

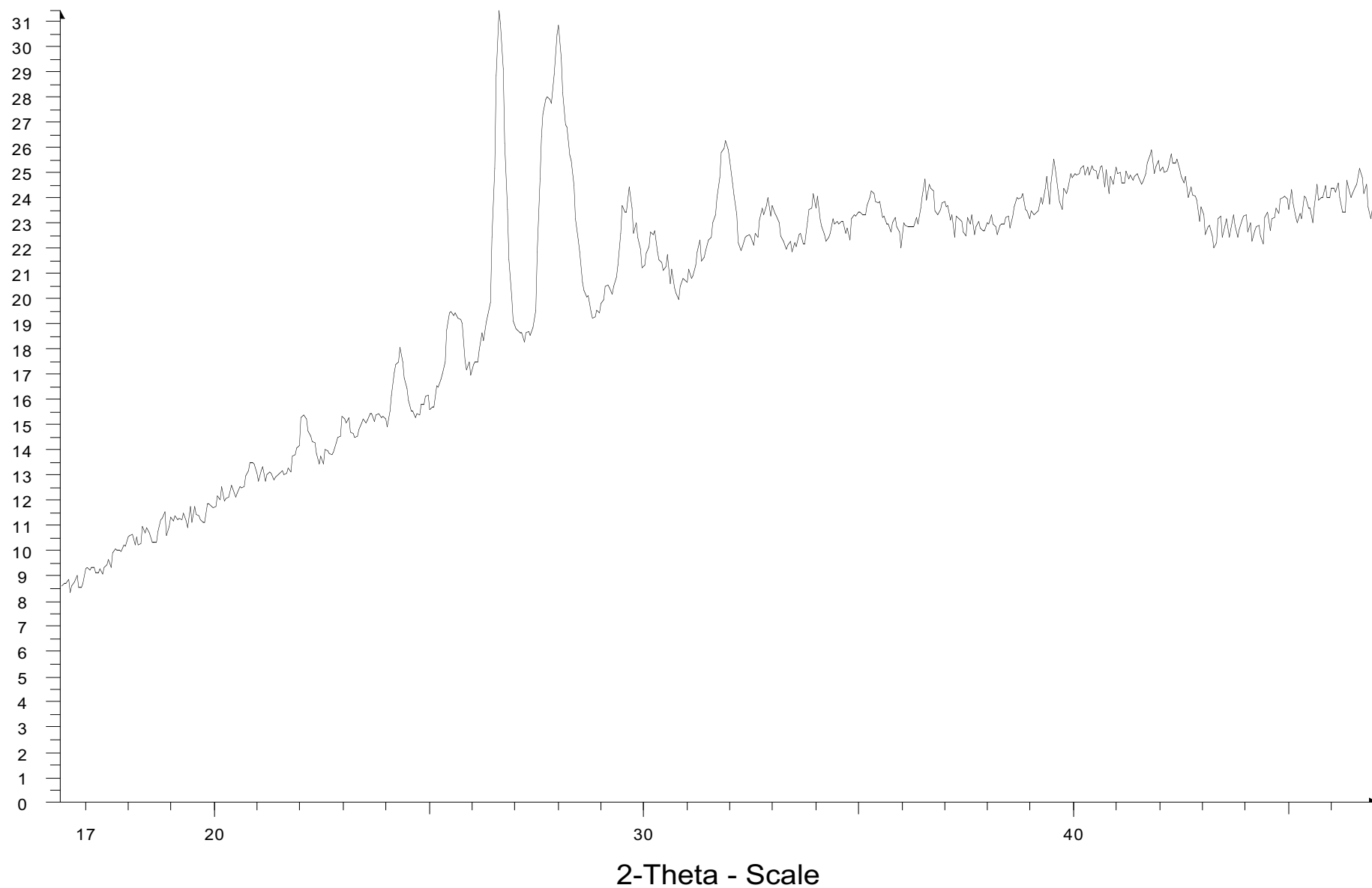
Sample ID:	Various
Zone:	N/A
Material identified:	Scorodite, primary silicates, primary sulfides
Type of radiation	CuK_1+K_2 = 1.54184Å
Power	40 kV x 40 mA
Type of scan	2_ (2 Omega)
Beam diameter	50 um
2_ range	6° - 21.5°
Time	2 hours


SAMPLE / DIFFRACTOGRAM INVENTORY

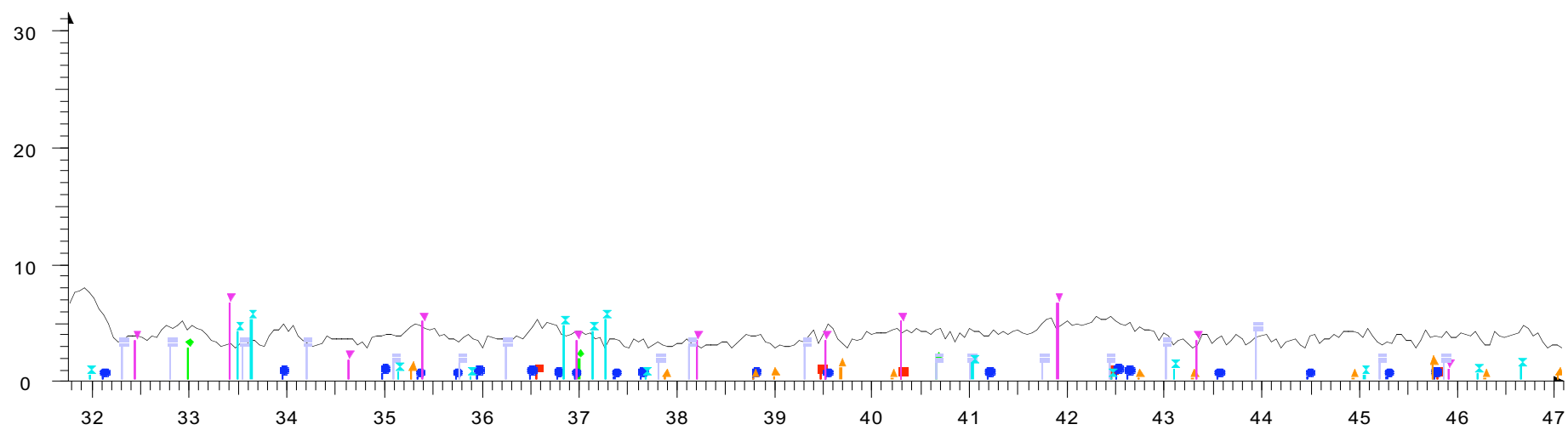
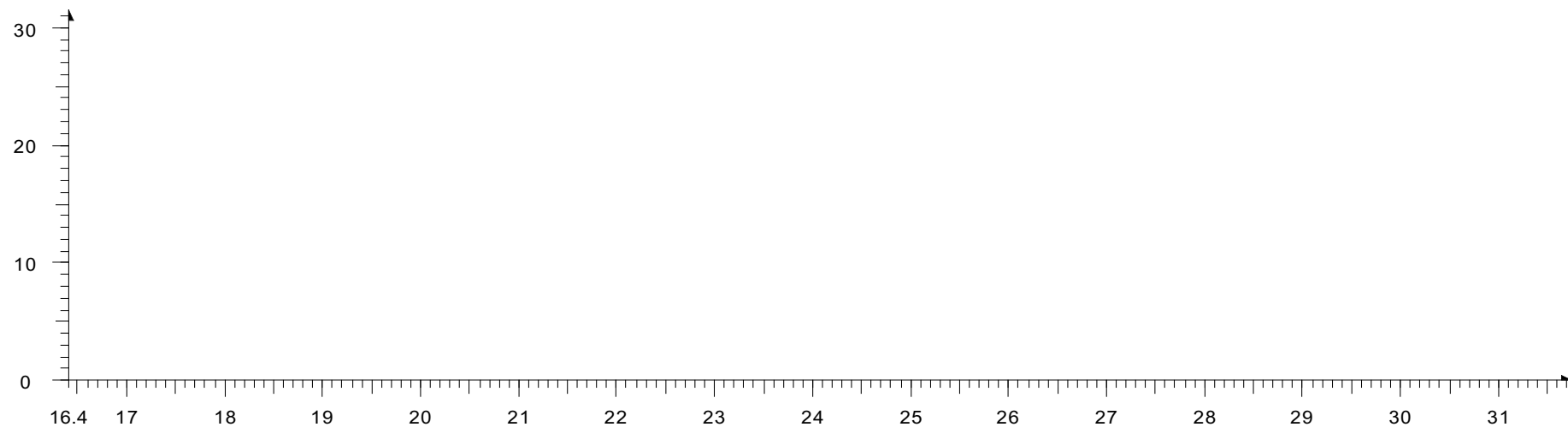
Sample ID	Spot ID	Zone	Notes
TM2-1	1	5	Zoned, amorphous reddish brown material containing jarosite.
TM2-1	2	5	Zoned, amorphous reddish brown material containing jarosite.
TM2-1	3	5	Yellow spot in zoned, amorphous reddish brown material.
TM2-1	4	3	Heterogeneous AISA spherule.
S2	5	3	Amorphous reddish brown material.
S3	6	1	Reddish brown material with diffuse yellow spot.
S3	7	4	Yellow altered material.
S3	8	4	Very light yellow altered material.
S3	9	5	Amorphous reddish brown material.
S3	10	5	Bright reddish brown material.
S3	11	5	White crystal.
TM2-4	12	6	Yellow spot in semi altered material.
TM2-4	13	6	Yellow spot in semi altered material.
TM2-4	14	6	Yellow spot in semi altered material.
TM2-4	15	6	Dark reddish brown material surrounded by reddish brown material.
TM2-4	16	8	Amorphous reddish brown and yellow material.
TM2-4	17	8	Amorphous reddish brown and yellow material.
TM2-4	18	9	Heterogeneous AISA spherule.

50 um scan, slide S3, point 9, amorphous reddish brown material.









Caption	Angle 2-Theta °	d value Angstrom	Intensity Count	Intensity % %
d=4.0246	22.1	4.0246	15.4	48.7
d=3.8572	23	3.8572	15.2	48.4
d=3.6623	24.3	3.6623	18.1	57.3
d=3.4901	25.5	3.4901	19.5	61.9
d=3.3469	26.6	3.3469	31.5	100
d=3.2133	27.7	3.2133	28	89
d=3.1866	28	3.1866	30.9	98.1
d=3.1509	28.3	3.1509	25.7	81.7
d=3.0116	29.6	3.0116	24.5	77.6
d=2.9574	30.2	2.9574	22.7	72
d=2.8039	31.9	2.8039	26.3	83.5
d=2.7220	32.9	2.722	24	76.3
d=2.6366	34	2.6366	24.2	76.8
d=2.4495	36.7	2.4495	24.5	77.9

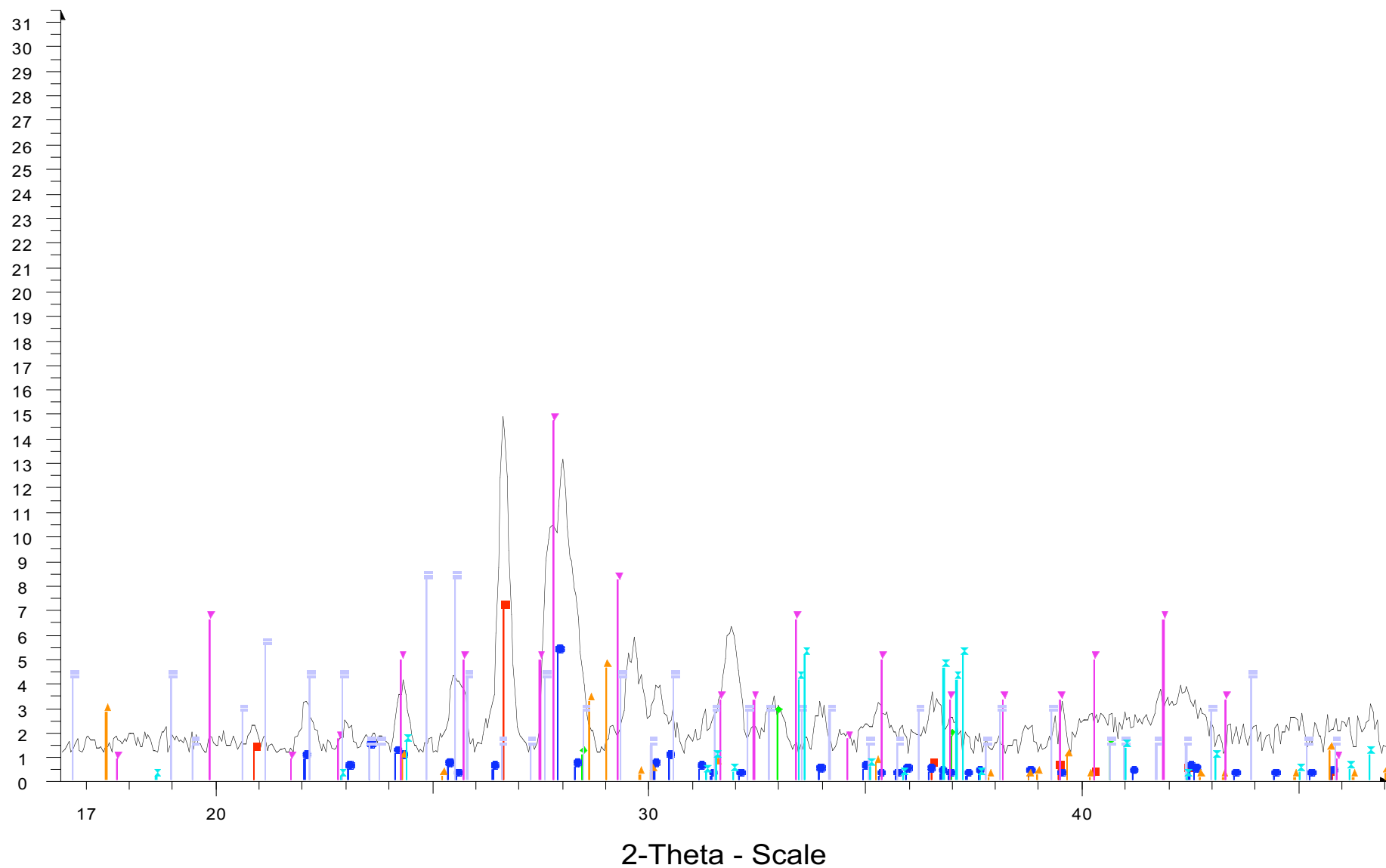


 File: Kristin50um18pts_09 [003].raw



2-Theta - Scale

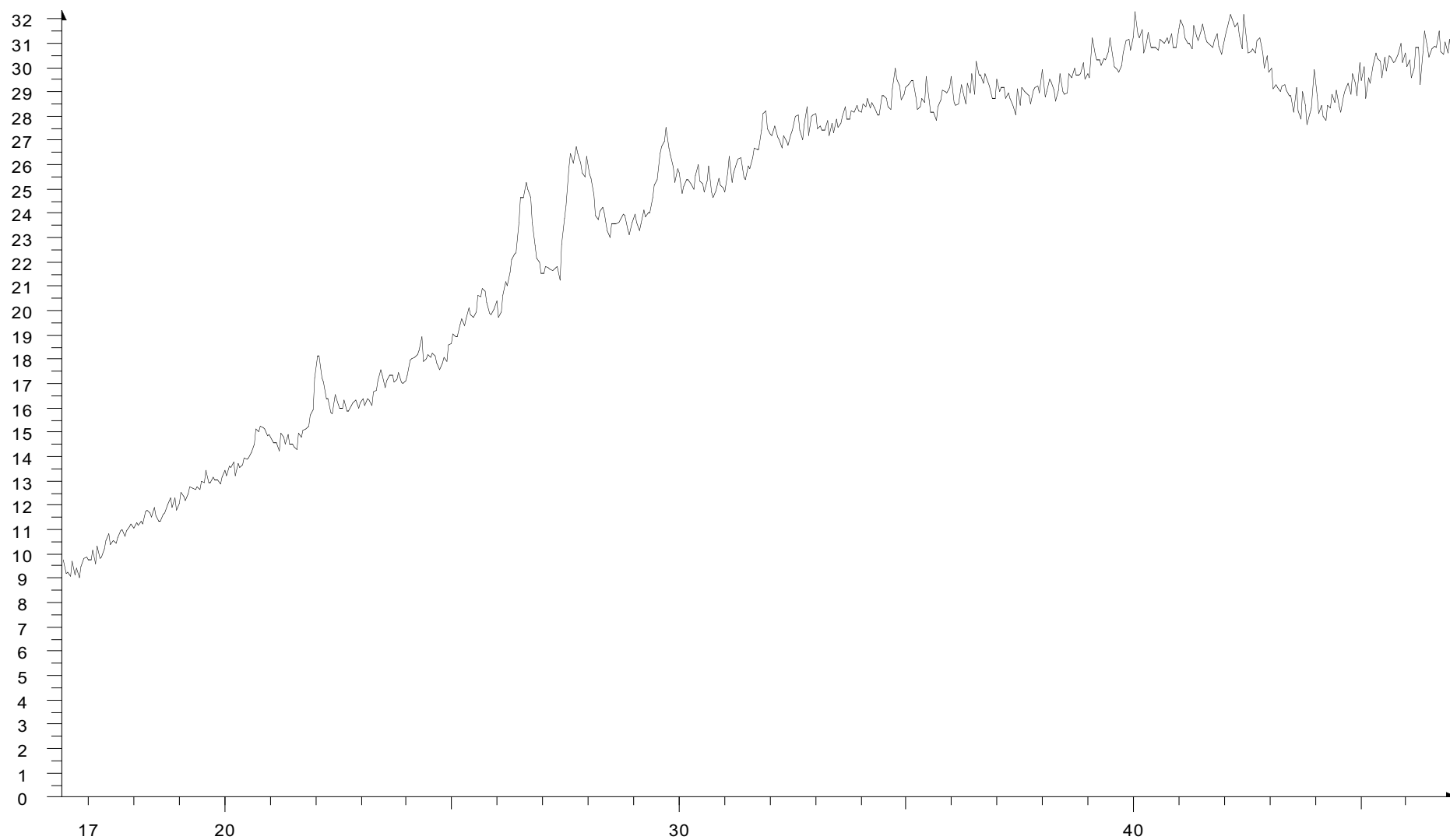
-  Y + 5.0 mm - File: Kristin50um18pts_09 [003].raw
-  85-0796 (C) - Quartz - SiO₂
-  71-0053 (C) - Pprite - FeS₂
-  09-0466 (*) - Albite, ordered - NaAlSi₃O₈
-  36-0427 (*) - Jarosite, OH-rich - (K,H₃O)Fe₃(SO₄)₂(OH)₆
-  44-1468 (N) - Tooeleite - Fe₈(AsO₄)₆(OH)₆·5H₂O
-  35-0583 (I) - Copiapite - FeFe₄(SO₄)₆(OH)₂·20H₂O
-  42-1320 (I) - Arsenopprite - FeAsS



- Y + 5.0 mm - File: Kristin50um18pts_09 [003].raw
- 85-0796 (C) - Quartz - SiO_2
- 71-0053 (C) - Prite - FeS_2
- 09-0466 (*) - Albite, ordered - $\text{NaAlSi}_3\text{O}_8$
- 36-0427 (*) - Jarosite, OH-rich - $(\text{K}, \text{H}_3\text{O})\text{Fe}_3(\text{SO}_4)_2(\text{OH})_6$
- 44-1468 (N) - Tooeleite - $\text{Fe}_8(\text{AsO}_4)_6(\text{OH})_6 \cdot 5\text{H}_2\text{O}$
- 35-0583 (I) - Copiapite - $\text{FeFe}_4(\text{SO}_4)_6(\text{OH})_2 \cdot 20\text{H}_2\text{O}$
- 42-1320 (I) - Arsenoprite - FeAsS

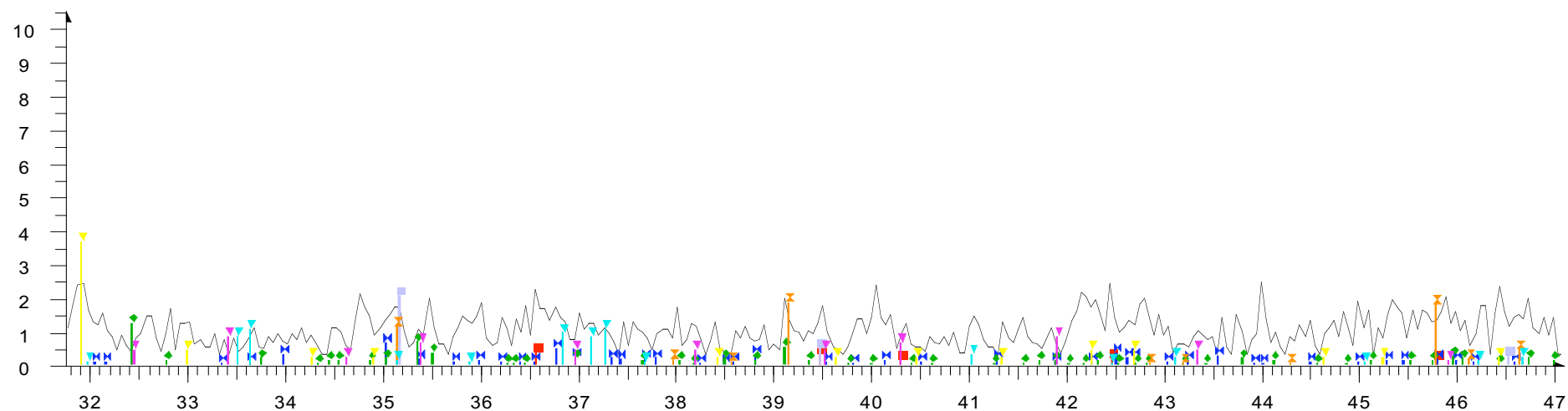
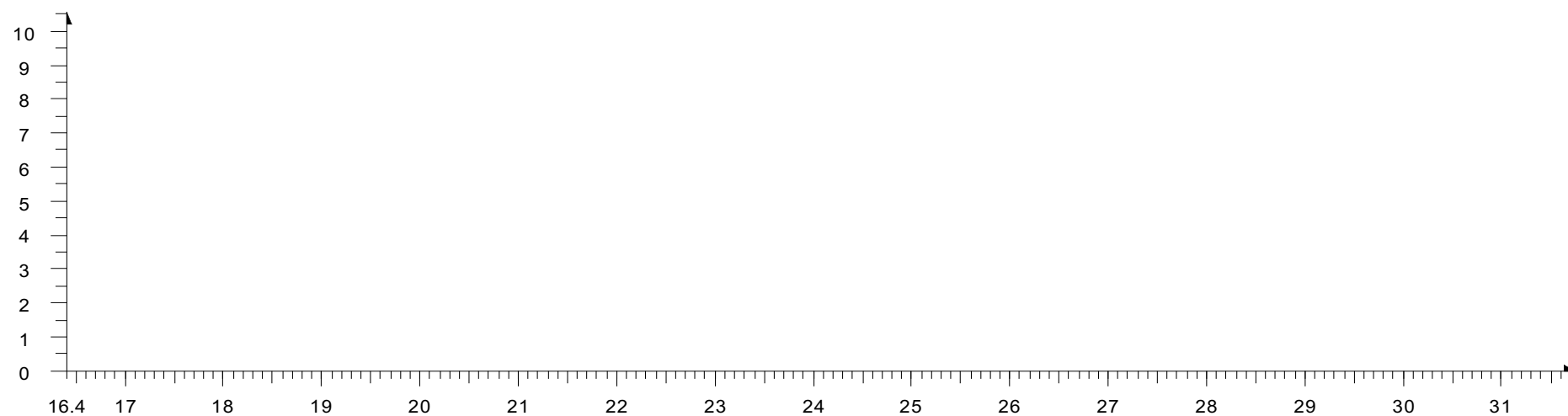
50 um scan, slide S3, point 10, bright reddish brown material.

Caption	Angle 2-Theta °	d value Angstrom	Intensity Count	Intensity % %
d=4.0312	22	4.0312	18.1	56.1
d=3.3465	26.6	3.3465	25.3	78.2
d=3.2302	27.6	3.2302	26.5	81.9
d=3.1840	28	3.184	26.4	81.5
d=3.0077	29.7	3.0077	27.6	85.2
d=2.5782	34.8	2.5782	30	92.7
d=2.2492	40.1	2.2492	32.4	100
d=2.1401	42.2	2.1401	32.2	99.6
d=2.0551	44	2.0551	29.9	92.5
d=2.8032	31.9	2.8032	28.3	87.4
d=3.6639	24.3	3.6639	18.9	58.4
d=3.4678	25.7	3.4678	20.9	64.6
d=4.2704	20.8	4.2704	15.2	47












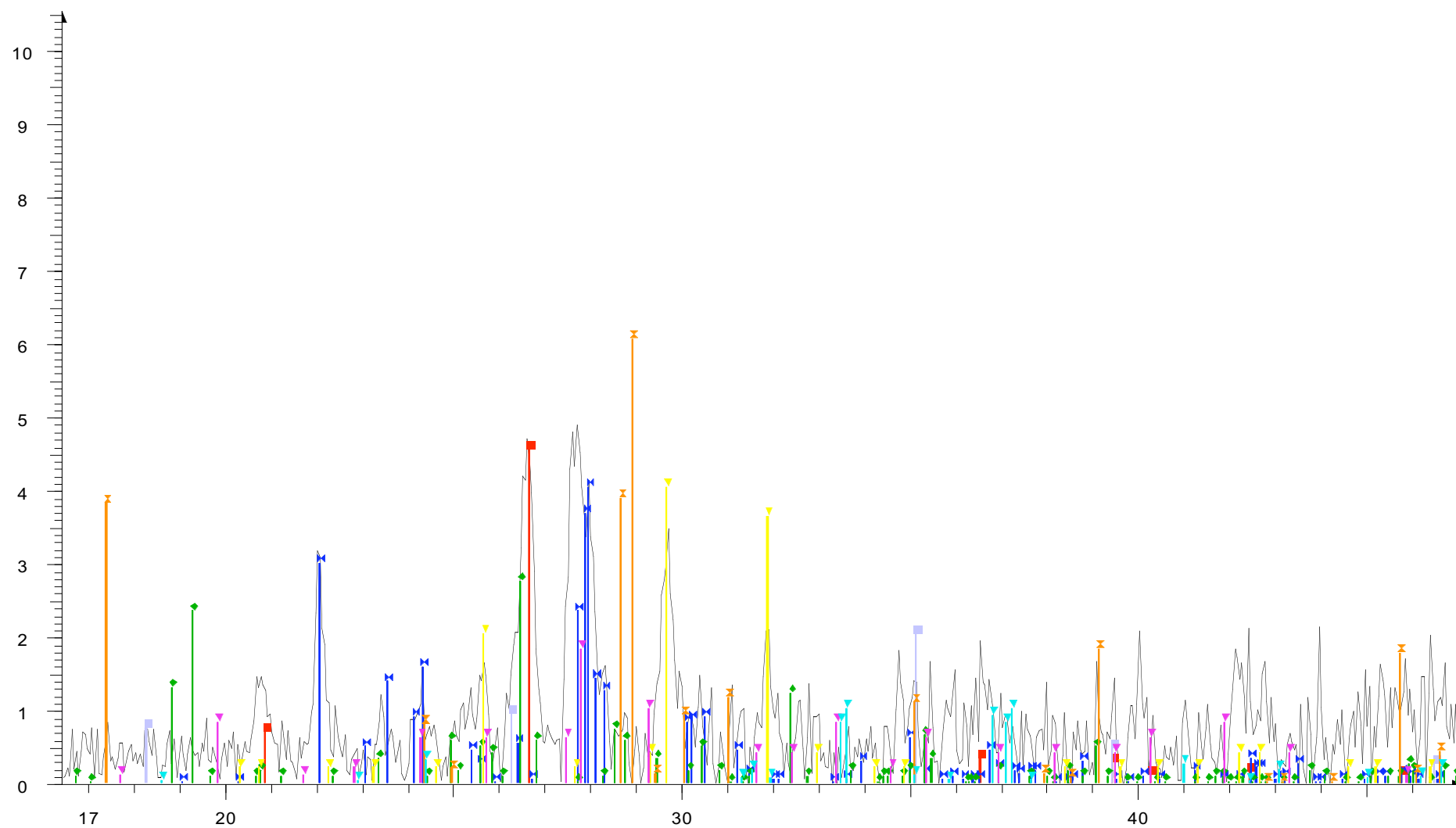
2-Theta - Scale

File: Kristin50um18pts 10 f0021.raw



2-Theta - Scale

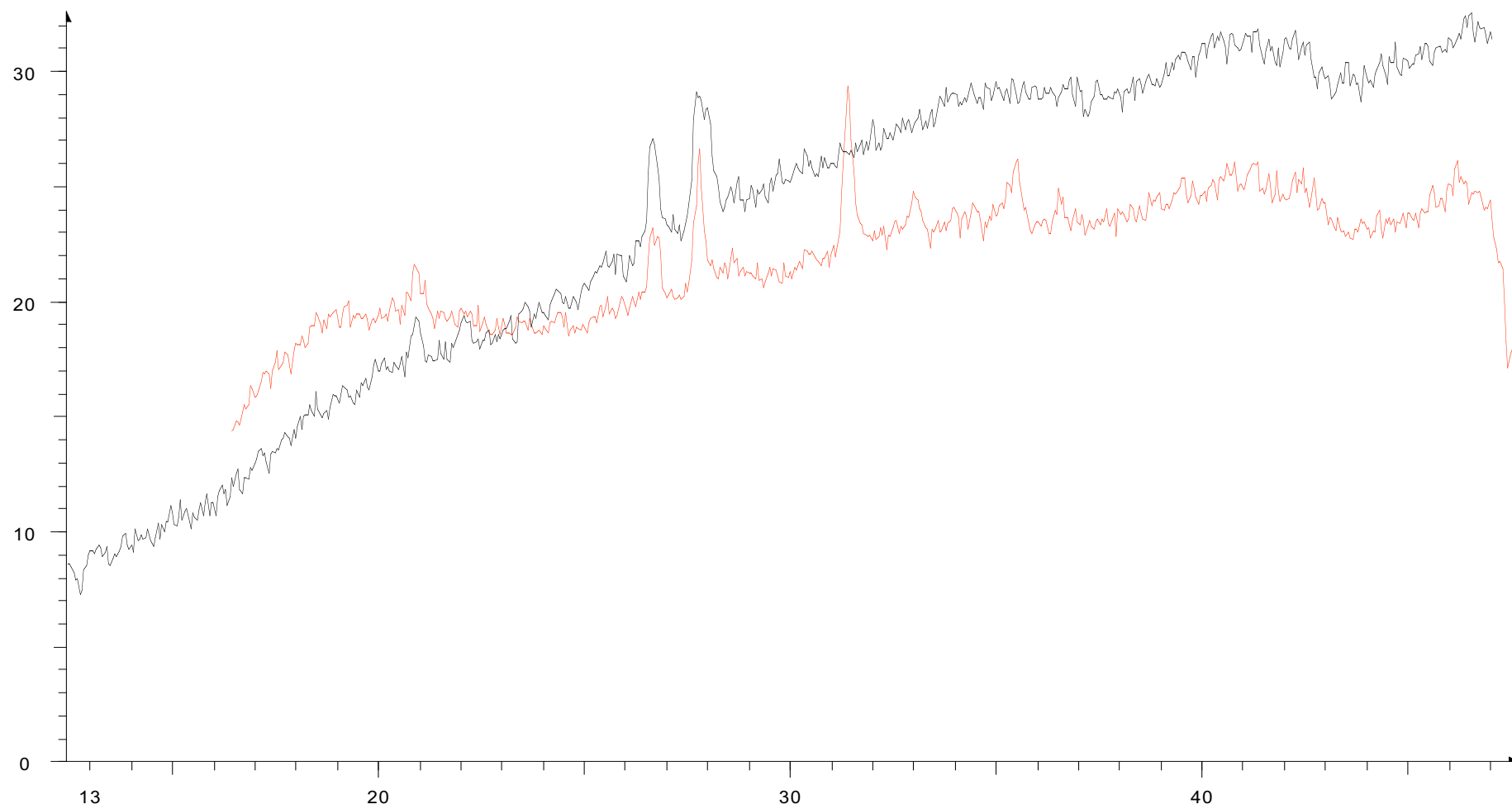
-  Y + 3.0 mm - File: Kristin50um18pts 10 f0021.raw
-  85-0795 (C) - Quartz - SiO₂
-  84-0752 (C) - Albite low - Na(AlSi₃O₈)
-  47-1775 (N) - Schwertmannite - Fe₁₆O₁₆(SO₄)₃(OH)₁₀·10H₂O
-  71-2408 (C) - Paracoquimbite - Fe₂(SO₄)₃(H₂O)₉
-  41-0224 (I) - Bassanite. syn - CaSO₄·0.5H₂O
-  76-0629 (C) - Jarosite - K(Fe₃(SO₄)₂(OH)₆)
-  44-1468 (N) - Tooeleite - Fe₈(AsO₄)₆(OH)₆·5H₂O
-  42-1320 (I) - Arsenopovrite - FeAsS



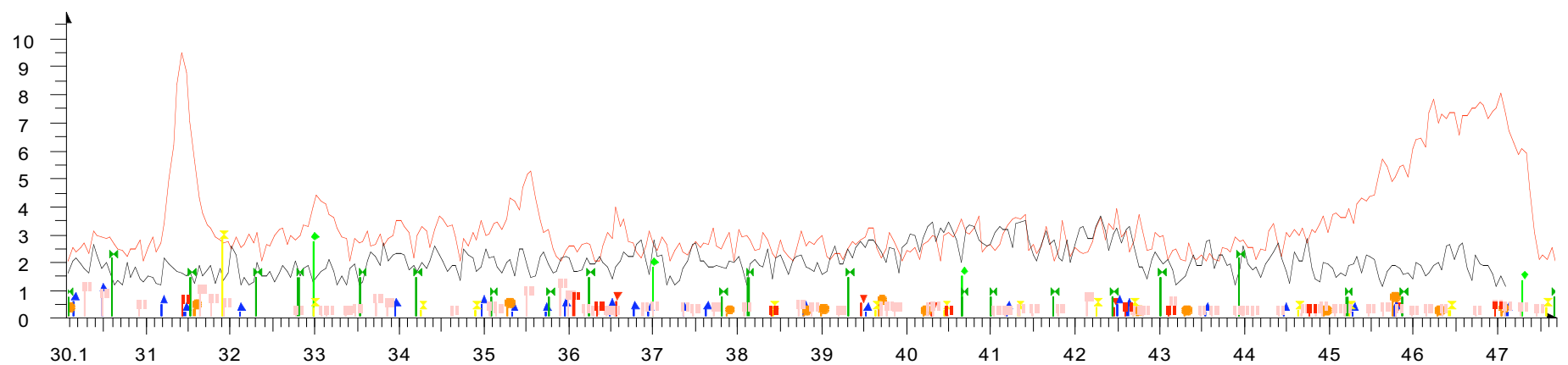
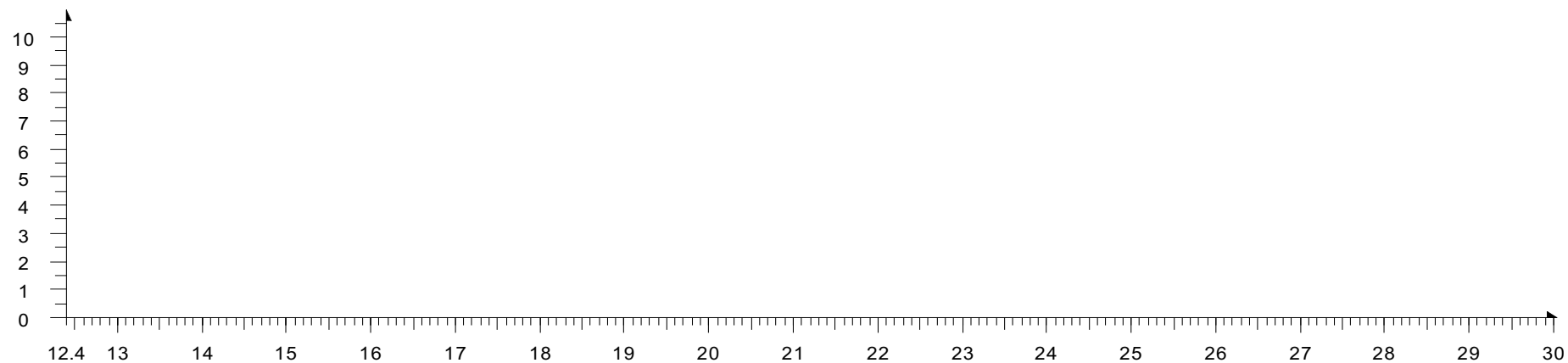
2-Theta - Scale

50 um scan, slide S3, points 6 and 8, reddish brown and yellow material.

Caption	Angle 2-Theta °	d value Angstrom	Intensity Count	Intensity % %
d=4.2593	20.8	4.2593	20.8	72.7
d=3.3416	26.7	3.3416	22.4	78.3
d=3.2102	27.8	3.2102	25.8	90.3
d=2.8450	31.4	2.845	28.6	100
d=2.7117	33	2.7117	24	83.8
d=2.5228	35.6	2.5228	25.4	88.8
d=2.4549	36.6	2.4549	24.1	84.3
d=2.1824	41.3	2.1824	25.3	88.5
d=2.1268	42.5	2.1268	25	87.5
d=1.9221	47.2	1.9221	21.5	75

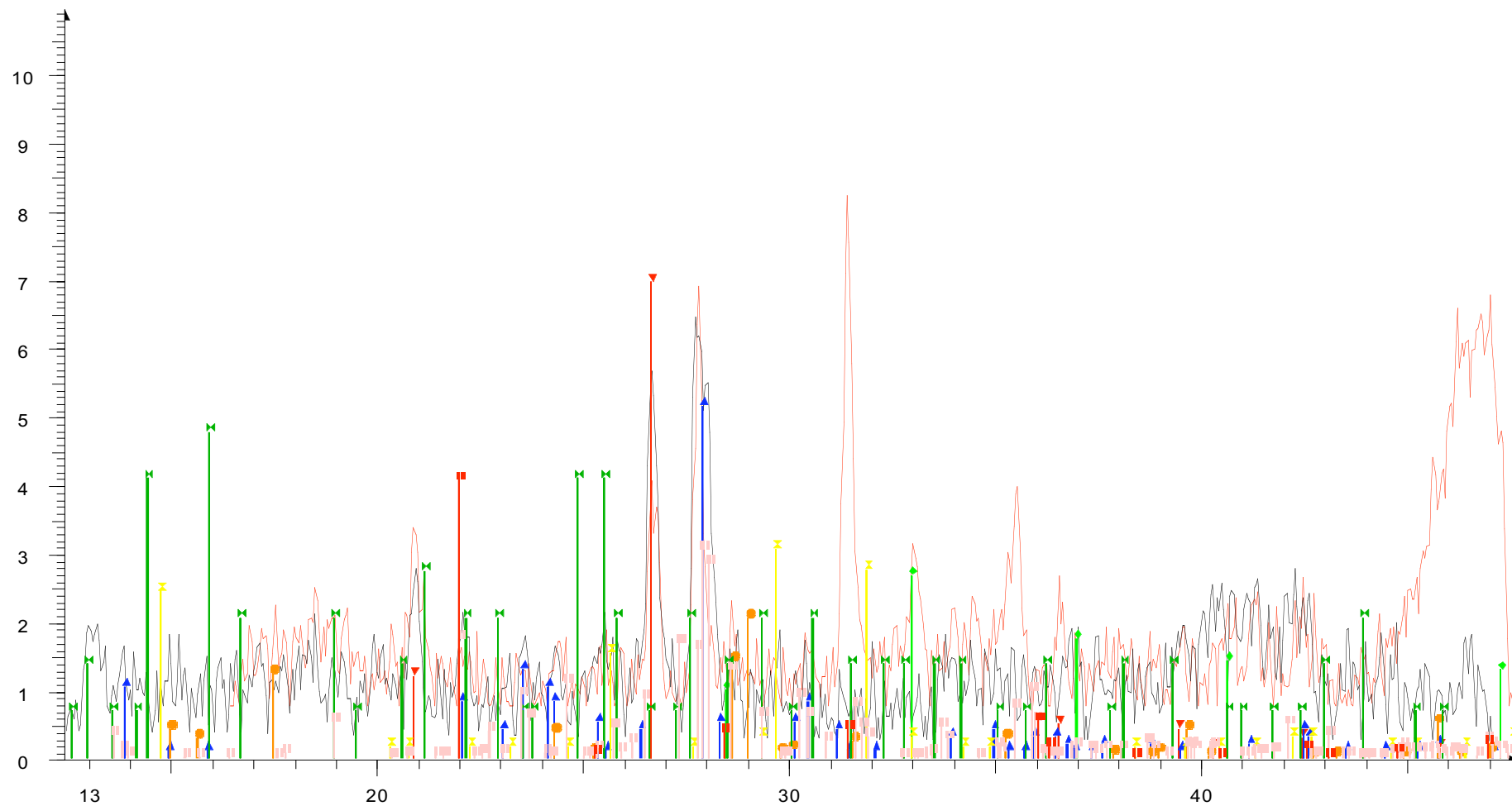


File: Kristin50um18pts_06.raw
Y + 3.0 mm - File: Kristin50um18pts_08 [003].raw



2-Theta - Scale

- | | |
|---|---|
| Y + 6.0 mm - File: Kristin50um18pts_06.raw | 86-1705 (C) - Anorthite - $\text{Ca}(\text{Al}_2\text{Si}_2\text{O}_8)$ |
| Y + 9.0 mm - File: Kristin50um18pts_08 [003].raw | 82-1403 (C) - Cristobalite beta. svn - SiO_2 |
| 85-0796 (C) - Quartz - SiO_2 | |
| 71-0053 (C) - Pvrite - FeS_2 | |
| 09-0466 (*) - Albite, ordered - $\text{NaAlSi}_3\text{O}_8$ | |
| 36-0427 (*) - Jarosite, OH-rich - $(\text{K}, \text{H}_3\text{O})\text{Fe}_3(\text{SO}_4)_2(\text{OH})_6$ | |
| 41-0224 (I) - Bassanite. svn - $\text{CaSO}_4 \cdot 0.5\text{H}_2\text{O}$ | |
| 35-0583 (I) - Copiapite - $\text{FeFe}_4(\text{SO}_4)_6(\text{OH})_2 \cdot 20\text{H}_2\text{O}$ | |

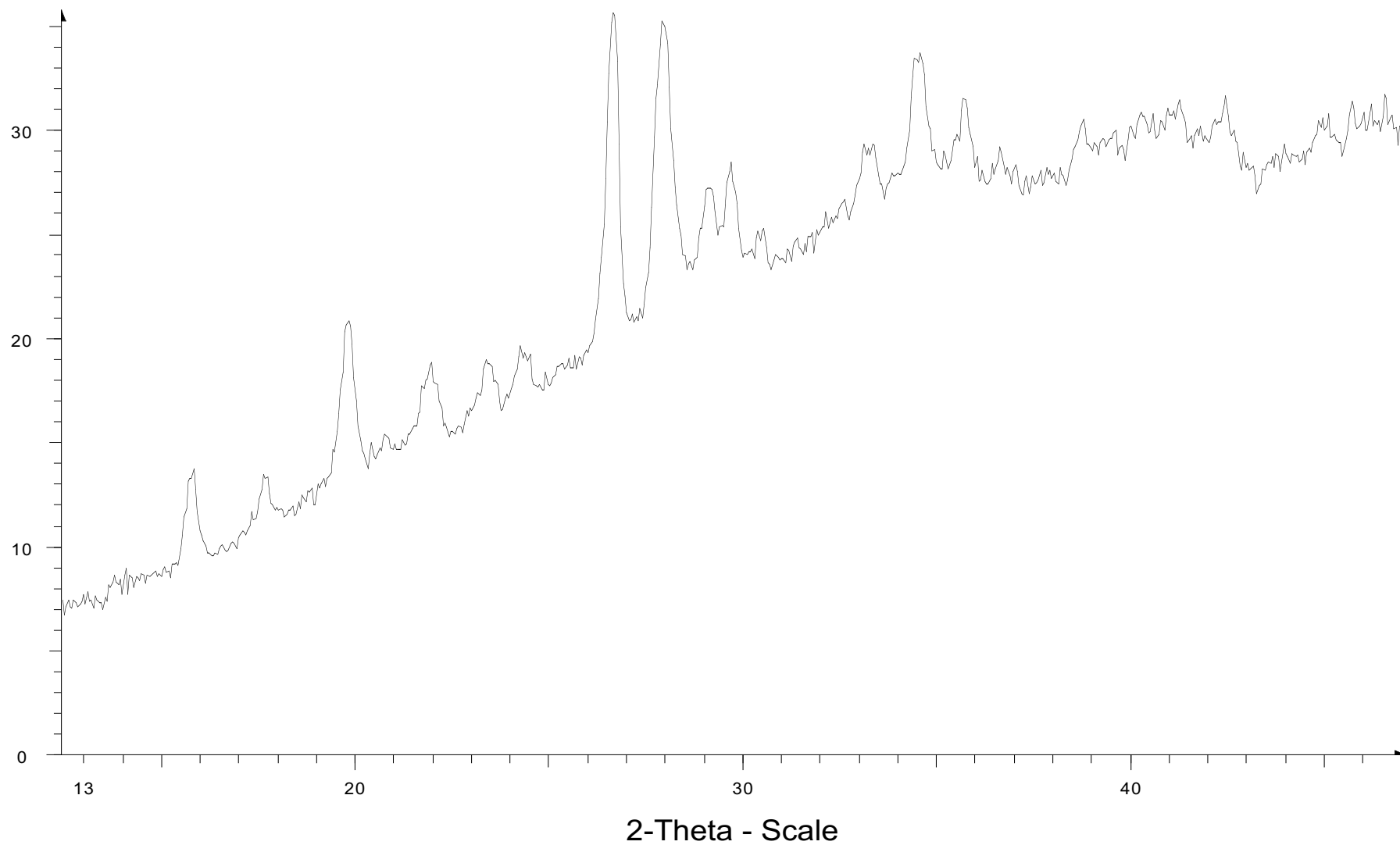


2-Theta - Scale

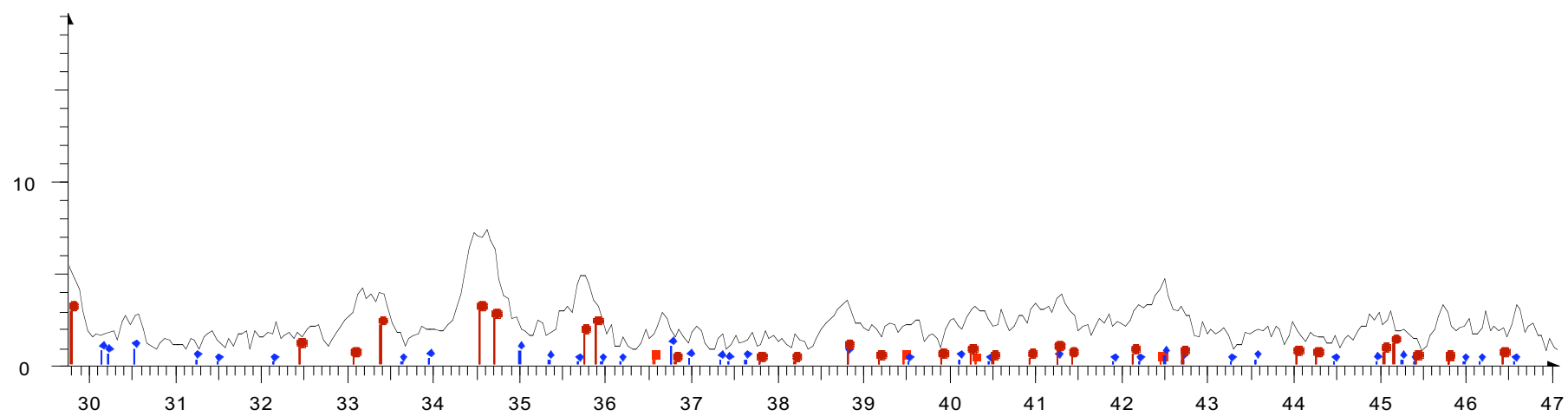
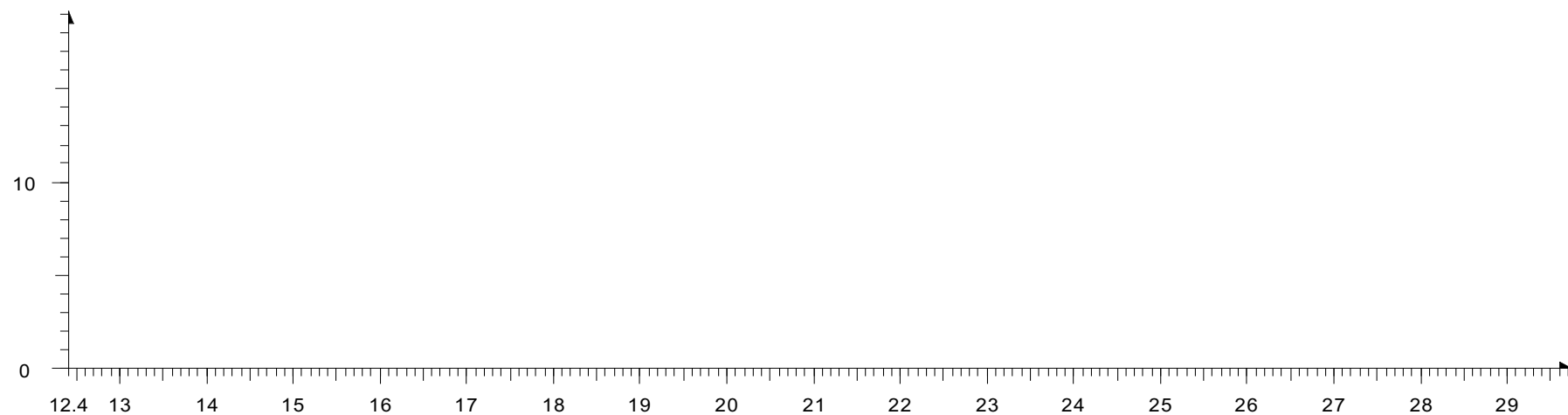
- | | |
|--|---|
| <ul style="list-style-type: none"> Y + 6.0 mm - File: Kristin50um18pts_06.raw Y + 9.0 mm - File: Kristin50um18pts_08_10031.raw 85-0796 (C) - Quartz - SiO₂ 71-0053 (C) - Prite - FeS₂ 09-0466 (*) - Albite, ordered - NaAlSi₃O₈ 36-0427 (*) - Jarosite, OH-rich - (K,H₃O)Fe₃(SO₄)₂(OH)₆ 41-0224 (I) - Bassanite, svn - CaSO₄·0.5H₂O 35-0583 (I) - Copiapite - FeFe₄(SO₄)₆(OH)₂·20H₂O | <ul style="list-style-type: none"> 86-1705 (C) - Anorthite - Ca(Al₂Si₂O₈) 82-1403 (C) - Cristobalite beta, svn - SiO₂ |
|--|---|

50 um scan, slide S3, point 7, yellowish green material.





Caption	Angle 2-Theta °	d value Angstrom	Intensity Count	Intensity % %
d=6.4194	13.8	6.4194	8.57	24
d=5.6209	15.8	5.6209	13.7	38.5
d=5.0242	17.6	5.0242	13.4	37.6
d=4.4834	19.8	4.4834	20.9	58.4
d=4.0494	21.9	4.0494	18.8	52.7
d=3.7998	23.4	3.7998	19	53.1
d=3.6654	24.3	3.6654	19.7	55
d=3.3406	26.7	3.3406	35.7	100
d=3.1898	27.9	3.1898	35.3	98.7
d=3.0645	29.1	3.0645	27.3	76.3
d=3.0086	29.7	3.0086	28.5	79.7
d=2.9275	30.5	2.9275	25.3	70.8
d=2.6829	33.4	2.6829	29.4	82.1
d=2.5938	34.6	2.5938	33.8	94.5
d=2.5124	35.7	2.5124	31.5	88.3
d=2.3216	38.8	2.3216	30.6	85.5
d=2.0087	45.1	2.0087	30.8	86.3
d=1.9808	45.8	1.9808	31.5	88.1

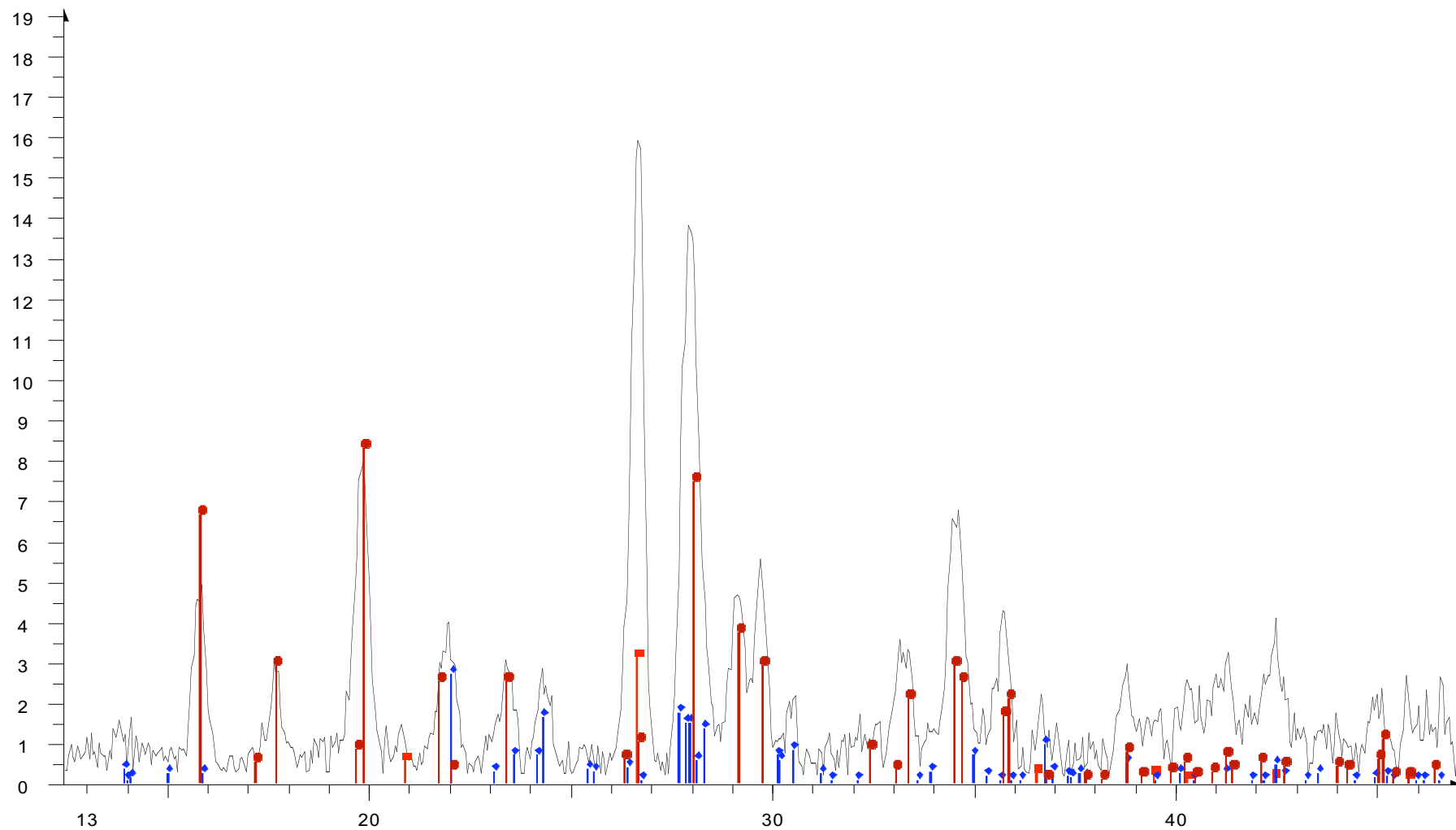


File: Kristin50um18pts 07.raw



2-Theta - Scale

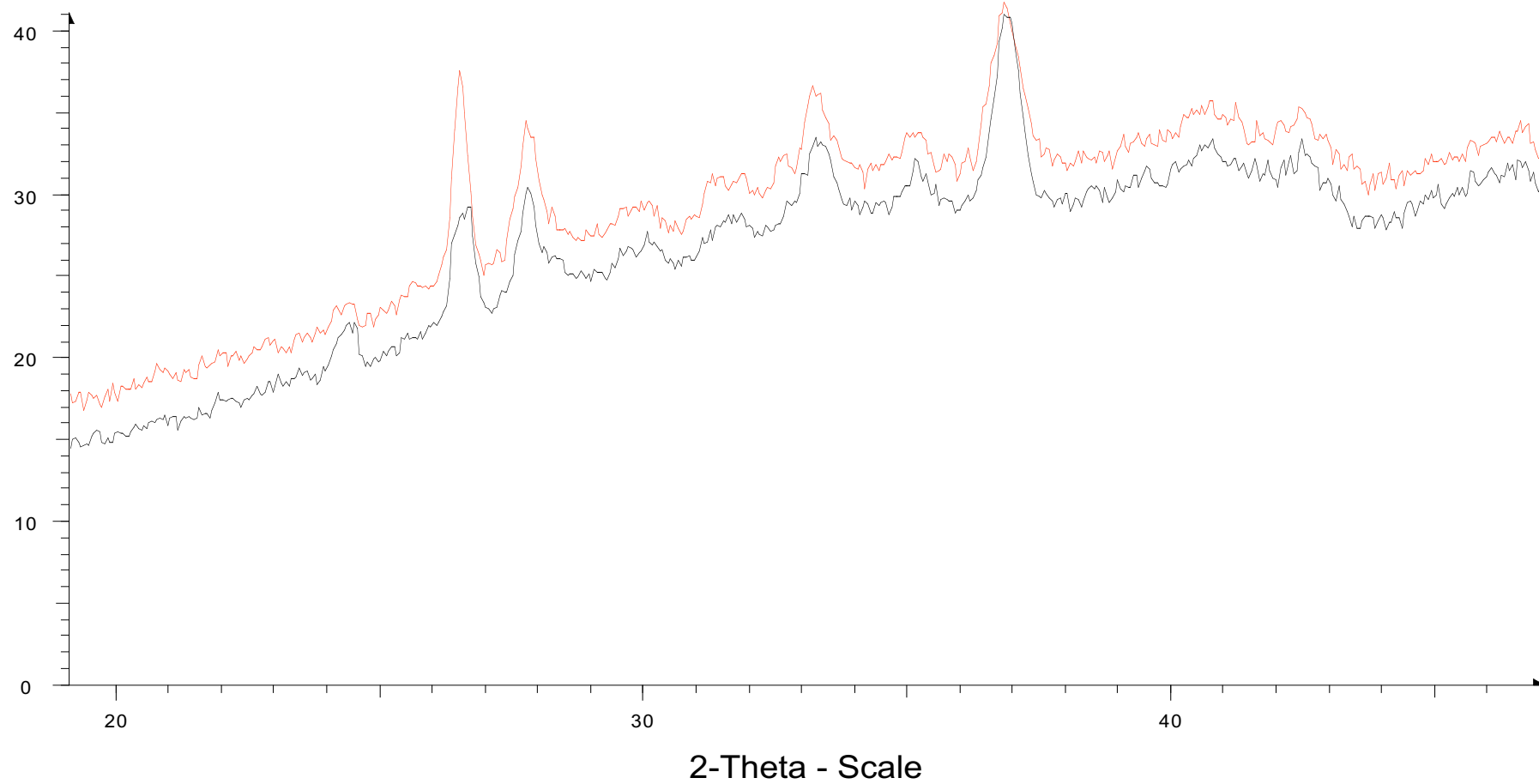
-  Y + 3.0 mm - File: Kristin50um18pts_07.raw
-  85-0796 (C) - Quartz - SiO₂
-  19-1184 (I) - Albite. ordered - NaAlSi₃O₈
-  37-0468 (*) - Scorodite - FeAsO₄·2H₂O



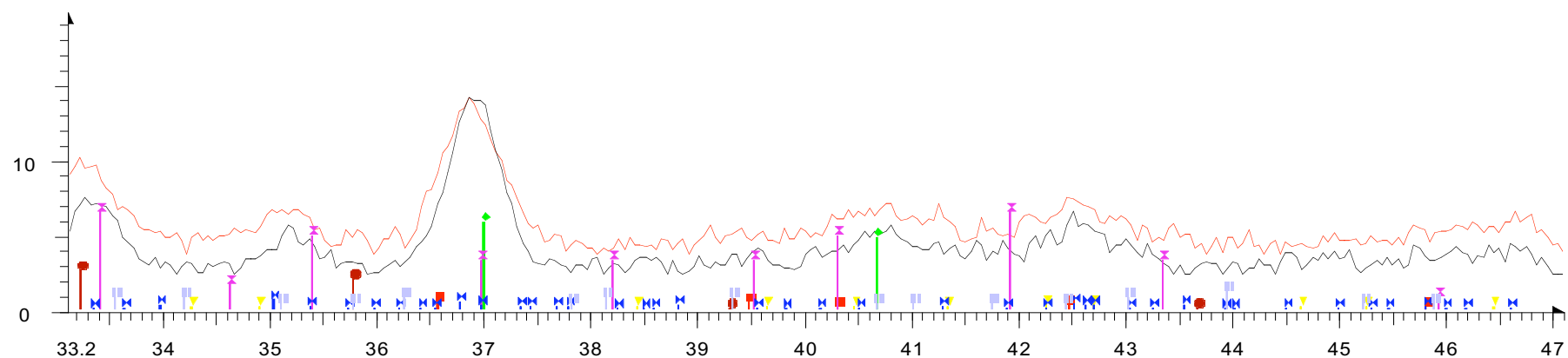
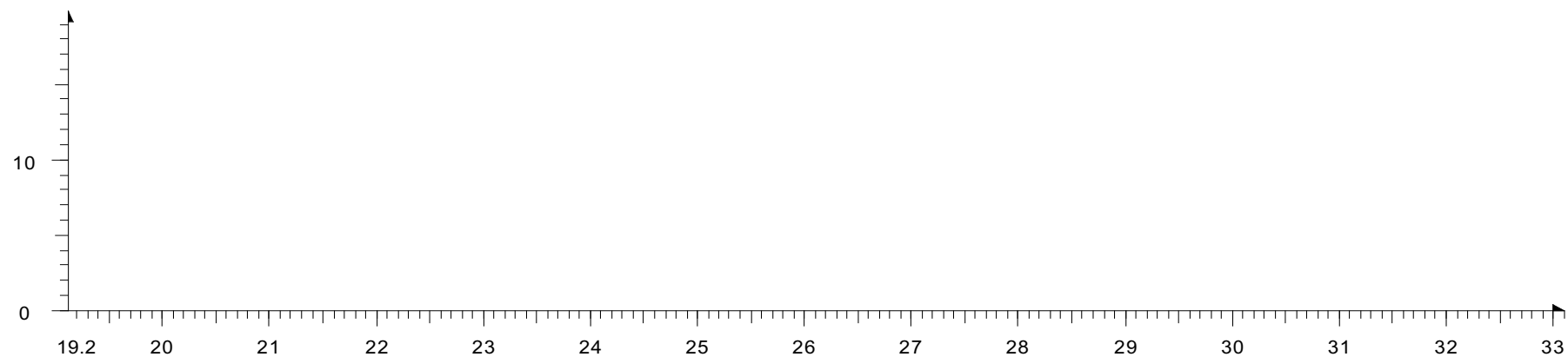
- Y + 3.0 mm - File: Kristin50um18pts 07.raw
- 85-0796 (C) - Quartz - SiO₂
- 19-1184 (I) - Albite, ordered - NaAlSi₃O₈
- 37-0468 (*) - Scorodite - FeAsO₄·2H₂O

50 um scan, TM2-4, points 12 and 13, "weird yellow" spots.

Caption	Angle 2-Theta °	d value Angstrom	Intensity Count	Intensity % %
d=3.6429	24.4	3.6429	22.1	53.8
d=3.3416	26.7	3.3416	29.2	71.2
d=3.2058	27.8	3.2058	30.4	74.1
d=2.8259	31.6	2.8259	28.8	70
d=2.6920	33.3	2.692	33.6	81.8
d=2.4332	36.9	2.4332	41.1	100
d=2.5500	35.2	2.55	32.2	78.3
d=2.9716	30	2.9716	27.7	67.5
d=2.1248	42.5	2.1248	33.5	81.5



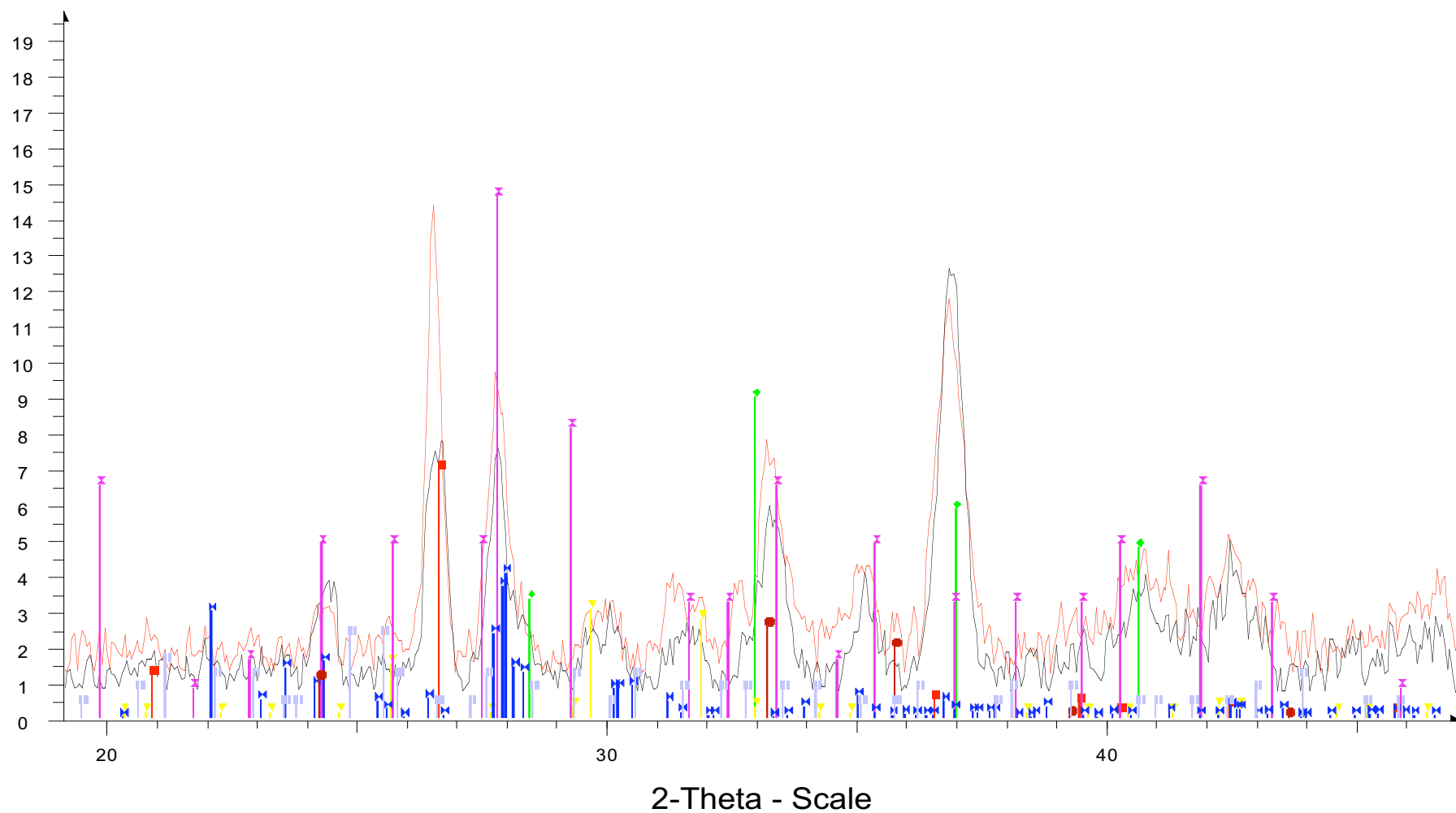
File: Kristin50um18pts 12.raw
Y + 7.0 mm - File: Kristin50um18pts 13.raw



2-Theta - Scale

- Y + 6.0 mm - File: Kristin50um18pts 12.raw
- Y + 9.0 mm - File: Kristin50um18pts 13.raw
- 85-0796 (C) - Quartz - SiO₂
- 71-0053 (C) - Pvrite - FeS₂
- 41-0224 (I) - Bassanite. svn - CaSO₄·0.5H₂O
- 44-1468 (N) - Tooeleite - Fe₈(AsO₄)₆(OH)₆·5H₂O
- 84-0752 (C) - Albite low - Na(AlSi₃O₈)
- 85-0599 (C) - Hematite - Fe₂O₃

35-0583 (I) - Copiapite - FeFe₄(SO₄)₆(OH)₂·20H₂O

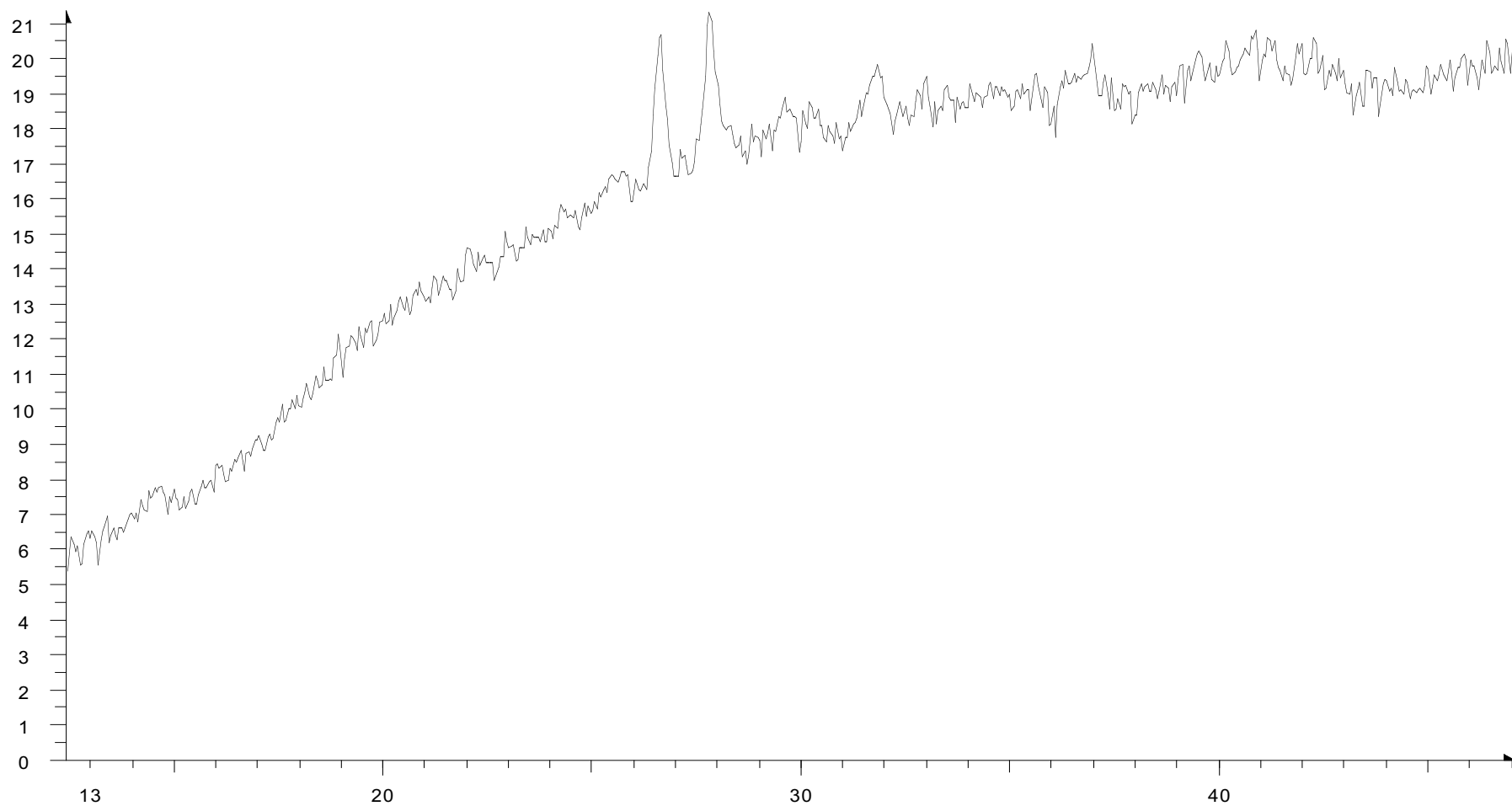


- Y + 6.0 mm - File: Kristin50um18pts 12.raw
- Y + 9.0 mm - File: Kristin50um18pts 13.raw
- 85-0796 (C) - Quartz - SiO₂
- 71-0053 (C) - Pvrite - FeS₂
- 41-0224 (I) - Bassanite. svn - CaSO₄·0.5H₂O
- 44-1468 (N) - Tooeleite - Fe₈(AsO₄)₆(OH)₆·5H₂O
- 84-0752 (C) - Albite low - Na(AlSi₃O₈)
- 85-0599 (C) - Hematite - Fe₂O₃

35-0583 (I) - Copiapite - FeFe₄(SO₄)₆(OH)₂·20H₂O

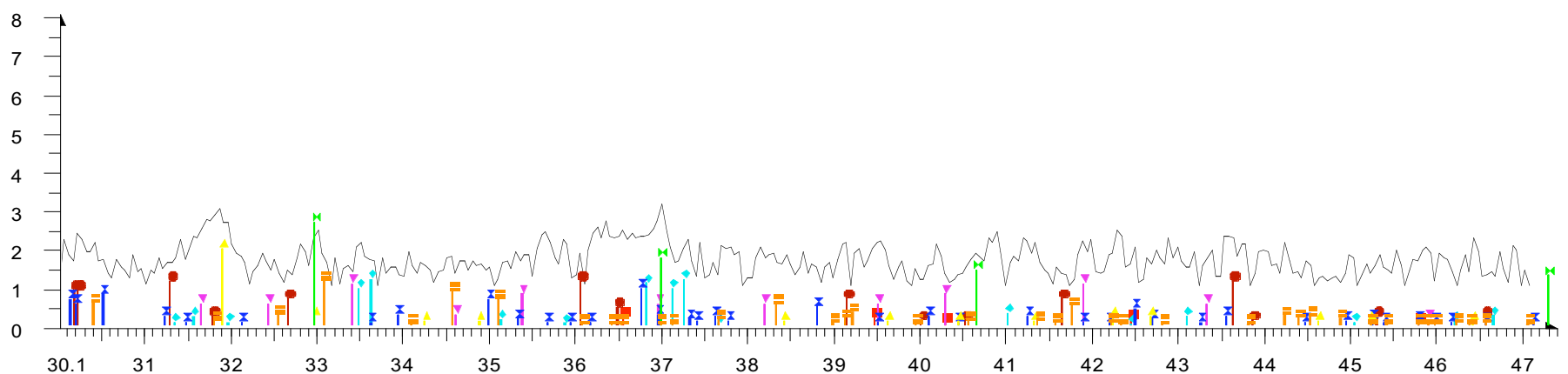
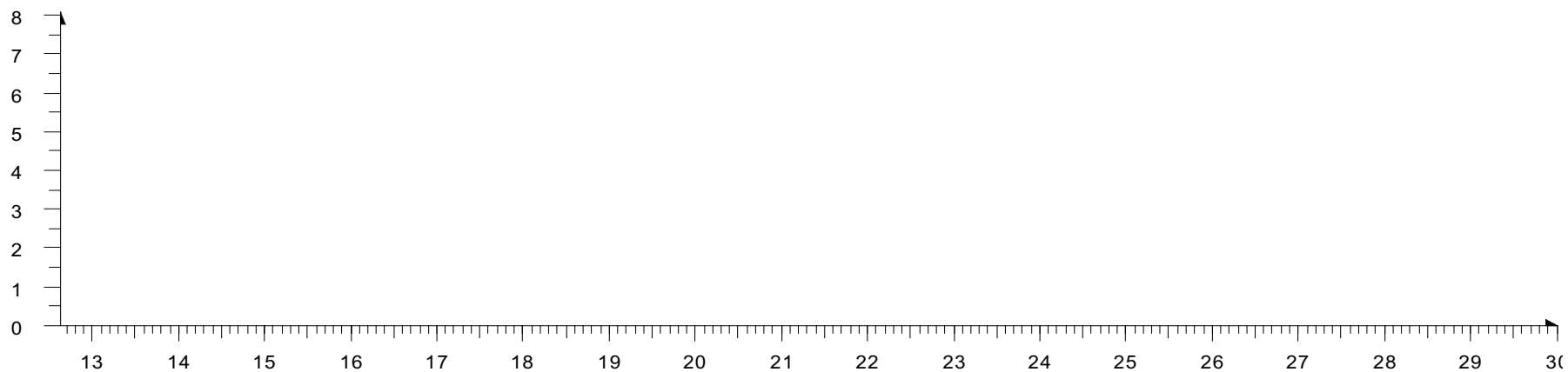
50 um scan, slide S2, point 5, reddish amorphous material.

Caption	Angle 2-Theta °	d value Angstrom	Intensity Count	Intensity % %
d=7.0563	12.5	7.0563	6.34	29.7
d=6.8038	13	6.8038	6.52	30.5
d=6.6523	13.3	6.6523	6.92	32.4
d=6.0605	14.6	6.0605	7.78	36.5
d=5.5295	16	5.5295	8.42	39.4
d=5.3586	16.5	5.3586	8.81	41.3
d=5.2186	17	5.2186	9.23	43.2
d=4.7016	18.9	4.7016	12.1	56.8
d=4.0355	22	4.0355	14.6	68.5
d=3.8785	22.9	3.8785	15.1	70.6
d=3.3451	26.6	3.3451	20.7	97
d=3.2050	27.8	3.205	21.3	100
d=3.0138	29.6	3.0138	18.9	88.6
d=2.8071	31.9	2.8071	19.9	93
d=2.7120	33	2.712	19.5	91.5
d=2.5190	35.6	2.519	19.6	91.8
d=2.4294	37	2.4294	20.5	95.9
d=2.3792	37.8	2.3792	19.3	90.2
d=2.2052	40.9	2.2052	20.8	97.6
d=2.1855	41.3	2.1855	20.7	96.7
d=2.1534	41.9	2.1534	20.5	95.8
d=2.1352	42.3	2.1352	20.6	96.7
d=2.0692	43.7	2.0692	19.7	92.1
d=1.9530	46.5	1.953	20.5	96.2



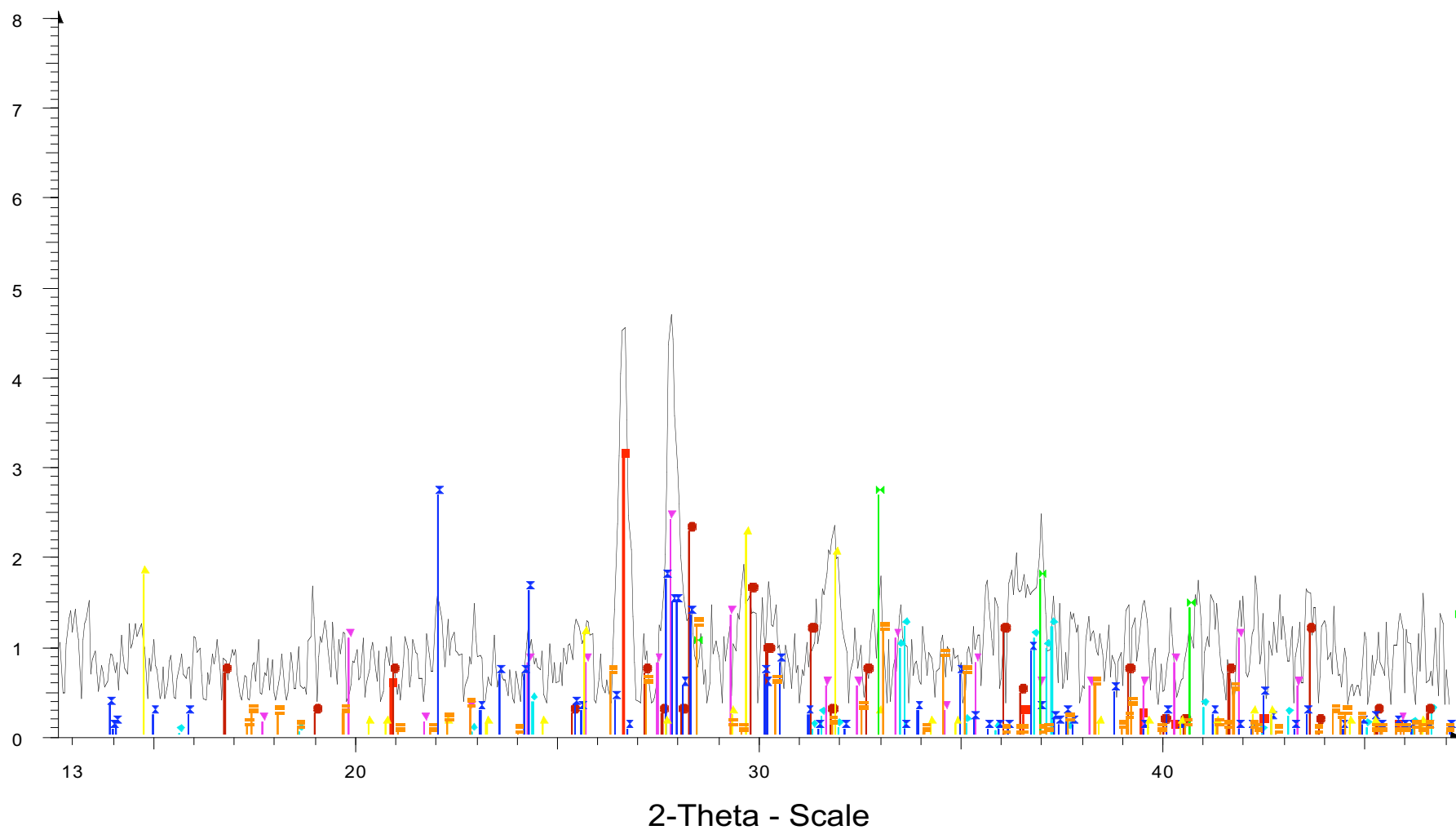
2-Theta - Scale

File: Kristin50um18pts 05.raw



2-Theta - Scale

- Y + 7.0 mm - File: Kristin50um18pts 05.raw
- 85-0796 (C) - Quartz - SiO₂
- 42-1320 (I) - Arsenopyrite - FeAsS
- 13-0121 (N) - Angelellite - Fe₄+3As₂O₁₁
- 44-1468 (N) - Tooeleite - Fe₈(AsO₄)₆(OH)₆·5H₂O
- 19-1184 (I) - Albite, ordered - NaAlSi₃O₈
- 41-0224 (I) - Bassanite, svn - CaSO₄·0.5H₂O
- 71-0053 (C) - Pvrite - FeS₂
- 73-1135 (C) - Amphibole - Al_{3.2}Ca_{3.4}Fe_{4.0}K_{0.6}Mg_{6.0}Na_{1.0}Si_{12.8}O₄₄(OH)

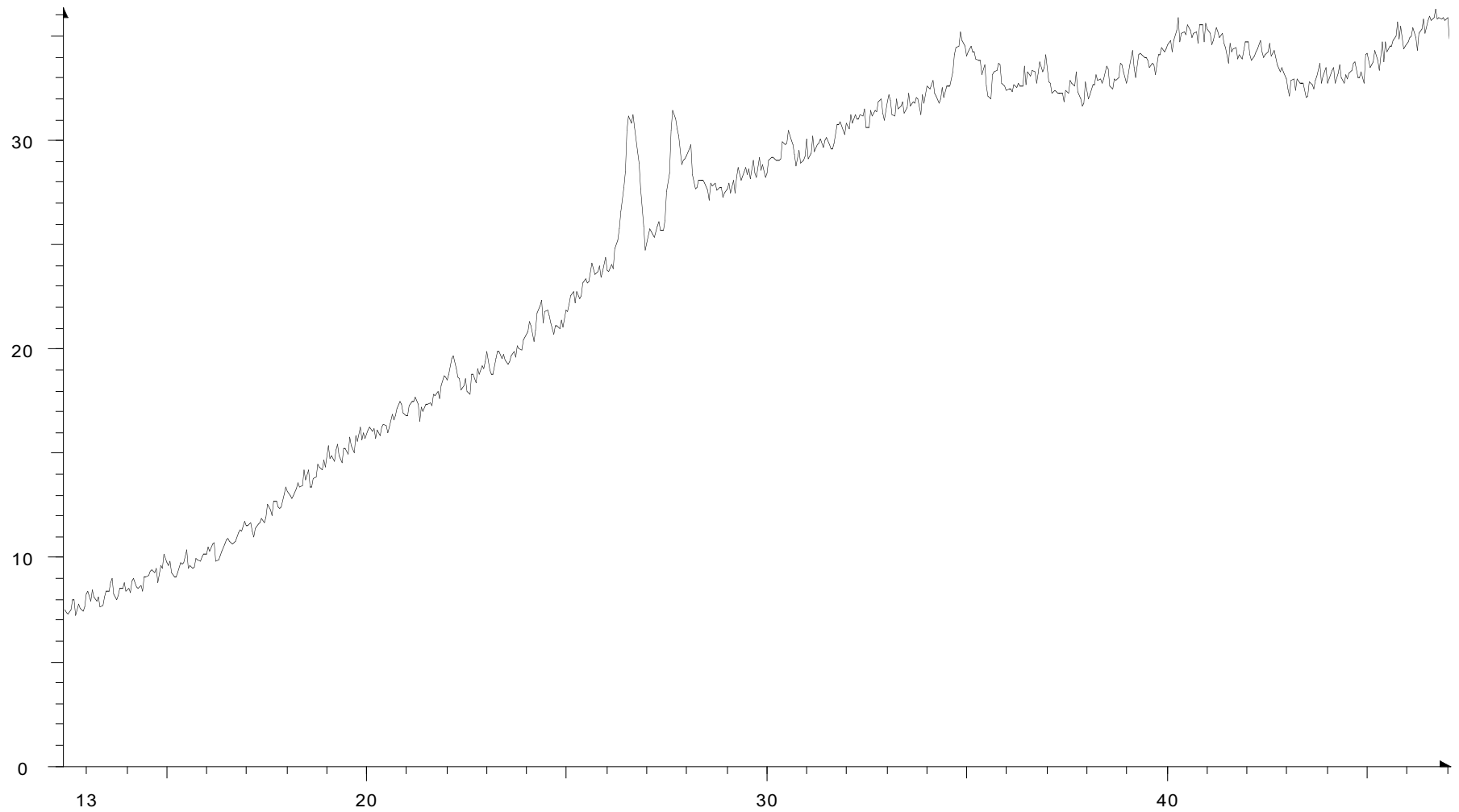



Y + 7.0 mm - File: Kristin50um18pts 05.raw
 85-0796 (C) - Quartz - SiO₂
 42-1320 (I) - Arsenopvrite - FeAsS
 13-0121 (N) - Angelellite - Fe₄+3As₂O₁₁
 44-1468 (N) - Tooeleite - Fe₈(AsO₄)₆(OH)₆·5H₂O
 19-1184 (I) - Albite, ordered - NaAlSi₃O₈
 41-0224 (I) - Bassanite, syn - CaSO₄·0.5H₂O
 71-0053 (C) - Pvrite - FeS₂

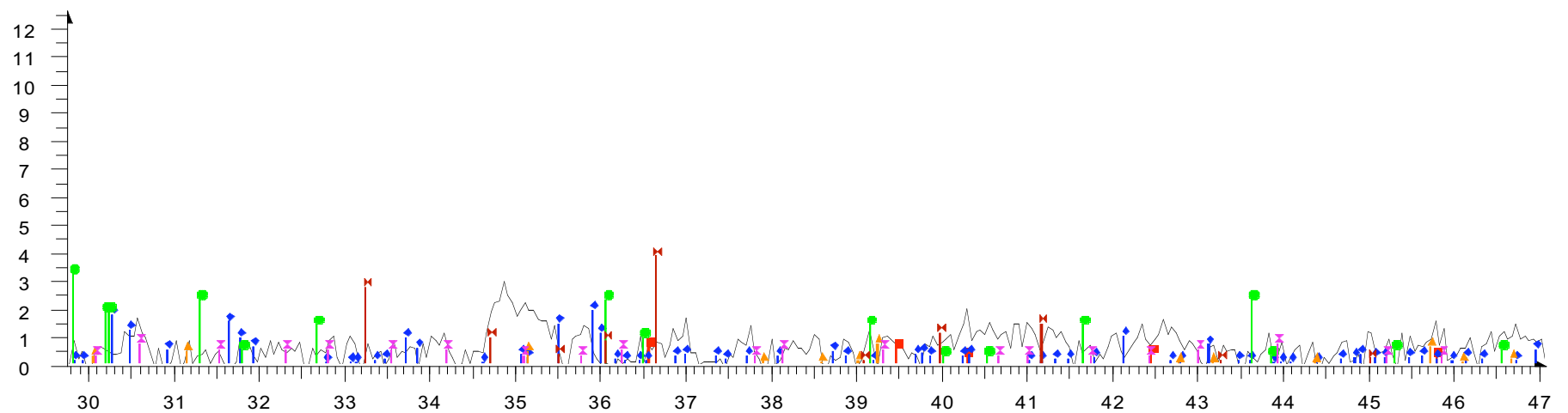
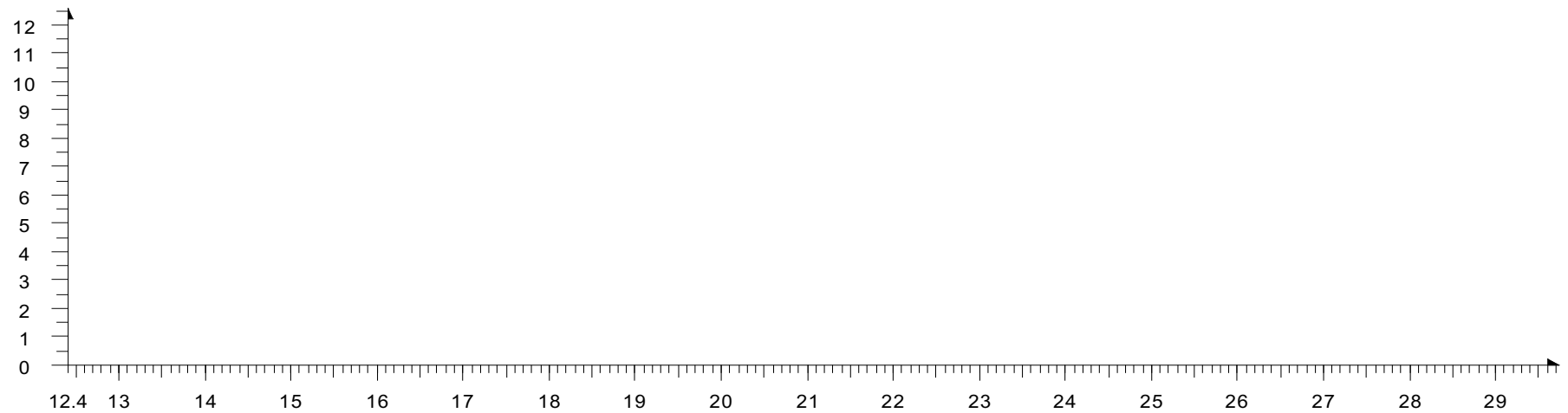
73-1135 (C) - Amphibole - Al_{3.2}Ca_{3.4}Fe_{4.0}K_{0.6}Ma_{6.0}Na_{1.0}Si_{12.8}O₄₄(OH)

50 um scan, slide TM2-1, point 3, yellow spot in zoned material.








Caption	Angle 2-Theta °	d value Angstrom	Intensity Count	Intensity % %
d=6.9897	12.7	6.9897	0.68	10.2
d=5.9384	14.9	5.9384	1.15	17.3
d=5.7505	15.4	5.7505	0.95	14.3
d=4.0141	22.1	4.0141	1.92	28.9
d=3.6578	24.3	3.6578	1.73	26
d=3.3483	26.6	3.3483	6.65	100
d=3.2221	27.7	3.2221	5.18	78
d=2.9255	30.5	2.9255	1.65	24.8
d=2.5737	34.8	2.5737	2.94	44.3
d=2.5065	35.8	2.5065	1.38	20.8
d=2.4324	36.9	2.4324	1.28	19.3
d=2.3834	37.7	2.3834	1.38	20.8
d=2.3364	38.5	2.3364	1.04	15.7
d=2.0607	43.9	2.0607	1.1	16.5
d=1.9789	45.8	1.9789	1.53	23.1
d=1.9359	46.9	1.9359	0.97	14.6

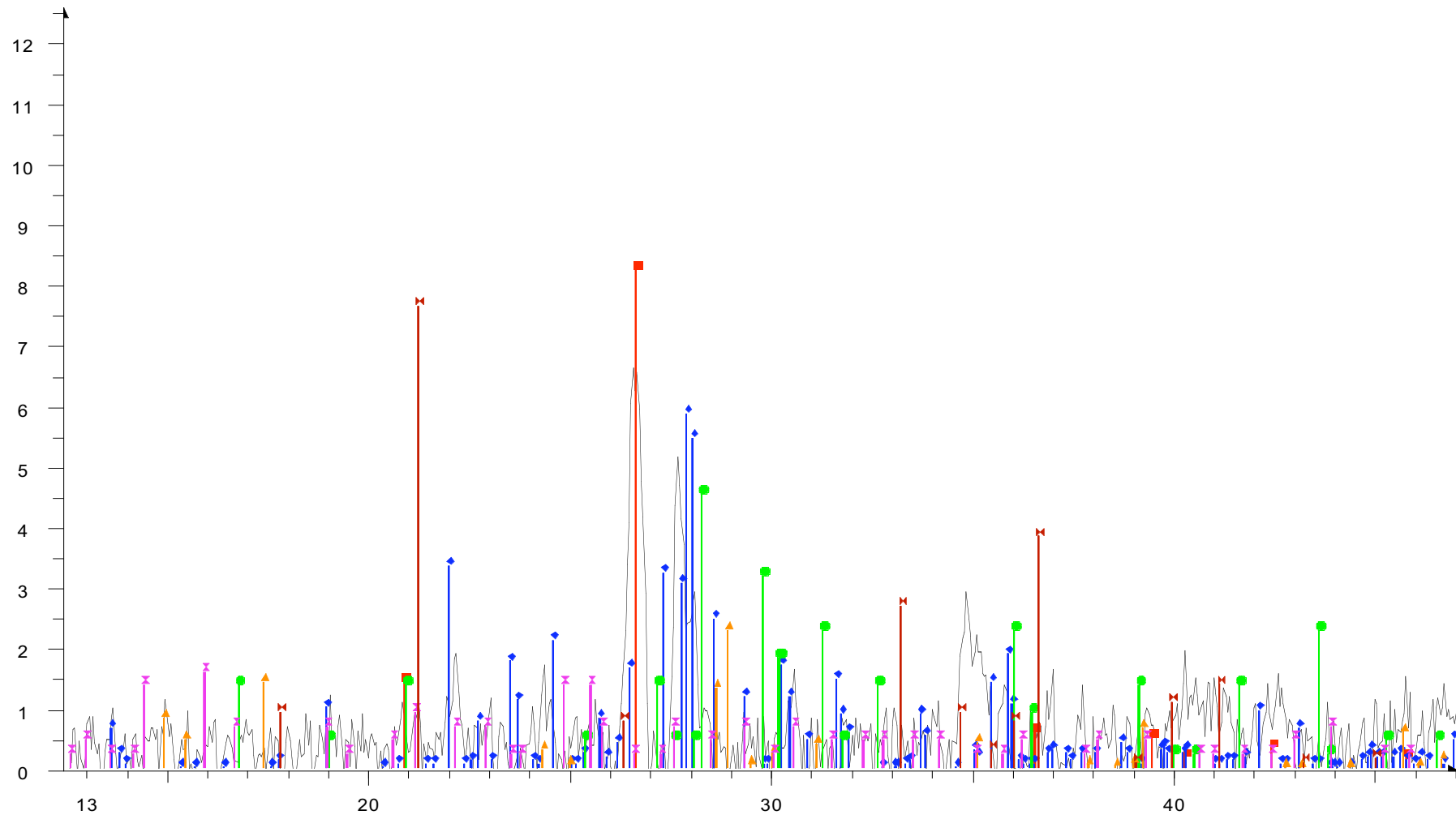


 File: Kristin50um18pts 03.raw



2-Theta - Scale

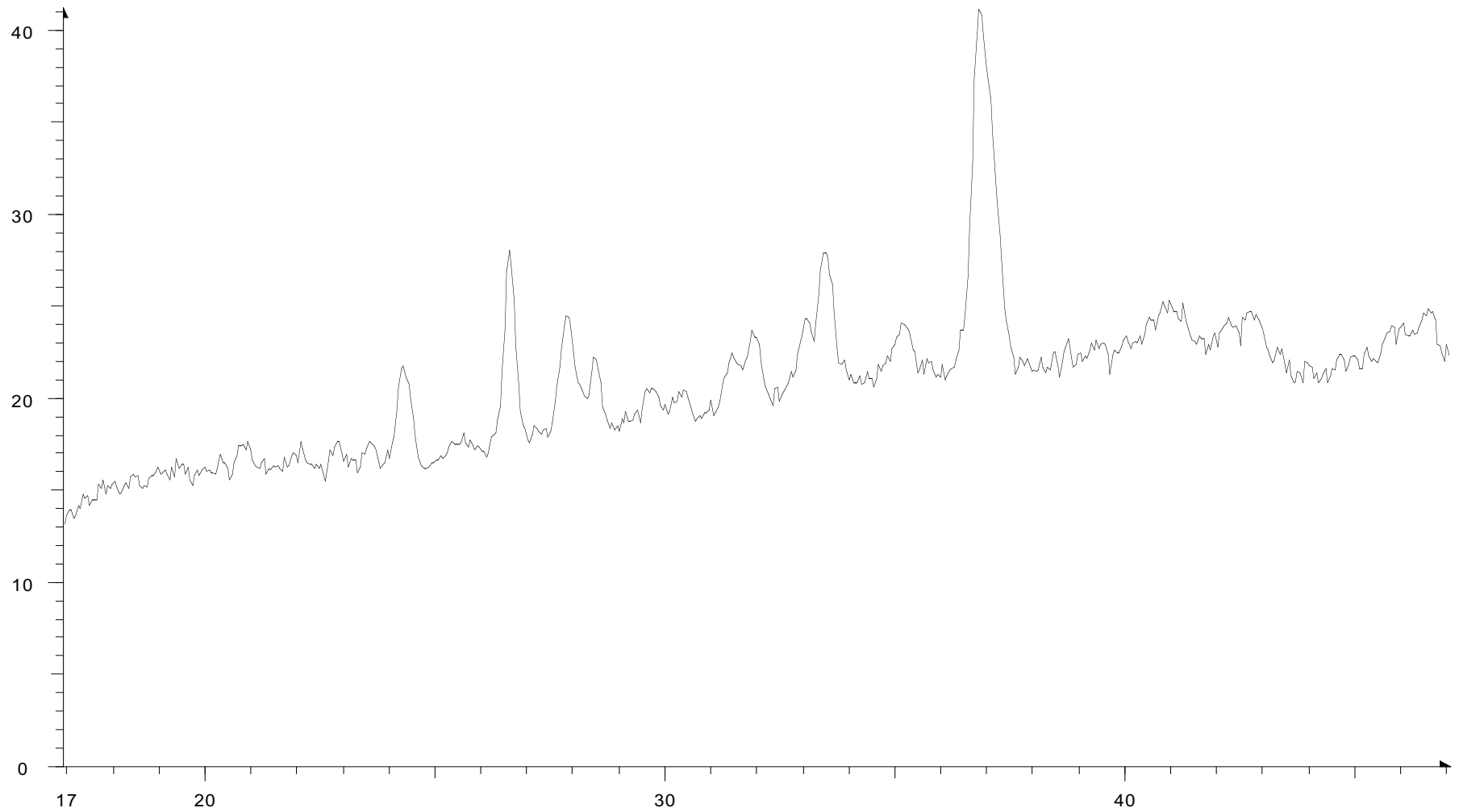
-  File: Kristin50um18pts_03.raw
-  85-0796 (C) - Quartz - SiO₂
-  86-1705 (C) - Anorthite - Ca(Al₂Si₂O₈)
-  13-0121 (N) - Angelellite - Fe₄+3As₂O₁₁
-  71-1777 (C) - Jarosite. svn - K(Fe₃(SO₄)₂(OH)₆)
-  35-0583 (I) - Copiapite - FeFe₄(SO₄)₆(OH)₂·20H₂O
-  29-0713 (I) - Goethite - Fe+3O(OH)



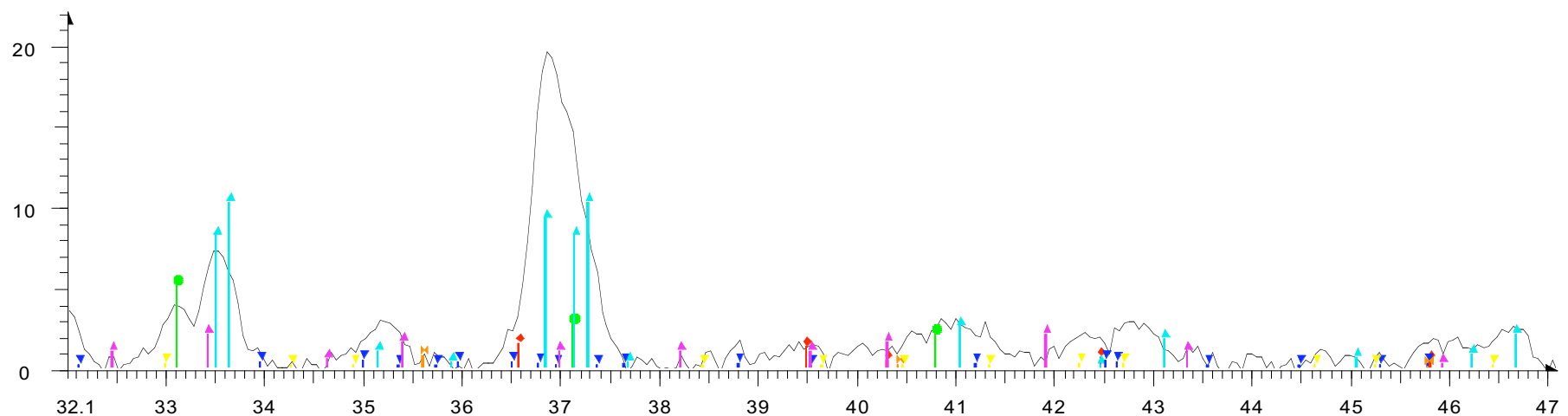
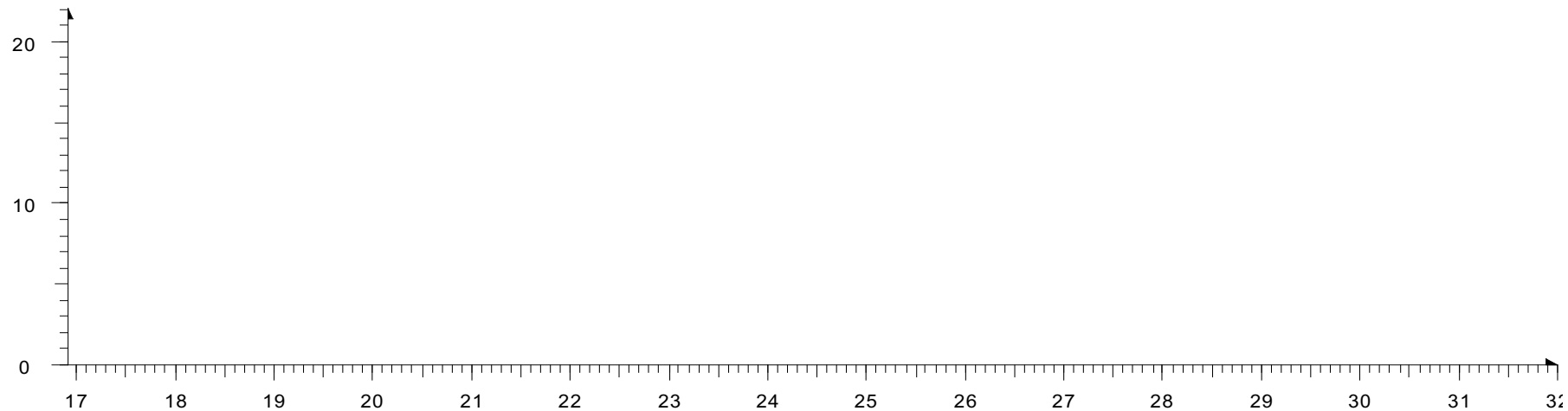
- File: Kristin50um18pts_03.raw
- 85-0796 (C) - Quartz - SiO_2
- 86-1705 (C) - Anorthite - $\text{Ca}(\text{Al}_2\text{Si}_2\text{O}_8)$
- 13-0121 (N) - Angelellite - $\text{Fe}_4^{+3}\text{As}_2\text{O}_{11}$
- 71-1777 (C) - Jarosite. svn - $\text{K}(\text{Fe}_3(\text{SO}_4)_2(\text{OH})_6)$
- 35-0583 (I) - Copiapite - $\text{FeFe}_4(\text{SO}_4)_6(\text{OH})_2 \cdot 20\text{H}_2\text{O}$
- 29-0713 (I) - Goethite - $\text{Fe} \cdot 3\text{O}(\text{OH})$

50 um scan, slide TM2-4, point 15, dark reddish brown material surrounded by reddish brown material.

Caption	Angle 2-Theta °	d value Angstrom	Intensity Count	Intensity % %
d=4.9280	18	4.928	15.4	37.4
d=4.3646	20.3	4.3646	16.9	40.9
d=4.2440	20.9	4.244	17.6	42.7
d=3.7659	23.6	3.7659	17.6	42.6
d=3.6643	24.3	3.6643	21.7	52.7
d=3.3481	26.6	3.3481	28.1	68
d=3.1988	27.9	3.1988	24.5	59.4
d=3.1323	28.5	3.1323	22.3	53.9
d=3.0025	29.7	3.0025	20.5	49.7
d=2.9417	30.4	2.9417	20.4	49.4
d=2.8401	31.5	2.8401	22.4	54.4
d=2.8024	31.9	2.8024	23.7	57.3
d=2.7059	33.1	2.7059	24.3	59
d=2.6742	33.5	2.6742	27.9	67.6
d=2.5487	35.2	2.5487	24.1	58.4
d=2.4360	36.9	2.436	41.2	100
d=2.4213	37.1	2.4213	37.5	90.9
d=2.3212	38.8	2.3212	23.2	56.3
d=1.9761	45.9	1.9761	23.9	58
d=1.9419	46.7	1.9419	24.7	59.8

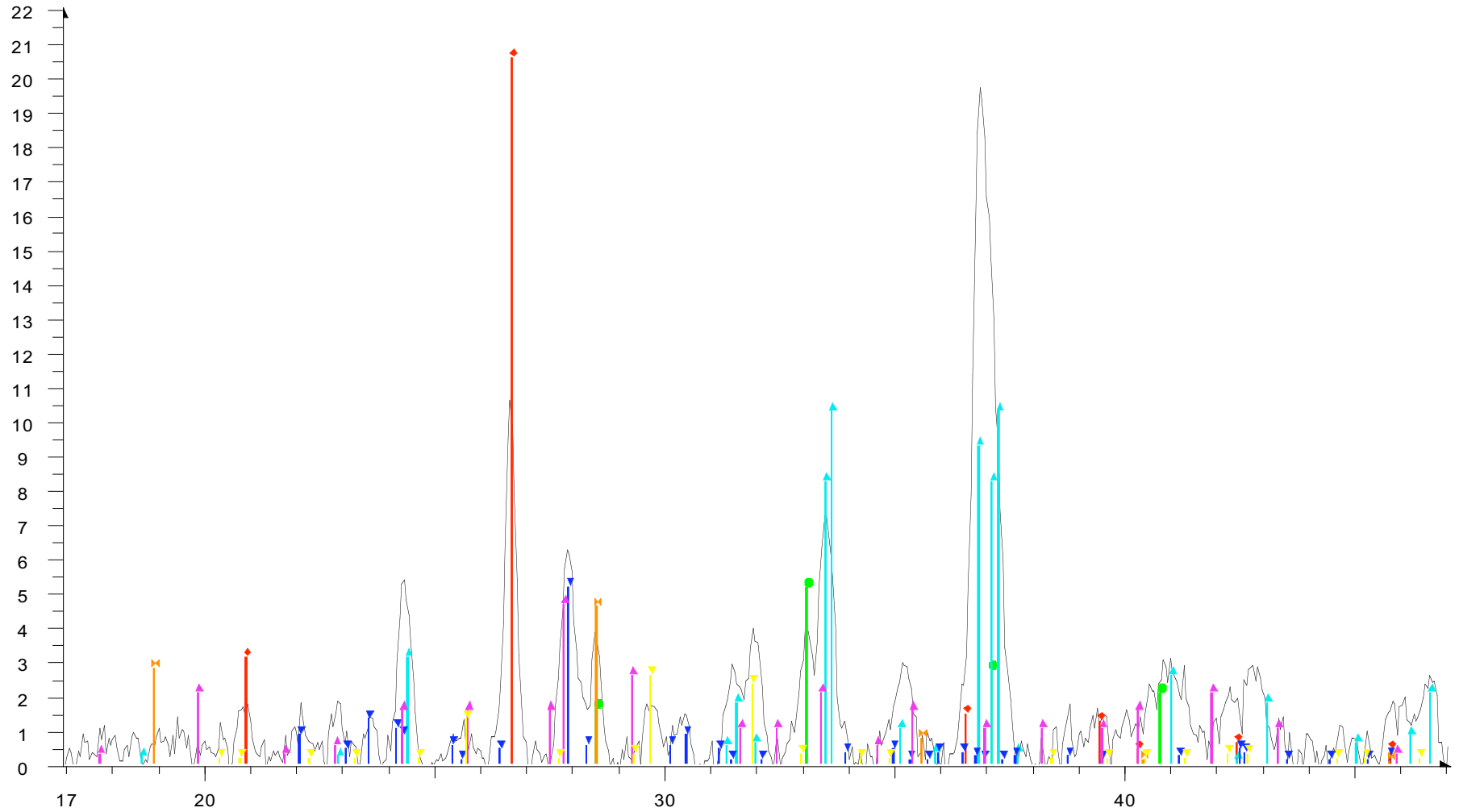


File: Kristin50um18pts 15.raw



2-Theta - Scale

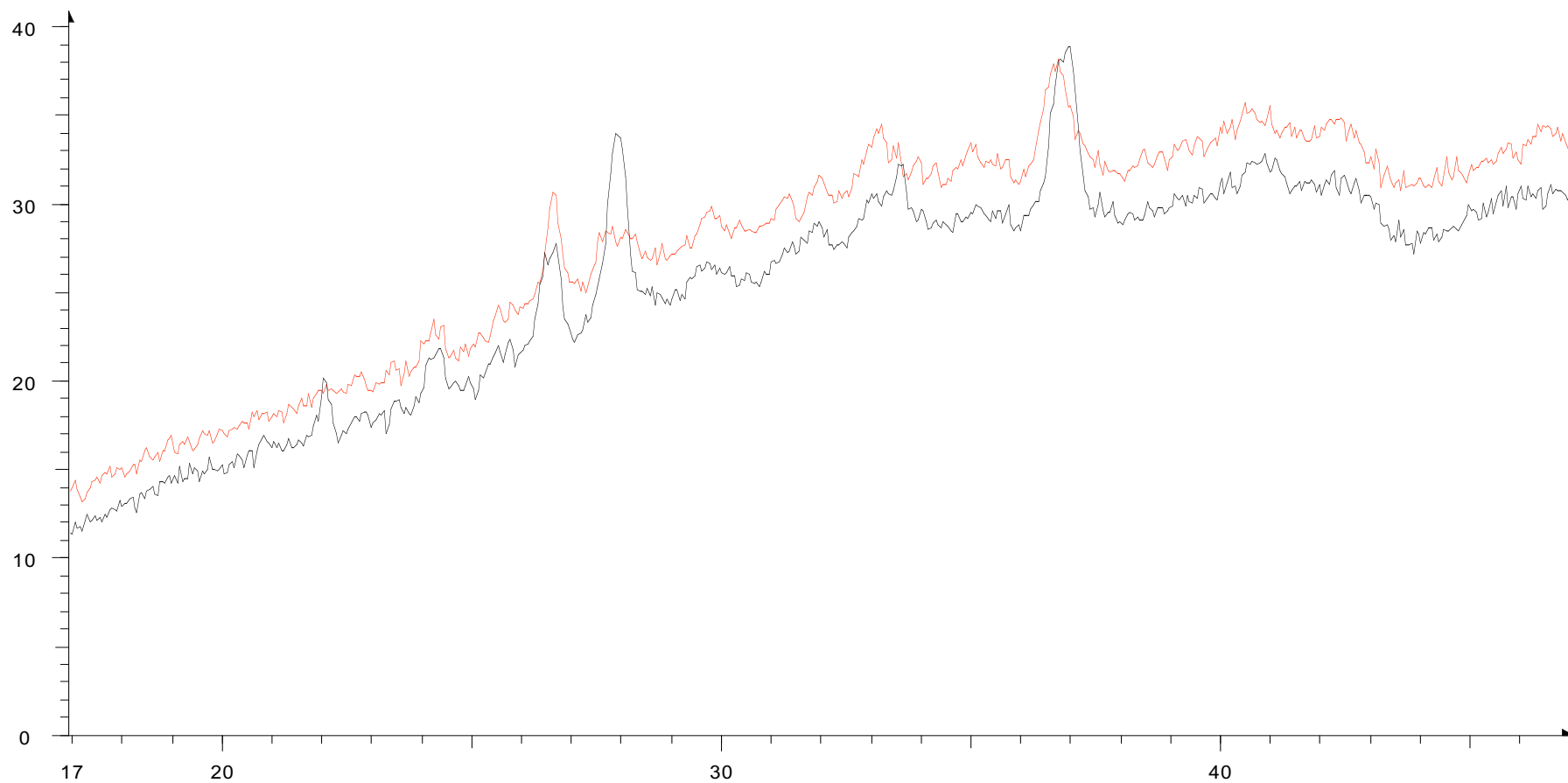
- File: Kristin50um18pts 15.raw
- 85-0795 (C) - Quartz - SiO₂
- 42-1340 (*) - Pyrite - FeS₂
- 42-1320 (I) - Arsenopyrite - FeAsS
- 09-0466 (*) - Albite, ordered - NaAlSi₃O₈
- 44-1468 (N) - Tooeleite - Fe₈(AsO₄)₆(OH)₆·5H₂O
- 46-1315 (N) - Ferrihydrite, svn - FeO(OH)
- 41-0224 (I) - Bassanite, svn - CaSO₄·0.5H₂O



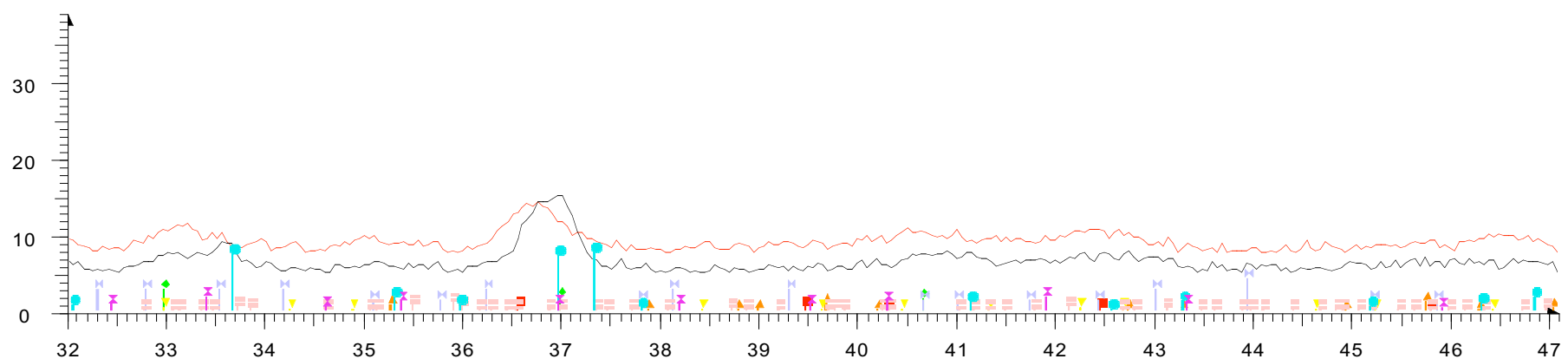
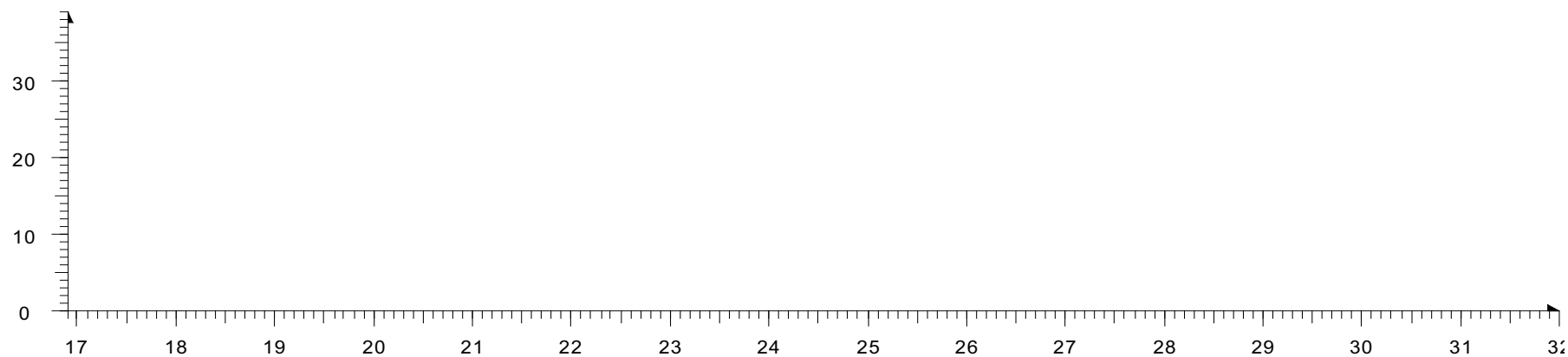
- File: Kristin50um18pts 15.raw
- 85-0795 (C) - Quartz - SiO2
- 42-1340 (*) - Pvrite - FeS2
- 42-1320 (I) - Arsenopvrite - FeAsS
- 09-0466 (*) - Albite, ordered - NaAlSi3O8
- 44-1468 (N) - Tooeleite - Fe8(AsO4)6(OH)6·5H2O
- 46-1315 (N) - Ferrihydrite, svn - FeO(OH)
- 41-0224 (I) - Bassanite, svn - CaSO4·0.5H2O

50 um scan, slide TM2-4, points 17 and 18, amorphous reddish brown material.

Caption	Angle 2-Theta °	d value Angstrom	Intensity Count	Intensity % %
d=4.8923	18.1	4.8923	13.4	34.4
d=4.0353	22	4.0353	20.1	51.6
d=3.6545	24.3	3.6545	21.9	56.1
d=3.3439	26.6	3.3439	27.8	71.3
d=3.1950	27.9	3.195	34.1	87.4
d=3.0026	29.7	3.0026	26.8	68.6
d=2.6662	33.6	2.6662	32.2	82.7
d=2.4300	37	2.43	39	100
d=2.2030	40.9	2.203	33	84.6

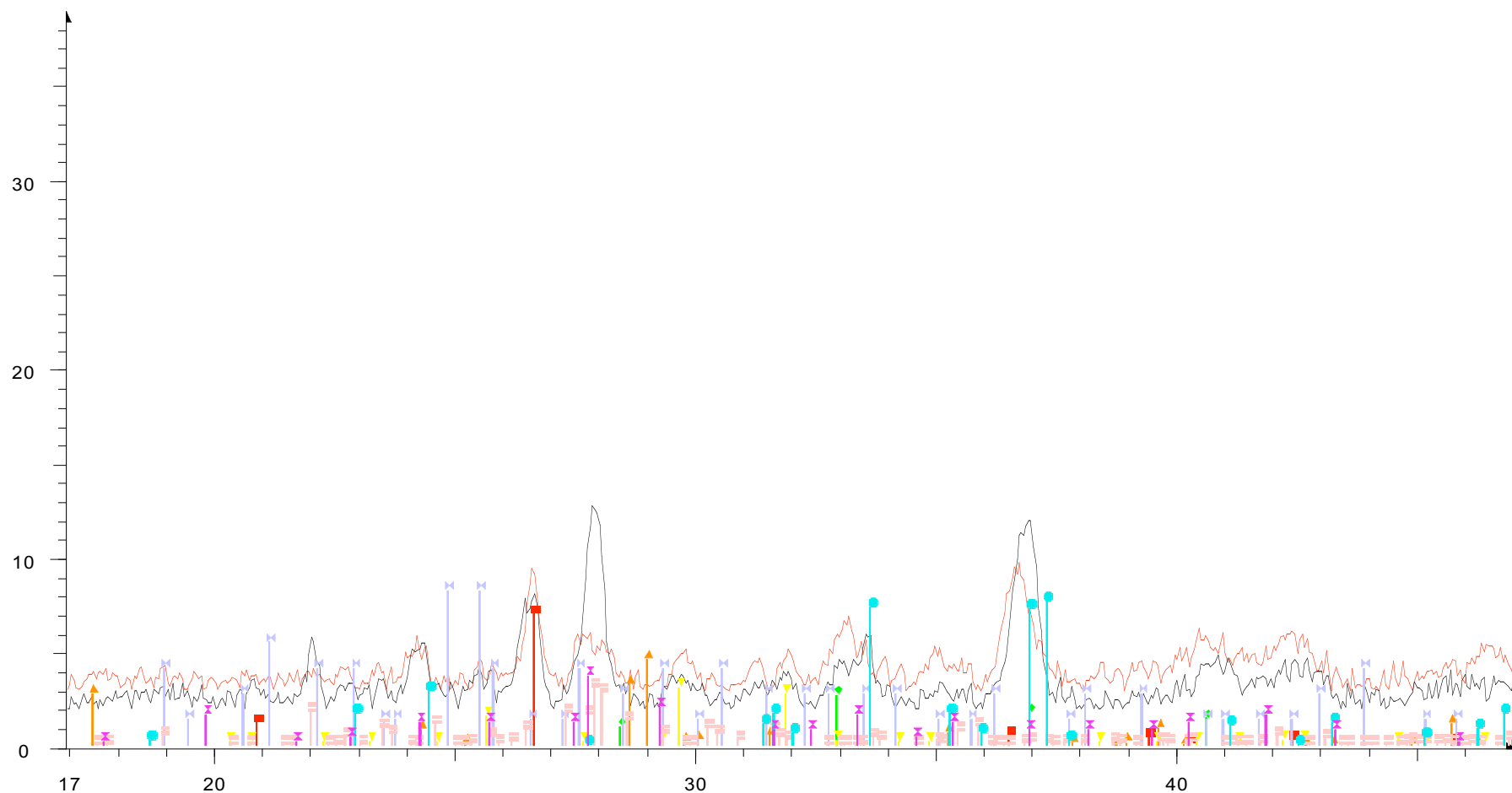


File: Kristin50um18pts 17.raw
Y + 5.0 mm - File: Kristin50um18pts 18.raw



2-Theta - Scale

- | | |
|---|---|
| Y + 6.0 mm - File: Kristin50um18pts 17.raw | 86-1705 (C) - Anorthite - $\text{Ca}(\text{Al}_2\text{Si}_2\text{O}_8)$ |
| Y + 9.0 mm - File: Kristin50um18pts 18.raw | 85-1723 (C) - Arsenopvrite - FeAsS |
| 85-0796 (C) - Quartz - SiO_2 | |
| 71-0053 (C) - Pyrite - FeS_2 | |
| 36-0427 (*) - Jarosite, OH-rich - $(\text{K.H}_3\text{O})\text{Fe}_3(\text{SO}_4)_2(\text{OH})_6$ | |
| 41-0224 (I) - Bassanite, syn - $\text{CaSO}_4 \cdot 0.5\text{H}_2\text{O}$ | |
| 44-1468 (N) - Tooeleite - $\text{Fe}_8(\text{AsO}_4)_6(\text{OH})_6 \cdot 5\text{H}_2\text{O}$ | |
| 35-0583 (I) - Copiapite - $\text{FeFe}_4(\text{SO}_4)_6(\text{OH})_2 \cdot 20\text{H}_2\text{O}$ | |

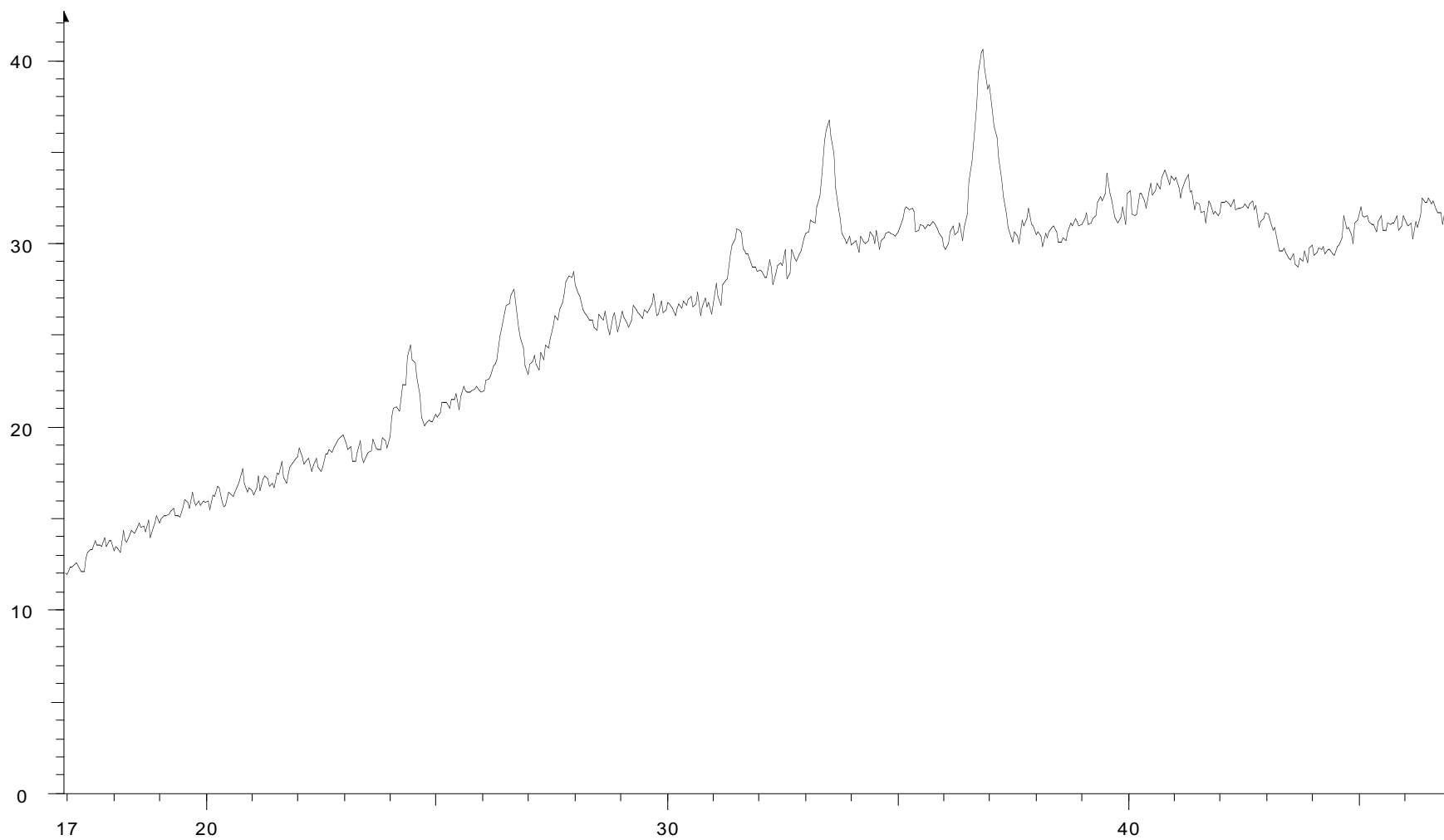



2-Theta - Scale

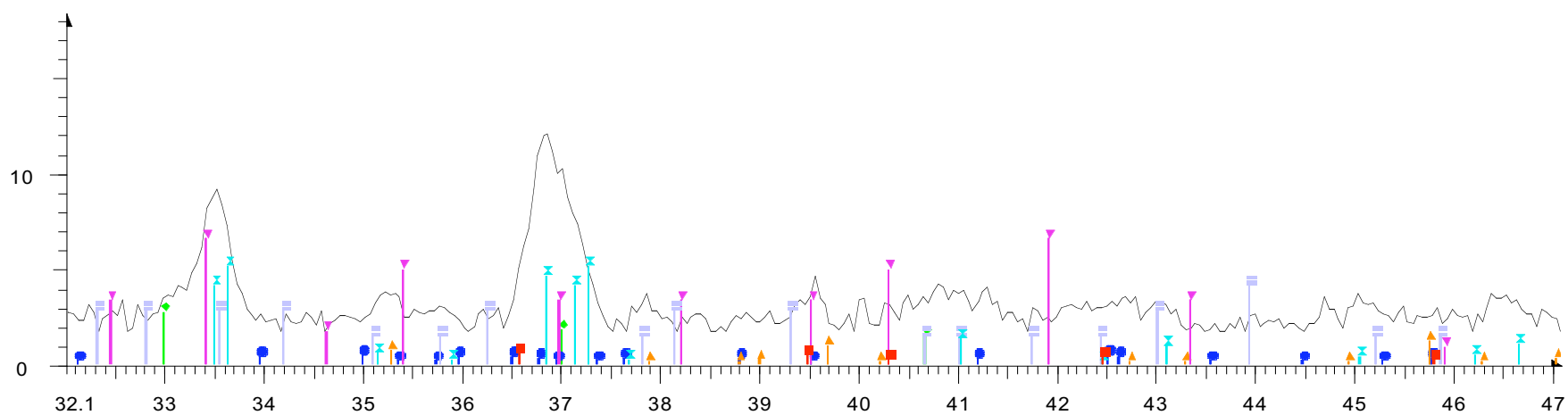
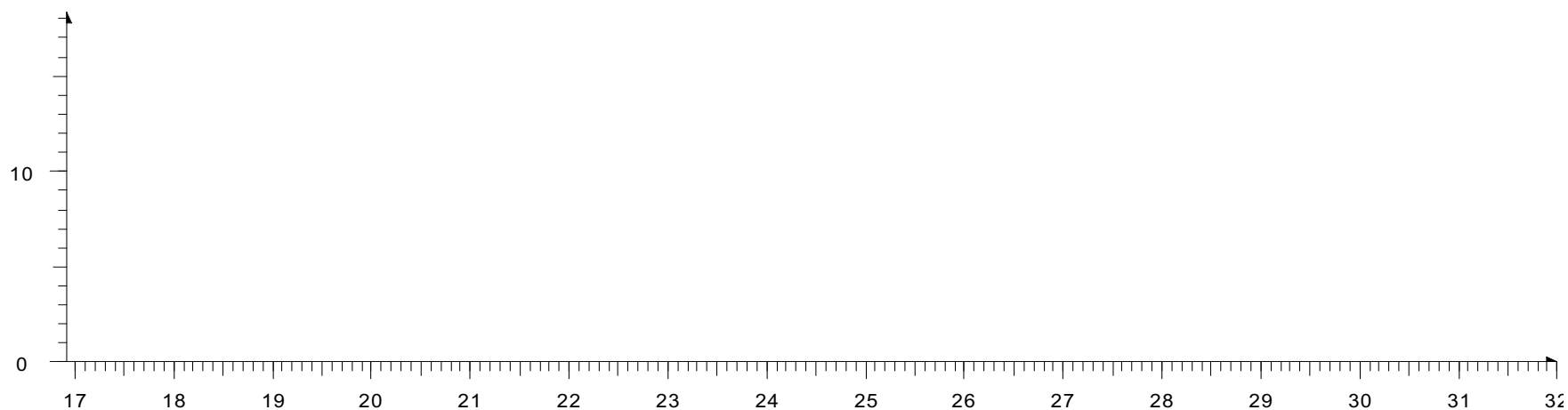
- | | |
|---|---|
| Y + 6.0 mm - File: Kristin50um18pts 17.raw | 86-1705 (C) - Anorthite - $\text{Ca}(\text{Al}_2\text{Si}_2\text{O}_8)$ |
| Y + 9.0 mm - File: Kristin50um18pts 18.raw | 85-1723 (C) - Arsenopyrite - FeAsS |
| 85-0796 (C) - Quartz - SiO_2 | |
| 71-0053 (C) - Pyrite - FeS_2 | |
| 36-0427 (*) - Jarosite, OH-rich - $(\text{K.H}_3\text{O})\text{Fe}_3(\text{SO}_4)_2(\text{OH})_6$ | |
| 41-0224 (I) - Bassanite, syn - $\text{CaSO}_4 \cdot 0.5\text{H}_2\text{O}$ | |
| 44-1468 (N) - Tooeleite - $\text{Fe}_8(\text{AsO}_4)_6(\text{OH})_6 \cdot 5\text{H}_2\text{O}$ | |
| 35-0583 (I) - Copiapite - $\text{FeFe}_4(\text{SO}_4)_6(\text{OH})_{12} \cdot 20\text{H}_2\text{O}$ | |

50 um scan, slide TM2-4, point 16, amorphous reddish brown material and yellow material.









Caption	Angle 2-Theta °	d value Angstrom	Intensity Count	Intensity % %
d=3.8785	22.9	3.8785	19.5	48.1
d=3.6399	24.4	3.6399	24.5	60.2
d=3.3473	26.6	3.3473	27.5	67.7
d=3.1955	27.9	3.1955	28.5	70.1
d=2.8358	31.5	2.8358	30.9	76
d=2.6739	33.5	2.6739	36.8	90.5
d=2.5435	35.3	2.5435	32.1	78.9
d=2.4379	36.8	2.4379	40.6	100
d=2.4213	37.1	2.4213	37.3	91.7
d=2.2758	39.6	2.2758	33.9	83.5
d=1.9523	46.5	1.9523	32.5	80

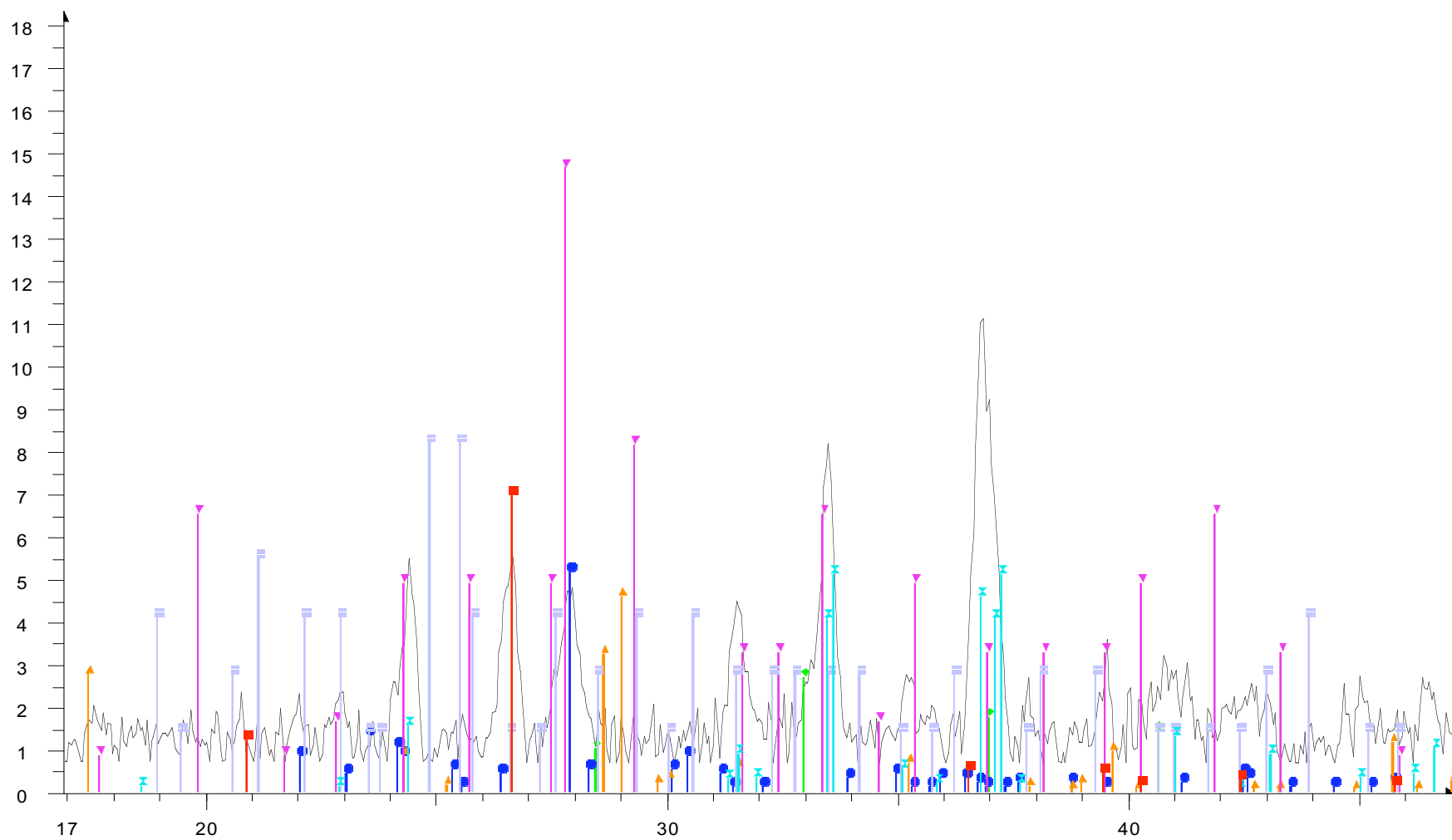


 File: Kristin50um18pts 16.raw



2-Theta - Scale

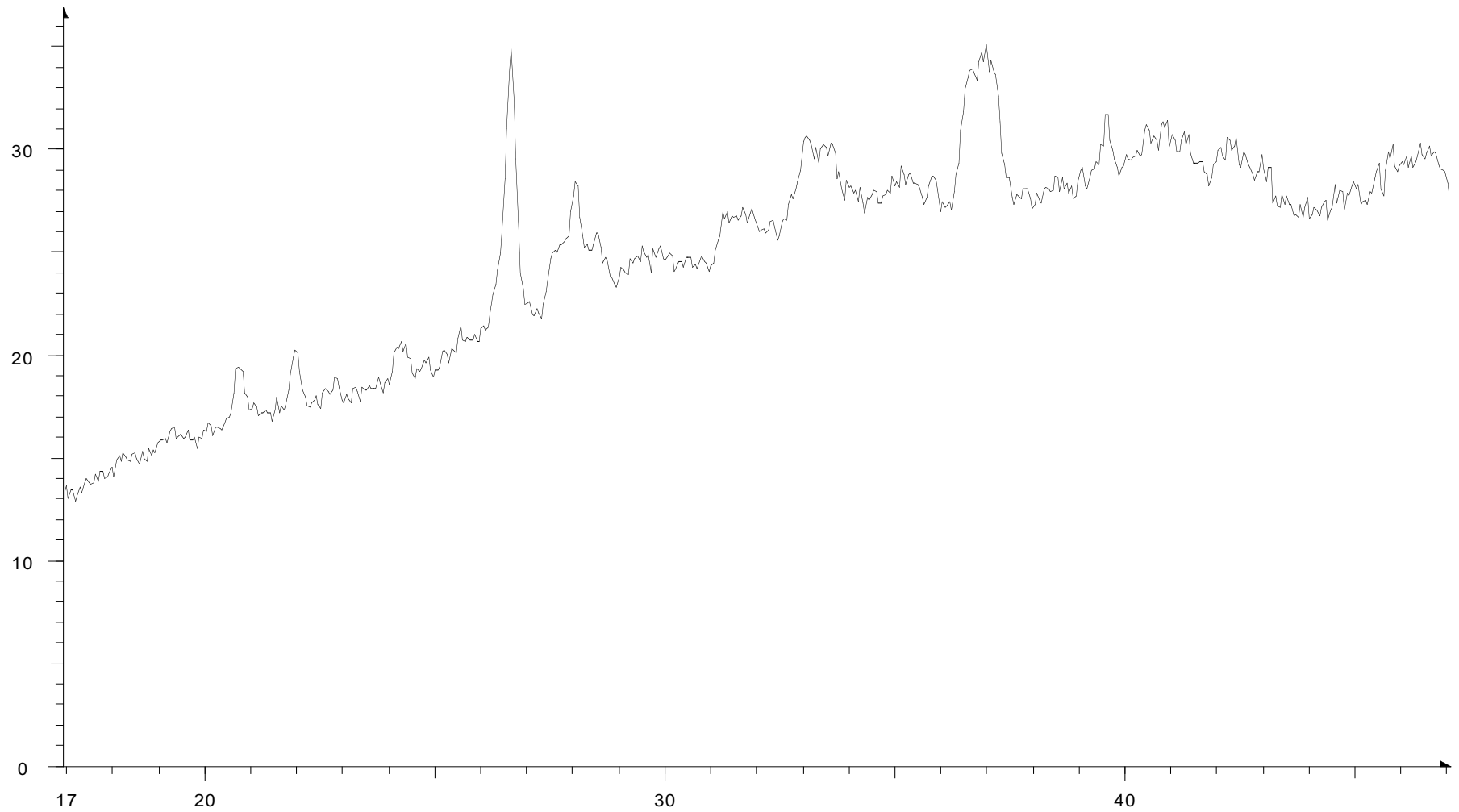
-  Y + 5.0 mm - File: Kristin50um18pts 16.raw
-  85-0796 (C) - Quartz - SiO₂
-  71-0053 (C) - Pprite - FeS₂
-  09-0466 (*) - Albite, ordered - NaAlSi₃O₈
-  36-0427 (*) - Jarosite, OH-rich - (K,H₃O)Fe₃(SO₄)₂(OH)₆
-  44-1468 (N) - Tooeleite - Fe₈(AsO₄)₆(OH)₆·5H₂O
-  35-0583 (I) - Copiapite - FeFe₄(SO₄)₆(OH)₂·20H₂O
-  42-1320 (I) - Arsenopprite - FeAsS



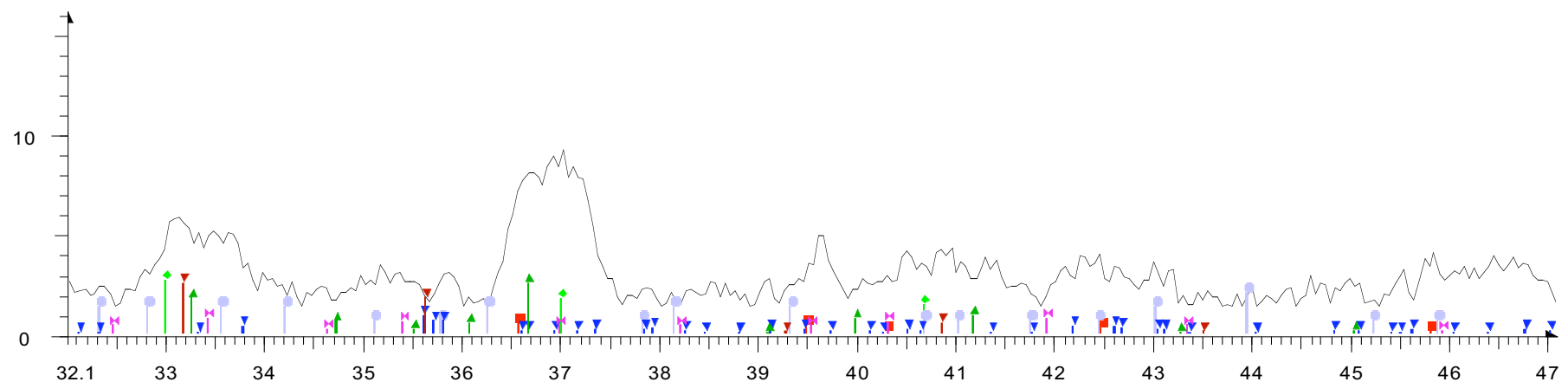
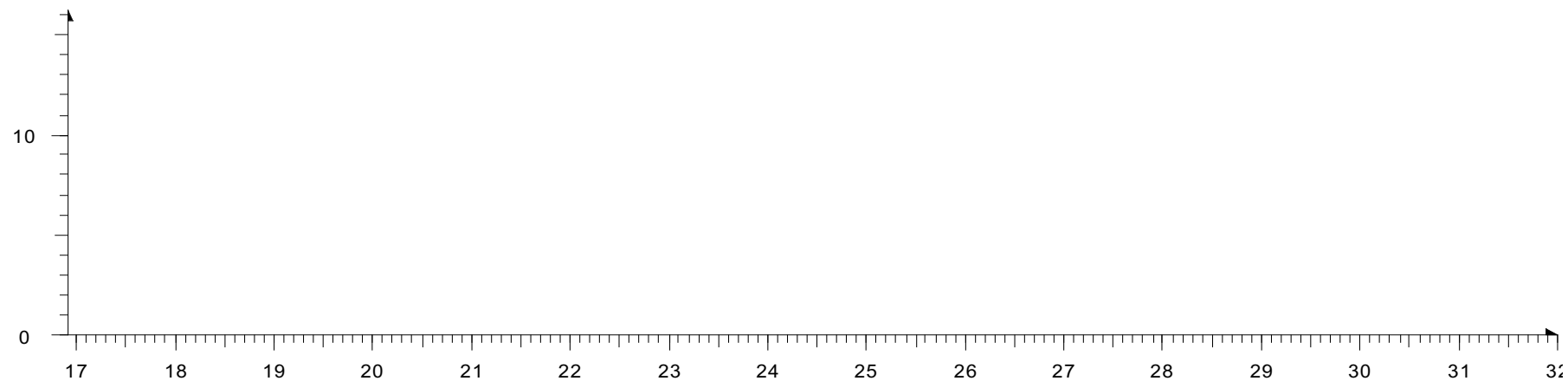
- Y + 5.0 mm - File: Kristin50um18pts 16.raw
- 85-0796 (C) - Quartz - SiO_2
- 71-0053 (C) - Pprite - FeS_2
- 09-0466 (*) - Albite, ordered - $\text{NaAlSi}_3\text{O}_8$
- 36-0427 (*) - Jarosite, OH-rich - $(\text{K}, \text{H}_3\text{O})\text{Fe}_3(\text{SO}_4)_2(\text{OH})_6$
- 44-1468 (N) - Tooeleite - $\text{Fe}_8(\text{AsO}_4)_6(\text{OH})_6 \cdot 5\text{H}_2\text{O}$
- 35-0583 (I) - Copiapite - $\text{FeFe}_4(\text{SO}_4)_6(\text{OH})_2 \cdot 20\text{H}_2\text{O}$
- 42-1320 (I) - Arsenopprite - FeAsS

50 um scan, slide TM2-4, point 14, yellow material.









Caption	Angle 2-Theta °	d value Angstrom	Intensity Count	Intensity % %
d=4.2827	20.7	4.2827	19.4	55.4
d=4.0442	22	4.0442	20.2	57.8
d=3.8973	22.8	3.8973	18.9	54
d=3.6769	24.2	3.6769	20.7	59.2
d=3.3443	26.6	3.3443	34.9	100
d=3.2283	27.6	3.2283	25.1	71.8
d=3.1781	28.1	3.1781	28.4	81.4
d=2.8534	31.3	2.8534	27	77.4
d=2.7056	33.1	2.7056	30.7	87.9
d=2.6605	33.7	2.6605	30.3	86.8
d=2.5031	35.8	2.5031	28.7	82.2
d=2.4480	36.7	2.448	33.9	97.2
d=2.4328	36.9	2.4328	34.8	99.7
d=2.2735	39.6	2.2735	31.7	90.9
d=2.0973	43.1	2.0973	29.1	83.4
d=1.9793	45.8	1.9793	30.3	86.7
d=3.1263	28.5	3.1263	25.9	74.2

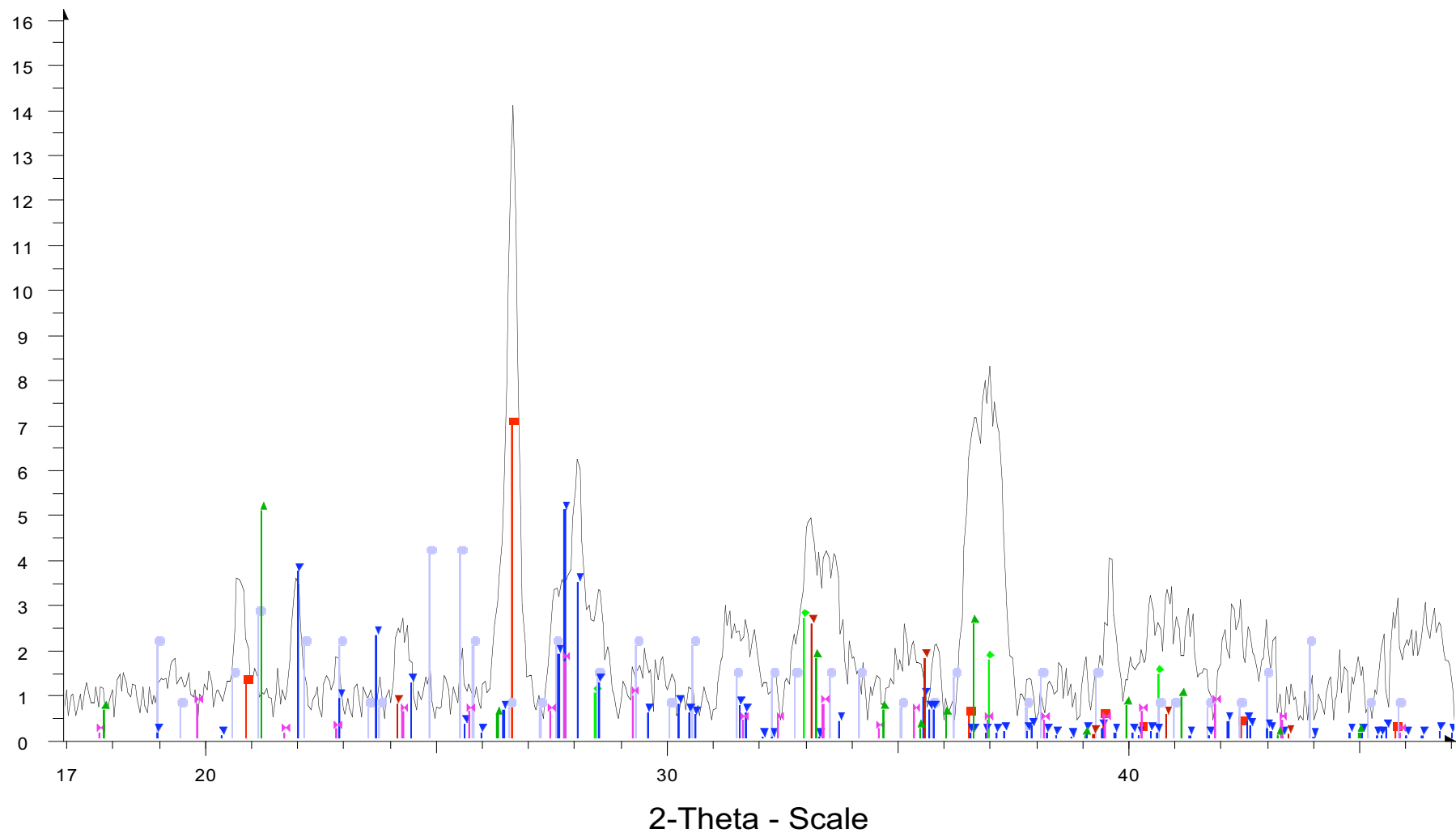


File: Kristin50um18pts 14.raw



2-Theta - Scale

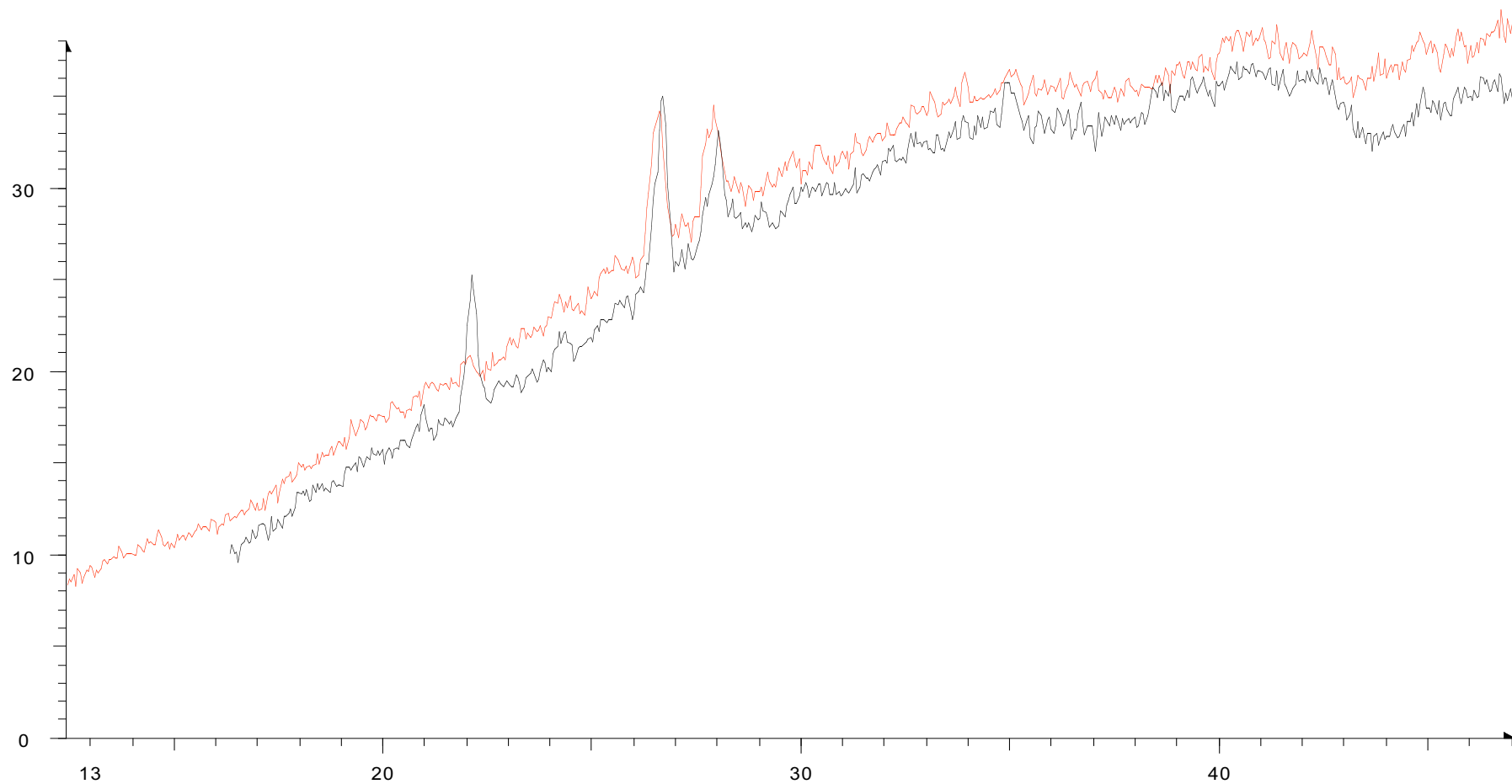
-  Y + 5.0 mm - File: Kristin50um18pts 14.raw
-  85-0796 (C) - Quartz - SiO₂
-  71-0053 (C) - Pyrite - FeS₂
-  35-0583 (I) - Copiapite - FeFe₄(SO₄)₆(OH)₂·20H₂O
-  83-1605 (C) - Albite high - Na(AlSi₃O₈)
-  29-0713 (I) - Goethite - Fe+3O(OH)
-  33-0664 (*) - Hematite, svn - Fe₂O₃
-  44-1468 (N) - Tooeleite - Fe₈(AsO₄)₆(OH)₆·5H₂O



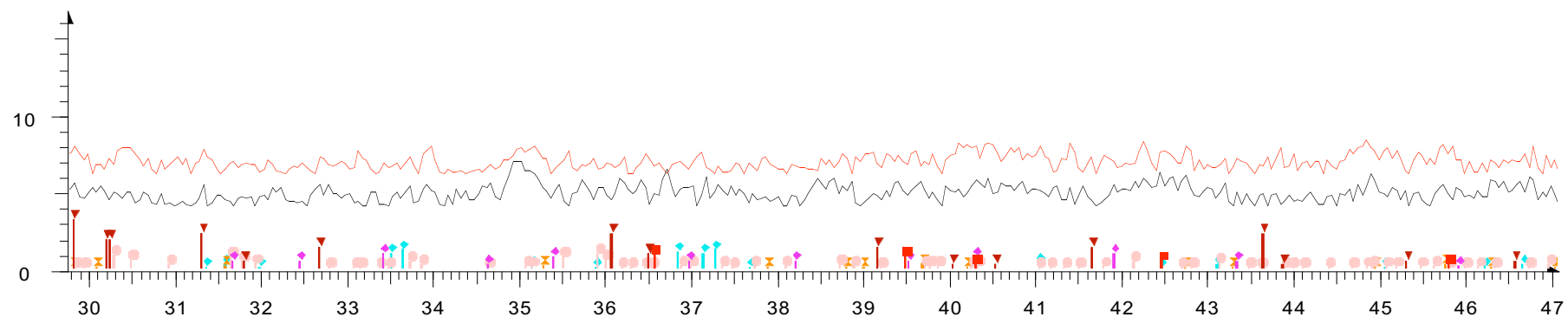
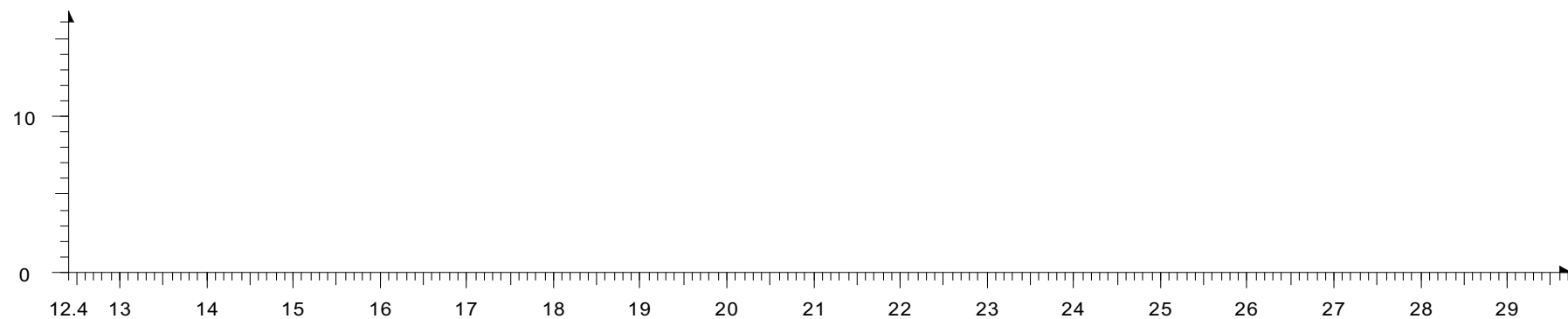
- Y + 5.0 mm - File: Kristin50um18pts 14.raw
- 85-0796 (C) - Quartz - SiO₂
- 71-0053 (C) - Pprite - FeS₂
- 35-0583 (I) - Copiapite - FeFe₄(SO₄)₆(OH)₂·20H₂O
- 83-1605 (C) - Albite high - Na(AlSi₃O₈)
- 29-0713 (I) - Goethite - Fe+3O(OH)
- 33-0664 (*) - Hematite, svn - Fe₂O₃
- 44-1468 (N) - Tooeleite - Fe₈(AsO₄)₆(OH)₆·5H₂O

50 um scan, slide TM2-1, points 1 and 2, zoned, amorphous material.









Caption	Angle 2-Theta °	d value Angstrom	Intensity Count	Intensity % %
d=4.2392	20.9	4.2392	18.1	50.6
d=4.0162	22.1	4.0162	25.3	70.5
d=3.3386	26.7	3.3386	35.1	98
d=3.1818	28	3.1818	33.2	92.6
d=2.5654	34.9	2.5654	35.8	100
d=3.1421	28.4	3.1421	29.4	82.2
d=3.6564	24.3	3.6564	22.2	62

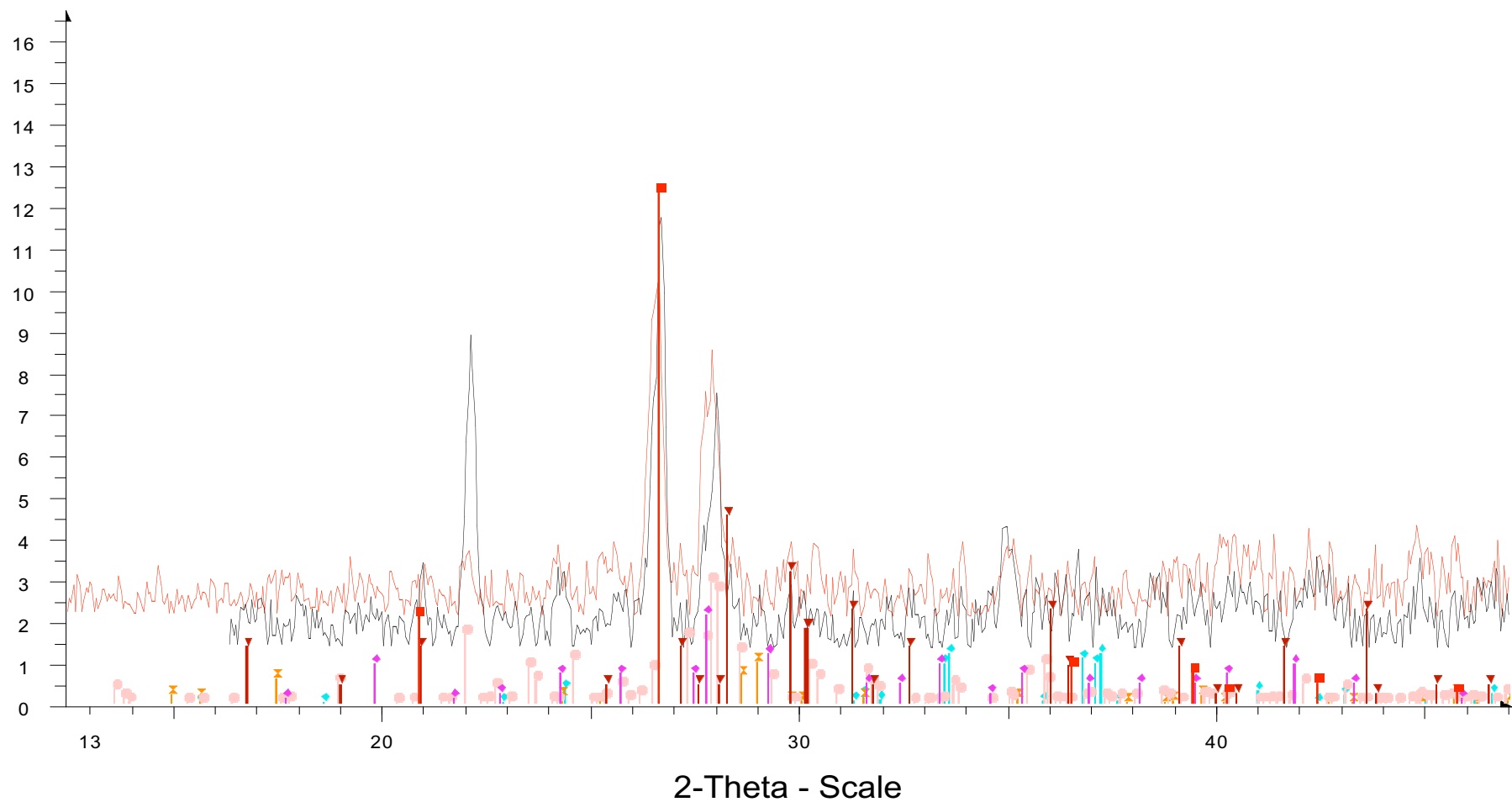


File: Kristin50um18pts_01.raw
Y + 5.0 mm - File: Kristin50um18pts_02.raw



2-Theta - Scale

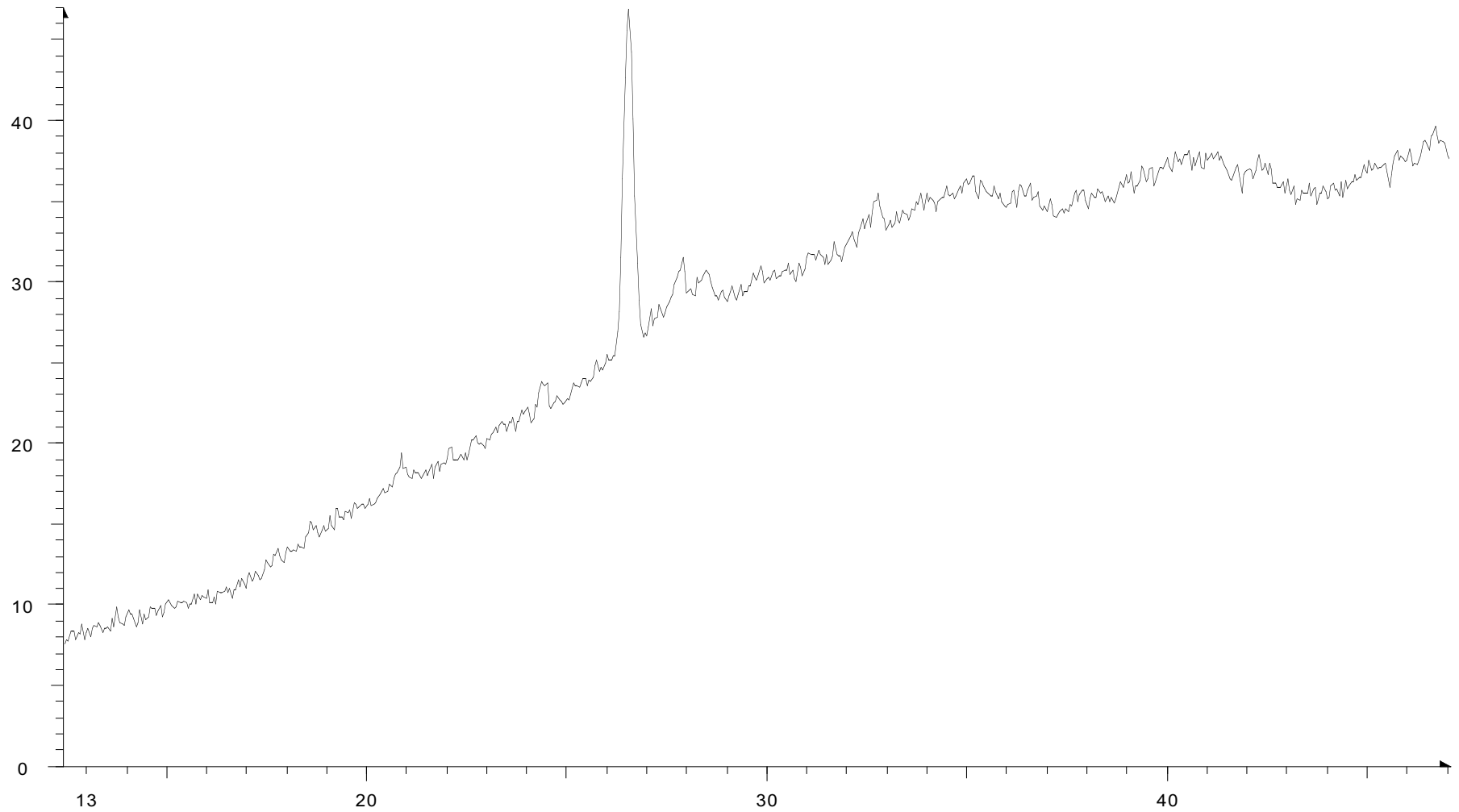
-  Y + 10.0 mm - File: Kristin50um18pts 01.raw
-  Y + 15.0 mm - File: Kristin50um18pts 02.raw
-  85-0796 (C) - Quartz - SiO₂
-  42-1320 (I) - Arsenopyrite - FeAsS
-  36-0427 (*) - Jarosite, OH-rich - (K.H₃O)Fe₃(SO₄)₂(OH)₆
-  86-1705 (C) - Anorthite - Ca(Al₂Si₂O₈)
-  13-0121 (N) - Angelellite - Fe₄+3As₂O₁₁
-  44-1468 (N) - Tooeleite - Fe₈(AsO₄)₆(OH)₆·5H₂O




- Y + 10.0 mm - File: Kristin50um18pts 01.raw
- Y + 15.0 mm - File: Kristin50um18pts 02.raw
- 85-0796 (C) - Quartz - SiO₂
- 42-1320 (I) - Arsenopyrite - FeAsS
- 36-0427 (*) - Jarosite, OH-rich - (K.H₃O)Fe₃(SO₄)₂(OH)₆
- 86-1705 (C) - Anorthite - Ca(Al₂Si₂O₈)
- 13-0121 (N) - Angelellite - Fe₄+3As₂O₁₁
- 44-1468 (N) - Tooeleite - Fe₈(AsO₄)₆(OH)₆·5H₂O

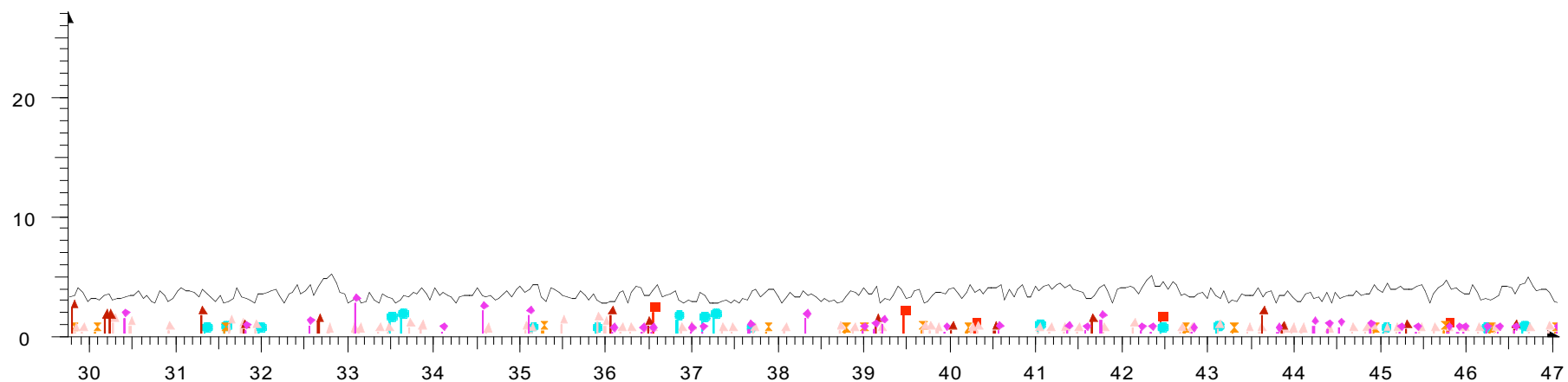
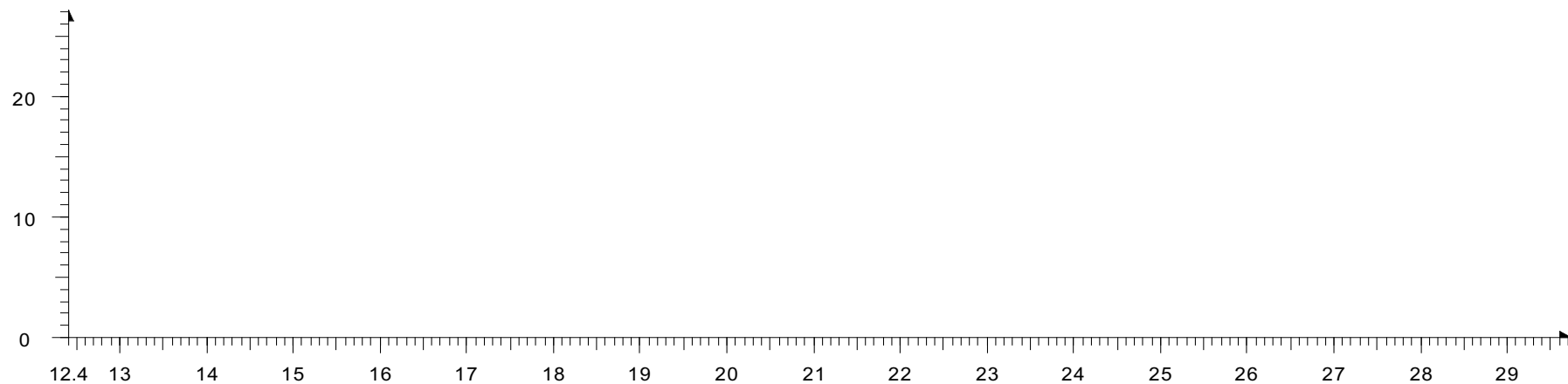
50 um scan, slide TM2-1, point 4, red ball.

Caption	Angle 2-Theta °	d value Angstrom	Intensity Count	Intensity % %
d=6.6953	13.2	6.6953	8.77	18.6
d=6.4541	13.7	6.4541	9.75	20.8
d=6.3073	14	6.3073	9.64	20.5
d=4.7703	18.6	4.7703	15.1	32.2
d=4.2535	20.9	4.2535	19.4	41.2
d=3.6426	24.4	3.6426	23.8	50.6
d=3.3569	26.5	3.3569	47	100
d=3.2010	27.8	3.201	31.6	67.2
d=3.1308	28.5	3.1308	30.8	65.5
d=2.7304	32.8	2.7304	35.5	75.5










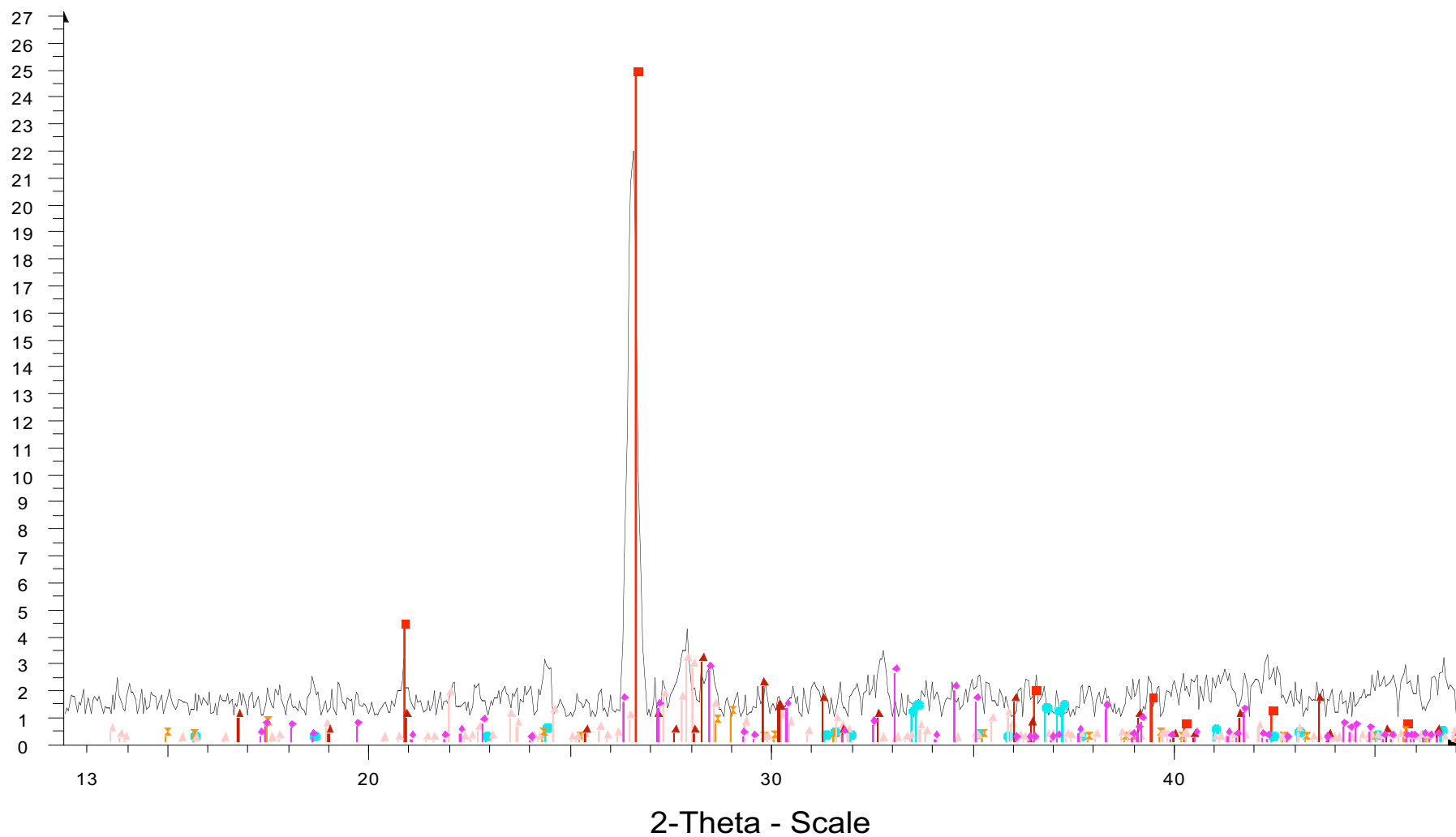
 File: Kristin50um18pts 04.raw

2-Theta - Scale



2-Theta - Scale

-  Y + 5.0 mm - File: Kristin50um18pts 04.raw
-  85-0796 (C) - Quartz - SiO₂
-  42-1320 (I) - Arsenopyrite - FeAsS
-  36-0427 (*) - Jarosite, OH-rich - (K,H₃O)Fe₃(SO₄)₂(OH)₆
-  86-1705 (C) - Anorthite - Ca(Al₂Si₂O₈)
-  73-1135 (C) - Amphibole - Al_{3.2}Ca_{3.4}Fe_{4.0}K_{6.0}Na_{1.0}Si_{12.8}O₄₄(OH)₄
-  13-0121 (N) - Angelellite - Fe₄+3As₂O₁₁



- Y + 5.0 mm - File: Kristin50um18pts 04.raw
- 85-0796 (C) - Quartz - SiO_2
- 42-1320 (I) - Arsenopyrite - FeAsS
- 36-0427 (*) - Jarosite, OH-rich - $(\text{K}, \text{H}_3\text{O})\text{Fe}_3(\text{SO}_4)_2(\text{OH})_6$
- 86-1705 (C) - Anorthite - $\text{Ca}(\text{Al}_2\text{Si}_2\text{O}_8)$
- 73-1135 (C) - Amphibole - $\text{Al}_3.2\text{Ca}_3.4\text{Fe}_4.0\text{K}_6.0\text{Na}_1.0\text{Si}_{12.8}\text{O}_{44}(\text{OH})_4$
- 13-0121 (N) - Angelellite - $\text{Fe}_4+3\text{As}_2\text{O}_{11}$