TAMU MICROPROBE DATA

13.5 m N Fracture

Hem+go spot outside data

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
	Sample No	Goethite U	Pb	As	S	Ca	Na	Si	Al	Hematite U	Pb	As	S	Ca	Na	Si	Al
1	NOPI-419-2	3387	1170	8763	523	1037	1030	21453	9310	1590	2850	7003	910	1397	350	11360	1093
2	NOPI-419-1	4937	1227	11813	437	1173	840	20247	7910	2770	2467	9260	1153	1487	533	10797	1380
3	NOPI-420-1a	1723	2333	5810	197	797	503	21360	4213	1057	1333	4260	763	1257	197	19980	2233
4	NOPI-420-1b	1727	1243	6713	380	977	597	20857	3547	1287	1650	4283	730	1387	177	20240	2010
5	NOPI-420-2a	3117	1513	4673	463	473	660	21287	6897	1542	1900	4377	580	1267	215	18735	3457
6	NOPI-420-2b	4270	1940	5187	460	745	385	22335	9020	880	1115	4185	795	1205	235	14860	1260
7	NOPI-421-2	3497	1197	13740	173	1867	547	16510	9147	1163	1787	10803	767	1897	523	11343	1617
8	NOPI-421-1	5347	1650	14107	177	2063	780	16513	7163	1703	1620	9767	607	2140	473	12230	1700
9	NOPI-422-1a	5303	1963	8443	650	1130	1473	20583	10597	980	5160	6315	1025	1415	1145	15265	2120
10	NOPI-422-2a	2093	3373	8330	890	1337	793	17533	5047	1277	4830	7593	943	1467	523	16327	2867
11	NOPI-422-2b	2960	2590	8723	817	1170	723	16317	5157	777	4007	6363	1017	1577	353	15627	3097
12	NOPI-423-1a	2670	1795	10950	340	1310	985	26290	7205	1335	2660	8631	815	1205	335	12675	1370
13	NOPI-423-1b	2483	1653	11397	290	1153	877	24070	7750	843	2000	5980	743	1147	160	16103	4107
14	NOPI-423-2a	3650	1207	11330	907	797	617	11947	9090	1257	3190	12177	580	1270	573	15973	3330
15	NOPI-423-2b	4267	1623	19003	577	1590	590	11853	8580	1443	3123	12230	543	1320	517	16063	2613
16	NOPI-424-1a	1207	907	6891	1313	1390	433	19013	8303	443	1493	5200	1003	1427	367	15263	2913
17	NOPI-424-1b	1477	1330	7463	553	1587	650	23957	8523	417	1490	7593	890	1593	397	14107	2373
18	NOPI-424-2a	1180	1610	7100	417	1350	593	23950	4580	220	1530	6797	853	1410	123	17447	2027
19	NOPI-424-2b	1120	970	8250	295	1685	665	24760	6460	382	1752	7827	752	1695	292	15080	2055
20	NOPI-425-1a	550	3660	6780	325	1050	660	27380	5265	317	2072	4270	1180	1195	187	15167	2822
21	NOPI-425-1b	995	1470	6260	805	990	505	21525	9990	227	2143	3647	1403	1170	353	14823	2603
22	NOPI-425-2a	1370	517	4757	1057	717	507	21967	15763	430	1793	4740	1253	1060	277	16973	4893
23	NOPI-425-2b	1270	950	4650	1045	840	315	22635	13205	912	1422	4532	1265	995	427	18700	7305
24	NOPI-425-3a	1470	2400	8160	610	1260	740	28210	5100	213	1967	3860	1417	983	163	12813	1026
25	NOPI-425-3b	823	1953	7257	1103	1020	230	16267	6527	385	2300	4605	1105	1150	185	18590	2710
26	NOPI-294-1	1120	2780	5880	540	1640	680	24610	12350	750	6047	6770	1317	2163	353	14487	3717
27	NOPI-294-3	856	4342	4876	790	1060	406	23052	6368	230	5740	2560	1325	1090	440	14660	1480
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Analysis	x	y	z	Na	Al	Si	As	Ca	S	K	Fe	Pb	U	O
5Fe2O3_stdck#1	7083	27064	0	0	0.009	0.012	0.004	0	0.012	0	70.248	0.008	0.001	30.23
5Fe2O3_stdck#2	6920	27141	0	0.013	0.015	0.017	0.02	0.002	0	0	70.364	0.006	0.011	30.287
5SiO2_stdck#1	8888	31561	-5	0	0.003	46.825	0	0	0.01	0.002	0.015	0.002	0.003	53.372
5SiO2_stdck#2	8888	31490	-5	0.001	0.011	46.776	0.011	0.002	0.012	0.003	0.014	0	0	53.332
NOP419_1_pt1 H	-13751	-4365	49	0.048	0.112	0.991	0.986	0.17	0.102	0.002	62.072	0.242	0.269	28.741
NOP419_1_pt2 G	-13754	-4355	49	0.094	0.719	2.149	1.139	0.113	0.058	0.013	53.947	0.133	0.48	27.13
NOP419_1_pt3 H	-13810	-4419	49	0.061	0.169	1.189	0.84	0.141	0.135	0.012	61.521	0.261	0.233	28.742
NOP419_1_pt4 G	-13796	-4406	49	0.084	0.905	1.926	1.207	0.138	0.036	0.019	53.544	0.106	0.522	26.881
NOP419_1_pt5 H	-13536	-4386	49	0.051	0.133	1.059	0.952	0.135	0.109	0.018	62.549	0.237	0.329	29.031
NOP419_1_pt6 G	-13521	-4408	49	0.074	0.749	1.999	1.198	0.101	0.037	0.012	51.609	0.129	0.479	25.969
NOP419_2_pt1 G	-6014	-10898	50	0.157	0.707	2.239	0.643	0.1	0.1	0.024	50.523	0.092	0.325	25.541
NOP419_2_pt2 H	-6009	-10865	50	0.041	0.119	1.148	0.646	0.167	0.095	0.018	55.049	0.276	0.154	25.704
NOP419_2_pt3 G	-5997	-10840	50	0.066	0.97	1.944	1.053	0.128	0.027	0.004	52.066	0.139	0.385	26.203
NOP419_2_pt4 H	-6010	-10849	50	0.035	0.105	1.115	0.805	0.154	0.083	0.013	63.084	0.301	0.164	29.17
NOP419_2_pt5 G	-6081	-10938	50	0.086	1.116	2.253	0.933	0.083	0.03	0.014	52.479	0.12	0.306	26.779
NOP419_2_pt6 H	-6078	-10945	50	0.029	0.104	1.145	0.65	0.098	0.095	0.019	60.1	0.278	0.159	27.829
NOP418_1_pt1 G	5343	-23515	12	0.041	0.403	2.194	0.902	0.089	0.057	0.007	53.59	0.05	1.385	26.699
NOP418_2_pt1 H	10864	-19572	25	0.024	0.041	1.093	0.736	0.09	0.099	0.017	62.787	0.232	0.675	28.978
NOP418_2_pt2 G	10874	-19573	25	0.104	0.52	1.739	2.14	0.167	0.031	0	51.282	0.167	1.429	25.99
NOP418_2_pt3 H	10857	-19558	25	0.024	0.027	0.723	0.664	0.062	0.114	0.008	63.666	0.243	0.683	28.896
NOP418_2_pt4 G	10844	-19552	25	0.126	0.501	1.685	2.304	0.207	0.017	0.008	51.403	0.096	1.649	26.074
NOP418_1_pt2 H	5392	-23439	12	0.03	0.131	1.719	0.835	0.089	0.065	0.004	62.101	0.101	0.711	29.461
NOP418_1_pt3 G	5343	-23387	12	0.06	0.412	2.268	0.928	0.107	0.041	0.001	53.645	0.032	1.331	26.807
NOP418_1_pt4 H	5175	-23548	13	0.021	0.142	2.058	0.701	0.07	0.021	0.023	60.28	0.144	0.649	28.929
NOP418_1_pt5 G	5140	-23530	13	0.07	1.18	1.653	1.082	0.059	0.014	0.004	51.683	0.084	1.03	25.94
NOP418_1_pt6 G	5182	-23479	13	0.06	0.137	2.364	0.656	0.05	0.037	0.01	55.027	0.091	1.062	27.067
NOP418_1_pt7 H	5036	-23651	13	0.024	0.13	2.253	0.647	0.076	0.027	0.001	60.946	0.137	0.593	29.396
NOP418_1_pt8 G	5036	-23624	13	0.075	0.471	2.32	0.586	0.044	0.035	0	54.459	0.12	0.719	26.987
NOP418_1_pt9 H	4992	-23568	13	0.019	0.145	2.167	0.728	0.082	0.024	0.001	60.298	0.129	0.751	29.094
NOP421_1_pt1 H	17898	21690	-2	0.05	0.171	1.242	1.003	0.223	0.068	0.023	60.273	0.107	0.092	28.245
NOP421_1_pt2 H	17915	21667	-2	0.043	0.162	1.206	0.951	0.225	0.051	0.04	60.866	0.184	0.253	28.433
NOP421_1_pt3 H	17944	21663	-2	0.049	0.177	1.221	0.976	0.194	0.063	0.012	60.314	0.195	0.166	28.231
NOP421_1_pt4 G	17903	21649	-3	0.084	0.675	1.753	1.472	0.214	0.009	0.044	52.217	0.149	0.592	26.061
NOP421_1_pt5 G	17903	21649	-3	0.071	0.764	1.632	1.169	0.177	0.03	0.017	53.684	0.177	0.403	26.458
NOP421_1_pt6 G	17927	21690	-3	0.079	0.71	1.569	1.591	0.228	0.014	0.017	52.718	0.169	0.609	26.173
NOP421_2_pt1 G	18403	27219	-19	0.064	0.633	1.491	1.314	0.221	0.011	0.003	53.184	0.192	0.345	26.022
NOP421_2_pt2 G	18430	27282	-21	0.048	1.298	2.011	1.391	0.194	0.022	0.021	52.272	0.099	0.341	26.843
NOP421_2_pt3 G	18368	27226	-21	0.052	0.813	1.451	1.417	0.145	0.019	0.022	53.428	0.068	0.363	26.26
NOP421_2_pt4 H	18383	27246	-21	0.05	0.154	1.146	1.055	0.134	0.062	0.033	58.614	0.128	0.059	27.39
NOP421_2_pt5 H	18400	27198	-21	0.039	0.16	1.133	1.087	0.204	0.085	0.019	61.21	0.19	0.148	28.591
NOP421_2_pt6 H	18430	27238	-21	0.068	0.171	1.124	1.099	0.231	0.083	0.031	61.675	0.218	0.142	28.822

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Analysis	x	y	z	Na	Al	Si	As	Ca	S	K	Fe	Pb	U	O
NOPI_423_1a_#1-H	12490	-33031	-13	0.022	0.173	1.194	0.906	0.084	0.039	0.004	55.008	0.249	0.133	25.774
NOPI_423_1a_#2-H	12445	-33199	-13	0.034	0.222	1.436	0.702	0.133	0.077	0.004	60.817	0.245	0.108	28.557
NOPI_423_1a_#3-H	12335	-33086	-13	0.033	0.052	1.099	1.026	0.108	0.086	0.000	61.885	0.287	0.159	28.665
NOPI_423_1a_#4-G	12368	-33086	-13	0.052	0.453	2.423	1.251	0.149	0.045	0.024	54.868	0.292	0.185	27.607
NOPI_423_1a_#5-G	12597	-33191	-13	0.112	0.632	2.777	1.042	0.117	0.034	0.000	50.755	0.191	0.258	26.278
NOPI_423_1a_#6-G	12517	-33037	-13	0.085	0.809	2.481	1.148	0.145	0.034	0.009	50.781	0.168	0.276	26.172
NOPI_423_1b_#1-H	11667	-33102	-10	0.020	0.563	1.684	0.548	0.106	0.086	0.015	59.328	0.202	0.089	28.416
NOPI_423_1b_#2-H	11497	-33102	-10	0.017	0.416	1.547	0.603	0.117	0.070	0.020	59.649	0.186	0.091	28.275
NOPI_423_1b_#3-H	11663	-33227	-10	0.011	0.253	1.600	0.643	0.121	0.067	0.000	60.714	0.212	0.073	28.660
NOPI_423_1b_#4-G	11595	-33245	-10	0.074	1.420	2.096	1.013	0.089	0.043	0.000	50.509	0.175	0.206	26.062
NOPI_423_1b_#5-G	11361	-32997	-10	0.087	0.563	2.707	1.078	0.121	0.019	0.000	51.612	0.176	0.236	26.492
NOPI_423_1b_#6-G	11704	-33072	-10	0.102	0.342	2.418	1.328	0.136	0.025	0.014	51.548	0.145	0.303	26.102
NOPI_423_2a_#1-H	-19791	-23361	18	0.077	0.494	1.692	0.989	0.107	0.055	0.035	58.133	0.293	0.106	28.071
NOPI_423_2a_#2-H	-19719	-23450	18	0.071	0.262	1.403	1.389	0.133	0.056	0.021	59.072	0.337	0.136	28.166
NOPI_423_2a_#3-H	-20015	-23525	14	0.024	0.243	1.697	1.275	0.141	0.063	0.030	57.496	0.327	0.135	27.745
NOPI_423_2a_#4-G	-19925	-23484	14	0.050	0.873	1.439	1.687	0.126	0.059	0.010	50.036	0.135	0.323	25.029
NOPI_423_2a_#5-G	-19868	-23265	14	0.060	1.099	1.140	0.945	0.051	0.077	0.000	52.321	0.121	0.428	25.486
NOPI_423_2a_#6-G	-19724	-23393	14	0.075	0.755	1.005	0.767	0.062	0.136	0.007	49.628	0.106	0.344	23.862
NOPI_423_2b_#1-H	-19727	-24662	11	0.059	0.182	1.908	0.706	0.112	0.068	0.061	58.043	0.337	0.117	27.875
NOPI_423_2b_#2-H	-19927	-24743	11	0.036	0.232	1.565	1.306	0.134	0.053	0.010	58.209	0.312	0.094	27.884
NOPI_423_2b_#3-H	-19822	-24722	11	0.060	0.370	1.346	1.657	0.150	0.042	0.017	56.792	0.288	0.222	27.350
NOPI_423_2b_#4-G	-19893	-24805	11	0.056	0.836	0.965	2.037	0.181	0.069	0.001	51.399	0.149	0.480	25.288
NOPI_423_2b_#5-G	-19675	-24788	11	0.076	0.910	1.768	1.292	0.145	0.033	0.009	50.666	0.143	0.364	25.480
NOPI_423_2b_#6-G	-19742	-24891	11	0.045	0.828	0.823	2.372	0.151	0.071	0.007	50.211	0.195	0.436	24.774
NOPI_422_1a_#1-H	12916	-8055	20	0.138	0.202	1.547	0.522	0.147	0.095	0.018	60.800	0.563	0.065	28.653
NOPI_422_1a_#2-H	12786	-8197	18	0.091	0.222	1.506	0.741	0.136	0.110	0.023	60.270	0.469	0.131	28.517
~~NOPI_422_1a_#3-X~~	~~12992~~	~~-7915~~	~~21~~	~~0.081~~	~~0.792~~	~~1.417~~	~~0.617~~	~~0.076~~	~~0.105~~	~~0.010~~	~~42.567~~	~~0.391~~	~~0.267~~	~~21.224~~
NOPI_422_1a_#4-G	13022	-7873	21	0.173	1.326	2.229	0.756	0.118	0.081	0.020	51.883	0.167	0.415	26.719
NOPI_422_1a_#5-G	12864	-8070	21	0.135	0.933	2.097	0.949	0.122	0.057	0.011	50.352	0.237	0.512	25.634
NOPI_422_1a_#6-G	12949	-8116	21	0.134	0.920	1.849	0.828	0.099	0.057	0.001	52.093	0.185	0.664	26.027
NOPI_422_1b_#1-J	11142	-9104	21	0.054	0.561	0.163	4.400	0.002	7.465	1.495	23.866	23.169	0.000	26.579
NOPI_422_1b_#2-J	11155	-9033	21	0.033	0.377	0.104	2.946	0.004	8.790	3.264	27.739	15.727	0.000	29.000
NOPI_422_1b_#3-J	10974	-9087	21	0.077	1.042	0.259	4.021	0.027	8.264	2.514	26.055	13.725	0.000	28.547
NOPI_422_1b_#4-G	10959	-9162	21	0.096	0.812	1.795	1.404	0.141	0.046	0.022	49.869	0.215	0.432	25.184
NOPI_422_1b_#5-G	11078	-9264	21	0.138	0.503	1.924	1.295	0.133	0.058	0.023	49.046	0.249	0.459	24.681
NOPI_422_1b_#6-G	10739	-9175	21	0.124	0.453	2.127	1.154	0.121	0.043	0.023	50.178	0.293	0.441	25.247
NOPI_422_2a_#1-H	8177	8436	33	0.055	0.355	1.640	0.826	0.138	0.096	0.127	56.722	0.496	0.202	27.310
NOPI_422_2a_#2-H	8193	8464	34	0.047	0.202	1.497	0.766	0.203	0.099	0.000	59.319	0.490	0.092	28.080
NOPI_422_2a_#3-H	8097	8443	34	0.055	0.303	1.761	0.686	0.099	0.088	0.070	56.448	0.463	0.089	27.151
NOPI_422_2a_#4-G	8026	8423	34	0.067	0.389	1.479	0.754	0.131	0.086	0.029	55.979	0.439	0.141	26.752
NOPI_422_2a_#5-G	7993	8390	29	0.073	0.449	1.874	0.837	0.134	0.120	0.025	53.877	0.335	0.220	26.452
NOPI_422_2a_#6-G	8028	8395	29	0.098	0.676	1.907	0.908	0.136	0.061	0.039	50.153	0.238	0.267	25.052
NOPI_422_2b_#1-G	8356	8171	29	0.100	0.762	1.951	0.907	0.109	0.055	0.033	47.551	0.231	0.315	24.047
NOPI_422_2b_#2-H	8682	7934	29	0.028	0.302	1.697	0.546	0.161	0.095	0.046	56.759	0.396	0.075	27.151
NOPI_422_2b_#3-G	8713	8100	29	0.078	0.335	1.476	1.049	0.112	0.097	0.003	52.032	0.246	0.444	25.194
NOPI_422_2b_#4-H	8885	8093	29	0.035	0.279	1.475	0.632	0.151	0.106	0.003	58.586	0.425	0.069	27.715
NOPI_422_2b_#5-G	8636	8012	29	0.039	0.450	1.468	0.661	0.130	0.093	0.024	55.605	0.300	0.129	26.571
NOPI_422_2b_#6-H	8792	7923	29	0.043	0.348	1.516	0.731	0.161	0.104	0.002	57.078	0.381	0.089	27.232

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U, Pb, As, S, Cu, Na, Si, Al

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Analysis	x	y	z	Na	Al	Si	As	Ca	S	K	Fe	Pb	U	O
NOPI_424_1a_#1-H	9867	20821	-1	0.042	0.083	1.376	0.524	0.118	0.087	0.009	58.002	0.154	0.065	27.060
NOPI_424_1a_#2-H	9816	21114	-1	0.027	0.347	1.624	0.501	0.156	0.101	0.017	57.449	0.152	0.030	27.355
NOPI_424_1a_#3-H	10116	20814	-1	0.041	0.444	1.579	0.535	0.154	0.113	0.015	57.216	0.142	0.038	27.329
NOPI_424_1a_#4-G	9944	20878	-1	0.044	1.154	1.642	0.802	0.161	0.168	0.013	52.630	0.067	0.160	26.302
NOPI_424_1a_#5-G	9840	20855	-1	0.041	0.487	1.858	0.648	0.124	0.060	0.029	55.617	0.121	0.082	26.976
NOPI_424_1a_#6-G	10248	20925	-1	0.045	0.850	2.204	0.619	0.132	0.166	0.020	51.201	0.084	0.120	25.943
NOPI_424_1b_#1-H	10358	21881	-3	0.041	0.068	1.068	1.111	0.157	0.075	0.016	59.408	0.144	0.061	27.611
NOPI_424_1b_#2-H	10211	21940	-3	0.057	0.382	1.578	0.588	0.156	0.106	0.027	58.721	0.145	0.034	27.947
NOPI_424_1b_#3-H	10338	21814	-3	0.021	0.262	1.586	0.579	0.165	0.086	0.011	58.868	0.158	0.030	27.866
NOPI_424_1b_#4-G	10311	21820	-3	0.067	0.916	1.897	0.649	0.167	0.093	0.008	54.527	0.098	0.101	27.006
NOPI_424_1b_#5-G	10311	22023	-3	0.053	0.768	2.593	0.829	0.177	0.046	0.000	49.914	0.166	0.176	25.723
NOPI_424_1b_#6-G	10590	21850	-3	0.075	0.873	2.697	0.761	0.132	0.027	0.008	50.082	0.135	0.166	25.930
NOPI_424_2a_#1-H	-7635	19425	14	0.013	0.171	1.820	0.747	0.138	0.085	0.015	59.582	0.161	0.023	28.432
NOPI_424_2a_#2-H	-7348	19634	14	0.006	0.159	1.656	0.551	0.160	0.109	0.006	62.143	0.156	0.021	29.272
NOPI_424_2a_#3-H	-7385	19574	14	0.018	0.278	1.758	0.741	0.125	0.062	0.011	57.462	0.142	0.022	27.503
NOPI_424_2a_#4-G	-7565	19403	14	0.050	0.436	2.337	0.592	0.105	0.037	0.010	51.681	0.152	0.116	25.719
NOPI_424_2a_#5-G	-7579	19515	14	0.073	0.420	2.379	0.694	0.137	0.047	0.015	51.480	0.201	0.133	25.764
NOPI_424_2a_#6-G	-7496	19449	14	0.055	0.518	2.469	0.844	0.163	0.041	0.000	53.169	0.130	0.105	26.742
NOPI_424_2b_#1-H	-7722	19922	10	0.027	0.169	1.455	0.819	0.184	0.091	0.000	59.899	0.216	0.040	28.227
NOPI_424_2b_#2-H	-7748	19976	10	0.024	0.200	1.561	0.628	0.189	0.073	0.009	59.491	0.197	0.014	28.068
NOPI_424_2b_#3-H	-7424	20069	10	0.044	0.113	1.329	0.646	0.149	0.074	0.000	59.159	0.124	0.040	27.584
NOPI_424_2b_#4-H	-7396	20093	10	0.022	0.340	1.687	1.038	0.156	0.063	0.016	57.155	0.164	0.059	27.527
NOPI_424_2b_#5-G	-7769	19792	10	0.066	0.790	2.466	0.810	0.167	0.022	0.032	49.654	0.126	0.108	25.435
NOPI_424_2b_#6-G	-7672	19936	10	0.067	0.502	2.486	0.840	0.170	0.037	0.008	52.099	0.068	0.116	26.283
NOPI_420_1a_#1-H	11984	-2856	17	0.027	0.184	2.044	0.448	0.125	0.081	0.000	59.260	0.118	0.094	28.399
NOPI_420_1a_#2-H	11806	-2877	17	0.008	0.220	2.209	0.450	0.126	0.041	0.015	59.471	0.151	0.123	28.654
NOPI_420_1a_#3-H	12148	-2860	16	0.024	0.266	1.741	0.380	0.126	0.107	0.018	59.728	0.131	0.100	28.335
NOPI_420_1a_#4-G	12089	-2852	16	0.041	0.518	2.222	0.803	0.125	0.021	0.000	51.975	0.243	0.180	25.894
NOPI_420_1a_#5-G	11988	-2944	16	0.063	0.358	2.144	0.500	0.047	0.019	0.000	52.595	0.254	0.192	25.743
NOPI_420_1a_#6-G	11749	-3035	16	0.047	0.388	2.042	0.440	0.067	0.019	0.000	53.345	0.203	0.145	25.936
NOPI_420_1b_#1-H	13101	-2401	17	0.006	0.205	2.224	0.457	0.178	0.056	0.011	59.206	0.163	0.173	28.596
NOPI_420_1b_#2-H	13137	-2291	17	0.023	0.255	2.083	0.420	0.129	0.071	0.006	58.935	0.201	0.124	28.349
NOPI_420_1b_#3-H	13032	-2426	17	0.024	0.143	1.765	0.408	0.109	0.092	0.018	60.447	0.131	0.089	28.547
NOPI_420_1b_#4-G	13082	-2441	17	0.059	0.472	1.944	0.531	0.095	0.050	0.000	55.694	0.130	0.163	27.016
NOPI_420_1b_#5-G	13003	-2568	17	0.048	0.218	2.342	0.900	0.137	0.033	0.000	52.605	0.110	0.205	26.105
NOPI_420_1b_#6-G	12990	-2343	17	0.072	0.374	1.971	0.583	0.061	0.031	0.001	53.427	0.133	0.150	25.975
NOPI_420_2a_#1-H	1331	-5879	24	0.022	0.356	2.122	0.444	0.161	0.055	0.009	57.733	0.198	0.160	27.974
NOPI_420_2a_#2-H	1361	-5738	24	0.006	0.277	1.635	0.493	0.128	0.087	0.010	59.566	0.192	0.152	28.190
NOPI_420_2a_#3-H	1102	-5662	24	0.032	0.513	2.093	0.387	0.078	0.024	0.001	55.123	0.164	0.140	26.845
NOPI_420_2a_#4-G	1140	-5667	24	0.069	0.545	2.101	0.393	0.042	0.034	0.000	53.353	0.184	0.191	26.146
NOPI_420_2a_#5-G	1435	-5859	24	0.068	0.545	2.287	0.481	0.051	0.020	0.000	52.361	0.135	0.250	25.965
NOPI_420_2a_#6-G	1330	-5938	24	0.061	0.979	1.998	0.528	0.049	0.085	0.001	50.884	0.135	0.494	25.540
NOPI_420_2a_#7-H	1346	-5925	24	0.026	0.237	1.644	0.427	0.140	0.066	0.001	59.589	0.206	0.165	28.120
NOPI_420_2b_#1-H	491	-5611	27	0.038	0.129	1.514	0.421	0.150	0.092	0.008	61.694	0.116	0.094	28.810
NOPI_420_2b_#2-H	631	-5691	25	0.009	0.123	1.458	0.416	0.091	0.067	0.012	60.058	0.107	0.082	27.963
NOPI_420_2b_#3-G	659	-5904	25	0.033	0.456	2.135	0.582	0.085	0.062	0.012	53.234	0.182	0.282	26.216
NOPI_420_2b_#4-G	646	-5937	25	0.020	1.936	2.214	0.324	0.076	0.054	0.006	50.047	0.188	0.486	26.123
NOPI_420_2b_#5-G	479	-5809	25	0.052	0.454	2.352	0.637	0.075	0.023	0.000	52.385	0.228	0.367	26.083
NOPI_420_2b_#6-G	441	-5685	25	0.049	0.762	2.233	0.532	0.062	0.045	0.000	50.897	0.178	0.573	25.578
NOPI_425_1a_#1-H	13322	-22771	23	0.008	0.432	1.740	0.523	0.150	0.117	0.001	60.032	0.224	0.040	28.703
NOPI_425_1a_#2-H	13529	-22581	23	0.026	0.082	1.246	0.349	0.104	0.139	0.007	63.359	0.192	0.009	29.182
NOPI_425_1a_#3-H	13629	-22706	23	0.028	0.508	1.684	0.574	0.122	0.105	0.000	59.634	0.206	0.039	28.540
NOPI_425_1a_#4-A	13738	-22719	23	0.041	0.741	2.195	0.745	0.142	0.110	0.008	56.854	0.098	0.134	28.252
NOPI_425_1a_#5-A	13528	-22820	23	0.044	0.398	3.297	0.489	0.140	0.037	0.013	56.498	0.281	0.084	28.812
NOPI_425_1a_#6-G	13816	-22627	23	0.062	0.383	2.943	0.605	0.103	0.028	0.000	52.491	0.356	0.071	26.714
NOPI_425_1a_#7-H	13589	-22752	22	0.013	0.107	1.397	0.262	0.102	0.111	0.006	62.858	0.207	0.039	29.071
NOPI_425_1a_#8-G	13608	-22717	22	0.070	0.670	2.533	0.751	0.107	0.037	0.002	53.461	0.376	0.039	27.013
NOPI_425_1a_#9-J	13684	-22745	24	0.028	1.533	0.013	0.000	0.003	12.766	1.716	30.822	0.306	0.000	34.119
NOPI_425_1b_#1-H	13791	-23028	20	0.036	0.125	1.333	0.300	0.116	0.151	0.012	62.906	0.217	0.016	29.128
NOPI_425_1b_#2-H	13857	-22890	20	0.026	0.129	1.411	0.299	0.124	0.156	0.004	62.608	0.218	0.015	29.097
NOPI_425_1b_#3-H	13530	-22887	20	0.044	0.527	1.703	0.495	0.111	0.114	0.015	59.658	0.208	0.037	28.564
NOPI_425_1b_#4-G	13513	-22940	20	0.044	1.182	1.932	0.451	0.084	0.093	0.000	55.520	0.137	0.104	27.564
NOPI_425_1b_#5-G	13816	-23088	20	0.057	0.816	2.373	0.801	0.114	0.068	0.009	52.465	0.157	0.095	26.594
NOPI_425_1b_#6-H	13798	-22842	20	0.041	0.746	2.104	0.670	0.120	0.097	0.000	57.810	0.234	0.064	28.495
NOPI_425_2a_#1-H	-15534	-29805	8	0.014	0.460	1.544	0.418	0.109	0.121	0.011	60.562	0.190	0.036	28.667

				Na	Al	Si	Ag	Cu	S	K	Fe	Pb	U	
NOPI_425_2a_#2-H	-15638	-29589	8	0.025	0.723	1.632	0.431	0.113	0.142	0.013	60.615	0.134	0.062	29.067
NOPI_425_2a_#3-H	-15348	-29897	5	0.044	0.285	1.916	0.573	0.096	0.113	0.033	58.825	0.214	0.031	28.272
NOPI_425_2a_#4-G	-15352	-29960	5	0.065	1.441	2.362	0.437	0.074	0.123	0.000	53.494	0.035	0.150	27.452
NOPI_425_2a_#5-G	-15563	-29961	5	0.036	1.569	1.986	0.532	0.086	0.107	0.015	52.786	0.070	0.119	26.857
NOPI_425_2a_#6-G	-15640	-29672	5	0.051	1.719	2.242	0.458	0.055	0.087	0.000	49.916	0.050	0.142	25.970
NOPI_425_2b_#1-H	-16368	-29492	8	0.055	0.636	1.623	0.478	0.092	0.129	0.015	59.605	0.156	0.050	28.554
NOPI_425_2b_#2-H	-16358	-29561	8	0.021	0.776	1.648	0.446	0.118	0.156	0.018	59.222	0.106	0.091	28.567
NOPI_425_2b_#3-H	-16559	-29194	8	0.032	0.676	1.846	0.408	0.093	0.116	0.012	58.718	0.146	0.096	28.403
NOPI_425_2b_#4-G	-16526	-29173	8	0.024	0.934	2.168	0.415	0.088	0.102	0.021	55.869	0.141	0.107	27.756
NOPI_425_2b_#5-G	-16520	-29547	8	0.039	1.707	2.359	0.515	0.080	0.107	0.008	54.001	0.049	0.147	27.917
NOPI_425_2b_#6-H	-16386	-29404	8	0.063	0.834	2.363	0.481	0.095	0.105	0.025	58.448	0.161	0.071	29.051
NOPI_425_3a_#1-H	5100	-24702	19	0.017	0.102	1.267	0.426	0.080	0.140	0.000	61.714	0.178	0.023	28.545
NOPI_425_3a_#2-H	5022	-24664	19	0.009	0.093	1.329	0.355	0.124	0.153	0.000	62.665	0.194	0.027	29.014
NOPI_425_3a_#3-H	5260	-24546	19	0.023	0.113	1.248	0.377	0.091	0.132	0.010	62.243	0.218	0.014	28.733
NOPI_425_3a_#4-G	5261	-24583	19	0.022	1.970	1.897	0.433	0.081	0.129	0.008	53.320	0.075	0.149	27.317
NOPI_425_3a_#5-G	5040	-24740	19	0.074	0.510	2.821	0.816	0.126	0.061	0.015	53.916	0.240	0.147	27.481
NOPI_425_3a_#6-H	5198	-24818	19	0.024	0.496	1.842	0.423	0.099	0.098	0.012	58.301	0.225	0.045	28.039
NOPI_425_3a_#7-J	4979	-24610	22	0.258	1.536	0.010	0.008	0.000	12.403	3.386	29.812	3.477	0.000	33.808
NOPI_425_3b_#1-H	4612	-24893	17	0.017	0.302	1.926	0.459	0.133	0.120	0.011	59.379	0.228	0.043	28.488
NOPI_425_3b_#2-H	4696	-24861	17	0.020	0.240	1.792	0.462	0.097	0.101	0.015	59.671	0.232	0.034	28.366
NOPI_425_3b_#3-G	4442	-24824	17	0.027	0.122	1.351	0.809	0.080	0.074	0.010	57.629	0.207	0.090	27.026
NOPI_425_3b_#4-G	4663	-24819	17	0.023	0.971	1.573	0.445	0.107	0.124	0.026	57.956	0.206	0.088	28.068
NOPI_425_3b_#5-G	4571	-24843	17	0.019	0.865	1.956	0.923	0.119	0.133	0.023	58.112	0.173	0.069	28.744
NOPI_425_3b_#6-J	4337	-25039	17	0.049	0.553	0.005	0.000	0.002	12.199	5.052	30.233	3.766	0.000	33.093
NOPI_425_3b_#7-J	4382	-24972	17	0.035	0.945	0.004	0.007	0.008	12.617	3.878	31.425	1.710	0.000	34.180
NOPI_425_3b_#8-J	4722	-24772	18	0.035	0.638	0.007	0.000	0.003	12.324	4.851	30.981	2.320	0.000	33.521

TAMU Microprobe Results from 13 m North fracture

		O	Na	Al	Si	P	As	Ca	S	Fe	K	Ba	Ti	Mn	Th	Pb	U
NOPI-294-TS1 (Location 1)																	
Point 1	Goethite	36.906	0.068	1.235	2.461	0.132	0.588	0.164	0.054	53.027	0.012	0.023	0.005	0.015	0.019	0.278	0.112
Point 8	~~Goethite~~ Hematite	33.110	0.033	0.459	1.336	0.169	0.944	0.233	0.133	59.063	0.002	0.014	0.002	0.014	0.000	0.593	0.090
Point 2	Hematite	31.727	0.052	0.198	1.274	0.133	0.517	0.206	0.127	62.172	0.017	0.006	0.009	0.010	0.010	0.643	0.058
Point 5	Hematite	33.967	0.021	0.458	1.736	0.124	0.570	0.210	0.135	59.794	0.022	0.017	0.005	0.014	0.000	0.578	0.077
Point 3	Jarosite core (late, euhedral)	46.269	0.075	3.056	0.023	0.004	0.423	0.001	12.681	26.881	6.943	0.000	0.000	0.014	0.000	0.850	0.000
Point 4	Jarosite rim (late, euhedral)	42.959	0.078	2.423	0.031	0.045	2.559	0.000	11.186	26.293	5.903	0.094	0.000	0.007	0.007	3.631	0.000
Point 6	Amorphous material	31.626	0.034	1.064	4.154	0.085	0.289	0.245	0.030	56.704	0.056	0.000	0.107	0.018	0.003	0.557	0.046
Point 7	Amorphous material	34.709	0.026	0.852	3.837	0.096	0.428	0.230	0.028	56.635	0.035	0.000	0.001	0.003	0.000	0.654	0.042
NOPI-294-TS1 (Location 3)																	
Point 1	Goethite	31.988	0.000	0.177	1.493	0.079	0.445	0.102	0.105	62.917	0.016	0.000	0.003	0.004	0.016	0.493	0.073
Point 2	Goethite	34.939	0.056	0.626	2.902	0.094	0.751	0.100	0.043	54.440	0.000	0.000	0.000	0.001	0.006	0.546	0.064
Point 3	Goethite	31.941	0.037	0.516	2.733	0.110	0.503	0.140	0.071	57.976	0.010	0.000	0.004	0.012	0.011	0.377	0.111
Point 6	Goethite	35.295	0.075	1.237	2.095	0.110	0.407	0.080	0.074	56.578	0.008	0.000	0.000	0.003	0.000	0.351	0.105
Point 7	Goethite	33.759	0.035	0.628	2.303	0.101	0.332	0.108	0.102	59.958	0.009	0.000	0.008	0.002	0.000	0.404	0.075
Point 4	Hematite	30.658	0.062	0.150	1.459	0.094	0.259	0.107	0.131	63.367	0.013	0.004	0.005	0.011	0.002	0.563	0.021
Point 5	Hematite	30.728	0.026	0.146	1.473	0.109	0.253	0.111	0.134	63.373	0.015	0.000	0.002	0.008	0.000	0.585	0.025
Point 8	Amorphous material	30.417	0.038	0.639	4.026	0.074	0.301	0.135	0.036	60.071	0.047	0.000	0.034	0.014	0.000	0.557	0.038
Point 9	Amorphous material	32.818	0.077	0.746	3.558	0.079	0.337	0.179	0.028	59.964	0.059	0.005	0.076	0.009	0.006	0.546	0.057
NOPI-301-TS1 (Location 2)																	
Point 1	Hematite	37.505	0.083	0.645	2.218	0.141	0.909	0.166	0.049	51.332	0.013	0.008	0.000	0.009	0.000	0.140	0.719
Point 4	Hematite	33.107	0.064	0.384	2.176	0.196	0.771	0.195	0.081	58.739	0.030	0.000	0.000	0.022	0.017	0.167	0.177
Point 5	Hematite	37.338	0.062	0.481	2.397	0.132	0.708	0.136	0.040	51.939	0.012	0.022	0.000	0.016	0.018	0.362	0.630
Point 6	Jarosite (early, granular)	44.262	0.162	0.927	0.064	0.011	0.057	0.012	12.076	30.527	7.006	0.079	0.000	0.000	0.000	0.000	0.001
Point 7	Jarosite (early, granular)	45.305	0.157	0.785	0.049	0.015	0.053	0.009	12.484	30.862	7.097	0.058	0.002	0.001	0.004	0.000	0.000
Point 2	Amorphous material/clay	41.705	0.075	8.913	9.470	0.036	0.212	0.061	0.066	33.848	0.049	0.025	0.003	0.003	0.000	0.134	0.331
Point 3	Amorphous material/clay	36.083	0.082	7.428	8.262	0.047	0.277	0.073	0.088	33.043	0.051	0.004	0.009	0.003	0.000	0.114	0.332
NOPI-301-TS1 (Location 5)																	
Point 1	Hematite	36.102	0.099	0.648	2.201	0.163	1.187	0.160	0.031	52.329	0.000	0.000	0.045	0.013	0.003	0.108	0.548
Point 2	Hematite	35.669	0.064	1.186	2.026	0.075	0.731	0.092	0.047	53.173	0.007	0.005	0.032	0.004	0.021	0.113	0.685
Point 5	Hematite	35.328	0.098	0.561	2.369	0.156	1.252	0.123	0.030	52.873	0.010	0.000	0.009	0.018	0.000	0.108	0.641
Point 6	Hematite	34.789	0.056	0.748	2.192	0.141	1.394	0.137	0.032	53.540	0.002	0.017	0.029	0.019	0.008	0.131	0.664
Point 3	Amorphous material/clay	31.096	0.291	6.890	19.741	0.019	0.151	0.049	0.015	7.018	7.711	0.000	0.020	0.008	0.015	0.007	0.055
Point 4	Amorphous material/clay	38.504	0.418	7.815	23.158	0.249	0.163	0.061	0.043	7.508	9.278	0.008	0.031	0.000	0.005	0.024	0.064
Point 7	Jarosite (early, granular)	42.588	0.140	0.365	0.055	0.016	0.516	0.000	12.200	33.639	3.292	0.229	0.000	0.000	0.000	0.924	0.000
Point 8	Jarosite (early, granular)	41.438	0.107	0.419	0.251	0.064	0.633	0.025	10.796	35.655	3.479	0.132	0.000	0.000	0.000	0.000	0.000
NOPI-414-TS1																	
BC#1	Fe-oxide	35.836	0.086	0.628	1.360	0.103	2.110	0.115	0.040	52.402	0.017	0.000	0.061	0.017	0.024	0.153	0.428
BC#2	Fe-oxide	35.511	0.068	0.631	1.249	0.102	2.192	0.202	0.075	52.030	0.017	0.001	0.053	0.011	0.020	0.058	0.299
BC#3	Fe-oxide	36.527	0.097	1.116	1.177	0.134	1.851	0.146	1.321	49.329	0.610	0.015	0.089	0.019	0.042	0.065	0.271
DE#1	Fe-oxide	35.594	0.081	0.609	1.286	0.122	2.221	0.260	0.048	52.104	0.026	0.024	0.046	0.011	0.061	0.123	0.389
DE#2	Fe-oxide	35.520	0.082	0.665	1.335	0.146	2.230	0.306	0.032	51.867	0.022	0.003	0.065	0.012	0.072	0.159	0.392
DE#3	Fe-oxide/jarosite	39.181	0.120	1.074	0.670	0.104	1.478	0.162	4.518	43.790	2.431	0.029	0.049	0.013	0.059	0.007	0.229
FG#1	Jarosite/Fe-oxide	43.351	0.177	1.056	0.235	0.055	0.595	0.056	9.770	35.233	5.448	0.053	0.036	0.017	0.047	0.000	0.234
FG#2	Fe-oxide/jarosite	37.819	0.074	0.949	0.927	0.112	1.810	0.206	2.688	47.614	1.399	0.025	0.057	0.006	0.052	0.044	0.363
FG#3	Jarosite/Fe-oxide	42.895	0.206	1.091	0.354	0.034	0.766	0.056	9.243	36.114	5.103	0.024	0.021	0.000	0.012	0.000	0.141
BSE#1B	Bright, Fe-oxide	35.772	0.059	0.660	1.348	0.110	2.219	0.240	0.039	51.596	0.018	0.020	0.059	0.023	0.061	0.143	0.398
BSE#2B	Bright, Fe-oxide	35.852	0.092	0.652	1.312	0.109	2.282	0.244	0.050	52.202	0.023	0.005	0.052	0.024	0.033	0.136	0.433
BSE#3B	Bright, Fe-oxide	35.695	0.090	0.728	1.240	0.124	2.373	0.250	0.046	51.868	0.005	0.005	0.071	0.019	0.045	0.145	0.444
BSE#1D	Darker, Jarosite	45.162	0.216	1.438	0.118	0.028	0.289	0.006	11.866	31.450	6.454	0.049	0.000	0.000	0.005	0.000	0.011
BSE#2D	Darker, Jarosite	45.269	0.198	1.273	0.110	0.025	0.164	0.003	11.939	31.407	6.497	0.000	0.000	0.000	0.000	0.000	0.028
BSE#3D	Darker, Jarosite	45.546	0.262	1.108	0.056	0.006	0.123	0.003	12.537	30.475	6.672	0.000	0.000	0.003	0.007	0.000	0.013

Ca	Na		U	Pb	As	S
	-10.0		1028 ± 325	2360 ± 1544		
991 ± 251	~~7.8~~	G	~~1083 ± 354~~	~~1623 ± 1082~~	5709 ± 1737	861 ± 314
			456 ± 247	2711 ± 1634		
1214 ± 382		H	~~480 ± 237~~	~~1446 ± 351~~	4520 ± 1464	1260 ± 178
	442 ± 213	A	~~1040 ± 353~~			
	300 ± 155					
1486 ± 234	-6.1	G	1257 ± 298	1225 ± 416	7353 ± 965	676 ± 526
1544 ± 198		H	367 ± 163	1581 ± 242	6929 ± 1949	865 ± 169
	578 ± 122					
	295 ± 145					
1118 ± 486	-2.1	G	3199 ± 942	1663 ± 480	13300 ± 4735	538 ± 321
1205 ± 185		H	1219 ± 399	2729 ± 532	9799 ± 3604	635 ± 153
	728 ± 212					
	387 ± 224					
1238 ± 126	1.1	G	3699 ± 1588	2612 ± 731	9585 ± 2269	712 ± 238
1[illegible] ± 293		H	1015 ± 454	4604 ± 591	6812 ± 1071	991 ± 71[illegible]
	1046 ± 376					
	615 ± 362					
			3981 ± 2142	1718 ± 653		
940 ± 403	6.2	G	~~2329 ± 1479~~	~~1771 ± 465~~	7060 ± 3007	382 ± 171
			1316 ± 344	1573 ± 348		
1335 ± 323		H	~~1347 ± 327~~	~~1505 ± 362~~	4240 ± 1507	690 ± 229
	576 ± 238					
	238 ± 158					
1732 ± 795	8.7	G	4043 ± 710	1315 ± 191	16340 ± 6511	453 ± 194
1516 ± 303		H	2347 ± 684	2147 ± 968	11153 ± 5797	961 ± 199
	876 ± 242					
	538 ± 217					

		U	Pb	As	S
-10.1	G	900 ± 216	4082 ± 974	5043 ± 1486.9 ~~4658 ± 2166~~	748 ± 249
	H	542 ± 307	5924 ± 307	5086 ± 2833	1320 ± 32
	A	458 ± 82	5785 ± 506	3388 ± 629	305 ± 39
3.2	G	4422 ± 1247	1423 ± 486	13923 ± 1431	175 ± 78
	H	1433 ± ~~600~~ 668	1703 ± 430	10285 ± 608	687 ± 131
	A				
6.1	G	4478 ± 584	1603 ± 997	10302 ± 2878	382 ± 84
	H	1770	1670	7710	810
	A	595 ± 64	155 ± 120	1570 ± 85	290 ± 198
8.4	G	4140 ± 238	1431 ± 127	22392 ± 863	425 ± 67
	H	2850 ± 198	615 ± 49	20215 ± 2411	750
9.0	G	4162 ± 902	1198 ± 178	10288 ± 2150	480 ± 277
	H	2180 ± 716	2658 ± 241	8132 ± 1446	1032 ± 178
11.7	G	12293 ± 3106	914 ± 444	12282 ± 7008	331 ± 146
	H	6770 ± 539	1643 ± 586	7185 ± 669	583 ± 409

		Ca	Na	Si	Al
-10.1	G	1157 ± 306	452 ± 273	23312 ± 5026	7365 ± 4206
	H	1734 ± 597	388 ± 175	14556 ± 1776	2822 ± 1622
	A	1973 ± 502	438 ± 227	38938 ± 2589	8253 ± 1813
3.2	G	1945 ± 314	633 ± 144	16512 ± 2062	855 ± 2448
	H	2018 ± 361	498 ± 99	11787 ± 504	1658 ± 86
6.1	G	1357 ± 267	770 ± 189	22338 ± 1350	7115 ± 2493
	H	1950	640	21760	3840
	A	550 ± 85	3545 ± 898	—	—
8.4	G	2358 ± 639	817 ± 119	13135 ± 447	6570 ± 407
	H	1740 ± 396	825 ± 205	12130 ± 509	8735 ± 3429
9.0	G	1105 ± 201	935 ± 326	20850 ± 1474	8610 ± 1645
	H	1442 ± 265	442 ± 116	11678 ± ~~716~~ 717	1237 ± 246
11.7	G	1033 ± 624	766 ± 290	20319 ± 3228	~~10~~ 5177 ± 3189
	H	782 ± 110	237 ± 37	16688 ± 6276	~~1026~~ 1027 ± 537

Analysis	x	y	z	Na	Al	Si	As	Ca	S	K	Fe	Pb	U	O
5Fe2O3_stdck#1	7083	27064	0	0	0.01	0.014	0.002	0	0.012	0	39.95	0.001	0	60.011
5Fe2O3_stdck#2	6920	27141	0	0.017	0.017	0.019	0.009	0.001	0	0	39.934	0.001	0.001	60
5SiO2_stdck#1	8888	31561	-5	0	0.002	33.318	0	0	0.006	0.001	0.005	0	0	66.667
5SiO2_stdck#2	8888	31490	-5	0.001	0.008	33.307	0.003	0.001	0.007	0.001	0.005	0	0	66.666
NOP419_1_pt1	-13751	-4365	49	0.071	0.14	1.187	0.443	0.142	0.107	0.002	37.393	0.039	0.038	60.437
NOP419_1_pt2	-13754	-4355	49	0.147	0.954	2.74	0.544	0.101	0.065	0.012	34.601	0.023	0.072	60.74
NOP419_1_pt3	-13810	-4419	49	0.089	0.21	1.424	0.377	0.118	0.141	0.01	37.081	0.042	0.033	60.472
NOP419_1_pt4	-13796	-4406	49	0.133	1.212	2.476	0.582	0.124	0.041	0.018	34.63	0.018	0.079	60.687
NOP419_1_pt5	-13536	-4386	49	0.074	0.164	1.256	0.423	0.112	0.113	0.016	37.31	0.038	0.046	60.447
NOP419_1_pt6	-13521	-4408	49	0.121	1.039	2.663	0.598	0.094	0.044	0.012	34.584	0.023	0.075	60.746
NOP419_2_pt1	-6014	-10898	50	0.26	0.996	3.031	0.326	0.095	0.119	0.023	34.391	0.017	0.052	60.689
NOP419_2_pt2	-6009	-10865	50	0.067	0.166	1.538	0.325	0.157	0.111	0.017	37.091	0.05	0.024	60.454
NOP419_2_pt3	-5997	-10840	50	0.106	1.333	2.565	0.521	0.118	0.032	0.003	34.548	0.025	0.06	60.69
NOP419_2_pt4	-6010	-10849	50	0.05	0.128	1.315	0.356	0.128	0.086	0.011	37.433	0.048	0.023	60.421
NOP419_2_pt5	-6081	-10938	50	0.135	1.501	2.91	0.452	0.075	0.034	0.013	34.091	0.021	0.047	60.723
NOP419_2_pt6	-6078	-10945	50	0.044	0.134	1.416	0.301	0.085	0.103	0.017	37.393	0.047	0.023	60.438
NOP418_1_pt1	5343	-23515	12	0.086	0.545	2.846	0.439	0.081	0.064	0.007	34.95	0.009	0.212	60.782
NOP418_2_pt1	10864	-19572	25	0.035	0.051	1.299	0.328	0.075	0.103	0.014	37.52	0.037	0.095	60.445
NOP418_2_pt2	10874	-19573	25	0.169	0.722	2.32	1.07	0.156	0.036	0	34.405	0.03	0.225	60.866
NOP418_2_pt3	10857	-19558	25	0.035	0.034	0.86	0.296	0.052	0.119	0.007	38.1	0.039	0.096	60.362
NOP418_1_pt4	10844	-19552	25	0.205	0.693	2.24	1.148	0.193	0.02	0.008	34.367	0.017	0.259	60.851
NOP418_1_pt2	5392	-23439	12	0.043	0.16	2.013	0.367	0.073	0.067	0.003	36.581	0.016	0.098	60.579
NOP418_1_pt3	5343	-23387	12	0.094	0.554	2.929	0.45	0.097	0.046	0.001	34.843	0.006	0.203	60.778
NOP418_1_pt4	5175	-23548	13	0.031	0.176	2.456	0.314	0.058	0.022	0.02	36.187	0.023	0.091	60.621
NOP418_1_pt5	5140	-23530	13	0.114	1.636	2.201	0.54	0.055	0.016	0.003	34.615	0.015	0.162	60.643
NOP418_1_pt6	5182	-23479	13	0.094	0.182	3.022	0.315	0.044	0.042	0.009	35.375	0.016	0.16	60.74
NOP418_1_pt7	5036	-23651	13	0.035	0.159	2.648	0.285	0.063	0.027	0.001	36.025	0.022	0.082	60.654
NOP418_1_pt8	5036	-23624	13	0.117	0.629	2.972	0.281	0.04	0.039	0	35.091	0.021	0.109	60.701
NOP418_1_pt9	4992	-23568	13	0.028	0.179	2.574	0.324	0.069	0.025	0.001	36.015	0.021	0.105	60.659
NOP421_1_pt1	17898	21690	-2	0.075	0.217	1.514	0.458	0.191	0.073	0.02	36.961	0.018	0.013	60.46
NOP421_1_pt2	17915	21667	-2	0.063	0.204	1.46	0.432	0.191	0.054	0.035	37.062	0.03	0.036	60.433
NOP421_1_pt3	17944	21663	-2	0.073	0.224	1.49	0.446	0.166	0.068	0.011	37.005	0.032	0.024	60.462
NOP421_1_pt4	17903	21649	-3	0.135	0.932	2.324	0.732	0.199	0.011	0.042	34.828	0.027	0.093	60.677
NOP421_1_pt5	17903	21649	-3	0.113	1.038	2.13	0.572	0.161	0.034	0.016	35.232	0.031	0.062	60.61
NOP421_1_pt6	17927	21690	-3	0.127	0.976	2.071	0.788	0.211	0.016	0.016	35.005	0.03	0.095	60.665
NOP421_2_pt1	18403	27219	-19	0.104	0.874	1.978	0.654	0.205	0.013	0.003	35.482	0.035	0.054	60.599
NOP421_2_pt2	18430	27282	-21	0.076	1.742	2.592	0.672	0.175	0.024	0.02	33.886	0.017	0.052	60.743
NOP421_2_pt3	18368	27226	-21	0.083	1.113	1.908	0.698	0.134	0.022	0.021	35.333	0.012	0.056	60.62
NOP421_2_pt4	18383	27246	-21	0.077	0.201	1.441	0.497	0.118	0.068	0.03	37.07	0.022	0.009	60.467
NOP421_2_pt5	18400	27198	-21	0.057	0.201	1.365	0.491	0.172	0.089	0.016	37.087	0.031	0.021	60.47
NOP421_2_pt6	18430	27238	-21	0.1	0.213	1.343	0.492	0.194	0.087	0.027	37.051	0.035	0.02	60.439

22.5/10.4 - TS1 2 - Traverses from uranophane bearing fracture into matrix
Length - 20 μm
Analysis every 2 μm

22.35/15.3 - TS1 Site 2
20 μm traverse

Site 1
20 μm traverse

geopsun.tamu.edu
IP - 128.194.195.16

Account no. ~~[illegible]~~ swri
password ev+ac+@c

microprobe@tamu.edu - email

geopsun. tamu. edu

IP address 128.194. 195.16

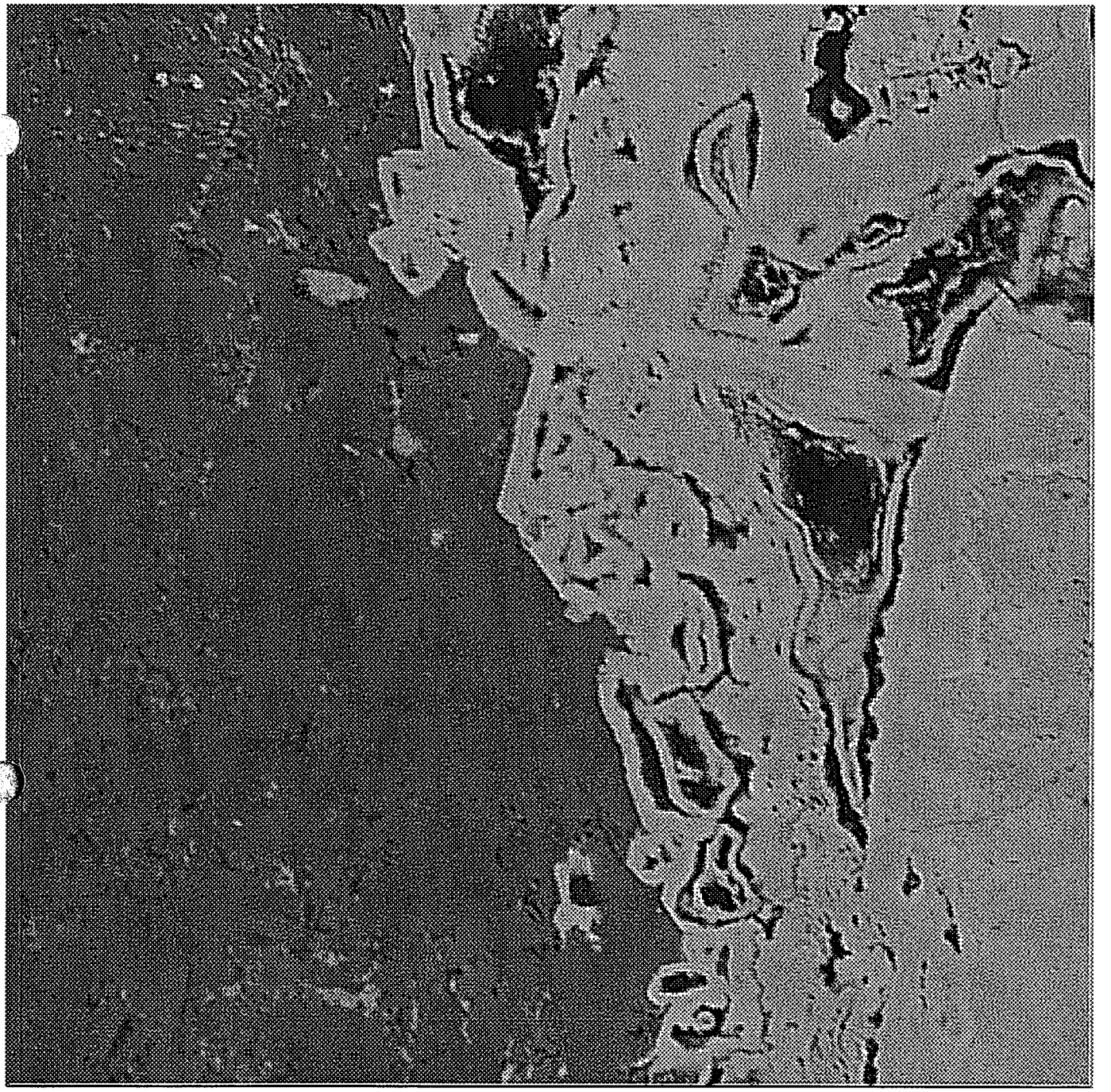
account no swri

password eu+ac+@c

email - microprobe @tamu. edu

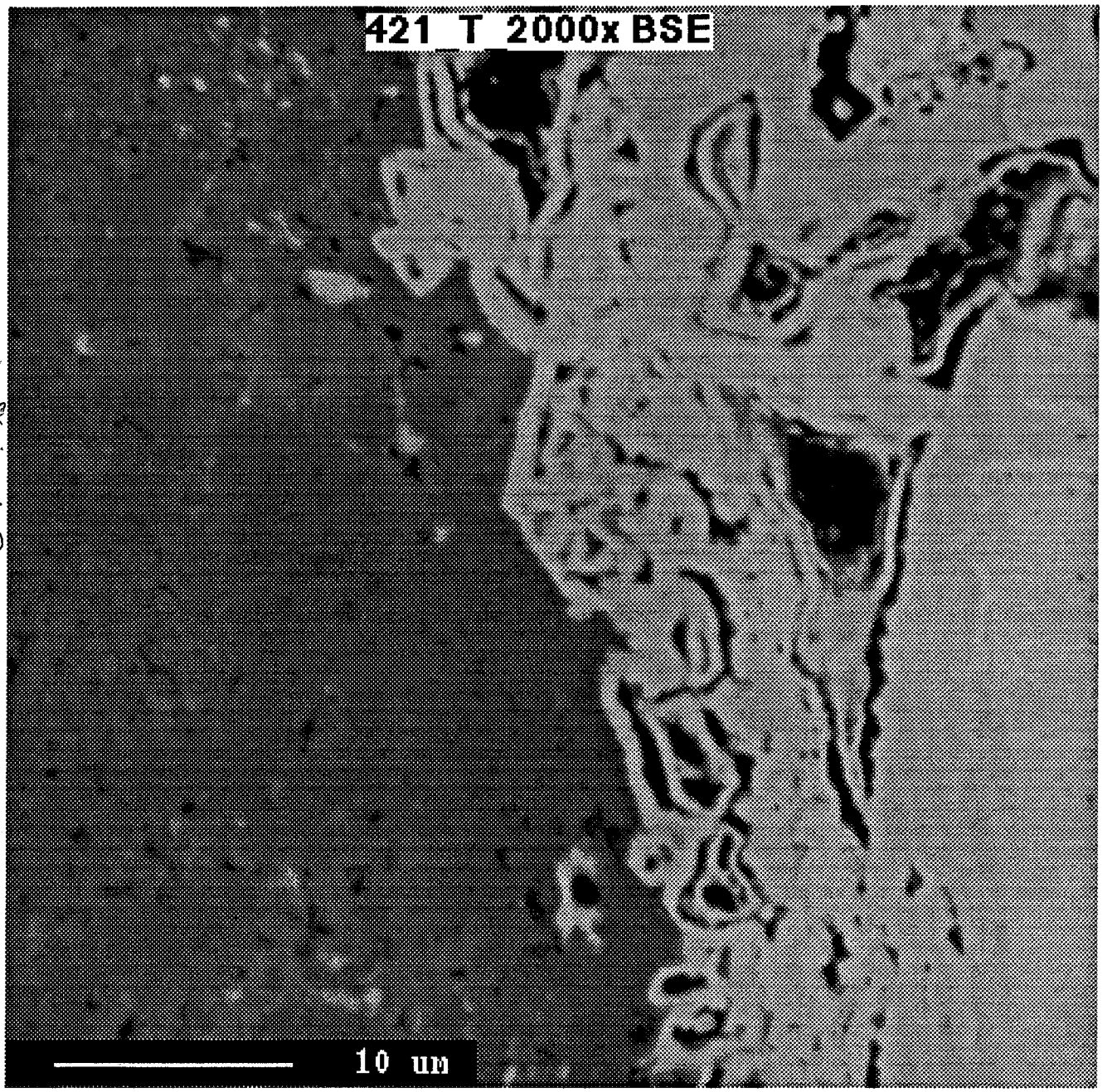
Analysis	x	y	z	Al	Si	U	Fe	O
NOP421_T_2u_trav	17839	30273	-27	1.673	2.318	0.057	35.477	60.475
NOP421_T_2u_trav	17837	30273	-27	1.122	9.734	0.048	27.139	61.956
NOP421_T_2u_trav	17834	30273	-27	1.446	28.349	0.009	4.524	65.672
NOP421_T_2u_trav	17832	30273	-27	1.213	31.621	0	0.842	66.324
NOP421_T_2u_trav	17830	30273	-27	1.814	31.253	0.002	0.68	66.251
NOP421_T_2u_trav	17828	30273	-27	2.64	30.555	0	0.693	66.111
NOP421_T_2u_trav	17825	30273	-27	2.915	30.386	0	0.622	66.077
NOP421_T_2u_trav	17823	30273	-27	3.966	29.167	0	1.033	65.833

Analysis	x	y	z	Al	Si	U	Fe	O
NOP421_T_2u_trav	17839	30273	-27	1.171	1.688	0.354	51.39	25.096
NOP421_T_2u_trav	17837	30273	-27	0.878	7.926	0.334	43.939	28.737
NOP421_T_2u_trav	17834	30273	-27	0.916	18.687	0.05	5.93	24.66
NOP421_T_2u_trav	17832	30273	-27	0.663	17.982	0	0.952	21.486
NOP421_T_2u_trav	17830	30273	-27	1.015	18.197	0.01	0.788	21.973
NOP421_T_2u_trav	17828	30273	-27	1.535	18.494	0.001	0.834	22.794
NOP421_T_2u_trav	17825	30273	-27	1.717	18.626	0	0.758	23.073
NOP421_T_2u_trav	17823	30273	-27	2.493	19.083	0.001	1.344	24.536

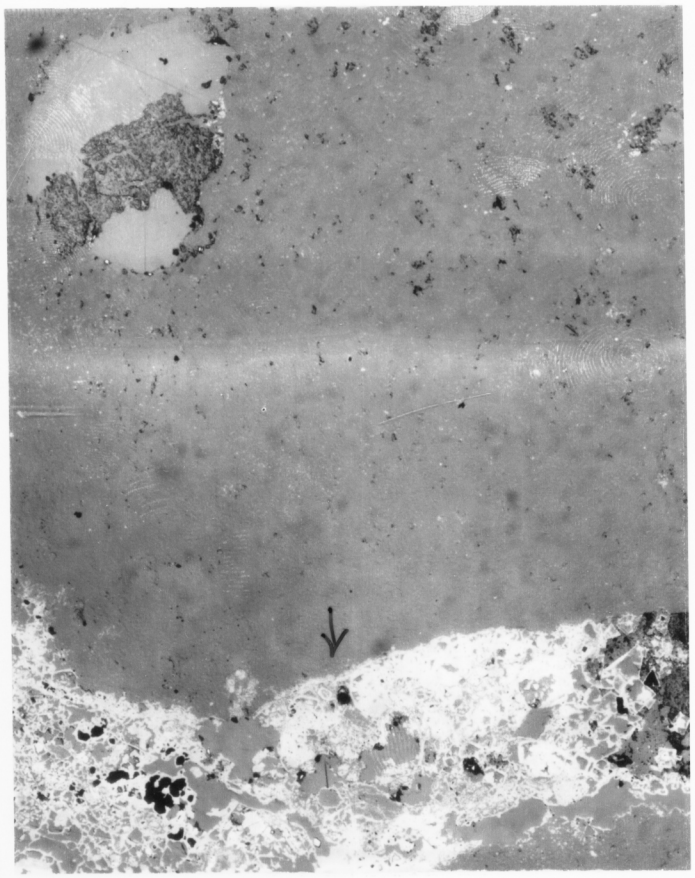


H21_T_2000 X BSE_Z.pict

I believe this is the location of the trou. →
(R to Left)



not ideal



4_18_95_utrav (wt).txt

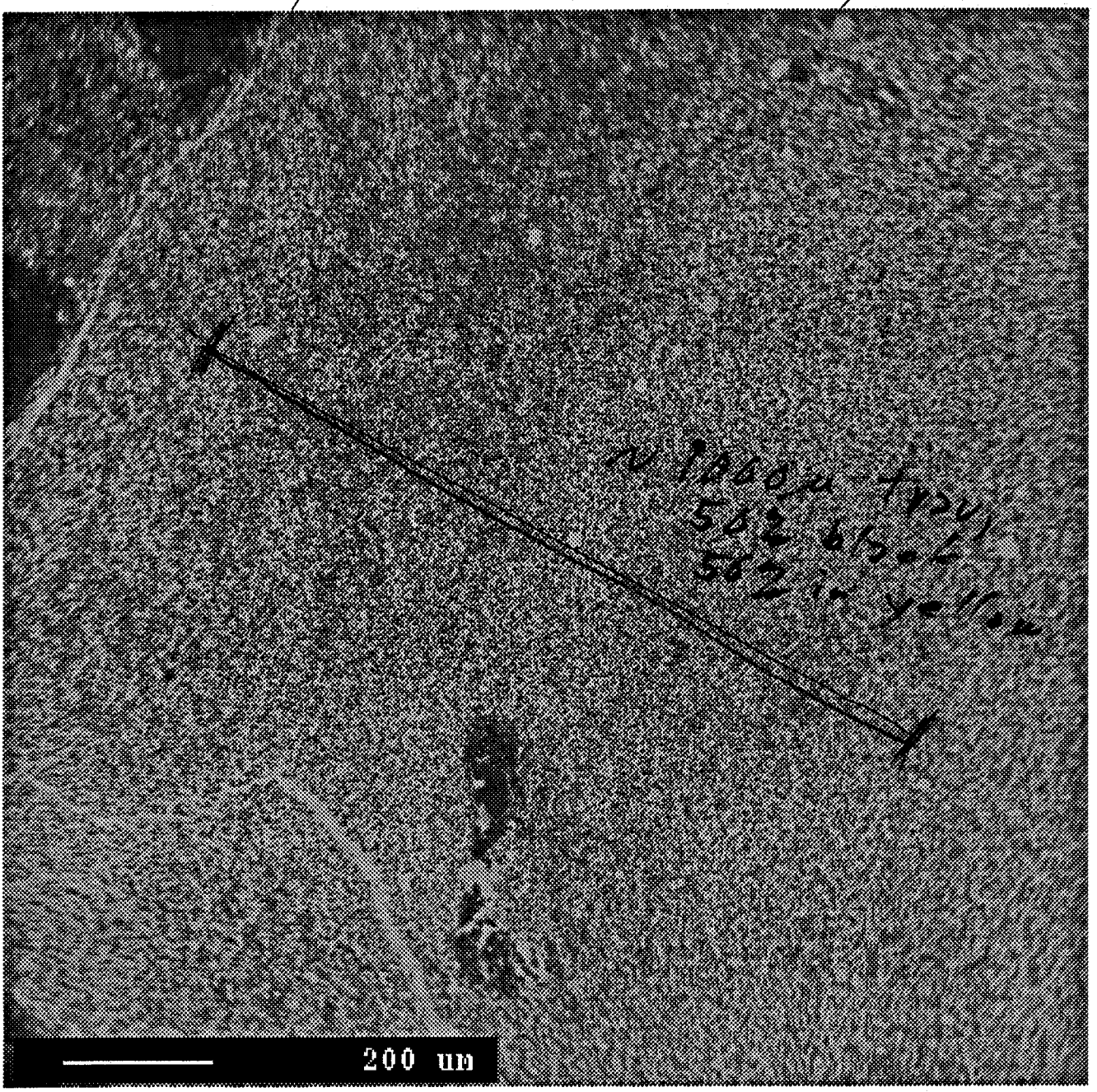
Analysis	x	y	z	Na	Al	Si	As	Ca	S	K	Fe	Pb	U	O
NOPIECP_1_trav	10264	17395	30	0.064	6.654	7.958	0.030	0.035	0.000	0.000	0.073	0.463	50.967	21.955
NOPIECP_1_trav	10314	17365	30	0.064	11.708	12.434	0.000	0.048	0.016	0.067	0.057	0.306	28.304	28.512
NOPIECP_1_trav	10364	17336	30	0.056	11.815	13.070	0.004	0.023	0.007	0.024	0.056	0.168	27.807	29.220
NOPIECP_1_trav	10414	17306	30	0.086	12.665	13.821	0.000	0.053	0.008	0.216	0.062	0.125	26.538	30.721
NOPIECP_1_trav	10464	17276	29	0.050	9.054	10.202	0.011	0.035	0.012	0.000	0.060	0.183	41.954	25.411
NOPIECP_1_trav	10514	17247	29	0.037	10.730	12.464	0.008	0.041	0.023	0.000	0.091	0.085	33.283	28.331
NOPIECP_1_trav	10564	17217	29	0.029	9.501	11.645	0.003	0.066	0.008	0.000	0.084	0.005	34.900	26.494
NOPIECP_1_trav	10614	17188	29	0.034	7.664	10.680	0.087	0.287	0.021	0.000	0.134	0.046	39.437	24.551
NOPIECP_1_trav	10664	17158	29	0.038	10.070	12.834	0.093	0.396	0.013	0.000	0.200	0.000	30.433	27.996
NOPIECP_1_trav	10714	17128	29	0.032	6.365	9.156	0.017	0.023	0.000	0.000	0.238	0.000	44.798	22.245
NOPIECP_1_trav	10765	17099	28	0.040	6.262	9.137	0.031	0.036	0.002	0.000	0.180	0.076	46.044	22.300
NOPIECP_1_trav	10815	17069	28	0.028	10.161	12.130	0.006	0.041	0.000	0.000	0.154	0.085	32.323	27.303
NOPIECP_1_trav	10865	17040	28	0.045	8.652	10.650	0.005	0.034	0.008	0.000	0.167	0.000	37.817	25.028
NOPIECP_1_trav	10915	17010	28	0.028	6.802	9.258	0.006	0.035	0.004	0.000	0.119	0.036	43.540	22.537
NOPIECP_1_trav	10965	16981	28	0.047	9.089	11.136	0.000	0.046	0.017	0.000	0.174	0.023	36.910	25.869
NOPIECP_1_trav	11015	16951	28	0.031	8.087	10.181	0.034	0.037	0.021	0.000	0.122	0.000	42.285	24.603
NOPIECP_1_trav	11065	16921	27	0.033	12.747	14.192	0.000	0.057	0.005	0.000	0.133	0.000	22.693	30.657
NOPIECP_1_trav	11115	16892	27	0.033	7.574	10.079	0.032	0.020	0.012	0.000	0.166	0.050	40.459	23.789
NOPIECP_1_trav	11165	16862	27	0.028	7.371	9.650	0.008	0.033	0.005	0.000	0.145	0.000	41.547	23.231
NOPIECP_1_trav	11215	16833	27	0.029	9.347	11.437	0.006	0.039	0.030	0.000	0.166	0.000	37.212	26.490

NOP/ECP/155

NOPIECP_1_63x

Black on Photo

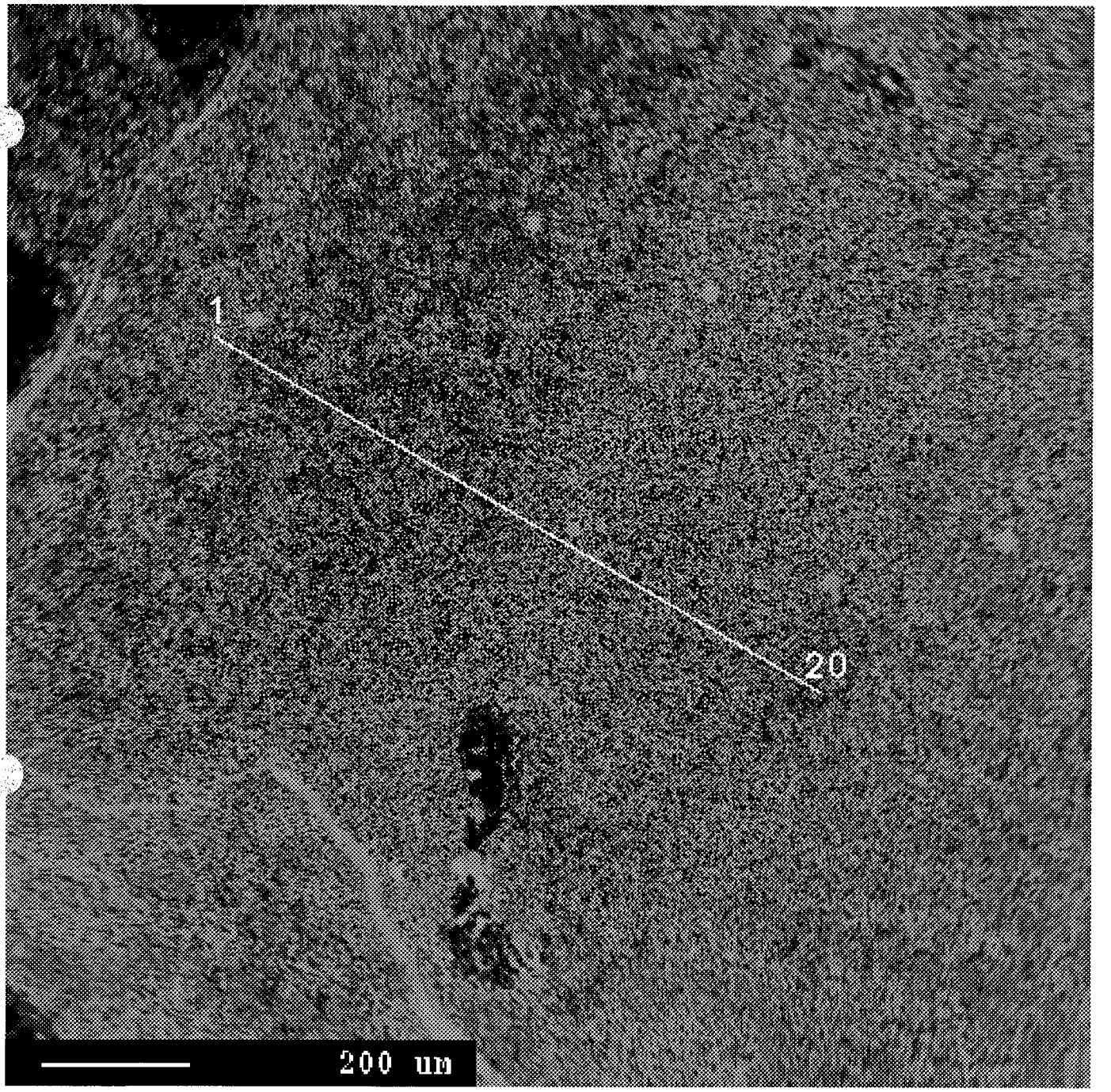
Yellow



- Hi U everywhere.
- 10 sec U+Pb analyses at 15 nA. (everything at 15 nA)

- 30 μ spot size
- (30 analyses, 30 μ spot)
- complete analyses
- interested in Al, Ca, Si,

label = utrav.

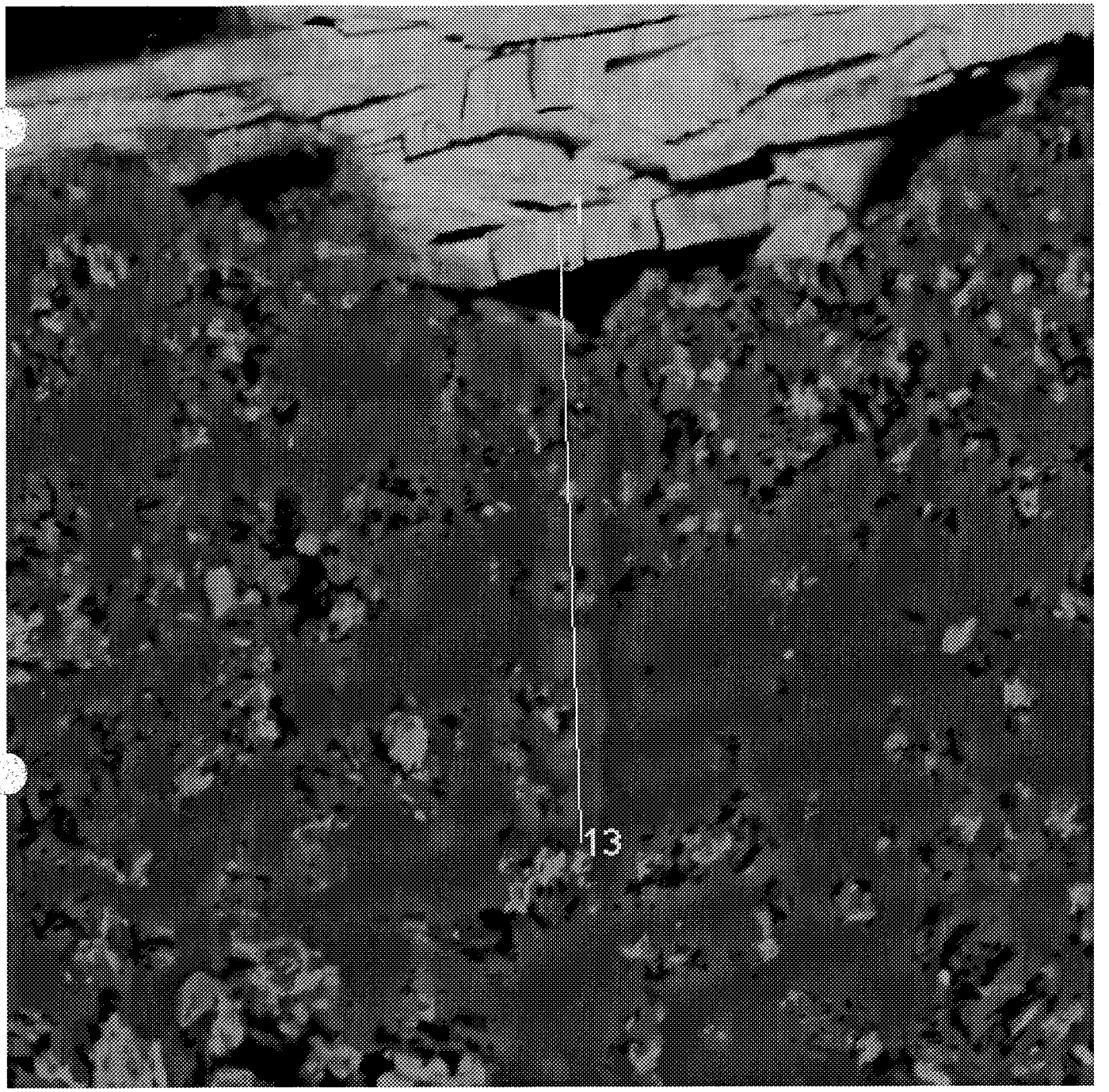


NOPIECP_1_63XBSEmap.pict

4_17_95 SWRItrav(wt).txt

Analysis	x	y	z	Al	Si	U	Fe	O
22.5_10.4_ts1_tr1a	15406	-20169	11	0.003	6.039	61.781	0.002	15.188
22.5_10.4_ts1_tr1a	15404	-20170	11	0.020	6.066	57.780	0.014	14.703
22.5_10.4_ts1_tr1a	15401	-20172	11	0.782	40.073	0.562	0.177	46.502
22.5_10.4_ts1_tr1a	15399	-20173	11	1.511	42.607	0.047	0.157	49.960
22.5_10.4_ts1_tr1a	15397	-20175	11	1.354	39.439	0.032	0.145	46.203
22.5_10.4_ts1_tr1a	15394	-20176	11	1.797	40.646	0.021	0.077	47.942
22.5_10.4_ts1_tr1a	15392	-20178	11	2.258	39.980	0.003	0.103	47.602
22.5_10.4_ts1_tr1a	15390	-20180	11	2.077	39.123	0.007	0.138	46.480
22.5_10.4_ts1_tr1a	15387	-20181	11	1.595	37.360	0.000	0.060	44.008
22.5_10.4_ts1_tr1a	15385	-20183	11	1.414	40.873	0.021	0.066	47.854
22.5_10.4_ts1_tr1b	15467	-20232	7	0.024	6.385	60.020	0.028	15.376
22.5_10.4_ts1_tr1b	15466	-20234	7	0.488	14.820	7.930	0.290	18.509
22.5_10.4_ts1_tr1b	15464	-20236	7	2.353	41.186	0.123	0.169	49.104
22.5_10.4_ts1_tr1b	15463	-20238	7	1.562	42.179	0.068	0.234	49.552
22.5_10.4_ts1_tr1b	15462	-20240	7	1.999	40.341	0.034	0.239	47.846
22.5_10.4_ts1_tr1b	15460	-20242	7	0.867	39.525	0.031	0.292	45.931
22.5_10.4_ts1_tr1b	15459	-20245	7	1.625	40.507	0.014	0.263	47.709
22.5_10.4_ts1_tr1b	15457	-20247	7	1.782	38.478	0.020	0.280	45.545
22.5_10.4_ts1_tr1b	15456	-20249	7	1.415	41.416	0.013	0.201	48.531
22.5_10.4_ts1_tr1b	15454	-20251	7	0.990	39.768	0.027	0.284	46.313
22.5_10.4_ts1_tr1b	15453	-20253	7	0.854	41.503	0.015	0.225	48.141
22.5_10.4_ts1_tr1b	15451	-20255	7	1.177	40.179	0.010	0.195	46.908
22.35_15.3_ts1_tr1a	14868	5587	11	0.419	5.940	26.361	1.076	11.146
22.35_15.3_ts1_tr1a	14868	5585	11	0.863	4.947	6.252	7.023	10.262
22.35_15.3_ts1_tr1a	14868	5583	11	0.645	11.813	0.623	3.528	15.632
22.35_15.3_ts1_tr1a	14868	5581	11	2.637	35.021	0.091	2.283	43.238
22.35_15.3_ts1_tr1a	14868	5579	11	3.945	36.303	0.089	3.068	46.198
22.35_15.3_ts1_tr1a	14868	5577	11	2.159	40.197	0.193	6.885	50.700
22.35_15.3_ts1_tr1a	14868	5575	11	1.540	34.628	0.068	1.928	41.658
22.35_15.3_ts1_tr1a	14868	5572	11	0.477	43.652	0.082	3.595	51.712
22.35_15.3_ts1_tr1a	14868	5570	11	3.365	35.497	0.026	0.612	43.701
22.35_15.3_ts1_tr1a	14868	5568	11	0.243	44.226	0.163	7.932	54.033
22.35_15.3_ts1_tr1a	14868	5566	11	2.567	38.058	0.080	3.335	47.086
22.35_15.3_ts1_tr1a	14868	5564	11	0.927	42.303	0.058	1.727	49.770
22.35_15.3_ts1_tr1a	14868	5562	11	1.261	42.347	0.178	7.452	52.593
22.35_15.3_ts1_tr1b	14676	5614	11	2.212	6.341	29.291	1.297	13.687
22.35_15.3_ts1_tr1b	14676	5612	11	1.844	32.712	1.565	13.944	45.112
22.35_15.3_ts1_tr1b	14676	5610	11	1.026	34.295	0.143	3.447	41.485
22.35_15.3_ts1_tr1b	14676	5608	11	3.313	37.544	0.097	2.427	46.776
22.35_15.3_ts1_tr1b	14676	5606	11	2.625	39.324	0.143	5.583	49.555
22.35_15.3_ts1_tr1b	14676	5604	11	3.253	36.778	0.293	14.042	50.868
22.35_15.3_ts1_tr1b	14676	5601	11	3.944	33.657	0.152	7.472	45.084
22.35_15.3_ts1_tr1b	14676	5599	11	4.087	33.143	0.029	1.591	42.082
22.35_15.3_ts1_tr1b	14676	5597	11	0.702	42.402	0.009	0.207	49.023
22.35_15.3_ts1_tr1b	14676	5595	11	0.206	44.417	0.008	0.161	50.857
22.35_15.3_ts1_tr1b	14676	5593	11	0.269	43.736	0.022	0.675	50.360
22.35_15.3_ts1_tr1b	14676	5591	11	4.605	35.448	0.022	1.084	44.949
22.35_15.3_ts1_tr2a	10229	7974	15	0.360	5.152	57.339	0.279	14.019
22.35_15.3_ts1_tr2a	10228	7972	15	1.696	9.630	13.512	1.575	14.973
22.35_15.3_ts1_tr2a	10227	7970	15	8.742	27.130	0.135	1.556	39.371
22.35_15.3_ts1_tr2a	10225	7968	15	5.881	25.720	0.076	2.530	35.631
22.35_15.3_ts1_tr2a	10224	7966	15	2.864	36.521	0.048	1.951	45.000
22.35_15.3_ts1_tr2a	10223	7964	15	2.115	37.667	0.047	1.691	45.528
22.35_15.3_ts1_tr2a	10222	7961	15	4.894	28.050	0.170	5.261	38.593
22.35_15.3_ts1_tr2a	10220	7959	15	4.665	25.073	0.092	3.852	34.382
22.35_15.3_ts1_tr2a	10219	7957	15	4.293	30.511	0.038	1.882	39.393
22.35_15.3_ts1_tr2a	10218	7955	15	3.905	35.128	0.040	2.669	44.647
22.35_15.3_ts1_tr2a	10216	7953	15	5.778	31.122	0.023	1.227	41.127
22.35_15.3_ts1_tr2b	10133	8082	15	1.112	5.715	59.094	0.086	15.481
22.35_15.3_ts1_tr2b	10131	8080	15	1.086	10.150	13.400	0.465	14.530
22.35_15.3_ts1_tr2b	10129	8078	15	0.778	43.312	0.070	0.492	50.257
22.35_15.3_ts1_tr2b	10127	8076	15	3.104	35.067	0.049	0.777	43.052
22.35_15.3_ts1_tr2b	10125	8074	15	5.487	26.990	0.036	0.683	35.929

22.35_15.3_ts1_tr2b	10123	8072	15	5.468	26.124	0.022	0.749	34.951
22.35_15.3_ts1_tr2b	10120	8070	15	4.096	34.756	0.016	0.473	43.446
22.35_15.3_ts1_tr2b	10118	8068	15	5.127	33.242	0.006	0.303	42.563
22.35_15.3_ts1_tr2b	10116	8066	15	0.799	41.435	0.013	0.282	48.040
22.35_15.3_ts1_tr2b	10114	8064	15	2.240	38.578	0.000	0.171	46.018
22.35_15.3_ts1_tr2b	10112	8062	15	0.104	44.091	0.000	0.136	50.383



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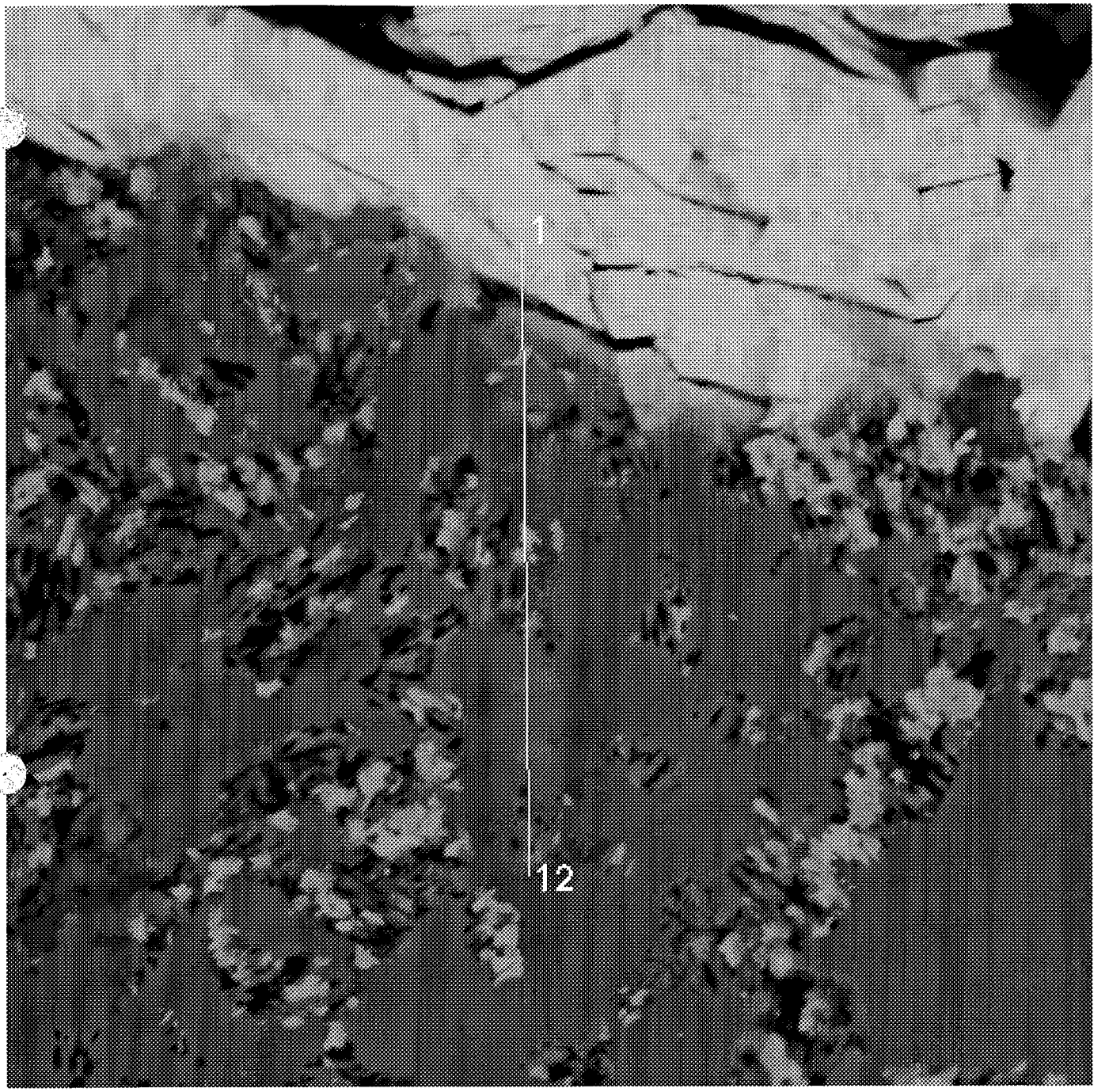

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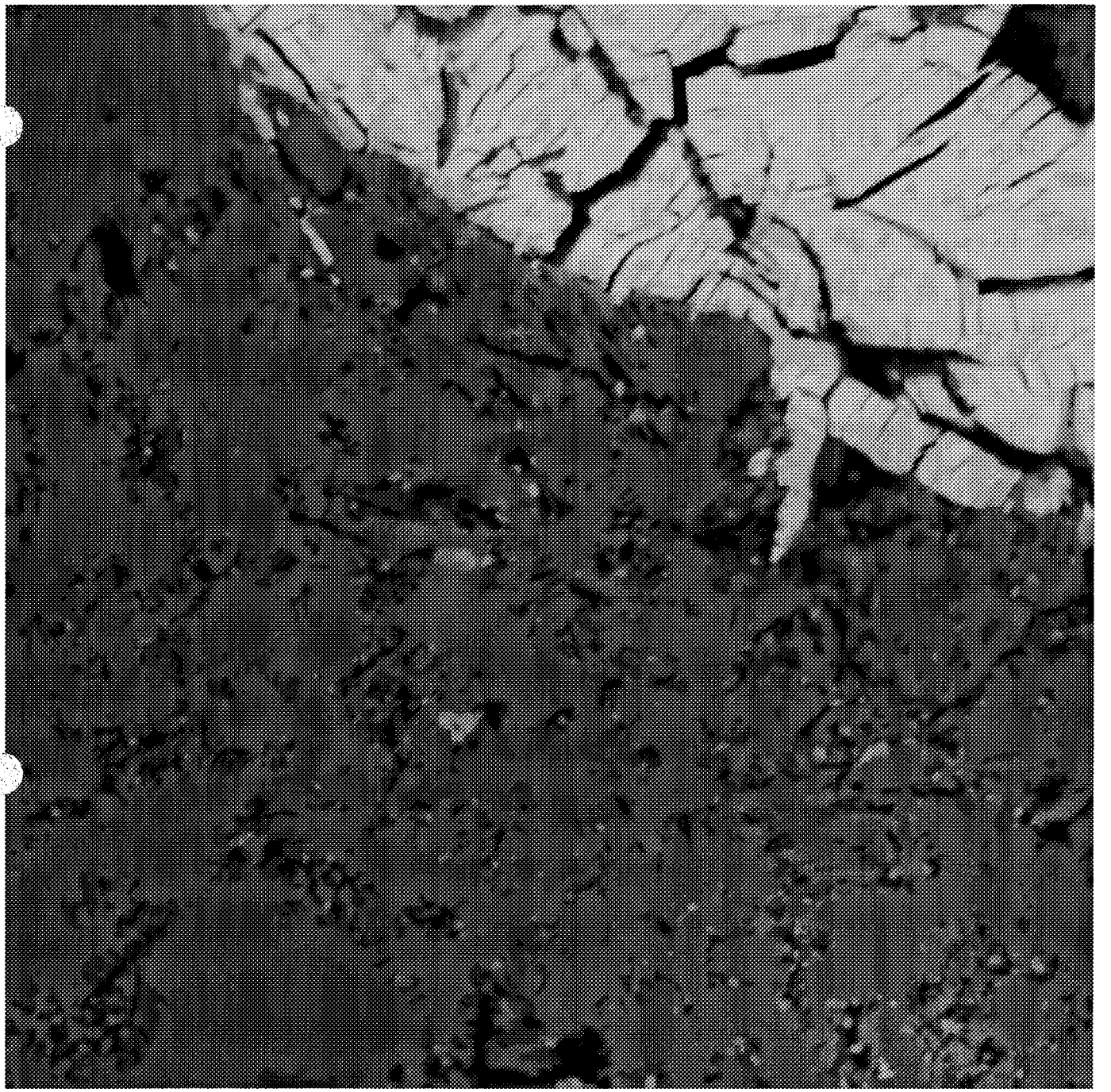

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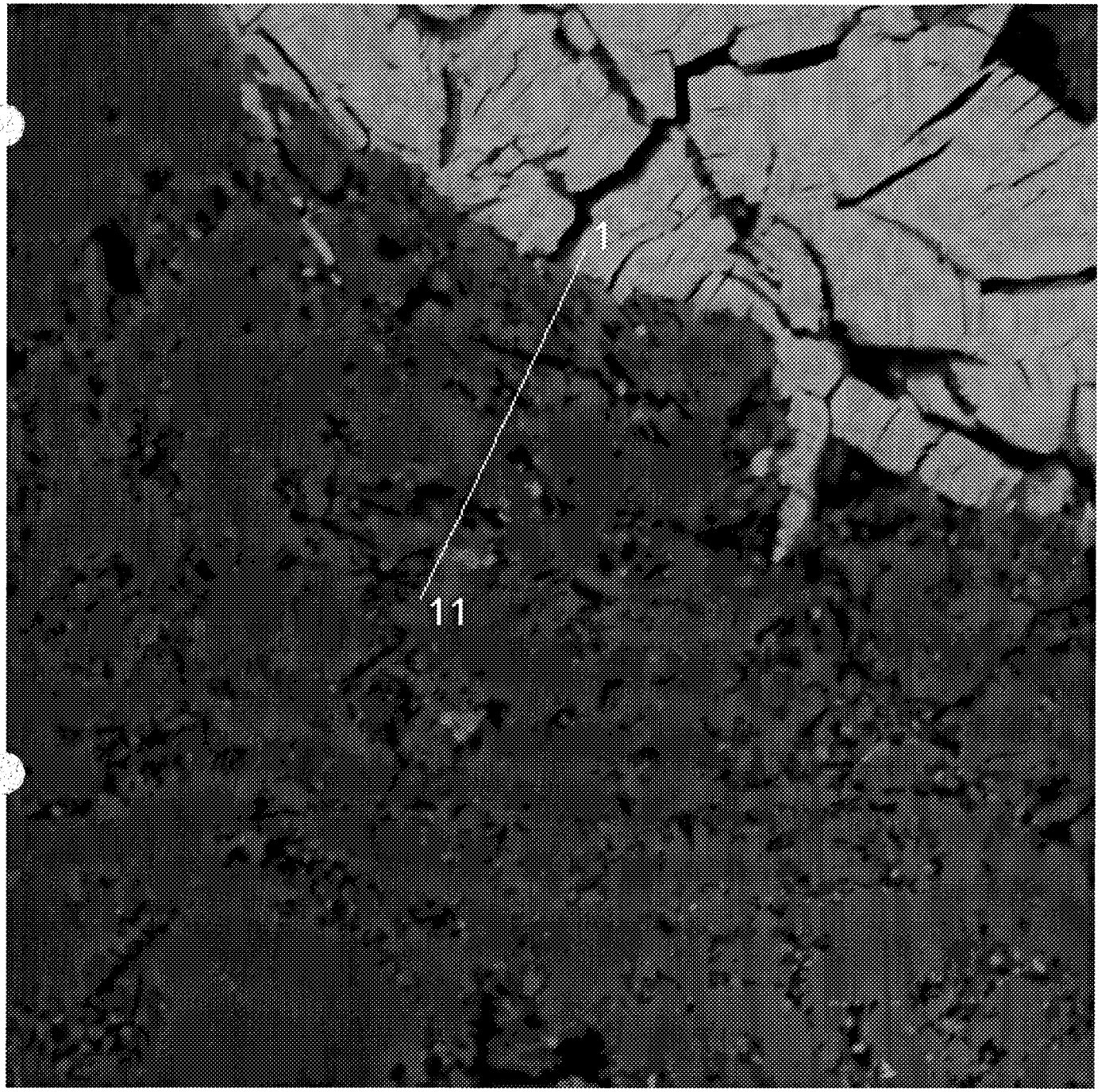

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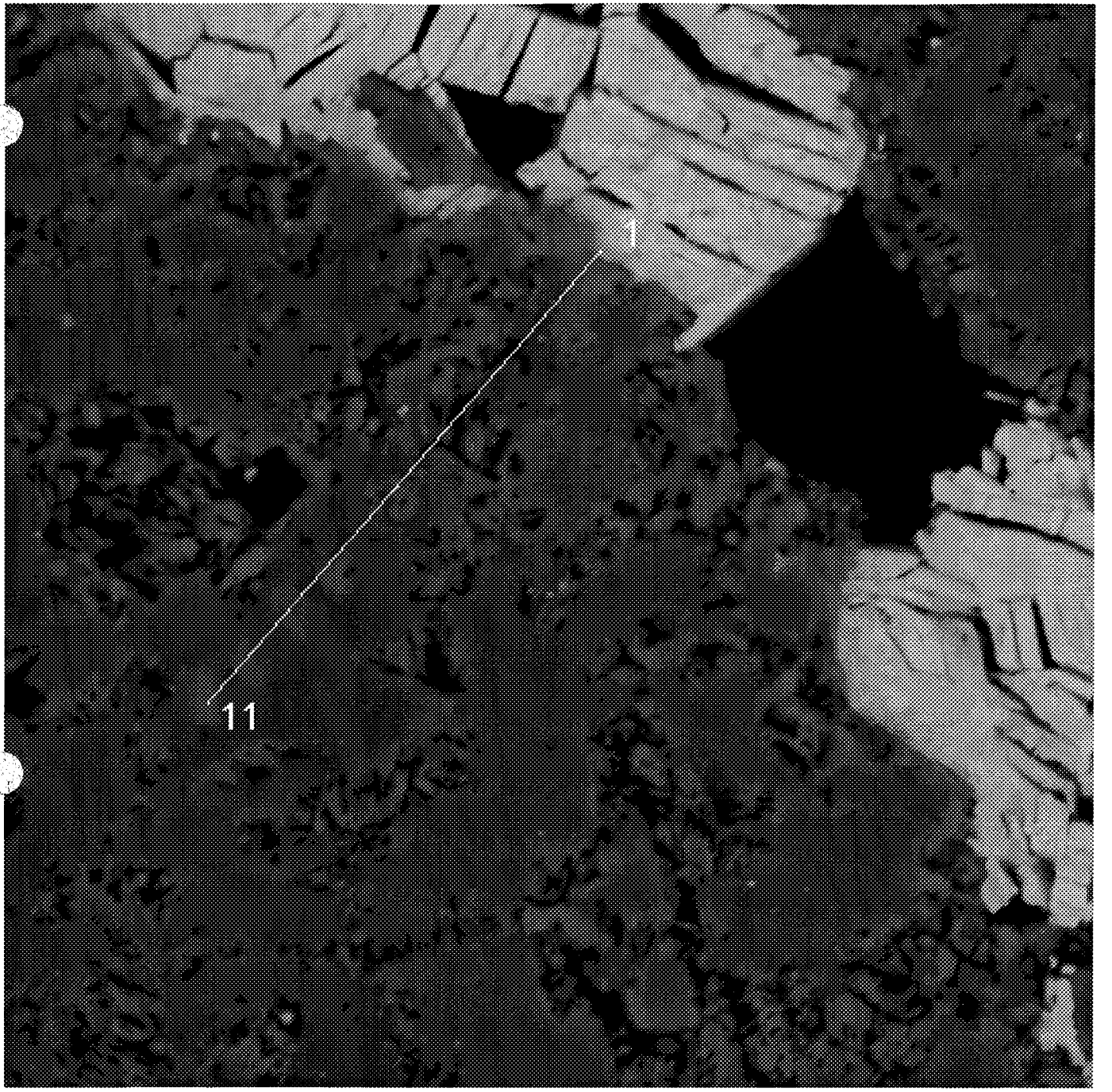
NOPI-96-T31



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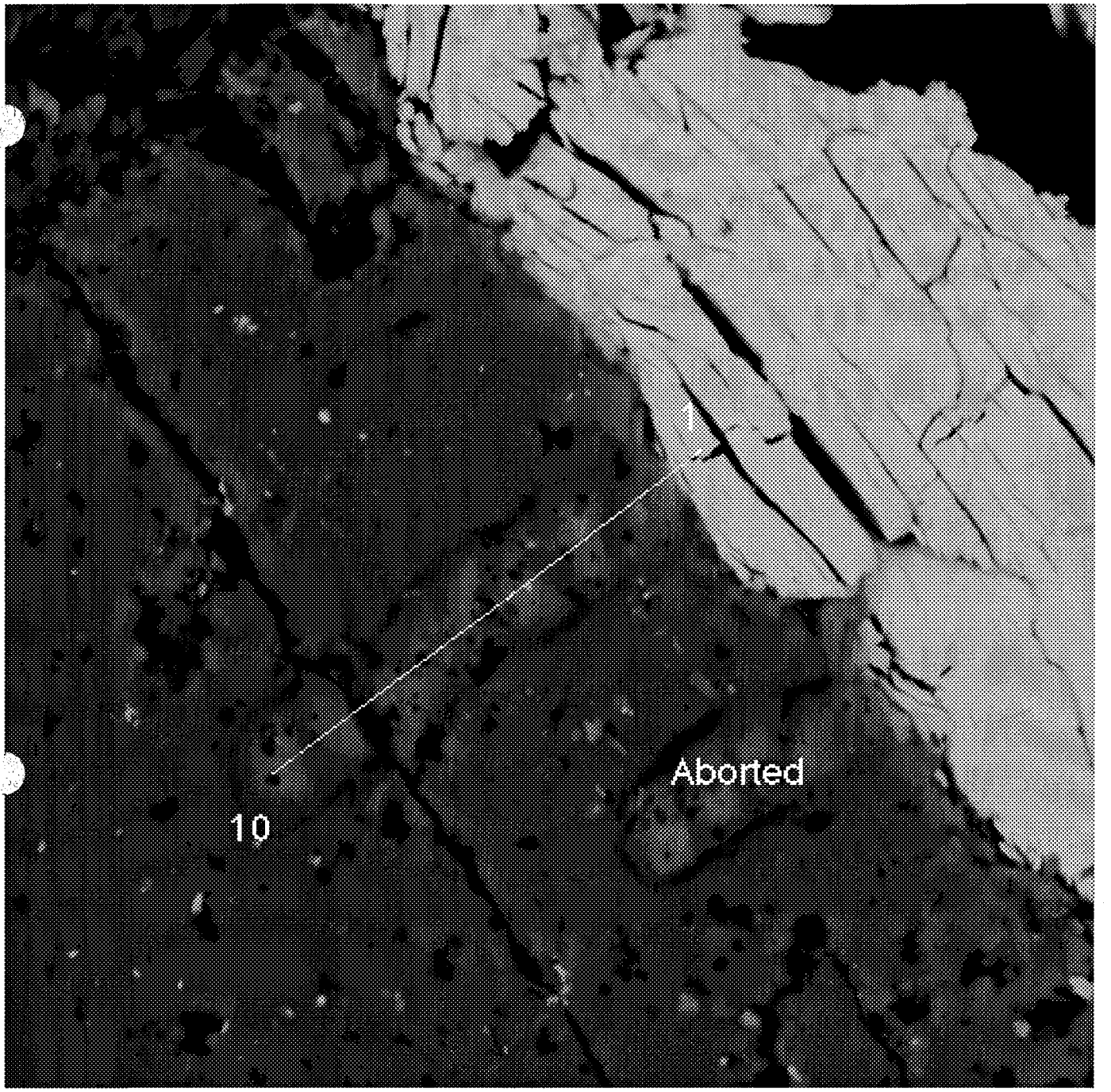
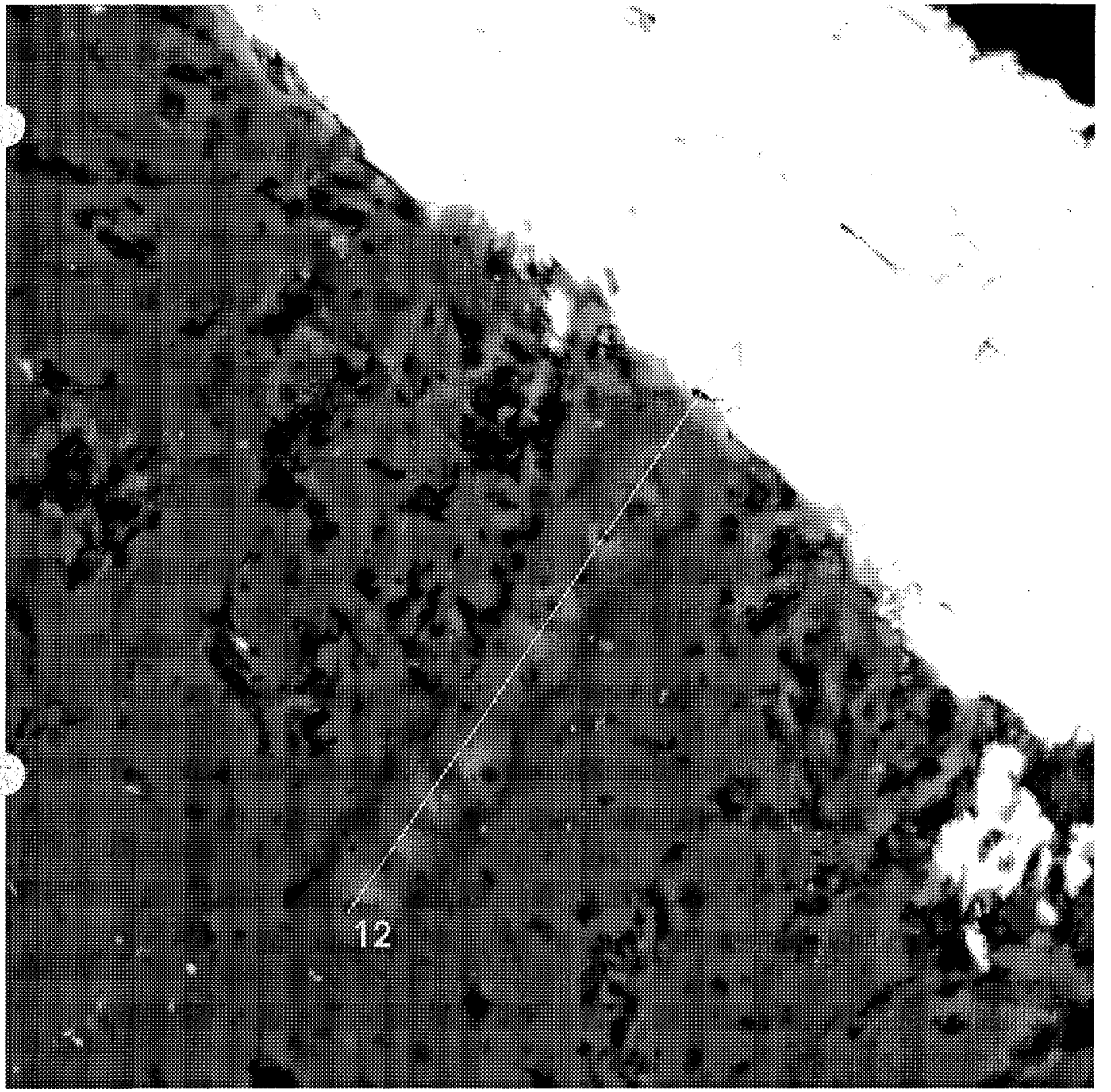


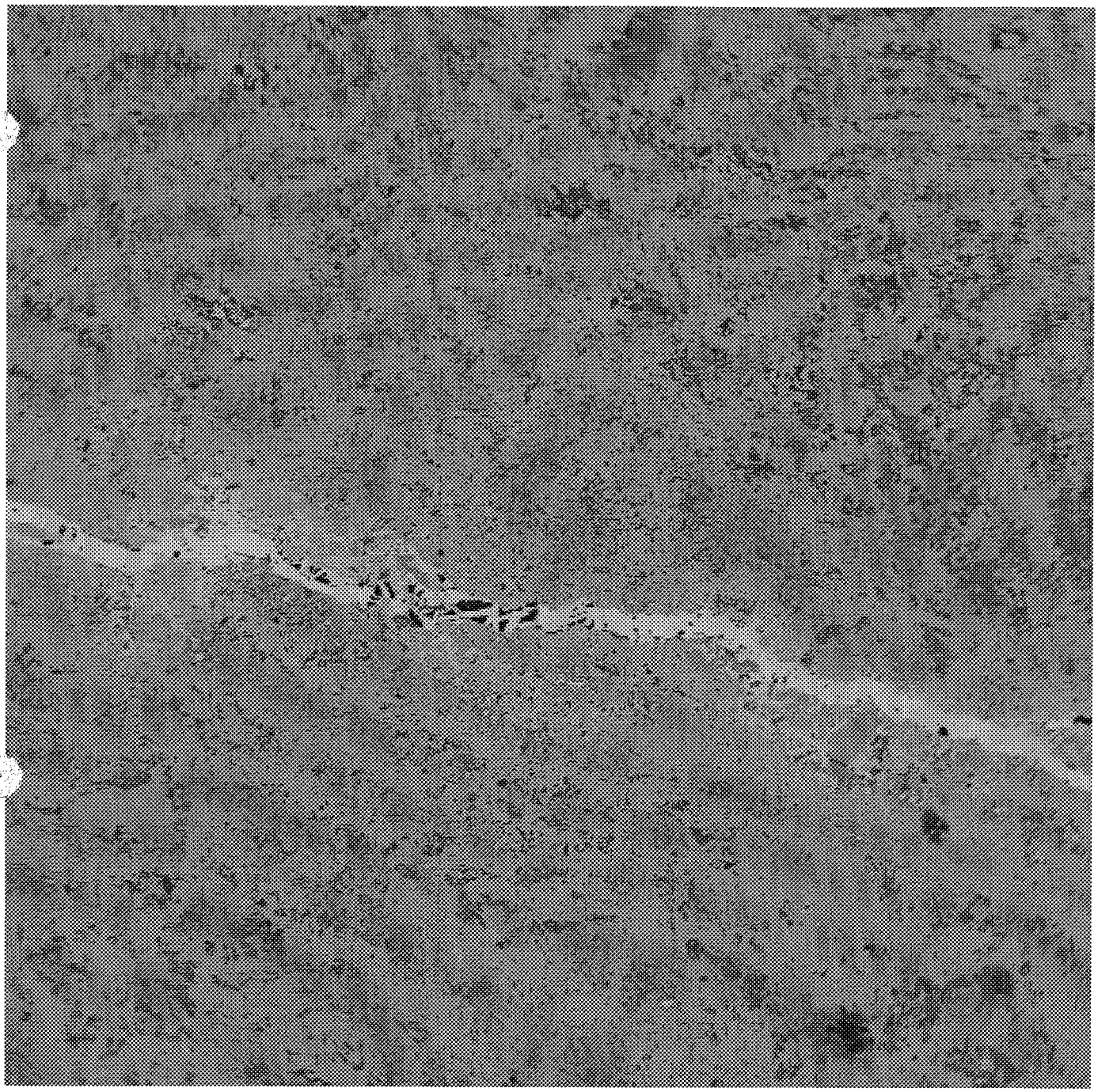
22.5_trla_2000xBSE m.pict

NOPI-48-T31



22.5_ tr16_ 2000x BSEm.pict

NOPI-48-TS1



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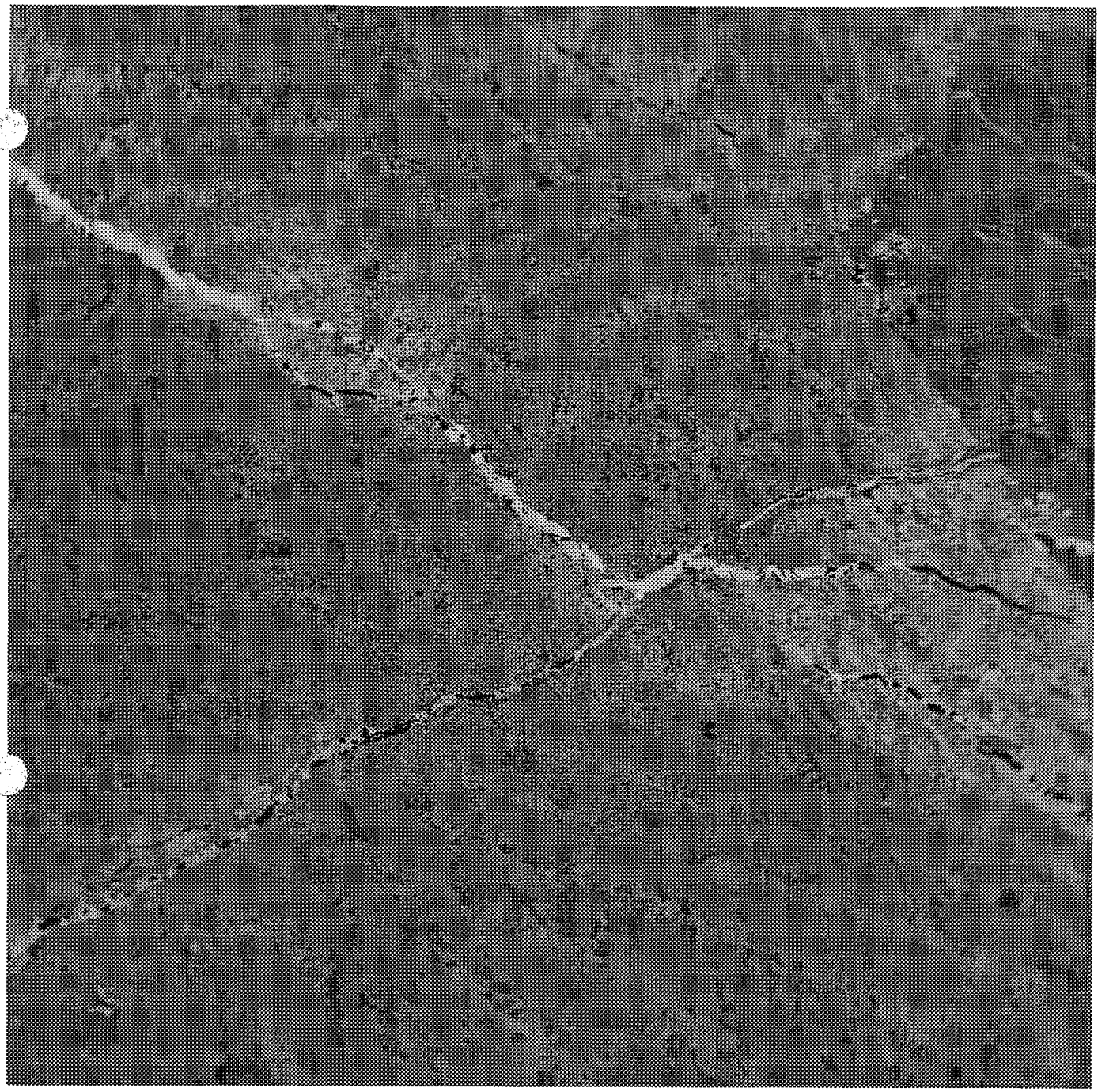

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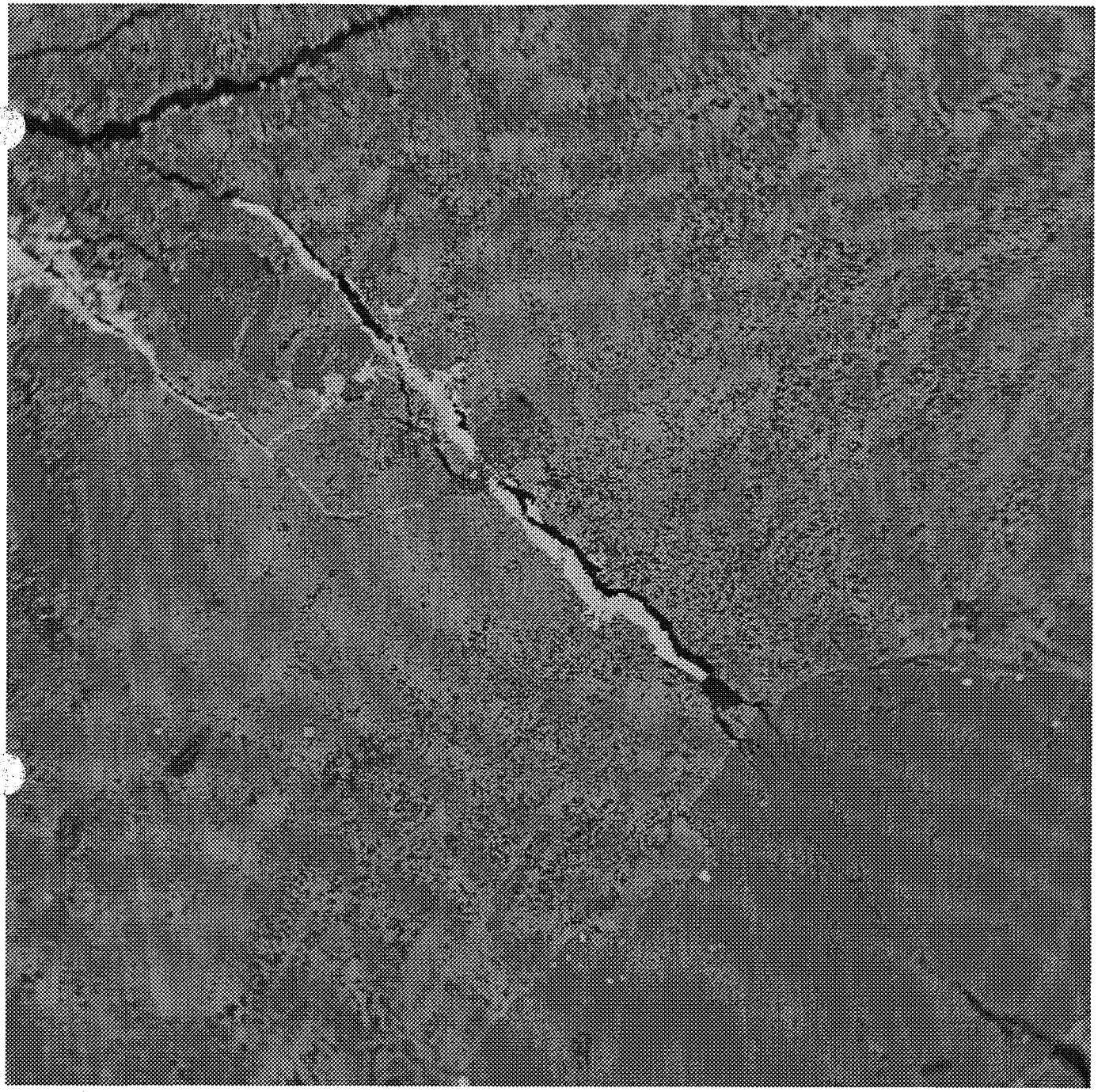

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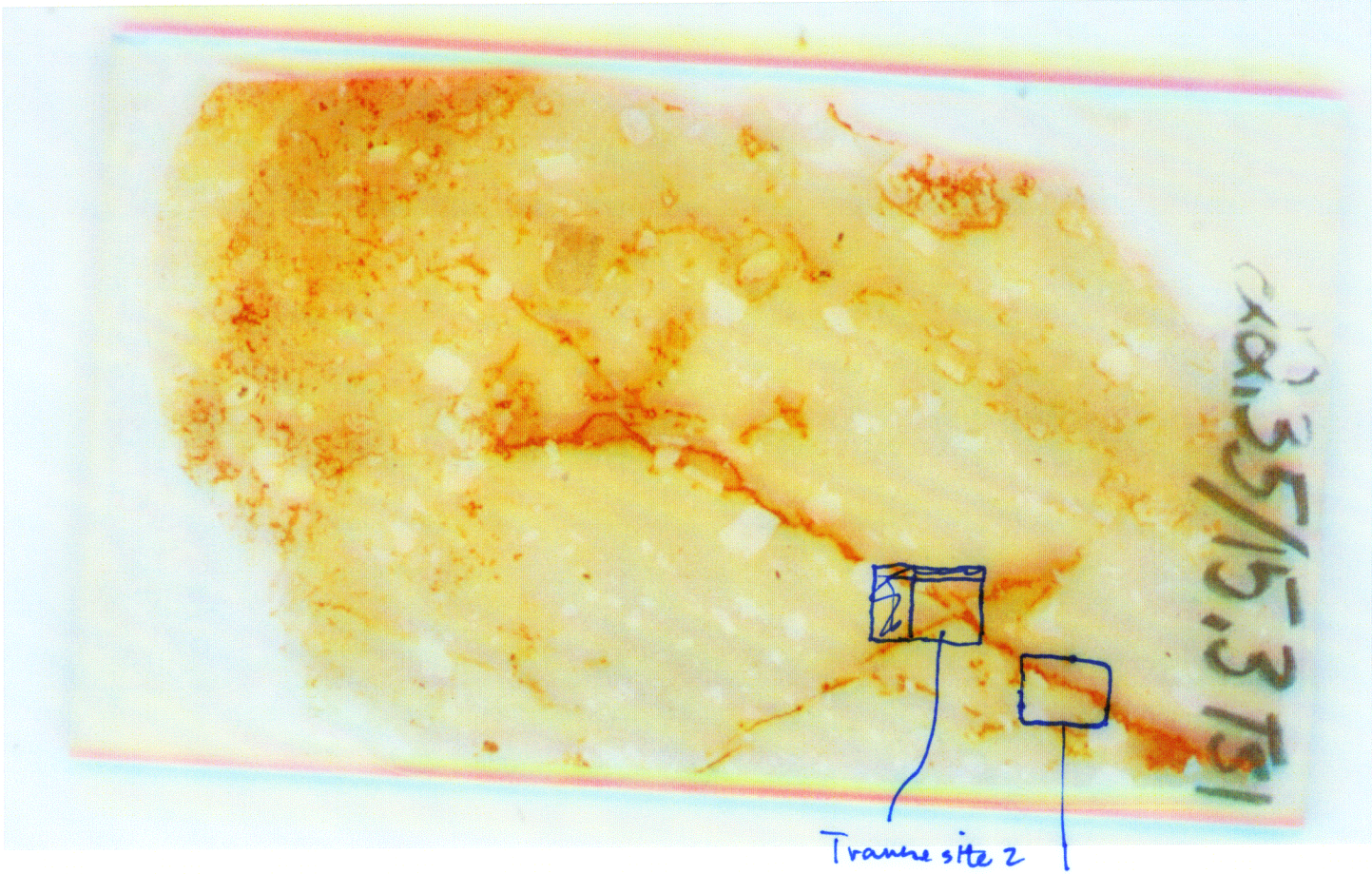
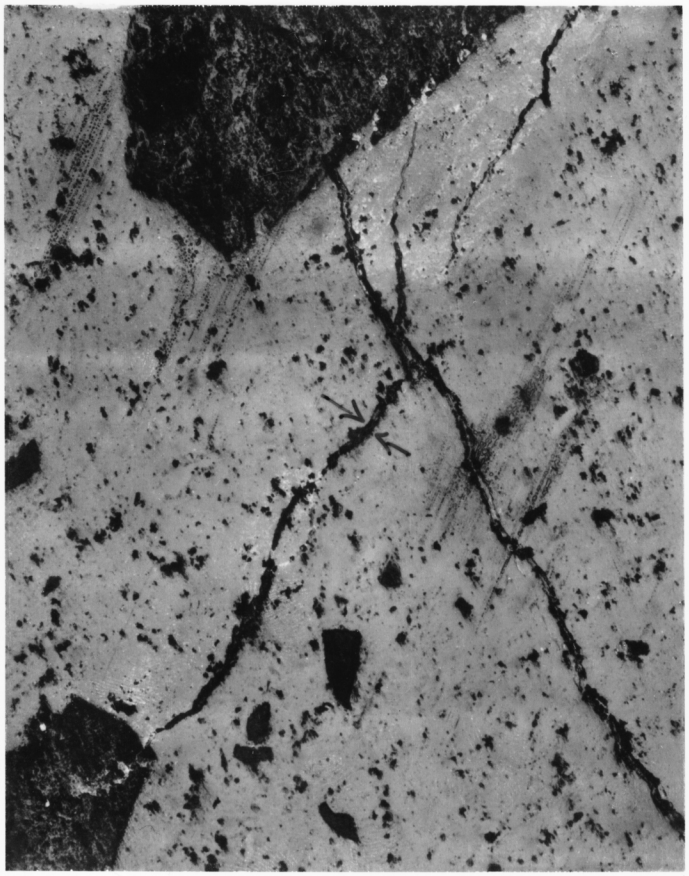
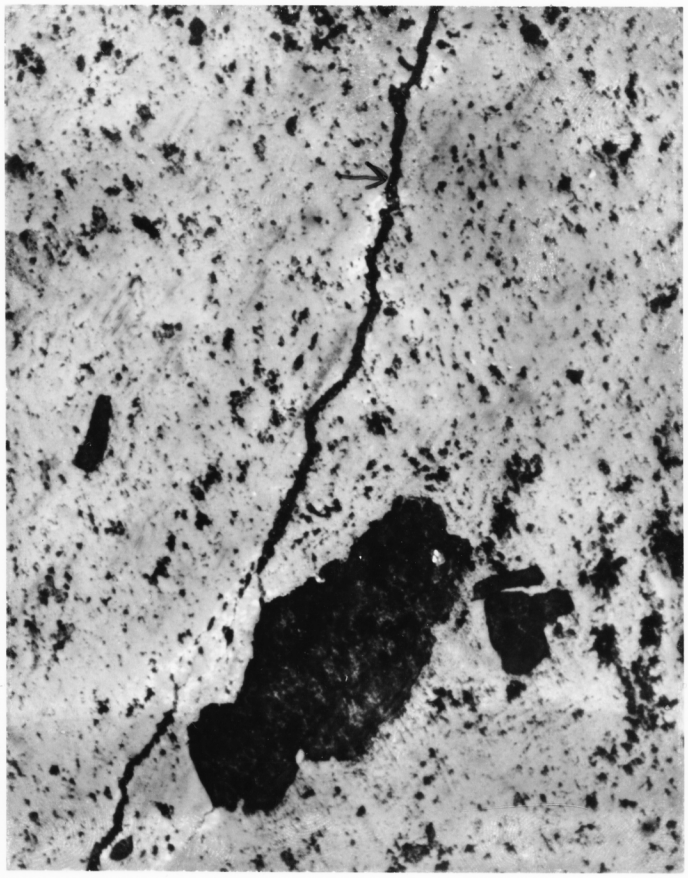
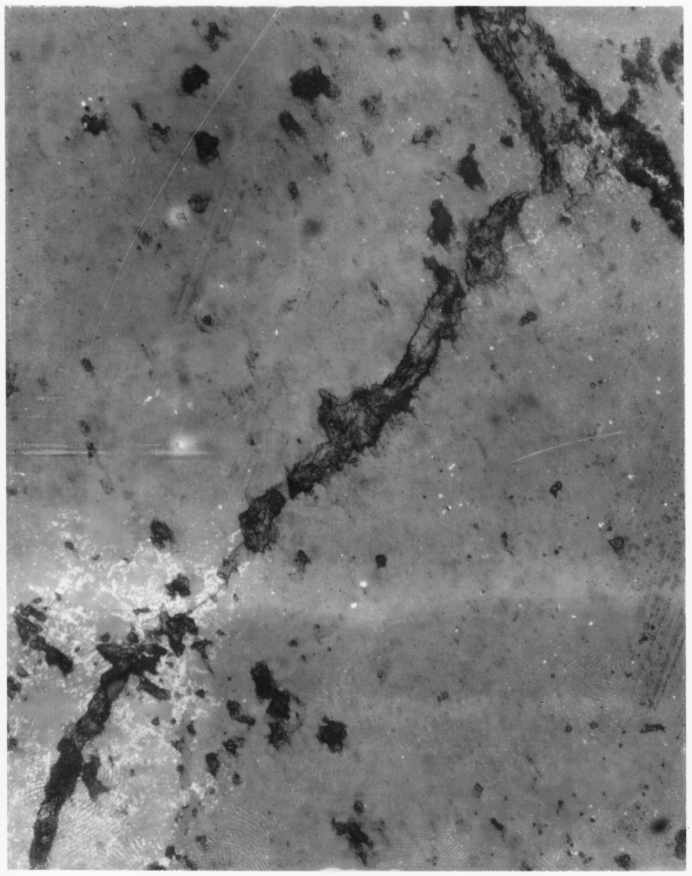
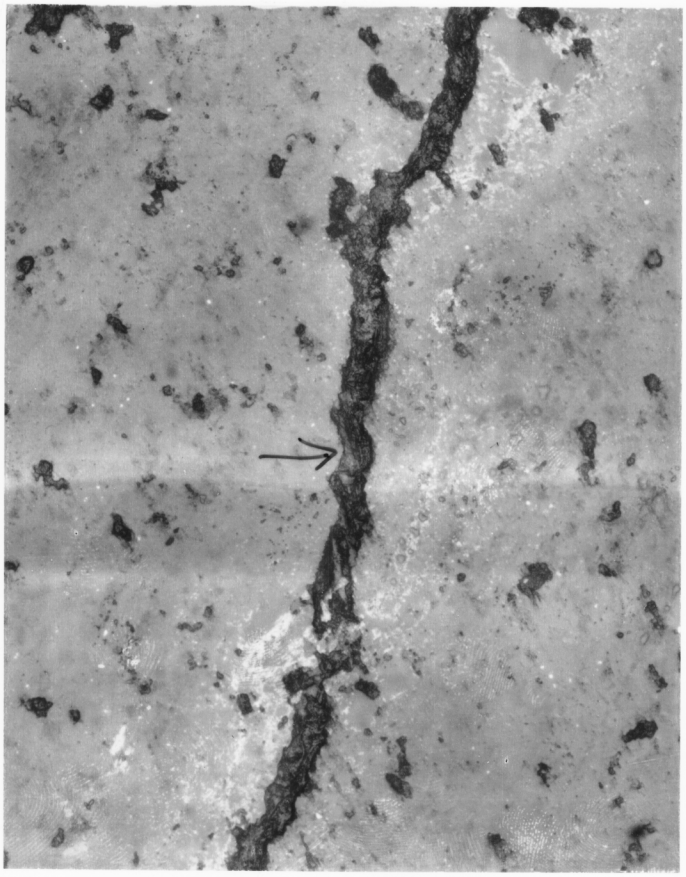

Transe site 2
Traverse Site 1



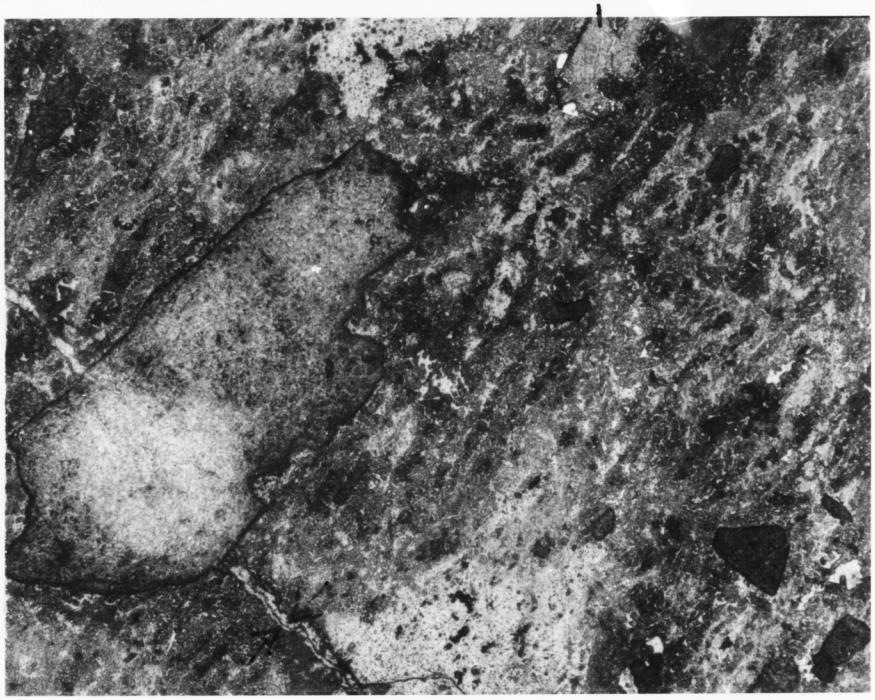


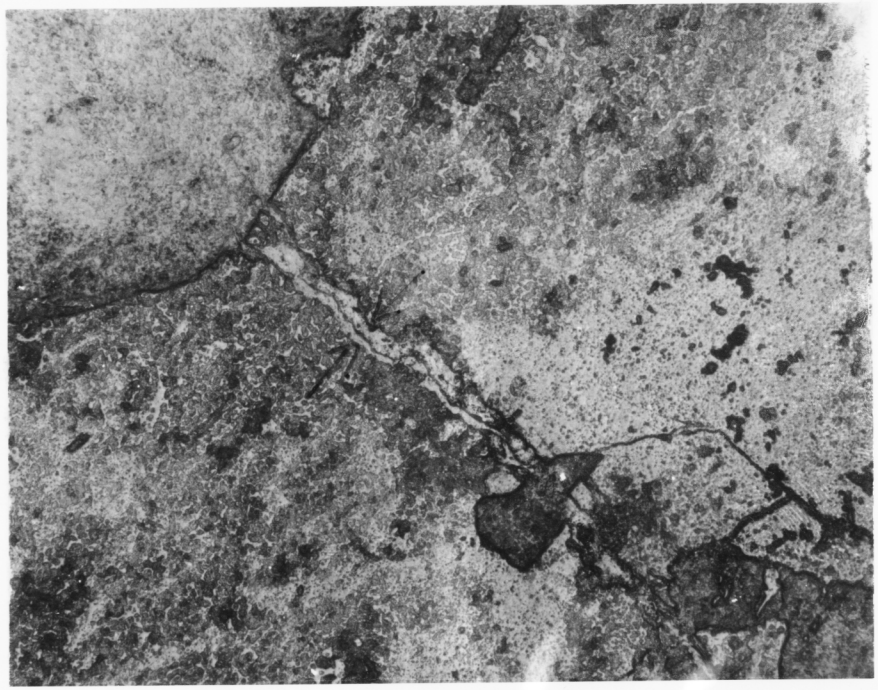




Trouser size

black





Lower Limits of Detection Instructions

Equation Used: $LLD = (4.24 / m) * \sqrt{(C_b / t_b)}$ (p. 166, Introduction to X-Ray Spectrometry, K.L. Williams, Allen and Unwin, 1987; 370pp)

where
- LLD = statistical lower limit of detection in ppm
- m = sensitivity (counts per second per unit concentration(in ppm))
- C_b = counts/second on background
- t_b = background counting time (if bkg ct. time = peak ct. time)

The LLD's calculated above are statistical LLD's and include no contributions from possible instrumental variability. As a general rule, we would consider the practical LLD to normally be about twice the statistical LLD. Only detailed reproducibility experiments on a specific instrument would tell you how good this estimate of the practical LLD is.
(On the TAMU sx50, a practical LLD of about 1.5x the statistical LLD appears reasonable)

Numbers below are statistical lower limits of detection (LLD) in ppm (wt.) calculated using Williams' formula

Material\Element	Na	Al	Si	As	Ca	S	K	Fe	Pb	U
(swrisife label)										
- for Fe ox/hyd	280	140	230	440	230	200	240	520	270	220
(swritrav label)										
- away from vein		150	330					90		170
(utrav label)										
- all	150	140	220	340	250	240	440	360	1480	1660

Notes:

* LLDs rounded to nearest tens place
* The LLD's calculated above are statistical LLD's and include no contributions from possible instrumental variability
* As a general rule, we would consider the practical LLD to normally be about twice the statistical LLD
* Only detailed reproducibility experiments on a specific instrument would tell you how good this estimate of the practical LLD is.
* (On the TAMU sx50, a practical LLD of about 1.5x the statistical LLD appears reasonable)

Numbers below are statistical lower limits of detection (LLD) in ppm (wt.) calculated using Williams' formula

Material \ Element	O	Na	Al	Si	P	As	Ca	S	Fe	K	Ba	Ti	Mn	Th	Pb	U
(swrife label)																
for Fe ox/hyd	350	360	200	230	260	630	190	190	430	200	360	120	130	340	400	370
SD on n analyses	25	60	10	15	15	45	15	55	25	50	150	30	15	45	40	10
n	17	23	23	23	23	23	23	23	23	21	17	20	22	17	21	23
for Fe Sulfates	460	270	180	190	220	530	160	350	380	220	400		100	280	730	360
SD on n analyses	5	40	10	10	25	45	90	15	10	10	40		40	45	10	50
n	7	7	7	7	6	7	4	7	7	7	4		4	4	2	3
(swrisi label)																
for silicates	470	210	170	360	190	330	170	120	290	200	370	120	100	300	330	290
SD on n analyses	10	20	10	15	40	175	30	60	25	15	110	10	25	80	95	75
n	43	43	43	43	14	14	42	34	43	43	32	43	33	16	22	18

Notes:

* LLDs rounded to nearest tens place
* Standard Deviations (SD) rounded to nearest five
* LLD's shown above were calculated on the 4/5/94 data set, and can be viewed as representative of all Spring 1994 data sets

* The LLD's calculated above are statistical LLD's and include no contributions from possible instrumental variability
* As a general rule, we would consider the practical LLD to normally be about twice the statistical LLD
* Only detailed reproducibility experiments on a specific instrument would tell you how good this estimate of the practical LLD is
* (On the TAMU sx50, a practical LLD of about 1.5x the statistical LLD appears reasonable)

Numbers below are statistical lower limits of detection (LLD) in ppm (wt.) calculated using Williams' formula

Material \ Element	O	Na	Al	Si	P	As	Ca	S	Fe	K	Ba	Ti	Mn	Th	Pb	U
(swrife label)																
for Fe ox/hyd	350	360	200	230	260	630	190	190	430	200	360	120	130	340	400	370
SD on n analyses	25	60	10	15	15	45	15	55	25	50	150	30	15	45	40	10
n 17 23	23	23	23	23	23	23	23	21	17	20	22	17	21	23		
for Fe Sulfates	460	270	180	190	220	530	160	350	380	220	400		100	280	730	360
SD on n analyses	5	40	10	10	25	45	90	15	10	10	40		40	45	10	50
n 7 7	7	7	6	7	4	7	7	7	4		4	4	2	3		
(swrisi label)																
for silicates	470	210	170	360	190	330	170	120	290	200	370	120	100	300	330	290
SD on n analyses	10	20	10	15	40	175	30	60	25	15	110	10	25	80	95	75
n 43 43	43	43	14	14	42	34	43	43	32	43	33	16	22	18		

Notes:

* LLDs rounded to nearest tens place
* Standard Deviations (SD) rounded to nearest five

"* LLD's shown above were calculated on the 4/5/94 data set, and can be viewed as representative of all Spring 1994 data sets"

* The LLD's calculated above are statistical LLD's and include no contributions from possible instrumental variability

"* As a general rule, we would consider the practical LLD to normally be about twice the statistical LLD"
* Only detailed reproducibility experiments on a specific instrument would tell you how good this estimate of the practical LLD is
"* (On the TAMU sx50, a practical LLD of about 1.5x the statistical LLD appears reasonable)"

Summary of Analytical Conditions.

'Quantitative Analysis Declaration

1:swrisife
Date:Tue Mar 14 12:51:22 1995
Type:Stoi
Take Off Angle:40.
Iteration Limit:0.000

Condition #1 15.0 kV 15 nA

Sp1 TAP

Na Ka	Shift:0	Valence:1
Time(sec):30	Pre.(%):0.1	Bkg(sec):0.0
(+)Bkg:500	(-)Bkg:-500	Slope:0.000
Standard:5albite		
Time(sec):20	Prec.(%):0.1	Bkg(sec):0.0
(+)Bkg:500	(-)Bkg:-500	Slope:0.000
Bias(V):1457	Gain(*):120	DeadTime(us):2
Baseline:1100	Window:1400	Mode:1
SineTheta:46356	I(C/s/nA):54.925	Date:14/Mar/95

Al Ka	Shift:0	Valence:3
Time(sec):40	Pre.(%):0.1	Bkg(sec):0.0
(+)Bkg:600	(-)Bkg:-600	Slope:0.000
Standard:5Al2O3		
Time(sec):20	Prec.(%):0.1	Bkg(sec):0.0
(+)Bkg:600	(-)Bkg:-600	Slope:0.000
Bias(V):1457	Gain(*):120	DeadTime(us):2
Baseline:1400	Window:1500	Mode:1
SineTheta:32462	I(C/s/nA):787.295	Date:14/Mar/95

Sp2 TAP

Si Ka	Shift:0	Valence:4
Time(sec):20	Pre.(%):0.1	Bkg(sec):0.0
(+)Bkg:500	(-)Bkg:-500	Slope:0.000
Standard:5SiO2		
Time(sec):20	Prec.(%):0.1	Bkg(sec):10.0
(+)Bkg:500	(-)Bkg:-500	Slope:0.000
Bias(V):1462	Gain(*):120	DeadTime(us):2
Baseline:2400	Window:1200	Mode:1
SineTheta:27731	I(C/s/nA):586.464	Date:14/Mar/95

As La	Shift:0	Valence:5
Time(sec):50	Pre.(%):0.1	Bkg(sec):0.0
(+)Bkg:600	(-)Bkg:-600	Slope:0.000
Standard:5GaAs		
Time(sec):20	Prec.(%):0.1	Bkg(sec):10.0
(+)Bkg:600	(-)Bkg:-600	Slope:0.000
Bias(V):1462	Gain(*):120	DeadTime(us):2
Baseline:1200	Window:1700	Mode:1
SineTheta:37640	I(C/s/nA):177.364	Date:14/Mar/95

Sp3 PET

Ca Ka	Shift:0	Valence:2
Time(sec):20	Pre.(%):0.1	Bkg(sec):0.0
(+)Bkg:500	(-)Bkg:-500	Slope:0.000
Standard:5CaSiO3		
Time(sec):20	Prec.(%):0.1	Bkg(sec):10.0

(+)Bkg:500 (-)Bkg:-500 Slope:0.000
Bias(V):1951 Gain(*):120 DeadTime(us):2
Baseline:1100 Window:1400 Mode:1
SineTheta:38385 I(C/s/nA):256.554 Date:14/Mar/95

S Ka Shift:0 Valence:6
Time(sec):30 Pre.(%):0.1 Bkg(sec):0.0
(+)Bkg:500 (-)Bkg:-500 Slope:0.000
Standard:5CaSO4
Time(sec):20 Prec.(%):0.1 Bkg(sec):0.0
(+)Bkg:500 (-)Bkg:-500 Slope:0.000
Bias(V):1951 Gain(*):120 DeadTime(us):2
Baseline:600 Window:1300 Mode:1
SineTheta:61394 I(C/s/nA):97.858 Date:14/Mar/95

K Ka Shift:0 Valence:1
Time(sec):20 Pre.(%):0.1 Bkg(sec):0.0
(+)Bkg:500 (-)Bkg:-500 Slope:0.000
Standard:5orthocla
Time(sec):20 Prec.(%):0.1 Bkg(sec):10.0
(+)Bkg:500 (-)Bkg:-500 Slope:0.000
Bias(V):1951 Gain(*):120 DeadTime(us):2
Baseline:1100 Window:1300 Mode:1
SineTheta:42761 I(C/s/nA):83.433 Date:14/Mar/95

Sp4 LIF
Fe Ka Shift:0 Valence:3
Time(sec):70 Pre.(%):0.1 Bkg(sec):0.0
(+)Bkg:500 (-)Bkg:-500 Slope:0.000
Standard:5Fe2O3
Time(sec):20 Prec.(%):0.1 Bkg(sec):0.0
(+)Bkg:500 (-)Bkg:-500 Slope:0.000
Bias(V):1810 Gain(*):120 DeadTime(us):2
Baseline:1100 Window:1000 Mode:1
SineTheta:48077 I(C/s/nA):143.107 Date:14/Mar/95

Condition #2 15.0 kV 200 nA

Sp1 TAP

Sp2 TAP

Sp3 PET
Pb Ma Shift:0 Valence:4
Time(sec):40 Pre.(%):0.1 Bkg(sec):0.0
(+)Bkg:750 (-)Bkg:-750 Slope:0.000
Standard:5PbS
Time(sec):20 Prec.(%):0.1 Bkg(sec):10.0
(+)Bkg:750 (-)Bkg:-750 Slope:0.000
Bias(V):1951 Gain(*):120 DeadTime(us):2
Baseline:600 Window:1600 Mode:1
SineTheta:60420 I(C/s/nA):82.789 Date:14/Mar/95

U Ma Shift:0 Valence:4
Time(sec):60 Pre.(%):0.1 Bkg(sec):60.0
(+)Bkg:750 (-)Bkg:0 Slope:1.050
Standard:4UO2
Time(sec):20 Prec.(%):0.1 Bkg(sec):20.0
(+)Bkg:750 (-)Bkg:0 Slope:1.050
Bias(V):1951 Gain(*):120 DeadTime(us):2
Baseline:1200 Window:1300 Mode:1
SineTheta:44670 I(C/s/nA):128.664 Date:14/Mar/95

Sp4 LIF

Not analyzed :0

Quantitative Analysis Declaration

1:swritrav
Date:Wed Mar 15 11:20:50 1995
Type:Stoi
Take Off Angle:40.
Iteration Limit:0.000

Condition #1 15.0 kV 200 nA

Sp1 TAP

Al Ka	Shift:0	Valence:3
Time(sec):10	Pre.(%):0.1	Bkg(sec):0.0
(+)Bkg:600	(-)Bkg:-600	Slope:0.000

Standard:5Al2O3		
Time(sec):20	Prec.(%):0.1	Bkg(sec):0.0
(+)Bkg:600	(-)Bkg:-600	Slope:0.000
Bias(V):1457	Gain(*):120	DeadTime(us):2
Baseline:1400	Window:1500	Mode:1
SineTheta:32462	I(C/s/nA):787.295	Date:14/Mar/95

Sp2 TAP

Si Ka	Shift:0	Valence:4
Time(sec):10	Pre.(%):0.1	Bkg(sec):0.0
(+)Bkg:500	(-)Bkg:-500	Slope:0.000

Standard:5SiO2		
Time(sec):20	Prec.(%):0.1	Bkg(sec):10.0
(+)Bkg:500	(-)Bkg:-500	Slope:0.000
Bias(V):1462	Gain(*):120	DeadTime(us):2
Baseline:2400	Window:1200	Mode:1
SineTheta:27731	I(C/s/nA):586.464	Date:14/Mar/95

Sp3 PET

U Ma	Shift:0	Valence:4
Time(sec):60	Pre.(%):0.1	Bkg(sec):60.0
(+)Bkg:750	(-)Bkg:0	Slope:1.050

Standard:4UO2		
Time(sec):20	Prec.(%):0.1	Bkg(sec):20.0
(+)Bkg:750	(-)Bkg:0	Slope:1.050
Bias(V):1951	Gain(*):120	DeadTime(us):2
Baseline:1200	Window:1300	Mode:1
SineTheta:44670	I(C/s/nA):128.664	Date:14/Mar/95

Sp4 LIF

Fe Ka	Shift:0	Valence:3
Time(sec):20	Pre.(%):0.1	Bkg(sec):0.0
(+)Bkg:500	(-)Bkg:-500	Slope:0.000

Standard:5Fe2O3		
Time(sec):20	Prec.(%):0.1	Bkg(sec):0.0
(+)Bkg:500	(-)Bkg:-500	Slope:0.000
Bias(V):1810	Gain(*):120	DeadTime(us):2
Baseline:1100	Window:1000	Mode:1
SineTheta:48077	I(C/s/nA):143.107	Date:14/Mar/95

Not analyzed :0

, 3-14a swrisife.dat <CAMECA : 8.0- 3.2>

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quantitative microprobe analysis
multi label

point n : 1 x= 7083 y= 27064 z= 0 swrisife
5Fe2O3_stdck#1

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46356	3.33	3.47	0.00000	10.0		
Al	32462	12.10	10.78	0.00011	4.5		
Si	27731	15.25	13.40	0.00021	5.7		
As	37640	7.48	7.30	0.00007	5.2		
Ca	38385	7.25	7.80	0.00000	8.3		
S	61394	2.37	1.63	0.00050	11.9		
K	42761	6.90	7.50	0.00000	8.5		
Fe	48077	2169.00	10.91	1.00525	0.5		
						201.	15.0
Pb	60420	36.88	35.73	0.00007	2.7		
U	44670	85.35	85.12	0.00001	1.5		

Analysis no. 1 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0000	0.0000	0.000	0.00	Na2O	
Al :	0.0001	0.0000	0.009	0.01	Al2O3	0.016
Si :	0.0002	0.0001	0.012	0.01	SiO2	0.026
As :	0.0001	0.0000	0.004	0.00	As2O5	0.007
Ca :	0.0000	0.0000	0.000	0.00	CaO	
S :	0.0005	0.0001	0.012	0.01	SO3	0.031
K :	0.0000	0.0000	0.000	0.00	K2O	
Fe :	1.0053	0.6499	70.248	39.95	Fe2O3	100.434
Pb :	0.0001	0.0001	0.008	0.00	PbO2	0.009
U :	0.0000	0.0000	0.001	0.00	UO2	0.001
O			30.230	60.01	by stoichiometry	
total :			100.524			100.524

iteration : 2
be carefull - k.r./w.f. = 0.00 for Na
be carefull - k.r./w.f. = 0.43 for As
be carefull - k.r./w.f. = 0.00 for Ca
be carefull - k.r./w.f. = 0.00 for K

point n : 2 x= 6920 y= 27141 z= 0 swrisife
5Fe2O3_stdck#2

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46356	3.70	3.07	0.00077	9.5		
Al	32462	12.73	10.45	0.00019	4.4		
Si	27731	14.85	12.30	0.00029	5.8		
As	37640	8.26	7.44	0.00031	4.9		
Ca	38385	9.10	8.90	0.00005	7.4		
S	61394	2.33	2.80	0.00000	12.0		
K	42761	6.80	7.65	0.00000	8.6		
Fe	48077	2173.39	12.00	1.00731	0.5		
						201.	15.0
Pb	60420	35.55	34.65	0.00005	2.7		
U	44670	85.75	83.21	0.00010	1.5		

Analysis no. 2 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0008	0.0000	0.013	0.02	Na2O	0.017
Al :	0.0002	0.0001	0.015	0.02	Al2O3	0.028
Si :	0.0003	0.0001	0.017	0.02	SiO2	0.035
As :	0.0003	0.0001	0.020	0.01	As2O5	0.031
Ca :	0.0001	0.0000	0.002	0.00	CaO	0.002
S :	0.0000	0.0000	0.000	0.00	SO3	
K :	0.0000	0.0000	0.000	0.00	K2O	
Fe :	1.0073	0.6512	70.364	39.93	Fe2O3	100.600
Pb :	0.0001	0.0000	0.006	0.00	PbO2	0.007
U :	0.0001	0.0001	0.011	0.00	UO2	0.012
O			30.287	60.00	by stoichiometry	
total :			100.734			100.734

iteration : 2
be carefull - k.r./w.f. = 0.29 for Na
be carefull - k.r./w.f. = 0.43 for As
be carefull - k.r./w.f. = 0.00 for S
be carefull - k.r./w.f. = 0.00 for K

point n : 3 x= 8888 y= 31561 z= -5 swrisife
5SiO2_stdck#1

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46356	3.47	3.97	0.00000	9.8		
Al	32462	13.25	12.60	0.00006	4.3		
Si	27731	8867.73	56.36	1.00204	0.3		
As	37640	7.68	8.48	0.00000	5.1		
	38385	4.25	4.60	0.00000	10.9		
	61394	1.47	1.00	0.00032	15.1		
K	42761	3.15	3.00	0.00012	12.6		
Fe	48077	2.60	2.20	0.00019	7.4		
						201.	15.0
Pb	60420	18.10	17.85	0.00002	3.8		
U	44670	42.35	41.65	0.00003	2.0		

Analysis no. 3 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0000	0.0000	0.000	0.00	Na2O	
Al :	0.0001	0.0000	0.003	0.00	Al2O3	0.006
Si :	1.0020	0.4027	46.825	33.32	SiO2	100.172
As :	0.0000	0.0000	0.000	0.00	As2O5	
Ca :	0.0000	0.0000	0.000	0.00	CaO	
S :	0.0003	0.0001	0.010	0.01	SO3	0.024
K :	0.0001	0.0000	0.002	0.00	K2O	0.002
Fe :	0.0002	0.0001	0.015	0.01	Fe2O3	0.021
Pb :	0.0000	0.0000	0.002	0.00	PbO2	0.002
U :	0.0000	0.0000	0.003	0.00	UO2	0.004
O			53.372	66.67	by stoichiometry	
total :			100.231			100.231

iteration : 1
be carefull - k.r./w.f. = 0.00 for Na
be carefull - k.r./w.f. = 0.00 for As
be carefull - k.r./w.f. = 0.00 for Ca

point n : 4 x= 8888 y= 31490 z= -5 swrisife
5SiO2_stdck#2

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0

Na	48358	3.73	3.80	0.00018	7.2		
Al	32462	13.95	11.55	0.00020	4.2		
Si	27731	8850.18	50.86	1.00075	0.3		
As	37640	7.94	7.24	0.00026	5.0		
Ca	38385	4.05	3.85	0.00005	11.1		
S	61394	1.60	1.03	0.00039	14.4		
K	42761	3.50	3.25	0.00020	12.0		
	48077	2.87	2.49	0.00018	7.1		
						201.	15.0
Pb	60420	16.90	18.60	0.00000	3.9		
U	44670	40.35	43.56	0.00000	2.1		

Analysis no. 4 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0002	0.0000	0.001	0.00	Na2O	0.002
Al :	0.0002	0.0001	0.011	0.01	Al2O3	0.021
Si :	1.0008	0.4022	46.776	33.31	SiO2	100.067
As :	0.0003	0.0001	0.011	0.00	As2O5	0.017
Ca :	0.0001	0.0000	0.002	0.00	CaO	0.003
S :	0.0004	0.0001	0.012	0.01	SO3	0.029
K :	0.0002	0.0000	0.003	0.00	K2O	0.003
Fe :	0.0002	0.0001	0.014	0.01	Fe2O3	0.021
Pb :	0.0000	0.0000	0.000	0.00	PbO2	
U :	0.0000	0.0000	0.000	0.00	UO2	
O			53.332	66.67	by stoichiometry	
total :			100.162			100.162

iteration : 1

be carefull - k.r./w.f. = 0.00 for Pb

be carefull - k.r./w.f. = 0.00 for U

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<CAMECA : 8.0- 3.2>

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quantitative microprobe analysis
multi label

calibration data :

	spc	xtal	pos.	+bg. shift (range)	-bg. shift (channel #)	bg. slope (-speed/100.)	pk-bg (c/s/nA) (c/nA)	sigma	pk_tim (s) (repeat)	% req. acc.	bg_tim (ms) (speed)
Na	1	TAP	46356	500	-500	0.000	54.925	0.8	20	0.1	0
Al	1	TAP	32462	600	-600	0.000	787.295	0.2	20	0.1	0
Si	2	TAP	27731	500	-500	0.000	586.464	0.2	20	0.1	10000
As	2	TAP	37640	600	-600	0.000	177.364	0.4	20	0.1	10000
Ca	3	PET	38385	500	-500	0.000	256.554	0.4	20	0.1	10000
S	3	PET	61394	500	-500	0.000	97.858	0.6	20	0.1	0
K	3	PET	42761	500	-500	0.000	83.433	0.6	20	0.1	10000
Fe	4	LIF	48077	500	-500	0.000	143.107	0.5	20	0.1	0
Pb	3	PET	60420	750	-750	0.000	82.789	0.6	20	0.1	10000
U	3	PET	44670	750	0	1.050	128.664	0.5	20	0.1	20000

point n : 1 x= -13751 y= -4365 z= 49
NOP419_1_pt1

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46356	6.40	3.90	0.00302	7.3		
Al	32462	29.35	11.83	0.00148	2.9		
Si	27731	167.16	13.70	0.01738	1.7		
As	37640	49.36	8.88	0.01516	2.1		
Ca	38385	30.50	9.15	0.00553	4.1		
S	61394	8.33	2.27	0.00412	6.4		
K	42761	9.35	9.15	0.00016	7.3		
Fe	48077	1898.71	9.34	0.87694	0.6		
						201.	15.0
Pb	60420	70.36	35.15	0.00212	2.0		
U	44670	146.51	83.30	0.00245	1.2		

Analysis no. 5 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0030	0.0001	0.048	0.07	Na2O	0.065
Al :	0.0015	0.0006	0.112	0.14	Al2O3	0.212
Si :	0.0174	0.0070	0.991	1.19	SiO2	2.120
As :	0.0152	0.0043	0.986	0.44	As2O5	1.513
Ca :	0.0055	0.0017	0.170	0.14	CaO	0.237
S :	0.0041	0.0009	0.102	0.11	SO3	0.256
K :	0.0002	0.0000	0.002	0.00	K2O	0.002
Fe :	0.8769	0.5669	62.072	37.39	Fe2O3	88.746
Pb :	0.0021	0.0018	0.242	0.04	PbO2	0.280
U :	0.0024	0.0021	0.269	0.04	UO2	0.306
O			28.741	60.44	by stoichiometry	
total :			93.736			93.736

iteration : 2
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 2 x= -13754 y= -4355 z= 49
NOP419_1_pt2

elt. peak peak backgr. i.x./i.std. sig/k beam kv

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46356	10.30	5.30	0.00605	5.7		
Al	32462	125.71	12.30	0.00958	1.4		
Si	27731	344.99	12.45	0.03770	1.2		
As	37640	55.47	7.92	0.01783	1.9		
Ca	38385	25.45	11.40	0.00364	4.4		
S	61394	5.83	2.40	0.00233	7.6		
K	42761	10.55	9.10	0.00116	6.9		
Fe	48077	1625.06	9.97	0.75045	0.6		
						201.	15.0
Pb	60420	53.76	34.63	0.00115	2.2		
U	44670	194.23	82.46	0.00432	1.1		

Analysis no. 6 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0061	0.0003	0.094	0.15	Na2O	0.127
Al :	0.0096	0.0041	0.719	0.95	Al2O3	1.358
Si :	0.0377	0.0152	2.149	2.74	SiO2	4.596
As :	0.0178	0.0051	1.139	0.54	As2O5	1.747
Ca :	0.0036	0.0011	0.113	0.10	CaO	0.158
S :	0.0023	0.0005	0.058	0.07	SO3	0.146
K :	0.0012	0.0001	0.013	0.01	K2O	0.016
Fe :	0.7505	0.4852	53.947	34.60	Fe2O3	77.129
Pb :	0.0011	0.0010	0.133	0.02	PbO2	0.153
U :	0.0043	0.0036	0.480	0.07	UO2	0.544
O			27.130	60.74	by stoichiometry	
total :			85.975			85.975

iteration : 3

be carefull - k.r./w.f. = 0.30 for Na

be carefull - k.r./w.f. = 0.45 for As

point n : 3 x= -13810 y= -4419 z= 49

NOP419_1_pt3

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46356	6.57	3.43	0.00379	7.2		
Al	32462	38.08	11.73	0.00223	2.6		
Si	27731	197.53	13.50	0.02087	1.6		
As	37640	42.52	8.04	0.01293	2.2		
Ca	38385	26.80	9.15	0.00457	4.3		
S	61394	10.67	2.70	0.00541	5.6		
K	42761	9.15	7.80	0.00108	7.4		
Fe	48077	1877.16	9.84	0.86766	0.6		
						201.	15.0
Pb	60420	73.64	35.70	0.00228	1.9		
U	44670	140.51	85.87	0.00211	1.2		

Analysis no. 7 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0038	0.0002	0.061	0.09	Na2O	0.082
Al :	0.0022	0.0009	0.169	0.21	Al2O3	0.318
Si :	0.0209	0.0084	1.189	1.42	SiO2	2.543
As :	0.0129	0.0037	0.840	0.38	As2O5	1.288
Ca :	0.0046	0.0014	0.141	0.12	CaO	0.197
S :	0.0054	0.0012	0.135	0.14	SO3	0.336
K :	0.0011	0.0001	0.012	0.01	K2O	0.015
Fe :	0.8677	0.5609	61.521	37.08	Fe2O3	87.957
Pb :	0.0023	0.0019	0.261	0.04	PbO2	0.302
U :	0.0021	0.0018	0.233	0.03	UO2	0.265
O			28.742	60.47	by stoichiometry	

total : 73.392 73.392

iteration : 2

be carefull - k.r./w.f. = 0.30 for Na

be carefull - k.r./w.f. = 0.44 for As

point n : 4 x= -13796 y= -4406 z= 49

NOP419_1_pt4

	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46356	9.47	5.00	0.00541	6.0		
Al	32462	154.57	11.88	0.01205	1.3		
Si	27731	309.44	12.00	0.03373	1.3		
As	37640	59.31	8.90	0.01890	1.9		
Ca	38385	24.90	7.70	0.00446	4.5		
S	61394	4.60	2.47	0.00145	8.5		
K	42761	8.90	6.80	0.00167	7.5		
Fe	48077	1611.33	8.97	0.74459	0.6		
						201.	15.0
Pb	60420	48.85	33.65	0.00091	2.3		
U	44670	204.15	82.51	0.00471	1.0		

Analysis no. 8 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0054	0.0003	0.084	0.13	Na2O	0.114
Al :	0.0121	0.0051	0.905	1.21	Al2O3	1.710
Si :	0.0337	0.0136	1.926	2.48	SiO2	4.119
As :	0.0189	0.0054	1.207	0.58	As2O5	1.851
Ca :	0.0045	0.0014	0.138	0.12	CaO	0.193
S :	0.0014	0.0003	0.036	0.04	SO3	0.091
K :	0.0017	0.0002	0.019	0.02	K2O	0.023
Fe :	0.7446	0.4814	53.544	34.63	Fe2O3	76.553
Pb :	0.0009	0.0008	0.106	0.02	PbO2	0.122
U :	0.0047	0.0039	0.522	0.08	UO2	0.592
O			26.881	60.69	by stoichiometry	
total :			85.367			85.367

iteration : 3

be carefull - k.r./w.f. = 0.30 for Na

be carefull - k.r./w.f. = 0.45 for As

point n : 5 x= -13536 y= -4386 z= 49

NOP419_1_pt5

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46356	6.47	3.83	0.00319	7.2		
Al	32462	31.30	10.55	0.00175	2.8		
Si	27731	176.96	13.15	0.01858	1.7		
As	37640	46.94	7.90	0.01464	2.1		
Ca	38385	25.85	8.85	0.00441	4.4		
S	61394	8.70	2.23	0.00439	6.2		
K	42761	9.40	7.35	0.00163	7.3		
Fe	48077	1914.60	10.80	0.88472	0.6		
						201.	15.0
Pb	60420	71.01	36.65	0.00207	2.0		
U	44670	161.62	84.56	0.00298	1.1		

Analysis no. 9 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0032	0.0002	0.051	0.07	Na2O	0.069
Al :	0.0018	0.0007	0.133	0.16	Al2O3	0.251
Si :	0.0186	0.0075	1.059	1.26	SiO2	2.265
As :	0.0146	0.0042	0.952	0.42	As2O5	1.440

Ca :	0.0044	0.0014	0.135	0.11	CaO	0.187
S :	0.0044	0.0010	0.109	0.11	SO3	0.273
K :	0.0016	0.0002	0.018	0.02	K2O	0.022
Fe :	0.8847	0.5720	62.549	37.31	Fe2O3	89.427
Pb :	0.0021	0.0017	0.237	0.04	PbO2	0.273
U :	0.0030	0.0025	0.329	0.05	UO2	0.373
O			29.031	60.45	by stoichiometry	
total :			94.603			94.603

iteration : 2
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 6 x= -13521 y= -4408 z= 49
NOP419_1_pt6

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46356	9.17	5.23	0.00476	6.1		
Al	32462	128.86	10.73	0.00998	1.4		
Si	27731	321.56	12.60	0.03503	1.3		
As	37640	58.65	8.60	0.01876	1.9		
Ca	38385	21.85	9.25	0.00327	4.8		
S	61394	4.47	2.27	0.00149	8.7		
K	42761	8.20	6.85	0.00108	7.8		
Fe	48077	1547.47	9.26	0.71473	0.6		
						201.	15.0
Pb	60420	52.66	34.15	0.00111	2.3		
U	44670	192.69	81.20	0.00432	1.1		

Analysis no. 10 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0048	0.0002	0.074	0.12	Na2O	0.100
Al :	0.0100	0.0043	0.749	1.04	Al2O3	1.416
Si :	0.0350	0.0141	1.999	2.66	SiO2	4.276
As :	0.0188	0.0053	1.198	0.60	As2O5	1.837
Ca :	0.0033	0.0010	0.101	0.09	CaO	0.141
S :	0.0015	0.0003	0.037	0.04	SO3	0.094
K :	0.0011	0.0001	0.012	0.01	K2O	0.015
Fe :	0.7147	0.4621	51.609	34.58	Fe2O3	73.787
Pb :	0.0011	0.0009	0.129	0.02	PbO2	0.148
U :	0.0043	0.0036	0.479	0.08	UO2	0.543
O			25.969	60.75	by stoichiometry	
total :			82.357			82.357

iteration : 3
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.45 for As

point n : 7 x= -6014 y= -10898 z= 50
NOP419_2_pt1

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46356	13.77	5.47	0.01005	5.0		
Al	32462	122.98	11.15	0.00945	1.4		
Si	27731	359.06	11.90	0.03937	1.2		
[illegible]	37640	34.82	8.04	0.01004	2.4		
Ca	38385	20.80	8.30	0.00324	4.9		
S	61394	8.43	2.57	0.00399	6.3		
K	42761	11.15	8.50	0.00211	6.7		
Fe	48077	1505.40	8.49	0.69562	0.6		
						201.	15.0
Pb	60420	47.20	33.90	0.00080	2.4		
U	44670	159.13	83.49	0.00293	1.1		

Analysis no. 11 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0100	0.0005	0.157	0.26	Na2O	0.212
Al :	0.0094	0.0040	0.707	1.00	Al2O3	1.336
Si :	0.0394	0.0158	2.239	3.03	SiO2	4.790
As :	0.0100	0.0029	0.643	0.33	As2O5	0.986
Ca :	0.0032	0.0010	0.100	0.10	CaO	0.140
S :	0.0040	0.0009	0.100	0.12	SO3	0.250
K :	0.0021	0.0002	0.024	0.02	K2O	0.029
Fe :	0.6956	0.4497	50.523	34.39	Fe2O3	72.234
Pb :	0.0008	0.0007	0.092	0.02	PbO2	0.107
U :	0.0029	0.0025	0.325	0.05	UO2	0.369
O			25.541	60.69	by stoichiometry	
total :			80.453			80.453

iteration : 3
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 8 x= -6009 y= -10865 z= 50
NOP419_2_pt2

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46356	5.80	3.70	0.00254	7.6		
Al	32462	29.63	11.05	0.00157	2.9		
Si	27731	190.12	12.30	0.02017	1.6		
As	37640	34.20	7.70	0.00994	2.5		
Ca	38385	31.05	10.10	0.00543	4.0		
S	61394	8.20	2.60	0.00381	6.4		
	42761	8.80	6.80	0.00159	7.6		
	48077	1654.73	9.60	0.76463	0.6		
						201.	15.0
Pb	60420	74.29	34.25	0.00241	1.9		
U	44670	119.85	83.70	0.00140	1.3		

Analysis no. 12 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0025	0.0001	0.041	0.07	Na2O	0.055
Al :	0.0016	0.0007	0.119	0.17	Al2O3	0.224
Si :	0.0202	0.0081	1.148	1.54	SiO2	2.456
As :	0.0099	0.0028	0.646	0.32	As2O5	0.991
Ca :	0.0054	0.0017	0.167	0.16	CaO	0.234
S :	0.0038	0.0008	0.095	0.11	SO3	0.236
K :	0.0016	0.0002	0.018	0.02	K2O	0.022
Fe :	0.7646	0.4943	55.049	37.09	Fe2O3	78.705
Pb :	0.0024	0.0020	0.276	0.05	PbO2	0.319
U :	0.0014	0.0012	0.154	0.02	UO2	0.175
O			25.704	60.45	by stoichiometry	
total :			83.417			83.417

iteration : 2
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

int n : 9 x= -5997 y= -10840 z= 50
NOP419_2_pt3

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46356	8.50	5.03	0.00420	6.3		
Al	32462	165.28	12.15	0.01294	1.2		
Si	27731	314.45	14.20	0.03405	1.3		

Ca	38385	24.20	8.30	0.00412	4.6
S	61394	4.13	2.53	0.00109	9.0
K	42761	7.60	7.20	0.00032	8.1
Fe	48077	1560.34	9.09	0.72102	0.6
					201. 15.0
Pb	60420	53.16	33.10	0.00121	2.3
	44670	170.67	81.09	0.00347	1.1

Analysis no. 13 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0042	0.0002	0.066	0.11	Na2O	0.088
Al :	0.0129	0.0055	0.970	1.33	Al2O3	1.834
Si :	0.0341	0.0137	1.944	2.57	SiO2	4.159
As :	0.0165	0.0047	1.053	0.52	As2O5	1.615
Ca :	0.0041	0.0013	0.128	0.12	CaO	0.178
S :	0.0011	0.0002	0.027	0.03	SO3	0.068
K :	0.0003	0.0000	0.004	0.00	K2O	0.004
Fe :	0.7210	0.4661	52.066	34.55	Fe2O3	74.440
Pb :	0.0012	0.0010	0.139	0.02	PbO2	0.161
U :	0.0035	0.0029	0.385	0.06	UO2	0.437
O			26.203	60.69	by stoichiometry	
total :			82.985			82.985

iteration : 3
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.45 for As

point n : 10 x= -6010 y= -10849 z= 50
NOP419_2_pt4

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46356	4.97	3.17	0.00218	8.2		
Al	32462	27.93	11.60	0.00138	3.0		
Si	27731	185.62	13.10	0.01957	1.7		
As	37640	41.22	8.24	0.01237	2.2		
Ca	38385	27.35	7.95	0.00503	4.3		
S	61394	7.67	2.77	0.00333	6.6		
K	42761	7.95	6.50	0.00116	8.0		
Fe	48077	1930.57	10.57	0.89249	0.6		
						201.	15.0
Pb	60420	77.89	34.20	0.00263	1.9		
U	44670	123.03	84.50	0.00149	1.3		

Analysis no. 14 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0022	0.0001	0.035	0.05	Na2O	0.047
Al :	0.0014	0.0006	0.105	0.13	Al2O3	0.198
Si :	0.0196	0.0079	1.115	1.32	SiO2	2.385
As :	0.0124	0.0035	0.805	0.36	As2O5	1.235
Ca :	0.0050	0.0016	0.154	0.13	CaO	0.216
S :	0.0033	0.0007	0.083	0.09	SO3	0.207
K :	0.0012	0.0001	0.013	0.01	K2O	0.016
Fe :	0.8925	0.5770	63.084	37.43	Fe2O3	90.192
Pb :	0.0026	0.0022	0.301	0.05	PbO2	0.348
:	0.0015	0.0013	0.164	0.02	UO2	0.187
O			29.170	60.42	by stoichiometry	
total :			95.029			95.029

iteration : 2
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 11 x= [illegible] y= [illegible] z= 50

NOP419_2_pt5

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46356	8.93	4.40	0.00549	6.2		
Al	32462	189.40	12.80	0.01492	1.2		
Si	27731	362.41	14.20	0.03949	1.2		
As	37640	47.56	8.56	0.01463	2.1		
Ca	38385	18.25	7.95	0.00267	5.2		
S	61394	4.30	2.53	0.00120	8.8		
K	42761	8.00	6.50	0.00120	7.9		
Fe	48077	1573.67	10.20	0.72665	0.6		
						201.	15.0
Pb	60420	49.33	32.15	0.00103	2.3		
U	44670	150.10	78.88	0.00276	1.2		

Analysis no. 15 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0055	0.0003	0.086	0.13	Na2O	0.115
Al :	0.0149	0.0064	1.116	1.50	Al2O3	2.109
Si :	0.0395	0.0159	2.253	2.91	SiO2	4.820
As :	0.0146	0.0042	0.933	0.45	As2O5	1.431
Ca :	0.0027	0.0008	0.083	0.07	CaO	0.116
S :	0.0012	0.0003	0.030	0.03	SO3	0.075
K :	0.0012	0.0001	0.014	0.01	K2O	0.016
Fe :	0.7267	0.4698	52.479	34.09	Fe2O3	75.029
Pb :	0.0010	0.0009	0.120	0.02	PbO2	0.138
U :	0.0028	0.0023	0.306	0.05	UO2	0.347
O			26.779	60.72	by stoichiometry	
total :			84.197			84.197

iteration : 3

be carefull - k.r./w.f. = 0.30 for Na

be carefull - k.r./w.f. = 0.45 for As

point n : 12 x= -6078 y= -10945 z= 50

NOP419_2_pt6

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46356	5.73	4.23	0.00182	7.7		
Al	32462	27.60	11.35	0.00137	3.0		
Si	27731	189.47	12.15	0.02011	1.6		
As	37640	34.52	7.92	0.00997	2.4		
Ca	38385	19.85	7.50	0.00320	5.0		
S	61394	7.77	2.17	0.00381	6.6		
K	42761	8.30	6.20	0.00167	7.8		
Fe	48077	1827.37	11.01	0.84402	0.6		
						201.	15.0
Pb	60420	74.51	34.25	0.00242	1.9		
U	44670	119.36	82.19	0.00144	1.3		

Analysis no. 16 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0018	0.0001	0.029	0.04	Na2O	0.039
Al :	0.0014	0.0006	0.104	0.13	Al2O3	0.196
Si :	0.0201	0.0081	1.145	1.42	SiO2	2.449
As :	0.0100	0.0028	0.650	0.30	As2O5	0.997
Ca :	0.0032	0.0010	0.098	0.09	CaO	0.138
S :	0.0038	0.0008	0.095	0.10	SO3	0.236
K :	0.0017	0.0002	0.019	0.02	K2O	0.023
Fe :	0.8440	0.5457	60.100	37.39	Fe2O3	85.926
Pb :	0.0024	0.0020	0.278	0.05	PbO2	0.320

U :	0.0014	0.0012	0.157	0.02	UO2	0.180
O			27.829	60.44	by stoichiometry	
total :			90.504			90.504

iteration : 2
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 13 x= 5343 y= -23515 z= 12
NOP418_1_pt1

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46356	7.37	5.17	0.00266	6.8		
Al	32462	73.31	9.53	0.00539	1.9		
Si	27731	355.75	14.65	0.03868	1.2		
As	37640	46.18	8.52	0.01412	2.1		
Ca	38385	19.35	8.20	0.00289	5.1		
S	61394	5.50	2.17	0.00227	7.8		
K	42761	9.25	8.45	0.00064	7.4		
Fe	48077	1617.65	9.76	0.74723	0.6		
						201.	15.0
Pb	60420	41.35	34.08	0.00044	2.5		
U	44670	407.05	83.54	0.01252	0.8		

Analysis no. 17 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0027	0.0001	0.041	0.07	Na2O	0.056
Al :	0.0054	0.0023	0.403	0.54	Al2O3	0.762
Si :	0.0387	0.0155	2.194	2.85	SiO2	4.694
As :	0.0141	0.0040	0.902	0.44	As2O5	1.384
Ca :	0.0029	0.0009	0.089	0.08	CaO	0.125
S :	0.0023	0.0005	0.057	0.06	SO3	0.141
K :	0.0006	0.0001	0.007	0.01	K2O	0.009
Fe :	0.7472	0.4831	53.590	34.95	Fe2O3	76.619
Pb :	0.0004	0.0004	0.050	0.01	PbO2	0.058
U :	0.0125	0.0105	1.385	0.21	UO2	1.571
O			26.699	60.78	by stoichiometry	
total :			85.420			85.420

iteration : 3
be carefull - k.r./w.f. = 0.31 for Na
be carefull - k.r./w.f. = 0.45 for As

point n : 14 x= 10864 y= -19572 z= 25
NOP418_2_pt1

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46356	5.00	3.77	0.00149	8.2		
Al	32462	16.80	10.38	0.00054	3.9		
Si	27731	183.17	13.75	0.01921	1.7		
As	37640	38.58	8.40	0.01132	2.3		
Ca	38385	20.50	9.25	0.00292	5.0		
S	61394	7.97	2.10	0.00399	6.5		
K	42761	9.90	8.05	0.00147	7.1		
Fe	48077	1923.17	9.99	0.88910	0.6		
						201.	15.0
Pb	60420	69.41	35.75	0.00202	2.0		
U	44670	246.17	87.76	0.00613	1.0		

Analysis no. 18 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0015	0.0001	0.024	0.03	Na2O	0.032

Al :	[illegible]	[illegible]	[illegible]	[illegible]	Al2O3	[illegible]
Si :	0.0192	0.0077	1.093	1.30	SiO2	2.338
As :	0.0113	0.0032	0.736	0.33	As2O5	1.129
Ca :	0.0029	0.0009	0.090	0.07	CaO	0.125
S :	0.0040	0.0009	0.099	0.10	SO3	0.247
K :	0.0015	0.0002	0.017	0.01	K2O	0.020
Fe :	0.8891	0.5748	62.787	37.52	Fe2O3	89.768
Pb :	0.0020	0.0017	0.232	0.04	PbO2	0.267
U :	0.0061	0.0051	0.675	0.09	UO2	0.766
O			28.978	60.44	by stoichiometry	

total : 94.771 94.771

iteration : 2

be carefull - k.r./w.f. = 0.30 for Na

be carefull - k.r./w.f. = 0.44 for As

point n : 15 x= 10874 y= -19573 z= 25

NOP418_2_pt2

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46356	10.93	5.33	0.00678	5.6		
Al	32462	93.22	11.50	0.00690	1.6		
Si	27731	282.06	13.60	0.03045	1.4		
As	37640	98.46	8.22	0.03384	1.5		
Ca	38385	28.90	8.05	0.00541	4.2		
S	61394	4.10	2.27	0.00125	9.0		
K	42761	8.55	8.75	0.00000	7.7		
Fe	48077	1551.30	9.89	0.71641	0.6		
						201.	15.0
Pb	60420	57.33	33.28	0.00145	2.2		
U	44670	420.85	87.18	0.01292	0.8		

lysis no. 19 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0068	0.0003	0.104	0.17	Na2O	0.140
Al :	0.0069	0.0029	0.520	0.72	Al2O3	0.982
Si :	0.0304	0.0122	1.739	2.32	SiO2	3.721
As :	0.0338	0.0096	2.140	1.07	As2O5	3.283
Ca :	0.0054	0.0017	0.167	0.16	CaO	0.234
S :	0.0012	0.0003	0.031	0.04	SO3	0.078
K :	0.0000	0.0000	0.000	0.00	K2O	
Fe :	0.7164	0.4632	51.282	34.40	Fe2O3	73.318
Pb :	0.0014	0.0012	0.167	0.03	PbO2	0.192
U :	0.0129	0.0108	1.429	0.22	UO2	1.621
O			25.990	60.87	by stoichiometry	

total : 83.569 83.569

iteration : 3

be carefull - k.r./w.f. = 0.31 for Na

be carefull - k.r./w.f. = 0.45 for As

be carefull - k.r./w.f. = 0.00 for K

point n : 16 x= 10857 y= -19558 z= 25

NOP418_2_pt3

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46356	4.80	3.57	0.00149	8.4		
Al	32462	14.18	9.93	0.00036	4.2		
Si	27731	125.48	13.55	0.01270	2.0		
As	37640	35.34	8.22	0.01017	2.4		
Ca	38385	19.35	11.50	0.00204	5.1		
S	61394	9.43	2.67	0.00460	6.0		
K	42761	10.30	9.40	0.00072	7.0		

						201.	15.0
Pb	60420	69.83	34.48	0.00213	2.0		
U	44670	246.64	86.18	0.00621	1.0		

Analysis no. 20 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0015	0.0001	0.024	0.03	Na2O	0.032
Al :	0.0004	0.0002	0.027	0.03	Al2O3	0.051
Si :	0.0127	0.0051	0.723	0.86	SiO2	1.546
As :	0.0102	0.0029	0.664	0.30	As2O5	1.019
Ca :	0.0020	0.0006	0.062	0.05	CaO	0.087
S :	0.0046	0.0010	0.114	0.12	SO3	0.285
K :	0.0007	0.0001	0.008	0.01	K2O	0.010
Fe :	0.9030	0.5838	63.666	38.10	Fe2O3	91.025
Pb :	0.0021	0.0018	0.243	0.04	PbO2	0.280
U :	0.0062	0.0052	0.683	0.10	UO2	0.775
O			28.896	60.36	by stoichiometry	
total :			95.110			95.110

iteration : 2
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 17 x= 10844 y= -19552 z= 25
NOP418_1_pt4

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46356	12.43	5.63	0.00824	5.2		
Al	32462	91.22	12.58	0.00664	1.7		
Si	27731	272.35	12.45	0.02948	1.4		
As	37640	106.34	9.06	0.03649	1.4		
Ca	38385	36.25	10.40	0.00670	3.7		
S	61394	3.93	2.93	0.00068	9.2		
K	42761	10.50	9.60	0.00072	6.9		
Fe	48077	1556.56	9.19	0.71927	0.6		
						201.	15.0
Pb	60420	49.08	35.28	0.00083	2.3		
U	44670	473.41	87.92	0.01492	0.8		

Analysis no. 21 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0082	0.0004	0.126	0.20	Na2O	0.170
Al :	0.0066	0.0028	0.501	0.69	Al2O3	0.946
Si :	0.0295	0.0118	1.685	2.24	SiO2	3.604
As :	0.0365	0.0104	2.304	1.15	As2O5	3.535
Ca :	0.0067	0.0021	0.207	0.19	CaO	0.290
S :	0.0007	0.0001	0.017	0.02	SO3	0.042
K :	0.0007	0.0001	0.008	0.01	K2O	0.010
Fe :	0.7193	0.4650	51.403	34.37	Fe2O3	73.492
Pb :	0.0008	0.0007	0.096	0.02	PbO2	0.110
U :	0.0149	0.0125	1.649	0.26	UO2	1.871
O			26.074	60.85	by stoichiometry	
total :			84.070			84.070

iteration : 3
be carefull - k.r./w.f. = 0.31 for Na
be carefull - k.r./w.f. = 0.45 for As

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quantitative microprobe analysis
multi label

point n : 1 x= 5392 y= -23439 z= 12 swrisife
NOP418_1_pt2

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46356	5.23	3.67	0.00190	8.0		
Al	32462	33.05	12.50	0.00174	2.8		
Si	27731	283.06	16.30	0.03024	1.4		
As	37640	42.34	7.90	0.01291	2.2		
Ca	38385	18.20	7.05	0.00289	5.3		
S	61394	6.20	2.37	0.00260	7.4		
K	42761	9.55	9.15	0.00032	7.3		
Fe	48077	1900.47	10.11	0.87811	0.6		
						201.	15.0
Pb	60420	50.58	36.00	0.00088	2.3		
U	44670	250.26	83.94	0.00644	1.0		

Analysis no. 22 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0019	0.0001	0.030	0.04	Na2O	1500.000
Al :	0.0017	0.0007	0.131	0.16	Al2O3	1500.000
Si :	0.0302	0.0122	1.719	2.01	SiO2	1500.000
As :	0.0129	0.0037	0.835	0.37	As2O5	1500.000
Ca :	0.0029	0.0009	0.089	0.07	CaO	1500.000
S :	0.0026	0.0006	0.065	0.07	SO3	1500.000
K :	0.0003	0.0000	0.004	0.00	K2O	1500.000
Fe :	0.8781	0.5677	62.101	36.58	Fe2O3	1500.000
Pb :	0.0009	0.0007	0.101	0.02	PbO2	1500.000
U :	0.0064	0.0054	0.711	0.10	UO2	1500.000
O			29.461	60.58	by stoichiometry	
total :			95.246			95.246

iteration : 2
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 2 x= 5343 y= -23387 z= 12 swrisife
NOP418_1_pt3

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46356	7.73	4.57	0.00383	6.6		
Al	32462	75.99	10.85	0.00550	1.8		
Si	27731	365.12	12.55	0.03997	1.2		
As	37640	46.96	8.18	0.01454	2.1		
Ca	38385	20.85	7.55	0.00345	4.9		
S	61394	5.23	2.83	0.00163	8.0		
K	42761	7.75	7.65	0.00008	8.1		
Fe	48077	1619.37	9.83	0.74788	0.6		
						201.	15.0
Pb	60420	39.68	35.03	0.00028	2.6		
U	44670	394.81	84.03	0.01203	0.8		

Analysis no. 23 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0038	0.0002	0.060	0.09	Na2O	0.080
Al :	0.0055	0.0023	0.412	0.55	Al2O3	0.778
Si :	0.0400	0.0161	2.268	2.93	SiO2	4.852
As :	0.0145	0.0041	0.928	0.45	As2O5	1.424
Ca :	0.0034	0.0011	0.107	0.10	CaO	0.149
:	0.0016	0.0004	0.041	0.05	SO3	0.102
K :	0.0001	0.0000	0.001	0.00	K2O	0.001
Fe :	0.7479	0.4835	53.645	34.84	Fe2O3	76.697
Pb :	0.0003	0.0002	0.032	0.01	PbO2	0.037
U :	0.0120	0.0101	1.331	0.20	UO2	1.510
O			26.807	60.78	by stoichiometry	
total :			85.632			85.632

iteration : 3
be carefull - k.r./w.f. = 0.31 for Na
be carefull - k.r./w.f. = 0.45 for As

point n : 3 x= 5175 y= -23548 z= 13 swrisife NOP418_1_pt4

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46356	4.87	3.77	0.00133	8.3		
Al	32462	33.55	11.30	0.00188	2.7		
Si	27731	334.57	14.85	0.03626	1.2		
As	37640	37.54	8.60	0.01085	2.3		
Ca	38385	15.35	6.65	0.00226	5.7		
S	61394	3.83	2.57	0.00086	9.3		
K	42761	8.85	6.25	0.00207	7.5		
Fe	48077	1835.48	9.54	0.84863	0.6		
						201.	15.0
	60420	54.46	33.60	0.00125	2.2		
U	44670	234.39	82.70	0.00587	1.0		

Analysis no. 24 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0013	0.0001	0.021	0.03	Na2O	0.028
Al :	0.0019	0.0008	0.142	0.18	Al2O3	0.267
Si :	0.0363	0.0146	2.058	2.46	SiO2	4.402
As :	0.0109	0.0031	0.701	0.31	As2O5	1.075
Ca :	0.0023	0.0007	0.070	0.06	CaO	0.097
S :	0.0009	0.0002	0.021	0.02	SO3	0.054
K :	0.0021	0.0002	0.023	0.02	K2O	0.028
Fe :	0.8486	0.5486	60.280	36.19	Fe2O3	86.184
Pb :	0.0013	0.0011	0.144	0.02	PbO2	0.167
U :	0.0059	0.0049	0.649	0.09	UO2	0.736
O			28.929	60.62	by stoichiometry	
total :			93.038			93.038

iteration : 2
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 4 x= 5140 y= -23530 z= 13 swrisife NOP418_1_pt5

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46356	9.43	5.70	0.00452	6.0		
Al	32462	198.75	12.35	0.01574	1.1		
Si	27731	269.24	14.15	0.02892	1.4		
As	37640	53.33	8.04	0.01698	2.0		
Ca	38385	14.45	7.05	0.00192	5.9		

K	42761	7.15	6.75	0.00032	8.4
Fe	48077	1553.99	9.56	0.71766	0.6
					201. 15.0
Pb	60420	46.70	34.60	0.00073	2.4
U	44670	322.98	82.67	0.00930	0.9

lysis no. 25 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0045	0.0002	0.070	0.11	Na2O	0.095
Al :	0.0157	0.0067	1.180	1.64	Al2O3	2.230
Si :	0.0289	0.0116	1.653	2.20	SiO2	3.535
As :	0.0170	0.0048	1.082	0.54	As2O5	1.659
Ca :	0.0019	0.0006	0.059	0.06	CaO	0.083
S :	0.0005	0.0001	0.014	0.02	SO3	0.034
K :	0.0003	0.0000	0.004	0.00	K2O	0.004
Fe :	0.7177	0.4640	51.683	34.61	Fe2O3	73.893
Pb :	0.0007	0.0006	0.084	0.02	PbO2	0.097
U :	0.0093	0.0078	1.030	0.16	UO2	1.169
O			25.940	60.64	by stoichiometry	
total :			82.799			82.799

iteration : 3
be carefull - k.r./w.f. = 0.31 for Na
be carefull - k.r./w.f. = 0.45 for As

point n : 5 x= 5182 y= -23479 z= 13 swrisife
NOP418_1_pt6

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
[illegible]	46356	7.23	4.07	0.00383	6.8		
[illegible]	32462	32.60	11.03	0.00182	2.8		
Si	27731	381.94	13.75	0.04176	1.2		
As	37640	34.82	7.56	0.01022	2.4		
Ca	38385	12.45	6.25	0.00161	6.3		
S	61394	4.67	2.47	0.00150	8.5		
K	42761	8.10	7.00	0.00088	7.9		
Fe	48077	1660.67	9.37	0.76745	0.6		
						201.	15.0
Pb	60420	45.95	32.83	0.00079	2.4		
U	44670	334.06	86.11	0.00960	0.9		

Analysis no. 26 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0038	0.0002	0.060	0.09	Na2O	0.081
Al :	0.0018	0.0008	0.137	0.18	Al2O3	0.258
Si :	0.0418	0.0168	2.364	3.02	SiO2	5.058
As :	0.0102	0.0029	0.656	0.31	As2O5	1.007
Ca :	0.0016	0.0005	0.050	0.04	CaO	0.070
S :	0.0015	0.0003	0.037	0.04	SO3	0.093
K :	0.0009	0.0001	0.010	0.01	K2O	0.012
Fe :	0.7674	0.4962	55.027	35.38	Fe2O3	78.674
Pb :	0.0008	0.0007	0.091	0.02	PbO2	0.105
U :	0.0096	0.0081	1.062	0.16	UO2	1.205
O			27.067	60.74	by stoichiometry	
total :			86.562			86.562

iteration : 3
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 6 x= 5036 y= -23651 z= 13 swrisife
NOP418_1_pt7

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46356	4.67	3.40	0.00153	8.5		
Al	32462	33.30	12.90	0.00172	2.7		
Si	27731	362.86	12.60	0.03972	1.2		
As	37640	34.96	8.24	0.01002	2.4		
Ca	38385	17.40	7.90	0.00246	5.4		
S	61394	4.47	2.90	0.00106	8.7		
K	42761	8.00	7.85	0.00012	7.9		
Fe	48077	1857.86	9.97	0.85884	0.6		
						201.	15.0
Pb	60420	53.91	34.13	0.00119	2.2		
U	44670	221.75	83.23	0.00536	1.0		

Analysis no. 27 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0015	0.0001	0.024	0.03	Na2O	0.033
Al :	0.0017	0.0007	0.130	0.16	Al2O3	0.245
Si :	0.0397	0.0160	2.253	2.65	SiO2	4.819
As :	0.0100	0.0029	0.647	0.29	As2O5	0.993
Ca :	0.0025	0.0008	0.076	0.06	CaO	0.106
S :	0.0011	0.0002	0.027	0.03	SO3	0.066
K :	0.0001	0.0000	0.001	0.00	K2O	0.002
Fe :	0.8588	0.5552	60.946	36.02	Fe2O3	87.136
Pb :	0.0012	0.0010	0.137	0.02	PbO2	0.158
U :	0.0054	0.0045	0.593	0.08	UO2	0.673
O			29.396	60.65	by stoichiometry	
total :			94.230			94.230

iteration : 2

be carefull - k.r./w.f. = 0.30 for Na

be carefull - k.r./w.f. = 0.44 for As

point n : 7 x= 5036 y= -23624 z= 13 swrisife NOP418_1_pt8

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46356	8.03	4.10	0.00476	6.5		
Al	32462	86.74	12.25	0.00629	1.7		
Si	27731	375.08	14.55	0.04089	1.2		
As	37640	32.20	7.86	0.00913	2.5		
Ca	38385	12.15	6.60	0.00144	6.4		
S	61394	4.50	2.47	0.00138	8.6		
K	42761	6.30	7.20	0.00000	8.9		
Fe	48077	1639.39	9.81	0.75733	0.6		
						201.	15.0
Pb	60420	49.90	32.60	0.00104	2.3		
U	44670	247.62	79.93	0.00649	1.0		

Analysis no. 28 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0048	0.0002	0.075	0.12	Na2O	0.101
Al :	0.0063	0.0027	0.471	0.63	Al2O3	0.890
Si :	0.0409	0.0164	2.320	2.97	SiO2	4.963
As :	0.0091	0.0026	0.586	0.28	As2O5	0.899
Ca :	0.0014	0.0005	0.044	0.04	CaO	0.062
S :	0.0014	0.0003	0.035	0.04	SO3	0.086
K :	0.0000	0.0000	0.000	0.00	K2O	
Fe :	0.7573	0.4896	54.459	35.09	Fe2O3	77.860
Pb :	0.0010	0.0009	0.120	0.02	PbO2	0.139
U :	0.0065	0.0054	0.719	0.11	UO2	0.816
O			26.987	60.70	by stoichiometry	

total : 85.816 85.816

iteration : 3

be carefull - k.r./w.f. = 0.30 for Na

be carefull - k.r./w.f. = 0.44 for As

be carefull - k.r./w.f. = 0.00 for K

int n : 8 x= 4992 y= -23568 z= 13 swrisife NOP418_1_pt9

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46356	4.63	3.63	0.00121	8.5		
Al	32462	35.25	12.50	0.00192	2.7		
Si	27731	349.54	12.65	0.03821	1.2		
As	37640	38.20	8.10	0.01129	2.3		
Ca	38385	18.35	8.05	0.00267	5.2		
S	61394	3.83	2.43	0.00095	9.3		
K	42761	9.40	9.25	0.00012	7.3		
Fe	48077	1837.13	9.86	0.84933	0.6		
						201.	15.0
Pb	60420	54.36	35.70	0.00112	2.2		
U	44670	260.62	84.98	0.00680	0.9		

Analysis no. 29 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0012	0.0001	0.019	0.03	Na2O	0.026
Al :	0.0019	0.0008	0.145	0.18	Al2O3	0.273
Si :	0.0382	0.0154	2.167	2.57	SiO2	4.637
As :	0.0113	0.0032	0.728	0.32	As2O5	1.117
Ca :	0.0027	0.0008	0.082	0.07	CaO	0.115
S :	0.0010	0.0002	0.024	0.02	SO3	0.059
K :	0.0001	0.0000	0.001	0.00	K2O	0.002
Fe :	0.8493	0.5491	60.298	36.02	Fe2O3	86.209
Pb :	0.0011	0.0009	0.129	0.02	PbO2	0.149
U :	0.0068	0.0057	0.751	0.11	UO2	0.853
O			29.094	60.66	by stoichiometry	

total : 93.439 93.439

iteration : 3

be carefull - k.r./w.f. = 0.30 for Na

be carefull - k.r./w.f. = 0.44 for As

3_14d

<CAMECA : 8.0- 3.2>

: Mar 14 20:25:23 1995

quantitative microprobe analysis
multi label

calibration data :

	spc	xtal	pos.	+bg. shift (range)	-bg. shift (channel #)	bg. slope (-speed/100.)	pk-bg (c/s/nA) (c/nA)	sigma	pk_tim (s) (repeat)	% req. acc.	bg_tim (ms) (speed)
Na	1	TAP	46356	500	-500	0.000	54.925	0.8	20	0.1	0
Al	1	TAP	32462	600	-600	0.000	787.295	0.2	20	0.1	0
Si	2	TAP	27731	500	-500	0.000	586.464	0.2	20	0.1	10000
As	2	TAP	37640	600	-600	0.000	177.364	0.4	20	0.1	10000
Ca	3	PET	38385	500	-500	0.000	256.554	0.4	20	0.1	10000
S	3	PET	61394	500	-500	0.000	97.858	0.6	20	0.1	0
K	3	PET	42761	500	-500	0.000	83.433	0.6	20	0.1	10000
Fe	4	LIF	48077	500	-500	0.000	143.107	0.5	20	0.1	0
Pb	3	PET	60420	750	-750	0.000	82.789	0.6	20	0.1	10000
U	3	PET	44670	750	0	1.050	128.664	0.5	20	0.1	20000

point n : 1 x= 17898 y= 21690 z= -2
NOP421_1_pt1

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46356	6.67	4.07	0.00315	7.1		
Al	32462	37.03	10.33	0.00225	2.6		
Si	27731	205.18	13.20	0.02176	1.6		
As	37640	48.96	7.78	0.01544	2.1		
Ca	38385	38.50	10.45	0.00727	3.6		
S	61394	6.53	2.50	0.00274	7.2		
K	42761	11.45	8.95	0.00199	6.6		
Fe	48077	1833.27	9.80	0.84709	0.6		
						201.	15.0
Pb	60420	35.20	19.63	0.00094	2.7		
U	44670	69.41	47.95	0.00083	1.6		

Analysis no. 30 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0031	0.0001	0.050	0.07	Na2O	0.068
Al :	0.0023	0.0010	0.171	0.22	Al2O3	0.323
Si :	0.0218	0.0087	1.242	1.51	SiO2	2.656
As :	0.0154	0.0044	1.003	0.46	As2O5	1.538
Ca :	0.0073	0.0023	0.223	0.19	CaO	0.312
S :	0.0027	0.0006	0.068	0.07	SO3	0.170
K :	0.0020	0.0002	0.023	0.02	K2O	0.027
Fe :	0.8471	0.5476	60.273	36.96	Fe2O3	86.174
Pb :	0.0009	0.0008	0.107	0.02	PbO2	0.124
U :	0.0008	0.0007	0.092	0.01	UO2	0.104
O			28.245	60.46	by stoichiometry	
total :			91.497			91.497

iteration : 2
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 2 x= 17915 y= 21667 z= -2
NOP421_1_pt2

elt.	peak	peak	backgr.	i.x./i.std.	sig/k	beam	kv

						15.	15.0
Na	46356	6.03	3.83	0.00266	7.5		
Al	32462	36.48	11.15	0.00214	2.6		
Si	27731	200.63	14.20	0.02115	1.6		
As	37640	47.12	8.08	0.01465	2.1		
Ca	38385	38.95	10.75	0.00731	3.6		
[illegible]	61394	5.77	2.73	0.00206	7.6		
[illegible]	42761	12.85	8.40	0.00355	6.3		
Fe	48077	1855.09	10.96	0.85734	0.6		
						201.	15.0
Pb	60420	56.51	29.78	0.00161	2.2		
U	44670	137.44	78.03	0.00230	1.2		

Analysis no. 31 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0027	0.0001	0.043	0.06	Na2O	0.057
Al :	0.0021	0.0009	0.162	0.20	Al2O3	0.306
Si :	0.0211	0.0085	1.206	1.46	SiO2	2.579
As :	0.0146	0.0042	0.951	0.43	As2O5	1.459
Ca :	0.0073	0.0023	0.225	0.19	CaO	0.314
S :	0.0021	0.0004	0.051	0.05	SO3	0.128
K :	0.0035	0.0004	0.040	0.03	K2O	0.048
Fe :	0.8573	0.5543	60.866	37.06	Fe2O3	87.021
Pb :	0.0016	0.0013	0.184	0.03	PbO2	0.213
U :	0.0023	0.0019	0.253	0.04	UO2	0.287
O			28.433	60.43	by stoichiometry	
total :			92.414			92.414

iteration : 2
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 3 x= 17944 y= 21663 z= -2
NOP421_1_pt3

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46356	6.53	4.00	0.00307	7.2		
Al	32462	38.53	10.95	0.00233	2.6		
Si	27731	201.43	12.65	0.02141	1.6		
As	37640	48.94	8.86	0.01503	2.1		
Ca	38385	33.50	9.15	0.00631	3.9		
S	61394	6.30	2.57	0.00254	7.3		
K	42761	9.40	8.05	0.00108	7.3		
Fe	48077	1835.80	10.90	0.84830	0.6		
						201.	15.0
Pb	60420	62.18	33.88	0.00170	2.1		
U	44670	124.63	85.71	0.00151	1.3		

Analysis no. 32 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0031	0.0001	0.049	0.07	Na2O	0.066
Al :	0.0023	0.0010	0.177	0.22	Al2O3	0.334
Si :	0.0214	0.0086	1.221	1.49	SiO2	2.612
As :	0.0150	0.0043	0.976	0.45	As2O5	1.497
[illegible] :	0.0063	0.0020	0.194	0.17	CaO	0.271
[illegible] :	0.0025	0.0006	0.063	0.07	SO3	0.158
K :	0.0011	0.0001	0.012	0.01	K2O	0.015
Fe :	0.8483	0.5484	60.314	37.00	Fe2O3	86.231
Pb :	0.0017	0.0014	0.195	0.03	PbO2	0.225
U :	0.0015	0.0013	0.166	0.02	UO2	0.188
O			28.231	60.46	by stoichiometry	

total : 71.377 71.377

iteration : 2

be carefull - k.r./w.f. = 0.30 for Na

be carefull - k.r./w.f. = 0.44 for As

point n : 4 x= 17903 y= 21649 z= -3

NOP421_1_pt4

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46356	9.03	4.60	0.00537	6.1		
Al	32462	117.75	11.65	0.00897	1.5		
Si	27731	282.86	12.40	0.03068	1.4		
As	37640	70.01	8.52	0.02307	1.7		
Ca	38385	34.45	7.70	0.00694	3.8		
S	61394	3.07	2.53	0.00036	10.4		
K	42761	11.00	6.10	0.00391	6.8		
Fe	48077	1569.70	9.27	0.72548	0.6		
						201.	15.0
Pb	60420	55.23	33.78	0.00129	2.2		
U	44670	219.73	81.58	0.00535	1.0		

Analysis no. 33 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0054	0.0003	0.084	0.14	Na2O	0.113
Al :	0.0090	0.0038	0.675	0.93	Al2O3	1.275
Si :	0.0307	0.0123	1.753	2.32	SiO2	3.749
As :	0.0231	0.0066	1.472	0.73	As2O5	2.258
Ca :	0.0069	0.0022	0.214	0.20	CaO	0.300
S :	0.0004	0.0001	0.009	0.01	SO3	0.023
K :	0.0039	0.0004	0.044	0.04	K2O	0.053
Fe :	0.7255	0.4690	52.217	34.83	Fe2O3	74.655
Pb :	0.0013	0.0011	0.149	0.03	PbO2	0.172
U :	0.0053	0.0045	0.592	0.09	UO2	0.672
O			26.061	60.68	by stoichiometry	

total : 83.270 83.270

iteration : 3

be carefull - k.r./w.f. = 0.31 for Na

be carefull - k.r./w.f. = 0.45 for As

point n : 5 x= 17903 y= 21649 z= -3

NOP421_1_pt5

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46356	8.60	4.87	0.00452	6.3		
Al	32462	132.99	12.80	0.01016	1.4		
Si	27731	265.64	13.70	0.02858	1.4		
As	37640	56.87	8.24	0.01824	1.9		
Ca	38385	29.85	7.80	0.00572	4.1		
S	61394	3.50	1.73	0.00120	9.8		
K	42761	9.00	7.15	0.00148	7.5		
Fe	48077	1614.99	9.43	0.74639	0.6		
						201.	15.0
Pb	60420	60.23	34.65	0.00154	2.1		
U	44670	176.65	82.54	0.00364	1.1		

Analysis no. 34 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0045	0.0002	0.071	0.11	Na2O	0.096
Al :	0.0102	0.0043	0.764	1.04	Al2O3	1.444
Si :	0.0286	0.0115	1.632	2.13	SiO2	3.492
As :	0.0182	0.0052	1.169	0.57	As2O5	1.793

Ca :	[illegible]	[illegible]	0.177	0.18	CaO	0.247
S :	0.0012	0.0003	0.030	0.03	SO3	0.075
K :	0.0015	0.0002	0.017	0.02	K2O	0.020
Fe :	0.7464	0.4825	53.684	35.23	Fe2O3	76.753
Pb :	0.0015	0.0013	0.177	0.03	PbO2	0.205
U :	0.0036	0.0031	0.403	0.06	UO2	0.458
O			26.458	60.61	by stoichiometry	
total :			84.582			84.582

iteration : 3
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 6 x= 17927 y= 21690 z= -3
NOP421_1_pt6

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46356	8.47	4.30	0.00505	6.3		
Al	32462	124.08	12.55	0.00942	1.4		
Si	27731	254.53	12.65	0.02744	1.4		
As	37640	74.79	8.32	0.02493	1.7		
Ca	38385	37.35	8.90	0.00738	3.7		
S	61394	3.47	2.63	0.00057	9.8		
K	42761	8.65	6.80	0.00148	7.6		
Fe	48077	1588.09	9.71	0.73368	0.6		
						201.	15.0
Pb	60420	59.21	34.90	0.00146	2.1		
U	44670	226.35	84.24	0.00550	1.0		

Analysis no. 35 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0050	0.0002	0.079	0.13	Na2O	0.106
Al :	0.0094	0.0040	0.710	0.98	Al2O3	1.342
Si :	0.0274	0.0110	1.569	2.07	SiO2	3.356
As :	0.0249	0.0071	1.591	0.79	As2O5	2.441
Ca :	0.0074	0.0023	0.228	0.21	CaO	0.319
S :	0.0006	0.0001	0.014	0.02	SO3	0.035
K :	0.0015	0.0002	0.017	0.02	K2O	0.020
Fe :	0.7337	0.4743	52.718	35.00	Fe2O3	75.372
Pb :	0.0015	0.0012	0.169	0.03	PbO2	0.195
U :	0.0055	0.0046	0.609	0.09	UO2	0.691
O			26.173	60.66	by stoichiometry	
total :			83.877			83.877

iteration : 3
be carefull - k.r./w.f. = 0.31 for Na
be carefull - k.r./w.f. = 0.45 for As

point n : 7 x= 18403 y= 27219 z= -19
NOP421_2_pt1

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46356	7.10	3.73	0.00408	6.9		
Al	32462	109.85	10.63	0.00839	1.5		
Si	27731	242.97	13.00	0.02609	1.5		
As	37640	62.65	8.04	0.02049	1.8		
Ca	38385	37.15	9.55	0.00716	3.7		
S	61394	2.90	2.23	0.00045	10.7		
K	42761	7.65	7.30	0.00028	8.1		
Fe	48077	1598.85	9.60	0.73895	0.6		
						201.	15.0
Pb	60420	59.88	32.15	0.00167	2.1		
U	44670	166.02	85.47	0.00312	1.1		

Analysis no. 36 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0041	0.0002	0.064	0.10	Na2O	0.086
Al :	0.0084	0.0036	0.633	0.87	Al2O3	1.195
Si :	0.0261	0.0105	1.491	1.98	SiO2	3.190
As :	0.0205	0.0058	1.314	0.65	As2O5	2.016
Ca :	0.0072	0.0023	0.221	0.21	CaO	0.309
S :	0.0005	0.0001	0.011	0.01	SO3	0.028
K :	0.0003	0.0000	0.003	0.00	K2O	0.004
Fe :	0.7389	0.4777	53.184	35.48	Fe2O3	76.039
Pb :	0.0017	0.0014	0.192	0.03	PbO2	0.222
U :	0.0031	0.0026	0.345	0.05	UO2	0.392
O			26.022	60.60	by stoichiometry	
total :			83.481			83.481

iteration : 3
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 8 x= 18430 y= 27282 z= -21
NOP421_2_pt2

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46356	7.00	4.43	0.00311	6.9		
Al	32462	216.59	11.63	0.01732	1.1		
Si	27731	321.66	11.95	0.03514	1.3		
As	37640	67.35	8.96	0.02190	1.8		
Ca	38385	31.30	7.20	0.00625	4.0		
S	61394	3.37	2.10	0.00086	10.0		
[illegible]	42761	8.50	6.15	0.00187	7.7		
[illegible]	48077	1568.55	9.06	0.72507	0.6		
						201.	15.0
Pb	60420	45.15	31.00	0.00085	2.4		
U	44670	158.13	78.81	0.00307	1.1		

Analysis no. 37 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0031	0.0001	0.048	0.08	Na2O	0.065
Al :	0.0173	0.0074	1.298	1.74	Al2O3	2.453
Si :	0.0351	0.0141	2.011	2.59	SiO2	4.302
As :	0.0219	0.0062	1.391	0.67	As2O5	2.134
Ca :	0.0063	0.0020	0.194	0.17	CaO	0.271
S :	0.0009	0.0002	0.022	0.02	SO3	0.054
K :	0.0019	0.0002	0.021	0.02	K2O	0.026
Fe :	0.7251	0.4688	52.272	33.89	Fe2O3	74.734
Pb :	0.0009	0.0007	0.099	0.02	PbO2	0.114
U :	0.0031	0.0026	0.341	0.05	UO2	0.387
O			26.843	60.74	by stoichiometry	
total :			84.539			84.539

iteration : 3
be carefull - k.r./w.f. = 0.31 for Na
be carefull - k.r./w.f. = 0.45 for As

point n : 9 x= 18368 y= 27226 z= -21
NOP421_2_pt3

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46356	6.93	4.20	0.00331	7.0		
Al	32462	140.81	13.35	0.01077	1.3		
Si	27731	235.01	11.70	0.02533	1.5		

Ca	38385	26.65	8.50	0.00471	4.3
S	61394	3.43	2.30	0.00077	9.9
K	42761	8.20	5.80	0.00191	7.8
Fe	48077	1606.20	8.74	0.74260	0.6
					201. 15.0
Pb	60420	43.70	33.85	0.00059	2.5
	44670	165.65	80.86	0.00328	1.1

Analysis no. 38 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0033	0.0002	0.052	0.08	Na2O	0.070
Al :	0.0108	0.0046	0.813	1.11	Al2O3	1.536
Si :	0.0253	0.0102	1.451	1.91	SiO2	3.103
As :	0.0221	0.0063	1.417	0.70	As2O5	2.173
Ca :	0.0047	0.0015	0.145	0.13	CaO	0.203
S :	0.0008	0.0002	0.019	0.02	SO3	0.048
K :	0.0019	0.0002	0.022	0.02	K2O	0.026
Fe :	0.7426	0.4801	53.428	35.33	Fe2O3	76.387
Pb :	0.0006	0.0005	0.068	0.01	PbO2	0.079
U :	0.0033	0.0028	0.363	0.06	UO2	0.412
O			26.260	60.62	by stoichiometry	
total :			84.038			84.038

iteration : 3
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 10 x= 18383 y= 27246 z= -21
NOP421_2_pt4

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46356	5.97	3.37	0.00315	7.5		
Al	32462	35.15	11.18	0.00203	2.7		
Si	27731	189.67	12.80	0.02006	1.6		
As	37640	50.51	7.22	0.01623	2.0		
Ca	38385	24.55	7.75	0.00436	4.5		
S	61394	5.70	2.07	0.00247	7.7		
K	42761	9.20	5.50	0.00295	7.4		
Fe	48077	1775.96	10.07	0.82082	0.6		
						201.	15.0
Pb	60420	43.10	24.60	0.00111	2.5		
U	44670	75.43	61.61	0.00054	1.6		

Analysis no. 39 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0031	0.0001	0.050	0.08	Na2O	0.068
Al :	0.0020	0.0009	0.154	0.20	Al2O3	0.291
Si :	0.0201	0.0081	1.146	1.44	SiO2	2.451
As :	0.0162	0.0046	1.055	0.50	As2O5	1.618
Ca :	0.0044	0.0014	0.134	0.12	CaO	0.187
S :	0.0025	0.0005	0.062	0.07	SO3	0.154
K :	0.0030	0.0003	0.033	0.03	K2O	0.040
Fe :	0.8208	0.5307	58.614	37.07	Fe2O3	83.802
Pb :	0.0011	0.0009	0.128	0.02	PbO2	0.148
:	0.0005	0.0004	0.059	0.01	UO2	0.067
O			27.390	60.47	by stoichiometry	
total :			88.825			88.825

iteration : 2
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 11 x= 18430 y= 27178 z= 21

NOP421_2_pt5

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46356	5.57	3.57	0.00242	7.8		
Al	32462	36.68	11.73	0.00211	2.6		
Si	27731	186.57	11.50	0.01986	1.7		
As	37640	53.57	8.94	0.01674	2.0		
Ca	38385	35.85	10.25	0.00664	3.8		
S	61394	7.07	2.07	0.00340	6.9		
K	42761	10.10	8.00	0.00167	7.1		
Fe	48077	1866.43	10.27	0.86284	0.6		
						201.	15.0
Pb	60420	63.33	35.85	0.00165	2.1		
U	44670	120.98	86.22	0.00135	1.3		

Analysis no. 40 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0024	0.0001	0.039	0.06	Na2O	0.052
Al :	0.0021	0.0009	0.160	0.20	Al2O3	0.302
Si :	0.0199	0.0080	1.133	1.37	SiO2	2.424
As :	0.0167	0.0048	1.087	0.49	As2O5	1.667
Ca :	0.0066	0.0021	0.204	0.17	CaO	0.285
S :	0.0034	0.0007	0.085	0.09	SO3	0.211
K :	0.0017	0.0002	0.019	0.02	K2O	0.023
Fe :	0.8628	0.5578	61.210	37.09	Fe2O3	87.514
Pb :	0.0017	0.0014	0.190	0.03	PbO2	0.219
U :	0.0013	0.0011	0.148	0.02	UO2	0.168
O			28.591	60.47	by stoichiometry	
total :			92.866			92.866

iteration : 2

be carefull - k.r./w.f. = 0.30 for Na

be carefull - k.r./w.f. = 0.44 for As

point n : 12 x= 18430 y= 27238 z= -21

NOP421_2_pt6

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46356	6.60	3.07	0.00428	7.2		
Al	32462	37.13	10.43	0.00226	2.6		
Si	27731	187.27	13.55	0.01970	1.7		
As	37640	53.89	8.76	0.01692	2.0		
Ca	38385	37.90	8.85	0.00753	3.7		
S	61394	7.33	2.43	0.00333	6.8		
K	42761	11.00	7.55	0.00275	6.8		
Fe	48077	1882.98	10.30	0.87045	0.6		
						201.	15.0
Pb	60420	65.88	34.28	0.00190	2.0		
U	44670	120.23	87.02	0.00129	1.3		

Analysis no. 41 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0043	0.0002	0.068	0.10	Na2O	0.092
Al :	0.0023	0.0010	0.171	0.21	Al2O3	0.323
Si :	0.0197	0.0079	1.124	1.34	SiO2	2.405
As :	0.0169	0.0048	1.099	0.49	As2O5	1.685
Ca :	0.0075	0.0024	0.231	0.19	CaO	0.324
S :	0.0033	0.0007	0.083	0.09	SO3	0.207
K :	0.0028	0.0003	0.031	0.03	K2O	0.037
Fe :	0.8705	0.5627	61.675	37.05	Fe2O3	88.177
Pb :	0.0019	0.0016	0.218	0.04	PbO2	0.252

0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
0			28.822	60.44	by stoichiometry	

total : 93.664 93.664

iteration : 2

be carefull - k.r./w.f. = 0.30 for Na

be carefull - k.r./w.f. = 0.44 for As

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Mar 14 23:02:35 1995

quantitative microprobe analysis
multi label

point n : 1 x= 17839 y= 30273 z= -27 swritrav
NOP421_T_2u_trav

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						201.	15.0
Al	32462	2637.44	162.95	0.01564	0.6		
Si	27731	3674.00	182.77	0.02962	0.6		
U	44670	164.02	81.48	0.00319	1.1		
Fe	48077	20434.93	126.73	0.70617	0.5		

Analysis no. 1 within swritrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Al :	0.0156	0.0067	1.171	1.67	Al2O3	2.212
Si :	0.0296	0.0119	1.688	2.32	SiO2	3.612
U :	0.0032	0.0027	0.354	0.06	UO2	0.401
Fe :	0.7062	0.4565	51.390	35.48	Fe2O3	73.474
O			25.096	60.47	by stoichiometry	
total :			79.699			79.699

iteration : 2

point n : 2 x= 17837 y= 30273 z= -27 swritrav
NOP421_T_2u_trav

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						201.	15.0
Al	32462	2099.28	160.55	0.01225	0.7		
Si	27731	17063.62	255.43	0.14260	0.3		
U	44670	150.20	74.16	0.00294	1.2		
Fe	48077	17241.09	113.53	0.59549	0.5		

Analysis no. 2 within swritrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Al :	0.0123	0.0052	0.878	1.12	Al2O3	1.658
Si :	0.1426	0.0573	7.926	9.73	SiO2	16.955
U :	0.0029	0.0025	0.334	0.05	UO2	0.379
Fe :	0.5955	0.3850	43.939	27.14	Fe2O3	62.821
O			28.737	61.96	by stoichiometry	
total :			81.813			81.813

iteration : 2

point n : 3 x= 17834 y= 30273 z= -27 swritrav
NOP421_T_2u_trav

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						201.	15.0
Al	32462	2645.73	163.95	0.01569	0.6		
Si	27731	42990.39	613.66	0.35957	0.3		
U	44670	60.22	49.95	0.00040	1.7		
Fe	48077	2188.89	44.45	0.07457	0.7		

Analysis no. 3 within swritrav

element	i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Al :	0.0157	0.0067	0.916	1.45	Al2O3	1.730
Si :	0.3596	0.1445	18.687	28.35	SiO2	39.978
U :	0.0004	0.0003	0.050	0.01	UO2	0.056
Fe :	0.0746	0.0482	5.930	4.52	Fe2O3	8.479
O			24.660	65.67	by stoichiometry	
total :			50.243			50.243

iteration : 2

point n : 4 x= 17832 y= 30273 z= -27 swritrav NOP421_T_2u_trav

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						201.	15.0
Al	32462	2058.24	157.15	0.01202	0.7		
Si	27731	42103.20	678.53	0.35152	0.3		
U	44670	45.95	45.91	0.00000	2.0		
Fe	48077	380.04	39.25	0.01185	1.2		

Analysis no. 4 within swritrav

element	i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Al :	0.0120	0.0051	0.663	1.21	Al2O3	1.252
Si :	0.3515	0.1413	17.982	31.62	SiO2	38.469
U :	0.0000	0.0000	0.000	0.00	UO2	0.000
Fe :	0.0119	0.0077	0.952	0.84	Fe2O3	1.361
O			21.486	66.32	by stoichiometry	
total :			41.083			41.083

iteration : 2

point n : 5 x= 17830 y= 30273 z= -27 swritrav NOP421_T_2u_trav

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						201.	15.0
Al	32462	3086.13	169.66	0.01843	0.6		
Si	27731	42422.19	681.95	0.35417	0.3		
U	44670	46.24	44.28	0.00008	2.0		
Fe	48077	319.30	37.30	0.00981	1.3		

Analysis no. 5 within swritrav

element	i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Al :	0.0184	0.0079	1.015	1.81	Al2O3	1.917
Si :	0.3542	0.1423	18.197	31.25	SiO2	38.928
U :	0.0001	0.0001	0.010	0.00	UO2	0.011
Fe :	0.0098	0.0063	0.788	0.68	Fe2O3	1.126
O			21.973	66.25	by stoichiometry	
total :			41.982			41.982

iteration : 2

point n : 6 x= 17828 y= 30273 z= -27 swritrav NOP421_T_2u_trav

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						201.	15.0
Al	32462	4582.21	176.66	0.02785	0.5		
Si	27731	42809.78	682.34	0.35746	0.3		
U	44670	44.75	44.49	0.00001	2.0		
Fe	48077	337.63	38.80	0.01039	1.3		

Analysis no. 6 within swritrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Al :	0.0278	0.0119	1.535	2.64	Al2O3	2.900
Si :	0.3575	0.1437	18.494	30.56	SiO2	39.564
U :	0.0000	0.0000	0.001	0.00	UO2	0.001
Fe :	0.0104	0.0067	0.834	0.69	Fe2O3	1.193
O			22.794	66.11	by stoichiometry	
total :			43.659			43.659

iteration : 2

point n : 7 x= 17825 y= 30273 z= -27 swritrav NOP421_T_2u_trav

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						201.	15.0
Al	32462	5103.36	172.66	0.03117	0.5		
Si	27731	43025.31	678.53	0.35934	0.3		
U	44670	44.52	44.47	0.00000	2.0		
Fe	48077	306.99	35.50	0.00944	1.4		

Analysis no. 7 within swritrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Al :	0.0312	0.0133	1.717	2.92	Al2O3	3.244
Si :	0.3593	0.1444	18.626	30.39	SiO2	39.846
U :	0.0000	0.0000	0.000	0.00	UO2	0.000
Fe :	0.0094	0.0061	0.758	0.62	Fe2O3	1.084
O			23.073	66.08	by stoichiometry	
total :			44.173			44.173

iteration : 2

point n : 8 x= 17823 y= 30273 z= -27 swritrav NOP421_T_2u_trav

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						201.	15.0
Al	32462	7281.52	179.37	0.04489	0.4		
Si	27731	43612.51	635.92	0.36465	0.3		
U	44670	44.14	43.93	0.00001	2.0		
Fe	48077	520.59	38.45	0.01676	1.1		

Analysis no. 8 within swritrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Al :	0.0449	0.0191	2.493	3.97	Al2O3	4.710
Si :	0.3647	0.1466	19.083	29.17	SiO2	40.823
U :	0.0000	0.0000	0.001	0.00	UO2	0.001
Fe :	0.0168	0.0108	1.344	1.03	Fe2O3	1.922
O			24.536	65.83	by stoichiometry	
total :			47.456			47.456

iteration : 2

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Mon Apr 17 21:00:53 1995

quantitative microprobe analysis
multi label

point n : 1 x= 15406 y= -20169 z= 11 swritrav
22.5_10.4_ts1_tr1a

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Al	32469	12.00	11.50	0.00004	6.5		
Si	27735	1177.92	26.50	0.11928	0.7		
						201.	15.0
U	44670	16906.87	200.77	0.61736	0.5		
Fe	48080	174.16	173.33	0.00003	1.1		

Analysis no. 1 within swritrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Al :	0.0000	0.0000	0.003	0.01	Al2O3	0.005
Si :	0.1193	0.0479	6.039	15.10	SiO2	12.919
U :	0.6174	0.5179	61.781	18.23	UO2	70.086
Fe :	0.0000	0.0000	0.002	0.00	Fe2O3	0.002
O			15.188	66.67	by stoichiometry	
total :			83.013			83.013

iteration : 2

point n : 2 x= 15404 y= -20170 z= 11 swritrav
22.5_10.4_ts1_tr1a

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Al	32469	15.00	11.45	0.00031	5.8		
Si	27735	1180.13	24.25	0.11973	0.7		
						201.	15.0
U	44670	15529.06	181.08	0.56726	0.5		
Fe	48080	172.93	165.42	0.00024	1.1		

Analysis no. 2 within swritrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Al :	0.0003	0.0001	0.020	0.05	Al2O3	0.038
Si :	0.1197	0.0481	6.066	15.67	SiO2	12.977
U :	0.5673	0.4758	57.780	17.61	UO2	65.548
Fe :	0.0002	0.0002	0.014	0.02	Fe2O3	0.020
O			14.703	66.65	by stoichiometry	
total :			78.584			78.584

iteration : 2

point n : 3 x= 15401 y= -20172 z= 11 swritrav
22.5_10.4_ts1_tr1a

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Al	32469	174.76	9.50	0.01437	1.7		
Si	27735	8146.50	52.26	0.83827	0.3		
						201.	15.0
U	44670	161.99	43.56	0.00438	1.1		
Fe	48080	109.34	39.70	0.00220	1.3		

Analysis no. 3 within swritrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Al :	0.0144	0.0061	0.782	0.66	Al2O3	1.477
Si :	0.8383	0.3369	40.073	32.67	SiO2	85.728
U :	0.0044	0.0037	0.562	0.05	UO2	0.637
Fe :	0.0022	0.0014	0.177	0.07	Fe2O3	0.253
O			46.502	66.54	by stoichiometry	
total :			88.096			88.096

iteration : 2

point n : 4 x= 15399 y= -20173 z= 11 swritrav 22.5_10.4_ts1_tr1a

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Al	32469	329.72	9.75	0.02783	1.2		
Si	27735	8678.36	53.71	0.89323	0.3		
						201.	15.0
U	44670	52.54	42.60	0.00037	1.8		
Fe	48080	99.94	38.20	0.00195	1.4		

Analysis no. 4 within swritrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Al :	0.0278	0.0119	1.511	1.19	Al2O3	2.855
Si :	0.8932	0.3590	42.607	32.29	SiO2	91.150
U :	0.0004	0.0003	0.047	0.00	UO2	0.054
Fe :	0.0020	0.0013	0.157	0.06	Fe2O3	0.225
O			49.960	66.46	by stoichiometry	
total :			94.283			94.283

iteration : 2

point n : 5 x= 15397 y= -20175 z= 11 swritrav 22.5_10.4_ts1_tr1a

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Al	32469	295.17	8.65	0.02493	1.3		
Si	27735	7964.84	49.30	0.81992	0.3		
						201.	15.0
U	44670	49.34	42.69	0.00025	1.9		
Fe	48080	96.85	40.07	0.00180	1.4		

Analysis no. 5 within swritrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Al :	0.0249	0.0106	1.354	1.15	Al2O3	2.558
Si :	0.8199	0.3295	39.439	32.32	SiO2	84.371
U :	0.0002	0.0002	0.032	0.00	UO2	0.036
Fe :	0.0018	0.0012	0.145	0.06	Fe2O3	0.207
O			46.203	66.46	by stoichiometry	
total :			87.172			87.172

iteration : 2

point n : 6 x= 15394 y= -20176 z= 11 swritrav 22.5_10.4_ts1_tr1a

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Al	32469	390.05	9.45	0.03311	1.2		
Si	27735	8220.05	54.06	0.84577	0.3		

```
                                                                  201.   15.0
 U    44670      49.25      44.77      0.00017    1.9
 Fe   48080      68.84      38.67      0.00096    1.6

Analysis no.    6 within swritrav
              k                    wt.  %   normalized
element  i.x./i.std.  k.ratio     concen.    atom. c    compound     concen.
  Al :      0.0331     0.0141       1.797      1.48    Al2O3           3.395
  Si :      0.8458     0.3399      40.646     32.08    SiO2           86.954
  U  :      0.0002     0.0001       0.021      0.00    UO2             0.024
  Fe :      0.0010     0.0006       0.077      0.03    Fe2O3           0.110
  O                                47.942     66.42  by stoichiometry

 total :                           90.483                             90.483
 iteration :  2

 point n :     7     x=  15392  y= -20178  z=     11   swritrav
                                                        22.5_10.4_ts1_tr1a
elt.  peak      peak     backgr.   i.x./i.std.  sig/k     beam      kv
      pos.      (c/s)     (c/s)
                                                                15.   15.0
 Al   32469     488.58      10.60      0.04159    1.0
 Si   27735    8037.41      46.85      0.82783    0.3
                                                                201.   15.0
 U    44670      47.17      46.55      0.00002    1.9
 Fe   48080      80.08      39.57      0.00128    1.5

Analysis no.    7 within swritrav
              k                    wt.  %   normalized
element  i.x./i.std.  k.ratio     concen.    atom. c    compound     concen.
  Al :      0.0416     0.0177       2.258      1.87    Al2O3           4.266
  Si :      0.8278     0.3327      39.980     31.74    SiO2           85.530
  U  :      0.0000     0.0000       0.003      0.00    UO2             0.003
  Fe :      0.0013     0.0008       0.103      0.04    Fe2O3           0.147
  O                                47.602     66.35  by stoichiometry

 total :                           89.947                             89.947
 iteration :  2

 point n :     8     x=  15390  y= -20180  z=     11   swritrav
                                                        22.5_10.4_ts1_tr1a
elt.  peak      peak     backgr.   i.x./i.std.  sig/k     beam      kv
      pos.      (c/s)     (c/s)
                                                                15.   15.0
 Al   32469     450.05      10.55      0.03824    1.1
 Si   27735    7855.92      49.25      0.80877    0.3
                                                                201.   15.0
 U    44670      45.82      44.37      0.00005    2.0
 Fe   48080      92.63      38.52      0.00171    1.4

Analysis no.    8 within swritrav
              k                    wt.  %   normalized
element  i.x./i.std.  k.ratio     concen.    atom. c    compound     concen.
  Al :      0.0382     0.0163       2.077      1.76    Al2O3           3.924
  Si :      0.8088     0.3251      39.123     31.82    SiO2           83.695
  U  :      0.0001     0.0000       0.007      0.00    UO2             0.008
  Fe :      0.0017     0.0011       0.138      0.06    Fe2O3           0.197
  O                                46.480     66.36  by stoichiometry

 total :                           87.824                             87.824
 iteration :  2

 point n :     9     x=  15387  y= -20181  z=     11   swritrav
                                                        22.5_10.4_ts1_tr1a
```

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Al	32469	348.19	10.60	0.02937	1.2		
Si	27735	7485.62	45.80	0.77071	0.3		
						201.	15.0
U	44670	44.25	44.72	0.00000	2.0		
Fe	48080	62.26	38.77	0.00074	1.7		

Analysis no. 9 within swritrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Al :	0.0294	0.0125	1.595	1.43	Al2O3	3.013
Si :	0.7707	0.3098	37.360	32.12	SiO2	79.924
U :	0.0000	0.0000	0.000	0.00	UO2	
Fe :	0.0007	0.0005	0.060	0.03	Fe2O3	0.086
O			44.008	66.42	by stoichiometry	
total :			83.023			83.023

iteration : 2
be carefull - k.r./w.f. = 0.00 for U

point n : 10 x= 15385 y= -20183 z= 11 swritrav 22.5_10.4_ts1_tr1a

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Al	32469	310.24	10.90	0.02605	1.3		
Si	27735	8281.58	47.50	0.85310	0.3		
						201.	15.0
U	44670	49.07	44.65	0.00016	1.9		
Fe	48080	65.03	39.22	0.00082	1.7		

Analysis no. 10 within swritrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Al :	0.0260	0.0111	1.414	1.16	Al2O3	2.671
Si :	0.8531	0.3429	40.873	32.34	SiO2	87.439
U :	0.0002	0.0001	0.021	0.00	UO2	0.024
Fe :	0.0008	0.0005	0.066	0.03	Fe2O3	0.094
O			47.854	66.47	by stoichiometry	
total :			90.228			90.228

iteration : 2

point n : 11 x= 15467 y= -20232 z= 7 swritrav 22.5_10.4_ts1_tr1b

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Al	32469	16.05	11.80	0.00037	5.6		
Si	27735	1242.03	24.90	0.12607	0.7		
						201.	15.0
U	44670	16297.98	207.00	0.59474	0.5		
Fe	48080	187.12	172.44	0.00046	1.0		

Analysis no. 11 within swritrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Al :	0.0004	0.0002	0.024	0.06	Al2O3	0.046
Si :	0.1261	0.0507	6.385	15.77	SiO2	13.658
U :	0.5947	0.4989	60.020	17.49	UO2	68.088
Fe :	0.0005	0.0003	0.028	0.03	Fe2O3	0.040
O			15.376	66.65	by stoichiometry	

```
 total :                              81.832                                  81.832
 iteration :  2

 point n :    12     x=  15466  y= -20234  z=      7   swritrav
                                                        22.5_10.4_ts1_tr1b
elt.  peak      peak     backgr.   i.x./i.std.  sig/k     beam      kv
      pos.      (c/s)     (c/s)
                                                             15.   15.0
 Al   32469     110.87      13.85      0.00844    2.1
 Si   27735    2844.04      34.75      0.29107    0.5
                                                            201.   15.0
 U    44670    1783.79      58.47      0.06379    0.6
 Fe   48080     174.66      53.11      0.00385    1.1

Analysis no.   12 within swritrav
              k                    wt.  %   normalized
element  i.x./i.std.  k.ratio     concen.    atom. c    compound     concen.
  Al :      0.0084     0.0036       0.488      1.04    Al2O3           0.922
  Si :      0.2911     0.1170      14.820     30.31    SiO2           31.704
  U  :      0.0638     0.0535       7.930      1.91    UO2             8.996
  Fe :      0.0038     0.0025       0.290      0.30    Fe2O3           0.414
  O                                18.509     66.44  by stoichiometry

 total :                              42.036                                  42.036
 iteration :  2

 point n :    13     x=  15464  y= -20236  z=      7   swritrav
                                                        22.5_10.4_ts1_tr1b
elt.  peak      peak     backgr.   i.x./i.std.  sig/k     beam      kv
      pos.      (c/s)     (c/s)
                                                             15.   15.0
 Al   32469     508.42      10.70      0.04331    1.0
 Si   27735    8307.27      48.80      0.85561    0.3
                                                            201.   15.0
 U    44670      69.78      43.91      0.00096    1.6
 Fe   48080     105.86      39.32      0.00211    1.3

Analysis no.   13 within swritrav
              k                    wt.  %   normalized
element  i.x./i.std.  k.ratio     concen.    atom. c    compound     concen.
  Al :      0.0433     0.0185       2.353      1.88    Al2O3           4.445
  Si :      0.8556     0.3439      41.186     31.70    SiO2           88.108
  U  :      0.0010     0.0008       0.123      0.01    UO2             0.139
  Fe :      0.0021     0.0014       0.169      0.07    Fe2O3           0.242
  O                                49.104     66.34  by stoichiometry

 total :                              92.934                                  92.934
 iteration :  2

 point n :    14     x=  15463  y= -20238  z=      7   swritrav
                                                        22.5_10.4_ts1_tr1b
elt.  peak      peak     backgr.   i.x./i.std.  sig/k     beam      kv
      pos.      (c/s)     (c/s)
                                                             15.   15.0
 Al   32469     341.63      11.40      0.02874    1.2
 Si   27735    8570.48      52.36      0.88278    0.3
                                                            201.   15.0
 U    44670      55.92      41.69      0.00053    1.8
 Fe   48080     130.10      38.15      0.00291    1.2

Analysis no.   14 within swritrav
              k                    wt.  %   normalized
element  i.x./i.std.  k.ratio     concen.    atom. c    compound     concen.
```

Al :	0.0287	0.0123	1.562	1.24	Al2O3	2.951
Si :	0.8828	0.3548	42.179	32.22	SiO2	90.232
U :	0.0005	0.0004	0.068	0.01	UO2	0.077
Fe :	0.0029	0.0019	0.234	0.09	Fe2O3	0.335
O			49.552	66.44	by stoichiometry	
total :			93.594			93.594

iteration : 2

point n : 15 x= 15462 y= -20240 z= 7 swritrav 22.5_10.4_ts1_tr1b

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Al	32469	433.83	11.15	0.03678	1.1		
Si	27735	8130.86	49.41	0.83742	0.3		
						201.	15.0
U	44670	50.02	42.79	0.00027	1.9		
Fe	48080	132.25	38.49	0.00297	1.2		

Analysis no. 15 within swritrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Al :	0.0368	0.0157	1.999	1.64	Al2O3	3.777
Si :	0.8374	0.3366	40.341	31.88	SiO2	86.302
U :	0.0003	0.0002	0.034	0.00	UO2	0.039
Fe :	0.0030	0.0019	0.239	0.09	Fe2O3	0.341
O			47.846	66.38	by stoichiometry	
total :			90.459			90.459

iteration : 2

point n : 16 x= 15460 y= -20242 z= 7 swritrav 22.5_10.4_ts1_tr1b

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Al	32469	192.52	9.35	0.01594	1.6		
Si	27735	8002.93	48.30	0.82438	0.3		
						201.	15.0
U	44670	49.32	42.70	0.00024	1.9		
Fe	48080	155.23	40.52	0.00363	1.1		

Analysis no. 16 within swritrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Al :	0.0159	0.0068	0.867	0.74	Al2O3	1.638
Si :	0.8244	0.3313	39.525	32.61	SiO2	84.556
U :	0.0002	0.0002	0.031	0.00	UO2	0.036
Fe :	0.0036	0.0023	0.292	0.12	Fe2O3	0.418
O			45.931	66.52	by stoichiometry	
total :			86.647			86.647

iteration : 2

point n : 17 x= 15459 y= -20245 z= 7 swritrav 22.5_10.4_ts1_tr1b

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Al	32469	354.15	10.60	0.02990	1.2		
Si	27735	8189.63	53.06	0.84315	0.3		
						201.	15.0
U	44670	45.90	42.93	0.00011	2.0		

```
 Fe   48080     141.96      38.85      0.00326    1.2

Analysis no.   17 within swritrav
                k                    wt.  %   normalized
element  i.x./i.std.  k.ratio      concen.    atom. c    compound      concen.
  Al :      0.0299     0.0128       1.625      1.34    Al2O3           3.070
  Si :      0.8431     0.3389      40.507     32.13    SiO2           86.655
  U  :      0.0001     0.0001       0.014      0.00    UO2             0.016
  Fe :      0.0033     0.0021       0.263      0.10    Fe2O3           0.375
  O                               47.709     66.43  by stoichiometry

 total :                          90.117                              90.117
 iteration :  2

 point n :    18     x=  15457  y= -20247  z=      7   swritrav
                                                        22.5_10.4_ts1_tr1b
elt.  peak      peak      backgr.   i.x./i.std.  sig/k     beam      kv
      pos.      (c/s)     (c/s)
                                                              15.   15.0
 Al   32469     385.40       8.95      0.03277    1.2
 Si   27735    7717.46      45.65      0.79519    0.3
                                                             201.   15.0
 U    44670      52.11      47.97      0.00015    1.9
 Fe   48080     148.64      38.82      0.00348    1.2

Analysis no.   18 within swritrav
                k                    wt.  %   normalized
element  i.x./i.std.  k.ratio      concen.    atom. c    compound      concen.
  Al :      0.0328     0.0140       1.782      1.54    Al2O3           3.367
  Si :      0.7952     0.3196      38.478     31.95    SiO2           82.316
  U  :      0.0002     0.0001       0.020      0.00    UO2             0.022
  Fe :      0.0035     0.0022       0.280      0.12    Fe2O3           0.400
  O                               45.545     66.39  by stoichiometry

 total :                          86.104                              86.104
 iteration :  2

 point n :    19     x=  15456  y= -20249  z=      7   swritrav
                                                        22.5_10.4_ts1_tr1b
elt.  peak      peak      backgr.   i.x./i.std.  sig/k     beam      kv
      pos.      (c/s)     (c/s)
                                                              15.   15.0
 Al   32469     309.64      10.40      0.02605    1.3
 Si   27735    8406.40      55.41      0.86560    0.3
                                                             201.   15.0
 U    44670      48.62      45.78      0.00010    1.9
 Fe   48080     119.18      40.09      0.00250    1.3

Analysis no.   19 within swritrav
                k                    wt.  %   normalized
element  i.x./i.std.  k.ratio      concen.    atom. c    compound      concen.
  Al :      0.0260     0.0111       1.415      1.15    Al2O3           2.674
  Si :      0.8656     0.3479      41.416     32.31    SiO2           88.600
  U  :      0.0001     0.0001       0.013      0.00    UO2             0.015
  Fe :      0.0025     0.0016       0.201      0.08    Fe2O3           0.288
  O                               48.531     66.46  by stoichiometry

 total :                          91.576                              91.576
 iteration :  2

 point n :    20     x=  15454  y= -20251  z=      7   swritrav
                                                        22.5_10.4_ts1_tr1b
elt.  peak      peak      backgr.   i.x./i.std.  sig/k     beam      kv
      pos.      (c/s)     (c/s)
```

						15.	15.0
Al	32469	219.25	9.95	0.01821	1.5		
Si	27735	8052.01	48.75	0.82932	0.3		
						201.	15.0
U	44670	51.06	45.45	0.00021	1.9		
Fe	48080	151.71	40.19	0.00353	1.1		

Analysis no. 20 within swritrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Al :	0.0182	0.0078	0.990	0.84	Al2O3	1.871
Si :	0.8293	0.3333	39.768	32.53	SiO2	85.074
U :	0.0002	0.0002	0.027	0.00	UO2	0.030
Fe :	0.0035	0.0023	0.284	0.12	Fe2O3	0.406
O			46.313	66.51	by stoichiometry	
total :			87.382			87.382

iteration : 2

point n : 21 x= 15453 y= -20253 z= 7 swritrav
22.5_10.4_ts1_tr1b

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Al	32469	190.32	9.75	0.01572	1.6		
Si	27735	8449.00	49.91	0.87063	0.3		
						201.	15.0
U	44670	48.82	45.73	0.00011	1.9		
Fe	48080	126.57	38.34	0.00279	1.2		

Analysis no. 21 within swritrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Al :	0.0157	0.0067	0.854	0.70	Al2O3	1.614
Si :	0.8706	0.3499	41.503	32.67	SiO2	88.786
U :	0.0001	0.0001	0.015	0.00	UO2	0.017
Fe :	0.0028	0.0018	0.225	0.09	Fe2O3	0.321
O			48.141	66.54	by stoichiometry	
total :			90.737			90.737

iteration : 2

point n : 22 x= 15451 y= -20255 z= 7 swritrav
22.5_10.4_ts1_tr1b

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Al	32469	257.68	8.75	0.02167	1.4		
Si	27735	8133.39	49.00	0.83799	0.3		
						201.	15.0
U	44670	46.22	44.03	0.00008	2.0		
Fe	48080	116.53	40.14	0.00242	1.3		

Analysis no. 22 within swritrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Al :	0.0217	0.0092	1.177	0.99	Al2O3	2.224
Si :	0.8380	0.3368	40.179	32.44	SiO2	85.955
U :	0.0001	0.0001	0.010	0.00	UO2	0.012
Fe :	0.0024	0.0016	0.195	0.08	Fe2O3	0.278
O			46.908	66.49	by stoichiometry	
total :			88.469			88.469

iteration : 2

point n : 23 x= 14868 y= 5587 z= 11 swritrav
22.35_15.3_ts1_tr1a

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Al	32469	85.56	11.20	0.00647	2.4		
Si	27735	1135.27	23.95	0.11518	0.7		
						201.	15.0
U	44670	6242.07	79.48	0.22790	0.5		
Fe	48080	611.01	79.60	0.01683	0.7		

Analysis no. 23 within swritrav

element	i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Al :	0.0065	0.0028	0.419	1.47	Al2O3	0.791
Si :	0.1152	0.0463	5.940	20.07	SiO2	12.707
U :	0.2279	0.1912	26.361	10.51	UO2	29.904
Fe :	0.0168	0.0109	1.076	1.83	Fe2O3	1.538
O			11.146	66.12	by stoichiometry	
total :			44.941			44.941

iteration : 3

point n : 24 x= 14868 y= 5585 z= 11 swritrav
22.35_15.3_ts1_tr1a

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Al	32469	158.15	6.40	0.01321	1.8		
Si	27735	894.70	11.65	0.09152	0.8		
						201.	15.0
U	44670	1483.92	49.16	0.05306	0.6		
Fe	48080	3118.14	58.77	0.09687	0.5		

Analysis no. 24 within swritrav

element	i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Al :	0.0132	0.0056	0.863	3.19	Al2O3	1.630
Si :	0.0915	0.0368	4.947	17.59	SiO2	10.584
U :	0.0531	0.0445	6.252	2.62	UO2	7.093
Fe :	0.0969	0.0626	7.023	12.56	Fe2O3	10.041
O			10.262	64.04	by stoichiometry	
total :			29.347			29.347

iteration : 3

point n : 25 x= 14868 y= 5583 z= 11 swritrav
22.35_15.3_ts1_tr1a

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Al	32469	132.23	5.20	0.01106	2.0		
Si	27735	2178.70	20.40	0.22373	0.5		
						201.	15.0
U	44670	179.33	44.65	0.00498	1.1		
Fe	48080	1449.24	44.95	0.04446	0.6		

Analysis no. 25 within swritrav

element	i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Al :	0.0111	0.0047	0.645	1.61	Al2O3	1.219
Si :	0.2237	0.0899	11.813	28.28	SiO2	25.272
U :	0.0050	0.0042	0.623	0.18	UO2	0.706

```
 Fe :      0.0445     0.0287       3.528      4.25    Fe2O3           5.043
 O                                15.632     65.69  by stoichiometry

 total :                          32.241                             32.241
 iteration :  2

 point n :    26     x=  14868  y=   5581  z=     11   swritrav
                                                        22.35_15.3_ts1_tr1a
elt.  peak      peak     backgr.   i.x./i.std.  sig/k     beam      kv
      pos.      (c/s)     (c/s)
                                                              15.   15.0
 Al   32469     558.37      9.90      0.04773    1.0
 Si   27735    6890.93     42.65      0.70963    0.4
                                                             201.   15.0
 U    44670      66.84     47.60      0.00071    1.7
 Fe   48080     946.09     45.04      0.02852    0.6

Analysis no.   26 within swritrav
              k                   wt.  %   normalized
element  i.x./i.std.  k.ratio     concen.    atom. c    compound     concen.
  Al :      0.0477     0.0204      2.637      2.39    Al2O3           4.982
  Si :      0.7096     0.2852     35.021     30.50    SiO2           74.920
  U  :      0.0007     0.0006      0.091      0.01    UO2             0.103
  Fe :      0.0285     0.0184      2.283      1.00    Fe2O3           3.264
  O                               43.238     66.10  by stoichiometry

 total :                          83.270                             83.270
 iteration :  2

 point n :    27     x=  14868  y=   5579  z=     11   swritrav
                                                        22.35_15.3_ts1_tr1a
elt.  peak      peak     backgr.   i.x./i.std.  sig/k     beam      kv
      pos.      (c/s)     (c/s)
                                                              15.   15.0
 Al   32469     830.88     13.75      0.07113    0.8
 Si   27735    7114.87     46.80      0.73260    0.4
                                                             201.   15.0
 U    44670      68.66     49.79      0.00070    1.6
 Fe   48080    1257.40     44.35      0.03840    0.6

Analysis no.   27 within swritrav
              k                   wt.  %   normalized
element  i.x./i.std.  k.ratio     concen.    atom. c    compound     concen.
  Al :      0.0711     0.0303      3.945      3.34    Al2O3           7.453
  Si :      0.7326     0.2944     36.303     29.50    SiO2           77.662
  U  :      0.0007     0.0006      0.089      0.01    UO2             0.101
  Fe :      0.0384     0.0248      3.068      1.25    Fe2O3           4.387
  O                               46.198     65.90  by stoichiometry

 total :                          89.602                             89.602
 iteration :  2

 point n :    28     x=  14868  y=   5577  z=     11   swritrav
                                                        22.35_15.3_ts1_tr1a
elt.  peak      peak     backgr.   i.x./i.std.  sig/k     beam      kv
      pos.      (c/s)     (c/s)
                                                              15.   15.0
 Al   32469     447.70      9.60      0.03814    1.1
 Si   27735    8022.13     48.55      0.82656    0.3
                                                             201.   15.0
 U    44670      92.87     51.60      0.00153    1.4
 Fe   48080    2795.76     54.22      0.08679    0.5

Analysis no.   28 within swritrav
```

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Al :	0.0381	0.0163	2.159	1.67	Al2O3	4.079
Si :	0.8266	0.3322	40.197	29.79	SiO2	85.992
U :	0.0015	0.0013	0.193	0.02	UO2	0.219
Fe :	0.0868	0.0561	6.885	2.57	Fe2O3	9.844
O			50.700	65.96	by stoichiometry	
total :			100.134			100.134

iteration : 2

point n : 29 x= 14868 y= 5575 z= 11 swritrav 22.35_15.3_ts1_tr1a

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Al	32469	332.47	11.50	0.02794	1.2		
Si	27735	6860.61	45.55	0.70630	0.4		
						201.	15.0
U	44670	59.94	45.61	0.00053	1.7		
Fe	48080	802.49	42.49	0.02406	0.6		

Analysis no. 29 within swritrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Al :	0.0279	0.0119	1.540	1.45	Al2O3	2.909
Si :	0.7063	0.2839	34.628	31.38	SiO2	74.079
U :	0.0005	0.0004	0.068	0.01	UO2	0.077
Fe :	0.0241	0.0156	1.928	0.88	Fe2O3	2.757
O			41.658	66.28	by stoichiometry	
total :			79.822			79.822

iteration : 2

point n : 30 x= 14868 y= 5572 z= 11 swritrav 22.35_15.3_ts1_tr1a

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Al	32469	108.37	9.65	0.00860	2.2		
Si	27735	8911.34	51.56	0.91856	0.3		
						201.	15.0
U	44670	64.12	46.66	0.00065	1.7		
Fe	48080	1464.39	43.97	0.04498	0.6		

Analysis no. 30 within swritrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Al :	0.0086	0.0037	0.477	0.36	Al2O3	0.901
Si :	0.9186	0.3692	43.652	31.92	SiO2	93.384
U :	0.0006	0.0005	0.082	0.01	UO2	0.094
Fe :	0.0450	0.0291	3.595	1.32	Fe2O3	5.140
O			51.712	66.39	by stoichiometry	
total :			99.518			99.518

iteration : 2

point n : 31 x= 14868 y= 5570 z= 11 swritrav 22.35_15.3_ts1_tr1a

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Al	32469	719.58	11.10	0.06168	0.9		
Si	27735	6978.25	45.10	0.71870	0.4		

```
                                                                  201.   15.0
 U    44670      48.49      42.97      0.00020    1.9
 Fe   48080     278.32      37.84      0.00762    0.9

Analysis no.   31 within swritrav
              k                    wt.  %   normalized
element  i.x./i.std.  k.ratio     concen.    atom. c    compound     concen.
  Al :      0.0617     0.0263       3.365      3.02    Al2O3           6.358
  Si :      0.7187     0.2889      35.497     30.59    SiO2           75.939
  U  :      0.0002     0.0002       0.026      0.00    UO2             0.030
  Fe :      0.0076     0.0049       0.612      0.27    Fe2O3           0.874
  O                                43.701     66.12  by stoichiometry

 total :                           83.201                              83.201
 iteration :  2

 point n :    32     x=  14868  y=   5568  z=     11   swritrav
                                                        22.35_15.3_ts1_tr1a
elt.  peak      peak     backgr.   i.x./i.std.  sig/k     beam      kv
      pos.      (c/s)     (c/s)
                                                              15.   15.0
 Al   32469      57.11       7.90      0.00428    3.0
 Si   27735    9006.25      53.61      0.92826    0.3
                                                             201.   15.0
 U    44670      83.33      48.58      0.00128    1.5
 Fe   48080    3214.86      52.86      0.10012    0.5

Analysis no.   32 within swritrav
              k                    wt.  %   normalized
element  i.x./i.std.  k.ratio     concen.    atom. c    compound     concen.
  Al :      0.0043     0.0018       0.243      0.18    Al2O3           0.460
  Si :      0.9283     0.3731      44.226     30.85    SiO2           94.612
  U  :      0.0013     0.0011       0.163      0.01    UO2             0.184
  Fe :      0.1001     0.0647       7.932      2.78    Fe2O3          11.341
  O                                54.033     66.17  by stoichiometry

 total :                          106.598                             106.598
 iteration :  2

 point n :    33     x=  14868  y=   5566  z=     11   swritrav
                                                        22.35_15.3_ts1_tr1a
elt.  peak      peak     backgr.   i.x./i.std.  sig/k     beam      kv
      pos.      (c/s)     (c/s)
                                                              15.   15.0
 Al   32469     542.69      11.80      0.04623    1.0
 Si   27735    7552.64      45.65      0.77837    0.3
                                                             201.   15.0
 U    44670      63.11      46.10      0.00063    1.7
 Fe   48080    1362.50      44.32      0.04173    0.6

Analysis no.   33 within swritrav
              k                    wt.  %   normalized
element  i.x./i.std.  k.ratio     concen.    atom. c    compound     concen.
  Al :      0.0462     0.0197       2.567      2.14    Al2O3           4.850
  Si :      0.7784     0.3128      38.058     30.43    SiO2           81.418
  U  :      0.0006     0.0005       0.080      0.01    UO2             0.091
  Fe :      0.0417     0.0270       3.335      1.34    Fe2O3           4.768
  O                                47.086     66.09  by stoichiometry

 total :                           91.126                              91.126
 iteration :  2

 point n :    34     x=  14868  y=   5564  z=     11   swritrav
                                                        22.35_15.3_ts1_tr1a
```

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Al	32469	204.03	10.00	0.01690	1.6		
Si	27735	8605.30	51.76	0.88691	0.3		
						201.	15.0
U	44670	59.04	46.90	0.00045	1.8		
Fe	48080	722.84	42.62	0.02154	0.7		

Analysis no. 34 within swritrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Al :	0.0169	0.0072	0.927	0.73	Al2O3	1.752
Si :	0.8869	0.3565	42.303	32.17	SiO2	90.498
U :	0.0004	0.0004	0.058	0.01	UO2	0.065
Fe :	0.0215	0.0139	1.727	0.66	Fe2O3	2.470
O			49.770	66.43	by stoichiometry	
total :			94.785			94.785

iteration : 2

point n : 35 x= 14868 y= 5562 z= 11 swritrav 22.35_15.3_ts1_tr1a

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Al	32469	263.69	8.20	0.02224	1.4		
Si	27735	8540.69	51.26	0.88003	0.3		
						201.	15.0
U	44670	89.73	51.72	0.00141	1.4		
Fe	48080	3022.21	53.16	0.09400	0.5		

Analysis no. 35 within swritrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Al :	0.0222	0.0095	1.261	0.94	Al2O3	2.383
Si :	0.8800	0.3537	42.347	30.30	SiO2	90.592
U :	0.0014	0.0012	0.178	0.02	UO2	0.202
Fe :	0.0940	0.0608	7.452	2.68	Fe2O3	10.654
O			52.593	66.06	by stoichiometry	
total :			103.831			103.831

iteration : 2

point n : 36 x= 14676 y= 5614 z= 11 swritrav 22.35_15.3_ts1_tr1b

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Al	32469	409.23	15.40	0.03429	1.1		
Si	27735	1194.40	25.75	0.12115	0.7		
						201.	15.0
U	44670	7044.16	110.61	0.25636	0.5		
Fe	48080	732.99	100.89	0.02001	0.7		

Analysis no. 36 within swritrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Al :	0.0343	0.0146	2.212	6.26	Al2O3	4.180
Si :	0.1212	0.0487	6.341	17.24	SiO2	13.566
U :	0.2564	0.2150	29.291	9.40	UO2	33.229
Fe :	0.0200	0.0129	1.297	1.77	Fe2O3	1.854
O			13.687	65.33	by stoichiometry	

```
 total :                              52.828                                  52.828
 iteration :  3

 point n :    37     x=  14676  y=   5612  z=     11   swritrav
                                                        22.35_15.3_ts1_tr1b
elt.  peak      peak     backgr.   i.x./i.std.  sig/k     beam      kv
      pos.      (c/s)     (c/s)
                                                            15.   15.0
 Al   32469     367.72      10.90      0.03107    1.2
 Si   27735    6346.60      42.50      0.65372    0.4
                                                           201.   15.0
 U    44670     397.88      55.62      0.01266    0.8
 Fe   48080    5725.25      66.78      0.17915    0.5

Analysis no.   37 within swritrav
              k                    wt.  %   normalized
element  i.x./i.std.  k.ratio     concen.    atom. c    compound     concen.
  Al :      0.0311     0.0133       1.844      1.59    Al2O3           3.484
  Si :      0.6537     0.2627      32.712     27.03    SiO2           69.981
  U  :      0.0127     0.0106       1.565      0.15    UO2             1.775
  Fe :      0.1792     0.1158      13.944      5.79    Fe2O3          19.936
  O                                45.112     65.44  by stoichiometry

 total :                              95.177                                  95.177
 iteration :  3

 point n :    38     x=  14676  y=   5610  z=     11   swritrav
                                                        22.35_15.3_ts1_tr1b
elt.  peak      peak     backgr.   i.x./i.std.  sig/k     beam      kv
      pos.      (c/s)     (c/s)
                                                            15.   15.0
 Al   32469     221.50      10.25      0.01840    1.5
 Si   27735    6790.33      43.35      0.69957    0.4
                                                           201.   15.0
 U    44670      77.05      46.68      0.00112    1.6
 Fe   48080    1408.93      46.52      0.04314    0.6

Analysis no.   38 within swritrav
              k                    wt.  %   normalized
element  i.x./i.std.  k.ratio     concen.    atom. c    compound     concen.
  Al :      0.0184     0.0078       1.026      0.97    Al2O3           1.938
  Si :      0.6996     0.2812      34.295     31.19    SiO2           73.368
  U  :      0.0011     0.0009       0.143      0.02    UO2             0.162
  Fe :      0.0431     0.0279       3.447      1.58    Fe2O3           4.928
  O                                41.485     66.24  by stoichiometry

 total :                              80.396                                  80.396
 iteration :  2

 point n :    39     x=  14676  y=   5608  z=     11   swritrav
                                                        22.35_15.3_ts1_tr1b
elt.  peak      peak     backgr.   i.x./i.std.  sig/k     beam      kv
      pos.      (c/s)     (c/s)
                                                            15.   15.0
 Al   32469     701.58      12.25      0.06002    0.9
 Si   27735    7418.25      46.75      0.76419    0.3
                                                           201.   15.0
 U    44670      64.79      44.26      0.00076    1.7
 Fe   48080    1001.30      43.22      0.03033    0.6

Analysis no.   39 within swritrav
              k                    wt.  %   normalized
element  i.x./i.std.  k.ratio     concen.    atom. c    compound     concen.
  Al :      0.0600     0.0256       3.313      2.77    Al2O3           6.260
```

Si :	0.7642	0.3071	37.544	30.19	SiO2	80.317
U :	0.0008	0.0006	0.097	0.01	UO2	0.110
Fe :	0.0303	0.0196	2.427	0.98	Fe2O3	3.470
O			46.776	66.04	by stoichiometry	
total :			90.157			90.157

iteration : 2

point n : 40 x= 14676 y= 5606 z= 11 swritrav 22.35_15.3_ts1_tr1b

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Al	32469	545.44	9.15	0.04670	1.0		
Si	27735	7814.81	46.80	0.80547	0.3		
						201.	15.0
U	44670	77.40	46.87	0.00113	1.5		
Fe	48080	2263.42	46.45	0.07020	0.5		

Analysis no. 40 within swritrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Al :	0.0467	0.0199	2.625	2.07	Al2O3	4.960
Si :	0.8055	0.3237	39.324	29.82	SiO2	84.126
U :	0.0011	0.0009	0.143	0.01	UO2	0.162
Fe :	0.0702	0.0454	5.583	2.13	Fe2O3	7.982
O			49.555	65.97	by stoichiometry	
total :			97.231			97.231

iteration : 2

point n : 41 x= 14676 y= 5604 z= 11 swritrav 22.35_15.3_ts1_tr1b

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Al	32469	646.64	10.50	0.05540	0.9		
Si	27735	7175.73	44.60	0.73952	0.4		
						201.	15.0
U	44670	115.64	52.16	0.00235	1.3		
Fe	48080	5736.26	62.42	0.17964	0.5		

Analysis no. 41 within swritrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Al :	0.0554	0.0236	3.253	2.48	Al2O3	6.147
Si :	0.7395	0.2972	36.778	26.93	SiO2	78.679
U :	0.0023	0.0020	0.293	0.03	UO2	0.332
Fe :	0.1796	0.1161	14.042	5.17	Fe2O3	20.077
O			50.868	65.39	by stoichiometry	
total :			105.235			105.235

iteration : 3

point n : 42 x= 14676 y= 5601 z= 11 swritrav 22.35_15.3_ts1_tr1b

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Al	32469	804.89	11.65	0.06907	0.8		
Si	27735	6502.12	40.55	0.66995	0.4		
						201.	15.0
U	44670	82.41	49.77	0.00121	1.5		
Fe	48080	3033.61	53.46	0.09435	0.5		

Analysis no. 42 within swritrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Al :	0.0691	0.0295	3.944	3.40	Al2O3	7.451
Si :	0.6700	0.2693	33.657	27.89	SiO2	72.002
U :	0.0012	0.0010	0.152	0.01	UO2	0.173
Fe :	0.0944	0.0610	7.472	3.11	Fe2O3	10.683
O			45.084	65.58	by stoichiometry	
total :			90.309			90.309

iteration : 3

point n : 43 x= 14676 y= 5599 z= 11 swritrav 22.35_15.3_ts1_tr1b

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Al	32469	864.29	11.10	0.07430	0.8		
Si	27735	6419.63	40.30	0.66148	0.4		
						201.	15.0
U	44670	53.82	47.62	0.00023	1.8		
Fe	48080	669.06	41.82	0.01986	0.7		

Analysis no. 43 within swritrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Al :	0.0743	0.0317	4.087	3.80	Al2O3	7.723
Si :	0.6615	0.2659	33.143	29.57	SiO2	70.902
U :	0.0002	0.0002	0.029	0.00	UO2	0.033
Fe :	0.0199	0.0128	1.591	0.71	Fe2O3	2.275
O			42.082	65.91	by stoichiometry	
total :			80.933			80.933

iteration : 2

point n : 44 x= 14676 y= 5597 z= 11 swritrav 22.35_15.3_ts1_tr1b

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Al	32469	157.95	9.45	0.01293	1.8		
Si	27735	8659.88	52.56	0.89261	0.3		
						201.	15.0
U	44670	46.62	44.65	0.00007	2.0		
Fe	48080	119.93	38.65	0.00257	1.3		

Analysis no. 44 within swritrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Al :	0.0129	0.0055	0.702	0.57	Al2O3	1.327
Si :	0.8926	0.3588	42.402	32.79	SiO2	90.710
U :	0.0001	0.0001	0.009	0.00	UO2	0.011
Fe :	0.0026	0.0017	0.207	0.08	Fe2O3	0.296
O			49.023	66.56	by stoichiometry	
total :			92.344			92.344

iteration : 2

point n : 45 x= 14676 y= 5595 z= 11 swritrav 22.35_15.3_ts1_tr1b

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0

Al	32469	50.81	7.25	0.00379	3.1
Si	27735	9147.39	53.21	0.94309	0.3
					201. 15.0
U	44670	46.25	44.63	0.00006	2.0
Fe	48080	102.37	39.12	0.00200	1.4

Analysis no. 45 within swritrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Al :	0.0038	0.0016	0.206	0.16	Al2O3	0.389
Si :	0.9431	0.3790	44.417	33.15	SiO2	95.021
U :	0.0001	0.0001	0.008	0.00	UO2	0.009
Fe :	0.0020	0.0013	0.161	0.06	Fe2O3	0.231
O			50.857	66.63	by stoichiometry	
total :			95.649			95.649

iteration : 2

point n : 46 x= 14676 y= 5593 z= 11 swritrav 22.35_15.3_ts1_tr1b

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Al	32469	64.51	7.90	0.00493	2.8		
Si	27735	8982.68	53.71	0.92578	0.3		
						201.	15.0
U	44670	46.40	41.69	0.00017	2.0		
Fe	48080	304.37	39.24	0.00840	0.9		

Analysis no. 46 within swritrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Al :	0.0049	0.0021	0.269	0.21	Al2O3	0.507
Si :	0.9258	0.3721	43.736	32.94	SiO2	93.564
U :	0.0002	0.0001	0.022	0.00	UO2	0.025
Fe :	0.0084	0.0054	0.675	0.26	Fe2O3	0.965
O			50.360	66.59	by stoichiometry	
total :			95.063			95.063

iteration : 2

point n : 47 x= 14676 y= 5591 z= 11 swritrav 22.35_15.3_ts1_tr1b

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Al	32469	978.11	12.25	0.08412	0.7		
Si	27735	6905.57	41.70	0.71185	0.4		
						200.	15.0
U	44670	47.64	42.91	0.00017	1.9		
Fe	48080	467.89	41.07	0.01352	0.8		

Analysis no. 47 within swritrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Al :	0.0841	0.0359	4.605	4.00	Al2O3	8.700
Si :	0.7118	0.2861	35.448	29.61	SiO2	75.833
U :	0.0002	0.0001	0.022	0.00	UO2	0.025
Fe :	0.0135	0.0087	1.084	0.46	Fe2O3	1.550
O			44.949	65.92	by stoichiometry	
total :			86.108			86.108

iteration : 2

point n : 48 x= 10229 y= 7974 z= 15 swritrav 22.35_15.3_ts1_tr2a

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Al	32469	72.56	9.90	0.00546	2.6		
Si	27735	1000.35	22.95	0.10135	0.7		
						201.	15.0
U	44670	15420.58	187.00	0.56349	0.5		
Fe	48080	309.61	161.17	0.00470	0.9		

Analysis no. 48 within swritrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Al :	0.0055	0.0023	0.360	1.01	Al2O3	0.681
Si :	0.1014	0.0407	5.152	13.91	SiO2	11.023
U :	0.5635	0.4727	57.339	18.26	UO2	65.047
Fe :	0.0047	0.0030	0.279	0.38	Fe2O3	0.400
O			14.019	66.43	by stoichiometry	
total :			77.150			77.150

iteration : 2

point n : 49 x= 10228 y= 7972 z= 15 swritrav 22.35_15.3_ts1_tr2a

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Al	32469	328.77	11.75	0.02760	1.3		
Si	27735	1792.05	24.20	0.18329	0.6		
						201.	15.0
U	44670	3096.66	75.09	0.11173	0.5		
Fe	48080	764.82	65.83	0.02213	0.7		

Analysis no. 49 within swritrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Al :	0.0276	0.0118	1.696	4.41	Al2O3	3.204
Si :	0.1833	0.0737	9.630	24.04	SiO2	20.601
U :	0.1117	0.0937	13.512	3.98	UO2	15.328
Fe :	0.0221	0.0143	1.575	1.98	Fe2O3	2.252
O			14.973	65.60	by stoichiometry	
total :			41.385			41.385

iteration : 3

point n : 50 x= 10227 y= 7970 z= 15 swritrav 22.35_15.3_ts1_tr2a

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Al	32469	1834.86	15.70	0.15840	0.6		
Si	27735	4991.13	34.00	0.51394	0.4		
						201.	15.0
U	44670	73.09	44.49	0.00106	1.6		
Fe	48080	656.34	41.24	0.01947	0.7		

Analysis no. 50 within swritrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Al :	0.1584	0.0676	8.742	8.57	Al2O3	16.518
Si :	0.5139	0.2066	27.130	25.56	SiO2	58.039
U :	0.0011	0.0009	0.135	0.01	UO2	0.153
Fe :	0.0195	0.0126	1.556	0.74	Fe2O3	2.225

```
 O                                  39.371     65.11  by stoichiometry

 total :                            76.935                              76.935
 iteration :  2

 point n :    51     x=  10225  y=   7968  z=     15   swritrav
                                                        22.35_15.3_ts1_tr2a
elt.  peak      peak     backgr.   i.x./i.std.  sig/k    beam      kv
      pos.      (c/s)     (c/s)
                                                            15.    15.0
 Al   32469    1222.83      11.85      0.10546    0.7
 Si   27735    4774.05      32.45      0.49167    0.4
                                                           201.    15.0
 U    44670      61.41      45.21      0.00060    1.7
 Fe   48080    1043.09      42.69      0.03168    0.6

Analysis no.   51 within swritrav
              k                   wt.  %   normalized
element  i.x./i.std.  k.ratio     concen.    atom. c    compound     concen.
  Al :      0.1055     0.0450       5.881      6.40    Al2O3          11.111
  Si :      0.4917     0.1976      25.720     26.88    SiO2           55.023
  U  :      0.0006     0.0005       0.076      0.01    UO2             0.086
  Fe :      0.0317     0.0205       2.530      1.33    Fe2O3           3.617
  O                                35.631     65.38  by stoichiometry

 total :                            69.838                              69.838
 iteration :  2

 point n :    52     x=  10224  y=   7966  z=     15   swritrav
                                                        22.35_15.3_ts1_tr2a
elt.  peak      peak     backgr.   i.x./i.std.  sig/k    beam      kv
      pos.      (c/s)     (c/s)
                                                            15.    15.0
 Al   32469     607.34      10.00      0.05201    0.9
 Si   27735    7211.74      44.70      0.74305    0.4
                                                           201.    15.0
 U    44670      55.22      45.03      0.00038    1.8
 Fe   48080     812.65      43.70      0.02435    0.6

Analysis no.   52 within swritrav
              k                   wt.  %   normalized
element  i.x./i.std.  k.ratio     concen.    atom. c    compound     concen.
  Al :      0.0520     0.0222       2.864      2.49    Al2O3           5.411
  Si :      0.7431     0.2986      36.521     30.57    SiO2           78.129
  U  :      0.0004     0.0003       0.048      0.00    UO2             0.055
  Fe :      0.0244     0.0157       1.951      0.82    Fe2O3           2.789
  O                                45.000     66.11  by stoichiometry

 total :                            86.384                              86.384
 iteration :  2

 point n :    53     x=  10223  y=   7964  z=     15   swritrav
                                                        22.35_15.3_ts1_tr2a
elt.  peak      peak     backgr.   i.x./i.std.  sig/k    beam      kv
      pos.      (c/s)     (c/s)
                                                            15.    15.0
 Al   32469     454.21      12.05      0.03851    1.1
 Si   27735    7501.02      45.30      0.77310    0.3
                                                           201.    15.0
 U    44670      56.39      46.52      0.00037    1.8
 Fe   48080     706.76      40.85      0.02109    0.7

Analysis no.   53 within swritrav
              k                   wt.  %   normalized
```

element	i.x./i.std.	k.ratio	concen.	atom. c	compound	concen.
Al :	0.0385	0.0164	2.115	1.83	Al2O3	3.997
Si :	0.7731	0.3107	37.667	31.22	SiO2	80.580
U :	0.0004	0.0003	0.047	0.00	UO2	0.053
Fe :	0.0211	0.0136	1.691	0.70	Fe2O3	2.418
O			45.528	66.25	by stoichiometry	
total :			87.048			87.048

iteration : 2

point n : 54 x= 10222 y= 7961 z= 15 swritrav 22.35_15.3_ts1_tr2a

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Al	32469	1002.71	12.25	0.08626	0.7		
Si	27735	5286.31	38.40	0.54419	0.4		
						201.	15.0
U	44670	90.17	53.77	0.00135	1.4		
Fe	48080	2145.03	54.81	0.06620	0.5		

Analysis no. 54 within swritrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Al :	0.0863	0.0368	4.894	4.92	Al2O3	9.248
Si :	0.5442	0.2187	28.050	27.09	SiO2	60.006
U :	0.0013	0.0011	0.170	0.02	UO2	0.193
Fe :	0.0662	0.0428	5.261	2.55	Fe2O3	7.521
O			38.593	65.42	by stoichiometry	
total :			76.968			76.968

iteration : 3

point n : 55 x= 10220 y= 7959 z= 15 swritrav 22.35_15.3_ts1_tr2a

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Al	32469	960.19	10.90	0.08267	0.8		
Si	27735	4674.55	32.80	0.48134	0.4		
						201.	15.0
U	44670	67.78	48.11	0.00073	1.6		
Fe	48080	1573.10	47.00	0.04833	0.6		

Analysis no. 55 within swritrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Al :	0.0827	0.0353	4.665	5.27	Al2O3	8.815
Si :	0.4813	0.1935	25.073	27.18	SiO2	53.638
U :	0.0007	0.0006	0.092	0.01	UO2	0.104
Fe :	0.0483	0.0312	3.852	2.10	Fe2O3	5.507
O			34.382	65.44	by stoichiometry	
total :			68.064			68.064

iteration : 3

point n : 56 x= 10219 y= 7957 z= 15 swritrav 22.35_15.3_ts1_tr2a

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Al	32469	906.09	13.30	0.07774	0.8		
Si	27735	5841.51	36.80	0.60181	0.4		
						201.	15.0

U	44670	51.91	43.84	0.00030	1.9
Fe	48080	784.48	42.07	0.02351	0.7

Analysis no. 56 within swritrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Al :	0.0777	0.0332	4.293	4.25	Al2O3	8.112
Si :	0.6018	0.2419	30.511	29.03	SiO2	65.272
U :	0.0003	0.0003	0.038	0.00	UO2	0.043
Fe :	0.0235	0.0152	1.882	0.90	Fe2O3	2.691
O			39.393	65.81	by stoichiometry	
total :			76.118			76.118

iteration : 2

point n : 57 x= 10218 y= 7955 z= 15 swritrav
22.35_15.3_ts1_tr2a

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Al	32469	822.55	12.60	0.07054	0.8		
Si	27735	6854.19	43.55	0.70625	0.4		
						201.	15.0
U	44670	55.16	46.69	0.00031	1.8		
Fe	48080	1097.45	43.42	0.03338	0.6		

Analysis no. 57 within swritrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Al :	0.0705	0.0301	3.905	3.42	Al2O3	7.378
Si :	0.7063	0.2839	35.128	29.54	SiO2	75.150
U :	0.0003	0.0003	0.040	0.00	UO2	0.045
Fe :	0.0334	0.0216	2.669	1.13	Fe2O3	3.816
O			44.647	65.91	by stoichiometry	
total :			86.389			86.389

iteration : 2

point n : 58 x= 10216 y= 7953 z= 15 swritrav
22.35_15.3_ts1_tr2a

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Al	32469	1220.62	12.50	0.10522	0.7		
Si	27735	5918.90	35.35	0.61012	0.4		
						201.	15.0
U	44670	52.84	47.88	0.00018	1.8		
Fe	48080	526.09	42.34	0.01532	0.7		

Analysis no. 58 within swritrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Al :	0.1052	0.0449	5.778	5.47	Al2O3	10.917
Si :	0.6101	0.2452	31.122	28.30	SiO2	66.580
U :	0.0002	0.0002	0.023	0.00	UO2	0.027
Fe :	0.0153	0.0099	1.227	0.56	Fe2O3	1.755
O			41.127	65.66	by stoichiometry	
total :			79.278			79.278

iteration : 2

point n : 59 x= 10133 y= 8082 z= 15 swritrav
22.35_15.3_ts1_tr2b

elt.	peak	peak	backgr.	i.x./i.std.	sig/k	beam	kv

	pos.	(c/s)	(c/s)				
						15.	15.0
Al	32469	206.94	12.80	0.01691	1.6		
Si	27735	1103.18	23.15	0.11199	0.7		
						201.	15.0
U	44670	15987.00	203.55	0.58370	0.5		
Fe	48080	205.33	160.03	0.00143	1.0		

Analysis no. 59 within swritrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Al :	0.0169	0.0072	1.112	2.82	Al2O3	2.101
Si :	0.1120	0.0450	5.715	13.92	SiO2	12.226
U :	0.5837	0.4896	59.094	16.98	UO2	67.038
Fe :	0.0014	0.0009	0.086	0.11	Fe2O3	0.123
O			15.481	66.18	by stoichiometry	
total :			81.488			81.488

iteration : 3

point n : 60 x= 10131 y= 8080 z= 15 swritrav 22.35_15.3_ts1_tr2b

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Al	32469	217.64	12.50	0.01786	1.5		
Si	27735	1911.73	29.00	0.19521	0.6		
						201.	15.0
U	44670	3041.05	71.23	0.10984	0.5		
Fe	48080	265.47	59.39	0.00653	0.9		

Analysis no. 60 within swritrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Al :	0.0179	0.0076	1.086	2.93	Al2O3	2.052
Si :	0.1952	0.0785	10.150	26.29	SiO2	21.714
U :	0.1098	0.0921	13.400	4.10	UO2	15.201
Fe :	0.0065	0.0042	0.465	0.61	Fe2O3	0.664
O			14.530	66.08	by stoichiometry	
total :			39.631			39.631

iteration : 3

point n : 61 x= 10129 y= 8078 z= 15 swritrav 22.35_15.3_ts1_tr2b

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Al	32469	174.41	10.20	0.01430	1.7		
Si	27735	8858.41	52.71	0.91328	0.3		
						201.	15.0
U	44670	57.09	42.32	0.00055	1.8		
Fe	48080	234.41	41.37	0.00611	1.0		

Analysis no. 61 within swritrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Al :	0.0143	0.0061	0.778	0.61	Al2O3	1.471
Si :	0.9133	0.3671	43.312	32.66	SiO2	92.656
U :	0.0005	0.0005	0.070	0.01	UO2	0.080
Fe :	0.0061	0.0040	0.492	0.19	Fe2O3	0.703
O			50.257	66.53	by stoichiometry	
total :			94.909			94.909

iteration : 2

point n : 62 x= 10127 y= 8076 z= 15 swritrav 22.35_15.3_ts1_tr2b

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Al	32469	662.13	9.80	0.05681	0.9		
Si	27735	6891.85	44.50	0.70999	0.4		
						201.	15.0
U	44670	51.66	41.41	0.00038	1.9		
Fe	48080	344.04	38.64	0.00967	0.8		

Analysis no. 62 within swritrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Al :	0.0568	0.0242	3.104	2.83	Al2O3	5.864
Si :	0.7100	0.2854	35.067	30.69	SiO2	75.019
U :	0.0004	0.0003	0.049	0.01	UO2	0.055
Fe :	0.0097	0.0063	0.777	0.34	Fe2O3	1.110
O			43.052	66.14	by stoichiometry	
total :			82.048			82.048

iteration : 2

point n : 63 x= 10125 y= 8074 z= 15 swritrav 22.35_15.3_ts1_tr2b

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Al	32469	1162.25	13.25	0.10006	0.7		
Si	27735	5057.54	33.60	0.52095	0.4		
						201.	15.0
U	44670	50.01	42.32	0.00028	1.9		
Fe	48080	306.02	37.19	0.00851	0.9		

Analysis no. 63 within swritrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Al :	0.1001	0.0427	5.487	5.94	Al2O3	10.368
Si :	0.5210	0.2094	26.990	28.08	SiO2	57.740
U :	0.0003	0.0002	0.036	0.00	UO2	0.041
Fe :	0.0085	0.0055	0.683	0.36	Fe2O3	0.976
O			35.929	65.62	by stoichiometry	
total :			69.126			69.126

iteration : 2

point n : 64 x= 10123 y= 8072 z= 15 swritrav 22.35_15.3_ts1_tr2b

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Al	32469	1155.21	11.85	0.09958	0.7		
Si	27735	4875.94	32.55	0.50227	0.4		
						201.	15.0
U	44670	48.09	43.39	0.00017	1.9		
Fe	48080	334.92	39.92	0.00934	0.8		

Analysis no. 64 within swritrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Al :	0.0996	0.0425	5.468	6.08	Al2O3	10.330
Si :	0.5023	0.2019	26.124	27.93	SiO2	55.887

U :	0.0002	0.0001	0.022	0.00	UO2	0.025
Fe :	0.0093	0.0060	0.749	0.40	Fe2O3	1.071
O			34.951	65.59	by stoichiometry	
total :			67.314			67.314

iteration : 2

point n : 65 x= 10120 y= 8070 z= 15 swritrav 22.35_15.3_ts1_tr2b

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Al	32469	875.38	12.60	0.07514	0.8		
Si	27735	6780.21	42.35	0.69874	0.4		
						201.	15.0
U	44670	48.67	45.40	0.00012	1.9		
Fe	48080	225.13	39.24	0.00589	1.0		

Analysis no. 65 within swritrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Al :	0.0751	0.0320	4.096	3.69	Al2O3	7.740
Si :	0.6987	0.2808	34.756	30.08	SiO2	74.354
U :	0.0001	0.0001	0.016	0.00	UO2	0.018
Fe :	0.0059	0.0038	0.473	0.21	Fe2O3	0.676
O			43.446	66.02	by stoichiometry	
total :			82.787			82.787

iteration : 2

point n : 66 x= 10118 y= 8068 z= 15 swritrav 22.35_15.3_ts1_tr2b

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Al	32469	1094.39	13.40	0.09412	0.7		
Si	27735	6414.55	44.60	0.66038	0.4		
						201.	15.0
U	44670	46.60	45.38	0.00005	2.0		
Fe	48080	157.55	38.49	0.00377	1.1		

Analysis no. 66 within swritrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Al :	0.0941	0.0401	5.127	4.70	Al2O3	9.688
Si :	0.6604	0.2654	33.242	29.30	SiO2	71.113
U :	0.0000	0.0000	0.006	0.00	UO2	0.007
Fe :	0.0038	0.0024	0.303	0.13	Fe2O3	0.433
O			42.563	65.86	by stoichiometry	
total :			81.240			81.240

iteration : 2

point n : 67 x= 10116 y= 8066 z= 15 swritrav 22.35_15.3_ts1_tr2b

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Al	32469	178.96	10.20	0.01470	1.7		
Si	27735	8433.02	50.76	0.86926	0.3		
						201.	15.0
U	44670	47.50	44.72	0.00010	1.9		
Fe	48080	150.76	40.25	0.00350	1.1		

Analysis no. 67 within swritrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Al :	0.0147	0.0063	0.799	0.66	Al2O3	1.509
Si :	0.8693	0.3494	41.435	32.69	SiO2	88.642
U :	0.0001	0.0001	0.013	0.00	UO2	0.015
Fe :	0.0035	0.0023	0.282	0.11	Fe2O3	0.403
O			48.040	66.54	by stoichiometry	
total :			90.569			90.569

iteration : 2

point n : 68 x= 10114 y= 8064 z= 15 swritrav 22.35_15.3_ts1_tr2b

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Al	32469	483.52	10.05	0.04124	1.0		
Si	27735	7716.79	48.15	0.79526	0.3		
						201.	15.0
U	44670	44.25	44.96	0.00000	2.0		
Fe	48080	105.86	38.57	0.00213	1.3		

Analysis no. 68 within swritrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Al :	0.0412	0.0176	2.240	1.92	Al2O3	4.233
Si :	0.7953	0.3196	38.578	31.68	SiO2	82.529
U :	0.0000	0.0000	0.000	0.00	UO2	
Fe :	0.0021	0.0014	0.171	0.07	Fe2O3	0.245
O			46.018	66.34	by stoichiometry	
total :			87.007			87.007

iteration : 2

be carefull - k.r./w.f. = 0.00 for U

point n : 69 x= 10112 y= 8062 z= 15 swritrav 22.35_15.3_ts1_tr2b

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Al	32469	29.60	7.55	0.00192	4.1		
Si	27735	9079.07	54.71	0.93596	0.3		
						201.	15.0
U	44670	43.54	45.26	0.00000	2.0		
Fe	48080	92.23	38.87	0.00169	1.4		

Analysis no. 69 within swritrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Al :	0.0019	0.0008	0.104	0.08	Al2O3	0.197
Si :	0.9360	0.3762	44.091	33.22	SiO2	94.322
U :	0.0000	0.0000	0.000	0.00	UO2	
Fe :	0.0017	0.0011	0.136	0.05	Fe2O3	0.195
O			50.383	66.64	by stoichiometry	
total :			94.714			94.714

iteration : 2

be carefull - k.r./w.f. = 0.00 for U

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<CAMECA : 8.0- 3.2>

Tue Apr 18 20:59:51 1995

quantitative microprobe analysis
multi label

point n : 1 x= 12490 y= -33031 z= -13 swrisife
NOPI_423_1a_#1

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46367	4.83	3.70	0.00135	8.3		
Al	32469	33.95	7.70	0.00228	2.7		
Si	27735	215.19	12.90	0.02094	1.5		
As	37644	43.82	7.70	0.01396	2.2		
Ca	38383	16.65	6.05	0.00273	5.5		
S	61390	4.20	1.83	0.00159	8.9		
K	42759	6.30	5.85	0.00035	8.9		
Fe	48080	1816.48	10.74	0.76466	0.5		
						201.	15.0
Pb	60415	71.51	35.45	0.00217	2.0		
U	44670	117.48	84.89	0.00120	1.3		

Analysis no. 1 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0014	0.0001	0.022	0.04	Na2O	0.029
Al :	0.0023	0.0010	0.173	0.24	Al2O3	0.327
Si :	0.0209	0.0084	1.194	1.60	SiO2	2.555
As :	0.0140	0.0040	0.906	0.45	As2O5	1.390
Ca :	0.0027	0.0009	0.084	0.08	CaO	0.117
S :	0.0016	0.0003	0.039	0.05	SO3	0.099
K :	0.0004	0.0000	0.004	0.00	K2O	0.005
Fe :	0.7647	0.4944	55.008	36.99	Fe2O3	78.646
Pb :	0.0022	0.0018	0.249	0.05	PbO	0.268
U :	0.0012	0.0010	0.133	0.02	UO2	0.151
O			25.774	60.49	by stoichiometry	
total :			83.586			83.586

iteration : 2
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 2 x= 12445 y= -33199 z= -13 swrisife
NOPI_423_1a_#2

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46367	5.47	3.70	0.00211	7.8		
Al	32469	42.88	9.10	0.00294	2.4		
Si	27735	259.73	16.15	0.02522	1.4		
As	37644	35.50	7.56	0.01080	2.4		
Ca	38383	24.30	7.50	0.00433	4.6		
S	61390	6.97	2.33	0.00311	6.9		
K	42759	8.15	7.65	0.00039	7.9		
Fe	48080	2030.93	11.60	0.85546	0.5		
						201.	15.0
Pb	60415	69.71	34.18	0.00214	2.0		
U	44670	113.14	86.60	0.00098	1.3		

Analysis no. 2 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0021	0.0001	0.034	0.05	Na2O	0.045

Al :	0.0029	0.0013	0.222	0.28	Al2O3	0.420
Si :	0.0252	0.0101	1.436	1.73	SiO2	3.072
As :	0.0108	0.0031	0.702	0.32	As2O5	1.076
Ca :	0.0043	0.0014	0.133	0.11	CaO	0.186
S :	0.0031	0.0007	0.077	0.08	SO3	0.193
K :	0.0004	0.0000	0.004	0.00	K2O	0.005
Fe :	0.8555	0.5531	60.817	36.89	Fe2O3	86.952
Pb :	0.0021	0.0018	0.245	0.04	PbO	0.264
U :	0.0010	0.0008	0.108	0.02	UO2	0.123
O			28.557	60.47	by stoichiometry	
total :			92.337			92.337

iteration : 2
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 3 x= 12335 y= -33086 z= -13 swrisife
NOPI_423_1a_#3

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46367	4.90	3.17	0.00207	8.3		
Al	32469	17.23	9.35	0.00069	3.8		
Si	27735	198.43	12.25	0.01928	1.6		
As	37644	49.02	8.24	0.01577	2.1		
Ca	38383	21.45	7.85	0.00351	4.8		
S	61390	7.43	2.30	0.00344	6.7		
K	42759	8.10	8.30	0.00000	7.9		
Fe	48080	2073.79	11.64	0.87375	0.5		
						201.	15.0
Pb	60415	76.09	34.48	0.00250	1.9		
U	44670	126.97	87.93	0.00144	1.2		

Analysis no. 3 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0021	0.0001	0.033	0.05	Na2O	0.045
Al :	0.0007	0.0003	0.052	0.07	Al2O3	0.098
Si :	0.0193	0.0078	1.099	1.32	SiO2	2.352
As :	0.0158	0.0045	1.026	0.46	As2O5	1.573
Ca :	0.0035	0.0011	0.108	0.09	CaO	0.151
S :	0.0034	0.0007	0.086	0.09	SO3	0.214
K :	0.0000	0.0000	0.000	0.00	K2O	
Fe :	0.8738	0.5649	61.885	37.39	Fe2O3	88.477
Pb :	0.0025	0.0021	0.287	0.05	PbO	0.309
U :	0.0014	0.0012	0.159	0.02	UO2	0.180
O			28.665	60.46	by stoichiometry	
total :			93.399			93.399

iteration : 2
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As
be carefull - k.r./w.f. = 0.00 for K

point n : 4 x= 12368 y= -33086 z= -13 swrisife
NOPI_423_1a_#4

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46367	8.47	5.70	0.00330	6.3		
Al	32469	78.36	9.03	0.00603	1.8		
Si	27735	424.81	13.60	0.04260	1.1		
As	37644	58.87	8.22	0.01959	1.9		
Ca	38383	25.85	7.20	0.00481	4.4		

S	61390	4.77	2.07	0.00181	8.4
K	42759	9.65	6.95	0.00211	7.2
Fe	48080	1814.89	11.01	0.76448	0.5
					201. 15.0
Pb	60415	74.84	32.78	0.00253	1.9
U	44670	130.72	85.69	0.00166	1.2

Analysis no. 4 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0033	0.0002	0.052	0.08	Na2O	0.070
Al :	0.0060	0.0026	0.453	0.59	Al2O3	0.856
Si :	0.0426	0.0171	2.423	3.04	SiO2	5.184
As :	0.0196	0.0056	1.251	0.59	As2O5	1.919
Ca :	0.0048	0.0015	0.149	0.13	CaO	0.208
S :	0.0018	0.0004	0.045	0.05	SO3	0.113
K :	0.0021	0.0002	0.024	0.02	K2O	0.029
Fe :	0.7645	0.4942	54.868	34.62	Fe2O3	78.446
Pb :	0.0025	0.0021	0.292	0.05	PbO	0.315
U :	0.0017	0.0014	0.185	0.03	UO2	0.210
O			27.607	60.80	by stoichiometry	
total :			87.348			87.348

iteration : 3
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.45 for As

point n : 5 x= 12597 y= -33191 z= -13 swrisife
NOPI_423_1a_#5

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46367	9.97	3.90	0.00724	5.8		
Al	32469	107.17	9.93	0.00846	1.5		
Si	27735	485.82	14.45	0.04885	1.0		
As	37644	50.97	8.62	0.01638	2.0		
Ca	38383	21.35	6.75	0.00377	4.9		
S	61390	3.83	1.83	0.00134	9.3		
K	42759	7.25	7.90	0.00000	8.3		
Fe	48080	1662.42	9.83	0.70062	0.5		
						201.	15.0
Pb	60415	60.68	33.25	0.00165	2.1		
U	44670	147.56	84.78	0.00232	1.2		

Analysis no. 5 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0072	0.0003	0.112	0.18	Na2O	0.152
Al :	0.0085	0.0036	0.632	0.87	Al2O3	1.195
Si :	0.0488	0.0196	2.777	3.66	SiO2	5.940
As :	0.0164	0.0047	1.042	0.52	As2O5	1.598
Ca :	0.0038	0.0012	0.117	0.11	CaO	0.164
S :	0.0013	0.0003	0.034	0.04	SO3	0.084
K :	0.0000	0.0000	0.000	0.00	K2O	
Fe :	0.7006	0.4530	50.755	33.68	Fe2O3	72.565
Pb :	0.0017	0.0014	0.191	0.03	PbO	0.206
U :	0.0023	0.0019	0.258	0.04	UO2	0.293
O			26.278	60.87	by stoichiometry	
total :			82.197			82.197

iteration : 3
be carefull - k.r./w.f. = 0.31 for Na
be carefull - k.r./w.f. = 0.45 for As
be carefull - k.r./w.f. = 0.00 for K

point n : 6 x= 12517 y= -33037 z= -13 swrisife
NOPI_423_1a_#6

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46367	10.30	5.73	0.00546	5.7		
Al	32469	133.69	9.48	0.01081	1.4		
Si	27735	436.13	16.00	0.04355	1.1		
As	37644	55.23	8.58	0.01805	2.0		
Ca	38383	25.95	7.80	0.00468	4.4		
S	61390	4.00	1.97	0.00136	9.1		
K	42759	8.15	7.10	0.00082	7.9		
Fe	48080	1664.09	10.16	0.70139	0.5		
						201.	15.0
Pb	60415	57.36	33.28	0.00145	2.2		
U	44670	153.50	86.36	0.00248	1.2		

Analysis no. 6 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0055	0.0003	0.085	0.14	Na2O	0.114
Al :	0.0108	0.0046	0.809	1.11	Al2O3	1.529
Si :	0.0436	0.0175	2.481	3.28	SiO2	5.308
As :	0.0181	0.0051	1.148	0.57	As2O5	1.761
Ca :	0.0047	0.0015	0.145	0.13	CaO	0.203
S :	0.0014	0.0003	0.034	0.04	SO3	0.086
K :	0.0008	0.0001	0.009	0.01	K2O	0.011
Fe :	0.7014	0.4535	50.781	33.81	Fe2O3	72.603
Pb :	0.0014	0.0012	0.168	0.03	PbO	0.181
U :	0.0025	0.0021	0.276	0.04	UO2	0.313
O			26.172	60.83	by stoichiometry	
total :			82.108			82.108

iteration : 3
be carefull - k.r./w.f. = 0.31 for Na
be carefull - k.r./w.f. = 0.45 for As

point n : 7 x= 11667 y= -33102 z= -10 swrisife
NOPI_423_1b_#1

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46367	4.40	3.37	0.00123	8.7		
Al	32469	95.52	9.55	0.00748	1.6		
Si	27735	300.38	14.90	0.02958	1.3		
As	37644	30.42	8.54	0.00847	2.6		
Ca	38383	21.40	8.00	0.00346	4.8		
S	61390	7.13	1.97	0.00347	6.9		
K	42759	8.45	6.80	0.00129	7.7		
Fe	48080	1971.47	10.63	0.83128	0.5		
						201.	15.0
Pb	60415	63.53	34.30	0.00176	2.1		
U	44670	106.76	84.92	0.00081	1.3		

Analysis no. 7 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0012	0.0001	0.020	0.03	Na2O	0.026
Al :	0.0075	0.0032	0.563	0.71	Al2O3	1.065
Si :	0.0296	0.0119	1.684	2.04	SiO2	3.603
As :	0.0085	0.0024	0.548	0.25	As2O5	0.841
Ca :	0.0035	0.0011	0.106	0.09	CaO	0.149
S :	0.0035	0.0008	0.086	0.09	SO3	0.216

K :	0.0013	0.0001	0.015	0.01	K2O	0.018
Fe :	0.8313	0.5374	59.328	36.20	Fe2O3	84.823
Pb :	0.0018	0.0015	0.202	0.03	PbO	0.218
U :	0.0008	0.0007	0.089	0.01	UO2	0.101
O			28.416	60.52	by stoichiometry	
total :			91.059			91.059

iteration : 2
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 8 x= 11497 y= -33102 z= -10 swrisife
NOPI_423_1b_#2

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46367	4.80	3.90	0.00108	8.4		
Al	32469	72.49	9.18	0.00551	1.9		
Si	27735	277.25	15.20	0.02717	1.4		
As	37644	31.88	7.86	0.00930	2.5		
Ca	38383	20.95	6.25	0.00379	4.9		
S	61390	6.40	2.23	0.00280	7.2		
K	42759	8.55	6.30	0.00176	7.7		
Fe	48080	1983.00	11.37	0.83634	0.5		
						201.	15.0
Pb	60415	62.01	35.18	0.00161	2.1		
U	44670	107.11	84.78	0.00083	1.3		

Analysis no. 8 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0011	0.0001	0.017	0.03	Na2O	0.023
Al :	0.0055	0.0024	0.416	0.53	Al2O3	0.786
Si :	0.0272	0.0109	1.547	1.89	SiO2	3.310
As :	0.0093	0.0026	0.603	0.28	As2O5	0.925
Ca :	0.0038	0.0012	0.117	0.10	CaO	0.163
S :	0.0028	0.0006	0.070	0.07	SO3	0.174
K :	0.0018	0.0002	0.020	0.02	K2O	0.024
Fe :	0.8363	0.5407	59.649	36.56	Fe2O3	85.281
Pb :	0.0016	0.0014	0.186	0.03	PbO	0.200
U :	0.0008	0.0007	0.091	0.01	UO2	0.103
O			28.275	60.49	by stoichiometry	
total :			90.990			90.990

iteration : 2
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 9 x= 11663 y= -33227 z= -10 swrisife
NOPI_423_1b_#3

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46367	4.90	4.33	0.00068	8.3		
Al	32469	48.10	9.68	0.00335	2.3		
Si	27735	285.56	14.35	0.02812	1.3		
As	37644	33.26	7.66	0.00991	2.5		
Ca	38383	22.75	7.45	0.00395	4.7		
S	61390	6.50	2.50	0.00268	7.2		
K	42759	6.60	7.10	0.00000	8.7		
Fe	48080	2023.14	11.10	0.85337	0.5		
						201.	15.0
Pb	60415	64.26	33.60	0.00184	2.1		
U	44670	103.20	85.27	0.00066	1.4		

Analysis no. 9 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0007	0.0000	0.011	0.02	Na2O	0.015
Al :	0.0033	0.0014	0.253	0.32	Al2O3	0.477
Si :	0.0281	0.0113	1.600	1.92	SiO2	3.423
As :	0.0099	0.0028	0.643	0.29	As2O5	0.987
Ca :	0.0039	0.0012	0.121	0.10	CaO	0.170
S :	0.0027	0.0006	0.067	0.07	SO3	0.167
K :	0.0000	0.0000	0.000	0.00	K2O	
Fe :	0.8534	0.5517	60.714	36.72	Fe2O3	86.804
Pb :	0.0018	0.0015	0.212	0.03	PbO	0.228
U :	0.0007	0.0006	0.073	0.01	UO2	0.083
O			28.660	60.51	by stoichiometry	
total :			92.354			92.354

iteration : 2
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As
be carefull - k.r./w.f. = 0.00 for K

point n : 10 x= 11595 y= -33245 z= -10 swrisife
NOPI_423_1b_#4

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46367	9.30	5.33	0.00474	6.0		
Al	32469	227.33	9.15	0.01900	1.1		
Si	27735	367.92	14.45	0.03665	1.2		
As	37644	49.02	7.86	0.01593	2.1		
Ca	38383	17.80	6.70	0.00287	5.3		
S	61390	4.50	1.97	0.00170	8.6		
K	42759	8.05	8.35	0.00000	7.9		
Fe	48080	1652.43	9.74	0.69679	0.5		
						201.	15.0
Pb	60415	57.66	32.58	0.00151	2.2		
U	44670	134.14	84.15	0.00185	1.2		

Analysis no. 10 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0047	0.0002	0.074	0.12	Na2O	0.099
Al :	0.0190	0.0081	1.420	1.96	Al2O3	2.683
Si :	0.0366	0.0147	2.096	2.78	SiO2	4.483
As :	0.0159	0.0045	1.013	0.50	As2O5	1.553
Ca :	0.0029	0.0009	0.089	0.08	CaO	0.124
S :	0.0017	0.0004	0.043	0.05	SO3	0.107
K :	0.0000	0.0000	0.000	0.00	K2O	
Fe :	0.6968	0.4505	50.509	33.71	Fe2O3	72.213
Pb :	0.0015	0.0013	0.175	0.03	PbO	0.188
U :	0.0018	0.0015	0.206	0.03	UO2	0.233
O			26.062	60.72	by stoichiometry	
total :			81.685			81.685

iteration : 3
be carefull - k.r./w.f. = 0.31 for Na
be carefull - k.r./w.f. = 0.45 for As
be carefull - k.r./w.f. = 0.00 for K

point n : 11 x= 11361 y= -32997 z= -10 swrisife
NOPI_423_1b_#5

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv

						15.	15.0
Na	46367	9.90	5.23	0.00557	5.9		
Al	32469	96.52	10.10	0.00752	1.6		
Si	27735	475.30	15.95	0.04761	1.1		
As	37644	52.01	8.28	0.01692	2.0		
Ca	38383	21.80	6.65	0.00391	4.8		
S	61390	3.67	2.53	0.00076	9.6		
K	42759	7.60	7.75	0.00000	8.1		
Fe	48080	1693.85	11.07	0.71360	0.5		
						201.	15.0
Pb	60415	58.31	33.00	0.00152	2.2		
U	44670	140.94	83.49	0.00212	1.2		

Analysis no. 11 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0056	0.0003	0.087	0.14	Na2O	0.117
Al :	0.0075	0.0032	0.563	0.77	Al2O3	1.064
Si :	0.0476	0.0191	2.707	3.54	SiO2	5.792
As :	0.0169	0.0048	1.078	0.53	As2O5	1.653
Ca :	0.0039	0.0012	0.121	0.11	CaO	0.170
S :	0.0008	0.0002	0.019	0.02	SO3	0.048
K :	0.0000	0.0000	0.000	0.00	K2O	
Fe :	0.7136	0.4613	51.612	33.97	Fe2O3	73.791
Pb :	0.0015	0.0013	0.176	0.03	PbO	0.190
U :	0.0021	0.0018	0.236	0.04	UO2	0.268
O			26.492	60.86	by stoichiometry	
total :			83.092			83.092

iteration : 3
be carefull - k.r./w.f. = 0.31 for Na
be carefull - k.r./w.f. = 0.45 for As
be carefull - k.r./w.f. = 0.00 for K

point n : 12 x= 11704 y= -33072 z= -10 swrisife
NOPI_423_1b_#6

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46367	10.07	4.57	0.00657	5.8		
Al	32469	61.98	9.75	0.00455	2.0		
Si	27735	423.11	13.45	0.04248	1.1		
As	37644	61.73	7.96	0.02081	1.9		
Ca	38383	23.15	6.10	0.00440	4.7		
S	61390	3.63	2.13	0.00101	9.6		
K	42759	7.55	6.00	0.00121	8.2		
Fe	48080	1691.52	9.67	0.71344	0.5		
						201.	15.0
Pb	60415	55.78	34.93	0.00125	2.2		
U	44670	156.37	82.54	0.00273	1.1		

Analysis no. 12 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0066	0.0003	0.102	0.17	Na2O	0.138
Al :	0.0045	0.0019	0.342	0.47	Al2O3	0.646
Si :	0.0425	0.0171	2.418	3.21	SiO2	5.173
As :	0.0208	0.0059	1.328	0.66	As2O5	2.037
Ca :	0.0044	0.0014	0.136	0.13	CaO	0.191
S :	0.0010	0.0002	0.025	0.03	SO3	0.063
K :	0.0012	0.0001	0.014	0.01	K2O	0.017
Fe :	0.7134	0.4612	51.548	34.42	Fe2O3	73.699
Pb :	0.0013	0.0011	0.145	0.03	PbO	0.156
U :	0.0027	0.0023	0.303	0.05	UO2	0.344

```
 O                                  26.102     60.83  by stoichiometry

 total :                            82.463                                82.463
 iteration :  3
    be carefull - k.r./w.f. = 0.30 for Na
    be carefull - k.r./w.f. = 0.45 for As

 point n :    13     x= -19791  y= -23361  z=     18   swrisife
                                                        NOPI_423_2a_#1
elt.  peak      peak     backgr.   i.x./i.std.  sig/k    beam      kv
      pos.      (c/s)     (c/s)
                                                            15.    15.0
 Na   46367      8.10       4.03      0.00486    6.5
 Al   32469     85.16       9.85      0.00656    1.7
 Si   27735    302.33      15.95      0.02969    1.3
 As   37644     47.18       7.56      0.01534    2.1
 Ca   38383     20.60       7.20      0.00346    4.9
 S    61390      5.67       2.40      0.00219    7.7
 K    42759     11.40       7.50      0.00304    6.7
 Fe   48080   1931.23      11.26      0.81428    0.5
                                                           201.    15.0
 Pb   60415     76.36      34.03      0.00255    1.9
 U    44670    110.12      84.29      0.00095    1.3

Analysis no.   13 within swrisife
              k                    wt.  %   normalized
element  i.x./i.std.  k.ratio      concen.    atom. c    compound      concen.
  Na :      0.0049     0.0002       0.077      0.12    Na2O            0.104
  Al :      0.0066     0.0028       0.494      0.63    Al2O3           0.934
  Si :      0.0297     0.0119       1.692      2.08    SiO2            3.620
  As :      0.0153     0.0044       0.989      0.46    As2O5           1.517
  Ca :      0.0035     0.0011       0.107      0.09    CaO             0.149
  S  :      0.0022     0.0005       0.055      0.06    SO3             0.137
  K  :      0.0030     0.0003       0.035      0.03    K2O             0.042
  Fe :      0.8143     0.5264      58.133     35.92    Fe2O3          83.114
  Pb :      0.0025     0.0021       0.293      0.05    PbO             0.316
  U  :      0.0010     0.0008       0.106      0.02    UO2             0.120
  O                                 28.071     60.55  by stoichiometry

 total :                            90.051                                90.051
 iteration :  3
    be carefull - k.r./w.f. = 0.30 for Na
    be carefull - k.r./w.f. = 0.44 for As

 point n :    14     x= -19719  y= -23450  z=     18   swrisife
                                                        NOPI_423_2a_#2
elt.  peak      peak     backgr.   i.x./i.std.  sig/k    beam      kv
      pos.      (c/s)     (c/s)
                                                            15.    15.0
 Na   46367      7.77       4.03      0.00446    6.6
 Al   32469     48.35       8.65      0.00346    2.3
 Si   27735    253.88      16.85      0.02457    1.4
 As   37644     63.83       8.20      0.02153    1.8
 Ca   38383     24.60       7.90      0.00431    4.5
 S    61390      5.10       1.77      0.00224    8.1
 K    42759      9.95       7.60      0.00183    7.1
 Fe   48080   1969.61      11.56      0.83050    0.5
                                                           201.    15.0
 Pb   60415     83.34      34.58      0.00293    1.8
 U    44670    120.53      87.20      0.00123    1.3

Analysis no.   14 within swrisife
              k                    wt.  %   normalized
element  i.x./i.std.  k.ratio      concen.    atom. c    compound      concen.
```

Na :	0.0045	0.0002	0.071	0.11	Na2O	0.095
Al :	0.0035	0.0015	0.262	0.33	Al2O3	0.495
Si :	0.0246	0.0099	1.403	1.72	SiO2	3.001
As :	0.0215	0.0061	1.389	0.64	As2O5	2.131
Ca :	0.0043	0.0014	0.133	0.11	CaO	0.186
S :	0.0022	0.0005	0.056	0.06	SO3	0.139
K :	0.0018	0.0002	0.021	0.02	K2O	0.025
Fe :	0.8305	0.5369	59.072	36.38	Fe2O3	84.456
Pb :	0.0029	0.0025	0.337	0.06	PbO	0.363
U :	0.0012	0.0010	0.136	0.02	UO2	0.154
O			28.166	60.55	by stoichiometry	
total :			91.045			91.045

iteration : 3
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 15 x= -20015 y= -23525 z= 14 swrisife
NOPI_423_2a_#3

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46367	4.87	3.60	0.00151	8.3		
Al	32469	46.15	9.25	0.00321	2.3		
Si	27735	304.69	17.40	0.02979	1.3		
As	37644	59.07	7.90	0.01981	1.9		
Ca	38383	24.75	7.00	0.00458	4.5		
S	61390	5.87	2.13	0.00251	7.6		
K	42759	10.40	7.05	0.00261	7.0		
Fe	48080	1909.58	11.10	0.80530	0.5		
						201.	15.0
Pb	60415	81.64	34.45	0.00284	1.9		
U	44670	120.08	86.95	0.00122	1.3		

Analysis no. 15 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0015	0.0001	0.024	0.04	Na2O	0.032
Al :	0.0032	0.0014	0.243	0.31	Al2O3	0.459
Si :	0.0298	0.0120	1.697	2.11	SiO2	3.631
As :	0.0198	0.0056	1.275	0.60	As2O5	1.956
Ca :	0.0046	0.0014	0.141	0.12	CaO	0.198
S :	0.0025	0.0005	0.063	0.07	SO3	0.156
K :	0.0026	0.0003	0.030	0.03	K2O	0.036
Fe :	0.8053	0.5206	57.496	36.00	Fe2O3	82.203
Pb :	0.0028	0.0024	0.327	0.06	PbO	0.352
U :	0.0012	0.0010	0.135	0.02	UO2	0.154
O			27.745	60.64	by stoichiometry	
total :			89.176			89.176

iteration : 3
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 16 x= -19925 y= -23484 z= 14 swrisife
NOPI_423_2a_#4

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46367	7.13	4.47	0.00319	6.9		
Al	32469	142.47	9.55	0.01157	1.3		
Si	27735	256.28	14.25	0.02509	1.4		
As	37644	76.59	8.26	0.02644	1.7		
Ca	38383	22.65	6.85	0.00408	4.7		

S	61390	5.53	2.03	0.00235	7.8
K	42759	7.80	6.70	0.00086	8.0
Fe	48080	1640.91	9.40	0.69185	0.5
					201. 15.0
Pb	60415	51.78	32.38	0.00117	2.3
U	44670	162.47	83.73	0.00291	1.1

Analysis no. 16 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0032	0.0002	0.050	0.08	Na2O	0.067
Al :	0.0116	0.0049	0.873	1.26	Al2O3	1.650
Si :	0.0251	0.0101	1.439	1.99	SiO2	3.078
As :	0.0264	0.0075	1.687	0.87	As2O5	2.587
Ca :	0.0041	0.0013	0.126	0.12	CaO	0.176
S :	0.0023	0.0005	0.059	0.07	SO3	0.147
K :	0.0009	0.0001	0.010	0.01	K2O	0.012
Fe :	0.6918	0.4473	50.036	34.78	Fe2O3	71.537
Pb :	0.0012	0.0010	0.135	0.03	PbO	0.145
U :	0.0029	0.0024	0.323	0.05	UO2	0.366
O			25.029	60.73	by stoichiometry	
total :			79.765			79.765

iteration : 3
be carefull - k.r./w.f. = 0.31 for Na
be carefull - k.r./w.f. = 0.45 for As

point n : 17 x= -19868 y= -23265 z= 14 swrisife
NOPI_423_2a_#5

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46367	7.17	4.00	0.00378	6.9		
Al	32469	176.69	9.15	0.01459	1.2		
Si	27735	207.04	15.05	0.01990	1.6		
As	37644	45.94	7.98	0.01469	2.1		
Ca	38383	12.45	6.10	0.00164	6.3		
S	61390	6.70	2.13	0.00306	7.1		
K	42759	6.75	6.85	0.00000	8.6		
Fe	48080	1718.92	10.23	0.72461	0.5		
						201.	15.0
Pb	60415	51.46	34.05	0.00105	2.3		
U	44670	189.32	84.57	0.00387	1.1		

Analysis no. 17 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0038	0.0002	0.060	0.10	Na2O	0.080
Al :	0.0146	0.0062	1.099	1.55	Al2O3	2.076
Si :	0.0199	0.0080	1.140	1.54	SiO2	2.438
As :	0.0147	0.0042	0.945	0.48	As2O5	1.449
Ca :	0.0016	0.0005	0.051	0.05	CaO	0.071
S :	0.0031	0.0007	0.077	0.09	SO3	0.191
K :	0.0000	0.0000	0.000	0.00	K2O	
Fe :	0.7246	0.4685	52.321	35.59	Fe2O3	74.805
Pb :	0.0010	0.0009	0.121	0.02	PbO	0.130
U :	0.0039	0.0032	0.428	0.07	UO2	0.486
O			25.486	60.51	by stoichiometry	
total :			81.725			81.725

iteration : 3
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As
be carefull - k.r./w.f. = 0.00 for K

point n : 18 x= -19724 y= -23393 z= 14 swrisife
NOPI_423_2a_#6

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46367	7.10	3.13	0.00474	6.9		
Al	32469	121.48	6.58	0.01001	1.5		
Si	27735	181.27	11.75	0.01758	1.7		
As	37644	36.34	5.68	0.01187	2.4		
Ca	38383	14.90	7.10	0.00201	5.8		
S	61390	10.57	2.47	0.00544	5.6		
K	42759	8.80	8.05	0.00059	7.6		
Fe	48080	1618.13	9.96	0.68233	0.5		
						201.	15.0
Pb	60415	49.10	33.75	0.00092	2.3		
U	44670	167.47	83.17	0.00312	1.1		

Analysis no. 18 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0047	0.0002	0.075	0.13	Na2O	0.101
Al :	0.0100	0.0043	0.755	1.14	Al2O3	1.427
Si :	0.0176	0.0071	1.005	1.45	SiO2	2.151
As :	0.0119	0.0034	0.767	0.42	As2O5	1.176
Ca :	0.0020	0.0006	0.062	0.06	CaO	0.087
S :	0.0054	0.0012	0.136	0.17	SO3	0.339
K :	0.0006	0.0001	0.007	0.01	K2O	0.008
Fe :	0.6823	0.4411	49.628	36.05	Fe2O3	70.954
Pb :	0.0009	0.0008	0.106	0.02	PbO	0.114
U :	0.0031	0.0026	0.344	0.06	UO2	0.391
O			23.862	60.50	by stoichiometry	
total :			76.747			76.747

iteration : 3
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 19 x= -19727 y= -24662 z= 11 swrisife
NOPI_423_2b_#1

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46367	6.40	3.30	0.00370	7.3		
Al	32469	36.95	9.25	0.00241	2.6		
Si	27735	339.78	15.80	0.03359	1.2		
As	37644	35.70	7.48	0.01092	2.4		
Ca	38383	21.95	7.85	0.00364	4.8		
S	61390	6.37	2.30	0.00273	7.3		
K	42759	13.25	6.40	0.00535	6.2		
Fe	48080	1925.86	11.30	0.81206	0.5		
						201.	15.0
Pb	60415	82.21	33.58	0.00293	1.9		
U	44670	112.19	83.63	0.00106	1.3		

Analysis no. 19 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0037	0.0002	0.059	0.09	Na2O	0.079
Al :	0.0024	0.0010	0.182	0.23	Al2O3	0.343
Si :	0.0336	0.0135	1.908	2.36	SiO2	4.081
As :	0.0109	0.0031	0.706	0.33	As2O5	1.083
Ca :	0.0036	0.0011	0.112	0.10	CaO	0.157
S :	0.0027	0.0006	0.068	0.07	SO3	0.170

K :	0.0053	0.0006	0.061	0.05	K2O	0.073
Fe :	0.8121	0.5250	58.043	36.13	Fe2O3	82.985
Pb :	0.0029	0.0025	0.337	0.06	PbO	0.363
U :	0.0011	0.0009	0.117	0.02	UO2	0.133
O			27.875	60.56	by stoichiometry	
total :			89.467			89.467

iteration : 2
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 20 x= -19927 y= -24743 z= 11 swrisife
NOPI_423_2b_#2

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46367	5.80	3.90	0.00227	7.6		
Al	32469	45.00	9.83	0.00306	2.4		
Si	27735	281.31	16.60	0.02744	1.4		
As	37644	60.41	8.10	0.02025	1.9		
Ca	38383	22.70	5.90	0.00434	4.7		
S	61390	5.33	2.17	0.00212	7.9		
K	42759	8.30	7.15	0.00090	7.8		
Fe	48080	1935.68	11.03	0.81633	0.5		
						201.	15.0
Pb	60415	78.51	33.45	0.00271	1.9		
U	44670	107.96	84.92	0.00085	1.3		

Analysis no. 20 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0023	0.0001	0.036	0.05	Na2O	0.048
Al :	0.0031	0.0013	0.232	0.30	Al2O3	0.438
Si :	0.0274	0.0110	1.565	1.94	SiO2	3.349
As :	0.0202	0.0058	1.306	0.61	As2O5	2.003
Ca :	0.0043	0.0014	0.134	0.12	CaO	0.187
S :	0.0021	0.0005	0.053	0.06	SO3	0.132
K :	0.0009	0.0001	0.010	0.01	K2O	0.012
Fe :	0.8163	0.5278	58.209	36.25	Fe2O3	83.222
Pb :	0.0027	0.0023	0.312	0.05	PbO	0.336
U :	0.0009	0.0007	0.094	0.01	UO2	0.107
O			27.884	60.61	by stoichiometry	
total :			89.834			89.834

iteration : 3
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 21 x= -19822 y= -24722 z= 11 swrisife
NOPI_423_2b_#3

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46367	6.93	3.77	0.00378	7.0		
Al	32469	65.76	9.63	0.00489	2.0		
Si	27735	242.62	15.65	0.02353	1.5		
As	37644	75.43	8.82	0.02578	1.7		
Ca	38383	26.20	7.30	0.00488	4.4		
S	61390	4.53	2.03	0.00168	8.6		
K	42759	8.95	7.05	0.00148	7.5		
Fe	48080	1886.61	10.43	0.79571	0.5		
						201.	15.0
Pb	60415	76.21	34.58	0.00251	1.9		
U	44670	144.49	90.14	0.00201	1.2		

Analysis no. 21 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0038	0.0002	0.060	0.09	Na2O	0.080
Al :	0.0049	0.0021	0.370	0.49	Al2O3	0.699
Si :	0.0235	0.0095	1.346	1.70	SiO2	2.878
As :	0.0258	0.0073	1.657	0.78	As2O5	2.542
Ca :	0.0049	0.0015	0.150	0.13	CaO	0.210
S :	0.0017	0.0004	0.042	0.05	SO3	0.105
K :	0.0015	0.0002	0.017	0.02	K2O	0.020
Fe :	0.7957	0.5144	56.792	36.05	Fe2O3	81.197
Pb :	0.0025	0.0021	0.288	0.05	PbO	0.310
U :	0.0020	0.0017	0.222	0.03	UO2	0.252
O			27.350	60.61	by stoichiometry	
total :			88.294			88.294

iteration : 3
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 22 x= -19893 y= -24805 z= 11 swrisife
NOPI_423_2b_#4

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46367	7.53	4.53	0.00358	6.7		
Al	32469	135.86	9.15	0.01103	1.4		
Si	27735	174.76	12.90	0.01678	1.7		
As	37644	90.76	8.32	0.03190	1.5		
Ca	38383	30.25	7.50	0.00587	4.1		
S	61390	6.57	2.47	0.00275	7.1		
K	42759	7.75	7.60	0.00012	8.1		
Fe	48080	1694.28	9.76	0.71442	0.5		
						201.	15.0
Pb	60415	54.68	33.18	0.00129	2.2		
U	44670	204.13	86.74	0.00434	1.0		

Analysis no. 22 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0036	0.0002	0.056	0.09	Na2O	0.075
Al :	0.0110	0.0047	0.836	1.19	Al2O3	1.579
Si :	0.0168	0.0067	0.965	1.32	SiO2	2.064
As :	0.0319	0.0091	2.037	1.04	As2O5	3.124
Ca :	0.0059	0.0018	0.181	0.17	CaO	0.253
S :	0.0028	0.0006	0.069	0.08	SO3	0.172
K :	0.0001	0.0000	0.001	0.00	K2O	0.002
Fe :	0.7144	0.4619	51.399	35.33	Fe2O3	73.485
Pb :	0.0013	0.0011	0.149	0.03	PbO	0.161
U :	0.0043	0.0036	0.480	0.08	UO2	0.544
O			25.288	60.67	by stoichiometry	
total :			81.459			81.459

iteration : 3
be carefull - k.r./w.f. = 0.31 for Na
be carefull - k.r./w.f. = 0.45 for As

point n : 23 x= -19675 y= -24788 z= 11 swrisife
NOPI_423_2b_#5

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46367	8.30	4.20	0.00490	6.4		

Al	32469	147.54	8.58	0.01210	1.3
Si	27735	313.30	15.15	0.03091	1.3
As	37644	60.97	8.66	0.02025	1.9
Ca	38383	24.65	6.50	0.00468	4.5
S	61390	4.33	2.40	0.00130	8.8
K	42759	7.25	6.25	0.00078	8.3
Fe	48080	1660.27	9.17	0.70035	0.5
					201. 15.0
Pb	60415	55.86	35.33	0.00124	2.2
U	44670	170.54	81.88	0.00328	1.1

Analysis no. 23 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0049	0.0002	0.076	0.13	Na2O	0.103
Al :	0.0121	0.0052	0.910	1.28	Al2O3	1.719
Si :	0.0309	0.0124	1.768	2.40	SiO2	3.782
As :	0.0202	0.0058	1.292	0.66	As2O5	1.982
Ca :	0.0047	0.0015	0.145	0.14	CaO	0.203
S :	0.0013	0.0003	0.033	0.04	SO3	0.081
K :	0.0008	0.0001	0.009	0.01	K2O	0.011
Fe :	0.7004	0.4528	50.666	34.57	Fe2O3	72.438
Pb :	0.0012	0.0010	0.143	0.03	PbO	0.154
U :	0.0033	0.0028	0.364	0.06	UO2	0.412
O			25.480	60.69	by stoichiometry	
total :			80.884			80.884

iteration : 3
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.45 for As

point n : 24 x= -19742 y= -24891 z= 11 swrisife
NOPI_423_2b_#6

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46367	7.43	5.00	0.00291	6.7		
Al	32469	133.84	8.63	0.01090	1.4		
Si	27735	149.79	12.00	0.01429	1.8		
As	37644	103.82	7.64	0.03723	1.5		
Ca	38383	25.15	6.20	0.00489	4.5		
S	61390	6.53	2.30	0.00284	7.2		
K	42759	6.75	5.95	0.00062	8.6		
Fe	48080	1653.67	9.40	0.69751	0.5		
						201.	15.0
Pb	60415	61.46	33.33	0.00169	2.1		
U	44670	191.57	84.89	0.00394	1.1		

Analysis no. 24 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0029	0.0001	0.045	0.08	Na2O	0.061
Al :	0.0109	0.0047	0.828	1.20	Al2O3	1.564
Si :	0.0143	0.0057	0.823	1.15	SiO2	1.761
As :	0.0372	0.0106	2.372	1.24	As2O5	3.638
Ca :	0.0049	0.0015	0.151	0.15	CaO	0.211
S :	0.0028	0.0006	0.071	0.09	SO3	0.177
K :	0.0006	0.0001	0.007	0.01	K2O	0.009
Fe :	0.6975	0.4509	50.211	35.26	Fe2O3	71.787
Pb :	0.0017	0.0014	0.195	0.04	PbO	0.210
U :	0.0039	0.0033	0.436	0.07	UO2	0.495
O			24.774	60.72	by stoichiometry	
total :			79.913			79.913

iteration : 3
be carefull - k.r./w.f. = 0.31 for Na
be carefull - k.r./w.f. = 0.45 for As

point n : 25 x= 12916 y= -8055 z= 20 swrisife NOPI_422_1a_#1

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46367	10.27	3.00	0.00868	5.7		
Al	32469	39.03	8.23	0.00268	2.5		
Si	27735	278.10	15.25	0.02724	1.4		
As	37644	28.04	7.24	0.00805	2.7		
Ca	38383	26.00	7.45	0.00479	4.4		
S	61390	7.87	2.17	0.00382	6.5		
K	42759	10.05	8.05	0.00156	7.1		
Fe	48080	2031.35	12.51	0.85592	0.5		
						201.	15.0
Pb	60415	116.33	34.73	0.00491	1.6		
U	44670	104.89	89.02	0.00059	1.4		

Analysis no. 25 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0087	0.0004	0.138	0.20	Na2O	0.186
Al :	0.0027	0.0011	0.202	0.25	Al2O3	0.382
Si :	0.0272	0.0109	1.547	1.86	SiO2	3.309
As :	0.0080	0.0023	0.522	0.24	As2O5	0.801
Ca :	0.0048	0.0015	0.147	0.12	CaO	0.206
S :	0.0038	0.0008	0.095	0.10	SO3	0.238
K :	0.0016	0.0002	0.018	0.02	K2O	0.021
Fe :	0.8559	0.5534	60.800	36.72	Fe2O3	86.927
Pb :	0.0049	0.0041	0.563	0.09	PbO	0.607
U :	0.0006	0.0005	0.065	0.01	UO2	0.074
O			28.653	60.40	by stoichiometry	
total :			92.750			92.750

iteration : 2
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 26 x= 12786 y= -8197 z= 18 swrisife NOPI_422_1a_#2

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46367	8.63	3.87	0.00569	6.3		
Al	32469	43.18	9.33	0.00295	2.4		
Si	27735	269.60	14.00	0.02649	1.4		
As	37644	38.26	8.72	0.01143	2.3		
Ca	38383	25.10	8.00	0.00441	4.5		
S	61390	8.97	2.40	0.00441	6.1		
K	42759	10.05	7.50	0.00199	7.1		
Fe	48080	2010.75	11.10	0.84800	0.5		
						201.	15.0
Pb	60415	102.25	34.30	0.00409	1.7		
U	44670	118.43	86.36	0.00119	1.3		

Analysis no. 26 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0057	0.0003	0.091	0.13	Na2O	0.122
Al :	0.0029	0.0013	0.222	0.28	Al2O3	0.420
Si :	0.0265	0.0106	1.506	1.82	SiO2	3.222

As :	0.0114	0.0033	0.741	0.34	As2O5	1.136
Ca :	0.0044	0.0014	0.136	0.11	CaO	0.190
S :	0.0044	0.0010	0.110	0.12	SO3	0.274
K :	0.0020	0.0002	0.023	0.02	K2O	0.027
Fe :	0.8480	0.5482	60.270	36.61	Fe2O3	86.169
Pb :	0.0041	0.0034	0.469	0.08	PbO	0.505
U :	0.0012	0.0010	0.131	0.02	UO2	0.149
O			28.517	60.47	by stoichiometry	
total :			92.215			92.215

iteration : 2
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 27 x= 12992 y= -7915 z= 21 swrisife
NOPI_422_1a_#3

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46367	8.70	4.37	0.00518	6.2		
Al	32469	130.61	9.10	0.01058	1.4		
Si	27735	254.13	14.30	0.02486	1.4		
As	37644	32.94	8.02	0.00965	2.5		
Ca	38383	14.70	5.15	0.00246	5.8		
S	61390	8.07	1.83	0.00418	6.5		
K	42759	7.60	6.45	0.00090	8.1		
Fe	48080	1371.68	9.33	0.57779	0.6		
						201.	15.0
Pb	60415	90.72	34.38	0.00339	1.8		
U	44670	145.86	80.76	0.00241	1.2		

Analysis no. 27 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0052	0.0002	0.081	0.16	Na2O	0.109
Al :	0.0106	0.0045	0.792	1.34	Al2O3	1.497
Si :	0.0249	0.0100	1.417	2.31	SiO2	3.032
As :	0.0096	0.0027	0.617	0.38	As2O5	0.947
Ca :	0.0025	0.0008	0.076	0.09	CaO	0.107
S :	0.0042	0.0009	0.105	0.15	SO3	0.261
K :	0.0009	0.0001	0.010	0.01	K2O	0.012
Fe :	0.5778	0.3735	42.567	34.82	Fe2O3	60.859
Pb :	0.0034	0.0028	0.391	0.09	PbO	0.421
U :	0.0024	0.0020	0.267	0.05	UO2	0.303
O			21.224	60.61	by stoichiometry	
total :			67.548			67.548

iteration : 3
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.45 for As

point n : 28 x= 13022 y= -7873 z= 21 swrisife
NOPI_422_1a_#4

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46367	13.70	4.40	0.01111	5.0		
Al	32469	214.49	10.40	0.01777	1.1		
Si	27735	392.06	15.00	0.03909	1.2		
As	37644	38.48	7.78	0.01188	2.3		
Ca	38383	20.95	6.25	0.00379	4.9		
S	61390	7.10	2.27	0.00324	6.9		
K	42759	9.20	6.95	0.00176	7.4		
Fe	48080	1702.30	9.96	0.71779	0.5		

						201.	15.0
Pb	60415	56.11	32.15	0.00144	2.2		
U	44670	184.97	84.12	0.00373	1.1		

Analysis no. 28 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0111	0.0005	0.173	0.27	Na2O	0.233
Al :	0.0178	0.0076	1.326	1.78	Al2O3	2.505
Si :	0.0391	0.0157	2.229	2.88	SiO2	4.768
As :	0.0119	0.0034	0.756	0.37	As2O5	1.160
Ca :	0.0038	0.0012	0.118	0.11	CaO	0.165
S :	0.0032	0.0007	0.081	0.09	SO3	0.203
K :	0.0018	0.0002	0.020	0.02	K2O	0.024
Fe :	0.7178	0.4640	51.883	33.74	Fe2O3	74.178
Pb :	0.0014	0.0012	0.167	0.03	PbO	0.180
U :	0.0037	0.0031	0.415	0.06	UO2	0.471
O			26.719	60.65	by stoichiometry	
total :			83.886			83.886

iteration : 3
be carefull - k.r./w.f. = 0.31 for Na
be carefull - k.r./w.f. = 0.45 for As

point n : 29 x= 12864 y= -8070 z= 21 swrisife
NOPI_422_1a_#5

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46367	11.80	4.50	0.00872	5.4		
Al	32469	153.07	9.80	0.01248	1.3		
Si	27735	370.37	15.35	0.03681	1.2		
As	37644	46.80	8.32	0.01490	2.1		
Ca	38383	21.65	6.40	0.00394	4.8		
S	61390	5.57	2.17	0.00228	7.8		
K	42759	8.30	7.05	0.00098	7.8		
Fe	48080	1649.87	10.09	0.69555	0.5		
						201.	15.0
Pb	60415	68.26	34.18	0.00205	2.0		
U	44670	209.59	84.78	0.00461	1.0		

Analysis no. 29 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0087	0.0004	0.135	0.22	Na2O	0.183
Al :	0.0125	0.0053	0.933	1.31	Al2O3	1.763
Si :	0.0368	0.0148	2.097	2.83	SiO2	4.487
As :	0.0149	0.0042	0.949	0.48	As2O5	1.455
Ca :	0.0039	0.0012	0.122	0.12	CaO	0.171
S :	0.0023	0.0005	0.057	0.07	SO3	0.143
K :	0.0010	0.0001	0.011	0.01	K2O	0.013
Fe :	0.6955	0.4497	50.352	34.15	Fe2O3	71.990
Pb :	0.0021	0.0017	0.237	0.04	PbO	0.255
U :	0.0046	0.0039	0.512	0.08	UO2	0.581
O			25.634	60.69	by stoichiometry	
total :			81.041			81.041

iteration : 3
be carefull - k.r./w.f. = 0.31 for Na
be carefull - k.r./w.f. = 0.45 for As

point n : 30 x= 12949 y= -8116 z= 21 swrisife
NOPI_422_1a_#6

elt.	peak	peak	backgr.	i.x./i.std.	sig/k	beam	kv

	pos.	(c/s)	(c/s)				
						15.	15.0
Na	46367	11.57	4.40	0.00856	5.4		
Al	32469	152.00	10.88	0.01229	1.3		
Si	27735	326.46	13.50	0.03244	1.3		
As	37644	41.44	7.98	0.01295	2.2		
Ca	38383	19.85	7.40	0.00321	5.0		
S	61390	6.00	2.63	0.00226	7.5		
K	42759	8.05	7.95	0.00008	7.9		
Fe	48080	1713.16	10.50	0.72203	0.5		
						201.	15.0
Pb	60415	59.58	32.98	0.00160	2.1		
U	44670	243.94	81.88	0.00599	1.0		

Analysis no. 30 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0086	0.0004	0.134	0.22	Na2O	0.180
Al :	0.0123	0.0052	0.920	1.27	Al2O3	1.739
Si :	0.0324	0.0130	1.849	2.45	SiO2	3.955
As :	0.0129	0.0037	0.828	0.41	As2O5	1.270
Ca :	0.0032	0.0010	0.099	0.09	CaO	0.139
S :	0.0023	0.0005	0.057	0.07	SO3	0.141
K :	0.0001	0.0000	0.001	0.00	K2O	0.001
Fe :	0.7220	0.4668	52.093	34.75	Fe2O3	74.478
Pb :	0.0016	0.0013	0.185	0.03	PbO	0.199
U :	0.0060	0.0050	0.664	0.10	UO2	0.754
O			26.027	60.60	by stoichiometry	
total :			82.856			82.856

iteration : 3
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.45 for As

point n : 31 x= 11142 y= -9104 z= 21 swrisife
NOPI_422_1b_#1

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46367	8.20	4.20	0.00478	6.4		
Al	32469	109.90	10.55	0.00865	1.5		
Si	27735	45.90	15.05	0.00320	3.3		
As	37644	236.63	12.72	0.08667	1.0		
Ca	38383	7.15	6.90	0.00006	8.4		
S	61390	488.28	8.03	0.32224	1.0		
K	42759	166.56	9.25	0.12278	1.8		
Fe	48080	839.52	8.64	0.35243	0.6		
						201.	15.0
Pb	60415	3655.91	85.21	0.21492	0.7		
U	44670	123.83	137.69	0.00000	1.3		

Analysis no. 31 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0048	0.0002	0.054	0.09	Na2O	0.073
Al :	0.0087	0.0037	0.561	0.81	Al2O3	1.061
Si :	0.0032	0.0013	0.163	0.23	SiO2	0.349
As :	0.0867	0.0247	4.400	2.29	As2O5	6.749
Ca :	0.0001	0.0000	0.002	0.00	CaO	0.003
S :	0.3222	0.0702	7.465	9.10	SO3	18.640
K :	0.1228	0.0135	1.495	1.49	K2O	1.801
Fe :	0.3524	0.2278	23.866	16.70	Fe2O3	34.122
Pb :	0.2149	0.1804	23.169	4.37	PbO	24.958
U :	0.0000	0.0000	0.000	0.00	UO2	

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 O                                  26.579     64.91  by stoichiometry

 total :                            87.756                              87.756
 iteration :  4
    be carefull - k.r./w.f. = 0.42 for Na
    be carefull - k.r./w.f. = 0.00 for U

 point n :    32     x=  11155  y=  -9033  z=     21   swrisife
                                                        NOPI_422_1b_#2
elt.  peak      peak     backgr.   i.x./i.std.  sig/k    beam      kv
      pos.      (c/s)     (c/s)
                                                            15.    15.0
 Na   46367       6.87       4.57      0.00275    7.0
 Al   32469      75.74       9.90      0.00573    1.8
 Si   27735      33.15      13.60      0.00203    3.9
 As   37644     155.33      10.62      0.05600    1.2
 Ca   38383       7.35       6.85      0.00013    8.3
 S    61390     566.14       8.77      0.37392    1.0
 K    42759     352.40       7.70      0.26899    1.3
 Fe   48080     944.41       8.44      0.39693    0.6
                                                           201.    15.0
 Pb   60415    2485.57      89.19      0.14419    0.7
 U    44670      98.02     121.86      0.00000    1.4

Analysis no.   32 within swrisife
              k                    wt.  %   normalized
element  i.x./i.std.  k.ratio     concen.    atom. c    compound      concen.
  Na :      0.0027     0.0001       0.033      0.05    Na2O            0.044
  Al :      0.0057     0.0024       0.377      0.50    Al2O3           0.712
  Si :      0.0020     0.0008       0.104      0.13    SiO2            0.223
  As :      0.0560     0.0160       2.946      1.40    As2O5           4.518
  Ca :      0.0001     0.0000       0.004      0.00    CaO             0.006
  S  :      0.3739     0.0815       8.790      9.79    SO3            21.948
  K  :      0.2690     0.0296       3.264      2.98    K2O             3.932
  Fe :      0.3969     0.2566      27.739     17.73    Fe2O3          39.659
  Pb :      0.1442     0.1211      15.727      2.71    PbO            16.941
  U  :      0.0000     0.0000       0.000      0.00    UO2
  O                                 29.000     64.70  by stoichiometry

 total :                            87.984                              87.984
 iteration :  3
    be carefull - k.r./w.f. = 0.40 for Na
    be carefull - k.r./w.f. = 0.00 for U

 point n :    33     x=  10974  y=  -9087  z=     21   swrisife
                                                        NOPI_422_1b_#3
elt.  peak      peak     backgr.   i.x./i.std.  sig/k    beam      kv
      pos.      (c/s)     (c/s)
                                                            15.    15.0
 Na   46367       9.43       3.97      0.00653    6.0
 Al   32469     191.30      11.23      0.01568    1.2
 Si   27735      61.61      13.90      0.00495    2.9
 As   37644     210.81      12.18      0.07688    1.1
 Ca   38383      10.80       7.70      0.00080    6.8
 S    61390     525.18       7.27      0.34750    1.0
 K    42759     274.20       8.95      0.20702    1.5
 Fe   48080     883.14       8.83      0.37083    0.6
                                                           201.    15.0
 Pb   60415    2148.37      82.21      0.12435    0.7
 U    44670      92.05     115.04      0.00000    1.4

Analysis no.   33 within swrisife
              k                    wt.  %   normalized
element  i.x./i.std.  k.ratio     concen.    atom. c    compound      concen.
```

Na :	0.0065	0.0003	0.077	0.12	Na2O	0.104
Al :	0.0157	0.0067	1.042	1.41	Al2O3	1.968
Si :	0.0049	0.0020	0.259	0.34	SiO2	0.553
As :	0.0769	0.0219	4.021	1.96	As2O5	6.168
Ca :	0.0008	0.0003	0.027	0.02	CaO	0.037
S :	0.3475	0.0757	8.264	9.39	SO3	20.635
K :	0.2070	0.0228	2.514	2.34	K2O	3.029
Fe :	0.3708	0.2397	26.055	17.00	Fe2O3	37.252
Pb :	0.1244	0.1044	13.725	2.41	PbO	14.785
U :	0.0000	0.0000	0.000	0.00	UO2	
O			28.547	65.01	by stoichiometry	
total :			84.531			84.531

iteration : 3
be carefull - k.r./w.f. = 0.40 for Na
be carefull - k.r./w.f. = 0.00 for U

point n : 34 x= 10959 y= -9162 z= 21 swrisife
NOPI_422_1b_#4

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46367	10.67	5.47	0.00621	5.6		
Al	32469	133.24	9.15	0.01080	1.4		
Si	27735	316.60	13.65	0.03140	1.3		
As	37644	64.95	7.98	0.02205	1.8		
Ca	38383	24.10	6.40	0.00457	4.6		
S	61390	4.97	2.23	0.00183	8.2		
K	42759	8.95	6.45	0.00195	7.5		
Fe	48080	1635.23	10.04	0.68921	0.5		
						201.	15.0
Pb	60415	62.56	31.60	0.00186	2.1		
U	44670	185.44	80.16	0.00389	1.1		

Analysis no. 34 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0062	0.0003	0.096	0.16	Na2O	0.130
Al :	0.0108	0.0046	0.812	1.16	Al2O3	1.534
Si :	0.0314	0.0126	1.795	2.46	SiO2	3.839
As :	0.0220	0.0063	1.404	0.72	As2O5	2.154
Ca :	0.0046	0.0014	0.141	0.14	CaO	0.198
S :	0.0018	0.0004	0.046	0.06	SO3	0.115
K :	0.0020	0.0002	0.022	0.02	K2O	0.027
Fe :	0.6892	0.4456	49.869	34.45	Fe2O3	71.298
Pb :	0.0019	0.0016	0.215	0.04	PbO	0.232
U :	0.0039	0.0033	0.432	0.07	UO2	0.490
O			25.184	60.72	by stoichiometry	
total :			80.016			80.016

iteration : 3
be carefull - k.r./w.f. = 0.31 for Na
be carefull - k.r./w.f. = 0.45 for As

point n : 35 x= 11078 y= -9264 z= 21 swrisife
NOPI_422_1b_#5

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46367	12.83	5.40	0.00889	5.2		
Al	32469	86.16	9.28	0.00670	1.7		
Si	27735	339.43	14.05	0.03375	1.2		
As	37644	59.73	7.32	0.02029	1.9		
Ca	38383	22.70	6.05	0.00430	4.7		

S	61390	5.30	1.83	0.00233	8.0
K	42759	7.90	5.35	0.00199	8.0
Fe	48080	1603.96	9.63	0.67658	0.5
					201. 15.0
Pb	60415	69.03	33.25	0.00215	2.0
U	44670	194.49	82.65	0.00414	1.0

Analysis no. 35 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0089	0.0004	0.138	0.24	Na2O	0.186
Al :	0.0067	0.0029	0.503	0.73	Al2O3	0.951
Si :	0.0338	0.0136	1.924	2.70	SiO2	4.116
As :	0.0203	0.0058	1.295	0.68	As2O5	1.986
Ca :	0.0043	0.0014	0.133	0.13	CaO	0.186
S :	0.0023	0.0005	0.058	0.07	SO3	0.146
K :	0.0020	0.0002	0.023	0.02	K2O	0.027
Fe :	0.6766	0.4374	49.046	34.57	Fe2O3	70.122
Pb :	0.0022	0.0018	0.249	0.05	PbO	0.268
U :	0.0041	0.0035	0.459	0.08	UO2	0.520
O			24.681	60.73	by stoichiometry	
total :			78.508			78.508

iteration : 3
be carefull - k.r./w.f. = 0.31 for Na
be carefull - k.r./w.f. = 0.45 for As

point n : 36 x= 10739 y= -9175 z= 21 swrisife
NOPI_422_1b_#6

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46367	12.03	5.37	0.00796	5.3		
Al	32469	78.59	9.18	0.00604	1.8		
Si	27735	373.38	12.85	0.03738	1.2		
As	37644	54.49	7.76	0.01808	2.0		
Ca	38383	22.25	7.10	0.00391	4.8		
S	61390	5.00	2.47	0.00170	8.2		
K	42759	9.50	6.90	0.00203	7.3		
Fe	48080	1644.98	10.29	0.69332	0.5		
						201.	15.0
Pb	60415	75.99	33.80	0.00254	1.9		
U	44670	195.59	88.07	0.00398	1.0		

Analysis no. 36 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0080	0.0004	0.124	0.21	Na2O	0.167
Al :	0.0060	0.0026	0.453	0.65	Al2O3	0.857
Si :	0.0374	0.0150	2.127	2.91	SiO2	4.550
As :	0.0181	0.0052	1.154	0.59	As2O5	1.770
Ca :	0.0039	0.0012	0.121	0.12	CaO	0.169
S :	0.0017	0.0004	0.043	0.05	SO3	0.106
K :	0.0020	0.0002	0.023	0.02	K2O	0.028
Fe :	0.6933	0.4482	50.178	34.58	Fe2O3	71.740
Pb :	0.0025	0.0021	0.293	0.05	PbO	0.316
U :	0.0040	0.0033	0.441	0.07	UO2	0.500
O			25.247	60.74	by stoichiometry	
total :			80.205			80.205

iteration : 3
be carefull - k.r./w.f. = 0.31 for Na
be carefull - k.r./w.f. = 0.45 for As

point n : 37 x= 8177 y= 8436 z= 33 swrisife
NOPI_422_2a_#1

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46367	6.73	3.80	0.00350	7.1		
Al	32469	63.83	9.58	0.00472	2.0		
Si	27735	293.87	15.45	0.02886	1.3		
As	37644	40.44	7.30	0.01283	2.3		
Ca	38383	25.80	8.45	0.00448	4.4		
S	61390	7.47	1.73	0.00385	6.7		
K	42759	21.45	7.10	0.01120	4.9		
Fe	48080	1880.55	10.76	0.79291	0.5		
						201.	15.0
Pb	60415	106.32	34.53	0.00432	1.7		
U	44670	134.75	85.38	0.00183	1.2		

Analysis no. 37 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0035	0.0002	0.055	0.09	Na2O	0.075
Al :	0.0047	0.0020	0.355	0.47	Al2O3	0.671
Si :	0.0289	0.0116	1.640	2.07	SiO2	3.509
As :	0.0128	0.0037	0.826	0.39	As2O5	1.268
Ca :	0.0045	0.0014	0.138	0.12	CaO	0.193
S :	0.0038	0.0008	0.096	0.11	SO3	0.239
K :	0.0112	0.0012	0.127	0.12	K2O	0.153
Fe :	0.7929	0.5126	56.722	36.01	Fe2O3	81.097
Pb :	0.0043	0.0036	0.496	0.08	PbO	0.535
U :	0.0018	0.0015	0.202	0.03	UO2	0.229
O			27.310	60.52	by stoichiometry	
total :			87.970			87.970

iteration : 3
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 38 x= 8193 y= 8464 z= 34 swrisife
NOPI_422_2a_#2

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46367	5.77	3.30	0.00295	7.6		
Al	32469	40.00	9.33	0.00267	2.5		
Si	27735	268.39	14.40	0.02633	1.4		
As	37644	37.72	7.14	0.01184	2.3		
Ca	38383	32.70	7.15	0.00659	3.9		
S	61390	8.17	2.23	0.00398	6.4		
K	42759	7.70	7.75	0.00000	8.1		
Fe	48080	1975.34	11.39	0.83290	0.5		
						201.	15.0
Pb	60415	107.57	36.65	0.00427	1.6		
U	44670	105.52	83.14	0.00083	1.4		

Analysis no. 38 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0029	0.0001	0.047	0.07	Na2O	0.063
Al :	0.0027	0.0011	0.202	0.26	Al2O3	0.381
Si :	0.0263	0.0106	1.497	1.84	SiO2	3.202
As :	0.0118	0.0034	0.766	0.35	As2O5	1.175
Ca :	0.0066	0.0021	0.203	0.17	CaO	0.284
S :	0.0040	0.0009	0.099	0.11	SO3	0.247
K :	0.0000	0.0000	0.000	0.00	K2O	

Fe :	0.8329	0.5385	59.319	36.61	Fe2O3	84.810
Pb :	0.0043	0.0036	0.490	0.08	PbO	0.528
U :	0.0008	0.0007	0.092	0.01	UO2	0.104
O			28.080	60.50	by stoichiometry	
total :			90.794			90.794

iteration : 2
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As
be carefull - k.r./w.f. = 0.00 for K

point n : 39 x= 8097 y= 8443 z= 34 swrisife
NOPI_422_2a_#3

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46367	7.07	4.17	0.00346	6.9		
Al	32469	54.58	8.40	0.00402	2.2		
Si	27735	314.10	15.05	0.03101	1.3		
As	37644	35.00	7.56	0.01062	2.4		
Ca	38383	18.45	6.00	0.00321	5.2		
S	61390	7.77	2.50	0.00353	6.6		
K	42759	15.15	7.20	0.00621	5.8		
Fe	48080	1867.42	10.93	0.78746	0.5		
						201.	15.0
Pb	60415	102.00	35.15	0.00402	1.7		
U	44670	107.42	85.62	0.00081	1.3		

Analysis no. 39 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0035	0.0002	0.055	0.09	Na2O	0.074
Al :	0.0040	0.0017	0.303	0.40	Al2O3	0.572
Si :	0.0310	0.0125	1.761	2.24	SiO2	3.768
As :	0.0106	0.0030	0.686	0.33	As2O5	1.052
Ca :	0.0032	0.0010	0.099	0.09	CaO	0.139
S :	0.0035	0.0008	0.088	0.10	SO3	0.220
K :	0.0062	0.0007	0.070	0.06	K2O	0.085
Fe :	0.7875	0.5091	56.448	36.06	Fe2O3	80.704
Pb :	0.0040	0.0034	0.463	0.08	PbO	0.498
U :	0.0008	0.0007	0.089	0.01	UO2	0.101
O			27.151	60.55	by stoichiometry	
total :			87.213			87.213

iteration : 3
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 40 x= 8026 y= 8423 z= 34 swrisife
NOPI_422_2a_#4

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46367	7.03	3.50	0.00422	6.9		
Al	32469	68.58	9.28	0.00516	1.9		
Si	27735	265.99	15.35	0.02598	1.4		
As	37644	37.50	7.36	0.01167	2.4		
Ca	38383	22.70	6.25	0.00425	4.7		
S	61390	7.90	2.73	0.00347	6.5		
K	42759	10.80	7.50	0.00258	6.8		
Fe	48080	1850.73	10.56	0.78047	0.5		
						201.	15.0
Pb	60415	97.97	34.48	0.00382	1.7		
U	44670	122.66	88.11	0.00128	1.3		

Analysis no. 40 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0042	0.0002	0.067	0.11	Na2O	0.090
Al :	0.0052	0.0022	0.389	0.52	Al2O3	0.735
Si :	0.0260	0.0104	1.479	1.90	SiO2	3.163
As :	0.0117	0.0033	0.754	0.36	As2O5	1.156
Ca :	0.0042	0.0013	0.131	0.12	CaO	0.183
S :	0.0035	0.0008	0.086	0.10	SO3	0.216
K :	0.0026	0.0003	0.029	0.03	K2O	0.035
Fe :	0.7805	0.5046	55.979	36.27	Fe2O3	80.034
Pb :	0.0038	0.0032	0.439	0.08	PbO	0.473
U :	0.0013	0.0011	0.141	0.02	UO2	0.160
O			26.752	60.50	by stoichiometry	
total :			86.246			86.246

iteration : 3
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 41 x= 7993 y= 8390 z= 29 swrisife
NOPI_422_2a_#5

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46367	9.23	5.33	0.00466	6.1		
Al	32469	77.19	8.55	0.00598	1.8		
Si	27735	331.57	13.75	0.03294	1.2		
As	37644	41.48	7.82	0.01303	2.2		
Ca	38383	25.60	8.75	0.00435	4.4		
S	61390	9.77	2.63	0.00479	5.9		
K	42759	11.00	8.20	0.00218	6.8		
Fe	48080	1774.92	10.79	0.74811	0.5		
						201.	15.0
Pb	60415	82.91	34.63	0.00291	1.8		
U	44670	141.32	87.55	0.00199	1.2		

Analysis no. 41 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0047	0.0002	0.073	0.12	Na2O	0.099
Al :	0.0060	0.0025	0.449	0.61	Al2O3	0.848
Si :	0.0329	0.0132	1.874	2.45	SiO2	4.008
As :	0.0130	0.0037	0.837	0.41	As2O5	1.284
Ca :	0.0043	0.0014	0.134	0.12	CaO	0.188
S :	0.0048	0.0010	0.120	0.14	SO3	0.299
K :	0.0022	0.0002	0.025	0.02	K2O	0.030
Fe :	0.7481	0.4837	53.877	35.39	Fe2O3	77.029
Pb :	0.0029	0.0024	0.335	0.06	PbO	0.361
U :	0.0020	0.0017	0.220	0.03	UO2	0.250
O			26.452	60.65	by stoichiometry	
total :			84.396			84.396

iteration : 3
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 42 x= 8028 y= 8395 z= 29 swrisife
NOPI_422_2a_#6

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46367	9.10	3.83	0.00629	6.1		

Al	32469	112.48	9.03	0.00900	1.5
Si	27735	337.33	14.45	0.03346	1.2
As	37644	43.78	7.14	0.01418	2.2
Ca	38383	23.80	6.80	0.00439	4.6
S	61390	6.33	2.70	0.00244	7.3
K	42759	11.10	6.65	0.00347	6.7
Fe	48080	1640.67	10.34	0.69125	0.5
					201. 15.0
Pb	60415	66.31	32.10	0.00206	2.0
U	44670	150.05	84.89	0.00241	1.2

Analysis no. 42 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0063	0.0003	0.098	0.17	Na2O	0.133
Al :	0.0090	0.0038	0.676	0.97	Al2O3	1.277
Si :	0.0335	0.0134	1.907	2.63	SiO2	4.079
As :	0.0142	0.0040	0.908	0.47	As2O5	1.392
Ca :	0.0044	0.0014	0.136	0.13	CaO	0.190
S :	0.0024	0.0005	0.061	0.07	SO3	0.152
K :	0.0035	0.0004	0.039	0.04	K2O	0.048
Fe :	0.6913	0.4469	50.153	34.78	Fe2O3	71.704
Pb :	0.0021	0.0017	0.238	0.04	PbO	0.256
U :	0.0024	0.0020	0.267	0.04	UO2	0.303
O			25.052	60.65	by stoichiometry	
total :			79.534			79.534

iteration : 3
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 43 x= 8356 y= 8171 z= 29 swrisife
NOPI_422_2b_#1

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46367	10.40	5.03	0.00641	5.7		
Al	32469	125.41	8.55	0.01017	1.4		
Si	27735	344.14	13.90	0.03423	1.2		
As	37644	44.12	7.42	0.01420	2.2		
Ca	38383	19.55	5.90	0.00352	5.1		
S	61390	5.37	2.07	0.00221	7.9		
K	42759	10.30	6.55	0.00293	7.0		
Fe	48080	1547.92	9.96	0.65221	0.6		
						201.	15.0
Pb	60415	66.13	32.93	0.00200	2.0		
U	44670	162.04	85.38	0.00284	1.1		

Analysis no. 43 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0064	0.0003	0.100	0.18	Na2O	0.135
Al :	0.0102	0.0043	0.762	1.14	Al2O3	1.440
Si :	0.0342	0.0138	1.951	2.81	SiO2	4.174
As :	0.0142	0.0040	0.907	0.49	As2O5	1.391
Ca :	0.0035	0.0011	0.109	0.11	CaO	0.153
S :	0.0022	0.0005	0.055	0.07	SO3	0.139
K :	0.0029	0.0003	0.033	0.03	K2O	0.040
Fe :	0.6522	0.4217	47.551	34.38	Fe2O3	67.985
Pb :	0.0020	0.0017	0.231	0.05	PbO	0.249
U :	0.0028	0.0024	0.315	0.05	UO2	0.357
O			24.047	60.69	by stoichiometry	
total :			76.062			76.062

iteration : 3
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.45 for As

point n : 44 x= 8682 y= 7934 z= 29 swrisife NOPI_422_2b_#2

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46367	5.40	3.93	0.00175	7.9		
Al	32469	54.53	8.40	0.00402	2.2		
Si	27735	303.18	14.95	0.02988	1.3		
As	37644	30.02	8.22	0.00844	2.6		
Ca	38383	27.75	7.50	0.00523	4.3		
S	61390	8.23	2.53	0.00382	6.4		
K	42759	12.60	7.45	0.00402	6.3		
Fe	48080	1877.19	10.93	0.79147	0.5		
						201.	15.0
Pb	60415	92.39	35.18	0.00344	1.8		
U	44670	106.57	88.28	0.00068	1.3		

Analysis no. 44 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0018	0.0001	0.028	0.04	Na2O	0.038
Al :	0.0040	0.0017	0.302	0.40	Al2O3	0.571
Si :	0.0299	0.0120	1.697	2.16	SiO2	3.631
As :	0.0084	0.0024	0.546	0.26	As2O5	0.837
Ca :	0.0052	0.0016	0.161	0.14	CaO	0.225
S :	0.0038	0.0008	0.095	0.11	SO3	0.238
K :	0.0040	0.0004	0.046	0.04	K2O	0.055
Fe :	0.7915	0.5117	56.759	36.25	Fe2O3	81.149
Pb :	0.0034	0.0029	0.396	0.07	PbO	0.426
U :	0.0007	0.0006	0.075	0.01	UO2	0.085
O			27.151	60.52	by stoichiometry	
total :			87.256			87.256

iteration : 2
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 45 x= 8713 y= 8100 z= 29 swrisife NOPI_422_2b_#3

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46367	8.90	4.77	0.00494	6.2		
Al	32469	59.58	8.63	0.00444	2.1		
Si	27735	263.39	13.60	0.02589	1.4		
As	37644	49.44	7.34	0.01629	2.1		
Ca	38383	21.60	7.55	0.00363	4.8		
S	61390	8.20	2.40	0.00389	6.4		
K	42759	7.40	7.05	0.00027	8.2		
Fe	48080	1709.88	10.00	0.72087	0.5		
						201.	15.0
Pb	60415	70.36	34.80	0.00214	2.0		
U	44670	195.38	86.74	0.00402	1.0		

Analysis no. 45 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0049	0.0002	0.078	0.13	Na2O	0.105
Al :	0.0044	0.0019	0.335	0.48	Al2O3	0.632
Si :	0.0259	0.0104	1.476	2.02	SiO2	3.157

As :	0.0163	0.0046	1.049	0.54	As2O5	1.609
Ca :	0.0036	0.0011	0.112	0.11	CaO	0.156
S :	0.0039	0.0008	0.097	0.12	SO3	0.242
K :	0.0003	0.0000	0.003	0.00	K2O	0.004
Fe :	0.7209	0.4660	52.032	35.87	Fe2O3	74.390
Pb :	0.0021	0.0018	0.246	0.05	PbO	0.265
U :	0.0040	0.0034	0.444	0.07	UO2	0.504
O			25.194	60.62	by stoichiometry	
total :			81.064			81.064

iteration : 3
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 46 x= 8885 y= 8093 z= 29 swrisife
NOPI_422_2b_#4

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46367	5.37	3.53	0.00219	7.9		
Al	32469	51.26	8.75	0.00370	2.2		
Si	27735	265.14	14.95	0.02594	1.4		
As	37644	33.28	8.08	0.00975	2.5		
Ca	38383	26.50	7.50	0.00490	4.4		
S	61390	8.60	2.27	0.00425	6.3		
K	42759	8.00	7.65	0.00027	7.9		
Fe	48080	1945.50	10.96	0.82049	0.5		
						200.	15.0
Pb	60415	97.67	36.23	0.00370	1.7		
U	44670	102.27	85.45	0.00062	1.4		

Analysis no. 46 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0022	0.0001	0.035	0.05	Na2O	0.047
Al :	0.0037	0.0016	0.279	0.36	Al2O3	0.527
Si :	0.0259	0.0104	1.475	1.83	SiO2	3.155
As :	0.0098	0.0028	0.632	0.29	As2O5	0.970
Ca :	0.0049	0.0015	0.151	0.13	CaO	0.211
S :	0.0042	0.0009	0.106	0.12	SO3	0.264
K :	0.0003	0.0000	0.003	0.00	K2O	0.004
Fe :	0.8205	0.5305	58.586	36.63	Fe2O3	83.761
Pb :	0.0037	0.0031	0.425	0.07	PbO	0.457
U :	0.0006	0.0005	0.069	0.01	UO2	0.078
O			27.715	60.49	by stoichiometry	
total :			89.476			89.476

iteration : 2
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 47 x= 8636 y= 8012 z= 29 swrisife
NOPI_422_2b_#5

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46367	5.73	3.67	0.00247	7.7		
Al	32469	78.14	9.55	0.00597	1.8		
Si	27735	262.99	14.20	0.02579	1.4		
As	37644	34.08	7.68	0.01022	2.5		
Ca	38383	22.70	6.30	0.00423	4.7		
S	61390	7.77	2.20	0.00373	6.6		
K	42759	9.85	7.10	0.00215	7.2		
Fe	48080	1834.42	10.20	0.77363	0.5		

						201.	15.0
Pb	60415	75.84	32.53	0.00261	1.9		
U	44670	119.01	87.55	0.00116	1.3		

Analysis no. 47 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0025	0.0001	0.039	0.06	Na2O	0.053
Al :	0.0060	0.0025	0.450	0.61	Al2O3	0.850
Si :	0.0258	0.0104	1.468	1.90	SiO2	3.142
As :	0.0102	0.0029	0.661	0.32	As2O5	1.014
Ca :	0.0042	0.0013	0.130	0.12	CaO	0.182
S :	0.0037	0.0008	0.093	0.11	SO3	0.233
K :	0.0021	0.0002	0.024	0.02	K2O	0.029
Fe :	0.7736	0.5002	55.605	36.28	Fe2O3	79.499
Pb :	0.0026	0.0022	0.300	0.05	PbO	0.323
U :	0.0012	0.0010	0.129	0.02	UO2	0.146
O			26.571	60.51	by stoichiometry	
total :			85.471			85.471

iteration : 2
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 48 x= 8792 y= 7923 z= 29 swrisife
NOPI_422_2b_#6

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46367	5.93	3.67	0.00271	7.5		
Al	32469	61.21	8.13	0.00462	2.0		
Si	27735	271.55	14.50	0.02665	1.4		
As	37644	36.64	7.44	0.01130	2.4		
Ca	38383	28.15	7.95	0.00521	4.2		
S	61390	8.50	2.27	0.00418	6.3		
K	42759	8.85	8.60	0.00020	7.5		
Fe	48080	1890.28	10.84	0.79705	0.5		
						201.	15.0
Pb	60415	89.54	34.38	0.00332	1.8		
U	44670	108.21	86.39	0.00081	1.3		

Analysis no. 48 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0027	0.0001	0.043	0.07	Na2O	0.058
Al :	0.0046	0.0020	0.348	0.46	Al2O3	0.658
Si :	0.0266	0.0107	1.516	1.92	SiO2	3.244
As :	0.0113	0.0032	0.731	0.35	As2O5	1.121
Ca :	0.0052	0.0016	0.161	0.14	CaO	0.225
S :	0.0042	0.0009	0.104	0.12	SO3	0.260
K :	0.0002	0.0000	0.002	0.00	K2O	0.003
Fe :	0.7970	0.5153	57.078	36.34	Fe2O3	81.605
Pb :	0.0033	0.0028	0.381	0.07	PbO	0.411
U :	0.0008	0.0007	0.089	0.01	UO2	0.101
O			27.232	60.53	by stoichiometry	
total :			87.687			87.687

iteration : 2
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 49 x= 10264 y= 17395 z= 30 utrav
NOPIECP_1_trav

elt.	peak	peak	backgr.	i.x./i.std.	sig/k	beam	kv

	pos.	(c/s)	(c/s)		
					15. 15.0
Na	46367	9.96	4.58	0.00643	4.5
Al	32469	1214.16	18.24	0.10410	0.5
Si	27735	1486.64	26.40	0.15135	0.5
As	37644	11.70	10.14	0.00060	3.5
Ca	38383	17.00	12.70	0.00111	5.4
S	61390	4.40	4.40	0.00000	10.7
K	42759	32.80	50.51	0.00000	4.0
Fe	48080	13.02	10.33	0.00114	2.8
Pb	60415	8.70	3.45	0.00423	7.6
U	44670	990.61	12.60	0.48434	0.9

Analysis no. 1 within utrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0064	0.0003	0.064	0.13	Na2O	0.086
Al :	0.1041	0.0444	6.654	11.61	Al2O3	12.572
Si :	0.1514	0.0608	7.958	13.34	SiO2	17.024
As :	0.0006	0.0002	0.030	0.02	As2O5	0.046
Ca :	0.0011	0.0003	0.035	0.04	CaO	0.049
S :	0.0000	0.0000	0.000	0.00	SO3	
K :	0.0000	0.0000	0.000	0.00	K2O	
Fe :	0.0011	0.0007	0.073	0.06	Fe2O3	0.105
Pb :	0.0042	0.0036	0.463	0.11	PbO	0.499
U :	0.4843	0.4063	50.967	10.08	UO2	57.818
O			21.955	64.61	by stoichiometry	
total :			88.199			88.199

iteration : 3
be carefull - k.r./w.f. = 0.48 for Na
be carefull - k.r./w.f. = 0.00 for S
be carefull - k.r./w.f. = 0.00 for K

point n : 50 x= 10314 y= 17365 z= 30 utrav
NOPIECP_1_trav

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46367	10.40	4.66	0.00685	4.5		
Al	32469	2242.21	20.10	0.19329	0.4		
Si	27735	2243.49	25.20	0.22976	0.4		
As	37644	9.47	9.51	0.00000	3.9		
Ca	38383	12.40	6.80	0.00144	6.4		
S	61390	3.30	2.35	0.00064	12.3		
K	42759	33.35	25.95	0.00577	3.9		
Fe	48080	8.45	6.55	0.00081	3.5		
Pb	60415	5.40	2.20	0.00258	9.6		
U	44670	505.56	7.82	0.24632	1.1		

Analysis no. 2 within utrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0069	0.0003	0.064	0.10	Na2O	0.086
Al :	0.1933	0.0824	11.708	15.57	Al2O3	22.121
Si :	0.2298	0.0923	12.434	15.89	SiO2	26.600
As :	0.0000	0.0000	0.000	0.00	As2O5	
Ca :	0.0014	0.0005	0.048	0.04	CaO	0.068
S :	0.0006	0.0001	0.016	0.02	SO3	0.041
K :	0.0058	0.0006	0.067	0.06	K2O	0.080
Fe :	0.0008	0.0005	0.057	0.04	Fe2O3	0.081
Pb :	0.0026	0.0022	0.306	0.05	PbO	0.329
U :	0.2463	0.2066	28.304	4.27	UO2	32.109
O			28.512	63.96	by stoichiometry	

total : 81.516 81.516
iteration : 3
be carefull - k.r./w.f. = 0.00 for As

point n : 51 x= 10364 y= 17336 z= 30 utrav
NOPIECP_1_trav

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46367	8.86	3.86	0.00597	4.8		
Al	32469	2268.75	19.22	0.19565	0.4		
Si	27735	2358.00	24.47	0.24166	0.4		
As	37644	9.37	9.14	0.00009	3.9		
Ca	38383	10.05	7.40	0.00068	7.1		
S	61390	3.20	2.80	0.00027	12.5		
K	42759	27.25	24.65	0.00203	4.3		
Fe	48080	7.88	6.01	0.00079	3.6		
Pb	60415	4.45	2.70	0.00141	10.6		
U	44670	495.49	7.40	0.24151	1.1		

Analysis no. 3 within utrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0060	0.0003	0.056	0.08	Na2O	0.075
Al :	0.1957	0.0834	11.815	15.35	Al2O3	22.323
Si :	0.2417	0.0971	13.070	16.32	SiO2	27.960
As :	0.0001	0.0000	0.004	0.00	As2O5	0.006
Ca :	0.0007	0.0002	0.023	0.02	CaO	0.032
S :	0.0003	0.0001	0.007	0.01	SO3	0.017
K :	0.0020	0.0002	0.024	0.02	K2O	0.028
Fe :	0.0008	0.0005	0.056	0.04	Fe2O3	0.080
Pb :	0.0014	0.0012	0.168	0.03	PbO	0.181
U :	0.2415	0.2026	27.807	4.10	UO2	31.545
O			29.220	64.04	by stoichiometry	

total : 82.248 82.248
iteration : 3

point n : 52 x= 10414 y= 17306 z= 30 utrav
NOPIECP_1_trav

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46367	12.58	4.80	0.00928	4.1		
Al	32469	2450.81	20.88	0.21132	0.4		
Si	27735	2489.90	24.93	0.25525	0.4		
As	37644	9.50	9.59	0.00000	3.9		
Ca	38383	12.55	6.50	0.00156	6.3		
S	61390	2.65	2.20	0.00030	13.7		
K	42759	49.80	26.15	0.01844	3.2		
Fe	48080	7.97	5.93	0.00086	3.6		
Pb	60415	3.85	2.55	0.00105	11.4		
U	44670	472.05	7.82	0.22969	1.1		

Analysis no. 4 within utrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0093	0.0004	0.086	0.12	Na2O	0.116
Al :	0.2113	0.0901	12.665	15.62	Al2O3	23.930
Si :	0.2553	0.1026	13.821	16.37	SiO2	29.566
As :	0.0000	0.0000	0.000	0.00	As2O5	
Ca :	0.0016	0.0005	0.053	0.04	CaO	0.074
S :	0.0003	0.0001	0.008	0.01	SO3	0.020

K :	0.0184	0.0020	0.216	0.18	K2O	0.260
Fe :	0.0009	0.0006	0.062	0.04	Fe2O3	0.088
Pb :	0.0010	0.0009	0.125	0.02	PbO	0.135
U :	0.2297	0.1927	26.538	3.71	UO2	30.105
O			30.721	63.89	by stoichiometry	
total :			84.295			84.295

iteration : 3
be carefull - k.r./w.f. = 0.00 for As

point n : 53 x= 10464 y= 17276 z= 29 utrav
NOPIECP_1_trav

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46367	9.62	5.30	0.00516	4.6		
Al	32469	1681.50	18.32	0.14465	0.4		
Si	27735	1875.54	25.80	0.19156	0.5		
As	37644	10.33	9.77	0.00022	3.7		
Ca	38383	14.35	10.10	0.00110	5.9		
S	61390	3.95	3.20	0.00050	11.3		
K	42759	37.50	42.76	0.00000	3.7		
Fe	48080	10.95	8.82	0.00090	3.1		
Pb	60415	4.55	2.55	0.00161	10.5		
U	44670	787.54	11.71	0.38389	0.9		

Analysis no. 5 within utrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0052	0.0002	0.050	0.09	Na2O	0.068
Al :	0.1447	0.0617	9.054	13.59	Al2O3	17.107
Si :	0.1916	0.0770	10.202	14.71	SiO2	21.825
As :	0.0002	0.0001	0.011	0.01	As2O5	0.016
Ca :	0.0011	0.0003	0.035	0.04	CaO	0.050
S :	0.0005	0.0001	0.012	0.02	SO3	0.031
K :	0.0000	0.0000	0.000	0.00	K2O	
Fe :	0.0009	0.0006	0.060	0.04	Fe2O3	0.086
Pb :	0.0016	0.0014	0.183	0.04	PbO	0.197
U :	0.3839	0.3220	41.954	7.14	UO2	47.593
O			25.411	64.33	by stoichiometry	
total :			86.972			86.972

iteration : 3
be carefull - k.r./w.f. = 0.49 for Na
be carefull - k.r./w.f. = 0.00 for K

point n : 54 x= 10514 y= 17247 z= 29 utrav
NOPIECP_1_trav

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46367	8.04	4.74	0.00394	5.0		
Al	32469	2034.50	18.84	0.17529	0.4		
Si	27735	2266.97	24.60	0.23219	0.4		
As	37644	9.57	9.13	0.00017	3.9		
Ca	38383	14.05	9.20	0.00125	6.0		
S	61390	3.65	2.30	0.00090	11.7		
K	42759	28.25	33.30	0.00000	4.3		
Fe	48080	9.95	6.87	0.00130	3.2		
Pb	60415	3.25	2.35	0.00072	12.4		
U	44670	604.13	8.45	0.29471	1.0		

Analysis no. 6 within utrav

k wt. % normalized

element	i.x./i.std.	k.ratio	concen.	atom. c	compound	concen.
Na :	0.0039	0.0002	0.037	0.06	Na2O	0.050
Al :	0.1753	0.0748	10.730	14.42	Al2O3	20.273
Si :	0.2322	0.0933	12.464	16.09	SiO2	26.663
As :	0.0002	0.0000	0.008	0.00	As2O5	0.012
Ca :	0.0013	0.0004	0.041	0.04	CaO	0.058
S :	0.0009	0.0002	0.023	0.03	SO3	0.057
K :	0.0000	0.0000	0.000	0.00	K2O	
Fe :	0.0013	0.0008	0.091	0.06	Fe2O3	0.130
Pb :	0.0007	0.0006	0.085	0.01	PbO	0.091
U :	0.2947	0.2472	33.283	5.07	UO2	37.757
O			28.331	64.22	by stoichiometry	
total :			85.092			85.092

iteration : 3
be carefull - k.r./w.f. = 0.00 for K

point n : 55 x= 10564 y= 17217 z= 29 utrav
NOPIECP_1_trav

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46367	7.70	5.20	0.00298	5.2		
Al	32469	1788.31	19.38	0.15383	0.4		
Si	27735	2128.46	26.17	0.21768	0.5		
As	37644	10.29	10.11	0.00007	3.8		
Ca	38383	16.20	8.45	0.00200	5.6		
S	61390	3.10	2.65	0.00030	12.7		
K	42759	26.45	29.95	0.00000	4.4		
Fe	48080	10.69	7.82	0.00122	3.1		
Pb	60415	2.90	2.85	0.00004	13.1		
U	44670	637.01	8.98	0.31072	1.0		

Analysis no. 7 within utrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0030	0.0001	0.029	0.05	Na2O	0.038
Al :	0.1538	0.0656	9.501	13.68	Al2O3	17.951
Si :	0.2177	0.0875	11.645	16.11	SiO2	24.912
As :	0.0001	0.0000	0.003	0.00	As2O5	0.005
Ca :	0.0020	0.0006	0.066	0.06	CaO	0.092
S :	0.0003	0.0001	0.008	0.01	SO3	0.019
K :	0.0000	0.0000	0.000	0.00	K2O	
Fe :	0.0012	0.0008	0.084	0.06	Fe2O3	0.120
Pb :	0.0000	0.0000	0.005	0.00	PbO	0.005
U :	0.3107	0.2606	34.900	5.70	UO2	39.592
O			26.494	64.33	by stoichiometry	
total :			82.733			82.733

iteration : 3
be carefull - k.r./w.f. = 0.50 for Na
be carefull - k.r./w.f. = 0.00 for K

point n : 56 x= 10614 y= 17188 z= 29 utrav
NOPIECP_1_trav

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46367	7.70	4.80	0.00346	5.2		
Al	32469	1424.87	18.18	0.12232	0.4		
Si	27735	1971.91	25.83	0.20150	0.5		
As	37644	14.33	9.74	0.00177	3.2		
Ca	38383	44.55	10.25	0.00884	3.4		
S	61390	3.75	2.45	0.00087	11.6		

K	42759	29.80	34.50	0.00000	4.1
Fe	48080	12.90	8.21	0.00199	2.8
Pb	60415	2.95	2.45	0.00040	13.0
U	44670	732.47	10.19	0.35734	1.0

Analysis no. 8 within utrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0035	0.0002	0.034	0.06	Na2O	0.045
Al :	0.1223	0.0522	7.664	11.95	Al2O3	14.481
Si :	0.2015	0.0810	10.680	15.99	SiO2	22.847
As :	0.0018	0.0005	0.087	0.05	As2O5	0.133
Ca :	0.0088	0.0028	0.287	0.30	CaO	0.401
S :	0.0009	0.0002	0.021	0.03	SO3	0.053
K :	0.0000	0.0000	0.000	0.00	K2O	
Fe :	0.0020	0.0013	0.134	0.10	Fe2O3	0.191
Pb :	0.0004	0.0003	0.046	0.01	PbO	0.049
U :	0.3573	0.2997	39.437	6.97	UO2	44.739
O			24.551	64.54	by stoichiometry	
total :			82.941			82.941

iteration : 3
be carefull - k.r./w.f. = 0.49 for Na
be carefull - k.r./w.f. = 0.00 for K

point n : 57 x= 10664 y= 17158 z= 29 utrav
NOPIECP_1_trav

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46367	7.76	4.36	0.00406	5.1		
Al	32469	1915.49	19.14	0.16491	0.4		
Si	27735	2337.01	25.53	0.23934	0.4		
As	37644	14.24	9.14	0.00197	3.2		
Ca	38383	55.31	9.10	0.01191	3.0		
S	61390	3.15	2.40	0.00050	12.6		
K	42759	24.75	28.75	0.00000	4.5		
Fe	48080	13.21	6.47	0.00286	2.8		
Pb	60415	2.05	2.60	0.00000	15.6		
U	44670	548.95	9.40	0.26694	1.1		

Analysis no. 9 within utrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0041	0.0002	0.038	0.06	Na2O	0.052
Al :	0.1649	0.0703	10.070	13.70	Al2O3	19.027
Si :	0.2393	0.0962	12.834	16.77	SiO2	27.456
As :	0.0020	0.0006	0.093	0.05	As2O5	0.143
Ca :	0.0119	0.0037	0.396	0.36	CaO	0.554
S :	0.0005	0.0001	0.013	0.01	SO3	0.032
K :	0.0000	0.0000	0.000	0.00	K2O	
Fe :	0.0029	0.0018	0.200	0.13	Fe2O3	0.286
Pb :	0.0000	0.0000	0.000	0.00	PbO	
U :	0.2669	0.2239	30.433	4.69	UO2	34.524
O			27.996	64.22	by stoichiometry	
total :			82.074			82.074

iteration : 3
be carefull - k.r./w.f. = 0.00 for K
be carefull - k.r./w.f. = 0.00 for Pb

point n : 58 x= 10714 y= 17128 z= 29 utrav
NOPIECP_1_trav

elt.	peak	peak	backgr.	i.x./i.std.	sig/k	beam	kv

	pos.	(c/s)	(c/s)				
						15.	15.0
Na	46367	7.58	4.86	0.00325	5.2		
Al	32469	1169.63	17.88	0.10014	0.5		
Si	27735	1704.49	25.80	0.17380	0.5		
As	37644	11.11	10.24	0.00034	3.6		
Ca	38383	14.60	11.85	0.00071	5.9		
S	61390	2.95	3.60	0.00000	13.0		
K	42759	34.05	42.76	0.00000	3.9		
Fe	48080	17.31	8.72	0.00364	2.4		
Pb	60415	3.20	3.20	0.00000	12.5		
U	44670	848.84	10.82	0.41455	0.9		

Analysis no. 10 within utrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0032	0.0002	0.032	0.07	Na2O	0.043
Al :	0.1001	0.0427	6.365	10.99	Al2O3	12.026
Si :	0.1738	0.0699	9.156	15.18	SiO2	19.586
As :	0.0003	0.0001	0.017	0.01	As2O5	0.026
Ca :	0.0007	0.0002	0.023	0.03	CaO	0.032
S :	0.0000	0.0000	0.000	0.00	SO3	
K :	0.0000	0.0000	0.000	0.00	K2O	
Fe :	0.0036	0.0024	0.238	0.20	Fe2O3	0.340
Pb :	0.0000	0.0000	0.000	0.00	PbO	
U :	0.4145	0.3477	44.798	8.77	UO2	50.820
O			22.245	64.76	by stoichiometry	
total :			82.874			82.874

iteration : 3

be carefull - k.r./w.f. = 0.48 for Na
be carefull - k.r./w.f. = 0.00 for S
be carefull - k.r./w.f. = 0.00 for K
be carefull - k.r./w.f. = 0.00 for Pb

point n : 59 x= 10765 y= 17099 z= 28 utrav
NOPIECP_1_trav

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46367	7.98	4.62	0.00401	5.1		
Al	32469	1150.78	18.54	0.09843	0.5		
Si	27735	1703.35	25.10	0.17373	0.5		
As	37644	11.91	10.33	0.00061	3.5		
Ca	38383	15.55	11.15	0.00113	5.7		
S	61390	3.05	2.95	0.00007	12.8		
K	42759	37.40	49.96	0.00000	3.7		
Fe	48080	14.87	8.36	0.00276	2.6		
Pb	60415	3.10	2.25	0.00068	12.7		
U	44670	877.84	12.02	0.42824	0.9		

Analysis no. 11 within utrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0040	0.0002	0.040	0.08	Na2O	0.054
Al :	0.0984	0.0420	6.262	10.79	Al2O3	11.832
Si :	0.1737	0.0698	9.137	15.12	SiO2	19.547
As :	0.0006	0.0002	0.031	0.02	As2O5	0.047
Ca :	0.0011	0.0004	0.036	0.04	CaO	0.050
S :	0.0001	0.0000	0.002	0.00	SO3	0.004
K :	0.0000	0.0000	0.000	0.00	K2O	
Fe :	0.0028	0.0018	0.180	0.15	Fe2O3	0.257
Pb :	0.0007	0.0006	0.076	0.02	PbO	0.082
U :	0.4282	0.3592	46.044	8.99	UO2	52.234

O	22.300	64.79	by stoichiometry
total :	84.108		84.108

iteration : 3
be carefull - k.r./w.f. = 0.48 for Na
be carefull - k.r./w.f. = 0.00 for K

point n : 60 x= 10815 y= 17069 z= 28 utrav
NOPIECP_1_trav

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46367	7.04	4.56	0.00296	5.4		
Al	32469	1924.56	19.22	0.16567	0.4		
Si	27735	2209.05	26.43	0.22597	0.5		
As	37644	9.46	9.16	0.00012	3.9		
Ca	38383	12.90	8.15	0.00122	6.2		
S	61390	3.00	3.00	0.00000	12.9		
K	42759	26.10	28.60	0.00000	4.4		
Fe	48080	12.21	6.97	0.00222	2.9		
Pb	60415	3.00	2.10	0.00072	12.9		
U	44670	584.93	8.45	0.28517	1.0		

Analysis no. 12 within utrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0030	0.0001	0.028	0.05	Na2O	0.038
Al :	0.1657	0.0707	10.161	14.18	Al2O3	19.198
Si :	0.2260	0.0908	12.130	16.26	SiO2	25.949
As :	0.0001	0.0000	0.006	0.00	As2O5	0.008
Ca :	0.0012	0.0004	0.041	0.04	CaO	0.057
S :	0.0000	0.0000	0.000	0.00	SO3	
K :	0.0000	0.0000	0.000	0.00	K2O	
Fe :	0.0022	0.0014	0.154	0.10	Fe2O3	0.221
Pb :	0.0007	0.0006	0.085	0.02	PbO	0.091
U :	0.2852	0.2392	32.323	5.11	UO2	36.668
O			27.303	64.25	by stoichiometry	
total :			82.230			82.230

iteration : 3
be carefull - k.r./w.f. = 0.00 for S
be carefull - k.r./w.f. = 0.00 for K

point n : 61 x= 10865 y= 17040 z= 28 utrav
NOPIECP_1_trav

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46367	8.36	4.50	0.00460	4.9		
Al	32469	1614.52	18.68	0.13870	0.4		
Si	27735	1954.54	24.93	0.19970	0.5		
As	37644	10.40	10.16	0.00009	3.7		
Ca	38383	12.65	8.60	0.00104	6.3		
S	61390	3.05	2.55	0.00033	12.8		
K	42759	27.25	34.65	0.00000	4.3		
Fe	48080	13.59	7.77	0.00246	2.8		
Pb	60415	2.90	3.05	0.00000	13.1		
U	44670	697.62	9.19	0.34042	1.0		

Analysis no. 13 within utrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0046	0.0002	0.045	0.08	Na2O	0.060
Al :	0.1387	0.0592	8.652	13.20	Al2O3	16.347

Si :	0.1997	0.0803	10.650	15.61	SiO2	22.783
As :	0.0001	0.0000	0.005	0.00	As2O5	0.007
Ca :	0.0010	0.0003	0.034	0.03	CaO	0.048
S :	0.0003	0.0001	0.008	0.01	SO3	0.021
K :	0.0000	0.0000	0.000	0.00	K2O	
Fe :	0.0025	0.0016	0.167	0.12	Fe2O3	0.239
Pb :	0.0000	0.0000	0.000	0.00	PbO	
U :	0.3404	0.2856	37.817	6.54	UO2	42.901
O			25.028	64.40	by stoichiometry	
total :			82.405			82.405

iteration : 3
be carefull - k.r./w.f. = 0.49 for Na
be carefull - k.r./w.f. = 0.00 for K
be carefull - k.r./w.f. = 0.00 for Pb

point n : 62 x= 10915 y= 17010 z= 28 utrav
NOPIECP_1_trav

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46367	7.80	5.42	0.00284	5.1		
Al	32469	1253.72	18.60	0.10735	0.5		
Si	27735	1719.69	25.83	0.17530	0.5		
As	37644	10.61	10.31	0.00012	3.7		
Ca	38383	13.00	8.80	0.00108	6.2		
S	61390	3.10	2.85	0.00017	12.7		
K	42759	32.30	42.21	0.00000	4.0		
Fe	48080	13.15	8.89	0.00180	2.8		
Pb	60415	3.80	3.40	0.00032	11.5		
U	44670	821.90	11.50	0.40074	0.9		

Analysis no. 14 within utrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0028	0.0001	0.028	0.06	Na2O	0.038
Al :	0.1074	0.0458	6.802	11.57	Al2O3	12.852
Si :	0.1753	0.0705	9.258	15.14	SiO2	19.806
As :	0.0001	0.0000	0.006	0.00	As2O5	0.009
Ca :	0.0011	0.0003	0.035	0.04	CaO	0.048
S :	0.0002	0.0000	0.004	0.01	SO3	0.010
K :	0.0000	0.0000	0.000	0.00	K2O	
Fe :	0.0018	0.0012	0.119	0.10	Fe2O3	0.170
Pb :	0.0003	0.0003	0.036	0.01	PbO	0.039
U :	0.4007	0.3361	43.540	8.40	UO2	49.393
O			22.537	64.68	by stoichiometry	
total :			82.365			82.365

iteration : 3
be carefull - k.r./w.f. = 0.48 for Na
be carefull - k.r./w.f. = 0.00 for K

point n : 63 x= 10965 y= 16981 z= 28 utrav
NOPIECP_1_trav

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46367	8.32	4.26	0.00484	5.0		
Al	32469	1701.21	18.14	0.14632	0.4		
Si	27735	2041.40	26.30	0.20860	0.5		
As	37644	9.64	9.74	0.00000	3.9		
Ca	38383	14.25	8.80	0.00140	5.9		
S	61390	3.50	2.50	0.00067	12.0		
K	42759	29.60	34.70	0.00000	4.2		

Fe	48080	13.47	7.44	0.00255	2.8
Pb	60415	3.25	3.00	0.00020	12.4
U	44670	678.87	9.35	0.33115	1.0

Analysis no. 15 within utrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0048	0.0002	0.047	0.08	Na2O	0.063
Al :	0.1463	0.0624	9.089	13.41	Al2O3	17.172
Si :	0.2086	0.0838	11.136	15.78	SiO2	23.824
As :	0.0000	0.0000	0.000	0.00	As2O5	
Ca :	0.0014	0.0004	0.046	0.05	CaO	0.064
S :	0.0007	0.0001	0.017	0.02	SO3	0.042
K :	0.0000	0.0000	0.000	0.00	K2O	
Fe :	0.0026	0.0017	0.174	0.12	Fe2O3	0.249
Pb :	0.0002	0.0002	0.023	0.00	PbO	0.025
U :	0.3312	0.2778	36.910	6.17	UO2	41.872
O			25.869	64.36	by stoichiometry	
total :			83.310			83.310

iteration : 3
be carefull - k.r./w.f. = 0.49 for Na
be carefull - k.r./w.f. = 0.00 for As
be carefull - k.r./w.f. = 0.00 for K

point n : 64 x= 11015 y= 16951 z= 28 utrav
NOPIECP_1_trav

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46367	7.32	4.68	0.00315	5.3		
Al	32469	1498.38	18.04	0.12868	0.4		
Si	27735	1879.81	26.13	0.19186	0.5		
As	37644	10.86	9.07	0.00069	3.7		
Ca	38383	16.15	11.75	0.00113	5.6		
S	61390	4.25	2.95	0.00087	10.9		
K	42759	35.45	41.56	0.00000	3.8		
Fe	48080	13.17	8.86	0.00183	2.8		
Pb	60415	2.95	3.30	0.00000	13.0		
U	44670	794.91	11.76	0.38730	0.9		

Analysis no. 16 within utrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0031	0.0001	0.031	0.06	Na2O	0.041
Al :	0.1287	0.0549	8.087	12.58	Al2O3	15.280
Si :	0.1919	0.0771	10.181	15.21	SiO2	21.780
As :	0.0007	0.0002	0.034	0.02	As2O5	0.052
Ca :	0.0011	0.0004	0.037	0.04	CaO	0.051
S :	0.0009	0.0002	0.021	0.03	SO3	0.053
K :	0.0000	0.0000	0.000	0.00	K2O	
Fe :	0.0018	0.0012	0.122	0.09	Fe2O3	0.174
Pb :	0.0000	0.0000	0.000	0.00	PbO	
U :	0.3873	0.3249	42.285	7.45	UO2	47.970
O			24.603	64.53	by stoichiometry	
total :			85.401			85.401

iteration : 3
be carefull - k.r./w.f. = 0.49 for Na
be carefull - k.r./w.f. = 0.00 for K
be carefull - k.r./w.f. = 0.00 for Pb

point n : 65 x= 11065 y= 16921 z= 27 utrav
NOPIECP_1_trav

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46367	7.22	4.18	0.00363	5.3		
Al	32469	2486.10	19.88	0.21438	0.4		
Si	27735	2544.75	24.13	0.26089	0.4		
As	37644	9.11	9.13	0.00000	4.0		
Ca	38383	13.30	6.75	0.00169	6.1		
S	61390	2.60	2.30	0.00020	13.9		
K	42759	18.10	22.80	0.00000	5.3		
Fe	48080	10.17	5.82	0.00184	3.2		
Pb	60415	2.40	2.70	0.00000	14.4		
U	44670	399.02	7.30	0.19372	1.2		

Analysis no. 17 within utrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0036	0.0002	0.033	0.05	Na2O	0.045
Al :	0.2144	0.0914	12.747	15.78	Al2O3	24.085
Si :	0.2609	0.1049	14.192	16.87	SiO2	30.361
As :	0.0000	0.0000	0.000	0.00	As2O5	
Ca :	0.0017	0.0005	0.057	0.05	CaO	0.080
S :	0.0002	0.0000	0.005	0.01	SO3	0.013
K :	0.0000	0.0000	0.000	0.00	K2O	
Fe :	0.0018	0.0012	0.133	0.08	Fe2O3	0.191
Pb :	0.0000	0.0000	0.000	0.00	PbO	
U :	0.1937	0.1625	22.693	3.18	UO2	25.743
O			30.657	63.99	by stoichiometry	
total :			80.519			80.519

iteration : 3
be carefull - k.r./w.f. = 0.00 for As
be carefull - k.r./w.f. = 0.00 for K
be carefull - k.r./w.f. = 0.00 for Pb

point n : 66 x= 11115 y= 16892 z= 27 utrav
NOPIECP_1_trav

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46367	8.24	5.40	0.00339	5.0		
Al	32469	1404.23	18.10	0.12046	0.4		
Si	27735	1862.24	25.60	0.19005	0.5		
As	37644	11.56	9.86	0.00066	3.5		
Ca	38383	12.65	10.20	0.00063	6.3		
S	61390	3.90	3.15	0.00050	11.3		
K	42759	31.05	37.80	0.00000	4.1		
Fe	48080	14.08	8.22	0.00248	2.7		
Pb	60415	3.55	3.00	0.00044	11.9		
U	44670	754.79	10.76	0.36786	1.0		

Analysis no. 18 within utrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0034	0.0002	0.033	0.06	Na2O	0.045
Al :	0.1205	0.0514	7.574	12.19	Al2O3	14.311
Si :	0.1901	0.0764	10.079	15.59	SiO2	21.562
As :	0.0007	0.0002	0.032	0.02	As2O5	0.049
Ca :	0.0006	0.0002	0.020	0.02	CaO	0.029
S :	0.0005	0.0001	0.012	0.02	SO3	0.031
K :	0.0000	0.0000	0.000	0.00	K2O	
Fe :	0.0025	0.0016	0.166	0.13	Fe2O3	0.237
Pb :	0.0004	0.0004	0.050	0.01	PbO	0.054
U :	0.3679	0.3086	40.459	7.38	UO2	45.898

```
 O                                  23.789     64.58  by stoichiometry

 total :                            82.215                                82.215
 iteration :  3
    be carefull - k.r./w.f. = 0.49 for Na
    be carefull - k.r./w.f. = 0.00 for K

 point n :    67     x=  11165  y=  16862  z=     27   utrav
                                                        NOPIECP_1_trav
elt.  peak      peak     backgr.   i.x./i.std.  sig/k    beam      kv
      pos.      (c/s)     (c/s)
                                                            15.    15.0
 Na   46367       7.20       4.82      0.00284    5.3
 Al   32469    1362.30      17.30      0.11686    0.4
 Si   27735    1784.71      24.77      0.18208    0.5
 As   37644      11.01      10.59      0.00017    3.6
 Ca   38383      13.50       9.55      0.00102    6.1
 S    61390       3.00       2.70      0.00020   12.9
 K    42759      27.95      39.25      0.00000    4.3
 Fe   48080      13.84       8.70      0.00218    2.7
 Pb   60415       2.90       3.20      0.00000   13.1
 U    44670     779.31      11.87      0.37937    0.9

Analysis no.   19 within utrav
              k                    wt.  %   normalized
element  i.x./i.std.  k.ratio     concen.    atom. c    compound      concen.
  Na :      0.0028     0.0001       0.028      0.05    Na2O            0.037
  Al :      0.1169     0.0498       7.371     12.15    Al2O3          13.926
  Si :      0.1821     0.0732       9.650     15.28    SiO2           20.644
  As :      0.0002     0.0000       0.008      0.00    As2O5           0.013
  Ca :      0.0010     0.0003       0.033      0.04    CaO             0.046
  S  :      0.0002     0.0000       0.005      0.01    SO3             0.012
  K  :      0.0000     0.0000       0.000      0.00    K2O
  Fe :      0.0022     0.0014       0.145      0.12    Fe2O3           0.207
  Pb :      0.0000     0.0000       0.000      0.00    PbO
  U  :      0.3794     0.3182      41.547      7.76    UO2            47.132
  O                                 23.231     64.59  by stoichiometry

 total :                            82.017                                82.017
 iteration :  3
    be carefull - k.r./w.f. = 0.48 for Na
    be carefull - k.r./w.f. = 0.00 for K
    be carefull - k.r./w.f. = 0.00 for Pb

 point n :    68     x=  11215  y=  16833  z=     27   utrav
                                                        NOPIECP_1_trav
elt.  peak      peak     backgr.   i.x./i.std.  sig/k    beam      kv
      pos.      (c/s)     (c/s)
                                                            15.    15.0
 Na   46367       7.46       4.94      0.00300    5.2
 Al   32469    1753.41      18.62      0.15072    0.4
 Si   27735    2097.13      26.13      0.21425    0.5
 As   37644       9.91       9.60      0.00012    3.8
 Ca   38383      13.05       8.40      0.00120    6.2
 S    61390       3.95       2.15      0.00121   11.3
 K    42759      29.70      35.60      0.00000    4.1
 Fe   48080      13.64       7.90      0.00243    2.7
 Pb   60415       3.00       3.10      0.00000   12.9
 U    44670     685.09       8.87      0.33426    1.0

Analysis no.   20 within utrav
              k                    wt.  %   normalized
element  i.x./i.std.  k.ratio     concen.    atom. c    compound      concen.
  Na :      0.0030     0.0001       0.029      0.05    Na2O            0.039
```

Al :	0.1507	0.0643	9.347	13.47	Al2O3	17.660
Si :	0.2143	0.0861	11.437	15.83	SiO2	24.467
As :	0.0001	0.0000	0.006	0.00	As2O5	0.009
Ca :	0.0012	0.0004	0.039	0.04	CaO	0.055
S :	0.0012	0.0003	0.030	0.04	SO3	0.075
K :	0.0000	0.0000	0.000	0.00	K2O	
Fe :	0.0024	0.0016	0.166	0.12	Fe2O3	0.237
Pb :	0.0000	0.0000	0.000	0.00	PbO	
U :	0.3343	0.2804	37.212	6.08	UO2	42.214
O			26.490	64.38	by stoichiometry	
total :			84.756			84.756

iteration : 3

be carefull - k.r./w.f. = 0.49 for Na

be carefull - k.r./w.f. = 0.00 for K

be carefull - k.r./w.f. = 0.00 for Pb

4_18_95_std_utrav.dat

<CAMECA : 8.0- 3.2>

Tue Apr 18 17:24:05 1995
quantitative microprobe analysis
multi label

calibration data :

spc	xtal	pos.	+bg. shift (range)	-bg. shift (channel #)	bg. slope (-speed/100.)	pk-bg (c/s/nA) (c/nA)	sigma	pk_tim (s) (repeat)	% req. acc.	bg_tim (ms) (speed)
Na 1	TAP	46367	500	-500	0.000	55.906	0.8	20	0.1	0
Al 1	TAP	32469	600	-600	0.000	767.076	0.2	20	0.1	0
Si 2	TAP	27735	500	-500	0.000	644.216	0.2	20	0.1	10000
As 2	TAP	37644	600	-600	0.000	172.565	0.4	20	0.1	10000
Ca 3	PET	38383	500	-500	0.000	258.801	0.4	20	0.1	10000
S 3	PET	61390	500	-500	0.000	99.544	0.6	20	0.1	0
K 3	PET	42759	500	-500	0.000	85.578	0.6	20	0.1	10000
Fe 4	LIF	48080	500	-500	0.000	157.471	0.5	20	0.1	0
Pb 3	PET	60415	750	-750	0.000	82.843	0.6	20	0.1	10000
U 3	PET	44670	750	0	1.050	134.828	0.5	20	0.1	20000

point n : 1 x= 8928 y= 31268 z= -4
5SiO2_stdck#1(20u)

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam 15.	kv 15.0
Na	46367	3.46	3.54	0.00000	7.6		
Al	32469	8.64	8.86	0.00000	4.8		
Si	27735	9747.39	60.67	1.00147	0.3		
As	37644	7.54	7.16	0.00015	4.4		
Ca	38383	4.65	4.50	0.00004	10.4		
S	61390	1.50	1.60	0.00000	18.3		
K	42759	4.35	4.70	0.00000	10.7		
Fe	48080	3.00	3.22	0.00000	5.8		
Pb	60415	1.55	1.50	0.00004	18.0		
U	44670	3.20	4.31	0.00000	12.5		

Analysis no. 1 within utrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0000	0.0000	0.000	0.00	Na2O	
Al :	0.0000	0.0000	0.000	0.00	Al2O3	
Si :	1.0015	0.4025	46.802	33.33	SiO2	100.123
As :	0.0001	0.0000	0.006	0.00	As2O5	0.010
Ca :	0.0000	0.0000	0.001	0.00	CaO	0.002
S :	0.0000	0.0000	0.000	0.00	SO3	
K :	0.0000	0.0000	0.000	0.00	K2O	
Fe :	0.0000	0.0000	0.000	0.00	Fe2O3	
Pb :	0.0000	0.0000	0.006	0.00	PbO	0.006
U :	0.0000	0.0000	0.000	0.00	UO2	
O			53.325	66.67	by stoichiometry	
total :			100.140			100.140

iteration : 1
be carefull - k.r./w.f. = 0.00 for Na
be carefull - k.r./w.f. = 0.00 for Al
be carefull - k.r./w.f. = 0.00 for S
be carefull - k.r./w.f. = 0.00 for K
be carefull - k.r./w.f. = 0.00 for Fe
be carefull - k.r./w.f. = 0.00 for U

point n : 2 x= -13393 y= 6611 z= 49
4UO2_stdck#1(20u)

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam 15.	kv 15.0
Na	46367	6.36	6.60	0.00000	5.7		
Al	32469	18.58	16.76	0.00016	3.3		
Si	27735	30.00	27.03	0.00031	3.3		
As	37644	14.50	14.53	0.00000	3.2		
Ca	38383	22.85	24.20	0.00000	4.7		
S	61390	4.90	5.80	0.00000	10.1		
K	42759	61.51	116.89	0.00000	2.9		
Fe	48080	17.88	17.88	0.00000	2.4		
Pb	60415	4.70	5.35	0.00000	10.3		
U	44670	2042.71	21.79	0.99818	0.7		

Analysis no. 2 within utrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.

Na :	0.0000	0.0000	0.000	0.00	Na2O	
Al :	0.0002	0.0001	0.011	0.04	Al2O3	0.020
Si :	0.0003	0.0001	0.016	0.05	SiO2	0.033
As :	0.0000	0.0000	0.000	0.00	As2O5	
Ca :	0.0000	0.0000	0.000	0.00	CaO	
S :	0.0000	0.0000	0.000	0.00	SO3	
K :	0.0000	0.0000	0.000	0.00	K2O	
Fe :	0.0000	0.0000	0.000	0.00	Fe2O3	
Pb :	0.0000	0.0000	0.000	0.00	PbO	
U :	0.9982	0.8373	88.034	33.25	UO2	99.868
O			11.861	66.66	by stoichiometry	
total :			99.922			99.922

iteration : 1
be carefull - k.r./w.f. = 0.00 for Na
be carefull - k.r./w.f. = 0.00 for As
be carefull - k.r./w.f. = 0.00 for Ca
be carefull - k.r./w.f. = 0.00 for S
be carefull - k.r./w.f. = 0.00 for K
be carefull - k.r./w.f. = 0.00 for Fe
be carefull - k.r./w.f. = 0.00 for Pb

point n : 3 x= 12921 y= 33771 z= -9
5Al2O3_stdck#1(20u)

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46367	3.66	3.60	0.00007	7.4		
Al	32469	11678.93	56.51	1.00901	0.2		
Si	27735	9.30	7.77	0.00016	6.0		
As	37644	9.79	9.60	0.00007	3.8		
Ca	38383	4.65	3.90	0.00019	10.4		
S	61390	1.65	1.70	0.00000	17.4		
K	42759	4.35	4.45	0.00000	10.7		
Fe	48080	3.12	3.02	0.00004	5.7		
Pb	60415	1.90	1.30	0.00048	16.2		
U	44670	3.90	2.78	0.00055	11.3		

Analysis no. 3 within utrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0001	0.0000	0.001	0.00	Na2O	0.001
Al :	1.0090	0.4304	53.301	39.97	Al2O3	100.709
Si :	0.0002	0.0001	0.011	0.01	SiO2	0.023
As :	0.0001	0.0000	0.003	0.00	As2O5	0.004
Ca :	0.0002	0.0001	0.007	0.00	CaO	0.010
S :	0.0000	0.0000	0.000	0.00	SO3	
K :	0.0000	0.0000	0.000	0.00	K2O	
Fe :	0.0000	0.0000	0.003	0.00	Fe2O3	0.005
Pb :	0.0005	0.0004	0.064	0.01	PbO	0.069
U :	0.0006	0.0005	0.069	0.01	UO2	0.078
O			47.440	60.00	by stoichiometry	
total :			100.899			100.899

iteration : 2
be carefull - k.r./w.f. = 0.00 for S
be carefull - k.r./w.f. = 0.00 for K

point n : 4 x= 7257 y= 26921 z= 1
5Fe2O3_stdck#1(20u)

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46367	3.12	3.06	0.00007	8.0		
Al	32469	8.80	7.54	0.00011	4.8		
Si	27735	16.77	13.87	0.00030	4.5		
As	37644	7.41	7.53	0.00000	4.4		
Ca	38383	9.40	8.85	0.00014	7.3		
S	61390	2.45	3.05	0.00000	14.3		
K	42759	8.45	8.80	0.00000	7.7		
Fe	48080	2379.90	12.71	1.00104	0.5		
Pb	60415	2.35	2.90	0.00000	14.6		
U	44670	6.40	7.04	0.00000	8.9		

Analysis no. 4 within utrav

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0001	0.0000	0.001	0.00	Na2O	0.002
Al :	0.0001	0.0000	0.008	0.01	Al2O3	0.016
Si :	0.0003	0.0001	0.017	0.02	SiO2	0.037
As :	0.0000	0.0000	0.000	0.00	As2O5	
Ca :	0.0001	0.0000	0.004	0.00	CaO	0.006
S :	0.0000	0.0000	0.000	0.00	SO3	
K :	0.0000	0.0000	0.000	0.00	K2O	
Fe :	1.0010	0.6472	70.000	39.96	Fe2O3	100.081
Pb :	0.0000	0.0000	0.000	0.00	PbO	
U :	0.0000	0.0000	0.000	0.00	UO2	
O			30.110	60.00	by stoichiometry	
total :			100.141			100.141

iteration : 2
be carefull - k.r./w.f. = 0.29 for Na

```
be carefull - k.r./w.f. = 0.00 for As
be carefull - k.r./w.f. = 0.00 for S
be carefull - k.r./w.f. = 0.00 for K
be carefull - k.r./w.f. = 0.00 for Pb
be carefull - k.r./w.f. = 0.00 for U
```

4_20_95_std_swrisife.dat

<CAMECA : 8.0- 3.2>

Thu Apr 20 17:09:56 1995
quantitative microprobe analysis
multi label

calibration data :

spc	xtal	pos.	+bg. shift (range)	-bg. shift (channel #)	bg. slope (-speed/100.)	pk-bg (c/s/nA) (c/nA)	sigma	pk_tim (s) (repeat)	% req. acc.	bg_tim (ms) (speed)
Na 1	TAP	46351	500	-500	0.000	55.819	0.8	20	0.1	0
Al 1	TAP	32464	600	-600	0.000	765.597	0.2	20	0.1	0
Si 2	TAP	27735	500	-500	0.000	657.835	0.2	20	0.1	10000
As 2	TAP	37667	600	-600	0.000	175.092	0.4	20	0.1	10000
Ca 3	PET	38390	500	-500	0.000	251.318	0.4	20	0.1	10000
S 3	PET	61386	500	-500	0.000	98.610	0.6	20	0.1	0
K 3	PET	42757	500	-500	0.000	85.662	0.6	20	0.1	10000
Fe 4	LIF	48079	500	-500	0.000	158.270	0.5	20	0.1	0
Pb 3	PET	60414	750	-750	0.000	82.589	0.6	20	0.1	10000
U 3	PET	44673	750	0	1.050	134.007	0.5	20	0.1	20000

point n : 1 x= 8974 y= 31677 z= -6
5SiO2_std_ck#1

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam 15.	kv 15.0
Na	46351	3.65	2.95	0.00083	11.7		
Al	32464	12.25	9.70	0.00022	6.4		
Si	27735	9976.73	58.46	1.00091	0.3		
As	37667	8.75	6.90	0.00070	7.6		
Ca	38390	3.55	3.90	0.00000	11.9		
S	61386	1.80	0.70	0.00074	16.7		
K	42757	4.65	3.90	0.00058	10.4		
Fe	48079	3.25	2.75	0.00021	12.4		
Pb	60414	1.50	1.30	0.00016	18.3		
U	44673	3.10	4.31	0.00000	12.7		

Analysis no. 1 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0008	0.0000	0.007	0.01	Na2O	0.010
Al :	0.0002	0.0001	0.012	0.01	Al2O3	0.023
Si :	1.0009	0.4023	46.784	33.29	SiO2	100.085
As :	0.0007	0.0002	0.030	0.01	As2O5	0.046
Ca :	0.0000	0.0000	0.000	0.00	CaO	
S :	0.0007	0.0002	0.022	0.01	SO3	0.055
K :	0.0006	0.0001	0.008	0.00	K2O	0.009
Fe :	0.0002	0.0001	0.017	0.01	Fe2O3	0.024
Pb :	0.0002	0.0001	0.022	0.00	PbO	0.024
U :	0.0000	0.0000	0.000	0.00	UO2	
O			53.374	66.66	by stoichiometry	
total :			100.276			100.276

iteration : 2
be carefull - k.r./w.f. = 0.00 for Ca
be carefull - k.r./w.f. = 0.00 for U

point n : 2 x= 13141 y= 33795 z= -57
5Al2O3_stdck#1

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam 15.	kv 15.0
Na	46351	4.45	4.35	0.00012	10.6		
Al	32464	11607.50	54.96	1.00150	0.3		
Si	27735	9.50	8.05	0.00015	7.3		
As	37667	9.10	10.95	0.00000	7.4		
Ca	38390	3.20	3.55	0.00000	12.5		
S	61386	1.30	1.20	0.00007	19.6		
K	42757	3.25	3.05	0.00015	12.4		
Fe	48079	3.00	3.60	0.00000	12.9		
Pb	60414	1.60	1.10	0.00040	17.7		
U	44673	3.90	4.62	0.00000	11.3		

Analysis no. 2 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0001	0.0000	0.001	0.00	Na2O	0.001
Al :	1.0015	0.4272	52.975	39.98	Al2O3	100.093
Si :	0.0001	0.0001	0.010	0.01	SiO2	0.022
As :	0.0000	0.0000	0.000	0.00	As2O5	

Ca :	0.0000	0.0000	0.000	0.00	CaO	
S :	0.0001	0.0000	0.002	0.00	SO3	0.005
K :	0.0002	0.0000	0.002	0.00	K2O	0.002
Fe :	0.0000	0.0000	0.000	0.00	Fe2O3	
Pb :	0.0004	0.0003	0.053	0.01	PbO	0.057
U :	0.0000	0.0000	0.000	0.00	UO2	
O			47.137	60.00	by stoichiometry	
total :			100.181			100.181

iteration : 2
be carefull - k.r./w.f. = 0.00 for As
be carefull - k.r./w.f. = 0.00 for Ca
be carefull - k.r./w.f. = 0.00 for Fe
be carefull - k.r./w.f. = 0.00 for U

point n : 3 x= -13325 y= 6547 z= 41
4UO2_stdck#1

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	7.70	6.95	0.00089	8.1		
Al	32464	20.25	18.85	0.00012	5.0		
Si	27735	28.60	27.00	0.00016	4.2		
As	37667	15.95	15.50	0.00017	5.6		
Ca	38390	13.75	18.75	0.00000	6.0		
S	61386	5.45	4.70	0.00050	9.6		
K	42757	50.16	102.43	0.00000	3.2		
Fe	48079	19.40	17.40	0.00084	5.1		
Pb	60414	5.40	6.00	0.00000	9.6		
U	44673	2018.42	24.47	0.98767	0.7		

Analysis no. 3 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0009	0.0000	0.010	0.04	Na2O	0.013
Al :	0.0001	0.0001	0.008	0.03	Al2O3	0.015
Si :	0.0002	0.0001	0.008	0.03	SiO2	0.018
As :	0.0002	0.0000	0.009	0.01	As2O5	0.014
Ca :	0.0000	0.0000	0.000	0.00	CaO	
S :	0.0005	0.0001	0.011	0.03	SO3	0.026
K :	0.0000	0.0000	0.000	0.00	K2O	
Fe :	0.0008	0.0005	0.047	0.08	Fe2O3	0.066
Pb :	0.0000	0.0000	0.000	0.00	PbO	
U :	0.9877	0.8285	87.346	33.15	UO2	99.088
O			11.802	66.64	by stoichiometry	
total :			99.241			99.241

iteration : 2
be carefull - k.r./w.f. = 0.44 for Na
be carefull - k.r./w.f. = 0.00 for Ca
be carefull - k.r./w.f. = 0.00 for K
be carefull - k.r./w.f. = 0.00 for Pb

point n : 4 x= 6963 y= 26817 z= -41
5Fe2O3_stdck#1

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	3.00	3.55	0.00000	12.9		
Al	32464	12.75	10.10	0.00023	6.3		
Si	27735	15.90	14.05	0.00019	5.6		
As	37667	8.00	7.50	0.00019	7.9		
Ca	38390	6.35	6.80	0.00000	8.9		
S	61386	2.55	2.30	0.00017	14.0		
K	42757	7.10	7.15	0.00000	8.4		
Fe	48079	2426.72	13.50	1.01197	0.6		
Pb	60414	3.35	2.20	0.00092	12.2		
U	44673	7.40	5.99	0.00070	8.2		

Analysis no. 4 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0000	0.0000	0.000	0.00	Na2O	
Al :	0.0002	0.0001	0.018	0.02	Al2O3	0.033
Si :	0.0002	0.0001	0.011	0.01	SiO2	0.023
As :	0.0002	0.0001	0.013	0.01	As2O5	0.019
Ca :	0.0000	0.0000	0.000	0.00	CaO	
S :	0.0002	0.0000	0.004	0.00	SO3	0.010
K :	0.0000	0.0000	0.000	0.00	K2O	
Fe :	1.0120	0.6542	70.602	39.93	Fe2O3	100.941
Pb :	0.0009	0.0008	0.105	0.02	PbO	0.113
U :	0.0007	0.0006	0.077	0.01	UO2	0.087
O			30.398	60.01	by stoichiometry	
total :			101.227			101.227

iteration : 2
be carefull - k.r./w.f. = 0.00 for Na
be carefull - k.r./w.f. = 0.43 for As
be carefull - k.r./w.f. = 0.00 for Ca
be carefull - k.r./w.f. = 0.00 for K

4_20_95_swrisife.dat

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Thu Apr 20 20:11:09 1995

quantitative microprobe analysis
multi label

point n : 1 x= 9867 y= 20821 z= -1 swrisife
NOPI_424_1a_#1

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	6.47	4.27	0.00261	7.2		
Al	32464	20.88	8.23	0.00110	3.5		
Si	27735	252.68	12.85	0.02418	1.4		
As	37667	28.68	7.44	0.00805	2.7		
Ca	38390	20.85	6.25	0.00385	4.9		
S	61386	7.13	1.93	0.00350	6.9		
K	42757	7.35	6.35	0.00077	8.3		
Fe	48079	1943.14	11.63	0.80945	0.5		
						201.	15.0
Pb	60414	56.93	34.65	0.00134	2.2		
U	44673	100.64	84.68	0.00059	1.4		

Analysis no. 1 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0026	0.0001	0.042	0.07	Na2O	0.057
Al :	0.0011	0.0005	0.083	0.11	Al2O3	0.157
Si :	0.0242	0.0097	1.376	1.75	SiO2	2.943
As :	0.0080	0.0023	0.524	0.25	As2O5	0.804
Ca :	0.0039	0.0012	0.118	0.11	CaO	0.166
S :	0.0035	0.0008	0.087	0.10	SO3	0.217
K :	0.0008	0.0001	0.009	0.01	K2O	0.011
Fe :	0.8094	0.5233	58.002	37.12	Fe2O3	82.927
Pb :	0.0013	0.0011	0.154	0.03	PbO	0.166
U :	0.0006	0.0005	0.065	0.01	UO2	0.074
O			27.060	60.45	by stoichiometry	
total :			87.521			87.521

iteration : 2
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 2 x= 9816 y= 21114 z= -1 swrisife
NOPI_424_1a_#2

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	4.80	3.37	0.00171	8.4		
Al	32464	62.23	9.13	0.00461	2.0		
Si	27735	296.43	13.85	0.02854	1.3		
As	37667	27.88	7.54	0.00772	2.7		
Ca	38390	25.85	6.70	0.00506	4.4		
S	61386	8.07	2.07	0.00404	6.5		
K	42757	9.15	7.20	0.00151	7.4		
Fe	48079	1919.64	11.83	0.80081	0.5		
						201.	15.0
Pb	60414	55.38	33.35	0.00133	2.2		
U	44673	92.25	85.03	0.00027	1.4		

Analysis no. 2 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0017	0.0001	0.027	0.04	Na2O	0.037

Al :	0.0046	0.0020	0.347	0.46	Al2O3	0.657
Si :	0.0285	0.0115	1.624	2.05	SiO2	3.474
As :	0.0077	0.0022	0.501	0.24	As2O5	0.768
Ca :	0.0051	0.0016	0.156	0.14	CaO	0.218
S :	0.0040	0.0009	0.101	0.11	SO3	0.252
K :	0.0015	0.0002	0.017	0.02	K2O	0.021
Fe :	0.8008	0.5177	57.449	36.41	Fe2O3	82.135
Pb :	0.0013	0.0011	0.152	0.03	PbO	0.164
U :	0.0003	0.0002	0.030	0.00	UO2	0.034
O			27.355	60.52	by stoichiometry	
total :			87.759			87.759

iteration : 2
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 3 x= 10116 y= 20814 z= -1 swrisife
NOPI_424_1a_#3

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	5.60	3.47	0.00254	7.8		
Al	32464	77.39	9.58	0.00589	1.8		
Si	27735	289.37	14.95	0.02773	1.3		
As	37667	29.68	7.96	0.00825	2.6		
Ca	38390	26.55	7.60	0.00501	4.4		
S	61386	9.37	2.67	0.00452	6.0		
K	42757	9.40	7.75	0.00128	7.3		
Fe	48079	1909.74	11.03	0.79734	0.5		
						201.	15.0
Pb	60414	54.56	34.03	0.00124	2.2		
U	44673	93.28	84.10	0.00034	1.4		

Analysis no. 3 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0025	0.0001	0.041	0.06	Na2O	0.055
Al :	0.0059	0.0025	0.444	0.58	Al2O3	0.839
Si :	0.0277	0.0111	1.579	1.99	SiO2	3.377
As :	0.0082	0.0023	0.535	0.25	As2O5	0.820
Ca :	0.0050	0.0016	0.154	0.14	CaO	0.216
S :	0.0045	0.0010	0.113	0.12	SO3	0.281
K :	0.0013	0.0001	0.015	0.01	K2O	0.017
Fe :	0.7973	0.5155	57.216	36.29	Fe2O3	81.803
Pb :	0.0012	0.0010	0.142	0.02	PbO	0.153
U :	0.0003	0.0003	0.038	0.01	UO2	0.043
O			27.329	60.51	by stoichiometry	
total :			87.604			87.604

iteration : 2
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 4 x= 9944 y= 20878 z= -1 swrisife
NOPI_424_1a_#4

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	6.17	3.83	0.00278	7.4		
Al	32464	187.50	10.48	0.01537	1.2		
Si	27735	299.38	15.05	0.02874	1.3		
As	37667	40.70	7.76	0.01251	2.3		
Ca	38390	25.55	5.85	0.00521	4.4		
S	61386	12.30	2.33	0.00672	5.2		

K	42757	7.40	5.95	0.00113	8.2
Fe	48079	1742.93	10.70	0.72769	0.5
					201. 15.0
Pb	60414	42.18	32.53	0.00058	2.5
U	44673	121.48	82.68	0.00144	1.3

Analysis no. 4 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0028	0.0001	0.044	0.07	Na2O	0.059
Al :	0.0154	0.0066	1.154	1.58	Al2O3	2.180
Si :	0.0287	0.0116	1.642	2.16	SiO2	3.513
As :	0.0125	0.0036	0.802	0.39	As2O5	1.230
Ca :	0.0052	0.0016	0.161	0.15	CaO	0.225
S :	0.0067	0.0015	0.168	0.19	SO3	0.420
K :	0.0011	0.0001	0.013	0.01	K2O	0.015
Fe :	0.7277	0.4705	52.630	34.76	Fe2O3	75.247
Pb :	0.0006	0.0005	0.067	0.01	PbO	0.072
U :	0.0014	0.0012	0.160	0.02	UO2	0.181
O			26.302	60.65	by stoichiometry	
total :			83.143			83.143

iteration : 3
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 5 x= 9840 y= 20855 z= -1 swrisife
NOPI_424_1a_#5

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	6.60	4.43	0.00258	7.1		
Al	32464	84.26	9.70	0.00648	1.7		
Si	27735	337.63	14.80	0.03263	1.2		
As	37667	33.98	7.56	0.01003	2.5		
Ca	38390	21.35	6.15	0.00402	4.9		
S	61386	6.03	2.47	0.00241	7.5		
K	42757	8.35	5.05	0.00256	7.8		
Fe	48079	1849.73	10.06	0.77288	0.5		
						201.	15.0
Pb	60414	50.63	33.18	0.00105	2.3		
U	44673	103.24	83.21	0.00074	1.4		

Analysis no. 5 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0026	0.0001	0.041	0.06	Na2O	0.055
Al :	0.0065	0.0028	0.487	0.65	Al2O3	0.921
Si :	0.0326	0.0131	1.858	2.38	SiO2	3.974
As :	0.0100	0.0029	0.648	0.31	As2O5	0.994
Ca :	0.0040	0.0013	0.124	0.11	CaO	0.174
S :	0.0024	0.0005	0.060	0.07	SO3	0.150
K :	0.0026	0.0003	0.029	0.03	K2O	0.035
Fe :	0.7729	0.4997	55.617	35.78	Fe2O3	79.517
Pb :	0.0011	0.0009	0.121	0.02	PbO	0.130
U :	0.0007	0.0006	0.082	0.01	UO2	0.093
O			26.976	60.58	by stoichiometry	
total :			86.044			86.044

iteration : 3
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 6 x= 10248 y= 20925 z= -1 swrisife

NOPI_424_1a_#6

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	7.00	4.60	0.00286	6.9		
Al	32464	140.19	9.43	0.01136	1.4		
Si	27735	395.91	12.80	0.03872	1.1		
As	37667	32.86	7.42	0.00966	2.5		
Ca	38390	22.55	6.50	0.00425	4.7		
S	61386	12.50	2.67	0.00663	5.2		
K	42757	9.45	7.15	0.00179	7.3		
Fe	48079	1689.01	10.86	0.70500	0.5		
						201.	15.0
Pb	60414	44.33	32.30	0.00072	2.5		
U	44673	114.44	85.38	0.00108	1.3		

Analysis no. 6 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0029	0.0001	0.045	0.07	Na2O	0.060
Al :	0.0114	0.0048	0.850	1.18	Al2O3	1.605
Si :	0.0387	0.0156	2.204	2.94	SiO2	4.715
As :	0.0097	0.0028	0.619	0.31	As2O5	0.949
Ca :	0.0042	0.0013	0.132	0.12	CaO	0.184
S :	0.0066	0.0014	0.166	0.19	SO3	0.415
K :	0.0018	0.0002	0.020	0.02	K2O	0.025
Fe :	0.7050	0.4558	51.201	34.36	Fe2O3	73.202
Pb :	0.0007	0.0006	0.084	0.02	PbO	0.090
U :	0.0011	0.0009	0.120	0.02	UO2	0.136
O			25.943	60.77	by stoichiometry	
total :			81.383			81.383

iteration : 3
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 7 x= 10358 y= 21881 z= -3 swrisife

NOPI_424_1b_#1

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	6.03	3.90	0.00254	7.5		
Al	32464	19.13	8.85	0.00089	3.6		
Si	27735	200.38	15.25	0.01871	1.6		
As	37667	53.59	8.62	0.01708	2.0		
Ca	38390	27.50	8.15	0.00512	4.3		
S	61386	6.53	2.07	0.00301	7.2		
K	42757	8.65	6.85	0.00140	7.6		
Fe	48079	1995.47	11.34	0.83357	0.5		
						201.	15.0
Pb	60414	55.93	35.05	0.00126	2.2		
U	44673	102.44	87.43	0.00056	1.4		

Analysis no. 7 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0025	0.0001	0.041	0.06	Na2O	0.055
Al :	0.0009	0.0004	0.068	0.09	Al2O3	0.128
Si :	0.0187	0.0075	1.068	1.33	SiO2	2.286
As :	0.0171	0.0049	1.111	0.52	As2O5	1.704
Ca :	0.0051	0.0016	0.157	0.14	CaO	0.220
S :	0.0030	0.0007	0.075	0.08	SO3	0.187
K :	0.0014	0.0002	0.016	0.01	K2O	0.019
Fe :	0.8336	0.5389	59.408	37.27	Fe2O3	84.936

Pb :	0.0013	0.0011	0.144	0.02	PbO	0.155
U :	0.0006	0.0005	0.061	0.01	UO2	0.070
O			27.611	60.46	by stoichiometry	
total :			89.760			89.760

iteration : 2
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 8 x= 10211 y= 21940 z= -3 swrisife NOPI_424_1b_#2

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	6.33	3.33	0.00357	7.3		
Al	32464	67.73	9.48	0.00506	1.9		
Si	27735	290.22	15.95	0.02772	1.3		
As	37667	31.48	7.64	0.00905	2.6		
Ca	38390	25.55	6.45	0.00505	4.4		
S	61386	8.43	2.13	0.00425	6.3		
K	42757	9.70	6.60	0.00241	7.2		
Fe	48079	1965.52	10.84	0.82122	0.5		
						201.	15.0
Pb	60414	54.76	33.85	0.00126	2.2		
U	44673	92.32	84.12	0.00030	1.4		

Analysis no. 8 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0036	0.0002	0.057	0.09	Na2O	0.077
Al :	0.0051	0.0022	0.382	0.49	Al2O3	0.721
Si :	0.0277	0.0111	1.578	1.95	SiO2	3.377
As :	0.0091	0.0026	0.588	0.27	As2O5	0.901
Ca :	0.0051	0.0016	0.156	0.13	CaO	0.218
S :	0.0042	0.0009	0.106	0.11	SO3	0.265
K :	0.0024	0.0003	0.027	0.02	K2O	0.033
Fe :	0.8212	0.5309	58.721	36.41	Fe2O3	83.954
Pb :	0.0013	0.0011	0.145	0.02	PbO	0.156
U :	0.0003	0.0003	0.034	0.00	UO2	0.038
O			27.947	60.49	by stoichiometry	
total :			89.740			89.740

iteration : 2
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 9 x= 10338 y= 21814 z= -3 swrisife NOPI_424_1b_#3

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	5.07	3.97	0.00131	8.1		
Al	32464	49.53	9.53	0.00347	2.3		
Si	27735	290.37	14.65	0.02787	1.3		
As	37667	31.74	8.26	0.00892	2.5		
Ca	38390	27.20	6.95	0.00536	4.3		
S	61386	7.63	2.53	0.00344	6.6		
K	42757	7.55	6.25	0.00101	8.2		
Fe	48079	1971.28	11.37	0.82343	0.5		
						201.	15.0
Pb	60414	57.76	34.98	0.00137	2.2		
U	44673	92.80	85.54	0.00027	1.4		

Analysis no. 9 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0013	0.0001	0.021	0.03	Na2O	0.028
Al :	0.0035	0.0015	0.262	0.34	Al2O3	0.496
Si :	0.0279	0.0112	1.586	1.96	SiO2	3.393
As :	0.0089	0.0025	0.579	0.27	As2O5	0.888
Ca :	0.0054	0.0017	0.165	0.14	CaO	0.231
S :	0.0034	0.0007	0.086	0.09	SO3	0.214
K :	0.0010	0.0001	0.011	0.01	K2O	0.014
Fe :	0.8234	0.5323	58.868	36.62	Fe2O3	84.164
Pb :	0.0014	0.0012	0.158	0.03	PbO	0.170
U :	0.0003	0.0002	0.030	0.00	UO2	0.034
O			27.866	60.51	by stoichiometry	
total :			89.632			89.632

iteration : 2
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 10 x= 10311 y= 21820 z= -3 swrisife
NOPI_424_1b_#4

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	7.17	3.60	0.00425	6.9		
Al	32464	150.25	9.68	0.01221	1.3		
Si	27735	342.68	13.45	0.03328	1.2		
As	37667	34.44	7.88	0.01009	2.4		
Ca	38390	27.85	7.45	0.00540	4.3		
S	61386	7.93	2.43	0.00371	6.5		
K	42757	8.75	7.85	0.00070	7.6		
Fe	48079	1811.37	11.27	0.75624	0.5		
						201.	15.0
Pb	60414	47.45	33.33	0.00085	2.4		
U	44673	110.97	86.50	0.00091	1.3		

Analysis no. 10 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0042	0.0002	0.067	0.10	Na2O	0.090
Al :	0.0122	0.0052	0.916	1.22	Al2O3	1.731
Si :	0.0333	0.0134	1.897	2.43	SiO2	4.059
As :	0.0101	0.0029	0.649	0.31	As2O5	0.995
Ca :	0.0054	0.0017	0.167	0.15	CaO	0.233
S :	0.0037	0.0008	0.093	0.10	SO3	0.232
K :	0.0007	0.0001	0.008	0.01	K2O	0.010
Fe :	0.7562	0.4889	54.527	35.05	Fe2O3	77.958
Pb :	0.0009	0.0007	0.098	0.02	PbO	0.106
U :	0.0009	0.0008	0.101	0.02	UO2	0.114
O			27.006	60.60	by stoichiometry	
total :			85.528			85.528

iteration : 3
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 11 x= 10311 y= 22023 z= -3 swrisife
NOPI_424_1b_#5

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	7.73	4.90	0.00338	6.6		
Al	32464	128.08	9.70	0.01028	1.4		
Si	27735	465.23	14.20	0.04559	1.1		

As	37667	42.30	8.04	0.01301	2.2
Ca	38390	28.75	7.15	0.00572	4.2
S	61386	4.60	1.87	0.00184	8.5
K	42757	7.20	7.55	0.00000	8.4
Fe	48079	1644.68	10.04	0.68675	0.5
					201. 15.0
Pb	60414	57.53	33.78	0.00143	2.2
U	44673	127.08	84.43	0.00158	1.2

Analysis no. 11 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0034	0.0002	0.053	0.09	Na2O	0.071
Al :	0.0103	0.0044	0.768	1.08	Al2O3	1.451
Si :	0.0456	0.0183	2.593	3.49	SiO2	5.546
As :	0.0130	0.0037	0.829	0.42	As2O5	1.271
Ca :	0.0057	0.0018	0.177	0.17	CaO	0.248
S :	0.0018	0.0004	0.046	0.05	SO3	0.116
K :	0.0000	0.0000	0.000	0.00	K2O	
Fe :	0.6868	0.4440	49.914	33.82	Fe2O3	71.363
Pb :	0.0014	0.0012	0.166	0.03	PbO	0.179
U :	0.0016	0.0013	0.176	0.03	UO2	0.200
O			25.723	60.83	by stoichiometry	
total :			80.445			80.445

iteration : 3
be carefull - k.r./w.f. = 0.31 for Na
be carefull - k.r./w.f. = 0.45 for As
be carefull - k.r./w.f. = 0.00 for K

point n : 12 x= 10590 y= 21850 z= -3 swrisife NOPI_424_1b_#6

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	8.17	4.10	0.00484	6.4		
Al	32464	143.99	9.20	0.01171	1.3		
Si	27735	484.07	14.95	0.04742	1.0		
As	37667	40.04	8.58	0.01195	2.3		
Ca	38390	22.70	6.65	0.00425	4.7		
S	61386	3.40	1.83	0.00106	9.9		
K	42757	7.05	6.15	0.00070	8.4		
Fe	48079	1649.64	9.74	0.68897	0.5		
						201.	15.0
Pb	60414	50.18	30.83	0.00117	2.3		
U	44673	124.81	84.56	0.00149	1.3		

Analysis no. 12 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0048	0.0002	0.075	0.12	Na2O	0.102
Al :	0.0117	0.0050	0.873	1.21	Al2O3	1.650
Si :	0.0474	0.0191	2.697	3.60	SiO2	5.770
As :	0.0119	0.0034	0.761	0.38	As2O5	1.167
Ca :	0.0042	0.0013	0.132	0.12	CaO	0.184
S :	0.0011	0.0002	0.027	0.03	SO3	0.066
K :	0.0007	0.0001	0.008	0.01	K2O	0.010
Fe :	0.6890	0.4454	50.082	33.65	Fe2O3	71.603
Pb :	0.0012	0.0010	0.135	0.02	PbO	0.146
U :	0.0015	0.0013	0.166	0.03	UO2	0.189
O			25.930	60.82	by stoichiometry	
total :			80.887			80.887

iteration : 3

be carefull - k.r./w.f. = 0.31 for Na
be carefull - k.r./w.f. = 0.45 for As

point n : 13 x= -7635 y= 19425 z= 14 swrisife
NOPI_424_2a_#1

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	4.53	3.87	0.00079	8.6		
Al	32464	35.28	9.25	0.00226	2.7		
Si	27735	330.37	13.85	0.03200	1.3		
As	37667	38.72	8.36	0.01153	2.3		
Ca	38390	24.25	7.35	0.00447	4.6		
S	61386	7.33	2.30	0.00339	6.8		
K	42757	9.30	7.60	0.00132	7.4		
Fe	48079	1998.66	10.56	0.83530	0.5		
						201.	15.0
Pb	60414	57.31	34.03	0.00140	2.2		
U	44673	92.88	87.29	0.00021	1.4		

Analysis no. 13 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0008	0.0000	0.013	0.02	Na2O	0.017
Al :	0.0023	0.0010	0.171	0.22	Al2O3	0.322
Si :	0.0320	0.0129	1.820	2.21	SiO2	3.893
As :	0.0115	0.0033	0.747	0.34	As2O5	1.146
Ca :	0.0045	0.0014	0.138	0.12	CaO	0.193
S :	0.0034	0.0007	0.085	0.09	SO3	0.212
K :	0.0013	0.0001	0.015	0.01	K2O	0.018
Fe :	0.8353	0.5400	59.582	36.38	Fe2O3	85.185
Pb :	0.0014	0.0012	0.161	0.03	PbO	0.174
U :	0.0002	0.0002	0.023	0.00	UO2	0.026
O			28.432	60.59	by stoichiometry	
total :			91.186			91.186

iteration : 2
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 14 x= -7348 y= 19634 z= 14 swrisife
NOPI_424_2a_#2

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	4.20	3.90	0.00036	8.9		
Al	32464	32.68	8.43	0.00211	2.8		
Si	27735	303.28	15.20	0.02912	1.3		
As	37667	30.36	8.04	0.00848	2.6		
Ca	38390	27.65	8.00	0.00520	4.3		
S	61386	8.67	2.17	0.00438	6.2		
K	42757	7.80	7.10	0.00054	8.0		
Fe	48079	2095.30	11.37	0.87553	0.5		
						201.	15.0
Pb	60414	57.93	35.35	0.00136	2.2		
U	44673	89.68	84.68	0.00019	1.5		

Analysis no. 14 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0004	0.0000	0.006	0.01	Na2O	0.008
Al :	0.0021	0.0009	0.159	0.20	Al2O3	0.301
Si :	0.0291	0.0117	1.656	1.95	SiO2	3.542
As :	0.0085	0.0024	0.551	0.24	As2O5	0.846

Ca :	0.0052	0.0016	0.160	0.13	CaO	0.224
S :	0.0044	0.0010	0.109	0.11	SO3	0.273
K :	0.0005	0.0001	0.006	0.01	K2O	0.007
Fe :	0.8755	0.5660	62.143	36.81	Fe2O3	88.848
Pb :	0.0014	0.0011	0.156	0.02	PbO	0.168
U :	0.0002	0.0002	0.021	0.00	UO2	0.023
O			29.272	60.52	by stoichiometry	
total :			94.239			94.239

iteration : 2
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 15 x= -7385 y= 19574 z= 14 swrisife
NOPI_424_2a_#3

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	4.83	3.90	0.00111	8.3		
Al	32464	51.78	9.38	0.00368	2.2		
Si	27735	321.21	15.75	0.03088	1.3		
As	37667	37.70	7.56	0.01145	2.3		
Ca	38390	21.40	6.00	0.00407	4.8		
S	61386	6.00	2.33	0.00247	7.5		
K	42757	7.25	6.05	0.00093	8.3		
Fe	48079	1918.99	10.76	0.80173	0.5		
						201.	15.0
Pb	60414	55.66	35.20	0.00123	2.2		
U	44673	91.02	85.68	0.00020	1.4		

Analysis no. 15 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0011	0.0001	0.018	0.03	Na2O	0.024
Al :	0.0037	0.0016	0.278	0.36	Al2O3	0.525
Si :	0.0309	0.0124	1.758	2.21	SiO2	3.760
As :	0.0114	0.0033	0.741	0.35	As2O5	1.137
Ca :	0.0041	0.0013	0.125	0.11	CaO	0.176
S :	0.0025	0.0005	0.062	0.07	SO3	0.154
K :	0.0009	0.0001	0.011	0.01	K2O	0.013
Fe :	0.8017	0.5183	57.462	36.26	Fe2O3	82.155
Pb :	0.0012	0.0010	0.142	0.02	PbO	0.153
U :	0.0002	0.0002	0.022	0.00	UO2	0.025
O			27.503	60.58	by stoichiometry	
total :			88.122			88.122

iteration : 2
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 16 x= -7565 y= 19403 z= 14 swrisife
NOPI_424_2a_#4

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	7.90	5.23	0.00318	6.5		
Al	32464	76.31	9.28	0.00582	1.8		
Si	27735	421.35	14.40	0.04114	1.1		
As	37667	32.02	7.76	0.00921	2.5		
Ca	38390	18.60	5.75	0.00340	5.2		
S	61386	4.57	2.40	0.00146	8.6		
K	42757	8.00	6.85	0.00089	7.9		
Fe	48079	1705.53	10.21	0.71226	0.5		
						201.	15.0

Pb	60414	53.81	32.00	0.00131	2.2
U	44673	114.19	85.90	0.00105	1.3

Analysis no. 16 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0032	0.0002	0.050	0.08	Na2O	0.067
Al :	0.0058	0.0025	0.436	0.61	Al2O3	0.825
Si :	0.0411	0.0165	2.337	3.14	SiO2	4.999
As :	0.0092	0.0026	0.592	0.30	As2O5	0.908
Ca :	0.0034	0.0011	0.105	0.10	CaO	0.147
S :	0.0015	0.0003	0.037	0.04	SO3	0.091
K :	0.0009	0.0001	0.010	0.01	K2O	0.012
Fe :	0.7123	0.4605	51.681	34.95	Fe2O3	73.889
Pb :	0.0013	0.0011	0.152	0.03	PbO	0.163
U :	0.0010	0.0009	0.116	0.02	UO2	0.132
O			25.719	60.72	by stoichiometry	
total :			81.235			81.235

iteration : 3
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 17 x= -7579 y= 19515 z= 14 swrisife
NOPI_424_2a_#5

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	7.93	4.03	0.00465	6.5		
Al	32464	73.69	9.18	0.00560	1.9		
Si	27735	427.62	13.20	0.04189	1.1		
As	37667	35.96	7.46	0.01082	2.4		
Ca	38390	24.85	8.15	0.00442	4.5		
S	61386	4.87	2.07	0.00189	8.3		
K	42757	9.85	8.15	0.00132	7.2		
Fe	48079	1699.76	10.14	0.70989	0.5		
						201.	15.0
Pb	60414	61.46	32.60	0.00174	2.1		
U	44673	117.68	85.34	0.00120	1.3		

Analysis no. 17 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0046	0.0002	0.073	0.12	Na2O	0.098
Al :	0.0056	0.0024	0.420	0.59	Al2O3	0.793
Si :	0.0419	0.0168	2.379	3.19	SiO2	5.090
As :	0.0108	0.0031	0.694	0.35	As2O5	1.065
Ca :	0.0044	0.0014	0.137	0.13	CaO	0.191
S :	0.0019	0.0004	0.047	0.06	SO3	0.118
K :	0.0013	0.0001	0.015	0.01	K2O	0.018
Fe :	0.7099	0.4589	51.480	34.76	Fe2O3	73.602
Pb :	0.0017	0.0015	0.201	0.04	PbO	0.216
U :	0.0012	0.0010	0.133	0.02	UO2	0.151
O			25.764	60.73	by stoichiometry	
total :			81.344			81.344

iteration : 3
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 18 x= -7496 y= 19449 z= 14 swrisife
NOPI_424_2a_#6

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv

						15.	15.0
Na	46351	7.97	5.00	0.00353	6.5		
Al	32464	89.24	9.65	0.00691	1.7		
Si	27735	446.70	17.05	0.04343	1.1		
As	37667	42.88	8.22	0.01316	2.2		
Ca	38390	27.30	7.45	0.00525	4.3		
S	61386	4.93	2.53	0.00162	8.2		
K	42757	7.00	7.05	0.00000	8.5		
Fe	48079	1762.48	10.83	0.73593	0.5		
						201.	15.0
Pb	60414	53.23	34.50	0.00113	2.3		
U	44673	108.81	83.42	0.00094	1.3		

Analysis no. 18 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0035	0.0002	0.055	0.09	Na2O	0.075
Al :	0.0069	0.0029	0.518	0.70	Al2O3	0.979
Si :	0.0434	0.0175	2.469	3.20	SiO2	5.283
As :	0.0132	0.0037	0.844	0.41	As2O5	1.294
Ca :	0.0053	0.0017	0.163	0.15	CaO	0.227
S :	0.0016	0.0004	0.041	0.05	SO3	0.101
K :	0.0000	0.0000	0.000	0.00	K2O	
Fe :	0.7359	0.4758	53.169	34.61	Fe2O3	76.017
Pb :	0.0011	0.0009	0.130	0.02	PbO	0.141
U :	0.0009	0.0008	0.105	0.02	UO2	0.119
O			26.742	60.76	by stoichiometry	
total :			84.236			84.236

iteration : 3
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As
be carefull - k.r./w.f. = 0.00 for K

point n : 19 x= -7722 y= 19922 z= 10 swrisife
NOPI_424_2b_#1

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	4.93	3.50	0.00171	8.3		
Al	32464	34.60	8.88	0.00223	2.7		
Si	27735	268.24	15.50	0.02555	1.4		
As	37667	41.58	8.38	0.01261	2.2		
Ca	38390	28.85	6.20	0.00599	4.2		
S	61386	7.97	2.53	0.00366	6.5		
K	42757	7.20	7.70	0.00000	8.4		
Fe	48079	2012.17	11.17	0.84080	0.5		
						201.	15.0
Pb	60414	64.66	33.40	0.00188	2.1		
U	44673	96.25	86.57	0.00036	1.4		

Analysis no. 19 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0017	0.0001	0.027	0.04	Na2O	0.037
Al :	0.0022	0.0010	0.169	0.21	Al2O3	0.319
Si :	0.0256	0.0103	1.455	1.78	SiO2	3.113
As :	0.0126	0.0036	0.819	0.37	As2O5	1.256
Ca :	0.0060	0.0019	0.184	0.16	CaO	0.258
S :	0.0037	0.0008	0.091	0.10	SO3	0.228
K :	0.0000	0.0000	0.000	0.00	K2O	
Fe :	0.8408	0.5436	59.899	36.79	Fe2O3	85.639
Pb :	0.0019	0.0016	0.216	0.04	PbO	0.233
U :	0.0004	0.0003	0.040	0.01	UO2	0.045

```
 O                                  28.227     60.51  by stoichiometry

 total :                            91.127                                91.127
 iteration :  2
    be carefull - k.r./w.f. = 0.30 for Na
    be carefull - k.r./w.f. = 0.44 for As
    be carefull - k.r./w.f. = 0.00 for K

 point n :    20     x=  -7748  y=  19976  z=     10   swrisife
                                                        NOPI_424_2b_#2
elt.  peak      peak     backgr.   i.x./i.std.  sig/k     beam      kv
      pos.      (c/s)     (c/s)
                                                             15.    15.0
 Na   46351      4.83       3.60      0.00147    8.3
 Al   32464     40.30       9.78      0.00265    2.5
 Si   27735    286.51      15.20      0.02743    1.3
 As   37667     33.46       8.02      0.00966    2.5
 Ca   38390     31.05       7.85      0.00614    4.0
 S    61386      7.67       3.30      0.00294    6.6
 K    42757      9.15       8.10      0.00082    7.4
 Fe   48079   1995.66      11.77      0.83354    0.5
                                                            201.    15.0
 Pb   60414     62.88      34.43      0.00171    2.1
 U    44673     92.03      88.56      0.00013    1.4

Analysis no.   20 within swrisife
              k                     wt.  %   normalized
element  i.x./i.std.  k.ratio      concen.    atom. c    compound      concen.
  Na :      0.0015     0.0001       0.024      0.04    Na2O            0.032
  Al :      0.0027     0.0011       0.200      0.26    Al2O3           0.378
  Si :      0.0274     0.0110       1.561      1.92    SiO2            3.338
  As :      0.0097     0.0028       0.628      0.29    As2O5           0.963
  Ca :      0.0061     0.0019       0.189      0.16    CaO             0.264
  S  :      0.0029     0.0006       0.073      0.08    SO3             0.183
  K  :      0.0008     0.0001       0.009      0.01    K2O             0.011
  Fe :      0.8335     0.5389      59.491     36.73    Fe2O3          85.055
  Pb :      0.0017     0.0014       0.197      0.03    PbO             0.212
  U  :      0.0001     0.0001       0.014      0.00    UO2             0.016
  O                                 28.068     60.49  by stoichiometry

 total :                            90.454                                90.454
 iteration :  2
    be carefull - k.r./w.f. = 0.30 for Na
    be carefull - k.r./w.f. = 0.44 for As

 point n :    21     x=  -7424  y=  20069  z=     10   swrisife
                                                        NOPI_424_2b_#3
elt.  peak      peak     backgr.   i.x./i.std.  sig/k     beam      kv
      pos.      (c/s)     (c/s)
                                                             15.    15.0
 Na   46351      6.30       4.00      0.00274    7.3
 Al   32464     26.08       8.85      0.00150    3.1
 Si   27735    245.32      14.45      0.02334    1.4
 As   37667     34.14       8.02      0.00992    2.5
 Ca   38390     25.80       7.45      0.00486    4.4
 S    61386      6.43       2.00      0.00299    7.2
 K    42757      7.20       7.15      0.00004    8.4
 Fe   48079   1981.42      10.87      0.82795    0.5
                                                            201.    15.0
 Pb   60414     52.66      34.75      0.00108    2.3
 U    44673     92.50      82.65      0.00037    1.4

Analysis no.   21 within swrisife
              k                     wt.  %   normalized
```

element	i.x./i.std.	k.ratio	concen.	atom. c	compound	concen.
Na :	0.0027	0.0001	0.044	0.07	Na2O	0.059
Al :	0.0015	0.0006	0.113	0.15	Al2O3	0.214
Si :	0.0233	0.0094	1.329	1.66	SiO2	2.844
As :	0.0099	0.0028	0.646	0.30	As2O5	0.992
Ca :	0.0049	0.0015	0.149	0.13	CaO	0.209
S :	0.0030	0.0007	0.074	0.08	SO3	0.186
K :	0.0000	0.0000	0.000	0.00	K2O	0.001
Fe :	0.8279	0.5353	59.159	37.14	Fe2O3	84.581
Pb :	0.0011	0.0009	0.124	0.02	PbO	0.133
U :	0.0004	0.0003	0.040	0.01	UO2	0.046
O			27.584	60.45	by stoichiometry	
total :			89.264			89.264

iteration : 2
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 22 x= -7396 y= 20093 z= 10 swrisife
NOPI_424_2b_#4

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	5.10	3.93	0.00139	8.1		
Al	32464	61.01	9.15	0.00450	2.0		
Si	27735	307.89	15.25	0.02958	1.3		
As	37667	49.96	7.64	0.01608	2.0		
Ca	38390	25.50	6.40	0.00505	4.4		
S	61386	6.43	2.67	0.00254	7.2		
K	42757	8.35	6.55	0.00140	7.8		
Fe	48079	1911.67	11.96	0.79820	0.5		
						201.	15.0
Pb	60414	55.43	31.78	0.00142	2.2		
U	44673	99.02	84.59	0.00054	1.4		

Analysis no. 22 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0014	0.0001	0.022	0.03	Na2O	0.030
Al :	0.0045	0.0019	0.340	0.44	Al2O3	0.643
Si :	0.0296	0.0119	1.687	2.12	SiO2	3.608
As :	0.0161	0.0046	1.038	0.49	As2O5	1.592
Ca :	0.0051	0.0016	0.156	0.14	CaO	0.218
S :	0.0025	0.0006	0.063	0.07	SO3	0.158
K :	0.0014	0.0002	0.016	0.01	K2O	0.019
Fe :	0.7982	0.5160	57.155	36.05	Fe2O3	81.716
Pb :	0.0014	0.0012	0.164	0.03	PbO	0.177
U :	0.0005	0.0004	0.059	0.01	UO2	0.067
O			27.527	60.61	by stoichiometry	
total :			88.227			88.227

iteration : 3
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 23 x= -7769 y= 19792 z= 10 swrisife
NOPI_424_2b_#5

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	9.10	5.53	0.00425	6.1		
Al	32464	130.91	9.25	0.01057	1.4		
Si	27735	443.39	14.90	0.04332	1.1		
As	37667	41.32	7.92	0.01269	2.2		

Ca	38390	25.95	5.55	0.00540	4.4
S	61386	3.97	2.67	0.00088	9.2
K	42757	10.40	6.75	0.00283	7.0
Fe	48079	1633.56	9.63	0.68231	0.5
					201. 15.0
Pb	60414	51.61	33.53	0.00109	2.3
U	44673	111.46	85.24	0.00097	1.3

Analysis no. 23 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0042	0.0002	0.066	0.11	Na2O	0.089
Al :	0.0106	0.0045	0.790	1.12	Al2O3	1.493
Si :	0.0433	0.0174	2.466	3.36	SiO2	5.275
As :	0.0127	0.0036	0.810	0.41	As2O5	1.242
Ca :	0.0054	0.0017	0.167	0.16	CaO	0.234
S :	0.0009	0.0002	0.022	0.03	SO3	0.055
K :	0.0028	0.0003	0.032	0.03	K2O	0.039
Fe :	0.6823	0.4411	49.654	33.98	Fe2O3	70.992
Pb :	0.0011	0.0009	0.126	0.02	PbO	0.136
U :	0.0010	0.0008	0.108	0.02	UO2	0.123
O			25.435	60.76	by stoichiometry	
total :			79.678			79.678

iteration : 3
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.45 for As

point n : 24 x= -7672 y= 19936 z= 10 swrisife
NOPI_424_2b_#6

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	8.10	4.50	0.00429	6.5		
Al	32464	86.44	9.40	0.00669	1.7		
Si	27735	447.25	14.80	0.04372	1.1		
As	37667	41.78	7.28	0.01310	2.2		
Ca	38390	28.15	7.40	0.00549	4.2		
S	61386	4.37	2.20	0.00146	8.8		
K	42757	8.45	7.55	0.00070	7.7		
Fe	48079	1722.14	10.41	0.71924	0.5		
						201.	15.0
Pb	60414	43.95	34.13	0.00059	2.5		
U	44673	111.49	83.38	0.00104	1.3		

Analysis no. 24 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0043	0.0002	0.067	0.11	Na2O	0.091
Al :	0.0067	0.0029	0.502	0.69	Al2O3	0.948
Si :	0.0437	0.0176	2.486	3.27	SiO2	5.319
As :	0.0131	0.0037	0.840	0.41	As2O5	1.288
Ca :	0.0055	0.0017	0.170	0.16	CaO	0.238
S :	0.0015	0.0003	0.037	0.04	SO3	0.092
K :	0.0007	0.0001	0.008	0.01	K2O	0.010
Fe :	0.7192	0.4650	52.099	34.51	Fe2O3	74.486
Pb :	0.0006	0.0005	0.068	0.01	PbO	0.074
U :	0.0010	0.0009	0.116	0.02	UO2	0.131
O			26.283	60.77	by stoichiometry	
total :			82.676			82.676

iteration : 3
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 25 x= 11984 y= -2856 z= 17 swrisife
NOPI_420_1a_#1

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	4.23	2.83	0.00167	8.9		
Al	32464	37.48	9.33	0.00245	2.6		
Si	27735	370.32	14.20	0.03600	1.2		
As	37667	25.48	7.30	0.00690	2.8		
Ca	38390	21.80	6.50	0.00405	4.8		
S	61386	6.90	2.07	0.00326	7.0		
K	42757	7.40	7.80	0.00000	8.2		
Fe	48079	1985.01	11.06	0.82936	0.5		
						201.	15.0
Pb	60414	51.48	34.50	0.00102	2.3		
U	44673	109.14	86.15	0.00085	1.3		

Analysis no. 25 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0017	0.0001	0.027	0.04	Na2O	0.036
Al :	0.0024	0.0010	0.184	0.23	Al2O3	0.348
Si :	0.0360	0.0145	2.044	2.48	SiO2	4.372
As :	0.0069	0.0020	0.448	0.20	As2O5	0.687
Ca :	0.0040	0.0013	0.125	0.11	CaO	0.175
S :	0.0033	0.0007	0.081	0.09	SO3	0.203
K :	0.0000	0.0000	0.000	0.00	K2O	
Fe :	0.8294	0.5362	59.260	36.22	Fe2O3	84.725
Pb :	0.0010	0.0009	0.118	0.02	PbO	0.127
U :	0.0009	0.0007	0.094	0.01	UO2	0.107
O			28.399	60.59	by stoichiometry	
total :			90.779			90.779

iteration : 2
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As
be carefull - k.r./w.f. = 0.00 for K

point n : 26 x= 11806 y= -2877 z= 17 swrisife
NOPI_420_1a_#2

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	4.13	3.73	0.00048	9.0		
Al	32464	42.68	9.05	0.00292	2.4		
Si	27735	400.62	15.40	0.03894	1.1		
As	37667	25.88	7.60	0.00694	2.8		
Ca	38390	24.15	8.70	0.00409	4.6		
S	61386	4.60	2.17	0.00164	8.5		
K	42757	9.20	7.45	0.00136	7.4		
Fe	48079	1994.24	11.51	0.83305	0.5		
						201.	15.0
Pb	60414	57.18	35.40	0.00131	2.2		
U	44673	116.89	87.04	0.00111	1.3		

Analysis no. 26 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0005	0.0000	0.008	0.01	Na2O	0.010
Al :	0.0029	0.0012	0.220	0.28	Al2O3	0.415
Si :	0.0389	0.0157	2.209	2.66	SiO2	4.727
As :	0.0069	0.0020	0.450	0.20	As2O5	0.690
Ca :	0.0041	0.0013	0.126	0.11	CaO	0.176

S :	0.0016	0.0004	0.041	0.04	SO3	0.102
K :	0.0014	0.0001	0.015	0.01	K2O	0.019
Fe :	0.8331	0.5386	59.471	36.04	Fe2O3	85.027
Pb :	0.0013	0.0011	0.151	0.02	PbO	0.163
U :	0.0011	0.0009	0.123	0.02	UO2	0.139
O			28.654	60.61	by stoichiometry	
total :			91.468			91.468

iteration : 2
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 27 x= 12148 y= -2860 z= 16 swrisife
NOPI_420_1a_#3

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	5.23	3.97	0.00151	8.0		
Al	32464	49.83	9.25	0.00352	2.2		
Si	27735	316.65	13.60	0.03063	1.3		
As	37667	22.84	7.46	0.00584	3.0		
Ca	38390	24.45	8.95	0.00410	4.5		
S	61386	8.83	2.47	0.00429	6.2		
K	42757	9.00	7.00	0.00155	7.5		
Fe	48079	2002.49	11.23	0.83663	0.5		
						201.	15.0
Pb	60414	54.68	35.75	0.00114	2.2		
U	44673	111.93	87.51	0.00091	1.3		

Analysis no. 27 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0015	0.0001	0.024	0.04	Na2O	0.033
Al :	0.0035	0.0015	0.266	0.34	Al2O3	0.502
Si :	0.0306	0.0123	1.741	2.12	SiO2	3.724
As :	0.0058	0.0017	0.380	0.17	As2O5	0.582
Ca :	0.0041	0.0013	0.126	0.11	CaO	0.177
S :	0.0043	0.0009	0.107	0.11	SO3	0.267
K :	0.0016	0.0002	0.018	0.02	K2O	0.021
Fe :	0.8366	0.5409	59.728	36.55	Fe2O3	85.395
Pb :	0.0011	0.0010	0.131	0.02	PbO	0.141
U :	0.0009	0.0008	0.100	0.01	UO2	0.114
O			28.335	60.52	by stoichiometry	
total :			90.955			90.955

iteration : 2
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 28 x= 12089 y= -2852 z= 16 swrisife
NOPI_420_1a_#4

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	7.07	4.87	0.00262	6.9		
Al	32464	88.49	9.00	0.00690	1.7		
Si	27735	401.27	14.80	0.03907	1.1		
As	37667	40.56	7.58	0.01253	2.3		
Ca	38390	23.15	7.90	0.00404	4.7		
S	61386	3.33	2.07	0.00085	10.0		
K	42757	7.05	7.65	0.00000	8.4		
Fe	48079	1719.26	9.90	0.71820	0.5		
						201.	15.0
Pb	60414	68.56	33.55	0.00211	2.0		

U	44673	129.98	86.32	0.00162	1.2

Analysis no. 28 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0026	0.0001	0.041	0.07	Na2O	0.055
Al :	0.0069	0.0029	0.518	0.72	Al2O3	0.978
Si :	0.0391	0.0157	2.222	2.97	SiO2	4.753
As :	0.0125	0.0036	0.803	0.40	As2O5	1.232
Ca :	0.0040	0.0013	0.125	0.12	CaO	0.175
S :	0.0009	0.0002	0.021	0.03	SO3	0.053
K :	0.0000	0.0000	0.000	0.00	K2O	
Fe :	0.7182	0.4643	51.975	34.91	Fe2O3	74.310
Pb :	0.0021	0.0018	0.243	0.04	PbO	0.262
U :	0.0016	0.0014	0.180	0.03	UO2	0.204
O			25.894	60.72	by stoichiometry	
total :			82.023			82.023

iteration : 3
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As
be carefull - k.r./w.f. = 0.00 for K

point n : 29 x= 11988 y= -2944 z= 16 swrisife
NOPI_420_1a_#5

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	8.23	4.87	0.00401	6.4		
Al	32464	63.41	8.53	0.00477	2.0		
Si	27735	389.05	15.50	0.03777	1.2		
As	37667	27.88	7.46	0.00776	2.7		
Ca	38390	11.65	5.95	0.00151	6.6		
S	61386	3.17	2.07	0.00074	10.3		
K	42757	5.95	6.70	0.00000	9.2		
Fe	48079	1738.47	9.44	0.72660	0.5		
						201.	15.0
Pb	60414	69.83	33.25	0.00220	2.0		
U	44673	132.72	86.01	0.00173	1.2		

Analysis no. 29 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0040	0.0002	0.063	0.10	Na2O	0.085
Al :	0.0048	0.0020	0.358	0.50	Al2O3	0.676
Si :	0.0378	0.0152	2.144	2.88	SiO2	4.588
As :	0.0078	0.0022	0.500	0.25	As2O5	0.767
Ca :	0.0015	0.0005	0.047	0.04	CaO	0.065
S :	0.0007	0.0002	0.019	0.02	SO3	0.046
K :	0.0000	0.0000	0.000	0.00	K2O	
Fe :	0.7266	0.4697	52.595	35.49	Fe2O3	75.195
Pb :	0.0022	0.0018	0.254	0.05	PbO	0.274
U :	0.0017	0.0015	0.192	0.03	UO2	0.218
O			25.743	60.64	by stoichiometry	
total :			81.915			81.915

iteration : 2
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As
be carefull - k.r./w.f. = 0.00 for K

point n : 30 x= 11749 y= -3035 z= 16 swrisife
NOPI_420_1a_#6

elt.	peak	peak	backgr.	i.x./i.std.	sig/k	beam	kv

	pos.	(c/s)	(c/s)				
						15.	15.0
Na	46351	7.47	5.00	0.00294	6.7		
Al	32464	67.78	8.33	0.00517	1.9		
Si	27735	370.92	15.45	0.03594	1.2		
As	37667	25.24	7.32	0.00681	2.8		
Ca	38390	14.00	5.85	0.00216	6.0		
S	61386	3.33	2.20	0.00076	10.0		
K	42757	7.55	7.55	0.00000	8.2		
Fe	48079	1765.86	10.77	0.73749	0.5		
						201.	15.0
Pb	60414	63.38	34.13	0.00176	2.1		
U	44673	121.75	86.38	0.00131	1.3		

Analysis no. 30 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0029	0.0001	0.047	0.08	Na2O	0.063
Al :	0.0052	0.0022	0.388	0.54	Al2O3	0.733
Si :	0.0359	0.0144	2.042	2.72	SiO2	4.368
As :	0.0068	0.0019	0.440	0.22	As2O5	0.674
Ca :	0.0022	0.0007	0.067	0.06	CaO	0.093
S :	0.0008	0.0002	0.019	0.02	SO3	0.048
K :	0.0000	0.0000	0.000	0.00	K2O	
Fe :	0.7375	0.4768	53.345	35.71	Fe2O3	76.269
Pb :	0.0018	0.0015	0.203	0.04	PbO	0.219
U :	0.0013	0.0011	0.145	0.02	UO2	0.165
O			25.936	60.60	by stoichiometry	
total :			82.631			82.631

iteration : 2
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As
be carefull - k.r./w.f. = 0.00 for K

point n : 31 x= 13101 y= -2401 z= 17 swrisife
NOPI_420_1b_#1

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	4.37	4.03	0.00040	8.8		
Al	32464	40.23	8.88	0.00272	2.5		
Si	27735	404.53	16.65	0.03921	1.1		
As	37667	26.10	7.52	0.00706	2.8		
Ca	38390	29.55	7.75	0.00577	4.1		
S	61386	5.43	2.13	0.00223	7.9		
K	42757	9.00	7.80	0.00093	7.5		
Fe	48079	1984.99	11.83	0.82915	0.5		
						201.	15.0
Pb	60414	56.46	32.88	0.00142	2.2		
U	44673	126.08	84.07	0.00156	1.3		

Analysis no. 31 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0004	0.0000	0.006	0.01	Na2O	0.009
Al :	0.0027	0.0012	0.205	0.26	Al2O3	0.387
Si :	0.0392	0.0158	2.224	2.69	SiO2	4.758
As :	0.0071	0.0020	0.457	0.21	As2O5	0.700
Ca :	0.0058	0.0018	0.178	0.15	CaO	0.249
S :	0.0022	0.0005	0.056	0.06	SO3	0.139
K :	0.0009	0.0001	0.011	0.01	K2O	0.013
Fe :	0.8292	0.5360	59.206	35.95	Fe2O3	84.649
Pb :	0.0014	0.0012	0.163	0.03	PbO	0.176

U :	0.0016	0.0013	0.173	0.02	UO2	0.196
O			28.596	60.62	by stoichiometry	
total :			91.274			91.274

iteration : 2
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 32 x= 13137 y= -2291 z= 17 swrisife NOPI_420_1b_#2

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	4.63	3.43	0.00143	8.5		
Al	32464	47.73	8.73	0.00339	2.3		
Si	27735	379.14	16.05	0.03670	1.2		
As	37667	24.52	7.44	0.00649	2.9		
Ca	38390	23.05	7.25	0.00418	4.7		
S	61386	6.17	1.93	0.00285	7.4		
K	42757	8.40	7.75	0.00050	7.7		
Fe	48079	1973.50	10.79	0.82466	0.5		
						201.	15.0
Pb	60414	61.61	32.60	0.00175	2.1		
U	44673	113.56	83.33	0.00112	1.3		

Analysis no. 32 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0014	0.0001	0.023	0.03	Na2O	0.031
Al :	0.0034	0.0014	0.255	0.32	Al2O3	0.481
Si :	0.0367	0.0148	2.083	2.54	SiO2	4.456
As :	0.0065	0.0018	0.420	0.19	As2O5	0.644
Ca :	0.0042	0.0013	0.129	0.11	CaO	0.180
S :	0.0029	0.0006	0.071	0.08	SO3	0.178
K :	0.0005	0.0001	0.006	0.01	K2O	0.007
Fe :	0.8247	0.5331	58.935	36.08	Fe2O3	84.260
Pb :	0.0017	0.0015	0.201	0.03	PbO	0.217
U :	0.0011	0.0009	0.124	0.02	UO2	0.141
O			28.349	60.59	by stoichiometry	
total :			90.595			90.595

iteration : 2
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 33 x= 13032 y= -2426 z= 17 swrisife NOPI_420_1b_#3

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	5.00	3.77	0.00147	8.2		
Al	32464	30.48	8.65	0.00190	2.9		
Si	27735	321.81	14.50	0.03107	1.3		
As	37667	23.80	7.28	0.00627	2.9		
Ca	38390	20.50	7.05	0.00356	5.0		
S	61386	8.03	2.53	0.00371	6.5		
K	42757	9.50	7.50	0.00155	7.3		
Fe	48079	2030.01	11.66	0.84804	0.5		
						201.	15.0
Pb	60414	52.41	33.45	0.00114	2.3		
U	44673	108.21	86.60	0.00080	1.3		

Analysis no. 33 within swrisife

k wt. % normalized

element	i.x./i.std.	k.ratio	concen.	atom. c	compound	concen.
Na :	0.0015	0.0001	0.024	0.03	Na2O	0.032
Al :	0.0019	0.0008	0.143	0.18	Al2O3	0.270
Si :	0.0311	0.0125	1.765	2.13	SiO2	3.775
As :	0.0063	0.0018	0.408	0.18	As2O5	0.626
Ca :	0.0036	0.0011	0.109	0.09	CaO	0.153
S :	0.0037	0.0008	0.092	0.10	SO3	0.231
K :	0.0016	0.0002	0.018	0.02	K2O	0.021
Fe :	0.8480	0.5483	60.447	36.71	Fe2O3	86.422
Pb :	0.0011	0.0010	0.131	0.02	PbO	0.141
U :	0.0008	0.0007	0.089	0.01	UO2	0.101
O			28.547	60.52	by stoichiometry	
total :			91.773			91.773

iteration : 2
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 34 x= 13082 y= -2441 z= 17 swrisife
NOPI_420_1b_#4

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	7.30	4.17	0.00373	6.8		
Al	32464	81.16	8.93	0.00628	1.8		
Si	27735	353.50	15.55	0.03417	1.2		
As	37667	28.94	7.30	0.00822	2.7		
Ca	38390	19.40	7.75	0.00308	5.1		
S	61386	5.27	2.30	0.00200	8.0		
K	42757	8.00	8.20	0.00000	7.9		
Fe	48079	1852.47	10.67	0.77404	0.5		
						201.	15.0
Pb	60414	52.81	34.00	0.00113	2.3		
U	44673	124.88	85.13	0.00148	1.3		

Analysis no. 34 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0037	0.0002	0.059	0.09	Na2O	0.080
Al :	0.0063	0.0027	0.472	0.63	Al2O3	0.892
Si :	0.0342	0.0137	1.944	2.48	SiO2	4.158
As :	0.0082	0.0023	0.531	0.25	As2O5	0.815
Ca :	0.0031	0.0010	0.095	0.09	CaO	0.133
S :	0.0020	0.0004	0.050	0.06	SO3	0.125
K :	0.0000	0.0000	0.000	0.00	K2O	
Fe :	0.7740	0.5004	55.694	35.78	Fe2O3	79.627
Pb :	0.0011	0.0010	0.130	0.02	PbO	0.141
U :	0.0015	0.0012	0.163	0.02	UO2	0.185
O			27.016	60.58	by stoichiometry	
total :			86.155			86.155

iteration : 2
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As
be carefull - k.r./w.f. = 0.00 for K

point n : 35 x= 13003 y= -2568 z= 17 swrisife
NOPI_420_1b_#5

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	8.03	5.50	0.00302	6.5		
Al	32464	41.55	8.20	0.00290	2.5		
Si	27735	423.71	16.00	0.04121	1.1		

As	37667	44.32	7.44	0.01401	2.2
Ca	38390	24.70	7.95	0.00443	4.5
S	61386	4.00	2.03	0.00133	9.1
K	42757	6.95	7.30	0.00000	8.5
Fe	48079	1742.44	10.89	0.72753	0.5
					201. 15.0
Pb	60414	48.15	32.35	0.00095	2.4
U	44673	131.65	81.76	0.00185	1.2

Analysis no. 35 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0030	0.0001	0.048	0.08	Na2O	0.064
Al :	0.0029	0.0012	0.218	0.30	Al2O3	0.411
Si :	0.0412	0.0166	2.342	3.11	SiO2	5.011
As :	0.0140	0.0040	0.900	0.45	As2O5	1.380
Ca :	0.0044	0.0014	0.137	0.13	CaO	0.192
S :	0.0013	0.0003	0.033	0.04	SO3	0.083
K :	0.0000	0.0000	0.000	0.00	K2O	
Fe :	0.7275	0.4704	52.605	35.08	Fe2O3	75.210
Pb :	0.0010	0.0008	0.110	0.02	PbO	0.118
U :	0.0019	0.0016	0.205	0.03	UO2	0.233
O			26.105	60.77	by stoichiometry	
total :			82.703			82.703

iteration : 3
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As
be carefull - k.r./w.f. = 0.00 for K

point n : 36 x= 12990 y= -2343 z= 17 swrisife
NOPI_420_1b_#6

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	7.93	4.13	0.00453	6.5		
Al	32464	65.86	8.63	0.00497	2.0		
Si	27735	356.80	14.10	0.03465	1.2		
As	37667	31.82	8.06	0.00903	2.5		
Ca	38390	13.60	6.10	0.00198	6.1		
S	61386	3.83	1.97	0.00126	9.3		
K	42757	6.50	6.40	0.00008	8.8		
Fe	48079	1768.72	10.16	0.73893	0.5		
						201.	15.0
Pb	60414	52.73	33.63	0.00115	2.3		
U	44673	119.95	83.56	0.00135	1.3		

Analysis no. 36 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0045	0.0002	0.072	0.12	Na2O	0.097
Al :	0.0050	0.0021	0.374	0.52	Al2O3	0.707
Si :	0.0346	0.0139	1.971	2.62	SiO2	4.216
As :	0.0090	0.0026	0.583	0.29	As2O5	0.894
Ca :	0.0020	0.0006	0.061	0.06	CaO	0.086
S :	0.0013	0.0003	0.031	0.04	SO3	0.079
K :	0.0001	0.0000	0.001	0.00	K2O	0.001
Fe :	0.7389	0.4777	53.427	35.71	Fe2O3	76.386
Pb :	0.0012	0.0010	0.133	0.02	PbO	0.143
U :	0.0014	0.0011	0.150	0.02	UO2	0.170
O			25.975	60.60	by stoichiometry	
total :			82.777			82.777

iteration : 2

be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 37 x= 1331 y= -5879 z= 24 swrisife
NOPI_420_2a_#1

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	4.87	3.70	0.00139	8.3		
Al	32464	63.36	8.78	0.00474	2.0		
Si	27735	383.74	13.85	0.03739	1.2		
As	37667	26.28	8.18	0.00687	2.8		
Ca	38390	26.65	6.95	0.00521	4.3		
S	61386	5.37	2.10	0.00220	7.9		
K	42757	8.10	7.10	0.00078	7.9		
Fe	48079	1929.62	11.26	0.80600	0.5		
						201.	15.0
Pb	60414	62.08	33.50	0.00172	2.1		
U	44673	125.97	87.02	0.00145	1.3		

Analysis no. 37 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0014	0.0001	0.022	0.03	Na2O	0.030
Al :	0.0047	0.0020	0.356	0.46	Al2O3	0.673
Si :	0.0374	0.0150	2.122	2.62	SiO2	4.540
As :	0.0069	0.0020	0.444	0.21	As2O5	0.682
Ca :	0.0052	0.0016	0.161	0.14	CaO	0.225
S :	0.0022	0.0005	0.055	0.06	SO3	0.137
K :	0.0008	0.0001	0.009	0.01	K2O	0.011
Fe :	0.8060	0.5211	57.733	35.83	Fe2O3	82.542
Pb :	0.0017	0.0014	0.198	0.03	PbO	0.214
U :	0.0014	0.0012	0.160	0.02	UO2	0.182
O			27.974	60.60	by stoichiometry	
total :			89.235			89.235

iteration : 2
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 38 x= 1361 y= -5738 z= 24 swrisife
NOPI_420_2a_#2

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	4.90	4.57	0.00040	8.3		
Al	32464	51.58	9.35	0.00367	2.2		
Si	27735	300.28	15.75	0.02876	1.3		
As	37667	27.62	7.64	0.00759	2.7		
Ca	38390	22.15	6.45	0.00415	4.8		
S	61386	7.47	2.27	0.00351	6.7		
K	42757	7.65	6.55	0.00085	8.1		
Fe	48079	1997.65	10.76	0.83486	0.5		
						201.	15.0
Pb	60414	61.31	33.58	0.00167	2.1		
U	44673	120.36	83.37	0.00137	1.3		

Analysis no. 38 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0004	0.0000	0.006	0.01	Na2O	0.009
Al :	0.0037	0.0016	0.277	0.35	Al2O3	0.523
Si :	0.0288	0.0116	1.635	2.00	SiO2	3.498
As :	0.0076	0.0022	0.493	0.23	As2O5	0.756

Ca :	0.0042	0.0013	0.128	0.11	CaO	0.179
S :	0.0035	0.0008	0.087	0.09	SO3	0.218
K :	0.0009	0.0001	0.010	0.01	K2O	0.012
Fe :	0.8349	0.5397	59.566	36.63	Fe2O3	85.163
Pb :	0.0017	0.0014	0.192	0.03	PbO	0.207
U :	0.0014	0.0012	0.152	0.02	UO2	0.172
O			28.190	60.52	by stoichiometry	
total :			90.736			90.736

iteration : 2
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 39 x= 1102 y= -5662 z= 24 swrisife
NOPI_420_2a_#3

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	5.90	4.23	0.00199	7.6		
Al	32464	88.62	9.93	0.00684	1.7		
Si	27735	378.99	14.70	0.03684	1.2		
As	37667	24.18	8.42	0.00599	2.9		
Ca	38390	15.05	5.50	0.00253	5.8		
S	61386	3.40	1.97	0.00097	9.9		
K	42757	7.00	6.90	0.00008	8.5		
Fe	48079	1830.00	10.41	0.76474	0.5		
						201.	15.0
Pb	60414	58.83	35.28	0.00142	2.2		
U	44673	120.01	85.97	0.00126	1.3		

Analysis no. 39 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0020	0.0001	0.032	0.05	Na2O	0.042
Al :	0.0068	0.0029	0.513	0.69	Al2O3	0.970
Si :	0.0368	0.0148	2.093	2.69	SiO2	4.478
As :	0.0060	0.0017	0.387	0.19	As2O5	0.593
Ca :	0.0025	0.0008	0.078	0.07	CaO	0.109
S :	0.0010	0.0002	0.024	0.03	SO3	0.060
K :	0.0001	0.0000	0.001	0.00	K2O	0.001
Fe :	0.7647	0.4944	55.123	35.64	Fe2O3	78.810
Pb :	0.0014	0.0012	0.164	0.03	PbO	0.176
U :	0.0013	0.0011	0.140	0.02	UO2	0.159
O			26.845	60.59	by stoichiometry	
total :			85.399			85.399

iteration : 2
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 40 x= 1140 y= -5667 z= 24 swrisife
NOPI_420_2a_#4

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	8.07	4.40	0.00437	6.5		
Al	32464	92.92	9.23	0.00727	1.7		
Si	27735	378.49	12.80	0.03697	1.2		
As	37667	24.10	8.06	0.00609	2.9		
Ca	38390	12.30	7.20	0.00135	6.4		
S	61386	4.17	2.17	0.00135	9.0		
K	42757	7.00	7.35	0.00000	8.5		
Fe	48079	1765.43	9.97	0.73768	0.5		
						201.	15.0

Pb	60414	58.81	32.28	0.00160	2.2
U	44673	130.07	83.77	0.00172	1.2

Analysis no. 40 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0044	0.0002	0.069	0.11	Na2O	0.093
Al :	0.0073	0.0031	0.545	0.75	Al2O3	1.030
Si :	0.0370	0.0149	2.101	2.77	SiO2	4.494
As :	0.0061	0.0017	0.393	0.19	As2O5	0.603
Ca :	0.0013	0.0004	0.042	0.04	CaO	0.058
S :	0.0013	0.0003	0.034	0.04	SO3	0.084
K :	0.0000	0.0000	0.000	0.00	K2O	
Fe :	0.7377	0.4769	53.353	35.43	Fe2O3	76.279
Pb :	0.0016	0.0013	0.184	0.03	PbO	0.199
U :	0.0017	0.0014	0.191	0.03	UO2	0.216
O			26.146	60.60	by stoichiometry	
total :			83.057			83.057

iteration : 2
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As
be carefull - k.r./w.f. = 0.00 for K

point n : 41 x= 1435 y= -5859 z= 24 swrisife
NOPI_420_2a_#5

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	8.77	5.17	0.00429	6.2		
Al	32464	93.19	9.40	0.00728	1.7		
Si	27735	411.49	13.50	0.04025	1.1		
As	37667	26.46	6.78	0.00748	2.8		
Ca	38390	13.70	7.50	0.00164	6.1		
S	61386	3.13	1.97	0.00079	10.3		
K	42757	7.10	7.90	0.00000	8.4		
Fe	48079	1729.89	10.24	0.72281	0.5		
						201.	15.0
Pb	60414	52.88	33.53	0.00117	2.3		
U	44673	142.41	81.76	0.00225	1.2		

Analysis no. 41 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0043	0.0002	0.068	0.11	Na2O	0.091
Al :	0.0073	0.0031	0.545	0.76	Al2O3	1.031
Si :	0.0402	0.0162	2.287	3.04	SiO2	4.892
As :	0.0075	0.0021	0.481	0.24	As2O5	0.738
Ca :	0.0016	0.0005	0.051	0.05	CaO	0.071
S :	0.0008	0.0002	0.020	0.02	SO3	0.049
K :	0.0000	0.0000	0.000	0.00	K2O	
Fe :	0.7228	0.4673	52.361	35.05	Fe2O3	74.862
Pb :	0.0012	0.0010	0.135	0.02	PbO	0.145
U :	0.0023	0.0019	0.250	0.04	UO2	0.283
O			25.965	60.67	by stoichiometry	
total :			82.162			82.162

iteration : 3
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As
be carefull - k.r./w.f. = 0.00 for K

point n : 42 x= 1330 y= -5938 z= 24 swrisife
NOPI_420_2a_#6

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	7.47	4.20	0.00389	6.7		
Al	32464	159.60	8.90	0.01309	1.3		
Si	27735	360.71	13.50	0.03510	1.2		
As	37667	28.64	6.94	0.00824	2.7		
Ca	38390	11.60	5.60	0.00159	6.6		
S	61386	7.17	2.13	0.00339	6.8		
K	42757	6.05	5.95	0.00008	9.1		
Fe	48079	1679.72	9.99	0.70164	0.5		
						201.	15.0
Pb	60414	51.81	32.33	0.00117	2.3		
U	44673	203.13	83.12	0.00446	1.0		

Analysis no. 42 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0039	0.0002	0.061	0.10	Na2O	0.082
Al :	0.0131	0.0056	0.979	1.38	Al2O3	1.849
Si :	0.0351	0.0141	1.998	2.70	SiO2	4.275
As :	0.0082	0.0023	0.528	0.27	As2O5	0.810
Ca :	0.0016	0.0005	0.049	0.05	CaO	0.069
S :	0.0034	0.0007	0.085	0.10	SO3	0.212
K :	0.0001	0.0000	0.001	0.00	K2O	0.001
Fe :	0.7016	0.4536	50.884	34.63	Fe2O3	72.750
Pb :	0.0012	0.0010	0.135	0.02	PbO	0.146
U :	0.0045	0.0037	0.494	0.08	UO2	0.561
O			25.540	60.67	by stoichiometry	
total :			80.755			80.755

iteration : 3
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 43 x= 1346 y= -5925 z= 24 swrisife
NOPI_420_2a_#7

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	4.97	3.60	0.00163	8.2		
Al	32464	44.80	8.70	0.00314	2.4		
Si	27735	302.33	16.15	0.02893	1.3		
As	37667	25.06	7.76	0.00657	2.9		
Ca	38390	24.15	6.95	0.00455	4.6		
S	61386	6.60	2.67	0.00265	7.1		
K	42757	8.15	8.00	0.00012	7.9		
Fe	48079	1998.64	11.26	0.83510	0.5		
						201.	15.0
Pb	60414	64.13	34.33	0.00180	2.1		
U	44673	128.12	87.81	0.00150	1.2		

Analysis no. 43 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0016	0.0001	0.026	0.04	Na2O	0.035
Al :	0.0031	0.0013	0.237	0.30	Al2O3	0.447
Si :	0.0289	0.0116	1.644	2.01	SiO2	3.517
As :	0.0066	0.0019	0.427	0.20	As2O5	0.655
Ca :	0.0046	0.0014	0.140	0.12	CaO	0.196
S :	0.0027	0.0006	0.066	0.07	SO3	0.165
K :	0.0001	0.0000	0.001	0.00	K2O	0.002
Fe :	0.8351	0.5399	59.589	36.72	Fe2O3	85.195
Pb :	0.0018	0.0015	0.206	0.03	PbO	0.222

U :	0.0015	0.0013	0.165	0.02	UO2	0.187
O			28.120	60.48	by stoichiometry	
total :			90.622			90.622

iteration : 2
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 44 x= 491 y= -5611 z= 27 swrisife
NOPI_420_2b_#1

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	4.77	2.80	0.00234	8.4		
Al	32464	28.70	9.05	0.00171	3.0		
Si	27735	279.66	16.30	0.02663	1.4		
As	37667	25.02	8.02	0.00646	2.9		
Ca	38390	26.45	8.00	0.00488	4.4		
S	61386	7.50	2.00	0.00371	6.7		
K	42757	8.90	8.00	0.00070	7.5		
Fe	48079	2076.70	11.50	0.86792	0.5		
						201.	15.0
Pb	60414	51.58	34.85	0.00101	2.3		
U	44673	107.94	85.05	0.00085	1.3		

Analysis no. 44 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0023	0.0001	0.038	0.05	Na2O	0.051
Al :	0.0017	0.0007	0.129	0.16	Al2O3	0.244
Si :	0.0266	0.0107	1.514	1.81	SiO2	3.239
As :	0.0065	0.0018	0.421	0.19	As2O5	0.646
Ca :	0.0049	0.0015	0.150	0.13	CaO	0.210
S :	0.0037	0.0008	0.092	0.10	SO3	0.231
K :	0.0007	0.0001	0.008	0.01	K2O	0.010
Fe :	0.8679	0.5611	61.694	37.08	Fe2O3	88.205
Pb :	0.0010	0.0008	0.116	0.02	PbO	0.125
U :	0.0008	0.0007	0.094	0.01	UO2	0.106
O			28.810	60.44	by stoichiometry	
total :			93.066			93.066

iteration : 2
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 45 x= 631 y= -5691 z= 25 swrisife
NOPI_420_2b_#2

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	4.43	3.97	0.00056	8.7		
Al	32464	27.55	8.78	0.00163	3.0		
Si	27735	268.49	14.95	0.02563	1.4		
As	37667	25.00	8.22	0.00637	2.9		
Ca	38390	17.40	6.15	0.00298	5.4		
S	61386	6.07	2.07	0.00270	7.4		
K	42757	7.70	6.30	0.00109	8.1		
Fe	48079	2014.51	11.94	0.84154	0.5		
						201.	15.0
Pb	60414	51.06	35.60	0.00093	2.3		
U	44673	104.81	84.80	0.00074	1.4		

Analysis no. 45 within swrisife
k wt. % normalized

element	i.x./i.std.	k.ratio	concen.	atom. c	compound	concen.
Na :	0.0006	0.0000	0.009	0.01	Na2O	0.012
Al :	0.0016	0.0007	0.123	0.16	Al2O3	0.233
Si :	0.0256	0.0103	1.458	1.80	SiO2	3.119
As :	0.0064	0.0018	0.416	0.19	As2O5	0.638
Ca :	0.0030	0.0009	0.091	0.08	CaO	0.128
S :	0.0027	0.0006	0.067	0.07	SO3	0.168
K :	0.0011	0.0001	0.012	0.01	K2O	0.015
Fe :	0.8415	0.5441	60.058	37.20	Fe2O3	85.866
Pb :	0.0009	0.0008	0.107	0.02	PbO	0.115
U :	0.0007	0.0006	0.082	0.01	UO2	0.093
O			27.963	60.45	by stoichiometry	
total :			90.387			90.387

iteration : 2
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 46 x= 659 y= -5904 z= 25 swrisife
NOPI_420_2b_#3

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	7.17	5.40	0.00210	6.9		
Al	32464	79.14	9.23	0.00607	1.8		
Si	27735	386.40	14.60	0.03759	1.2		
As	37667	31.06	7.24	0.00905	2.6		
Ca	38390	17.55	7.20	0.00274	5.3		
S	61386	5.67	2.00	0.00247	7.7		
K	42757	8.10	6.70	0.00109	7.9		
Fe	48079	1764.12	10.43	0.73686	0.5		
						201.	15.0
Pb	60414	59.16	32.93	0.00158	2.1		
U	44673	154.85	86.24	0.00255	1.2		

Analysis no. 46 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0021	0.0001	0.033	0.05	Na2O	0.045
Al :	0.0061	0.0026	0.456	0.63	Al2O3	0.861
Si :	0.0376	0.0151	2.135	2.82	SiO2	4.568
As :	0.0090	0.0026	0.582	0.29	As2O5	0.893
Ca :	0.0027	0.0009	0.085	0.08	CaO	0.118
S :	0.0025	0.0005	0.062	0.07	SO3	0.154
K :	0.0011	0.0001	0.012	0.01	K2O	0.015
Fe :	0.7369	0.4764	53.234	35.30	Fe2O3	76.109
Pb :	0.0016	0.0013	0.182	0.03	PbO	0.196
U :	0.0025	0.0021	0.282	0.04	UO2	0.320
O			26.216	60.68	by stoichiometry	
total :			83.279			83.279

iteration : 3
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 47 x= 646 y= -5937 z= 25 swrisife
NOPI_420_2b_#4

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	5.33	4.23	0.00131	7.9		
Al	32464	309.57	9.05	0.02611	0.9		
Si	27735	396.96	13.10	0.03881	1.1		
As	37667	19.54	6.10	0.00511	3.2		

Ca	38390	16.20	6.90	0.00246	5.6
S	61386	6.03	2.83	0.00216	7.5
K	42757	7.95	7.30	0.00050	8.0
Fe	48079	1649.84	10.23	0.68899	0.5
					201. 15.0
Pb	60414	59.86	32.98	0.00162	2.1
U	44673	203.75	86.27	0.00436	1.0

Analysis no. 47 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0013	0.0001	0.020	0.03	Na2O	0.027
Al :	0.0261	0.0111	1.936	2.67	Al2O3	3.658
Si :	0.0388	0.0156	2.214	2.93	SiO2	4.736
As :	0.0051	0.0015	0.324	0.16	As2O5	0.497
Ca :	0.0025	0.0008	0.076	0.07	CaO	0.107
S :	0.0022	0.0005	0.054	0.06	SO3	0.135
K :	0.0005	0.0001	0.006	0.01	K2O	0.007
Fe :	0.6890	0.4454	50.047	33.30	Fe2O3	71.553
Pb :	0.0016	0.0014	0.188	0.03	PbO	0.202
U :	0.0044	0.0037	0.486	0.08	UO2	0.551
O			26.123	60.67	by stoichiometry	
total :			81.473			81.473

iteration : 3
be carefull - k.r./w.f. = 0.31 for Na
be carefull - k.r./w.f. = 0.45 for As

point n : 48 x= 479 y= -5809 z= 25 swrisife
NOPI_420_2b_#5

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	7.87	5.07	0.00334	6.6		
Al	32464	78.94	9.15	0.00606	1.8		
Si	27735	424.71	14.90	0.04143	1.1		
As	37667	33.96	7.80	0.00994	2.5		
Ca	38390	15.15	6.00	0.00242	5.8		
S	61386	3.63	2.30	0.00090	9.6		
K	42757	6.85	7.35	0.00000	8.6		
Fe	48079	1734.54	10.19	0.72459	0.5		
						201.	15.0
Pb	60414	65.26	32.43	0.00198	2.1		
U	44673	173.29	84.28	0.00331	1.1		

Analysis no. 48 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0033	0.0002	0.052	0.08	Na2O	0.071
Al :	0.0061	0.0026	0.454	0.63	Al2O3	0.858
Si :	0.0414	0.0167	2.352	3.12	SiO2	5.031
As :	0.0099	0.0028	0.637	0.32	As2O5	0.978
Ca :	0.0024	0.0008	0.075	0.07	CaO	0.105
S :	0.0009	0.0002	0.023	0.03	SO3	0.056
K :	0.0000	0.0000	0.000	0.00	K2O	
Fe :	0.7246	0.4684	52.385	34.94	Fe2O3	74.895
Pb :	0.0020	0.0017	0.228	0.04	PbO	0.246
U :	0.0033	0.0028	0.367	0.06	UO2	0.416
O			26.083	60.72	by stoichiometry	
total :			82.656			82.656

iteration : 3
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

be carefull - k.r./w.f. = 0.00 for K

point n : 49 x= 441 y= -5685 z= 25 swrisife
NOPI_420_2b_#6

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	7.30	4.67	0.00314	6.8		
Al	32464	126.46	9.00	0.01020	1.4		
Si	27735	404.13	15.30	0.03931	1.1		
As	37667	29.52	7.64	0.00831	2.6		
Ca	38390	13.40	5.80	0.00201	6.1		
S	61386	4.60	1.93	0.00180	8.5		
K	42757	7.20	7.15	0.00004	8.4		
Fe	48079	1681.45	10.26	0.70228	0.5		
						201.	15.0
Pb	60414	58.33	32.70	0.00154	2.2		
U	44673	224.23	85.06	0.00517	1.0		

Analysis no. 49 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0031	0.0001	0.049	0.08	Na2O	0.066
Al :	0.0102	0.0044	0.762	1.07	Al2O3	1.440
Si :	0.0393	0.0158	2.233	3.02	SiO2	4.778
As :	0.0083	0.0024	0.532	0.27	As2O5	0.816
Ca :	0.0020	0.0006	0.062	0.06	CaO	0.087
S :	0.0018	0.0004	0.045	0.05	SO3	0.112
K :	0.0000	0.0000	0.000	0.00	K2O	0.001
Fe :	0.7023	0.4540	50.897	34.61	Fe2O3	72.768
Pb :	0.0015	0.0013	0.178	0.03	PbO	0.192
U :	0.0052	0.0043	0.573	0.09	UO2	0.650
O			25.578	60.71	by stoichiometry	
total :			80.910			80.910

iteration : 3
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.45 for As

point n : 50 x= 13322 y= -22771 z= 23 swrisife
NOPI_425_1a_#1

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	4.40	3.97	0.00052	8.7		
Al	32464	75.04	9.05	0.00573	1.8		
Si	27735	316.55	14.00	0.03059	1.3		
As	37667	28.60	7.36	0.00807	2.7		
Ca	38390	25.85	7.50	0.00486	4.4		
S	61386	9.33	2.37	0.00470	6.0		
K	42757	8.05	7.95	0.00008	7.9		
Fe	48079	2015.82	11.54	0.84223	0.5		
						201.	15.0
Pb	60414	66.48	34.15	0.00195	2.0		
U	44673	96.75	87.01	0.00036	1.4		

Analysis no. 50 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0005	0.0000	0.008	0.01	Na2O	0.011
Al :	0.0057	0.0024	0.432	0.54	Al2O3	0.816
Si :	0.0306	0.0123	1.740	2.09	SiO2	3.721
As :	0.0081	0.0023	0.523	0.24	As2O5	0.802
Ca :	0.0049	0.0015	0.150	0.13	CaO	0.209

S :	0.0047	0.0010	0.117	0.12	SO3	0.293
K :	0.0001	0.0000	0.001	0.00	K2O	0.001
Fe :	0.8422	0.5445	60.032	36.28	Fe2O3	85.829
Pb :	0.0019	0.0016	0.224	0.04	PbO	0.241
U :	0.0004	0.0003	0.040	0.01	UO2	0.045
O			28.703	60.55	by stoichiometry	
total :			91.969			91.969

iteration : 2
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 51 x= 13529 y= -22581 z= 23 swrisife
NOPI_425_1a_#2

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	4.87	3.53	0.00159	8.3		
Al	32464	20.33	7.93	0.00108	3.5		
Si	27735	230.96	14.25	0.02191	1.5		
As	37667	22.04	7.98	0.00534	3.0		
Ca	38390	20.20	7.35	0.00340	5.0		
S	61386	10.60	2.30	0.00560	5.6		
K	42757	7.10	6.30	0.00062	8.4		
Fe	48079	2140.24	12.11	0.89438	0.5		
						201.	15.0
Pb	60414	63.28	35.45	0.00168	2.1		
U	44673	86.88	84.64	0.00008	1.5		

Analysis no. 51 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0016	0.0001	0.026	0.04	Na2O	0.035
Al :	0.0011	0.0005	0.082	0.10	Al2O3	0.154
Si :	0.0219	0.0088	1.246	1.47	SiO2	2.666
As :	0.0053	0.0015	0.349	0.15	As2O5	0.536
Ca :	0.0034	0.0011	0.104	0.09	CaO	0.146
S :	0.0056	0.0012	0.139	0.14	SO3	0.348
K :	0.0006	0.0001	0.007	0.01	K2O	0.008
Fe :	0.8944	0.5782	63.359	37.57	Fe2O3	90.586
Pb :	0.0017	0.0014	0.192	0.03	PbO	0.207
U :	0.0001	0.0001	0.009	0.00	UO2	0.010
O			29.182	60.40	by stoichiometry	
total :			94.696			94.696

iteration : 2
be carefull - k.r./w.f. = 0.29 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 52 x= 13629 y= -22706 z= 23 swrisife
NOPI_425_1a_#3

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	4.33	2.87	0.00175	8.8		
Al	32464	87.54	9.88	0.00675	1.7		
Si	27735	309.64	17.00	0.02958	1.3		
As	37667	30.62	7.28	0.00887	2.6		
Ca	38390	21.35	6.35	0.00397	4.9		
S	61386	8.77	2.53	0.00420	6.2		
K	42757	7.10	7.60	0.00000	8.4		
Fe	48079	2000.34	10.74	0.83601	0.5		
						201.	15.0
Pb	60414	65.13	35.43	0.00179	2.1		

U	44673	97.17	87.57	0.00036	1.4

Analysis no. 52 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0017	0.0001	0.028	0.04	Na2O	0.038
Al :	0.0067	0.0029	0.508	0.64	Al2O3	0.960
Si :	0.0296	0.0119	1.684	2.03	SiO2	3.603
As :	0.0089	0.0025	0.574	0.26	As2O5	0.881
Ca :	0.0040	0.0012	0.122	0.10	CaO	0.171
S :	0.0042	0.0009	0.105	0.11	SO3	0.262
K :	0.0000	0.0000	0.000	0.00	K2O	
Fe :	0.8360	0.5405	59.634	36.24	Fe2O3	85.260
Pb :	0.0018	0.0015	0.206	0.03	PbO	0.222
U :	0.0004	0.0003	0.039	0.01	UO2	0.045
O			28.540	60.53	by stoichiometry	
total :			91.441			91.441

iteration : 2
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As
be carefull - k.r./w.f. = 0.00 for K

point n : 53 x= 13738 y= -22719 z= 23 swrisife
NOPI_425_1a_#4

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	6.70	4.53	0.00258	7.1		
Al	32464	123.23	9.53	0.00988	1.4		
Si	27735	396.66	15.15	0.03857	1.1		
As	37667	38.00	7.48	0.01159	2.3		
Ca	38390	24.00	6.70	0.00458	4.6		
S	61386	9.07	2.53	0.00441	6.1		
K	42757	7.80	6.95	0.00066	8.0		
Fe	48079	1898.05	11.00	0.79292	0.5		
						201.	15.0
Pb	60414	48.08	34.00	0.00085	2.4		
U	44673	115.53	82.95	0.00121	1.3		

Analysis no. 53 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0026	0.0001	0.041	0.06	Na2O	0.055
Al :	0.0099	0.0042	0.741	0.94	Al2O3	1.400
Si :	0.0386	0.0155	2.195	2.69	SiO2	4.697
As :	0.0116	0.0033	0.745	0.34	As2O5	1.143
Ca :	0.0046	0.0014	0.142	0.12	CaO	0.198
S :	0.0044	0.0010	0.110	0.12	SO3	0.276
K :	0.0007	0.0001	0.008	0.01	K2O	0.009
Fe :	0.7929	0.5126	56.854	34.99	Fe2O3	81.285
Pb :	0.0008	0.0007	0.098	0.02	PbO	0.105
U :	0.0012	0.0010	0.134	0.02	UO2	0.152
O			28.252	60.69	by stoichiometry	
total :			89.320			89.320

iteration : 3
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 54 x= 13528 y= -22820 z= 23 swrisife
NOPI_425_1a_#5

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv

						15.	15.0
Na	46351	7.00	4.67	0.00278	6.9		
Al	32464	72.39	10.90	0.00534	1.9		
Si	27735	594.26	17.40	0.05833	0.9		
As	37667	27.58	7.46	0.00764	2.7		
Ca	38390	24.60	7.50	0.00453	4.5		
S	61386	4.47	2.30	0.00146	8.7		
K	42757	8.15	6.70	0.00113	7.9		
Fe	48079	1884.19	11.16	0.78716	0.5		
						201.	15.0
Pb	60414	72.11	31.88	0.00242	2.0		
U	44673	100.92	80.65	0.00075	1.4		

Analysis no. 54 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0028	0.0001	0.044	0.06	Na2O	0.059
Al :	0.0053	0.0023	0.398	0.50	Al2O3	0.752
Si :	0.0583	0.0234	3.297	3.97	SiO2	7.054
As :	0.0076	0.0022	0.489	0.22	As2O5	0.750
Ca :	0.0045	0.0014	0.140	0.12	CaO	0.196
S :	0.0015	0.0003	0.037	0.04	SO3	0.092
K :	0.0011	0.0001	0.013	0.01	K2O	0.015
Fe :	0.7872	0.5089	56.498	34.18	Fe2O3	80.776
Pb :	0.0024	0.0020	0.281	0.05	PbO	0.302
U :	0.0008	0.0006	0.084	0.01	UO2	0.095
O			28.812	60.84	by stoichiometry	
total :			90.091			90.091

iteration : 3
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.45 for As

point n : 55 x= 13816 y= -22627 z= 23 swrisife
NOPI_425_1a_#6

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	7.93	4.60	0.00397	6.5		
Al	32464	68.53	9.50	0.00513	1.9		
Si	27735	529.86	15.80	0.05197	1.0		
As	37667	32.40	7.48	0.00947	2.5		
Ca	38390	17.90	5.35	0.00332	5.3		
S	61386	3.77	2.10	0.00112	9.4		
K	42757	6.85	7.20	0.00000	8.6		
Fe	48079	1737.24	10.61	0.72557	0.5		
						201.	15.0
Pb	60414	84.14	33.05	0.00308	1.8		
U	44673	99.90	82.67	0.00064	1.4		

Analysis no. 55 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0040	0.0002	0.062	0.10	Na2O	0.084
Al :	0.0051	0.0022	0.383	0.52	Al2O3	0.723
Si :	0.0520	0.0209	2.943	3.82	SiO2	6.295
As :	0.0095	0.0027	0.605	0.29	As2O5	0.928
Ca :	0.0033	0.0010	0.103	0.09	CaO	0.144
S :	0.0011	0.0002	0.028	0.03	SO3	0.070
K :	0.0000	0.0000	0.000	0.00	K2O	
Fe :	0.7256	0.4691	52.491	34.24	Fe2O3	75.047
Pb :	0.0031	0.0026	0.356	0.06	PbO	0.384
U :	0.0006	0.0005	0.071	0.01	UO2	0.081
O			26.714	60.83	by stoichiometry	

total : 83.756 83.756
iteration : 3
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.45 for As
be carefull - k.r./w.f. = 0.00 for K

point n : 56 x= 13589 y= -22752 z= 22 swrisife
NOPI_425_1a_#7

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	4.50	3.80	0.00083	8.6		
Al	32464	24.20	7.88	0.00142	3.2		
Si	27735	259.23	16.20	0.02457	1.4		
As	37667	18.50	7.96	0.00400	3.3		
Ca	38390	19.45	6.95	0.00331	5.1		
S	61386	9.13	2.53	0.00445	6.1		
K	42757	7.70	7.00	0.00054	8.1		
Fe	48079	2120.28	11.67	0.88622	0.5		
						201.	15.0
Pb	60414	65.73	35.75	0.00181	2.0		
U	44673	93.42	83.87	0.00035	1.4		

Analysis no. 56 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0008	0.0000	0.013	0.02	Na2O	0.018
Al :	0.0014	0.0006	0.107	0.13	Al2O3	0.203
Si :	0.0246	0.0099	1.397	1.65	SiO2	2.988
As :	0.0040	0.0011	0.262	0.12	As2O5	0.401
Ca :	0.0033	0.0010	0.102	0.08	CaO	0.142
S :	0.0045	0.0010	0.111	0.11	SO3	0.277
K :	0.0005	0.0001	0.006	0.01	K2O	0.007
Fe :	0.8862	0.5729	62.858	37.42	Fe2O3	89.869
Pb :	0.0018	0.0015	0.207	0.03	PbO	0.223
U :	0.0004	0.0003	0.039	0.01	UO2	0.044
O			29.071	60.41	by stoichiometry	

total : 94.172 94.172
iteration : 2
be carefull - k.r./w.f. = 0.29 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 57 x= 13608 y= -22717 z= 22 swrisife
NOPI_425_1a_#8

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	8.70	4.93	0.00449	6.2		
Al	32464	112.90	9.75	0.00896	1.5		
Si	27735	455.66	14.60	0.04460	1.1		
As	37667	39.00	8.10	0.01174	2.3		
Ca	38390	19.15	6.05	0.00347	5.1		
S	61386	4.70	2.53	0.00146	8.4		
K	42757	7.20	7.00	0.00016	8.4		
Fe	48079	1774.78	11.54	0.74104	0.5		
						201.	15.0
Pb	60414	88.17	34.25	0.00325	1.8		
U	44673	88.03	78.50	0.00035	1.5		

Analysis no. 57 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.

Na :	0.0045	0.0002	0.070	0.11	Na2O	0.095
Al :	0.0090	0.0038	0.670	0.89	Al2O3	1.266
Si :	0.0446	0.0179	2.533	3.24	SiO2	5.420
As :	0.0117	0.0033	0.751	0.36	As2O5	1.151
Ca :	0.0035	0.0011	0.107	0.10	CaO	0.150
S :	0.0015	0.0003	0.037	0.04	SO3	0.092
K :	0.0002	0.0000	0.002	0.00	K2O	0.002
Fe :	0.7410	0.4791	53.461	34.44	Fe2O3	76.435
Pb :	0.0032	0.0027	0.376	0.07	PbO	0.405
U :	0.0004	0.0003	0.039	0.01	UO2	0.045
O			27.013	60.74	by stoichiometry	
total :			85.060			85.060

iteration : 3
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.45 for As

point n : 58 x= 13684 y= -22745 z= 24 swrisife
NOPI_425_1a_#9

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	4.90	3.17	0.00207	8.3		
Al	32464	269.37	10.08	0.02253	1.0		
Si	27735	11.80	9.45	0.00024	6.5		
As	37667	6.98	7.16	0.00000	5.4		
Ca	38390	5.15	4.85	0.00008	9.9		
S	61386	776.91	8.20	0.51853	0.9		
K	42757	187.87	6.55	0.14080	1.7		
Fe	48079	978.04	7.34	0.40796	0.6		
						201.	15.0
Pb	60414	166.81	121.97	0.00270	1.4		
U	44673	70.69	72.04	0.00000	1.6		

Analysis no. 58 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0021	0.0001	0.028	0.04	Na2O	0.038
Al :	0.0225	0.0096	1.533	1.78	Al2O3	2.897
Si :	0.0002	0.0001	0.013	0.01	SiO2	0.027
As :	0.0000	0.0000	0.000	0.00	As2O5	
Ca :	0.0001	0.0000	0.003	0.00	CaO	0.004
S :	0.5185	0.1130	12.766	12.49	SO3	31.876
K :	0.1408	0.0155	1.716	1.38	K2O	2.067
Fe :	0.4080	0.2637	30.822	17.32	Fe2O3	44.067
Pb :	0.0027	0.0023	0.306	0.05	PbO	0.330
U :	0.0000	0.0000	0.000	0.00	UO2	
O			34.119	66.92	by stoichiometry	
total :			81.306			81.306

iteration : 3
be carefull - k.r./w.f. = 0.35 for Na
be carefull - k.r./w.f. = 0.00 for As
be carefull - k.r./w.f. = 0.00 for U

point n : 59 x= 13791 y= -23028 z= 20 swrisife
NOPI_425_1b_#1

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	5.20	3.33	0.00222	8.0		
Al	32464	27.85	8.83	0.00165	3.0		
Si	27735	248.07	16.10	0.02345	1.4		
As	37667	19.32	7.22	0.00460	3.2		

Ca	38390	22.65	8.40	0.00377	4.7
S	61386	11.77	2.77	0.00607	5.4
K	42757	8.90	7.55	0.00105	7.5
Fe	48079	2122.88	11.60	0.88712	0.5
					201. 15.0
Pb	60414	66.93	35.48	0.00190	2.0
U	44673	91.55	87.71	0.00014	1.4

Analysis no. 59 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0022	0.0001	0.036	0.05	Na2O	0.048
Al :	0.0017	0.0007	0.125	0.15	Al2O3	0.236
Si :	0.0235	0.0094	1.333	1.57	SiO2	2.852
As :	0.0046	0.0013	0.300	0.13	As2O5	0.461
Ca :	0.0038	0.0012	0.116	0.10	CaO	0.162
S :	0.0061	0.0013	0.151	0.16	SO3	0.377
K :	0.0010	0.0001	0.012	0.01	K2O	0.014
Fe :	0.8871	0.5735	62.906	37.38	Fe2O3	89.938
Pb :	0.0019	0.0016	0.217	0.03	PbO	0.234
U :	0.0001	0.0001	0.016	0.00	UO2	0.018
O			29.128	60.41	by stoichiometry	
total :			94.340			94.340

iteration : 2
be carefull - k.r./w.f. = 0.29 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 60 x= 13857 y= -22890 z= 20 swrisife
NOPI_425_1b_#2

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	4.50	3.17	0.00159	8.6		
Al	32464	27.63	7.95	0.00171	3.0		
Si	27735	260.59	15.00	0.02484	1.4		
As	37667	19.68	7.62	0.00458	3.2		
Ca	38390	23.20	8.00	0.00402	4.7		
S	61386	11.50	2.23	0.00625	5.4		
K	42757	7.00	6.55	0.00035	8.5		
Fe	48079	2111.33	12.19	0.88233	0.5		
						201.	15.0
Pb	60414	67.58	36.08	0.00190	2.0		
U	44673	87.02	83.42	0.00013	1.5		

Analysis no. 60 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0016	0.0001	0.026	0.04	Na2O	0.034
Al :	0.0017	0.0007	0.129	0.16	Al2O3	0.244
Si :	0.0248	0.0100	1.411	1.67	SiO2	3.019
As :	0.0046	0.0013	0.299	0.13	As2O5	0.459
Ca :	0.0040	0.0013	0.124	0.10	CaO	0.173
S :	0.0063	0.0014	0.156	0.16	SO3	0.388
K :	0.0003	0.0000	0.004	0.00	K2O	0.005
Fe :	0.8823	0.5704	62.608	37.26	Fe2O3	89.512
Pb :	0.0019	0.0016	0.218	0.03	PbO	0.235
U :	0.0001	0.0001	0.015	0.00	UO2	0.017
O			29.097	60.44	by stoichiometry	
total :			94.086			94.086

iteration : 2
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 61 x= 13530 y= -22887 z= 20 swrisife
NOPI_425_1b_#3

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	5.03	2.73	0.00274	8.2		
Al	32464	89.72	9.18	0.00700	1.7		
Si	27735	311.69	15.65	0.02993	1.3		
As	37667	27.02	6.92	0.00764	2.8		
Ca	38390	20.00	6.40	0.00360	5.0		
S	61386	9.07	2.27	0.00459	6.1		
K	42757	8.15	6.45	0.00132	7.9		
Fe	48079	2001.51	11.60	0.83617	0.5		
						201.	15.0
Pb	60414	64.66	34.60	0.00181	2.1		
U	44673	94.43	85.52	0.00033	1.4		

Analysis no. 61 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0027	0.0001	0.044	0.06	Na2O	0.059
Al :	0.0070	0.0030	0.527	0.66	Al2O3	0.995
Si :	0.0299	0.0120	1.703	2.06	SiO2	3.643
As :	0.0076	0.0022	0.495	0.22	As2O5	0.759
Ca :	0.0036	0.0011	0.111	0.09	CaO	0.155
S :	0.0046	0.0010	0.114	0.12	SO3	0.286
K :	0.0013	0.0001	0.015	0.01	K2O	0.018
Fe :	0.8362	0.5406	59.658	36.21	Fe2O3	85.294
Pb :	0.0018	0.0015	0.208	0.03	PbO	0.224
U :	0.0003	0.0003	0.037	0.01	UO2	0.042
O			28.564	60.52	by stoichiometry	
total :			91.476			91.476

iteration : 2
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 62 x= 13513 y= -22940 z= 20 swrisife
NOPI_425_1b_#4

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	6.57	4.23	0.00278	7.2		
Al	32464	191.45	9.70	0.01579	1.2		
Si	27735	350.65	15.50	0.03388	1.2		
As	37667	25.62	7.14	0.00702	2.8		
Ca	38390	18.30	8.05	0.00271	5.2		
S	61386	7.70	2.20	0.00371	6.6		
K	42757	7.25	7.85	0.00000	8.3		
Fe	48079	1846.62	10.93	0.77133	0.5		
						201.	15.0
Pb	60414	52.51	32.78	0.00119	2.3		
U	44673	110.02	84.87	0.00093	1.3		

Analysis no. 62 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0028	0.0001	0.044	0.07	Na2O	0.059
Al :	0.0158	0.0067	1.182	1.54	Al2O3	2.234
Si :	0.0339	0.0136	1.932	2.42	SiO2	4.132
As :	0.0070	0.0020	0.451	0.21	As2O5	0.692
Ca :	0.0027	0.0009	0.084	0.07	CaO	0.117
S :	0.0037	0.0008	0.093	0.10	SO3	0.232

K :	0.0000	0.0000	0.000	0.00	K2O	
Fe :	0.7713	0.4987	55.520	34.96	Fe2O3	79.378
Pb :	0.0012	0.0010	0.137	0.02	PbO	0.148
U :	0.0009	0.0008	0.104	0.02	UO2	0.118
O			27.564	60.59	by stoichiometry	
total :			87.110			87.110

iteration : 2
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As
be carefull - k.r./w.f. = 0.00 for K

point n : 63 x= 13816 y= -23088 z= 20 swrisife
NOPI_425_1b_#5

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	8.07	5.00	0.00365	6.5		
Al	32464	135.11	9.68	0.01090	1.4		
Si	27735	428.97	16.70	0.04168	1.1		
As	37667	40.54	7.58	0.01252	2.3		
Ca	38390	21.50	7.65	0.00366	4.8		
S	61386	6.13	2.13	0.00270	7.4		
K	42757	7.35	6.35	0.00078	8.3		
Fe	48079	1736.83	10.87	0.72519	0.5		
						201.	15.0
Pb	60414	56.93	34.35	0.00136	2.2		
U	44673	105.01	81.91	0.00086	1.4		

Analysis no. 63 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0037	0.0002	0.057	0.09	Na2O	0.077
Al :	0.0109	0.0046	0.816	1.10	Al2O3	1.541
Si :	0.0417	0.0168	2.373	3.09	SiO2	5.076
As :	0.0125	0.0036	0.801	0.39	As2O5	1.228
Ca :	0.0037	0.0012	0.114	0.10	CaO	0.159
S :	0.0027	0.0006	0.068	0.08	SO3	0.169
K :	0.0008	0.0001	0.009	0.01	K2O	0.011
Fe :	0.7252	0.4688	52.465	34.34	Fe2O3	75.010
Pb :	0.0014	0.0011	0.157	0.03	PbO	0.170
U :	0.0009	0.0007	0.095	0.01	UO2	0.108
O			26.594	60.76	by stoichiometry	
total :			83.548			83.548

iteration : 3
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.45 for As

point n : 64 x= 13798 y= -22842 z= 20 swrisife
NOPI_425_1b_#6

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	5.13	2.93	0.00262	8.1		
Al	32464	123.96	9.50	0.00994	1.4		
Si	27735	380.04	14.30	0.03698	1.2		
As	37667	34.86	7.46	0.01041	2.4		
Ca	38390	20.85	6.15	0.00389	4.9		
S	61386	7.53	1.80	0.00387	6.7		
K	42757	6.70	7.25	0.00000	8.7		
Fe	48079	1934.12	11.66	0.80797	0.5		
						201.	15.0
Pb	60414	67.43	33.78	0.00203	2.0		

U	44673	101.87	86.36	0.00058	1.4

Analysis no. 64 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0026	0.0001	0.041	0.06	Na2O	0.056
Al :	0.0099	0.0042	0.746	0.94	Al2O3	1.410
Si :	0.0370	0.0149	2.104	2.55	SiO2	4.502
As :	0.0104	0.0030	0.670	0.30	As2O5	1.027
Ca :	0.0039	0.0012	0.120	0.10	CaO	0.168
S :	0.0039	0.0008	0.097	0.10	SO3	0.242
K :	0.0000	0.0000	0.000	0.00	K2O	
Fe :	0.8080	0.5224	57.810	35.25	Fe2O3	82.653
Pb :	0.0020	0.0017	0.234	0.04	PbO	0.252
U :	0.0006	0.0005	0.064	0.01	UO2	0.072
O			28.495	60.64	by stoichiometry	
total :			90.382			90.382

iteration : 3
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As
be carefull - k.r./w.f. = 0.00 for K

point n : 65 x= -15534 y= -29805 z= 8 swrisife NOPI_425_2a_#1

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	4.93	4.20	0.00087	8.3		
Al	32464	78.99	8.78	0.00610	1.8		
Si	27735	284.76	16.35	0.02714	1.3		
As	37667	25.30	8.36	0.00644	2.8		
Ca	38390	20.20	6.85	0.00353	5.0		
S	61386	9.50	2.30	0.00486	6.0		
K	42757	9.00	7.80	0.00093	7.5		
Fe	48079	2034.57	11.70	0.85010	0.5		
						201.	15.0
Pb	60414	62.63	35.15	0.00166	2.1		
U	44673	93.42	84.73	0.00032	1.4		

Analysis no. 65 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0009	0.0000	0.014	0.02	Na2O	0.019
Al :	0.0061	0.0026	0.460	0.58	Al2O3	0.869
Si :	0.0271	0.0109	1.544	1.86	SiO2	3.304
As :	0.0064	0.0018	0.418	0.19	As2O5	0.641
Ca :	0.0035	0.0011	0.109	0.09	CaO	0.152
S :	0.0049	0.0011	0.121	0.13	SO3	0.302
K :	0.0009	0.0001	0.011	0.01	K2O	0.013
Fe :	0.8501	0.5496	60.562	36.61	Fe2O3	86.586
Pb :	0.0017	0.0014	0.190	0.03	PbO	0.205
U :	0.0003	0.0003	0.036	0.01	UO2	0.040
O			28.667	60.49	by stoichiometry	
total :			92.132			92.132

iteration : 2
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 66 x= -15638 y= -29589 z= 8 swrisife NOPI_425_2a_#2

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv

						15.	15.0
Na	46351	5.07	3.73	0.00159	8.1		
Al	32464	120.45	9.90	0.00960	1.5		
Si	27735	299.38	16.00	0.02865	1.3		
As	37667	25.02	7.50	0.00666	2.9		
Ca	38390	20.00	6.15	0.00367	5.0		
S	61386	10.57	2.13	0.00569	5.6		
K	42757	8.15	6.70	0.00113	7.9		
Fe	48079	2036.52	11.06	0.85111	0.5		
						201.	15.0
Pb	60414	52.36	32.98	0.00117	2.3		
U	44673	95.18	80.00	0.00056	1.4		

Analysis no. 66 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0016	0.0001	0.025	0.04	Na2O	0.034
Al :	0.0096	0.0041	0.723	0.89	Al2O3	1.366
Si :	0.0286	0.0115	1.632	1.93	SiO2	3.490
As :	0.0067	0.0019	0.431	0.19	As2O5	0.662
Ca :	0.0037	0.0012	0.113	0.09	CaO	0.158
S :	0.0057	0.0012	0.142	0.15	SO3	0.355
K :	0.0011	0.0001	0.013	0.01	K2O	0.015
Fe :	0.8511	0.5502	60.615	36.15	Fe2O3	86.663
Pb :	0.0012	0.0010	0.134	0.02	PbO	0.145
U :	0.0006	0.0005	0.062	0.01	UO2	0.071
O			29.067	60.51	by stoichiometry	
total :			92.958			92.958

iteration : 2
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 67 x= -15348 y= -29897 z= 5 swrisife
NOPI_425_2a_#3

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	5.20	2.90	0.00274	8.0		
Al	32464	51.73	8.10	0.00379	2.2		
Si	27735	348.84	15.25	0.03372	1.2		
As	37667	30.44	7.14	0.00885	2.6		
Ca	38390	18.10	6.30	0.00312	5.3		
S	61386	8.93	2.20	0.00454	6.1		
K	42757	9.45	5.75	0.00287	7.3		
Fe	48079	1969.90	10.94	0.82312	0.5		
						201.	15.0
Pb	60414	64.26	33.43	0.00186	2.1		
U	44673	88.75	81.14	0.00028	1.5		

Analysis no. 67 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0027	0.0001	0.044	0.07	Na2O	0.059
Al :	0.0038	0.0016	0.285	0.36	Al2O3	0.539
Si :	0.0337	0.0136	1.916	2.34	SiO2	4.100
As :	0.0089	0.0025	0.573	0.26	As2O5	0.879
Ca :	0.0031	0.0010	0.096	0.08	CaO	0.135
S :	0.0045	0.0010	0.113	0.12	SO3	0.283
K :	0.0029	0.0003	0.033	0.03	K2O	0.039
Fe :	0.8231	0.5321	58.825	36.11	Fe2O3	84.103
Pb :	0.0019	0.0016	0.214	0.04	PbO	0.230
U :	0.0003	0.0002	0.031	0.00	UO2	0.035
O			28.272	60.59	by stoichiometry	

total : 90.403 90.403

iteration : 2

be carefull - k.r./w.f. = 0.30 for Na

be carefull - k.r./w.f. = 0.44 for As

point n : 68 x= -15352 y= -29960 z= 5 swrisife NOPI_425_2a_#4

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	7.33	3.87	0.00413	6.8		
Al	32464	232.31	9.73	0.01934	1.1		
Si	27735	426.01	16.20	0.04143	1.1		
As	37667	25.42	7.40	0.00685	2.8		
Ca	38390	16.50	7.45	0.00240	5.5		
S	61386	9.80	2.57	0.00488	5.9		
K	42757	7.55	8.00	0.00000	8.2		
Fe	48079	1771.19	10.39	0.73990	0.5		
						201.	15.0
Pb	60414	40.75	35.73	0.00030	2.6		
U	44673	120.11	83.77	0.00135	1.3		

Analysis no. 68 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0041	0.0002	0.065	0.10	Na2O	0.087
Al :	0.0193	0.0082	1.441	1.89	Al2O3	2.724
Si :	0.0414	0.0167	2.362	2.97	SiO2	5.052
As :	0.0068	0.0019	0.437	0.21	As2O5	0.671
Ca :	0.0024	0.0008	0.074	0.07	CaO	0.104
S :	0.0049	0.0011	0.123	0.14	SO3	0.306
K :	0.0000	0.0000	0.000	0.00	K2O	
Fe :	0.7399	0.4783	53.494	33.89	Fe2O3	76.482
Pb :	0.0003	0.0003	0.035	0.01	PbO	0.038
U :	0.0013	0.0011	0.150	0.02	UO2	0.170
O			27.452	60.71	by stoichiometry	

total : 85.634 85.634

iteration : 3

be carefull - k.r./w.f. = 0.30 for Na

be carefull - k.r./w.f. = 0.45 for As

be carefull - k.r./w.f. = 0.00 for K

point n : 69 x= -15563 y= -29961 z= 5 swrisife NOPI_425_2a_#5

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	5.60	3.67	0.00230	7.8		
Al	32464	250.93	9.08	0.02101	1.0		
Si	27735	358.91	15.10	0.03476	1.2		
As	37667	29.62	7.72	0.00832	2.6		
Ca	38390	18.20	7.75	0.00277	5.3		
S	61386	8.33	2.00	0.00427	6.4		
K	42757	7.60	5.85	0.00136	8.1		
Fe	48079	1746.87	11.44	0.72931	0.5		
						201.	15.0
Pb	60414	43.40	33.38	0.00060	2.5		
U	44673	109.87	81.13	0.00107	1.3		

Analysis no. 69 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.

Na :	0.0023	0.0001	0.036	0.06	Na2O	0.049
Al :	0.0210	0.0090	1.569	2.10	Al2O3	2.965
Si :	0.0348	0.0140	1.986	2.55	SiO2	4.248
As :	0.0083	0.0024	0.532	0.26	As2O5	0.816
Ca :	0.0028	0.0009	0.086	0.08	CaO	0.120
S :	0.0043	0.0009	0.107	0.12	SO3	0.268
K :	0.0014	0.0001	0.015	0.01	K2O	0.019
Fe :	0.7293	0.4715	52.786	34.15	Fe2O3	75.469
Pb :	0.0006	0.0005	0.070	0.01	PbO	0.075
U :	0.0011	0.0009	0.119	0.02	UO2	0.135
O			26.857	60.64	by stoichiometry	
total :			84.163			84.163

iteration : 3
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.45 for As

point n : 70 x= -15640 y= -29672 z= 5 swrisife
NOPI_425_2a_#6

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	6.90	4.17	0.00326	7.0		
Al	32464	276.15	10.23	0.02310	1.0		
Si	27735	405.18	16.90	0.03925	1.1		
As	37667	26.90	7.98	0.00719	2.8		
Ca	38390	12.40	5.75	0.00176	6.4		
S	61386	7.17	2.07	0.00344	6.8		
K	42757	5.80	6.30	0.00000	9.3		
Fe	48079	1641.34	10.41	0.68533	0.5		
						201.	15.0
Pb	60414	38.65	31.53	0.00043	2.6		
U	44673	115.49	81.27	0.00127	1.3		

Analysis no. 70 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0033	0.0002	0.051	0.08	Na2O	0.068
Al :	0.0231	0.0099	1.719	2.38	Al2O3	3.249
Si :	0.0393	0.0158	2.242	2.99	SiO2	4.797
As :	0.0072	0.0020	0.458	0.23	As2O5	0.702
Ca :	0.0018	0.0006	0.055	0.05	CaO	0.076
S :	0.0034	0.0007	0.087	0.10	SO3	0.216
K :	0.0000	0.0000	0.000	0.00	K2O	
Fe :	0.6853	0.4431	49.916	33.43	Fe2O3	71.366
Pb :	0.0004	0.0004	0.050	0.01	PbO	0.054
U :	0.0013	0.0011	0.142	0.02	UO2	0.161
O			25.970	60.71	by stoichiometry	
total :			80.689			80.689

iteration : 3
be carefull - k.r./w.f. = 0.31 for Na
be carefull - k.r./w.f. = 0.45 for As
be carefull - k.r./w.f. = 0.00 for K

point n : 71 x= -16368 y= -29492 z= 8 swrisife
NOPI_425_2b_#1

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	6.33	3.43	0.00346	7.3		
Al	32464	105.95	8.75	0.00844	1.6		
Si	27735	296.73	14.80	0.02850	1.3		
As	37667	26.46	7.06	0.00737	2.8		

Ca	38390	18.70	7.45	0.00298	5.2
S	61386	10.23	2.57	0.00517	5.7
K	42757	9.50	7.75	0.00136	7.3
Fe	48079	1998.50	11.01	0.83514	0.5
					201. 15.0
Pb	60414	56.41	33.90	0.00136	2.2
U	44673	96.25	84.01	0.00045	1.4

Analysis no. 71 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0035	0.0002	0.055	0.08	Na2O	0.074
Al :	0.0084	0.0036	0.636	0.80	Al2O3	1.201
Si :	0.0285	0.0115	1.623	1.96	SiO2	3.473
As :	0.0074	0.0021	0.478	0.22	As2O5	0.733
Ca :	0.0030	0.0009	0.092	0.08	CaO	0.128
S :	0.0052	0.0011	0.129	0.14	SO3	0.322
K :	0.0014	0.0001	0.015	0.01	K2O	0.019
Fe :	0.8351	0.5399	59.605	36.18	Fe2O3	85.218
Pb :	0.0014	0.0011	0.156	0.03	PbO	0.168
U :	0.0005	0.0004	0.050	0.01	UO2	0.057
O			28.554	60.50	by stoichiometry	
total :			91.393			91.393

iteration : 2
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 72 x= -16358 y= -29561 z= 8 swrisife
NOPI_425_2b_#2

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	4.93	3.80	0.00135	8.3		
Al	32464	127.96	9.20	0.01032	1.4		
Si	27735	299.53	13.25	0.02894	1.3		
As	37667	25.60	7.44	0.00690	2.8		
Ca	38390	21.60	7.10	0.00384	4.8		
S	61386	11.73	2.50	0.00623	5.4		
K	42757	9.10	7.00	0.00163	7.4		
Fe	48079	1983.90	10.86	0.82901	0.5		
						201.	15.0
Pb	60414	49.55	34.30	0.00092	2.3		
U	44673	101.54	79.50	0.00082	1.4		

Analysis no. 72 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0014	0.0001	0.021	0.03	Na2O	0.029
Al :	0.0103	0.0044	0.776	0.97	Al2O3	1.466
Si :	0.0289	0.0116	1.648	1.99	SiO2	3.527
As :	0.0069	0.0020	0.446	0.20	As2O5	0.685
Ca :	0.0038	0.0012	0.118	0.10	CaO	0.165
S :	0.0062	0.0014	0.156	0.16	SO3	0.388
K :	0.0016	0.0002	0.018	0.02	K2O	0.022
Fe :	0.8290	0.5360	59.222	35.95	Fe2O3	84.670
Pb :	0.0009	0.0008	0.106	0.02	PbO	0.114
U :	0.0008	0.0007	0.091	0.01	UO2	0.103
O			28.567	60.54	by stoichiometry	
total :			91.169			91.169

iteration : 2
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 73 x= -16559 y= -29194 z= 8 swrisife
NOPI_425_2b_#3

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	5.77	4.10	0.00199	7.6		
Al	32464	113.23	9.70	0.00899	1.5		
Si	27735	336.73	15.80	0.03244	1.2		
As	37667	24.76	8.14	0.00631	2.9		
Ca	38390	17.30	5.95	0.00300	5.4		
S	61386	8.77	1.87	0.00465	6.2		
K	42757	8.10	6.70	0.00109	7.9		
Fe	48079	1964.83	10.86	0.82106	0.5		
						201.	15.0
Pb	60414	54.51	33.40	0.00127	2.2		
U	44673	104.74	81.30	0.00087	1.4		

Analysis no. 73 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0020	0.0001	0.032	0.05	Na2O	0.043
Al :	0.0090	0.0038	0.676	0.85	Al2O3	1.277
Si :	0.0324	0.0130	1.846	2.24	SiO2	3.949
As :	0.0063	0.0018	0.408	0.19	As2O5	0.626
Ca :	0.0030	0.0009	0.093	0.08	CaO	0.130
S :	0.0047	0.0010	0.116	0.12	SO3	0.290
K :	0.0011	0.0001	0.012	0.01	K2O	0.015
Fe :	0.8211	0.5308	58.718	35.86	Fe2O3	83.950
Pb :	0.0013	0.0011	0.146	0.02	PbO	0.158
U :	0.0009	0.0007	0.096	0.01	UO2	0.109
O			28.403	60.56	by stoichiometry	
total :			90.547			90.547

iteration : 2
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 74 x= -16526 y= -29173 z= 8 swrisife
NOPI_425_2b_#4

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	5.70	4.40	0.00155	7.7		
Al	32464	153.55	9.88	0.01248	1.3		
Si	27735	391.26	14.45	0.03810	1.2		
As	37667	24.64	7.64	0.00646	2.9		
Ca	38390	18.50	7.80	0.00283	5.2		
S	61386	8.47	2.43	0.00407	6.3		
K	42757	8.95	6.60	0.00182	7.5		
Fe	48079	1858.15	10.39	0.77660	0.5		
						201.	15.0
Pb	60414	54.36	34.13	0.00122	2.2		
U	44673	109.96	84.01	0.00096	1.3		

Analysis no. 74 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0015	0.0001	0.024	0.04	Na2O	0.033
Al :	0.0125	0.0053	0.934	1.21	Al2O3	1.766
Si :	0.0381	0.0153	2.168	2.70	SiO2	4.637
As :	0.0065	0.0018	0.415	0.19	As2O5	0.637
Ca :	0.0028	0.0009	0.088	0.08	CaO	0.123
S :	0.0041	0.0009	0.102	0.11	SO3	0.255

K :	0.0018	0.0002	0.021	0.02	K2O	0.025
Fe :	0.7766	0.5021	55.869	34.97	Fe2O3	79.877
Pb :	0.0012	0.0010	0.141	0.02	PbO	0.152
U :	0.0010	0.0008	0.107	0.02	UO2	0.121
O			27.756	60.64	by stoichiometry	
total :			87.625			87.625

iteration : 2
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 75 x= -16520 y= -29547 z= 8 swrisife
NOPI_425_2b_#5

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	6.47	4.37	0.00250	7.2		
Al	32464	274.68	10.88	0.02292	1.0		
Si	27735	423.01	14.20	0.04133	1.1		
As	37667	27.98	6.72	0.00808	2.7		
Ca	38390	17.50	7.70	0.00259	5.4		
S	61386	8.87	2.53	0.00427	6.2		
K	42757	8.25	7.35	0.00070	7.8		
Fe	48079	1790.95	10.46	0.74819	0.5		
						201.	15.0
Pb	60414	36.93	29.98	0.00042	2.7		
U	44673	112.24	76.61	0.00132	1.3		

Analysis no. 75 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0025	0.0001	0.039	0.06	Na2O	0.053
Al :	0.0229	0.0098	1.707	2.20	Al2O3	3.225
Si :	0.0413	0.0166	2.359	2.92	SiO2	5.046
As :	0.0081	0.0023	0.515	0.24	As2O5	0.790
Ca :	0.0026	0.0008	0.080	0.07	CaO	0.113
S :	0.0043	0.0009	0.107	0.12	SO3	0.268
K :	0.0007	0.0001	0.008	0.01	K2O	0.010
Fe :	0.7482	0.4837	54.001	33.64	Fe2O3	77.206
Pb :	0.0004	0.0004	0.049	0.01	PbO	0.052
U :	0.0013	0.0011	0.147	0.02	UO2	0.167
O			27.917	60.71	by stoichiometry	
total :			86.929			86.929

iteration : 3
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.45 for As

point n : 76 x= -16386 y= -29404 z= 8 swrisife
NOPI_425_2b_#6

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	6.57	3.20	0.00401	7.2		
Al	32464	138.14	9.98	0.01113	1.4		
Si	27735	426.11	14.95	0.04157	1.1		
As	37667	26.60	6.90	0.00748	2.8		
Ca	38390	17.20	5.55	0.00308	5.4		
S	61386	8.80	2.60	0.00418	6.2		
K	42757	8.70	5.90	0.00217	7.6		
Fe	48079	1956.80	11.96	0.81730	0.5		
						201.	15.0
Pb	60414	57.61	34.50	0.00139	2.2		
U	44673	102.77	85.57	0.00064	1.4		

Analysis no. 76 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0040	0.0002	0.063	0.09	Na2O	0.085
Al :	0.0111	0.0047	0.834	1.03	Al2O3	1.575
Si :	0.0416	0.0167	2.363	2.81	SiO2	5.055
As :	0.0075	0.0021	0.481	0.21	As2O5	0.738
Ca :	0.0031	0.0010	0.095	0.08	CaO	0.133
S :	0.0042	0.0009	0.105	0.11	SO3	0.262
K :	0.0022	0.0002	0.025	0.02	K2O	0.030
Fe :	0.8173	0.5284	58.448	34.96	Fe2O3	83.564
Pb :	0.0014	0.0012	0.161	0.03	PbO	0.173
U :	0.0006	0.0005	0.071	0.01	UO2	0.080
O			29.051	60.65	by stoichiometry	
total :			91.697			91.697

iteration : 2
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 77 x= 5100 y= -24702 z= 19 swrisife
NOPI_425_3a_#1

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	4.67	3.77	0.00107	8.5		
Al	32464	23.93	8.38	0.00135	3.2		
Si	27735	235.11	14.90	0.02226	1.5		
As	37667	23.90	6.74	0.00652	2.9		
Ca	38390	18.25	8.40	0.00261	5.2		
S	61386	10.60	2.27	0.00562	5.6		
K	42757	7.10	7.35	0.00000	8.4		
Fe	48079	2076.79	10.96	0.86808	0.5		
						201.	15.0
Pb	60414	60.61	34.90	0.00155	2.1		
U	44673	93.37	87.81	0.00021	1.4		

Analysis no. 77 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0011	0.0001	0.017	0.03	Na2O	0.023
Al :	0.0014	0.0006	0.102	0.13	Al2O3	0.193
Si :	0.0223	0.0089	1.267	1.53	SiO2	2.710
As :	0.0065	0.0019	0.426	0.19	As2O5	0.653
Ca :	0.0026	0.0008	0.080	0.07	CaO	0.112
S :	0.0056	0.0012	0.140	0.15	SO3	0.349
K :	0.0000	0.0000	0.000	0.00	K2O	
Fe :	0.8681	0.5612	61.714	37.44	Fe2O3	88.234
Pb :	0.0015	0.0013	0.178	0.03	PbO	0.191
U :	0.0002	0.0002	0.023	0.00	UO2	0.026
O			28.545	60.44	by stoichiometry	
total :			92.492			92.492

iteration : 2
be carefull - k.r./w.f. = 0.29 for Na
be carefull - k.r./w.f. = 0.44 for As
be carefull - k.r./w.f. = 0.00 for K

point n : 78 x= 5022 y= -24664 z= 19 swrisife
NOPI_425_3a_#2

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0

Na	46351	3.73	3.27	0.00056	9.5
Al	32464	22.58	8.48	0.00123	3.3
Si	27735	246.42	15.30	0.02337	1.4
As	37667	21.96	7.64	0.00544	3.0
Ca	38390	22.20	6.95	0.00404	4.8
S	61386	10.90	1.80	0.00614	5.6
K	42757	7.90	8.20	0.00000	8.0
Fe	48079	2113.58	12.31	0.88330	0.5
					201. 15.0
Pb	60414	64.53	36.53	0.00169	2.1
U	44673	89.87	83.17	0.00025	1.4

Analysis no. 78 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0006	0.0000	0.009	0.01	Na2O	0.012
Al :	0.0012	0.0005	0.093	0.11	Al2O3	0.175
Si :	0.0234	0.0094	1.329	1.58	SiO2	2.843
As :	0.0054	0.0016	0.355	0.16	As2O5	0.545
Ca :	0.0040	0.0013	0.124	0.10	CaO	0.173
S :	0.0061	0.0013	0.153	0.16	SO3	0.381
K :	0.0000	0.0000	0.000	0.00	K2O	
Fe :	0.8833	0.5711	62.665	37.40	Fe2O3	89.593
Pb :	0.0017	0.0014	0.194	0.03	PbO	0.208
U :	0.0002	0.0002	0.027	0.00	UO2	0.031
O			29.014	60.44	by stoichiometry	
total :			93.963			93.963

iteration : 2
be carefull - k.r./w.f. = 0.29 for Na
be carefull - k.r./w.f. = 0.44 for As
be carefull - k.r./w.f. = 0.00 for K

point n : 79 x= 5260 y= -24546 z= 19 swrisife
NOPI_425_3a_#3

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	4.63	3.43	0.00143	8.5		
Al	32464	25.30	8.18	0.00149	3.2		
Si	27735	230.81	13.85	0.02194	1.5		
As	37667	22.20	7.00	0.00578	3.0		
Ca	38390	17.60	6.35	0.00298	5.3		
S	61386	10.43	2.57	0.00531	5.7		
K	42757	7.30	6.15	0.00089	8.3		
Fe	48079	2097.19	11.91	0.87658	0.5		
						201.	15.0
Pb	60414	64.91	33.40	0.00190	2.1		
U	44673	88.38	84.96	0.00013	1.5		

Analysis no. 79 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0014	0.0001	0.023	0.03	Na2O	0.031
Al :	0.0015	0.0006	0.113	0.14	Al2O3	0.213
Si :	0.0219	0.0088	1.248	1.49	SiO2	2.670
As :	0.0058	0.0016	0.377	0.17	As2O5	0.579
Ca :	0.0030	0.0009	0.091	0.08	CaO	0.128
S :	0.0053	0.0012	0.132	0.14	SO3	0.330
K :	0.0009	0.0001	0.010	0.01	K2O	0.012
Fe :	0.8766	0.5667	62.243	37.49	Fe2O3	88.989
Pb :	0.0019	0.0016	0.218	0.04	PbO	0.234
U :	0.0001	0.0001	0.014	0.00	UO2	0.016
O			28.733	60.41	by stoichiometry	

total : 93.202 93.202
iteration : 2
be carefull - k.r./w.f. = 0.29 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 80 x= 5261 y= -24583 z= 19 swrisife
NOPI_425_3a_#4

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	5.90	4.73	0.00139	7.6		
Al	32464	313.67	9.40	0.02643	0.9		
Si	27735	343.29	15.15	0.03317	1.2		
As	37667	25.16	7.32	0.00678	2.9		
Ca	38390	16.40	6.55	0.00261	5.5		
S	61386	10.10	2.50	0.00513	5.8		
K	42757	7.75	6.90	0.00066	8.1		
Fe	48079	1766.42	11.19	0.73757	0.5		
						201.	15.0
Pb	60414	43.30	32.55	0.00065	2.5		
U	44673	119.81	83.77	0.00134	1.3		

Analysis no. 80 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0014	0.0001	0.022	0.03	Na2O	0.029
Al :	0.0264	0.0113	1.970	2.59	Al2O3	3.722
Si :	0.0332	0.0133	1.897	2.40	SiO2	4.059
As :	0.0068	0.0019	0.433	0.20	As2O5	0.663
Ca :	0.0026	0.0008	0.081	0.07	CaO	0.113
S :	0.0051	0.0011	0.129	0.14	SO3	0.322
K :	0.0007	0.0001	0.008	0.01	K2O	0.009
Fe :	0.7376	0.4768	53.320	33.90	Fe2O3	76.232
Pb :	0.0006	0.0005	0.075	0.01	PbO	0.081
U :	0.0013	0.0011	0.149	0.02	UO2	0.169
O			27.317	60.62	by stoichiometry	

total : 85.399 85.399
iteration : 3
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.45 for As

point n : 81 x= 5040 y= -24740 z= 19 swrisife
NOPI_425_3a_#5

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	8.23	4.27	0.00473	6.4		
Al	32464	87.77	9.18	0.00683	1.7		
Si	27735	506.31	14.55	0.04972	1.0		
As	37667	42.24	8.60	0.01278	2.2		
Ca	38390	22.10	6.75	0.00406	4.8		
S	61386	5.87	2.27	0.00243	7.6		
K	42757	8.15	6.50	0.00128	7.9		
Fe	48079	1790.98	10.84	0.74809	0.5		
						201.	15.0
Pb	60414	68.18	33.73	0.00208	2.0		
U	44673	116.63	81.00	0.00132	1.3		

Analysis no. 81 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0047	0.0002	0.074	0.11	Na2O	0.100

Al :	0.0068	0.0029	0.510	0.67	Al2O3	0.964
Si :	0.0497	0.0200	2.821	3.56	SiO2	6.035
As :	0.0128	0.0036	0.816	0.39	As2O5	1.252
Ca :	0.0041	0.0013	0.126	0.11	CaO	0.176
S :	0.0024	0.0005	0.061	0.07	SO3	0.152
K :	0.0013	0.0001	0.015	0.01	K2O	0.018
Fe :	0.7481	0.4836	53.916	34.19	Fe2O3	77.085
Pb :	0.0021	0.0017	0.240	0.04	PbO	0.259
U :	0.0013	0.0011	0.147	0.02	UO2	0.167
O			27.481	60.83	by stoichiometry	
total :			86.208			86.208

iteration : 3
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.45 for As

point n : 82 x= 5198 y= -24818 z= 19 swrisife
NOPI_425_3a_#6

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	4.63	3.37	0.00151	8.5		
Al	32464	84.86	8.93	0.00660	1.7		
Si	27735	335.27	14.85	0.03240	1.2		
As	37667	24.72	7.54	0.00653	2.9		
Ca	38390	17.65	5.55	0.00320	5.3		
S	61386	7.57	1.73	0.00393	6.7		
K	42757	7.85	6.45	0.00109	8.0		
Fe	48079	1948.78	10.67	0.81452	0.5		
						201.	15.0
Pb	60414	67.31	34.90	0.00195	2.0		
U	44673	95.42	84.56	0.00040	1.4		

Analysis no. 82 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0015	0.0001	0.024	0.04	Na2O	0.032
Al :	0.0066	0.0028	0.496	0.64	Al2O3	0.938
Si :	0.0324	0.0130	1.842	2.27	SiO2	3.940
As :	0.0065	0.0019	0.423	0.19	As2O5	0.648
Ca :	0.0032	0.0010	0.099	0.09	CaO	0.138
S :	0.0039	0.0009	0.098	0.11	SO3	0.245
K :	0.0011	0.0001	0.012	0.01	K2O	0.015
Fe :	0.8145	0.5266	58.301	36.07	Fe2O3	83.354
Pb :	0.0020	0.0016	0.225	0.04	PbO	0.242
U :	0.0004	0.0003	0.045	0.01	UO2	0.051
O			28.039	60.55	by stoichiometry	
total :			89.603			89.603

iteration : 2
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 83 x= 4979 y= -24610 z= 22 swrisife
NOPI_425_3a_#7

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	21.13	4.47	0.01986	4.0		
Al	32464	275.13	10.15	0.02302	1.0		
Si	27735	14.90	13.05	0.00019	5.8		
As	37667	7.78	7.42	0.00014	5.1		
Ca	38390	5.60	6.35	0.00000	9.5		
S	61386	766.27	8.77	0.51095	0.9		

K	42757	365.02	7.60	0.27752	1.3
Fe	48079	961.30	7.60	0.40080	0.6
					201. 15.0
Pb	60414	634.28	119.62	0.03102	0.9
U	44673	72.29	79.20	0.00000	1.6

Analysis no. 83 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0199	0.0009	0.258	0.35	Na2O	0.347
Al :	0.0230	0.0098	1.536	1.78	Al2O3	2.902
Si :	0.0002	0.0001	0.010	0.01	SiO2	0.021
As :	0.0001	0.0000	0.008	0.00	As2O5	0.012
Ca :	0.0000	0.0000	0.000	0.00	CaO	
S :	0.5109	0.1114	12.403	12.07	SO3	30.968
K :	0.2775	0.0305	3.386	2.70	K2O	4.078
Fe :	0.4008	0.2591	29.812	16.65	Fe2O3	42.623
Pb :	0.0310	0.0260	3.477	0.52	PbO	3.745
U :	0.0000	0.0000	0.000	0.00	UO2	
O			33.808	65.92	by stoichiometry	
total :			84.697			84.697

iteration : 3
be carefull - k.r./w.f. = 0.37 for Na
be carefull - k.r./w.f. = 0.00 for Ca
be carefull - k.r./w.f. = 0.00 for U

point n : 84 x= 4612 y= -24893 z= 17 swrisife
NOPI_425_3b_#1

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	4.07	3.17	0.00107	9.1		
Al	32464	55.13	8.98	0.00401	2.1		
Si	27735	349.39	13.90	0.03392	1.2		
As	37667	26.32	7.68	0.00708	2.8		
Ca	38390	23.70	7.45	0.00430	4.6		
S	61386	10.03	2.90	0.00481	5.8		
K	42757	8.00	6.80	0.00093	7.9		
Fe	48079	1989.77	10.86	0.83163	0.5		
						201.	15.0
Pb	60414	64.63	31.78	0.00198	2.1		
U	44673	93.00	82.58	0.00039	1.4		

Analysis no. 84 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0011	0.0001	0.017	0.03	Na2O	0.023
Al :	0.0040	0.0017	0.302	0.38	Al2O3	0.570
Si :	0.0339	0.0136	1.926	2.33	SiO2	4.121
As :	0.0071	0.0020	0.459	0.21	As2O5	0.704
Ca :	0.0043	0.0014	0.133	0.11	CaO	0.185
S :	0.0048	0.0010	0.120	0.13	SO3	0.300
K :	0.0009	0.0001	0.011	0.01	K2O	0.013
Fe :	0.8316	0.5376	59.379	36.18	Fe2O3	84.895
Pb :	0.0020	0.0017	0.228	0.04	PbO	0.245
U :	0.0004	0.0003	0.043	0.01	UO2	0.049
O			28.488	60.58	by stoichiometry	
total :			91.105			91.105

iteration : 2
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 85 x= 4696 y= -24861 z= 17 swrisife
NOPI_425_3b_#2

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	4.10	3.07	0.00123	9.0		
Al	32464	45.85	9.15	0.00319	2.3		
Si	27735	327.26	15.30	0.03154	1.3		
As	37667	26.58	7.84	0.00712	2.8		
Ca	38390	18.40	6.45	0.00316	5.2		
S	61386	8.30	2.30	0.00405	6.4		
K	42757	8.00	6.25	0.00136	7.9		
Fe	48079	2000.82	10.84	0.83615	0.5		
						201.	15.0
Pb	60414	68.06	34.63	0.00202	2.0		
U	44673	90.70	82.47	0.00031	1.4		

Analysis no. 85 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0012	0.0001	0.020	0.03	Na2O	0.027
Al :	0.0032	0.0014	0.240	0.30	Al2O3	0.454
Si :	0.0315	0.0127	1.792	2.18	SiO2	3.833
As :	0.0071	0.0020	0.462	0.21	As2O5	0.709
Ca :	0.0032	0.0010	0.097	0.08	CaO	0.136
S :	0.0040	0.0009	0.101	0.11	SO3	0.252
K :	0.0014	0.0001	0.015	0.01	K2O	0.019
Fe :	0.8361	0.5406	59.671	36.49	Fe2O3	85.313
Pb :	0.0020	0.0017	0.232	0.04	PbO	0.250
U :	0.0003	0.0003	0.034	0.00	UO2	0.038
O			28.366	60.54	by stoichiometry	
total :			91.030			91.030

iteration : 2
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 86 x= 4442 y= -24824 z= 17 swrisife
NOPI_425_3b_#3

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	5.20	3.77	0.00171	8.0		
Al	32464	26.80	8.28	0.00161	3.1		
Si	27735	247.97	13.45	0.02371	1.4		
As	37667	41.02	8.24	0.01245	2.3		
Ca	38390	16.95	7.10	0.00261	5.4		
S	61386	6.67	2.23	0.00299	7.1		
K	42757	8.95	7.85	0.00085	7.5		
Fe	48079	1927.10	11.54	0.80491	0.5		
						201.	15.0
Pb	60414	65.96	35.98	0.00181	2.0		
U	44673	110.06	88.18	0.00081	1.3		

Analysis no. 86 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0017	0.0001	0.027	0.04	Na2O	0.037
Al :	0.0016	0.0007	0.122	0.16	Al2O3	0.230
Si :	0.0237	0.0095	1.351	1.72	SiO2	2.890
As :	0.0125	0.0035	0.809	0.39	As2O5	1.241
Ca :	0.0026	0.0008	0.080	0.07	CaO	0.112
S :	0.0030	0.0007	0.074	0.08	SO3	0.186
K :	0.0009	0.0001	0.010	0.01	K2O	0.012

Fe :	0.8049	0.5204	57.629	36.96	Fe2O3	82.393
Pb :	0.0018	0.0015	0.207	0.04	PbO	0.223
U :	0.0008	0.0007	0.090	0.01	UO2	0.102
O			27.026	60.51	by stoichiometry	
total :			87.426			87.426

iteration : 2
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 87 x= 4663 y= -24819 z= 17 swrisife
NOPI_425_3b_#4

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	4.97	3.77	0.00143	8.2		
Al	32464	158.23	9.50	0.01292	1.3		
Si	27735	286.76	13.80	0.02760	1.3		
As	37667	25.62	7.48	0.00689	2.8		
Ca	38390	20.35	7.30	0.00345	5.0		
S	61386	10.03	2.67	0.00497	5.8		
K	42757	9.10	6.20	0.00225	7.4		
Fe	48079	1936.83	10.80	0.80952	0.5		
						201.	15.0
Pb	60414	62.88	33.18	0.00179	2.1		
U	44673	105.34	83.84	0.00080	1.4		

Analysis no. 87 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0014	0.0001	0.023	0.03	Na2O	0.031
Al :	0.0129	0.0055	0.971	1.24	Al2O3	1.834
Si :	0.0276	0.0111	1.573	1.93	SiO2	3.366
As :	0.0069	0.0020	0.445	0.20	As2O5	0.683
Ca :	0.0035	0.0011	0.107	0.09	CaO	0.149
S :	0.0050	0.0011	0.124	0.13	SO3	0.310
K :	0.0023	0.0002	0.026	0.02	K2O	0.031
Fe :	0.8095	0.5234	57.956	35.79	Fe2O3	82.861
Pb :	0.0018	0.0015	0.206	0.03	PbO	0.222
U :	0.0008	0.0007	0.088	0.01	UO2	0.100
O			28.068	60.50	by stoichiometry	
total :			89.587			89.587

iteration : 2
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 88 x= 4571 y= -24843 z= 17 swrisife
NOPI_425_3b_#5

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	4.90	3.87	0.00123	8.3		
Al	32464	142.22	9.68	0.01152	1.3		
Si	27735	354.55	15.35	0.03430	1.2		
As	37667	46.02	8.18	0.01438	2.1		
Ca	38390	21.65	7.05	0.00386	4.8		
S	61386	10.10	2.20	0.00533	5.8		
K	42757	9.80	7.20	0.00202	7.2		
Fe	48079	1946.51	11.31	0.81333	0.5		
						201.	15.0
Pb	60414	58.38	33.45	0.00150	2.2		
U	44673	100.29	83.49	0.00062	1.4		

Analysis no. 88 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0012	0.0001	0.019	0.03	Na2O	0.026
Al :	0.0115	0.0049	0.865	1.08	Al2O3	1.635
Si :	0.0343	0.0138	1.956	2.35	SiO2	4.184
As :	0.0144	0.0041	0.923	0.42	As2O5	1.416
Ca :	0.0039	0.0012	0.119	0.10	CaO	0.167
S :	0.0053	0.0012	0.133	0.14	SO3	0.333
K :	0.0020	0.0002	0.023	0.02	K2O	0.028
Fe :	0.8133	0.5258	58.112	35.14	Fe2O3	83.084
Pb :	0.0015	0.0013	0.173	0.03	PbO	0.187
U :	0.0006	0.0005	0.069	0.01	UO2	0.078
O			28.744	60.68	by stoichiometry	
total :			91.137			91.137

iteration : 3
be carefull - k.r./w.f. = 0.30 for Na
be carefull - k.r./w.f. = 0.44 for As

point n : 89 x= 4337 y= -25039 z= 17 swrisife NOPI_425_3b_#6

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	6.33	3.17	0.00377	7.3		
Al	32464	104.42	8.98	0.00829	1.6		
Si	27735	12.70	11.70	0.00010	6.3		
As	37667	6.80	7.26	0.00000	5.4		
Ca	38390	5.35	5.15	0.00005	9.7		
S	61386	759.45	8.63	0.50638	0.9		
K	42757	544.34	8.85	0.41575	1.1		
Fe	48079	978.07	7.77	0.40773	0.6		
						201.	15.0
Pb	60414	683.76	122.57	0.03382	0.9		
U	44673	75.64	84.26	0.00000	1.6		

Analysis no. 89 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0038	0.0002	0.049	0.07	Na2O	0.066
Al :	0.0083	0.0035	0.553	0.65	Al2O3	1.044
Si :	0.0001	0.0000	0.005	0.01	SiO2	0.011
As :	0.0000	0.0000	0.000	0.00	As2O5	
Ca :	0.0001	0.0000	0.002	0.00	CaO	0.002
S :	0.5064	0.1104	12.199	12.04	SO3	30.461
K :	0.4157	0.0457	5.052	4.09	K2O	6.086
Fe :	0.4077	0.2636	30.233	17.13	Fe2O3	43.224
Pb :	0.0338	0.0284	3.766	0.58	PbO	4.056
U :	0.0000	0.0000	0.000	0.00	UO2	
O			33.093	65.45	by stoichiometry	
total :			84.951			84.951

iteration : 3
be carefull - k.r./w.f. = 0.36 for Na
be carefull - k.r./w.f. = 0.00 for As
be carefull - k.r./w.f. = 0.00 for U

point n : 90 x= 4382 y= -24972 z= 17 swrisife NOPI_425_3b_#7

elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	5.67	3.43	0.00266	7.7		

Al	32464	170.81	9.60	0.01401	1.2
Si	27735	12.90	12.15	0.00008	6.2
As	37667	7.56	7.24	0.00012	5.2
Ca	38390	6.45	5.55	0.00024	8.8
S	61386	777.37	9.00	0.51837	0.9
K	42757	418.35	7.40	0.31914	1.3
Fe	48079	1007.55	8.04	0.42012	0.6
					201. 15.0
Pb	60414	375.68	123.19	0.01522	1.0
U	44673	71.68	76.05	0.00000	1.6

Analysis no. 90 within swrisife

element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0027	0.0001	0.035	0.05	Na2O	0.048
Al :	0.0140	0.0060	0.945	1.08	Al2O3	1.785
Si :	0.0001	0.0000	0.004	0.00	SiO2	0.009
As :	0.0001	0.0000	0.007	0.00	As2O5	0.011
Ca :	0.0002	0.0001	0.008	0.01	CaO	0.011
S :	0.5184	0.1130	12.617	12.16	SO3	31.504
K :	0.3191	0.0351	3.878	3.06	K2O	4.671
Fe :	0.4201	0.2716	31.425	17.38	Fe2O3	44.930
Pb :	0.0152	0.0128	1.710	0.25	PbO	1.842
U :	0.0000	0.0000	0.000	0.00	UO2	
O			34.180	66.00	by stoichiometry	
total :			84.810			84.810

iteration : 3
be carefull - k.r./w.f. = 0.36 for Na
be carefull - k.r./w.f. = 0.00 for U

point n : 91 x= 4722 y= -24772 z= 18 swrisife
NOPI_425_3b_#8

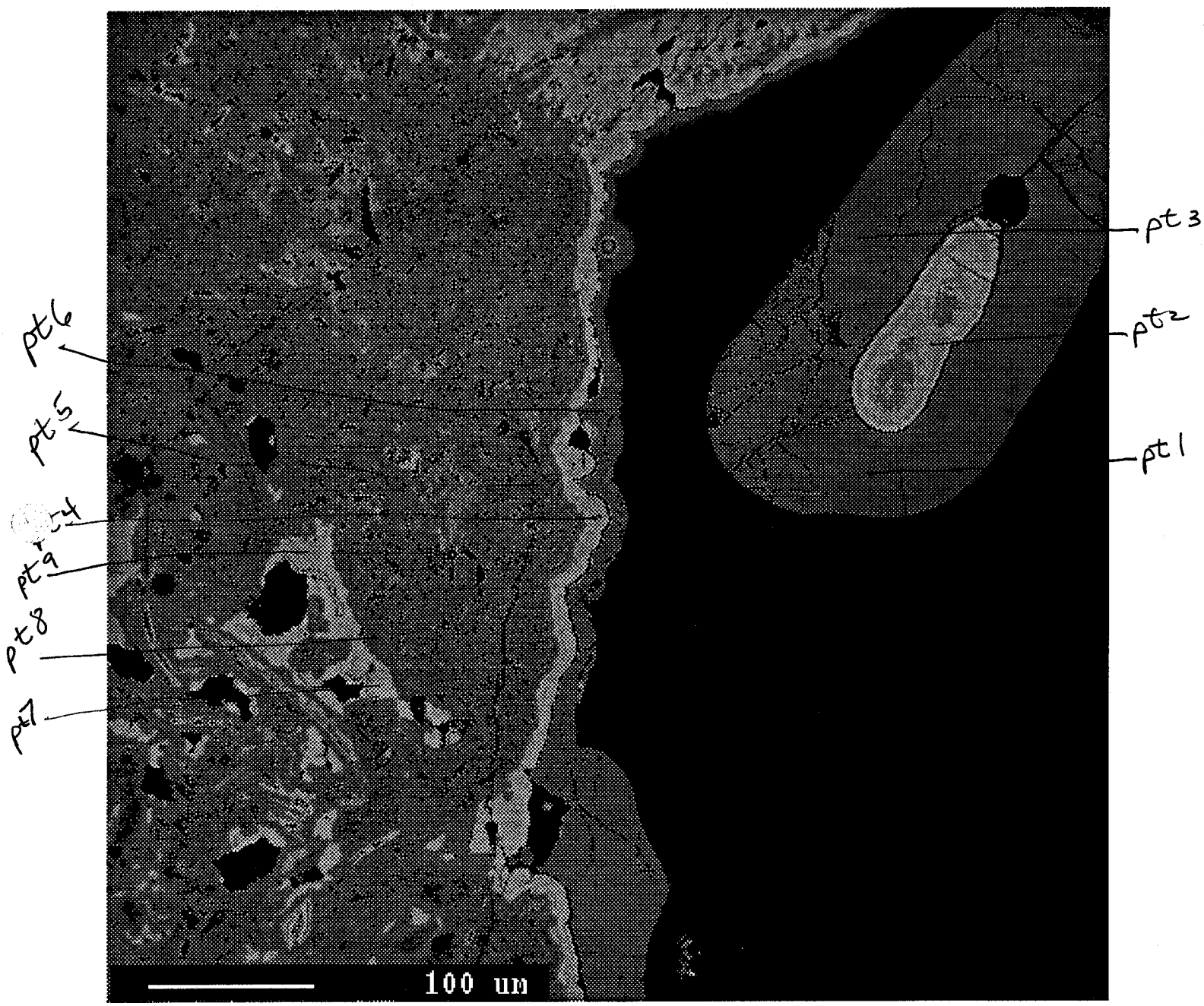
elt.	peak pos.	peak (c/s)	backgr. (c/s)	i.x./i.std.	sig/k	beam	kv
						15.	15.0
Na	46351	5.27	3.03	0.00266	8.0		
Al	32464	118.65	9.33	0.00950	1.5		
Si	27735	13.65	12.35	0.00013	6.1		
As	37667	6.38	7.02	0.00000	5.6		
Ca	38390	5.70	5.40	0.00008	9.4		
S	61386	764.63	10.37	0.50876	0.9		
K	42757	522.90	8.10	0.39971	1.2		
Fe	48079	996.81	8.36	0.41540	0.6		
						201.	15.0
Pb	60414	470.29	126.20	0.02074	1.0		
U	44673	70.06	74.96	0.00000	1.6		

Analysis no. 91 within swrisife

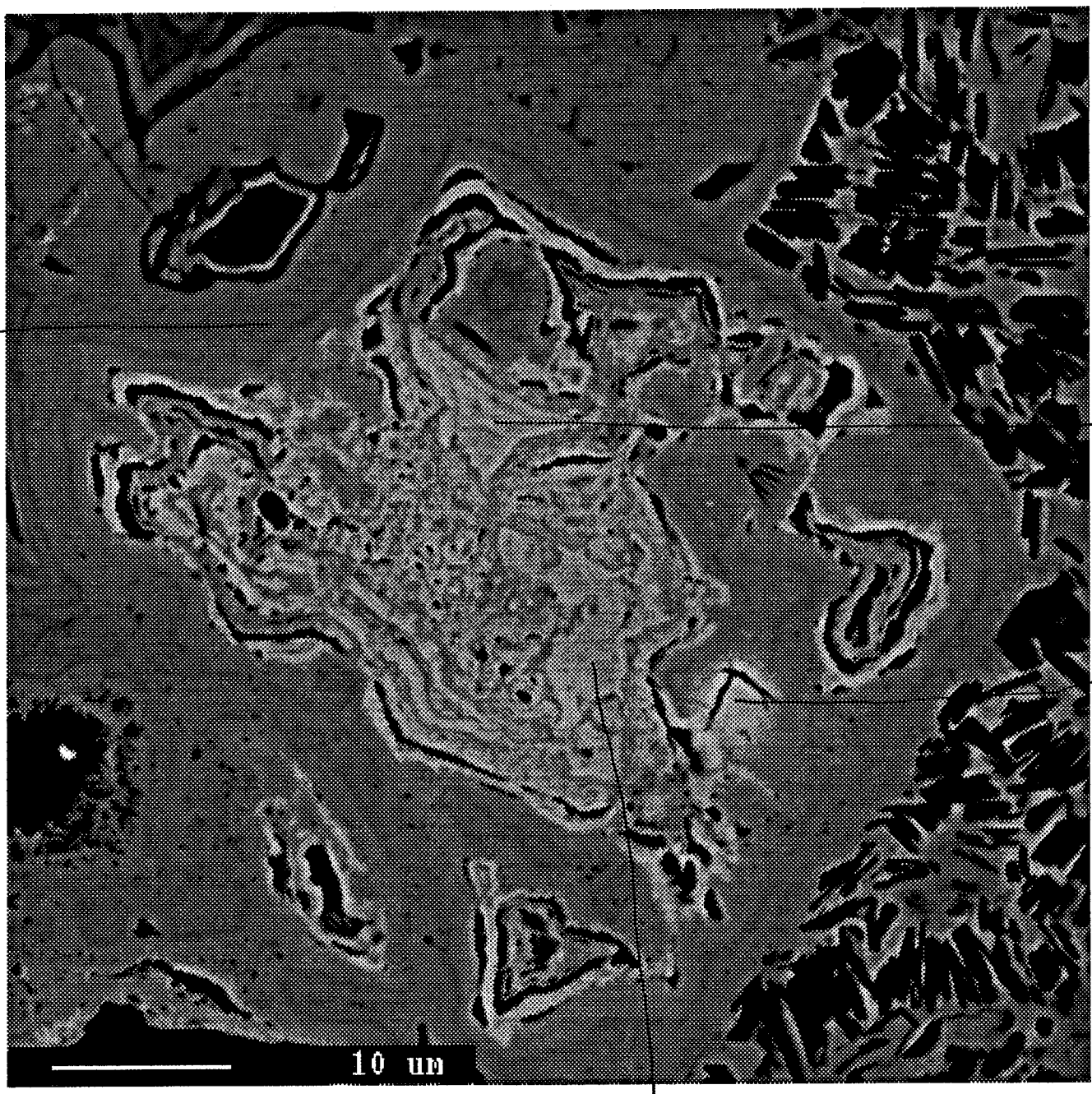
element	k i.x./i.std.	k.ratio	wt. % concen.	normalized atom. c	compound	concen.
Na :	0.0027	0.0001	0.035	0.05	Na2O	0.047
Al :	0.0095	0.0041	0.638	0.74	Al2O3	1.206
Si :	0.0001	0.0001	0.007	0.01	SiO2	0.015
As :	0.0000	0.0000	0.000	0.00	As2O5	
Ca :	0.0001	0.0000	0.003	0.00	CaO	0.004
S :	0.5088	0.1109	12.324	12.03	SO3	30.771
K :	0.3997	0.0439	4.851	3.88	K2O	5.844
Fe :	0.4154	0.2686	30.981	17.36	Fe2O3	44.293
Pb :	0.0207	0.0174	2.320	0.35	PbO	2.499
U :	0.0000	0.0000	0.000	0.00	UO2	
O			33.521	65.58	by stoichiometry	
total :			84.679			84.679

```
iteration :  3
   be carefull - k.r./w.f. = 0.36 for Na
   be carefull - k.r./w.f. = 0.00 for As
   be carefull - k.r./w.f. = 0.00 for U
```

418-1_150xBSE



418_2_1500 BSE



419_2_600x BSE

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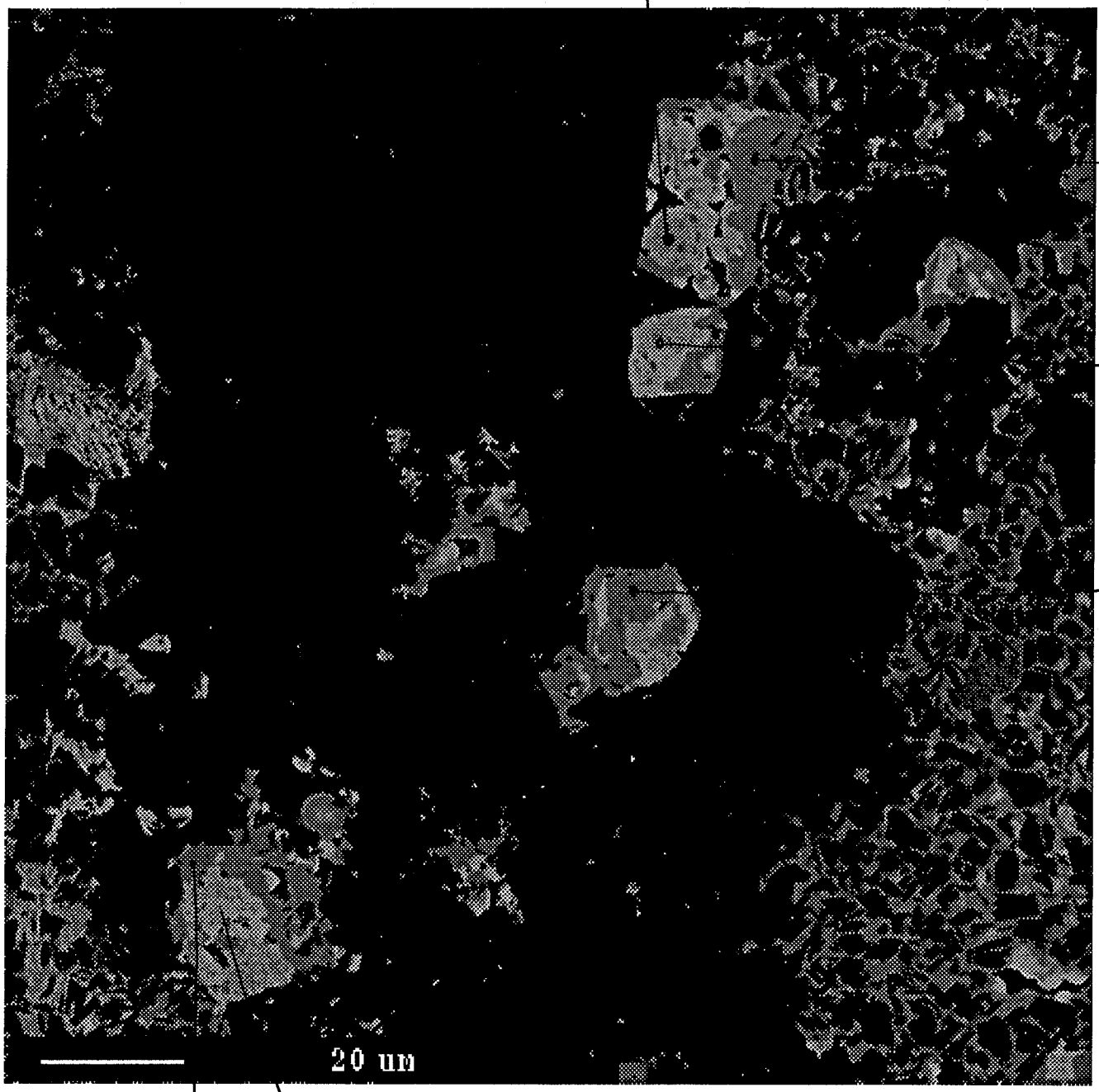
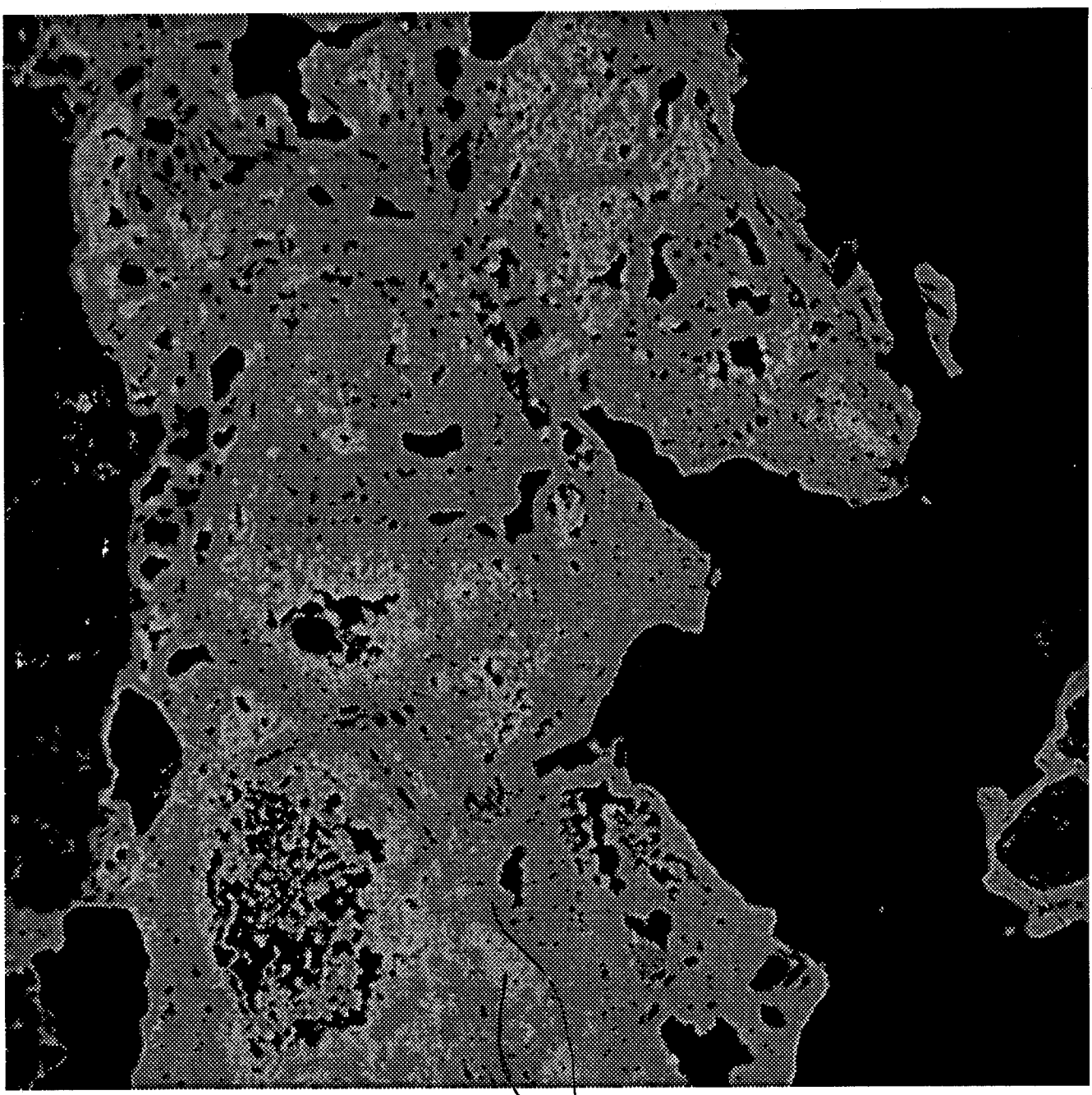


NOPI-419_1_300X. BSE

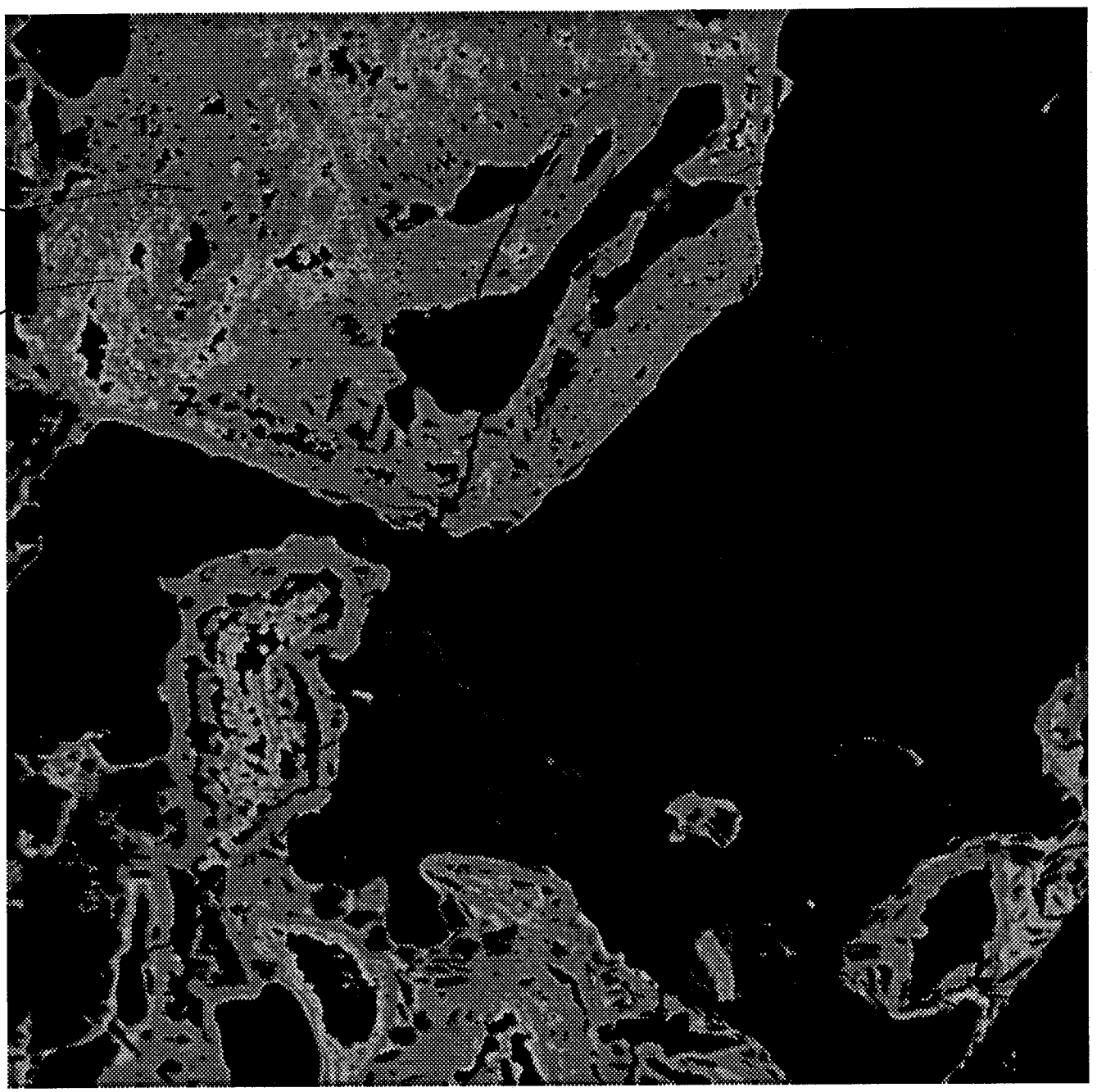
size= 1024

NW quadrant



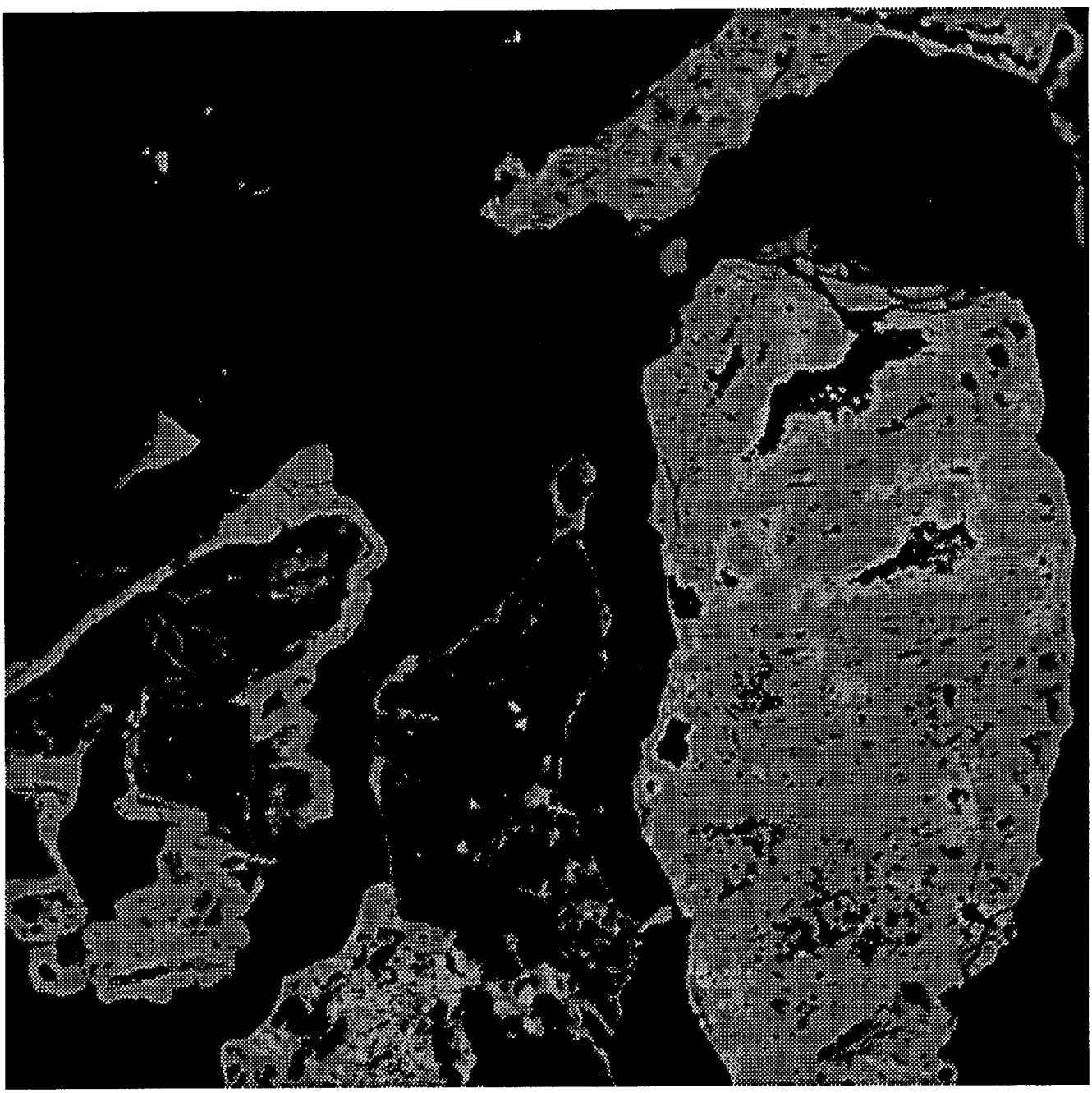
419_1

SW



419-1

NE



419_1

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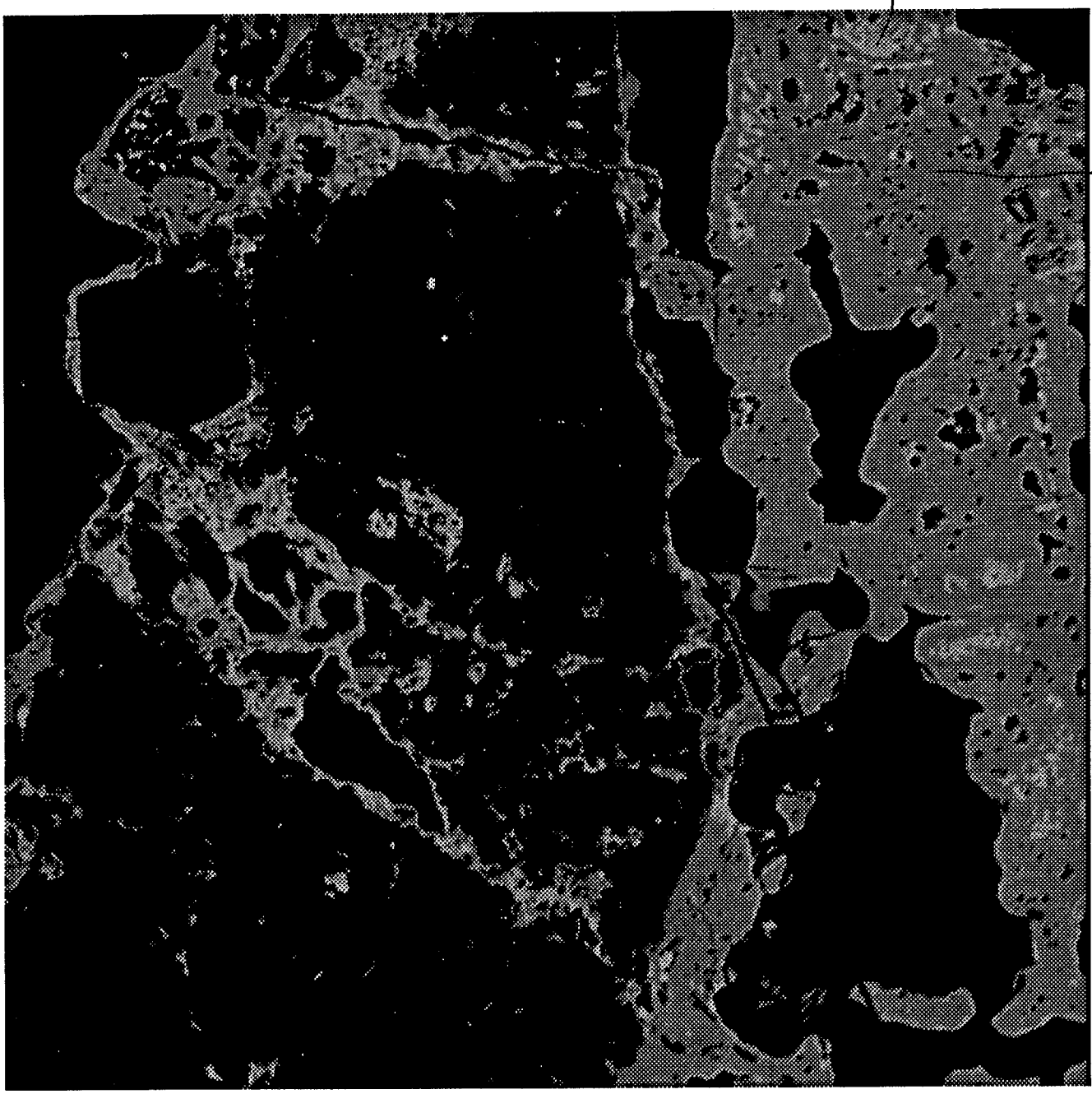
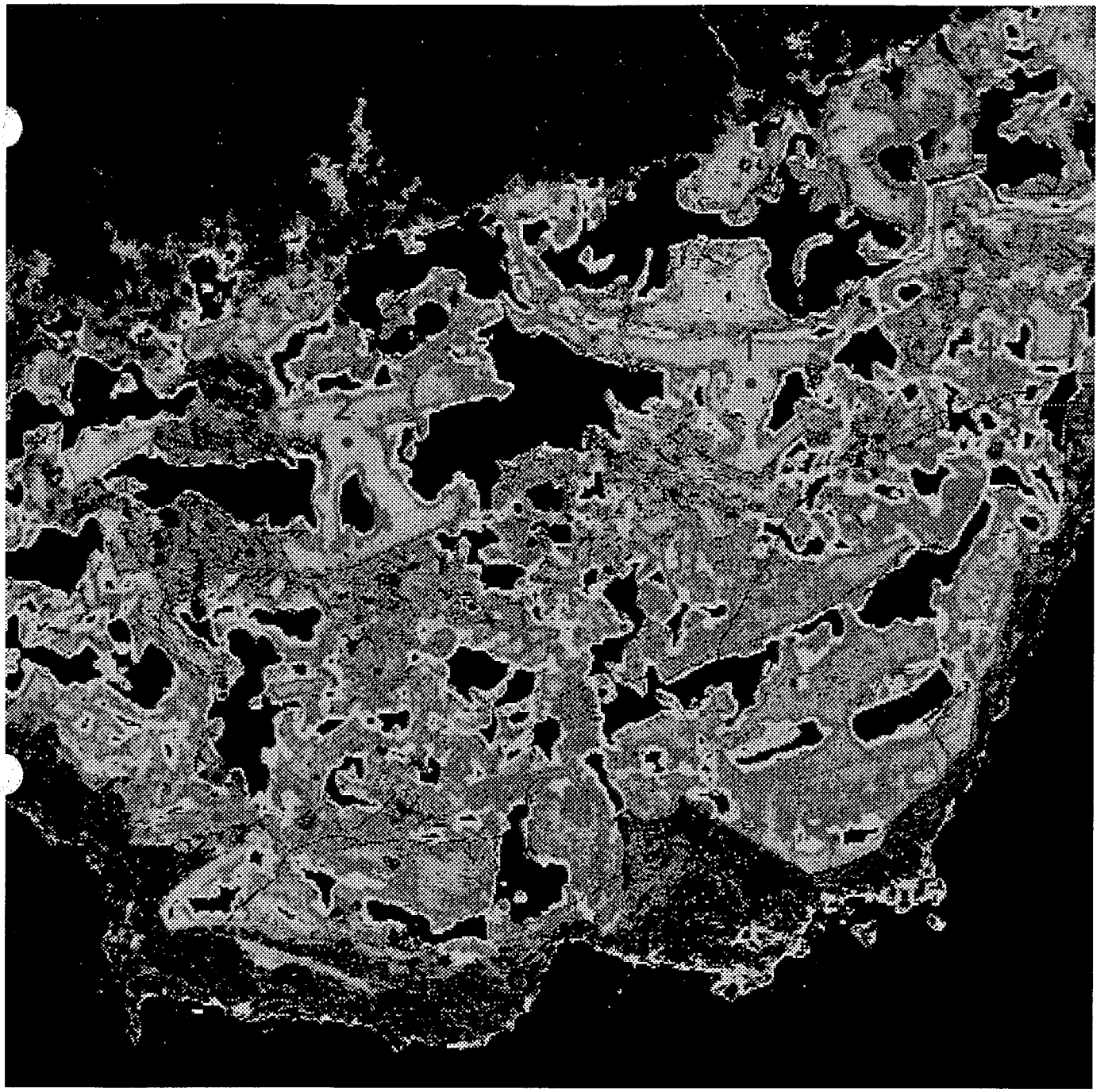
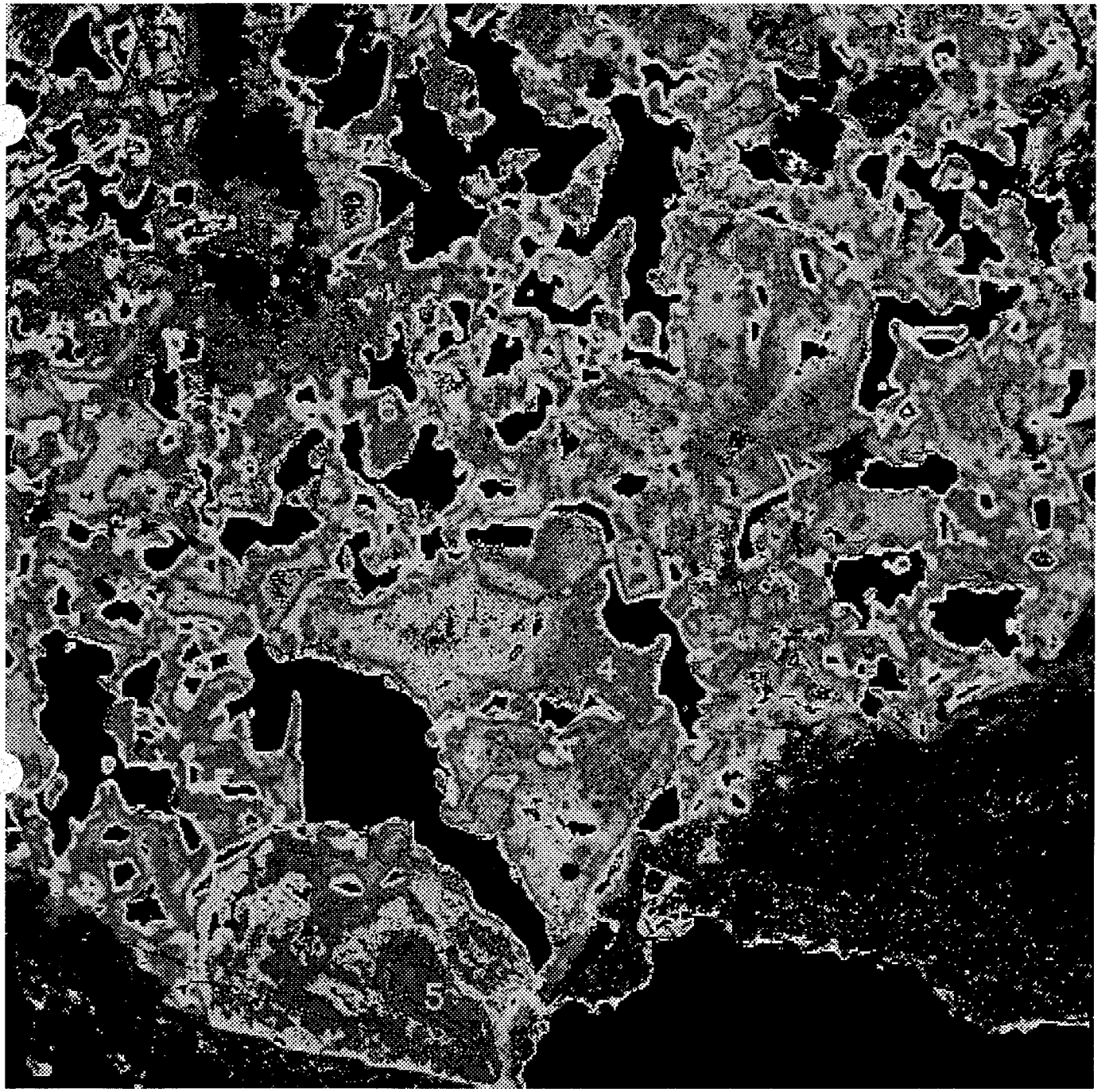
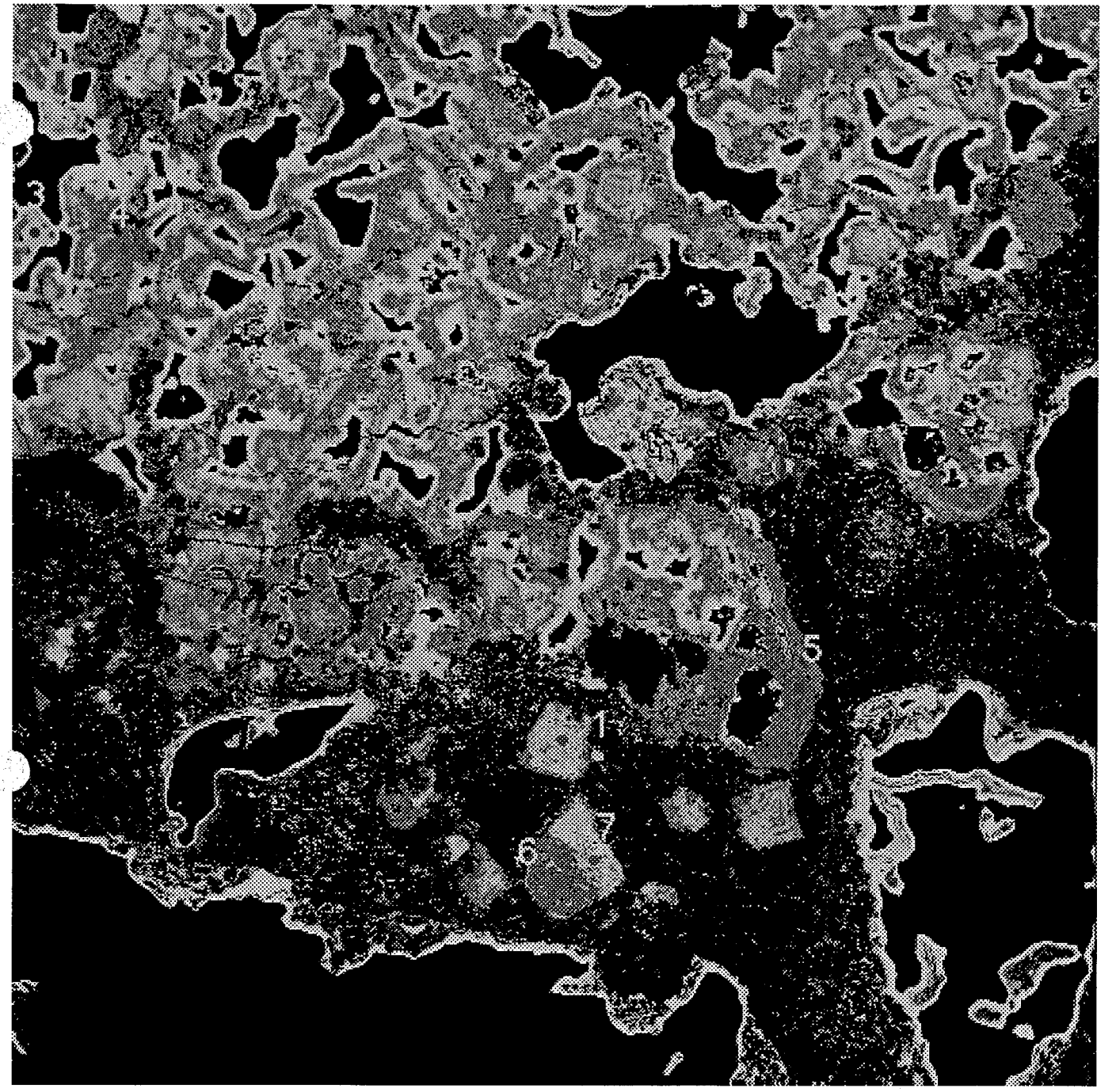




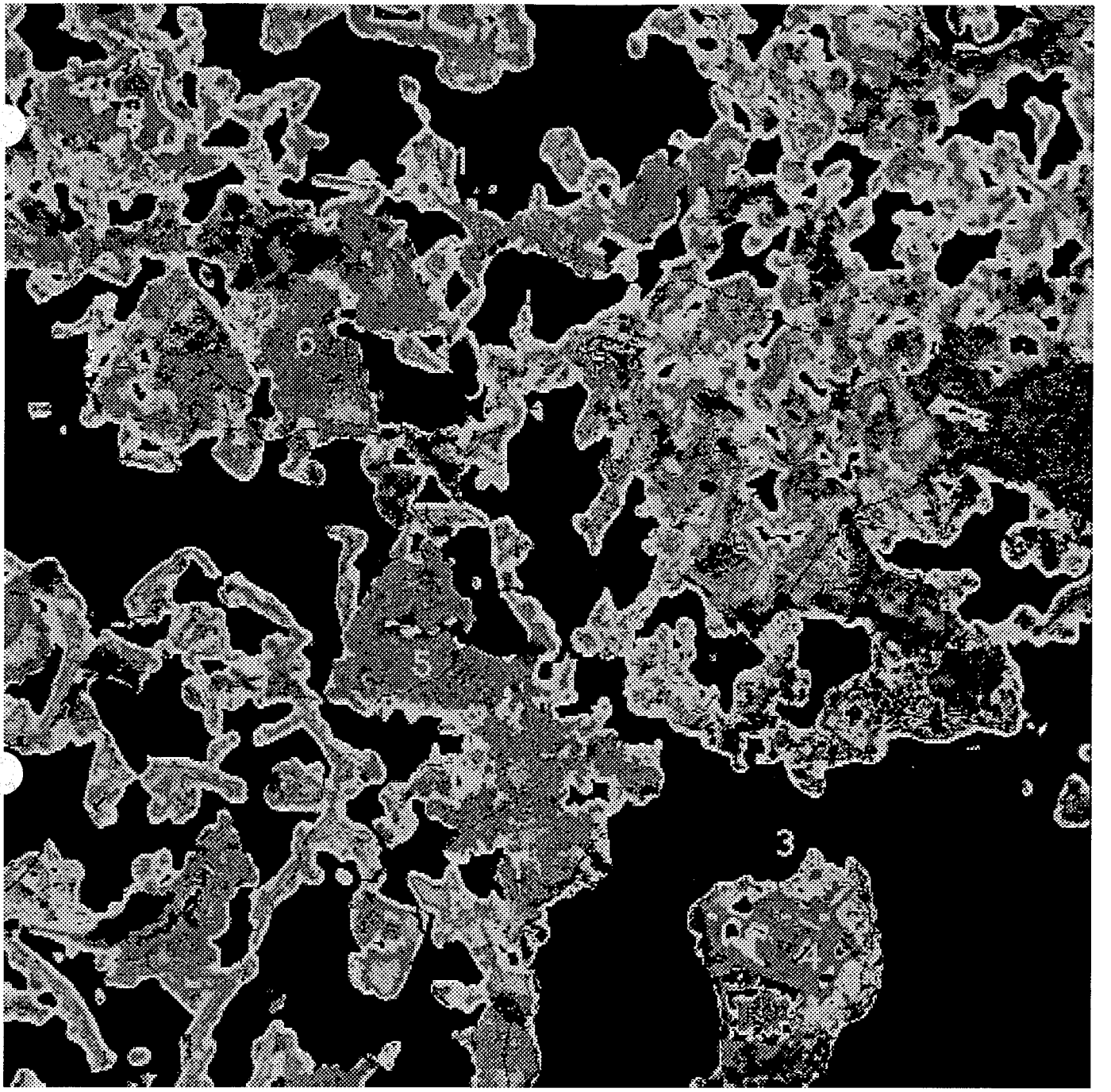
420_1a_200xBSE map.pict



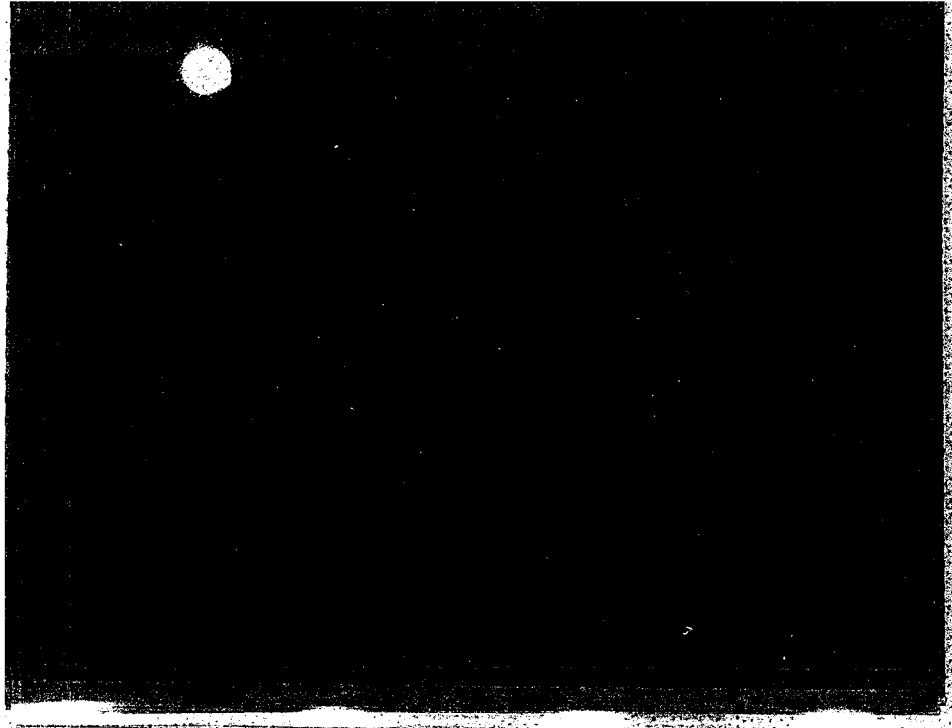
420_1b _ 200x BSE map.pict

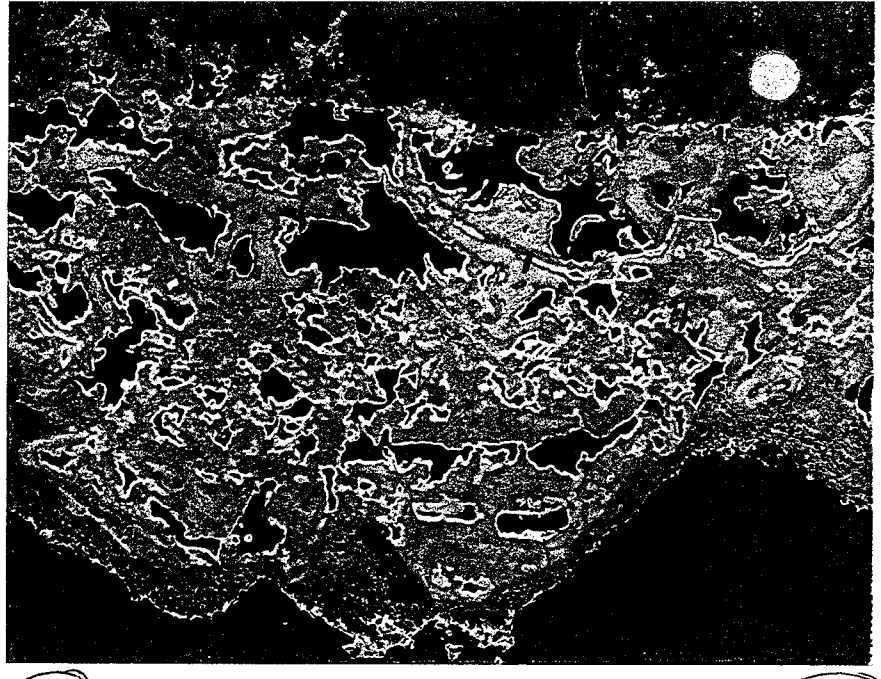


420_2a - 200x BSE map.pict



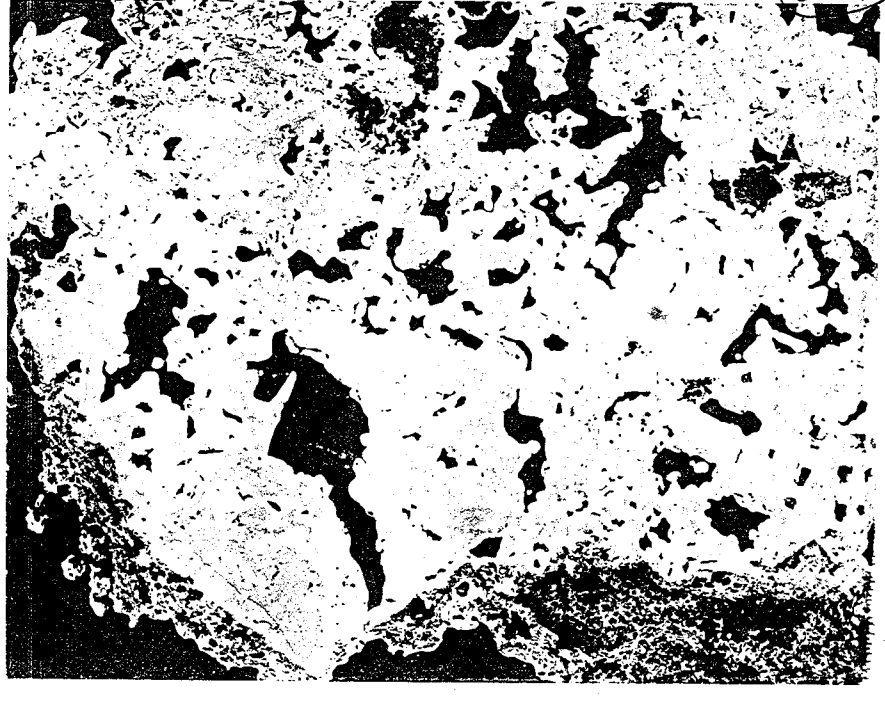
420_26_200x BSE map.pict





(a) WNW of center (20x)

(b) NE of center (20x)

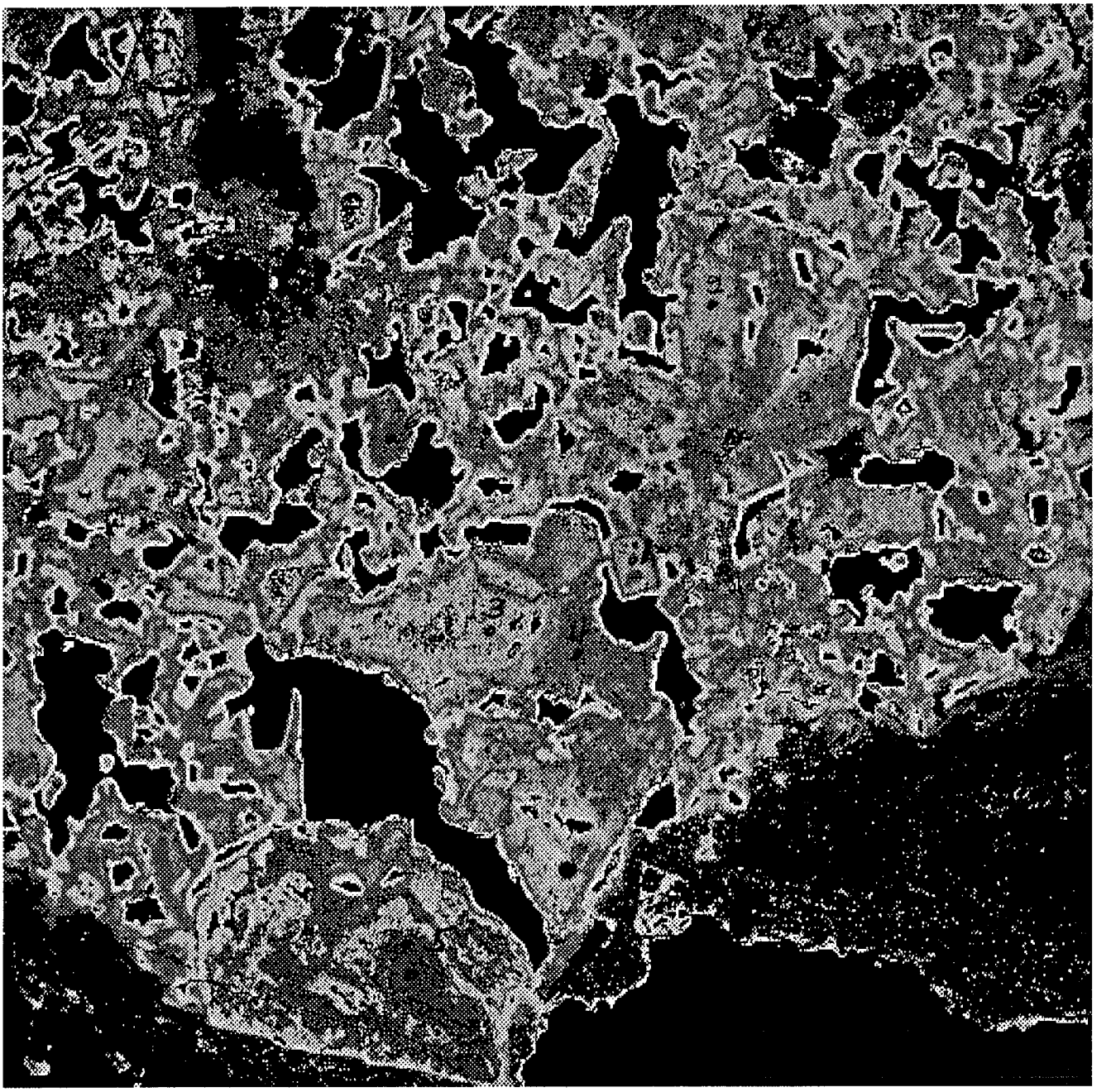


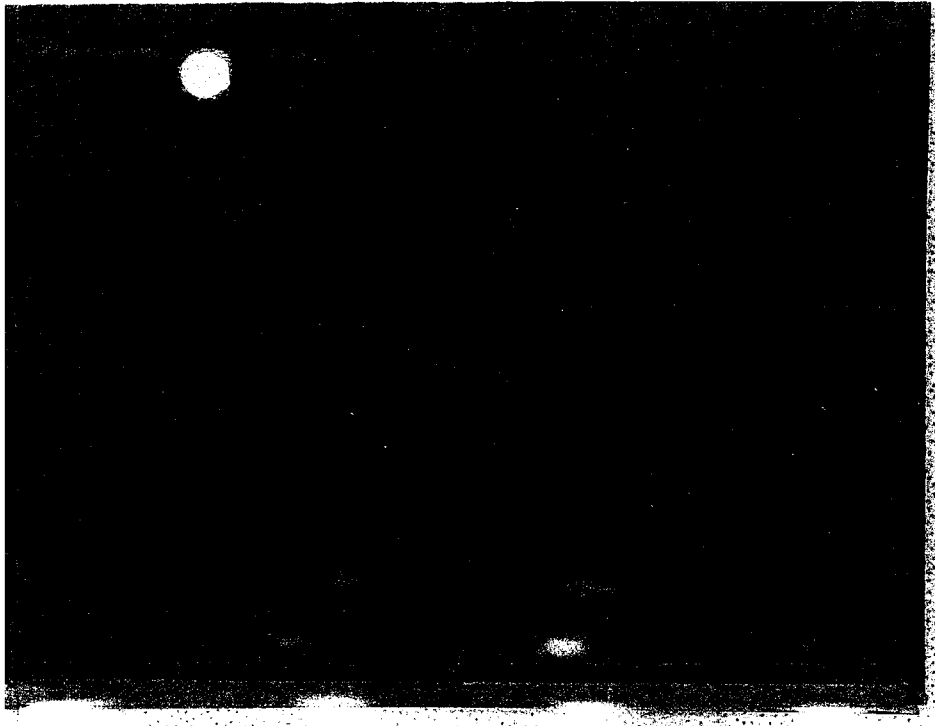
NOPI-420 Site 1 (5x)

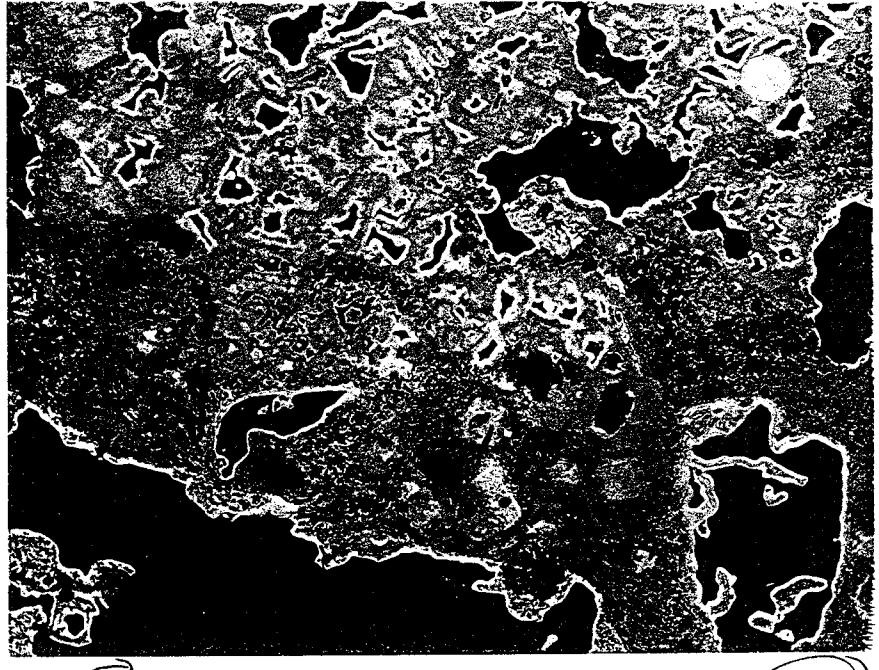
NOPI-420 Site 1

(b) NOPI-420 Site1 ("IOX")

BSE (optical unusable)

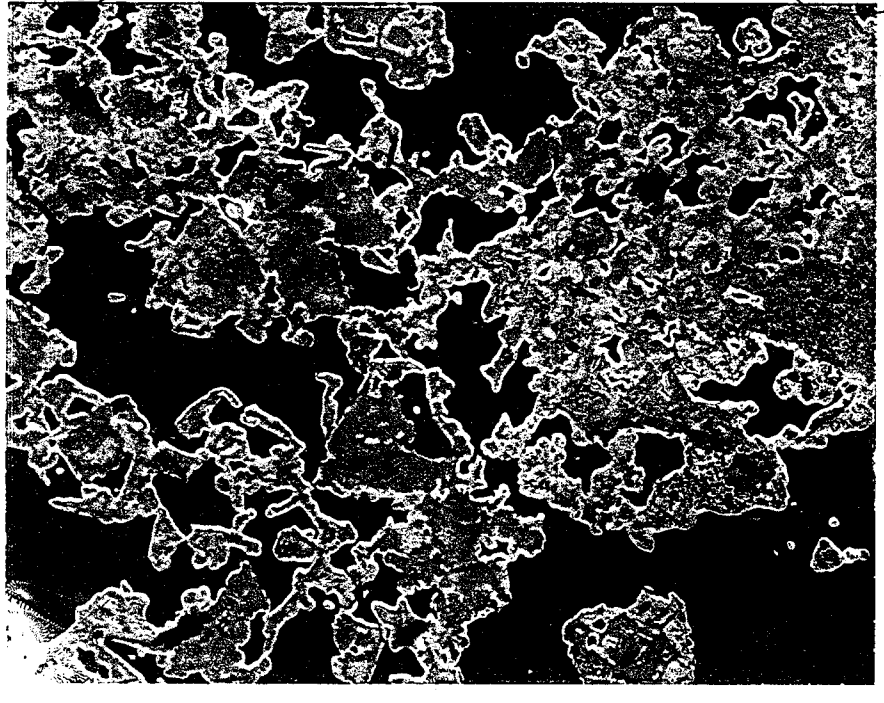




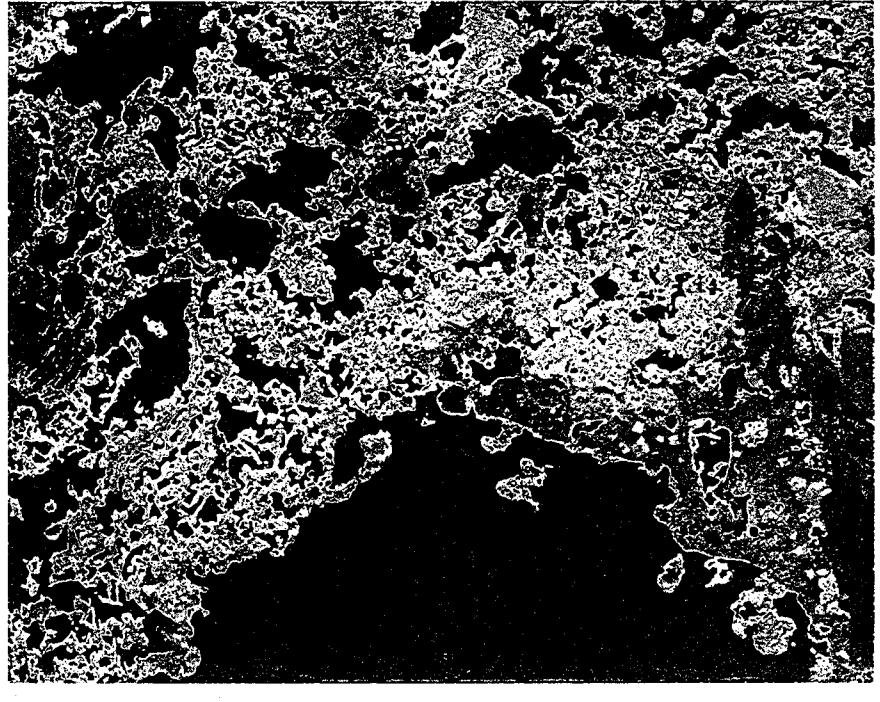


(a) ESE of center (20x)

(b) WSW of center (20x)



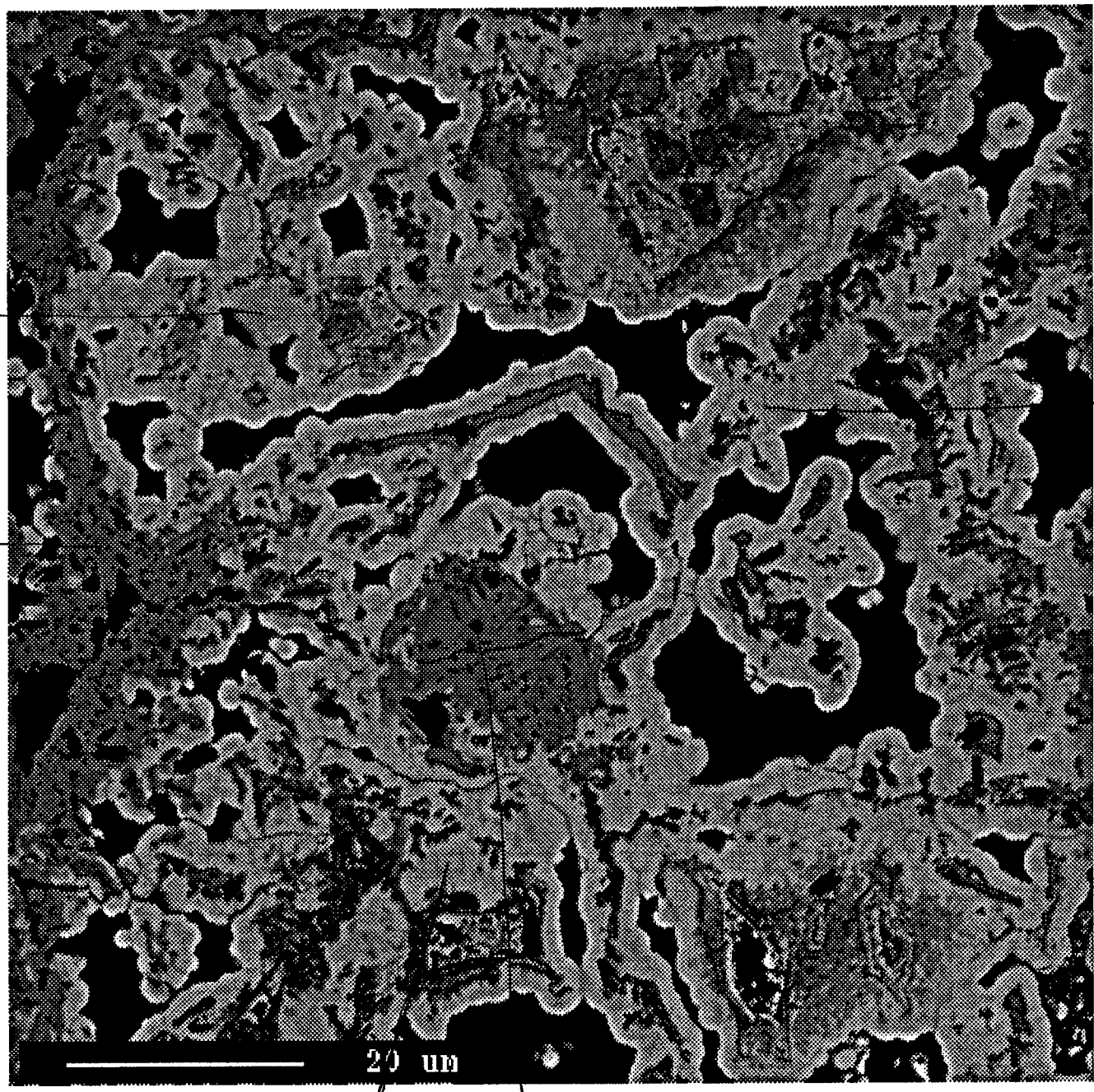
NOPI-420 Site 2 (5x)



NOPI-420 Site 2

421_2 - 100DX BSE

pt 2
• gray material
(goethite)



pt4

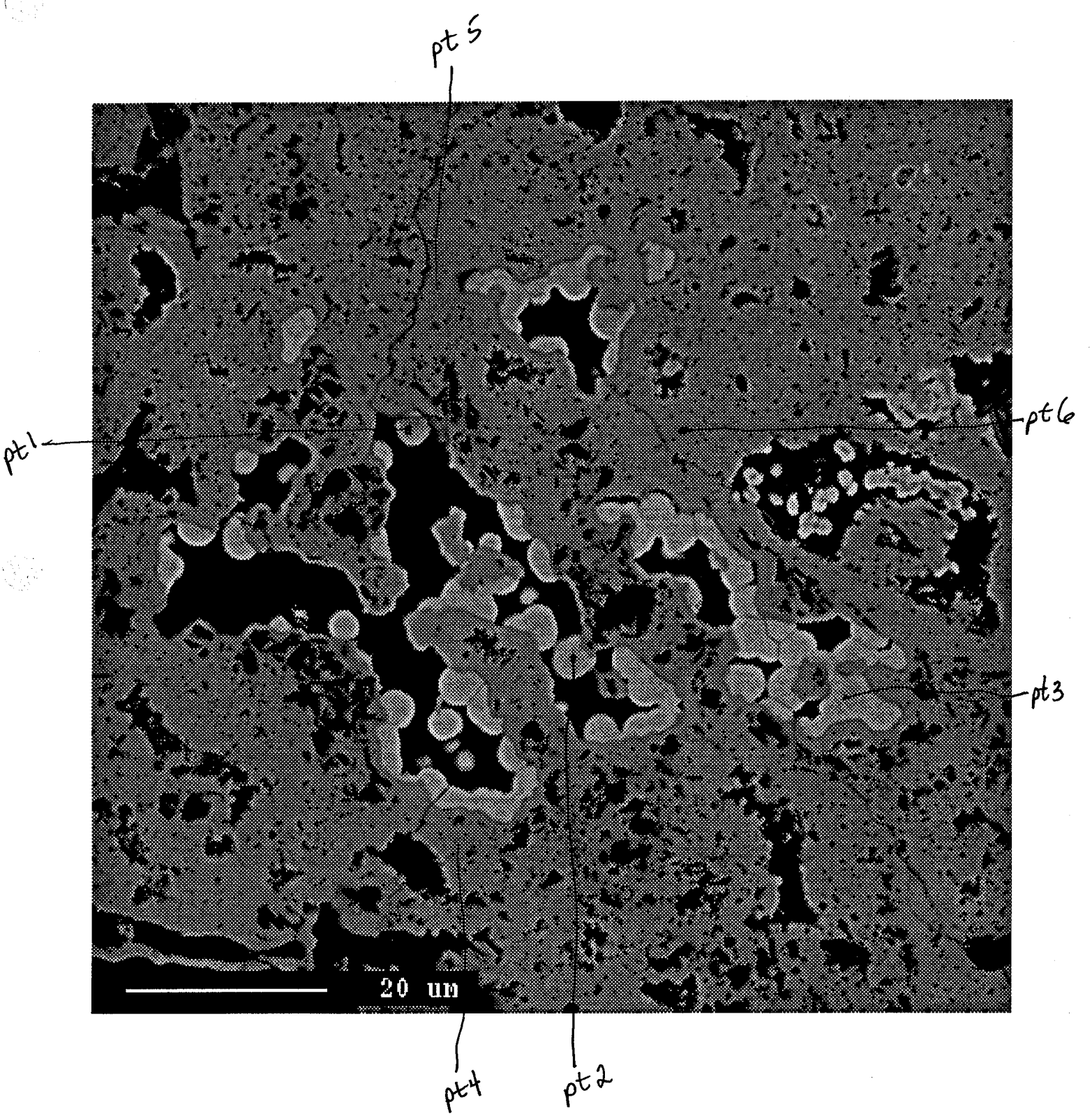
pt6

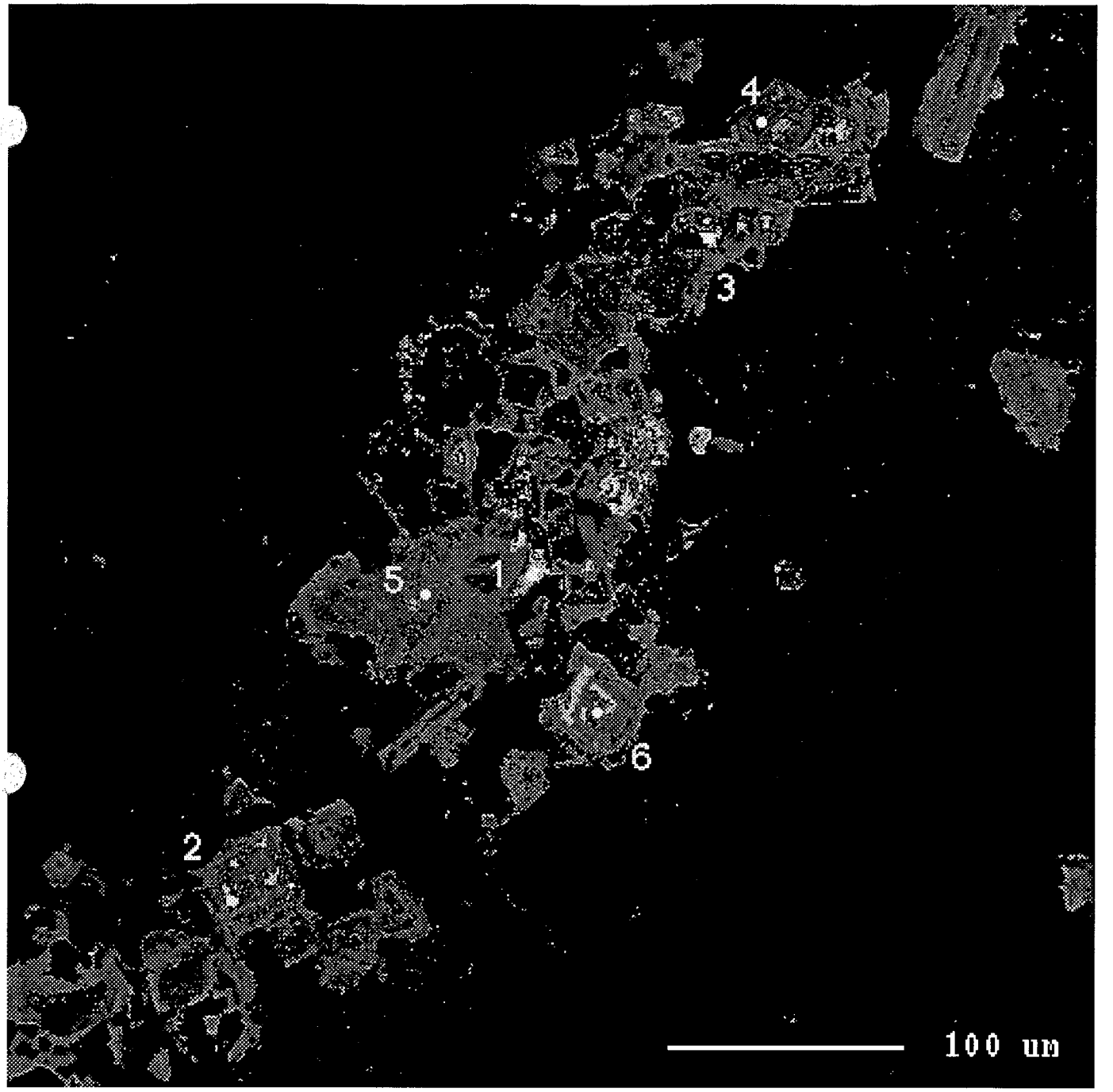
pt3

pt5

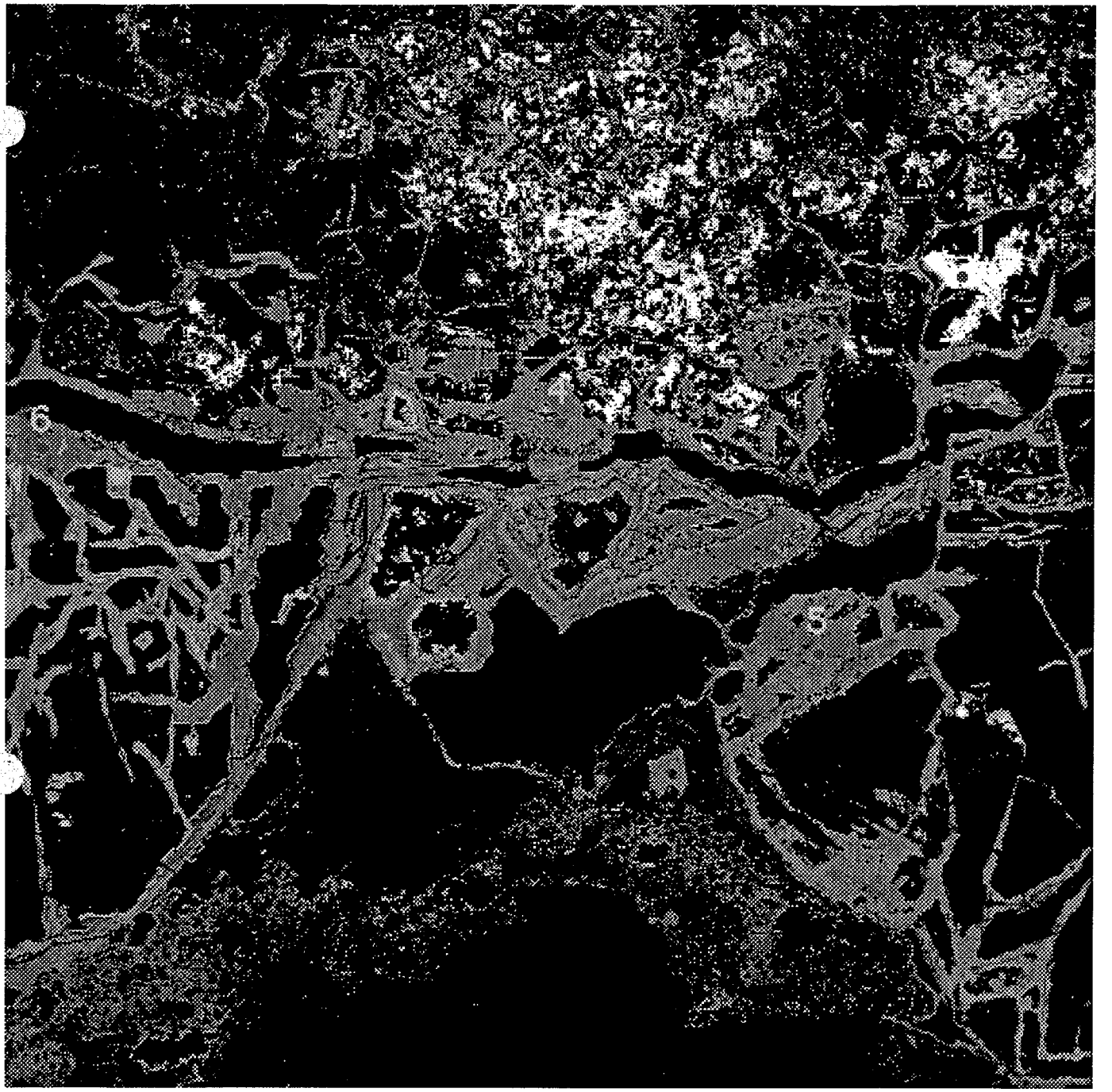
pt1

421_1_1000X

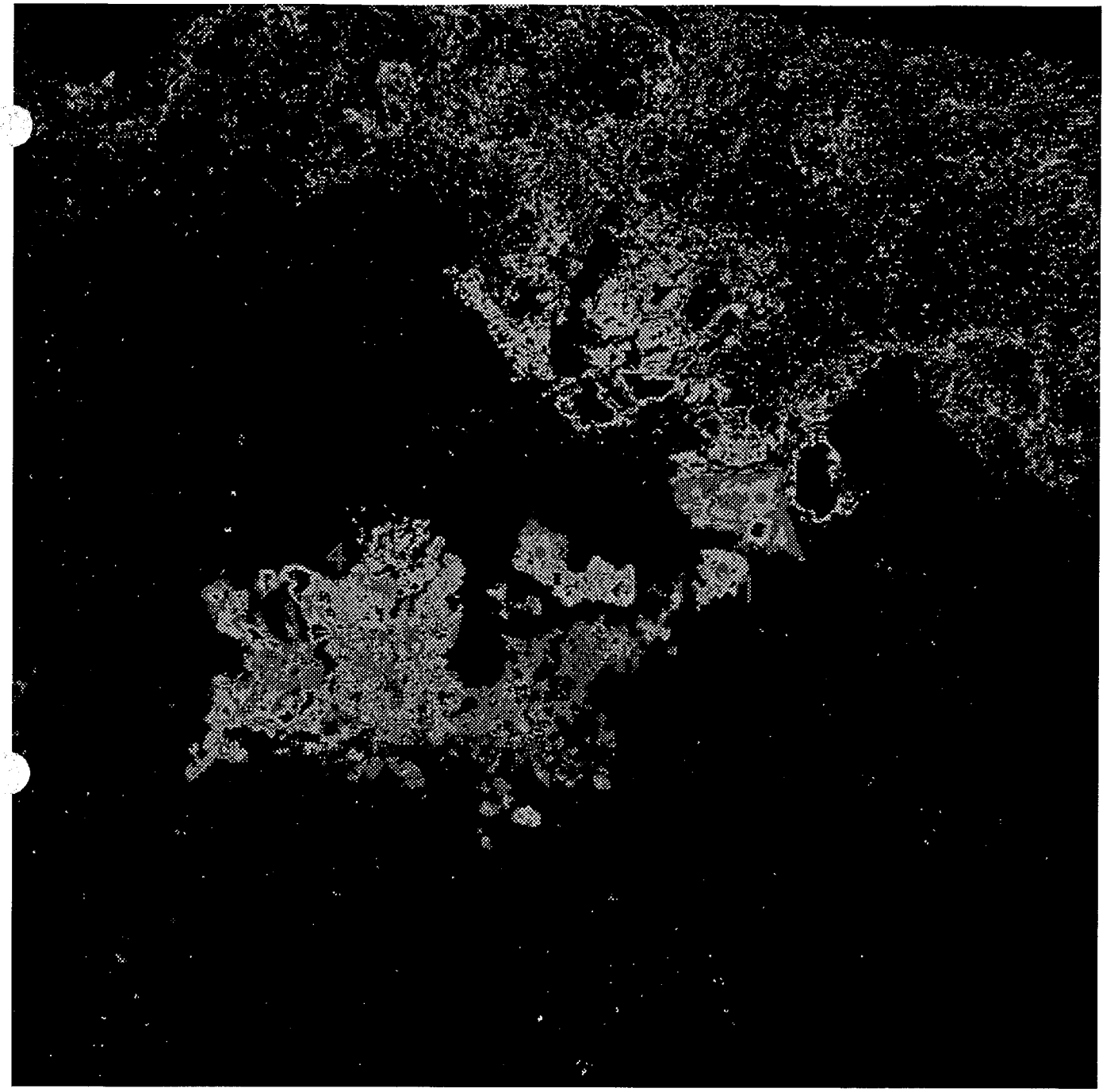




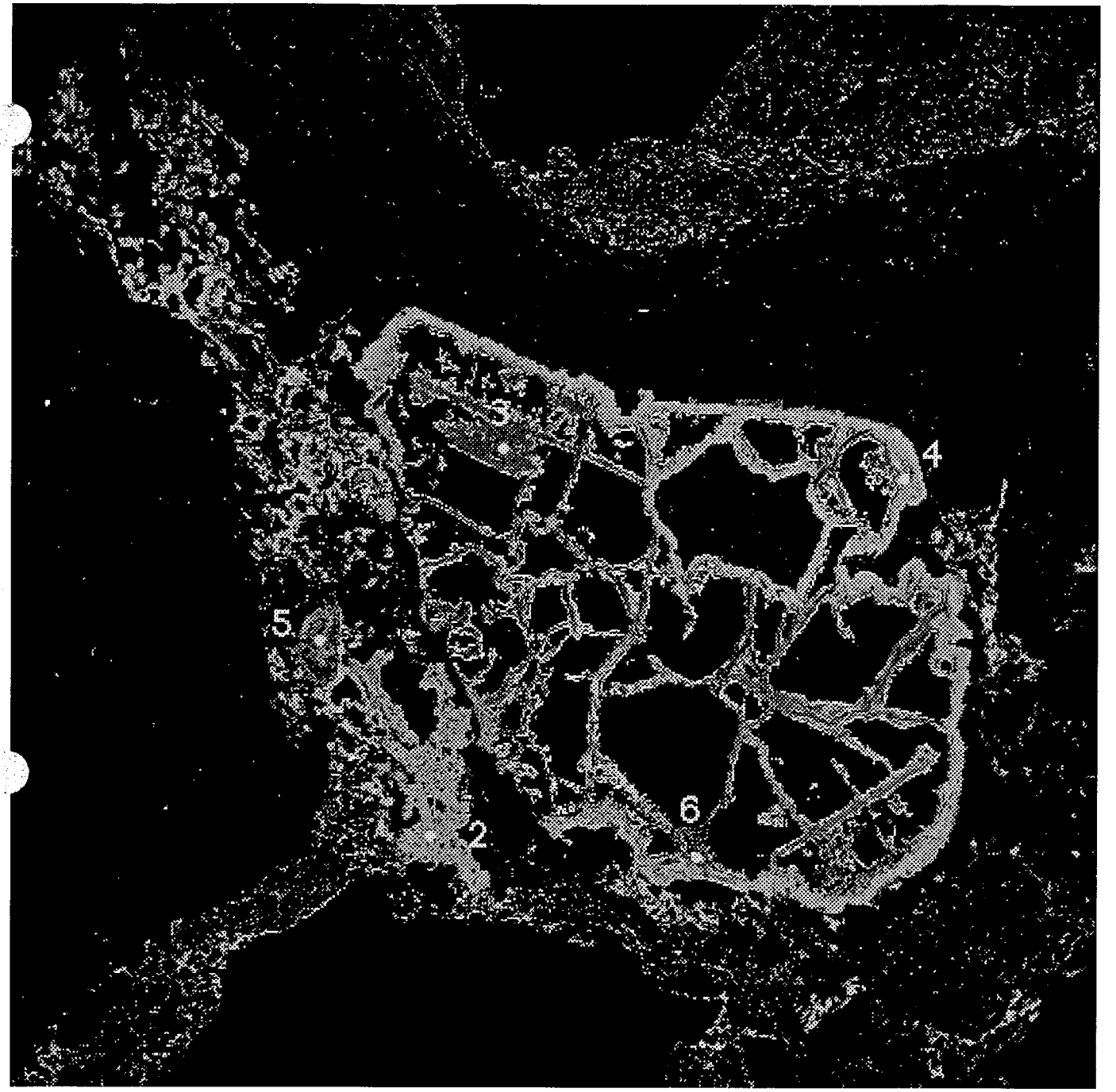
422-1a-200x BSE map.pict



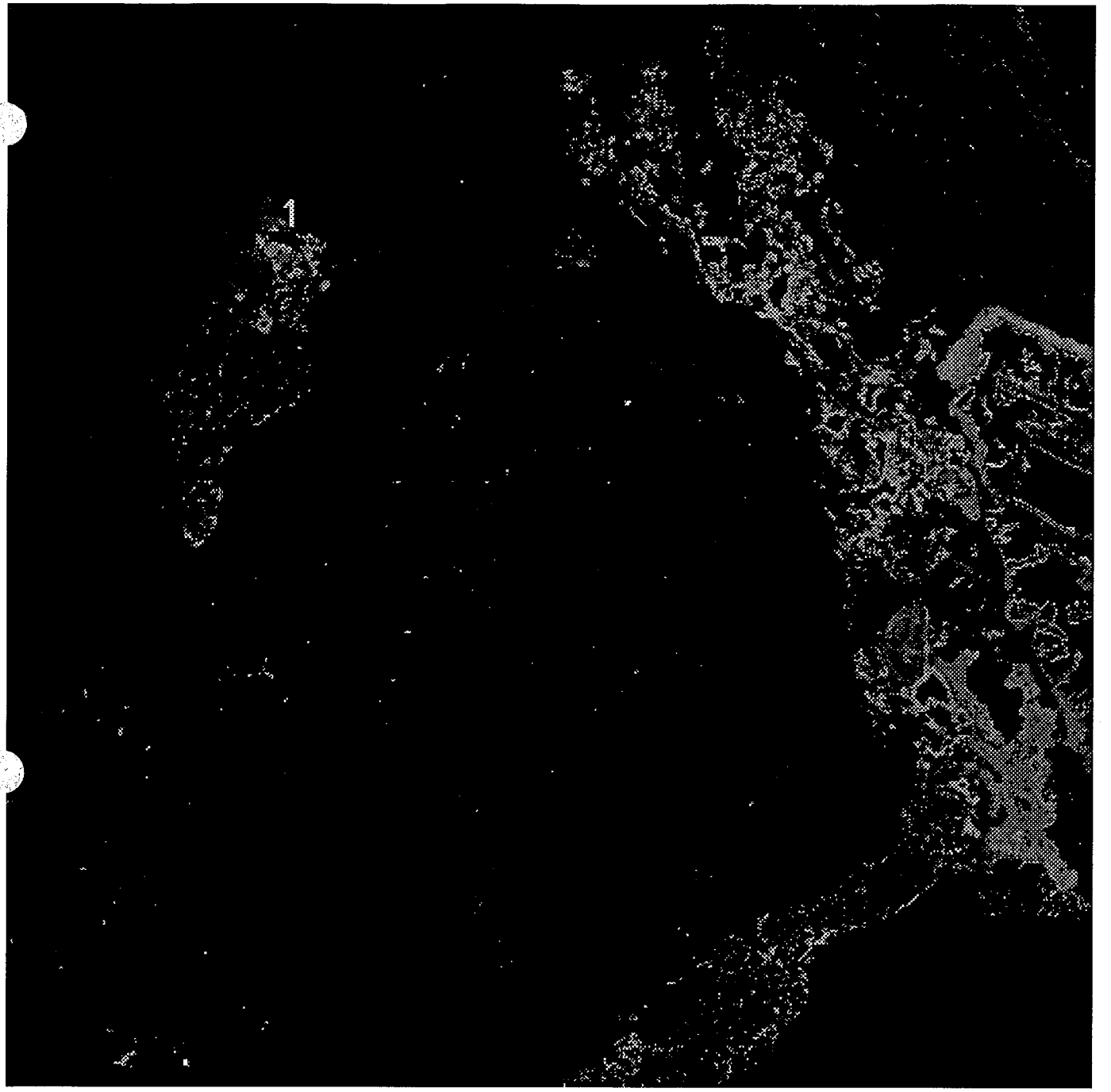
422-1b_ 200xBSE map.pict



422-2a_200xBSEmap.pict



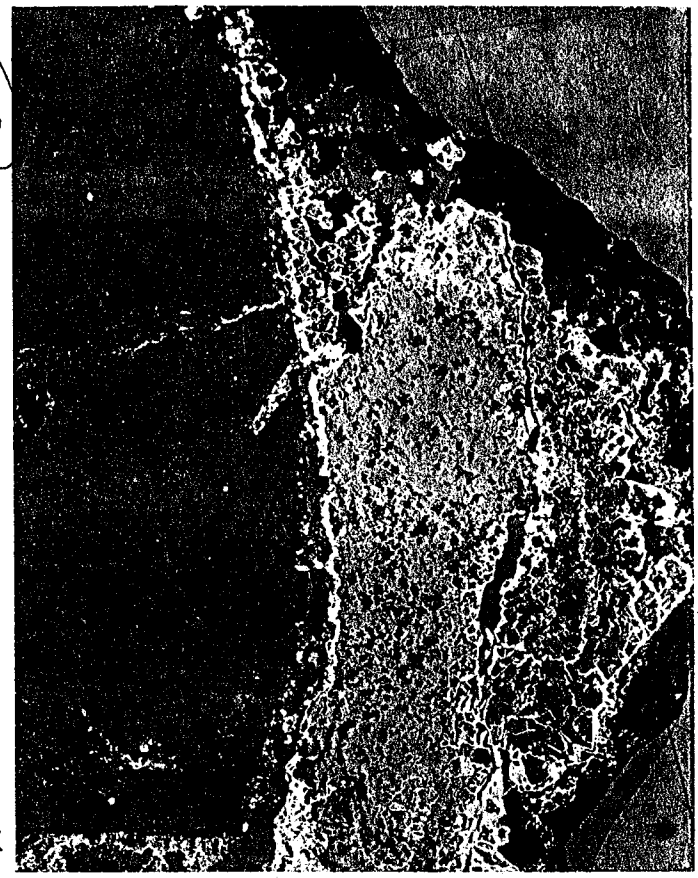
422_2b1_ 200x BSE map.pict



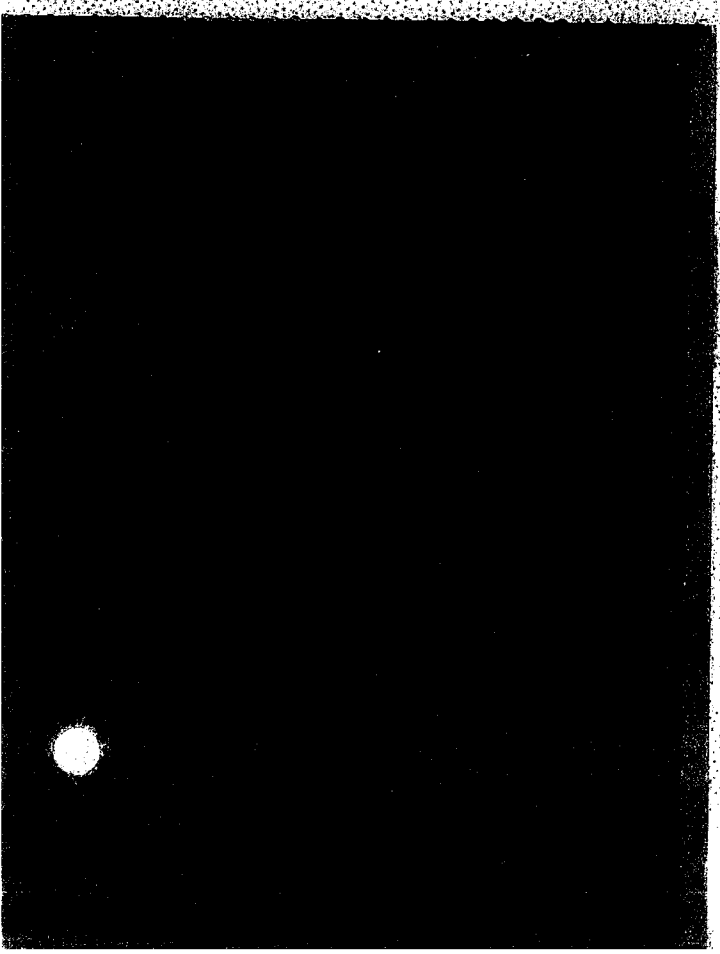
422-262-200xBSE map.pict

NOPI-422 Site 1

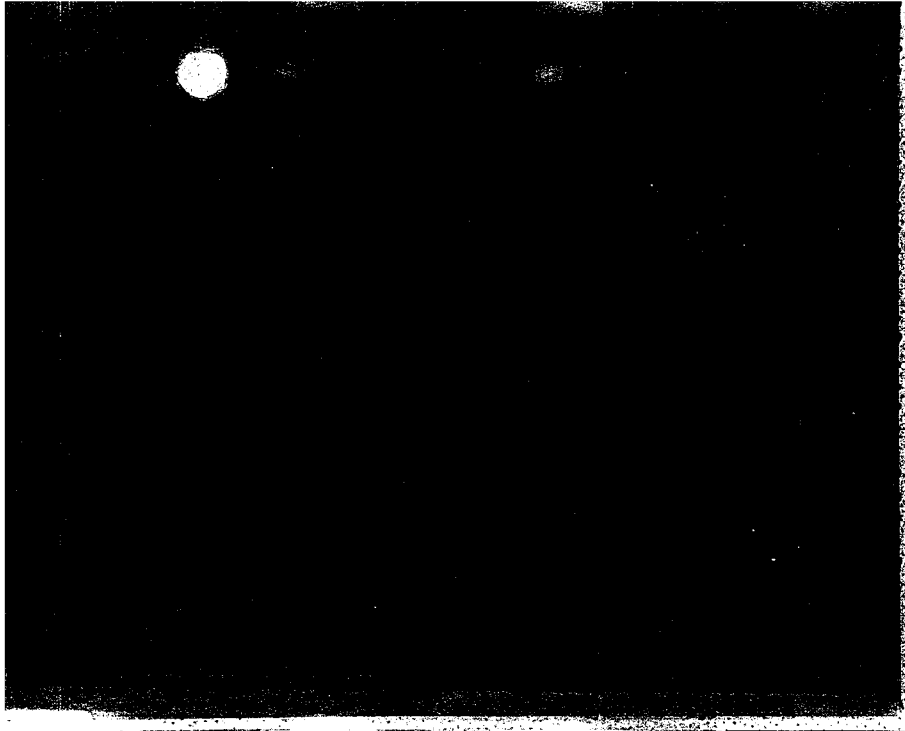
(a) Far Right (50x)

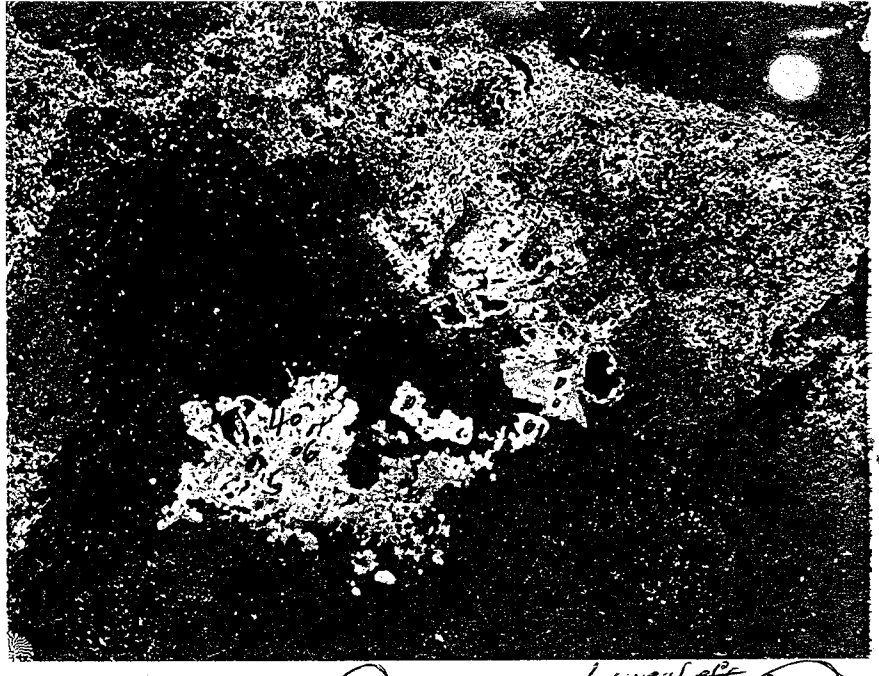


NOPI-422 Site 1 (5x)



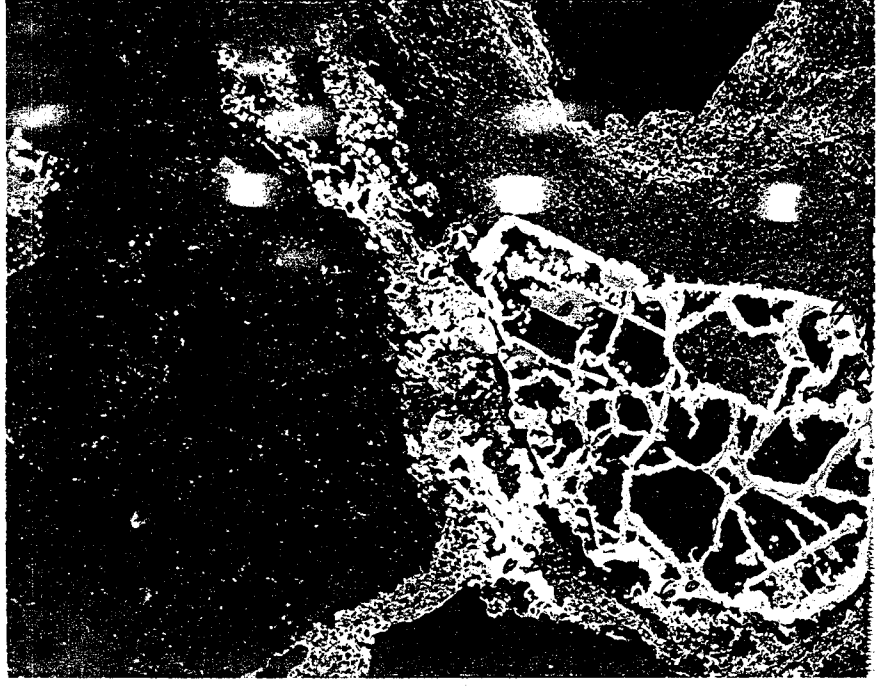
(b) Far Left Lower Center (50x)





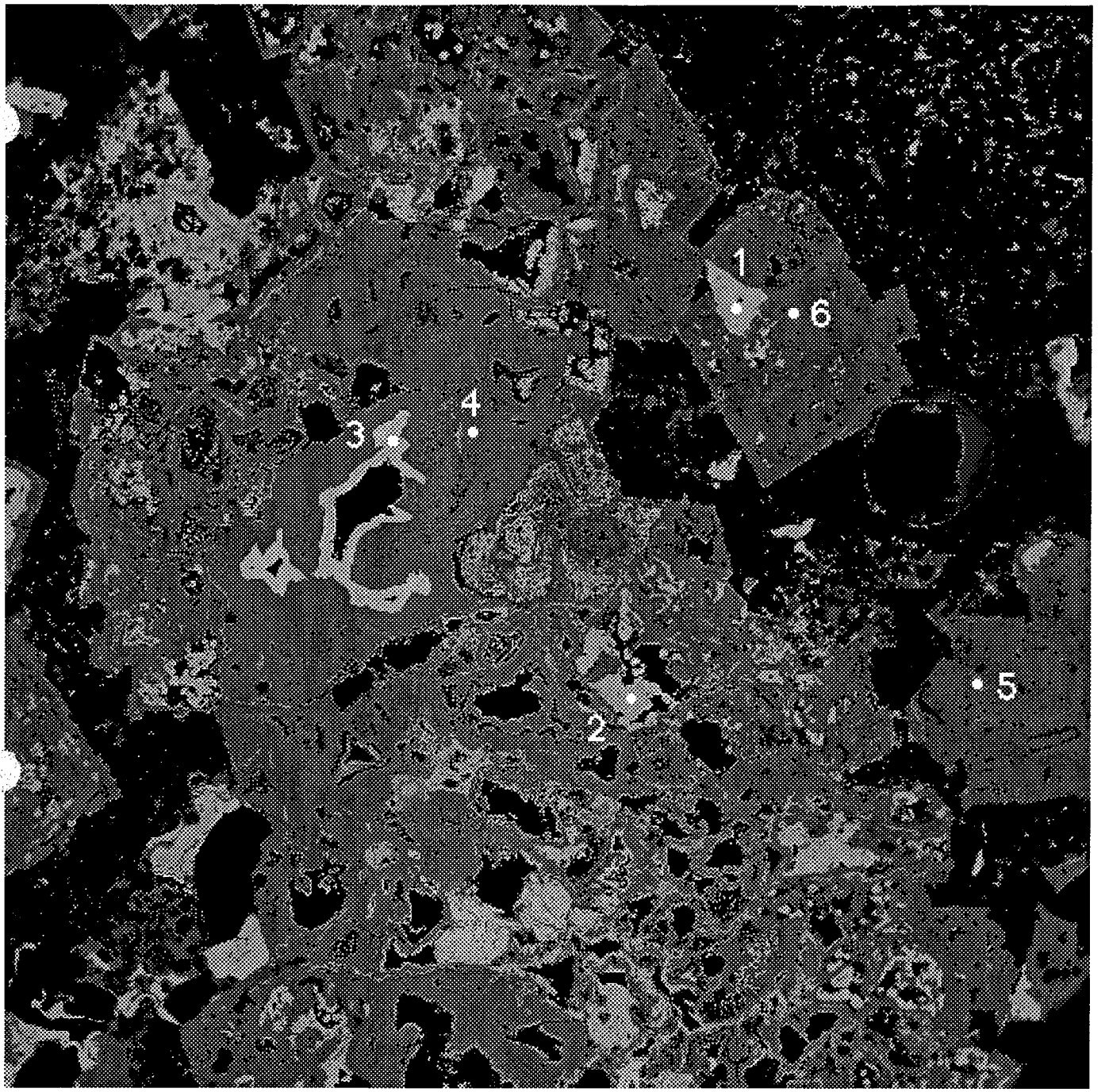
(2) Lower Left Center (10X)

(6) Bottom Right Center (10X)

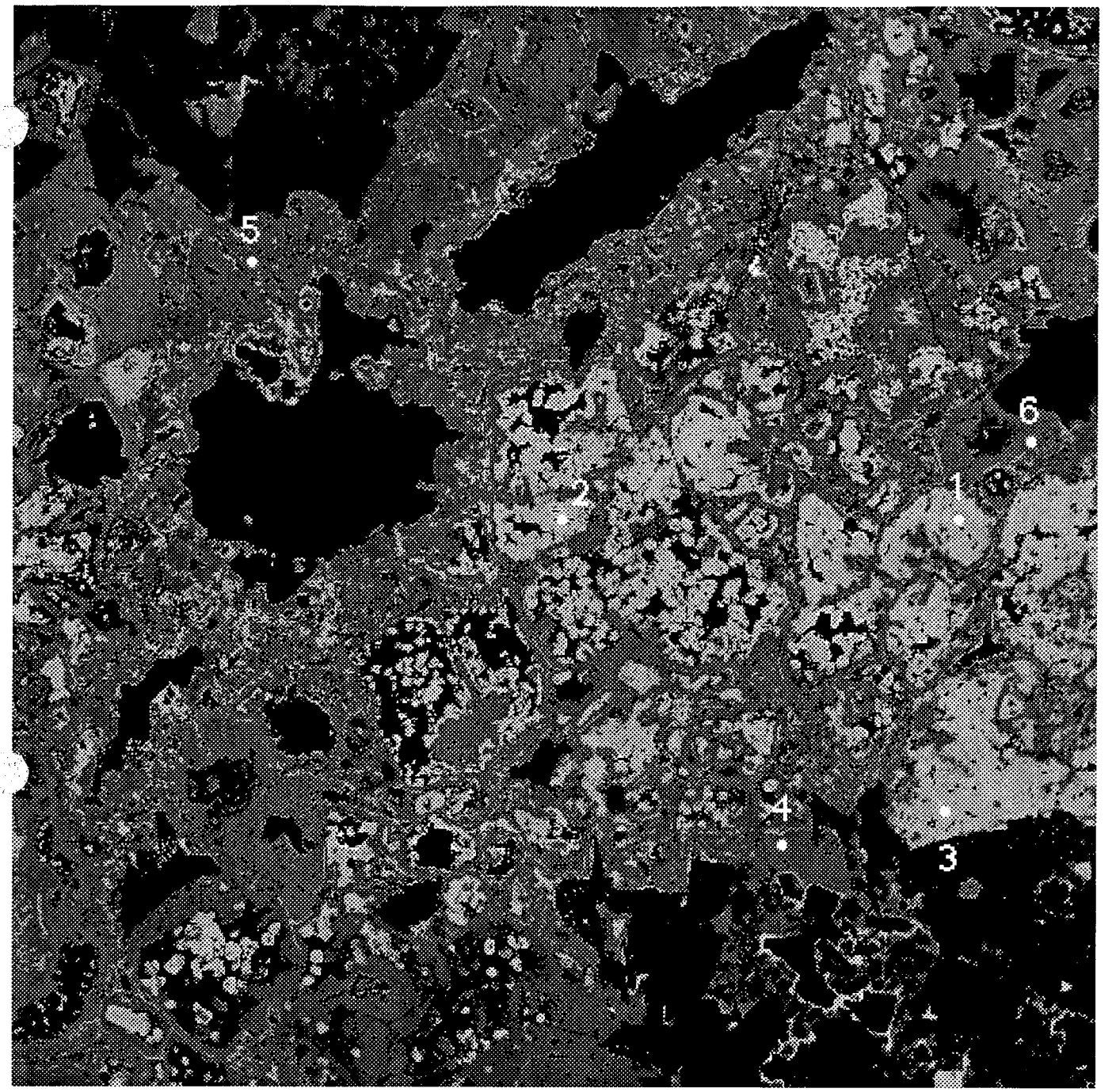


NOPI-421 Site 2 (5X)

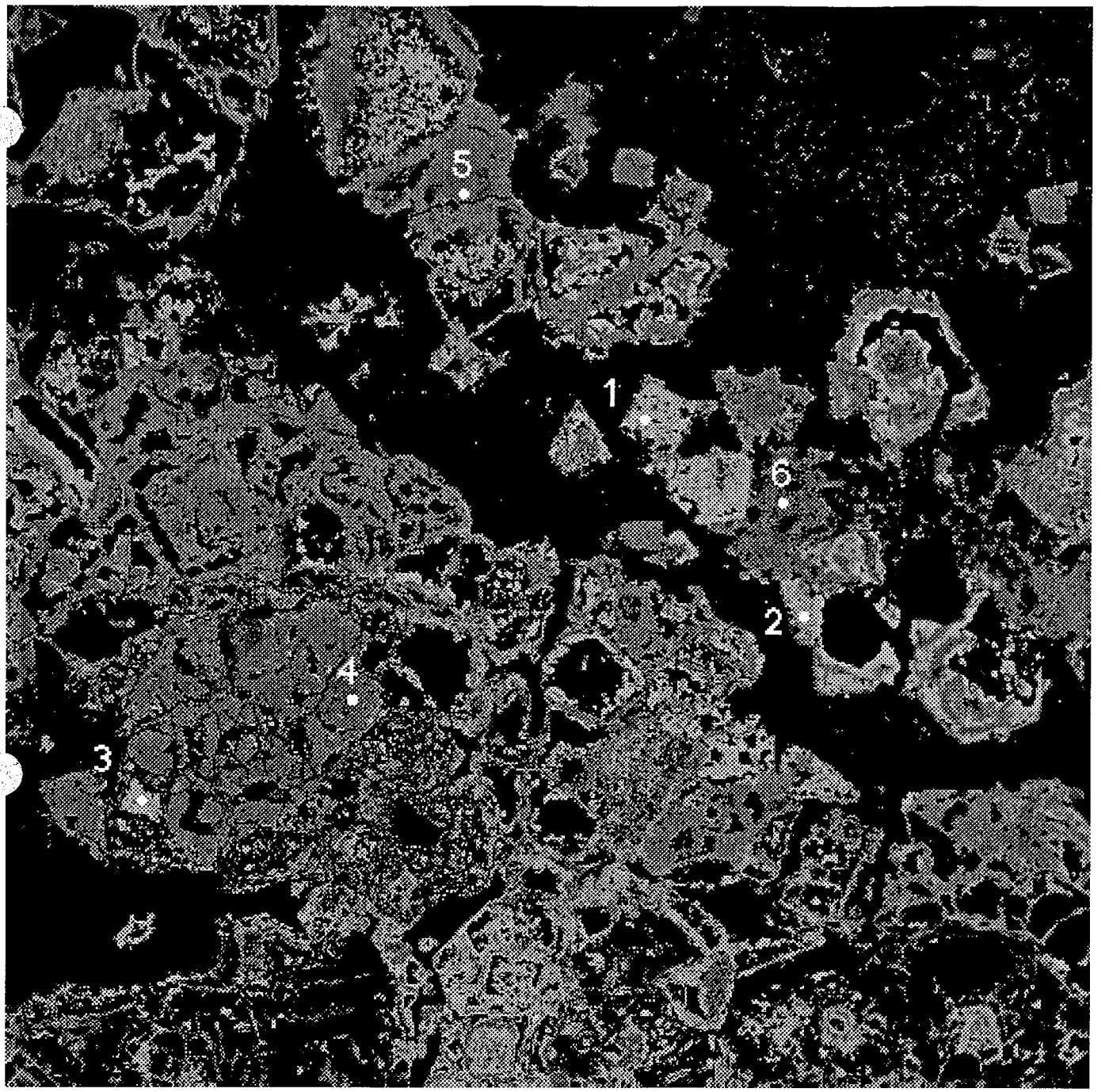
NOPI-421 Site 2



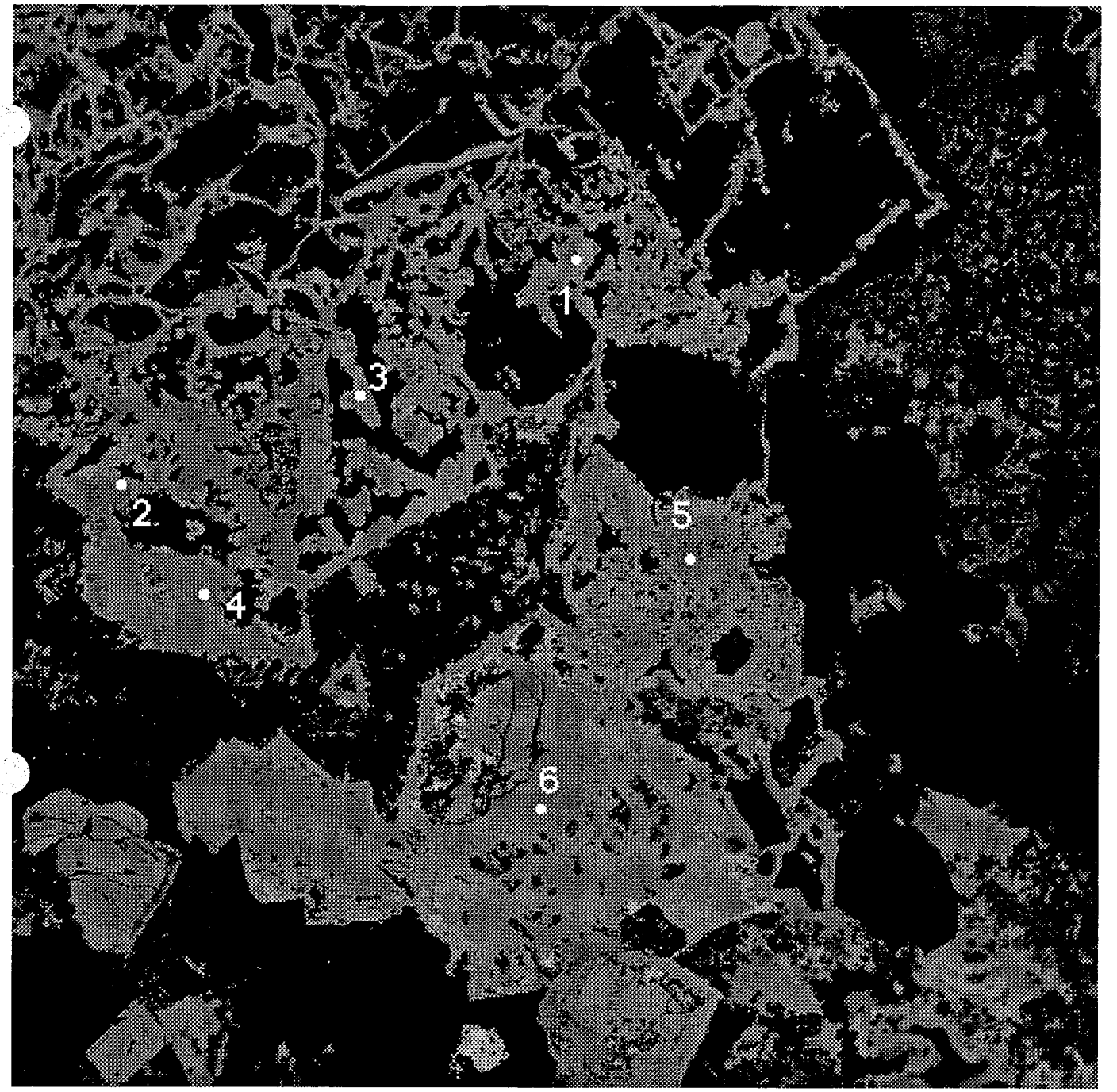
423_1a_200xBSEmap.pict



423_1b_200x BSEmap.pict



423-2a-200x BSEmap.pict

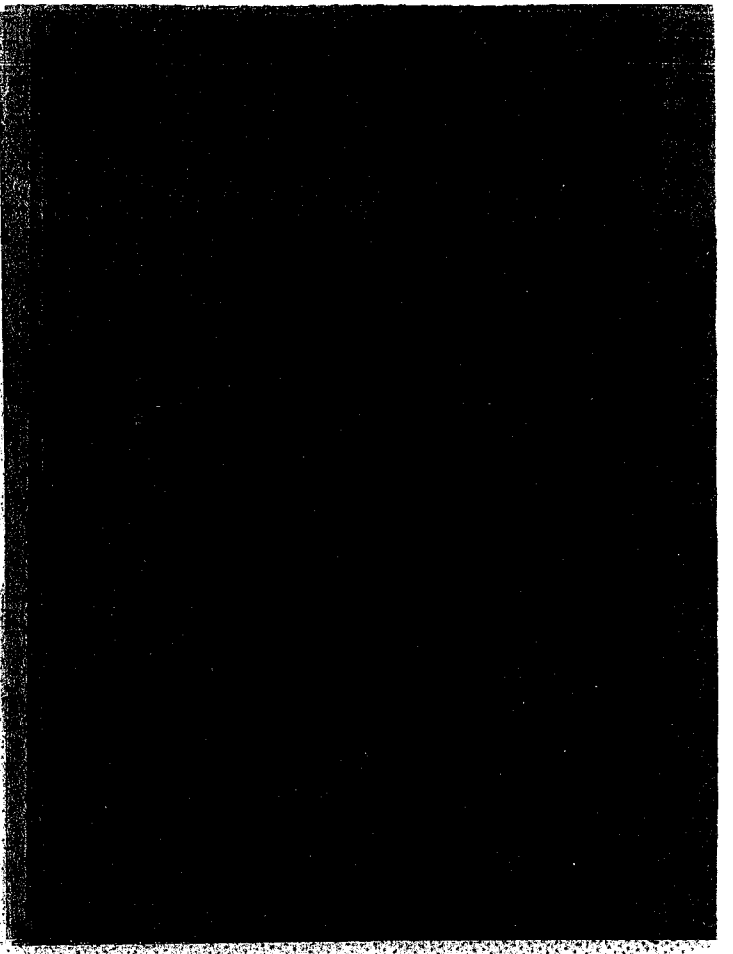


423_2b_200xBSEmap.pict

NOPI-423 Site 1

Right Center (20x)

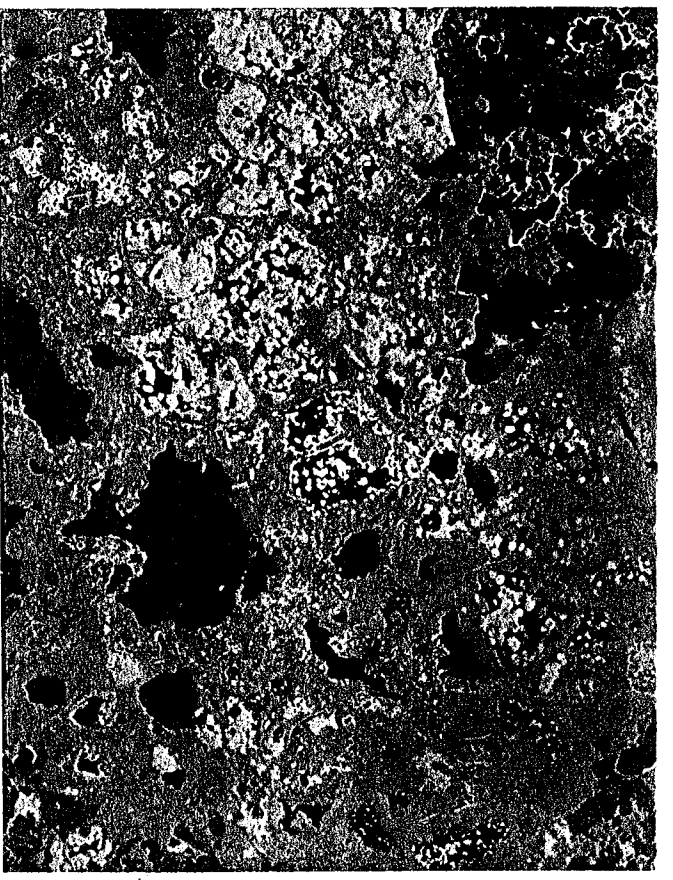
(2)



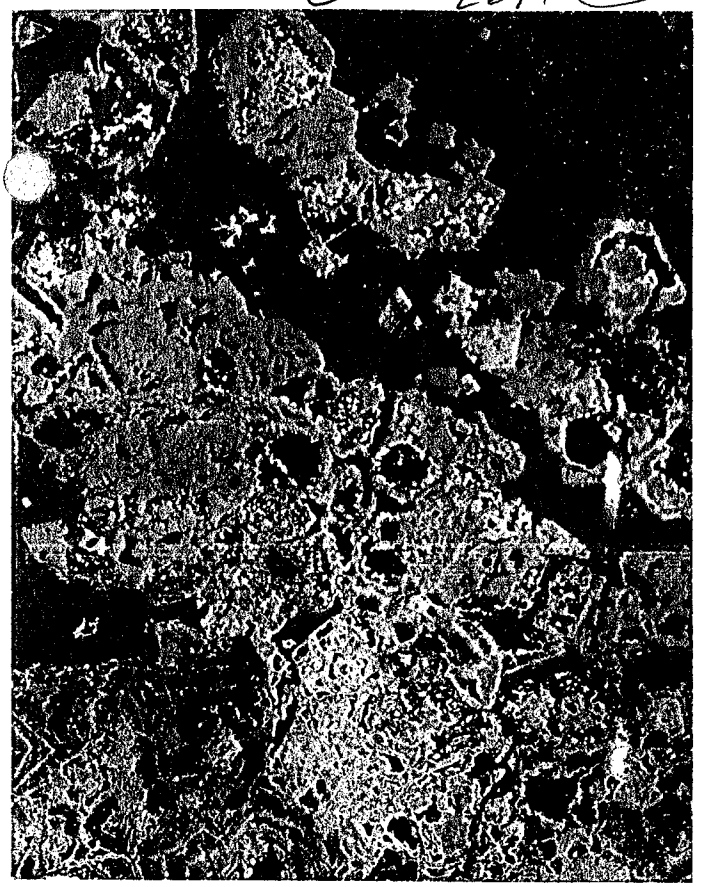
NOPI-423 Site 1 (5x)

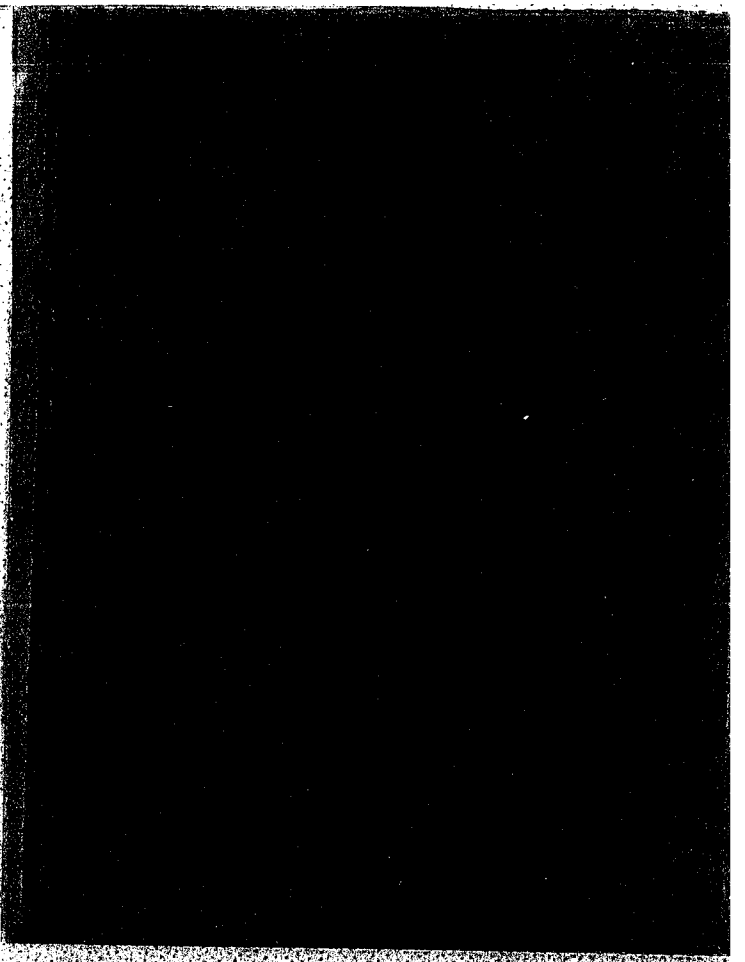
Left Center (20x)

(6)



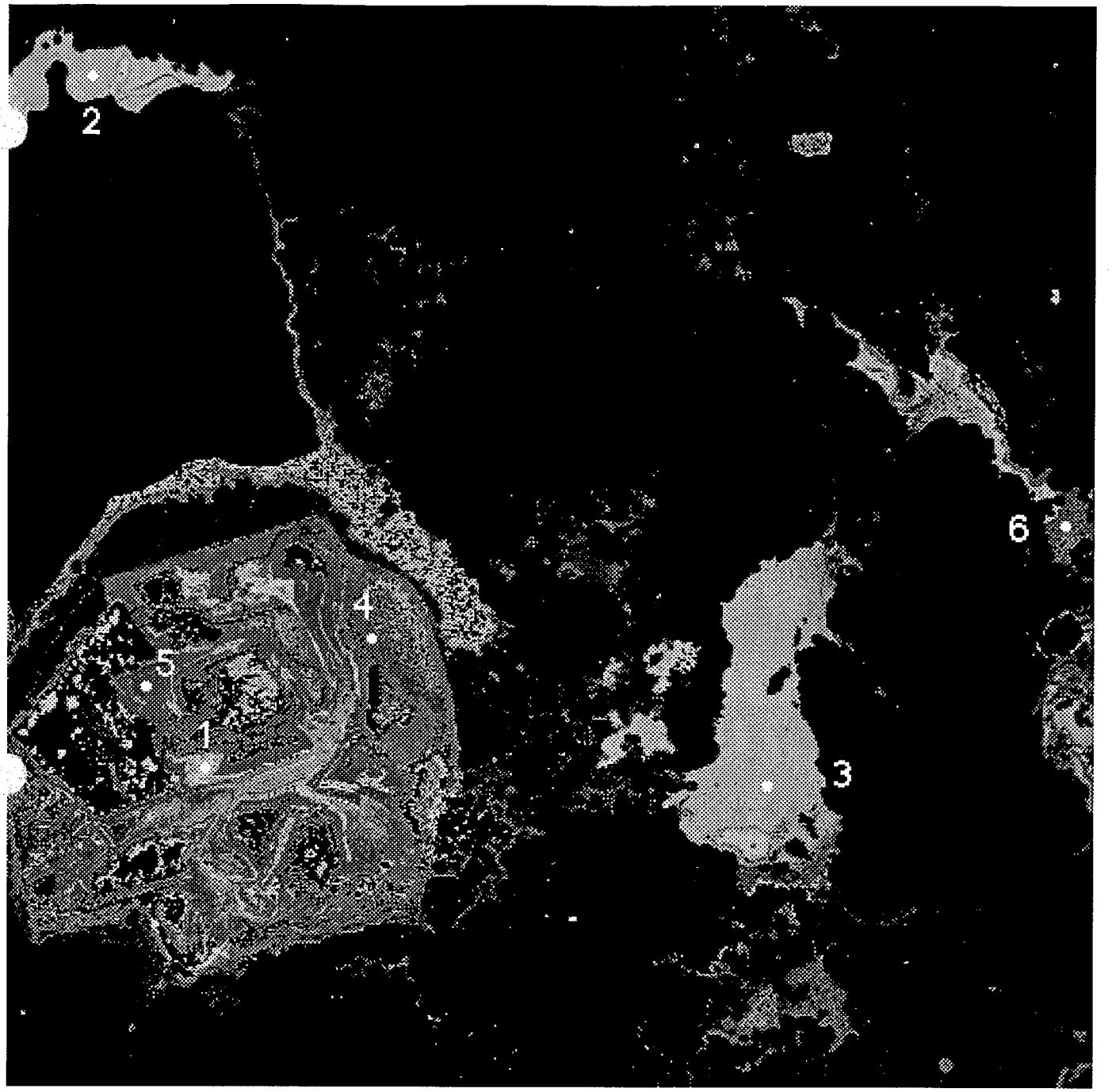
(a) Upper Left (5X)



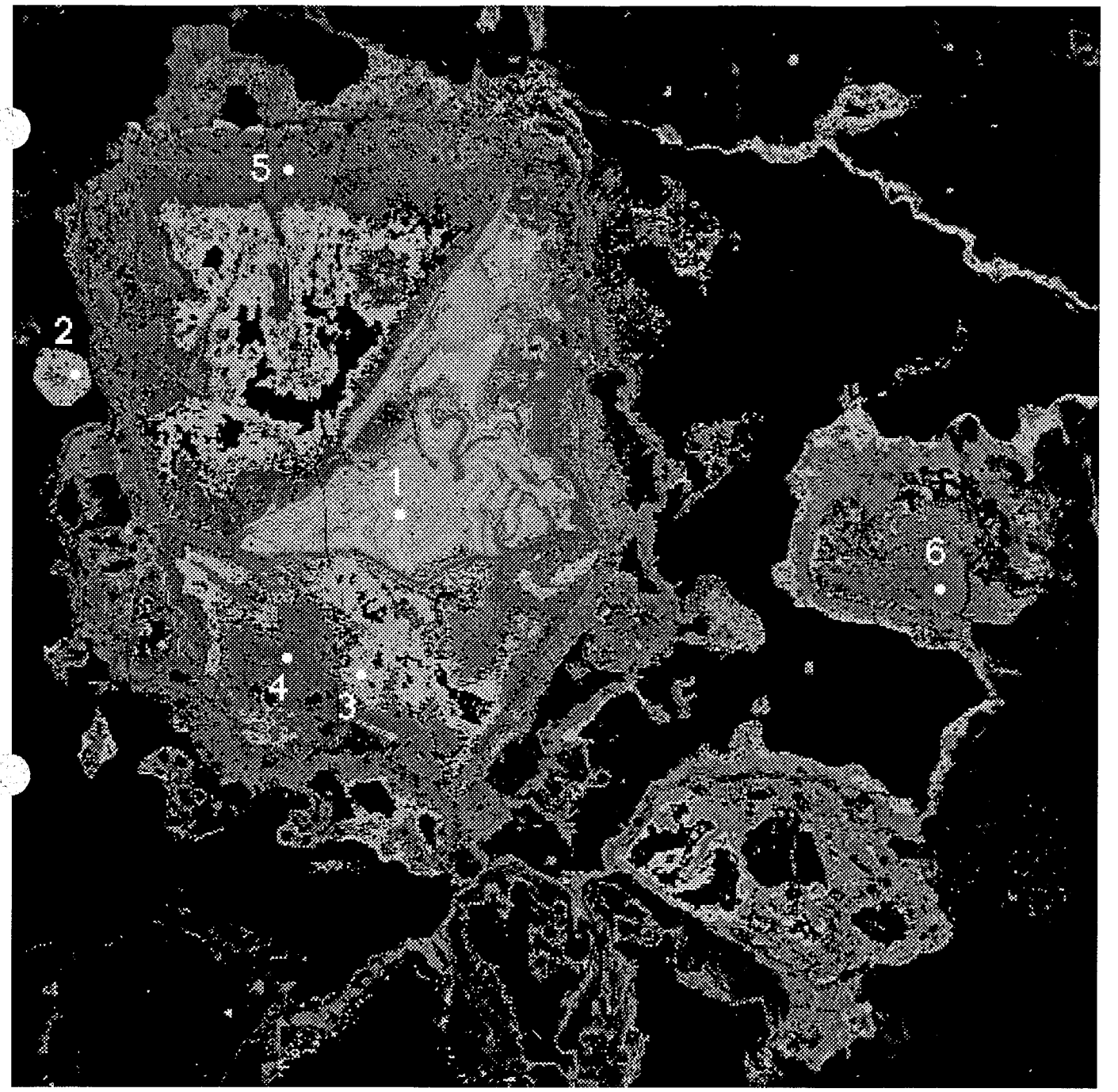


MPI-423 Site 2 (5X)

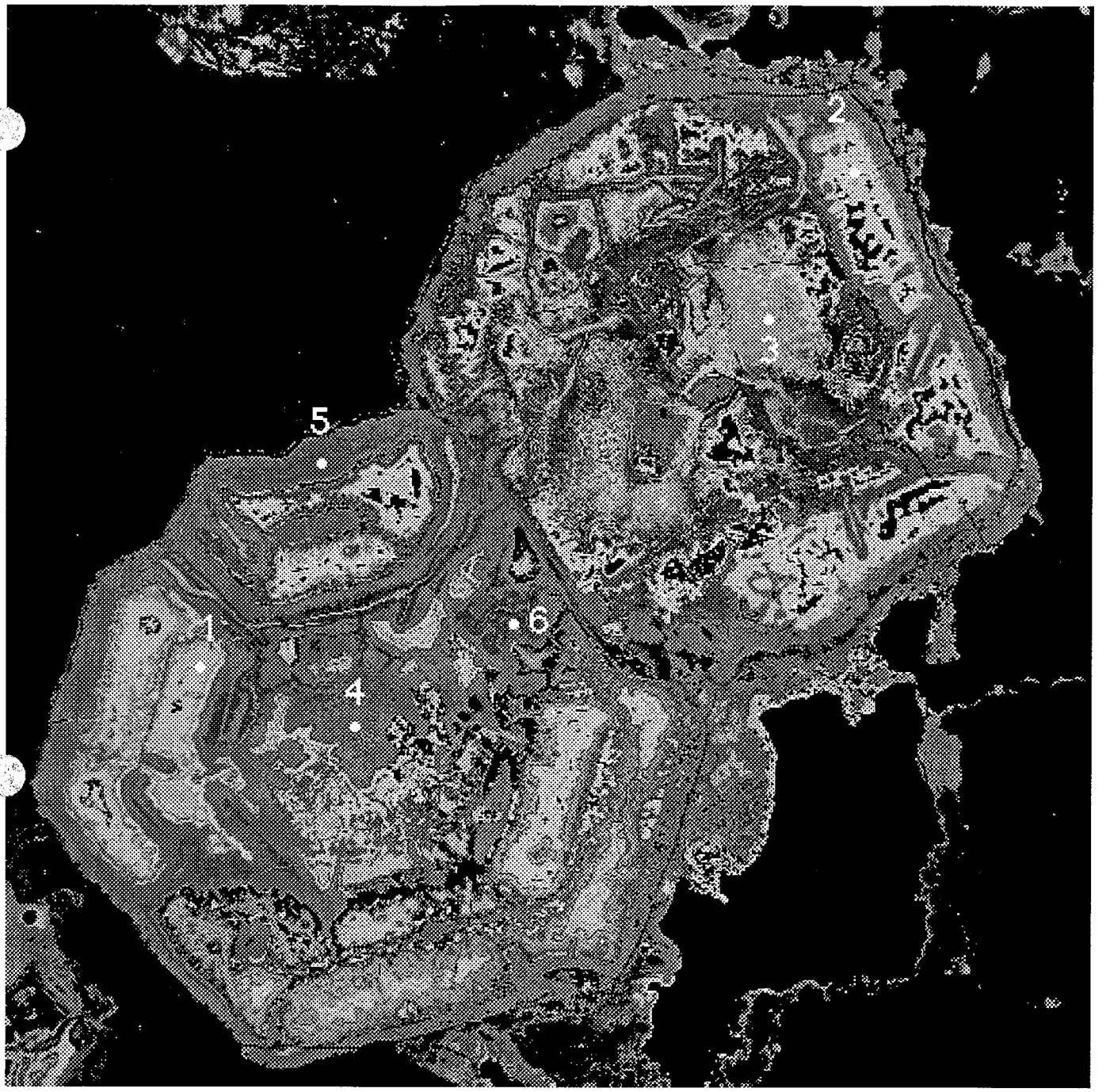
(b) Lower Left (5X)



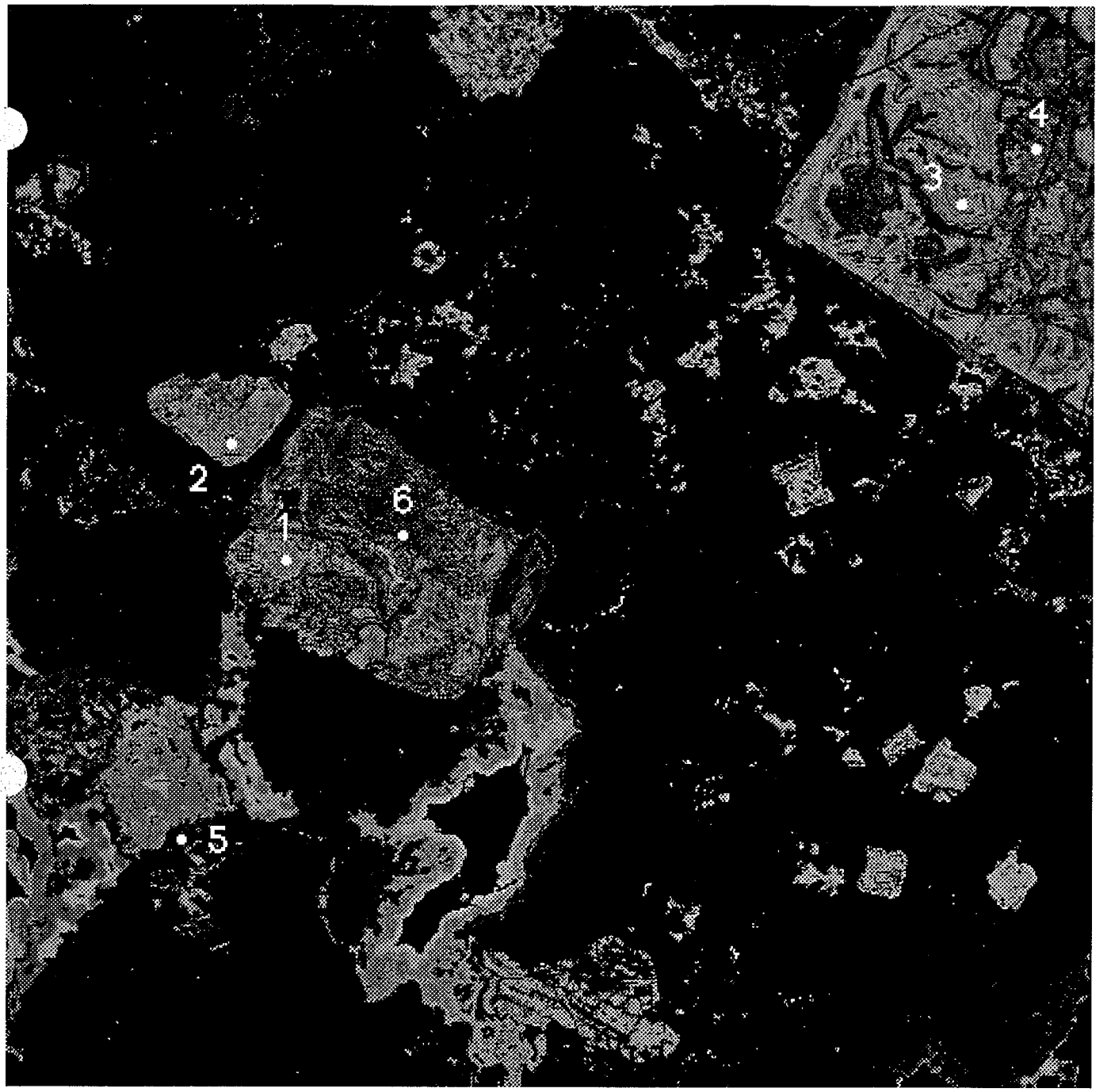
424-1a - 200xBSE map.pict



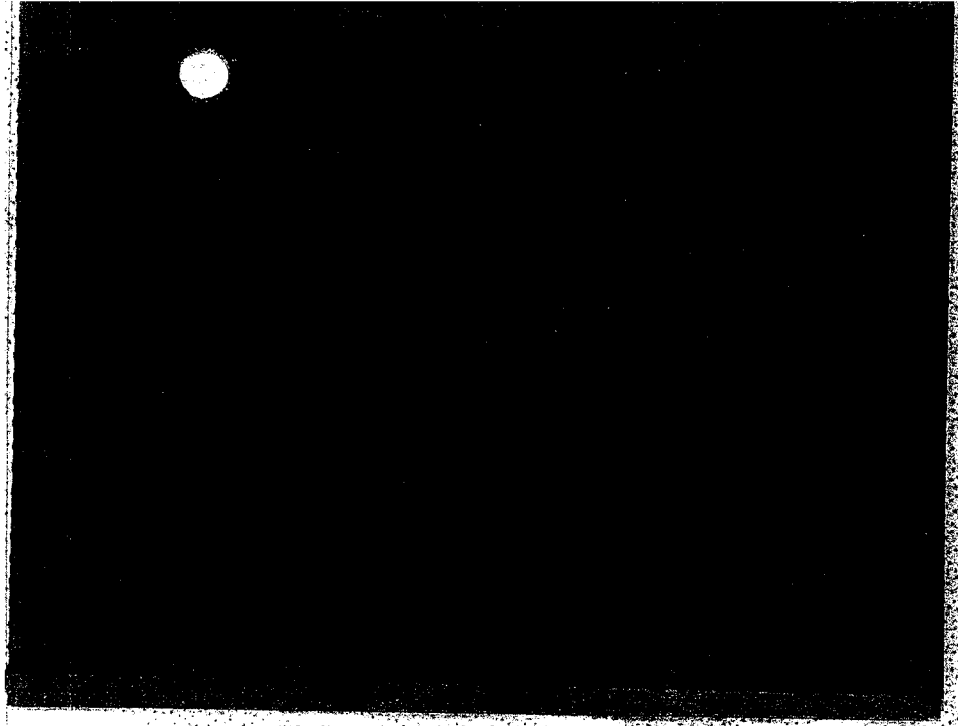
424_1b_200YBSEmap.pict



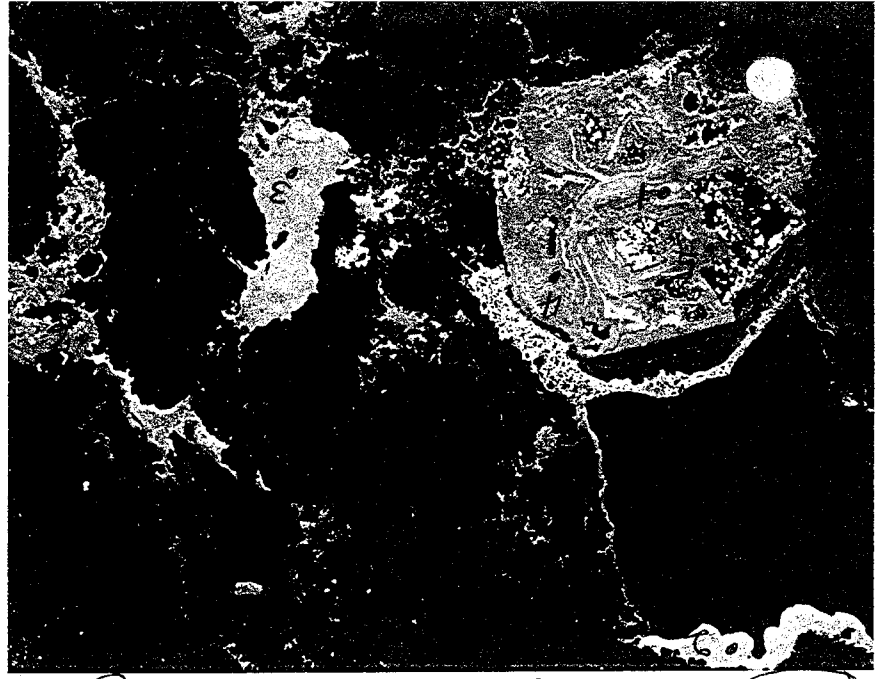
424_2a_200XBSEmap.pict



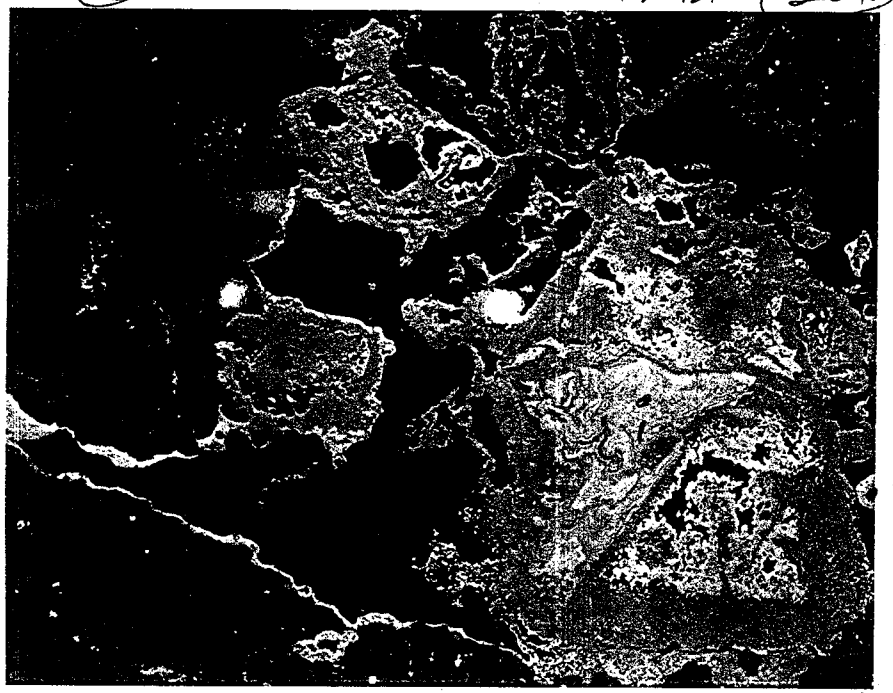
424_2b_200xBSEmap.pict



(b) Lower Left Mid (20X)



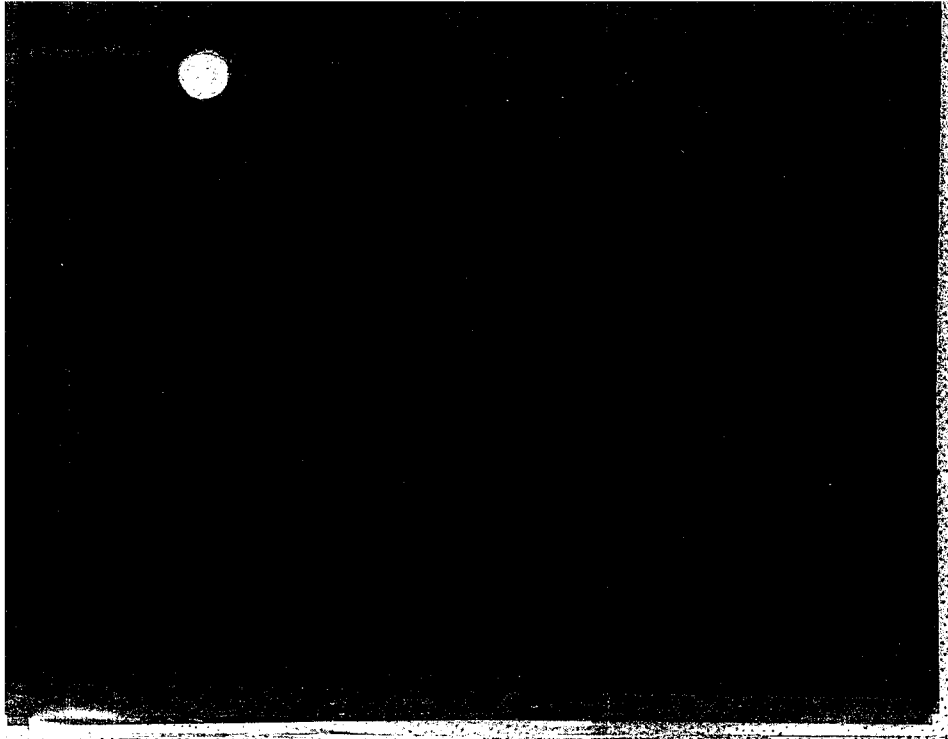
(a) NE of center (20X)



(20X)

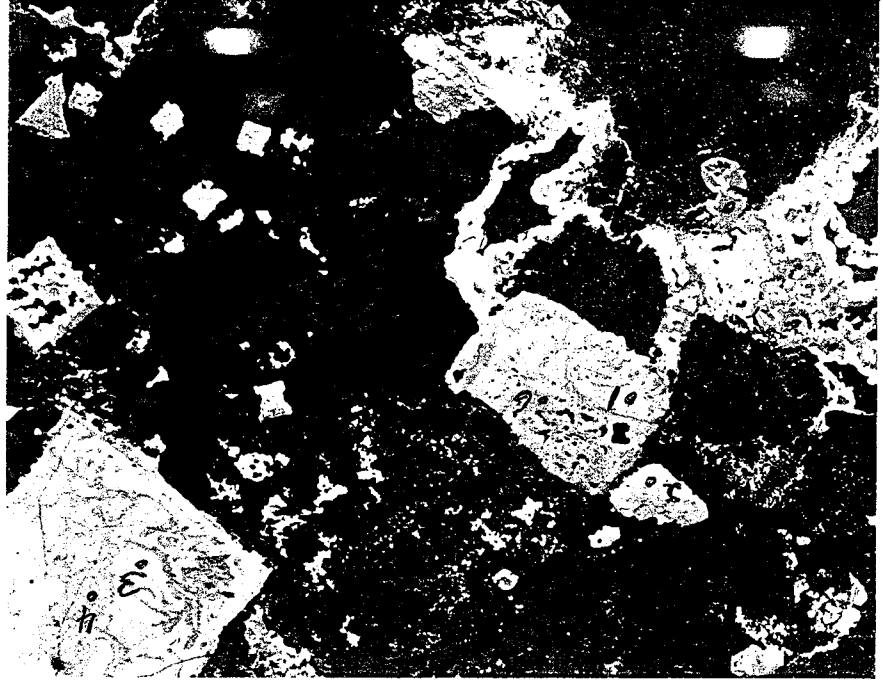
NOPI-434 Site 1 (5X)

NOPI-434 Site 1



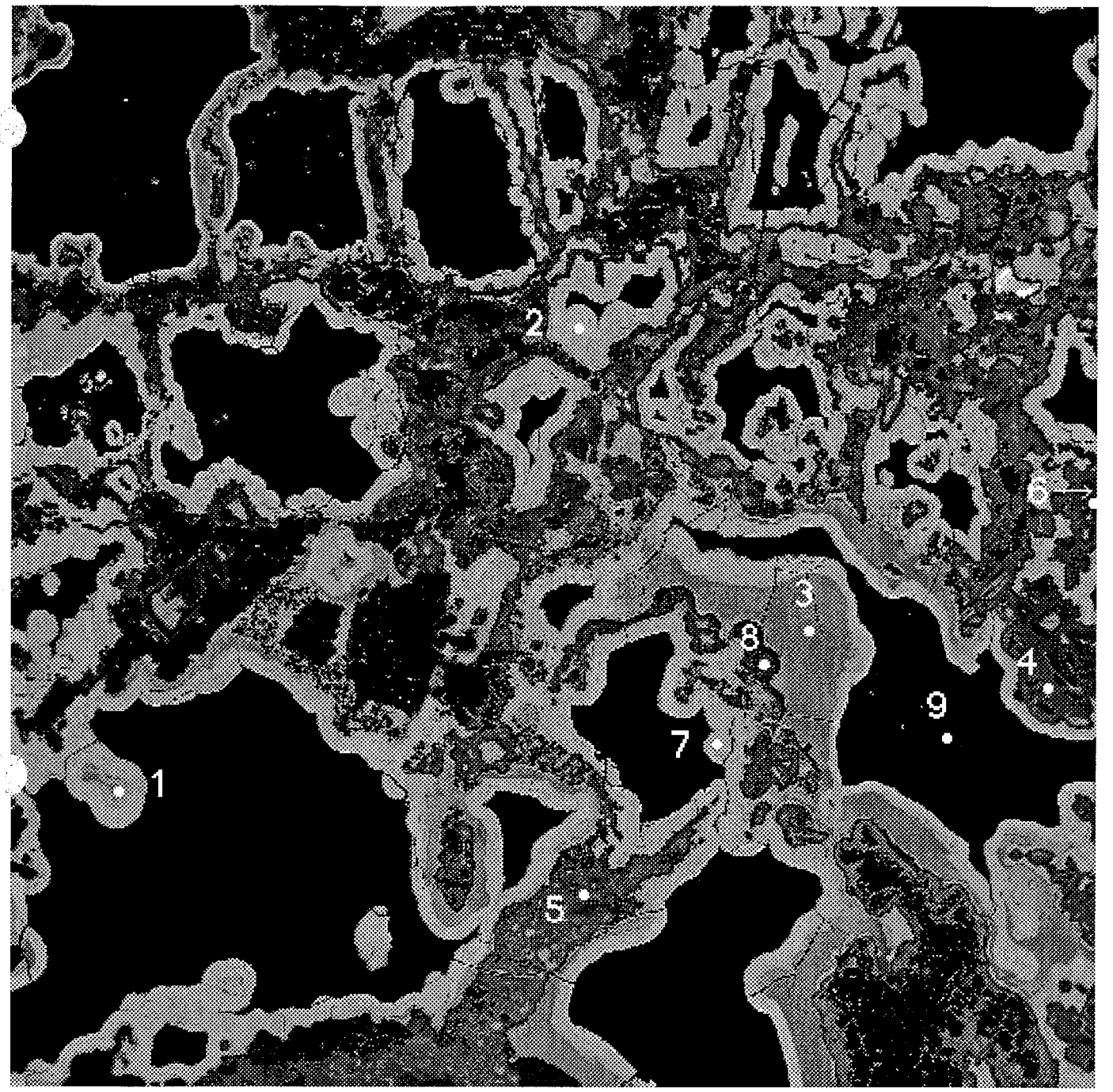
(a) N of Center (20x)

(b) NE Corner (20x)

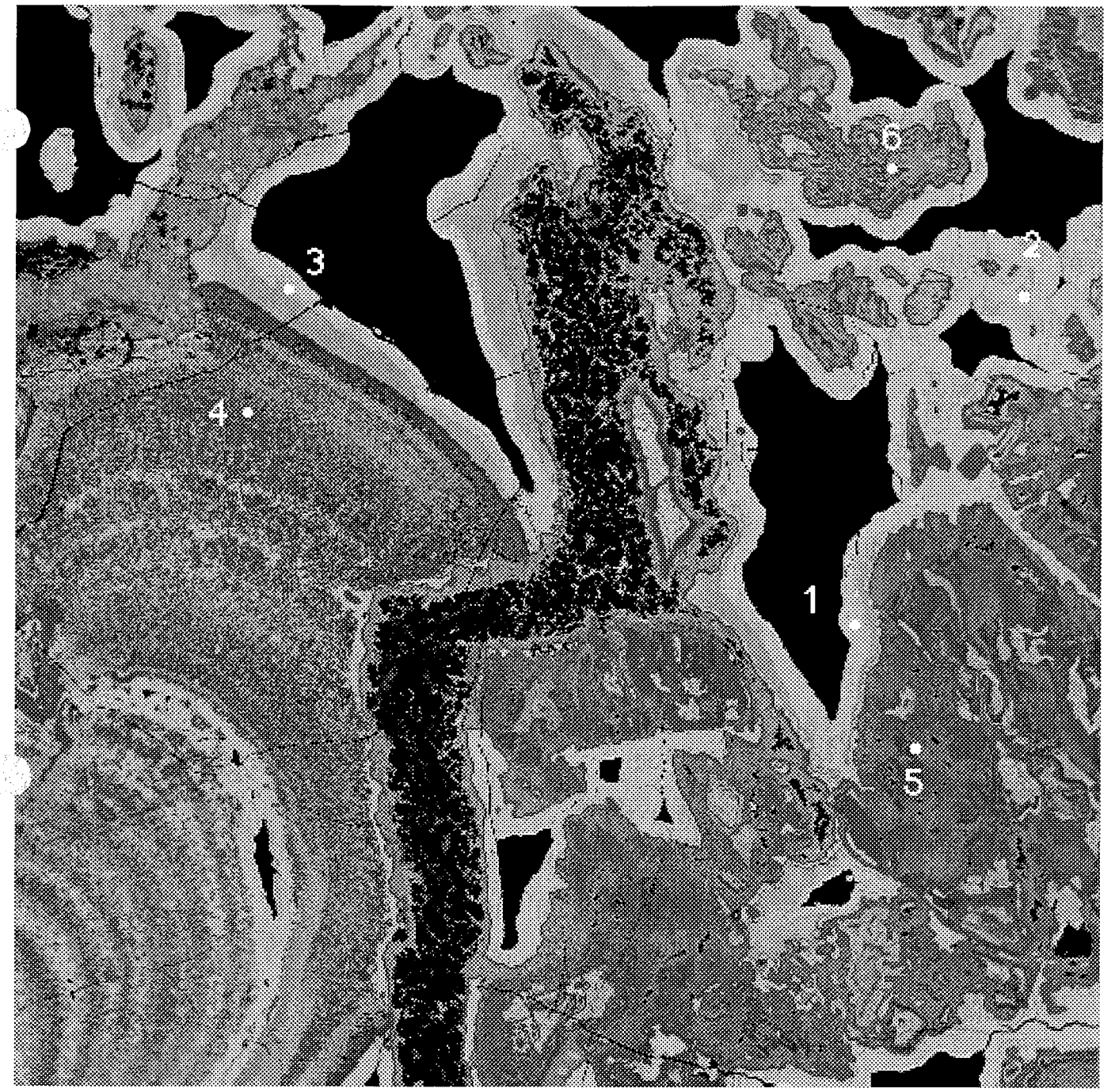


NOPI-24 Site 2 (5X)

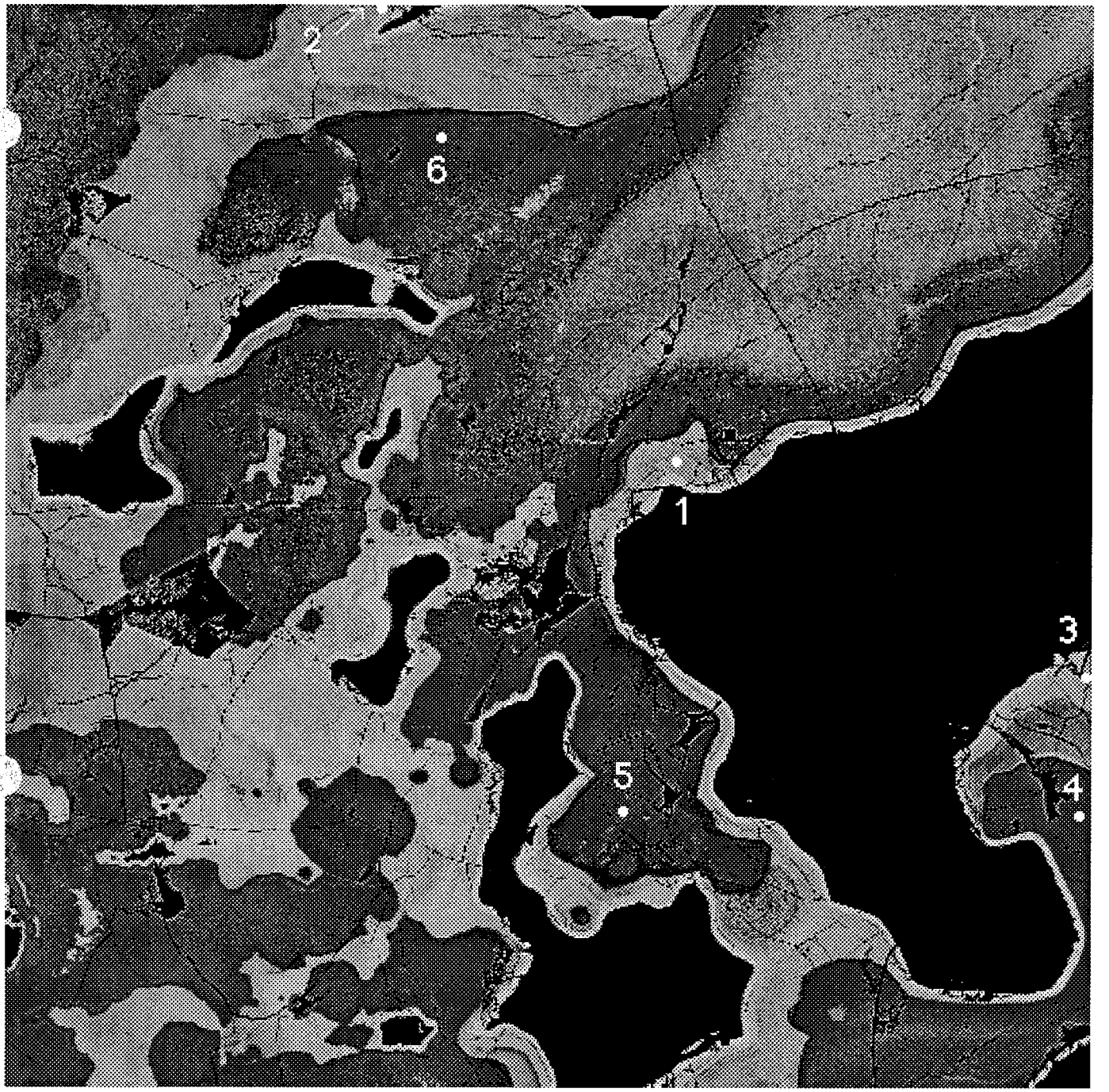
NOPI-424 Site 2



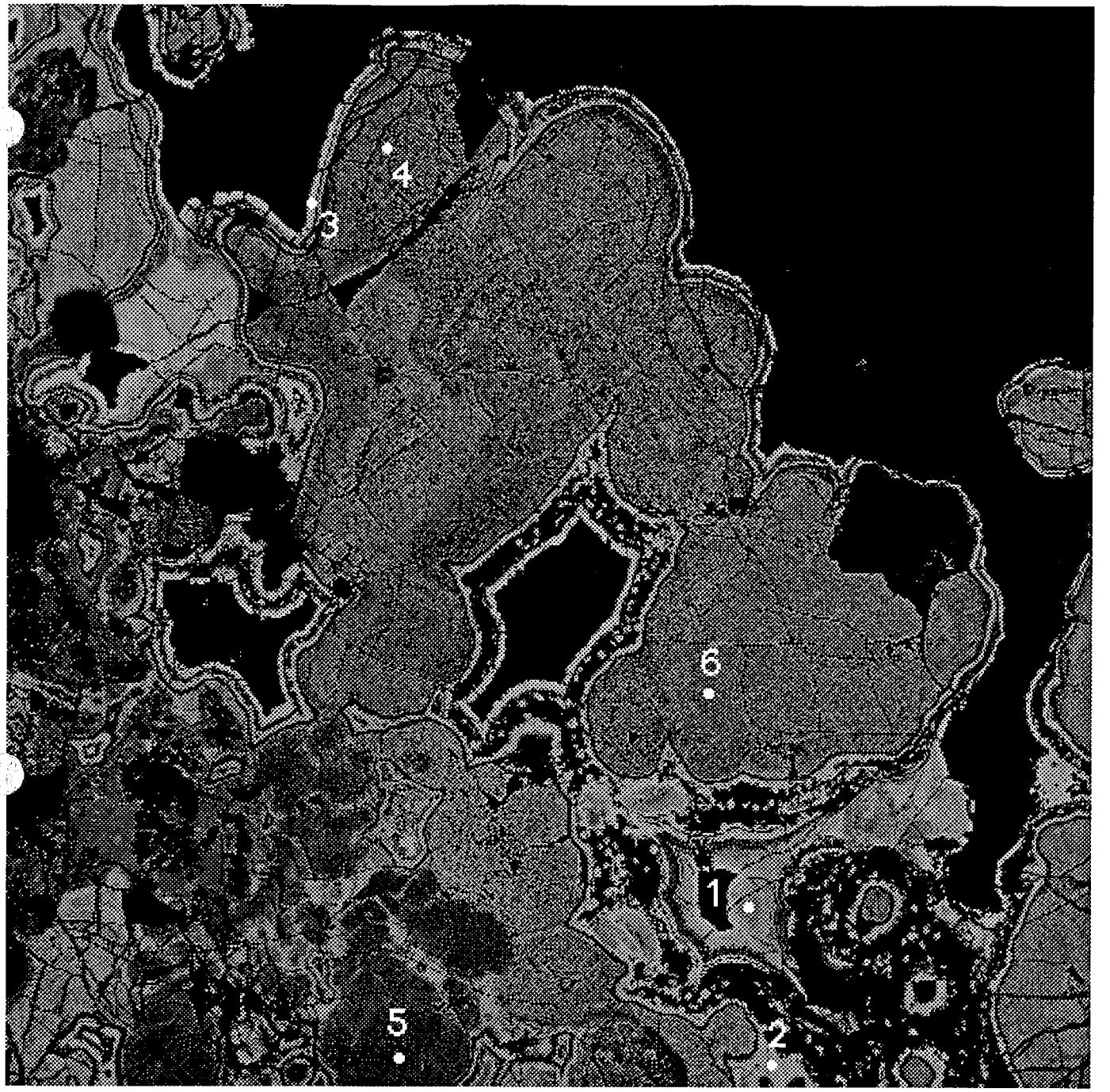
425-1a - 200x BSE map. pict



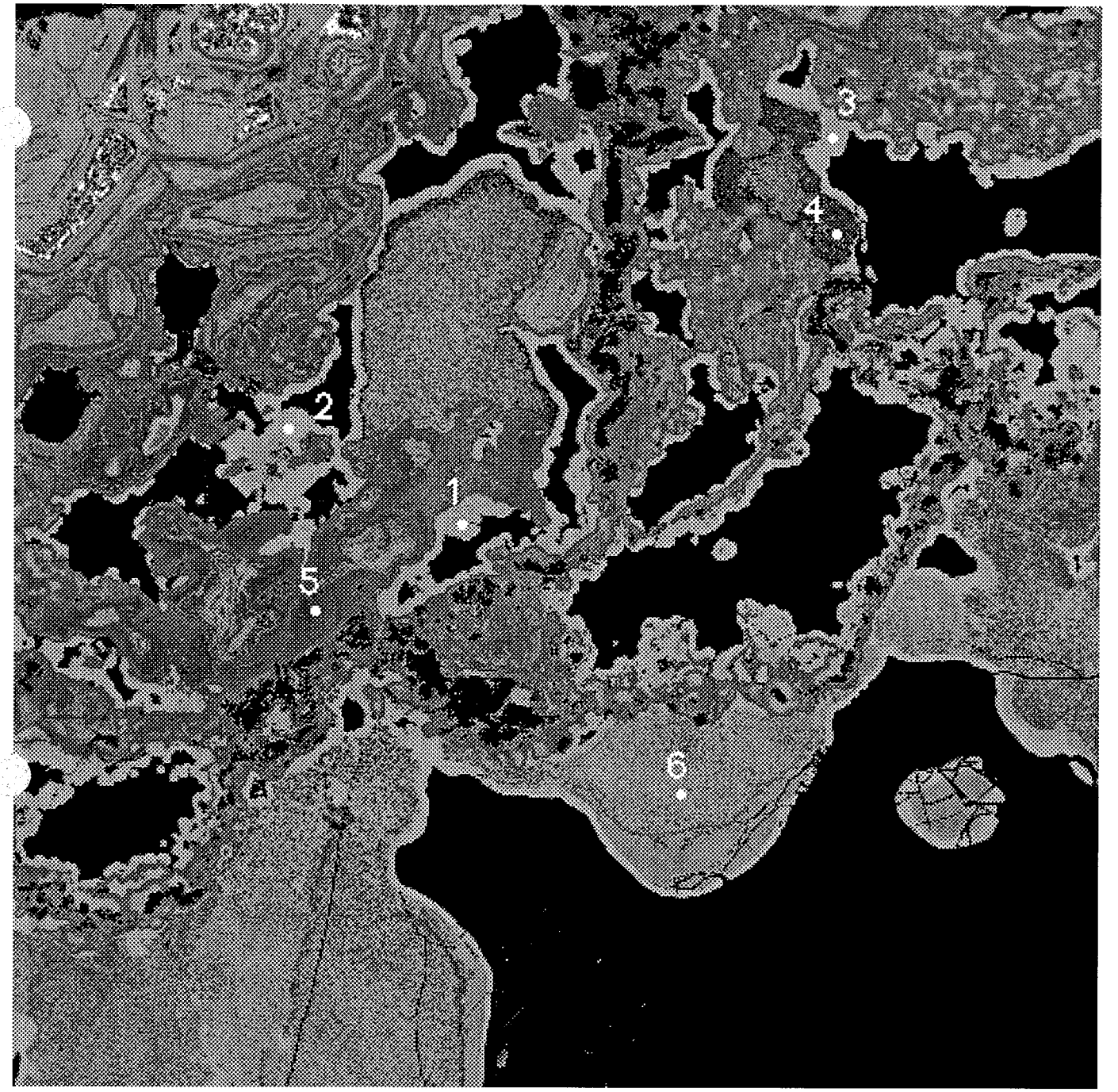
425_1b_200x BSE map.pict



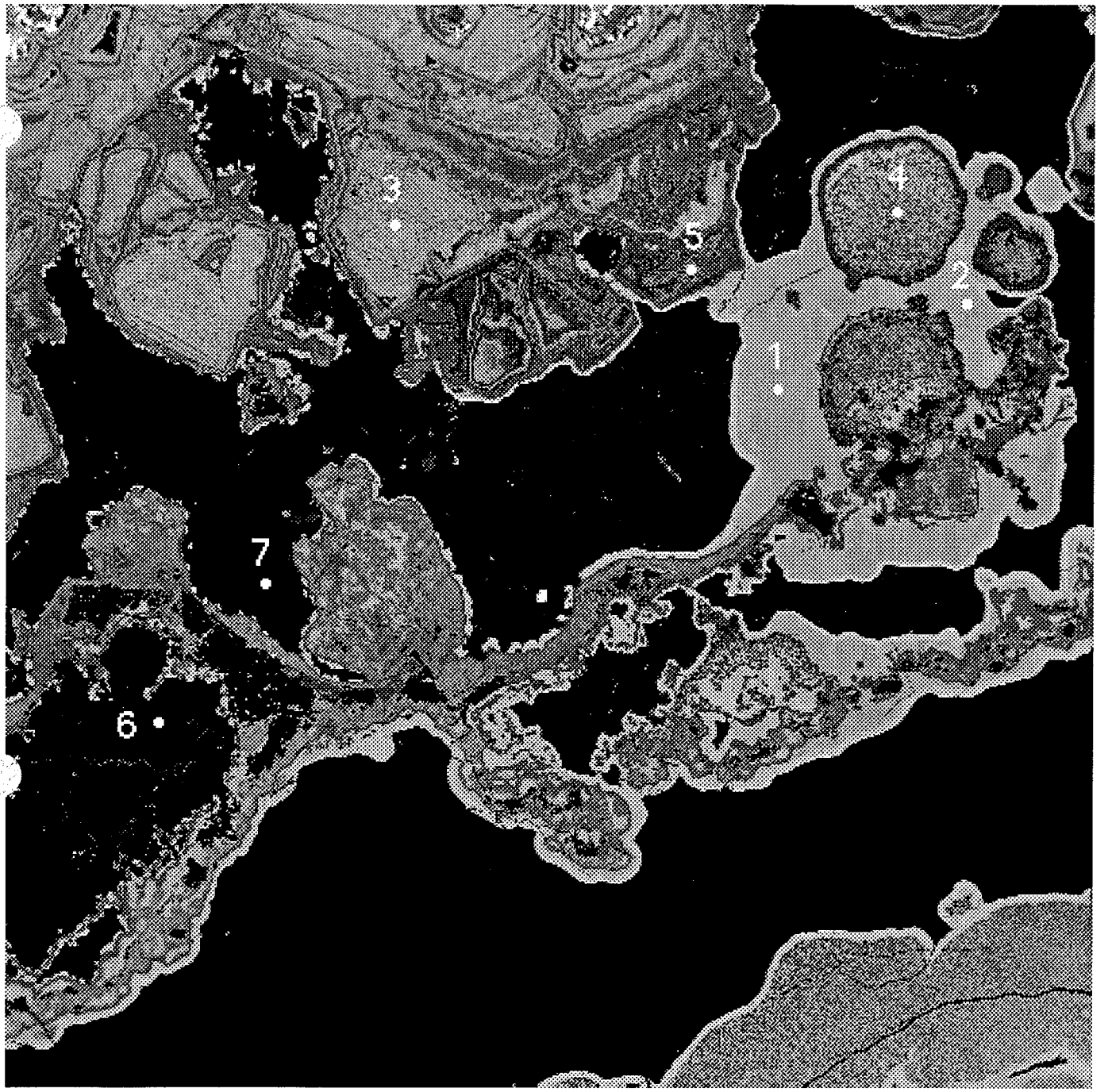
425_2a_200xBSEmap.pict



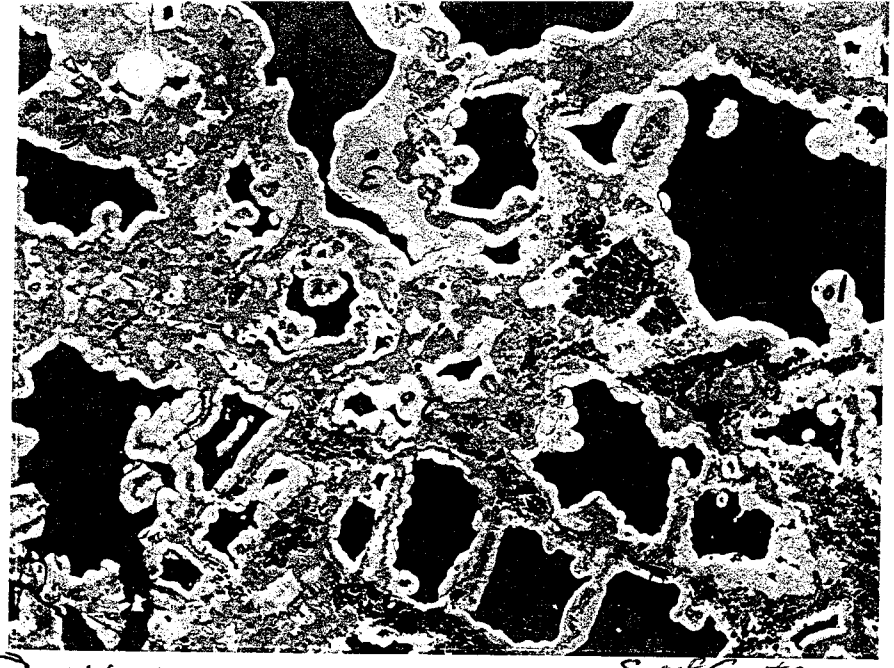
425_2b_200X BSE map.pict.



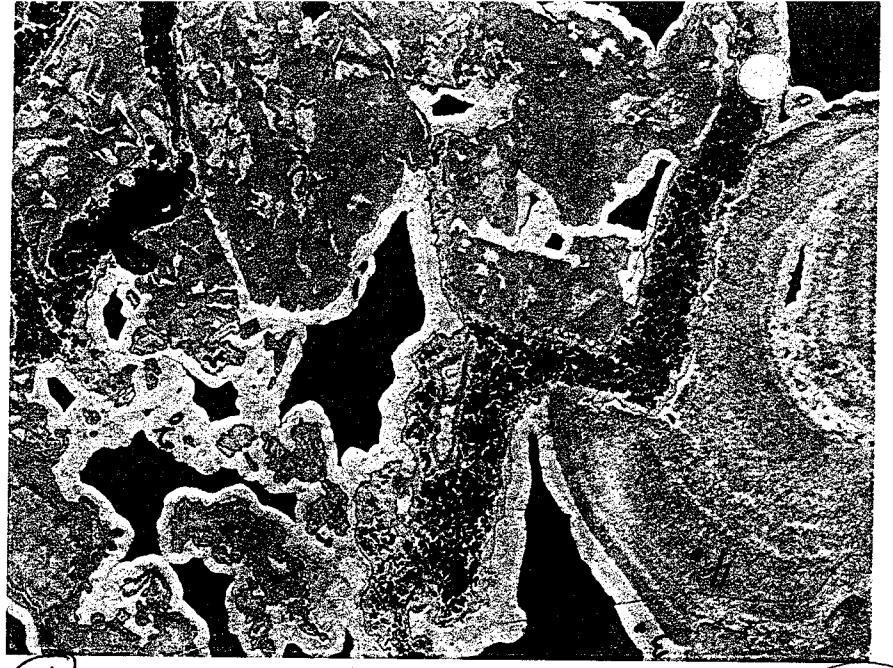
425_3a_200x BSE map.pict



425_36. 200xBSEmap.pict

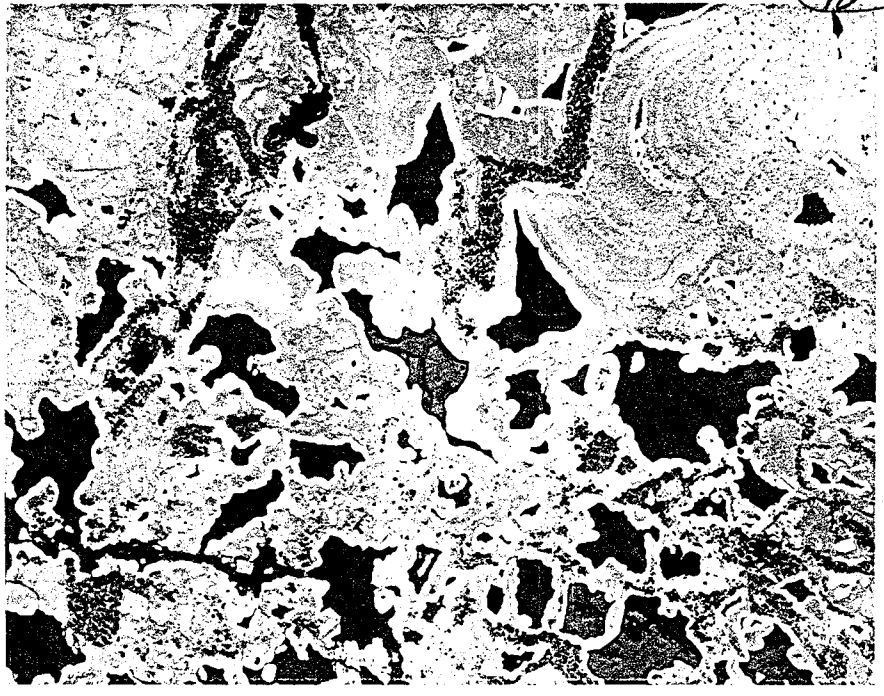


(a) ~~NOPI-415 Site 1~~ S of Center of 10x (50x)

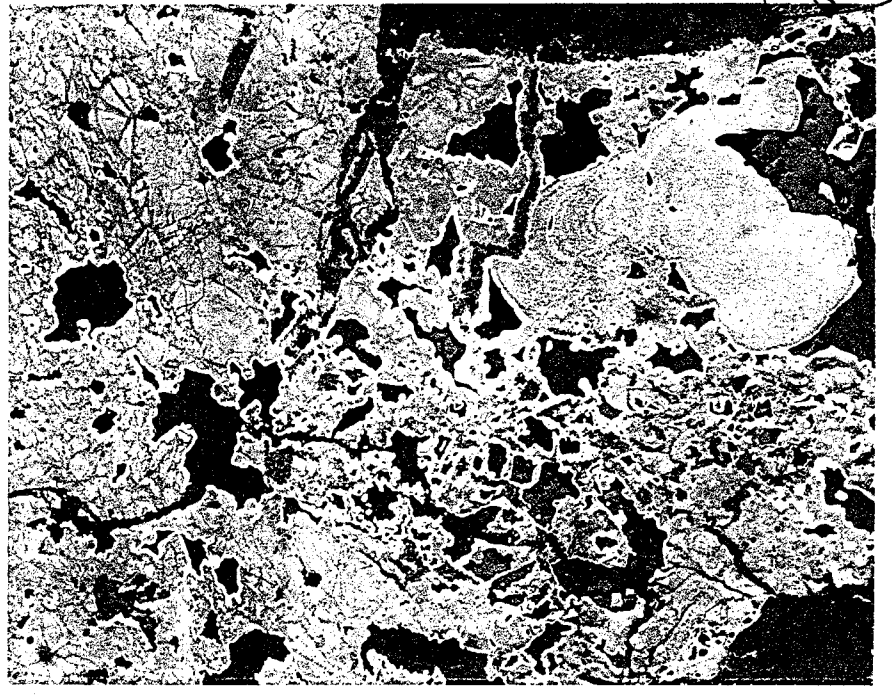


(b) N. of center (20x)

Center (10x)

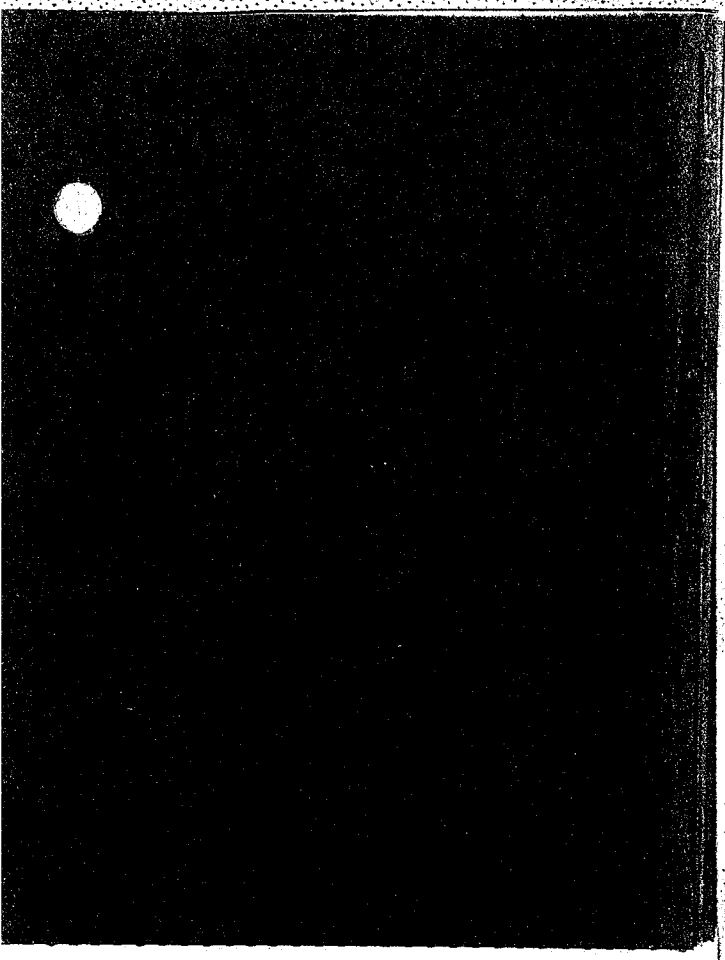


NOPI-415 Site 1 (2x)



NOPI-415 Site 1

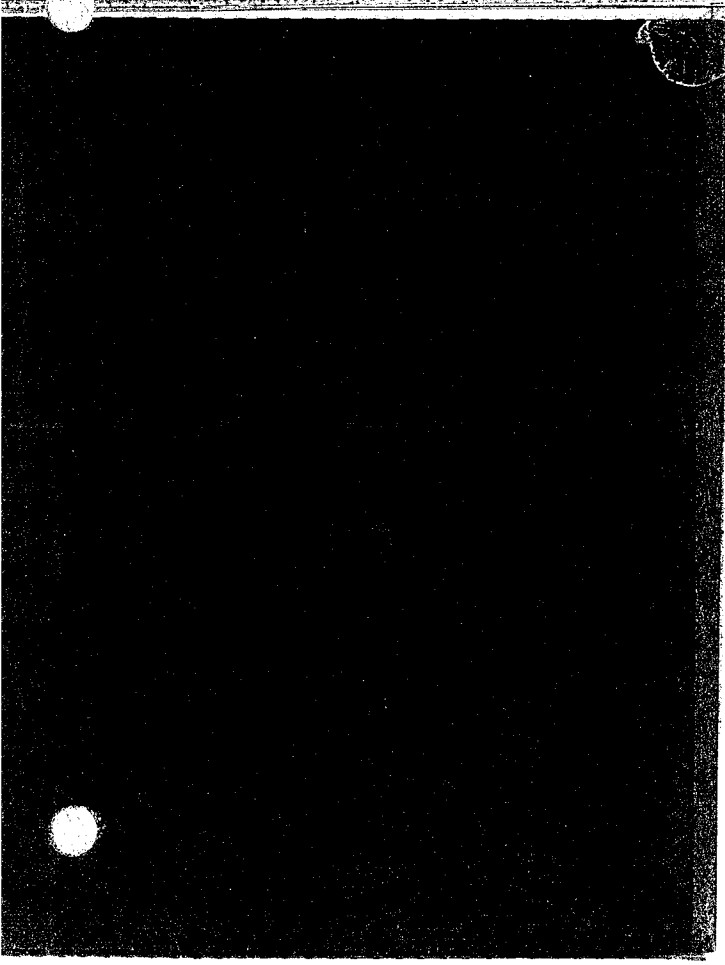
NOPI-425 Site 1



Polaroid F46315A50820A

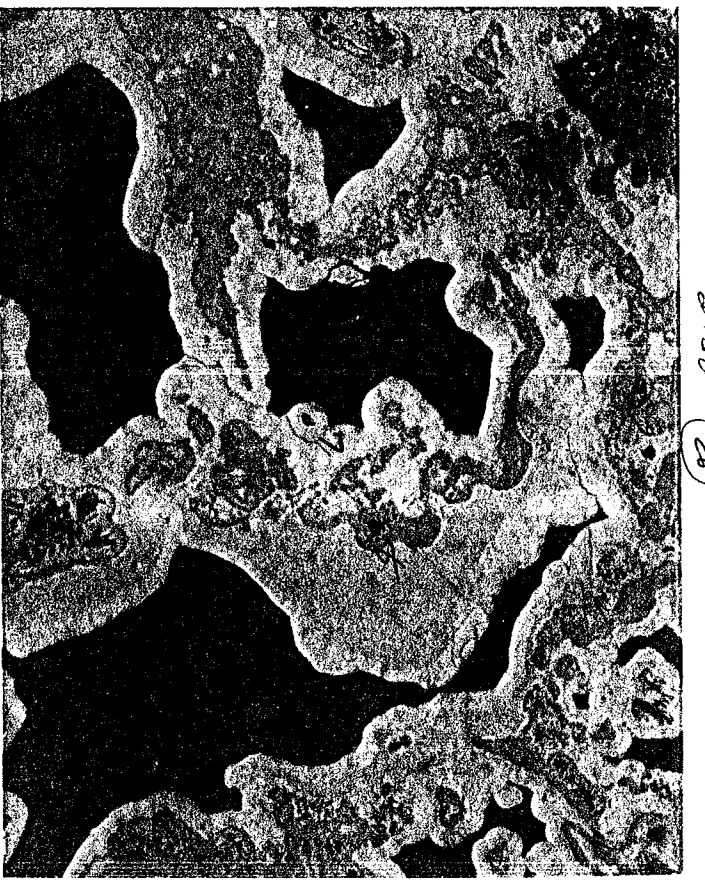
NOPI-425 Site 1 10x

Polaroid F46315A50820A



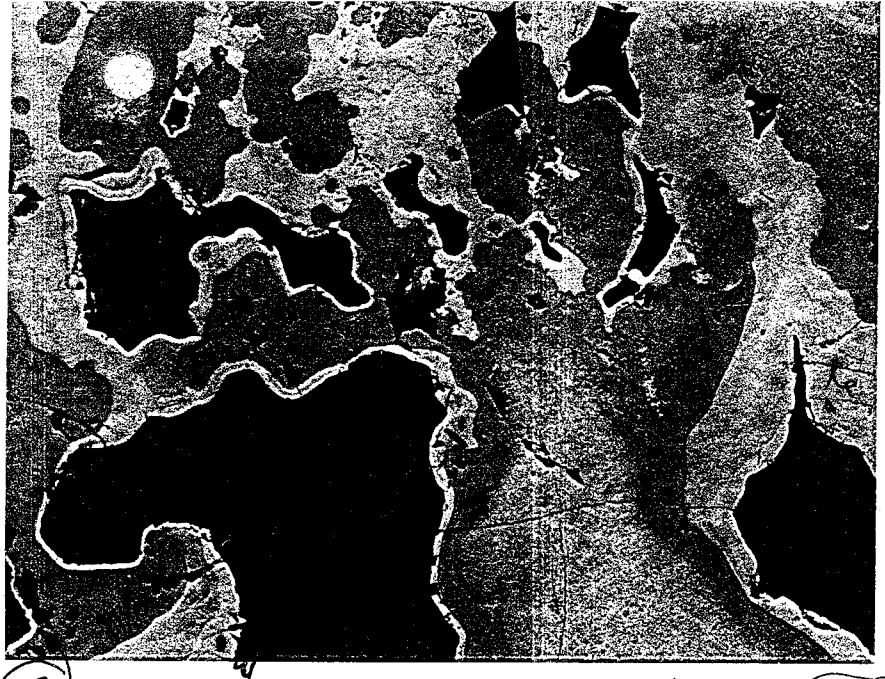
Polaroid F46315A50820A

NOPI-425 Site 1 Not center of 10x(C) 40x

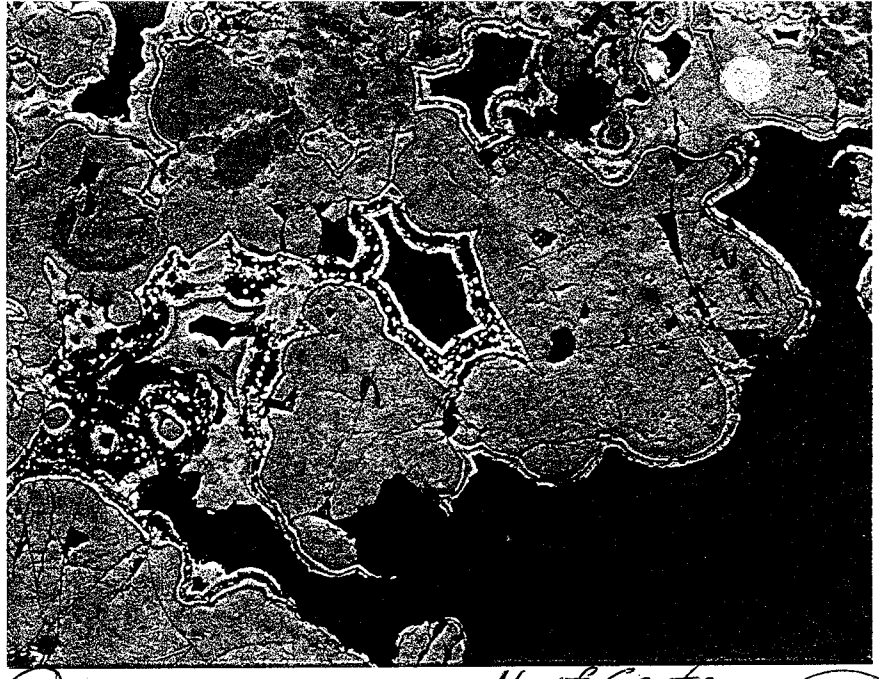


2/50 (2)

within (2)

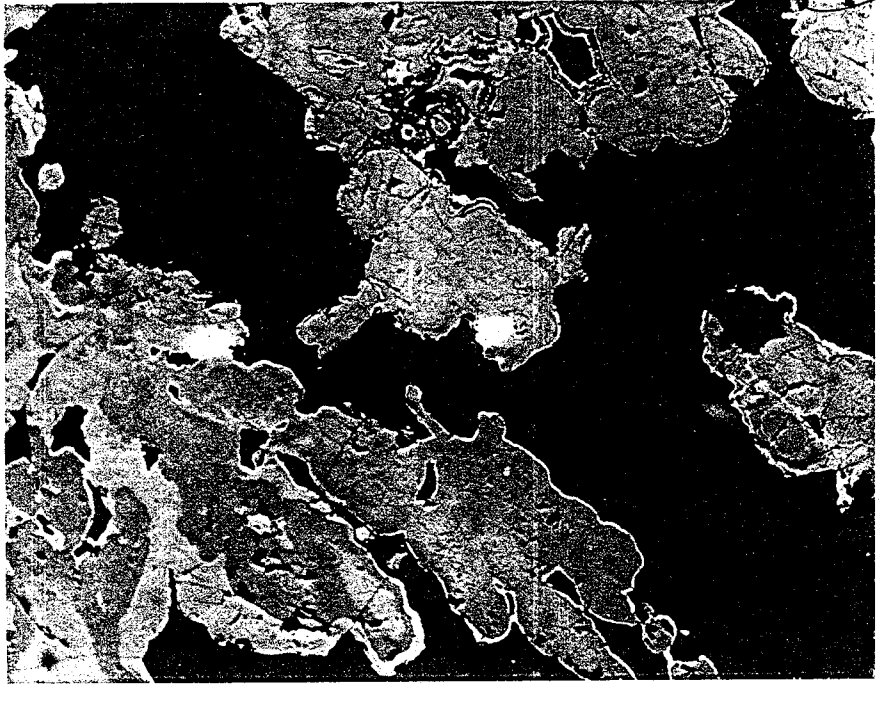


(a) WSW of center (20x)

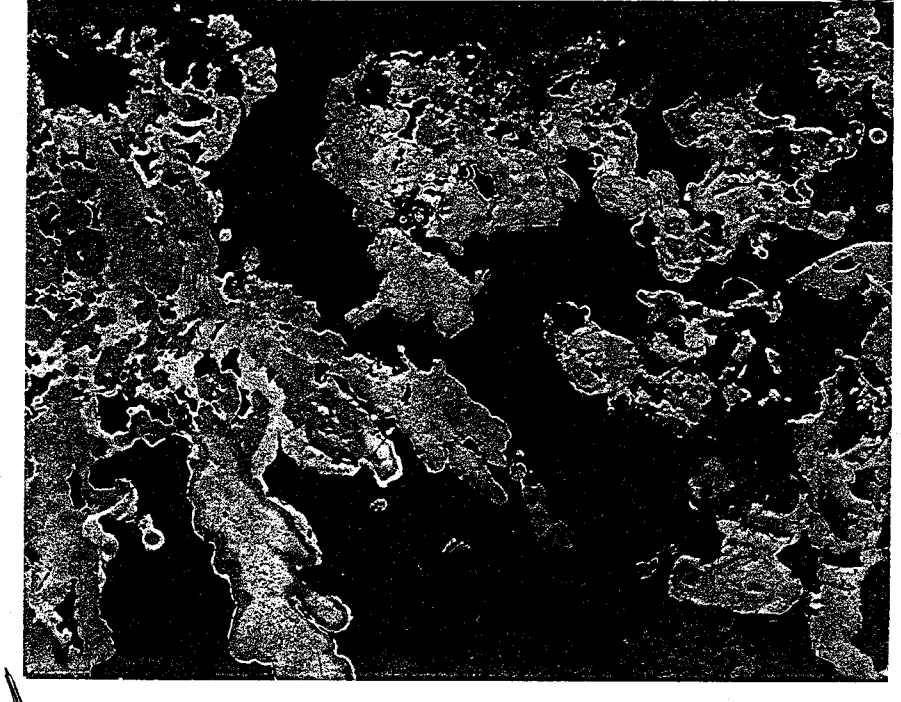


(b) N. of Center of 10x, 5x (20x)

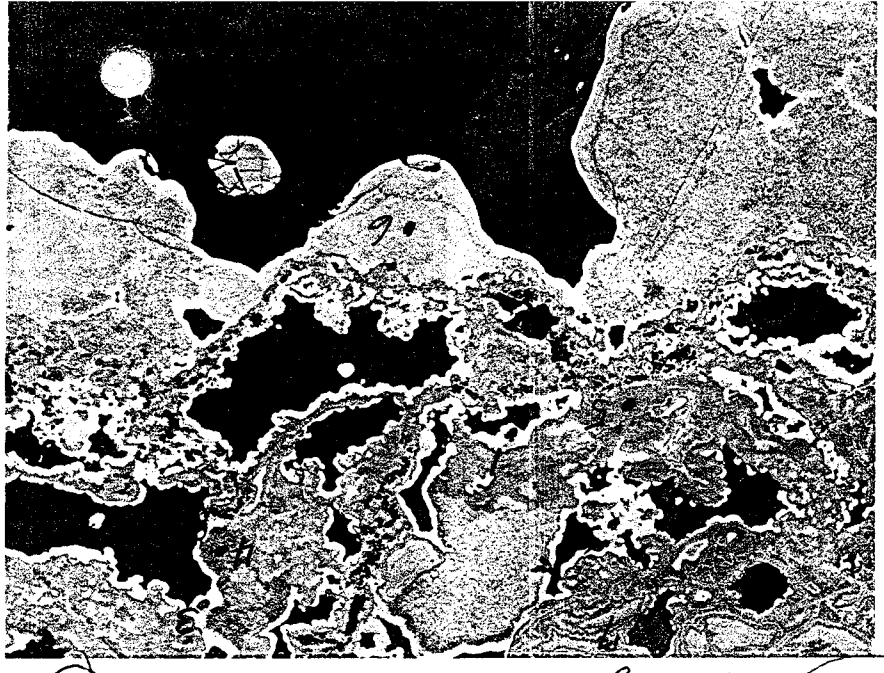
Center (10x)



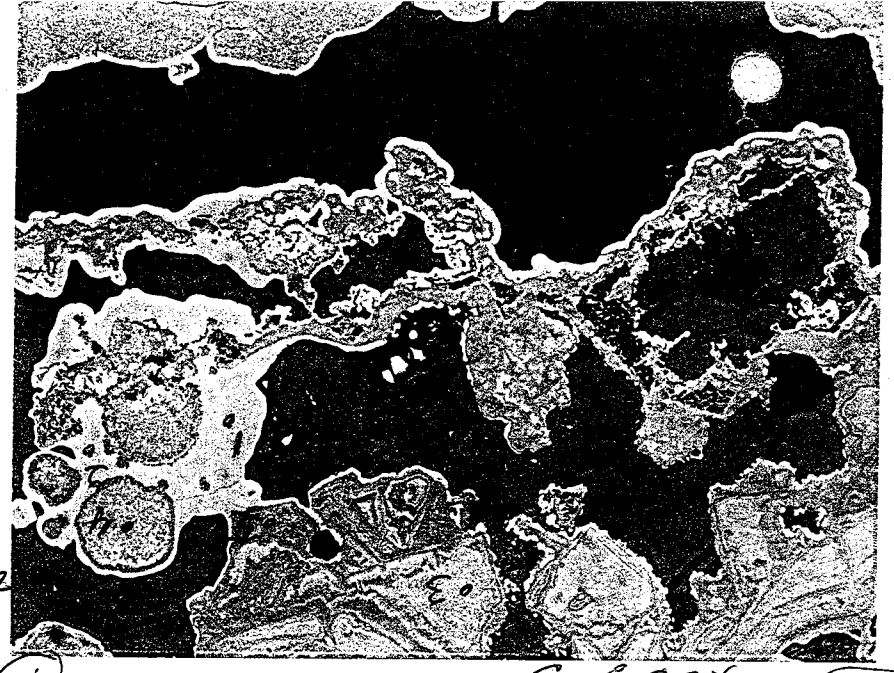
NOAI-415 Site 2 (5x)



NOAI-415 Site 2

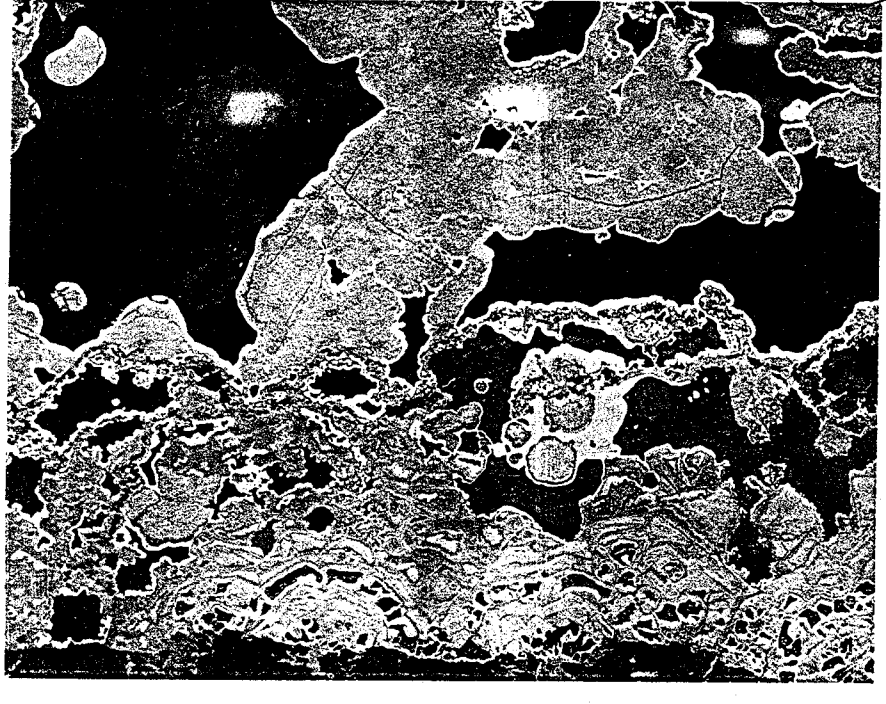


(a) L. of center of 5x, 10x (20x)

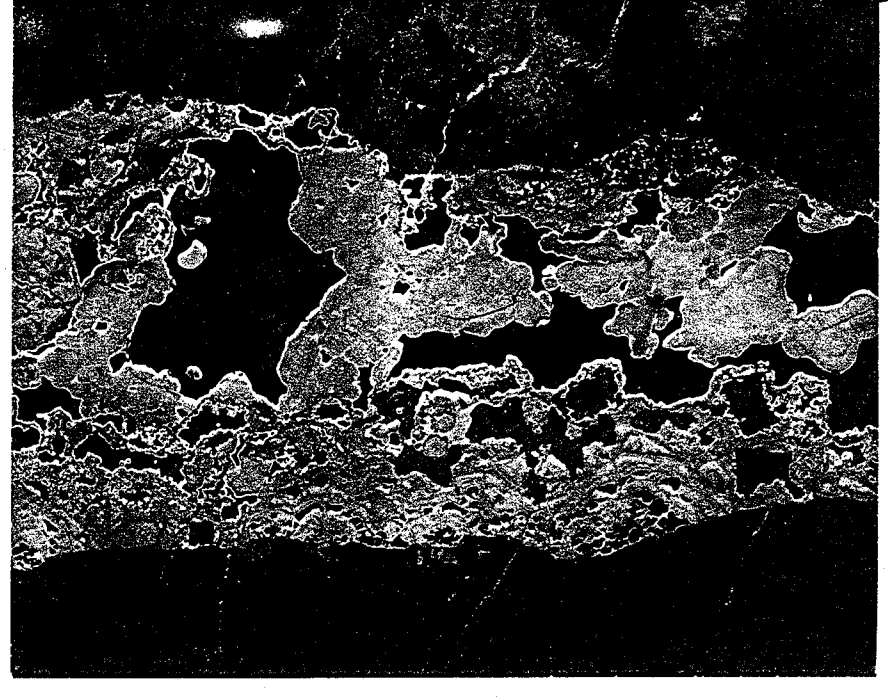


(b) S. of center of 5x, 10x (20x)

Center (10x)



NOPI-415 Site 3 (5x)



NOPI-415 Site 3