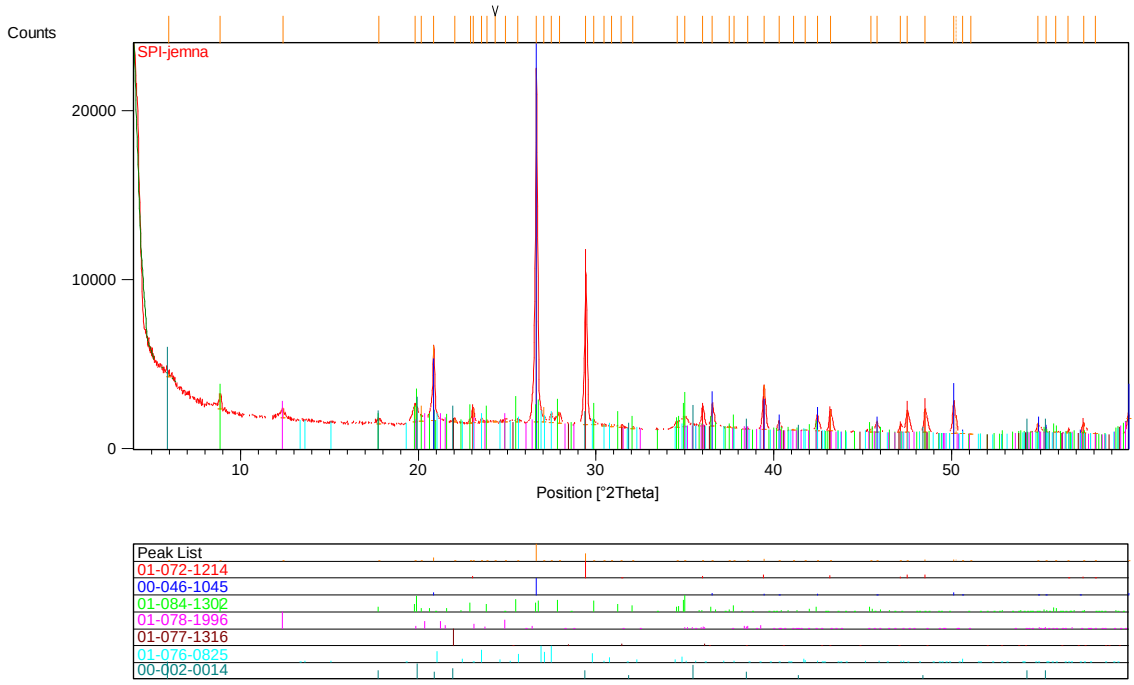
REPORT OF MEASUREMENT and ANALYSIS

Measurement Conditions:

Dataset Name	XHanus-p1-ADS20_SPI-jemna
File name	C:\X'Pert Data 2009\Maixner\Hanus\2009-09-09\XHanus-p1-ADS20_SPI-jemna.xrdml
Sample Identification	SPI-jemna
Comment	4-60, 9min
Operator	Administrator
Raw Data Origin	XRD measurement (*.XRDML)
Scan Axis	Gonio
Start Position [°2Th.]	4.0084
End Position [°2Th.]	59.9894
Step Size [°2Th.]	0.0170
Scan Step Time [s]	21.3200
Scan Type	Continuous
PSD Mode	Scanning
PSD Length [°2Th.]	2.12
Offset [°2Th.]	0.0000
Divergence Slit Type	Fixed
Divergence Slit Size [°]	1.0000
Specimen Length [mm]	10.00
Measurement Temperature [°C]	25.00
Anode Material	Cu
K-Alpha1 [Å]	1.54060
K-Alpha2 [Å]	1.54443
K-Beta [Å]	1.39225
K-A2 / K-A1 Ratio	0.50000
Generator Settings	30 mA, 40 kV
Goniometer Radius [mm]	240.00
Dist. Focus-Diverg. Slit [mm]	100.00
Incident Beam Monochromator	No
Spinning	No
Fast detector	X'Celerator

Main Graphics, Analyze View:



Peak List:

Pos. [°2Th.]	d-spacing [Å]	Height [cts]	Rel. Int. [%]	FWHM [°2Th.]	Matched by
5.9453	14.86590	197.70	0.94	0.5353	00-002-0014
8.8536	9.98811	933.50	4.46	0.0836	01-084-1302
12.4012	7.13769	598.09	2.86	0.1004	01-078-1996
17.7858	4.98704	292.05	1.40	0.1338	01-084-1302; 00-002-0014
19.8148	4.48072	994.41	4.75	0.2342	01-084-1302; 01-078-1996; 00-002-0014
20.1666	4.40334	916.75	4.38	0.0335	01-084-1302
20.8736	4.25577	4474.32	21.38	0.0836	00-046-1045; 01-084-1302; 00-002-0014
22.0553	4.03035	209.37	1.00	0.1004	01-077-1316; 00-002-0014
22.9330	3.87805	304.86	1.46	0.0900	01-072-1214; 01-084-1302
23.0732	3.85480	871.45	4.16	0.1171	01-072-1214; 01-078-1996; 01-076-0825
23.5587	3.77645	247.87	1.18	0.1338	01-076-0825
23.8474	3.73139	116.94	0.56	0.0900	01-084-1302;

					01-078-1996
24.3234	3.65944	119.05	0.57	0.0900	
24.9128	3.57417	233.85	1.12	0.1673	01-084-1302;
					01-078-1996
25.5867	3.48155	198.22	0.95	0.2676	01-084-1302;
					01-076-0825
26.6509	3.34489	20926.20	100.00	0.1338	00-046-1045;
					01-084-1302
27.0750	3.29345	895.02	4.28	0.0100	01-076-0825
27.4921	3.24442	560.54	2.68	0.1004	01-076-0825
27.9507	3.19222	634.75	3.03	0.1338	01-084-1302
29.4214	3.03592	9034.46	43.17	0.1338	01-072-1214;
					00-002-0014
29.8654	2.99179	272.61	1.30	0.0900	01-084-1302;
					01-076-0825
30.4604	2.93470	97.03	0.46	0.0900	01-076-0825
30.8733	2.89638	134.45	0.64	0.2007	01-076-0825
31.3927	2.84963	163.67	0.78	0.2676	01-072-1214;
					01-077-1316
32.0754	2.79053	143.56	0.69	0.0900	01-084-1302
34.5574	2.59558	391.55	1.87	0.0900	01-084-1302;
					01-076-0825
34.9921	2.56432	653.43	3.12	0.2676	01-084-1302;
					01-078-1996;
					01-076-0825
35.9950	2.49514	1147.86	5.49	0.1171	01-072-1214;
					01-084-1302;
					01-078-1996;
					01-077-1316
36.5465	2.45875	1350.59	6.45	0.0836	00-046-1045;
					01-084-1302
37.4984	2.39849	76.51	0.37	0.0900	01-084-1302
37.7457	2.38334	133.17	0.64	0.4684	01-084-1302;
					01-078-1996;
					01-076-0825
38.5354	2.33630	94.29	0.45	0.0900	01-078-1996;
					01-077-1316;
					01-076-0825;
					00-002-0014
39.4470	2.28439	2652.01	12.67	0.1171	01-072-1214;
					00-046-1045
40.2955	2.23822	588.57	2.81	0.0669	00-046-1045;
					01-084-1302;
					01-078-1996;
					01-076-0825
41.1194	2.19526	87.66	0.42	0.0900	01-078-1996
41.7484	2.16363	37.88	0.18	0.0900	01-076-0825
42.4417	2.12987	921.55	4.40	0.0836	00-046-1045;
					01-084-1302;
					01-078-1996;

					01-076-0825
43.1822	2.09505	1257.58	6.01	0.1004	01-072-1214; 01-078-1996; 01-077-1316
45.4714	1.99476	200.20	0.96	0.0900	01-084-1302; 01-078-1996
45.7952	1.98141	636.26	3.04	0.0836	00-046-1045; 01-084-1302; 01-076-0825
47.1356	1.92814	486.68	2.33	0.0836	01-072-1214; 01-084-1302; 01-077-1316; 01-076-0825
47.5149	1.91363	1289.77	6.16	0.0836	01-072-1214; 01-078-1996; 01-076-0825
48.5114	1.87663	1389.33	6.64	0.1004	01-072-1214; 01-084-1302; 01-078-1996; 01-077-1316; 00-002-0014
50.1363	1.81805	1929.52	9.22	0.1020	00-046-1045
50.2698	1.81804	1019.44	4.87	0.0612	
50.6224	1.80172	155.36	0.74	0.0900	00-046-1045; 01-076-0825
51.0984	1.78605	52.64	0.25	0.0900	01-084-1302; 01-078-1996
54.8580	1.67220	550.68	2.63	0.1020	00-046-1045; 01-084-1302; 01-078-1996; 01-076-0825
55.3089	1.65963	266.43	1.27	0.1224	00-046-1045; 01-084-1302; 01-078-1996; 01-076-0825; 00-002-0014
55.8414	1.64506	22.86	0.11	0.0900	01-084-1302; 01-078-1996; 01-076-0825
56.5685	1.62563	196.97	0.94	0.1632	01-072-1214; 01-084-1302; 01-076-0825
57.4272	1.60335	612.25	2.93	0.1428	01-072-1214; 01-084-1302; 01-078-1996; 01-077-1316; 01-076-0825
58.1024	1.58631	23.77	0.11	0.0900	01-072-1214; 01-084-1302; 01-078-1996

59.9894	1.54085	15.89	0.08	0.0900	00-046-1045

Pattern List:

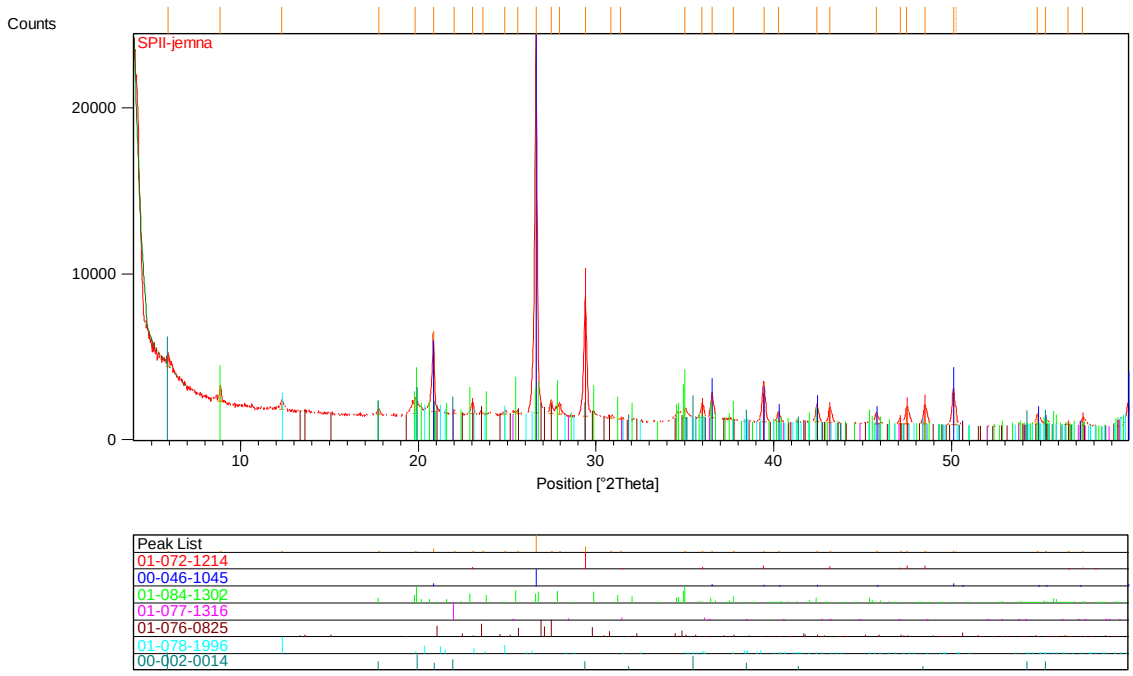
Ref. Code	Score	Chemical Formula	Mineral Name	SemiQuant [%]
01-072-1214	66	Ca C O3	Calcite, syn	17
00-046-1045	63	Si O2	Quartz, syn	41
01-084-1302	39	K Al3 Si3 O10 (O H)2	Muscovite 2\ITM\RG#1	25
01-078-1996	33	Al2 (Si2 O5) (O H)4	Kaolinite 1\ITA\RG	5
01-077-1316	19	Si O2	Cristobalite low, syn	1
01-076-0825	40	(K.88 Na.10 Ca.009 Ba.012) (Al1.005 Si2.995 O8)	Orthoclase	5
00-002-0014	17	Na Mg Al Si O2 (O H) H2 O	Montmorillonite (Clay)	6

REPORT OF MEASUREMENT and ANALYSIS

Measurement Conditions:

Dataset Name	XHanus-p1-ADS20_SPII-jemna
File name	C:\X'Pert Data 2009\Maixner\Hanus\2009-09-09\XHanus-p1-ADS20_SPII-jemna.xrdml
Sample Identification	SPII-jemna
Comment	4-60, 9min
Operator	Administrator
Raw Data Origin	XRD measurement (*.XRDML)
Scan Axis	Gonio
Start Position [°2Th.]	4.0084
End Position [°2Th.]	59.9894
Step Size [°2Th.]	0.0170
Scan Step Time [s]	21.3200
Scan Type	Continuous
PSD Mode	Scanning
PSD Length [°2Th.]	2.12
Offset [°2Th.]	0.0000
Divergence Slit Type	Fixed
Divergence Slit Size [°]	1.0000
Specimen Length [mm]	10.00
Measurement Temperature [°C]	25.00
Anode Material	Cu
K-Alpha1 [Å]	1.54060
K-Alpha2 [Å]	1.54443
K-Beta [Å]	1.39225
K-A2 / K-A1 Ratio	0.50000
Generator Settings	30 mA, 40 kV
Goniometer Radius [mm]	240.00
Dist. Focus-Diverg. Slit [mm]	100.00
Incident Beam Monochromator	No
Spinning	No
Fast detector	X'Celerator

Main Graphics, Analyze View:



Peak List:

Pos. [°2Th.]	d-spacing [Å]	Height [cts]	Rel. Int. [%]	FWHM [°2Th.]	Matched by
5.9381	14.88398	617.18	2.68	0.1004	00-002-0014
8.8546	9.98702	982.65	4.27	0.0669	01-084-1302
12.3236	7.18241	506.59	2.20	0.1673	01-078-1996
17.7803	4.98857	316.07	1.37	0.1338	01-084-1302; 00-002-0014
19.8258	4.47826	920.10	4.00	0.2342	01-084-1302; 01-078-1996; 00-002-0014
20.8489	4.26077	4879.93	21.21	0.1004	00-046-1045; 01-084-1302; 00-002-0014
22.0299	4.03495	214.16	0.93	0.1338	01-077-1316; 00-002-0014
23.0682	3.85563	700.46	3.04	0.0669	01-072-1214; 01-084-1302; 01-076-0825; 01-078-1996
23.6182	3.76708	136.16	0.59	0.2007	01-076-0825; 01-078-1996
24.8785	3.57903	216.95	0.94	0.1338	01-084-1302; 01-078-1996

25.6048	3.47913	156.88	0.68	0.4684	01-084-1302; 01-076-0825
26.6241	3.34820	23005.07	100.00	0.1338	00-046-1045; 01-084-1302
27.4673	3.24730	838.70	3.65	0.1171	01-076-0825
27.9550	3.19175	648.13	2.82	0.1338	01-084-1302
29.3929	3.03880	7389.33	32.12	0.1171	01-072-1214; 00-002-0014
30.8262	2.90069	127.77	0.56	0.2007	01-076-0825
31.3631	2.85226	127.71	0.56	0.3346	01-072-1214; 01-084-1302; 01-077-1316
34.9818	2.56505	594.45	2.58	0.2007	01-084-1302; 01-076-0825; 01-078-1996
35.9638	2.49723	915.37	3.98	0.1004	01-072-1214; 01-084-1302; 01-077-1316; 01-078-1996
36.5154	2.46077	1536.42	6.68	0.1004	00-046-1045; 01-084-1302; 01-077-1316
37.7307	2.38425	106.43	0.46	0.4684	01-084-1302; 01-076-0825; 01-078-1996
39.4459	2.28444	2359.02	10.25	0.1338	01-072-1214; 00-046-1045
40.2644	2.23988	685.34	2.98	0.0836	00-046-1045; 01-084-1302; 01-076-0825; 01-078-1996
42.4215	2.13084	1075.25	4.67	0.1004	00-046-1045; 01-084-1302; 01-076-0825; 01-078-1996
43.1411	2.09695	951.73	4.14	0.1171	01-072-1214; 01-084-1302; 01-077-1316; 01-078-1996
45.7655	1.98263	674.89	2.93	0.1004	00-046-1045; 01-084-1302; 01-076-0825; 01-078-1996
47.1011	1.92948	370.31	1.61	0.1338	01-072-1214; 01-084-1302; 01-077-1316; 01-076-0825
47.4822	1.91488	1055.51	4.59	0.1004	01-072-1214; 01-076-0825; 01-078-1996

48.4935	1.87728	1163.03	5.06	0.1004	01-072-1214; 01-084-1302; 01-077-1316; 01-078-1996; 00-002-0014
50.1075	1.81902	2195.20	9.54	0.1428	00-046-1045
50.2557	1.81852	1041.78	4.53	0.0612	
54.8279	1.67305	622.56	2.71	0.1224	00-046-1045; 01-084-1302; 01-076-0825; 01-078-1996
55.2598	1.66099	261.98	1.14	0.1632	00-046-1045; 01-084-1302; 01-076-0825; 01-078-1996; 00-002-0014
56.5680	1.62564	187.07	0.81	0.2448	01-072-1214; 01-084-1302; 01-076-0825
57.3702	1.60480	453.06	1.97	0.2040	01-072-1214; 00-046-1045; 01-084-1302; 01-077-1316; 01-076-0825; 01-078-1996

Pattern List:

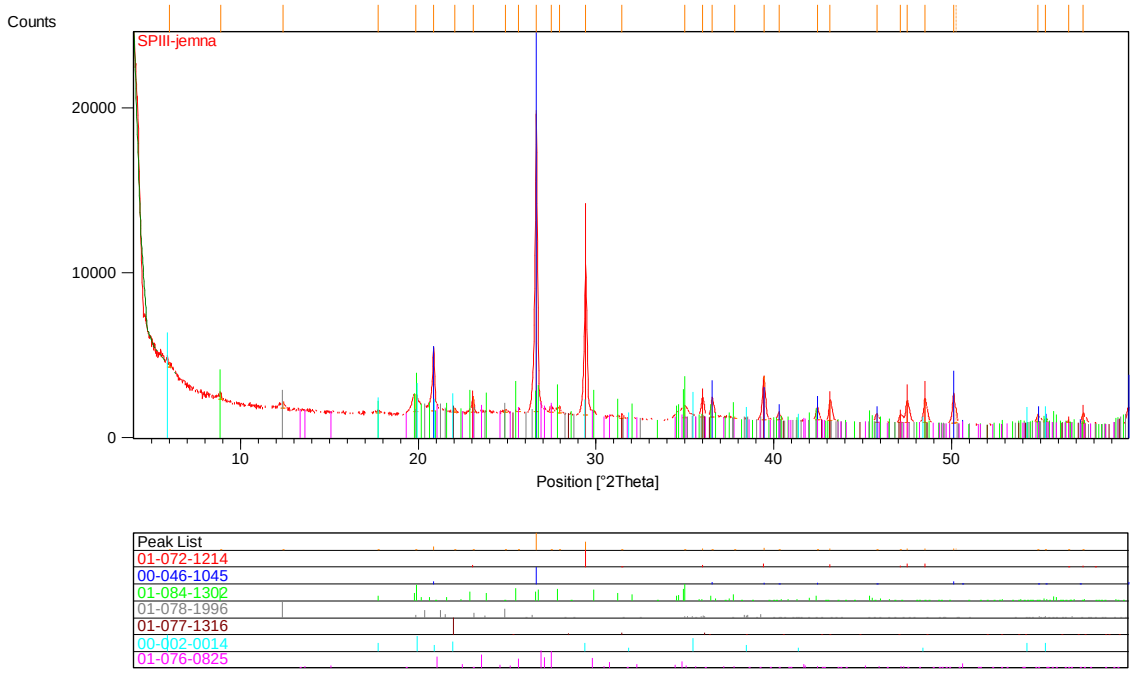
Ref. Code	Score	Chemical Formula	Mineral Name	SemiQuant [%]
01-072-1214	67	Ca C O3	Calcite, syn	13
00-046-1045	60	Si O2	Quartz, syn	43
01-084-1302	32	K Al3 Si3 O10 (O H)2	Muscovite 2\ITM\RG#1	25
01-077-1316	21	Si O2	Cristobalite low, syn	1
01-076-0825	32	(K.88 Na.10 Ca.009 Ba.012) (Al1.005 Si2.995 O8)	Orthoclase	5
01-078-1996	31	Al2 (Si2 O5) (O H)4	Kaolinite 1\ITA\RG	5
00-002-0014	22	Na Mg Al Si O2 (O H) H2 O	Montmorillonite (Clay)	8

REPORT OF MEASUREMENT and ANALYSIS

Measurement Conditions:

Dataset Name	XHanus-p1-ADS20_SPIII-jemna
File name	C:\X'Pert Data 2009\Maixner\Hanus\2009-09-09\XHanus-p1-ADS20_SPIII-jemna.xrdml
Sample Identification	SPIII-jemna
Comment	4-60, 9min
Operator	Administrator
Raw Data Origin	XRD measurement (*.XRDML)
Scan Axis	Gonio
Start Position [°2Th.]	4.0084
End Position [°2Th.]	59.9894
Step Size [°2Th.]	0.0170
Scan Step Time [s]	21.3200
Scan Type	Continuous
PSD Mode	Scanning
PSD Length [°2Th.]	2.12
Offset [°2Th.]	0.0000
Divergence Slit Type	Fixed
Divergence Slit Size [°]	1.0000
Specimen Length [mm]	10.00
Measurement Temperature [°C]	25.00
Anode Material	Cu
K-Alpha1 [Å]	1.54060
K-Alpha2 [Å]	1.54443
K-Beta [Å]	1.39225
K-A2 / K-A1 Ratio	0.50000
Generator Settings	30 mA, 40 kV
Goniometer Radius [mm]	240.00
Dist. Focus-Diverg. Slit [mm]	100.00
Incident Beam Monochromator	No
Spinning	No
Fast detector	X'Celerator

Main Graphics, Analyze View:



Peak List:

Pos. [°2Th.]	d-spacing [Å]	Height [cts]	Rel. Int. [%]	FWHM [°2Th.]	Matched by
6.0163	14.69076	287.18	1.57	0.5353	00-002-0014
8.8689	9.97090	336.46	1.84	0.0669	01-084-1302
12.3841	7.14745	382.95	2.10	0.1004	01-078-1996
17.7507	4.99682	154.49	0.85	0.2676	01-084-1302; 00-002-0014
19.8487	4.47314	1116.99	6.11	0.2342	01-084-1302; 01-078-1996; 00-002-0014
20.8708	4.25634	3902.46	21.36	0.0836	00-046-1045; 01-084-1302; 00-002-0014
22.0440	4.03239	234.13	1.28	0.1004	01-077-1316; 00-002-0014
23.0817	3.85341	944.43	5.17	0.0836	01-072-1214; 01-078-1996; 01-076-0825
24.8876	3.57773	204.95	1.12	0.1004	01-084-1302; 01-078-1996
25.6319	3.47550	148.14	0.81	0.2007	01-084-1302; 01-076-0825
26.6427	3.34590	18267.69	100.00	0.1171	00-046-1045;

					01-084-1302
27.4665	3.24740	368.91	2.02	0.1338	01-076-0825
27.9307	3.19447	417.16	2.28	0.1004	01-084-1302
29.4092	3.03715	9170.82	50.20	0.1506	01-072-1214;
					00-002-0014
31.4499	2.84458	209.96	1.15	0.2676	01-072-1214;
					01-078-1996;
					01-077-1316
34.9909	2.56440	707.56	3.87	0.2676	01-084-1302;
					01-078-1996;
					01-076-0825
35.9835	2.49591	1198.76	6.56	0.1171	01-072-1214;
					01-084-1302;
					01-078-1996;
					01-077-1316
36.5207	2.46042	1129.06	6.18	0.1004	00-046-1045;
					01-084-1302;
					01-077-1316
37.7819	2.38114	126.10	0.69	0.2676	01-084-1302;
					01-078-1996;
					01-076-0825
39.4387	2.28485	2666.09	14.59	0.1171	01-072-1214;
					00-046-1045
40.2838	2.23884	522.09	2.86	0.0669	00-046-1045;
					01-084-1302;
					01-078-1996;
					01-076-0825
42.4495	2.12950	817.90	4.48	0.0836	00-046-1045;
					01-084-1302;
					01-078-1996;
					01-076-0825
43.1636	2.09591	1265.10	6.93	0.0836	01-072-1214;
					01-084-1302;
					01-078-1996;
					01-077-1316
45.7897	1.98163	544.44	2.98	0.1338	00-046-1045;
					01-084-1302;
					01-078-1996;
					01-076-0825
47.1192	1.92878	497.36	2.72	0.0836	01-072-1214;
					01-084-1302;
					01-078-1996;
					01-077-1316;
					01-076-0825
47.5088	1.91387	1363.89	7.47	0.1171	01-072-1214;
					01-078-1996;
					01-076-0825
48.4984	1.87710	1458.92	7.99	0.1004	01-072-1214;
					01-084-1302;
					01-078-1996;

					01-077-1316; 00-002-0014
50.1231	1.81849	1839.55	10.07	0.1020	00-046-1045
50.2616	1.81831	880.64	4.82	0.0816	
54.8568	1.67224	471.13	2.58	0.1020	00-046-1045; 01-084-1302; 01-078-1996; 01-076-0825
55.2876	1.66022	230.06	1.26	0.1224	00-046-1045; 01-084-1302; 01-078-1996; 00-002-0014; 01-076-0825
56.5693	1.62561	232.66	1.27	0.1632	01-072-1214; 01-084-1302; 01-076-0825
57.4131	1.60371	612.20	3.35	0.1224	01-072-1214; 01-084-1302; 01-078-1996; 01-077-1316; 01-076-0825

Pattern List:

Ref. Code	Score	Chemical Formula	Mineral Name	SemiQuant [%]
01-072-1214	72	Ca C O3	Calcite, syn	17
00-046-1045	65	Si O2	Quartz, syn	40
01-084-1302	32	K Al3 Si3 O10 (O H)2	Muscovite 2\ITM\RG#1	26
01-078-1996	31	Al2 (Si2 O5) (O H)4	Kaolinite 1\ITA\RG	5
01-077-1316	23	Si O2	Cristobalite low, syn	1
00-002-0014	20	Na Mg Al Si O2 (O H) H2 O	Montmorillonite (Clay)	5
01-076-0825	26	(K.88 Na.10 Ca.009 Ba.012) (Al1.005 Si2.995 O8)	Orthoclase	6