

AM-87-352

Crystal structures of lizardite-1T and lizardite-2H1 from Coli, Italy

Mellini and Zanazzi

To be deposited: Table 4a

American Mineralogist, 72, 9-10, 943-948

OBSERVED AND CALCULATED STRUCTURE FACTORS FOR LIZARDITE 1T FROM COLLI (ITALY)										PAGE 1														
H	K	L	10FO	10FC	H	K	L	10FO	10FC	H	K	L	10FO	10FC	H	K	L	10FO	10FC					
0	0	-9	59	48	-2	4	4	72	75	0	3	-3	140	148	-2	6	-2	55	49	-1	4	0	141	107
0	0	-9	42	19	-1	4	4	44	43	1	3	-3	53	54	-1	6	-2	50	53	1	4	0	108	113
0	0	-8	191	164	0	4	4	82	93	2	3	-3	51	60	0	0	-1	266	307	-2	5	0	113	89
1	1	-8	122	106	1	4	4	78	78	3	3	-3	101	112	0	1	-1	176	175	-1	5	0	133	114
-1	1	-8	49	42	-2	5	5	54	44	-2	4	-3	373	390	1	1	-1	578	563	0	5	0	78	77
0	0	-8	65	53	-1	5	5	211	214	-1	4	-3	62	64	-1	2	-1	221	195	1	5	0	72	79
0	0	-7	155	143	0	0	0	176	182	0	4	-3	73	76	0	2	-1	95	85	-3	6	0	418	339
0	0	-7	42	35	0	1	1	64	63	1	4	-3	225	244	1	2	-1	123	121	-1	6	0	86	79
0	0	-7	64	66	1	1	1	275	302	2	4	-3	61	57	2	2	-1	244	232	0	0	1	271	307
1	1	-7	159	156	-1	1	1	401	413	-2	5	-3	52	52	-1	3	-1	131	114	0	1	1	181	175
-1	0	-7	83	83	0	2	2	120	129	0	5	-3	49	49	0	3	-1	297	281	1	1	1	250	198
0	0	-7	100	87	1	2	2	63	57	1	3	-3	44	44	1	3	-1	95	93	-1	0	1	606	564
0	0	-7	123	116	2	2	2	320	339	-3	6	-3	103	105	2	3	-1	81	87	0	2	1	133	114
1	1	-7	42	34	-1	3	3	45	49	-2	6	-3	57	53	3	3	-1	150	161	1	1	1	98	87
-2	0	-6	54	60	0	3	3	91	94	0	0	-2	416	472	-2	4	-1	547	472	-1	2	1	606	564
0	0	-6	210	210	1	3	3	49	48	0	1	-2	132	137	-1	4	-1	113	104	0	3	1	136	121
0	0	-6	40	43	2	3	3	40	43	1	1	-2	421	426	-1	4	-1	41	37	-1	0	1	110	104
1	1	-6	169	161	3	3	3	70	75	-1	2	-2	182	203	1	4	-1	293	302	1	3	1	110	104
-1	0	-6	92	96	-2	4	4	152	159	0	2	-2	114	112	-2	5	-1	85	79	3	3	1	79	79
0	0	-6	107	119	-1	4	4	63	57	1	2	-2	103	103	-1	5	-1	125	113	3	3	1	145	157
1	1	-6	36	37	0	4	4	84	86	2	2	-2	217	222	0	5	-1	71	74	-2	4	1	263	234
-1	2	-6	85	91	2	4	4	172	189	-1	3	-2	92	94	1	5	-1	64	60	-1	4	1	107	93
-1	3	-6	57	44	2	4	4	60	64	0	3	-2	186	187	-3	6	-1	188	156	0	4	1	37	38
0	0	-6	192	187	-2	5	5	39	40	1	3	-2	76	78	-1	6	-1	74	72	1	4	1	111	115
-2	4	-6	73	79	-1	5	5	243	262	2	3	-2	72	76	0	1	0	254	189	-2	4	1	37	36
0	0	-6	82	85	0	5	5	36	38	3	3	-2	119	124	1	1	0	136	117	-1	5	1	91	87
0	0	-5	207	210	-3	6	6	73	67	-2	4	-2	149	157	-1	2	0	178	118	0	5	1	333	302
1	1	-5	46	49	-2	6	6	63	68	-1	4	-2	94	87	1	2	0	100	71	0	5	1	69	74
-1	0	-5	122	118	0	0	0	166	187	0	4	-2	68	70	1	2	0	152	128	-1	5	1	73	72
0	0	-5	347	354	0	1	1	85	89	1	4	-2	174	185	2	2	0	232	216	-3	6	1	181	162
0	0	-5	121	130	1	1	1	395	432	-2	4	-2	52	50	-1	3	0	190	128	-1	6	1	70	60
1	1	-5	51	50	-1	2	2	131	132	0	5	-2	67	67	0	3	0	700	569	0	0	1	420	472
-1	2	-5	204	203	0	2	2	126	133	-1	5	-2	162	162	1	3	0	117	107	0	1	1	131	137
0	0	-5	40	44	1	2	2	70	73	0	5	-2	52	54	2	3	0	90	89	1	1	1	191	204
-1	0	-5	219	227	2	2	2	63	71	1	5	-2	47	52	3	3	0	326	339	-1	2	2	428	427
2	0	-5	43	41	-1	3	3	69	70	-3	6	-2	126	118	-2	4	0	291	214	0	2	2	115	113

Table 4a (continued)

OBSERVED AND CALCULATED STRUCTURE FACTORS FOR		LIZARDITE 1T FROM COLI (ITALY)		PAGE															
H	K	L	10F0	10FC	2														
1	2	2	100	94															
2	2	2	156	158															
-1	3	2	101	103															
0	3	2	191	187															
1	3	2	92	87															
2	3	2	68	67															
3	3	2	114	119															
-2	4	2	228	221															
-1	4	2	73	78															
0	4	2	69	70															
1	4	2	160	163															
2	4	2	46	49															
-2	5	2	62	64															
-1	5	2	180	185															
0	5	2	59	54															
1	5	2	54	53															
-3	6	2	131	125															
-2	6	2	57	51															
-1	6	2	60	52															
0	6	2	170	182															
1	6	2	88	88															
1	6	3	135	132															
LIZARDITE 1T FROM COLI (ITALY)																			
H <td>K <td>L <td>10F0 <td>10FC <td>H <td>K <td>L <td>10F0 <td>10FC <td>H <td>K <td>L <td>10F0 <td>10FC <td>H <td>K <td>L <td>10F0 <td>10FC </td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td>	K <td>L <td>10F0 <td>10FC <td>H <td>K <td>L <td>10F0 <td>10FC <td>H <td>K <td>L <td>10F0 <td>10FC <td>H <td>K <td>L <td>10F0 <td>10FC </td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td>	L <td>10F0 <td>10FC <td>H <td>K <td>L <td>10F0 <td>10FC <td>H <td>K <td>L <td>10F0 <td>10FC <td>H <td>K <td>L <td>10F0 <td>10FC </td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td>	10F0 <td>10FC <td>H <td>K <td>L <td>10F0 <td>10FC <td>H <td>K <td>L <td>10F0 <td>10FC <td>H <td>K <td>L <td>10F0 <td>10FC </td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td>	10FC <td>H <td>K <td>L <td>10F0 <td>10FC <td>H <td>K <td>L <td>10F0 <td>10FC <td>H <td>K <td>L <td>10F0 <td>10FC </td></td></td></td></td></td></td></td></td></td></td></td></td></td></td>	H <td>K <td>L <td>10F0 <td>10FC <td>H <td>K <td>L <td>10F0 <td>10FC <td>H <td>K <td>L <td>10F0 <td>10FC </td></td></td></td></td></td></td></td></td></td></td></td></td></td>	K <td>L <td>10F0 <td>10FC <td>H <td>K <td>L <td>10F0 <td>10FC <td>H <td>K <td>L <td>10F0 <td>10FC </td></td></td></td></td></td></td></td></td></td></td></td></td>	L <td>10F0 <td>10FC <td>H <td>K <td>L <td>10F0 <td>10FC <td>H <td>K <td>L <td>10F0 <td>10FC </td></td></td></td></td></td></td></td></td></td></td></td>	10F0 <td>10FC <td>H <td>K <td>L <td>10F0 <td>10FC <td>H <td>K <td>L <td>10F0 <td>10FC </td></td></td></td></td></td></td></td></td></td></td>	10FC <td>H <td>K <td>L <td>10F0 <td>10FC <td>H <td>K <td>L <td>10F0 <td>10FC </td></td></td></td></td></td></td></td></td></td>	H <td>K <td>L <td>10F0 <td>10FC <td>H <td>K <td>L <td>10F0 <td>10FC </td></td></td></td></td></td></td></td></td>	K <td>L <td>10F0 <td>10FC <td>H <td>K <td>L <td>10F0 <td>10FC </td></td></td></td></td></td></td></td>	L <td>10F0 <td>10FC <td>H <td>K <td>L <td>10F0 <td>10FC </td></td></td></td></td></td></td>	10F0 <td>10FC <td>H <td>K <td>L <td>10F0 <td>10FC </td></td></td></td></td></td>	10FC <td>H <td>K <td>L <td>10F0 <td>10FC </td></td></td></td></td>	H <td>K <td>L <td>10F0 <td>10FC </td></td></td></td>	K <td>L <td>10F0 <td>10FC </td></td></td>	L <td>10F0 <td>10FC </td></td>	10F0 <td>10FC </td>	10FC
-1	2	3	407	431	0	0	4	178	182	-2	6	4	64	64	1	2	6	38	44
0	2	3	126	134	0	1	4	68	62	0	0	5	209	209	2	2	6	78	80
1	2	3	73	70	1	1	4	410	413	0	1	5	48	48	0	3	6	187	187
2	2	3	386	389	-1	2	4	277	302	1	1	5	350	354	2	3	6	46	46
3	2	3	70	72	0	2	4	114	130	-1	2	5	118	119	-2	4	6	93	91
4	2	3	142	148	0	2	4	50	48	0	2	5	119	130	0	4	6	77	77
5	2	3	67	64	1	2	4	156	158	1	2	5	44	44	0	4	6	93	91
6	2	3	56	52	-1	3	4	56	57	2	2	5	44	44	0	4	6	77	77
7	2	3	96	105	0	3	4	91	94	-1	3	5	75	76	0	4	6	77	77
8	2	3	68	71	1	3	4	52	56	0	3	5	51	49	1	1	7	152	142
9	2	3	55	54	1	3	4	39	39	2	3	5	215	227	0	1	7	152	142
10	2	3	75	76	2	3	4	59	67	1	1	5	42	43	1	1	7	152	142
11	2	3	49	46	3	3	4	321	337	0	4	5	38	44	-1	2	7	81	82
12	2	3	61	60	-2	4	4	42	47	2	3	5	38	44	0	2	7	81	82
13	2	3	60	54	-1	4	4	85	86	-2	4	5	198	203	1	2	7	46	46
14	2	3	230	244	0	4	4	245	262	0	4	5	84	94	2	2	7	62	61
15	2	3	49	51	1	4	4	64	69	1	4	5	208	214	0	3	7	119	115
16	2	3	54	51	-2	4	4	44	43	-1	5	5	67	79	0	4	7	119	115
17	2	3	105	111	0	5	4	174	189	0	0	6	207	211	0	0	8	187	188
18	2	3	53	57	-1	5	4	42	37	0	1	6	41	43	0	1	8	37	41
19	2	3	46	37	0	5	4	63	76	1	1	6	92	96	-1	2	8	50	53
20	2	3			-3	6	4			0	2	6	164	162	0	0	8	111	106
21	2	3				6	4			0	2	6	102	119	0	0	9	64	53
22	2	3				6	4			0	2	6			0	0	9	51	48

OBSERVED AND CALCULATED STRUCTURE FACTORS FOR LIZARDITE 2H1 FROM COLLI (ITALY)

H	K	L	IOFO	IOFC	H	K	L	IOFO	IOFC	H	K	L	IOFO	IOFC	H	K	L	IOFO	IOFC	H	K	L	IOFO	IOFC	
0	1	20	275	273	-1	0	0	99	94	0	0	0	431	407	-3	7	7	71	72	0	3	3	0	554	536
-4	2	19	86	91	0	0	0	503	515	0	1	1	150	149	-1	2	2	592	597	-2	4	4	0	685	675
0	0	18	130	137	0	0	0	95	96	-1	2	2	606	598	-2	4	4	379	383	-1	4	4	0	186	191
0	0	18	98	97	-1	0	0	195	194	0	2	2	263	271	-1	4	4	38	43	0	4	4	0	62	61
0	1	18	72	81	0	0	0	248	248	-1	3	3	121	121	-1	5	5	270	264	-2	5	5	0	151	150
-1	2	18	340	339	-1	0	0	83	85	0	3	3	210	210	-2	7	7	184	191	-1	5	5	0	389	377
0	2	18	117	119	0	0	0	117	119	-2	4	4	423	421	0	0	0	960	964	0	5	5	0	121	129
-1	3	18	76	71	-2	0	0	73	66	-1	4	4	104	109	0	1	1	276	273	-3	6	6	0	288	286
0	3	18	51	47	-1	0	0	70	72	0	4	4	179	179	-1	2	2	446	419	-2	6	6	0	44	48
-1	2	17	112	129	0	0	0	180	180	-2	5	5	91	91	0	2	2	230	222	-1	6	6	0	121	118
-2	4	17	93	96	-2	0	0	70	68	-1	5	5	362	356	-1	3	3	200	200	0	6	6	0	172	171
0	0	16	454	450	-1	0	0	47	62	0	5	5	75	81	0	3	3	384	378	-3	6	6	0	101	105
0	0	16	72	69	0	0	0	133	132	-3	6	6	144	146	-2	4	4	145	136	-2	7	7	0	263	259
-1	2	16	200	201	-3	0	0	308	300	-2	6	6	133	130	-1	4	4	160	165	-1	7	7	0	232	235
0	2	16	148	144	-1	0	0	309	303	-2	6	6	71	69	0	4	4	129	129	-2	7	7	0	184	197
-1	3	16	61	62	-2	0	0	224	235	-1	6	6	487	529	-2	5	5	133	132	-1	4	4	0	53	49
0	3	16	417	413	-1	0	0	505	496	-1	7	7	38	28	-1	5	5	200	193	-1	5	5	0	144	146
-2	4	16	75	78	0	0	0	112	113	-2	7	7	366	384	0	6	6	104	108	-2	7	7	0	94	100
-1	4	16	50	54	0	0	0	459	457	-1	7	7	38	36	-3	6	6	245	235	-1	7	7	0	352	367
-1	4	15	94	86	-1	0	0	276	279	-1	5	5	412	389	-2	6	6	88	87	-1	2	2	0	190	171
-2	4	15	73	79	0	0	0	99	104	0	0	0	300	313	-1	6	6	105	110	0	2	2	0	149	138
0	0	14	386	373	-1	0	0	499	490	-1	0	0	491	197	0	6	6	291	288	-1	0	0	0	236	240
0	1	14	73	78	0	0	0	202	198	-2	2	2	329	322	-3	7	7	90	87	0	3	3	0	1095	1104
-1	2	14	257	255	-1	0	0	79	83	-1	2	2	268	263	-2	7	7	115	116	-2	4	4	0	369	354
-1	2	14	187	192	0	0	0	187	187	-1	3	3	149	153	-1	2	2	415	435	-1	4	4	0	190	197
0	3	14	72	67	-2	0	0	82	88	-2	4	4	301	292	-1	3	3	39	31	-2	5	5	0	154	153
-1	3	14	294	284	-1	0	0	277	275	-1	4	4	408	408	-2	4	4	301	309	-1	5	5	0	119	111
-2	4	14	147	144	0	0	0	82	81	-1	4	4	125	129	-1	5	5	43	41	-3	6	6	0	128	123
-1	4	14	52	59	-3	0	0	327	326	-2	5	5	155	152	-1	6	6	49	34	-1	6	6	0	619	603
0	4	14	141	144	-2	0	0	141	144	-1	5	5	111	113	-1	5	5	111	113	-3	6	6	0	123	134
-2	5	14	55	55	-1	0	0	64	62	0	5	5	94	100	-2	6	6	139	139	0	6	6	0	595	597
-1	5	14	172	168	-1	0	0	467	473	-3	6	6	205	204	-2	7	7	617	622	-3	7	7	0	96	96
-1	2	13	174	187	-2	0	0	330	330	-2	6	6	114	114	-1	7	7	343	344	-2	7	7	0	98	96
-2	4	13	131	136	-1	0	0	45	35	-1	6	6	90	89	0	1	1	758	749	-1	7	7	0	252	261
-1	4	13	53	24	-1	0	0	235	239	0	6	6	161	154	-1	2	2	172	163	-2	8	8	0	194	196

Table 4b

(continued)

OBSERVED AND CALCULATED STRUCTURE FACTORS FOR LIZARDITE 2H1 FROM COLTI (ITALY)

OBSERVED		CALCULATED		STRUCTURE FACTORS FOR		LIZARDITE 2H1 FROM COLTI		(ITALY)	
H	K	L	IOFO	IOFC	H	K	L	IOFO	IOFC
-1	5	1	148	146	0	3	4	383	379
-2	7	1	98	99	-2	4	4	143	137
0	0	2	619	622	-1	4	4	157	165
0	1	2	339	343	0	4	4	130	131
-1	2	2	759	753	-2	5	4	129	131
0	2	2	174	165	-1	5	4	200	196
-1	3	2	228	226	0	5	4	108	108
0	3	2	555	541	-3	6	4	240	236
-2	4	2	685	680	-2	6	4	92	89
-1	4	2	185	190	-1	6	4	103	109
0	4	2	66	63	0	6	4	294	288
-2	5	2	146	150	-3	7	4	82	87
-1	5	2	387	379	-2	7	4	121	119
0	5	2	122	129	-1	7	4	604	595
-3	6	2	287	288	-2	7	5	385	381
-2	6	2	57	49	-1	7	5	49	43
0	6	2	117	118	-1	7	5	276	264
-3	6	2	164	172	-2	7	5	189	180
-2	7	2	98	105	0	7	6	400	381
-1	7	2	262	261	0	8	6	191	196
-2	7	2	439	433	-1	8	6	323	320
-1	7	2	320	307	0	8	6	268	265
-1	4	3	46	41	-1	8	6	153	152
-1	5	3	252	250	0	8	6	299	292
-2	7	3	143	137	-2	8	6	403	406
0	0	4	957	964	-1	9	6	121	128
0	1	4	272	273	0	9	6	155	153
-1	1	4	445	424	-2	9	6	110	112
0	2	4	229	225	-1	9	6	191	191
0	2	4	198	199	0	9	6	90	99

PAGE 1

LIZARDITE 2H1 FROM COLTI (ITALY)