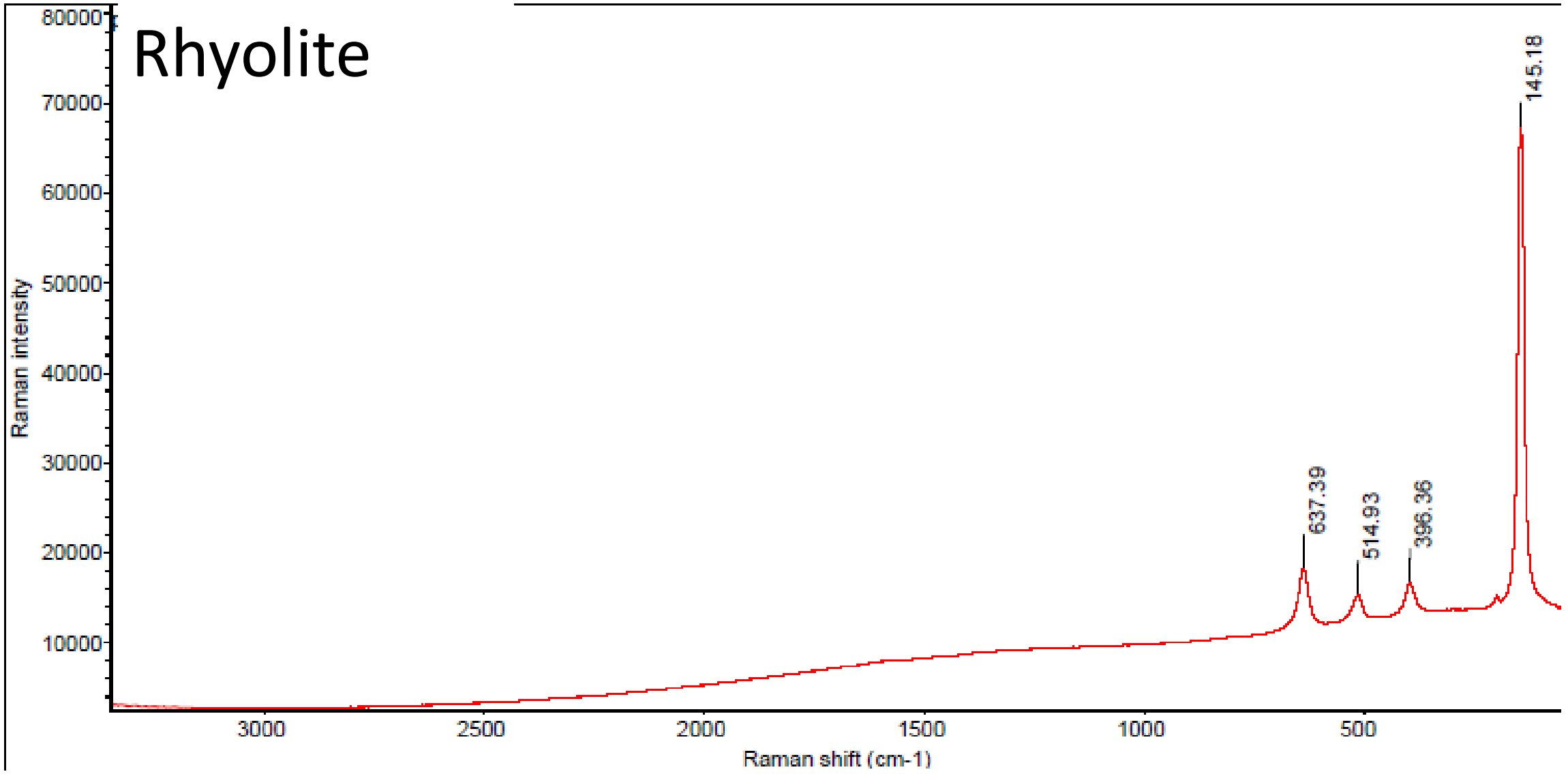

Raman intensity
900
800
700
600
500
400
300
200
100
3000
2500
2000
1500
1000
500
Raman shift (cm-1)
1086.67
712.97
281.31
154.40

Petrified Wood

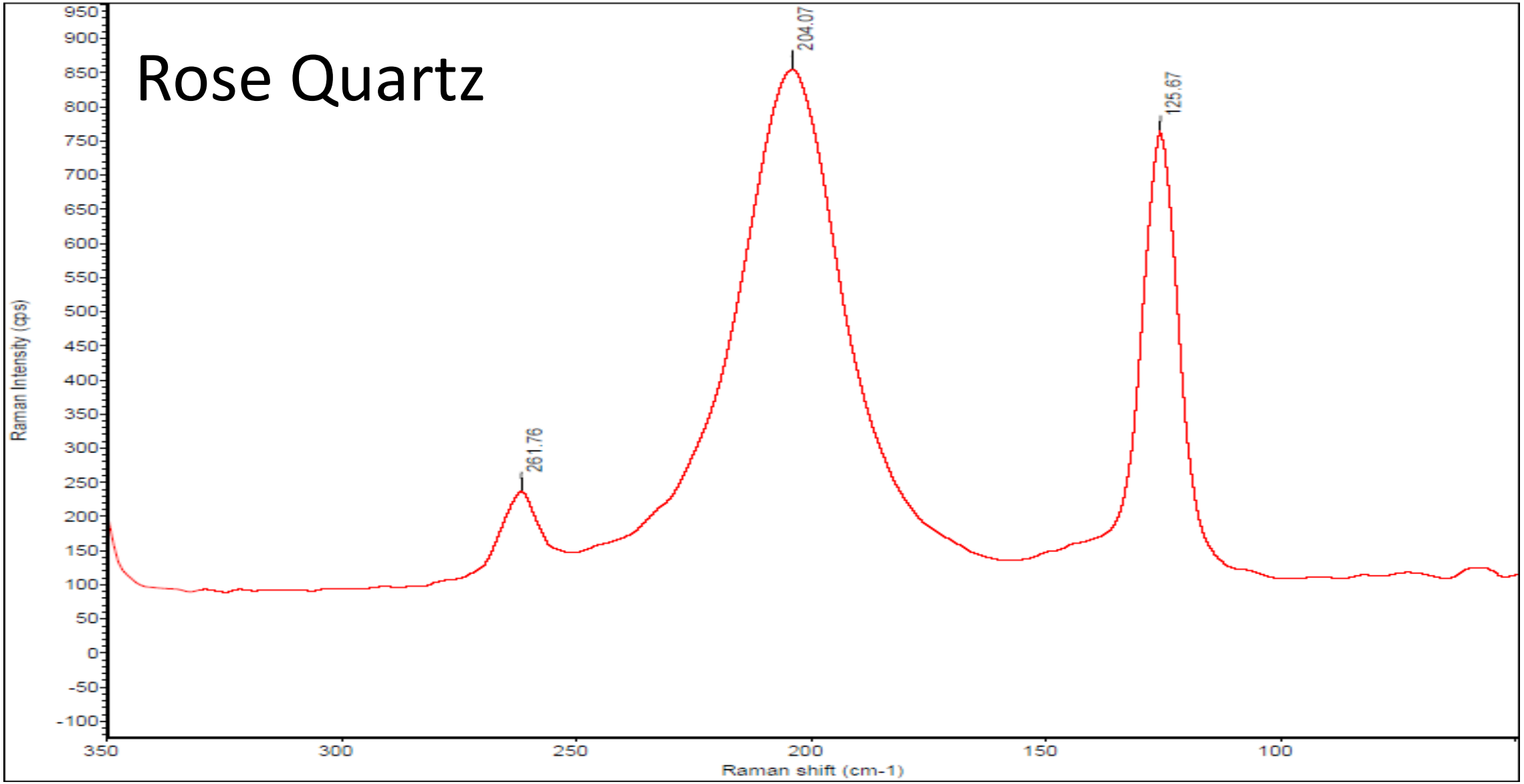
Pyrite


Raman Intensity (cps)
380
360
340
320
300
280
260
240
220
200
180
160
140
120
100
80
60
40
1008.73
493.50
413.72
379.92
343.66
1200
1000
800
600
400
200
Raman shift (cm-1)

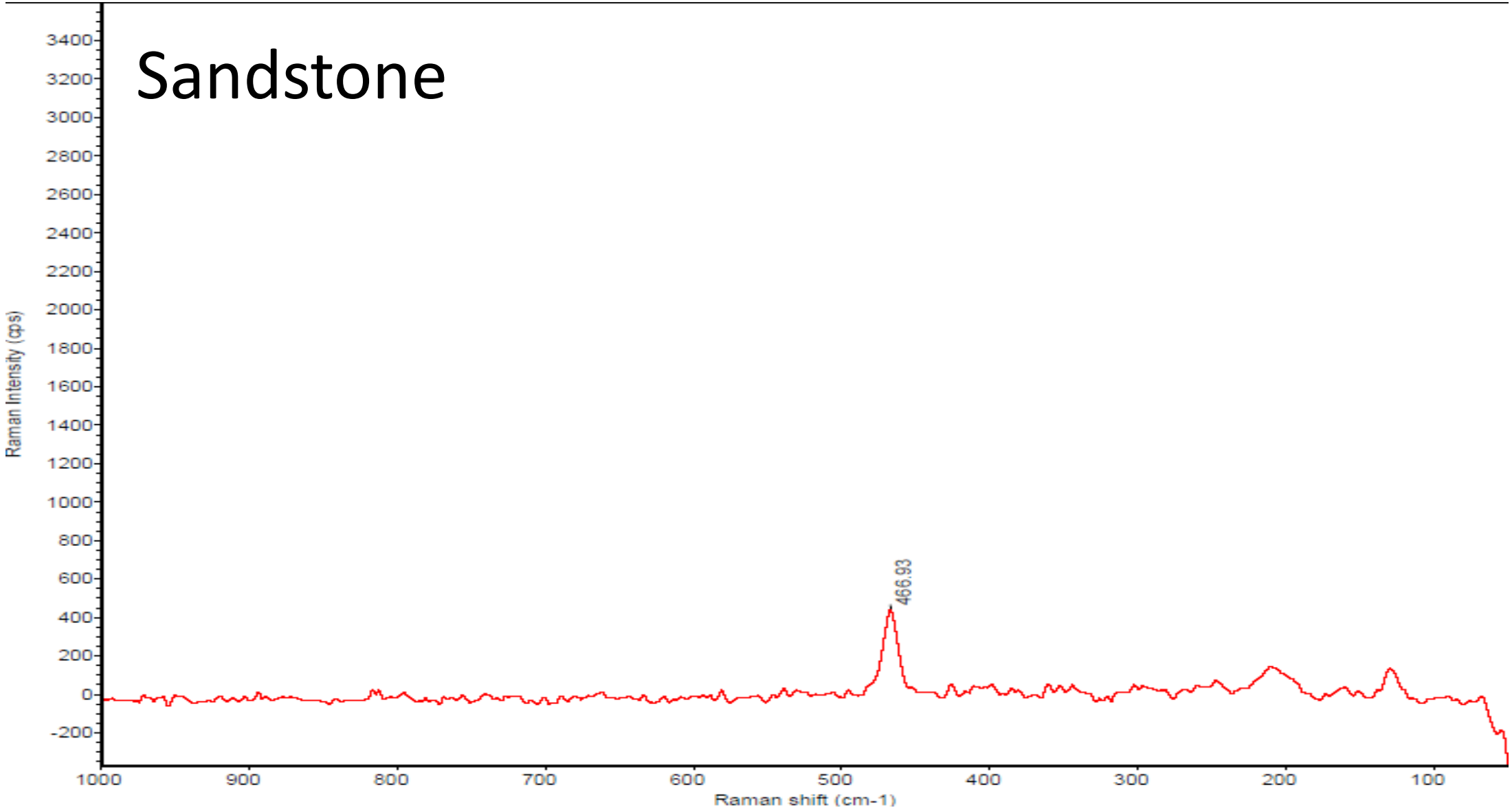
Rhyolite


Raman intensity
80000
70000
60000
50000
40000
30000
20000
10000
3000
2500
2000
1500
1000
500
Raman shift (cm-1)
145.18
637.39
514.93
396.36

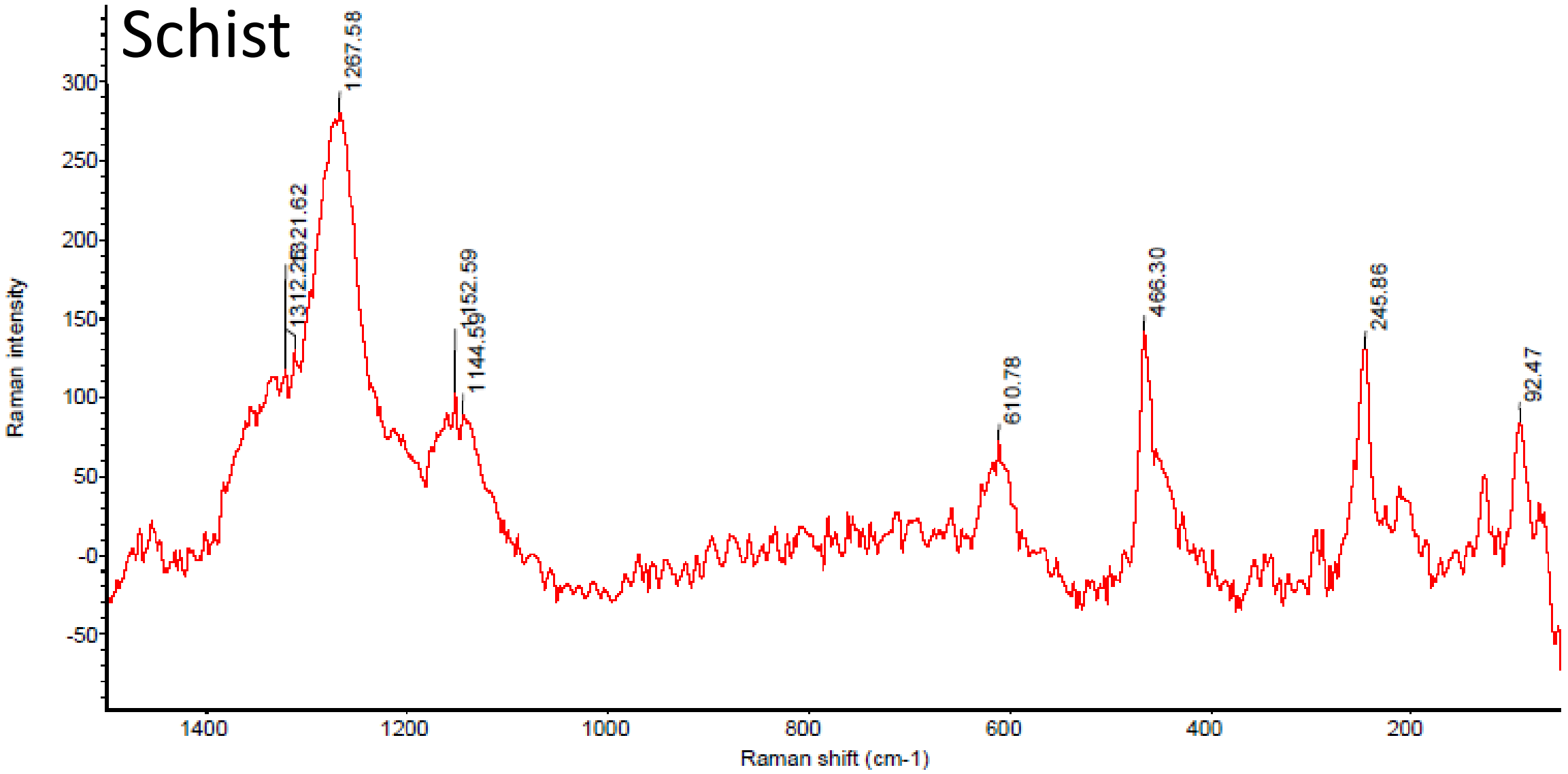
Rose Quartz


204.07
125.67
261.76
Raman Intensity (cps)
Raman shift (cm-1)
950
900
850
800
750
700
650
600
550
500
450
400
350
300
250
200
150
100
50
0
-50
-100
350
300
250
200
150
100

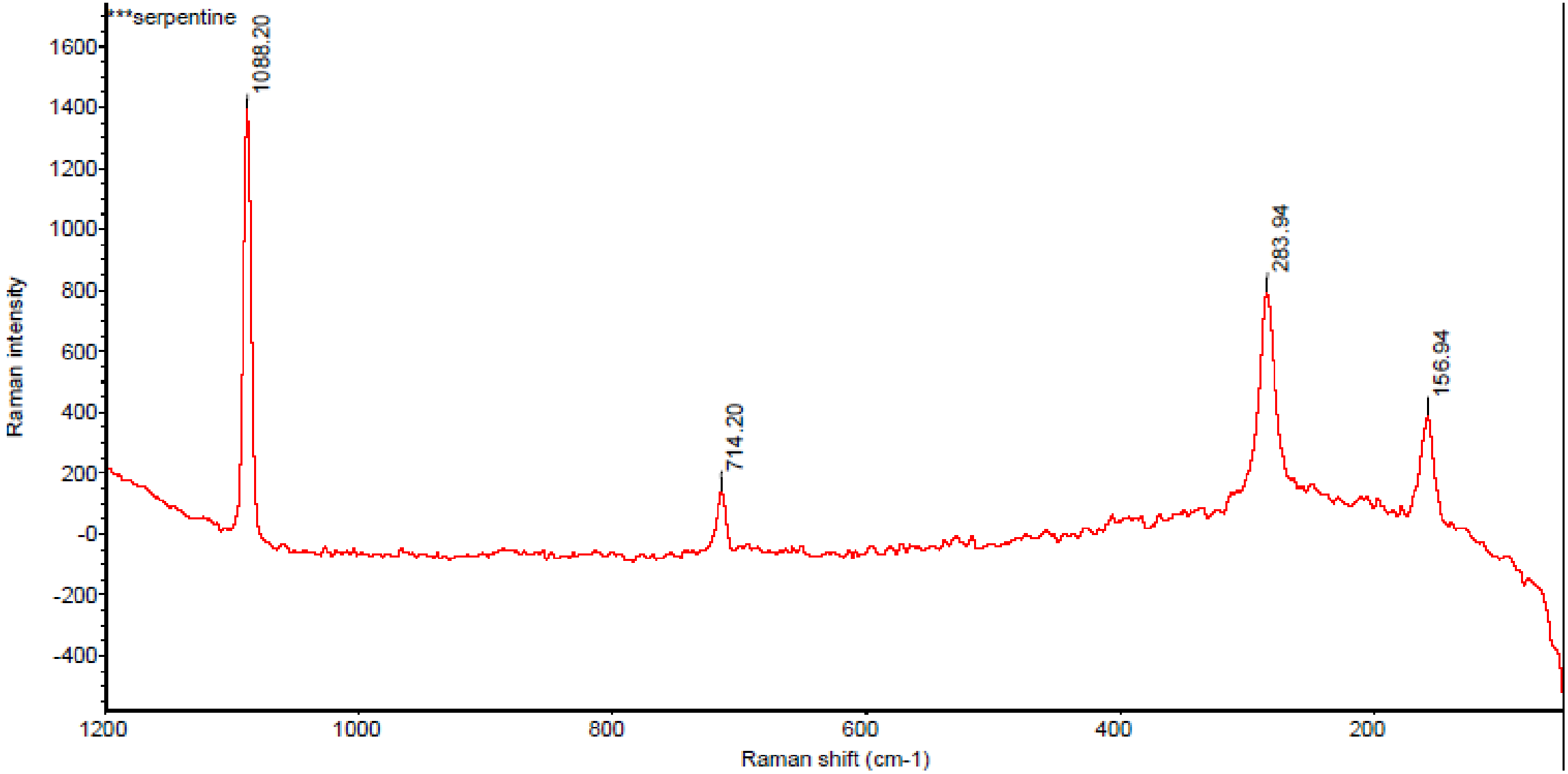
Sandstone


Raman Intensity (cps)
3400
3200
3000
2800
2600
2400
2200
2000
1800
1600
1400
1200
1000
800
600
400
200
0
-200
466.93
1000
900
800
700
600
500
400
300
200
100
Raman shift (cm-1)

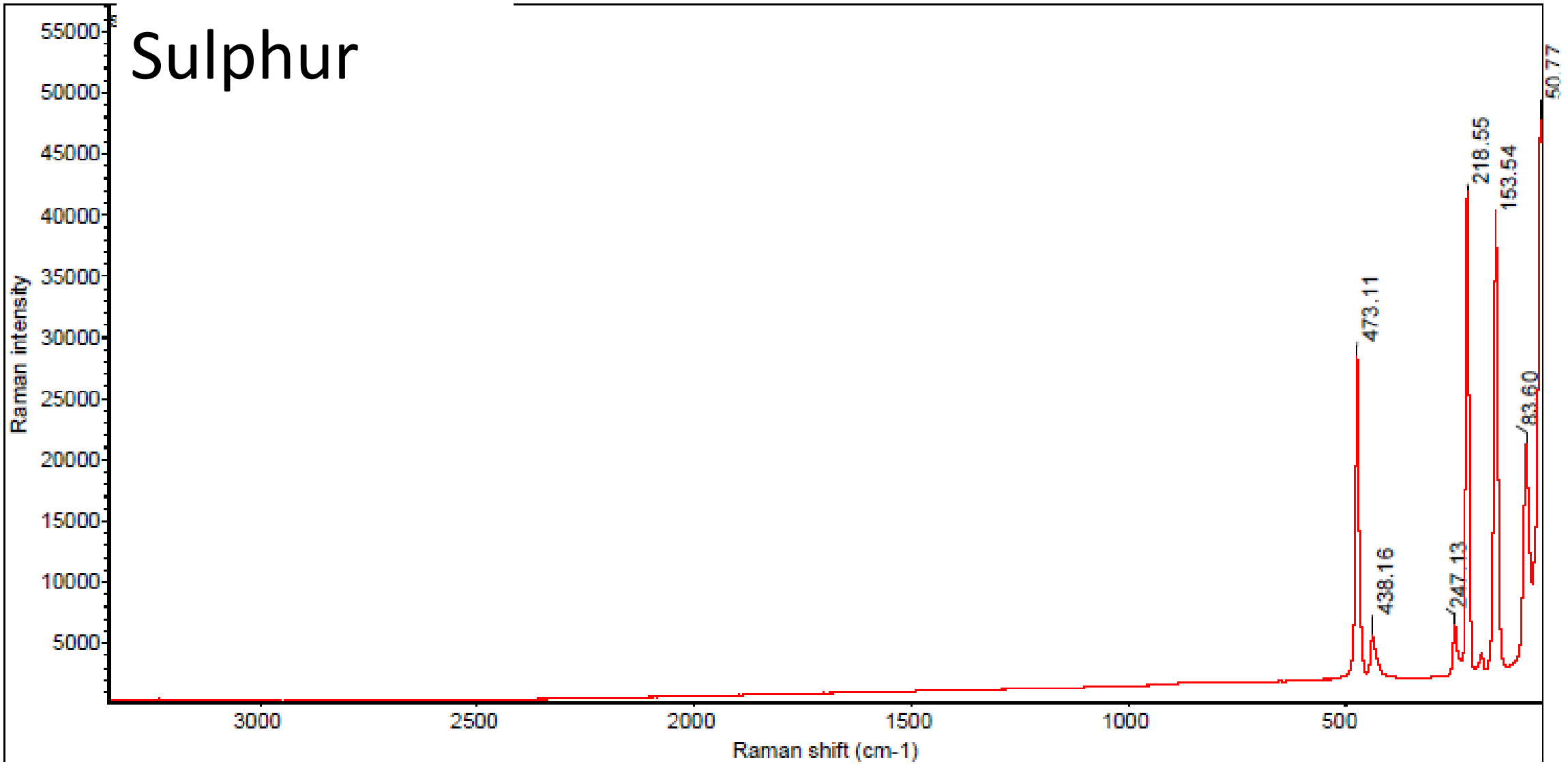
Schist


Raman intensity
300
250
200
150
100
50
-0
-50
1400
1200
1000
800
600
400
200
Raman shift (cm-1)
1267.58
1321.62
1312.26
1152.59
1144.59
610.78
466.30
245.86
92.47

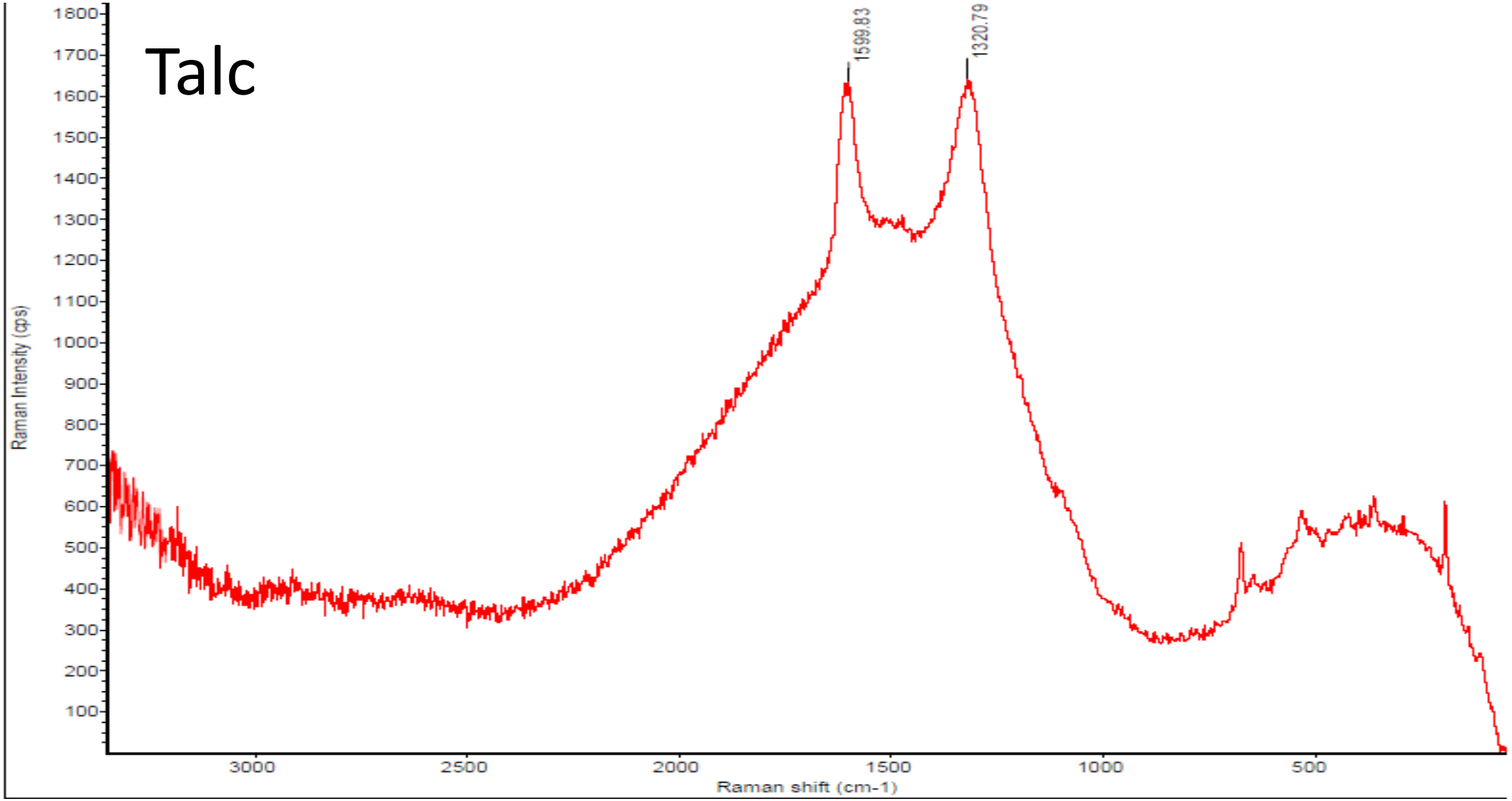
Serpentine


***serpentine
1088.20
714.20
283.94
156.94
Raman intensity
1600
1400
1200
1000
800
600
400
200
-0
-200
-400
1200
1000
800
600
400
200
Raman shift (cm-1)

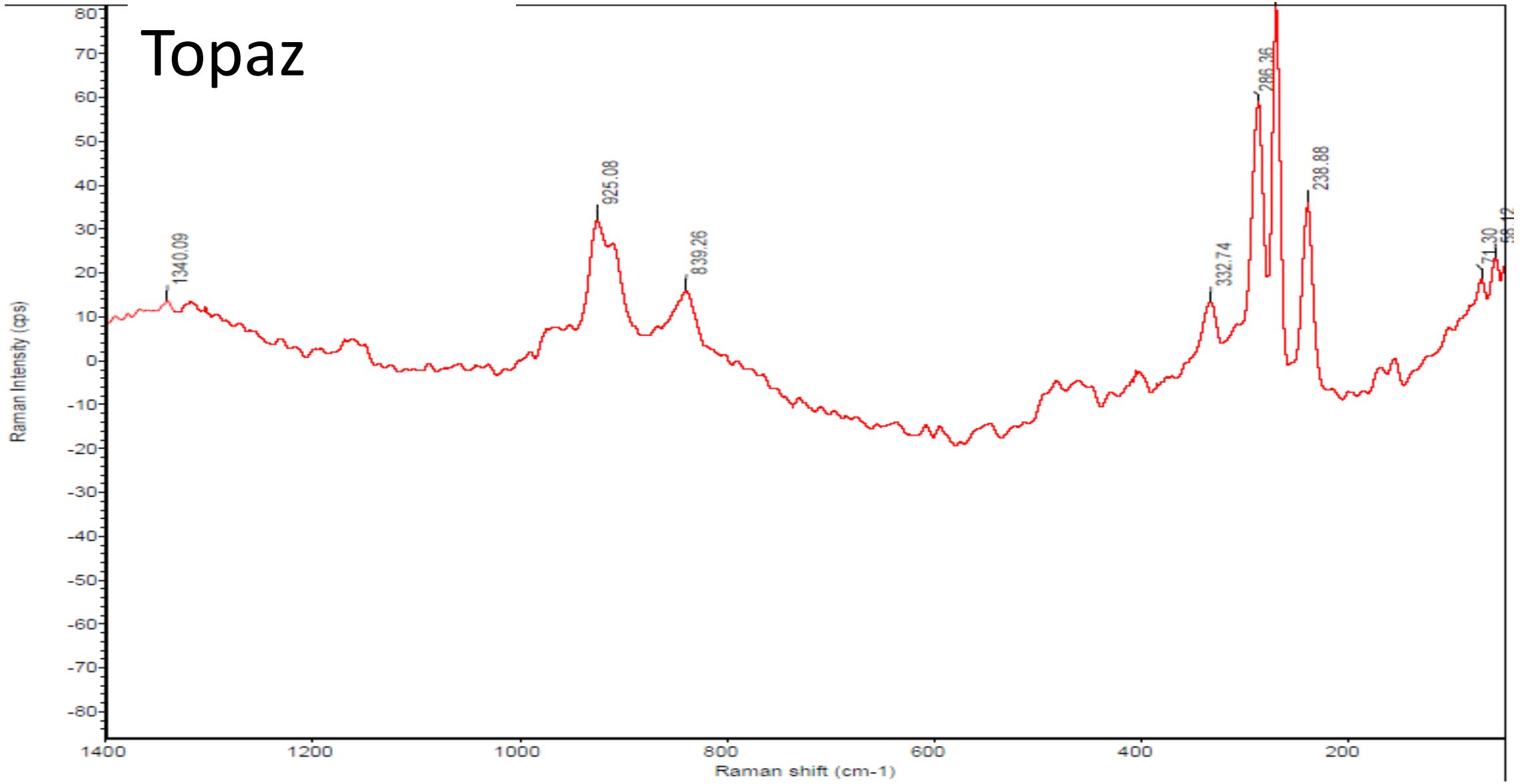
Sulphur


Raman intensity
55000
50000
45000
40000
35000
30000
25000
20000
15000
10000
5000
3000
2500
2000
1500
1000
500
Raman shift (cm-1)
473.11
438.16
247.13
218.55
153.54
83.60
50.77

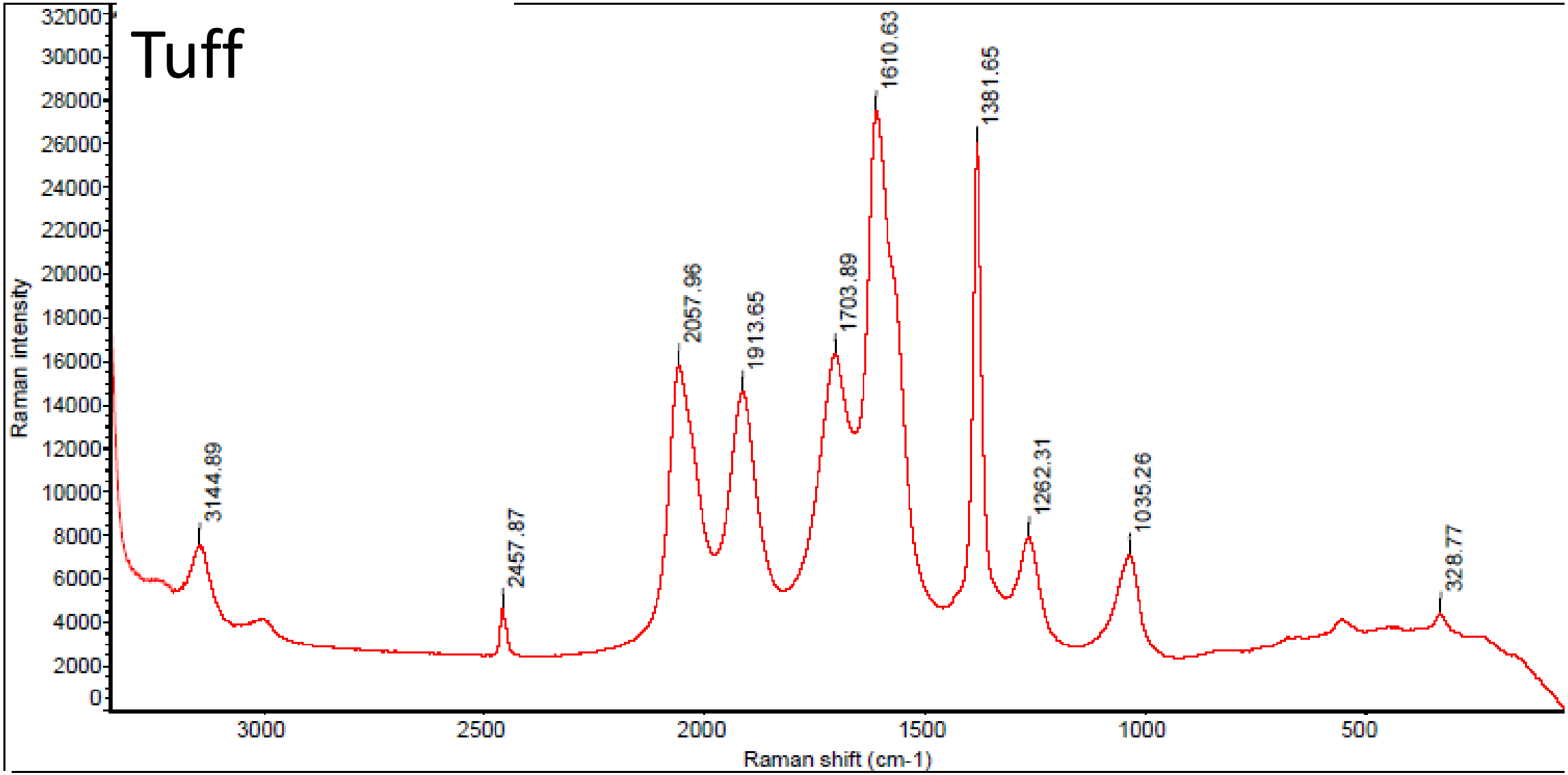
Talc


1599.83
1320.79
Raman Intensity (cps)
1800
1700
1600
1500
1400
1300
1200
1100
1000
900
800
700
600
500
400
300
200
100
3000
2500
2000
1500
1000
500
Raman shift (cm-1)

Topaz


Raman Intensity (cps)
Raman shift (cm-1)
1340.09
925.08
839.26
332.74
286.36
238.88
71.30
68.12

Tuff


Raman intensity
32000
30000
28000
26000
24000
22000
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
3144.89
2457.87
2057.96
1913.65
1703.89
1610.63
1381.65
1262.31
1035.26
328.77
3000
2500
2000
1500
1000
500
Raman shift (cm-1)