

Spectrum Label: Spectrum 1

Livetime 90.0 s

Acquisition geometry ( degrees ):

Tilt = 0.0

Azimuth = 0.0

Elevation = 30.0

Accelerating voltage = 10.00 kV

Total spectrum counts = 67632

|  |  |  |  |
| --- | --- | --- | --- |
| Sample data : | Energy (eV) | Resn. (eV) | Area |
| Strobe : | 3.8 | 52.63 | 917160 |
|  |  |  |  |
| Optimization data : Manganese K series |  |  |  |
|  | Energy (eV) | Resn. (eV) | Area |
| Strobe : | .1 | 53.38 | 1150729 |
| Optimization element : | 5892.6 | 129.89 | 573533 |

Spectrum processing :

No peaks omitted

Processing option : Oxygen by stoichiometry (Normalised)

Number of iterations = 1

Standard :

Na Albite 1-Jun-1999 12:00 AM

Mg MgO 1-Jun-1999 12:00 AM

Al Al2O3 1-Jun-1999 12:00 AM

Si SiO2 1-Jun-1999 12:00 AM

P GaP 1-Jun-1999 12:00 AM

S FeS2 1-Jun-1999 12:00 AM

Cl KCl 1-Jun-1999 12:00 AM

K MAD-10 Feldspar 1-Jun-1999 12:00 AM

Ca Wollastonite 1-Jun-1999 12:00 AM

Fe Fe 1-Jun-1999 12:00 AM

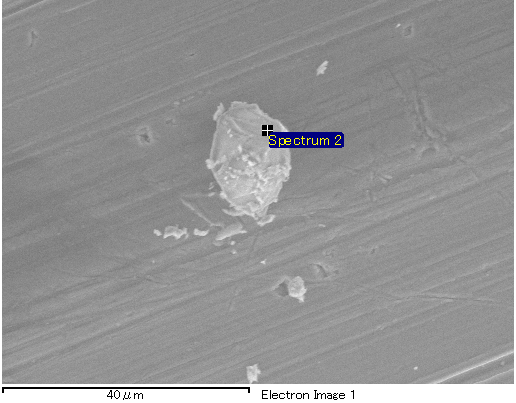
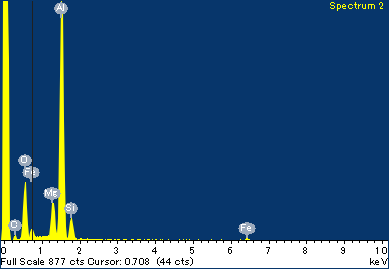
Ni Ni 1-Jun-1999 12:00 AM

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Element | Weight% | Atomic% | Compd% | Formula |  |
|  |  |  |  |  |  |
| Na K | 0.01 | 0.01 | 0.01 | Na2O |  |
| Mg K | 4.43 | 3.79 | 7.35 | MgO |  |
| Al K | 41.23 | 31.81 | 77.91 | Al2O3 |  |
| Si K | 4.64 | 3.44 | 9.92 | SiO2 |  |
| P K | -0.09 | -0.06 | -0.22 | P2O5 |  |
| S K | -0.11 | -0.07 | -0.27 | SO3 |  |
| Cl K | 0.24 | 0.14 | 0.00 |  |  |
| K K | -0.03 | -0.01 | -0.03 | K2O |  |
| Ca K | -0.02 | -0.01 | -0.03 | CaO |  |
| Fe L | 4.31 | 1.61 | 5.54 | FeO |  |
| Ni L | -0.32 | -0.11 | -0.41 | NiO |  |
| O | 45.72 | 59.48 |  |  |  |
| Totals | 100.00 |  |  |  |  |

Project: Project 1

Owner: Operator

Site: Site of Interest 47



Spectrum Label: Spectrum 2

Livetime 90.0 s

Acquisition geometry ( degrees ):

Tilt = 0.0

Azimuth = 0.0

Elevation = 30.0

Accelerating voltage = 10.00 kV

Total spectrum counts = 68071

|  |  |  |  |
| --- | --- | --- | --- |
| Sample data : | Energy (eV) | Resn. (eV) | Area |
| Strobe : | 3.8 | 52.60 | 917023 |
|  |  |  |  |
| Optimization data : Manganese K series |  |  |  |
|  | Energy (eV) | Resn. (eV) | Area |
| Strobe : | .1 | 53.38 | 1150729 |
| Optimization element : | 5892.6 | 129.89 | 573533 |

Spectrum processing :

No peaks omitted

Processing option : Oxygen by stoichiometry (Normalised)

Number of iterations = 1

Standard :

Na Albite 1-Jun-1999 12:00 AM

Mg MgO 1-Jun-1999 12:00 AM

Al Al2O3 1-Jun-1999 12:00 AM

Si SiO2 1-Jun-1999 12:00 AM

P GaP 1-Jun-1999 12:00 AM

S FeS2 1-Jun-1999 12:00 AM

Cl KCl 1-Jun-1999 12:00 AM

K MAD-10 Feldspar 1-Jun-1999 12:00 AM

Ca Wollastonite 1-Jun-1999 12:00 AM

Fe Fe 1-Jun-1999 12:00 AM

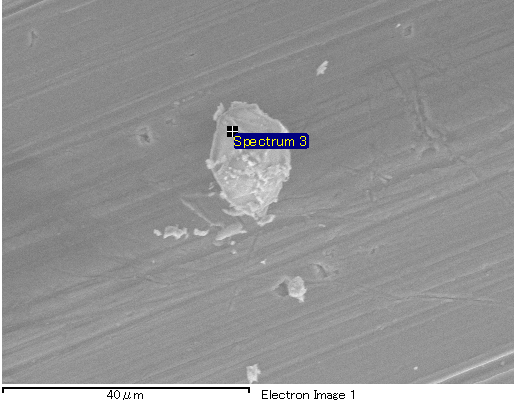
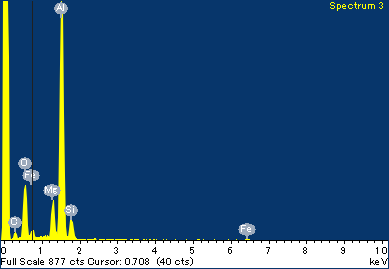
Ni Ni 1-Jun-1999 12:00 AM

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Element | Weight% | Atomic% | Compd% | Formula |  |
|  |  |  |  |  |  |
| Na K | 0.02 | 0.02 | 0.03 | Na2O |  |
| Mg K | 4.59 | 4.12 | 7.61 | MgO |  |
| Al K | 35.68 | 28.87 | 67.42 | Al2O3 |  |
| Si K | 4.15 | 3.23 | 8.88 | SiO2 |  |
| P K | 0.14 | 0.10 | 0.33 | P2O5 |  |
| S K | -0.01 | 0.00 | -0.02 | SO3 |  |
| Cl K | -0.15 | -0.09 | 0.00 |  |  |
| K K | 0.10 | 0.06 | 0.12 | K2O |  |
| Ca K | -0.24 | -0.13 | -0.33 | CaO |  |
| Fe L | 12.50 | 4.89 | 16.08 | FeO |  |
| Ni L | 0.01 | 0.00 | 0.01 | NiO |  |
| O | 43.18 | 58.93 |  |  |  |
| Totals | 100.00 |  |  |  |  |

Project: Project 1

Owner: Operator

Site: Site of Interest 47



Spectrum Label: Spectrum 3

Livetime 90.0 s

Acquisition geometry ( degrees ):

Tilt = 0.0

Azimuth = 0.0

Elevation = 30.0

Accelerating voltage = 10.00 kV

Total spectrum counts = 68627

|  |  |  |  |
| --- | --- | --- | --- |
| Sample data : | Energy (eV) | Resn. (eV) | Area |
| Strobe : | 3.8 | 52.61 | 916374 |
|  |  |  |  |
| Optimization data : Manganese K series |  |  |  |
|  | Energy (eV) | Resn. (eV) | Area |
| Strobe : | .1 | 53.38 | 1150729 |
| Optimization element : | 5892.6 | 129.89 | 573533 |

Spectrum processing :

No peaks omitted

Processing option : Oxygen by stoichiometry (Normalised)

Number of iterations = 1

Standard :

Na Albite 1-Jun-1999 12:00 AM

Mg MgO 1-Jun-1999 12:00 AM

Al Al2O3 1-Jun-1999 12:00 AM

Si SiO2 1-Jun-1999 12:00 AM

P GaP 1-Jun-1999 12:00 AM

S FeS2 1-Jun-1999 12:00 AM

Cl KCl 1-Jun-1999 12:00 AM

K MAD-10 Feldspar 1-Jun-1999 12:00 AM

Ca Wollastonite 1-Jun-1999 12:00 AM

Fe Fe 1-Jun-1999 12:00 AM

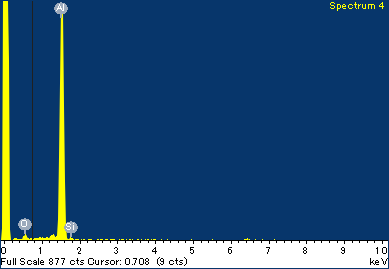
Ni Ni 1-Jun-1999 12:00 AM

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Element | Weight% | Atomic% | Compd% | Formula |  |
|  |  |  |  |  |  |
| Na K | -0.05 | -0.05 | -0.07 | Na2O |  |
| Mg K | 4.91 | 4.38 | 8.15 | MgO |  |
| Al K | 36.17 | 29.04 | 68.34 | Al2O3 |  |
| Si K | 4.15 | 3.20 | 8.88 | SiO2 |  |
| P K | 0.08 | 0.06 | 0.19 | P2O5 |  |
| S K | 0.13 | 0.08 | 0.31 | SO3 |  |
| Cl K | -0.02 | -0.01 | 0.00 |  |  |
| K K | -0.14 | -0.07 | -0.16 | K2O |  |
| Ca K | 0.11 | 0.06 | 0.15 | CaO |  |
| Fe L | 11.05 | 4.29 | 14.22 | FeO |  |
| Ni L | 0.02 | 0.01 | 0.02 | NiO |  |
| O | 43.59 | 59.03 |  |  |  |
| Totals | 100.00 |  |  |  |  |

Project: Project 1

Owner: Operator

Site: Site of Interest 47



Spectrum Label: Spectrum 4

Livetime 90.0 s

Acquisition geometry ( degrees ):

Tilt = 0.0

Azimuth = 0.0

Elevation = 30.0

Accelerating voltage = 10.00 kV

Total spectrum counts = 64108

|  |  |  |  |
| --- | --- | --- | --- |
| Sample data : | Energy (eV) | Resn. (eV) | Area |
| Strobe : | 3.8 | 52.61 | 918541 |
|  |  |  |  |
| Optimization data : Manganese K series |  |  |  |
|  | Energy (eV) | Resn. (eV) | Area |
| Strobe : | .1 | 53.38 | 1150729 |
| Optimization element : | 5892.6 | 129.89 | 573533 |

Spectrum processing :

No peaks omitted

Processing option : Oxygen by stoichiometry (Normalised)

Number of iterations = 1

Standard :

Na Albite 1-Jun-1999 12:00 AM

Mg MgO 1-Jun-1999 12:00 AM

Al Al2O3 1-Jun-1999 12:00 AM

Si SiO2 1-Jun-1999 12:00 AM

P GaP 1-Jun-1999 12:00 AM

S FeS2 1-Jun-1999 12:00 AM

Cl KCl 1-Jun-1999 12:00 AM

K MAD-10 Feldspar 1-Jun-1999 12:00 AM

Ca Wollastonite 1-Jun-1999 12:00 AM

Fe Fe 1-Jun-1999 12:00 AM

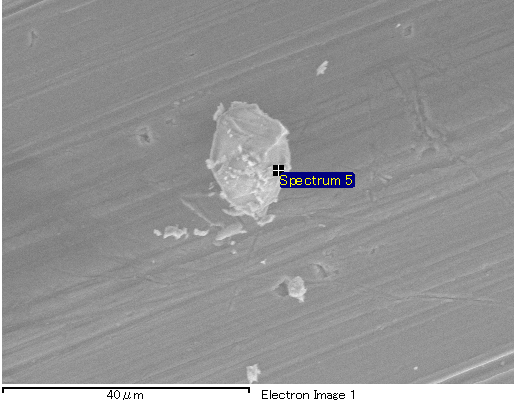
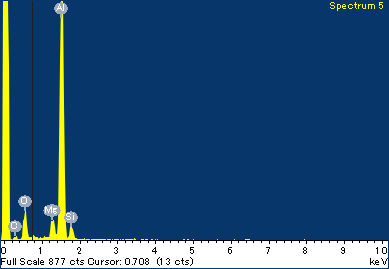
Ni Ni 1-Jun-1999 12:00 AM

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Element | Weight% | Atomic% | Compd% | Formula |  |
|  |  |  |  |  |  |
| Na K | -0.13 | -0.11 | -0.17 | Na2O |  |
| Mg K | 0.49 | 0.41 | 0.82 | MgO |  |
| Al K | 52.50 | 39.50 | 99.20 | Al2O3 |  |
| Si K | 0.71 | 0.51 | 1.51 | SiO2 |  |
| P K | -0.06 | -0.04 | -0.14 | P2O5 |  |
| S K | -0.12 | -0.08 | -0.31 | SO3 |  |
| Cl K | -0.10 | -0.06 | 0.00 |  |  |
| K K | 0.08 | 0.04 | 0.10 | K2O |  |
| Ca K | -0.01 | 0.00 | -0.01 | CaO |  |
| Fe L | -0.16 | -0.06 | -0.21 | FeO |  |
| Ni L | -0.55 | -0.19 | -0.70 | NiO |  |
| O | 47.34 | 60.07 |  |  |  |
| Totals | 100.00 |  |  |  |  |

Project: Project 1

Owner: Operator

Site: Site of Interest 47



Spectrum Label: Spectrum 5

Livetime 90.0 s

Acquisition geometry ( degrees ):

Tilt = 0.0

Azimuth = 0.0

Elevation = 30.0

Accelerating voltage = 10.00 kV

Total spectrum counts = 66899

|  |  |  |  |
| --- | --- | --- | --- |
| Sample data : | Energy (eV) | Resn. (eV) | Area |
| Strobe : | 3.8 | 52.56 | 917295 |
|  |  |  |  |
| Optimization data : Manganese K series |  |  |  |
|  | Energy (eV) | Resn. (eV) | Area |
| Strobe : | .1 | 53.38 | 1150729 |
| Optimization element : | 5892.6 | 129.89 | 573533 |

Spectrum processing :

No peaks omitted

Processing option : Oxygen by stoichiometry (Normalised)

Number of iterations = 1

Standard :

Na Albite 1-Jun-1999 12:00 AM

Mg MgO 1-Jun-1999 12:00 AM

Al Al2O3 1-Jun-1999 12:00 AM

Si SiO2 1-Jun-1999 12:00 AM

P GaP 1-Jun-1999 12:00 AM

S FeS2 1-Jun-1999 12:00 AM

Cl KCl 1-Jun-1999 12:00 AM

K MAD-10 Feldspar 1-Jun-1999 12:00 AM

Ca Wollastonite 1-Jun-1999 12:00 AM

Fe Fe 1-Jun-1999 12:00 AM

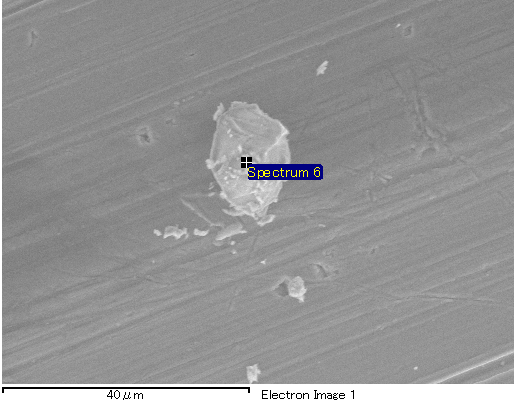
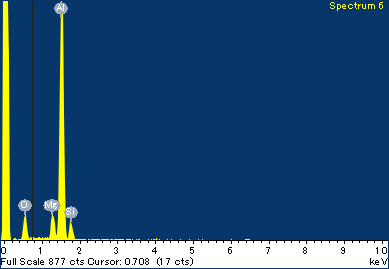
Ni Ni 1-Jun-1999 12:00 AM

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Element | Weight% | Atomic% | Compd% | Formula |  |
|  |  |  |  |  |  |
| Na K | 0.22 | 0.20 | 0.30 | Na2O |  |
| Mg K | 2.87 | 2.41 | 4.76 | MgO |  |
| Al K | 45.89 | 34.75 | 86.70 | Al2O3 |  |
| Si K | 3.20 | 2.33 | 6.85 | SiO2 |  |
| P K | 0.18 | 0.12 | 0.41 | P2O5 |  |
| S K | 0.05 | 0.03 | 0.12 | SO3 |  |
| Cl K | -0.19 | -0.11 | 0.00 |  |  |
| K K | -0.27 | -0.14 | -0.33 | K2O |  |
| Ca K | 0.02 | 0.01 | 0.03 | CaO |  |
| Fe L | 1.53 | 0.56 | 1.97 | FeO |  |
| Ni L | -0.50 | -0.17 | -0.64 | NiO |  |
| O | 46.99 | 60.01 |  |  |  |
| Totals | 100.00 |  |  |  |  |

Project: Project 1

Owner: Operator

Site: Site of Interest 47



Spectrum Label: Spectrum 6

Livetime 90.0 s

Acquisition geometry ( degrees ):

Tilt = 0.0

Azimuth = 0.0

Elevation = 30.0

Accelerating voltage = 10.00 kV

Total spectrum counts = 65767

|  |  |  |  |
| --- | --- | --- | --- |
| Sample data : | Energy (eV) | Resn. (eV) | Area |
| Strobe : | 3.8 | 52.62 | 919881 |
|  |  |  |  |
| Optimization data : Manganese K series |  |  |  |
|  | Energy (eV) | Resn. (eV) | Area |
| Strobe : | .1 | 53.38 | 1150729 |
| Optimization element : | 5892.6 | 129.89 | 573533 |

Spectrum processing :

No peaks omitted

Processing option : Oxygen by stoichiometry (Normalised)

Number of iterations = 1

Standard :

Na Albite 1-Jun-1999 12:00 AM

Mg MgO 1-Jun-1999 12:00 AM

Al Al2O3 1-Jun-1999 12:00 AM

Si SiO2 1-Jun-1999 12:00 AM

P GaP 1-Jun-1999 12:00 AM

S FeS2 1-Jun-1999 12:00 AM

Cl KCl 1-Jun-1999 12:00 AM

K MAD-10 Feldspar 1-Jun-1999 12:00 AM

Ca Wollastonite 1-Jun-1999 12:00 AM

Fe Fe 1-Jun-1999 12:00 AM

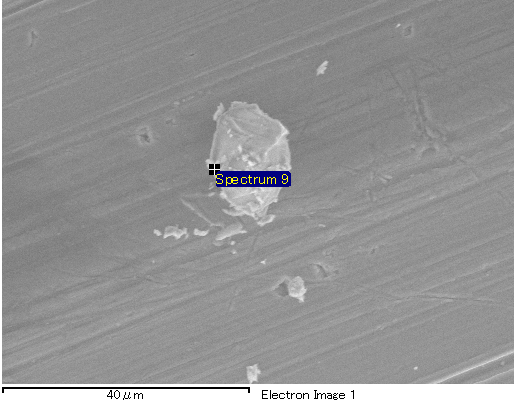
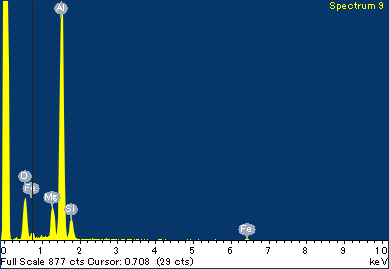
Ni Ni 1-Jun-1999 12:00 AM

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Element | Weight% | Atomic% | Compd% | Formula |  |
|  |  |  |  |  |  |
| Na K | 0.03 | 0.03 | 0.04 | Na2O |  |
| Mg K | 3.62 | 3.09 | 6.00 | MgO |  |
| Al K | 42.97 | 33.06 | 81.19 | Al2O3 |  |
| Si K | 3.74 | 2.76 | 7.99 | SiO2 |  |
| P K | 0.01 | 0.01 | 0.03 | P2O5 |  |
| S K | 0.06 | 0.04 | 0.15 | SO3 |  |
| Cl K | 0.01 | 0.00 | 0.00 |  |  |
| K K | 0.25 | 0.13 | 0.30 | K2O |  |
| Ca K | -0.06 | -0.03 | -0.08 | CaO |  |
| Fe L | 3.42 | 1.27 | 4.40 | FeO |  |
| Ni L | -0.01 | 0.00 | -0.02 | NiO |  |
| O | 45.97 | 59.65 |  |  |  |
| Totals | 100.00 |  |  |  |  |

Project: Project 1

Owner: Operator

Site: Site of Interest 47



Spectrum Label: Spectrum 9

Livetime 90.0 s

Acquisition geometry ( degrees ):

Tilt = 0.0

Azimuth = 0.0

Elevation = 30.0

Accelerating voltage = 10.00 kV

Total spectrum counts = 67410

|  |  |  |  |
| --- | --- | --- | --- |
| Sample data : | Energy (eV) | Resn. (eV) | Area |
| Strobe : | 3.8 | 52.60 | 917693 |
|  |  |  |  |
| Optimization data : Manganese K series |  |  |  |
|  | Energy (eV) | Resn. (eV) | Area |
| Strobe : | .1 | 53.38 | 1150729 |
| Optimization element : | 5892.6 | 129.89 | 573533 |

Spectrum processing :

No peaks omitted

Processing option : Oxygen by stoichiometry (Normalised)

Number of iterations = 1

Standard :

Na Albite 1-Jun-1999 12:00 AM

Mg MgO 1-Jun-1999 12:00 AM

Al Al2O3 1-Jun-1999 12:00 AM

Si SiO2 1-Jun-1999 12:00 AM

P GaP 1-Jun-1999 12:00 AM

S FeS2 1-Jun-1999 12:00 AM

Cl KCl 1-Jun-1999 12:00 AM

K MAD-10 Feldspar 1-Jun-1999 12:00 AM

Ca Wollastonite 1-Jun-1999 12:00 AM

Fe Fe 1-Jun-1999 12:00 AM

Ni Ni 1-Jun-1999 12:00 AM

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Element | Weight% | Atomic% | Compd% | Formula |  |
|  |  |  |  |  |  |
| Na K | 0.08 | 0.08 | 0.11 | Na2O |  |
| Mg K | 4.42 | 3.89 | 7.33 | MgO |  |
| Al K | 37.96 | 30.07 | 71.72 | Al2O3 |  |
| Si K | 4.51 | 3.43 | 9.65 | SiO2 |  |
| P K | -0.02 | -0.02 | -0.06 | P2O5 |  |
| S K | -0.02 | -0.01 | -0.04 | SO3 |  |
| Cl K | 0.03 | 0.02 | 0.00 |  |  |
| K K | 0.19 | 0.10 | 0.23 | K2O |  |
| Ca K | -0.02 | -0.01 | -0.03 | CaO |  |
| Fe L | 8.51 | 3.26 | 10.95 | FeO |  |
| Ni L | 0.08 | 0.03 | 0.10 | NiO |  |
| O | 44.27 | 59.16 |  |  |  |
| Totals | 100.00 |  |  |  |  |

Project: Project 1

Owner: Operator

Site: Site of Interest 47