

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 = 66370

|  |  |  |  |
| --- | --- | --- | --- |
| Sample data : | Energy (eV) | Resn. (eV) | Area |
| Strobe : | 3.8 | 52.58 | 919585 |
|  |  |  |  |
| 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

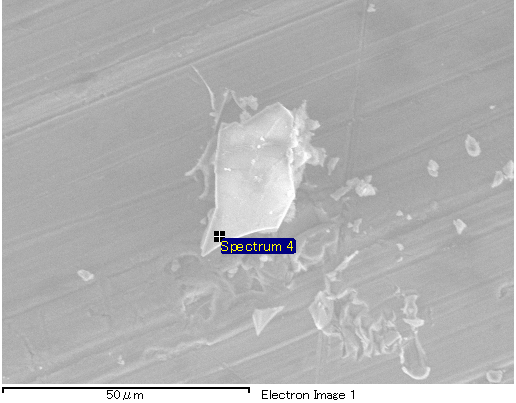
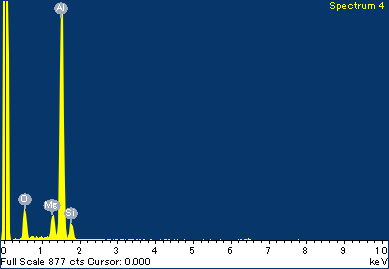
Ni Ni 1-Jun-1999 12:00 AM

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Element | Weight% | Atomic% | Compd% | Formula |  |
|  |  |  |  |  |  |
| Na K | 0.15 | 0.15 | 0.21 | Na2O |  |
| Mg K | 2.15 | 1.93 | 3.56 | MgO |  |
| Al K | 36.83 | 29.82 | 69.59 | Al2O3 |  |
| Si K | 1.50 | 1.17 | 3.21 | SiO2 |  |
| P K | 0.11 | 0.08 | 0.24 | P2O5 |  |
| S K | 2.88 | 1.96 | 7.20 | SO3 |  |
| Cl K | -0.21 | -0.13 | 0.00 |  |  |
| K K | 0.10 | 0.05 | 0.12 | K2O |  |
| Ca K | 0.02 | 0.01 | 0.03 | CaO |  |
| Fe L | 12.74 | 4.99 | 16.39 | FeO |  |
| Ni L | -0.27 | -0.10 | -0.34 | NiO |  |
| O | 43.99 | 60.07 |  |  |  |
| Totals | 100.00 |  |  |  |  |

Project: Project 1

Owner: Operator

Site: Site of Interest 37



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 = 64985

|  |  |  |  |
| --- | --- | --- | --- |
| Sample data : | Energy (eV) | Resn. (eV) | Area |
| Strobe : | 3.8 | 52.58 | 918748 |
|  |  |  |  |
| 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

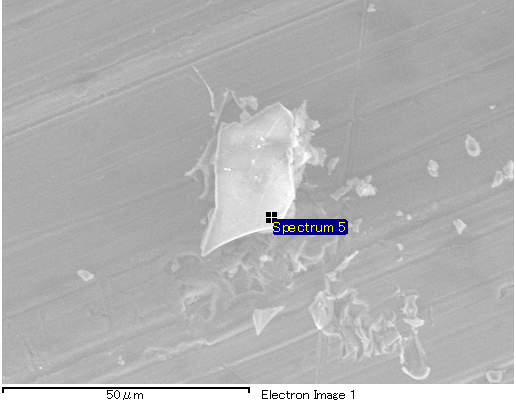
Ni Ni 1-Jun-1999 12:00 AM

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Element | Weight% | Atomic% | Compd% | Formula |  |
|  |  |  |  |  |  |
| Na K | -0.12 | -0.11 | -0.16 | Na2O |  |
| Mg K | 3.83 | 3.29 | 6.36 | MgO |  |
| Al K | 42.09 | 32.56 | 79.53 | Al2O3 |  |
| Si K | 4.18 | 3.11 | 8.95 | SiO2 |  |
| P K | -0.21 | -0.14 | -0.49 | P2O5 |  |
| S K | -0.08 | -0.05 | -0.20 | SO3 |  |
| Cl K | -0.02 | -0.01 | 0.00 |  |  |
| K K | 0.37 | 0.20 | 0.45 | K2O |  |
| Ca K | 0.15 | 0.08 | 0.21 | CaO |  |
| Fe L | 4.01 | 1.50 | 5.16 | FeO |  |
| Ni L | 0.16 | 0.06 | 0.21 | NiO |  |
| O | 45.62 | 59.52 |  |  |  |
| Totals | 100.00 |  |  |  |  |

Project: Project 1

Owner: Operator

Site: Site of Interest 37



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 = 64966

|  |  |  |  |
| --- | --- | --- | --- |
| Sample data : | Energy (eV) | Resn. (eV) | Area |
| Strobe : | 3.8 | 52.63 | 919385 |
|  |  |  |  |
| 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

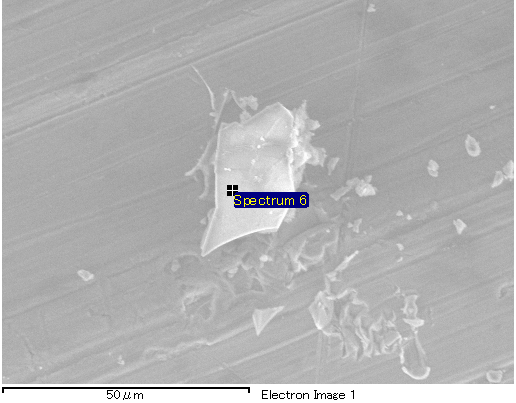
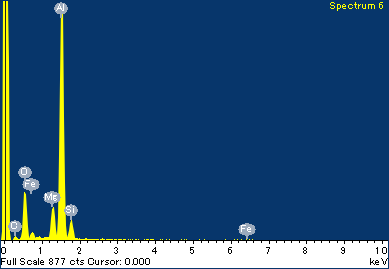
Ni Ni 1-Jun-1999 12:00 AM

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Element | Weight% | Atomic% | Compd% | Formula |  |
|  |  |  |  |  |  |
| Na K | -0.04 | -0.03 | -0.05 | Na2O |  |
| Mg K | 3.00 | 2.60 | 4.98 | MgO |  |
| Al K | 43.27 | 33.77 | 81.76 | Al2O3 |  |
| Si K | 2.69 | 2.02 | 5.76 | SiO2 |  |
| P K | 0.09 | 0.06 | 0.21 | P2O5 |  |
| S K | -0.14 | -0.09 | -0.36 | SO3 |  |
| Cl K | -0.25 | -0.15 | 0.00 |  |  |
| K K | -0.02 | -0.01 | -0.02 | K2O |  |
| Ca K | 0.13 | 0.07 | 0.19 | CaO |  |
| Fe L | 5.89 | 2.22 | 7.58 | FeO |  |
| Ni L | 0.15 | 0.06 | 0.20 | NiO |  |
| O | 45.20 | 59.49 |  |  |  |
| Totals | 100.00 |  |  |  |  |

Project: Project 1

Owner: Operator

Site: Site of Interest 37



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 = 65888

|  |  |  |  |
| --- | --- | --- | --- |
| Sample data : | Energy (eV) | Resn. (eV) | Area |
| Strobe : | 3.8 | 52.53 | 920349 |
|  |  |  |  |
| 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

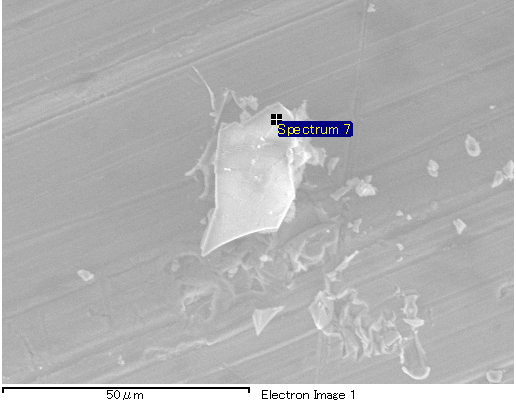
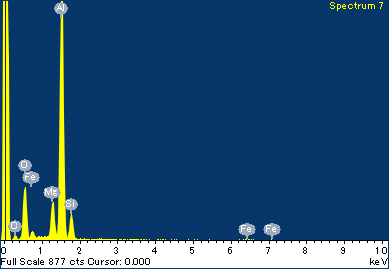
Ni Ni 1-Jun-1999 12:00 AM

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Element | Weight% | Atomic% | Compd% | Formula |  |
|  |  |  |  |  |  |
| Na K | 0.12 | 0.11 | 0.16 | Na2O |  |
| Mg K | 4.44 | 3.92 | 7.36 | MgO |  |
| Al K | 38.24 | 30.47 | 72.26 | Al2O3 |  |
| Si K | 3.94 | 3.01 | 8.42 | SiO2 |  |
| P K | -0.10 | -0.07 | -0.22 | P2O5 |  |
| S K | -0.23 | -0.16 | -0.58 | SO3 |  |
| Cl K | -0.08 | -0.05 | 0.00 |  |  |
| K K | 0.01 | 0.01 | 0.01 | K2O |  |
| Ca K | 0.38 | 0.21 | 0.54 | CaO |  |
| Fe L | 9.51 | 3.66 | 12.23 | FeO |  |
| Ni L | -0.08 | -0.03 | -0.10 | NiO |  |
| O | 43.85 | 58.91 |  |  |  |
| Totals | 100.00 |  |  |  |  |

Project: Project 1

Owner: Operator

Site: Site of Interest 37



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 = 66668

|  |  |  |  |
| --- | --- | --- | --- |
| Sample data : | Energy (eV) | Resn. (eV) | Area |
| Strobe : | 3.8 | 52.61 | 918956 |
|  |  |  |  |
| 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

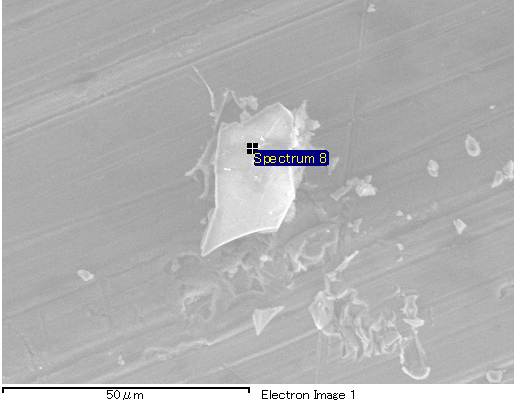
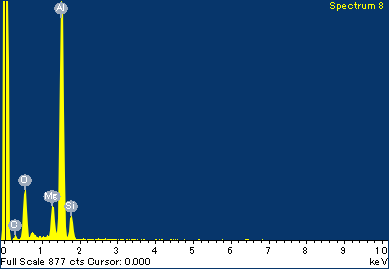
Ni Ni 1-Jun-1999 12:00 AM

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Element | Weight% | Atomic% | Compd% | Formula |  |
|  |  |  |  |  |  |
| Na K | 0.01 | 0.01 | 0.01 | Na2O |  |
| Mg K | 4.48 | 3.96 | 7.42 | MgO |  |
| Al K | 36.67 | 29.24 | 69.29 | Al2O3 |  |
| Si K | 4.75 | 3.64 | 10.16 | SiO2 |  |
| P K | 0.09 | 0.07 | 0.21 | P2O5 |  |
| S K | 0.08 | 0.05 | 0.19 | SO3 |  |
| Cl K | 0.03 | 0.02 | 0.00 |  |  |
| K K | 0.06 | 0.03 | 0.07 | K2O |  |
| Ca K | -0.02 | -0.01 | -0.03 | CaO |  |
| Fe L | 10.02 | 3.86 | 12.89 | FeO |  |
| Ni L | -0.19 | -0.07 | -0.24 | NiO |  |
| O | 44.03 | 59.21 |  |  |  |
| Totals | 100.00 |  |  |  |  |

Project: Project 1

Owner: Operator

Site: Site of Interest 37



Spectrum Label: Spectrum 8

Livetime 90.0 s

Acquisition geometry ( degrees ):

Tilt = 0.0

Azimuth = 0.0

Elevation = 30.0

Accelerating voltage = 10.00 kV

Total spectrum counts = 66533

|  |  |  |  |
| --- | --- | --- | --- |
| Sample data : | Energy (eV) | Resn. (eV) | Area |
| Strobe : | 3.8 | 52.51 | 919020 |
|  |  |  |  |
| 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

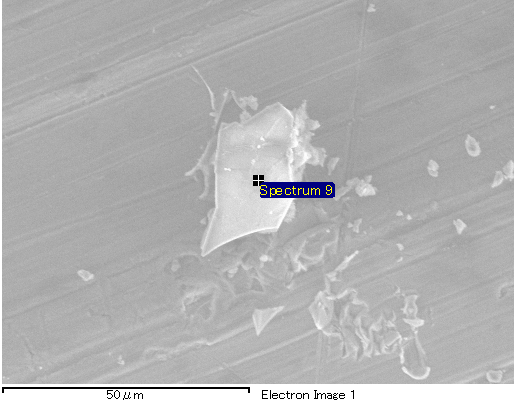
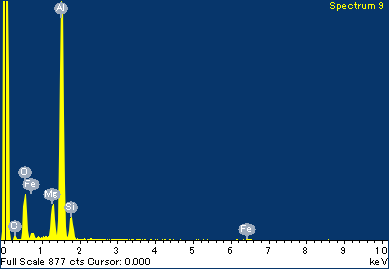
Ni Ni 1-Jun-1999 12:00 AM

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Element | Weight% | Atomic% | Compd% | Formula |  |
|  |  |  |  |  |  |
| Na K | -0.21 | -0.20 | -0.29 | Na2O |  |
| Mg K | 4.55 | 3.96 | 7.54 | MgO |  |
| Al K | 38.80 | 30.45 | 73.30 | Al2O3 |  |
| Si K | 4.71 | 3.55 | 10.08 | SiO2 |  |
| P K | -0.05 | -0.04 | -0.12 | P2O5 |  |
| S K | 0.02 | 0.01 | 0.05 | SO3 |  |
| Cl K | 0.05 | 0.03 | 0.00 |  |  |
| K K | -0.03 | -0.02 | -0.04 | K2O |  |
| Ca K | 0.32 | 0.17 | 0.44 | CaO |  |
| Fe L | 7.63 | 2.89 | 9.81 | FeO |  |
| Ni L | -0.65 | -0.24 | -0.83 | NiO |  |
| O | 44.88 | 59.41 |  |  |  |
| Totals | 100.00 |  |  |  |  |

Project: Project 1

Owner: Operator

Site: Site of Interest 37



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 = 65928

|  |  |  |  |
| --- | --- | --- | --- |
| Sample data : | Energy (eV) | Resn. (eV) | Area |
| Strobe : | 3.8 | 52.51 | 918268 |
|  |  |  |  |
| 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 | 4.55 | 4.02 | 7.55 | MgO |  |
| Al K | 37.17 | 29.56 | 70.23 | Al2O3 |  |
| Si K | 4.75 | 3.63 | 10.16 | SiO2 |  |
| P K | -0.01 | -0.01 | -0.03 | P2O5 |  |
| S K | -0.08 | -0.05 | -0.19 | SO3 |  |
| Cl K | 0.10 | 0.06 | 0.00 |  |  |
| K K | 0.14 | 0.08 | 0.17 | K2O |  |
| Ca K | 0.06 | 0.03 | 0.09 | CaO |  |
| Fe L | 8.72 | 3.35 | 11.21 | FeO |  |
| Ni L | 0.48 | 0.17 | 0.61 | NiO |  |
| O | 44.04 | 59.08 |  |  |  |
| Totals | 100.00 |  |  |  |  |

Project: Project 1

Owner: Operator

Site: Site of Interest 37