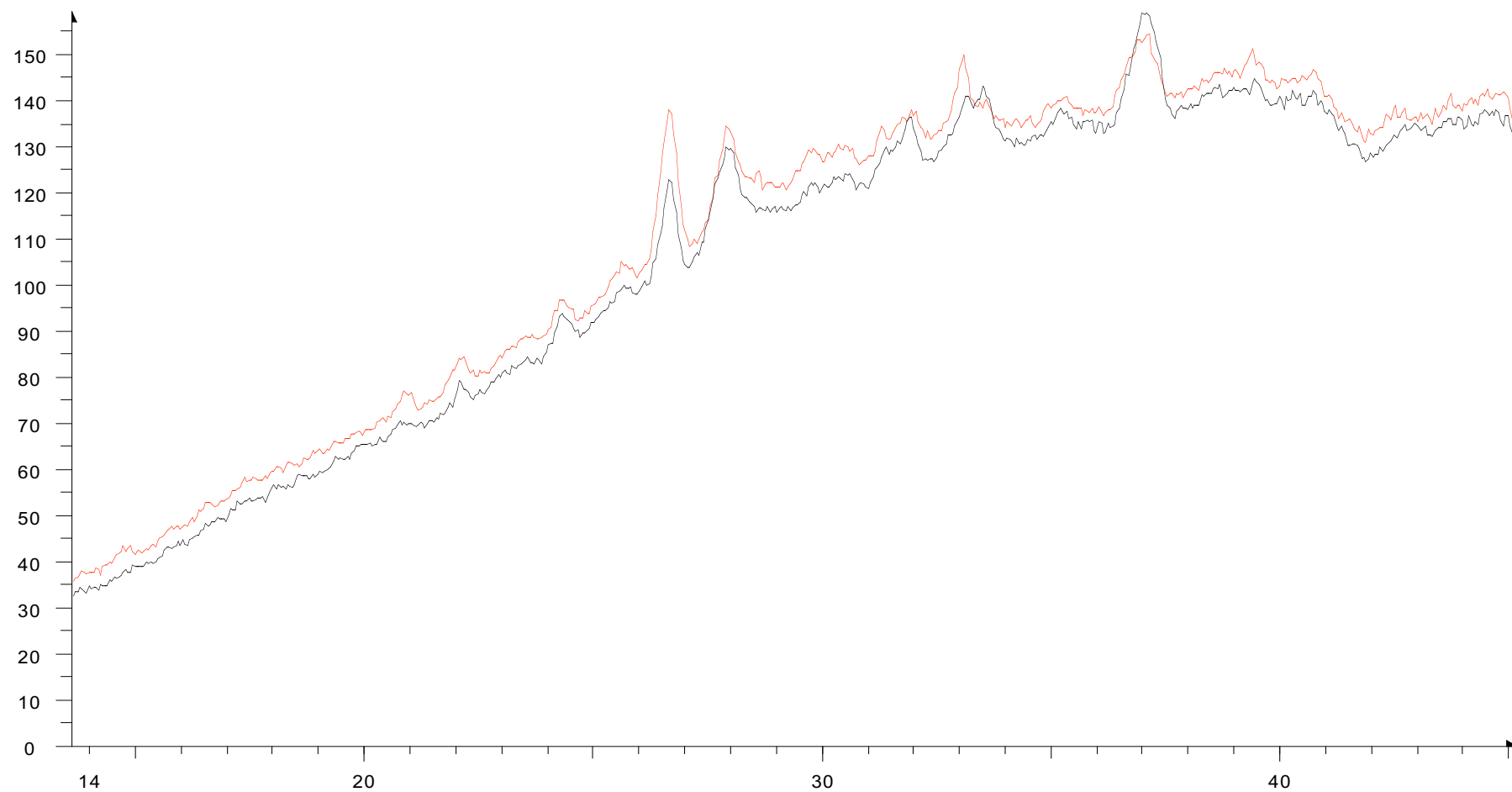


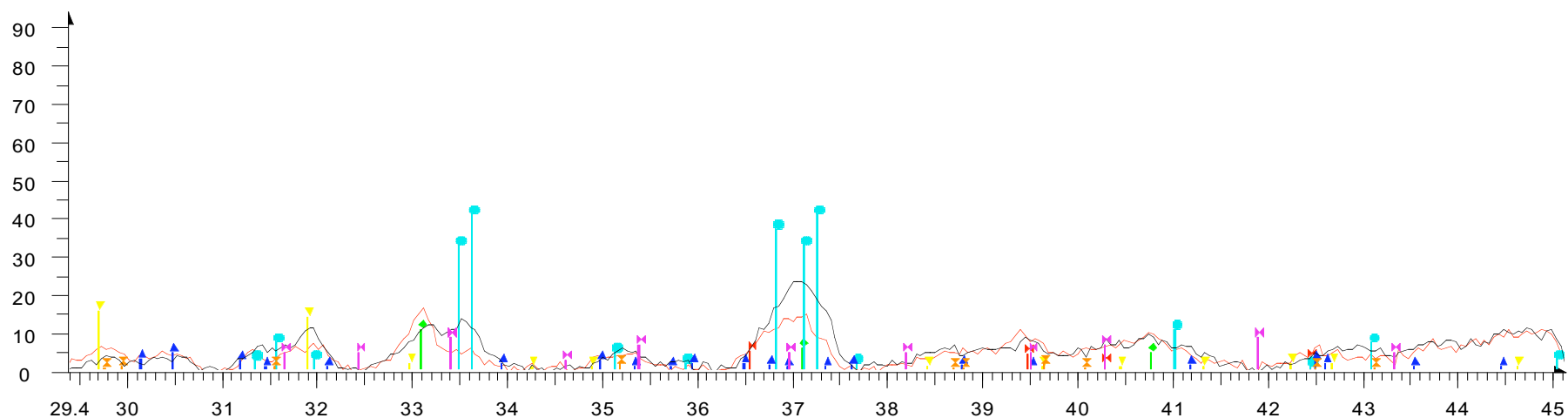
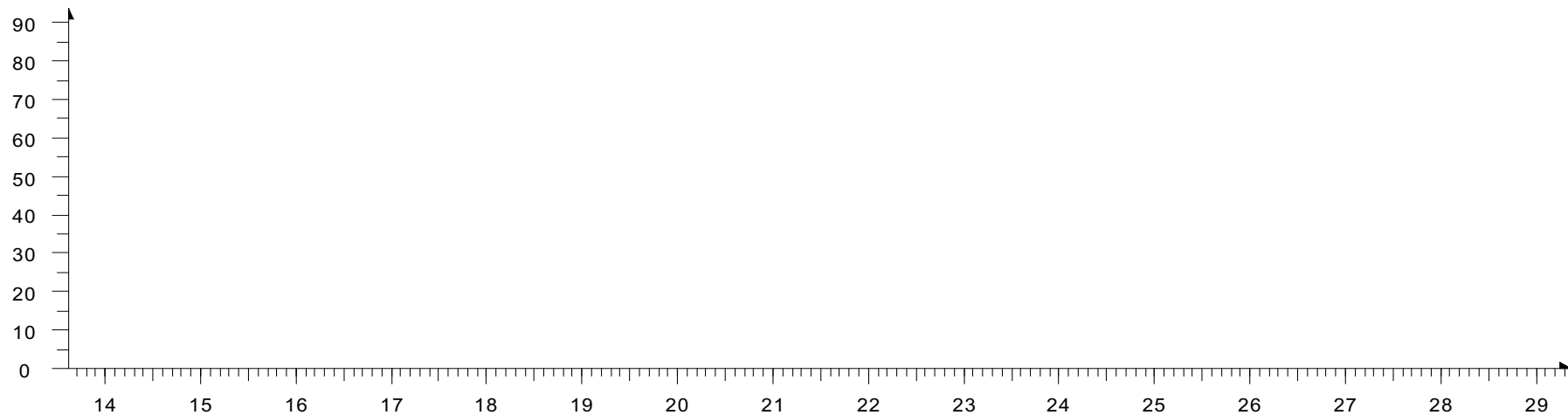
Sample ID:	TM2-4
Zone:	Lower alteration zone
Type of radiation	CuK_1+K_2 = 1.54184Å
Power	40 kV x 40 mA
Type of scan	2_ (2 Omega)
Beam diameter	500 um
2_ range	6° - 21.5°
Time	20 minutes

## SAMPLE / DIFFRACTOGRAM INVENTORY

Sample ID	Spot ID	Zone	Notes
TM2-4	1	2	White crystal.
TM2-4	2	2	Heterogeneous AISA spherule.
TM2-4	3	2	Heterogeneous AISA spherule.
TM2-4	4	4	Grey material.
TM2-4	5	6	Diffuse, heterogeneous yellow and reddish brown material surrounded by grey material.
TM2-4	6	6	Diffuse, heterogeneous yellow and reddish brown material surrounded by grey material.
TM2-4	7	6	Yellow, diffuse material surrounded by grey material.
TM2-4	8	8	Amorphous yellow and red brown material surrounded by grey material.
TM2-4	9	8	Amorphous yellow and red brown material surrounded by grey material.
TM2-4	10	8	Amorphous yellow and red brown material surrounded by grey material.
TM2-4	11	9	Heterogeneous AISA spherule.
TM2-4	12	9	Heterogeneous AISA spherule.
TM2-4	13	9	Red brown and grey material surrounding ball.
TM2-4	14	9	Grey material with chunks of white crystal and fragments of red material.



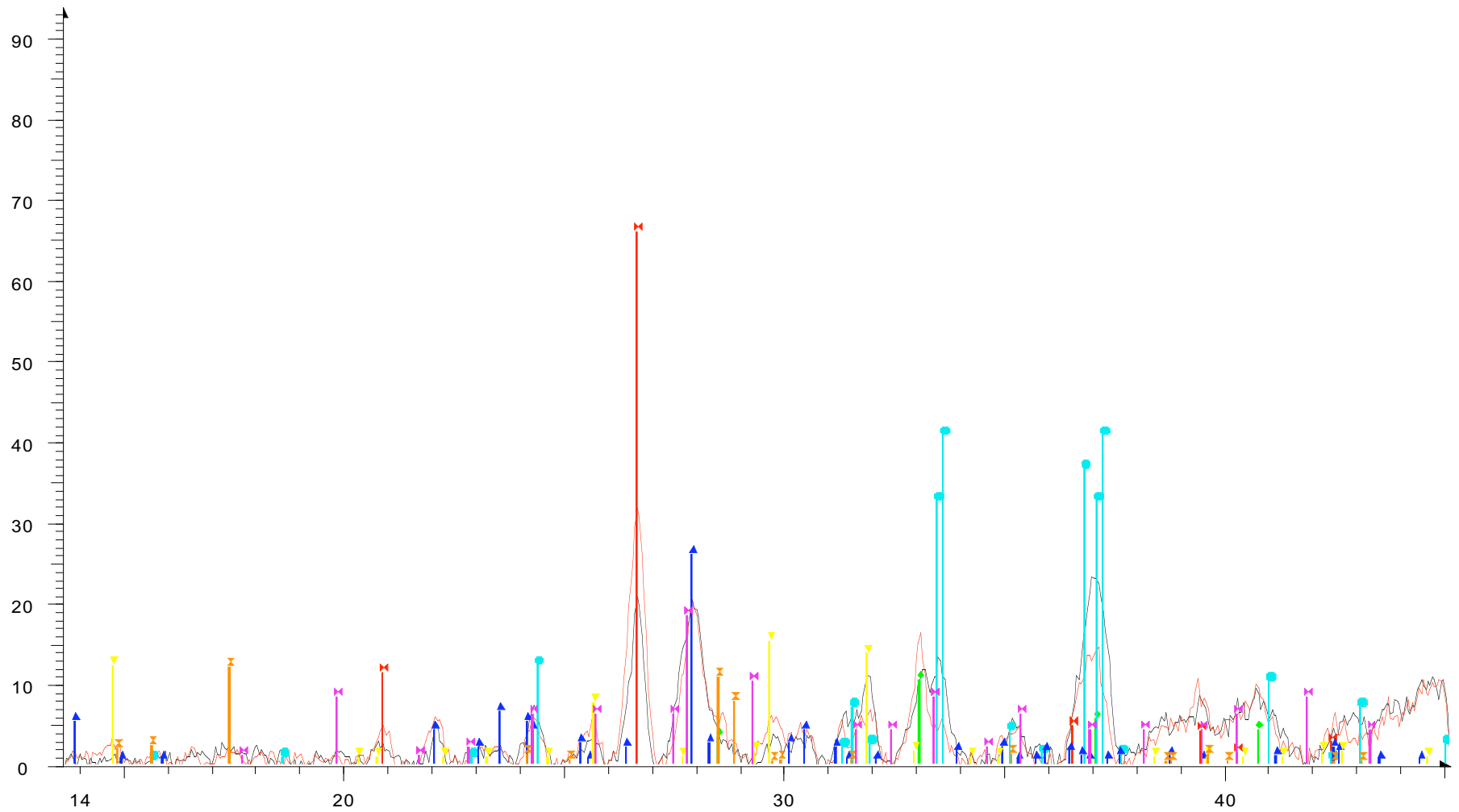
File: KristinTM2 4 02.raw  
Y + 3.0 mm - File: KristinTM2 4 03.raw



2-Theta - Scale

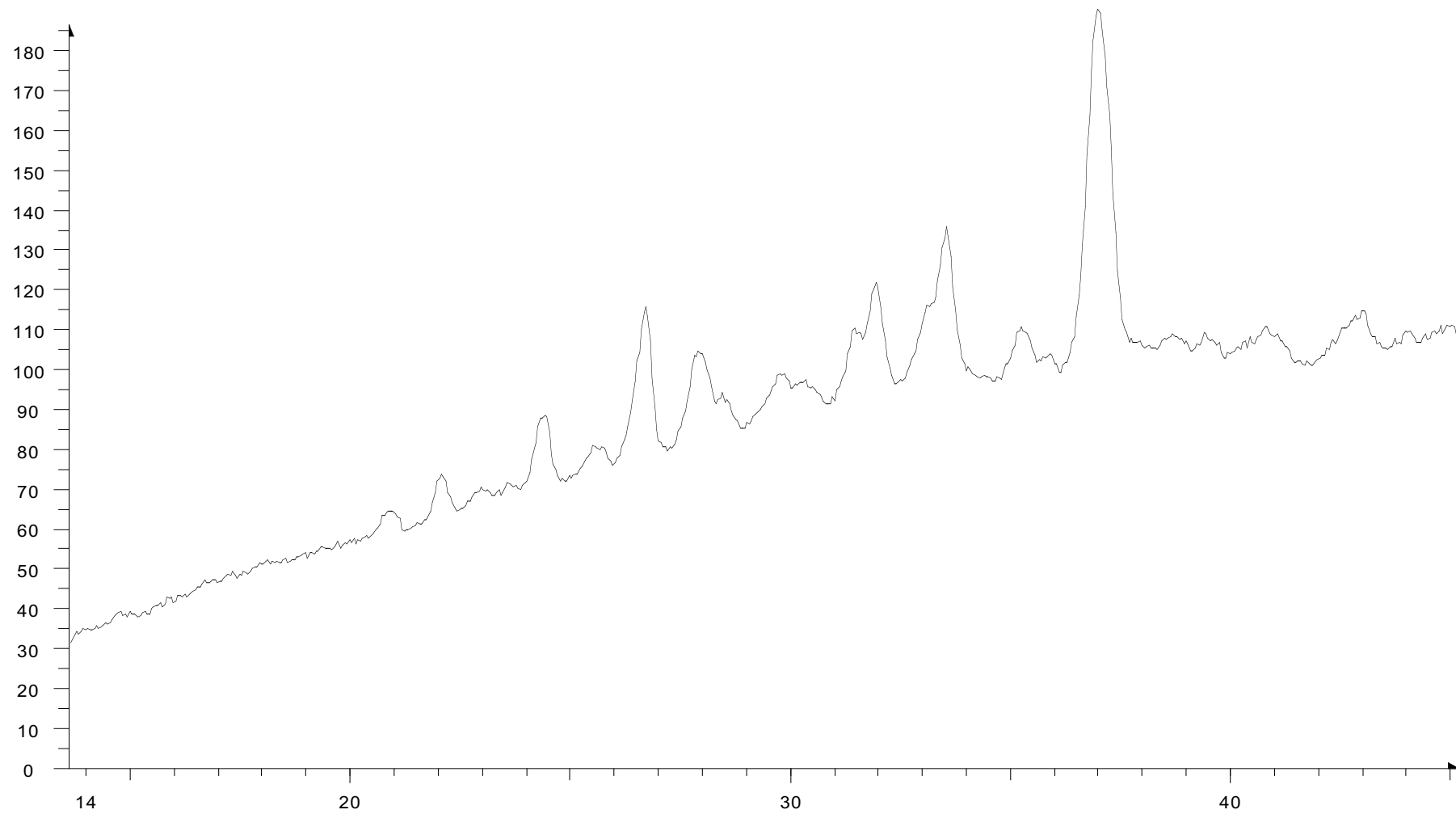
- File: KristinTM2 4 02.raw
- File: KristinTM2 4 03.raw
- 85-0796 (C) - Quartz - SiO<sub>2</sub>
- 42-1340 (\*) - Pyrite - FeS<sub>2</sub>
- 42-1320 (I) - Arsenopyrite - FeAsS
- 09-0466 (\*) - Albite, ordered - NaAlSi<sub>3</sub>O<sub>8</sub>
- 41-0224 (I) - Bassanite, svn - CaSO<sub>4</sub>·0.5H<sub>2</sub>O
- 31-0650 (I) - Hydroniumiarosite, svn - (H<sub>3</sub>O)Fe<sub>3</sub>(SO<sub>4</sub>)<sub>2</sub>(OH)<sub>6</sub>

44-1468 (N) - Tooeleite - Fe<sub>8</sub>(AsO<sub>4</sub>)<sub>6</sub>(OH)<sub>6</sub>·5H<sub>2</sub>O



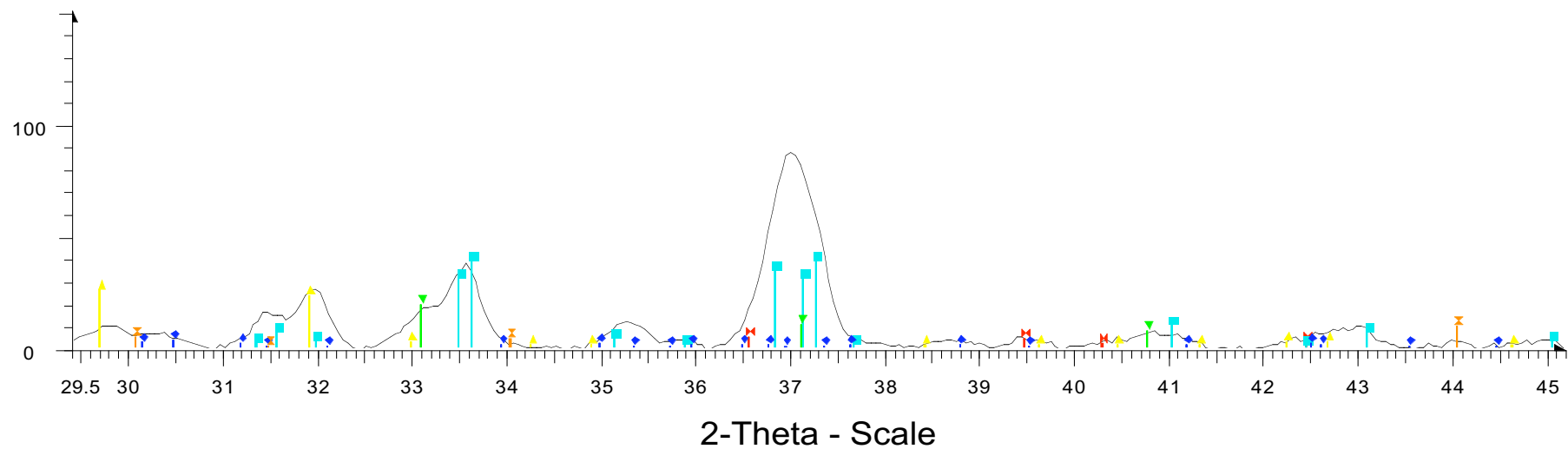
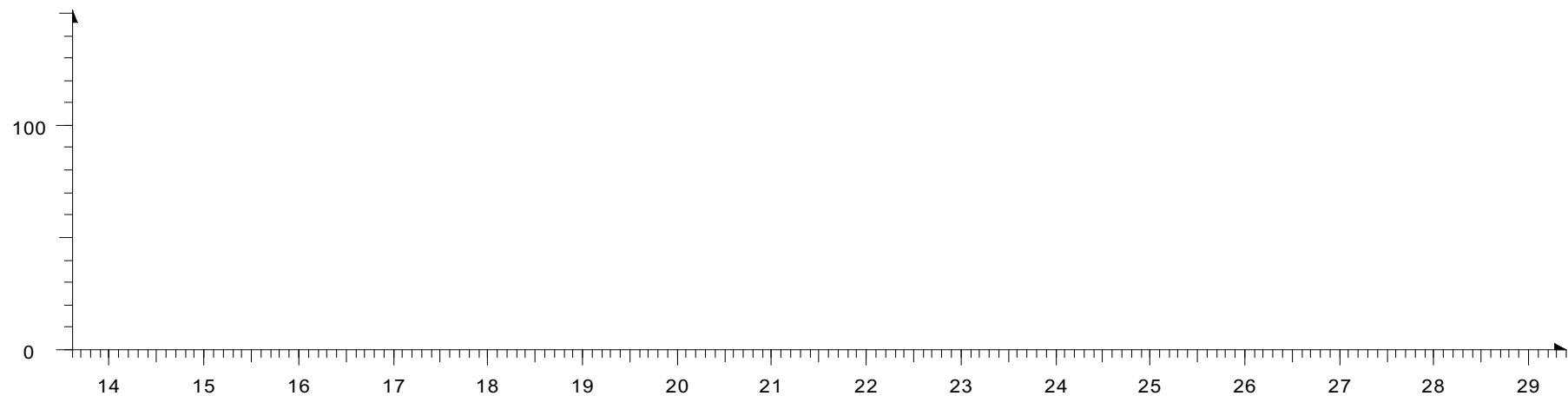
2-Theta - Scale

- File: KristinTM2 4 02.raw
- File: KristinTM2 4 03.raw
- 85-0796 (C) - Quartz - SiO<sub>2</sub>
- 42-1340 (\*) - Pyrite - FeS<sub>2</sub>
- 42-1320 (I) - Arsenopyrite - FeAsS
- 09-0466 (\*) - Albite, ordered - NaAlSi<sub>3</sub>O<sub>8</sub>
- 41-0224 (I) - Bassanite, svn - CaSO<sub>4</sub>·0.5H<sub>2</sub>O
- 31-0650 (I) - Hydroniumiarosite, svn - (H<sub>3</sub>O)Fe<sub>3</sub>(SO<sub>4</sub>)<sub>2</sub>(OH)<sub>6</sub>
- 44-1468 (N) - Tooeleite - Fe<sub>8</sub>(AsO<sub>4</sub>)<sub>6</sub>(OH)<sub>6</sub>·5H<sub>2</sub>O

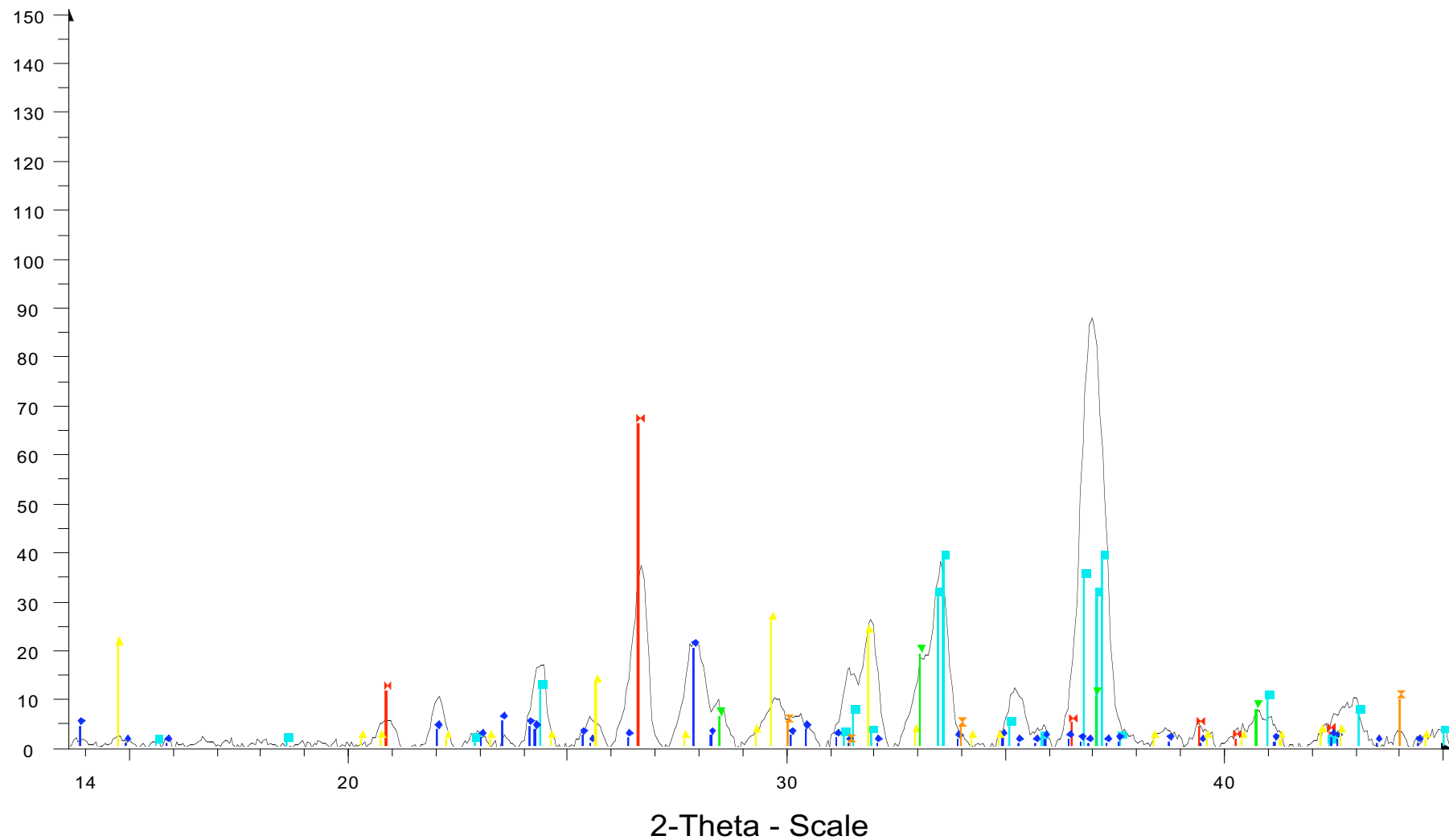


2-Theta - Scale

Y + 3.0 mm - File: KristinTM2 4 01.raw

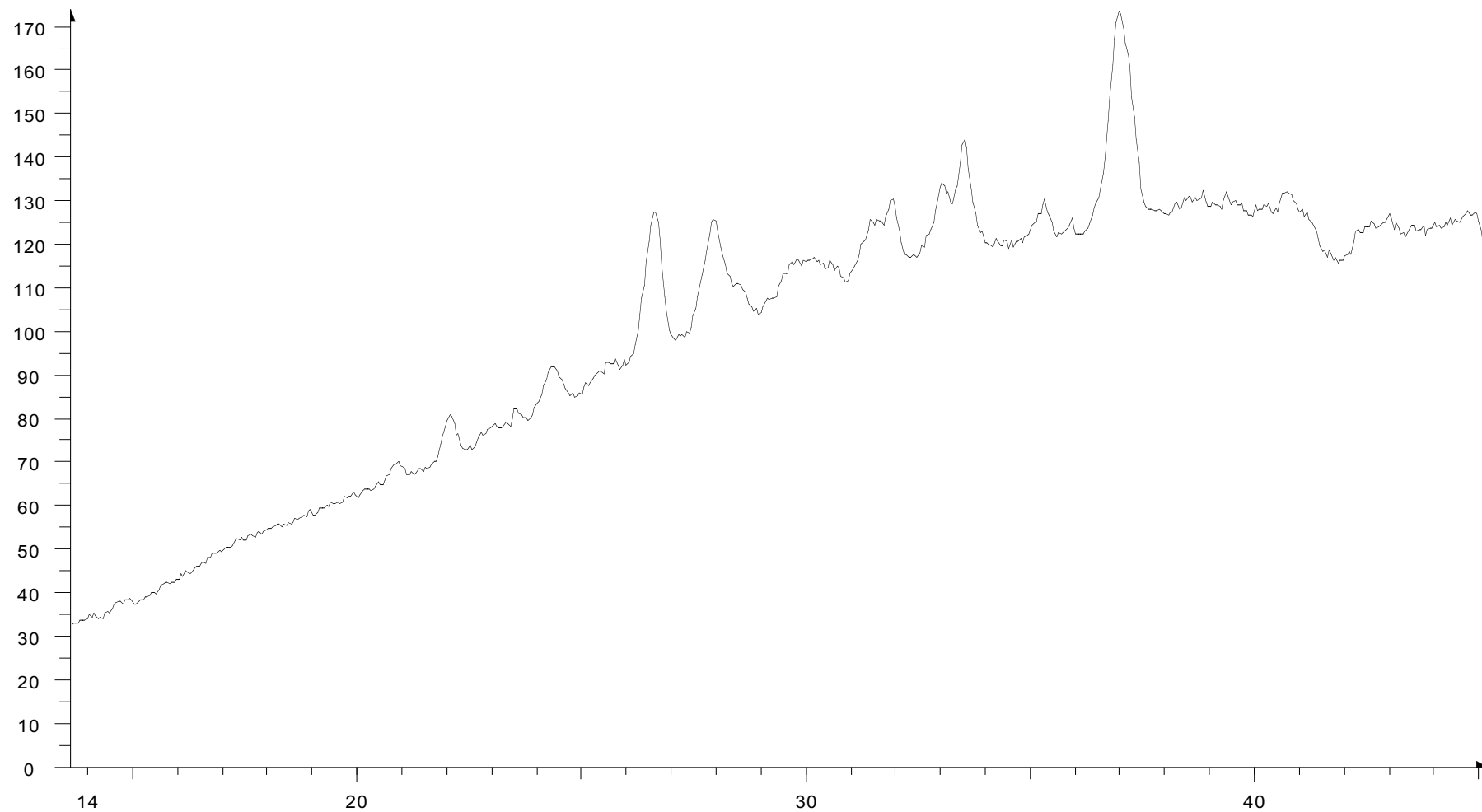


- File: KristinTM2 4 01.raw
- 85-0796 (C) - Quartz - SiO<sub>2</sub>
- 42-1320 (I) - Arsenopyrite - FeAsS
- 09-0466 (\*) - Albite, ordered - NaAlSi<sub>3</sub>O<sub>8</sub>
- 41-0224 (I) - Bassanite. svn - CaSO<sub>4</sub>·0.5H<sub>2</sub>O
- 42-1340 (\*) - Pyrite - FeS<sub>2</sub>
- 75-0600 (C) - Pyrrhotite - Fe<sub>95</sub>S<sub>1.05</sub>



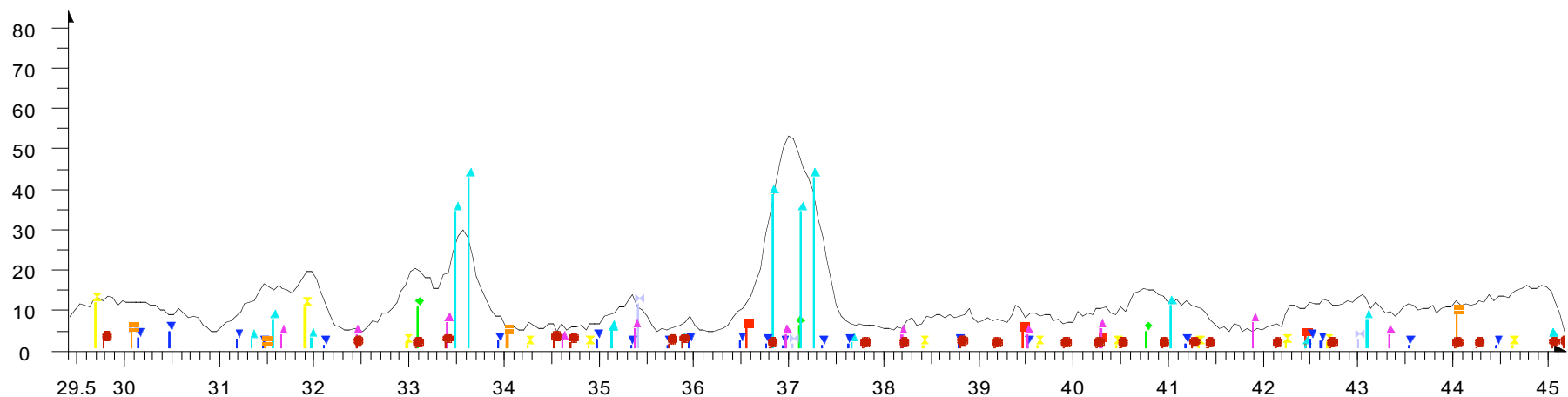
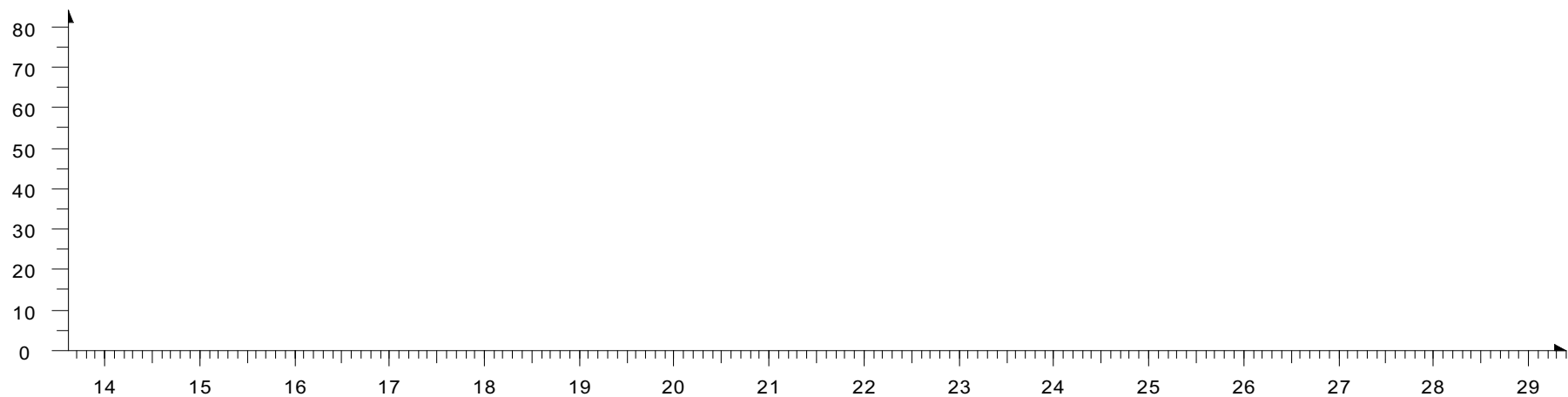
- File: KristinTM2 4 01.raw
- 85-0796 (C) - Quartz - SiO<sub>2</sub>
- 42-1320 (I) - Arsenopyrite - FeAsS
- 09-0466 (\*) - Albite, ordered - NaAlSi<sub>3</sub>O<sub>8</sub>
- 41-0224 (I) - Bassanite, svn - CaSO<sub>4</sub>·0.5H<sub>2</sub>O
- 42-1340 (\*) - Pyrite - FeS<sub>2</sub>
- 75-0600 (C) - Pyrrhotite - Fe<sub>9</sub>S<sub>10.05</sub>





2-Theta - Scale

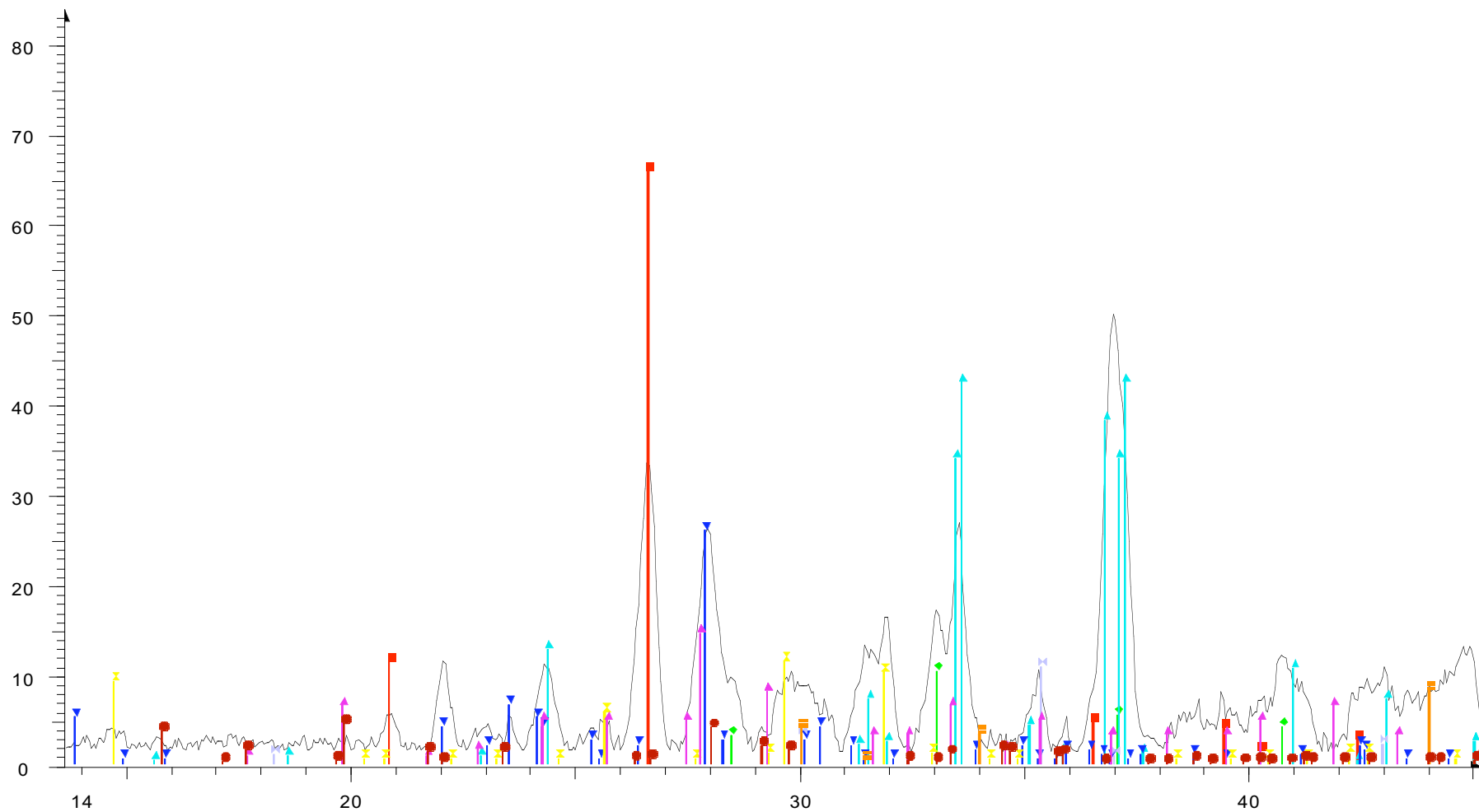
File: KristinTM2 4 04.raw



### 2-Theta - Scale

- Y + 3.0 mm - File: KristinTM2 4 04.raw
- 85-0796 (C) - Quartz - SiO<sub>2</sub>
- 42-1340 (\*) - Pwrite - FeS<sub>2</sub>
- 37-0468 (\*) - Scorodite - FeAsO<sub>4</sub>·2H<sub>2</sub>O
- 42-1320 (I) - Arsenopvrite - FeAsS
- 09-0466 (\*) - Albite, ordered - NaAlSi<sub>3</sub>O<sub>8</sub>
- 41-0224 (I) - Bassanite, syn - CaSO<sub>4</sub>·0.5H<sub>2</sub>O
- 76-1849 (C) - Magnetite - Fe<sub>3</sub>O<sub>4</sub>

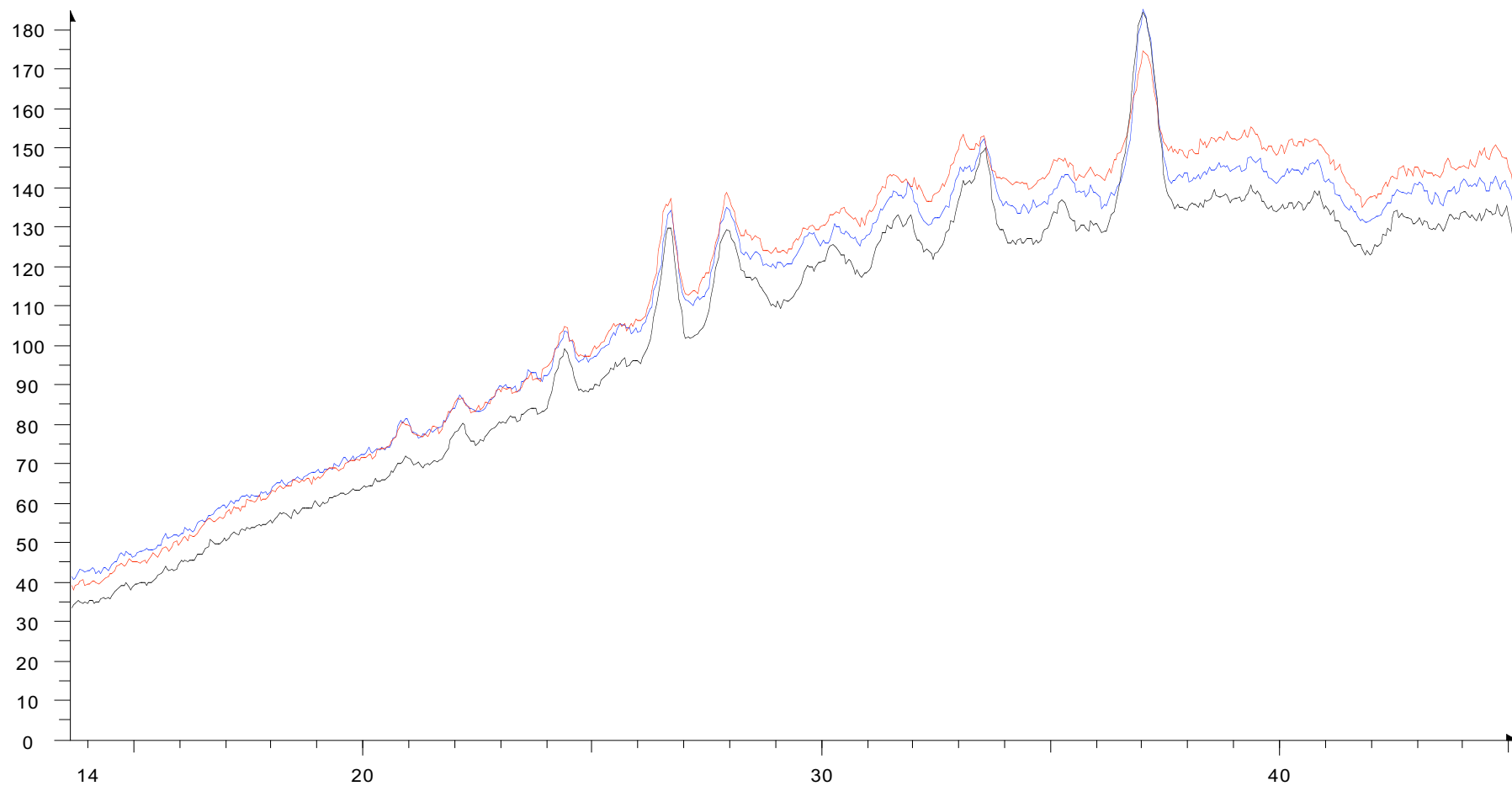
- 75-0600 (C) - Prrhotite - Fe<sub>95</sub>S<sub>1.05</sub>
- 44-1468 (N) - Tooeleite - Fe<sub>8</sub>(AsO<sub>4</sub>)<sub>6</sub>(OH)<sub>6</sub>·5H<sub>2</sub>O



## 2-Theta - Scale

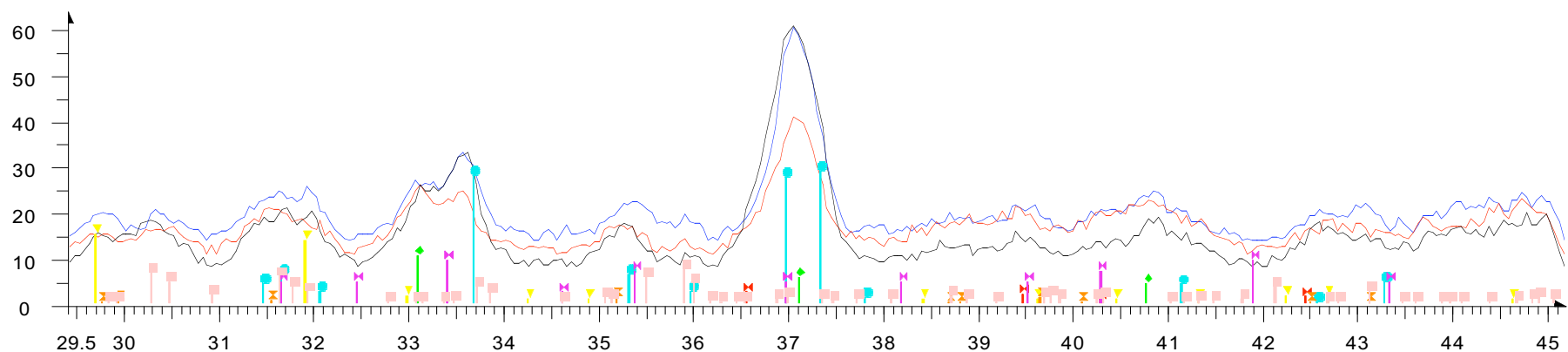
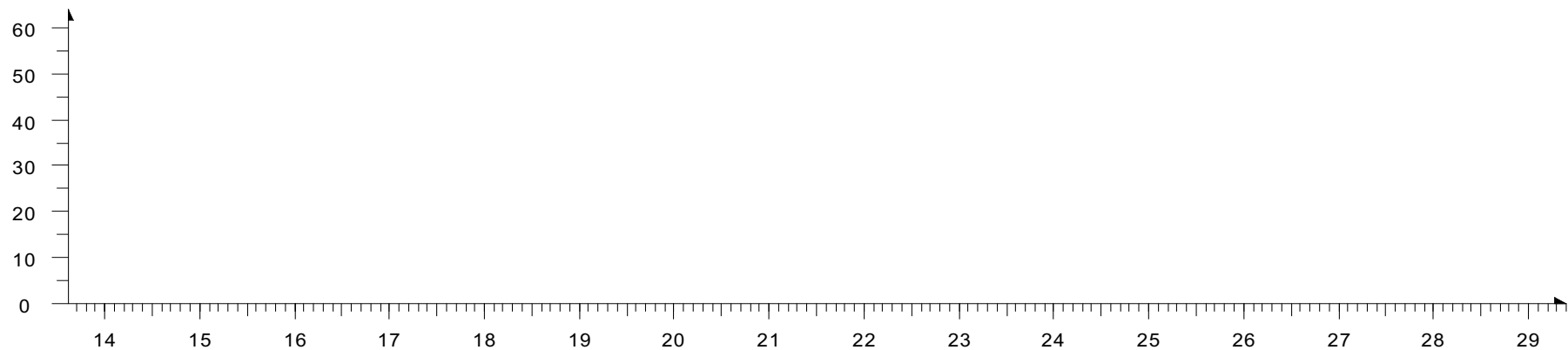
- Y + 3.0 mm - File: KristinTM2 4 04.raw
- 85-0796 (C) - Quartz - SiO<sub>2</sub>
- 42-1340 (\*) - Pwrite - FeS<sub>2</sub>
- 37-0468 (\*) - Scorodite - FeAsO<sub>4</sub>·2H<sub>2</sub>O
- 42-1320 (I) - Arsenopvrite - FeAsS
- 09-0466 (\*) - Albite, ordered - NaAlSi<sub>3</sub>O<sub>8</sub>
- 41-0224 (I) - Bassanite, syn - CaSO<sub>4</sub>·0.5H<sub>2</sub>O
- 76-1849 (C) - Magnetite - Fe<sub>3</sub>O<sub>4</sub>

- 75-0600 (C) - Prrhotite - Fe<sub>95</sub>S<sub>1.05</sub>
- 44-1468 (N) - Tooeleite - Fe<sub>8</sub>(AsO<sub>4</sub>)<sub>6</sub>(OH)<sub>6</sub>·5H<sub>2</sub>O



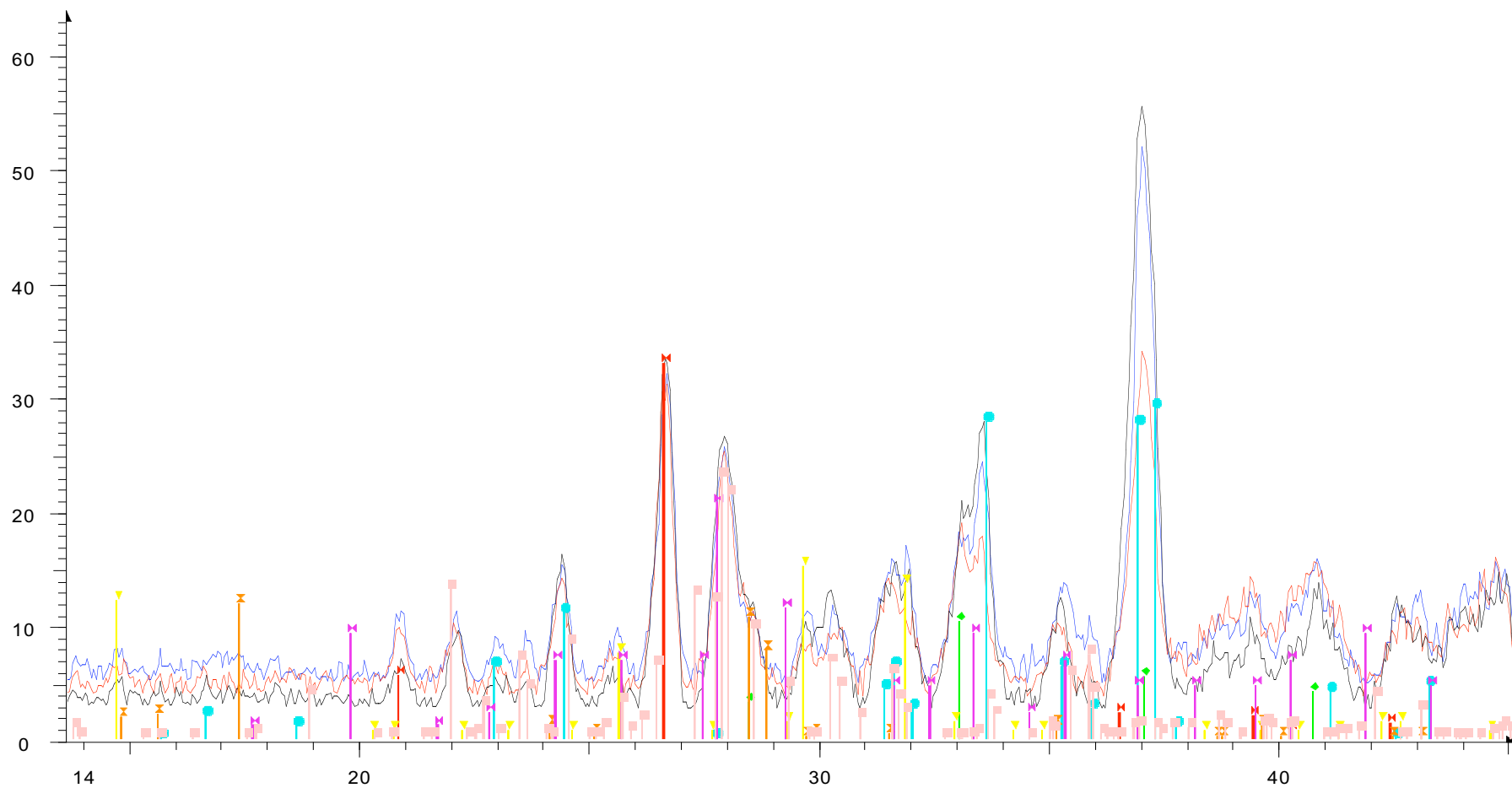
2-Theta - Scale

File: KristinTM2 4 07.raw  
Y + 2.0 mm - File: KristinTM2 4 06.raw  
Y + 4.0 mm - File: KristinTM2 4 05.raw



2-Theta - Scale

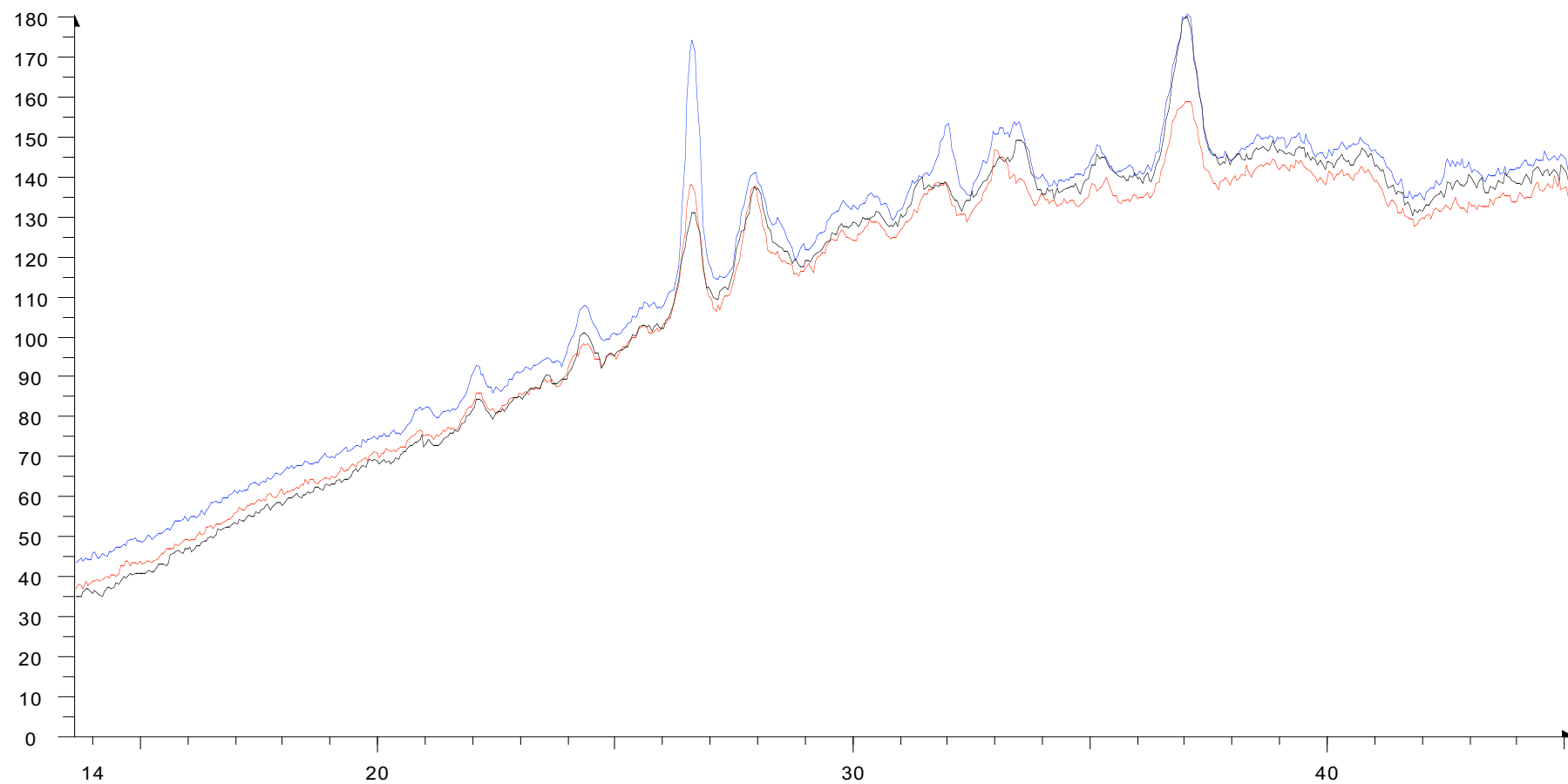
- Y + 6.0 mm - File: KristinTM2 4 07.raw
- Y + 8.0 mm - File: KristinTM2 4 06.raw
- Y + 10.0 mm - File: KristinTM2 4 05.raw
- 85-0796 (C) - Quartz - SiO<sub>2</sub>
- 42-1340 (\*) - Pwrite - FeS<sub>2</sub>
- 85-1723 (C) - Arsenopyrite - FeAsS
- 41-0224 (I) - Bassanite. svn - CaSO<sub>4</sub>·0.5H<sub>2</sub>O
- 31-0650 (I) - Hvdroniumiarosite. svn - (H<sub>3</sub>O)Fe<sub>3</sub>(SO<sub>4</sub>)<sub>2</sub>(OH)<sub>6</sub>
- 44-1468 (N) - Tooeleite - Fe<sub>8</sub>(AsO<sub>4</sub>)<sub>6</sub>(OH)<sub>6</sub>·5H<sub>2</sub>O
- 86-1705 (C) - Anorthite - Ca(Al<sub>2</sub>Si<sub>2</sub>O<sub>8</sub>)



### 2-Theta - Scale

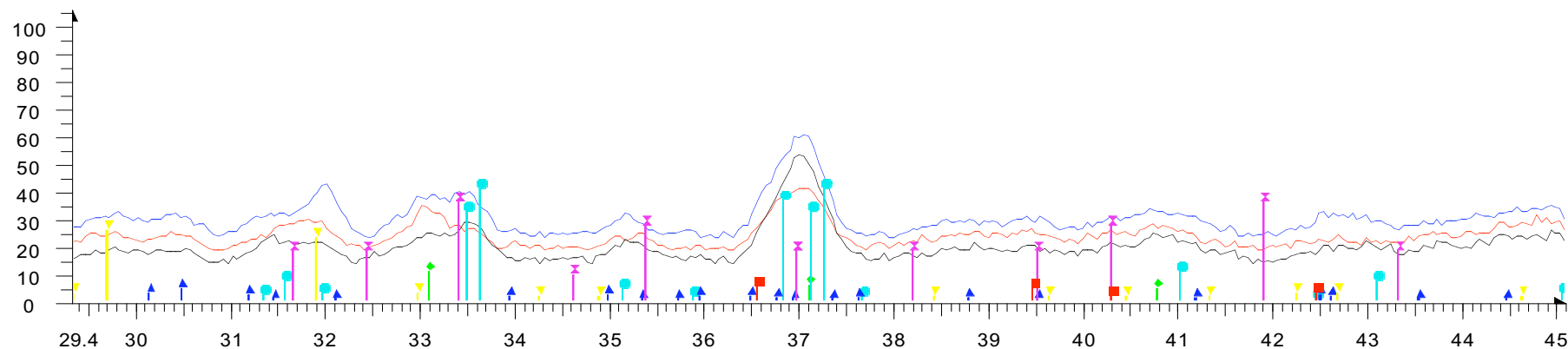
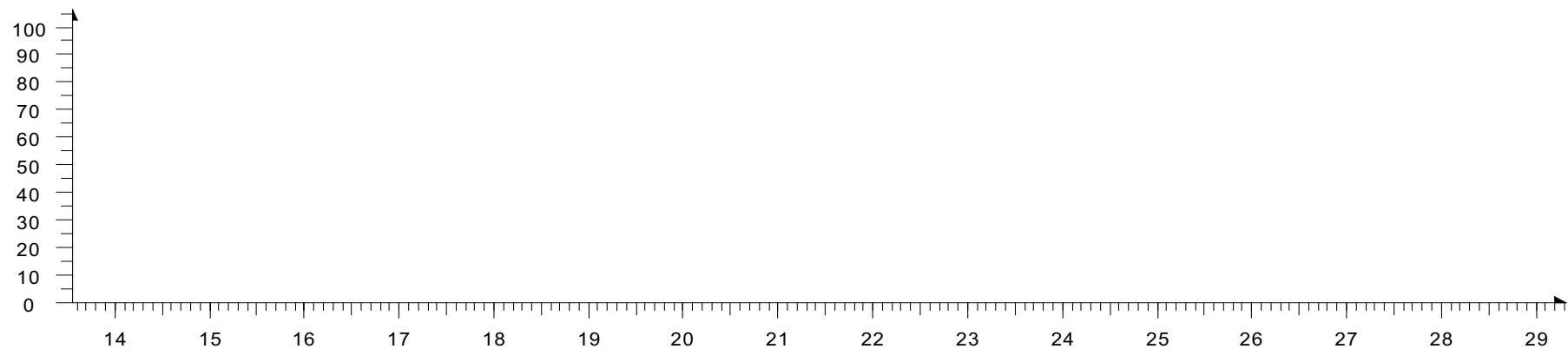
- Y + 6.0 mm - File: KristinTM2 4 07.raw
- Y + 8.0 mm - File: KristinTM2 4 06.raw
- Y + 10.0 mm - File: KristinTM2 4 05.raw
- 85-0796 (C) - Quartz - SiO<sub>2</sub>
- 42-1340 (\*) - Pvrite - FeS<sub>2</sub>
- 85-1723 (C) - Arsenopyrite - FeAsS
- 41-0224 (I) - Bassanite, svn - CaSO<sub>4</sub>·0.5H<sub>2</sub>O
- 31-0650 (I) - Hvdroniumiarosite, svn - (H<sub>3</sub>O)Fe<sub>3</sub>(SO<sub>4</sub>)<sub>2</sub>(OH)<sub>6</sub>

- 44-1468 (N) - Tooeleite - Fe<sub>8</sub>(AsO<sub>4</sub>)<sub>6</sub>(OH)<sub>6</sub>·5H<sub>2</sub>O
- 86-1705 (C) - Anorthite - Ca(Al<sub>2</sub>Si<sub>2</sub>O<sub>8</sub>)



2-Theta - Scale

File: KristinTM2 4 08.raw  
Y + 3.0 mm - File: KristinTM2 4 09.raw  
Y + 6.0 mm - File: KristinTM2 4 10.raw

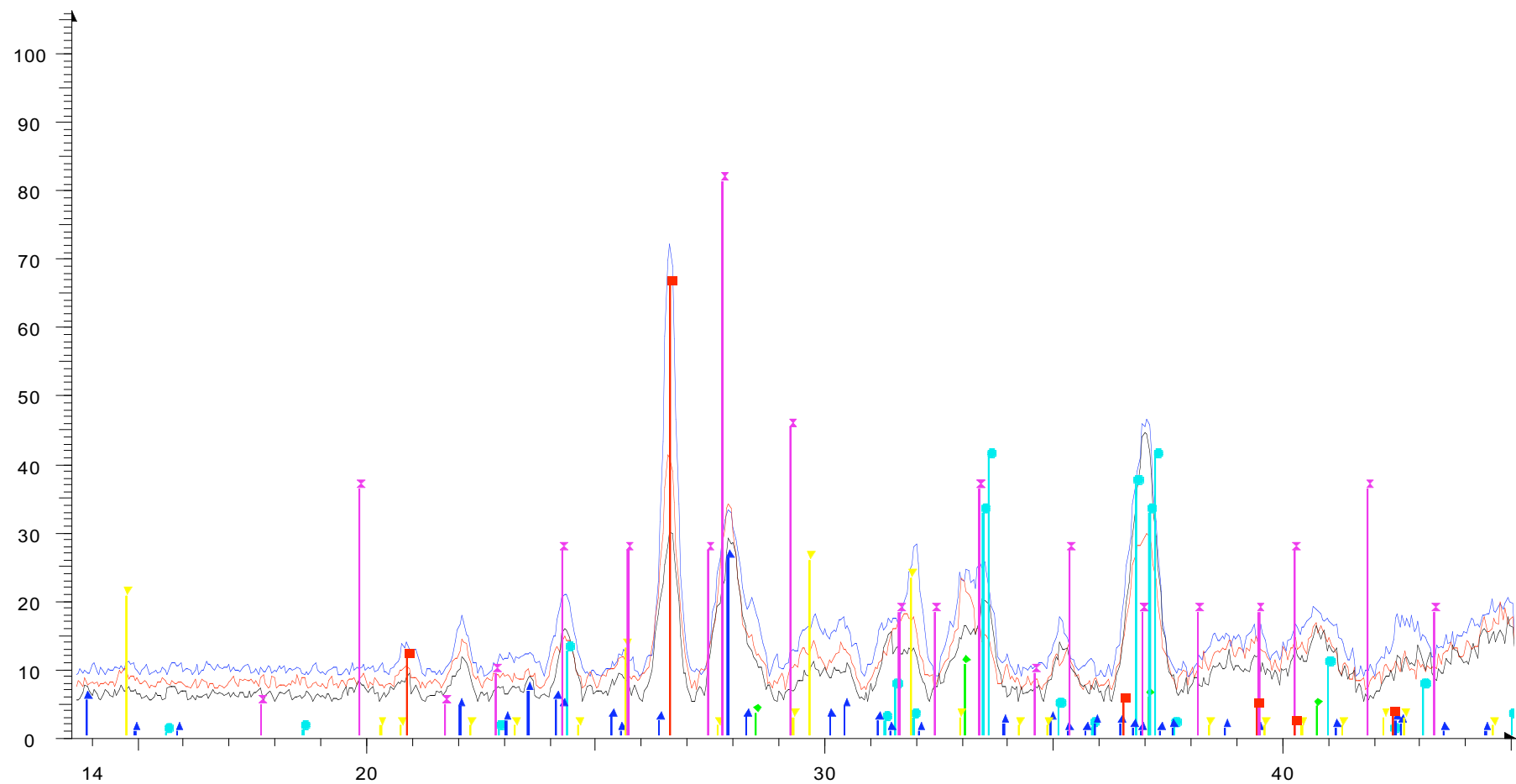


2-Theta - Scale

- Y + 6.0 mm - File: KristinTM2 4 08.raw
- Y + 8.0 mm - File: KristinTM2 4 09.raw
- Y + 10.0 mm - File: KristinTM2 4 10.raw
- 85-0796 (C) - Quartz - SiO<sub>2</sub>
- 42-1340 (\*) - Pprite - FeS<sub>2</sub>
- 42-1320 (I) - Arsenopvrite - FeAsS
- 09-0466 (\*) - Albite, ordered - NaAlSi<sub>3</sub>O<sub>8</sub>
- 41-0224 (I) - Bassanite, svn - CaSO<sub>4</sub>·0.5H<sub>2</sub>O

44-1468 (N) - Tooeleite - Fe<sub>8</sub>(AsO<sub>4</sub>)<sub>6</sub>(OH)<sub>6</sub>·5H<sub>2</sub>O

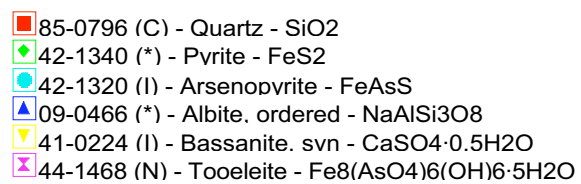


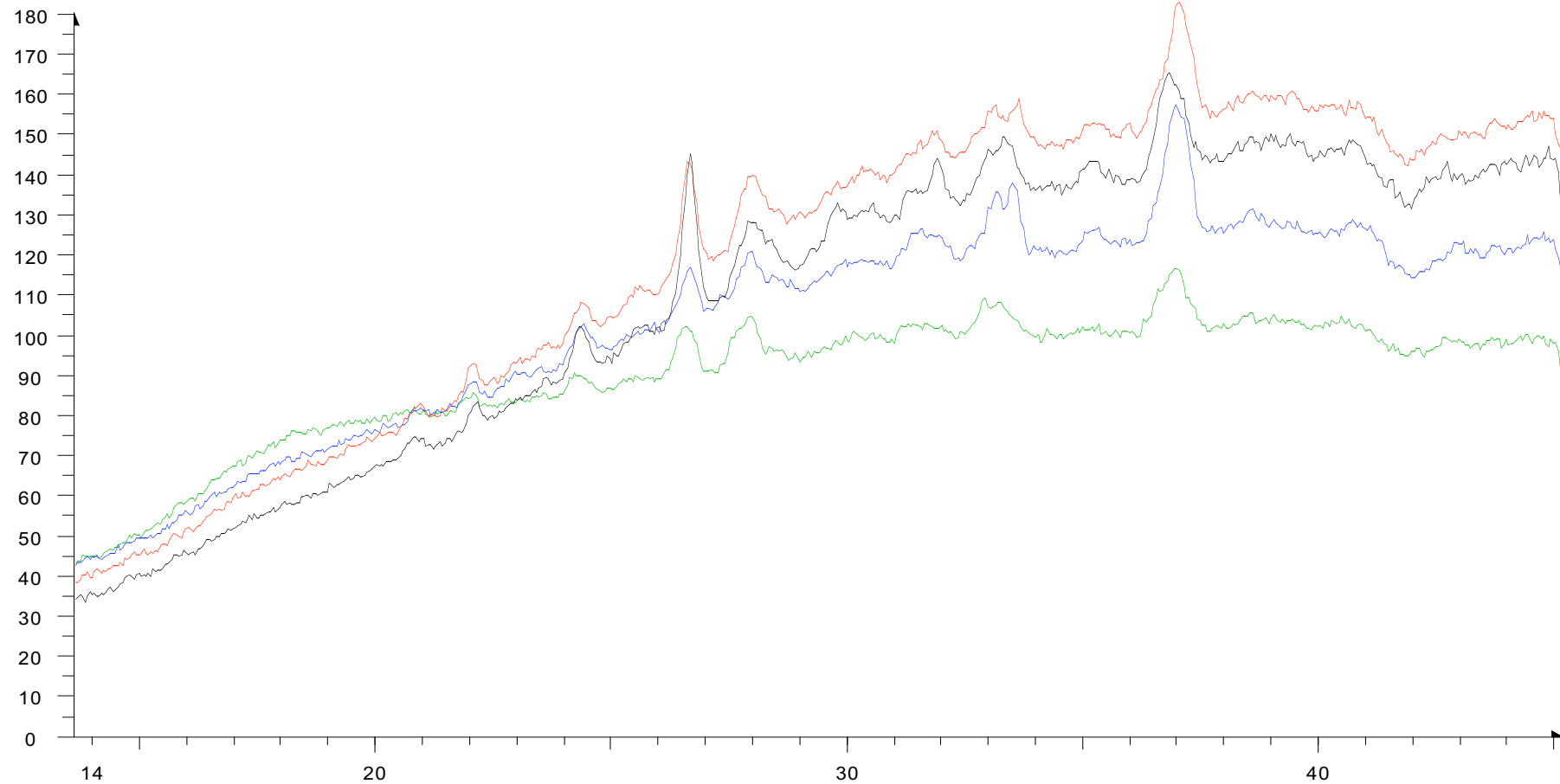


2-Theta - Scale

- Y + 6.0 mm - File: KristinTM2 4 08.raw
- Y + 8.0 mm - File: KristinTM2 4 09.raw
- Y + 10.0 mm - File: KristinTM2 4 10.raw
- 85-0796 (C) - Quartz - SiO<sub>2</sub>
- 42-1340 (\*) - Pprite - FeS<sub>2</sub>
- 42-1320 (I) - Arsenopvrite - FeAsS
- 09-0466 (\*) - Albite, ordered - NaAlSi<sub>3</sub>O<sub>8</sub>
- 41-0224 (I) - Bassanite, svn - CaSO<sub>4</sub>·0.5H<sub>2</sub>O

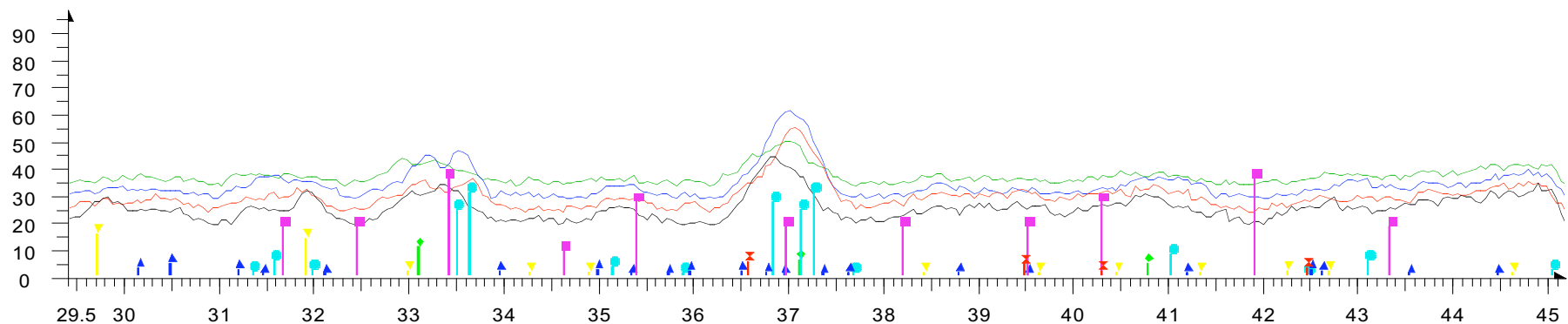
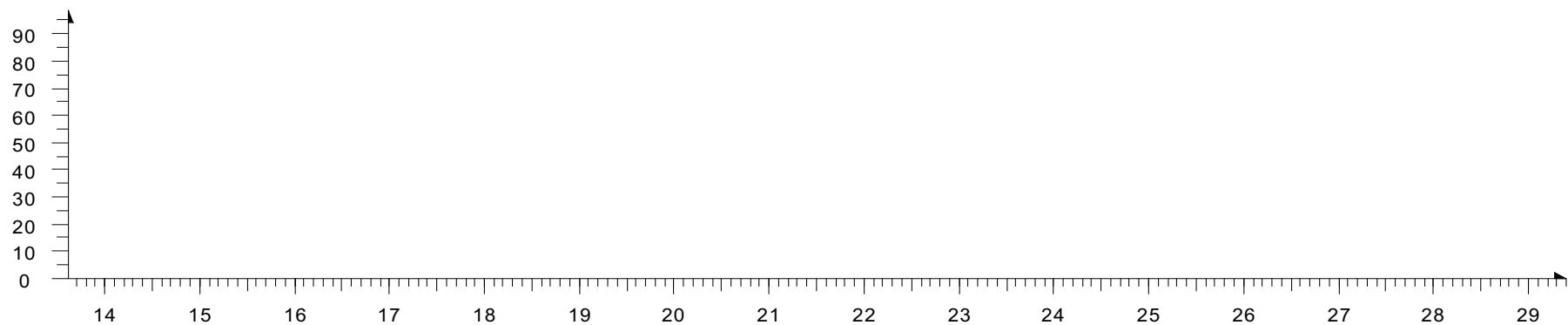
44-1468 (N) - Tooeleite - Fe<sub>8</sub>(AsO<sub>4</sub>)<sub>6</sub>(OH)<sub>6</sub>·5H<sub>2</sub>O





2-Theta - Scale

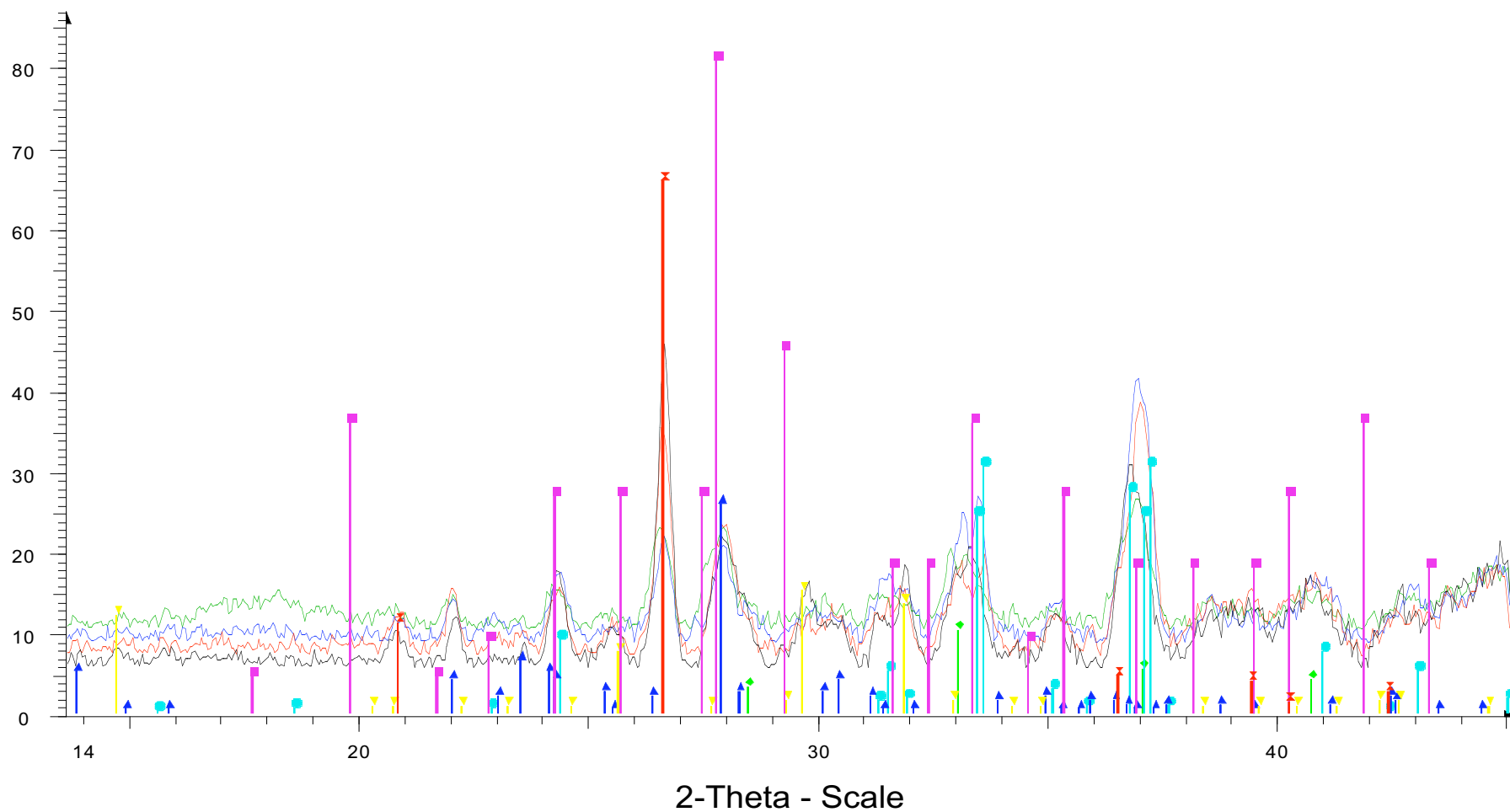
- File: KristinTM2 4 11.raw
- Y + 2.0 mm - File: KristinTM2 4 12.raw
- Y + 4.0 mm - File: KristinTM2 4 13.raw
- Y + 6.0 mm - File: KristinTM2 4 14.raw



### 2-Theta - Scale

- ▬ Y + 8.0 mm - File: KristinTM2 4 11.raw
- ▬ Y + 10.0 mm - File: KristinTM2 4 12.raw
- ▬ Y + 12.0 mm - File: KristinTM2 4 13.raw
- ▬ Y + 14.0 mm - File: KristinTM2 4 14.raw
- ✕ 85-0796 (C) - Quartz - SiO<sub>2</sub>
- ◆ 42-1340 (\*) - Pyrite - FeS<sub>2</sub>
- 42-1320 (I) - Arsenopyrite - FeAsS
- ▲ 09-0466 (\*) - Albite, ordered - NaAlSi<sub>3</sub>O<sub>8</sub>

- ▼ 41-0224 (I) - Bassanite, svn - CaSO<sub>4</sub>·0.5H<sub>2</sub>O
- 44-1468 (N) - Tooeleite - Fe<sub>8</sub>(AsO<sub>4</sub>)<sub>6</sub>(OH)<sub>6</sub>·5H<sub>2</sub>O



Y + 8.0 mm - File: KristinTM2 4 11.raw  
 Y + 10.0 mm - File: KristinTM2 4 12.raw  
 Y + 12.0 mm - File: KristinTM2 4 13.raw  
 Y + 14.0 mm - File: KristinTM2 4 14.raw  
 85-0796 (C) - Quartz - SiO<sub>2</sub>  
 42-1340 (\*) - Pyrite - FeS<sub>2</sub>  
 42-1320 (I) - Arsenopyrite - FeAsS  
 09-0466 (\*) - Albite, ordered - NaAlSi<sub>3</sub>O<sub>8</sub>

41-0224 (I) - Bassanite, svn - CaSO<sub>4</sub>·0.5H<sub>2</sub>O  
 44-1468 (N) - Tooeleite - Fe<sub>8</sub>(AsO<sub>4</sub>)<sub>6</sub>(OH)<sub>6</sub>·5H<sub>2</sub>O