

Thermo Fisher Scientific  
900 Middlesex Turnpike  
Billerica, MA 01821

**Certificate of Verification**

XL3t-69288

Reading No 1  
Mode Mining  
Time 2014-03-31 15:32  
Duration 120.12  
Units ppm  
Sigma Value 2  
Sequence Final  
Flags  
INV NR GNM GM 13  
OBJEKT TAFELGEMAELDE  
MATERIAL HOLZ FASSUNG METALL  
ANALYSESTELLE P1 SCHILD LINKS  
MESSAUFBAU STATIV ANLIEGEND  
FILTER m30lo30i30li30  
User Login Raquet



	ppm	±	Error
Ce	< LOD	:	101.504
La	< LOD	:	46.612
Ba	< LOD	:	50.329
Sb	< LOD	:	25.719
Sn	< LOD	:	11.043
Cd	13.640	±	4.912
Ag	547.056	±	12.120
Bal	876523.813	±	613.769
Nb	< LOD	:	3.619
Zr	< LOD	:	14.860
Y	< LOD	:	2.993
Sr	215.055	±	4.580
Rb	< LOD	:	5.900
Th	< LOD	:	223.707
Bi	< LOD	:	203.931
Au	21.613	±	10.086
As	379.785	±	25.418
Se	< LOD	:	4.709
<b>Pb</b>	<b>1395.347</b>	±	23.077
Hg	211.122	±	7.671
Zn	823.514	±	22.217
Cu	378.346	±	19.192
Ni	< LOD	:	30.494
Co	< LOD	:	29.466
Fe	942.055	±	52.825
Mn	< LOD	:	71.139
Cr	< LOD	:	31.711
V	< LOD	:	29.088
Ti	129.759	±	79.101
Ca	98676.703	±	653.546
K	870.159	±	118.750
Al	1046.448	±	564.666
P	1035.649	±	107.138
Si	4175.083	±	309.743
Cl	1735.043	±	37.815
S	10879.823	±	118.910
Mg	< LOD	:	8821.779

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**Certificate of Verification**

XL3t-69288

Reading No 2  
Mode Mining  
Time 2014-03-31 15:40  
Duration 121.84  
Units ppm  
Sigma Value 2  
Sequence Final  
Flags  
INV NR GNM GM 13  
OBJEKT TAFELGEMAELEN  
MATERIAL HOLZ FASSUNG METALL  
ANALYSESTELLE P2 SCHILD LINKS  
MESSAUFBAU STATIV ANLIEGEND  
FILTER m30lo30i30li30  
User Login Raquet



	ppm	±	Error
Ce	< LOD	:	101.182
La	< LOD	:	46.371
Ba	< LOD	:	49.685
Sb	< LOD	:	23.994
Sn	< LOD	:	10.501
Cd	14.251	±	4.842
Ag	454.759	±	10.866
Bal	882980.250	±	604.272
Nb	< LOD	:	7.971
Zr	< LOD	:	22.487
Y	< LOD	:	4.771
Sr	196.024	±	4.566
Rb	< LOD	:	9.593
Th	< LOD	:	335.681
Bi	< LOD	:	322.922
Au	< LOD	:	13.569
As	911.438	±	39.757
Se	< LOD	:	6.886
<b>Pb</b>	<b>3206.964</b>	±	41.151
Hg	98.231	±	7.062
Zn	668.689	±	20.632
Cu	135.159	±	14.385
Ni	< LOD	:	30.912
Co	< LOD	:	27.150
Fe	677.496	±	49.061
Mn	< LOD	:	72.901
Cr	< LOD	:	33.867
V	< LOD	:	22.602
Ti	< LOD	:	96.455
Ca	88845.828	±	689.442
K	708.394	±	114.340
Al	< LOD	:	864.531
P	819.886	±	103.953
Si	4112.885	±	290.927
Cl	1772.523	±	37.004
S	14326.686	±	149.053
Mg	< LOD	:	8201.586

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XL3t-69288

Reading No 3  
Mode Mining  
Time 2014-03-31 15:46  
Duration 120.60  
Units ppm  
Sigma Value 2  
Sequence Final  
Flags  
INV NR GNM GM 13  
OBJEKT TAFELGEMAELEN  
MATERIAL HOLZ FASSUNG METALL  
ANALYSESTELLE P3 SCHILD RECHTS  
MESSAUFBAU STATIV ANLIEGEND  
FILTER m30lo30i30li30  
User Login Raquet



	ppm	±	Error
Ce	< LOD	:	121.292
La	< LOD	:	55.401
Ba	< LOD	:	59.828
Sb	< LOD	:	20.293
Sn	< LOD	:	11.916
Cd	11.389	±	5.563
Ag	370.701	±	11.059
Bal	890873.125	±	647.624
Nb	12.848	±	8.120
Zr	< LOD	:	43.690
Y	< LOD	:	10.020
Sr	190.429	±	5.282
Rb	< LOD	:	21.086
Th	< LOD	:	639.964
Bi	< LOD	:	612.326
Au	273.758	±	21.402
As	2892.881	±	81.038
Se	< LOD	:	13.679
<b>Pb</b>	<b>9971.615</b>	±	123.578
Hg	< LOD	:	9.201
Zn	208.659	±	13.295
Cu	134.909	±	15.894
Ni	< LOD	:	36.377
Co	< LOD	:	33.539
Fe	860.779	±	58.614
Mn	< LOD	:	80.753
Cr	32.741	±	14.503
V	< LOD	:	22.717
Ti	160.235	±	66.351
Ca	57680.461	±	641.920
K	755.872	±	102.765
Al	872.836	±	527.176
P	2147.610	±	126.437
Si	7008.870	±	367.117
Cl	2211.474	±	45.892
S	16696.943	±	216.374
Mg	< LOD	:	9274.803

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XL3t-69288

Reading No 4  
Mode Mining  
Time 2014-03-31 15:50  
Duration 122.14  
Units ppm  
Sigma Value 2  
Sequence Final  
Flags  
INV NR GNM GM 13  
OBJEKT TAFELGEMAEDELDE  
MATERIAL HOLZ FASSUNG METALL  
ANALYSESTELLE P4 SCHILD RECHTS  
MESSAUFBAU STATIV ANLIEGEND  
FILTER m30lo30i30li30  
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	ppm	±	Error
Ce	< LOD	:	113.925
La	< LOD	:	52.415
Ba	< LOD	:	56.162
Sb	< LOD	:	29.840
Sn	< LOD	:	11.112
Cd	13.767	±	5.315
Ag	337.061	±	10.184
Bal	884775.313	±	649.889
Nb	< LOD	:	16.953
Zr	< LOD	:	39.685
Y	< LOD	:	8.989
Sr	185.404	±	4.992
Rb	< LOD	:	21.219
Th	< LOD	:	583.080
Bi	< LOD	:	551.605
Au	898.140	±	30.353
As	2518.858	±	72.138
Se	< LOD	:	11.547
<b>Pb</b>	<b>8654.332</b>	±	103.859
Hg	< LOD	:	8.785
Zn	116.233	±	11.151
Cu	109.704	±	14.582
Ni	< LOD	:	33.959
Co	< LOD	:	30.780
Fe	685.118	±	52.734
Mn	< LOD	:	78.344
Cr	37.372	±	14.448
V	< LOD	:	16.691
Ti	94.598	±	61.359
Ca	61107.680	±	639.630
K	666.338	±	102.639
Al	2010.161	±	527.298
P	5443.318	±	155.158
Si	9029.042	±	381.005
Cl	2354.268	±	43.512
S	20963.246	±	242.269
Mg	< LOD	:	8477.328

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Reading No 5  
Mode Mining  
Time 2014-03-31 15:54  
Duration 120.79  
Units ppm  
Sigma Value 2  
Sequence Final  
Flags  
INV NR GNM GM 13  
OBJEKT TAFELGEMAELEN  
MATERIAL HOLZ FASSUNG METALL  
ANALYSESTELLE P5 SCHILD RECHTS  
MESSAUFBAU STATIV ANLIEGEND  
FILTER m30lo30i30li30  
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	ppm	±	Error
Ce	< LOD	:	124.113
La	< LOD	:	56.794
Ba	< LOD	:	60.924
Sb	< LOD	:	22.164
Sn	< LOD	:	12.059
Cd	14.270	±	5.727
Ag	350.314	±	10.882
Bal	890191.063	±	645.797
Nb	< LOD	:	12.596
Zr	< LOD	:	45.235
Y	< LOD	:	10.279
Sr	215.512	±	5.661
Rb	< LOD	:	26.333
Th	< LOD	:	662.510
Bi	< LOD	:	605.882
Au	107.466	±	18.259
As	3021.397	±	83.148
Se	< LOD	:	13.707
<b>Pb</b>	<b>10341.846</b>	±	128.329
Hg	< LOD	:	9.419
Zn	103.287	±	9.985
Cu	62.533	±	13.784
Ni	< LOD	:	36.523
Co	< LOD	:	32.389
Fe	595.728	±	52.559
Mn	< LOD	:	82.656
Cr	< LOD	:	23.909
V	< LOD	:	24.210
Ti	< LOD	:	97.981
Ca	59125.758	±	666.004
K	571.835	±	108.999
Al	888.021	±	562.747
P	2290.315	±	142.101
Si	6964.375	±	383.188
Cl	2309.511	±	48.621
S	22720.279	±	283.956
Mg	< LOD	:	9632.190

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Reading No 6  
Mode Mining  
Time 2014-03-31 15:58  
Duration 120.56  
Units ppm  
Sigma Value 2  
Sequence Final  
Flags  
INV NR GNM GM 13  
OBJEKT TAFELGEMAELEN  
MATERIAL HOLZ FASSUNG METALL  
ANALYSESTELLE P6 SCHILD RECHTS  
MESSAUFBAU STATIV ANLIEGEND  
FILTER m30lo30i30li30  
User Login Raquet



	ppm	±	Error
Ce	< LOD	:	135.355
La	< LOD	:	61.929
Ba	< LOD	:	66.404
Sb	50.395	±	16.436
Sn	< LOD	:	13.883
Cd	13.585	±	6.153
Ag	248.656	±	9.810
Bal	894818.063	±	654.538
Nb	18.004	±	10.114
Zr	< LOD	:	53.952
Y	< LOD	:	12.621
Sr	198.471	±	5.804
Rb	< LOD	:	24.332
Th	< LOD	:	783.514
Bi	< LOD	:	795.902
Au	< LOD	:	20.035
As	3995.160	±	102.787
Se	< LOD	:	13.890
Pb	13669.509	±	178.830
Hg	< LOD	:	10.692
Zn	1892.206	±	43.871
Cu	40.780	±	13.688
Ni	< LOD	:	37.511
Co	< LOD	:	38.627
Fe	1086.688	±	66.232
Mn	< LOD	:	90.309
Cr	37.019	±	17.893
V	< LOD	:	42.405
Ti	217.201	±	130.230
Ca	46663.617	±	596.408
K	468.673	±	101.770
Al	2137.084	±	541.173
P	1443.652	±	120.581
Si	8164.789	±	369.752
Cl	1852.069	±	41.640
S	22974.922	±	310.216
Mg	< LOD	:	11071.352

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Reading No 7  
Mode Mining  
Time 2014-03-31 16:08  
Duration 121.83  
Units ppm  
Sigma Value 2  
Sequence Final  
Flags  
INV NR GNM GM 13  
OBJEKT TAFELGEMAELEN  
MATERIAL HOLZ FASSUNG METALL  
ANALYSESTELLE P7 KRONE  
MESSAUFBAU STATIV ANLIEGEND  
FILTER m30lo30i30li30  
User Login Raquet



	ppm	±	Error
Ce	< LOD	:	100.425
La	< LOD	:	46.074
Ba	< LOD	:	49.627
Sb	< LOD	:	18.067
Sn	104.104	±	7.932
Cd	13.714	±	4.743
Ag	12.373	±	3.304
BaI	849504.563	±	774.781
Nb	< LOD	:	10.475
Zr	< LOD	:	27.107
Y	< LOD	:	5.834
Sr	206.504	±	4.931
Rb	< LOD	:	12.966
Th	< LOD	:	402.924
Bi	< LOD	:	376.842
Au	1967.025	±	41.076
As	1138.241	±	46.755
Se	< LOD	:	10.187
Pb	4256.305	±	52.414
Hg	53.426	±	7.803
Zn	626.408	±	21.694
Cu	89.187	±	13.469
Ni	< LOD	:	32.711
Co	< LOD	:	29.210
Fe	714.218	±	51.332
Mn	< LOD	:	82.077
Cr	36.895	±	16.853
V	< LOD	:	38.426
Ti	< LOD	:	200.394
Ca	102004.992	±	804.309
K	536.423	±	100.558
Al	2131.578	±	626.813
P	10440.378	±	204.482
Si	6392.283	±	386.785
Cl	4495.544	±	61.157
S	15115.741	±	160.330
Mg	< LOD	:	10899.566

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Reading No 8  
Mode Mining  
Time 2014-03-31 16:13  
Duration 120.50  
Units ppm  
Sigma Value 2  
Sequence Final  
Flags  
INV NR GNM GM 13  
OBJEKT TAFELGEMAELE  
MATERIAL HOLZ FASSUNG METALL  
ANALYSESTELLE P8 NIMBUS  
MESSAUFBAU STATIV ANLIEGEND  
FILTER m30lo30i30li30  
User Login Raquet



	ppm	±	Error
Ce	< LOD	:	94.789
La	< LOD	:	43.411
Ba	< LOD	:	46.788
Sb	< LOD	:	23.438
Sn	9.687	±	6.046
Cd	11.088	±	4.483
Ag	16.367	±	3.303
Bal	808379.375	±	854.492
Nb	< LOD	:	2.498
Zr	< LOD	:	9.812
Y	< LOD	:	1.727
Sr	208.480	±	4.292
Rb	10.784	±	4.172
Th	< LOD	:	149.098
Bi	< LOD	:	127.226
Au	2514.352	±	40.374
As	97.513	±	12.907
Se	< LOD	:	7.135
Pb	351.665	±	10.907
Hg	< LOD	:	4.984
Zn	41.025	±	10.186
Cu	23.986	±	10.331
Ni	< LOD	:	28.575
Co	< LOD	:	23.233
Fe	290.092	±	37.124
Mn	< LOD	:	70.046
Cr	54.386	±	15.155
V	< LOD	:	19.190
Ti	192.241	±	71.117
Ca	150885.547	±	814.654
K	380.345	±	102.629
Al	< LOD	:	1415.210
P	24777.758	±	313.587
Si	< LOD	:	570.918
Cl	1974.483	±	42.126
S	9297.107	±	112.408
Mg	< LOD	:	11681.504



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Reading No 9  
Mode Mining  
Time 2014-03-31 16:18  
Duration 121.46  
Units ppm  
Sigma Value 2  
Sequence Final  
Flags  
INV NR GNM GM 13  
OBJEKT TAFELGEMAELDE  
MATERIAL HOLZ FASSUNG METALL  
ANALYSESTELLE P9 HINTERGRUND  
MESSAUFBAU STATIV ANLIEGEND  
FILTER m30lo30i30li30  
User Login Raquet



	ppm	±	Error
Ce	< LOD	:	97.684
La	< LOD	:	44.875
Ba	< LOD	:	48.442
Sb	< LOD	:	24.059
Sn	11.210	±	6.246
Cd	17.597	±	4.780
Ag	11.500	±	3.252
Bal	809388.375	±	876.904
Nb	< LOD	:	3.564
Zr	< LOD	:	14.576
Y	< LOD	:	2.912
Sr	228.002	±	4.639
Rb	15.278	±	5.366
Th	< LOD	:	219.489
Bi	< LOD	:	184.196
Au	2648.096	±	42.912
As	318.879	±	23.001
Se	< LOD	:	8.193
Pb	1166.271	±	20.684
Hg	< LOD	:	5.765
Zn	102.652	±	11.900
Cu	32.864	±	11.007
Ni	< LOD	:	30.213
Co	< LOD	:	25.157
Fe	506.374	±	43.314
Mn	< LOD	:	75.141
Cr	82.386	±	17.437
V	< LOD	:	40.549
Ti	< LOD	:	210.543
Ca	137905.406	±	817.134
K	599.869	±	106.281
Al	1346.875	±	774.299
P	22587.201	±	311.445
Si	4280.686	±	454.976
Cl	4289.899	±	61.805
S	14300.957	±	148.609
Mg	< LOD	:	16856.832

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Reading No 10  
Mode Mining  
Time 2014-03-31 16:26  
Duration 120.44  
Units ppm  
Sigma Value 2  
Sequence Final  
Flags  
INV NR GNM GM 14  
OBJEKT TAFELGEMAELDE  
MATERIAL HOLZ FASSUNG METALL  
ANALYSESTELLE P1 NIMBUS ZWICKEL  
MESSAUFBAU STATIV ANLIEGEND  
FILTER m30lo30i30li30  
User Login Raquet



	ppm	±	Error
Ce	< LOD	:	144.400
La	< LOD	:	65.763
Ba	< LOD	:	70.174
Sb	< LOD	:	29.571
Sn	1089.746	±	24.652
Cd	20.598	±	6.650
Ag	69.899	±	6.136
Bal	908526.625	±	656.287
Nb	33.096	±	15.731
Zr	< LOD	:	80.952
Y	< LOD	:	19.492
Sr	81.751	±	4.864
Rb	< LOD	:	48.236
Th	< LOD	:	1142.504
Bi	< LOD	:	985.212
Au	249.542	±	30.013
As	5633.913	±	146.980
Se	< LOD	:	17.594
Pb	23456.664	±	333.216
Hg	< LOD	:	16.880
Zn	156.739	±	13.495
Cu	702.272	±	32.004
Ni	< LOD	:	42.193
Co	< LOD	:	50.602
Fe	2644.964	±	105.380
Mn	< LOD	:	118.851
Cr	30.841	±	16.056
V	< LOD	:	21.992
Ti	168.683	±	78.075
Ca	7181.823	±	175.203
K	693.410	±	118.380
Al	1534.054	±	464.530
P	9385.912	±	214.203
Si	14959.167	±	484.680
Cl	3897.433	±	74.212
S	19482.924	±	318.544
Mg	< LOD	:	7472.805

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XL3t-69288

Reading No 11  
Mode Mining  
Time 2014-03-31 16:30  
Duration 121.98  
Units ppm  
Sigma Value 2  
Sequence Final  
Flags  
INV NR GNM GM 14  
OBJEKT TAFELGEMAELDE  
MATERIAL HOLZ FASSUNG METALL  
ANALYSESTELLE P2 NIMBUS  
MESSAUFBAU STATIV ANLIEGEND  
FILTER m30lo30i30li30  
User Login Raquet



	ppm	±	Error
Ce	< LOD	:	174.271
La	< LOD	:	79.795
Ba	< LOD	:	85.147
Sb	< LOD	:	31.666
Sn	1696.746	±	36.727
Cd	26.299	±	8.018
Ag	169.957	±	9.605
Bal	887257.563	±	909.090
Nb	38.222	±	21.533
Zr	< LOD	:	108.109
Y	< LOD	:	26.874
Sr	100.246	±	6.342
Rb	< LOD	:	65.639
Th	< LOD	:	1504.045
Bi	< LOD	:	1253.120
Au	462.818	±	40.778
As	6963.291	±	191.678
Se	< LOD	:	24.620
Pb	31816.955	±	494.736
Hg	< LOD	:	21.917
Zn	183.182	±	16.298
Cu	872.061	±	39.569
Ni	< LOD	:	50.175
Co	< LOD	:	60.833
Fe	3427.920	±	133.244
Mn	< LOD	:	111.315
Cr	44.065	±	17.011
V	< LOD	:	31.453
Ti	189.271	±	86.339
Ca	8291.187	±	201.045
K	1317.168	±	142.372
Al	3050.698	±	544.331
P	11832.104	±	262.867
Si	16794.072	±	531.991
Cl	4034.356	±	81.824
S	21337.229	±	375.204
Mg	< LOD	:	8060.412

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