

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 = 66055

|  |  |  |  |
| --- | --- | --- | --- |
| Sample data : | Energy (eV) | Resn. (eV) | Area |
| Strobe : | 3.8 | 52.52 | 918999 |
|  |  |  |  |
| 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

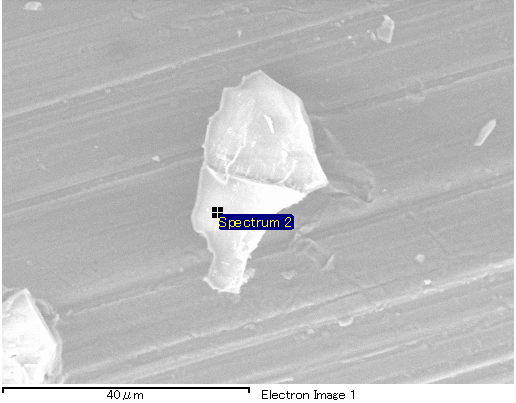
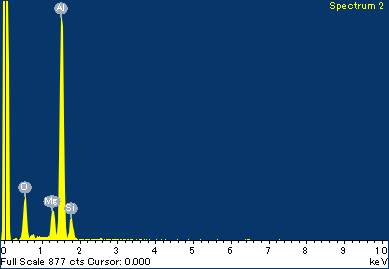
Ni Ni 1-Jun-1999 12:00 AM

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Element | Weight% | Atomic% | Compd% | Formula |  |
|  |  |  |  |  |  |
| Na K | -0.09 | -0.09 | -0.12 | Na2O |  |
| Mg K | 5.47 | 4.91 | 9.07 | MgO |  |
| Al K | 34.65 | 28.03 | 65.46 | Al2O3 |  |
| Si K | 4.57 | 3.55 | 9.77 | SiO2 |  |
| P K | -0.09 | -0.06 | -0.20 | P2O5 |  |
| S K | 0.03 | 0.02 | 0.08 | SO3 |  |
| Cl K | -0.02 | -0.01 | 0.00 |  |  |
| K K | -0.10 | -0.06 | -0.12 | K2O |  |
| Ca K | 0.02 | 0.01 | 0.03 | CaO |  |
| Fe L | 13.11 | 5.12 | 16.86 | FeO |  |
| Ni L | -0.64 | -0.24 | -0.81 | NiO |  |
| O | 43.09 | 58.80 |  |  |  |
| Totals | 100.00 |  |  |  |  |

Project: Project 1

Owner: Operator

Site: Site of Interest 20



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 = 65301

|  |  |  |  |
| --- | --- | --- | --- |
| Sample data : | Energy (eV) | Resn. (eV) | Area |
| Strobe : | 3.8 | 52.47 | 918619 |
|  |  |  |  |
| 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

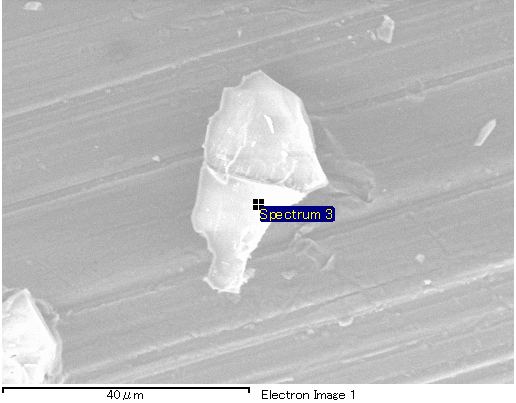
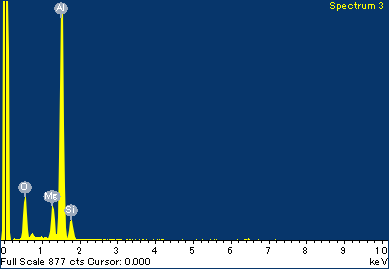
Ni Ni 1-Jun-1999 12:00 AM

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Element | Weight% | Atomic% | Compd% | Formula |  |
|  |  |  |  |  |  |
| Na K | -0.08 | -0.07 | -0.11 | Na2O |  |
| Mg K | 4.45 | 3.84 | 7.38 | MgO |  |
| Al K | 39.51 | 30.69 | 74.64 | Al2O3 |  |
| Si K | 4.92 | 3.67 | 10.53 | SiO2 |  |
| P K | 0.03 | 0.02 | 0.08 | P2O5 |  |
| S K | 0.18 | 0.12 | 0.46 | SO3 |  |
| Cl K | -0.25 | -0.15 | 0.00 |  |  |
| K K | 0.10 | 0.06 | 0.13 | K2O |  |
| Ca K | 0.06 | 0.03 | 0.08 | CaO |  |
| Fe L | 5.75 | 2.16 | 7.40 | FeO |  |
| Ni L | -0.26 | -0.09 | -0.33 | NiO |  |
| O | 45.58 | 59.72 |  |  |  |
| Totals | 100.00 |  |  |  |  |

Project: Project 1

Owner: Operator

Site: Site of Interest 20



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 = 65063

|  |  |  |  |
| --- | --- | --- | --- |
| Sample data : | Energy (eV) | Resn. (eV) | Area |
| Strobe : | 3.8 | 52.57 | 917612 |
|  |  |  |  |
| 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

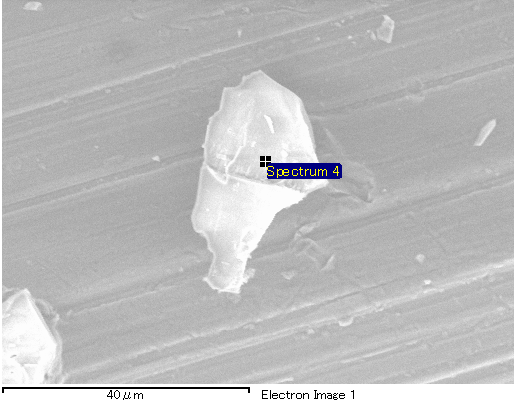
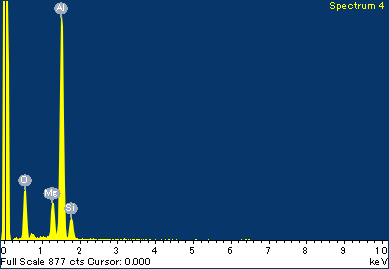
Ni Ni 1-Jun-1999 12:00 AM

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Element | Weight% | Atomic% | Compd% | Formula |  |
|  |  |  |  |  |  |
| Na K | 0.02 | 0.02 | 0.03 | Na2O |  |
| Mg K | 4.58 | 3.98 | 7.60 | MgO |  |
| Al K | 39.19 | 30.66 | 74.04 | Al2O3 |  |
| Si K | 4.59 | 3.45 | 9.81 | SiO2 |  |
| P K | -0.04 | -0.03 | -0.09 | P2O5 |  |
| S K | 0.02 | 0.01 | 0.05 | SO3 |  |
| Cl K | 0.12 | 0.07 | 0.00 |  |  |
| K K | 0.07 | 0.04 | 0.09 | K2O |  |
| Ca K | 0.06 | 0.03 | 0.08 | CaO |  |
| Fe L | 6.76 | 2.55 | 8.69 | FeO |  |
| Ni L | -0.34 | -0.12 | -0.43 | NiO |  |
| O | 44.97 | 59.33 |  |  |  |
| Totals | 100.00 |  |  |  |  |

Project: Project 1

Owner: Operator

Site: Site of Interest 20



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 = 65847

|  |  |  |  |
| --- | --- | --- | --- |
| Sample data : | Energy (eV) | Resn. (eV) | Area |
| Strobe : | 3.8 | 52.46 | 919007 |
|  |  |  |  |
| 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

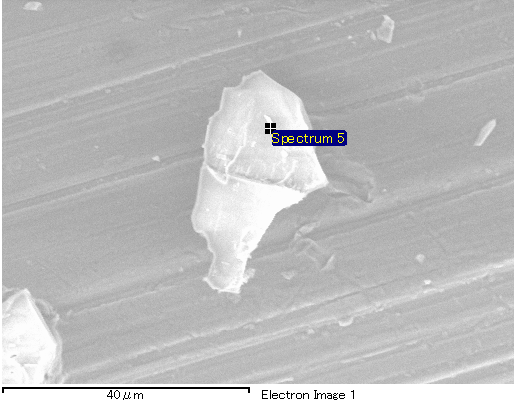
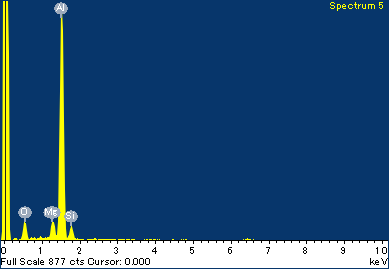
Ni Ni 1-Jun-1999 12:00 AM

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Element | Weight% | Atomic% | Compd% | Formula |  |
|  |  |  |  |  |  |
| Na K | -0.05 | -0.05 | -0.07 | Na2O |  |
| Mg K | 5.26 | 4.58 | 8.71 | MgO |  |
| Al K | 37.06 | 29.12 | 70.02 | Al2O3 |  |
| Si K | 5.13 | 3.88 | 10.98 | SiO2 |  |
| P K | 0.09 | 0.06 | 0.21 | P2O5 |  |
| S K | 0.19 | 0.12 | 0.46 | SO3 |  |
| Cl K | -0.02 | -0.01 | 0.00 |  |  |
| K K | 0.02 | 0.01 | 0.03 | K2O |  |
| Ca K | 0.12 | 0.06 | 0.16 | CaO |  |
| Fe L | 7.76 | 2.95 | 9.98 | FeO |  |
| Ni L | -0.36 | -0.13 | -0.46 | NiO |  |
| O | 44.82 | 59.40 |  |  |  |
| Totals | 100.00 |  |  |  |  |

Project: Project 1

Owner: Operator

Site: Site of Interest 20



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 = 63815

|  |  |  |  |
| --- | --- | --- | --- |
| Sample data : | Energy (eV) | Resn. (eV) | Area |
| Strobe : | 3.8 | 52.54 | 917948 |
|  |  |  |  |
| 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

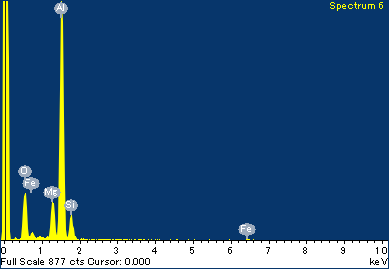
Ni Ni 1-Jun-1999 12:00 AM

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Element | Weight% | Atomic% | Compd% | Formula |  |
|  |  |  |  |  |  |
| Na K | 0.00 | 0.00 | 0.00 | Na2O |  |
| Mg K | 2.92 | 2.45 | 4.84 | MgO |  |
| Al K | 45.55 | 34.46 | 86.07 | Al2O3 |  |
| Si K | 3.81 | 2.77 | 8.15 | SiO2 |  |
| P K | 0.19 | 0.12 | 0.43 | P2O5 |  |
| S K | -0.15 | -0.10 | -0.39 | SO3 |  |
| Cl K | -0.08 | -0.05 | 0.00 |  |  |
| K K | 0.08 | 0.04 | 0.10 | K2O |  |
| Ca K | 0.24 | 0.12 | 0.33 | CaO |  |
| Fe L | 1.45 | 0.53 | 1.87 | FeO |  |
| Ni L | -1.04 | -0.36 | -1.33 | NiO |  |
| O | 47.03 | 60.01 |  |  |  |
| Totals | 100.00 |  |  |  |  |

Project: Project 1

Owner: Operator

Site: Site of Interest 20



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 = 65807

|  |  |  |  |
| --- | --- | --- | --- |
| Sample data : | Energy (eV) | Resn. (eV) | Area |
| Strobe : | 3.8 | 52.66 | 919247 |
|  |  |  |  |
| 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

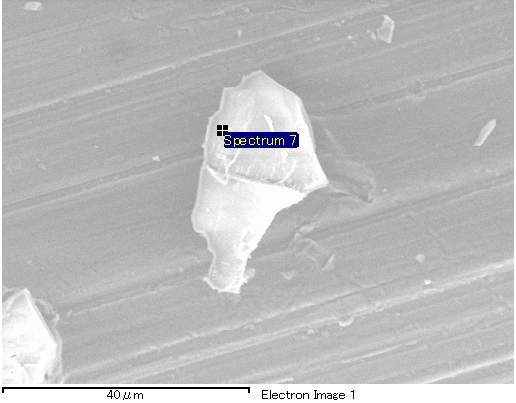
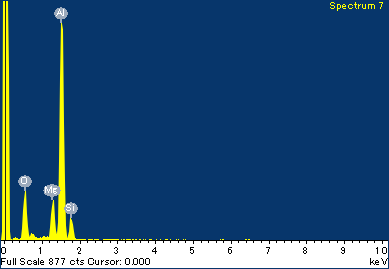
Ni Ni 1-Jun-1999 12:00 AM

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Element | Weight% | Atomic% | Compd% | Formula |  |
|  |  |  |  |  |  |
| Na K | -0.03 | -0.03 | -0.05 | Na2O |  |
| Mg K | 5.20 | 4.53 | 8.62 | MgO |  |
| Al K | 37.37 | 29.34 | 70.61 | Al2O3 |  |
| Si K | 4.96 | 3.74 | 10.61 | SiO2 |  |
| P K | 0.07 | 0.05 | 0.16 | P2O5 |  |
| S K | 0.31 | 0.20 | 0.76 | SO3 |  |
| Cl K | -0.01 | -0.01 | 0.00 |  |  |
| K K | -0.03 | -0.02 | -0.04 | K2O |  |
| Ca K | -0.12 | -0.07 | -0.17 | CaO |  |
| Fe L | 7.73 | 2.93 | 9.94 | FeO |  |
| Ni L | -0.35 | -0.13 | -0.45 | NiO |  |
| O | 44.91 | 59.46 |  |  |  |
| Totals | 100.00 |  |  |  |  |

Project: Project 1

Owner: Operator

Site: Site of Interest 20



Spectrum Label: Spectrum 7

Livetime 90.0 s

Acquisition geometry ( degrees ):

Tilt = 0.0

Azimuth = 0.0

Elevation = 30.0

Accelerating voltage = 10.00 kV

Total spectrum counts = 65485

|  |  |  |  |
| --- | --- | --- | --- |
| Sample data : | Energy (eV) | Resn. (eV) | Area |
| Strobe : | 3.8 | 52.51 | 918287 |
|  |  |  |  |
| 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 | 0.12 | 0.11 | 0.16 | Na2O |  |
| Mg K | 5.39 | 4.66 | 8.94 | MgO |  |
| Al K | 38.28 | 29.83 | 72.33 | Al2O3 |  |
| Si K | 5.14 | 3.85 | 11.00 | SiO2 |  |
| P K | -0.10 | -0.07 | -0.23 | P2O5 |  |
| S K | 0.04 | 0.02 | 0.09 | SO3 |  |
| Cl K | 0.25 | 0.15 | 0.00 |  |  |
| K K | -0.04 | -0.02 | -0.04 | K2O |  |
| Ca K | 0.07 | 0.03 | 0.09 | CaO |  |
| Fe L | 6.55 | 2.47 | 8.43 | FeO |  |
| Ni L | -0.80 | -0.29 | -1.02 | NiO |  |
| O | 45.10 | 59.25 |  |  |  |
| Totals | 100.00 |  |  |  |  |

Project: Project 1

Owner: Operator

Site: Site of Interest 20