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SFUND RECORDS CTR
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TRILLIUM INC.

Data Validation Report

TDD No:	09-04-01-0011
PAN:	001275.0440.01TA
Site:	El Dorado Hills
Laboratory:	Lab/Cor, Inc.
Reviewer:	Denise A. Shepperd, Trillium, Inc.
Date:	January 28, 2005

I. Case Summary

SAMPLE INFORMATION:

Asbestos Samples:	APG-L2-13CH-100404; APG-L2-1CH-100404; APG-L2-1ZB-100404; APG-L2-2CH-100404; APG-L2-3CH-100404; APG-L2-4CH-100404; APG-L2-5CH-100404; CC1-L6-1CA-100204; CC1-L6-1CB-100204; CC1-L6-2CB-100204; CC1-L6-3CB-100204; CC2A-L6-1CA-100304; CC2-L6-11CC-100304; CC2-L6-1CC-100304; CC2-L6-2CC-100304; CC2-L6-3CC-100304; CC2-L6-4CC-100304; SVBA-H2-1FD-100204; SVBA-H2-2FD-100204; SVBA-H2-3FD-100204; SVBB-H2-1FD-100304; SVBB-H2-2FD-100304; SVBB-H2-3FD-100304; TPG-L2-11CH-100404; TPG-L2-1CH-100404; TPG-L2-1ZB-100404; TPG-L2-2CH-100404; TPG-L2-3CH-100404; TPG-L2-4CH-100404; TPG-L2-5CH-100404; RHB-H2-1FD-100304; RHB-H2-2FD-100304; RHB-H2-3FD-100304; RHB-L2-1CH-100304; RHB-L2-2CH-100304; RHB-L2-3CH-100304; RHB-L2-4CH-100304; RHB-L2-5CH-100304; SVBA-L2-11CH-100204; SVBA-L2-1CH-100204; SVBA-L2-2CH-100204; SVBA-L2-3CH-100204; SVBA-L2-4CH-100204; SVBA-L2-5CH-100204; SVBB-L2-12CH-100304; SVBB-L2-1CH-100304; SVBB-L2-2CH-100304; SVBB-L2-3CH-100304; SVBB-L2-4CH-100304; SVBB-L2-5CH-100304; SVM-H2-1FD-100204; SVM-H2-2FD-100204; SVM-H2-3FD-100204
Matrix:	53 Air samples
Analysis:	Asbestos by Transmission Electron Microscopy
Collection Dates:	October 2 through 4, 2004
Sample Receipt Date:	October 7, 2004
Analysis Date:	October 7 through November 22, 2004
Analytical Method:	ISO Method 10312

FIELD QC:

Field Trip Blanks (TB):	APG-L2-1ZB-100404
Filter Blanks (FB):	None
Equipment Blanks (EB):	None
Background Samples (BG):	None

Field Duplicates (D1): Not Identified

TABLES:

1A: Analytical Results with Qualifications
1B: Data Qualifier Definitions for Inorganic Data Review

SAMPLING ISSUES:

Five chain of custody (COC) documents were included in the data package and were properly completed. These documents included all of the field samples in the data package, as well as many additional samples.

VALIDATION PARAMETERS AND COMMENTS:

I. Holding Times, Preservation and Sample Integrity

This parameter is evaluated to ensure that sample custody is documented from collection through analysis, samples are analyzed within the recommended holding time, and that no alteration in sample content has occurred during sample shipment, handling, and storage.

There is no established holding time or storage condition for asbestos samples.

II. Calibration

The analyses of materials of known content ensures that identification and quantitation of analytes will be accurate for all samples. Review of the documentation provided for appropriate calibration determines whether or not the analytical results reported by the laboratory are valid and supported by the data.

The data deliverables for this project were included in multiple data packages. The calibration documentation was provided in a single package associated with all of the site sample data packages.

A letter representing documentation of an NVLAP laboratory site assessment conducted on 11/7/03 was included in the data package. The letter included (dated 5/10/04) indicated that the laboratory met the on-site assessment requirements.

Results and evaluator notes and tables were included for an NISTIR 5351 analysis of an inter-laboratory QC sample. The laboratory's raw data were compiled and assessed by Batta Labs. Analysts were identified by initials and included all of the initials documented with this sample set, except "JH." According to the assessor's notes, the sample included chrysotile fibers and structures and the laboratory's results were within NVLAP and NISTIR 5351acceptance limits. No raw data were provided for this QC sample.

Results for a New York State Department of Health Environmental Laboratory Approval Program proficiency test, conducted between 9/7/04 and 11/9/04, were included. The proficiency samples included asbestos in air. The laboratory's results were satisfactory for all four of the air sample categories. Actinolite and amosite fiber types were identified and counts were acceptable according to the data sheet. No raw data were provided for this proficiency sample. Upon request, the laboratory provided raw data documenting the identification of actinolite and amosite asbestos on 1/27/05. These data were inserted into the QC data package by the validator.

Acceptable instrument calibration was documented in the data package, including screen and camera magnification, camera length and camera constant, spot size, k-factor, beam dose, EDS sensitivity and peak intensity. No documentation of grid opening size was provided. Documentation was provided in the separate proficiency and calibration data package for October through December, 2004, for both of the instruments used for analysis of

samples included in this data package. Analyses of the samples in this data set were performed during this time period.

Based on the fact that the laboratory demonstrated proficiency in the performance evaluation (PE) analyses performed in the third quarter of 2004, and that these PE samples included the two predominant asbestos types detected in this field sample set, no action was taken by the validator. It is recommended however, that supporting data be expanded to include raw data supporting the identification of all asbestos types detected in PE samples and demonstration, wherever possible, of the correct identification (in known reference materials) of all fiber types detected in a field sample set.

III. Blanks

Sample matrices known to be devoid of the analytes of interest (method blanks) are prepared and analyzed with each analytical batch. Evaluation of this parameter ensures that contamination introduced during preparation and analyses is not attributed to the field samples.

Other blanks may be generated in the field or laboratory to ensure that no contamination is introduced during sampling and/or storage.

Blanks required for this project included Filter Blanks and Field Trip Blanks. No filter blanks were included with this sample set; two Field Trip Blanks (APG-L2-1ZB-100404 and TPG-L2-1ZB-100404) were included. Field Trip Blanks are processed and analyzed by the laboratory in the same manner as field samples. Results can be used to assess contamination from a combination of the field and the laboratory environments. No asbestos structures were identified in either of the field blanks.

IV. Spiked Samples

The analytes of interest are added in known concentrations to like-matrix blanks or authentic field samples before preparation. This parameter is evaluated in order to assess the laboratory's ability to preserve and recover the compounds of interest.

The analytical method does not require laboratory spiked sample analyses. It is recommended by the validator that some type of laboratory prepared or purchased spiked analyses be performed with each analytical sample batch.

The project requirements specified that results from the most recent inter-laboratory study would be acceptable as an LCS sample for these data. This requirement was met by the laboratory and reported results for the inter-laboratory study sample were acceptable for all air sample parameters (see Section I).

V. Duplicate/Replicate Samples

Results for duplicate/replicate samples are evaluated to assess the laboratory's precision for the analytes of interest in the applicable sample matrix. For asbestos analyses, duplicate and replicate measurements take the form of a combination of variables which include the preparation of the grid, the choice of grid openings to be analyzed, and the analyst performing the counting and identification of structures.

The laboratory included all of the QC samples from all of the field sample sets in a separate data package under a separate report number.

The two analysts, JH and TM, not represented in the PE sample analyses included with the data packages for this project did perform intra-laboratory replicate and duplicate analyses on associated field samples. Results for these QC analyses for both analysts were within the sample-specific acceptance limits.

The quality assurance project plan (QAPP) requires five types of laboratory duplicate/replicate analyses, each to be performed at a rate of 5% (one for every twenty) of the field samples. Based on 50 field samples reported in the data package, two or more of each of these QC sample pairs were required. The laboratory compared the primary asbestos structure count for each of the QC samples prepared and analyzed. Results for all of the duplicate/replicate pair types were evaluated based on 95% confidence limits determined from the original sample count result. Results for all of the reported QC samples were within the laboratory's calculated limits. A summary of the laboratory QC samples included with this data set are as follows:

Replicate analyses:

- one sample, SVM-H2-2FD-100204, was analyzed as a replicate wherein a different preparation was analyzed by the same analyst;

Duplicate analyses:

- SVM-H2-2FD-100204 was also analyzed as a duplicate wherein the same grid openings were recounted by a different analyst;
- Three samples, RHB-H2-2FD-100304, SVM-H2-1FD-100204, and SVM-H2-2FD-100204, were both analyzed as duplicates, wherein different grid openings were selected for counting by a different analyst; and
- One sample, RHB-H2-3FD-100304 was analyzed as the third type of duplicate specified by the QAPP, wherein a different analyst analyzes a different preparation.

No samples were analyzed as QC samples for one of the required categories:

- a replicate wherein different grid openings were selected by the same analyst for a second measurement

Two samples should have been included for each of these QC sample categories in order to satisfy the 5% requirements of the QAPP.

An additional type of QC sample not identified by the QAPP was included. Two samples (RHB-H2-2FD-100304 and RHB-H2-3FD-100304) were recounted by the same analyst counting the same grids.

The laboratory indicated on the QC sample summary sheet that an additional sample from this analytical batch was included as one replicate and two duplicate analyses. The replicate analysis was a new preparation and the duplicate analyses were performed on the same and different grid openings, however, it is not possible to determine the original analyst from the documentation provided. The primary structure count for the original sample analysis was recorded on the QC summary sheet, however. There was good agreement between the results reported on the QC summary sheet for the four analyses (original and 3 QC samples) of this sample.

According to the QAPP provided with the data packages, field duplicates were required at a rate of 10% of field samples. Field duplicate pairs were not identified or evaluated as part of this validation effort.

VI. Identification

Identification of asbestos structures and fibers is dependent on sample preparation techniques, analyst training, instrument operation, and data interpretation. Comparison with results from known standards is used to evaluate the accuracy of the structure identification for field samples.

Actinolite, chrysotile, amosite, anthophyllite, wincherite, tremolite, and edenite were identified in the field samples. According to the report forms provided in the QC package, the laboratory correctly identified actinolite, chrysotile, and amosite in PE sample analyses performed in the third quarter of 2004. Comparison of identification between the various analysts, grid opening, and preparations combinations that make up the daily QC for these analyses were acceptable. Therefore; based on the documentation provided, fiber and structure identifications for chrysotile, amosite, and actinolite were determined to be valid as reported. It was assumed that the laboratory correctly identified the other structures that were reported in the field samples.

VII. Quantitation and Reported Detection Limits

Raw data documentation is reviewed to ensure that all reported results and detection limits are correctly calculated, accurately reported, and supported by the raw data.

Results for asbestos categories, fiber density, and detection limits were correctly calculated and accurately reported by the laboratory. Results were verified by the validator using the information included on the reporting forms and the chain of custody records.

Results from the analyses of three field samples (APG-L2-13CH-100404, APG-L2-1CH-100404, and CC1-L6-3CB-100204) were rejected by the laboratory due to overloading of the filters and were not reported with this data set.

VIII. System Performance

This parameter is evaluated to ensure that the laboratory analytical systems were functioning properly at the time of analyses and that methodology appropriate to the analyses were followed.

The analytical systems appear to have been working satisfactorily and to have been calibrated properly at the time of these analyses, based on the available documentation.

IX. Documentation

Data and documentation completeness is critical in providing support for the reported results. Problems encountered with the nature or quality of the data package documentation are addressed.

No raw data were provided in the data package for the proficiency samples analyzed in support of the laboratory's accreditation. Raw data to support the identification of actinolite and amosite were received upon request on 1/26/05.

Raw data for chrysotile fibers were not included in the data package for review. Raw data documenting fiber identification for the other asbestos types identified in the field samples were present in the data package. Upon request, negatives and EDS for selected field samples were received from the laboratory on 1/27/05.

Count sheets included in the data package are computer generated forms. No date of the actual count is presented on these forms. If there is a corresponding bench sheet from which these forms are prepared, these should be supplied as a part of the data package. It is recommended that analyst's intials and date of count be added to the documentation.

The legend for the count sheets, which defines the codes used for the structure counts lists PSCH as the code for protocol chrysotile structures. The code appearing on the count sheets for this category is PCAS.

On the printouts for the EDS for some of the field samples the analysis date listed is Jan 1, 1997.

Raw data are an integral part of a complete and defensible data package. Edits made on all data should be performed correctly. Proper editing requires drawing a single line through the incorrect information, adding the correct information, and initialing and dating the changes.

Asbestos structures identified in the field samples included actinolite, chrysotile, amosite, anthophyllite, wincherite, tremolite, and edenite. Examples of known materials included in the data package in support of the sample analyses included only actinolite, chrysotile, and amosite, identified in the proficiency sample analyses. No raw data were provided for the proficiency sample analyses. Based on the documentation provided, the identification of the other fiber types in a known standard was not documented.

COMMENTS:

A. The EDS #552 was not listed on the count sheet for sample APG-L2-4CH-100404. The validator added this entry to the count sheet for the sample.

ADDITIONAL COMMENTS:

Based on the available data, results for all of the samples included in this data set were determined to be valid as reported by the laboratory. Reported results, analytical sensitivity, and detection limits are considered to be accurate within the bounds of the 95% confidence limits determined for each sample. No qualifiers were applied to these data by the validator.

The data results tables included as Table 1A include only the primary and total asbestos structure counts. Counts for individual categories required by the project Scope of Work are presented in the associated electronic data deliverables (EDD) tables.

This report was prepared according to the specifications of the analytical method, ISO Method 10312 " Ambient air - Determination of asbestos fibres - Direct-transfer transmission electron microscopy method," the document "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review," 2/94, and Trillium, Inc.'s SOP No. 0497-06A, for Validation of Analytical Data: Inorganic Analytes.

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TABLE 1B

DATA QUALIFIER DEFINITIONS FOR INORGANIC DATA REVIEW

The definitions of the following qualifiers are prepared in accordance with the document, "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review," 2/94.

U The analyte was analyzed for, but was not detected above the level of the reported value. The reported value is either the sample quantitation limit or the sample detection limit.

L Indicates results which fall between the sample detection limit and the CRDL. Results are estimated and are considered qualitatively acceptable but quantitatively unreliable due to uncertainties in the analytical precision near the limit of detection.

J The associated value is an estimated quantity. The analyte was analyzed for and was positively identified, but the reported numerical value may not be consistent with the amount actually present in the environmental sample.

R The data are unusable. The analyte was analyzed for, but the presence or absence of the analyte cannot be verified.

UJ A combination of the "U" and "J" qualifier. The analyte was analyzed for but was not detected. The reported value is an estimate and may be inaccurate or imprecise.

Table 1A
Analytical Results with Qualifications
Asbestos in Air Samples

C-sample-num	Type	# of structures counted	Concentrations	Units	Analytical sensitivity (AS)	Lower *	Upper*	Val Adj Result Conc.	Val Qual	Val Adj AS	Val Units	Val Comm
APG-L2-1ZB-100404	Total Asbestos Structures	0	0	structures/ cc	0.00107	0	3				structures/ cc	
APG-L2-1ZB-100404	Primary Asbestos Structures	0	0	structures/ cc	0.00107	0	3				structures/ cc	
APG-L2-2CH-100404	Primary Asbestos Structures	19	0.019	structures/ cc	0.000999	11	30				structures/ cc	
APG-L2-2CH-100404	Total Asbestos Structures	19	0.019	structures/ cc	0.000999	11	30				structures/ cc	
APG-L2-3CH-100404	Primary Asbestos Structures	9	0.00889	structures/ cc	0.000988	4	17				structures/ cc	
APG-L2-3CH-100404	Total Asbestos Structures	9	0.00889	structures/ cc	0.000988	4	17				structures/ cc	
APG-L2-4CH-100404	Total Asbestos Structures	10	0.00997	structures/ cc	0.000997	5	18				structures/ cc	A
APG-L2-4CH-100404	Primary Asbestos Structures	10	0.00997	structures/ cc	0.000997	5	18				structures/ cc	A
APG-L2-5CH-100404	Primary Asbestos Structures	6	0.00603	structures/ cc	0.001	2	13				structures/ cc	
APG-L2-5CH-100404	Total Asbestos Structures	6	0.00603	structures/ cc	0.001	2	13				structures/ cc	
CC1-L6-1CA-100204	Primary Asbestos Structures	6	0.00595	structures/ cc	0.000992	2	13				structures/ cc	
CC1-L6-1CA-100204	Total Asbestos Structures	6	0.00595	structures/ cc	0.000992	2	13				structures/ cc	
CC1-L6-1CB-100204	Total Asbestos Structures	4	0.00389	structures/ cc	0.000972	1	10				structures/ cc	
CC1-L6-1CB-100204	Primary Asbestos Structures	5	0.00486	structures/ cc	0.000972	2	12				structures/ cc	
CC1-L6-2CB-100204	Total Asbestos Structures	8	0.00808	structures/ cc	0.00101	3	16				structures/ cc	
CC1-L6-2CB-100204	Primary Asbestos Structures	8	0.00808	structures/ cc	0.00101	3	16				structures/ cc	

Table 1A
Analytical Results with Qualifications
Asbestos in Air Samples

C-sample-num	Type	# of structures counted	Concentrations	Units	Analytical sensitivity (AS)	Lower*	Upper*	Val Adj Result Conc.	Val Qual	Val Adj AS	Val Units	Val Comm
CC2A-L6-1CA-100304	Total Asbestos Structures	21	0.0209	structures/ cc	0.000995	13	32				structures/ cc	
CC2A-L6-1CA-100304	Primary Asbestos Structures	11	0.0109	structures/ cc	0.000995	5	20				structures/ cc	
CC2-L6-11CC-100304	Primary Asbestos Structures	3	0.00295	structures/ cc	0.000982	0	8				structures/ cc	
CC2-L6-11CC-100304	Total Asbestos Structures	2	0.00196	structures/ cc	0.000982	0	6				structures/ cc	
CC2-L6-1CC-100304	Total Asbestos Structures	2	0.00195	structures/ cc	0.000976	0	6				structures/ cc	
CC2-L6-1CC-100304	Primary Asbestos Structures	2	0.00195	structures/ cc	0.000976	0	6				structures/ cc	
CC2-L6-2CC-100304	Total Asbestos Structures	0	0	structures/ cc	0.000996	0	3				structures/ cc	
CC2-L6-2CC-100304	Primary Asbestos Structures	0	0	structures/ cc	0.000996	0	3				structures/ cc	
CC2-L6-3CC-100304	Total Asbestos Structures	11	0.0108	structures/ cc	0.000982	5	20				structures/ cc	
CC2-L6-3CC-100304	Primary Asbestos Structures	11	0.0108	structures/ cc	0.000982	5	20				structures/ cc	
CC2-L6-4CC-100304	Primary Asbestos Structures	15	0.015	structures/ cc	0.000999	8	25				structures/ cc	
CC2-L6-4CC-100304	Total Asbestos Structures	15	0.015	structures/ cc	0.000999	8	25				structures/ cc	
SVBA-H2-1FD-100204	Total Asbestos Structures	17	0.0169	structures/ cc	0.000994	10	27				structures/ cc	
SVBA-H2-1FD-100204	Primary Asbestos Structures	17	0.0169	structures/ cc	0.000994	10	27				structures/ cc	
SVBA-H2-2FD-100204	Total Asbestos Structures	9	0.009	structures/ cc	0.001	4	17				structures/ cc	
SVBA-H2-2FD-100204	Primary Asbestos Structures	9	0.009	structures/ cc	0.001	4	17				structures/ cc	

Table 1A
Analytical Results with Qualifications
Asbestos in Air Samples

C-sample-num	Type	# of structures counted	Concentrations	Units	Analytical sensitivity (AS)	Lower *	Upper*	Val Adj Result Conc	Val Qual	Val Adj AS	Val Units	Val Comm
SVBA-H2-3FD-100204	Primary Asbestos Structures	3	0.00295	structures/ cc	0.000984	0	8				structures/ cc	
SVBA-H2-3FD-100204	Total Asbestos Structures	3	0.00295	structures/ cc	0.000984	0	8				structures/ cc	
SVBB-H2-1FD-100304	Primary Asbestos Structures	2	0.00202	structures/ cc	0.00101	0	6				structures/ cc	
SVBB-H2-1FD-100304	Total Asbestos Structures	2	0.00202	structures/ cc	0.00101	0	6				structures/ cc	
SVBB-H2-2FD-100304	Total Asbestos Structures	0	0	structures/ cc	0.000983	0	3				structures/ cc	
SVBB-H2-2FD-100304	Primary Asbestos Structures	0	0	structures/ cc	0.000983	0	3				structures/ cc	
SVBB-H2-3FD-100304	Primary Asbestos Structures	0	0	structures/ cc	0.000994	0	3				structures/ cc	
SVBB-H2-3FD-100304	Total Asbestos Structures	0	0	structures/ cc	0.000994	0	3				structures/ cc	
TPG-L2-11CH-100404	Total Asbestos Structures	14	0.014	structures/ cc	0.001	8	24				structures/ cc	
TPG-L2-11CH-100404	Primary Asbestos Structures	14	0.014	structures/ cc	0.001	8	24				structures/ cc	
TPG-L2-1CH-100404	Primary Asbestos Structures	26	0.026	structures/ cc	0.001	17	38				structures/ cc	
TPG-L2-1CH-100404	Total Asbestos Structures	26	0.026	structures/ cc	0.001	17	38				structures/ cc	
TPG-L2-1ZB-100404	Primary Asbestos Structures	0	0	structures/ cc	0.000995	0	3				structures/ cc	
TPG-L2-1ZB-100404	Total Asbestos Structures	0	0	structures/ cc	0.000995	0	3				structures/ cc	
TPG-L2-2CH-100404	Total Asbestos Structures	56	0.116	structures/ cc	0.00208	42	73				structures/ cc	
TPG-L2-2CH-100404	Primary Asbestos Structures	53	0.11	structures/ cc	0.00208	40	69				structures/ cc	

Table 1A
Analytical Results with Qualifications
Asbestos in Air Samples

C-sample-num	Type	# of structures counted	Concentrations	Units	Analytical sensitivity (AS)	Lower*	Upper*	Val Adj Result Conc	Val Qual	Val Adj AS	Val Units	Val Comm
TPG-L2-3CH-100404	Primary Asbestos Structures	22	0.022	structures/cc	0.000998	14	33				structures/cc	
TPG-L2-3CH-100404	Total Asbestos Structures	22	0.022	structures/cc	0.000998	14	33				structures/cc	
TPG-L2-4CH-100404	Primary Asbestos Structures	49	0.264	structures/cc	0.00539	36	65				structures/cc	
TPG-L2-4CH-100404	Total Asbestos Structures	53	0.286	structures/cc	0.00539	40	69				structures/cc	
TPG-L2-5CH-100404	Primary Asbestos Structures	43	0.0557	structures/cc	0.0013	31	58				structures/cc	
TPG-L2-5CH-100404	Total Asbestos Structures	50	0.0648	structures/cc	0.0013	37	66				structures/cc	
RHB-H2-1FD-100304	Total Asbestos Structures	1	0.000974	structures/cc	0.000974	0	5				structures/cc	
RHB-H2-1FD-100304	Primary Asbestos Structures	1	0.000974	structures/cc	0.000974	0	5				structures/cc	
RHB-H2-2FD-100304	Primary Asbestos Structures	6	0.00594	structures/cc	0.00099	2	13				structures/cc	
RHB-H2-2FD-100304	Total Asbestos Structures	6	0.00594	structures/cc	0.00099	2	13				structures/cc	
RHB-H2-3FD-100304	Primary Asbestos Structures	2	0.00203	structures/cc	0.00101	0	6				structures/cc	
RHB-H2-3FD-100304	Total Asbestos Structures	2	0.00203	structures/cc	0.00101	0	6				structures/cc	
RHB-L2-1CH-100304	Total Asbestos Structures	9	0.009	structures/cc	0.000999	4	17				structures/cc	
RHB-L2-1CH-100304	Primary Asbestos Structures	9	0.009	structures/cc	0.000999	4	17				structures/cc	
RHB-L2-2CH-100304	Total Asbestos Structures	3	0.00299	structures/cc	0.000995	0	8				structures/cc	
RHB-L2-2CH-100304	Primary Asbestos Structures	3	0.00299	structures/cc	0.000995	0	8				structures/cc	

Table 1A
Analytical Results with Qualifications
Asbestos in Air Samples

C-sample-num	Type	# of structures counted	Concentrations	Units	Analytical sensitivity (AS)	Lower*	Upper*	Val Adj Result Conc	Val Qual	Val Adj AS	Val Units	Val Comm
RHB-L2-3CH-100304	Primary Asbestos Structures	1	0.000996	structures/cc	0.000996	0	5				structures/cc	
RHB-L2-3CH-100304	Total Asbestos Structures	1	0.000996	structures/cc	0.000996	0	5				structures/cc	
RHB-L2-4CH-100304	Primary Asbestos Structures	4	0.00395	structures/cc	0.000989	1	10				structures/cc	
RHB-L2-4CH-100304	Total Asbestos Structures	4	0.00395	structures/cc	0.000989	1	10				structures/cc	
RHB-L2-5CH-100304	Primary Asbestos Structures	4	0.004	structures/cc	0.000999	1	10				structures/cc	
RHB-L2-5CH-100304	Total Asbestos Structures	4	0.004	structures/cc	0.000999	1	10				structures/cc	
SVBA-L2-11CH-100204	Total Asbestos Structures	19	0.0189	structures/cc	0.000997	11	30				structures/cc	
SVBA-L2-11CH-100204	Primary Asbestos Structures	19	0.0189	structures/cc	0.000997	11	30				structures/cc	
SVBA-L2-1CH-100204	Primary Asbestos Structures	20	0.0202	structures/cc	0.00101	12	31				structures/cc	
SVBA-L2-1CH-100204	Total Asbestos Structures	20	0.0202	structures/cc	0.00101	12	31				structures/cc	
SVBA-L2-2CH-100204	Primary Asbestos Structures	14	0.0139	structures/cc	0.000992	8	24				structures/cc	
SVBA-L2-2CH-100204	Total Asbestos Structures	14	0.0139	structures/cc	0.000992	8	24				structures/cc	
SVBA-L2-3CH-100204	Primary Asbestos Structures	10	0.00997	structures/cc	0.000997	5	18				structures/cc	
SVBA-L2-3CH-100204	Total Asbestos Structures	9	0.00897	structures/cc	0.000997	4	17				structures/cc	
SVBA-L2-4CH-100204	Primary Asbestos Structures	11	0.011	structures/cc	0.000996	5	20				structures/cc	
SVBA-L2-4CH-100204	Total Asbestos Structures	11	0.011	structures/cc	0.000996	5	20				structures/cc	

Table 1A
Analytical Results with Qualifications
Asbestos in Air Samples

C-sample-num	Type	# of structures counted	Concentrations	Units	Analytical sensitivity (AS)	Lower*	Upper*	Val Adj Result Conc.	Val Qual	Val Adj AS	Val Units	Val Comm
SVBA-L2-5CH-100204	Primary Asbestos Structures	14	0.0137	structures/cc	0.000981	8	24				structures/cc	
SVBA-L2-5CH-100204	Total Asbestos Structures	13	0.0128	structures/cc	0.000981	7	22				structures/cc	
SVBB-L2-12CH-100304	Total Asbestos Structures	5	0.00495	structures/cc	0.000989	2	12				structures/cc	
SVBB-L2-12CH-100304	Primary Asbestos Structures	4	0.00396	structures/cc	0.000989	1	10				structures/cc	
SVBB-L2-1CH-100304	Total Asbestos Structures	7	0.00699	structures/cc	0.000998	3	14				structures/cc	
SVBB-L2-1CH-100304	Primary Asbestos Structures	7	0.00699	structures/cc	0.000998	3	14				structures/cc	
SVBB-L2-2CH-100304	Primary Asbestos Structures	10	0.00999	structures/cc	0.000999	5	18				structures/cc	
SVBB-L2-2CH-100304	Total Asbestos Structures	10	0.00999	structures/cc	0.000999	5	18				structures/cc	
SVBB-L2-3CH-100304	Primary Asbestos Structures	6	0.00586	structures/cc	0.000977	2	13				structures/cc	
SVBB-L2-3CH-100304	Total Asbestos Structures	6	0.00586	structures/cc	0.000977	2	13				structures/cc	
SVBB-L2-4CH-100304	Primary Asbestos Structures	6	0.00888	structures/cc	0.00148	2	13				structures/cc	
SVBB-L2-4CH-100304	Total Asbestos Structures	6	0.00888	structures/cc	0.00148	2	13				structures/cc	
SVBB-L2-5CH-100304	Total Asbestos Structures	4	0.00399	structures/cc	0.000997	1	10				structures/cc	
SVBB-L2-5CH-100304	Primary Asbestos Structures	4	0.00399	structures/cc	0.000997	1	10				structures/cc	
SVM-H2-1FD-100204	Total Asbestos Structures	2	0.002	structures/cc	0.000998	0	6				structures/cc	
SVM-H2-1FD-100204	Primary Asbestos Structures	2	0.002	structures/cc	0.000998	0	6				structures/cc	

Table 1A
Analytical Results with Qualifications
Asbestos in Air Samples

C-sample-num	Type	# of structures counted	Concentrations	Units	Analytical sensitivity (AS)	Lower *	Upper*	Val Adj Result Conc.	Val Qual	Val Adj AS	Val Units	Val Comm
SVM-H2-2FD-100204	Primary Asbestos Structures	3	0.00291	structures/ cc	0.000968	0	8				structures/ cc	
SVM-H2-2FD-100204	Total Asbestos Structures	3	0.00291	structures/ cc	0.000968	0	8				structures/ cc	
SVM-H2-3FD-100204	Primary Asbestos Structures	1	0.000994	structures/ cc	0.000994	0	5				structures/ cc	
SVM-H2-3FD-100204	Total Asbestos Structures	1	0.000994	structures/ cc	0.000994	0	5				structures/ cc	

* 95% confidence limits - # of structures counted

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Tuesday, December 07, 2004 Lab/Cor Report Number: *041172R3*

Howard Edwards
Ecology and Environment, Inc.
350 Sansome
Ste 300
San Francisco CA 94104

Phone: 415-981-2811
Fax: 415-981-0801

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS
Project Number: 0440.01CP-0001
Client Reference:
Sample Receipt Date: 10/7/2004

Enclosed please find results for samples submitted to our laboratory. A list of samples and analyses follows:

Lab/Cor Analysis #	Client Sample # and Description	Analysis Type and Notes
Batch #: B4760		
S1-A1	APG-L2-13CH-100404	ISO 10312, direct: Rejected - overloaded
S2-A1	APG-L2-1CH-100404	ISO 10312, direct: Rejected - overloaded
S3-A1	APG-L2-1ZB-100404	ISO 10312, direct
S4-A1	APG-L2-2CH-100404	ISO 10312, direct
S5-A1	APG-L2-3CH-100404	ISO 10312, direct
S6-A1	APG-L2-4CH-100404	ISO 10312, direct
S7-A1	APG-L2-5CH-100404	ISO 10312, direct
S8-A1	CC1-L6-1CA-100204	ISO 10312, direct
S9-A1	CC1-L6-1CB-100204	ISO 10312, direct
S10-A1	CC1-L6-2CB-100204	ISO 10312, direct
S11-A1	CC1-L6-3CB-100204	ISO 10312, direct: Rejected - overloaded
S12-A1	CC2A-L6-1CA-100304	ISO 10312, direct
S13-A1	CC2-L6-11CC-100304	ISO 10312, direct
S14-A1	CC2-L6-1CC-100304	ISO 10312, direct
S15-A1	CC2-L6-2CC-100304	ISO 10312, direct
S16-A1	CC2-L6-3CC-100304	ISO 10312, direct
S17-A1	CC2-L6-4CC-100304	ISO 10312, direct
S18-A1	SVBA-H2-1FD-100204	ISO 10312, direct
S19-A1	SVBA-H2-2FD-100204	ISO 10312, direct
S20-A1	SVBA-H2-3FD-100204	ISO 10312, direct
S21-A1	SVBB-H2-1FD-100304	ISO 10312, direct
S22-A1	SVBB-H2-2FD-100304	ISO 10312, direct
S23-A1	SVBB-H2-3FD-100304	ISO 10312, direct
S24-A1	TPG-L2-11CH-100404	ISO 10312, direct
S25-A1	TPG-L2-1CH-100404	ISO 10312, direct
S26-A1	TPG-L2-1ZB-100404	ISO 10312, direct
S27-A1	TPG-L2-2CH-100404	ISO 10312, direct
S28-A1	TPG-L2-3CH-100404	ISO 10312, direct
S29-A1	TPG-L2-4CH-100404	ISO 10312, direct

S30-A1	TPG-L2-5CH-100404	ISO 10312, direct
S31-A1	RHB-H2-1FD-100304	ISO 10312, direct
S32-A1	RHB-H2-2FD-100304	ISO 10312, direct
S33-A1	RHB-H2-3FD-100304	ISO 10312, direct
S34-A1	RHB-L2-1CH-100304	ISO 10312, direct
S35-A1	RHB-L2-2CH-100304	ISO 10312, direct
S36-A1	RHB-L2-3CH-100304	ISO 10312, direct
S37-A1	RHB-L2-4CH-100304	ISO 10312, direct
S38-A1	RHB-L2-5CH-100304	ISO 10312, direct
S39-A1	SVBA-L2-11CH-100204	ISO 10312, direct
S40-A1	SVBA-L2-1CH-100204	ISO 10312, direct
S41-A1	SVBA-L2-2CH-100204	ISO 10312, direct
S42-A1	SVBA-L2-3CH-100204	ISO 10312, direct
S43-A1	SVBA-L2-4CH-100204	ISO 10312, direct
S44-A1	SVBA-L2-5CH-100204	ISO 10312, direct
S45-A1	SVBB-L2-12CH-100304	ISO 10312, direct
S46-A1	SVBB-L2-1CH-100304	ISO 10312, direct
S47-A1	SVBB-L2-2CH-100304	ISO 10312, direct
S48-A1	SVBB-L2-3CH-100304	ISO 10312, direct
S49-A1	SVBB-L2-4CH-100304	ISO 10312, direct
S50-A1	SVBB-L2-5CH-100304	ISO 10312, direct
S51-A1	SVM-H2-1FD-100204	ISO 10312, direct
S52-A1	SVM-H2-2FD-100204	ISO 10312, direct
S53-A1	SVM-H2-3FD-100204	ISO 10312, direct

ISO 10312, direct

Preparation and analysis of the above samples was conducted in accordance with the ISO method 10312 (Direct) for the identification of asbestos. Briefly, the samples were collapsed with acetone, then etched in a low temperature plasma etcher to remove the top surface of the filter and other organics. The samples were carbon coated at high vacuum with a thin layer of carbon, placed on 200 mesh copper grids and allowed to dissolve in acetone until cleared of filter debris.

TEM analysis was performed using a transmission electron microscope equipped with an EDS X ray analyzer. The air samples were analyzed at various approximate screen magnifications of 5,000x for PCM equivalent structures, 10,000x for asbestos structures greater than 5.0 micrometer lengths, and 20,000x for asbestos structures greater than 0.5 micrometer lengths. An accelerating voltage of 100 KV was applied. The sizing of grid openings was performed on the microscope at a magnification of approximately 550X.

Disclaimer

This test report relates only to the items tested in this report. Interpretation of these results is the sole responsibility of the client.

If further clarification of these results is needed, please call us. Thank you for allowing the staff at Lab/Cor, Inc. the opportunity to provide you with analytical services.

Sincerely,

John Harris, M.P.H.
Laboratory Director

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

ANALYSIS DETAIL

Lab/Cor Sample No. B4760 S3 A1
Client Sample No. APG-L2-1ZB-100404
Description
Analysis Date 10/7/2004
Analyst DW

Volume (L) 299.76
No. of Grid Openings 83
Filter Area (mm2) 385
Area Analyzed (mm2) 1.20
Analytical Sens. (struc/cc) 0.00107
Dectection Limit. (struc/cc) 0.00319

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Primary Asbestos Structures	0.0	<0.00319	0.00 - 0.00319	0
Total Asbestos Structures	0.0	<0.00319	0.00 - 0.00319	0
Asbestos Structures > 5um	0.0	<0.00319	0.00 - 0.00319	0
Asbestos Fibers and Bundles > 5um	0.0	<0.00319	0.00 - 0.00319	0
PCM Equivalent Fibers-US	0.0	<0.00319	0.00 - 0.00319	0
PCM Equivalent Structures-US	0.0	<0.00319	0.00 - 0.00319	0
PROTOCOL ASB STRUCS 5-10	0.0	<0.00319	0.00 - 0.00319	0
PROTOCOL ASB STRUCS >10	0.0	<0.00319	0.00 - 0.00319	0
PROTOCOL ASB STRUCS TOTAL	0.0	<0.00319	0.00 - 0.00319	0
PROTOCOL CHRYS STRUCS 5-10	0.0	<0.00319	0.00 - 0.00319	0
PROTOCOL CHRYS STRUCS >10	0.0	<0.00319	0.00 - 0.00319	0
PROTOCOL CHRYS STRUCS TOTAL	0.0	<0.00319	0.00 - 0.00319	0
PROTOCOL AMPH STRUCS 5-10	0.0	<0.00319	0.00 - 0.00319	0
PROTOCOL AMPH STRUCS >10	0.0	<0.00319	0.00 - 0.00319	0
PROTOCOL AMPH STRUCS TOTAL	0.0	<0.00319	0.00 - 0.00319	0
AHERA-like Total Structures 3:1	0.0	<0.00319	0.00 - 0.00319	0
AHERA-like Asb Strucs >5 and 3:1	0.0	<0.00319	0.00 - 0.00319	0
AHERA-like Asb Strucs 5 - 10 and 3:1	0.0	<0.00319	0.00 - 0.00319	0
AHERA-like Asb Strucs >10 and 3:1	0.0	<0.00319	0.00 - 0.00319	0
Total Other Amphibole Strucs 3:1	0.0	<0.00319	0.00 - 0.00319	0
Other Amphibole Strucs >5 and 3:1	0.0	<0.00319	0.00 - 0.00319	0
Other Amphibole Strucs 5 - 10 and 3:1	0.0	<0.00319	0.00 - 0.00319	0
Other Amphibole Struca >10 and 3:1	0.0	<0.00319	0.00 - 0.00319	0

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

ANALYSIS DETAIL

Lab/Cor Sample No. B4760 S4 A1
Client Sample No. APG-L2-2CH-100404
Description .
Analysis Date 10/7/2004
Analyst KM

Volume (L) 289.2
No. of Grid Openings 92
Filter Area (mm2) 385
Area Analyzed (mm2) 1.33
Analytical Sens. (struc/cc) 0.000999
Dectection Limit. (struc/cc) 0.00299

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Primary Asbestos Structures	14.3	0.0190	0.0114 - 0.0296	19
Total Asbestos Structures	14.3	0.0190	0.0114 - 0.0296	19
Asbestos Structures > 5um	7.5	0.00999	0.00479 - 0.0184	10
Asbestos Fibers and Bundles > 5um	6.8	0.00899	0.00411 - 0.0171	9
PCM Equivalent Fibers-US	6.8	0.00899	0.00411 - 0.0171	9
PCM Equivalent Structures-US	7.5	0.00999	0.00479 - 0.0184	10
PROTOCOL ASB STRUCS 5-10	1.5	0.00200	0.00 - 0.00629	2
PROTOCOL ASB STRUCS >10	0.0	<0.00299	0.00 - 0.00299	0
PROTOCOL ASB STRUCS TOTAL	1.5	0.00200	0.00 - 0.00629	2
PROTOCOL CHRYS STRUCS 5-10	0.8	0.000999	0.00 - 0.00473	1
PROTOCOL CHRYS STRUCS >10	0.0	<0.00299	0.00 - 0.00299	0
PROTOCOL CHRYS STRUCS TOTAL	0.8	0.000999	0.00 - 0.00473	1
PROTOCOL AMPH STRUCS 5-10	0.8	0.000999	0.00 - 0.00473	1
PROTOCOL AMPH STRUCS >10	0.0	<0.00299	0.00 - 0.00299	0
PROTOCOL AMPH STRUCS TOTAL	0.8	0.000999	0.00 - 0.00473	1
AHERA-like Total Structures 3:1	14.3	0.0190	0.0114 - 0.0296	19
AHERA-like Asb Strucs >5 and 3:1	7.5	0.00999	0.00479 - 0.0184	10
AHERA-like Asb Strucs 5 - 10 and 3:1	5.3	0.00699	0.00281 - 0.0144	7
AHERA-like Asb Strucs >10 and 3:1	2.3	0.00300	0.00 - 0.00774	3
Total Other Amphibole Strucs 3:1	0.0	<0.00299	0.00 - 0.00299	0
Other Amphibole Strucs >5 and 3:1	0.0	<0.00299	0.00 - 0.00299	0
Other Amphibole Strucs 5 - 10 and 3:1	0.0	<0.00299	0.00 - 0.00299	0
Other Amphibole Strucs >10 and 3:1	0.0	<0.00299	0.00 - 0.00299	0

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

ANALYSIS DETAIL

Lab/Cor Sample No. B4760 S5 A1
Client Sample No. APG-L2-3CH-100404
Description
Analysis Date 10/7/2004
Analyst KM

Volume (L) 295.56
No. of Grid Openings 91
Filter Area (mm2) 385
Area Analyzed (mm2) 1.32
Analytical Sens. (struc/cc) 0.000988
Dectection Limit. (struc/cc) 0.00295

Structure Type	Filter Dansity (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Primary Asbestos Structures	6.8	0.00889	0.00407 - 0.0169	9
Total Asbestos Structures	6.8	0.00889	0.00407 - 0.0169	9
Asbestos Structures > 5um	1.5	0.00198	0.00 - 0.00622	2
Asbestos Fibers and Bundles > 5um	1.5	0.00198	0.00 - 0.00622	2
PCM Equivalent Fibers-US	1.5	0.00198	0.00 - 0.00622	2
PCM Equivalent Structures-US	0.8	0.000988	0.00 - 0.00468	1
PROTOCOL ASB STRUCS 5-10	0.0	<0.00295	0.00 - 0.00295	0
PROTOCOL ASB STRUCS >10	0.0	<0.00295	0.00 - 0.00295	0
PROTOCOL ASB STRUCS TOTAL	0.0	<0.00295	0.00 - 0.00295	0
PROTOCOL CHRYS STRUCS 5-10	0.0	<0.00295	0.00 - 0.00295	0
PROTOCOL CHRYS STRUCS >10	0.0	<0.00295	0.00 - 0.00295	0
PROTOCOL CHRYS STRUCS TOTAL	0.0	<0.00295	0.00 - 0.00295	0
PROTOCOL AMPH STRUCS 5-10	0.0	<0.00295	0.00 - 0.00295	0
PROTOCOL AMPH STRUCS >10	0.0	<0.00295	0.00 - 0.00295	0
PROTOCOL AMPH STRUCS TOTAL	0.0	<0.00295	0.00 - 0.00295	0
AHERA-like Total Structures 3:1	6.8	0.00889	0.00407 - 0.0169	9
AHERA-like Asb Strucs >5 and 3:1	1.5	0.00198	0.00 - 0.00622	2
AHERA-like Asb Strucs 5 - 10 and 3:1	0.8	0.000988	0.00 - 0.00468	1
AHERA-like Asb Strucs >10 and 3:1	0.8	0.000988	0.00 - 0.00468	1
Total Other Amphibole Strucs 3:1	0.0	<0.00295	0.00 - 0.00295	0
Other Amphibole Strucs >5 and 3:1	0.0	<0.00295	0.00 - 0.00295	0
Other Amphibole Strucs 5 - 10 and 3:1	0.0	<0.00295	0.00 - 0.00295	0
Other Amphibole Strucs >10 and 3:1	0.0	<0.00295	0.00 - 0.00295	0

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

ANALYSIS DETAIL

Lab/Cor Sample No. B4760 S6 A1
Client Sample No. APG-L2-4CH-100404
Description
Analysis Date 10/8/2004
Analyst JH

Volume (L) 299.4
No. of Grid Openings 89
Filter Area (mm2) 385
Area Analyzed (mm2) 1.29
Analytical Sens. (struc/cc) 0.000997
Dectection Limit. (struc/cc) 0.00298

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Primary Asbestos Structures	7.8	0.00997	0.00478 - 0.0183	10
Total Asbestos Structures	7.8	0.00997	0.00478 - 0.0183	10
Asbestos Structures > 5um	3.1	0.00399	0.00109 - 0.0102	4
Asbestos Fibers and Bundles > 5um	3.1	0.00399	0.00109 - 0.0102	4
PCM Equivalent Fibers-US	3.1	0.00399	0.00109 - 0.0102	4
PCM Equivalent Structures-US	3.1	0.00399	0.00109 - 0.0102	4
PROTOCOL ASB STRUCS 5-10	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL ASB STRUCS >10	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL ASB STRUCS TOTAL	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL CHRYS STRUCS 5-10	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL CHRYS STRUCS >10	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL CHRYS STRUCS TOTAL	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL AMPH STRUCS 5-10	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL AMPH STRUCS >10	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL AMPH STRUCS TOTAL	0.0	<0.00298	0.00 - 0.00298	0
AHERA-like Total Structures 3:1	7.8	0.00997	0.00478 - 0.0183	10
AHERA-like Asb Strucs >5 and 3:1	3.1	0.00399	0.00109 - 0.0102	4
AHERA-like Asb Strucs 5 - 10 and 3:1	3.1	0.00399	0.00109 - 0.0102	4
AHERA-like Asb Strucs >10 and 3:1	0.0	<0.00298	0.00 - 0.00298	0
Total Other Amphibole Strucs 3:1	0.0	<0.00298	0.00 - 0.00298	0
Other Amphibole Strucs >5 and 3:1	0.0	<0.00298	0.00 - 0.00298	0
Other Amphibole Strucs 5 - 10 and 3:1	0.0	<0.00298	0.00 - 0.00298	0
Other Amphibole Strucs >10 and 3:1	0.0	<0.00298	0.00 - 0.00298	0

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

ANALYSIS DETAIL

Lab/Cor Sample No. B4760 S7 A1
Client Sample No. APG-L2-5CH-100404
Description
Analysis Date 10/7/2004
Analyst DW

Volume (L) 290.64
No. of Grid Openings 91
Filter Area (mm2) 385
Area Analyzed (mm2) 1.32
Analytical Sens. (struc/cc) 0.00100
Dectection Limit. (struc/cc) 0.00300

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Primary Asbestos Structures	4.6	0.00603	0.00221 - 0.0131	6
Total Asbestos Structures	4.6	0.00603	0.00221 - 0.0131	6
Asbestos Structures > 5um	0.8	0.00100	0.00 - 0.00476	1
Asbestos Fibers and Bundles > 5um	0.8	0.00100	0.00 - 0.00476	1
PCM Equivalent Fibers-US	0.8	0.00100	0.00 - 0.00476	1
PCM Equivalent Structures-US	0.8	0.00100	0.00 - 0.00476	1
PROTOCOL ASB STRUCS 5-10	0.0	<0.00300	0.00 - 0.00300	0
PROTOCOL ASB STRUCS >10	0.0	<0.00300	0.00 - 0.00300	0
PROTOCOL ASB STRUCS TOTAL	0.0	<0.00300	0.00 - 0.00300	0
PROTOCOL CHRYS STRUCS 5-10	0.0	<0.00300	0.00 - 0.00300	0
PROTOCOL CHRYS STRUCS >10	0.0	<0.00300	0.00 - 0.00300	0
PROTOCOL CHRYS STRUCS TOTAL	0.0	<0.00300	0.00 - 0.00300	0
PROTOCOL AMPH STRUCS 5-10	0.0	<0.00300	0.00 - 0.00300	0
PROTOCOL AMPH STRUCS >10	0.0	<0.00300	0.00 - 0.00300	0
PROTOCOL AMPH STRUCS TOTAL	0.0	<0.00300	0.00 - 0.00300	0
AHERA-like Total Structures 3:1	4.6	0.00603	0.00221 - 0.0131	6
AHERA-like Asb Strucs >5 and 3:1	0.8	0.00100	0.00 - 0.00476	1
AHERA-like Asb Strucs 5 - 10 and 3:1	0.0	<0.00300	0.00 - 0.00300	0
AHERA-like Asb Strucs >10 and 3:1	0.8	0.00100	0.00 - 0.00476	1
Total Other Amphibole Strucs 3:1	0.0	<0.00300	0.00 - 0.00300	0
Other Amphibole Strucs >5 and 3:1	0.0	<0.00300	0.00 - 0.00300	0
Other Amphibole Strucs 5 - 10 and 3:1	0.0	<0.00300	0.00 - 0.00300	0
Other Amphibole Strucs >10 and 3:1	0.0	<0.00300	0.00 - 0.00300	0

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

ANALYSIS DETAIL

Lab/Cor Sample No. B4760 S8 A1
Client Sample No. CC1-L6-1CA-100204
Description
Analysis Date 10/8/2004
Analyst TM

Volume (L) 569.77
No. of Grid Openings 47
Filter Area (mm2) 385
Area Analyzed (mm2) 0.681
Analytical Sens. (struc/cc) 0.000992
Dectection Limit. (struc/cc) 0.00297

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Primary Asbestos Structures	8.8	0.00595	0.00218 - 0.0130	6
Total Asbestos Structures	8.8	0.00595	0.00218 - 0.0130	6
Asbestos Structures > 5um	1.5	0.000992	0.00 - 0.00470	1
Asbestos Fibers and Bundles > 5um	1.5	0.000992	0.00 - 0.00470	1
PCM Equivalent Fibers-US	1.5	0.000992	0.00 - 0.00470	1
PCM Equivalent Structures-US	1.5	0.000992	0.00 - 0.00470	1
PROTOCOL ASB STRUCS 5-10	0.0	<0.00297	0.00 - 0.00297	0
PROTOCOL ASB STRUCS >10	0.0	<0.00297	0.00 - 0.00297	0
PROTOCOL ASB STRUCS TOTAL	0.0	<0.00297	0.00 - 0.00297	0
PROTOCOL CHRYS STRUCS 5-10	0.0	<0.00297	0.00 - 0.00297	0
PROTOCOL CHRYS STRUCS >10	0.0	<0.00297	0.00 - 0.00297	0
PROTOCOL CHRYS STRUCS TOTAL	0.0	<0.00297	0.00 - 0.00297	0
PROTOCOL AMPH STRUCS 5-10	0.0	<0.00297	0.00 - 0.00297	0
PROTOCOL AMPH STRUCS >10	0.0	<0.00297	0.00 - 0.00297	0
PROTOCOL AMPH STRUCS TOTAL	0.0	<0.00297	0.00 - 0.00297	0
AHERA-like Total Structures 3:1	8.8	0.00595	0.00218 - 0.0130	6
AHERA-like Asb Strucs >5 and 3:1	1.5	0.000992	0.00 - 0.00470	1
AHERA-like Asb Strucs 5 - 10 and 3:1	1.5	0.000992	0.00 - 0.00470	1
AHERA-like Asb Strucs >10 and 3:1	0.0	<0.00297	0.00 - 0.00297	0
Total Other Amphibole Strucs 3:1	0.0	<0.00297	0.00 - 0.00297	0
Other Amphibole Strucs >5 and 3:1	0.0	<0.00297	0.00 - 0.00297	0
Other Amphibole Strucs 5 - 10 and 3:1	0.0	<0.00297	0.00 - 0.00297	0
Other Amphibole Strucs >10 and 3:1	0.0	<0.00297	0.00 - 0.00297	0

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

ANALYSIS DETAIL

Lab/Cor Sample No. B4760 S9 A1
Client Sample No. CC1-L6-1CB-100204
Description
Analysis Date 10/8/2004
Analyst JH

Volume (L) 607.18
No. of Grid Openings 45
Filter Area (mm2) 385
Area Analyzed (mm2) 0.652
Analytical Sens. (struc/cc) 0.000972
Dectection Limit. (struc/cc) 0.00291

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Primary Asbestos Structures	7.7	0.00486	0.00158 - 0.0113	5
Total Asbestos Structures	6.1	0.00389	0.00106 - 0.00996	4
Asbestos Structures > 5um	1.5	0.000972	0.00 - 0.00461	1
Asbestos Fibers and Bundles > 5um	1.5	0.000972	0.00 - 0.00461	1
PCM Equivalent Fibers-US	1.5	0.000972	0.00 - 0.00461	1
PCM Equivalent Structures-US	1.5	0.000972	0.00 - 0.00461	1
PROTOCOL ASB STRUCS 5-10	0.0	<0.00291	0.00 - 0.00291	0
PROTOCOL ASB STRUCS >10	0.0	<0.00291	0.00 - 0.00291	0
PROTOCOL ASB STRUCS TOTAL	0.0	<0.00291	0.00 - 0.00291	0
PROTOCOL CHRYS STRUCS 5-10	0.0	<0.00291	0.00 - 0.00291	0
PROTOCOL CHRYS STRUCS >10	0.0	<0.00291	0.00 - 0.00291	0
PROTOCOL CHRYS STRUCS TOTAL	0.0	<0.00291	0.00 - 0.00291	0
PROTOCOL AMPH STRUCS 5-10	0.0	<0.00291	0.00 - 0.00291	0
PROTOCOL AMPH STRUCS >10	0.0	<0.00291	0.00 - 0.00291	0
PROTOCOL AMPH STRUCS TOTAL	0.0	<0.00291	0.00 - 0.00291	0
AHERA-like Total Structures 3:1	6.1	0.00389	0.00106 - 0.00996	4
AHERA-like Asb Strucs >5 and 3:1	1.5	0.000972	0.00 - 0.00461	1
AHERA-like Asb Strucs 5 - 10 and 3:1	0.0	<0.00291	0.00 - 0.00291	0
AHERA-like Asb Strucs >10 and 3:1	1.5	0.000972	0.00 - 0.00461	1
Total Other Amphibole Strucs 3:1	1.5	0.000972	0.00 - 0.00461	1
Other Amphibole Strucs >5 and 3:1	0.0	<0.00291	0.00 - 0.00291	0
Other Amphibole Strucs 5 - 10 and 3:1	0.0	<0.00291	0.00 - 0.00291	0
Other Amphibole Strucs >10 and 3:1	0.0	<0.00291	0.00 - 0.00291	0

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

ANALYSIS DETAIL

Lab/Cor Sample No. B4760 S10 A1
Client Sample No. CC1-L6-2CB-100204
Description
Analysis Date 10/8/2004
Analyst DW

Volume (L) 597.98
No. of Grid Openings 44
Filter Area (mm2) 385
Area Analyzed (mm2) 0.638
Analytical Sens. (struc/cc) 0.00101
Dectection Limit. (struc/cc) 0.00302

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Primary Asbestos Structures	12.5	0.00808	0.00349 - 0.0159	8
Total Asbestos Structures	12.5	0.00808	0.00349 - 0.0159	8
Asbestos Structures > 5um	4.7	0.00303	0.00 - 0.00783	3
Asbestos Fibers and Bundles > 5um	4.7	0.00303	0.00 - 0.00783	3
PCM Equivalent Fibers-US	3.1	0.00202	0.00 - 0.00636	2
PCM Equivalent Structures-US	3.1	0.00202	0.00 - 0.00636	2
PROTOCOL ASB STRUCS 5-10	0.0	<0.00302	0.00 - 0.00302	0
PROTOCOL ASB STRUCS >10	0.0	<0.00302	0.00 - 0.00302	0
PROTOCOL ASB STRUCS TOTAL	0.0	<0.00302	0.00 - 0.00302	0
PROTOCOL CHRYS STRUCS 5-10	0.0	<0.00302	0.00 - 0.00302	0
PROTOCOL CHRYS STRUCS >10	0.0	<0.00302	0.00 - 0.00302	0
PROTOCOL CHRYS STRUCS TOTAL	0.0	<0.00302	0.00 - 0.00302	0
PROTOCOL AMPH STRUCS 5-10	0.0	<0.00302	0.00 - 0.00302	0
PROTOCOL AMPH STRUCS >10	0.0	<0.00302	0.00 - 0.00302	0
PROTOCOL AMPH STRUCS TOTAL	0.0	<0.00302	0.00 - 0.00302	0
AHERA-like Total Structures 3:1	12.5	0.00808	0.00349 - 0.0159	8
AHERA-like Asb Strucs >5 and 3:1	4.7	0.00303	0.00 - 0.00783	3
AHERA-like Asb Struca 5 - 10 and 3:1	3.1	0.00202	0.00 - 0.00636	2
AHERA-like Asb Strucs >10 and 3:1	1.6	0.00101	0.00 - 0.00479	1
Total Other Amphibole Strucs 3:1	0.0	<0.00302	0.00 - 0.00302	0
Other Amphibole Strucs >5 and 3:1	0.0	<0.00302	0.00 - 0.00302	0
Other Amphibole Strucs 5 - 10 and 3:1	0.0	<0.00302	0.00 - 0.00302	0
Other Amphibole Strucs >10 and 3:1	0.0	<0.00302	0.00 - 0.00302	0

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

ANALYSIS DETAIL

Lab/Cor Sample No. B4760 S12 A1
Client Sample No. CC2A-L6-1CA-100304
Description
Analysis Date 10/8/2004
Analyst TM

Volume (L) 269.72
No. of Grid Openings 99
Filter Area (mm2) 385
Area Analyzed (mm2) 1.43
Analytical Sens. (struc/cc) 0.000995
Dectection Limit. (struc/cc) 0.00298

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Primary Asbestos Structures	7.7	0.0109	0.00546 - 0.0196	11
Total Asbestos Structures	14.6	0.0209	0.0129 - 0.0319	21
Asbestos Structures > 5um	2.1	0.00299	0.00 - 0.00771	3
Asbestos Fibers and Bundles > 5um	0.0	<0.00298	0.00 - 0.00298	0
PCM Equivalent Fibers-US	0.7	0.000995	0.00 - 0.00472	1
PCM Equivalent Structures-US	0.7	0.000995	0.00 - 0.00472	1
PROTOCOL ASB STRUCS 5-10	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL ASB STRUCS >10	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL ASB STRUCS TOTAL	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL CHRYS STRUCS 5-10	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL CHRYS STRUCS >10	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL CHRYS STRUCS TOTAL	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL AMPH STRUCS 5-10	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL AMPH STRUCS >10	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL AMPH STRUCS TOTAL	0.0	<0.00298	0.00 - 0.00298	0
AHERA-like Total Structures 3:1	7.7	0.0109	0.00546 - 0.0196	11
AHERA-like Asb Strucs >5 and 3:1	2.1	0.00299	0.00 - 0.00771	3
AHERA-like Asb Strucs 5 - 10 and 3:1	2.1	0.00299	0.00 - 0.00771	3
AHERA-like Asb Strucs >10 and 3:1	0.0	<0.00298	0.00 - 0.00298	0
Total Other Amphibole Strucs 3:1	0.0	<0.00298	0.00 - 0.00298	0
Other Amphibole Strucs >5 and 3:1	0.0	<0.00298	0.00 - 0.00298	0
Other Amphibole Strucs 5 - 10 and 3:1	0.0	<0.00298	0.00 - 0.00298	0
Other Amphibole Strucs >10 and 3:1	0.0	<0.00298	0.00 - 0.00298	0

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

ANALYSIS DETAIL

Lab/Cor Sample No. B4760 S13 A1
Client Sample No. CC2-L6-11CC-100304
Description
Analysis Date 10/8/2004
Analyst DW

Volume (L) 530.45
No. of Grid Openings 51
Filter Area (mm2) 385
Area Analyzed (mm2) 0.739
Analytical Sans. (struc/cc) 0.000982
Dectection Limit. (struc/cc) 0.00294

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Primary Asbestos Structures	4.1	0.00295	0.00 - 0.00761	3
Total Asbestos Structures	2.7	0.00196	0.00 - 0.00619	2
Asbestos Structures > 5um	1.4	0.000982	0.00 - 0.00466	1
Asbestos Fibers and Bundles > 5um	1.4	0.000982	0.00 - 0.00466	1
PCM Equivalent Fibers-US	1.4	0.000982	0.00 - 0.00466	1
PCM Equivalent Structures-US	1.4	0.000982	0.00 - 0.00466	1
PROTOCOL ASB STRUCS 5-10	0.0	<0.00294	0.00 - 0.00294	0
PROTOCOL ASB STRUCS >10	0.0	<0.00294	0.00 - 0.00294	0
PROTOCOL ASB STRUCS TOTAL	0.0	<0.00294	0.00 - 0.00294	0
PROTOCOL CHRYS STRUCS 5-10	0.0	<0.00294	0.00 - 0.00294	0
PROTOCOL CHRYS STRUCS >10	0.0	<0.00294	0.00 - 0.00294	0
PROTOCOL CHRYS STRUCS TOTAL	0.0	<0.00294	0.00 - 0.00294	0
PROTOCOL AMPH STRUCS 5-10	0.0	<0.00294	0.00 - 0.00294	0
PROTOCOL AMPH STRUCS >10	0.0	<0.00294	0.00 - 0.00294	0
PROTOCOL AMPH STRUCS TOTAL	0.0	<0.00294	0.00 - 0.00294	0
AHERA-like Total Structures 3:1	4.1	0.00295	0.00 - 0.00761	3
AHERA-like Asb Strucs >5 and 3:1	2.7	0.00196	0.00 - 0.00619	2
AHERA-like Asb Strucs 5 - 10 and 3:1	1.4	0.000982	0.00 - 0.00466	1
AHERA-like Asb Strucs >10 and 3:1	1.4	0.000982	0.00 - 0.00466	1
Total Other Amphibole Strucs 3:1	0.0	<0.00294	0.00 - 0.00294	0
Other Amphibole Strucs >5 and 3:1	0.0	<0.00294	0.00 - 0.00294	0
Other Amphibole Strucs 5 - 10 and 3:1	0.0	<0.00294	0.00 - 0.00294	0
Other Amphibole Strucs >10 and 3:1	0.0	<0.00294	0.00 - 0.00294	0

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

ANALYSIS DETAIL

Lab/Cor Sample No. B4760 S14 A1
Client Sample No. CC2-L6-1CC-100304
Description
Analysis Date 10/9/2004
Analyst JH

Volume (L) 533.62
No. of Grid Openings 51
Filter Area (mm2) 385
Area Analyzed (mm2) 0.739
Analytical Sens. (struc/cc) 0.000976
Dectection Limit. (struc/cc) 0.00292

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Primary Asbestos Structures	2.7	0.00195	0.00 - 0.00615	2
Total Asbestos Structures	2.7	0.00195	0.00 - 0.00615	2
Asbestos Structures > 5um	1.4	0.000976	0.00 - 0.00463	1
Asbestos Fibers and Bundles > 5um	1.4	0.000976	0.00 - 0.00463	1
PCM Equivalent Fibers-US	0.0	<0.00292	0.00 - 0.00292	0
PCM Equivalent Structures-US	0.0	<0.00292	0.00 - 0.00292	0
PROTOCOL ASB STRUCS 5-10	0.0	<0.00292	0.00 - 0.00292	0
PROTOCOL ASB STRUCS >10	0.0	<0.00292	0.00 - 0.00292	0
PROTOCOL ASB STRUCS TOTAL	0.0	<0.00292	0.00 - 0.00292	0
PROTOCOL CHRYS STRUCS 5-10	0.0	<0.00292	0.00 - 0.00292	0
PROTOCOL CHRYS STRUCS >10	0.0	<0.00292	0.00 - 0.00292	0
PROTOCOL CHRYS STRUCS TOTAL	0.0	<0.00292	0.00 - 0.00292	0
PROTOCOL AMPH STRUCS 5-10	0.0	<0.00292	0.00 - 0.00292	0
PROTOCOL AMPH STRUCS >10	0.0	<0.00292	0.00 - 0.00292	0
PROTOCOL AMPH STRUCS TOTAL	0.0	<0.00292	0.00 - 0.00292	0
AHERA-like Total Structures 3:1	2.7	0.00195	0.00 - 0.00615	2
AHERA-like Asb Strucs >5 and 3:1	1.4	0.000976	0.00 - 0.00463	1
AHERA-like Asb Strucs 5 - 10 and 3:1	0.0	<0.00292	0.00 - 0.00292	0
AHERA-like Asb Strucs >10 and 3:1	1.4	0.000976	0.00 - 0.00463	1
Total Other Amphibole Strucs 3:1	0.0	<0.00292	0.00 - 0.00292	0
Other Amphibole Strucs >5 and 3:1	0.0	<0.00292	0.00 - 0.00292	0
Other Amphibole Strucs 5 - 10 and 3:1	0.0	<0.00292	0.00 - 0.00292	0
Other Amphibole Strucs >10 and 3:1	0.0	<0.00292	0.00 - 0.00292	0

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

ANALYSIS DETAIL

Lab/Cor Sample No. B4760 S15 A1
Client Sample No. CC2-L6-2CC-100304
Description
Analysis Date 10/9/2004
Analyst KM

Volume (L) 523
No. of Grid Openings 51
Filter Area (mm2) 385
Area Analyzed (mm2) 0.739
Analytical Sens. (struc/cc) 0.000996
Dectection Limit. (struc/cc) 0.00298

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Primary Asbestos Structures	0.0	<0.00298	0.00 - 0.00298	0
Total Asbestos Structures	0.0	<0.00298	0.00 - 0.00298	0
Asbestos Structures > 5um	0.0	<0.00298	0.00 - 0.00298	0
Asbestos Fibers and Bundles > 5um	0.0	<0.00298	0.00 - 0.00298	0
PCM Equivalent Fibers-US	0.0	<0.00298	0.00 - 0.00298	0
PCM Equivalent Structures-US	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL ASB STRUCS 5-10	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL ASB STRUCS >10	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL ASB STRUCS TOTAL	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL CHRYS STRUCS 5-10	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL CHRYS STRUCS >10	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL CHRYS STRUCS TOTAL	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL AMPH STRUCS 5-10	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL AMPH STRUCS >10	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL AMPH STRUCS TOTAL	0.0	<0.00298	0.00 - 0.00298	0
AHERA-like Total Structures 3:1	0.0	<0.00298	0.00 - 0.00298	0
AHERA-like Asb Strucs >5 and 3:1	0.0	<0.00298	0.00 - 0.00298	0
AHERA-like Asb Strucs 5 - 10 and 3:1	0.0	<0.00298	0.00 - 0.00298	0
AHERA-like Asb Strucs >10 and 3:1	0.0	<0.00298	0.00 - 0.00298	0
Total Other Amphibole Strucs 3:1	0.0	<0.00298	0.00 - 0.00298	0
Other Amphibole Strucs >5 and 3:1	0.0	<0.00298	0.00 - 0.00298	0
Other Amphibole Strucs 5 - 10 and 3:1	0.0	<0.00298	0.00 - 0.00298	0
Other Amphibole Strucs >10 and 3:1	0.0	<0.00298	0.00 - 0.00298	0

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

ANALYSIS DETAIL

Lab/Cor Sample No. B4760 S16 A1
Client Sample No. CC2-L6-3CC-100304
Description
Analysis Date 10/9/2004
Analyst KM

Volume (L) 520.12
No. of Grid Openings 52
Filter Area (mm2) 385
Area Analyzed (mm2) 0.753
Analytical Sens. (struc/cc) 0.000982
Dectection Limit. (struc/cc) 0.00294

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Primary Asbestos Structures	14.6	0.0108	0.00539 - 0.0193	11
Total Asbestos Structures	14.6	0.0108	0.00539 - 0.0193	11
Asbestos Structures > 5um	8.0	0.00589	0.00216 - 0.0128	6
Asbestos Fibers and Bundles > 5um	6.6	0.00491	0.00160 - 0.0115	5
PCM Equivalent Fibers-US	6.6	0.00491	0.00160 - 0.0115	5
PCM Equivalent Structures-US	5.3	0.00393	0.00107 - 0.0101	4
PROTOCOL ASB STRUCS 5-10	0.0	<0.00294	0.00 - 0.00294	0
PROTOCOL ASB STRUCS >10	0.0	<0.00294	0.00 - 0.00294	0
PROTOCOL ASB STRUCS TOTAL	0.0	<0.00294	0.00 - 0.00294	0
PROTOCOL CHRYS STRUCS 5-10	0.0	<0.00294	0.00 - 0.00294	0
PROTOCOL CHRYS STRUCS >10	0.0	<0.00294	0.00 - 0.00294	0
PROTOCOL CHRYS STRUCS TOTAL	0.0	<0.00294	0.00 - 0.00294	0
PROTOCOL AMPH STRUCS 5-10	0.0	<0.00294	0.00 - 0.00294	0
PROTOCOL AMPH STRUCS >10	0.0	<0.00294	0.00 - 0.00294	0
PROTOCOL AMPH STRUCS TOTAL	0.0	<0.00294	0.00 - 0.00294	0
AHERA-like Total Structures 3:1	14.6	0.0108	0.00539 - 0.0193	11
AHERA-like Asb Strucs >5 and 3:1	8.0	0.00589	0.00216 - 0.0128	6
AHERA-like Asb Strucs 5 - 10 and 3:1	4.0	0.00295	0.00 - 0.00761	3
AHERA-like Asb Strucs >10 and 3:1	4.0	0.00295	0.00 - 0.00761	3
Total Other Amphibole Strucs 3:1	0.0	<0.00294	0.00 - 0.00294	0
Other Amphibole Strucs >5 and 3:1	0.0	<0.00294	0.00 - 0.00294	0
Other Amphibole Strucs 5 - 10 and 3:1	0.0	<0.00294	0.00 - 0.00294	0
Other Amphibole Strucs >10 and 3:1	0.0	<0.00294	0.00 - 0.00294	0

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

ANALYSIS DETAIL

Lab/Cor Sample No. B4760 S17 A1
Client Sample No. CC2-L6-4CC-100304
Description
Analysis Date 10/9/2004
Analyst KM

Volume (L) 542.69
No. of Grid Openings 49
Filter Area (mm2) 385
Area Analyzed (mm2) 0.710
Analytical Sens. (struc/cc) 0.000999
Dectection Limit. (struc/cc) 0.00299

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Primary Asbestos Structures	21.1	0.0150	0.00839 - 0.0247	15
Total Asbestos Structures	21.1	0.0150	0.00839 - 0.0247	15
Asbestos Structures > 5um	5.6	0.00400	0.00109 - 0.0102	4
Asbestos Fibers and Bundles > 5um	4.2	0.00300	0.00 - 0.00774	3
PCM Equivalent Fibers-US	5.6	0.00400	0.00109 - 0.0102	4
PCM Equivalent Structures-US	4.2	0.00300	0.00 - 0.00774	3
PROTOCOL ASB STRUCS 5-10	1.4	0.000999	0.00 - 0.00474	1
PROTOCOL ASB STRUCS >10	0.0	<0.00299	0.00 - 0.00299	0
PROTOCOL ASB STRUCS TOTAL	1.4	0.000999	0.00 - 0.00474	1
PROTOCOL CHRYS STRUCS 5-10	0.0	<0.00299	0.00 - 0.00299	0
PROTOCOL CHRYS STRUCS >10	0.0	<0.00299	0.00 - 0.00299	0
PROTOCOL CHRYS STRUCS TOTAL	0.0	<0.00299	0.00 - 0.00299	0
PROTOCOL AMPH STRUCS 5-10	1.4	0.000999	0.00 - 0.00474	1
PROTOCOL AMPH STRUCS >10	0.0	<0.00299	0.00 - 0.00299	0
PROTOCOL AMPH STRUCS TOTAL	1.4	0.000999	0.00 - 0.00474	1
AHERA-like Total Structures 3:1	21.1	0.0150	0.00839 - 0.0247	15
AHERA-like Asb Strucs >5 and 3:1	5.6	0.00400	0.00109 - 0.0102	4
AHERA-like Asb Strucs 5 - 10 and 3:1	4.2	0.00300	0.00 - 0.00774	3
AHERA-like Asb Strucs >10 and 3:1	1.4	0.000999	0.00 - 0.00474	1
Total Other Amphibole Strucs 3:1	0.0	<0.00299	0.00 - 0.00299	0
Other Amphibole Strucs >5 and 3:1	0.0	<0.00299	0.00 - 0.00299	0
Other Amphibole Strucs 5 - 10 and 3:1	0.0	<0.00299	0.00 - 0.00299	0
Other Amphibole Strucs >10 and 3:1	0.0	<0.00299	0.00 - 0.00299	0

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

ANALYSIS DETAIL

Lab/Cor Sample No. B4760 S18 A1
Client Sample No. SVBA-H2-1FD-100204
Description
Analysis Date 10/9/2004
Analyst KM

Volume (L) 556.69
No. of Grid Openings 48
Filter Area (mm2) 385
Area Analyzed (mm2) 0.696
Analytical Sens. (struc/cc) 0.000994
Dectection Limit. (struc/cc) 0.00297

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Primary Asbestos Structures	24.4	0.0169	0.00985 - 0.0271	17
Total Asbestos Structures	24.4	0.0169	0.00985 - 0.0271	17
Asbestos Structures > 5um	5.8	0.00398	0.00108 - 0.0102	4
Asbestos Fibers and Bundles > 5um	4.3	0.00298	0.00 - 0.00771	3
PCM Equivalent Fibers-US	4.3	0.00298	0.00 - 0.00771	3
PCM Equivalent Structures-US	1.4	0.000994	0.00 - 0.00471	1
PROTOCOL ASB STRUCS 5-10	1.4	0.000994	0.00 - 0.00471	1
PROTOCOL ASB STRUCS >10	0.0	<0.00297	0.00 - 0.00297	0
PROTOCOL ASB STRUCS TOTAL	1.4	0.000994	0.00 - 0.00471	1
PROTOCOL CHRYS STRUCS 5-10	1.4	0.000994	0.00 - 0.00471	1
PROTOCOL CHRYS STRUCS >10	0.0	<0.00297	0.00 - 0.00297	0
PROTOCOL CHRYS STRUCS TOTAL	1.4	0.000994	0.00 - 0.00471	1
PROTOCOL AMPH STRUCS 5-10	0.0	<0.00297	0.00 - 0.00297	0
PROTOCOL AMPH STRUCS >10	0.0	<0.00297	0.00 - 0.00297	0
PROTOCOL AMPH STRUCS TOTAL	0.0	<0.00297	0.00 - 0.00297	0
AHERA-like Total Structures 3:1	24.4	0.0169	0.00985 - 0.0271	17
AHERA-like Asb Strucs >5 and 3:1	5.8	0.00398	0.00108 - 0.0102	4
AHERA-like Asb Strucs 5 - 10 and 3:1	4.3	0.00298	0.00 - 0.00771	3
AHERA-like Asb Strucs >10 and 3:1	1.4	0.000994	0.00 - 0.00471	1
Total Other Amphibole Strucs 3:1	0.0	<0.00297	0.00 - 0.00297	0
Other Amphibole Strucs >5 and 3:1	0.0	<0.00297	0.00 - 0.00297	0
Other Amphibole Strucs 5 - 10 and 3:1	0.0	<0.00297	0.00 - 0.00297	0
Other Amphibole Strucs >10 and 3:1	0.0	<0.00297	0.00 - 0.00297	0

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

ANALYSIS DETAIL

Lab/Cor Sample No. B4760 S19 A1
Client Sample No. SVBA-H2-2FD-100204
Description
Analysis Date 10/10/2004
Analyst KM

Volume (L) 531.47
No. of Grid Openings 50
Filter Area (mm2) 385
Area Analyzed (mm2) 0.724
Analytical Sens. (struc/cc) 0.00100
Dectection Limit. (struc/cc) 0.00299

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Primary Asbestos Structures	12.4	0.00900	0.00411 - 0.0171	9
Total Asbestos Structures	12.4	0.00900	0.00411 - 0.0171	9
Asbestos Structures > 5um	4.1	0.00300	0.00 - 0.00775	3
Asbestos Fibers and Bundles > 5um	4.1	0.00300	0.00 - 0.00775	3
PCM Equivalent Fibers-US	4.1	0.00300	0.00 - 0.00775	3
PCM Equivalent Structures-US	4.1	0.00300	0.00 - 0.00775	3
PROTOCOL ASB STRUCS 5-10	0.0	<0.00299	0.00 - 0.00299	0
PROTOCOL ASB STRUCS >10	0.0	<0.00299	0.00 - 0.00299	0
PROTOCOL ASB STRUCS TOTAL	0.0	<0.00299	0.00 - 0.00299	0
PROTOCOL CHRYS STRUCS 5-10	0.0	<0.00299	0.00 - 0.00299	0
PROTOCOL CHRYS STRUCS >10	0.0	<0.00299	0.00 - 0.00299	0
PROTOCOL CHRYS STRUCS TOTAL	0.0	<0.00299	0.00 - 0.00299	0
PROTOCOL AMPH STRUCS 5-10	0.0	<0.00299	0.00 - 0.00299	0
PROTOCOL AMPH STRUCS >10	0.0	<0.00299	0.00 - 0.00299	0
PROTOCOL AMPH STRUCS TOTAL	0.0	<0.00299	0.00 - 0.00299	0
AHERA-like Total Structures 3:1	12.4	0.00900	0.00411 - 0.0171	9
AHERA-like Asb Strucs >5 and 3:1	4.1	0.00300	0.00 - 0.00775	3
AHERA-like Asb Strucs 5 - 10 and 3:1	4.1	0.00300	0.00 - 0.00775	3
AHERA-like Asb Strucs >10 and 3:1	0.0	<0.00299	0.00 - 0.00299	0
Total Other Amphibole Strucs 3:1	0.0	<0.00299	0.00 - 0.00299	0
Other Amphibole Strucs >5 and 3:1	0.0	<0.00299	0.00 - 0.00299	0
Other Amphibole Strucs 5 - 10 and 3:1	0.0	<0.00299	0.00 - 0.00299	0
Other Amphibole Strucs >10 and 3:1	0.0	<0.00299	0.00 - 0.00299	0

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

ANALYSIS DETAIL

Lab/Cor Sample No. B4760 S20 A1
Client Sample No. SVBA-H2-3FD-100204
Description
Analysis Date 10/10/2004
Analyst KM

Volume (L) 562.41
No. of Grid Openings 48
Filter Area (mm2) 385
Area Analyzed (mm2) 0.696
Analytical Sens. (struc/cc) 0.000984
Dectection Limit. (struc/cc) 0.00294

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Primary Asbestos Structures	4.3	0.00295	0.00 - 0.00763	3
Total Asbestos Structures	4.3	0.00295	0.00 - 0.00763	3
Asbestos Structures > 5um	2.9	0.00197	0.00 - 0.00620	2
Asbestos Fibers and Bundles > 5um	1.4	0.000984	0.00 - 0.00467	1
PCM Equivalent Fibers-US	0.0	<0.00294	0.00 - 0.00294	0
PCM Equivalent Structures-US	0.0	<0.00294	0.00 - 0.00294	0
PROTOCOL ASB STRUCS 5-10	0.0	<0.00294	0.00 - 0.00294	0
PROTOCOL ASB STRUCS >10	0.0	<0.00294	0.00 - 0.00294	0
PROTOCOL ASB STRUCS TOTAL	0.0	<0.00294	0.00 - 0.00294	0
PROTOCOL CHRYS STRUCS 5-10	0.0	<0.00294	0.00 - 0.00294	0
PROTOCOL CHRYS STRUCS >10	0.0	<0.00294	0.00 - 0.00294	0
PROTOCOL CHRYS STRUCS TOTAL	0.0	<0.00294	0.00 - 0.00294	0
PROTOCOL AMPH STRUCS 5-10	0.0	<0.00294	0.00 - 0.00294	0
PROTOCOL AMPH STRUCS >10	0.0	<0.00294	0.00 - 0.00294	0
PROTOCOL AMPH STRUCS TOTAL	0.0	<0.00294	0.00 - 0.00294	0
AHERA-like Total Structures 3:1	4.3	0.00295	0.00 - 0.00763	3
AHERA-like Asb Strucs >5 and 3:1	2.9	0.00197	0.00 - 0.00620	2
AHERA-like Asb Strucs 5 - 10 and 3:1	1.4	0.000984	0.00 - 0.00467	1
AHERA-like Asb Strucs >10 and 3:1	1.4	0.000984	0.00 - 0.00467	1
Total Other Amphibole Strucs 3:1	0.0	<0.00294	0.00 - 0.00294	0
Other Amphibole Strucs >5 and 3:1	0.0	<0.00294	0.00 - 0.00294	0
Other Amphibole Strucs 5 - 10 and 3:1	0.0	<0.00294	0.00 - 0.00294	0
Other Amphibole Strucs >10 and 3:1	0.0	<0.00294	0.00 - 0.00294	0

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

ANALYSIS DETAIL

Lab/Cor Sample No. B4760 S21 A1
Client Sample No. SVBB-H2-1FD-100304
Description
Analysis Date 10/10/2004
Analyst DW

Volume (L) 611.75
No. of Grid Openings 43
Filter Area (mm2) 385
Area Analyzed (mm2) 0.623
Analytical Sens. (struc/cc) 0.00101
Dectection Limit. (struc/cc) 0.00302

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Primary Asbestos Structures	3.2	0.00202	0.00 - 0.00636	2
Total Asbestos Structures	3.2	0.00202	0.00 - 0.00636	2
Asbestos Structures > 5um	0.0	<0.00302	0.00 - 0.00302	0
Asbestos Fibers and Bundles > 5um	0.0	<0.00302	0.00 - 0.00302	0
PCM Equivalent Fibers-US	0.0	<0.00302	0.00 - 0.00302	0
PCM Equivalent Structures-US	0.0	<0.00302	0.00 - 0.00302	0
PROTOCOL ASB STRUCS 5-10	0.0	<0.00302	0.00 - 0.00302	0
PROTOCOL ASB STRUCS >10	0.0	<0.00302	0.00 - 0.00302	0
PROTOCOL ASB STRUCS TOTAL	0.0	<0.00302	0.00 - 0.00302	0
PROTOCOL CHRYS STRUCS 5-10	0.0	<0.00302	0.00 - 0.00302	0
PROTOCOL CHRYS STRUCS >10	0.0	<0.00302	0.00 - 0.00302	0
PROTOCOL CHRYS STRUCS TOTAL	0.0	<0.00302	0.00 - 0.00302	0
PROTOCOL AMPH STRUCS 5-10	0.0	<0.00302	0.00 - 0.00302	0
PROTOCOL AMPH STRUCS >10	0.0	<0.00302	0.00 - 0.00302	0
PROTOCOL AMPH STRUCS TOTAL	0.0	<0.00302	0.00 - 0.00302	0
AHERA-like Total Structures 3:1	3.2	0.00202	0.00 - 0.00636	2
AHERA-like Asb Strucs >5 and 3:1	0.0	<0.00302	0.00 - 0.00302	0
AHERA-like Asb Strucs 5 - 10 and 3:1	0.0	<0.00302	0.00 - 0.00302	0
AHERA-like Asb Strucs >10 and 3:1	0.0	<0.00302	0.00 - 0.00302	0
Total Other Amphibole Strucs 3:1	0.0	<0.00302	0.00 - 0.00302	0
Other Amphibole Strucs >5 and 3:1	0.0	<0.00302	0.00 - 0.00302	0
Other Amphibole Strucs 5 - 10 and 3:1	0.0	<0.00302	0.00 - 0.00302	0
Other Amphibole Strucs >10 and 3:1	0.0	<0.00302	0.00 - 0.00302	0

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

ANALYSIS DETAIL

Lab/Cor Sample No. B4760 S22 A1
Client Sample No. SVBB-H2-2FD-100304
Description
Analysis Date 10/10/2004
Analyst KM

Volume (L) 563.3
No. of Grid Openings 48
Filter Area (mm2) 385
Area Analyzed (mm2) 0.696
Analytical Sens. (struc/cc) 0.000983
Dectection Limit. (struc/cc) 0.00294

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Primary Asbestos Structures	0.0	<0.00294	0.00 - 0.00294	0
Total Asbestos Structures	0.0	<0.00294	0.00 - 0.00294	0
Asbestos Structures > 5um	0.0	<0.00294	0.00 - 0.00294	0
Asbestos Fibers and Bundles > 5um	0.0	<0.00294	0.00 - 0.00294	0
PCM Equivalent Fibers-US	0.0	<0.00294	0.00 - 0.00294	0
PCM Equivalent Structures-US	0.0	<0.00294	0.00 - 0.00294	0
PROTOCOL ASB STRUCS 5-10	0.0	<0.00294	0.00 - 0.00294	0
PROTOCOL ASB STRUCS >10	0.0	<0.00294	0.00 - 0.00294	0
PROTOCOL ASB STRUCS TOTAL	0.0	<0.00294	0.00 - 0.00294	0
PROTOCOL CHRYS STRUCS 5-10	0.0	<0.00294	0.00 - 0.00294	0
PROTOCOL CHRYS STRUCS >10	0.0	<0.00294	0.00 - 0.00294	0
PROTOCOL CHRYS STRUCS TOTAL	0.0	<0.00294	0.00 - 0.00294	0
PROTOCOL AMPH STRUCS 5-10	0.0	<0.00294	0.00 - 0.00294	0
PROTOCOL AMPH STRUCS >10	0.0	<0.00294	0.00 - 0.00294	0
PROTOCOL AMPH STRUCS TOTAL	0.0	<0.00294	0.00 - 0.00294	0
AHERA-like Total Structures 3:1	0.0	<0.00294	0.00 - 0.00294	0
AHERA-like Asb Strucs >5 and 3:1	0.0	<0.00294	0.00 - 0.00294	0
AHERA-like Asb Struca 5 - 10 and 3:1	0.0	<0.00294	0.00 - 0.00294	0
AHERA-like Asb Strucs >10 and 3:1	0.0	<0.00294	0.00 - 0.00294	0
Total Other Amphibole Strucs 3:1	0.0	<0.00294	0.00 - 0.00294	0
Other Amphibole Strucs >5 and 3:1	0.0	<0.00294	0.00 - 0.00294	0
Other Amphibole Strucs 5 - 10 and 3:1	0.0	<0.00294	0.00 - 0.00294	0
Other Amphibole Strucs >10 and 3:1	0.0	<0.00294	0.00 - 0.00294	0

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

ANALYSIS DETAIL

Lab/Cor Sample No. B4760 S23 A1
Client Sample No. SVBB-H2-3FD-100304
Description
Analysis Date 10/10/2004
Analyst DW

Volume (L) 580.91
No. of Grid Openings 46
Filter Area (mm2) 385
Area Analyzed (mm2) 0.667
Analytical Sens. (struc/cc) 0.000994
Dectection Limit. (struc/cc) 0.00297

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Primary Asbestos Structures	0.0	<0.00297	0.00 - 0.00297	0
Total Asbestos Structures	0.0	<0.00297	0.00 - 0.00297	0
Asbestos Structures > 5um	0.0	<0.00297	0.00 - 0.00297	0
Asbestos Fibers and Bundles > 5um	0.0	<0.00297	0.00 - 0.00297	0
PCM Equivalent Fibers-US	0.0	<0.00297	0.00 - 0.00297	0
PCM Equivalent Structures-US	0.0	<0.00297	0.00 - 0.00297	0
PROTOCOL ASB STRUCS 5-10	0.0	<0.00297	0.00 - 0.00297	0
PROTOCOL ASB STRUCS >10	0.0	<0.00297	0.00 - 0.00297	0
PROTOCOL ASB STRUCS TOTAL	0.0	<0.00297	0.00 - 0.00297	0
PROTOCOL CHRYS STRUCS 5-10	0.0	<0.00297	0.00 - 0.00297	0
PROTOCOL CHRYS STRUCS >10	0.0	<0.00297	0.00 - 0.00297	0
PROTOCOL CHRYS STRUCS TOTAL	0.0	<0.00297	0.00 - 0.00297	0
PROTOCOL AMPH STRUCS 5-10	0.0	<0.00297	0.00 - 0.00297	0
PROTOCOL AMPH STRUCS >10	0.0	<0.00297	0.00 - 0.00297	0
PROTOCOL AMPH STRUCS TOTAL	0.0	<0.00297	0.00 - 0.00297	0
AHERA-like Total Structures 3:1	0.0	<0.00297	0.00 - 0.00297	0
AHERA-like Asb Struca >5 and 3:1	0.0	<0.00297	0.00 - 0.00297	0
AHERA-like Asb Struca 5 - 10 and 3:1	0.0	<0.00297	0.00 - 0.00297	0
AHERA-like Asb Strucs >10 and 3:1	0.0	<0.00297	0.00 - 0.00297	0
Total Other Amphibole Strucs 3:1	0.0	<0.00297	0.00 - 0.00297	0
Other Amphibole Strucs >5 and 3:1	0.0	<0.00297	0.00 - 0.00297	0
Other Amphibole Strucs 5 - 10 and 3:1	0.0	<0.00297	0.00 - 0.00297	0
Other Amphibole Strucs >10 and 3:1	0.0	<0.00297	0.00 - 0.00297	0

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

ANALYSIS DETAIL

Lab/Cor Sample No. B4760 S24 A1
Client Sample No. TPG-L2-11CH-100404
Description
Analysis Date 10/10/2004
Analyst DW

Volume (L) 288.72
No. of Grid Openings 92
Filter Area (mm2) 385
Area Analyzed (mm2) 1.33
Analytical Sens. (struc/cc) 0.00100
Dectection Limit. (struc/cc) 0.00299

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Primary Asbestos Structures	10.5	0.0140	0.00766 - 0.0235	14
Total Asbestos Structures	10.5	0.0140	0.00766 - 0.0235	14
Asbestos Structures > 5um	6.8	0.00900	0.00412 - 0.0171	9
Asbestos Fibers and Bundles > 5um	6.0	0.00800	0.00346 - 0.0158	8
PCM Equivalent Fibers-US	5.3	0.00700	0.00281 - 0.0144	7
PCM Equivalent Structures-US	3.0	0.00400	0.00109 - 0.0102	4
PROTOCOL ASB STRUCS 5-10	0.0	<0.00299	0.00 - 0.00299	0
PROTOCOL ASB STRUCS >10	1.5	0.00200	0.00 - 0.00630	2
PROTOCOL ASB STRUCS TOTAL	1.5	0.00200	0.00 - 0.00630	2
PROTOCOL CHRYS STRUCS 5-10	0.0	<0.00299	0.00 - 0.00299	0
PROTOCOL CHRYS STRUCS >10	0.8	0.00100	0.00 - 0.00474	1
PROTOCOL CHRYS STRUCS TOTAL	0.8	0.00100	0.00 - 0.00474	1
PROTOCOL AMPH STRUCS 5-10	0.0	<0.00299	0.00 - 0.00299	0
PROTOCOL AMPH STRUCS >10	0.8	0.00100	0.00 - 0.00474	1
PROTOCOL AMPH STRUCS TOTAL	0.8	0.00100	0.00 - 0.00474	1
AHERA-like Total Structures 3:1	10.5	0.0140	0.00766 - 0.0235	14
AHERA-like Asb Strucs >5 and 3:1	6.8	0.00900	0.00412 - 0.0171	9
AHERA-like Asb Strucs 5 - 10 and 3:1	2.3	0.00300	0.00 - 0.00775	3
AHERA-like Asb Strucs >10 and 3:1	4.5	0.00600	0.00220 - 0.0131	6
Total Other Amphibole Strucs 3:1	0.0	<0.00299	0.00 - 0.00299	0
Other Amphibole Strucs >5 and 3:1	0.0	<0.00299	0.00 - 0.00299	0
Other Amphibole Strucs 5 - 10 and 3:1	0.0	<0.00299	0.00 - 0.00299	0
Other Amphibole Strucs >10 and 3:1	0.0	<0.00299	0.00 - 0.00299	0

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

ANALYSIS DETAIL

Lab/Cor Sample No. B4760 S25 A1
Client Sample No. TPG-L2-1CH-100404
Description
Analysis Date 10/10/2004
Analyst KM

Volume (L) 291.6
No. of Grid Openings 91
Filter Area (mm2) 385
Area Analyzed (mm2) 1.32
Analytical Sens. (struc/cc) 0.00100
Dectection Limit. (struc/cc) 0.00299

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Primary Asbestos Structures	19.7	0.0260	0.0170 - 0.0381	26
Total Asbestos Structures	19.7	0.0260	0.0170 - 0.0381	26
Asbestos Structures > 5um	9.9	0.0130	0.00693 - 0.0223	13
Asbestos Fibera and Bundles > 5um	6.8	0.00901	0.00412 - 0.0171	9
PCM Equivalent Fibers-US	6.1	0.00801	0.00346 - 0.0158	8
PCM Equivalent Structures-US	5.3	0.00701	0.00282 - 0.0144	7
PROTOCOL ASB STRUCS 5-10	2.3	0.00300	0.00 - 0.00776	3
PROTOCOL ASB STRUCS >10	0.0	<0.00299	0.00 - 0.00299	0
PROTOCOL ASB STRUCS TOTAL	2.3	0.00300	0.00 - 0.00776	3
PROTOCOL CHRYS STRUCS 5-10	0.8	0.00100	0.00 - 0.00475	1
PROTOCOL CHRYS STRUCS >10	0.0	<0.00299	0.00 - 0.00299	0
PROTOCOL CHRYS STRUCS TOTAL	0.8	0.00100	0.00 - 0.00475	1
PROTOCOL AMPH STRUCS 5-10	1.5	0.00200	0.00 - 0.00631	2
PROTOCOL AMPH STRUCS >10	0.0	<0.00299	0.00 - 0.00299	0
PROTOCOL AMPH STRUCS TOTAL	1.5	0.00200	0.00 - 0.00631	2
AHERA-like Total Structures 3:1	19.7	0.0260	0.0170 - 0.0381	26
AHERA-like Asb Strucs >5 and 3:1	9.9	0.0130	0.00693 - 0.0223	13
AHERA-like Asb Strucs 5 - 10 and 3:1	6.8	0.00901	0.00412 - 0.0171	9
AHERA-like Asb Strucs >10 and 3:1	3.0	0.00401	0.00109 - 0.0103	4
Total Other Amphibole Strucs 3:1	0.0	<0.00299	0.00 - 0.00299	0
Other Amphibole Strucs >5 and 3:1	0.0	<0.00299	0.00 - 0.00299	0
Other Amphibole Strucs 5 - 10 and 3:1	0.0	<0.00299	0.00 - 0.00299	0
Other Amphibole Strucs >10 and 3:1	0.0	<0.00299	0.00 - 0.00299	0

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

ANALYSIS DETAIL

Lab/Cor Sample No. B4760 S26 A1
Client Sample No. TPG-L2-1ZB-100404
Description
Analysis Date 10/11/2004
Analyst JH

Volume (L) 303.6
No. of Grid Openings 88
Filter Area (mm2) 385
Area Analyzed (mm2) 1.28
Analytical Sens. (struc/cc) 0.000995
Dectection Limit. (struc/cc) 0.00297

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Primary Asbestos Structures	0.0	<0.00297	0.00 - 0.00297	0
Total Asbestos Structures	0.0	<0.00297	0.00 - 0.00297	0
Asbestos Structures > 5um	0.0	<0.00297	0.00 - 0.00297	0
Asbestos Fibers and Bundles > 5um	0.0	<0.00297	0.00 - 0.00297	0
PCM Equivalent Fibers-US	0.0	<0.00297	0.00 - 0.00297	0
PCM Equivalent Structures-US	0.0	<0.00297	0.00 - 0.00297	0
PROTOCOL ASB STRUCS 5-10	0.0	<0.00297	0.00 - 0.00297	0
PROTOCOL ASB STRUCS >10	0.0	<0.00297	0.00 - 0.00297	0
PROTOCOL ASB STRUCS TOTAL	0.0	<0.00297	0.00 - 0.00297	0
PROTOCOL CHRYS STRUCS 5-10	0.0	<0.00297	0.00 - 0.00297	0
PROTOCOL CHRYS STRUCS >10	0.0	<0.00297	0.00 - 0.00297	0
PROTOCOL CHRYS STRUCS TOTAL	0.0	<0.00297	0.00 - 0.00297	0
PROTOCOL AMPH STRUCS 5-10	0.0	<0.00297	0.00 - 0.00297	0
PROTOCOL AMPH STRUCS >10	0.0	<0.00297	0.00 - 0.00297	0
PROTOCOL AMPH STRUCS TOTAL	0.0	<0.00297	0.00 - 0.00297	0
AHERA-like Total Structures 3:1	0.0	<0.00297	0.00 - 0.00297	0
AHERA-like Asb Strucs >5 and 3:1	0.0	<0.00297	0.00 - 0.00297	0
AHERA-like Asb Strucs 5 - 10 and 3:1	0.0	<0.00297	0.00 - 0.00297	0
AHERA-like Asb Strucs >10 and 3:1	0.0	<0.00297	0.00 - 0.00297	0
Total Other Amphibole Strucs 3:1	0.0	<0.00297	0.00 - 0.00297	0
Other Amphibole Strucs >5 and 3:1	0.0	<0.00297	0.00 - 0.00297	0
Other Amphibole Strucs 5 - 10 and 3:1	0.0	<0.00297	0.00 - 0.00297	0
Other Amphibole Strucs >10 and 3:1	0.0	<0.00297	0.00 - 0.00297	0

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

ANALYSIS DETAIL

Lab/Cor Sample No. B4760 S27 A1
Client Sample No. TPG-L2-2CH-100404
Description
Analysis Date 10/11/2004
Analyst JH

Volume (L) 290.4
No. of Grid Openings 44
Filter Area (mm2) 385
Area Analyzed (mm2) 0.638
Analytical Sens. (struc/cc) 0.00208
Dectection Limit. (struc/cc) 0.00622

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Primary Asbestos Structures	83.1	0.110	0.0826 - 0.144 (Poisson)	53
Total Asbestos Structures	87.8	0.116	0.0880 - 0.151 (Poisson)	56
Asbestos Structures > 5um	17.3	0.0229	0.0114 - 0.0409	11
Asbestos Fibers and Bundles > 5um	7.8	0.0104	0.00338 - 0.0243	5
PCM Equivalent Fibers-US	6.3	0.00832	0.00227 - 0.0213	4
PCM Equivalent Structures-US	4.7	0.00624	0.00 - 0.0161	3
PROTOCOL ASB STRUCS 5-10	1.6	0.00208	0.00 - 0.00986	1
PROTOCOL ASB STRUCS >10	0.0	<0.00622	0.00 - 0.00622	0
PROTOCOL ASB STRUCS TOTAL	1.6	0.00208	0.00 - 0.00986	1
PROTOCOL CHRYS STRUCS 5-10	1.6	0.00208	0.00 - 0.00986	1
PROTOCOL CHRYS STRUCS >10	0.0	<0.00622	0.00 - 0.00622	0
PROTOCOL CHRYS STRUCS TOTAL	1.6	0.00208	0.00 - 0.00986	1
PROTOCOL AMPH STRUCS 5-10	0.0	<0.00622	0.00 - 0.00622	0
PROTOCOL AMPH STRUCS >10	0.0	<0.00622	0.00 - 0.00622	0
PROTOCOL AMPH STRUCS TOTAL	0.0	<0.00622	0.00 - 0.00622	0
AHERA-like Total Structures 3:1	81.6	0.108	0.0808 - 0.142 (Poisson)	52
AHERA-like Asb Strucs >5 and 3:1	17.3	0.0229	0.0114 - 0.0409	11
AHERA-like Asb Strucs 5 - 10 and 3:1	9.4	0.0125	0.00458 - 0.0272	6
AHERA-like Asb Strucs >10 and 3:1	7.8	0.0104	0.00338 - 0.0243	5
Total Other Amphibole Strucs 3:1	0.0	<0.00622	0.00 - 0.00622	0
Other Amphibole Strucs >5 and 3:1	0.0	<0.00622	0.00 - 0.00622	0
Other Amphibole Strucs 5 - 10 and 3:1	0.0	<0.00622	0.00 - 0.00622	0
Other Amphibole Strucs >10 and 3:1	0.0	<0.00622	0.00 - 0.00622	0

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

ANALYSIS DETAIL

Lab/Cor Sample No. B4760 S28 A1
Client Sample No. TPG-L2-3CH-100404
Description
Analysis Date 10/11/2004
Analyst KM

Volume (L) 299.16
No. of Grid Openings 89
Filter Area (mm2) 385
Area Analyzed (mm2) 1.29
Analytical Sens. (struc/cc) 0.000998
Dectection Limit. (struc/cc) 0.00298

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Primary Asbestos Structures	17.1	0.0220	0.0138 - 0.0332	22
Total Asbestos Structures	17.1	0.0220	0.0138 - 0.0332	22
Asbestos Structures > 5um	4.7	0.00599	0.00220 - 0.0130	6
Asbestos Fibers and Bundles > 5um	1.6	0.00200	0.00 - 0.00629	2
PCM Equivalent Fibers-US	0.8	0.000998	0.00 - 0.00473	1
PCM Equivalent Structures-US	0.8	0.000998	0.00 - 0.00473	1
PROTOCOL ASB STRUCS 5-10	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL ASB STRUCS >10	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL ASB STRUCS TOTAL	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL CHRYS STRUCS 5-10	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL CHRYS STRUCS >10	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL CHRYS STRUCS TOTAL	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL AMPH STRUCS 5-10	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL AMPH STRUCS >10	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL AMPH STRUCS TOTAL	0.0	<0.00298	0.00 - 0.00298	0
AHERA-like Total Structures 3:1	17.1	0.0220	0.0138 - 0.0332	22
AHERA-like Asb Strucs >5 and 3:1	4.7	0.00599	0.00220 - 0.0130	6
AHERA-like Asb Strucs 5 - 10 and 3:1	3.9	0.00499	0.00162 - 0.0116	5
AHERA-like Asb Strucs >10 and 3:1	0.8	0.000998	0.00 - 0.00473	1
Total Other Amphibole Strucs 3:1	0.0	<0.00298	0.00 - 0.00298	0
Other Amphibole Strucs >5 and 3:1	0.0	<0.00298	0.00 - 0.00298	0
Other Amphibole Strucs 5 - 10 and 3:1	0.0	<0.00298	0.00 - 0.00298	0
Other Amphibole Strucs >10 and 3:1	0.0	<0.00298	0.00 - 0.00298	0

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

ANALYSIS DETAIL

Lab/Cor Sample No. B4760 S29 A1
Client Sample No. TPG-L2-4CH-100404
Description
Analysis Date 10/12/2004
Analyst DW

Volume (L) 290
No. of Grid Openings 17
Filter Area (mm2) 385
Area Analyzed (mm2) 0.246
Analytical Sens. (struc/cc) 0.00539
Dectection Limit. (struc/cc) 0.0161

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Primary Asbestos Structures	198.9	0.264	0.195 - 0.349 (Poisson)	49
Total Asbestos Structures	215.2	0.286	0.214 - 0.374 (Poisson)	53
Asbestos Structures > 5um	60.9	0.0808	0.0452 - 0.133	15
Asbestos Fibers and Bundles > 5um	8.1	0.0108	0.00 - 0.0340	2
PCM Equivalent Fibers-US	8.1	0.0108	0.00 - 0.0340	2
PCM Equivalent Structures-US	0.0	<0.0161	0.00 - 0.0161	0
PROTOCOL ASB STRUCS 5-10	0.0	<0.0161	0.00 - 0.0161	0
PROTOCOL ASB STRUCS >10	0.0	<0.0161	0.00 - 0.0161	0
PROTOCOL ASB STRUCS TOTAL	0.0	<0.0161	0.00 - 0.0161	0
PROTOCOL CHRYS STRUCS 5-10	0.0	<0.0161	0.00 - 0.0161	0
PROTOCOL CHRYS STRUCS >10	0.0	<0.0161	0.00 - 0.0161	0
PROTOCOL CHRYS STRUCS TOTAL	0.0	<0.0161	0.00 - 0.0161	0
PROTOCOL AMPH STRUCS 5-10	0.0	<0.0161	0.00 - 0.0161	0
PROTOCOL AMPH STRUCS >10	0.0	<0.0161	0.00 - 0.0161	0
PROTOCOL AMPH STRUCS TOTAL	0.0	<0.0161	0.00 - 0.0161	0
AHERA-like Total Structures 3:1	198.9	0.264	0.195 - 0.349 (Poisson)	49
AHERA-like Asb Strucs >5 and 3:1	60.9	0.0808	0.0452 - 0.133	15
AHERA-like Asb Strucs 5 - 10 and 3:1	32.5	0.0431	0.0186 - 0.0850	8
AHERA-like Asb Strucs >10 and 3:1	28.4	0.0377	0.0152 - 0.0777	7
Total Other Amphibole Strucs 3:1	0.0	<0.0161	0.00 - 0.0161	0
Other Amphibole Strucs >5 and 3:1	0.0	<0.0161	0.00 - 0.0161	0
Other Amphibole Strucs 5 - 10 and 3:1	0.0	<0.0161	0.00 - 0.0161	0
Other Amphibole Strucs >10 and 3:1	0.0	<0.0161	0.00 - 0.0161	0

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

ANALYSIS DETAIL

Lab/Cor Sample No. B4760 S30 A1
Client Sample No. TPG-L2-5CH-100404
Description
Analysis Date 10/12/2004
Analyst JH

Volume (L) 288.84
No. of Grid Openings 71
Filter Area (mm2) 385
Area Analyzed (mm2) 1.03
Analytical Sens. (struc/cc) 0.00130
Dectection Limit. (struc/cc) 0.00387

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Primary Asbestos Structures	41.8	0.0557	0.0403 - 0.0750 (Poisson)	43
Total Asbestos Structures	48.6	0.0648	0.0481 - 0.0854 (Poisson)	50
Asbestos Structures > 5um	9.7	0.0130	0.00621 - 0.0238	10
Asbestos Fibers and Bundles > 5um	4.9	0.00648	0.00210 - 0.0151	5
PCM Equivalent Fibers-US	3.9	0.00518	0.00141 - 0.0133	4
PCM Equivalent Structures-US	2.9	0.00389	0.00 - 0.0100	3
PROTOCOL ASB STRUCS 5-10	1.9	0.00259	0.00 - 0.00816	2
PROTOCOL ASB STRUCS >10	0.0	<0.00387	0.00 - 0.00387	0
PROTOCOL ASB STRUCS TOTAL	1.9	0.00259	0.00 - 0.00816	2
PROTOCOL CHRYS STRUCS 5-10	1.0	0.00130	0.00 - 0.00614	1
PROTOCOL CHRYS STRUCS >10	0.0	<0.00387	0.00 - 0.00387	0
PROTOCOL CHRYS STRUCS TOTAL	1.0	0.00130	0.00 - 0.00614	1
PROTOCOL AMPH STRUCS 5-10	1.0	0.00130	0.00 - 0.00614	1
PROTOCOL AMPH STRUCS >10	0.0	<0.00387	0.00 - 0.00387	0
PROTOCOL AMPH STRUCS TOTAL	1.0	0.00130	0.00 - 0.00614	1
AHERA-like Total Structures 3:1	41.8	0.0557	0.0403 - 0.0750 (Poisson)	43
AHERA-like Asb Strucs >5 and 3:1	9.7	0.0130	0.00621 - 0.0238	10
AHERA-like Asb Strucs 5 - 10 and 3:1	8.7	0.0117	0.00533 - 0.0221	9
AHERA-like Asb Strucs >10 and 3:1	1.0	0.00130	0.00 - 0.00614	1
Total Other Amphibole Strucs 3:1	0.0	<0.00387	0.00 - 0.00387	0
Other Amphibole Strucs >5 and 3:1	0.0	<0.00387	0.00 - 0.00387	0
Other Amphibole Struca 5 - 10 and 3:1	0.0	<0.00387	0.00 - 0.00387	0
Other Amphibole Strucs >10 and 3:1	0.0	<0.00387	0.00 - 0.00387	0

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

ANALYSIS DETAIL

Lab/Cor Sample No. B4760 S31 A1
Client Sample No. RHB-H2-1FD-100304
Description
Analysis Date 11/3/2004
Analyst JH

Volume (L) 1186.08
No. of Grid Openings 23
Filter Area (mm2) 385
Area Analyzed (mm2) 0.333
Analytical Sens. (struc/cc) 0.000974
Dectection Limit. (struc/cc) 0.00291

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Primary Asbestos Structures	3.0	0.000974	0.00 - 0.00462	1
Total Asbestos Structures	3.0	0.000974	0.00 - 0.00462	1
Asbestos Structures > 5um	3.0	0.000974	0.00 - 0.00462	1
Asbestos Fibers and Bundles > 5um	3.0	0.000974	0.00 - 0.00462	1
PCM Equivalent Fibers-US	3.0	0.000974	0.00 - 0.00462	1
PCM Equivalent Structures-US	3.0	0.000974	0.00 - 0.00462	1
PROTOCOL ASB STRUCS 5-10	0.0	<0.00291	0.00 - 0.00291	0
PROTOCOL ASB STRUCS >10	0.0	<0.00291	0.00 - 0.00291	0
PROTOCOL ASB STRUCS TOTAL	0.0	<0.00291	0.00 - 0.00291	0
PROTOCOL CHRYS STRUCS 5-10	0.0	<0.00291	0.00 - 0.00291	0
PROTOCOL CHRYS STRUCS >10	0.0	<0.00291	0.00 - 0.00291	0
PROTOCOL CHRYS STRUCS TOTAL	0.0	<0.00291	0.00 - 0.00291	0
PROTOCOL AMPH STRUCS 5-10	0.0	<0.00291	0.00 - 0.00291	0
PROTOCOL AMPH STRUCS >10	0.0	<0.00291	0.00 - 0.00291	0
PROTOCOL AMPH STRUCS TOTAL	0.0	<0.00291	0.00 - 0.00291	0
AHERA-like Total Structures 3:1	3.0	0.000974	0.00 - 0.00462	1
AHERA-like Asb Struca >5 and 3:1	3.0	0.000974	0.00 - 0.00462	1
AHERA-like Asb Strucs 5 - 10 and 3:1	3.0	0.000974	0.00 - 0.00462	1
AHERA-like Asb Strucs >10 and 3:1	0.0	<0.00291	0.00 - 0.00291	0
Total Other Amphibole Strucs 3:1	0.0	<0.00291	0.00 - 0.00291	0
Other Amphibole Strucs >5 and 3:1	0.0	<0.00291	0.00 - 0.00291	0
Other Amphibole Strucs 5 - 10 and 3:1	0.0	<0.00291	0.00 - 0.00291	0
Other Amphibole Strucs >10 and 3:1	0.0	<0.00291	0.00 - 0.00291	0

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

ANALYSIS DETAIL

Lab/Cor Sample No. B4760 S32 A1
Client Sample No. RHB-H2-2FD-100304
Description
Analysis Date 11/3/2004
Analyst JH

Volume (L) 1220
No. of Grid Openings 22
Filter Area (mm2) 385
Area Analyzed (mm2) 0.319
Analytical Sens. (struc/cc) 0.000990
Dectection Limit. (struc/cc) 0.00296

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Primary Asbestos Structures	18.8	0.00594	0.00218 - 0.0129	6
Total Asbestos Structures	18.8	0.00594	0.00218 - 0.0129	6
Asbestos Structures > 5um	9.4	0.00297	0.00 - 0.00767	3
Asbestos Fibers and Bundles > 5um	9.4	0.00297	0.00 - 0.00767	3
PCM Equivalent Fibers-US	9.4	0.00297	0.00 - 0.00767	3
PCM Equivalent Structures-US	9.4	0.00297	0.00 - 0.00767	3
PROTOCOL ASB STRUCS 5-10	3.1	0.000990	0.00 - 0.00469	1
PROTOCOL ASB STRUCS >10	0.0	<0.00296	0.00 - 0.00296	0
PROTOCOL ASB STRUCS TOTAL	3.1	0.000990	0.00 - 0.00469	1
PROTOCOL CHRYS STRUCS 5-10	0.0	<0.00296	0.00 - 0.00296	0
PROTOCOL CHRYS STRUCS >10	0.0	<0.00296	0.00 - 0.00296	0
PROTOCOL CHRYS STRUCS TOTAL	0.0	<0.00296	0.00 - 0.00296	0
PROTOCOL AMPH STRUCS 5-10	3.1	0.000990	0.00 - 0.00469	1
PROTOCOL AMPH STRUCS >10	0.0	<0.00296	0.00 - 0.00296	0
PROTOCOL AMPH STRUCS TOTAL	3.1	0.000990	0.00 - 0.00469	1
AHERA-like Total Structures 3:1	18.8	0.00594	0.00218 - 0.0129	6
AHERA-like Asb Strucs >5 and 3:1	9.4	0.00297	0.00 - 0.00767	3
AHERA-like Asb Strucs 5 - 10 and 3:1	6.3	0.00198	0.00 - 0.00624	2
AHERA-like Asb Strucs >10 and 3:1	3.1	0.000990	0.00 - 0.00469	1
Total Other Amphibole Strucs 3:1	0.0	<0.00296	0.00 - 0.00296	0
Other Amphibole Strucs >5 and 3:1	0.0	<0.00296	0.00 - 0.00296	0
Other Amphibole Strucs 5 - 10 and 3:1	0.0	<0.00296	0.00 - 0.00296	0
Other Amphibole Strucs >10 and 3:1	0.0	<0.00296	0.00 - 0.00296	0

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

ANALYSIS DETAIL

Lab/Cor Sample No. B4760 S33 A1
Client Sample No. RHB-H2-3FD-100304
Description
Analysis Date 11/3/2004
Analyst KM

Volume (L) 1140.7
No. of Grid Openings 23
Filter Area (mm2) 385
Area Analyzed (mm2) 0.333
Analytical Sens. (struc/cc) 0.00101
Dectection Limit. (struc/cc) 0.00303

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Primary Asbestos Structures	6.0	0.00203	0.00 - 0.00638	2
Total Asbestos Structures	6.0	0.00203	0.00 - 0.00638	2
Asbestos Structures > 5um	3.0	0.00101	0.00 - 0.00480	1
Asbestos Fibers and Bundles > 5um	3.0	0.00101	0.00 - 0.00480	1
PCM Equivalent Fibers-US	3.0	0.00101	0.00 - 0.00480	1
PCM Equivalent Structures-US	0.0	<0.00303	0.00 - 0.00303	0
PROTOCOL ASB STRUCS 5-10	0.0	<0.00303	0.00 - 0.00303	0
PROTOCOL ASB STRUCS >10	0.0	<0.00303	0.00 - 0.00303	0
PROTOCOL ASB STRUCS TOTAL	0.0	<0.00303	0.00 - 0.00303	0
PROTOCOL CHRYS STRUCS 5-10	0.0	<0.00303	0.00 - 0.00303	0
PROTOCOL CHRYS STRUCS >10	0.0	<0.00303	0.00 - 0.00303	0
PROTOCOL CHRYS STRUCS TOTAL	0.0	<0.00303	0.00 - 0.00303	0
PROTOCOL AMPH STRUCS 5-10	0.0	<0.00303	0.00 - 0.00303	0
PROTOCOL AMPH STRUCS >10	0.0	<0.00303	0.00 - 0.00303	0
PROTOCOL AMPH STRUCS TOTAL	0.0	<0.00303	0.00 - 0.00303	0
AHERA-like Total Structures 3:1	6.0	0.00203	0.00 - 0.00638	2
AHERA-like Asb Struca >5 and 3:1	3.0	0.00101	0.00 - 0.00480	1
AHERA-like Asb Strucs 5 - 10 and 3:1	3.0	0.00101	0.00 - 0.00480	1
AHERA-like Asb Strucs >10 and 3:1	0.0	<0.00303	0.00 - 0.00303	0
Total Other Amphibole Strucs 3:1	0.0	<0.00303	0.00 - 0.00303	0
Other Amphibole Strucs >5 and 3:1	0.0	<0.00303	0.00 - 0.00303	0
Other Amphibole Struca 5 - 10 and 3:1	0.0	<0.00303	0.00 - 0.00303	0
Other Amphibole Strucs >10 and 3:1	0.0	<0.00303	0.00 - 0.00303	0

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

ANALYSIS DETAIL

Lab/Cor Sample No. B4760 S34 A1
Client Sample No. RHB-L2-1CH-100304
Description
Analysis Date 11/3/2004
Analyst TM

Volume (L) 309.12
No. of Grid Openings 86
Filter Area (mm2) 385
Area Analyzed (mm2) 1.25
Analytical Sens. (struc/cc) 0.000999
Dectection Limit. (struc/cc) 0.00299

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Primary Asbestos Structures	7.2	0.00900	0.00411 - 0.0171	9
Total Asbestos Structures	7.2	0.00900	0.00411 - 0.0171	9
Asbestos Structures > 5um	4.8	0.00600	0.00220 - 0.0131	6
Asbestos Fibers and Bundles > 5um	2.4	0.00300	0.00 - 0.00775	3
PCM Equivalent Fibers-US	2.4	0.00300	0.00 - 0.00775	3
PCM Equivalent Structures-US	2.4	0.00300	0.00 - 0.00775	3
PROTOCOL ASB STRUCS 5-10	0.8	0.000999	0.00 - 0.00474	1
PROTOCOL ASB STRUCS >10	0.0	<0.00299	0.00 - 0.00299	0
PROTOCOL ASB STRUCS TOTAL	0.8	0.000999	0.00 - 0.00474	1
PROTOCOL CHRYS STRUCS 5-10	0.8	0.000999	0.00 - 0.00474	1
PROTOCOL CHRYS STRUCS >10	0.0	<0.00299	0.00 - 0.00299	0
PROTOCOL CHRYS STRUCS TOTAL	0.8	0.000999	0.00 - 0.00474	1
PROTOCOL AMPH STRUCS 5-10	0.0	<0.00299	0.00 - 0.00299	0
PROTOCOL AMPH STRUCS >10	0.0	<0.00299	0.00 - 0.00299	0
PROTOCOL AMPH STRUCS TOTAL	0.0	<0.00299	0.00 - 0.00299	0
AHERA-like Total Structures 3:1	7.2	0.00900	0.00411 - 0.0171	9
AHERA-like Asb Strucs >5 and 3:1	4.8	0.00600	0.00220 - 0.0131	6
AHERA-like Asb Strucs 5 - 10 and 3:1	4.0	0.00500	0.00162 - 0.0117	5
AHERA-like Asb Strucs >10 and 3:1	0.8	0.000999	0.00 - 0.00474	1
Total Other Amphibole Strucs 3:1	0.0	<0.00299	0.00 - 0.00299	0
Other Amphibole Strucs >5 and 3:1	0.0	<0.00299	0.00 - 0.00299	0
Other Amphibole Strucs 5 - 10 and 3:1	0.0	<0.00299	0.00 - 0.00299	0
Other Amphibole Strucs >10 and 3:1	0.0	<0.00299	0.00 - 0.00299	0

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

ANALYSIS DETAIL

Lab/Cor Sample No. B4760 S35 A1
Client Sample No. RHB-L2-2CH-100304
Description
Analysis Date 11/3/2004
Analyst DW

Volume (L) 293.4
No. of Grid Openings 91
Filter Area (mm2) 385
Area Analyzed (mm2) 1.32
Analytical Sens. (struc/cc) 0.000995
Dectection Limit. (struc/cc) 0.00298

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Primary Asbestos Structures	2.3	0.00299	0.00 - 0.00771	3
Total Asbestos Structures	2.3	0.00299	0.00 - 0.00771	3
Asbestos Structures > 5um	1.5	0.00199	0.00 - 0.00627	2
Asbestos Fibers and Bundles > 5um	1.5	0.00199	0.00 - 0.00627	2
PCM Equivalent Fibers-US	1.5	0.00199	0.00 - 0.00627	2
PCM Equivalent Structures-US	0.8	0.000995	0.00 - 0.00472	1
PROTOCOL ASB STRUCS 5-10	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL ASB STRUCS >10	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL ASB STRUCS TOTAL	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL CHRYS STRUCS 5-10	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL CHRYS STRUCS >10	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL CHRYS STRUCS TOTAL	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL AMPH STRUCS 5-10	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL AMPH STRUCS >10	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL AMPH STRUCS TOTAL	0.0	<0.00298	0.00 - 0.00298	0
AHERA-like Total Structures 3:1	2.3	0.00299	0.00 - 0.00771	3
AHERA-like Asb Strucs >5 and 3:1	1.5	0.00199	0.00 - 0.00627	2
AHERA-like Asb Strucs 5 - 10 and 3:1	0.8	0.000995	0.00 - 0.00472	1
AHERA-like Asb Strucs >10 and 3:1	0.8	0.000995	0.00 - 0.00472	1
Total Other Amphibole Strucs 3:1	0.0	<0.00298	0.00 - 0.00298	0
Other Amphibole Strucs >5 and 3:1	0.0	<0.00298	0.00 - 0.00298	0
Other Amphibole Strucs 5 - 10 and 3:1	0.0	<0.00298	0.00 - 0.00298	0
Other Amphibole Strucs >10 and 3:1	0.0	<0.00298	0.00 - 0.00298	0

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

ANALYSIS DETAIL

Lab/Cor Sample No. B4760 S36 A1
Client Sample No. RHB-L2-3CH-100304
Description
Analysis Date 11/4/2004
Analyst JH

Volume (L) 306.48
No. of Grid Openings 87
Filter Area (mm2) 385
Area Analyzed (mm2) 1.26
Analytical Sens. (struc/cc) 0.000996
Dectection Limit. (struc/cc) 0.00298

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Primary Asbestos Structures	0.8	0.000996	0.00 - 0.00472	1
Total Asbestos Structures	0.8	0.000996	0.00 - 0.00472	1
Asbestos Structures > 5um	0.8	0.000996	0.00 - 0.00472	1
Asbestos Fibers and Bundles > 5um	0.8	0.000996	0.00 - 0.00472	1
PCM Equivalent Fibers-US	0.8	0.000996	0.00 - 0.00472	1
PCM Equivalent Structures-US	0.8	0.000996	0.00 - 0.00472	1
PROTOCOL ASB STRUCS 5-10	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL ASB STRUCS >10	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL ASB STRUCS TOTAL	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL CHRYS STRUCS 5-10	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL CHRYS STRUCS >10	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL CHRYS STRUCS TOTAL	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL AMPH STRUCS 5-10	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL AMPH STRUCS >10	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL AMPH STRUCS TOTAL	0.0	<0.00298	0.00 - 0.00298	0
AHERA-like Total Structures 3:1	0.8	0.000996	0.00 - 0.00472	1
AHERA-like Asb Strucs >5 and 3:1	0.8	0.000996	0.00 - 0.00472	1
AHERA-like Asb Strucs 5 - 10 and 3:1	0.8	0.000996	0.00 - 0.00472	1
AHERA-like Asb Strucs >10 and 3:1	0.0	<0.00298	0.00 - 0.00298	0
Total Other Amphibole Strucs 3:1	0.0	<0.00298	0.00 - 0.00298	0
Other Amphibole Strucs >5 and 3:1	0.0	<0.00298	0.00 - 0.00298	0
Other Amphibole Strucs 5 - 10 and 3:1	0.0	<0.00298	0.00 - 0.00298	0
Other Amphibole Strucs >10 and 3:1	0.0	<0.00298	0.00 - 0.00298	0

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

ANALYSIS DETAIL

Lab/Cor Sample No. B4760 S37 A1
Client Sample No. RHB-L2-4CH-100304
Description
Analysis Date 11/4/2004
Analyst KM

Volume (L) 312.48
No. of Grid Openings 86
Filter Area (mm2) 385
Area Analyzed (mm2) 1.25
Analytical Sens. (struc/cc) 0.000989
Dectection Limit. (struc/cc) 0.00296

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Primary Asbestos Structures	3.2	0.00395	0.00108 - 0.0101	4
Total Asbestos Structures	3.2	0.00395	0.00108 - 0.0101	4
Asbestos Structures > 5um	2.4	0.00297	0.00 - 0.00766	3
Asbestos Fibers and Bundles > 5um	0.8	0.000989	0.00 - 0.00469	1
PCM Equivalent Fibers-US	0.8	0.000989	0.00 - 0.00469	1
PCM Equivalent Structures-US	0.8	0.000989	0.00 - 0.00469	1
PROTOCOL ASB STRUCS 5-10	0.0	<0.00296	0.00 - 0.00296	0
PROTOCOL ASB STRUCS >10	0.0	<0.00296	0.00 - 0.00296	0
PROTOCOL ASB STRUCS TOTAL	0.0	<0.00296	0.00 - 0.00296	0
PROTOCOL CHRYS STRUCS 5-10	0.0	<0.00296	0.00 - 0.00296	0
PROTOCOL CHRYS STRUCS >10	0.0	<0.00296	0.00 - 0.00296	0
PROTOCOL CHRYS STRUCS TOTAL	0.0	<0.00296	0.00 - 0.00296	0
PROTOCOL AMPH STRUCS 5-10	0.0	<0.00296	0.00 - 0.00296	0
PROTOCOL AMPH STRUCS >10	0.0	<0.00296	0.00 - 0.00296	0
PROTOCOL AMPH STRUCS TOTAL	0.0	<0.00296	0.00 - 0.00296	0
AHERA-like Total Structures 3:1	3.2	0.00395	0.00108 - 0.0101	4
AHERA-like Asb Strucs >5 and 3:1	2.4	0.00297	0.00 - 0.00766	3
AHERA-like Asb Strucs 5 - 10 and 3:1	2.4	0.00297	0.00 - 0.00766	3
AHERA-like Asb Struca >10 and 3:1	0.0	<0.00296	0.00 - 0.00296	0
Total Other Amphibole Strucs 3:1	0.0	<0.00296	0.00 - 0.00296	0
Other Amphibole Strucs >5 and 3:1	0.0	<0.00296	0.00 - 0.00296	0
Other Amphibole Strucs 5 - 10 and 3:1	0.0	<0.00296	0.00 - 0.00296	0
Other Amphibole Strucs >10 and 3:1	0.0	<0.00296	0.00 - 0.00296	0

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

ANALYSIS DETAIL

Lab/Cor Sample No. B4760 S38 A1
Client Sample No. RHB-L2-5CH-100304
Description
Analysis Date 11/4/2004
Analyst KM

Volume (L) 295.56
No. of Grid Openings 90
Filter Area (mm2) 385
Area Analyzed (mm2) 1.30
Analytical Sens. (struc/cc) 0.000999
Dectection Limit. (struc/cc) 0.00299

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Primary Asbestos Structures	3.1	0.00400	0.00109 - 0.0102	4
Total Asbestos Structures	3.1	0.00400	0.00109 - 0.0102	4
Asbestos Structures > 5um	1.5	0.00200	0.00 - 0.00629	2
Asbestos Fibers and Bundles > 5um	0.8	0.000999	0.00 - 0.00473	1
PCM Equivalent Fibers-US	0.8	0.000999	0.00 - 0.00473	1
PCM Equivalent Structures-US	0.8	0.000999	0.00 - 0.00473	1
PROTOCOL ASB STRUCS 5-10	0.0	<0.00299	0.00 - 0.00299	0
PROTOCOL ASB STRUCS >10	0.0	<0.00299	0.00 - 0.00299	0
PROTOCOL ASB STRUCS TOTAL	0.0	<0.00299	0.00 - 0.00299	0
PROTOCOL CHRYS STRUCS 5-10	0.0	<0.00299	0.00 - 0.00299	0
PROTOCOL CHRYS STRUCS >10	0.0	<0.00299	0.00 - 0.00299	0
PROTOCOL CHRYS STRUCS TOTAL	0.0	<0.00299	0.00 - 0.00299	0
PROTOCOL AMPH STRUCS 5-10	0.0	<0.00299	0.00 - 0.00299	0
PROTOCOL AMPH STRUCS >10	0.0	<0.00299	0.00 - 0.00299	0
PROTOCOL AMPH STRUCS TOTAL	0.0	<0.00299	0.00 - 0.00299	0
AHERA-like Total Structures 3:1	3.1	0.00400	0.00109 - 0.0102	4
AHERA-like Asb Strucs >5 and 3:1	1.5	0.00200	0.00 - 0.00629	2
AHERA-like Asb Strucs 5 - 10 and 3:1	1.5	0.00200	0.00 - 0.00629	2
AHERA-like Asb Strucs >10 and 3:1	0.0	<0.00299	0.00 - 0.00299	0
Total Other Amphibole Struca 3:1	0.0	<0.00299	0.00 - 0.00299	0
Other Amphibole Strucs >5 and 3:1	0.0	<0.00299	0.00 - 0.00299	0
Other Amphibole Strucs 5 - 10 and 3:1	0.0	<0.00299	0.00 - 0.00299	0
Other Amphibole Strucs >10 and 3:1	0.0	<0.00299	0.00 - 0.00299	0

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

ANALYSIS DETAIL

Lab/Cor Sample No. B4760 S39 A1
Client Sample No. SVBA-L2-11CH-100204
Description
Analysis Date 11/4/2004
Analyst TM

Volume (L) 296.24
No. of Grid Openings 90
Filter Area (mm2) 385
Area Analyzed (mm2) 1.30
Analytical Sens. (struc/cc) 0.000997
Dectection Limit. (struc/cc) 0.00298

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Primary Asbestos Structures	14.6	0.0189	0.0114 - 0.0296	19
Total Asbestos Structures	14.6	0.0189	0.0114 - 0.0296	19
Asbestos Structures > 5um	10.0	0.0130	0.00690 - 0.0222	13
Asbestos Fibers and Bundles > 5um	6.1	0.00797	0.00344 - 0.0157	8
PCM Equivalent Fibers-US	5.4	0.00698	0.00280 - 0.0144	7
PCM Equivalent Structures-US	3.8	0.00498	0.00162 - 0.0116	5
PROTOCOL ASB STRUCS 5-10	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL ASB STRUCS >10	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL ASB STRUCS TOTAL	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL CHRYS STRUCS 5-10	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL CHRYS STRUCS >10	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL CHRYS STRUCS TOTAL	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL AMPH STRUCS 5-10	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL AMPH STRUCS >10	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL AMPH STRUCS TOTAL	0.0	<0.00298	0.00 - 0.00298	0
AHERA-like Total Structures 3:1	14.6	0.0189	0.0114 - 0.0296	19
AHERA-like Asb Strucs >5 and 3:1	10.0	0.0130	0.00690 - 0.0222	13
AHERA-like Asb Strucs 5 - 10 and 3:1	6.1	0.00797	0.00344 - 0.0157	8
AHERA-like Asb Strucs >10 and 3:1	3.8	0.00498	0.00162 - 0.0116	5
Total Other Amphibole Strucs 3:1	0.0	<0.00298	0.00 - 0.00298	0
Other Amphibole Strucs >5 and 3:1	0.0	<0.00298	0.00 - 0.00298	0
Other Amphibole Strucs 5 - 10 and 3:1	0.0	<0.00298	0.00 - 0.00298	0
Other Amphibole Strucs >10 and 3:1	0.0	<0.00298	0.00 - 0.00298	0

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

ANALYSIS DETAIL

Lab/Cor Sample No. B4760 S40 A1
Client Sample No. SVBA-L2-1CH-100204
Description
Analysis Date 11/4/2004
Analyst DW

Volume (L) 292.44
No. of Grid Openings 90
Filter Area (mm2) 385
Area Analyzed (mm2) 1.30
Analytical Sens. (struc/cc) 0.00101
Dectection Limit. (struc/cc) 0.00302

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Primary Asbestos Structures	15.3	0.0202	0.0123 - 0.0312	20
Total Asbestos Structures	15.3	0.0202	0.0123 - 0.0312	20
Asbestos Structures > 5um	11.5	0.0151	0.00848 - 0.0250	15
Asbestos Fibers and Bundles > 5um	10.7	0.0141	0.00773 - 0.0237	14
PCM Equivalent Fibers-US	9.2	0.0121	0.00626 - 0.0212	12
PCM Equivalent Structures-US	7.7	0.0101	0.00484 - 0.0186	10
PROTOCOL ASB STRUCS 5-10	0.8	0.00101	0.00 - 0.00479	1
PROTOCOL ASB STRUCS >10	0.8	0.00101	0.00 - 0.00479	1
PROTOCOL ASB STRUCS TOTAL	1.5	0.00202	0.00 - 0.00636	2
PROTOCOL CHRYS STRUCS 5-10	0.8	0.00101	0.00 - 0.00479	1
PROTOCOL CHRYS STRUCS >10	0.0	<0.00302	0.00 - 0.00302	0
PROTOCOL CHRYS STRUCS TOTAL	0.8	0.00101	0.00 - 0.00479	1
PROTOCOL AMPH STRUCS 5-10	0.0	<0.00302	0.00 - 0.00302	0
PROTOCOL AMPH STRUCS >10	0.8	0.00101	0.00 - 0.00479	1
PROTOCOL AMPH STRUCS TOTAL	0.8	0.00101	0.00 - 0.00479	1
AHERA-like Total Structures 3:1	15.3	0.0202	0.0123 - 0.0312	20
AHERA-like Asb Strucs >5 and 3:1	11.5	0.0151	0.00848 - 0.0250	15
AHERA-like Asb Strucs 5 - 10 and 3:1	4.6	0.00606	0.00222 - 0.0132	6
AHERA-like Asb Strucs >10 and 3:1	6.9	0.00909	0.00415 - 0.0172	9
Total Other Amphibole Strucs 3:1	0.0	<0.00302	0.00 - 0.00302	0
Other Amphibole Strucs >5 and 3:1	0.0	<0.00302	0.00 - 0.00302	0
Other Amphibole Strucs 5 - 10 and 3:1	0.0	<0.00302	0.00 - 0.00302	0
Other Amphibole Strucs >10 and 3:1	0.0	<0.00302	0.00 - 0.00302	0

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

ANALYSIS DETAIL

Lab/Cor Sample No. B4760 S41 A1
Client Sample No. SVBA-L2-2CH-100204
Description
Analysis Date 11/5/2004
Analyst JH

Volume (L) 297.72
No. of Grid Openings 90
Filter Area (mm2) 385
Area Analyzed (mm2) 1.30
Analytical Sens. (struc/cc) 0.000992
Dectection Limit. (struc/cc) 0.00296

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Primary Asbestos Structures	10.7	0.0139	0.00759 - 0.0233	14
Total Asbestos Structures	10.7	0.0139	0.00759 - 0.0233	14
Asbestos Structures > 5um	5.4	0.00694	0.00279 - 0.0143	7
Asbestos Fibers and Bundles > 5um	3.8	0.00496	0.00161 - 0.0116	5
PCM Equivalent Fibers-US	1.5	0.00198	0.00 - 0.00625	2
PCM Equivalent Structures-US	0.0	<0.00296	0.00 - 0.00296	0
PROTOCOL ASB STRUCS 5-10	0.0	<0.00296	0.00 - 0.00296	0
PROTOCOL ASB STRUCS >10	0.0	<0.00296	0.00 - 0.00296	0
PROTOCOL ASB STRUCS TOTAL	0.0	<0.00296	0.00 - 0.00296	0
PROTOCOL CHRYS STRUCS 5-10	0.0	<0.00296	0.00 - 0.00296	0
PROTOCOL CHRYS STRUCS >10	0.0	<0.00296	0.00 - 0.00296	0
PROTOCOL CHRYS STRUCS TOTAL	0.0	<0.00296	0.00 - 0.00296	0
PROTOCOL AMPH STRUCS 5-10	0.0	<0.00296	0.00 - 0.00296	0
PROTOCOL AMPH STRUCS >10	0.0	<0.00296	0.00 - 0.00296	0
PROTOCOL AMPH STRUCS TOTAL	0.0	<0.00296	0.00 - 0.00296	0
AHERA-like Total Structures 3:1	10.7	0.0139	0.00759 - 0.0233	14
AHERA-like Asb Strucs >5 and 3:1	5.4	0.00694	0.00279 - 0.0143	7
AHERA-like Asb Strucs 5 - 10 and 3:1	0.8	0.000992	0.00 - 0.00470	1
AHERA-like Asb Strucs >10 and 3:1	4.6	0.00595	0.00218 - 0.0130	6
Total Other Amphibole Strucs 3:1	0.0	<0.00296	0.00 - 0.00296	0
Other Amphibole Strucs >5 and 3:1	0.0	<0.00296	0.00 - 0.00296	0
Other Amphibole Strucs 5 - 10 and 3:1	0.0	<0.00296	0.00 - 0.00296	0
Other Amphibole Strucs >10 and 3:1	0.0	<0.00296	0.00 - 0.00296	0

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

ANALYSIS DETAIL

Lab/Cor Sample No. B4760 S42 A1
Client Sample No. SVBA-L2-3CH-100204
Description
Analysis Date 11/6/2004
Analyst KM

Volume (L) 299.52
No. of Grid Openings 89
Filter Area (mm2) 385
Area Analyzed (mm2) 1.29
Analytical Sens. (struc/cc) 0.000997
Dectection Limit. (struc/cc) 0.00298

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Primary Asbestos Structures	7.8	0.00997	0.00478 - 0.0183	10
Total Asbestos Structures	7.0	0.00897	0.00410 - 0.0170	9
Asbestos Structures > 5um	4.7	0.00598	0.00219 - 0.0130	6
Asbestos Fibers and Bundles > 5um	3.1	0.00399	0.00109 - 0.0102	4
PCM Equivalent Fibers-US	3.1	0.00399	0.00109 - 0.0102	4
PCM Equivalent Structures-US	1.6	0.00199	0.00 - 0.00628	2
PROTOCOL ASB STRUCS 5-10	1.6	0.00199	0.00 - 0.00628	2
PROTOCOL ASB STRUCS >10	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL ASB STRUCS TOTAL	1.6	0.00199	0.00 - 0.00628	2
PROTOCOL CHRYS STRUCS 5-10	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL CHRYS STRUCS >10	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL CHRYS STRUCS TOTAL	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL AMPH STRUCS 5-10	1.6	0.00199	0.00 - 0.00628	2
PROTOCOL AMPH STRUCS >10	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL AMPH STRUCS TOTAL	1.6	0.00199	0.00 - 0.00628	2
AHERA-like Total Structures 3:1	7.0	0.00897	0.00410 - 0.0170	9
AHERA-like Asb Strucs >5 and 3:1	4.7	0.00598	0.00219 - 0.0130	6
AHERA-like Asb Strucs 5 - 10 and 3:1	2.3	0.00299	0.00 - 0.00772	3
AHERA-like Asb Strucs >10 and 3:1	2.3	0.00299	0.00 - 0.00772	3
Total Other Amphibole Strucs 3:1	0.8	0.000997	0.00 - 0.00472	1
Other Amphibole Strucs >5 and 3:1	0.8	0.000997	0.00 - 0.00472	1
Other Amphibole Strucs 5 - 10 and 3:1	0.0	<0.00298	0.00 - 0.00298	0
Other Amphibole Strucs >10 and 3:1	0.8	0.000997	0.00 - 0.00472	1

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

ANALYSIS DETAIL

Lab/Cor Sample No. B4760 S43 A1
Client Sample No. SVBA-L2-4CH-100204
Description
Analysis Date 11/6/2004
Analyst JH

Volume (L) 293.28
No. of Grid Openings 91
Filter Area (mm2) 385
Area Analyzed (mm2) 1.32
Analytical Sens. (struc/cc) 0.000996
Dectection Limit. (struc/cc) 0.00298

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Primary Asbestos Structures	8.3	0.0110	0.00547 - 0.0196	11
Total Asbestos Structures	8.3	0.0110	0.00547 - 0.0196	11
Asbestos Structures > 5um	6.8	0.00896	0.00410 - 0.0170	9
Asbestos Fibers and Bundles > 5um	6.8	0.00896	0.00410 - 0.0170	9
PCM Equivalent Fibers-US	5.3	0.00697	0.00280 - 0.0144	7
PCM Equivalent Structures-US	5.3	0.00697	0.00280 - 0.0144	7
PROTOCOL ASB STRUCS 5-10	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL ASB STRUCS >10	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL ASB STRUCS TOTAL	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL CHRYS STRUCS 5-10	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL CHRYS STRUCS >10	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL CHRYS STRUCS TOTAL	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL AMPH STRUCS 5-10	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL AMPH STRUCS >10	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL AMPH STRUCS TOTAL	0.0	<0.00298	0.00 - 0.00298	0
AHERA-like Total Structures 3:1	8.3	0.0110	0.00547 - 0.0196	11
AHERA-like Asb Strucs >5 and 3:1	6.8	0.00896	0.00410 - 0.0170	9
AHERA-like Asb Strucs 5 - 10 and 3:1	3.8	0.00498	0.00162 - 0.0116	5
AHERA-like Asb Strucs >10 and 3:1	3.0	0.00398	0.00109 - 0.0102	4
Total Other Amphibole Strucs 3:1	0.0	<0.00298	0.00 - 0.00298	0
Other Amphibole Strucs >5 and 3:1	0.0	<0.00298	0.00 - 0.00298	0
Other Amphibole Strucs 5 - 10 and 3:1	0.0	<0.00298	0.00 - 0.00298	0
Other Amphibole Strucs >10 and 3:1	0.0	<0.00298	0.00 - 0.00298	0

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

ANALYSIS DETAIL

Lab/Cor Sample No. B4760 S44 A1
Client Sample No. SVBA-L2-5CH-100204
Description
Analysis Date 11/6/2004
Analyst KM

Volume (L) 291.12
No. of Grid Openings 93
Filter Area (mm2) 385
Area Analyzed (mm2) 1.35
Analytical Sens. (struc/cc) 0.000981
Dectection Limit. (struc/cc) 0.00293

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Primary Asbestos Structures	10.4	0.0137	0.00751 - 0.0231	14
Total Asbestos Structures	9.6	0.0128	0.00679 - 0.0218	13
Asbestos Structures > 5um	5.2	0.00687	0.00276 - 0.0142	7
Asbestos Fibers and Bundles > 5um	4.5	0.00589	0.00216 - 0.0128	6
PCM Equivalent Fibers-US	3.7	0.00491	0.00159 - 0.0115	5
PCM Equivalent Structures-US	3.0	0.00393	0.00107 - 0.0101	4
PROTOCOL ASB STRUCS 5-10	0.7	0.000981	0.00 - 0.00465	1
PROTOCOL ASB STRUCS >10	0.0	<0.00293	0.00 - 0.00293	0
PROTOCOL ASB STRUCS TOTAL	0.7	0.000981	0.00 - 0.00465	1
PROTOCOL CHRYS STRUCS 5-10	0.7	0.000981	0.00 - 0.00465	1
PROTOCOL CHRYS STRUCS >10	0.0	<0.00293	0.00 - 0.00293	0
PROTOCOL CHRYS STRUCS TOTAL	0.7	0.000981	0.00 - 0.00465	1
PROTOCOL AMPH STRUCS 5-10	0.0	<0.00293	0.00 - 0.00293	0
PROTOCOL AMPH STRUCS >10	0.0	<0.00293	0.00 - 0.00293	0
PROTOCOL AMPH STRUCS TOTAL	0.0	<0.00293	0.00 - 0.00293	0
AHERA-like Total Structures 3:1	10.4	0.0137	0.00751 - 0.0231	14
AHERA-like Asb Strucs >5 and 3:1	5.2	0.00687	0.00276 - 0.0142	7
AHERA-like Asb Strucs 5 - 10 and 3:1	3.0	0.00393	0.00107 - 0.0101	4
AHERA-like Asb Strucs >10 and 3:1	2.2	0.00294	0.00 - 0.00761	3
Total Other Amphibole Strucs 3:1	0.0	<0.00293	0.00 - 0.00293	0
Other Amphibole Strucs >5 and 3:1	0.0	<0.00293	0.00 - 0.00293	0
Other Amphibole Strucs 5 - 10 and 3:1	0.0	<0.00293	0.00 - 0.00293	0
Other Amphibole Strucs >10 and 3:1	0.0	<0.00293	0.00 - 0.00293	0

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

ANALYSIS DETAIL

Lab/Cor Sample No. B4760 S45 A1
Client Sample No. SVBB-L2-12CH-100304
Description
Analysis Date 11/7/2004
Analyst KM

Volume (L) 288.75
No. of Grid Openings 93
Filter Area (mm2) 385
Area Analyzed (mm2) 1.35
Analytical Sens. (struc/cc) 0.000989
Dectection Limit. (struc/cc) 0.00296

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Primary Asbestos Structures	3.0	0.00396	0.00108 - 0.0101	4
Total Asbestos Structures	3.7	0.00495	0.00161 - 0.0115	5
Asbestos Structures > 5um	0.7	0.000989	0.00 - 0.00469	1
Asbestos Fibers and Bundles > 5um	0.0	<0.00296	0.00 - 0.00296	0
PCM Equivalent Fibers-US	0.0	<0.00296	0.00 - 0.00296	0
PCM Equivalent Structures-US	0.0	<0.00296	0.00 - 0.00296	0
PROTOCOL ASB STRUCS 5-10	0.0	<0.00296	0.00 - 0.00296	0
PROTOCOL ASB STRUCS >10	0.0	<0.00296	0.00 - 0.00296	0
PROTOCOL ASB STRUCS TOTAL	0.0	<0.00296	0.00 - 0.00296	0
PROTOCOL CHRYS STRUCS 5-10	0.0	<0.00296	0.00 - 0.00296	0
PROTOCOL CHRYS STRUCS >10	0.0	<0.00296	0.00 - 0.00296	0
PROTOCOL CHRYS STRUCS TOTAL	0.0	<0.00296	0.00 - 0.00296	0
PROTOCOL AMPH STRUCS 5-10	0.0	<0.00296	0.00 - 0.00296	0
PROTOCOL AMPH STRUCS >10	0.0	<0.00296	0.00 - 0.00296	0
PROTOCOL AMPH STRUCS TOTAL	0.0	<0.00296	0.00 - 0.00296	0
AHERA-like Total Structures 3:1	3.0	0.00396	0.00108 - 0.0101	4
AHERA-like Asb Strucs >5 and 3:1	0.7	0.000989	0.00 - 0.00469	1
AHERA-like Asb Strucs 5 - 10 and 3:1	0.7	0.000989	0.00 - 0.00469	1
AHERA-like Asb Strucs >10 and 3:1	0.0	<0.00296	0.00 - 0.00296	0
Total Other Amphibole Strucs 3:1	0.0	<0.00296	0.00 - 0.00296	0
Other Amphibole Strucs >5 and 3:1	0.0	<0.00296	0.00 - 0.00296	0
Other Amphibole Strucs 5 - 10 and 3:1	0.0	<0.00296	0.00 - 0.00296	0
Other Amphibole Strucs >10 and 3:1	0.0	<0.00296	0.00 - 0.00296	0

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

ANALYSIS DETAIL

Lab/Cor Sample No. B4760 S46 A1
Client Sample No. SVBB-L2-1CH-100304
Description
Analysis Date 11/7/2004
Analyst TM

Volume (L) 302.56
No. of Grid Openings 88
Filter Area (mm2) 385
Area Analyzed (mm2) 1.28
Analytical Sens. (struc/cc) 0.000998
Dectection Limit. (struc/cc) 0.00298

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Primary Asbestos Structures	5.5	0.00699	0.00281 - 0.0144	7
Total Asbestos Structures	5.5	0.00699	0.00281 - 0.0144	7
Asbestos Structures > 5um	4.7	0.00599	0.00220 - 0.0130	6
Asbestos Fibers and Bundles > 5um	4.7	0.00599	0.00220 - 0.0130	6
PCM Equivalent Fibers-US	3.1	0.00399	0.00109 - 0.0102	4
PCM Equivalent Structures-US	2.4	0.00299	0.00 - 0.00773	3
PROTOCOL ASB STRUCS 5-10	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL ASB STRUCS >10	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL ASB STRUCS TOTAL	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL CHRYS STRUCS 5-10	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL CHRYS STRUCS >10	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL CHRYS STRUCS TOTAL	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL AMPH STRUCS 5-10	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL AMPH STRUCS >10	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL AMPH STRUCS TOTAL	0.0	<0.00298	0.00 - 0.00298	0
AHERA-like Total Structures 3:1	5.5	0.00699	0.00281 - 0.0144	7
AHERA-like Asb Strucs >5 and 3:1	4.7	0.00599	0.00220 - 0.0130	6
AHERA-like Asb Strucs 5 - 10 and 3:1	1.6	0.00200	0.00 - 0.00629	2
AHERA-like Asb Strucs >10 and 3:1	3.1	0.00399	0.00109 - 0.0102	4
Total Other Amphibole Strucs 3:1	0.0	<0.00298	0.00 - 0.00298	0
Other Amphibole Strucs >5 and 3:1	0.0	<0.00298	0.00 - 0.00298	0
Other Amphibole Strucs 5 - 10 and 3:1	0.0	<0.00298	0.00 - 0.00298	0
Other Amphibole Strucs >10 and 3:1	0.0	<0.00298	0.00 - 0.00298	0

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

ANALYSIS DETAIL

Lab/Cor Sample No. B4760 S47 A1
Client Sample No. SVBB-L2-2CH-100304
Description
Analysis Date 11/7/2004
Analyst DW

Volume (L) 309.16
No. of Grid Openings 86
Filter Area (mm2) 385
Area Analyzed (mm2) 1.25
Analytical Sens. (struc/cc) 0.000999
Dectection Limit. (struc/cc) 0.00299

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Primary Asbestos Structures	8.0	0.00999	0.00479 - 0.0184	10
Total Asbestos Structures	8.0	0.00999	0.00479 - 0.0184	10
Asbestos Structures > 5um	5.6	0.00700	0.00281 - 0.0144	7
Asbestos Fibers and Bundles > 5um	4.8	0.00600	0.00220 - 0.0131	6
PCM Equivalent Fibers-US	4.8	0.00600	0.00220 - 0.0131	6
PCM Equivalent Structures-US	0.8	0.000999	0.00 - 0.00474	1
PROTOCOL ASB STRUCS 5-10	0.0	<0.00299	0.00 - 0.00299	0
PROTOCOL ASB STRUCS >10	0.0	<0.00299	0.00 - 0.00299	0
PROTOCOL ASB STRUCS TOTAL	0.0	<0.00299	0.00 - 0.00299	0
PROTOCOL CHRYS STRUCS 5-10	0.0	<0.00299	0.00 - 0.00299	0
PROTOCOL CHRYS STRUCS >10	0.0	<0.00299	0.00 - 0.00299	0
PROTOCOL CHRYS STRUCS TOTAL	0.0	<0.00299	0.00 - 0.00299	0
PROTOCOL AMPH STRUCS 5-10	0.0	<0.00299	0.00 - 0.00299	0
PROTOCOL AMPH STRUCS >10	0.0	<0.00299	0.00 - 0.00299	0
PROTOCOL AMPH STRUCS TOTAL	0.0	<0.00299	0.00 - 0.00299	0
AHERA-like Total Structures 3:1	8.0	0.00999	0.00479 - 0.0184	10
AHERA-like Asb Strucs >5 and 3:1	5.6	0.00700	0.00281 - 0.0144	7
AHERA-like Asb Strucs 5 - 10 and 3:1	1.6	0.00200	0.00 - 0.00630	2
AHERA-like Asb Strucs >10 and 3:1	4.0	0.00500	0.00162 - 0.0117	5
Total Other Amphibole Strucs 3:1	0.0	<0.00299	0.00 - 0.00299	0
Other Amphibole Strucs >5 and 3:1	0.0	<0.00299	0.00 - 0.00299	0
Other Amphibole Strucs 5 - 10 and 3:1	0.0	<0.00299	0.00 - 0.00299	0
Other Amphibole Strucs >10 and 3:1	0.0	<0.00299	0.00 - 0.00299	0

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

ANALYSIS DETAIL

Lab/Cor Sample No. B4760 S48 A1
Client Sample No. SVBB-L2-3CH-100304
Description
Analysis Date 11/8/2004
Analyst KM

Volume (L) 312.66
No. of Grid Openings 87
Filter Area (mm2) 385
Area Analyzed (mm2) 1.26
Analytical Sens. (struc/cc) 0.000977
Dectection Limit. (struc/cc) 0.00292

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Primary Asbestos Structures	4.8	0.00586	0.00215 - 0.0128	6
Total Asbestos Structures	4.8	0.00586	0.00215 - 0.0128	6
Asbestos Structures > 5um	3.2	0.00391	0.00106 - 0.0100	4
Asbestos Fibers and Bundles > 5um	3.2	0.00391	0.00106 - 0.0100	4
PCM Equivalent Fibers-US	3.2	0.00391	0.00106 - 0.0100	4
PCM Equivalent Structures-US	2.4	0.00293	0.00 - 0.00757	3
PROTOCOL ASB STRUCS 5-10	0.0	<0.00292	0.00 - 0.00292	0
PROTOCOL ASB STRUCS >10	0.0	<0.00292	0.00 - 0.00292	0
PROTOCOL ASB STRUCS TOTAL	0.0	<0.00292	0.00 - 0.00292	0
PROTOCOL CHRYS STRUCS 5-10	0.0	<0.00292	0.00 - 0.00292	0
PROTOCOL CHRYS STRUCS >10	0.0	<0.00292	0.00 - 0.00292	0
PROTOCOL CHRYS STRUCS TOTAL	0.0	<0.00292	0.00 - 0.00292	0
PROTOCOL AMPH STRUCS 5-10	0.0	<0.00292	0.00 - 0.00292	0
PROTOCOL AMPH STRUCS >10	0.0	<0.00292	0.00 - 0.00292	0
PROTOCOL AMPH STRUCS TOTAL	0.0	<0.00292	0.00 - 0.00292	0
AHERA-like Total Structures 3:1	4.8	0.00586	0.00215 - 0.0128	6
AHERA-like Asb Strucs >5 and 3:1	3.2	0.00391	0.00106 - 0.0100	4
AHERA-like Asb Strucs 5 - 10 and 3:1	2.4	0.00293	0.00 - 0.00757	3
AHERA-like Asb Strucs >10 and 3:1	0.8	0.000977	0.00 - 0.00463	1
Total Other Amphibole Strucs 3:1	0.0	<0.00292	0.00 - 0.00292	0
Other Amphibole Strucs >5 and 3:1	0.0	<0.00292	0.00 - 0.00292	0
Other Amphibole Strucs 5 - 10 and 3:1	0.0	<0.00292	0.00 - 0.00292	0
Other Amphibole Strucs >10 and 3:1	0.0	<0.00292	0.00 - 0.00292	0

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

ANALYSIS DETAIL

Lab/Cor Sample No.	B4760 S49 A1	**Volume (L)**	299.35
Client Sample No.	SVBB-L2-4CH-100304	**No. of Grid Openings**	60
Description		**Filter Area (mm2)**	385
Analysis Date	11/8/2004	**Area Analyzed (mm2)**	0.869
Analyst	KM	**Analytical Sens. (struc/cc)**	0.00148
		Dectection Limit. (struc/cc)	0.00442

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Primary Asbestos Structures	6.9	0.00888	0.00326 - 0.0193	6
Total Asbestos Structures	6.9	0.00888	0.00326 - 0.0193	6
Asbestos Structures > 5um	3.5	0.00444	0.00 - 0.0115	3
Asbestos Fibers and Bundles > 5um	2.3	0.00296	0.00 - 0.00932	2
PCM Equivalent Fibers-US	2.3	0.00296	0.00 - 0.00932	2
PCM Equivalent Structures-US	2.3	0.00296	0.00 - 0.00932	2
PROTOCOL ASB STRUCS 5-10	0.0	<0.00442	0.00 - 0.00442	0
PROTOCOL ASB STRUCS >10	0.0	<0.00442	0.00 - 0.00442	0
PROTOCOL ASB STRUCS TOTAL	0.0	<0.00442	0.00 - 0.00442	0
PROTOCOL CHRYS STRUCS 5-10	0.0	<0.00442	0.00 - 0.00442	0
PROTOCOL CHRYS STRUCS >10	0.0	<0.00442	0.00 - 0.00442	0
PROTOCOL CHRYS STRUCS TOTAL	0.0	<0.00442	0.00 - 0.00442	0
PROTOCOL AMPH STRUCS 5-10	0.0	<0.00442	0.00 - 0.00442	0
PROTOCOL AMPH STRUCS >10	0.0	<0.00442	0.00 - 0.00442	0
PROTOCOL AMPH STRUCS TOTAL	0.0	<0.00442	0.00 - 0.00442	0
AHERA-like Total Structures 3:1	6.9	0.00888	0.00326 - 0.0193	6
AHERA-like Asb Strucs >5 and 3:1	3.5	0.00444	0.00 - 0.0115	3
AHERA-like Asb Strucs 5 - 10 and 3:1	2.3	0.00296	0.00 - 0.00932	2
AHERA-like Asb Strucs >10 and 3:1	1.2	0.00148	0.00 - 0.00701	1
Total Other Amphibole Strucs 3:1	0.0	<0.00442	0.00 - 0.00442	0
Other Amphibole Strucs >5 and 3:1	0.0	<0.00442	0.00 - 0.00442	0
Other Amphibole Strucs 5 - 10 and 3:1	0.0	<0.00442	0.00 - 0.00442	0
Other Amphibole Strucs >10 and 3:1	0.0	<0.00442	0.00 - 0.00442	0

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

ANALYSIS DETAIL

Lab/Cor Sample No. B4760 S50 A1
Client Sample No. SVBB-L2-5CH-100304
Description
Analysis Date 11/8/2004
Analyst JH

Volume (L) 313.51
No. of Grid Openings 85
Filter Area (mm2) 385
Area Analyzed (mm2) 1.23
Analytical Sens. (struc/cc) 0.000997
Dectection Limit. (struc/cc) 0.00298

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Primary Asbestos Structures	3.2	0.00399	0.00109 - 0.0102	4
Total Asbestos Structures	3.2	0.00399	0.00109 - 0.0102	4
Asbestos Structures > 5um	1.6	0.00199	0.00 - 0.00628	2
Asbestos Fibers and Bundles > 5um	1.6	0.00199	0.00 - 0.00628	2
PCM Equivalent Fibers-US	0.8	0.000997	0.00 - 0.00473	1
PCM Equivalent Structures-US	0.8	0.000997	0.00 - 0.00473	1
PROTOCOL ASB STRUCS 5-10	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL ASB STRUCS >10	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL ASB STRUCS TOTAL	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL CHRYS STRUCS 5-10	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL CHRYS STRUCS >10	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL CHRYS STRUCS TOTAL	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL AMPH STRUCS 5-10	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL AMPH STRUCS >10	0.0	<0.00298	0.00 - 0.00298	0
PROTOCOL AMPH STRUCS TOTAL	0.0	<0.00298	0.00 - 0.00298	0
AHERA-like Total Structures 3:1	3.2	0.00399	0.00109 - 0.0102	4
AHERA-like Asb Strucs >5 and 3:1	1.6	0.00199	0.00 - 0.00628	2
AHERA-like Asb Strucs 5 - 10 and 3:1	0.0	<0.00298	0.00 - 0.00298	0
AHERA-like Asb Strucs >10 and 3:1	1.6	0.00199	0.00 - 0.00628	2
Total Other Amphibole Strucs 3:1	0.0	<0.00298	0.00 - 0.00298	0
Other Amphibole Strucs >5 and 3:1	0.0	<0.00298	0.00 - 0.00298	0
Other Amphibole Strucs 5 - 10 and 3:1	0.0	<0.00298	0.00 - 0.00298	0
Other Amphibole Strucs >10 and 3:1	0.0	<0.00298	0.00 - 0.00298	0

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

ANALYSIS DETAIL

Lab/Cor Sample No. B4760 S51 A1
Client Sample No. SVM-H2-1FD-100204
Description
Analysis Date 11/8/2004
Analyst DW

Volume (L) 1209.75
No. of Grid Openings 22
Filter Area (mm2) 385
Area Analyzed (mm2) 0.319
Analytical Sens. (struc/cc) 0.000998
Dectection Limit. (struc/cc) 0.00299

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Primary Asbestos Structures	6.3	0.00200	0.00 - 0.00629	2
Total Asbestos Structures	6.3	0.00200	0.00 - 0.00629	2
Asbestos Structures > 5um	3.1	0.000998	0.00 - 0.00473	1
Asbestos Fibers and Bundles > 5um	3.1	0.000998	0.00 - 0.00473	1
PCM Equivalent Fibers-US	3.1	0.000998	0.00 - 0.00473	1
PCM Equivalent Structures-US	3.1	0.000998	0.00 - 0.00473	1
PROTOCOL ASB STRUCS 5-10	0.0	<0.00299	0.00 - 0.00299	0
PROTOCOL ASB STRUCS >10	3.1	0.000998	0.00 - 0.00473	1
PROTOCOL ASB STRUCS TOTAL	3.1	0.000998	0.00 - 0.00473	1
PROTOCOL CHRYS STRUCS 5-10	0.0	<0.00299	0.00 - 0.00299	0
PROTOCOL CHRYS STRUCS >10	3.1	0.000998	0.00 - 0.00473	1
PROTOCOL CHRYS STRUCS TOTAL	3.1	0.000998	0.00 - 0.00473	1
PROTOCOL AMPH STRUCS 5-10	0.0	<0.00299	0.00 - 0.00299	0
PROTOCOL AMPH STRUCS >10	0.0	<0.00299	0.00 - 0.00299	0
PROTOCOL AMPH STRUCS TOTAL	0.0	<0.00299	0.00 - 0.00299	0
AHERA-like Total Structures 3:1	6.3	0.00200	0.00 - 0.00629	2
AHERA-like Asb Strucs >5 and 3:1	3.1	0.000998	0.00 - 0.00473	1
AHERA-like Asb Strucs 5 - 10 and 3:1	0.0	<0.00299	0.00 - 0.00299	0
AHERA-like Asb Strucs >10 and 3:1	3.1	0.000998	0.00 - 0.00473	1
Total Other Amphibole Strucs 3:1	0.0	<0.00299	0.00 - 0.00299	0
Other Amphibole Strucs >5 and 3:1	0.0	<0.00299	0.00 - 0.00299	0
Other Amphibole Strucs 5 - 10 and 3:1	0.0	<0.00299	0.00 - 0.00299	0
Other Amphibole Strucs >10 and 3:1	0.0	<0.00299	0.00 - 0.00299	0

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

ANALYSIS DETAIL

Lab/Cor Sample No. B4760 S52 A1
Client Sample No. SVM-H2-2FD-100204
Description
Analysis Date 11/8/2004
Analyst DW

Volume (L) 1192.92
No. of Grid Openings 23
Filter Area (mm2) 385
Area Analyzed (mm2) 0.333
Analytical Sens. (struc/cc) 0.000968
Dectection Limit. (struc/cc) 0.00290

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Primary Asbestos Structures	9.0	0.00291	0.00 - 0.00751	3
Total Asbestos Structures	9.0	0.00291	0.00 - 0.00751	3
Asbestos Structures > 5um	6.0	0.00194	0.00 - 0.00610	2
Asbestos Fibers and Bundles > 5um	6.0	0.00194	0.00 - 0.00610	2
PCM Equivalent Fibers-US	6.0	0.00194	0.00 - 0.00610	2
PCM Equivalent Structures-US	6.0	0.00194	0.00 - 0.00610	2
PROTOCOL ASB STRUCS 5-10	0.0	<0.00290	0.00 - 0.00290	0
PROTOCOL ASB STRUCS >10	0.0	<0.00290	0.00 - 0.00290	0
PROTOCOL ASB STRUCS TOTAL	0.0	<0.00290	0.00 - 0.00290	0
PROTOCOL CHRYS STRUCS 5-10	0.0	<0.00290	0.00 - 0.00290	0
PROTOCOL CHRYS STRUCS >10	0.0	<0.00290	0.00 - 0.00290	0
PROTOCOL CHRYS STRUCS TOTAL	0.0	<0.00290	0.00 - 0.00290	0
PROTOCOL AMPH STRUCS 5-10	0.0	<0.00290	0.00 - 0.00290	0
PROTOCOL AMPH STRUCS >10	0.0	<0.00290	0.00 - 0.00290	0
PROTOCOL AMPH STRUCS TOTAL	0.0	<0.00290	0.00 - 0.00290	0
AHERA-like Total Structures 3:1	9.0	0.00291	0.00 - 0.00751	3
AHERA-like Asb Strucs >5 and 3:1	6.0	0.00194	0.00 - 0.00610	2
AHERA-like Asb Strucs 5 - 10 and 3:1	6.0	0.00194	0.00 - 0.00610	2
AHERA-like Asb Strucs >10 and 3:1	0.0	<0.00290	0.00 - 0.00290	0
Total Other Amphibole Strucs 3:1	0.0	<0.00290	0.00 - 0.00290	0
Other Amphibole Strucs >5 and 3:1	0.0	<0.00290	0.00 - 0.00290	0
Other Amphibole Strucs 5 - 10 and 3:1	0.0	<0.00290	0.00 - 0.00290	0
Other Amphibole Strucs >10 and 3:1	0.0	<0.00290	0.00 - 0.00290	0

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

ANALYSIS DETAIL

Lab/Cor Sample No. B4760 S53 A1
Client Sample No. SVM-H2-3FD-100204
Description
Analysis Date 11/8/2004
Analyst DW

Volume (L) 1215.12
No. of Grid Openings 22
Filter Area (mm2) 385
Area Analyzed (mm2) 0.319
Analytical Sens. (struc/cc) 0.000994
Dectection Limit. (struc/cc) 0.00297

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Primary Asbestos Structures	3.1	0.000994	0.00 - 0.00471	1
Total Asbestos Structures	3.1	0.000994	0.00 - 0.00471	1
Asbestos Structures > 5um	3.1	0.000994	0.00 - 0.00471	1
Asbestos Fibers and Bundles > 5um	3.1	0.000994	0.00 - 0.00471	1
PCM Equivalent Fibers-US	3.1	0.000994	0.00 - 0.00471	1
PCM Equivalent Structures-US	3.1	0.000994	0.00 - 0.00471	1
PROTOCOL ASB STRUCS 5-10	0.0	<0.00297	0.00 - 0.00297	0
PROTOCOL ASB STRUCS >10	0.0	<0.00297	0.00 - 0.00297	0
PROTOCOL ASB STRUCS TOTAL	0.0	<0.00297	0.00 - 0.00297	0
PROTOCOL CHRYS STRUCS 5-10	0.0	<0.00297	0.00 - 0.00297	0
PROTOCOL CHRYS STRUCS >10	0.0	<0.00297	0.00 - 0.00297	0
PROTOCOL CHRYS STRUCS TOTAL	0.0	<0.00297	0.00 - 0.00297	0
PROTOCOL AMPH STRUCS 5-10	0.0	<0.00297	0.00 - 0.00297	0
PROTOCOL AMPH STRUCS >10	0.0	<0.00297	0.00 - 0.00297	0
PROTOCOL AMPH STRUCS TOTAL	0.0	<0.00297	0.00 - 0.00297	0
AHERA-like Total Structures 3:1	3.1	0.000994	0.00 - 0.00471	1
AHERA-like Asb Strucs >5 and 3:1	3.1	0.000994	0.00 - 0.00471	1
AHERA-like Asb Strucs 5 - 10 and 3:1	0.0	<0.00297	0.00 - 0.00297	0
AHERA-like Asb Strucs >10 and 3:1	3.1	0.000994	0.00 - 0.00471	1
Total Other Amphibole Strucs 3:1	0.0	<0.00297	0.00 - 0.00297	0
Other Amphibole Strucs >5 and 3:1	0.0	<0.00297	0.00 - 0.00297	0
Other Amphibole Strucs 5 - 10 and 3:1	0.0	<0.00297	0.00 - 0.00297	0
Other Amphibole Strucs >10 and 3:1	0.0	<0.00297	0.00 - 0.00297	0

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: APG-L2-1ZB-100404 *Lab/Cor Sample No.:* B4760 S3 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
A	1	B44		NSD									
A	2	B24		NSD									
A	3	B4		NSD									
A	4	C14		NSD									
A	5	C34		NSD									
A	6	C43		NSD									
A	7	C23		NSD									
A	8	C3		NSD									
A	9	B13		NSD									
A	10	B33		NSD									
A	11	B42		NSD									
A	12	B22		NSD									
A	13	B2		NSD									
A	14	C12		NSD									
A	15	C32		NSD									
A	16	C41		NSD									
A	17	C21		NSD									
A	18	C1		NSD									
A	19	B11		NSD									
A	20	B31		NSD									
A	21	B40		NSD									
A	22	B20		NSD									
A	23	B10		NSD									
A	24	D41		NSD									
A	25	D21		NSD									
A	26	D1		NSD									
A	27	A11		NSD									
A	28	A31		NSD									
A	29	A42		NSD									
A	30	A22		NSD									
A	31	A2		NSD									
A	32	D12		NSD									
A	33	D32		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: APG-L2-1ZB-100404 *Lab/Cor Sample No.:* B4760 S3 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
A	34	D43		NSD									
B	35	B44		NSD									
B	36	B24		NSD									
B	37	B4		NSD									
B	38	C14		NSD									
B	39	C34		NSD									
B	40	C43		NSD									
B	41	C23		NSD									
B	42	C3		NSD									
B	43	B13		NSD									
B	44	B33		NSD									
B	45	B42		NSD									
B	46	B22		NSD									
B	47	B2		NSD									
B	48	C12		NSD									
B	49	C32		NSD									
B	50	C41		NSD									
B	51	C21		NSD									
B	52	C1		NSD									
B	53	B11		NSD									
B	54	B31		NSD									
B	55	B40		NSD									
B	56	B20		NSD									
B	57	B10		NSD									
B	58	A10		NSD									
B	59	A30		NSD									
B	60	A41		NSD									
B	61	A21		NSD									
C	62	B43		NSD									
C	63	B23		NSD									
C	64	B3		NSD									
C	65	C13		NSD									
C	66	C33		NSD									
C	67	C42		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: APG-L2-1ZB-100404 *Lab/Cor Sample No.:* B4760 S3 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
C	68	C22		NSD									
C	69	C2		NSD									
C	70	B12		NSD									
C	71	B32		NSD									
C	72	B41		NSD									
C	73	B21		NSD									
C	74	B1		NSD									
C	75	C11		NSD									
C	76	C31		NSD									
C	77	C41		NSD									
C	78	C40		NSD									
C	79	C20		NSD									
C	80	C10		NSD									
C	81	D11		NSD									
C	82	D31		NSD									
C	83	D41		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: APG-L2-2CH-100404 *Lab/Cor Sample No.:* B4760 S4 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
A	1	B34	ADQ	1	1	F	7.5	0.8	9.4			Mg, Al, Si, Ca, Fe Actinolite	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
A	2	B14		NSD									
A	3	C14		NSD									
A	4	C44	ADQ	2	2	F	4.8	0.8	6.0			Mg, Si, Ca, Fe Actinolite	TAS_AHRA
A	5	B23		NSD									
A	6	B3		NSD									
A	7	C13		NSD									
A	8	C43		NSD									
A	9	B42		NSD									
A	10	B22		NSD									
A	11	B2		NSD									
A	12	C12		NSD									
A	13	C32	AZQ	3	3	F	8	0.5	16	845	544	Mg, Si, Ca, Fe Actinolite Zone Axis [3 1 0] -- KM	AS>5, AFB>5, PCMEF-US, PCMES-US, PSAS 5-10, PSAS TOT, PSAM 5-10, PSAM TOT, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
A	14	B21		NSD									
A	15	B1		NSD									
A	16	C11		NSD									
A	17	C31		NSD									
A	18	B20		NSD									
A	19	B10		NSD									
A	20	A20		NSD									
A	21	A10		NSD									
A	22	D10	ADQ	4	4	F	2	0.38	5.3			Mg, Al, Si, Ca, Fe Actinolite	TAS_AHRA
A	23	D40		NSD									
A	24	A21		NSD									
A	25	A1		NSD									
A	26	D11		NSD									
A	27	D31		NSD									
A	28	A32	ADQ	5	5	F	5.5	0.8	6.9			Mg, Al, Si, Ca, Fe Actinolite	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
A	29	A12		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: APG-L2-2CH-100404 *Lab/Cor Sample No.:* B4760 S4 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
A	30	D2	CDQ	6	6	B	4.5	0.2	22	802	546	Mg, Si Chrysotile Confirmed - KM	TAS_AHRA
A	31	D22		NSD									
B	32	B24		NSD									
B	33	B14		NSD									
B	34	C14	ADQ	7	7	F	2.5	0.4	6.2			Mg, Al, Si, Ca, Fe Actinolite	TAS_AHRA
B	35	C24		NSD									
B	36	C34		NSD									
B	37	B33	CDQ	8	8	B	24	1	24			Mg, Si Chrysotile	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
B	38	B13	CDQ	9	9	B	5.3	0.4	13			Mg, Si Chrysotile	AS>5, AFB>5, PCMEF-US, PCMES-US, PSAS 5-10, PSAS TOT, PCAS 5-10, PCAS TOT, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
B	38	B13	CDQ	10	10	F	1.2	0.08	15			Mg, Si Chrysotile	TAS_AHRA
B	39	C3		NSD									
B	40	C23		NSD									
B	41	C43		NSD									
B	42	B12		NSD									
B	43	C2		NSD									
B	44	C22		NSD									
B	45	C42		NSD									
B	46	B11		NSD									
B	47	C1		NSD									
B	48	C21		NSD									
B	49	C41		NSD									
B	50	B40		NSD									
B	51	B20	ADQ	11	11	F	3.5	0.5	7.0			Mg, Al, Si, Ca, Fe Actinolite	TAS_AHRA
B	52	C20		NSD									
B	53	C40		NSD									
B	54	D10	ADQ	12	12	F	4	0.4	10			Mg, Al, Si, Ca, Fe Actinolite	TAS_AHRA
B	55	D40		NSD									
B	56	A30		NSD									
B	57	A10		NSD									
B	58	A31		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: APG-L2-2CH-100404 *Lab/Cor Sample No.:* B4760 S4 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
B	59	A1		NSD									
B	60	D1		NSD									
B	61	D21		NSD									
B	62	D41		NSD									
C	63	B44		NSD									
C	64	C34	CMQ	13	13	F	1.2	0.1	12			Mg, Si Chrysotile	TAS_AHRA
C	65	C44		NSD									
C	66	B33		NSD									
C	67	B13	ADQ	14	14	F	8.5	0.6	14			Mg, Al, Si, Ca, Fe Actinolite	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
C	68	C23		NSD									
C	69	C33		NSD									
C	70	B22		NSD									
C	71	B12		NSD									
C	72	C12		NSD									
C	73	C32		NSD									
C	74	C42		NSD									
C	75	B1		NSD									
C	76	C1		NSD									
C	77	C11		NSD									
C	78	C31		NSD									
C	79	A30		NSD									
C	80	A10		NSD									
C	81	D20		NSD									
C	82	D40		NSD									
C	83	A11	ADQ	15	15	F	5.5	0.7	7.9			Mg, Al, Si, Ca, Fe Actinolite	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
C	84	A31		NSD									
C	85	D1		NSD									
C	86	D21		NSD									
C	87	D41		NSD									
C	88	A33	ADQ	16		MD1-0	5.3	1.5	3.5			Actinolite	AS>5, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: APG-L2-2CH-100404 *Lab/Cor Sample No.:* B4760 S4 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
C	88	A33	ADQ		16	MF	2.2	0.38	5.8			Mg, Al, Si, Ca, Fe Actinolite	
C	89	A13	ADQ	17	17	F	11	2.5	4.4			Mg, Al, Si, Ca, Fe Actinolite	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
C	90	D3		NSD									
C	91	D33		NSD									
C	92	A24	CMQ	18	18	F	0.8	0.12	6.7			Mg, Al, Si, Ca, Fe Chrysotile	TAS_AHRA
C	92	A24	ADQ	19	19	F	10.5	1.5	7.0			Mg, Al, Si, Ca, Fe Actinolite	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS>10_AHRA

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: APG-L2-3CH-100404 *Lab/Cor Sample No.:* B4760 S5 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
A	1	B44	AZQ	1	1	F	8	0.8	10	804	15501	Mg, Si, Ca, Fe Actinolite Zone Axis [5 1 2] - KM	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
A	2	B24		NSD									
A	3	B4		NSD									
A	4	C14		NSD									
A	5	C34		NSD									
A	6	B43		NSD									
A	7	B3		NSD									
A	8	B3		NSD									
A	9	C13		NSD									
A	10	C33		NSD									
A	11	B12	CDQ	2	2	B	0.7	0.2	3.5	805	548	Mg, Si Chrysotile Confirmed - KM	TAS_AHRA
A	12	C2		NSD									
A	13	C22		NSD									
A	14	C42		NSD									
A	15	B41		NSD									
A	16	B21	AZQ	3	3	F	1.5	0.25	6.0	806	549	Mg, Si, Ca, Fe Actinolite Zone Axis [1 0 1] - KM	TAS_AHRA
A	17	B1		NSD									
A	18	C11		NSD									
A	19	C31		NSD									
A	20	B30		NSD									
A	21	B10		NSD									
A	22	C10		NSD									
A	23	C40		NSD									
A	24	A40		NSD									
A	25	A20		NSD									
A	26	D10		NSD									
A	27	D30		NSD									
A	28	A31		NSD									
A	29	A11		NSD									
A	30	D1		NSD									
A	31	D21		NSD									
B	32	B4		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: APG-L2-3CH-100404 *Lab/Cor Sample No.:* B4760 S5 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
B	33	C4		NSD									
B	34	C24		NSD									
B	35	A33		NSD									
B	36	D13		NSD									
B	37	D23		NSD									
B	38	D33		NSD									
B	39	D43		NSD									
B	40	A32		NSD									
B	41	D22		NSD									
B	42	D32		NSD									
B	43	D42		NSD									
B	44	A41		NSD									
B	45	A21		NSD									
B	46	D11		NSD									
B	47	D21		NSD									
B	48	D31		NSD									
B	49	D41		NSD									
B	50	D30	ADQ	4		MD1-1	13	4	3.2			Amosite	AS>5, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
B	50	D30	AZQ		4	MB	10	2	5.0	807	550	Mg, Si, Fe Amosite Zone Axis [1 0 0] - KM	AFB>5, PCMEF-US
B	51	D40		NSD									
B	52	A30	ADQ	5		MD1-0	4	2	2.0			Actinolite	TAS_AHRA
B	52	A30	ADQ		5	MF	1.2	0.22	5.5			Mg, Al, Si, Ca, Fe Actinolite	
B	52	A30	ADQ	6	6	F	5	1	5.0			Mg, Al, Si, Ca, Fe Actinolite	TAS_AHRA
B	53	A10		NSD									
B	54	C10		NSD									
B	55	C30		NSD									
B	56	B1	CM	7	7	F	1.2	0.11	11			Chrysotile	TAS_AHRA
B	57	C11		NSD									
B	58	C21		NSD									
B	59	C41		NSD									
B	60	B22		NSD									
B	61	B2		NSD									
C	62	B44		NSD									

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A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: APG-L2-3CH-100404 *Lab/Cor Sample No.:* B4760 S5 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
C	63	B34		NSD									
C	64	B43		NSD									
C	65	B33		NSD									
C	66	B23		NSD									
C	67	B42		NSD									
C	68	B32	ADQ	8	8	F	1.8	0.12	15			Mg, Al, Si, Ca, Fe Actinolite	TAS_AHRA
C	69	B20		NSD									
C	70	B10		NSD									
C	71	A40		NSD									
C	72	A30		NSD									
C	73	D40	ADQ	9	9	F	1.8	0.3	6.0			Mg, Al, Si, Ca, Fe Actinolite	TAS_AHRA
C	74	A21		NSD									
C	75	A11		NSD									
C	76	A42		NSD									
C	77	A32		NSD									
C	78	A22		NSD									
C	79	A2		NSD									
D	80	C10		NSD									
D	81	C20		NSD									
D	82	C30		NSD									
D	83	C40		NSD									
D	84	A21		NSD									
D	85	A1		NSD									
D	86	D11		NSD									
D	87	D31		NSD									
D	88	A42		NSD									
D	89	A22		NSD									
D	90	A2		NSD									
D	91	D31		NSD									

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A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: APG-L2-4CH-100404 *Lab/Cor Sample No.:* B4760 S6 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
A	1	A10		NSD									
A	2	A30		NSD									
A	3	B40		NSD									
A	4	B42		NSD									
A	5	B22		NSD									
A	6	B24	AZQ	1	1	F	4.8	0.8	6.0	808	551	Mg, Si, Ca, Fe Actinolite Zone Axis [1 0 0] - KM	TAS_AHRA
A	7	B4		NSD									
A	8	B2		NSD									
A	9	A12		NSD									
A	10	A14	ADQ	2	2	F	4.5	0.6	7.5			Mg, Si, Ca, Fe Actinolite	TAS_AHRA
A	11	A13		NSD									
A	12	D3		NSD									
A	13	D1		NSD									
A	14	C1		NSD									
A	15	C3	ADQ	3	3	F	5.3	1.2	4.4			Na, Mg, Si, Ca, Fe Actinolite	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
A	16	C24		NSD									
A	17	C22		NSD									
A	18	C20		NSD									
A	19	D21		NSD									
A	20	D23	AZQ	4	4	F	2.3	0.4	5.8	810	553	Mg, Si, Ca, Fe Tremolite Zone Axis [4 1 3] - KM	TAS_AHRA
A	21	D43		NSD									
A	22	D41		NSD									
A	23	C40		NSD									
A	24	C42		NSD									
A	25	C33	ADQ	5	5	F	7.5	0.7	11		554	Mg, Si, Ca, Fe Actinolite	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
A	26	C13		NSD									
A	27	B3		NSD									
A	28	B23	ADQ	6	6	F	4	0.5	8.0			Mg, Si, Ca, Fe Actinolite	TAS_AHRA
A	29	B31		NSD									
B	30	A1		NSD									
B	31	A3		NSD									

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A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: APG-L2-4CH-100404 *Lab/Cor Sample No.:* B4760 S6 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
B	32	A23		NSD									
B	33	A43		NSD									
B	34	A41	ADQ	7	7	F	4.8	0.4	12			Mg, Si, Ca, Fe Actinolite	TAS_AHRA
B	35	B40		NSD									
B	36	B42		NSD									
B	37	B24		NSD									
B	38	B22		NSD									
B	39	B20		NSD									
B	40	A21		NSD									
B	41	A23		NSD									
B	42	A3		NSD									
B	43	A1		NSD									
B	44	B1		NSD									
B	45	B3		NSD									
B	46	C14		NSD									
B	47	C12		NSD									
B	48	C10		NSD									
B	49	D11		NSD									
B	50	D12		NSD									
B	51	D34		NSD									
B	52	D32		NSD									
B	53	D30		NSD									
B	54	C31		NSD									
B	55	C33		NSD									
B	56	C13	ADQ	8	8	F	5.5	1.2	4.6			Actinolite	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
B	56	C13	AZQ	9	9	F	5.1	1.5	3.4	843	557	Mg, Si, Ca, Fe Actinolite Ferri-actinolite - Zone Axis [4 0 -1] - KM	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
B	57	B3		NSD									
B	58	B23		NSD									
B	59	B21		NSD									
B	60	A10		NSD									
C	61	D1		NSD									
C	62	D3		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: APG-L2-4CH-100404 *Lab/Cor Sample No.:* B4760 S6 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
C	63	D24		NSD									
C	64	D22		NSD									
C	65	D20		NSD									
C	66	C23		NSD									
C	67	C44		NSD									
C	68	C42		NSD									
C	69	C40		NSD									
C	70	D43		NSD									
C	71	A1		NSD									
C	72	A22		NSD									
C	73	A20		NSD									
C	74	B21		NSD									
C	75	B13		NSD									
C	76	B4		NSD									
C	77	B2		NSD									
C	78	C1		NSD									
C	79	C3		NSD									
C	80	B10		NSD									
C	81	B20		NSD									
C	82	B22		NSD									
C	83	B12		NSD									
C	84	B3		NSD									
C	85	B1		NSD									
C	86	A2		NSD									
C	87	A12		NSD									
C	88	A32	ADQ	10	10	F	4	1	4.0			Actinolite	TAS_AHRA
C	89	A31		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: APG-L2-5CH-100404 *Lab/Cor Sample No.:* B4760 S7 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
A	1	B44		NSD									
A	2	B24		NSD									
A	3	B4		NSD									
A	4	C14		NSD									
A	5	C34		NSD									
A	6	C43		NSD									
A	7	C23		NSD									
A	8	C3		NSD									
A	9	B13		NSD									
A	10	B33		NSD									
A	11	B42		NSD									
A	12	B22		NSD									
A	13	B2		NSD									
A	14	C12		NSD									
A	15	C32		NSD									
A	16	C41		NSD									
A	17	C21		NSD									
A	18	B11		NSD									
A	19	B31		NSD									
A	20	B41		NSD									
A	21	A31	AZQ	1	1	F	4.8	0.7	6.9	5229	15149	MG,AL,SI,CA,FE Actinolite Zone Axis [1 0 1] - KM	TAS_AHRA
A	22	A11		NSD									
A	23	D1		NSD									
A	24	D21		NSD									
A	25	D41		NSD									
A	26	D42		NSD									
A	27	D22		NSD									
A	28	D2		NSD									
A	29	A12		NSD									
A	30	A32		NSD									
A	31	A42	ADQ	2	2	F	2.5	0.5	5.0			Mg, Al, Si, Ca, Fe Actinolite	TAS_AHRA
A	32	A43		NSD									
A	33	A23		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: APG-L2-5CH-100404 *Lab/Cor Sample No.:* B4760 S7 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
A	34	A3		NSD									
A	35	D13		NSD									
A	36	D33		NSD									
A	37	D44		NSD									
B	38	B44		NSD									
B	39	B24		NSD									
B	40	B4		NSD									
B	41	C14		NSD									
B	42	C34	ADQ	3	3	F	16.5	2.5	6.6			Mg, Al, Si, Ca, Fe Actinolite	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
B	43	C44	ADQ	4	4	F	3.5	0.65	5.4			Mg, Al, Si, Ca, Fe Actinolite	TAS_AHRA
B	44	C43		NSD									
B	45	C23		NSD									
B	46	C3		NSD									
B	47	B13		NSD									
B	48	B23		NSD									
B	49	B43		NSD									
B	50	B42		NSD									
B	51	B22		NSD									
B	52	B2		NSD									
B	53	C12		NSD									
B	54	C32		NSD									
B	55	C41		NSD									
B	56	C11		NSD									
B	57	A41		NSD									
B	58	A21		NSD									
B	59	A1		NSD									
B	60	D11		NSD									
B	61	D31		NSD									
B	62	D41		NSD									
B	63	D21		NSD									
B	64	D1		NSD									
B	65	A11		NSD									
B	66	A31		NSD									

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Report # 041172R3

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Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: APG-L2-5CH-100404 *Lab/Cor Sample No.:* B4760 S7 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
B	67	A41		NSD									
B	68	A43		NSD									
B	69	A33		NSD									
B	70	A23		NSD									
B	71	A13		NSD									
B	72	A3		NSD									
B	73	D3		NSD									
B	74	D13		NSD									
B	75	D23		NSD									
B	76	D33		NSD									
B	77	D43	CMQ	5	5	F	1	0.05	20	5230	15150	Mg, Si Chrysotile	TAS_AHRA
C	78	C42		NSD									
C	79	C32		NSD									
C	80	C12		NSD									
C	81	C2		NSD									
C	82	B12	CMQ	6	6	F	1.2	0.05	24	5283	15198	Mg, Si Chrysotile	TAS_AHRA
C	83	B4		NSD									
C	84	C4		NSD									
C	85	C14		NSD									
C	86	C24		NSD									
C	87	C34		NSD									
C	88	C44		NSD									
C	89	C43		NSD									
C	90	C33		NSD									
C	91	C23		NSD									

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A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: CC1-L6-1CA-100204 *Lab/Cor Sample No.:* B4760 S8 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
A	1	A1		NSD									
A	2	A11	AZQ	1	1	F	3.5	0.35	10	844	15152	Mg, Al, Si, Ca, Fe Actinolite Zone Axis [3 0 2] - KM	TAS_AHRA
A	3	A10		NSD									
A	4	B10		NSD									
A	5	B11		NSD									
A	6	B1		NSD									
A	7	C1		NSD									
A	8	C11		NSD									
A	9	C10		NSD									
A	10	D10		NSD									
A	11	D11		NSD									
A	12	D1		NSD									
A	13	A21		NSD									
A	14	A20		NSD									
A	15	B20		NSD									
A	16	B21		NSD									
B	17	B10		NSD									
B	18	B11		NSD									
B	19	B1		NSD									
B	20	C1		NSD									
B	21	C11		NSD									
B	22	C10	CDQ	2	2	F	0.6	0.05	12	5233	15153	Mg, Si, Fe Chrysotile Confirmed - KM	TAS_AHRA
B	22	C10	AZQ	3	3	F	3.5	0.5	7.0	5234	15154	Mg, Al, Si, Ca, Fe Actinolite Zone Axis [1 0 0] - KM	TAS_AHRA
B	23	D10	AZQ	4	4	F	9.5	2	4.8	5235	15155	Mg, Al, Si, Ca, Fe Actinolite Zone Axis [3 1 0] - KM	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
B	24	D11		NSD									
B	25	D1		NSD									
B	26	A1		NSD									
B	27	A11		NSD									
B	28	A32		NSD									
B	29	A31		NSD									
B	30	A30	ADQ	5	5	F	4.25	1.1	3.9			Mg, Si, Ca, Fe Actinolite	TAS_AHRA

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: CC1-L6-1CA-100204 *Lab/Cor Sample No.:* B4760 S8 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
B	31	B30		NSD									
B	32	B31		NSD									
B	33	B32		NSD									
B	34	B33		NSD									
B	35	B34		NSD									
B	36	B14		NSD									
B	37	B13		NSD									
B	38	B12		NSD									
B	39	A12		NSD									
B	40	D2		NSD									
B	41	C2		NSD									
B	42	C3		NSD									
B	43	C4		NSD									
B	44	C24		NSD									
B	45	C23		NSD									
B	46	C22		NSD									
B	47	C21	AZQ	6	6	F1-0	2.2	0.4	5.5	5236	15156	Mg, Si, Ca, Fe Tremolite Zone Axis [3 1 0] - KM	TAS_AHRA

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: CC1-L6-1CB-100204 *Lab/Cor Sample No.:* B4760 S9 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
A	1	D1		NSD									
A	2	D3		NSD									
A	3	D24	CDQ	1		MD1-0	4.9	1.5	3.3			Chrysotile	TAS_AHRA
A	3	D24	CDQ		1	MB	4.9	0.4	12	811	558	Mg, Si Chrysotile Confirmed - KM	
A	4	D22		NSD									
A	5	D20		NSD									
A	6	C21	AZQ	2	2	F	11	1.5	7.3	812	559	Mg, Si, Ca, Fe Actinolite Zone Axis [2 0 -3] - KM	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
A	7	C23	OZQ	3	3	F	4.8	0.6	8.0	813	560	Na, Mg, Al, Si, Ca, Fe Edenite Zone Axis [3 2 1] - KM	TOS_AHRA
A	8	C43		NSD									
A	9	C41		NSD									
A	10	D40		NSD									
A	11	D42		NSD									
A	12	A2		NSD									
A	13	A4		NSD									
A	14	A24		NSD									
A	15	A22		NSD									
A	16	A20		NSD									
A	17	B21		NSD									
A	18	B23		NSD									
A	19	B24		NSD									
A	20	B34		NSD									
A	21	B44		NSD									
A	22	B33		NSD									
A	23	B13		NSD									
A	24	C3		NSD									
B	25	B24		NSD									
B	26	B4		NSD									
B	27	C14		NSD									
B	28	C34		NSD									
B	29	C44		NSD									
B	30	C43		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: CC1-L6-1CB-100204 *Lab/Cor Sample No.:* B4760 S9 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
B	31	C23		NSD									
B	32	C3		NSD									
B	33	B13		NSD									
B	34	B33		NSD									
B	35	B22		NSD									
B	36	B2		NSD									
B	37	C12		NSD									
B	38	C32		NSD									
B	39	C42		NSD									
B	40	C41		NSD									
B	41	C21		NSD									
B	42	C1		NSD									
B	43	B11	CDQ	4	4	F	1.2	0.05	24			Chrysotile	TAS_AHRA
B	44	B20	ADQ	5	5	F	1.25	0.4	3.1			Mg, Al, Si, Ca, Fe Actinolite	TAS_AHRA
B	45	A20		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: CC1-L6-2CB-100204 *Lab/Cor Sample No.:* B4760 S10 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
A	1	B44		NSD									
A	2	B24		NSD									
A	3	B4		NSD									
A	4	C14		NSD									
A	5	C24		NSD									
A	6	C44		NSD									
A	7	C43		NSD									
A	8	C23	ADQ	1	1	F	2.5	0.4	6.2			Mg, Al, Si, Ca, Fe Actinolite	TAS_AHRA
A	8	C3		NSD									
A	9	B13	ADQ	2	2	F	6	1.3	4.6			Mg, Al, Si, Ca, Fe Actinolite	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
A	10	B33		NSD									
A	11	B43		NSD									
A	12	B32		NSD									
A	13	B12		NSD									
A	14	C2		NSD									
A	15	C22		NSD									
A	16	C42		NSD									
A	17	C41		NSD									
A	18	C21		NSD									
A	19	C1		NSD									
A	20	B11		NSD									
A	21	B31		NSD									
A	22	B40	ADQ	3		MD1-0	5	5	1.0			Actinolite	TAS_AHRA
A	22	B40	ADQ		3	MF	2.5	0.3	8.3			Mg, Al, Si, Ca, Fe Actinolite	
A	23	B20		NSD									
A	24	A10		NSD									
A	25	A30		NSD									
A	26	A41		NSD									
A	27	A21		NSD									
A	28	A1	ADQ	4	4	F	5	0.5	10			Mg, Al, Si, Ca, Fe Actinolite	TAS_AHRA
A	29	D11	CDQ	5	5	F	5	0.15	33	814	561	Mg, Si Chrysotile Confirmed - KM	TAS_AHRA

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: CC1-L6-2CB-100204 *Lab/Cor Sample No.:* B4760 S10 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
A	29	D11	AZQ	6	6	F	10	0.7	14	815	562	Mg, Al, Si, Ca, Fe Actinolite Zone Axis [3 0 4] - KM	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
B	30	B44		NSD									
B	31	B24		NSD									
B	32	B4		NSD									
B	33	C14		NSD									
B	34	C34		NSD									
B	35	C43		NSD									
B	36	C23		NSD									
B	37	C3		NSD									
B	38	B13		NSD									
B	39	B33	ADQ	7	7	F	15	3.5	4.3			Mg, Si, Ca, Fe Actinolite	AS>5, AFB>5, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
B	40	B42		NSD									
B	41	B22		NSD									
B	42	B12		NSD									
B	43	B2	ADQ	8	8	F	4	1	4.0			Mg, Al, Si, Ca, Fe Actinolite	TAS_AHRA
B	44	C12		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: CC2A-L6-1CA-100304 *Lab/Cor Sample No.:* B4760 S12 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
A	1	A1		NSD									
A	2	A2		NSD									
A	3	B24	CDQ	1	1	B	8.5	2	4.2	5238	15157	Mg, Si, Fe Chrysotile Confirmed - KM	AS>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
A	4	B22		NSD									
A	5	B21		NSD									
A	6	B20		NSD									
A	7	A11		NSD									
A	8	A10		NSD									
A	9	B10		NSD									
A	10	B12		NSD									
A	11	C20		NSD									
A	12	C21		NSD									
A	13	C23		NSD									
A	14	C33		NSD									
A	15	C44		NSD									
A	16	C43	CDQ	2		MD2-0	2.5	2	1.2	5239	15158	Mg, Si, Fe Chrysotile Confirmed - KM	TAS_AHRA
A	16	C43	CDQ		2	MF	1.25	0.05	25			Chrysotile	
A	16	C43	CDQ		3	MF	1	0.05	20			Chrysotile	
A	17	C42		NSD									
A	18	C32		NSD									
A	19	D41	ADQ	3	4	F	2.5	0.5	5.0		15159	Mg, Si, Ca, Fe Actinolite	TAS_AHRA
A	20	D42		NSD									
A	21	D32		NSD									
A	22	D31		NSD									
A	23	D30		NSD									
A	24	D20	CDQ	4		MD99-0	6	4	1.5	5242	15160	Mg, Si, Fe Chrysotile Confirmed - KM	AS>5, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
A	24	D20	CDQ		5	MR50-0	2.5	1.5	1.7			Chrysotile	
A	24	D20	CDQ		6	MR30-0	2.5	1	2.5			Chrysotile	
A	24	D20	CDQ		7	MR15-0	2	1.5	1.3			Chrysotile	
A	24	D20	CDQ		8	MR7-0	2	0.8	2.5			Chrysotile	
A	24	D20	CDQ		9	MR30-0	2	0.5	4.0			Chrysotile	
A	24	D20	CDQ		10	MF	1.2	0.06	20			Chrysotile	

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: CC2A-L6-1CA-100304 *Lab/Cor Sample No.:* B4760 S12 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
A	24	D20	CDQ		11	MF	0.7	0.05	14			Chrysotile	
A	24	D20	CDQ		12	MF	0.6	0.05	12			Chrysotile	
A	25	D21		NSD									
A	26	D22		NSD									
A	27	D12		NSD									
A	28	D11		NSD									
A	29	D10		NSD									
A	30	D2		NSD									
A	31	A12	CDQ	5	13	F	0.65	0.05	13	5243	15161	Mg, Si, Fe Chrysotile Confirmed - KM	TAS_AHRA
A	32	A22		NSD									
A	33	A30		NSD									
B	34	A1		NSD									
B	35	A11		NSD									
B	36	A10		NSD									
B	37	B10		NSD									
B	38	B11		NSD									
B	39	B1		NSD									
B	40	C1		NSD									
B	41	C11	CDQ	6	14	F	1.1	0.1	11			Mg, Si, Fe Chrysotile	TAS_AHRA
B	42	C10		NSD									
B	43	D10		NSD									
B	44	D11		NSD									
B	45	D1		NSD									
B	46	A2		NSD									
B	47	A12		NSD									
B	48	A22	AZQ	7	15	F	1.25	0.3	4.2	5284	15199	Mg, Si, Ca, Fe Actinolite Zone Axis [5 1 2] - KM	TAS_AHRA
B	49	A21		NSD									
B	50	A20	ADQ	8	16	F	4.5	0.55	8.2			Mg, Si, Ca, Fe Actinolite	TAS_AHRA
B	51	B20		NSD									
B	52	B21		NSD									
B	53	B22		NSD									
B	54	B12		NSD									
B	55	B2		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

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Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: CC2A-L6-1CA-100304 *Lab/Cor Sample No.:* B4760 S12 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
B	56	C2		NSD									
B	57	C12		NSD									
B	58	C22		NSD									
B	59	C21		NSD									
B	60	C20		NSD									
B	61	D20		NSD									
B	62	D21		NSD									
B	63	D22		NSD									
B	64	D12		NSD									
B	65	D2		NSD									
B	66	A30		NSD									
C	67	A1		NSD									
C	68	A10		NSD									
C	69	B10		NSD									
C	70	B11		NSD									
C	71	B1		NSD									
C	72	C1		NSD									
C	73	C11		NSD									
C	74	C10		NSD									
C	75	D10		NSD									
C	76	B44		NSD									
C	77	B24		NSD									
C	78	B4		NSD									
C	79	C14		NSD									
C	80	C34		NSD									
C	81	B33		NSD									
C	82	B12		NSD									
C	83	C2		NSD									
C	84	C22		NSD									
C	85	C42		NSD									
C	86	B41		NSD									
C	87	B21		NSD									
C	88	C21		NSD									
C	89	C41		NSD									

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Report # 041172R3

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Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: CC2A-L6-1CA-100304 *Lab/Cor Sample No.:* B4760 S12 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
C	90	C20		NSD									
C	91	C40	CD	9		MD1-0	8	8	1.0			Chrysotile	AS>5, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
C	91	C40	CD		17	MB	3.5	0.5	7.0			Chrysotile	
C	92	B30	CM	10	18	F	0.6	0.1	6.0			Chrysotile	TAS_AHRA
C	93	A20		NSD									
C	94	D20		NSD									
C	95	D40		NSD									
C	96	D33	CM	11		MD3-0	4.5	3.5	1.3			Chrysotile	TAS_AHRA
C	96	D33	CM		19	MF	1.8	0.1	18			Chrysotile	
C	96	D33	CM		20	MB	1.6	0.2	8.0			Chrysotile	
C	96	D33	CM		21	MF	1.2	0.1	12			Chrysotile	
C	97	D13		NSD									
C	98	A2		NSD									
C	99	D12		NSD									

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Report # 041172R3

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Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: CC2-L6-11CC-100304 *Lab/Cor Sample No.:* B4760 S13 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
A	1	B44		NSD									
A	2	B24		NSD									
A	3	B4		NSD									
A	4	C14		NSD									
A	5	B34		NSD									
A	6	C23		NSD									
A	7	C3		NSD									
A	8	B23		NSD									
A	9	B33		NSD									
A	10	B42		NSD									
A	11	B22		NSD									
A	12	B2		NSD									
A	13	C12		NSD									
A	14	C32		NSD									
A	15	C31		NSD									
A	16	C11		NSD									
A	17	B1		NSD									
A	18	B10		NSD									
A	19	B20		NSD									
A	20	B30	AZQ	1	1	F	4	0.5	8.0	816	563	Mg, Si, Ca, Fe Actinolite Zone Axis [4 1 1] - KM	TAS_AHRA
A	21	B40		NSD									
A	22	A41		NSD									
A	23	A21		NSD									
A	24	A1		NSD									
A	25	A3		NSD									
B	26	D1		NSD									
B	27	D3		NSD									
B	28	D24		NSD									
B	29	D22		NSD									
B	30	D20		NSD									
B	31	C21		NSD									
B	32	C23		NSD									
B	33	C44		NSD									

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TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: CC2-L6-11CC-100304 *Lab/Cor Sample No.:* B4760 S13 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
B	34	C42		NSD									
B	35	C40		NSD									
B	36	D41		NSD									
B	37	D43		NSD									
B	38	B1		NSD									
B	39	B3		NSD									
B	40	B14		NSD									
B	41	B12		NSD									
B	42	B10		NSD									
B	43	A11	ADQ	2	2	F	16	4.5	3.6			Mg, Si, Ca, Fe Actinolite	AS>5, AFB>5, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
B	44	A12	AZQ	3	3	F	6	1.3	4.6	817	564	Na, Mg, Si, Ca, Fe Edenite Zone Axis [9 -1 6] - KM	PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
B	45	A42		NSD									
B	46	A40		NSD									
B	47	B41		NSD									
B	48	B43		NSD									
B	49	B24		NSD									
B	50	B22		NSD									
B	51	B20		NSD									

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TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: CC2-L6-1CC-100304 *Lab/Cor Sample No.:* B4760 S14 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
A	1	A2	CDQ	1	1	B	24	4	6.0	818	565	Mg, Si Chrysotile Confirmed - KM	AS>5, AFB>5, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
A	2	A4		NSD									
A	3	A24		NSD									
A	4	A22		NSD									
A	5	A20		NSD									
A	6	B21		NSD									
A	7	B23		NSD									
A	8	B43		NSD									
A	9	B41		NSD									
A	10	A40		NSD									
A	11	A42		NSD									
A	12	A44		NSD									
A	13	A24		NSD									
A	14	A22		NSD									
A	15	A20		NSD									
A	16	B21		NSD									
A	17	B23		NSD									
A	18	B4		NSD									
A	19	B2		NSD									
A	20	A1		NSD									
A	21	A3		NSD									
A	22	D14		NSD									
A	23	D12		NSD									
A	24	D10		NSD									
A	25	C11		NSD									
B	26	D1		NSD									
B	27	D3		NSD									
B	28	D24		NSD									
B	29	D22		NSD									
B	30	D20		NSD									
B	31	C20		NSD									
B	32	D40		NSD									
B	33	D42		NSD									

Lab/Cor, Inc.

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Report # 041172R3

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Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: CC2-L6-1CC-100304 *Lab/Cor Sample No.:* B4760 S14 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
B	34	A1		NSD									
B	35	A3		NSD									
B	36	A24		NSD									
B	37	A22		NSD									
B	38	A21		NSD									
B	39	B20		NSD									
B	40	B11		NSD									
B	41	B21		NSD									
B	42	B31		NSD									
B	43	B40		NSD									
B	44	A41		NSD									
B	45	A43		NSD									
B	46	A33		NSD									
B	47	A13		NSD									
B	48	D33	AZQ	2	2	F	4	0.6	6.7	819	566	Mg, Si, Ca, Fe Actinolite Zone Axis [9 1 10] - KM	TAS_AHRA
B	49	D31		NSD									
B	50	B10		NSD									
B	51	C10		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: CC2-L6-2CC-100304 *Lab/Cor Sample No.:* B4760 S15 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
A	1	B44		NSD									
A	2	B4		NSD									
A	3	C14		NSD									
A	4	C34		NSD									
A	5	C3		NSD									
A	6	C23		NSD									
A	7	C43		NSD									
A	8	B22		NSD									
A	9	B2		NSD									
A	10	C12		NSD									
A	11	C32		NSD									
A	12	B31		NSD									
A	13	C1		NSD									
A	14	C21		NSD									
A	15	C41		NSD									
A	16	D40		NSD									
A	17	D20		NSD									
B	18	B34		NSD									
B	19	B14		NSD									
B	19	C4		NSD									
B	20	C14		NSD									
B	21	C24		NSD									
B	22	C44		NSD									
B	23	B43		NSD									
B	24	B23		NSD									
B	25	B3		NSD									
B	26	C13		NSD									
B	27	C33		NSD									
B	28	B42		NSD									
B	29	B22		NSD									
B	30	B2		NSD									
B	31	C12		NSD									
B	32	C32		NSD									
B	33	B31		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: CC2-L6-2CC-100304 *Lab/Cor Sample No.:* B4760 S15 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
B	34	B11		NSD									
C	35	B44		NSD									
C	36	B24		NSD									
C	37	B4		NSD									
C	38	C14		NSD									
C	39	C34		NSD									
C	40	B33		NSD									
C	41	B13		NSD									
C	42	C3		NSD									
C	43	C23		NSD									
C	44	C43		NSD									
C	45	B42		NSD									
C	46	B22		NSD									
C	47	B2		NSD									
C	48	C12		NSD									
C	49	C32		NSD									
C	50	B31		NSD									
C	51	B11		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: CC2-L6-3CC-100304 *Lab/Cor Sample No.:* B4760 S16 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
A	1	B44	ADQ	1	1	F	8.5	1.5	5.7			Mg, Si, Ca, Fe Actinolite	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
A	2	B24		NSD									
A	3	B4		NSD									
A	4	C14		NSD									
A	5	C34		NSD									
A	6	B33		NSD									
A	7	B13		NSD									
A	8	B23		NSD									
A	9	C23		NSD									
A	10	C43		NSD									
A	11	B42		NSD									
A	12	B22		NSD									
A	13	B2		NSD									
A	14	C12		NSD									
A	15	C32		NSD									
A	16	B41	ADQ	2	2	F1-0	4.5	1	4.5			Mg, Si, Ca, Fe Actinolite	TAS_AHRA
A	17	B21		NSD									
A	18	B1		NSD									
B	19	B44		NSD									
B	20	B24		NSD									
B	21	B4		NSD									
B	22	C14		NSD									
B	22	C34		NSD									
B	23	B33	AZQ	3	3	F	3.8	0.4	9.5	5246	15163	Mg, Si, Ca, Fe Actinolite Zone Axis [5 3 0] - RF	TAS_AHRA
B	24	B13	ADQ	4		MD1-0	3.5	1.2	2.9			Actinolite	TAS_AHRA
B	24	B13	ADQ		4	MF	1.8	0.38	4.7			Actinolite	
B	25	C3	ADQ	5	5	F	6	1	6.0			Mg, Si, Ca, Fe Actinolite	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
B	26	C23		NSD									
B	27	C43		NSD									
B	28	B32		NSD									
B	29	C10	AQ	6		MD1-0	17	8	2.1			Actinolite	AS>5, TAS_AHRA, AS>5_AHRA, AS>10_AHRA

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: CC2-L6-3CC-100304 *Lab/Cor Sample No.:* B4760 S16 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
B	29	C10	AQ		6	MB	3.8	1.2	3.2			Actinolite	
B	30	C30		NSD									
B	31	A1		NSD									
B	32	D11		NSD									
B	33	D31		NSD									
B	34	D20		NSD									
B	35	D10		NSD									
C	36	A42	ADQ	7	7	F	3.6	0.4	9.0			Mg, Si, Ca, Fe Actinolite	TAS_AHRA
C	36	A42	ADQ	8	8	F	9	3	3.0			Mg, Si, Ca, Fe Actinolite	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
C	37	A22	AZQ	9	9	F	4	1	4.0	5278	15164	Mg, Si, Ca, Fe Amosite Zone Axis [1 2 0] - KM	TAS_AHRA
C	37	A22	ADQ	10		MD1-1	13	7	1.9			Actinolite	AS>5, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
C	37	A22	ADQ		10	MF	9.5	2	4.8			Mg, Si, Ca, Fe Actinolite	AFB>5, PCMEF-US
C	38	A2		NSD									
C	39	D12		NSD									
C	40	D42		NSD									
C	41	A41		NSD									
C	42	A21		NSD									
C	43	A1		NSD									
C	44	D11		NSD									
C	45	D31		NSD									
C	46	B41		NSD									
C	47	B21		NSD									
C	48	B1	ADQ	11	11	F	10.5	1.2	8.8			Mg, Si, Ca, Fe Actinolite	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
C	49	C11		NSD									
C	50	C31		NSD									
C	51	C10		NSD									
C	52	C30		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: CC2-L6-4CC-100304 *Lab/Cor Sample No.:* B4760 S17 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
B	29	B22	ADQ	NSD		F	4.2	0.6	7.0			Actinolite	TAS_AHRA
A	1	B34	CM	1	1	F	0.9	0.08	11			Chrysotile	TAS_AHRA
A	2	B14		NSD									
A	3	C4	ADQ	2	2	F	1.8	0.6	3.0		15165	Mg, Si, Ca, Fe Actinolite	TAS_AHRA
A	4	C24		NSD									
A	5	C44		NSD									
A	6	B43		NSD									
A	7	B23	ADQ	3	3	F	2.5	0.5	5.0			Actinolite	TAS_AHRA
A	8	B3		NSD									
A	9	C13		NSD									
A	10	C33		NSD									
A	11	B41		NSD									
A	12	B11		NSD									
A	13	C1		NSD									
A	14	C31		NSD									
A	15	A40		NSD									
A	16	A10		NSD									
A	17	D10		NSD									
B	18	B44	AZQ	4	4	F	7	2	3.5	5279	15197	Mg, Al, Si, Ca, Fe Actinolite Zone Axis [2 1 3] - KM	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
B	19	B24	ADQ	5		MD1-0	3.2	1.2	2.7			Actinolite	TAS_AHRA
B	19	B24	ADQ		5	MF	1.5	0.5	3.0			Actinolite	
B	19	B24		NSD									
B	20	B4		NSD									
B	21	C14		NSD									
B	22	C34		NSD									
B	23	B33	CDQ	6	6	B	6.5	1.5	4.3	5250	15166	Mg, Si Chrysotile Confirmed - KM	AS>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
B	23	B33	ADQ	7		MD1-1	25	8	3.1			Amosite	AS>5, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
B	23	B33	ADQ		7	MF	9	0.5	18			Mg, Si, Ca, Fe Amosite	AFB>5, PCMEF-US, PSAS 5-10, PSAS TOT, PSAM 5-10, PSAM TOT
B	24	B13	ADQ	8	8	F	5	1.5	3.3			Actinolite	TAS_AHRA
B	24	B13	CMQ	9	9	F	1.5	0.1	15			Chrysotile	TAS_AHRA

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: CC2-L6-4CC-100304 *Lab/Cor Sample No.:* B4760 S17 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
B	25	C3		NSD									
B	26	C23		NSD									
B	27	C43		NSD									
B	28	B42		NSD									
B	29	B2		NSD									
B	30	C12		NSD									
B	31	C32		NSD									
B	32	B41		NSD									
B	33	B21		NSD									
C	34	B44		NSD									
C	35	B24		NSD									
C	36	B4	ADQ	10	10	F	1.8	0.6	3.0			Mg, Si, Ca, Fe Actinolite	TAS_AHRA
C	37	C4		NSD									
C	38	B43	ADQ	11	11	F	5.1	0.7	7.3			Mg, Si, Ca, Fe Actinolite	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
C	39	B23		NSD									
C	40	B3	CMQ	12	12	F	0.7	0.1	7.0			Chrysotile	TAS_AHRA
C	40	B3	CDQ	13	13	F	1.2	0.1	12			Chrysotile	TAS_AHRA
C	41	C23		NSD									
C	42	B42		NSD									
C	43	B32		NSD									
C	44	B12		NSD									
C	45	C2		NSD									
C	46	B31		NSD									
C	47	B11	ADQ	14	14	F	3.5	0.4	8.8			Actinolite	TAS_AHRA
C	48	C1		NSD									
C	49	C11		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: SVBA-H2-1FD-100204 *Lab/Cor Sample No.:* B4760 S18 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
A	1	B34		NSD									
A	2	B14		NSD									
A	3	C4	CDQ	1	1	F	0.9	0.1	9.0	5251	15169	Mg, Si Chrysotile Confirmed - KM	TAS_AHRA
A	4	C24		NSD									
A	5	C44		NSD									
A	6	B43		NSD									
A	7	B23		NSD									
A	8	B3		NSD									
A	9	C13		NSD									
A	10	C33	ADQ	2		MD1-1	14	3.5	4.0			Actinolite	AS>5, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
A	10	C33	ADQ		2	MF	6.5	1	6.5			Mg, Si, Ca, Fe Actinolite	AFB>5, PCMEF-US
A	10	C33	AZQ	3	3	F	4	0.5	8.0	5252	15171	Mg, Si, Ca, Fe Actinolite Zone Axis [7 1 6] - RF	TAS_AHRA
A	11	B32	ADQ	4	4	F	6.8	0.8	8.5			Actinolite	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
A	12	B12		NSD									
A	13	C2		NSD									
A	14	C22	CM	5	5	F	0.8	0.11	7.3			Chrysotile	TAS_AHRA
A	15	C42		NSD									
A	16	B10	CD	6	6	F	1.1	0.1	11			Chrysotile	TAS_AHRA
B	17	B4		NSD									
B	18	C14	CDQ	7	7	F	2.75	0.15	18	5253	15172	Mg, Si Chrysotile 5253A Negative - Confirmed - KM	TAS_AHRA
B	18	C14	CDQ	8	8	B	1.8	0.25	7.2			Mg, Si Chrysotile	TAS_AHRA
B	19	C34		NSD									
B	20	B43		NSD									
B	21	B23		NSD									
B	22	B3	AZQ	9	9	F	2.1	0.45	4.7	5254	15173	Mg, Si, Ca, Fe Actinolite Zone Axis [4 -1 4] - KM	TAS_AHRA
B	23	C13	CMQ	10	10	B	1.5	0.2	7.5			Mg, Si Chrysotile	TAS_AHRA
B	23	C13	CM	11	11	F	2.5	0.1	25			Chrysotile	TAS_AHRA
B	24	C23		NSD									
B	25	B42		NSD									
B	26	B22		NSD									
B	27	B2		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: SVBA-H2-1FD-100204 *Lab/Cor Sample No.:* B4760 S18 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
B	28	C12		NSD									
B	29	C32		NSD									
B	30	B41		NSD									
B	31	B21		NSD									
B	32	B1		NSD									
C	33	B44	CDQ	12	12	F	0.6	0.1	6.0			Mg, Si, Fe Chrysotile	TAS_AHRA
C	34	B24		NSD									
C	35	B4		NSD									
C	36	C14		NSD									
C	37	C34	CDQ	13		MD1-1	6	5	1.2			Chrysotile	AS>5, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
C	37	C34	CDQ		13	MF	6	0.4	15			Mg, Si, Fe Chrysotile	AFB>5, PCMEF-US, PSAS 5-10, PSAS TOT, PCAS 5-10, PCAS TOT
C	38	B43	CD	14	14	F	1	0.05	20			Chrysotile	TAS_AHRA
C	39	B23	CDQ	15	15	B	0.75	0.2	3.8			Mg, Si, Fe Chrysotile	TAS_AHRA
C	40	B3		NSD									
C	41	C13		NSD									
C	42	B42		NSD									
C	43	B22		NSD									
C	44	B2	CDQ	16		MD1-0	7	3	2.3			Chrysotile	AS>5, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
C	44	B2	CDQ		16	MB	1.5	0.2	7.5			Mg, Si, Fe Chrysotile	
C	45	C12	CDQ	17		MD1-0	2	1	2.0			Chrysotile	TAS_AHRA
C	45	C12	CDQ		17	MB	1.15	0.2	5.8			Mg, Si, Fe Chrysotile	
C	46	C32		NSD									
C	47	B41		NSD									
C	48	B21		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: SVBA-H2-2FD-100204 *Lab/Cor Sample No.:* B4760 S19 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
A	1	B44		NSD									
A	2	B24		NSD									
A	3	B4	CDQ	1	1	F	1.5	0.15	10	5255	15174	Mg,Si,Fe Chrysotile Confirmed - KM	TAS_AHRA
A	4	C14		NSD									
A	5	C34		NSD									
A	6	B43	AZQ	2	2	F	7.25	1.25	5.8	5256	15175	Mg, Si, Ca, Fe Actinolite Zone Axis [1 0 0] - KM	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
A	7	B23		NSD									
A	8	B3		NSD									
A	9	C13		NSD									
A	10	B32		NSD									
A	11	B12		NSD									
A	12	C2	AQ	3	3	F	5.8	0.8	7.2		15176	Mg, Si, Ca, Fe Amosite	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
A	13	C22		NSD									
A	14	B41		NSD									
A	15	B21		NSD									
A	16	B1		NSD									
A	17	C11		NSD									
B	18	B44		NSD									
B	19	B24	CD	4	4	F	0.6	0.1	6.0			Chrysotile	TAS_AHRA
B	20	B4		NSD									
B	21	C14	AQ	5		MD1-0	3.8	1	3.8			Actinolite	TAS_AHRA
B	21	C14	AQ		5	MF	1.5	0.5	3.0			Mg, Si, Ca, Fe Actinolite	
B	22	C23	ADQ	6	6	F	8	2	4.0			Mg, Si, Ca, Fe Actinolite	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
B	23	B43		NSD									
B	24	B23		NSD									
B	25	B3		NSD									
B	26	C13		NSD									
B	27	C33		NSD									
B	28	B22	ADQ	7	7	F	4.5	0.6	7.5			Mg, Si, Ca, Fe Actinolite	TAS_AHRA
B	29	B2		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: SVBA-H2-2FD-100204 *Lab/Cor Sample No.:* B4760 S19 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
B	30	C12		NSD									
B	31	C22		NSD									
B	32	B41		NSD									
B	33	B11	CM	8	8	F	1.5	0.11	14			Chrysotile	TAS_AHRA
B	34	C1		NSD									
C	35	B44		NSD									
C	36	B24		NSD									
C	37	B4		NSD									
C	38	C14		NSD									
C	39	C34		NSD									
C	40	B43		NSD									
C	41	B13		NSD									
C	42	C3		NSD									
C	43	C23		NSD									
C	44	C43		NSD									
C	45	B42		NSD									
C	46	B22	CMQ	9	9	F	1	0.1	10			Mg, Si Chrysotile	TAS_AHRA
C	47	B2		NSD									
C	48	C12		NSD									
C	49	C42		NSD									
C	50	B41		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: SVBA-H2-3FD-100204 *Lab/Cor Sample No.:* B4760 S20 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
A	1	B42		NSD									
A	2	B22		NSD									
A	3	B2		NSD									
A	4	C12		NSD									
A	5	C32		NSD									
A	6	B41		NSD									
A	7	B21		NSD									
A	8	B1		NSD									
A	9	C11		NSD									
A	10	C31		NSD									
A	11	A41		NSD									
A	12	A21	ADQ	1	1	F	4	0.5	8.0			Mg, Si, Ca, Fe Actinolite	TAS_AHRA
A	13	A1		NSD									
A	14	D11		NSD									
A	15	D31		NSD									
A	16	D32		NSD									
B	17	B44		NSD									
B	18	B24		NSD									
B	19	B4		NSD									
B	20	C14		NSD									
B	21	C34		NSD									
B	22	B23		NSD									
B	23	B3		NSD									
B	24	C3		NSD									
B	25	C23		NSD									
B	26	C43		NSD									
B	27	B42		NSD									
B	28	B22		NSD									
B	29	B2		NSD									
B	30	C12		NSD									
B	31	C32		NSD									
B	32	C21	AZQ	2		MD1-0	9	8	1.1			Actinolite	AS>5, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
B	32	C21	AZQ		2	MF	3.2	0.4	8.0	5259	15177	Mg, Si, Ca, Fe Actinolite Zone Axis [4 1 4] - KM	

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: SVBA-H2-3FD-100204 *Lab/Cor Sample No.:* B4760 S20 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
C	33	B34		NSD									
C	34	B14		NSD									
C	35	B4		NSD									
C	36	C4		NSD									
C	37	C24		NSD									
C	38	C44		NSD									
C	39	B42	ADQ	3	3	F	14	4.5	3.1			Mg, Si, Ca, Fe Actinolite	AS>5, AFB>5, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
C	40	B22		NSD									
C	41	B2		NSD									
C	42	C12		NSD									
C	43	C32		NSD									
C	44	A31		NSD									
C	45	A11		NSD									
C	46	D1		NSD									
C	47	D21		NSD									
C	48	D41		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: SVBB-H2-1FD-100304 *Lab/Cor Sample No.:* B4760 S21 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
A	1	B44		NSD									
A	2	B24		NSD									
A	3	B4		NSD									
A	4	C14		NSD									
A	5	C34		NSD									
A	6	C43	ADQ	1	1	F	3	0.5	6.0			Na, Mg, Al, Si, Ca, Fe Actinolite	TAS_AHRA
A	7	C23		NSD									
A	8	C3	AZQ	2	2	F	2.75	0.4	6.9	847	569	Na, Mg, Al, Si, Ca, Fe Actinolite Zone Axis [3 1 1] - KM	TAS_AHRA
A	9	B13		NSD									
A	10	B33		NSD									
A	11	B42		NSD									
A	12	B22		NSD									
A	13	B2		NSD									
A	14	C12		NSD									
A	15	C32		NSD									
A	16	C41		NSD									
A	17	C21		NSD									
A	18	C1		NSD									
A	19	B11		NSD									
A	20	B31		NSD									
A	21	B40		NSD									
A	22	B20		NSD									
A	23	A10		NSD									
A	24	A30		NSD									
A	25	A41		NSD									
A	26	A21		NSD									
A	27	A1		NSD									
A	28	D11		NSD									
B	29	A20		NSD									
B	30	A40		NSD									
B	31	A31		NSD									
B	32	A11		NSD									
B	33	D1		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: SVBB-H2-1FD-100304 *Lab/Cor Sample No.:* B4760 S21 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
B	34	D21		NSD									
B	35	D41		NSD									
B	36	D32		NSD									
B	37	D12		NSD									
B	38	A2		NSD									
B	39	A22		NSD									
B	40	A42		NSD									
B	41	B41		NSD									
B	42	B21		NSD									
B	43	B1		NSD									

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A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: SVBB-H2-2FD-100304 *Lab/Cor Sample No.:* B4760 S22 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
A	1	B44		NSD									
A	2	B34		NSD									
A	3	B24		NSD									
A	4	B14		NSD									
A	5	B4		NSD									
A	6	B43		NSD									
A	7	B33		NSD									
A	8	B23		NSD									
A	9	B13		NSD									
A	10	B3		NSD									
A	11	B42		NSD									
A	12	B32		NSD									
A	13	B22		NSD									
A	14	B12		NSD									
A	15	B41		NSD									
A	16	B31		NSD									
B	17	B44		NSD									
B	18	B24		NSD									
B	19	B4		NSD									
B	20	C4		NSD									
B	21	B43		NSD									
B	22	B23		NSD									
B	23	B3		NSD									
B	24	C3		NSD									
B	25	B42		NSD									
B	26	B22		NSD									
B	27	B2		NSD									
B	28	C2		NSD									
B	29	B41		NSD									
B	30	B21		NSD									
B	31	B1		NSD									
B	32	C1		NSD									
C	33	B44		NSD									
C	34	B24		NSD									

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A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: SVBB-H2-2FD-100304 *Lab/Cor Sample No.:* B4760 S22 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
C	35	B4		NSD									
C	36	C14		NSD									
C	37	B43		NSD									
C	38	B23		NSD									
C	39	B3		NSD									
C	40	C13		NSD									
C	41	C33		NSD									
C	42	B42		NSD									
C	43	B22		NSD									
C	44	C12		NSD									
C	45	C32		NSD									
C	46	C42		NSD									
C	47	C21		NSD									
C	48	C41		NSD									

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A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: SVBB-H2-3FD-100304 *Lab/Cor Sample No.:* B4760 S23 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
A	1	B44		NSD									
A	2	B34		NSD									
A	3	B24		NSD									
A	4	B4		NSD									
A	5	B33		NSD									
A	6	B13		NSD									
A	7	C3		NSD									
A	8	C23		NSD									
A	9	C42		NSD									
A	10	C32		NSD									
A	11	C12		NSD									
A	12	B2		NSD									
A	13	B22		NSD									
A	14	B42		NSD									
A	15	B31		NSD									
A	16	B11		NSD									
A	17	C1		NSD									
A	18	C21		NSD									
A	19	C41		NSD									
A	20	C30		NSD									
A	21	C10		NSD									
A	22	D1		NSD									
A	23	D21		NSD									
A	24	D41		NSD									
A	25	D32		NSD									
A	26	D12		NSD									
A	27	A2		NSD									
A	28	A22		NSD									
A	29	A42		NSD									
A	30	A33		NSD									
B	31	B44		NSD									
B	32	B24		NSD									
B	33	B4		NSD									
B	34	C14		NSD									

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A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: SVBB-H2-3FD-100304 *Lab/Cor Sample No.:* B4760 S23 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
B	35	C34		NSD									
B	36	C43		NSD									
B	37	C23		NSD									
B	38	C3		NSD									
B	39	B13		NSD									
B	40	B43		NSD									
B	41	B42		NSD									
B	42	B32		NSD									
B	43	A41		NSD									
B	44	A21		NSD									
B	45	A1		NSD									
B	46	D11		NSD									

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A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: TPG-L2-11CH-100404 *Lab/Cor Sample No.:* B4760 S24 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
A	1	B44		NSD									
A	2	B24		NSD									
A	3	B4		NSD									
A	4	C14		NSD									
A	5	C34	ADQ	1	1	F	5	1.5	3.3			Mg, Si, Ca, Fe Actinolite	TAS_AHRA
A	6	C43		NSD									
A	7	C23		NSD									
A	8	C3	ADQ	2	2	F	10	2.5	4.0			Mg, Si, Ca, Fe Actinolite	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
A	8	C3	ADQ	3	3	F	1.5	0.5	3.0			Mg, Si, Ca, Fe Actinolite	TAS_AHRA
A	9	B13	ADQ	4	4	F	14	1.5	9.3			Mg, Si, Ca, Fe Actinolite	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
A	10	B33		NSD									
A	11	B42		NSD									
A	12	B22		NSD									
A	13	B2		NSD									
A	14	C12		NSD									
A	15	C32		NSD									
A	16	C41		NSD									
A	17	B1		NSD									
A	18	B21		NSD									
A	19	B41		NSD									
A	20	B40		NSD									
A	21	B30		NSD									
A	22	B20		NSD									
A	23	B10		NSD									
A	24	A1		NSD									
A	25	A21		NSD									
A	26	A41		NSD									
A	27	A32		NSD									
A	28	A22		NSD									
A	29	A12		NSD									
A	30	A2		NSD									
A	31	D12		NSD									

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A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: TPG-L2-11CH-100404 *Lab/Cor Sample No.:* B4760 S24 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
A	32	D32		NSD									
B	33	B44	AZQ	5	5	F	2.75	0.4	6.9	5281	570	Mg, Si, Ca, Fe Actinolite Zone Axis [3 0 1] - KM	TAS_AHRA
B	34	B24		NSD									
B	35	B4	ADQ	6		MD	5.5	5	1.1			Mg, Si, Ca, Fe Actinolite	AS>5, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
B	35	B4	ADQ		6	MF	5.5	1.5	3.7			Mg, Si, Ca, Fe Actinolite	AFB>5, PCMEF-US
B	36	C14		NSD									
B	37	C34		NSD									
B	38	C43		NSD									
B	39	C31		NSD									
B	40	C11	ADQ	7		MD1-1	12	6	2.0			Actinolite	AS>5, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
B	40	C11	ADQ		7	MF	8	0.7	11			Mg, Si, Ca, Fe Actinolite	AFB>5, PCMEF-US
B	41	B21		NSD									
B	42	B41		NSD									
B	43	A40		NSD									
B	44	A20		NSD									
B	45	A10		NSD									
B	46	D10		NSD									
B	47	D30		NSD									
B	48	D22		NSD									
B	49	D2		NSD									
B	50	A12		NSD									
B	51	A32	AZQ	8	8	F	4.5	0.7	6.4	825	571	Na, Mg, Al, Si, Ca, Fe Actinolite Ferrian-actinolite - Zone Axis [2 0 1] - KM	TAS_AHRA
B	52	A44		NSD									
B	53	A24		NSD									
B	54	A4		NSD									
B	55	D14		NSD									
B	56	D24		NSD									
B	57	A13		NSD									
B	58	A11	CDQ	9		MD1-1	18	15	1.2			Chrysotile	AS>5, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
B	58	A11	CDQ		9	MF	15	0.05	300	826	572	Mg, Si Chrysotile Confirmed - KM	AFB>5, PSAS >10, PSAS TOT, PCAS >10, PCAS TOT

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: TPG-L2-11CH-100404 *Lab/Cor Sample No.:* B4760 S24 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
B	59	B10		NSD									
B	60	B12		NSD									
B	61	B14		NSD									
B	62	B34		NSD									
B	63	B32		NSD									
B	64	B30		NSD									
C	65	A1	CDQ	10	10	B	4	0.6	6.7			Mg, Si Chrysotile	TAS_AHRA
C	66	A21		NSD									
C	67	A41		NSD									
C	68	B40		NSD									
C	69	B20		NSD									
C	70	B10		NSD									
C	71	C20		NSD									
C	72	C40		NSD									
C	73	D41		NSD									
C	74	D21		NSD									
C	75	D1		NSD									
C	76	A11		NSD									
C	77	A31		NSD									
C	78	A43	ADQ	11	11	F	8	1	8.0			Mg, Si, Ca, Fe Actinolite	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
C	79	A23		NSD								-	
C	80	A3		NSD									
C	81	D3		NSD									
C	82	D23		NSD									
C	83	D43		NSD									
C	84	D44		NSD									
C	85	D34	ADQ	12	12	F	10.5	2.5	4.2			Mg, Si, Ca, Fe Actinolite	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
C	86	D4		NSD									
C	87	A14		NSD									
C	88	A24	ADQ	13		MD1-0	12	5	2.4			Tremolite	AS>5, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
C	88	A24	AZQ		13	MF	4	0.25	16	827	573	Mg, Si, Ca, Fe Tremolite Zone Axis [5 1 6] - KM	

Lab/Cor, Inc.

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Report # 041172R3

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Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: TPG-L2-11CH-100404 *Lab/Cor Sample No.:* B4760 S24 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
C	89	A44	ADQ	14		MD1-1	13	7	1.9			Actinolite	AS>5, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
C	89	A44	ADQ		14	MF	13	0.5	26			Mg, Si, Ca, Fe Actinolite	AFB>5, PCMEF-US, PSAS >10, PSAS TOT, PSAM >10, PSAM TOT
C	90	B11		NSD									
C	91	B12		NSD									
C	92	B13		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

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Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: TPG-L2-1CH-100404 *Lab/Cor Sample No.:* B4760 S25 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
A	1	B34		NSD									
A	2	B14		NSD									
A	3	C24	AZQ	1	1	F	5.5	0.4	14	5262	15181	Mg, Si, Fe Amosite Zone Axis [7 1 20] - JH	AS>5, AFB>5, PCMEF-US, PCMES-US, PSAS 5-10, PSAS TOT, PSAM 5-10, PSAM TOT, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
A	3	C24	ADQ	2	2	F	18	4	4.5			Mg, Si, Ca,Fe Actinolite	AS>5, AFB>5, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
A	4	C4		NSD									
A	5	C44		NSD									
A	6	B43		NSD									
A	7	B33	AZQ	3		MD1-0	2.5	2	1.2			Actinolite	TAS_AHRA
A	7	B33	AZQ		3	MF	1.7	0.2	8.5	5263	15502	Mg, Si, Ca,Fe Actinolite Zone Axis [3 -1 2] - KM	
A	8	B3	AX	4	4	F	15	2.5	6.0			Actinolite	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
A	8	B3	CDQ	5		MD1-0	10	8	1.2			Chrysotile	AS>5, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
A	8	B3	CDQ		5	MB	1.8	0.15	12	5264	15183	Mg, Si Chrysotile Confirmed - KM	
A	9	C13		NSD									
A	10	C33	ADQ	6	6	F	6.8	1.5	4.5			Mg, Si, Ca,Fe Actinolite	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
A	11	B32	CM	7		MD1-0	15	10	1.5			Chrysotile	AS>5, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
A	11	B32	CM		7	MF	1.2	0.1	12			Chrysotile	
A	12	B22		NSD									
A	13	B2		NSD									
A	14	C12	CMQ	8	8	F	1.2	0.1	12			Mg, Si Chrysotile	TAS_AHRA
A	15	C32		NSD									
A	16	B31		NSD									
A	17	B21	CM	9	9	F	1	0.08	12			Chrysotile	TAS_AHRA
A	18	B1		NSD									
A	19	C11	CD	10	10	F	0.8	0.08	10			Chrysotile	TAS_AHRA
A	20	C31		NSD									
A	21	A31	CDQ	11		MD1-0	6.5	6	1.1			Chrysotile	AS>5, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: TPG-L2-1CH-100404 *Lab/Cor Sample No.:* B4760 S25 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
A	21	A31	CDQ		11	MF	1.1	0.1	11			Chrysotile	
A	22	A11	ADQ	12		MD1-1	15	10	1.5			Actinolite	AS>5, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
A	22	A11	ADQ		12	MF	10	0.4	25			Mg, Si, Ca, Fe Actinolite	AFB>5, PCMEF-US, PSAS 5-10, PSAS TOT, PSAM 5-10, PSAM TOT
A	23	D1	CD	13		MD1-0	3	2	1.5			Chrysotile	TAS_AHRA
A	23	D1	CD		13	MF	0.7	0.08	8.8			Chrysotile	
A	24	D21	CDQ	14	14	B	8.5	0.4	21			Mg, Si Chrysotile	AS>5, AFB>5, PCMEF-US, PCMES-US, PSAS 5-10, PSAS TOT, PCAS 5-10, PCAS TOT, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
A	25	D41		NSD									
A	26	A32		NSD									
A	27	A12		NSD									
A	28	D2		NSD									
A	29	D22		NSD									
A	30	D42		NSD									
A	31	D10		NSD									
B	32	B44		NSD									
B	33	B24		NSD									
B	34	B4		NSD									
B	35	C14		NSD									
B	36	C34		NSD									
B	37	B33	CD	15	15	F	0.9	0.11	8.2			Chrysotile	TAS_AHRA
B	38	B13	ADQ	16	16	F	3.8	0.5	7.6			Mg, Si, Ca, Fe Actinolite	TAS_AHRA
B	39	C3		NSD									
B	40	C23		NSD									
B	41	C43		NSD									
B	42	B42	CD	17	17	F	1	0.1	10			Chrysotile	TAS_AHRA
B	43	B22		NSD									
B	44	B2	CD	18		MD1-0	5.9	4	1.5			Chrysotile	AS>5, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
B	44	B2	CD		18	MF	1.5	0.11	14			Chrysotile	
B	45	C12		NSD									
B	46	C32		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: TPG-L2-1CH-100404 *Lab/Cor Sample No.:* B4760 S25 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
B	47	B41		NSD									
B	48	B21		NSD									
B	49	B1		NSD									
B	50	C11		NSD									
B	51	C31		NSD									
B	52	A41		NSD									
B	53	A21		NSD									
B	54	A1		NSD									
B	55	D11		NSD									
B	56	D31		NSD									
B	57	A32	ADQ	19	19	F	5.5	1	5.5			Actinolite	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
B	58	A12	CD	20	20	F	0.8	0.11	7.3			Chrysotile	TAS_AHRA
B	59	D2		NSD									
B	60	D22		NSD									
B	61	D42		NSD									
B	62	C10		NSD									
C	63	B34		NSD									
C	64	B14		NSD									
C	65	C4		NSD									
C	66	C24		NSD									
C	67	C44	ADQ	21	21	F	1.8	0.5	3.6			Mg, Si, Ca,Fe Actinolite	TAS_AHRA
C	68	B43		NSD									
C	69	B23	ADQ	22	22	F	10	1.5	6.7			Mg, Si, Ca,Fe Actinolite	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
C	70	B3		NSD									
C	71	C13		NSD									
C	72	C33		NSD									
C	73	B32		NSD									
C	74	B12		NSD									
C	74	C2	ADQ	23	23	F	9	3	3.0			Mg, Si, Ca,Fe Actinolite	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
C	75	C22		NSD									

Lab/Cor, Inc.

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Report # 041172R3

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Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: TPG-L2-1CH-100404 *Lab/Cor Sample No.:* B4760 S25 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
C	76	C42		NSD									
C	77	B41		NSD									
C	78	B21		NSD									
C	79	B2		NSD									
C	80	C12		NSD									
C	81	C32		NSD									
C	82	A31	CD	24		MD1-0	4.5	3.5	1.3			Chrysotile	TAS_AHRA
C	82	A31	CD		24	MF	0.5	0.08	6.2			Chrysotile	
C	82	A31	ADQ	25	25	F	4.5	1.35	3.3			Mg, Si, Ca,Fe Actinolite	TAS_AHRA
C	83	A11		NSD									
C	84	D1		NSD									
C	85	D21	CD	26	26	F	1	0.12	8.3			Chrysotile	TAS_AHRA
C	86	D41		NSD									
C	87	A42		NSD									
C	88	A22		NSD									
C	89	A2		NSD									
C	90	D12		NSD									
C	91	D32		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: TPG-L2-1ZB-100404 *Lab/Cor Sample No.:* B4760 S26 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
A	1	A1		NSD									
A	2	A21		NSD									
A	3	A41		NSD									
A	4	A43		NSD									
A	5	A23		NSD									
A	6	A3		NSD									
A	7	D13		NSD									
A	8	D33		NSD									
A	9	D40		NSD									
A	10	D20		NSD									
A	11	D10		NSD									
A	12	C10		NSD									
A	13	C20		NSD									
A	14	C40		NSD									
A	15	C42		NSD									
A	16	C22		NSD									
A	17	C2		NSD									
A	18	A12		NSD									
A	19	A32		NSD									
A	20	B44		NSD									
A	21	B24		NSD									
A	22	B4		NSD									
A	23	C14		NSD									
A	24	C34		NSD									
A	25	C44		NSD									
A	26	C33		NSD									
A	27	C13		NSD									
A	28	B3		NSD									
A	29	B23		NSD									
A	30	B43		NSD									
B	31	A10		NSD									
B	32	A42		NSD									
B	33	A22		NSD									
B	34	A2		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: TPG-L2-1ZB-100404 *Lab/Cor Sample No.:* B4760 S26 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
B	35	D12		NSD									
B	36	D32		NSD									
B	37	D44		NSD									
B	38	D24		NSD									
B	39	D4		NSD									
B	40	A14		NSD									
B	41	A34		NSD									
B	42	B40		NSD									
B	43	B20		NSD									
B	44	B10		NSD									
B	45	B42		NSD									
B	46	B22		NSD									
B	47	B2		NSD									
B	48	C12		NSD									
B	49	C32		NSD									
B	50	C44		NSD									
B	51	C24		NSD									
B	52	B4		NSD									
B	53	B24		NSD									
B	54	B44		NSD									
B	55	D1		NSD									
B	56	A1		NSD									
B	57	A11		NSD									
B	58	A21		NSD									
B	59	A31		NSD									
B	60	A41		NSD									
C	61	A4		NSD									
C	62	A2		NSD									
C	63	A11		NSD									
C	64	A13		NSD									
C	65	B10		NSD									
C	66	B12		NSD									
C	67	B14		NSD									
C	68	B24		NSD									

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Report # 041172R3

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Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: TPG-L2-1ZB-100404 *Lab/Cor Sample No.:* B4760 S26 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
C	69	B22		NSD									
C	70	B20		NSD									
C	71	A21		NSD									
C	72	A23		NSD									
C	73	A33		NSD									
C	74	A43		NSD									
C	75	A42		NSD									
C	76	A40		NSD									
C	77	B41		NSD									
C	78	B43		NSD									
C	79	B44		NSD									
C	80	B1		NSD									
C	81	B3		NSD									
C	82	C14		NSD									
C	83	C12		NSD									
C	84	C10		NSD									
C	85	D11		NSD									
C	86	D13		NSD									
C	87	D34		NSD									
C	88	D32		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: TPG-L2-2CH-100404 *Lab/Cor Sample No.:* B4760 S27 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
A	1	A1	CDQ	1		MD1-0	4.9	3	1.6			Chrysotile	TAS_AHRA
A	1	A1	CDQ		1	MB	4.9	0.3	16	828	574	Mg, Si Chrysotile Confirmed - KM	
A	1	A1	CDQ	2	2	B	0.7	0.2	3.5			Chrysotile	TAS_AHRA
A	1	A1	CDQ	3	3	B	1	0.08	12			Chrysotile	TAS_AHRA
A	1	A1	CDQ	4	4	F	0.6	0.04	15			Chrysotile	TAS_AHRA
A	1	A1	CDQ	5	5	F	0.6	0.04	15			Chrysotile	TAS_AHRA
A	2	A21	CDQ	6		MD2-0	6	2.3	2.6			Chrysotile	AS>5, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
A	2	A21	CDQ		6	MF	1.5	0.05	30			Chrysotile	
A	2	A21	CDQ		7	MF	2.5	0.05	50			Chrysotile	
A	3	A41		NSD									
A	4	A43	AZQ	7	8	F	4	0.7	5.7	829	575	Na, Mg, Al, Si, Ca, Fe Actinolite Zone Axis [7 1 0] - KM	TAS_AHRA
A	5	A23	CD	8	9	F	0.6	0.05	12			Chrysotile	TAS_AHRA
A	6	A3	CD	9	10	F	0.7	0.05	14			Chrysotile	TAS_AHRA
A	7	D13		NSD									
A	8	D30	CD	10	11	F	1	0.07	14			Chrysotile	TAS_AHRA
A	8	D30	CD	11	12	B	2.3	0.5	4.6			Chrysotile	TAS_AHRA
A	9	D41	CD	12	13	F	0.7	0.05	14			Chrysotile	TAS_AHRA
A	9	D41	CD	13	14	B	17	7	2.4			Chrysotile	AS>5, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
A	10	C40	ADQ	14	15	F	4.5	0.9	5.0			Mg, Si, Ca,Fe Actinolite	TAS_AHRA
A	11	C20		NSD									
A	12	C10		NSD									
A	13	C42	CD	15		MD2-0	2.6	2.3	1.1			Chrysotile	TAS_AHRA
A	13	C42	CD		16	MF	2.5	0.04	62			Chrysotile	
A	13	C42	CD		17	MF	0.7	0.08	8.8			Chrysotile	
A	14	C22	CD	16		MD1-0	8	5	1.6			Chrysotile	AS>5, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
A	14	C22	CD		18	MB	2.4	0.2	12			Chrysotile	
A	14	C22	CD	17	19	F	1.1	0.04	28			Chrysotile	TAS_AHRA
A	14	C22	CD	18	20	F	1	0.04	25			Chrysotile	TAS_AHRA
A	15	C2		NSD									
A	16	B12	CD	19	21	F	0.55	0.05	11			Chrysotile	TAS_AHRA
A	17	B22	CD	20	22	B	2.3	0.2	12			Chrysotile	TAS_AHRA

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: TPG-L2-2CH-100404 *Lab/Cor Sample No.:* B4760 S27 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
A	18	B42		NSD									
A	19	B44		NSD									
A	20	B24	CD	21		MD1-0	4	2.3	1.7			Chrysotile	TAS_AHRA
A	20	B24	CD		23	MF	4	0.06	67			Chrysotile	
A	20	B24	ADQ	22	24	F	15	5	3.0			Mg, Si, Ca,Fe Actinolite	AS>5, AFB>5, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
A	21	C4	CD	23	25	CC6-0	2.3	0.4	5.8			Chrysotile	
A	22	C24	CDQ	24	26	F	1.7	0.05	34			Mg, Si Chrysotile	TAS_AHRA
A	22	C24	CD	25	27	F	2.5	0.06	42			Chrysotile	TAS_AHRA
B	23	A10		NSD									
B	24	B40		NSD									
B	25	B41		NSD									
B	26	A41	CD	26	28	F	1	0.1	10			Chrysotile	TAS_AHRA
B	27	A21	CD	27	29	F	0.75	0.05	15			Chrysotile	TAS_AHRA
B	27	A21	ADQ	28		MD1-1	11	10	1.1			Actinolite	AS>5, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
B	27	A21	ADQ		30	MF	5.1	1.3	3.9			Mg, Si, Ca, Fe Actinolite	AFB>5, PCMEF-US
B	28	A1	CDQ	29		MD1-0	5	3.5	1.4			Chrysotile	TAS_AHRA
B	28	A1	CDQ		31	MB	2	0.3	6.7			Mg, Si Chrysotile	
B	28	A1	CD	30		MD1-0	4	2	2.0			Chrysotile	TAS_AHRA
B	28	A1	CD		32	MF	0.6	0.05	12			Chrysotile	
B	29	D11		NSD									
B	30	D31		NSD									
B	31	D41	CMQ	31	33	F	0.6	0.05	12			Mg, Si Chrysotile	TAS_AHRA
B	31	D41	CMQ	32	34	F	1.2	0.05	24			Mg, Si Chrysotile	TAS_AHRA
B	31	D41	CMQ	33	35	F	0.6	0.05	12			Mg, Si Chrysotile	TAS_AHRA
B	31	D41	ADQ	34	36	F	8.5	0.85	10			Mg, Si, Ca, Fe Actinolite	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
B	31	D41	CMQ	35	37	B	9	2.5	3.6			Mg, Si Chrysotile	AS>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
B	32	D21		NSD									
B	32	A1	CMQ	36	38	F	1	0.05	20			Mg, Si Chrysotile	TAS_AHRA
B	33	A1	CMQ	37	39	F	0.75	0.05	15			Mg, Si Chrysotile	TAS_AHRA

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Report # 041172R3

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Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: TPG-L2-2CH-100404 *Lab/Cor Sample No.:* B4760 S27 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
B	33	A1	ADQ	38	40	F	9	2	4.5			Mg, Si, Ca, Fe Actinolite	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
B	34	A21	CD	39		MD1-0	20	20	1.0			Chrysotile	AS>5, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
B	34	A21	CD		41	MF	1	0.05	20			Chrysotile	
B	34	A21	CMQ	40	42	F	0.6	0.05	12			Mg, Si Chrysotile	TAS_AHRA
B	34	A21	CMQ	41	43	F	1	0.05	20			Mg, Si Chrysotile	TAS_AHRA
B	34	A21	CMQ	42	44	F	0.6	0.05	12			Mg, Si Chrysotile	TAS_AHRA
B	34	A21	CMQ	43	45	F	0.5	0.05	10			Mg, Si Chrysotile	TAS_AHRA
B	35	A41	CMQ	44		MD1-1	40	15	2.7			Chrysotile	AS>5, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
B	35	A41	CMQ		46	MF	5.1	0.05	100			Mg, Si Chrysotile	AFB>5, PSAS 5-10, PSAS TOT, PCAS 5-10, PCAS TOT
B	36	A32	CMQ	45		MD1-0	5	5	1.0			Chrysotile	TAS_AHRA
B	36	A32	CMQ		47	MF	0.6	0.05	12			Mg, Si Chrysotile	
B	37	A12	CDQ	46	48	F	1.75	0.05	35			Mg, Si Chrysotile	TAS_AHRA
B	38	D2		NSD									
B	39	D22		NSD									
B	40	D42		NSD									
B	41	C44	CMQ	47	49	F	1	0.05	20			Mg, Si Chrysotile	TAS_AHRA
B	42	C24	AQ	48	50	F	4	0.5	8.0			Mg, Si, Ca, Fe Actinolite	TAS_AHRA
B	42	C24	CMQ	49	51	F	2.75	0.05	55			Mg, Si Chrysotile	TAS_AHRA
B	43	C4	CMQ	50	52	F	0.6	0.05	12			Mg, Si Chrysotile	TAS_AHRA
B	43	C4	CMQ	51	53	F	1	0.025	40			Mg, Si Chrysotile	TAS_AHRA
B	44	B14	CMQ	52		MD1-0	10	8	1.2			Chrysotile	AS>5, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
B	44	B14	CMQ		54	MF	0.85	0.1	8.5			Mg, Si Chrysotile	
B	44	B14	CMQ	53		MD2-0	3	2	1.5			Chrysotile	TAS_AHRA
B	44	B14	CMQ		55	MF	1.25	0.15	8.3			Mg, Si Chrysotile	
B	44	B14	CMQ		56	MF	1	0.15	6.7			Mg, Si Chrysotile	

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A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: TPG-L2-3CH-100404 *Lab/Cor Sample No.:* B4760 S28 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
A	1	B44		NSD									
A	2	B24		NSD									
A	3	B4		NSD									
A	4	C14		NSD									
A	5	C34		NSD									
A	6	B33		NSD									
A	7	B13		NSD									
A	8	C3		NSD									
A	9	C23		NSD									
A	10	C43		NSD									
A	11	B42		NSD									
A	12	B22	CDQ	1		MD1-0	8	6	1.3			Chrysotile	AS>5, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
A	12	B22	CDQ		1	MB	1.5	0.38	3.9	5265	15184	Mg, Si Chrysotile Confirmed - KM	
A	13	B2		NSD									
A	14	C12		NSD									
A	15	C32		NSD									
A	16	B41		NSD									
A	17	B21		NSD									
A	18	B1	CMQ	2	2	B	3.7	0.5	7.4			Mg, Si Chrysotile	TAS_AHRA
A	19	C11		NSD									
A	20	C31	CMQ	3		MD1-0	5.5	3.8	1.4			Mg, Si Chrysotile	AS>5, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
A	20	C31	CMQ		3	MF	0.5	0.1	5.0			Mg, Si Chrysotile	
A	21	A41	ADQ	4	4	F	3.7	1.1	3.4			Mg, Si, Ca,Fe Actinolite	TAS_AHRA
A	22	A21		NSD									
A	23	A1		NSD									
A	24	D11		NSD									
A	25	D31		NSD									
A	26	A32		NSD									
A	27	A12		NSD									
A	28	D2		NSD									
A	29	D22		NSD									
A	30	D42		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: TPG-L2-3CH-100404 *Lab/Cor Sample No.:* B4760 S28 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
B	31	B44		NSD									
B	32	B24		NSD									
B	33	B4		NSD									
B	34	C14		NSD									
B	35	C34	AZQ	5		MD1-0	10	6	1.7			Actinolite	AS>5, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
B	35	C34	AZQ		5	MF	1.7	0.45	3.8	5285	15185	Mg, Si, Ca,Fe Actinolite Zone Axis [1 0 0] - KM	
B	36	B33		NSD									
B	37	B13		NSD									
B	38	C13		NSD									
B	39	C23		NSD									
B	40	C43		NSD									
B	41	B42		NSD									
B	42	B22		NSD									
B	43	B2		NSD									
B	44	C12		NSD									
B	45	C32	CQ	6		MD1-0	8	6	1.3			Chrysotile	AS>5, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
B	45	C32	CQ		6	MF	0.7	0.1	7.0			Mg, Si Chrysotile	
B	46	B41		NSD									
B	47	B11		NSD									
B	48	C1		NSD									
B	49	C21		NSD									
B	50	C41		NSD									
B	51	A31		NSD									
B	52	A11	CM	7	7	B	2.2	0.35	6.3			Chrysotile	TAS_AHRA
B	53	D1		NSD									
B	54	D21		NSD									
B	55	D41		NSD									
B	56	A42		NSD									
B	57	A22		NSD									
B	58	A2		NSD									
B	59	D12		NSD									
B	60	D32		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: TPG-L2-3CH-100404 *Lab/Cor Sample No.:* B4760 S28 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
C	61	A12		NSD									
C	61	A32	CMQ	8	8	F	1.7	0.05	34			Mg, Si Chrysotile	TAS_AHRA
C	61	A32	CMQ	9	9	F	1.05	0.05	21			Mg, Si Chrysotile	TAS_AHRA
C	61	A32	CMQ	10	10	F	0.5	0.07	7.1			Mg, Si Chrysotile	TAS_AHRA
C	62	A42	CMQ	11	11	F	0.65	0.05	13			Mg, Si Chrysotile	TAS_AHRA
C	63	A41		NSD									
C	64	A31	CDQ	12	12	B5-0	1.75	0.25	7.0			Mg, Si Chrysotile	TAS_AHRA
C	65	A40		NSD									
C	66	B31	AQ	13	13	F	5	1	5.0			Mg, Si, Ca, Fe Actinolite	TAS_AHRA
C	67	B32		NSD									
C	68	B33	CMQ	14	14	F	0.5	0.05	10			Mg, Si Chrysotile	TAS_AHRA
C	68	B33	CMQ	15	15	F	1	0.07	14			Mg, Si Chrysotile	TAS_AHRA
C	69	B43		NSD									
C	70	B44	CMQ	16	16	F	1.4	0.05	28			Mg, Si Chrysotile	TAS_AHRA
C	70	B44	CMQ	17	17	F	1.1	0.05	22			Mg, Si Chrysotile	TAS_AHRA
C	71	B34		NSD									
C	72	C31		NSD									
C	73	C42		NSD									
C	74	D20		NSD									
C	75	D30	CDQ	18	18	B6-0	0.75	0.3	2.5			Mg, Si Chrysotile	TAS_AHRA
C	76	D40		NSD									
C	77	D22		NSD									
C	78	D32		NSD									
C	79	D42		NSD									
D	80	D22		NSD									
D	81	D32	CDQ	19	19	F	1	0.05	20			Mg, Si Chrysotile	TAS_AHRA
D	82	D41	CMQ	20	20	F	0.75	0.05	15			Mg, Si Chrysotile	TAS_AHRA
D	82	D41	AQ	21	21	F	15	5	3.0			Mg, Si, Ca, Fe Actinolite	AS>5, AFB>5, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
D	83	D40		NSD									
D	84	D31		NSD									
D	85	D30	AQ	22	22	F	5.5	1.3	4.2			Mg, Si, Ca, Fe Actinolite	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
D	86	C20		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: TPG-L2-3CH-100404 *Lab/Cor Sample No.:* B4760 S28 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
D	87	C30		NSD									
D	88	C40		NSD									
D	89	C31		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: TPG-L2-4CH-100404 *Lab/Cor Sample No.:* B4760 S29 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
A	1	B44	CDQ	1		MD1-0	11	9	1.2			Chrysotile	AS>5, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
A	1	B44	CDQ		1	MF	1.25	0.15	8.3			Mg, Si Chrysotile	
A	1	B44	CQ	2		MD2-0	10	7	1.4			Chrysotile	AS>5, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
A	1	B44	CQ		2	MF	0.6	0.05	12			Mg, Si Chrysotile	
A	1	B44	CQ		3	MF	0.7	0.05	14			Mg, Si Chrysotile	
A	1	B44	CQ	3		MD1-0	1	1	1.0			Chrysotile	TAS_AHRA
A	1	B44	CQ		4	MF	0.75	0.15	5.0			Mg, Si Chrysotile	
A	2	B14	CQ	4		MD1-0	4	2	2.0			Chrysotile	TAS_AHRA
A	2	B14	CQ		5	MF	1.25	0.15	8.3			Mg, Si Chrysotile	
A	3	C4	CDQ	5	6	F	1.5	0.05	30			Mg, Si Chrysotile	TAS_AHRA
A	3	C4	CDQ	6	7	F	1.3	0.05	26			Mg, Si Chrysotile	TAS_AHRA
A	3	C4	CQ	7	8	F	0.6	0.01	60			Mg, Si Chrysotile	TAS_AHRA
A	3	C4	CDQ	8		MD2-0	5	5	1.0			Chrysotile	TAS_AHRA
A	3	C4	CDQ		9	MF	2.5	0.05	50			Mg, Si Chrysotile	
A	3	C4	CDQ		10	MF	2	0.05	40	831	577	Mg, Si Chrysotile Confirmed - KM	
A	3	C4	CQ	9	11	F	0.65	0.15	4.3			Mg, Si Chrysotile	TAS_AHRA
A	3	C4	CQ	10	12	F	0.75	0.01	75			Mg, Si Chrysotile	TAS_AHRA
A	4	C24	CM	11		MD2-0	10	7	1.4			Chrysotile	AS>5, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
A	4	C24	CM		13	MF	1.5	0.05	30			Chrysotile	
A	4	C24	CM		14	MF	0.75	0.05	15			Chrysotile	
A	4	C24	CM	12	15	F	0.5	0.05	10			Chrysotile	TAS_AHRA
A	4	C24	CD	13	16	F	0.5	0.01	50			Chrysotile	TAS_AHRA
A	5	C44	CM	14		MD1-0	1.2	1.2	1.0			Chrysotile	TAS_AHRA
A	5	C44	CM		17	MF	1	0.05	20			Chrysotile	
A	5	C44	CM	15	18	F	0.5	0.05	10			Chrysotile	TAS_AHRA
A	5	C44	CM	16	19	F	1.2	0.05	24			Chrysotile	TAS_AHRA
A	5	C44	CM	17		MD1-0	1.5	0.75	2.0			Chrysotile	TAS_AHRA
A	5	C44	CM		20	MF	1.2	0.05	24			Chrysotile	
A	5	C44	CM	18	21	F	1.5	0.05	30			Chrysotile	TAS_AHRA
A	5	C44	AZQ	19		MD1-0	20	15	1.3			Actinolite	AS>5, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
A	5	C44	AZQ		22	MF	4	0.65	6.2	5286	15503	Mg,Al,Si,Ca,Fe Actinolite Zone Axis [1 -1 1] - KM	

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: TPG-L2-4CH-100404 *Lab/Cor Sample No.:* B4760 S29 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
A	6	C43		NSD									
A	7	C33	CM	20		MD1-0	5.5	5	1.1			Chrysotile	AS>5, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
A	7	C33	CM		23	MF	1	0.05	20			Chrysotile	
A	7	C33	CM	21		MD1-0	20	15	1.3			Chrysotile	AS>5, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
A	7	C33	CM		24	MF	0.6	0.05	12			Chrysotile	
A	7	C33	CM	22	25	F	0.6	0.01	60			Chrysotile	TAS_AHRA
A	7	C33	CM	23	26	F	0.5	0.05	10			Chrysotile	TAS_AHRA
A	7	C33	CM	24	27	F	1	0.05	20			Chrysotile	TAS_AHRA
A	7	C33	CM	25	28	F	0.75	0.05	15			Chrysotile	TAS_AHRA
A	7	C33	CM	26		MD1-0	15	15	1.0			Chrysotile	AS>5, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
A	7	C33	CM		29	MF	1.2	0.1	12			Chrysotile	
A	7	C33	CM	27		MD1-1	30	15	2.0			Chrysotile	AS>5, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
A	7	C33	CM		30	MB	8	1.2	6.7			Chrysotile	AFB>5, PCMEF-US
A	8	C13	CM	28		MD1-0	10	10	1.0			Chrysotile	AS>5, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
A	8	C13	CM		31	MF	0.6	0.05	12			Chrysotile	
A	9	B3	CM	29		MD1-0	20	15	1.3			Chrysotile	AS>5, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
A	9	B3	CM		32	MF	1	0.05	20			Chrysotile	
A	9	B3	CM	30	33	F	0.65	0.05	13			Chrysotile	TAS_AHRA
A	9	B3	CM	31	34	F	0.65	0.05	13			Chrysotile	TAS_AHRA
A	9	B3	CM	32		MD1-0	7.5	7.5	1.0			Chrysotile	AS>5, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
A	9	B3	CM		35	MF	0.75	0.05	15			Chrysotile	
A	10	B23		NSD									
A	11	B43	CD	33	36	B	2	2	1.0			Chrysotile	TAS_AHRA
A	11	B43	ADQ	34		MD1-1	20	15	1.3			Actinolite	AS>5, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
A	11	B43	AQ		37	MF	9	0.75	12			Mg, Si, Ca, Fe Actinolite	AFB>5, PCMEF-US
A	11	B43	CM	35	38	F	0.75	0.05	15			Chrysotile	TAS_AHRA
A	11	B43	CM	36	39	F	0.75	0.05	15			Chrysotile	TAS_AHRA
A	11	B43	CM	37	40	F	1	0.15	6.7			Chrysotile	TAS_AHRA
A	12	B32	CM	38	41	F	0.6	0.05	12			Chrysotile	TAS_AHRA

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: TPG-L2-4CH-100404 *Lab/Cor Sample No.:* B4760 S29 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
A	12	B32	CM	39		MD2-0	3.5	3	1.2			Chrysotile	TAS_AHRA
A	12	B32	CM		42	MF	0.75	0.05	15			Chrysotile	
A	12	B32	CM		43	MF	0.75	0.05	15			Chrysotile	
A	12	B32	CM	40	44	F	0.5	0.05	10			Chrysotile	TAS_AHRA
A	12	B32	CM	41		MD1-0	6	5	1.2			Chrysotile	AS>5, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
A	12	B32	CM		45	MF	3.5	0.15	23			Chrysotile	
A	12	B32	CM	42		MD1-0	10	10	1.0			Chrysotile	AS>5, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
A	12	B32	CM		46	MF	1	0.05	20			Chrysotile	
B	13	B31		NSD									
B	14	B11	CM	43	47	F	0.5	0.01	50			Chrysotile	TAS_AHRA
B	15	C1	CM	44	48	F	0.5	0.05	10			Chrysotile	TAS_AHRA
B	16	C21	CM	45		MD1-0	4	2.5	1.6			Chrysotile	TAS_AHRA
B	16	C21	CM		49	MF	1	0.01	100			Chrysotile	
B	16	C21	CM	46	50	F	1.2	0.01	120			Chrysotile	TAS_AHRA
B	16	C21	CM	47	51	F	1	0.01	100			Chrysotile	TAS_AHRA
B	17	C41	CD	48		MD1-0	4	3	1.3			Chrysotile	TAS_AHRA
B	17	C41	CD		52	MF	2.5	0.01	250			Chrysotile	
B	17	C41	CM	49		MD1-0	7.5	7.5	1.0			Chrysotile	AS>5, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
B	17	C41	CM		53	MF	1	0.05	20			Chrysotile	

Lab/Cor, Inc.

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Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: TPG-L2-5CH-100404 *Lab/Cor Sample No.:* B4760 S30 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
A	1	A10		NSD									
A	2	A30		NSD									
A	3	A40	CD	1		MD1-0	3	1.8	1.7			Chrysotile	TAS_AHRA
A	3	A40	CD		1	MB	3	0.1	30	833		Chrysotile Fiber tilts into grid bar. Confirmed - KM	
A	3	A40	CDQ	2	2	B	1.1	0.2	5.5	834	579	Mg, Si Chrysotile Confirmed - KM	TAS_AHRA
A	4	B41	AZQ	3	3	F	4.5	0.3	15	835	580	Mg, Si, Ca, Fe Tremolite Zone Axis [3 0 1] - KM	TAS_AHRA
A	5	B21	CDQ	4	4	F	1.2	0.1	12			Chrysotile	TAS_AHRA
A	6	B1		NSD									
A	7	C11		NSD									
A	8	C31	CDQ	5	5	F	5.2	0.05	100			Chrysotile	AS>5, AFB>5, PSAS 5-10, PSAS TOT, PCAS 5-10, PCAS TOT, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
A	9	C43		NSD									
A	10	C23	CDQ	6	6	F	0.7	0.1	7.0			Chrysotile	TAS_AHRA
A	11	C3		NSD									
A	12	B13		NSD									
A	13	B33		NSD									
A	14	A41		NSD									
A	15	A21		NSD									
A	16	D1		NSD									
A	17	D3		NSD									
A	17	D13	CD	7	7	F	1.2	0.08	15			Chrysotile	TAS_AHRA
A	18	D43		NSD									
B	19	A1		NSD									
B	20	A3	CD	8	8	F	1.2	0.06	20			Chrysotile	TAS_AHRA
B	20	A3	ADQ	9	9	F	2.7	0.3	9.0			Tremolite	TAS_AHRA
B	21	A4		NSD									
B	22	A24		NSD									
B	23	A44	CD	10		CD3-0	3	2	1.5			Chrysotile	TAS_AHRA
B	23	A44	CD		10	CB	3	0.5	6.0			Chrysotile	
B	23	A44	CD		11	CF	2.5	0.05	50			Chrysotile	
B	23	A44	CD		12	CB	2.2	0.6	3.7			Chrysotile	
B	24	A24		NSD									

Lab/Cor, Inc.

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Report # 041172R3

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Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: TPG-L2-5CH-100404 *Lab/Cor Sample No.:* B4760 S30 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
B	25	A22		NSD									
B	26	A2	CD	11	13	F	1.1	0.07	16			Chrysotile	TAS_AHRA
B	27	D12		NSD									
B	28	D32	CD	12	14	B	3.5	0.25	14			Chrysotile	TAS_AHRA
B	29	D40	CD	13	15	F	1.2	0.05	24			Chrysotile	TAS_AHRA
B	30	D20		NSD									
B	31	D10		NSD									
B	32	C20		NSD									
B	33	C40		NSD									
B	34	C42	CD	14	16	F	0.7	0.05	14			Chrysotile	TAS_AHRA
B	35	C22		NSD									
B	36	C2		NSD									
B	37	B12	CD	15	17	F	0.5	0.05	10			Chrysotile	TAS_AHRA
B	38	B32		NSD									
B	39	B44		NSD									
B	40	B24		NSD									
B	41	B4		NSD									
B	42	C14		NSD									
B	43	B1	AZQ	16	18	F	5.1	1	5.1	838	582	Mg, Si, Ca, Fe Actinolite Zone Axis [4 0 3] - KM	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
B	44	B3		NSD									
B	45	B14		NSD									
B	46	B12	CD	17		MD3-0	3	3	1.0			Chrysotile	TAS_AHRA
B	46	B12	CD		19	MB	3	0.2	15			Chrysotile	
B	46	B12	CD		20	MF	2.8	0.05	56			Chrysotile	
B	46	B12	CD		21	MB	2.4	0.15	16			Chrysotile	
B	47	B10		NSD									
B	48	A11		NSD									
B	49	A13		NSD									
B	50	A34	ADQ	18	22	F	7	1	7.0			Mg, Si, Ca, Fe Actinolite	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
B	51	A32		NSD									
B	52	A30		NSD									
B	53	B31		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: TPG-L2-5CH-100404 *Lab/Cor Sample No.:* B4760 S30 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
B	54	B33	ADQ	19	23	F	1.5	0.3	5.0			Mg, Si, Ca, Fe Actinolite	TAS_AHRA
B	54	B33	CD	20	24	B	1	0.2	5.0			Chrysotile	TAS_AHRA
B	55	C13	CD	21	25	F	1.2	0.06	20			Chrysotile	TAS_AHRA
B	56	C11	CD	22		MD1-0	5.3	4.8	1.1			Chrysotile	AS>5, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
B	56	C11	CD		26	MB	2	0.2	10			Chrysotile	
B	56	C11	CD	23	27	F	2.3	0.06	38			Chrysotile	TAS_AHRA
B	56	C11	CD	24		CD3-0	2.8	1	2.8			Chrysotile	TAS_AHRA
B	56	C11	CD		28	CR15-0	2.8	0.6	4.7			Chrysotile	
B	56	C11	CD		29	CF	1.2	0.05	24			Chrysotile	
B	56	C11	CD		30	CF	1	0.04	25			Chrysotile	
B	56	C11	CD	25	31	B	1.5	0.5	3.0			Chrysotile	TAS_AHRA
B	57	D11		NSD									
B	58	D13		NSD									
B	59	D34	ADQ	26	32	F	2.3	0.3	7.7			Mg, Si, Ca, Fe Actinolite	TAS_AHRA
B	59	D34	ADQ	27		MD1-1	5.2	3	1.7			Tremolite	AS>5, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
B	59	D34	ADQ		33	MF	5.2	0.4	13			Mg, Si, Ca, Fe Tremolite	AFB>5, PCMEF-US, PSAS 5-10, PSAS TOT, PSAM 5-10, PSAM TOT
C	60	B44	CM	28		MD1-0	3.5	3.5	1.0			Chrysotile	TAS_AHRA
C	60	B44	CM		34	MF	2	0.05	40			Chrysotile	
C	61	B24	CM	29	35	F	0.6	0.05	12			Chrysotile	TAS_AHRA
C	61	B24	CM	30	36	F	0.5	0.01	50			Chrysotile	TAS_AHRA
C	61	B24	CM	31		MD1-0	5.5	5.5	1.0			Chrysotile	AS>5, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
C	61	B24	CM		37	MB	2.5	0.3	8.3			Chrysotile	
C	62	B4		NSD									
C	63	C14	CD	32		MD1-0	6.5	6.5	1.0			Chrysotile	AS>5, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
C	63	C14	CM		38	MF	1.5	0.1	15			Chrysotile	
C	63	C14	CM	33	39	F	0.6	0.05	12			Chrysotile	TAS_AHRA
C	63	C14	CM	34	40	F	0.6	0.05	12			Chrysotile	TAS_AHRA
C	64	B33		NSD									
C	65	B13	CM	35	41	F	0.75	0.15	5.0			Chrysotile	TAS_AHRA
C	65	B13	CM	36		MD1-0	4	2.5	1.6			Chrysotile	TAS_AHRA

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: TPG-L2-5CH-100404 *Lab/Cor Sample No.:* B4760 S30 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
C	65	B13	CM		42	MB	4.5	0.85	5.3			Chrysotile	
C	65	B13	CM	37	43	F	1	0.05	20			Chrysotile	TAS_AHRA
C	66	C3		NSD									
C	67	C23	CM	38		MD1-0	1	1	1.0			Chrysotile	TAS_AHRA
C	67	C23	CM		44	MF	1	0.05	20			Chrysotile	
C	68	C43	CM	39		MD1-1	15	15	1.0			Chrysotile	AS>5, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
C	68	C43	CM		45	MB	9	1.2	7.5			Chrysotile	AFB>5, PCMEF-US
C	69	C32	CM	40	46	F	0.5	0.05	10			Chrysotile	TAS_AHRA
C	70	C12		NSD									
C	71	B2	CM	41	47	F	0.6	0.01	60			Chrysotile	TAS_AHRA
C	71	B2	CM	42		MD2-0	10	10	1.0			Chrysotile	AS>5, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
C	71	B2	CM		48	MB	1.2	0.25	4.8			Chrysotile	
C	71	B2	CM		49	MF	1	0.05	20			Chrysotile	
C	71	B2	CM	43		MD1-0	8	2	4.0			Chrysotile	AS>5, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
C	71	B2	CM		50	MF	0.6	0.05	12			Chrysotile	

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: RHB-H2-1FD-100304 *Lab/Cor Sample No.:* B4760 S31 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
A	1	A43		NSD									
A	2	A23		NSD									
A	3	A3		NSD									
A	4	D23		NSD									
A	5	D43		NSD									
A	6	D41		NSD									
A	7	D21		NSD									
A	8	D1		NSD									
A	9	A11		NSD									
A	10	A31		NSD									
A	11	B40		NSD									
A	12	B20		NSD									
B	13	B42		NSD									
B	14	B22		NSD									
B	15	C2		NSD									
B	16	C22		NSD									
B	17	C42	AZQ	1	1	F	7	1.7	4.1	978	711	Mg, Al, Si, Ca, Fe Actinolite Zone Axis [1 0 0] - KM	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
B	18	C40		NSD									
B	19	C20		NSD									
B	20	B10		NSD									
B	21	A41		NSD									
B	22	A11		NSD									
B	23	D1		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: RHB-H2-2FD-100304 *Lab/Cor Sample No.:* B4760 S32 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
A	1	A43		NSD									
A	2	A23		NSD									
A	3	A3		NSD									
A	4	D13		NSD									
A	5	D33	AZQ	1	1	F	4.9	0.7	7.0	979	15504	Mg, Al, Si, Ca, Fe Actinolite Zone Axis [1 0 0] - KM	TAS_AHRA
A	6	D41		NSD									
A	7	D21	AQ	2		MD1-0	4.3	2.7	1.6			Actinolite	TAS_AHRA
A	7	D21	AQ		2	MF	4	0.45	8.9			Mg, Al, Si, Ca, Fe Actinolite	
A	8	D1		NSD									
A	9	A11		NSD									
A	10	B40		NSD									
A	11	B20		NSD									
A	12	C1		NSD									
B	13	B43	AQ	3	3	F	4.8	1.2	4.0			Mg, Al, Si, Ca, Fe Actinolite	TAS_AHRA
B	14	B23		NSD									
B	15	B3		NSD									
B	16	C13		NSD									
B	17	C43		NSD									
B	18	C41	AQ	4	4	F	11	1	11			Mg, Al, Si, Ca, Fe Actinolite	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
B	19	C21		NSD									
B	20	C1		NSD									
B	21	B11		NSD									
B	22	B31	AQ	5	5	F	7.7	0.5	15			Mg, Al, Si, Ca, Fe Actinolite	AS>5, AFB>5, PCMEF-US, PCMES-US, PSAS 5-10, PSAS TOT, PSAM 5-10, PSAM TOT, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
B	22	B31	AQ	6	6	F	6	1.5	4.0			Mg, Al, Si, Ca, Fe Actinolite	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA

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A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: RHB-H2-3FD-100304 *Lab/Cor Sample No.:* B4760 S33 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
A	1	B42		NSD									
A	2	B12		NSD									
A	3	C12		NSD									
A	4	B14		NSD									
A	5	C14		NSD									
A	6	C44		NSD									
A	7	A20		NSD									
A	8	D10		NSD									
B	9	A32		NSD									
B	10	A2		NSD									
B	11	D22		NSD									
B	12	B31		NSD									
B	13	B1		NSD									
B	14	C21		NSD									
B	15	B13		NSD									
B	16	C3		NSD									
C	17	B23	CDQ	1	1	F	1	0.05	20	980	713	Mg, Si Chrysotile Verified - KM	TAS_AHRA
C	18	B43		NSD									
C	19	B3		NSD									
C	20	C13	AZQ	2		MD1-1	6	6	1.0			Mg, Al, Si, Ca, Fe Actinolite	AS>5, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
C	20	C13	AZQ		2	MF	8	0.75	11	5438	15505	Mg, Al, Si, Ca, Fe Actinolite Zone Axis [5 1 4] - KM	AFB>5, PCMEF-US
C	21	C33		NSD									
C	22	C42		NSD									
C	23	C22		NSD									

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A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: RHB-L2-1CH-100304 *Lab/Cor Sample No.:* B4760 S34 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
A	1	B44		NSD									
A	2	B24		NSD									
A	3	B4		NSD									
A	4	C14		NSD									
A	5	C34		NSD									
A	6	C43		NSD									
A	7	C23		NSD									
A	8	C3		NSD									
A	9	B13		NSD									
A	10	B33		NSD									
A	11	B42		NSD									
A	12	B22		NSD									
A	13	B2		NSD									
A	14	C12		NSD									
A	15	C32		NSD									
A	16	C41		NSD									
A	17	C21		NSD									
A	18	C1		NSD									
A	19	B11	CDQ	1		MD1-0	6	3.5	1.7			Chrysotile	AS>5, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
A	19	B11	CDQ		1	MF	0.95	0.1	9.5	5402	15298	Mg, Si, Fe Chrysotile Verified - KM	
A	20	B41		NSD									
A	21	B40		NSD									
A	22	B20		NSD									
A	23	C10	AZQ	2		MD1-0	4	2.5	1.6			Actinolite	TAS_AHRA
A	23	C10	AZQ		2	MF	2	0.25	8.0	5403	15299	Mg, Si, Ca, Fe Actinolite Zone Axis [3 1 -2] - KM	
A	24	C30		NSD									
A	25	D40		NSD									
A	26	D20	AQ	3		MD1-0	25.5	4.25	6.0			Actinolite	AS>5, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
A	26	D20	AQ		3	MF	4.25	0.45	9.4			Mg, Al, Si, Ca, Fe Actinolite Alumino-actinolite	
A	27	A10		NSD									
A	28	A30		NSD									
A	29	A41		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: RHB-L2-1CH-100304 *Lab/Cor Sample No.:* B4760 S34 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
B	30	B44		NSD									
B	31	B44		NSD									
B	32	B34		NSD									
B	33	B24		NSD									
B	34	B14	AQ	4	4	F	3.3	0.6	5.5			Mg, Al, Si, Ca, Fe Actinolite	TAS_AHRA
B	35	C4		NSD									
B	36	C14		NSD									
B	37	C24		NSD									
B	38	C34		NSD									
B	39	C44		NSD									
B	40	C3		NSD									
B	41	C13		NSD									
B	42	C23		NSD									
B	43	C33		NSD									
B	44	C43		NSD									
B	45	C2		NSD									
B	46	C12		NSD									
B	47	C22		NSD									
B	48	C32		NSD									
B	49	C42		NSD									
B	50	C1		NSD									
B	51	C31	AZQ	5	5	F	5.8	1.5	3.9	5404	15300	Mg, Si, Ca Tremolite Zone Axis [3 1 0] - KM	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
B	52	C11		NSD									
B	53	C21		NSD									
B	54	C41		NSD									
B	55	C20		NSD									
B	56	C30	AQ	6		MD1-0	6	2.5	2.4			Tremolite	AS>5, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
B	56	C30	AQ		6	MF	3.8	0.5	7.6			Mg, Si, Ca Tremolite	
C	57	B44		NSD									
C	58	B24		NSD									
C	59	B4		NSD									
C	60	C14		NSD									

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A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: RHB-L2-1CH-100304 *Lab/Cor Sample No.:* B4760 S34 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
C	61	C34		NSD									
C	62	B33		NSD									
C	63	B13	CDQ	7	7	B	8	0.35	23	5405	15301	Mg, Si Chrysotile Verified - KM	AS>5, AFB>5, PCMEF-US, PCMES-US, PSAS 5-10, PSAS TOT, PCAS 5-10, PCAS TOT, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
C	64	C3		NSD									
C	65	C23	AQ	8	8	F	3.7	0.6	6.2			Mg, Al, Si, Ca, Fe Actinolite	TAS_AHRA
C	66	C43		NSD									
C	67	B42		NSD									
C	68	B22		NSD									
C	69	B2		NSD									
C	70	C12		NSD									
C	71	C32		NSD									
C	72	B31		NSD									
C	73	B11		NSD									
C	74	C1		NSD									
C	75	C21		NSD									
C	76	C41		NSD									
C	77	B40		NSD									
C	78	B20	AQ	9	9	F	7.8	1.2	6.5			Mg, Al, Si, Ca, Fe Actinolite	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
C	79	B10		NSD									
C	80	C10		NSD									
C	81	C30		NSD									
C	82	A41		NSD									
C	83	A21		NSD									
C	84	A11		NSD									
C	85	A1		NSD									
C	86	D11		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: RHB-L2-2CH-100304 *Lab/Cor Sample No.:* B4760 S35 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
A	1	B44		NSD									
A	2	B34		NSD									
A	3	B24		NSD									
A	4	B14		NSD									
A	5	B4		NSD									
A	6	C4		NSD									
A	7	C14		NSD									
A	8	C24		NSD									
A	9	C34		NSD									
A	10	C43		NSD									
A	11	C33		NSD									
A	12	C23		NSD									
A	13	C13		NSD									
A	14	C3		NSD									
A	15	B3		NSD									
A	16	B13		NSD									
A	17	B23		NSD									
A	18	B33		NSD									
A	19	B43		NSD									
A	20	B42		NSD									
A	21	B32		NSD									
A	22	B22		NSD									
A	23	B12		NSD									
A	24	B2		NSD									
A	25	C2		NSD									
A	26	C12		NSD									
A	27	C22		NSD									
A	28	C32		NSD									
A	29	C42		NSD									
A	30	C41		NSD									
A	31	C31		NSD									
B	32	B44		NSD									
B	33	B34		NSD									

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A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: RHB-L2-2CH-100304 *Lab/Cor Sample No.:* B4760 S35 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
B	34	B24	AZQ	1		MD1-1	16	12	1.3			Actinolite	AS>5, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
B	34	B24	AZQ		1	MF	6	1	6.0	981	715	Mg, Al, Si, Ca, Fe Actinolite Zone Axis [5 1 4] - KM	AFB>5, PCMEF-US
B	35	B14		NSD									
B	36	B4		NSD									
B	37	C4		NSD									
B	38	C14		NSD									
B	39	C24		NSD									
B	40	C34		NSD									
B	41	C44	AZQ	2	2	F	6	1.5	4.0	982	716	Mg, Al, Si, Ca, Fe Tremolite Zone Axis [1 0 0] - KM	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
B	42	C43		NSD									
B	43	C33		NSD									
B	44	C23		NSD									
B	45	C13		NSD									
B	46	C3		NSD									
B	47	B3		NSD									
B	48	B13		NSD									
B	49	B23		NSD									
B	50	B33		NSD									
B	51	B43		NSD									
B	52	B41		NSD									
B	53	B21		NSD									
B	54	B1		NSD									
B	55	C11		NSD									
B	56	C31		NSD									
B	57	D40		NSD									
B	58	D20		NSD									
B	59	A10		NSD									
B	60	A30		NSD									
B	61	A42		NSD									
C	62	A43		NSD									
C	63	A23		NSD									
C	64	A3		NSD									

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A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: RHB-L2-2CH-100304 *Lab/Cor Sample No.:* B4760 S35 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
C	65	D13		NSD									
C	66	D33		NSD									
C	67	D41		NSD									
C	68	D21		NSD									
C	69	D1		NSD									
C	70	A11		NSD									
C	71	A31	AQ	3	3	F	1.7	0.5	3.4			Mg, Si, Ca, Fe Actinolite	TAS_AHRA
C	72	B40		NSD									
C	73	B10		NSD									
C	74	C10		NSD									
C	75	C30		NSD									
C	76	C42		NSD									
C	77	C22		NSD									
C	78	C2		NSD									
C	79	B12		NSD									
C	80	B42		NSD									
C	81	B43		NSD									
C	82	B3		NSD									
C	83	C3		NSD									
C	84	C23		NSD									
C	85	C43		NSD									
C	86	C44		NSD									
C	87	C24		NSD									
C	88	C4		NSD									
C	89	D14		NSD									
C	90	A34		NSD									
C	91	A14		NSD									

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A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: RHB-L2-3CH-100304 *Lab/Cor Sample No.:* B4760 S36 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
A	1	A44		NSD									
A	2	D24		NSD									
A	3	D34		NSD									
A	4	D32		NSD									
A	5	D12		NSD									
A	6	A2		NSD									
A	7	A12		NSD									
A	8	A32		NSD									
A	9	A42		NSD									
A	10	A40		NSD									
A	11	A20		NSD									
A	12	A10		NSD									
A	13	D10		NSD									
A	14	D30		NSD									
A	15	C41		NSD									
A	16	C21		NSD									
A	17	C1		NSD									
A	18	B11		NSD									
A	19	B31		NSD									
A	20	B41		NSD									
A	21	B43		NSD									
A	22	B23		NSD									
A	23	B3		NSD									
A	24	C13		NSD									
A	25	C33		NSD									
A	26	C43		NSD									
A	27	C44		NSD									
A	28	C24		NSD									
A	29	C4		NSD									
A	30	B14		NSD									
B	31	B43		NSD									
B	32	B33		NSD									
B	33	C23		NSD									
B	34	C43		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: RHB-L2-3CH-100304 *Lab/Cor Sample No.:* B4760 S36 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
B	35	C41		NSD									
B	36	C21		NSD									
B	37	C1		NSD									
B	38	B11		NSD									
B	39	B31		NSD									
B	40	B41		NSD									
B	41	A40		NSD									
B	42	A20		NSD									
B	43	A10		NSD									
B	44	D10		NSD									
B	45	D30		NSD									
B	46	D40		NSD									
B	47	D42		NSD									
B	48	D22		NSD									
B	49	D2		NSD									
B	50	A12		NSD									
B	51	A32		NSD									
B	52	A42		NSD									
B	53	A24		NSD									
B	54	A4		NSD									
B	55	D14		NSD									
B	56	D34		NSD									
B	57	D44		NSD									
B	58	D41		NSD									
C	59	A44		NSD									
C	60	A24		NSD									
C	61	A4		NSD									
C	62	D14		NSD									
C	63	D34		NSD									
C	64	D44		NSD									
C	65	D42		NSD									
C	66	D22		NSD									
C	67	D2		NSD									
C	68	A12		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: RHB-L2-3CH-100304 *Lab/Cor Sample No.:* B4760 S36 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
C	69	A32		NSD									
C	70	A42		NSD									
C	71	A40		NSD									
C	72	A20		NSD									
C	73	A10		NSD									
C	74	D10		NSD									
C	75	C41		NSD									
C	76	C21		NSD									
C	77	C1		NSD									
C	78	B11		NSD									
C	79	B31		NSD									
C	80	B41		NSD									
C	81	B43		NSD									
C	82	B23	AZQ	1	1	F	8	1.5	5.3	983	717	Mg, Al, Si, Ca, Fe Actinolite Zone Axis [1 0 5] - KM	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
C	83	B3		NSD									
C	84	B23		NSD									
C	85	B43		NSD									
C	86	B44		NSD									
C	87	B24		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: RHB-L2-4CH-100304 *Lab/Cor Sample No.:* B4760 S37 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
A	1	B44		NSD									
A	2	B24		NSD									
A	3	B4		NSD									
A	4	C14		NSD									
A	5	C34		NSD									
A	6	B33		NSD									
A	7	B13		NSD									
A	8	C3		NSD									
A	9	C23		NSD									
A	10	C43		NSD									
A	11	B32		NSD									
A	12	B12		NSD									
A	13	C2		NSD									
A	14	C22		NSD									
A	15	C42		NSD									
A	16	B31		NSD									
A	17	B21	ADQ	1		MD1-0	6.5	4	1.6			Actinolite	AS>5, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
A	17	B21	ADQ		1	MF	2	0.4	5.0		15302	Mg, Al, Si, Ca, Fe Actinolite	
A	18	B1		NSD									
A	19	C11		NSD									
A	20	C31		NSD									
A	21	A31		NSD									
A	22	A21		NSD									
A	23	A1		NSD									
A	24	D11		NSD									
A	25	D31		NSD									
A	26	A32		NSD									
A	27	A12		NSD									
A	28	D2		NSD									
A	29	D22		NSD									
B	30	B44		NSD									
B	31	B24		NSD									
B	32	B4		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: RHB-L2-4CH-100304 *Lab/Cor Sample No.:* B4760 S37 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
B	33	C4		NSD									
B	34	C24		NSD									
B	35	C44		NSD									
B	36	C43	AZQ	2		MD1-0	6	6	1.0			Actinolite	AS>5, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
B	36	C43	AZQ		2	MF	2.5	0.75	3.3	5408	15303	Mg, Al, Si, Ca, Fe Actinolite Zone Axis [2 0 1] - KM	
B	37	C23		NSD									
B	38	C3		NSD									
B	39	B3		NSD									
B	40	B23		NSD									
B	41	B43		NSD									
B	42	B42		NSD									
B	43	B22		NSD									
B	44	B2		NSD									
B	45	C2		NSD									
B	46	C22		NSD									
B	47	C42		NSD									
B	48	C41		NSD									
B	49	C21		NSD									
B	50	C1		NSD									
B	51	B1		NSD									
B	52	B21		NSD									
B	53	B41		NSD									
B	54	B40		NSD									
B	55	B20		NSD									
B	56	C20	AQ	3	3	F	8	0.9	8.9			Mg, Si, Ca, Fe Actinolite	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
B	57	C40		NSD									
B	58	D40		NSD									
C	59	B44		NSD									
C	60	B24		NSD									
C	61	B4	AQ	4	4	F	1.2	0.2	6.0			Mg, Al, Si, Ca, Fe Actinolite	TAS_AHRA
C	62	C14		NSD									
C	63	C24		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: RHB-L2-4CH-100304 *Lab/Cor Sample No.:* B4760 S37 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
C	64	C42		NSD									
C	65	C22		NSD									
C	66	C2		NSD									
C	67	B12		NSD									
C	68	B32		NSD									
C	69	B42		NSD									
C	70	B40		NSD									
C	71	B20		NSD									
C	72	B10		NSD									
C	73	C10		NSD									
C	74	C30		NSD									
C	75	D41		NSD									
C	76	D21		NSD									
C	77	D1		NSD									
C	78	A11		NSD									
C	79	A31		NSD									
C	80	A41		NSD									
C	81	A13		NSD									
C	82	D3		NSD									
C	83	D23		NSD									
C	84	D33		NSD									
C	85	D43		NSD									
C	86	D42		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: RHB-L2-5CH-100304 *Lab/Cor Sample No.:* B4760 S38 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
A	1	B34		NSD									
A	2	B14		NSD									
A	3	C4		NSD									
A	4	C24		NSD									
A	5	C44		NSD									
A	6	B43		NSD									
A	7	B23		NSD									
A	8	B3		NSD									
A	9	C13		NSD									
A	10	C33		NSD									
A	11	B32		NSD									
A	12	B12		NSD									
A	13	C2		NSD									
A	14	C22		NSD									
A	15	C42		NSD									
A	16	B41		NSD									
A	17	B21		NSD									
A	18	B1		NSD									
A	19	C11		NSD									
A	20	C31		NSD									
A	21	B30		NSD									
A	22	B10		NSD									
A	23	C10		NSD									
A	24	C30		NSD									
A	25	C40		NSD									
A	26	A41		NSD									
A	27	A21		NSD									
A	28	A1		NSD									
A	29	D11		NSD									
A	30	D31	ADQ	1		MD1-0	10	5	2.0			Tremolite	AS>5, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
A	30	D31	ADQ		1	MF	1.6	0.2	8.0			Mg, Al, Si, Ca, Fe Tremolite	
B	31	B34		NSD									
B	32	B14	AZQ	2	2	F	2	0.22	9.1	5439	718	Mg, Al, Si, Ca, Fe Tremolite Zone Axis [1 0 1] - KM	TAS_AHRA

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: RHB-L2-5CH-100304 *Lab/Cor Sample No.:* B4760 S38 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
B	33	C4		NSD									
B	34	C24		NSD									
B	35	C44		NSD									
B	36	B43		NSD									
B	37	B23		NSD									
B	38	B3		NSD									
B	39	C13		NSD									
B	40	C33		NSD									
B	41	B32		NSD									
B	42	B12	ADQ	3	3	F	6	1.5	4.0			Mg, Al, Si, Ca, Fe Actinolite	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
B	43	C2		NSD									
B	44	C22		NSD									
B	45	C42		NSD									
B	46	B31		NSD									
B	47	B21		NSD									
B	48	B11		NSD									
B	49	B1		NSD									
B	50	C1		NSD									
B	51	C11		NSD									
B	52	C21		NSD									
B	53	C31		NSD									
B	54	C41		NSD									
B	55	A41		NSD									
B	56	A31		NSD									
B	57	A21		NSD									
B	58	A11		NSD									
B	59	A1		NSD									
B	60	D1		NSD									
B	61	D11		NSD									
B	62	D21		NSD									
B	63	D31		NSD									
B	64	D41		NSD									
C	65	B43		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: RHB-L2-5CH-100304 *Lab/Cor Sample No.:* B4760 S38 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
C	66	B33		NSD									
C	67	B23		NSD									
C	68	B13		NSD									
C	69	B3		NSD									
C	70	C3		NSD									
C	71	C13		NSD									
C	72	C23		NSD									
C	73	C33		NSD									
C	74	C43		NSD									
C	75	C42		NSD									
C	76	C32		NSD									
C	77	C22		NSD									
C	78	C12		NSD									
C	79	C2		NSD									
C	80	B2		NSD									
C	81	B12	AZQ	4	4	F	4	0.75	5.3	5440	719	Mg, Al, Si, Ca, Fe Actinolite Zone Axis [1 0 0] - KM	TAS_AHRA
C	82	B22		NSD									
C	83	B32		NSD									
C	84	B42		NSD									
C	85	B31		NSD									
C	86	B21		NSD									
C	87	B11		NSD									
C	88	B1		NSD									
C	89	C1		NSD									
C	90	C11		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: SVBA-L2-11CH-100204 *Lab/Cor Sample No.:* B4760 S39 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
A	1	A42		NSD									
A	2	A32		NSD									
A	3	A22		NSD									
A	4	A12		NSD									
A	5	A2	AQ	1		MD1-0	15	15	1.0			Actinolite	AS>5, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
A	5	A2	AQ		1	MF	2.5	0.5	5.0			Mg, Al, Si, Ca, Fe Actinolite	
A	6	D2		NSD									
A	7	D22		NSD									
A	8	D32		NSD									
A	9	D42		NSD									
A	10	A41		NSD									
A	11	A31		NSD									
A	12	A21	AQ	2		MD1-0	10	7.5	1.3			Actinolite	AS>5, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
A	12	A21	AQ		2	MF	6	0.85	7.1			Mg, Al, Si, Ca, Fe Actinolite	AFB>5, PCMEF-US
A	13	A11		NSD									
A	14	A1		NSD									
A	15	D1	AQ	3		MD1-0	15	12	1.2			Actinolite	AS>5, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
A	15	D1	AQ		3	MF	4	0.6	6.7		720	Mg, Al, Si, Ca, Fe Actinolite	
A	16	D11	AQ	4	4	F	5.5	1.5	3.7			Mg, Al, Si, Ca, Fe Actinolite	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
A	17	D21		NSD									
A	18	D31		NSD									
A	19	D41		NSD									
A	20	B42		NSD									
A	21	B32	AQ	5	5	F	10	2	5.0			Mg, Al, Si, Ca, Fe Actinolite	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
A	22	B22		NSD									
A	23	B12		NSD									
A	24	B2		NSD									
A	25	C2		NSD									
A	26	C12		NSD									
A	27	C22		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: SVBA-L2-11CH-100204 *Lab/Cor Sample No.:* B4760 S39 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
A	28	C32		NSD									
A	29	C42		NSD									
A	30	C43		NSD									
A	31	C33		NSD									
B	32	B44		NSD									
B	33	B34		NSD									
B	34	B24		NSD									
B	35	B14		NSD									
B	36	B4		NSD									
B	37	C4		NSD									
B	38	C14		NSD									
B	39	C24		NSD									
B	40	C34		NSD									
B	41	C44		NSD									
B	42	B43		NSD									
B	43	B33		NSD									
B	44	B23		NSD									
B	45	B13	AQ	6	6	F	7.5	1.5	5.0			Mg, Al, Si, Ca, Fe Actinolite	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
B	46	B3		NSD									
B	47	C3		NSD									
B	48	C13		NSD									
B	49	C23		NSD									
B	50	C33		NSD									
B	51	C43		NSD									
B	52	C42		NSD									
B	53	C32		NSD									
B	54	C22	AQ	7		MD1-0	12	7.5	1.6			Actinolite	AS>5, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
B	54	C22	AQ		7	MF	2.75	0.85	3.2			Actinolite	
B	55	C12		NSD									
B	56	C2	AQ	8	8	F	4.5	0.75	6.0			Mg, Al, Si, Ca, Fe Actinolite	TAS_AHRA
B	57	B2		NSD									
B	58	B12		NSD									

Lab/Cor, Inc.

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Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: SVBA-L2-11CH-100204 *Lab/Cor Sample No.:* B4760 S39 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
B	59	B22		NSD									
B	60	B32		NSD									
B	61	B42		NSD									
B	62	B41		NSD									
C	63	A1	AQ	9		MD1-0	10	6	1.7			Actinolite	AS>5, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
C	63	A1	AQ		9	MF	4.5	0.5	9.0			Actinolite	
C	64	A2	AQ	10	10	F	1.2	0.25	4.8			Mg, Al, Si, Ca, Fe Actinolite	TAS_AHRA
C	64	A2	AQ	11		MD1-1	9	5	1.8			Actinolite	AS>5, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
C	64	A2	AQ		11	MF	6.5	0.85	7.6			Mg, Al, Si, Ca, Fe Actinolite	AFB>5, PCMEF-US
C	64	A2	AQ	12		MD1-1	10	6	1.7			Actinolite	AS>5, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
C	64	A2	AQ		12	MF	5	1	5.0			Mg, Al, Si, Ca, Fe Actinolite	
C	65	A3		NSD									
C	66	A4	AQ	13	13	F	4	1.2	3.3			Mg, Al, Si, Ca, Fe Actinolite	TAS_AHRA
C	67	D4		NSD									
C	68	A14		NSD									
C	69	A13		NSD									
C	70	A12		NSD									
C	71	A11		NSD									
C	72	A10		NSD									
C	73	A2		NSD									
C	74	A21		NSD									
C	75	A22	AQ	14	14	F	15	4	3.8			Mg, Al, Si, Ca, Fe Actinolite	AS>5, AFB>5, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
C	76	A23		NSD									
C	77	A24		NSD									
C	78	A34		NSD									
C	79	A33		NSD									
C	80	A32		NSD									
C	81	A31		NSD									
C	82	A30	CDQ	15	15	F	3	0.01	300	984	721	Mg, Si Chrysotile Verified - KM	TAS_AHRA
C	83	A40	AQ	16		MD	15	3	5.0			Actinolite	AS>5, PCMES-US, TAS_AHRA, AS>5_AHRA, AS>10_AHRA

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: SVBA-L2-11CH-100204 *Lab/Cor Sample No.:* B4760 S39 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
C	83	A40	AQ		16	MF	12	1.3	9.2			Mg, Al, Si, Ca, Fe Actinolite	AFB>5, PCMEF-US
C	84	A41	AQ	17	17	F	2.75	0.75	3.7			Mg, Al, Si, Ca, Fe Actinolite	TAS_AHRA
C	85	A42		NSD									
C	86	A43	AQ	18	18	F	7	0.75	9.3			Mg, Al, Si, Ca, Fe Actinolite	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
C	86	A43	AZQ	19	19	F	1.2	0.2	6.0	5441	15334	Mg, Al, Si, Ca, Fe Actinolite Zone Axis [5 1 2] - KM	TAS_AHRA
C	87	B20		NSD									
C	88	B3		NSD									
C	89	B31		NSD									
C	90	B21		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: SVBA-L2-1CH-100204 *Lab/Cor Sample No.:* B4760 S40 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
A	1	B44		NSD									
A	2	B34		NSD									
A	3	B24		NSD									
A	4	B14		NSD									
A	5	B4		NSD									
A	6	C4		NSD									
A	7	C14		NSD									
A	8	C24		NSD									
A	9	C34		NSD									
A	10	C44		NSD									
A	11	C43		NSD									
A	12	C33		NSD									
A	13	C23		NSD									
A	14	B3	AQ	1		MD1-1	14	14	1.0			Actinolite	AS>5, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
A	14	B3	AQ		1	MF	9	2	4.5			Mg, Al, Si, Ca, Fe Actinolite	AFB>5, PCMEF-US
A	15	C3		NSD									
A	16	B13		NSD									
A	17	B23	AQ	2	2	F	14	2.75	5.1			Mg, Al, Si, Ca, Fe Actinolite	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
A	18	B43	AQ	3	3	F	6	1.5	4.0			Mg, Al, Si, Ca, Fe Actinolite	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
A	19	B33		NSD									
A	20	B42	AQ	4	4	F	2.75	0.2	14			Mg, Al, Si, Ca, Fe Actinolite	TAS_AHRA
A	21	B22	AZQ	5		MD	2.5	1.2	2.1			Actinolite	TAS_AHRA
A	21	B22	AZQ		5	MF	2.5	0.2	12	5444	15335	Mg, Al, Si, Ca, Fe Actinolite Zone Axis [1 3 2] - KM	
A	22	B12		NSD									
A	23	B2		NSD									
A	24	C2		NSD									
A	25	C12		NSD									
A	26	C22		NSD									
A	27	C32	AQ	6	6	F	1.5	0.3	5.0			Mg, Al, Si, Ca, Fe Actinolite	TAS_AHRA
A	27	C32	AQ	7		MD1-0	20	15	1.3			Actinolite	AS>5, TAS_AHRA, AS>5_AHRA, AS>10_AHRA

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP; 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: SVBA-L2-1CH-100204 *Lab/Cor Sample No.:* B4760 S40 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
A	27	C32	AQ		7	MF	3.5	0.35	10			Mg, Al, Si, Ca, Fe Actinolite	
A	28	C42		NSD									
A	29	C41		NSD									
A	30	C31		NSD									
A	31	C21		NSD									
A	32	C11		NSD									
A	33	C1		NSD									
B	34	B24		NSD									
B	35	B14		NSD									
B	36	B4		NSD									
B	37	C4		NSD									
B	38	C14		NSD									
B	39	C24		NSD									
B	40	C34	AQ	8	8	F	4.5	0.4	11			Mg, Al, Si, Ca, Fe Actinolite	TAS_AHRA
B	40	C43	AQ	9		MD1-1	50	25	2.0			Actinolite	AS>5, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
B	40	C43	AQ		9	MF	20	4	5.0			Mg, Al, Si, Ca, Fe Actinolite	AFB>5
B	41	C44	AQ	10	10	F.	23	2.5	9.2			Mg, Al, Si, Ca, Fe Actinolite	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
B	42	C42		NSD									
B	43	C22		NSD									
B	44	C2		NSD									
B	45	B12		NSD									
B	46	B32		NSD									
B	47	B42		NSD									
B	48	B40		NSD									
B	49	B20		NSD									
B	50	B10		NSD									
B	51	C10		NSD									
B	52	C30		NSD									
B	53	D41		NSD									
B	54	D21		NSD									
B	55	D1		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: SVBA-L2-1CH-100204 *Lab/Cor Sample No.:* B4760 S40 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
B	56	A11	AQ	11	11	F	5.5	1.3	4.2			Mg, Al, Si, Ca, Fe Actinolite	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
B	57	A31		NSD									
B	58	A41	AQ	12	12	F	10	3	3.3			Mg, Al, Si, Ca, Fe Actinolite	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
B	59	A43		NSD									
B	60	A23	AQ	13	13	F	13.5	2	6.8			Mg, Al, Si, Ca, Fe Actinolite	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
B	60	A23	CDQ	14		MD1-0	4.5	3	1.5			Chrysotile	TAS_AHRA
B	60	A23	CDQ		14	MF	3.8	0.05	76	985	722	Mg, Si Chrysotile Verified - KM	
B	61	A3	CD	15		MD1-1	15	10	1.5			Chrysotile	AS>5, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
B	61	A3	CD		15	MF	6	0.1	60			Chrysotile	AFB>5, PSAS 5-10, PSAS TOT, PCAS 5-10, PCAS TOT
C	62	A43		NSD									
C	63	A33		NSD									
C	64	A23	AQ	16	16	F	11	0.5	22			Mg, Al, Si, Ca, Fe Actinolite	AS>5, AFB>5, PCMEF-US, PCMES-US, PSAS >10, PSAS TOT, PSAM >10, PSAM TOT, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
C	65	A13		NSD									
C	66	A3	AQ	17		MD1-1	9	8	1.1			Actinolite	AS>5, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
C	66	A3	AQ		17	MF	9	0.6	15			Mg, Al, Si, Ca, Fe Actinolite	AFB>5, PCMEF-US
C	67	D3	AQ	18	18	F	7.5	2.4	3.1			Mg, Al, Si, Ca, Fe Actinolite	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
C	68	D13		NSD									
C	69	D23		NSD									
C	70	D33		NSD									
C	71	D43		NSD									
C	72	D41		NSD									
C	73	D21		NSD									
C	74	D1		NSD									
C	75	A11		NSD									
C	76	A31		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: SVBA-L2-1CH-100204 *Lab/Cor Sample No.:* B4760 S40 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
C	77	A41		NSD									
C	78	B40		NSD									
C	79	B30	AQ	19	19	F	10	2	5.0			Mg, Al, Si, Ca, Fe Actinolite	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
C	80	B20		NSD									
C	81	B10		NSD									
C	82	C10		NSD									
C	83	C20	AQ	20	20	F	84	2.3	37			Mg, Al, Si, Ca, Fe Actinolite	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
C	84	C30		NSD									
C	85	C40		NSD									
C	86	C41		NSD									
C	87	C31		NSD									
C	88	C21		NSD									
C	89	C11		NSD									
C	90	C1		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: SVBA-L2-2CH-100204 *Lab/Cor Sample No.:* B4760 S41 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
A	1	A42		NSD									
A	2	A22		NSD									
A	3	A12		NSD									
A	4	B44	AQ	1		MD1-0	7.5	5	1.5			Actinolite	AS>5, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
A	4	B44	AQ		1	MF	4	0.45	8.9			Mg, Al, Si, Ca, Fe Actinolite	
A	5	B34		NSD									
A	6	B24	CM	2	2	F	2.5	0.05	50			Mg, Si Chrysotile	TAS_AHRA
A	6	B24	AQ	3	3	F	5	1.2	4.2			Mg, Al, Si, Ca, Fe Actinolite	TAS_AHRA
A	7	B14		NSD									
A	8	B4		NSD									
A	9	C4		NSD									
A	10	C14		NSD									
A	11	C24		NSD									
A	12	C34		NSD									
A	13	C44		NSD									
A	14	C43		NSD									
A	15	C23		NSD									
A	16	C33	AQ	4	4	F	5	1.2	4.2			Mg, Al, Si, Ca, Fe Actinolite	TAS_AHRA
A	17	C13		NSD									
A	18	C3		NSD									
A	19	B3		NSD									
A	20	B13		NSD									
A	21	B23	AQ	5	5	F	20	5	4.0			Mg, Al, Si, Ca, Fe Actinolite	AS>5, AFB>5, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
A	22	B33	CDQ	6		MD1-0	15	15	1.0			Chrysotile	AS>5, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
A	22	B33	CDQ		6	MB	2	0.35	5.7	986	723	Mg, Si Chrysotile Verified - KM	
A	23	B43		NSD									
A	24	B42	AQ	7	7	F	15	4	3.8			Mg, Al, Si, Ca, Fe Actinolite	AS>5, AFB>5, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
A	25	B32		NSD									
A	26	B22		NSD									
A	27	B12		NSD									
A	28	B2		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: SVBA-L2-2CH-100204 *Lab/Cor Sample No.:* B4760 S41 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
A	29	C2		NSD									
A	30	C12		NSD									
A	31	C22		NSD									
A	32	C32		NSD									
A	33	C42	CDQ	8	8	F	4.5	0.15	30	987	724	Mg, Si Chrysotile Verified - KM	TAS_AHRA
A	33	C42	AQ	9	9	F	4	0.85	4.7	5415	15506	Mg, Al, Si, Ca, Fe Actinolite Zone Axis [1 0 0] - KM	TAS_AHRA
B	34	B43	CQ	10	10	F	1.2	0.1	12			Mg, Si Chrysotile	TAS_AHRA
B	35	B33		NSD									
B	36	B23		NSD									
B	37	B13		NSD									
B	38	B3		NSD									
B	39	C3		NSD									
B	40	C13		NSD									
B	41	C23		NSD									
B	42	C33		NSD									
B	43	C43		NSD									
B	44	C42		NSD									
B	45	C32		NSD									
B	46	C22		NSD									
B	47	C12		NSD									
B	48	C2		NSD									
B	49	B2		NSD									
B	50	B12		NSD									
B	51	B22		NSD									
B	52	B32		NSD									
B	53	B42		NSD									
B	54	B41		NSD									
B	55	B31		NSD									
B	56	B21		NSD									
B	57	B11		NSD									
B	58	B1		NSD									
B	59	C1		NSD									
B	60	C11		NSD									

Lab/Cor, Inc.

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Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: SVBA-L2-2CH-100204 *Lab/Cor Sample No.:* B4760 S41 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
B	61	C21		NSD									
B	62	C31		NSD									
B	63	C41		NSD									
C	64	B42		NSD									
C	65	B32	AQ	11		MD1-1	15	15	1.0			Actinolite	AS>5, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
C	65	B32	AQ		11	MF	5.1	1	5.1			Mg, Al, Si, Ca, Fe Actinolite	AFB>5, PCMEF-US
C	66	B22	AQ	12	12	F	14	4	3.5			Mg, Al, Si, Ca, Fe Actinolite	AS>5, AFB>5, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
C	67	B12		NSD									
C	68	B2		NSD									
C	69	C2		NSD									
C	70	C12		NSD									
C	71	C22	AQ	13		MD1-1	20	10	2.0			Actinolite	AS>5, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
C	71	C22	AQ		13	MF	6	1.5	4.0			Mg, Al, Si, Ca, Fe Actinolite	AFB>5, PCMEF-US
C	72	C32		NSD									
C	73	C42		NSD									
C	74	B41		NSD									
C	75	B31		NSD									
C	76	B21		NSD									
C	77	B11		NSD									
C	78	B1		NSD									
C	79	C1		NSD									
C	80	C11		NSD									
C	81	C21	CM	14	14	F	1.5	0.1	15			Chrysotile	TAS_AHRA
C	82	C31		NSD									
C	83	C41		NSD									
C	84	A11		NSD									
C	85	A1		NSD									
C	86	D1		NSD									
C	87	D11		NSD									
C	88	D21		NSD									
C	89	D31		NSD									
C	90	D41		NSD									

Lab/Cor, Inc.

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Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: SVBA-L2-3CH-100204 *Lab/Cor Sample No.:* B4760 S42 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
A	1	B44		NSD									
A	2	B24		NSD									
A	3	B4		NSD									
A	4	C4		NSD									
A	5	C24		NSD									
A	6	C44		NSD									
A	7	C43		NSD									
A	8	C23		NSD									
A	9	C3		NSD									
A	10	B3	AZQ	1		MD1-1	24	5.25	4.6			Actinolite	AS>5, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
A	10	B3	AZQ		1	MF	22	3	7.3	5411	15306	Mg, Al, Si, Ca, Fe Actinolite Zone Axis [5 1 2] - KM	AFB>5, PCMEF-US
A	11	B23		NSD									
A	12	B43		NSD									
A	13	B42	CMQ	2		MD1-0	12.5	9.5	1.3			Chrysotile	AS>5, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
A	13	B42	CMQ		2	MB	3.4	0.25	14	5443	15307	Mg, Al, Si, Fe Chrysotile No Diffraction	
A	13	B42	OZQ	3		MD1-0	15	11	1.4			Edenite	TOS_AHRA, OS>5_AHRA, OS>10_AHRA
A	13	B42	OZQ		3	MF	4.5	0.6	7.5	5412	15308	Mg, Si, K, Ca, Fe Edenite Zone Axis [4 2 -3] - KM	
A	14	B22		NSD									
A	15	B2		NSD									
A	16	C2		NSD									
A	17	C22		NSD									
A	18	C42		NSD									
A	19	C41	AQ	4	4	F	1.1	0.3	3.7			Mg, Al, Si, Ca, Fe Actinolite	TAS_AHRA
A	19	C41	AQ	5		MD1-0	5.25	3.5	1.5			Actinolite	AS>5, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
A	19	C41	AQ		5	MF	3.5	0.45	7.8			Mg, Al, Si, Ca, Fe Actinolite	
A	20	C21		NSD									
A	21	C1		NSD									
A	22	B1		NSD									
A	23	B21		NSD									
A	24	B41		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: SVBA-L2-3CH-100204 *Lab/Cor Sample No.:* B4760 S42 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
A	25	A41		NSD									
A	26	A21		NSD									
A	27	A1		NSD									
A	28	D1		NSD									
A	29	D21	ADQ	6		MD1-1	15	7	2.1			Mg, Si, Ca, Fe Actinolite	AS>5, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
A	29	D21	ADQ		6	MF	8	0.8	10			Mg, Si, Ca, Fe Actinolite	AFB>5, PCMEF-US
A	30	D31		NSD									
B	31	B34		NSD									
B	32	B14		NSD									
B	33	C4	ADQ	7	7	F	5.5	0.38	14			Mg, Si, Ca, Fe Actinolite	AS>5, AFB>5, PCMEF-US, PCMES-US, PSAS 5-10, PSAS TOT, PSAM 5-10, PSAM TOT, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
B	34	C24		NSD									
B	35	C44		NSD									
B	36	B33		NSD									
B	37	B23		NSD									
B	38	B3		NSD									
B	39	C13		NSD									
B	40	C33		NSD									
B	41	B32		NSD									
B	42	B12		NSD									
B	43	C2		NSD									
B	44	C22		NSD									
B	45	C42		NSD									
B	46	B1		NSD									
B	47	C11	CMQ	8		MD1-0	4.5	2.2	2.0			Chrysotile	TAS_AHRA
B	47	C11	CMQ		8	MF	1.5	0.1	15	5442	15309	Mg, Si Chrysotile No Diffraction	
B	48	C21		NSD									
B	49	C31		NSD									
B	50	C41		NSD									
B	51	A31		NSD									
B	52	A11		NSD									
B	53	D1		NSD									

Lab/Cor, Inc.

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Report # 041172R3

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Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: SVBA-L2-3CH-100204 *Lab/Cor Sample No.:* B4760 S42 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
B	54	D21		NSD									
B	55	D41		NSD									
B	56	A42		NSD									
B	57	A22		NSD									
B	58	A2		NSD									
B	59	D12		NSD									
B	60	D32		NSD									
C	61	B44		NSD									
C	62	B34		NSD									
C	63	B24		NSD									
C	64	B4	ADQ	9	9	F	5.8	0.4	14			Mg, Si, Ca, Fe Actinolite	AS>5, AFB>5, PCMEF-US, PCMES-US, PSAS 5-10, PSAS TOT, PSAM 5-10, PSAM TOT, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
C	65	C14		NSD									
C	66	B33		NSD									
C	67	B13		NSD									
C	68	B3		NSD									
C	69	C3		NSD									
C	70	C43		NSD									
C	71	B42		NSD									
C	72	B22		NSD									
C	73	B12	ADQ	10	10	F	4.8	0.8	6.0	1009	15507	Mg, Si, Fe Anthophyllite [8 1 2] Zone - KM	TAS_AHRA
C	74	B2		NSD									
C	75	C2		NSD									
C	76	B41		NSD									
C	77	B31		NSD									
C	78	B21		NSD									
C	79	B11		NSD									
C	80	B1		NSD									
C	81	A41		NSD									
C	82	A21		NSD									
C	83	A1		NSD									
C	84	D11		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: SVBA-L2-3CH-100204 *Lab/Cor Sample No.:* B4760 S42 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
C	85	D31		NSD									
C	86	A42		NSD									
C	87	A32		NSD									
C	88	A22		NSD									
C	89	A12		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: SVBA-L2-4CH-100204 *Lab/Cor Sample No.:* B4760 S43 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
A	1	A44		NSD									
A	2	A42	AZQ	1	1	F	10	1.8	5.6	988	725	Na, Mg, Al, Si, Ca, Fe Actinolite Zone Axis [3 2 1] - KM	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
A	3	A4	AQ	2	2	F	3	0.7	4.3			Mg, Al, Si, Ca, Fe Actinolite	TAS_AHRA
A	4	D14		NSD									
A	5	D34		NSD									
A	6	D44		NSD									
A	7	D42		NSD									
A	8	D22		NSD									
A	9	D2		NSD									
A	10	A12		NSD									
A	11	A32		NSD									
A	12	A42		NSD									
A	13	A40		NSD									
A	14	A10		NSD									
A	15	D20		NSD									
A	16	D40		NSD									
A	17	C41		NSD									
A	18	C21		NSD									
A	19	B1		NSD									
A	20	B11		NSD									
A	21	B31		NSD									
A	22	B41		NSD									
A	23	B43		NSD									
A	24	B23	AQ	3	3	F	21	7	3.0			Mg, Al, Si, Ca, Fe Actinolite	AS>5, AFB>5, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
A	25	C3	AQ	4	4	F	2.6	0.8	3.2			Mg, Al, Si, Ca, Fe Actinolite	TAS_AHRA
A	26	C12	AQ	5	5	F	12	3	4.0			Mg, Al, Si, Ca, Fe Actinolite Alumino-actinolite	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
A	27	C22		NSD									
A	28	C32		NSD									
A	29	C42		NSD									
A	30	C34		NSD									
B	31	B44		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: SVBA-L2-4CH-100204 *Lab/Cor Sample No.:* B4760 S43 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
B	32	B24		NSD									
B	33	B14		NSD									
B	34	C4		NSD									
B	35	C42		NSD									
B	36	C22		NSD									
B	37	B22		NSD									
B	38	B32		NSD									
B	39	B42		NSD									
B	40	B40		NSD									
B	41	B30		NSD									
B	42	B10		NSD									
B	43	B30		NSD									
B	44	B40		NSD									
B	45	D41	AQ	6	6	F	18	2.5	7.2			Mg, Al, Si, Ca, Fe Actinolite Alumino-actinolite	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
B	46	D21	AQ	7	7	F	6	1.6	3.8			Mg, Al, Si, Ca, Fe Actinolite	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
B	47	D1		NSD									
B	48	A11		NSD									
B	49	D2		NSD									
B	50	D12		NSD									
B	51	D22		NSD									
B	52	D32		NSD									
B	53	D42	AQ	8	8	F	8	0.7	11			Mg, Al, Si, Ca, Fe Actinolite	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
B	54	D44		NSD									
B	55	D24		NSD									
B	56	D4		NSD									
B	57	A4		NSD									
B	58	C11		NSD									
B	59	C10		NSD									
B	60	D10		NSD									
C	61	A33		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: SVBA-L2-4CH-100204 *Lab/Cor Sample No.:* B4760 S43 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
C	62	A23	AQ	9	9	F	9	2.4	3.7			Mg, Al, Si, Ca, Fe Actinolite	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
C	63	A13		NSD									
C	64	A3		NSD									
C	65	D3		NSD									
C	66	D13		NSD									
C	67	D33		NSD									
C	68	D2		NSD									
C	69	D1		NSD									
C	70	A2		NSD									
C	71	A22		NSD									
C	72	A32		NSD									
C	73	A42		NSD									
C	74	A30		NSD									
C	75	A20		NSD									
C	76	D30		NSD									
C	77	C40		NSD									
C	78	C30		NSD									
C	79	B40		NSD									
C	80	B41		NSD									
C	81	B31		NSD									
C	82	B21		NSD									
C	83	B1		NSD									
C	84	C1		NSD									
C	85	C22		NSD									
C	86	C2	AQ	10	10	F	24	3.5	6.9			Mg, Al, Si, Ca, Fe Actinolite	AS>5, AFB>5, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
C	87	C22		NSD									
C	88	C3		NSD									
C	89	C13		NSD									
C	90	C23		NSD									
C	91	C33	AQ	11	11	F	7.5	1.5	5.0			Mg, Al, Si, Ca, Fe Actinolite Alumino-actinolite	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: SVBA-L2-5CH-100204 *Lab/Cor Sample No.:* B4760 S44 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
A	1	B44		NSD									
A	2	B34		NSD									
A	3	B24		NSD									
A	4	B14	AZQ	1	1	F	9.5	1.5	6.3	5417	15312	Mg, Al, Si, Ca, Fe Actinolite Zone Axis [5 1 4] - KM	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
A	5	B4		NSD									
A	6	B43	CDQ	2	2	F	1.8	0.1	18	5418	15313	Mg, Si, Ca, Fe Chrysotile Verified - KM	TAS_AHRA
A	7	B33	ADQ	3	3	F	3.8	0.7	5.4			Mg, Si, Ca, Fe Actinolite	TAS_AHRA
A	8	B23		NSD									
A	9	B13		NSD									
A	10	B3		NSD									
A	11	B42		NSD									
A	12	B22		NSD									
A	13	B2		NSD									
A	14	C2		NSD									
A	15	C12		NSD									
A	16	B41		NSD									
A	17	B21		NSD									
A	18	B1		NSD									
A	19	C11		NSD									
A	20	C31		NSD									
A	21	A11		NSD									
A	22	A1		NSD									
A	23	D1		NSD									
A	24	D11		NSD									
A	25	D21		NSD									
A	26	B40		NSD									
A	27	B30		NSD									
A	28	B20		NSD									
A	29	B10		NSD									
A	30	C10		NSD									
A	31	C20		NSD									
B	32	B44		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: SVBA-L2-5CH-100204 *Lab/Cor Sample No.:* B4760 S44 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
B	33	B24		NSD									
B	34	B4		NSD									
B	35	C4		NSD									
B	36	C24	CDQ	4		MD1-1	12	7.75	1.5			Chrysotile	AS>5, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
B	36	C24	CDQ		4	MB	7	0.4	18	5419	15314	Mg, Si, Fe Chrysotile Verified - KM	AFB>5, PCMEF-US, PSAS 5-10, PSAS TOT, PCAS 5-10, PCAS TOT
B	37	C44		NSD									
B	38	C43		NSD									
B	39	C23		NSD									
B	40	C3		NSD									
B	42	B23	AZQ	5		MD1-0	5.25	2.75	1.9			Actinolite	AS>5, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
B	42	B23	AZQ		5	MF	4	0.25	16	5420	15315	Mg, Al, Si, Ca, Fe Actinolite Zone Axis [2 1 0] - KM	
B	41	B3		NSD									
B	43	B43	AQ	6	6	F	1.05	0.25	4.2			Mg, Al, Si, Ca, Fe Actinolite	TAS_AHRA
B	44	B42	AQ	7	7	F	5.5	1.25	4.4			Mg, Al, Si, Ca, Fe Actinolite	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
B	45	B22		NSD									
B	46	B2		NSD									
B	47	C2		NSD									
B	48	C22		NSD									
B	49	C42	AQ	8	8	F	17.75	1.75	10			Mg, Al, Si, Ca, Fe Actinolite	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
B	50	C41	AQ	9	9	F	3.75	0.45	8.3			Mg, Al, Si, Ca, Fe Actinolite	TAS_AHRA
B	51	C21		NSD									
B	52	C1		NSD									
B	53	B1		NSD									
B	54	B21	CD	10	10	F	0.55	0.05	11			Chrysotile	TAS_AHRA
B	55	B41	AQ	11	11	F	15.5	3.5	4.4			Mg, Al, Si, Ca, Fe Actinolite	AS>5, AFB>5, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
B	56	B40		NSD									
B	57	B20		NSD									
B	58	C10		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: SVBA-L2-5CH-100204 *Lab/Cor Sample No.:* B4760 S44 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
B	59	C30	ADQ	12	12	F	3.25	0.75	4.3		15316	Mg, Al, Si, Fe Anthophyllite	TAS_AHRA
B	60	D10		NSD									
B	61	A20		NSD									
B	62	A40	AZQ	13	13	F	2.75	0.6	4.6	5422	15317	Na, Mg, Si, Ca, Fe Winchite Potassianwinchite - Zone Axis [7 -1 2] - KM	TAS_AHRA
C	63	B44		NSD									
C	64	B24		NSD									
C	65	B4		NSD									
C	66	C14		NSD									
C	67	C34		NSD									
C	68	B33		NSD									
C	69	B13		NSD									
C	70	C3		NSD									
C	71	C23		NSD									
C	72	C43		NSD									
C	73	B42		NSD									
C	74	B22		NSD									
C	75	B2	AZQ	14	14	F	6.8	2	3.4	5425	15320	Na, Mg, Al, Si, Fe Anthophyllite Zone Axis [2 1 - 1] - KM	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
C	76	C12		NSD									
C	77	C32		NSD									
C	78	B31		NSD									
C	79	B11		NSD									
C	80	C1		NSD									
C	81	C21		NSD									
C	82	C41		NSD									
C	83	A31		NSD									
C	84	A21		NSD									
C	85	A1		NSD									
C	86	D11		NSD									
C	87	D31		NSD									
C	88	A32		NSD									
C	89	A12		NSD									
C	90	D2		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: SVBA-L2-5CH-100204 *Lab/Cor Sample No.:* B4760 S44 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
C	91	D22		NSD									
C	92	D42		NSD									
C	93	B21		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: SVBB-L2-12CH-100304 *Lab/Cor Sample No.:* B4760 S45 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
B	52	B41		NSD									
A	1	B24		NSD									
A	2	B4		NSD									
A	3	C14		NSD									
A	4	C24		NSD									
A	5	C34		NSD									
A	6	B33		NSD									
A	7	B13		NSD									
A	8	C3	CMQ	1	1	F	1.8	0.1	18	991	726	Mg, Si Chrysotile	TAS_AHRA
A	9	C23		NSD									
A	10	C43		NSD									
A	11	B32		NSD									
A	12	B22		NSD									
A	13	B2	AZQ	2	2	F	4.5	1	4.5	992	727	Mg, Al, Si, Ca, Fe Actinolite Zone Axis [1 1 0] - KM	TAS_AHRA
A	14	C12		NSD									
A	15	C32		NSD									
A	16	C42		NSD									
A	17	B31		NSD									
A	18	B11		NSD									
A	19	C1		NSD									
A	20	C21		NSD									
A	21	C41		NSD									
A	22	A31		NSD									
A	23	A11		NSD									
A	24	D1		NSD									
A	25	D21		NSD									
A	26	D41		NSD									
A	27	A42		NSD									
A	28	A22		NSD									
A	29	A2		NSD									
A	30	D12		NSD									
A	31	D32		NSD									
B	32	B44		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: SVBB-L2-12CH-100304 *Lab/Cor Sample No.:* B4760 S45 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
B	33	B24		NSD									
B	34	B4		NSD									
B	35	C14		NSD									
B	36	C34		NSD									
B	37	B43		NSD									
B	38	B33		NSD									
B	39	B23		NSD									
B	40	B13		NSD									
B	41	B3		NSD									
B	42	C3		NSD									
B	43	C13		NSD									
B	44	C23		NSD									
B	45	C33		NSD									
B	46	B42		NSD									
B	47	B22		NSD									
B	48	B2		NSD									
B	49	C12		NSD									
B	50	C22		NSD									
B	51	C32	CDQ	3	3	F	0.8	0.11	7.3	1002	736	Mg, Si Chrysotile Verified - KM	TAS_AHRA
B	53	B31		NSD									
B	54	B21		NSD									
B	55	B1		NSD									
B	56	C11		NSD									
B	57	C31		NSD									
B	58	A41		NSD									
B	59	A31		NSD									
B	60	A21		NSD									
B	61	A11		NSD									
B	62	A10		NSD									
C	63	B4		NSD									
C	64	C4		NSD									
C	65	C14		NSD									
C	66	C24		NSD									

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Report # 041172R3

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Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: SVBB-L2-12CH-100304 *Lab/Cor Sample No.:* B4760 S45 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
C	67	C34		NSD									
C	68	B33		NSD									
C	69	B23		NSD									
C	70	B3		NSD									
C	71	C13		NSD									
C	72	C33		NSD									
C	73	A22		NSD									
C	74	A12		NSD									
C	75	A2		NSD									
C	76	D12		NSD									
C	77	D22	CD	4		MD2-0	8	8	1.0			Chrysotile	AS>5, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
C	77	D22	CD		4	MF	2	0.08	25			Chrysotile	
C	77	D22	CD		5	MF	1.2	0.1	12			Chrysotile	
C	78	A21		NSD									
C	79	A1		NSD									
C	80	A30		NSD									
C	81	A20		NSD									
C	82	A10		NSD									
C	83	D10		NSD									
C	84	B30		NSD									
C	85	B20		NSD									
C	86	B10		NSD									
C	87	C10		NSD									
C	88	C20		NSD									
C	89	B11		NSD									
C	90	B1		NSD									
C	91	C1		NSD									
C	92	C11		NSD									
C	93	C21		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

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Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: SVBB-L2-1CH-100304 *Lab/Cor Sample No.:* B4760 S46 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
A	1	B44		NSD									
A	2	B24	AZQ	1	1	F	7.5	1	7.5	1003	728	Mg, Al, Si, Ca, Fe Actinolite Zone Axis [5 1 0] - KM	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
A	3	B4		NSD									
A	4	C14	AQ	2	2	F	22	4	5.5			Mg, Al, Si, Ca, Fe Actinolite	AS>5, AFB>5, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
A	5	C34		NSD									
A	6	B33		NSD									
A	7	B13		NSD									
A	8	C3		NSD									
A	9	C23		NSD									
A	10	C43	AQ	3	3	F	11.5	2	5.8			Mg, Al, Si, Ca, Fe Actinolite	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
A	11	B42		NSD									
A	12	B22		NSD									
A	13	B2		NSD									
A	14	C12		NSD									
A	15	C32		NSD									
A	16	B31		NSD									
A	17	B11		NSD									
A	18	C1		NSD									
A	19	C21		NSD									
A	20	C41		NSD									
A	21	A41		NSD									
A	22	A21		NSD									
A	23	A1		NSD									
A	24	D11	ADQ	4	4	F	23	4.2	5.5			Mg, Al, Si, Ca, Fe Actinolite	AS>5, AFB>5, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
A	25	D31		NSD									
A	26	A32		NSD									
A	27	A12		NSD									
A	28	D2		NSD									
A	29	D22		NSD									
A	30	D42		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: SVBB-L2-1CH-100304 *Lab/Cor Sample No.:* B4760 S46 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
B	31	B44		NSD									
B	32	B24		NSD									
B	33	B4		NSD									
B	34	C14		NSD									
B	35	C34		NSD									
B	36	B33		NSD									
B	37	B13		NSD									
B	38	C3		NSD									
B	39	C23		NSD									
B	40	C43		NSD									
B	41	B42		NSD									
B	42	B32		NSD									
B	43	B22		NSD									
B	44	B12		NSD									
B	45	B2		NSD									
B	46	C2		NSD									
B	47	C12		NSD									
B	48	C22		NSD									
B	49	C32		NSD									
B	50	C42		NSD									
B	51	A41		NSD									
B	52	A31		NSD									
B	53	A21		NSD									
B	54	A11		NSD									
B	55	A1		NSD									
B	56	D1		NSD									
B	57	D11		NSD									
B	58	D21		NSD									
B	59	D31		NSD									
B	60	D41		NSD									
B	61	D32		NSD									
B	62	D12		NSD									
B	63	A2		NSD									
C	64	B44		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: SVBB-L2-1CH-100304 *Lab/Cor Sample No.:* B4760 S46 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
C	65	B24		NSD									
C	66	B4		NSD									
C	67	C14		NSD									
C	68	C34		NSD									
C	69	C44		NSD									
C	70	C43		NSD									
C	71	C33		NSD									
C	72	C23		NSD									
C	73	C13		NSD									
C	74	C3		NSD									
C	75	B3		NSD									
C	76	B13		NSD									
C	77	B23	AQ	5	5	F	5	0.85	5.9			Mg, Al, Si, Ca, Fe Actinolite	TAS_AHRA
C	78	B33		NSD									
C	79	B22		NSD									
C	80	B12		NSD									
C	81	B2	AQ	6	6	F	10	2.5	4.0			Mg, Al, Si, Ca, Fe Actinolite	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
C	81	B2	AQ	7		MD1-1	20	20	1.0			Actinolite	AS>5, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
C	81	B2	AQ		7	MF	20	2	10			Mg, Al, Si, Ca, Fe Actinolite	AFB>5, PCMEF-US
C	82	C2		NSD									
C	83	C12		NSD									
C	84	C22		NSD									
C	85	C32		NSD									
C	86	C42		NSD									
C	87	C41		NSD									
C	88	C31		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: SVBB-L2-2CH-100304 *Lab/Cor Sample No.:* B4760 S47 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
A	1	B44		NSD									
A	2	B34		NSD									
A	3	B24		NSD									
A	4	B14		NSD									
A	5	C14	AQ	1		MD1-1	11	6	1.8			Actinolite	AS>5, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
A	5	C14	AQ		1	MF	11	2.5	4.4		729	Mg, Al, Si, Ca, Fe Actinolite	AFB>5, PCMEF-US
A	6	C24		NSD									
A	7	C34		NSD									
A	8	C44		NSD									
A	9	C23		NSD									
A	10	C13		NSD									
A	11	C3		NSD									
A	12	B13	AZQ	2		MD1-1	10	6	1.7			Actinolite	AS>5, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
A	12	B13	AZQ		2	MF	7.5	0.75	10	5445	15336	Mg, Al, Si, Ca, Fe Actinolite Zone Axis [1 1 0] - KM	AFB>5, PCMEF-US
A	13	B23		NSD									
A	14	B33		NSD									
A	15	B43		NSD									
A	16	B42		NSD									
A	17	B32		NSD									
A	18	B22		NSD									
A	19	B12		NSD									
A	20	B2		NSD									
A	21	C2		NSD									
A	22	C12		NSD									
A	23	C22		NSD									
A	24	C32		NSD									
A	25	C42		NSD									
A	26	C41		NSD									
A	27	C31		NSD									
A	28	C21	AQ	3	3	F	12	1	12			Mg, Si, Ca, Fe Actinolite	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
A	29	C11		NSD									

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A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: SVBB-L2-2CH-100304 *Lab/Cor Sample No.:* B4760 S47 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
A	30	C1		NSD									
A	31	B1		NSD									
A	32	B11		NSD									
B	33	B44		NSD									
B	34	B34		NSD									
B	35	B24		NSD									
B	36	B14		NSD									
B	37	B4		NSD									
B	38	C4		NSD									
B	39	C14		NSD									
B	40	C24		NSD									
B	41	C34		NSD									
B	42	C33		NSD									
B	43	C23		NSD									
B	44	C13	AQ	4		MD1-0	7	4	1.8			Actinolite	AS>5, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
B	44	C13	AQ		4	MF	2.75	0.85	3.2			Mg, Al, Si, Ca, Fe Actinolite	
B	45	C3		NSD									
B	46	B3		NSD									
B	47	B13		NSD									
B	48	B23		NSD									
B	49	B33		NSD									
B	50	B43		NSD									
B	51	B42		NSD									
B	52	B32		NSD									
B	53	B22		NSD									
B	54	B12		NSD									
B	55	B2		NSD									
B	56	C2		NSD									
B	57	C12		NSD									
B	58	C22		NSD									
B	59	C32		NSD									
B	60	C42		NSD									
C	61	B44		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: SVBB-L2-2CH-100304 *Lab/Cor Sample No.:* B4760 S47 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
C	62	B34	CDQ	5	5	F	1	0.1	10	995	731	Mg, Si Chrysotile Verified - KM	TAS_AHRA
C	63	B24		NSD									
C	64	B14		NSD									
C	65	B4		NSD									
C	66	C4		NSD									
C	67	C14		NSD									
C	68	C24		NSD									
C	69	C34		NSD									
C	70	C43		NSD									
C	71	C33		NSD									
C	72	C23	AQ	6	6	F	5	1.2	4.2			Mg, Al, Si, Ca, Fe Actinolite	TAS_AHRA
C	73	C13	AQ	7		MD1-1	20	7.5	2.7			Actinolite	AS>5, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
C	73	C13	AQ		7	MF	16	2.5	6.4			Mg, Al, Si, Ca, Fe Actinolite	AFB>5, PCMEF-US
C	74	C3		NSD									
C	75	B3		NSD									
C	76	B13		NSD									
C	77	B23	AQ	8		MD1-1	15	10	1.5			Actinolite	AS>5, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
C	77	B23	AQ		8	MF	13	1.3	10			Mg, Al, Si, Ca, Fe Actinolite	AFB>5, PCMEF-US
C	78	B33		NSD									
C	79	B43		NSD									
C	80	B42		NSD									
C	81	B32		NSD									
C	82	B22		NSD									
C	83	B12	AZQ	9		MD1-1	11	7.5	1.5			Actinolite	AS>5, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
C	83	B12	AZQ		9	MF	11	0.75	15	5424	15319	Mg, Al, Si, Ca, Fe Actinolite Zone Axis [5 -1 2] - KM	AFB>5, PCMEF-US
C	84	B2	CMQ	10	10	F	1.5	0.1	15			Mg, Si Chrysotile	TAS_AHRA
C	85	B1		NSD									
C	86	B11		NSD									

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A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: SVBB-L2-3CH-100304 *Lab/Cor Sample No.:* B4760 S48 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
A	1	B44	AZQ	1		MD1-1	9.5	4	2.4			Actinolite	AS>5, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
A	1	B44	AZQ		1	MF	9	1.3	6.9	5426	15321	Mg, Al, Si, Ca, Fe Actinolite Zone Axis [3 -1 2] - KM	AFB>5, PCMEF-US
A	2	B24		NSD									
A	3	B4		NSD									
A	4	C14		NSD									
A	5	C44		NSD									
A	6	B33		NSD									
A	7	B13		NSD									
A	8	C3		NSD									
A	9	C23		NSD									
A	10	C43		NSD									
A	11	B42		NSD									
A	12	B22		NSD									
A	13	B2		NSD									
A	14	C12	ADQ	2	2	F	7.8	2.5	3.1			Mg, Al, Si, Ca, Fe Actinolite	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
A	15	C32		NSD									
A	16	B31		NSD									
A	17	B11		NSD									
A	18	C1		NSD									
A	19	C21		NSD									
A	20	C41		NSD									
A	21	A41		NSD									
A	22	A31		NSD									
A	23	A21		NSD									
A	24	A11		NSD									
A	25	A1		NSD									
A	26	D1		NSD									
A	27	A40		NSD									
A	28	A30		NSD									
A	29	A10		NSD									
B	30	B42		NSD									
B	31	B22		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: SVBB-L2-3CH-100304 *Lab/Cor Sample No.:* B4760 S48 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
B	32	B12		NSD									
B	33	B2		NSD									
B	34	C2		NSD									
B	35	C12		NSD									
B	36	B21		NSD									
B	37	B11		NSD									
B	38	B1		NSD									
B	39	C1		NSD									
B	40	C11		NSD									
B	41	C21		NSD									
B	42	C10		NSD									
B	43	B20		NSD									
B	44	B10		NSD									
B	45	A30		NSD									
B	46	D30	AZQ	3	3	F	7.5	0.6	12	5428	15323	Mg, Al, Si, Ca, Fe Tremolite Zone Axis [5 1 6] - KM	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
B	47	D40		NSD									
B	48	A31		NSD									
B	49	A21		NSD									
B	50	A11		NSD									
B	51	A1		NSD									
B	52	D11		NSD									
B	53	D21		NSD									
B	54	A12		NSD									
B	55	D2		NSD									
B	56	D12	ADQ	4	4	F	2.8	0.45	6.2			Mg, Al, Si, Ca, Fe Actinolite	TAS_AHRA
B	57	D22		NSD									
C	58	A33	AZQ	5	5	F	15	1.6	9.4	1007	738	Mg, Al, Si, Ca, Fe Tremolite Zone Axis [5 1 4] - KM	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
C	59	A13		NSD									
C	60	D3		NSD									
C	61	D23		NSD									
C	62	D43		NSD									
C	63	D41		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: SVBB-L2-3CH-100304 *Lab/Cor Sample No.:* B4760 S48 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
C	64	D21		NSD									
C	65	D1		NSD									
C	66	A11		NSD									
C	67	A31		NSD									
C	68	A41		NSD									
C	69	B20		NSD									
C	70	B10		NSD									
C	71	C10		NSD									
C	72	C30		NSD									
C	73	C40		NSD									
C	74	C42		NSD									
C	75	C22		NSD									
C	76	C2		NSD									
C	77	B12		NSD									
C	78	B22		NSD									
C	79	B42		NSD									
C	80	B43		NSD									
C	81	B23		NSD									
C	82	B3	AQ	6	6	F	3.5	0.7	5.0			Mg, Al, Si, Ca, Fe Actinolite	TAS_AHRA
C	83	C13		NSD									
C	84	C33		NSD									
C	85	C34		NSD									
C	86	C44		NSD									
C	87	C24		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: SVBB-L2-4CH-100304 *Lab/Cor Sample No.:* B4760 S49 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
A	1	B44		NSD									
A	2	B24		NSD									
A	3	B4		NSD									
A	4	C14		NSD									
A	5	C34		NSD									
A	6	B33		NSD									
A	7	B13		NSD									
A	8	C3		NSD									
A	9	C23		NSD									
A	10	C43		NSD									
A	11	B42	AZQ	1	1	F	15	2.5	6.0	1004	15323	Mg, Al, Si, Ca, Fe Tremolite Zone Axis [1 0 1] - KM	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
A	12	B22		NSD									
A	13	B2	CDQ	2		MD1-0	4.5	3	1.5			Chrysotile	TAS_AHRA
A	13	B2	CDQ		2	MF	1	0.08	12	5429	15324	Mg, Si Chrysotile Verified - KM	
A	14	C12		NSD									
A	15	C32		NSD									
A	16	B31		NSD									
A	17	B11		NSD									
A	18	C1		NSD									
A	19	C21		NSD									
A	20	C41		NSD									
A	21	A41		NSD									
A	22	A21		NSD									
A	23	A1		NSD									
A	24	D11		NSD									
A	25	D31		NSD									
A	26	A32		NSD									
A	27	D22	AZQ	3		MD1-0	4.7	1	4.7			Actinolite	TAS_AHRA
A	27	D22	AZQ		3	MF	4.7	0.6	7.8	1008	15325	Mg, Al, Si, Ca, Fe Actinolite [1 0 1] Zone - KM	
A	28	A12		NSD									
A	29	D2		NSD									
A	30	A10		NSD									

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A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: SVBB-L2-4CH-100304 *Lab/Cor Sample No.:* B4760 S49 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
B	31	B34		NSD									
B	32	B14		NSD									
B	33	C4		NSD									
B	34	C24		NSD									
B	35	C44		NSD									
B	36	B43		NSD									
B	37	B13		NSD									
B	38	C3		NSD									
B	39	C43	CMQ	4		MD1-0	9	5	1.8			Chrysotile	AS>5, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
B	39	C43	CMQ		4	MF	1	0.12	8.3			Mg, Si Chrysotile	
B	40	C23		NSD									
B	41	B42		NSD									
B	42	B22		NSD									
B	43	B2		NSD									
B	44	C12		NSD									
B	45	C32		NSD									
B	46	B41		NSD									
B	47	B21		NSD									
B	48	B1		NSD									
B	49	C11		NSD									
B	50	C21		NSD									
B	51	A41		NSD									
B	52	A21		NSD									
B	53	A1		NSD									
B	54	D11		NSD									
B	55	D21		NSD									
B	56	B40		NSD									
B	57	B20		NSD									
B	58	A30	ADQ	5	5	F	3.8	0.4	9.5			Mg, Al, Si, Ca, Fe Actinolite	TAS_AHRA
B	59	A20		NSD									
B	60	A10	ADQ	6	6	F	5.5	0.6	9.2			Mg, Al, Si, Ca, Fe Actinolite	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: SVBB-L2-5CH-100304 *Lab/Cor Sample No.:* B4760 S50 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
A	1	A43		NSD									
A	2	A23		NSD									
A	3	A3		NSD									
A	4	D13		NSD									
A	5	D33		NSD									
A	6	D43		NSD									
A	7	D41		NSD									
A	8	D21		NSD									
A	9	D1		NSD									
A	10	A11		NSD									
A	11	A31		NSD									
A	12	A41		NSD									
A	13	B40		NSD									
A	14	B20		NSD									
A	15	B10		NSD									
A	16	C10	AZQ	1	1	F	15	2	7.5	997	732	Na, Mg, Al, Si, Ca, Fe Actinolite Zone Axis [1 2 2] - KM	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
A	17	C30		NSD									
A	18	C40		NSD									
A	19	C42		NSD									
A	20	C22		NSD									
A	21	C2		NSD									
A	22	B12		NSD									
A	23	B32		NSD									
A	24	B42		NSD									
A	25	B43		NSD									
A	26	B23		NSD									
A	27	B3		NSD									
A	28	C13		NSD									
A	29	C33		NSD									
B	30	B14		NSD									
B	31	C4		NSD									
B	32	C34	CDQ	2	2	F	1.3	0.05	26	998	733	Mg, Si Chrysotile Verified - KM	TAS_AHRA

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: SVBB-L2-5CH-100304 *Lab/Cor Sample No.:* B4760 S50 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
B	33	C44		NSD									
B	34	C42		NSD									
B	35	C22		NSD									
B	36	C2		NSD									
B	37	B12		NSD									
B	38	B33		NSD									
B	39	B40		NSD									
B	40	B20		NSD									
B	41	B10		NSD									
B	42	C10	ADQ	3	3	F	3.9	0.2	20			Mg, Si, Ca, Fe Actinolite	TAS_AHRA
B	43	C30		NSD									
B	44	C40		NSD									
B	45	D41		NSD									
B	46	D21		NSD									
B	47	D1		NSD									
B	48	A11		NSD									
B	49	A31		NSD									
B	50	A41		NSD									
B	51	A43	AQ	4	4	F	25	4	6.2			Mg, Al, Si, Ca, Fe Actinolite	AS>5, AFB>5, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
B	52	A23		NSD									
B	53	A3		NSD									
B	54	D13		NSD									
B	55	D33		NSD									
B	56	D34		NSD									
B	57	D14		NSD									
B	58	A4		NSD									
C	59	A43		NSD									
C	60	A23		NSD									
C	61	A3		NSD									
C	62	D13		NSD									
C	63	D33		NSD									
C	64	D43		NSD									
C	65	D41		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: SVBB-L2-5CH-100304 *Lab/Cor Sample No.:* B4760 S50 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
C	66	D21		NSD									
C	67	D1		NSD									
C	68	A11		NSD									
C	69	A31		NSD									
C	70	A41		NSD									
C	71	B20		NSD									
C	72	B10		NSD									
C	73	C10		NSD									
C	74	C30		NSD									
C	75	C40		NSD									
C	76	C42		NSD									
C	77	C12		NSD									
C	78	C2		NSD									
C	79	B2		NSD									
C	80	B22		NSD									
C	81	B32		NSD									
C	82	B42		NSD									
C	83	B33		NSD									
C	84	B13		NSD									
C	85	C3		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: SVM-H2-1FD-100204 *Lab/Cor Sample No.:* B4760 S51 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
A	1	B41		NSD									
A	2	B31		NSD									
A	3	B21		NSD									
A	4	B11		NSD									
A	5	B1		NSD									
A	6	C11		NSD									
A	7	C31	CMQ	1	1	B	16	0.5	32	999	734	Mg, Si Chrysotile No Diffraction	AS>5, AFB>5, PCMEF-US, PCMES-US, PSAS >10, PSAS TOT, PCAS >10, PCAS TOT, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
A	8	C42		NSD									
A	9	C22		NSD									
A	10	C2	CMQ	2	2	B	2.5	0.4	6.2			Mg, Si Chrysotile	TAS_AHRA
A	11	B12		NSD									
B	12	A41		NSD									
B	13	A21		NSD									
B	14	A11		NSD									
B	15	D1		NSD									
B	16	D11		NSD									
B	17	D31		NSD									
B	18	D42		NSD									
B	19	D22		NSD									
B	20	D2		NSD									
B	21	A12		NSD									
B	22	A32		NSD									

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: SVM-H2-2FD-100204 *Lab/Cor Sample No.:* B4760 S52 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
A	1	B34		NSD									
A	2	B24		NSD									
A	3	B14		NSD									
A	4	C4		NSD									
A	5	C14		NSD									
A	6	C34		NSD									
A	7	C43		NSD									
A	8	C33		NSD									
A	9	C13		NSD									
A	10	C3		NSD									
A	11	B13		NSD									
A	12	B23		NSD									
A	13	A41		NSD									
A	14	A21		NSD									
B	15	B44		NSD									
B	16	B34		NSD									
B	17	B24		NSD									
B	18	C4		NSD									
B	19	C14		NSD									
B	20	C24		NSD									
B	21	C34	CDQ	1	1	B	10	2	5.0	1010	15331	Mg, Si Chrysotile Verified - KM	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
B	22	C44		NSD									
B	23	C23	AZQ	2	2	F	10	2	5.0	5435	15330	Mg, Al, Si, Ca, Fe Actinolite Zone Axis [5 3 2] - KM	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS5-10_AHRA
B	23	C23	AQ	3	3	F	5	0.85	5.9			Mg, Al, Si, Ca, Fe Actinolite	TAS_AHRA

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

Report # 041172R3

Client: Ecology and Environment, Inc.

Project Name: Site# 0440.01CP, 0440.01CP-0001- FINAL RESULTS

TEM ASBESTOS STRUCTURE COUNT - RAW DATA

Sample No.: SVM-H2-3FD-100204 *Lab/Cor Sample No.:* B4760 S53 A1

Descripiton:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Neg#	EDS#	Comment	Count Categories
A	1	B34		NSD									
A	2	B24		NSD									
A	3	B14		NSD									
A	4	B4		NSD									
A	5	C4		NSD									
A	6	C14		NSD									
A	7	C34		NSD									
A	8	B12		NSD									
A	9	C32		NSD									
A	10	B41		NSD									
A	11	B31		NSD									
A	12	B1		NSD									
B	13	B41		NSD									
B	14	B31		NSD									
B	15	B21		NSD									
B	16	B11		NSD									
B	17	B1		NSD									
B	18	C11		NSD									
B	19	C31		NSD									
B	20	C42		NSD									
B	21	C33	AZQ	1	1	F	11	1.5	7.3	5437	15333	Mg, Al, Si, Ca, Fe Actinolite Zone Axis [5 -1 2] - KM	AS>5, AFB>5, PCMEF-US, PCMES-US, TAS_AHRA, AS>5_AHRA, AS>10_AHRA
B	22	C23		NSD									

NSD = No Structures Detected
PAS = Primary Asbestos Structures
TAS = Total Asbestos Structures
AS>5 = Asbestos Structures > 5um
AFB>5 = Asbestos Fibers and Bundles > 5um
PCMEF-US = PCM Equivalent Fibers-US
PCMES-US = PCM Equivalent Structures-US
PCMEF-ISO = PCM Equivalent Fibers-ISO
PCMES-ISO = PCM Equivalent Structures-ISO

CF = Cleavage Fragments
TS = Transitional Structures

PSAS 5-10 = PROTOCOL ASB STRUCS 5-10
PSAS >10 = PROTOCOL ASB STRUCS >10
PSAS TOT = PROTOCOL ASB STRUCS TOTAL
PSCH 5-10 = PROTOCOL CHRYS STRUCS 5-10
PSCH >10 = PROTOCOL CHRYS STRUCS >10
PSCH TOT = PROTOCOL CHRYS STRUCS TOTAL
PSAM 5-10 = PROTOCOL AMPH STRUCS 5-10
PSAM >10 = PROTOCOL AMPH STRUCS >10
PSAM TOT = PROTOCOL AMPH STRUCS TOTAL

PChS = Primary Chrysotile Structures
PAmS = Primary Amphibole Structures

TAS_AHRA = AHERA-like Total Strucs 3:1
AS>5_AHRA = AHERA-like Asb Strucs >5 and 3:1
AS5-10_AHRA = AHERA-like Asb Strucs 5 - 10 and 3:1
AS>10_AHRA = AHERA-like Asb Strucs >10 and 3:1
TOS_AHRA = Total Other Amphibole Strucs 3:1
OS>5_AHRA = Other Amphibole Struc >5 and 3:1
OS5-10_AHRA = Other Amphibole Struc 5 - 10 and 3:1
OS>10_AHRA = Other Amphibole Strucs >10 and 3:1

QC Summary Sheet

Project: El Dorado - Priority 1 and 2 samples
LC Job No.: 041172, 041174, 041188, 041191, 041210
Total Samples: 227
Total QC Samples: 57
Average GO Area: 0.01449

QC Type	Tally
Replicate - Same GO's	12
Replicate - Reprep	10
Duplicate - Same GO's	11
Duplicate - Different Grids	12
Duplicate - Reprep	12
Total	57

Original Analyst	Original LC Number	Original Client Number	Reference LC Num	QC Analyst	QC Type	Primary Structures: Original Counts Total	Original Counts No. GO's	Test Counts Total	Test Counts No. GO's	95% Poisson Confidence Limits: Lower Total	Upper Total	QC Result
JH	041172-32	RHB-H2-2FD-100304	041176-01	JH	Replicate - Same GO's	6	22	6	22	2.00	13.00	PASS
	041172-32	RHB-H2-2FD-100304	041176-02		GRIDS BLOWN OUT							
JH	041172-32	RHB-H2-2FD-100304	041176-03	DW	Duplicate - Different Grids	6	22	4	22	2.00	13.00	PASS
KM	041172-33	RHB-H2-3FD-100304	041176-04	KM	Replicate - Same GO's	2	23	3	22	0.20	7.00	PASS
KM	041172-33	RHB-H2-3FD-100304	041176-05	JH	Duplicate - Reprep	2	23	1	23	0.20	7.00	PASS
DW	041172-51	SVM-H2-1FD-100204	041176-06	KM	Duplicate - Different Grids	2	22	2	22	0.20	7.00	PASS
DW	041172-52	SVM-H2-2FD-100204	041176-07	DW	Replicate - Reprep	3	23	2	24	0.60	9.00	PASS
DW	041172-52	SVM-H2-2FD-100204	041176-08	KM	Duplicate - Same GO's	3	23	3	22	2.85	3.15	PASS
DW	041172-52	SVM-H2-2FD-100204	041176-09	KM	Duplicate - Different Grids	3	23	3	22	2.85	3.15	PASS
TM	041172-54	CC2-H8-1CT-100304	041176-10	TM	Replicate - Same GO's	12	18	16	18	6.00	21.00	PASS
TM	041172-54	CC2-H8-1CT-100304	041176-11	KM	Duplicate - Same GO's	12	18	13	18	6.00	21.00	PASS
TM	041172-54	CC2-H8-1CT-100304	041176-12	DW	Duplicate - Reprep	12	18	17	18	6.00	21.00	PASS
KM	041174-02	SRA-R01-100204	041176-13	KM	Replicate - Same GO's	13	14	13	13	7.00	22.00	PASS
KM	041174-02	SRA-R01-100204	041176-14	JH	Duplicate - Reprep	13	14	13	14	7.00	22.00	PASS
JH	041174-10	SRA-R04-100104	041176-15	JH	Replicate - Reprep	13	19	10	19	7.00	22.00	PASS
JH	041174-10	SRA-R04-100104	041176-16	KM	Duplicate - Same GO's	13	19	11	18	7.00	22.00	PASS
KM	041188-01	CC2-H6-1CP-100504	041176-17	KM	Replicate - Same GO's	13	12	14	12	7.00	22.00	PASS
KM	041174-02	SRA-R01-100204	041176-18	JH	Duplicate - Reprep	13	14	11	14	7.00	22.00	PASS
DW	041188-04	CC2-L6-1CA-100504	041176-19	KM	Duplicate - Same GO's	23	29	29	29	15.00	35.00	PASS
KM	041188-10	CC5-L6-1CA-100604	041176-20	KM	Replicate - Reprep	24	30	15	29	15.00	36.00	PASS
KM	041188-10	CC5-L6-1CA-100604	041176-21	DW	Duplicate - Different Grids	24	30	17	30	15.00	36.00	PASS
JH	041210-41	NRA-R04-101104	041176-22	JH	Replicate - Reprep	12	17	15	17	6.00	21.00	PASS
DW	041188-36	SFBC-H2-1FD-100604	041176-23	KM	Duplicate - Same GO's	32	22	25	22	22.00	45.00	PASS
KM	041191-02	CC6-H6-2CP-100704	041176-24	KM	Replicate - Same GO's	2	11	2	11	0.20	7.00	PASS
KM	041191-03	CC6-L6-1CA-100704	041176-25	KM	Replicate - Same GO's	6	30	6	28	2.00	13.00	PASS
JH	041191-10	CPS-H2-4FD-100704	041176-26	TM	Duplicate - Reprep	7	23	9	29	3.00	14.00	PASS
JH	041191-10	CPS-H2-4FD-100704	041176-27	JH	Replicate - Reprep	7	23	4	23	3.00	14.00	PASS
JH	041191-10	CPS-H2-4FD-100704	041176-28	KM	Duplicate - Same GO's	7	23	6	22	3.00	14.00	PASS
TM	041191-41	JEB-H1-6FD-101004	041176-29	TM	Duplicate - Different Grids	10	22	9	23	5.00	18.00	PASS
TM	041191-41	JEB-H1-6FD-101004	041176-30	KM	Duplicate - Reprep	10	22	6	22	5.00	18.00	PASS
KM	041191-03	CC6-L6-1CA-100704	041176-31	JH	Duplicate - Reprep	6	30	8	30	2.00	13.00	PASS
JH	041191-66	CPS-H2-1PG-100704	041176-32	KM	Duplicate - Same GO's	3	22	3	22	0.60	9.00	PASS
JH	041191-67	CPS-H2-1PG-100704	041176-33	JH	Replicate - Same GO's	5	23	3	23	2.00	12.00	PASS
JH	041191-67	CPS-H2-1PG-100704	041176-34	TM	Duplicate - Reprep	5	23	6	23	2.00	12.00	PASS
TM	041191-81	JOGB-H2-5TR-100704	041176-35	KM	Duplicate - Different Grids	6	23	8	23	2.00	13.00	PASS
TM	041191-81	JOGB-H2-5TR-100704	041176-36	KM	Duplicate - Same GO's	6	23	5	23	2.00	13.00	PASS
DW	041210-04	SRA-RO4-100404	041176-37	KM	Duplicate - Different Grids	10	18	5	18	5.00	18.00	PASS
TM	041210-06	SRA-R103-100504	041176-38	DW	Duplicate - Different Grids	9	15	6	15	4.00	17.00	PASS
TM	041210-06	SRA-R103-100504	041176-39	KM	Duplicate - Different Grids	9	15	7	15	4.00	17.00	PASS
DW	041210-07	SRA-R04-100504	041176-40	DW	Replicate - Reprep	10	14	11	14	5.00	18.00	PASS
DW	041210-07	SRA-R04-100504	041176-41	KM	Duplicate - Reprep	10	14	5	14	5.00	18.00	PASS
JH	041210-13	SRA-R102-100604	041176-42	DW	Duplicate - Reprep	10	14	18	14	5.00	18.00	PASS
JH	041210-13	SRA-R102-100604	041176-43	JH	Replicate - Reprep	10	14	10	13	5.00	18.00	PASS
JH	041210-15	SRA-R05-100604	041176-44	JH	Replicate - Same GO's	11	15	14	15	5.50	20.00	PASS
JH	041210-15	SRA-R05-100604	041176-45	DW	Duplicate - Same GO's	11	15	19	15	5.50	20.00	PASS
DW	041210-17	SRA-R02-100604	041176-46	DW	Replicate - Same GO's	10	14	15	14	5.00	18.00	PASS
DW	041210-17	SRA-R02-100604	041176-47	JH	Duplicate - Same GO's	10	14	15	14	5.00	18.00	PASS
TM	041210-21	SRA-R02-100704	041176-48	JH	Duplicate - Different Grids	14	14	8	13	8.00	23.50	PASS
DW	041210-26	SRA-R02-100804	041176-49	DW	Replicate - Reprep	10	14	10	14	5.00	18.00	PASS
DW	041210-26	SRA-R02-100804	041176-50	KM	Duplicate - Reprep	10	14	7	14	5.00	18.00	PASS
JH	041210-40	NRA-R03-101104	041176-51	JH	Replicate - Same GO's	21	16	21	16	13.00	32.00	PASS
JH	041210-40	NRA-R03-101104	041176-52	KM	Duplicate - Different Grids	21	16	14	16	13.00	32.00	PASS
JH	041210-41	NRA-R04-101104	041176-53	JH	Replicate - Reprep	12	17	11	17	6.00	21.00	PASS
JH	041210-41	NRA-R04-101104	041176-54	DW	Duplicate - Reprep	12	17	11	17	6.00	21.00	PASS
	041210-41	NRA-R04-101104	041176-55		GRIDS BLOWN OUT							
JH	041210-44	NRA-R02-101104	041176-56	JH	Replicate - Same GO's	12	17	7	17	4.00	17.00	PASS
JH	041210-44	NRA-R02-101104	041176-57	KM	Duplicate - Same GO's	9	17	9	17	4.00	17.00	PASS
JH	041210-44	NRA-R02-101104	041176-58	DW	Duplicate - Different Grids	9	17	11	17	4.00	17.00	PASS
TM	041191-41	JEB-H1-6FD-101004	041176-59	TM	Replicate - Reprep	10	22	5	22	5.00	18.00	PASS

QC Parameters
Pass - Test value (s/mm2) between reference upper and lower 95% confidence limits, inclusive
Fail - Test value (s/mm2) outside reference upper and lower 95% confidence limits, exclusive

.B4760

041172 1 of 5

CHAIN OF CUSTODY RECORD

No: 0440.01CP-0001

Site #: 0440.01CP

Cooler #:

EPA Contract #:

Contact Name:

Lab:

Contact Phone:

Lab Phone:

Lab #	Sample #	Analyses	Matrix	Date Collected	Sample Time	Numb Cont	Volume	Vol Units	Priority
.01	APG-L2-13CH-100404	ISO 10312	Air	10/4/2004	16:00	1	300.96	Liters	1
-02	APG-L2-1CH-100404	ISO 10312	Air	10/4/2004	16:00	1	296.04	Liters	1
-03	APG-L2-1ZB-100404	ISO 10312	Air	10/4/2004	16:00	1	299.76	Liters	1
-04	APG-L2-2CH-100404	ISO 10312	Air	10/4/2004	16:00	1	289.2	Liters	1
-05	APG-L2-3CH-100404	ISO 10312	Air	10/4/2004	16:00	1	295.56	Liters	1
-06	APG-L2-4CH-100404	ISO 10312	Air	10/4/2004	16:00	1	299.4	Liters	1
-07	APG-L2-5CH-100404	ISO 10312	Air	10/4/2004	16:00	1	290.64	Liters	1
-08	CC1-L6-1CA-100204	ISO 10312	Air	10/2/2004	18:24	1	569.77	Liters	1
-09	CC1-L6-1CB-100204	ISO 10312	Air	10/2/2004	18:24	1	607.18	Liters	1
-10	CC1-L6-2CB-100204	ISO 10312	Air	10/2/2004	18:24	1	597.98	Liters	1
-11	CC1-L6-3CB-100204	ISO 10312	Air	10/2/2004	18:24	1	608.15	Liters	1
-12	CC2A-L6-1CA-100304	ISO 10312	Air	10/3/2004	19:05	1	269.72	Liters	1
-54	CC2-H8-1CT-100304	ISO 10312	Air	10/3/2004	18:17	1	5013.54	Liters	
-55	CC2-H8-2CT-100304	ISO 10312	Air	10/3/2004	18:12	1	3647.28	Liters	
-56	CC2-H8-3CT-100304	ISO 10312	Air	10/3/2004	18:35	1	4690	Liters	
-57	CC2-H8-4CT-100304	ISO 10312	Air	10/3/2004	18:47	1	4366.96	Liters	
-58	CC2-H8-5CT-100304	ISO 10312	Air	10/3/2004	17:52	1	3479.53	Liters	
-13	CC2-L6-11CC-100304	ISO 10312	Air	10/3/2004	19:05	1	530.45	Liters	1
-14	CC2-L6-1CC-100304	ISO 10312	Air	10/3/2004	19:05	1	533.62	Liters	1
-15	CC2-L6-2CC-100304	ISO 10312	Air	10/3/2004	19:05	1	523	Liters	1

Comments: ISO 10312 PER STATEMENT OF WORK, STANDARD TURN AROUND TIME

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

SAMPLE SET #1

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
	[illegible]	10/6/04	FED-X B/L#	10/6/04	1845						
			829691975701								
			D Jones	10/7/04	9:45						

B4760

041172 2 of 5

CHAIN OF CUSTODY RECORD

No: 0440.01CP-0001

Site #: 0440.01CP

EPA Contract #:

Contact Name:

Contact Phone:

Cooler #:

Lab:

Lab Phone:

Lab #	Sample #	Analyses	Matrix	Date Collected	Sample Time	Numb Cont	Volume	Vol Units	Priority
-16	CC2-L6-3CC-100304	ISO 10312	Air	10/3/2004	19:05	1	520.12	Liters	1
-17	CC2-L6-4CC-100304	ISO 10312	Air	10/3/2004	1905	1	542.69	Liters	1
-31	RHB-H2-1FD-100304	ISO 10312	Air	10/3/2004	19:07	1	1186.08	Liters	2
-32	RHB-H2-2FD-100304	ISO 10312	Air	10/3/2004	19:07	1	1220	Liters	2
-33	RHB-H2-3FD-100304	ISO 10312	Air	10/3/2004	19:07	1	1140.7	Liters	2
-59	RHB-H2-4FD-100304	ISO 10312	Air	10/3/2004	19:05	1	1207.2	Liters	
-60	RHB-H2-5FD-100304	ISO 10312	Air	10/3/2004	19:05	1	1083.32	Liters	
-61	RHB-L2-14CH-100304	ISO 10312	Air	10/3/2004	19:05	1	301.32	Liters	
-34	RHB-L2-1CH-100304	ISO 10312	Air	10/3/2004	19:05	1	309.12	Liters	2
-62	RHB-L2-1NA-100304	ISO 10312	Air	10/3/2004	19:05	1	318.6	Liters	
-63	RHB-L2-1ZB-100304	ISO 10312	Air	10/3/2004	19:05	1	326.4	Liters	
-35	RHB-L2-2CH-100304	ISO 10312	Air	10/3/2004	19:05	1	293.4	Liters	2
-36	RHB-L2-3CH-100304	ISO 10312	Air	10/3/2004	19:05	1	306.48	Liters	2
-37	RHB-L2-4CH-100304	ISO 10312	Air	10/3/2004	19:05	1	312.48	Liters	2
-38	RHB-L2-5CH-100304	ISO 10312	Air	10/3/2004	19:05	1	295.56	Liters	2
-64	RHB-L2-FB-100304	ISO 10312	Air	10/3/2004		1			Filter Blank
-65	RHS-H2-1FD-100304	ISO 10312	Air	10/3/2004	16:21	1	455.68	Liters	
-66	RHS-H2-2FD-100304	ISO 10312	Air	10/3/2004	16:22	1	472.81	Liters	
-67	RHS-H2-3FD-100304	ISO 10312	Air	10/3/2004	16:23	1	480.95	Liters	
-68	RHS-H2-4FD-100304	ISO 10312	Air	10/3/2004	16:21	1	931.5	Liters	

Comments: ISO 10312 PER STATEMENT OF WORK, STANDARD TURN AROUND TIME

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
	[illegible]	10/6/04	FED-X	10/6/04	1845						
			D Jones	10/7/04	9:45						

R4760

041172 3 of 5

CHAIN OF CUSTODY RECORD

No: 0440.01CP-0001

Site #: 0440.01CP

EPA Contract #:

Contact Name:

Contact Phone:

Cooler #:

Lab:

Lab Phone:

Lab #	Sample #	Analyses	Matrix	Date Collected	Sample Time	Numb Cont	Volume	Vol Units	Priority
-69	RHS-H2-5FD-100304	ISO 10312	Air	10/3/2004	16:21	1	935.53	Liters	
-70	RHS-L2-14CH-100304	ISO 10312	Air	10/3/2004	16:18	1	223.65	Liters	
-71	RHS-L2-1CH-100304	ISO 10312	Air	10/3/2004	16:18	1	221.94	Liters	
-72	RHS-L2-1NA-100304	ISO 10312	Air	10/3/2004	16:18	1	223.83	Liters	
-73	RHS-L2-2CH-100304	ISO 10312	Air	10/3/2004	16:18	1	232.47	Liters	
-74	RHS-L2-3CH-100304	ISO 10312	Air	10/3/2004	16:18	1	229.32	Liters	
-75	RHS-L2-4CH-100304	ISO 10312	Air	10/3/2004	16:18	1	228.06	Liters	
-76	RHS-L2-5CH-100304	ISO 10312	Air	10/3/2004	16:18	1	233.06	Liters	
-18	SVBA-H2-1FD-100204	ISO 10312	Air	10/2/2004	1826	1	556.69	Liters	1
-19	SVBA-H2-2FD-100204	ISO 10312	Air	10/2/2004	18:25	1	531.47	Liters	1
-20	SVBA-H2-3FD-100204	ISO 10312	Air	10/2/2004	18:25	1	562.41	Liters	1
-77	SVBA-H2-4FD-100204	ISO 10312	Air	10/2/2004	18:24	1	1195.08	Liters	
-78	SVBA-H2-5FD-100204	ISO 10312	Air	10/2/2004	18:24	1	1198.92	Liters	
-39	SVBA-L2-11CH-100204	ISO 10312	Air	10/2/2004	1824	1	296.24	Liters	2
-40	SVBA-L2-1CH-100204	ISO 10312	Air	10/2/2004	18:24	1	292.44	Liters	2
-79	SVBA-L2-1NA-100204	ISO 10312	Air	10/2/2004	18:24	1	293.4	Liters	
-80	SVBA-L2-1ZB-100204	ISO 10312	Air	10/2/2004	19:07	1	301.32	Liters	
-41	SVBA-L2-2CH-100204	ISO 10312	Air	10/2/2004	18:24	1	297.72	Liters	2
-42	SVBA-L2-3CH-100204	ISO 10312	Air	10/2/2004	18:24	1	299.52	Liters	2
-43	SVBA-L2-4CH-100204	ISO 10312	Air	10/2/2004	18:24	1	293.28	Liters	2

Comments: ISO 10312 PER STATEMENT OF WORK, STANDARD TURN AROUND TIME

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
	M Stelo	10/6/04	FED-X	10/6/04	1845						
			D Jones	10/7/04	9:45						

B47.60

041172 4 of 5

CHAIN OF CUSTODY RECORD

No: 0440.01CP-0001

Site #: 0440.01CP

EPA Contract #:

Contact Name:

Contact Phone:

Cooler #:

Lab:

Lab Phone:

Lab #	Sample #	Analyses	Matrix	Date Collected	Sample Time	Numb Cont	Volume	Vol Units	Priority
-44	SVBA-L2-5CH-100204	ISO 10312	Air	10/2/2004	18:24	1	291.12	Liters	2
-81	SVBB-H2-12FD-100304	ISO 10312	Air	10/3/2004	12:10	1	557.15	Liters	
-21	SVBB-H2-1FD-100304	ISO 10312	Air	10/3/2004	12:09	1	611.75	Liters	1
-22	SVBB-H2-2FD-100304	ISO 10312	Air	10/3/2004	12:10	1	563.3	Liters	1
-23	SVBB-H2-3FD-100304	ISO 10312	Air	10/3/2004	12:08	1	580.91	Liters	1
-82	SVBB-H2-4FD-100304	ISO 10312	Air	10/3/2004	12:05	1	1205.89	Liters	
-83	SVBB-H2-5FD-100304	ISO 10312	Air	10/3/2004	12:05	1	1210	Liters	
-45	SVBB-L2-12CH-100304	ISO 10312	Air	10/3/2004	12:05	1	288.75	Liters	2
-46	SVBB-L2-1CH-100304	ISO 10312	Air	10/3/2004	12:06	1	302.56	Liters	2
-84	SVBB-L2-1NA-100304	ISO 10312	Air	10/3/2004	12:06	1	306.71	Liters	
-85	SVBB-L2-1ZB-100304	ISO 10312	Air	10/3/2004	12:06	1	302.56	Liters	
-47	SVBB-L2-2CH-100304	ISO 10312	Air	10/3/2004	12:05	1	309.16	Liters	2
-48	SVBB-L2-3CH-100304	ISO 10312	Air	10/3/2004	12:05	1	312.66	Liters	2
-49	SVBB-L2-4CH-100304	ISO 10312	Air	10/3/2004	12:05	1	299.35	Liters	2
-50	SVBB-L2-5CH-100304	ISO 10312	Air	10/3/2004	12:05	1	313.51	Liters	2
-51	SVM-H2-1FD-100204	ISO 10312	Air	10/2/2004	13:16	1	1209.75	Liters	2
-52	SVM-H2-2FD-100204	ISO 10312	Air	10/2/2004	13:16	1	1192.92	Liters	2
-53	SVM-H2-3FD-100204	ISO 10312	Air	10/2/2004	13:16	1	1215.12	Liters	2
-86	SVM-H2-4FD-100204	ISO 10312	Air	10/2/2004	13:15	1	1194.88	Liters	
-87	SVM-H2-5FD-100204	ISO 10312	Air	10/2/2004	13:16	1	1194.26	Liters	

Comments: ISO 10312 PER STATEMENT OF WORK, STANDARD TURN AROUND TIME

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
	[illegible]	10/6/04	FED-X	10/6/04	1845						
			D Jones	10/7/04	9:45						

B4760

041172 5 of 5

CHAIN OF CUSTODY RECORD

No: 0440.01CP-0001

Site #: 0440.01CP

EPA Contract #:

Contact Name:

Contact Phone:

Cooler #:

Lab:

Lab Phone:

Lab #	Sample #	Analyses	Matrix	Date Collected	Sample Time	Numb Cont	Volume	Vol Units	Priority
-88	SVM-L2-15AD-100204	ISO 10312	Air	10/2/2004	13:16	1	304.76	Liters	
-89	SVM-L2-1AD-100204	ISO 10312	Air	10/2/2004	13:16	1	305.61	Liters	
-90	SVM-L2-2AD-100204	ISO 10312	Air	10/2/2004	13:16	1	306.83	Liters	
-91	SVM-L2-3AD-100204	ISO 10312	Air	10/2/2004	13:16	1	305.98	Liters	
-92	SVM-L2-4AD-100204	ISO 10312	Air	10/2/2004	13:16	1	307.93	Liters	
-93	SVM-L2-5AD-100204	ISO 10312	Air	10/2/2004	13:16	1	306.46	Liters	
-94	SVM-L2-6AD-100204	ISO 10312	Air	10/2/2004	13:16	1	311.83	Liters	
-24	TPG-L2-11CH-100404	ISO 10312	Air	10/4/2004	11:15	1	288.72	Liters	1
-25	TPG-L2-1CH-100404	ISO 10312	Air	10/4/2004	11:15	1	291.6	Liters	1
-26	TPG-L2-1ZB-100404	ISO 10312	Air	10/4/2004	16:00	1	303.6	Liters	1
-27	TPG-L2-2CH-100404	ISO 10312	Air	10/4/2004	11:15	1	290.4	Liters	1
-28	TPG-L2-3CH-100404	ISO 10312	Air	10/4/2004	11:15	1	299.16	Liters	1
-29	TPG-L2-4CH-100404	ISO 10312	Air	10/4/2004	11:15	1	290	Liters	1
-30	TPG-L2-5CH-100404	ISO 10312	Air	10/4/2004	11:15	1	288.84	Liters	1
-95	TPG-L2-FB-100404	ISO 10312	Air	10/4/2004		1			Filter Blank

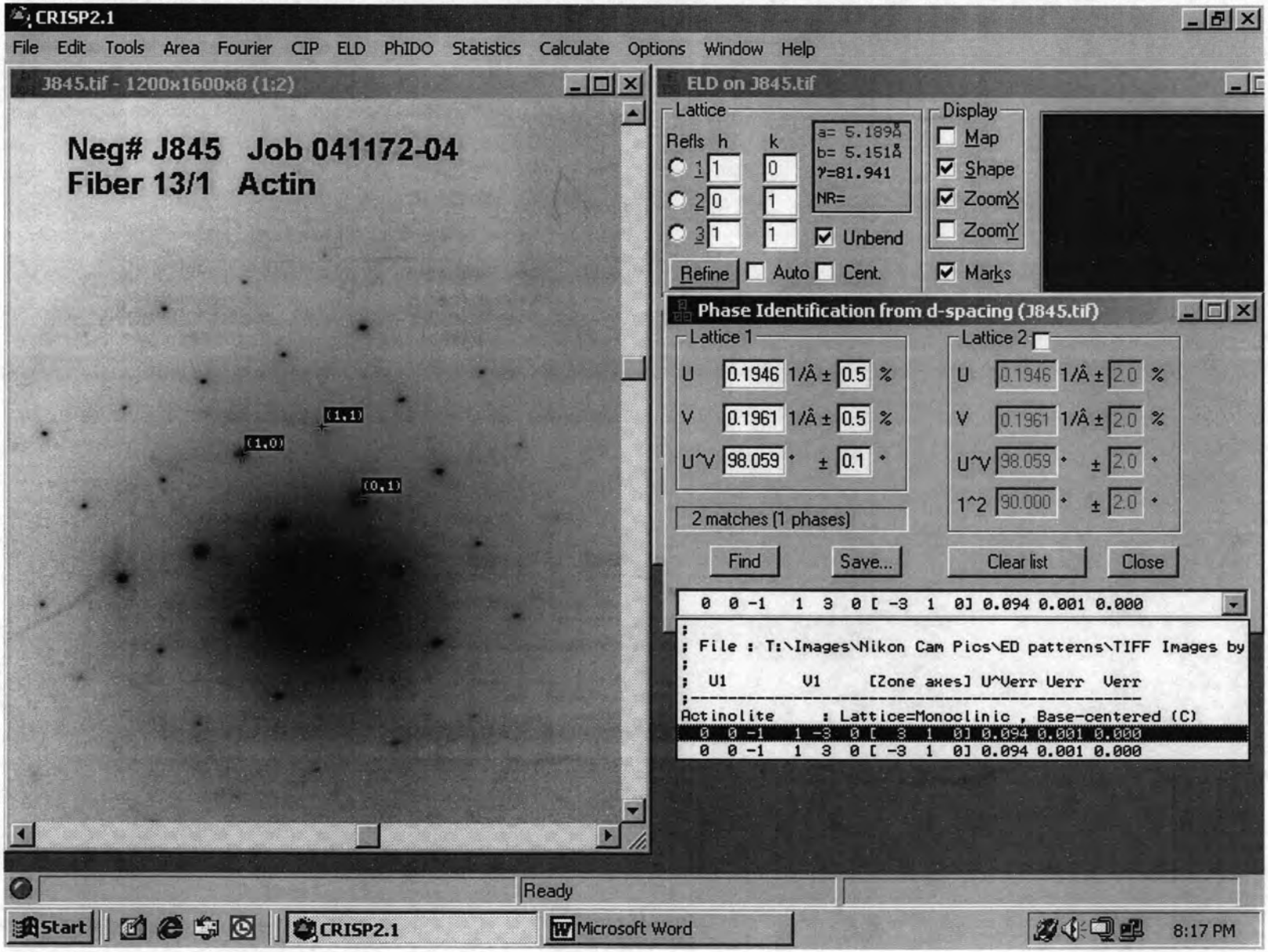
Comments: ISO 10312 PER STATEMENT OF WORK, STANDARD TURN AROUND TIME

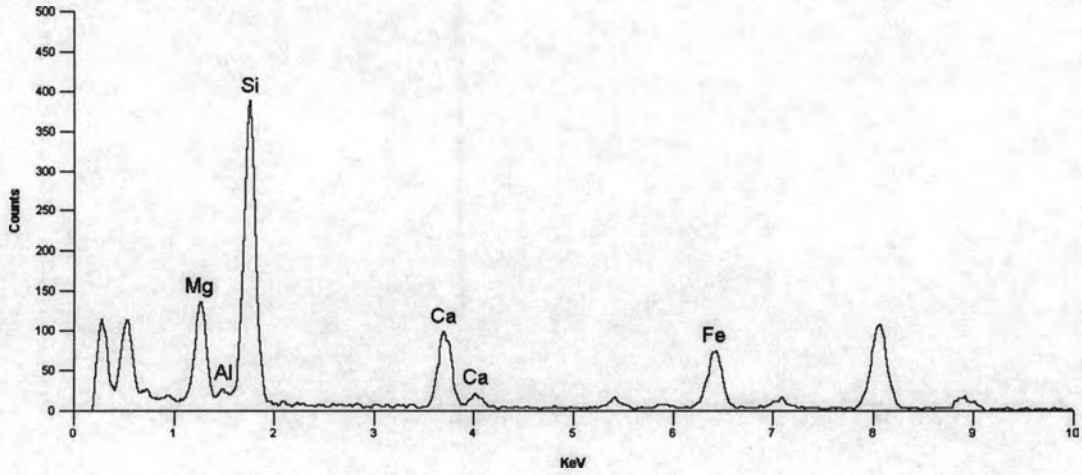
SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
	[illegible]	10/6/04	FED-X	10/6/04	1845						
			O Jones	10/7/04	9:45						

ACTINOLITE
[3 1 0]





Quantitative Analysis Results - Standardless Analysis :
Spectrum1 041172-04 13/T3 SP 544 Jan 1, 1997
EDS Parameters - 18KV, Takeoff Angle: 28.2°, Fit Index: 322.20
Correction: CLIFF LORIMER, Cycles: 1

Element	Atoms%	Compound	Weight%	Error(±)	Norm%
Mg	10.92	MgO	20.29	1.36	20.29
Si	20.72	SiO2	57.41	2.08	57.41
Ca	3.53	CaO	9.13	0.81	9.13
Fe	3.57	Fe2O3	13.16	1.48	13.16
<Total>	100.00		100.00		100.00

	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	57.41	Si+4	7.8719	7.8719							
Al2O3	0	Al+3	0.0000	0.0000	**0.0000**						
TiO2	0	Ti+4	0.0000	0.0000	**0.0000**						
Cr2O3	0	Cr+3	0.0000			0.0000	0.0000				
Fe(total)O	13.16	Fe+3	0.6653			0.6653	0.0000				
MgO	20.29	Mg+2	4.1476			4.1476	**0.0000**				
MnO	0	Fe+2	0.7695			0.1871	**0.5824**				
CaO	9.13	Mn+2	0.0000			0.0000	**0.0000**				
Na2O	0	Ca+2	1.3412					1.3412	0.0000		
K2O	0	Na+	0.0000					0.0000	**0.0000**	0.0000	0.0000
		K+	0.0000							0.0000	0.0000
Total	**99.99**		**Excess**	T site	**0.0000**	C site	**0.5824**	B site	**0**	A site	**0**
			Total	**7.8719**		**5.0000**		**1.3412**		**0.0000**	**0.0000**
			%Fill	**98.398**		**100**		**67.0584**			

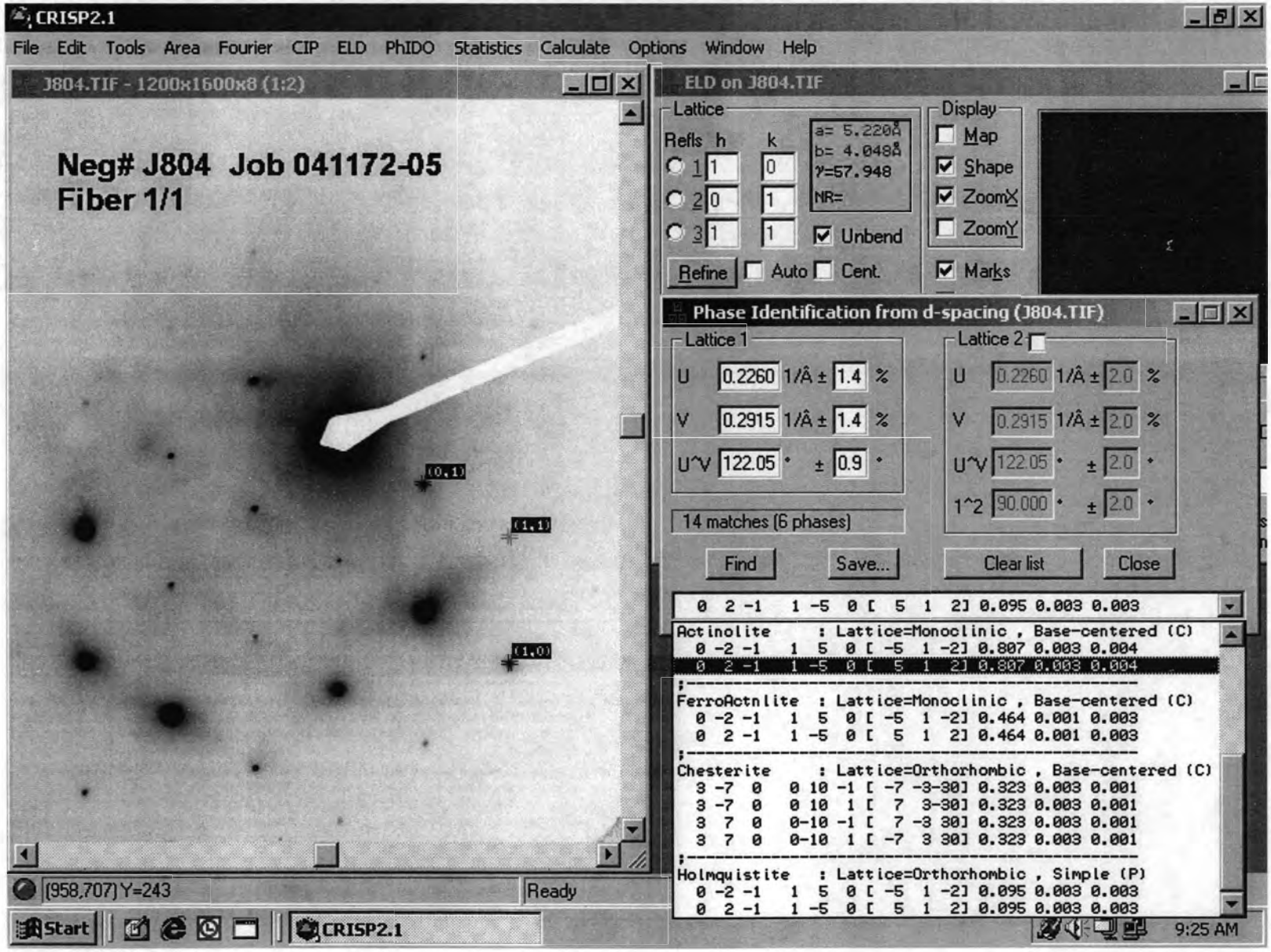
Prefix none
Name probable actinolite Ca values below optimal levels
Modifier none
Group Calcic Amphibole

Sample # **041172-04-544**

Values		Satisfied Conditions
(Ca,Na)@B	1.34	(Ca,Na)@B >= 1 and Na@B < 0.5
Na@B	0.00	1 < Ca@B < 1.5 and (Na,K)@A < 0.5
Ca@B	1.34	(Mg/(Mg+Fe2))>= 0.5
(Na,K)@A	0.00	Si > 7.5
Mg/(Mg+Fe2)	0.84	(Mg/(Mg+Fe2))< 0.9
Si	7.87	

Mineral Analysis Program (Version 5.0)

ACTINOLITE
[5 1 2]



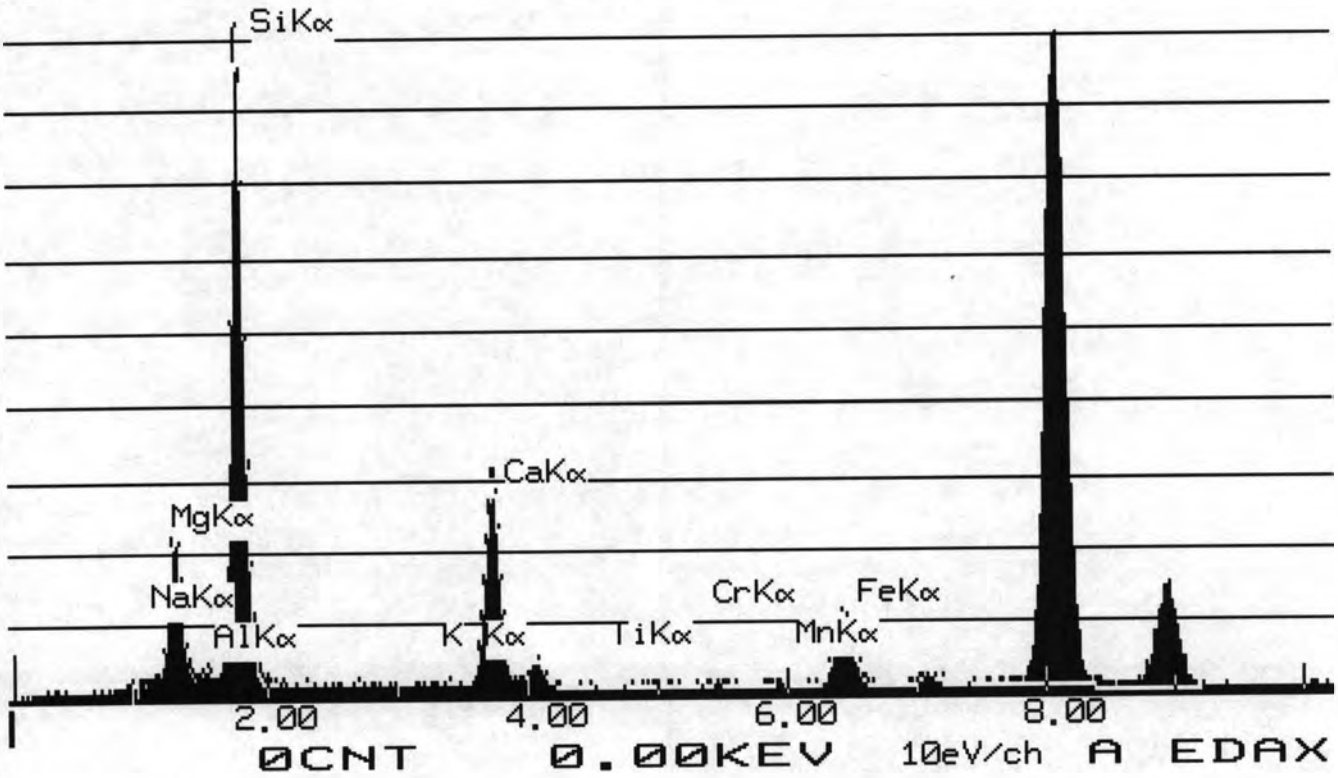
INTE-% :
LABEL = 041172-05 SP 15501
05-DEC-72 18:00:53
66.220 LIVE SECONDS

ELEM	CPS	WT % ELEM	WT % OXIDE
MGK	55.633	11.403	18.908
ALK	2.446	0.301	0.569
SIK	236.832	27.302	58.409
CAK	90.471	9.944	13.913
CRK	1.238	0.189	0.277
MNK	1.238	0.196	0.254
FEK	36.741	5.365	7.670

TOTAL			100.000

USED PEIF: USER

04-DEC-04 18:01:31 SUPER QUANT
RATE= 2238CPS TIME= 66LSEC
FS= 1678/ 1678 PRST= 200LSEC
A =041172-05 SP 15501



	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	58.409	Si+4	8.0000	8.0000							
Al2O3	0.569	Al+3	0.0920	0.0000	**0.0920**						
TiO2	0	Ti+4	0.0000	0.0000	**0.0000**						
Cr2O3	0.277	Cr+3	0.0301			0.0301	0.0000				
Fe(total)O	7.67	Fe+3	0.0080			0.0080	0.0000				
MgO	18.908	Mg+2	3.8618			3.8618	**0.0000**				
MnO	0.254	Fe+2	0.8700			0.8700	**0.0000**				
CaO	13.913	Mn+2	0.0296			0.0296	**0.0000**				
Na2O	0	Ca+2	2.0421					2.0000	0.0421		
K2O	0	Na+	0.0000					0.0000	**0.0000**	0.0000	0.0000
		K+	0.0000							0.0000	0.0000
Total	**100**		**Excess**	T site	**0.0920**	C site	**0.0000**	B site	**0.0420742**	A site	**0**
			Total	**8**		**4.8914**		**2.0000**		**0.0000**	**0.0000**
			%Fill	**100**		**97.8281**		**100**			

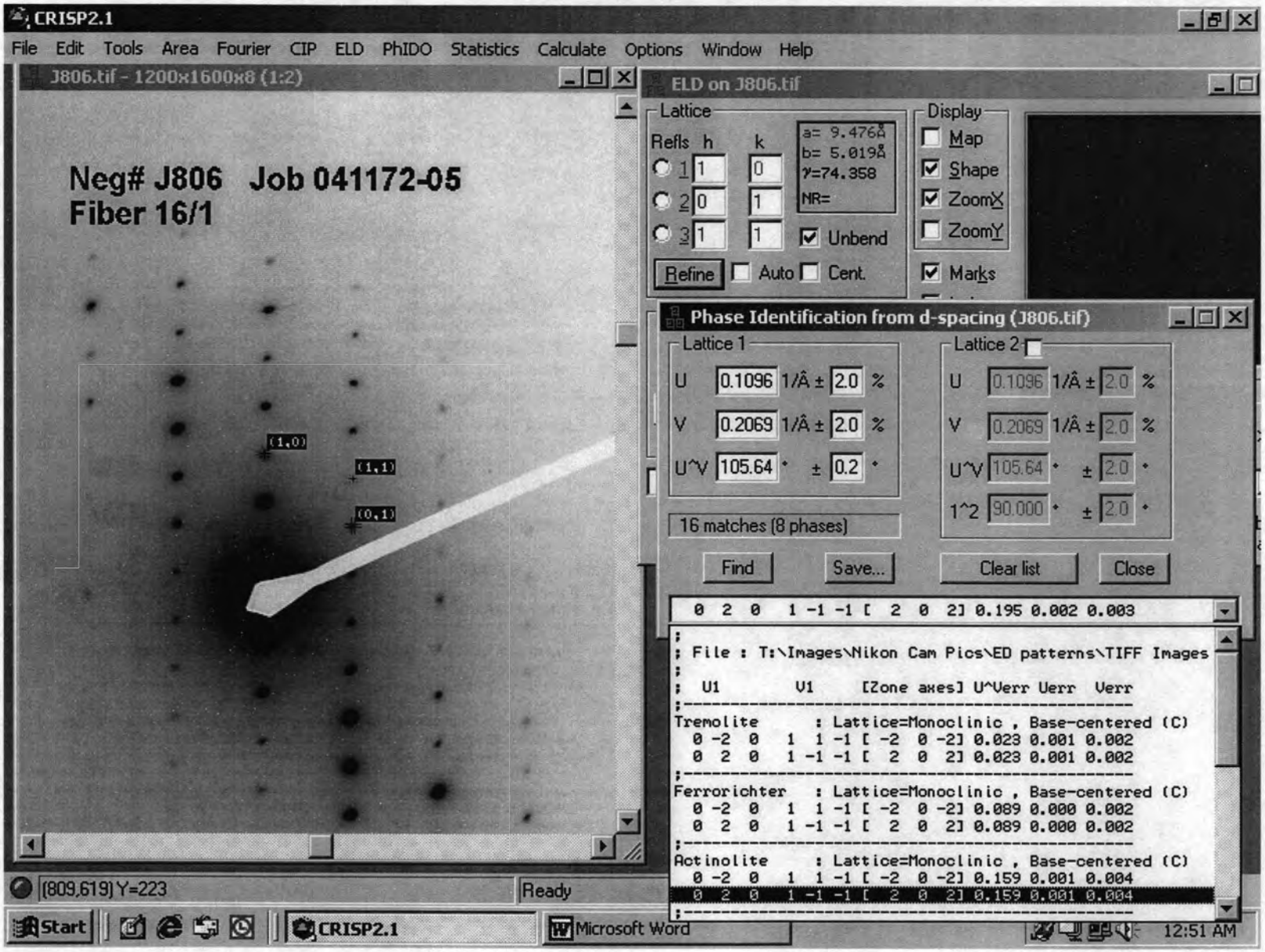
Prefix none
Name actinolite
Modifier none
Group Calcic Amphibole

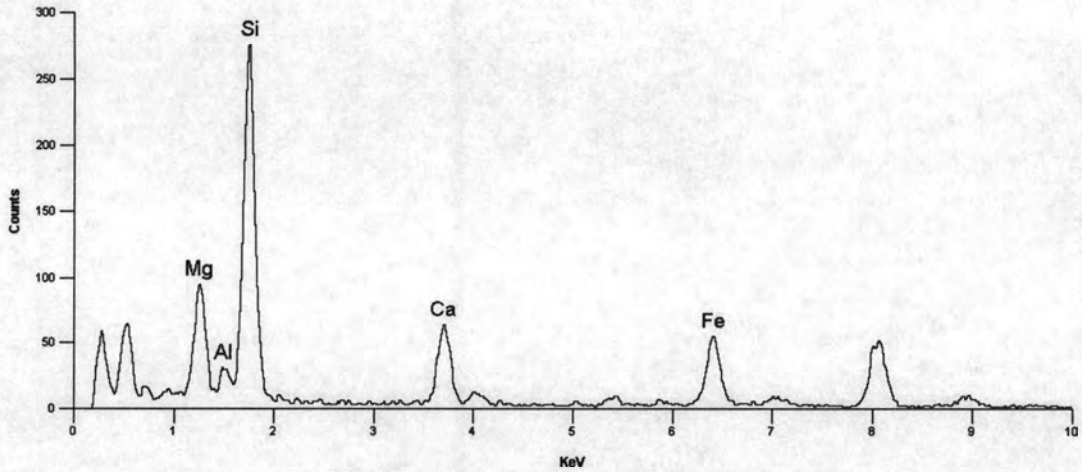
Sample # **041172-05-15501**

Values		Satisfied Conditions
(Ca,Na)@B	2.00	(Ca,Na)@B >= 1 and Na@B < 0.5
Na@B	0.00	Ca@B >= 1.5 and (Na,K)@A < 0.5
Ca@B	2.00	(Mg/(Mg+Fe2))>= 0.5
(Na,K)@A	0.00	Si > 7.5
Mg/(Mg+Fe2)	0.82	(Mg/(Mg+Fe2))< 0.9
Si	8.00	

Mineral Analysis Program (Version 5.0)

ACTINOLITE
[1 0 1]





Quantitative Analysis Results - Standardless Analysis :
Spectrum1 041172-05 16/1 SP 549 Jan 1, 1997
EDS Parameters - 18KV, Takeoff Angle: 28.2°, Fit Index: 368.94
Correction: CLIFF LORIMER, Cycles: 1

Element	Atoms%	Compound	Weight%	Error(±)	Norm%
Mg	10.35	MgO	19.21	1.66	19.21
Al	0.88	Al2O3	2.07	0.49	2.07
Si	20.40	SiO2	56.44	2.54	56.44
Ca	3.15	CaO	8.14	0.92	8.14
Fe	3.84	Fe2O3	14.14	1.77	14.14
<Total>	100.00		100.00		100.00

	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	56.44	Si+4	7.7385	7.7385							
Al2O3	2.07	Al+3	0.3345	0.2615	**0.0730**						
TiO2	0	Ti+4	0.0000	0.0000	**0.0000**						
Cr2O3	0	Cr+3	0.0000			0.0000	0.0000				
Fe(total)O	14.14	Fe+3	0.7148			0.7148	0.0000				
MgO	19.21	Mg+2	3.9266			3.9266	**0.0000**				
MnO	0	Fe+2	0.8268			0.2856	**0.5412**				
CaO	8.14	Mn+2	0.0000			0.0000	**0.0000**				
Na2O	0	Ca+2	1.1957					1.1957	0.0000		
K2O	0	Na+	0.0000					0.0000	**0.0000**	0.0000	0.0000
		K+	0.0000							0.0000	0.0000
Total	**100**		**Excess**	T site	**0.0730**	C site	**0.5412**	B site	**0**	A site	**0**
			Total	**8**		**5.0000**		**1.1957**		**0.0000**	**0.0000**
			%Fill	**100**		**100**		**59.784**			

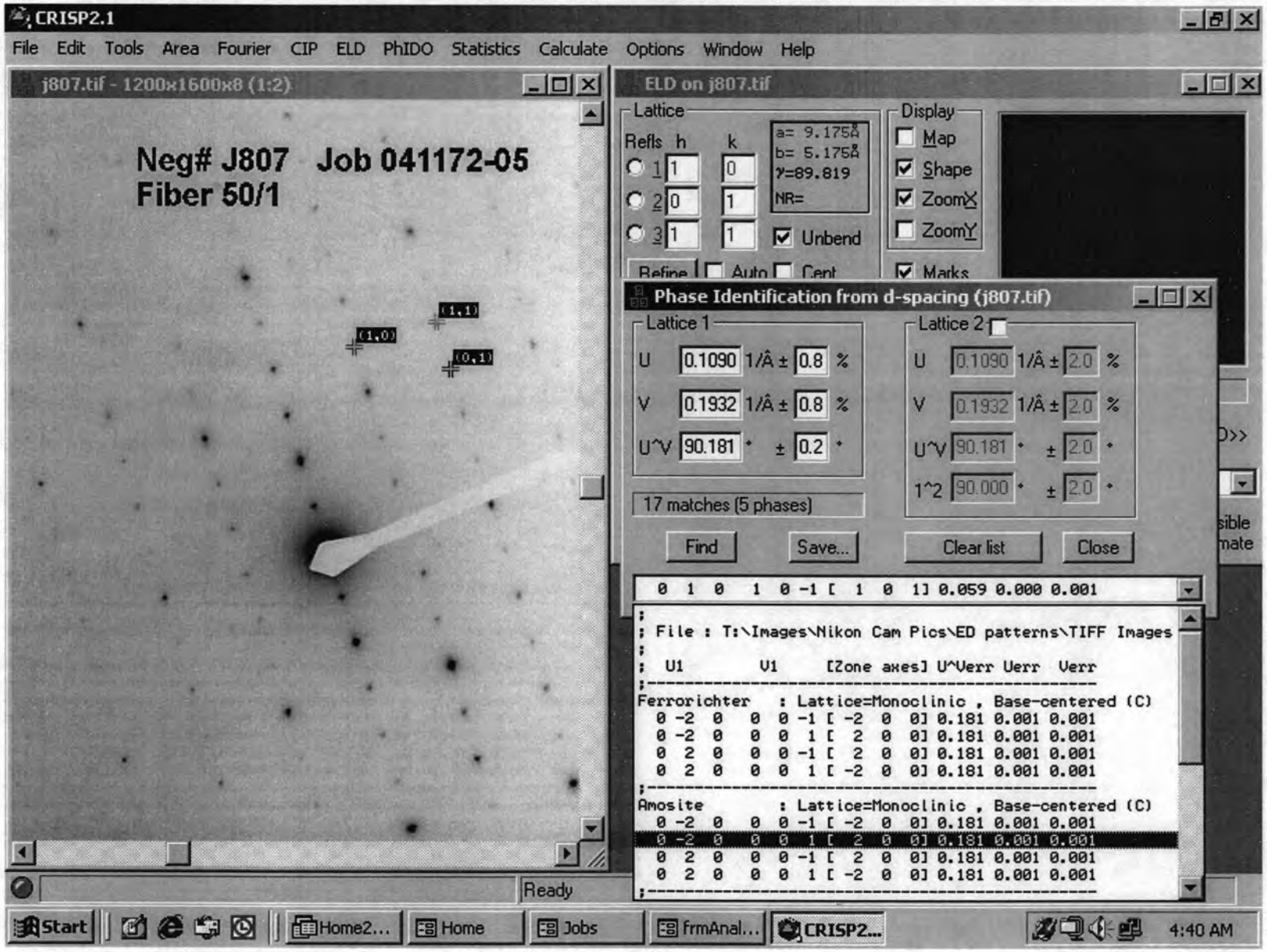
Prefix none
Name probable actinolite Ca values below optimal levels
Modifier none
Group Calcic Amphibole

Sample # **041172-05-549**

Values		Satisfied Conditions
(Ca,Na)@B	1.20	(Ca,Na)@B >= 1 and Na@B < 0.5
Na@B	0.00	1 < Ca@B < 1.5 and (Na,K)@A < 0.5
Ca@B	1.20	(Mg/(Mg+Fe2))>= 0.5
(Na,K)@A	0.00	Si > 7.5
Mg/(Mg+Fe2)	0.83	(Mg/(Mg+Fe2))< 0.9
Si	7.74	

Mineral Analysis Program (Version 5.0)

AMOSITE
[1 0 0]


CRISP2.1
File Edit Tools Area Fourier CIP ELD PhIDO Statistics Calculate Options Window Help
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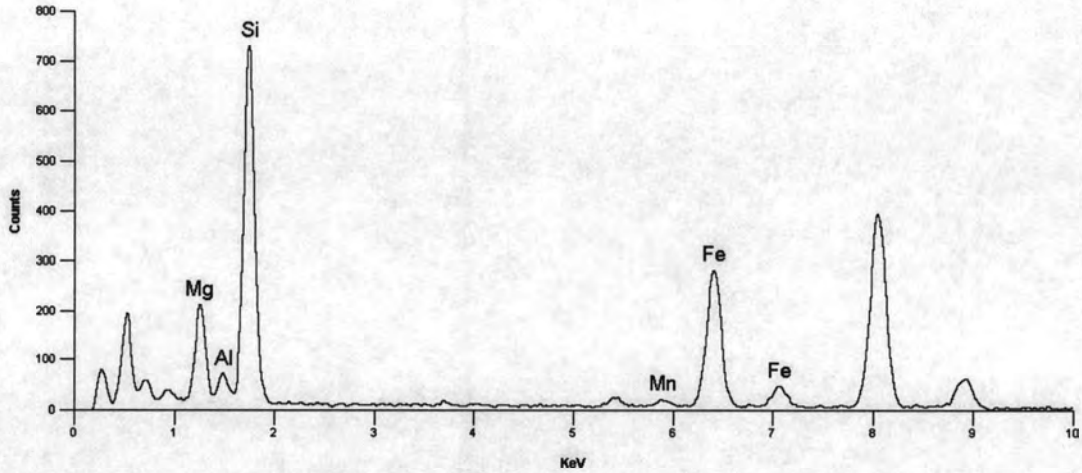
Neg# J807 Job 041172-05
Fiber 50/1
(1,1)
(1,0)
(0,1)
ELD on j807.tif
Lattice
Refls h k
1 1 0
2 0 1
3 1 1
a= 9.175Å
b= 5.175Å
γ=89.819
NR=
Unbend
Display
Map
Shape
ZoomX
ZoomY
Marks
Phase Identification from d-spacing (j807.tif)
Lattice 1
U 0.1090 1/Å ± 0.8 %
V 0.1932 1/Å ± 0.8 %
U^V 90.181 ° ± 0.2 °
Lattice 2
U 0.1090 1/Å ± 2.0 %
V 0.1932 1/Å ± 2.0 %
U^V 90.181 ° ± 2.0 °
1^2 90.000 ° ± 2.0 °
17 matches (5 phases)
Find
Save...
Clear list
Close
0 1 0 1 0 -1 [1 0 1] 0.059 0.000 0.001
; File : T:\Images\Nikon Cam Pics\ED patterns\TIFF Images
; U1 V1 [Zone axes] U^Verr Uerr Verr
Ferrorichter : Lattice=Monoclinic , Base-centered (C)
0 -2 0 0 0 -1 [-2 0 0] 0.181 0.001 0.001
0 -2 0 0 0 1 [2 0 0] 0.181 0.001 0.001
0 2 0 0 0 -1 [2 0 0] 0.181 0.001 0.001
0 2 0 0 0 1 [-2 0 0] 0.181 0.001 0.001
Amosite : Lattice=Monoclinic , Base-centered (C)
0 -2 0 0 0 -1 [-2 0 0] 0.181 0.001 0.001
0 -2 0 0 0 1 [2 0 0] 0.181 0.001 0.001
0 2 0 0 0 -1 [2 0 0] 0.181 0.001 0.001
0 2 0 0 0 1 [-2 0 0] 0.181 0.001 0.001
Ready
Start
Home2...
Home
Jobs
frmAnal...
CRISP2...
4:40 AM



Quantitative Analysis Results - Standardless Analysis :
Spectrum1 041172-05 50/1 SP 550 Jan 1, 1997
EDS Parameters - 18KV, Takeoff Angle: 28.2°, Fit Index: 366.63
Correction: CLIFF LORIMER, Cycles: 1

Element	Atoms%	Compound	Weight%	Error(±)	Norm%
Mg	8.63	MgO	15.54	0.86	15.54
Al	0.69	Al2O3	1.58	0.26	1.58
Si	20.50	SiO2	55.04	1.43	55.04
Fe	7.80	Fe2O3	27.84	1.47	27.84
<Total>	100.00		100.00		100.00

	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	55.04	Si+4	7.9458	7.9458							
Al2O3	1.58	Al+3	0.2688	0.0542	**0.2146**						
TiO2	0	Ti+4	0.0000	0.0000	**0.0000**						
Cr2O3	0	Cr+3	0.0000			0.0000	0.0000				
Fe(total)O	27.84	Fe+3	0.0000			0.0000	0.0000				
MgO	15.54	Mg+2	3.3445			3.3445	**0.0000**				
MnO	0	Fe+2	3.3607			1.4409	**1.9198**				
CaO	0	Mn+2	0.0000			0.0000	**0.0000**				
Na2O	0	Ca+2	0.0000					0.0000	0.0000		
K2O	0	Na+	0.0000					0.0000	**0.0000**	0.0000	0.0000
		K+	0.0000							0.0000	0.0000
Total	**100**		**Excess**	T site	**0.2146**	C site	**1.9198**	B site	**0**	A site	**0**
			Total	**8**		**5.0000**		**0.0000**		**0.0000**	**0.0000**
			%Fill	**100**		**100**		**0**			

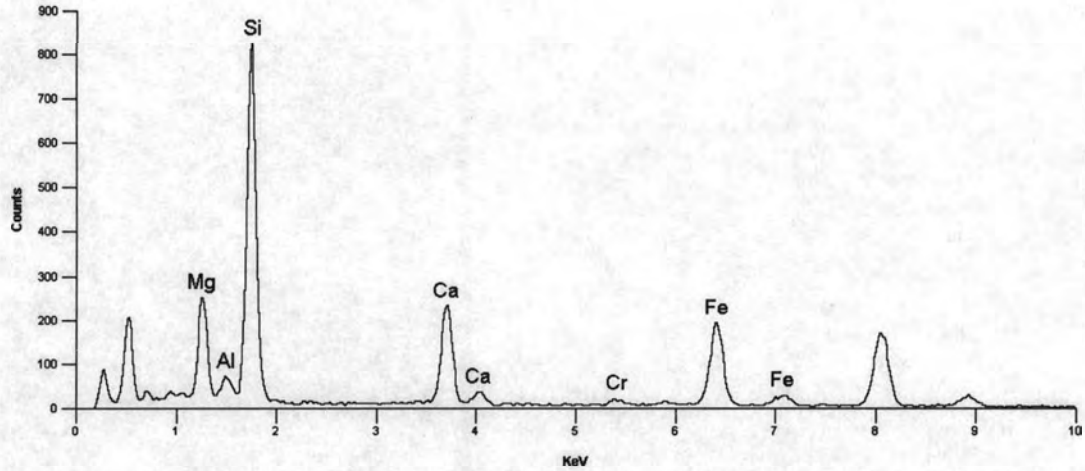
Prefix none
Name grunerite, ferro-anthophyllite, ferroholmquistite, clinoferroholmquistite
Modifier none
Group Mg-Fe-Mn Amphibole

Sample # 041172-05-550

Values		Satisfied Conditions
(Ca,Na)@B	0.00	(Ca,Na)@B < 1 and (Mg,Fe2,Mn)@B >= 0.95
(Mg,Fe2,Mn)@B	1.92	(Mg/(Mg+Fe2))< 0.5
Mg/(Mg+Fe2)	0.50	Si > 7
Si	7.95	

Mineral Analysis Program (Version 5.0)

ACTINOLITE
[1 0 0]



Quantitative Analysis Results - Standardless Analysis :
Spectrum1 041172-06 G10/1 SP551 Jan 1, 1997
EDS Parameters - 18KV, Takeoff Angle: 28.2°, Fit Index: 591.46
Correction: CLIFF LORIMER, Cycles: 1

Element	Atoms%	Compound	Weight%	Error(±)	Norm%
Mg	9.22	MgO	16.79	0.73	16.79
Al	0.75	Al2O3	1.73	0.21	1.73
Si	19.83	SiO2	53.86	1.16	53.86
Ca	4.34	CaO	11.00	0.49	11.00
Fe	4.61	Fe2O3	16.63	0.95	16.63
<Total>	100.00		100.00		100.00

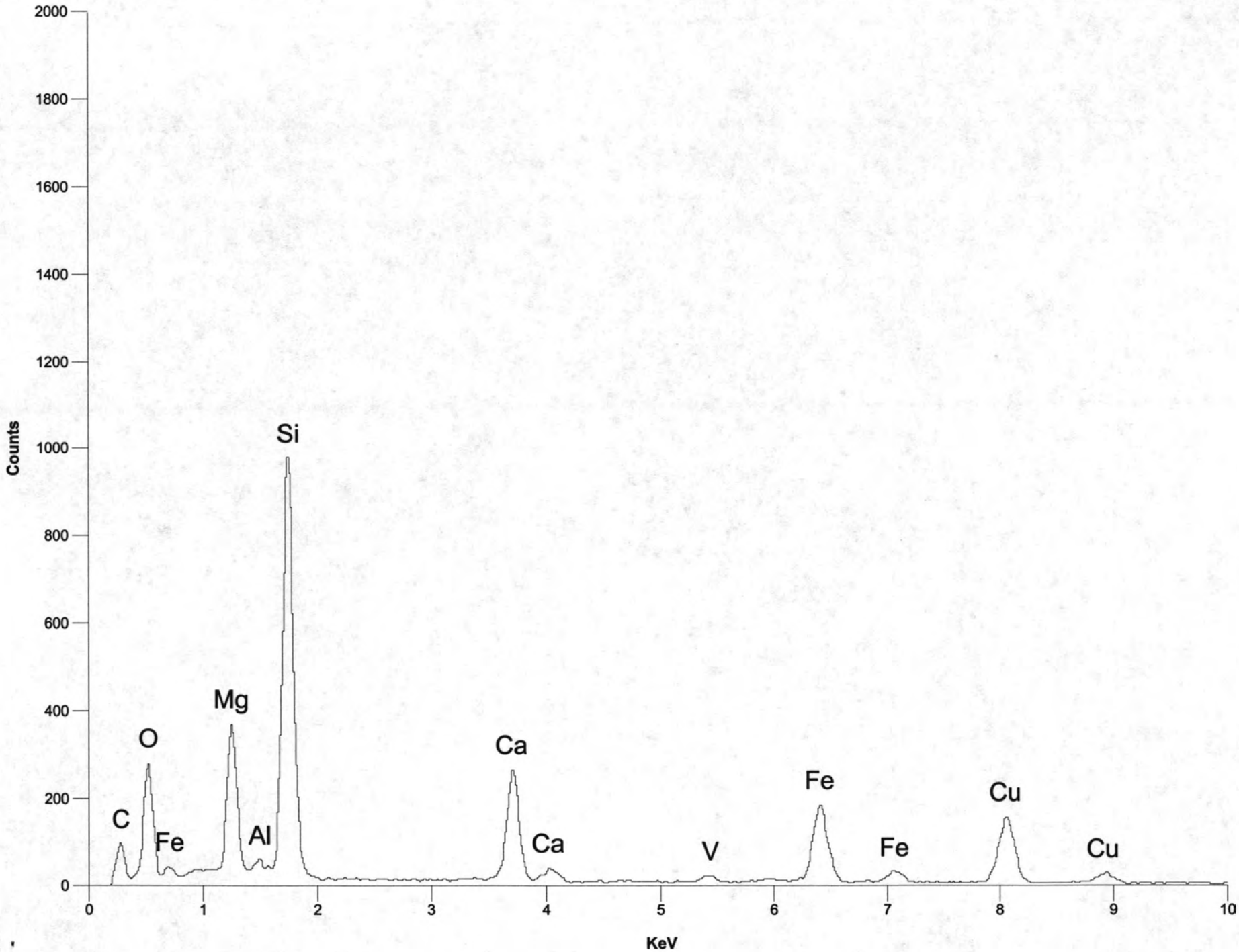
	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	53.86	Si+4	7.5589	7.5589							
Al2O3	1.73	Al+3	0.2861	0.2861	**0.0000**						
TiO2	0	Ti+4	0.0000	0.0000	**0.0000**						
Cr2O3	0	Cr+3	0.0000			0.0000	0.0000				
Fe(total)O	16.63	Fe+3	0.8605			0.8605	0.0000				
MgO	16.79	Mg+2	3.5129			3.5129	**0.0000**				
MnO	0	Fe+2	0.9953			0.6265	**0.3688**				
CaO	11	Mn+2	0.0000			0.0000	**0.0000**				
Na2O	0	Ca+2	1.6539					1.6312	0.0227		
K2O	0	Na+	0.0000					0.0000	**0.0000**	0.0000	0.0000
		K+	0.0000							0.0000	0.0000
Total	**100.01**		**Excess**	T site	**0.0000**	C site	**0.3688**	B site	**0.0226698**	A site	**0**
			Total	**7.8451**		**5.0000**		**1.6312**		**0.0000**	**0.0000**
			%Fill	**98.063**		**100**		**81.5614**			

Prefix none
Name actinolite
Modifier Ferrian
Group Calcic Amphibole

Sample # **041172-06-551**

Values		Satisfied Conditions
(Ca,Na)@B	1.63	(Ca,Na)@B >= 1 and Na@B < 0.5
Na@B	0.00	Ca@B >= 1.5 and (Na,K)@A < 0.5
Ca@B	1.63	(Mg/(Mg+Fe2))>= 0.5
(Na,K)@A	0.00	Si > 7.5
Mg/(Mg+Fe2)	0.78	(Mg/(Mg+Fe2))< 0.9
Si	7.56	

Mineral Analysis Program (Version 5.0)



Title: 041172-06 15/1 SP552 Time: 12:00 Date: Jan 1, 1997

	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	55.38	Si+4	7.8446	7.8446							
Al2O3	1.36	Al+3	0.2270	0.1554	**0.0716**						
TiO2	0	Ti+4	0.0000	0.0000	**0.0000**						
Cr2O3	0	Cr+3	0.0000			0.0000	0.0000				
Fe(total)O	13.35	Fe+3	0.0142			0.0142	0.0000				
MgO	15.02	Mg+2	3.1718			3.1718	**0.0000**				
MnO	0	Fe+2	1.5654			1.5654	**0.0000**				
CaO	11.99	Mn+2	0.0000			0.0000	**0.0000**				
Na2O	2.77	Ca+2	1.8195					1.8195	0.0000		
K2O	0.13	Na+	0.7607					0.1805	**0.5802**	0.5802	0.0000
		K+	0.0235							0.0235	0.0000
Total	**100**		**Excess**	T site	**0.0716**	C site	**0.0000**	B site	**0.5802156**	A site	**0**
			Total	**8**		**4.8232**		**2.0000**		**0.6037**	**0.0000**
			%Fill	**100**		**96.4631**		**100**			

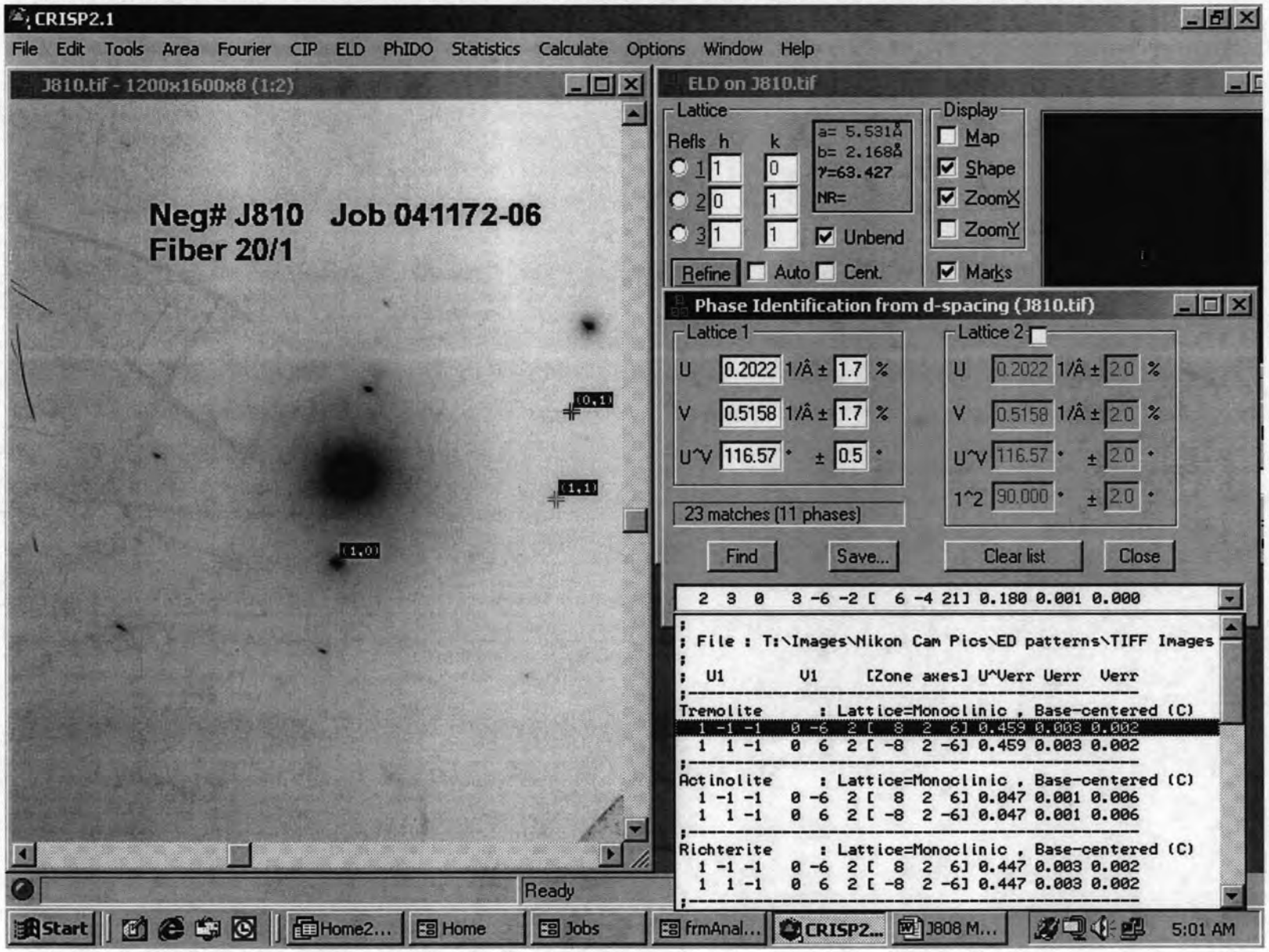
Prefix none
Name edenite
Modifier none
Group Calcic Amphibole

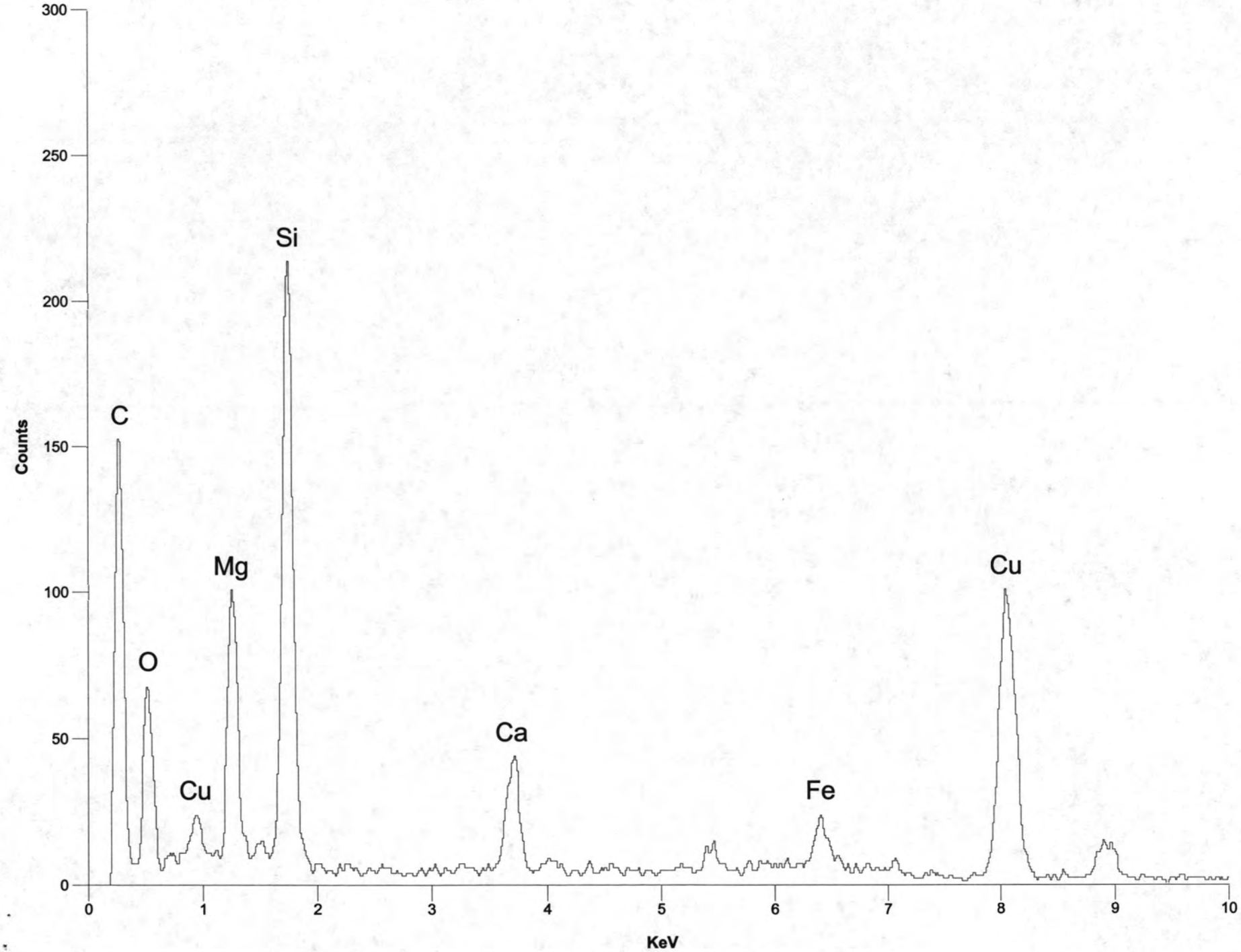
Sample # **041172-06-15-1**

Values		Satisfied Conditions
(Ca,Na)@B	2.00	(Ca,Na)@B >= 1 and Na@B < 0.5
Na@B	0.18	Ca@B >= 1.5 and (Na,K)@A >= 0.5
Ca@B	1.82	(Mg/(Mg+Fe2))>= 0.5
(Na,K)@A	0.60	Si > 6.5
Mg/(Mg+Fe2)	0.67	
Si	7.84	

Mineral Analysis Program (Version 5.0)

TREMOLITE
[4 1 3]





Title: 041172-06 2/1 SP553 Time: 12:00 Date: Jan 1, 1997

	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	60.23	Si+4	8.0000	8.0000							
Al2O3	0.02	Al+3	0.0066	0.0000	**0.0066**						
TiO2	0	Ti+4	0.0000	0.0000	**0.0000**						
Cr2O3	0	Cr+3	0.0000			0.0000	0.0000				
Fe(total)O	5.29	Fe+3	0.2626			0.2626	0.0000				
MgO	23.12	Mg+2	4.6101			4.6101	**0.0000**				
MnO	0	Fe+2	0.3060			0.1208	**0.1852**				
CaO	11.3	Mn+2	0.0000			0.0000	**0.0000**				
Na2O	0.03	Ca+2	1.6224					1.6224	0.0000		
K2O	0.01	Na+	0.0162					0.0162	**0.0000**	0.0000	0.0000
		K+	0.0054							0.0054	0.0000
Total	**100**		**Excess**	T site	**0.0066**	C site	**0.1852**	B site	**0**	A site	**0**
			Total	**8**		**5.0000**		**1.6386**		**0.0054**	**0.0000**
			%Fill	**100**		**100**		**81.928**			

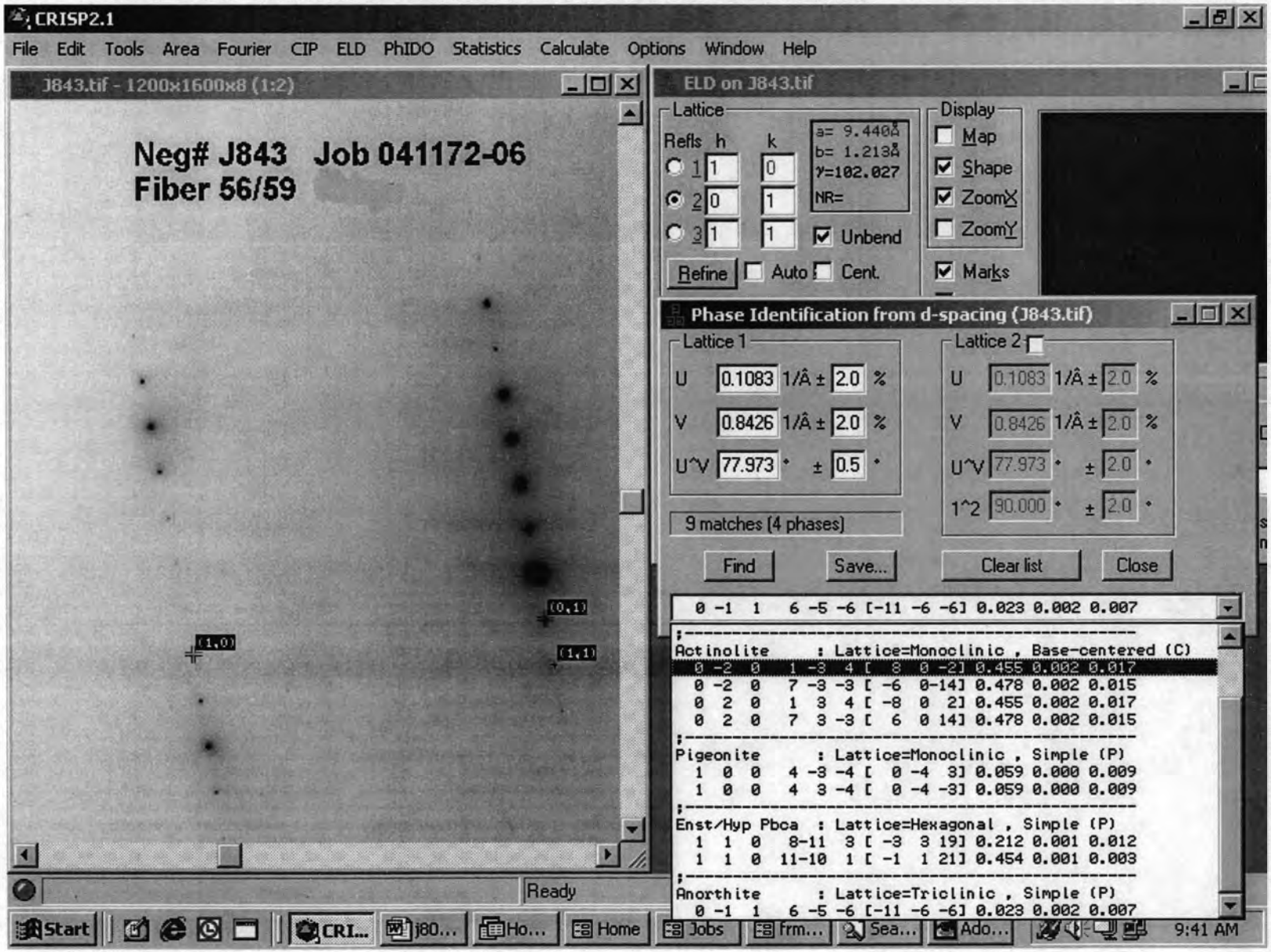
Prefix none
Name tremolite
Modifier none
Group Calcic Amphibole

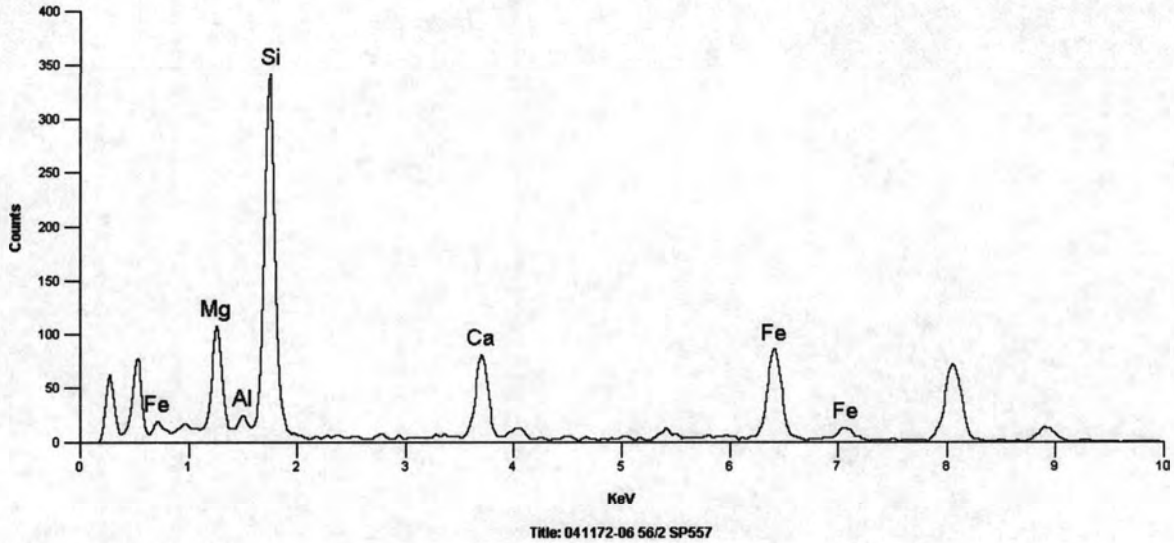
Sample # **041172-06-20-1**

Values		Satisfied Conditions
(Ca,Na)@B	1.64	(Ca,Na)@B >= 1 and Na@B < 0.5
Na@B	0.02	Ca@B >= 1.5 and (Na,K)@A < 0.5
Ca@B	1.62	(Mg/(Mg+Fe2))>= 0.5
(Na,K)@A	0.01	Si > 7.5
Mg/(Mg+Fe2)	0.94	(Mg/(Mg+Fe2))>= 0.9
Si	8.00	

Mineral Analysis Program (Version 5.0)

ACTINOLITE
[4 0 -1]





Quantitative Analysis Results - Standardless Analysis :
Spectrum1 041172-06 56/2 SP557 Jan 1, 1997
EDS Parameters - 18KV, Takeoff Angle: 28.2°, Fit Index: 588.52
Correction: CLIFF LORIMER, Cycles: 1

Element	Atoms%	Compound	Weight%	Error(±)	Norm%
Mg	9.11	MgO	16.52	1.14	16.52
Al	0.46	Al2O3	1.06	0.30	1.06
Si	19.97	SiO2	53.96	1.86	53.96
Ca	3.61	CaO	9.09	0.70	9.09
Fe	5.40	Fe2O3	19.37	1.54	19.37
<Total>	100.00		100.00		100.00

	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	53.96	Si+4	7.6078	7.6078							
Al2O3	1.06	Al+3	0.1761	0.1761	**0.0000**						
TiO2	0	Ti+4	0.0000	0.0000	**0.0000**						
Cr2O3	0	Cr+3	0.0000			0.0000	0.0000				
Fe(total)O	19.37	Fe+3	1.0069			1.0069	0.0000				
MgO	16.52	Mg+2	3.4723			3.4723	**0.0000**				
MnO	0	Fe+2	1.1646			0.5208	**0.6439**				
CaO	9.09	Mn+2	0.0000			0.0000	**0.0000**				
Na2O	0	Ca+2	1.3730					1.3561	0.0169		
K2O	0	Na+	0.0000					0.0000	**0.0000**	0.0000	0.0000
		K+	0.0000							0.0000	0.0000
Total	**100**		**Excess**	T site	**0.0000**	C site	**0.6439**	B site	**0.016856**	A site	**0**
			Total	**7.7839**		**5.0000**		**1.3561**		**0.0000**	**0.0000**
			%Fill	**97.298**		**100**		**67.8071**			

Prefix Ferri

Name probable actinolite Ca values below optimal levels

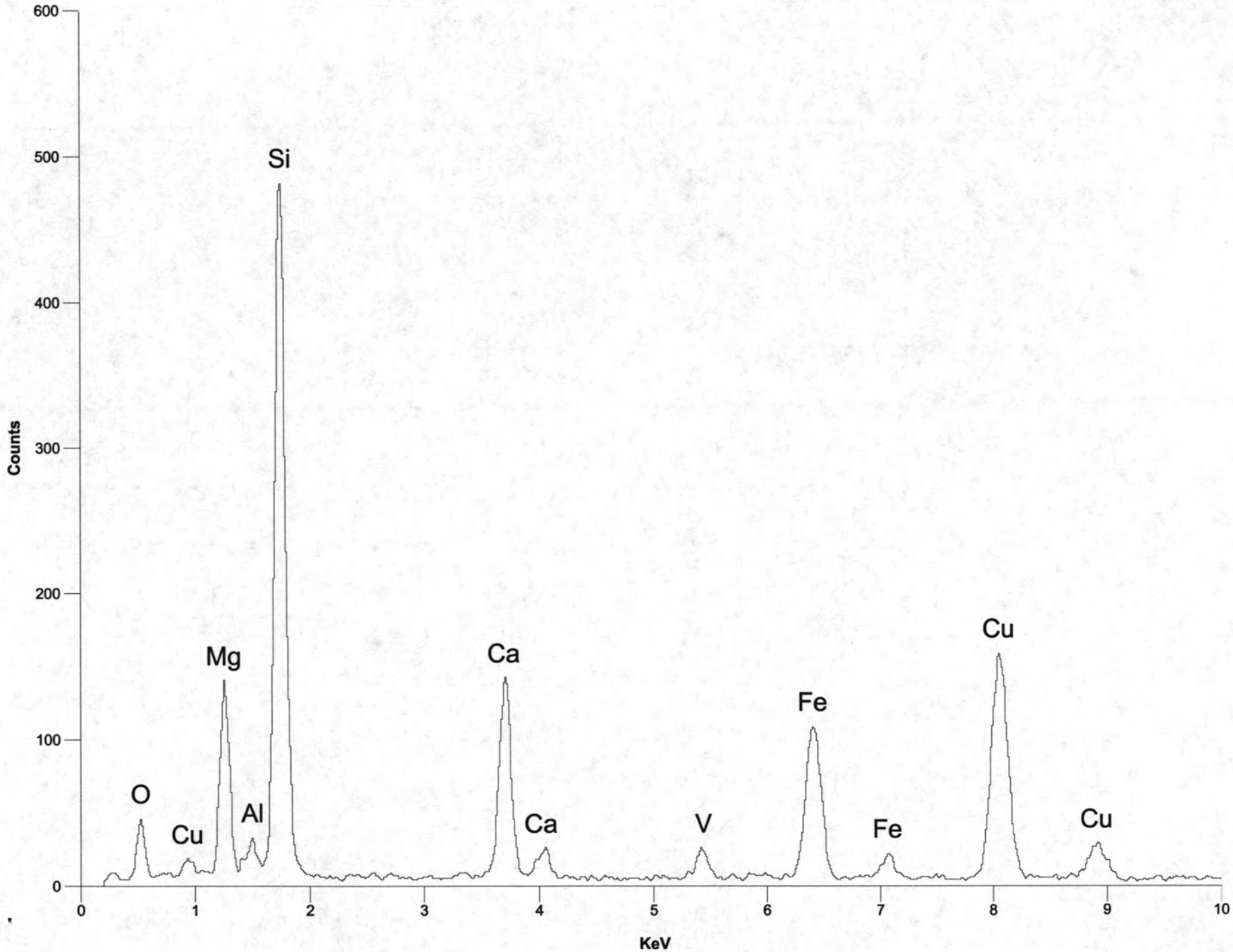
Modifier none

Group Calcic Amphibole

Sample # 041172-06-557

Values		Satisfied Conditions
(Ca,Na)@B	1.36	(Ca,Na)@B >= 1 and Na@B < 0.5
Na@B	0.00	1 < Ca@B < 1.5 and (Na,K)@A < 0.5
Ca@B	1.36	(Mg/(Mg+Fe2))>= 0.5
(Na,K)@A	0.00	Si > 7.5
Mg/(Mg+Fe2)	0.75	(Mg/(Mg+Fe2))< 0.9
Si	7.61	

Mineral Analysis Program (Version 5.0)



Title: 041172-06 25/1 SP554 Time: 12:00 Date: Jan 1, 1997

	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	54.56	Si+4	7.8154	7.8154							
Al2O3	3.02	Al+3	0.5098	0.1846	**0.3252**						
TiO2	0	Ti+4	0.0000	0.0000	**0.0000**						
Cr2O3	0	Cr+3	0.0000			0.0000	0.0000				
Fe(total)O	17.5	Fe+3	0.0189			0.0189	0.0000				
MgO	11.73	Mg+2	2.5050			2.5050	**0.0000**				
MnO	0	Fe+2	2.0752			2.0752	**0.0000**				
CaO	12.73	Mn+2	0.0000			0.0000	**0.0000**				
Na2O	0.01	Ca+2	1.9536					1.9536	0.0000		
K2O	0.45	Na+	0.0028					0.0028	**0.0000**	0.0000	0.0000
		K+	0.0822							0.0822	0.0000
Total	**100**		**Excess**	T site	**0.3252**	C site	**0.0000**	B site	**0**	A site	**0**
			Total	**8**		**4.9242**		**1.9563**		**0.0822**	**0.0000**
			%Fill	**100**		**98.484**		**97.8169**			

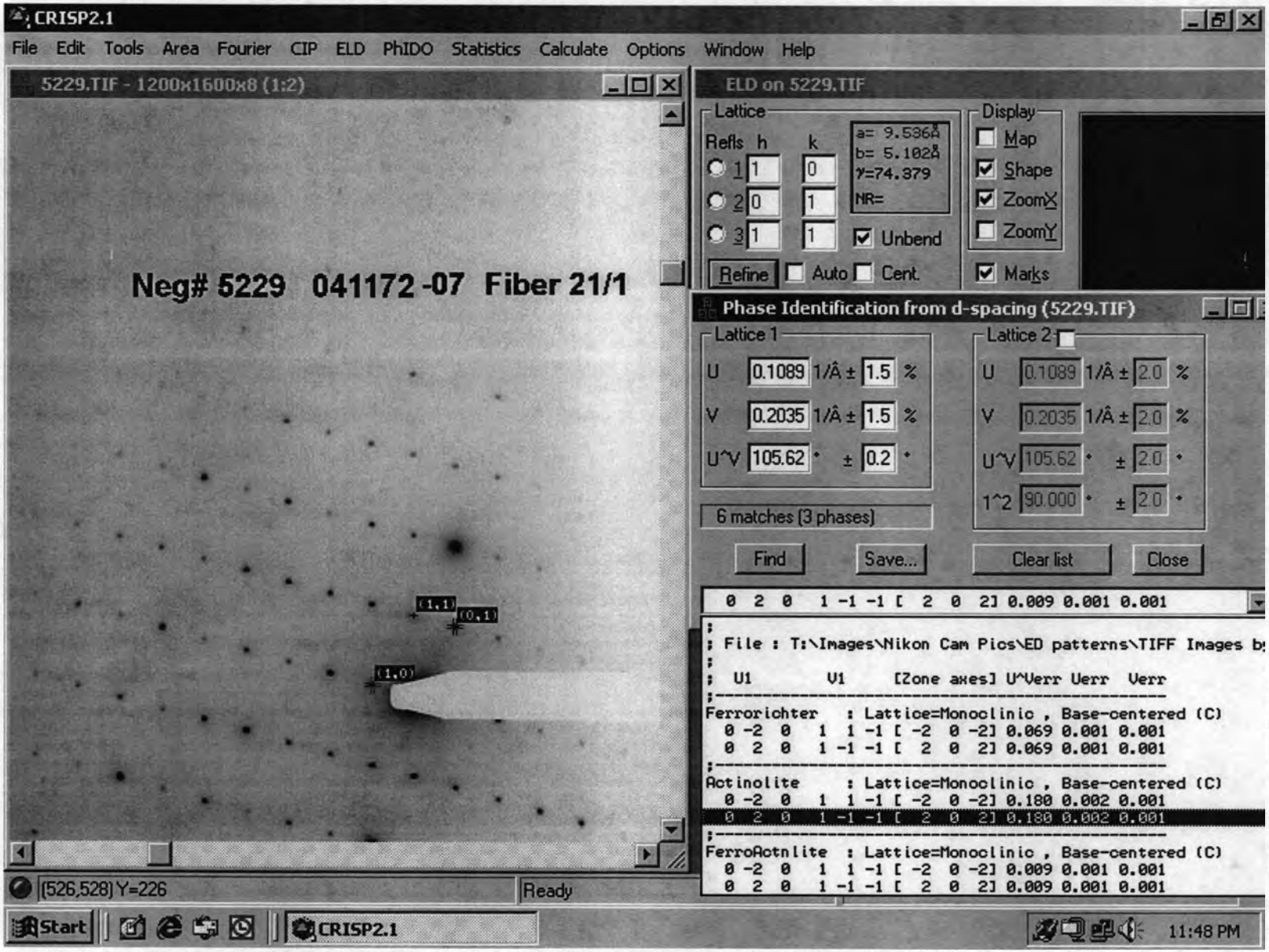
Prefix none
Name actinolite
Modifier none
Group Calcic Amphibole

Sample # **041172-06-25-1**

Values		Satisfied Conditions
(Ca,Na)@B	1.96	(Ca,Na)@B >= 1 and Na@B < 0.5
Na@B	0.00	Ca@B >= 1.5 and (Na,K)@A < 0.5
Ca@B	1.95	(Mg/(Mg+Fe2))>= 0.5
(Na,K)@A	0.08	Si > 7.5
Mg/(Mg+Fe2)	0.55	(Mg/(Mg+Fe2))< 0.9
Si	7.82	

Mineral Analysis Program (Version 5.0)

ACTINOLITE
[101]



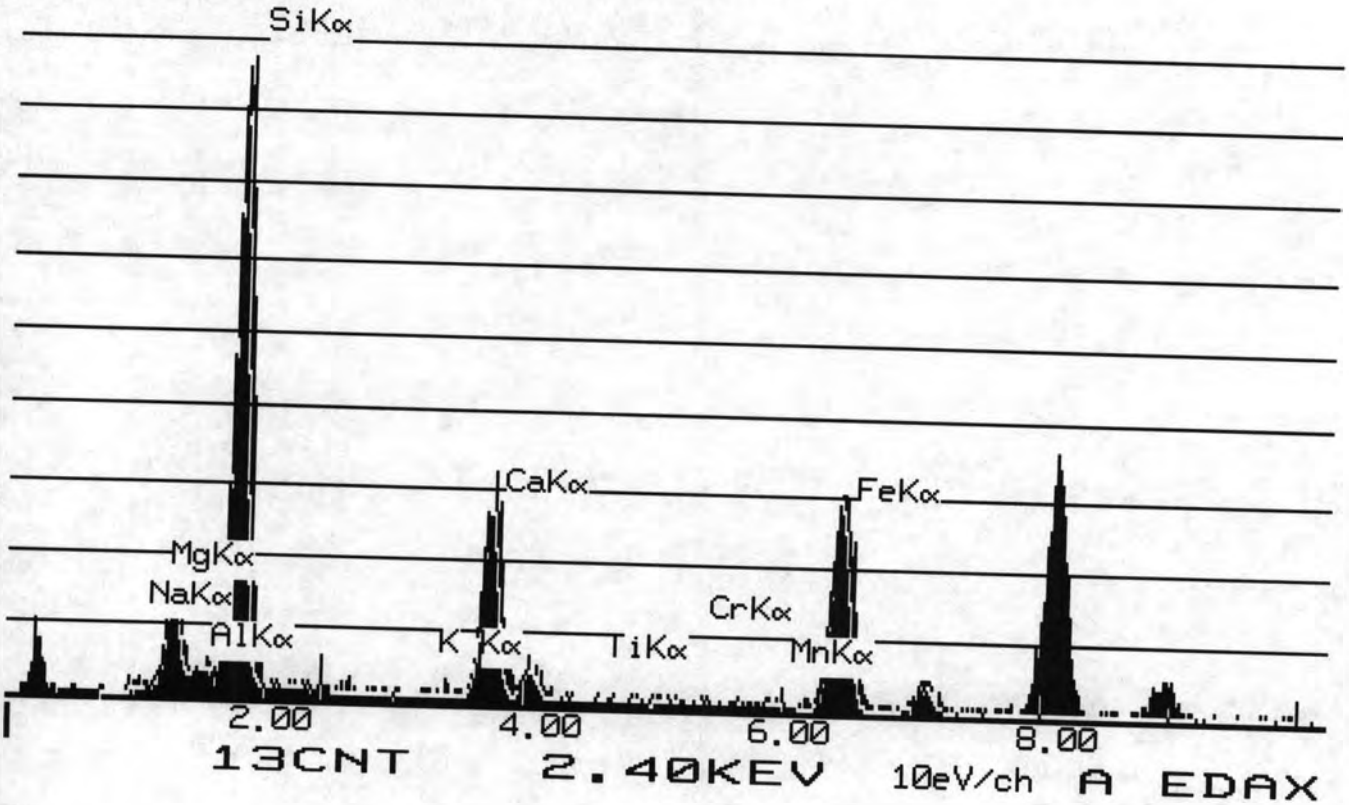
INTE-% :
LABEL = 041172-07 21/21 15149
23-NOV-72 00:17:00
55.752 LIVE SECONDS

ELEM	CPS	WT % ELEM	WT % OXIDE
NAK	0.215	0.256	0.345
MGK	12.879	7.240	12.004
ALK	1.058	0.357	0.675
SIK	78.312	24.759	52.968
CAK	30.887	9.310	13.027
CRK	0.413	0.173	0.253
MNK	0.574	0.250	0.322
FEK	35.640	14.272	20.405

TOTAL			100.000

USED PEIF: USER

22-NOV-04 00:17:30 SUPER QUANT
RATE= 1CPS TIME= 55LSEC
FS= 509/ 509 PRST= 200LSEC
A =041172-07 21/21 15149



	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	52.968	Si+4	7.7415	7.7415							
Al2O3	0.675	Al+3	0.1163	0.1163	**0.0000**						
TiO2	0	Ti+4	0.0000	0.0000	**0.0000**						
Cr2O3	0.253	Cr+3	0.0292			0.0292	0.0000				
Fe(total)O	20.405	Fe+3	0.1571			0.1571	0.0000				
MgO	12.004	Mg+2	2.6155			2.6155	**0.0000**				
MnO	0.322	Fe+2	2.3192			2.1981	**0.1210**				
CaO	13.027	Mn+2	0.0399			0.0000	**0.0399**				
Na2O	0.345	Ca+2	2.0397					1.8391	0.2006		
K2O	0	Na+	0.0978					0.0000	**0.0978**	0.0978	0.0000
		K+	0.0000							0.0000	0.0000
Total	**99.999**		**Excess**	T site	**0.0000**	C site	**0.1609**	B site	**0.2983809**	A site	**0**
			Total	**7.8577**		**5.0000**		**1.8391**		**0.0978**	**0.0000**
			%Fill	**98.222**		**100**		**91.956**			

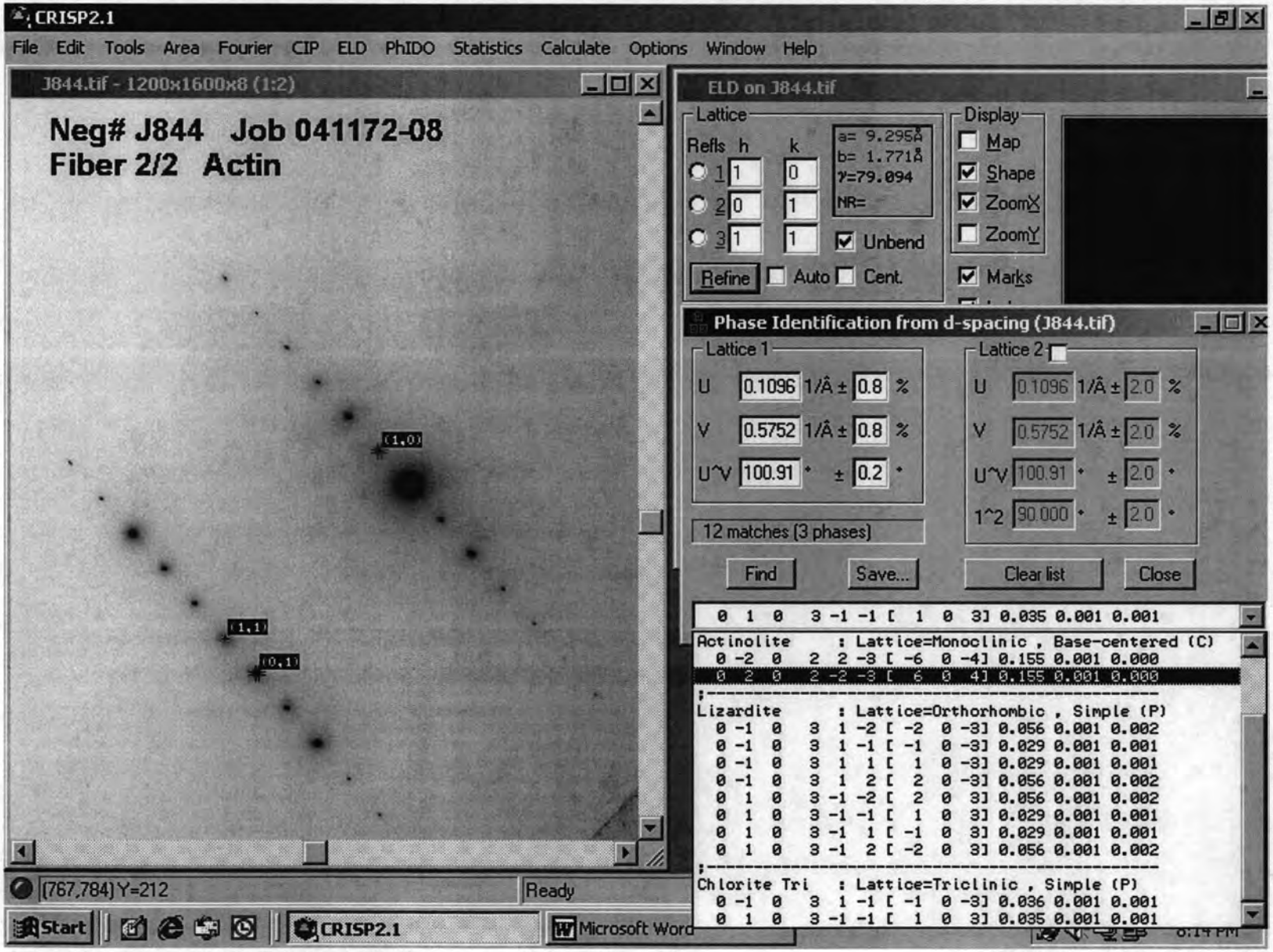
Prefix none
Name actinolite
Modifier none
Group **Calcic Amphibole**

Sample # **041172-07-21**

Values		Satisfied Conditions
(Ca,Na)@B	1.84	(Ca,Na)@B >= 1 and Na@B < 0.5
Na@B	0.00	Ca@B >= 1.5 and (Na,K)@A < 0.5
Ca@B	1.84	(Mg/(Mg+Fe2))>= 0.5
(Na,K)@A	0.10	Si > 7.5
Mg/(Mg+Fe2)	0.53	(Mg/(Mg+Fe2))< 0.9
Si	7.74	

Mineral Analysis Program (Version 5.0)

ACTINOLITE
[3 0 2]



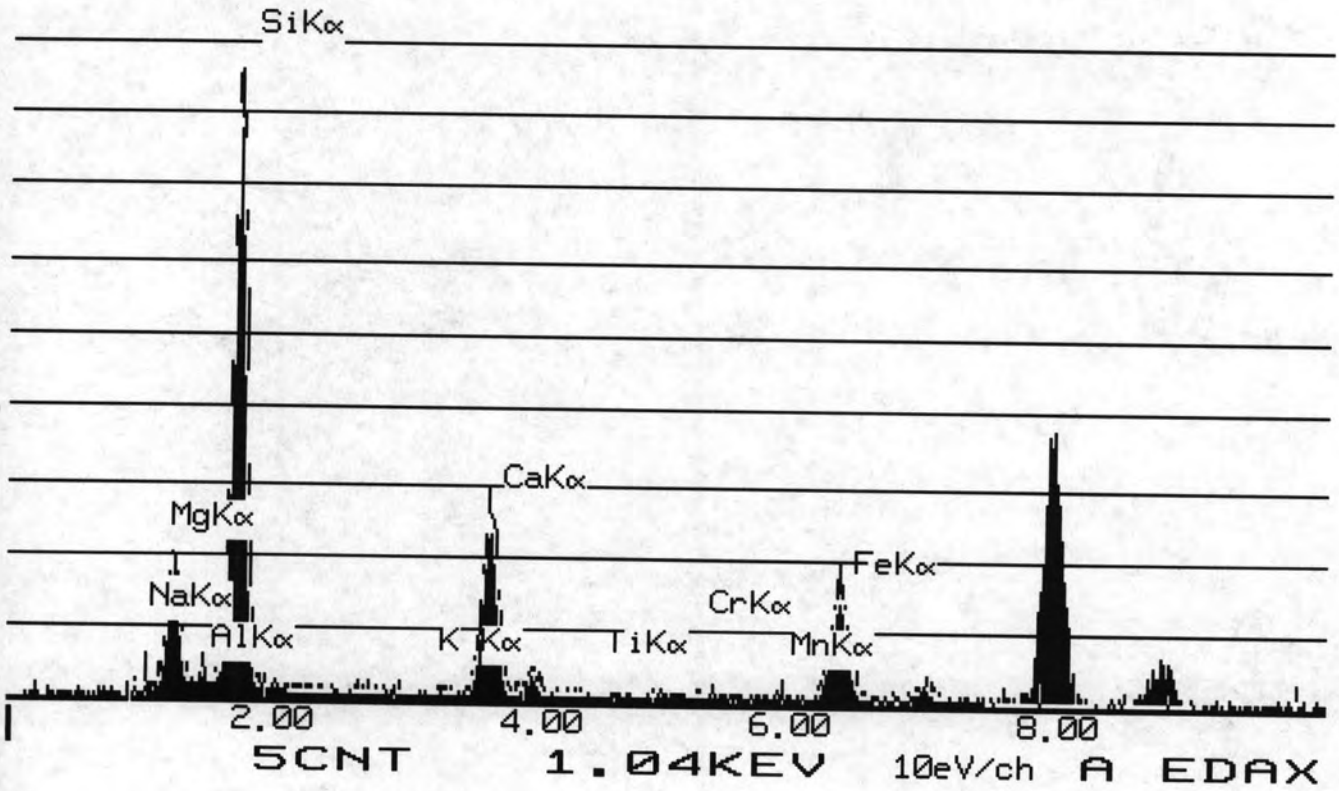
INTE-% :
LABEL = 041172-08 2/1 15152
09-OCT-72 12:12:26
125.576 LIVE SECONDS

ELEM	CPS	WT % ELEM	WT % OXIDE
MGK	5.089	9.907	16.427
ALK	0.502	0.587	1.109
SIK	24.742	27.093	57.962
K K	0.319	0.580	0.698
CAK	8.624	9.004	12.598
TIK	0.088	0.129	0.215
FEK	5.542	7.687	10.990

TOTAL			100.000

USED PEIF: USER

08-OCT-04 12:12:58 SUPER QUANT
RATE= 108CPS TIME= 126LSEC
FS= 359/ 359 PRST= 200LSEC
A =041172-08 2/1 15152



	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	57.962	Si+4	8.0000	8.0000							
Al2O3	1.109	Al+3	0.1844	0.0000	**0.1844**						
TiO2	0.215	Ti+4	0.0265	0.0000	**0.0265**						
Cr2O3	0	Cr+3	0.0000			0.0000	0.0000				
Fe(total)O	10.99	Fe+3	0.0135			0.0135	0.0000				
MgO	16.427	Mg+2	3.4040			3.4040	**0.0000**				
MnO	0	Fe+2	1.2661			1.2661	**0.0000**				
CaO	12.598	Mn+2	0.0000			0.0000	**0.0000**				
Na2O	0	Ca+2	1.8773					1.8773	0.0000		
K2O	0.698	Na+	0.0000					0.0000	**0.0000**	0.0000	0.0000
		K+	0.1269							0.1269	0.0000
Total	**99.999**		**Excess**	T site	**0.2109**	C site	**0.0000**	B site	**0**	A site	**0**
			Total	**8**		**4.8944**		**1.8773**		**0.1269**	**0.0000**
			%Fill	**100**		**97.8888**		**93.8664**			

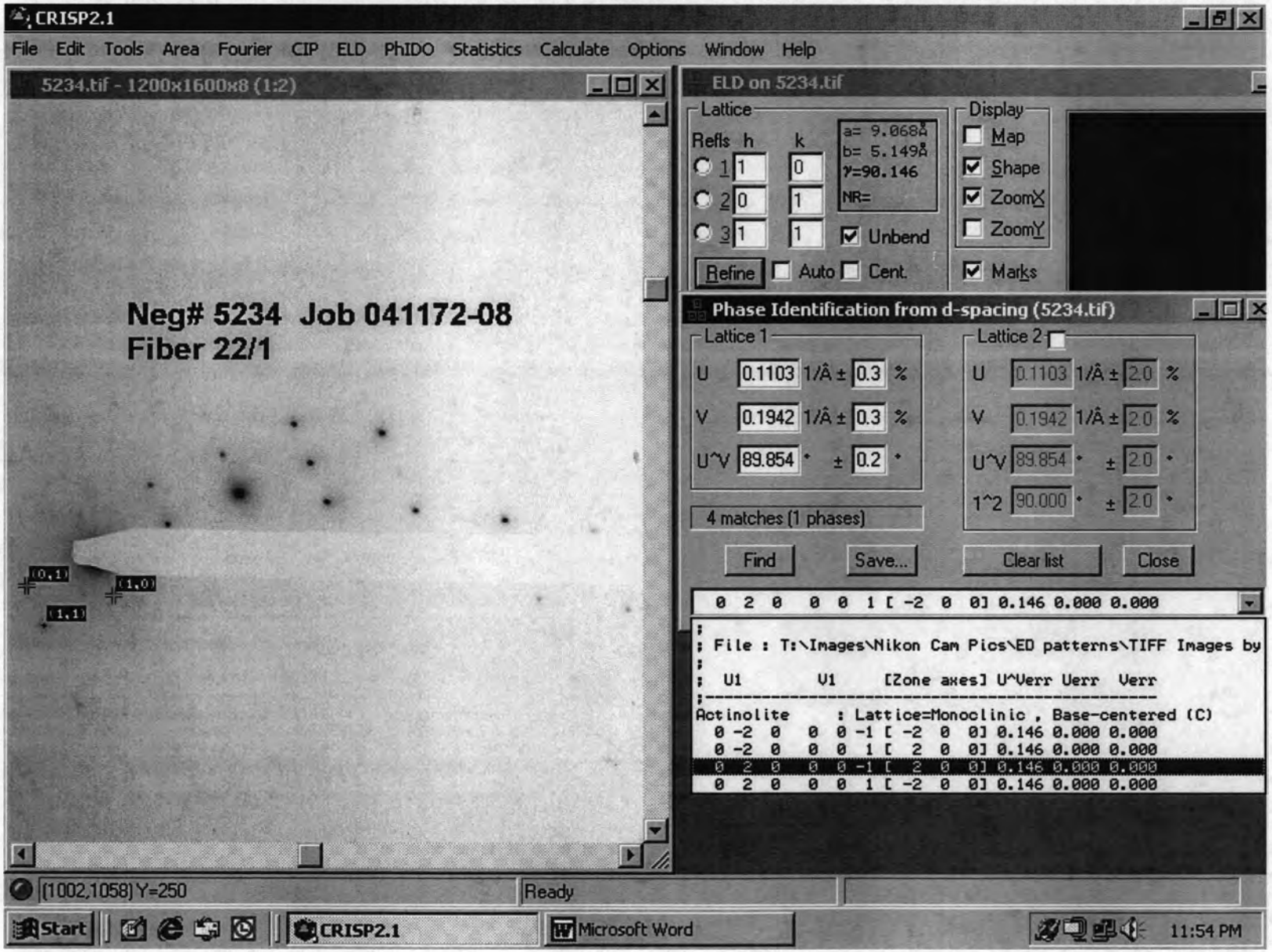
Prefix none
Name actinolite
Modifier none
Group Calcic Amphibole

Sample # **041172-08-15152**

Values		Satisfied Conditions
(Ca,Na)@B	1.88	(Ca,Na)@B >= 1 and Na@B < 0.5
Na@B	0.00	Ca@B >= 1.5 and (Na,K)@A < 0.5
Ca@B	1.88	(Mg/(Mg+Fe2))>= 0.5
(Na,K)@A	0.13	Si > 7.5
Mg/(Mg+Fe2)	0.73	(Mg/(Mg+Fe2))< 0.9
Si	8.00	

Mineral Analysis Program (Version 5.0)

ACTINOLITE
[1 0 0]



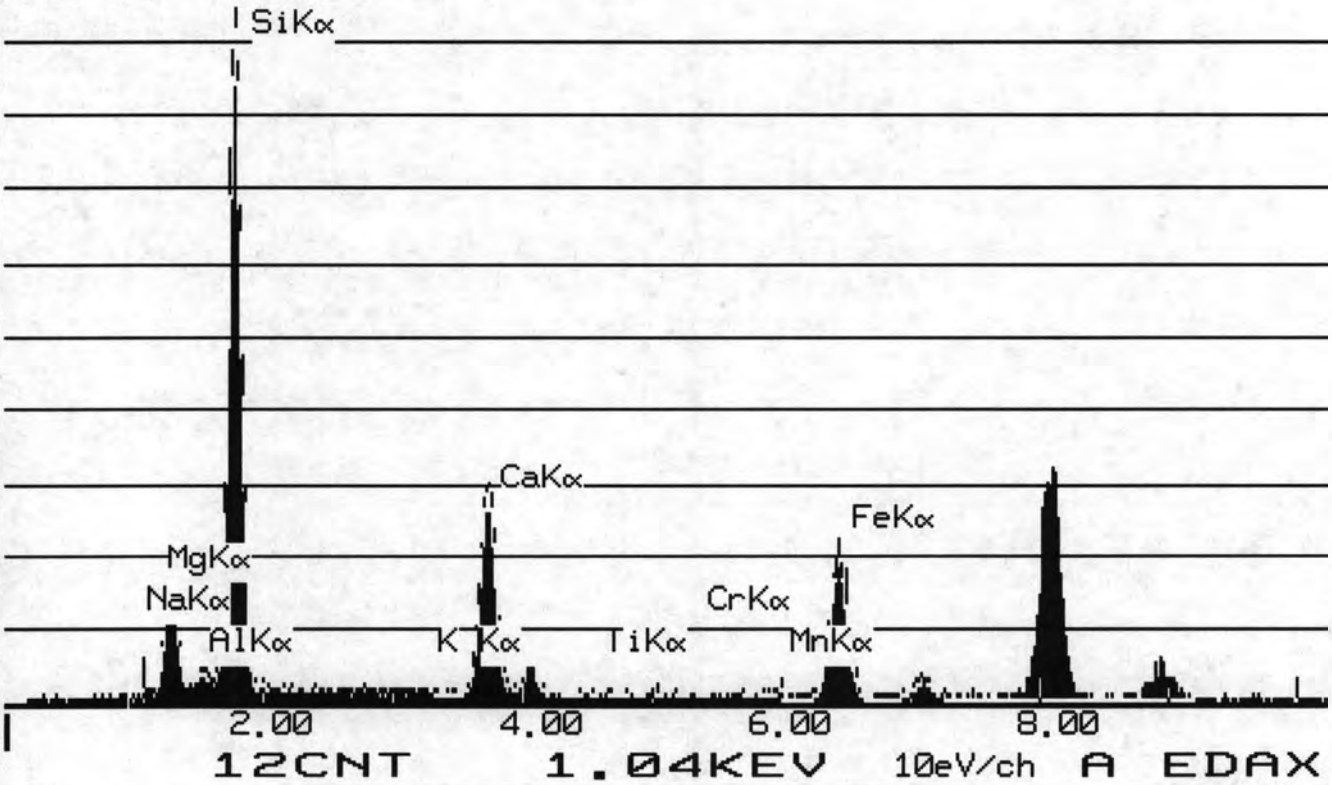
INTE-% :
LABEL = 04117-08 23/2 15154
09-OCT-72 17:16:09
91.504 LIVE SECONDS

ELEM	CPS	WT % ELEM	WT % OXIDE
MGK	12.480	8.585	14.234
ALK	1.945	0.804	1.519
SIK	69.025	26.703	57.127
CAK	25.463	9.392	13.141
MNK	0.590	0.314	0.406
FEK	19.376	9.494	13.574

TOTAL			100.000

USED PEIF: USER

08-OCT-04 17:16:38 SUPER QUANT
RATE= 299CPS TIME= 91LSEC
FS= 687/ 687 PRST= 200LSEC
A =04117-08 23/2 15154



	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	57.127	Si+4	8.0000	8.0000							
Al2O3	1.519	Al+3	0.2524	0.0000	**0.2524**						
TiO2	0	Ti+4	0.0000	0.0000	**0.0000**						
Cr2O3	0	Cr+3	0.0000			0.0000	0.0000				
Fe(total)O	13.574	Fe+3	0.0151			0.0151	0.0000				
MgO	14.234	Mg+2	2.9798			2.9798	**0.0000**				
MnO	0.406	Fe+2	1.5780			1.5780	**0.0000**				
CaO	13.141	Mn+2	0.0501			0.0501	**0.0000**				
Na2O	0	Ca+2	1.9771					1.9771	0.0000		
K2O	0	Na+	0.0000					0.0000	**0.0000**	0.0000	0.0000
		K+	0.0000							0.0000	0.0000
Total	**100.001**		**Excess**	T site	**0.2524**	C site	**0.0000**	B site	**0**	A site	**0**
			Total	**8**		**4.8754**		**1.9771**		**0.0000**	**0.0000**
			%Fill	**100**		**97.508**		**98.8537**			

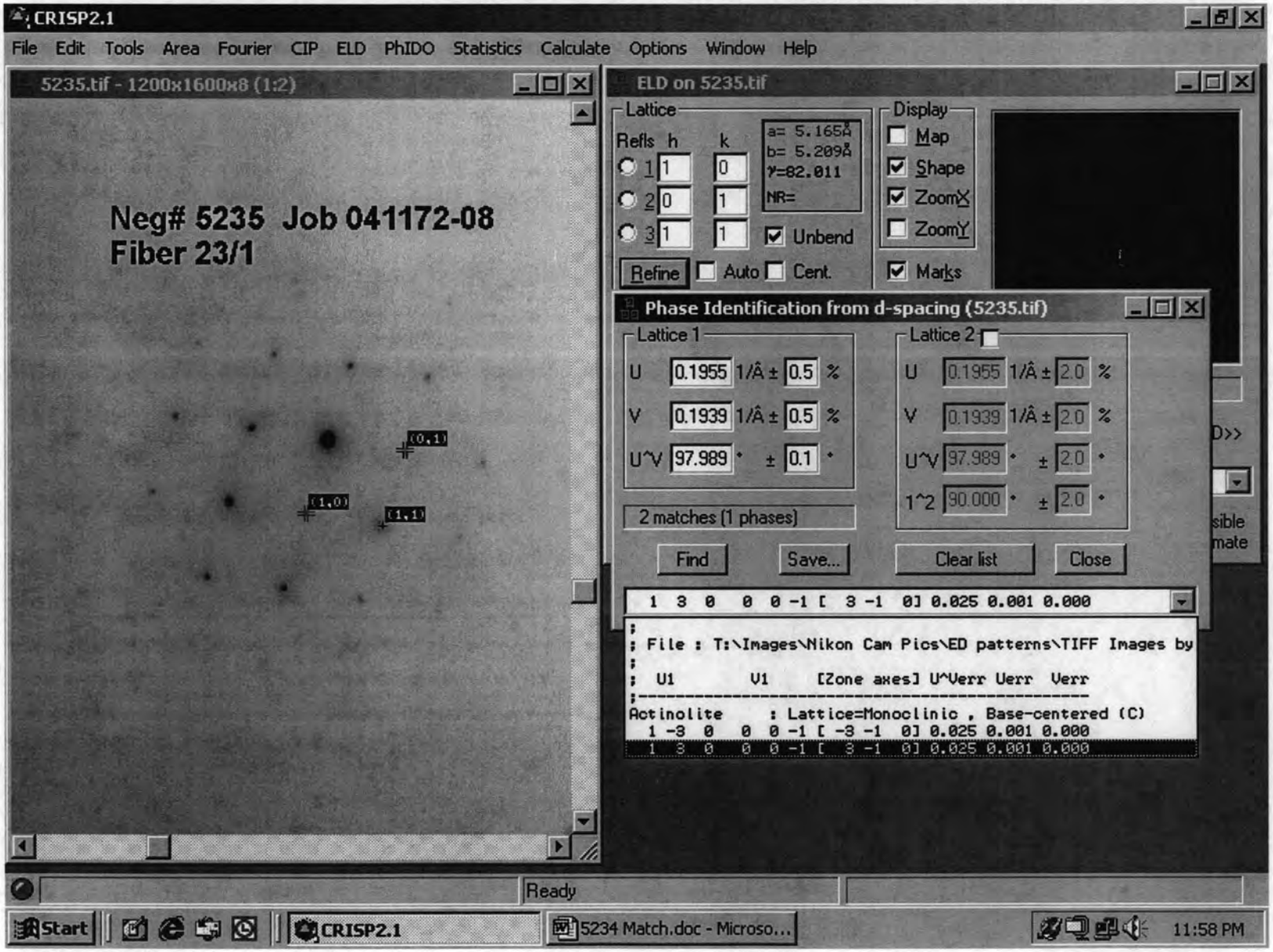
Prefix none
Name actinolite
Modifier none
Group Calcic Amphibole

Sample # **041172-08-15154**

Values		Satisfied Conditions
(Ca,Na)@B	1.98	(Ca,Na)@B >= 1 and Na@B < 0.5
Na@B	0.00	Ca@B >= 1.5 and (Na,K)@A < 0.5
Ca@B	1.98	(Mg/(Mg+Fe2))>= 0.5
(Na,K)@A	0.00	Si > 7.5
Mg/(Mg+Fe2)	0.65	(Mg/(Mg+Fe2))< 0.9
Si	8.00	

Mineral Analysis Program (Version 5.0)

ACTINOLITE
[3 1 0]



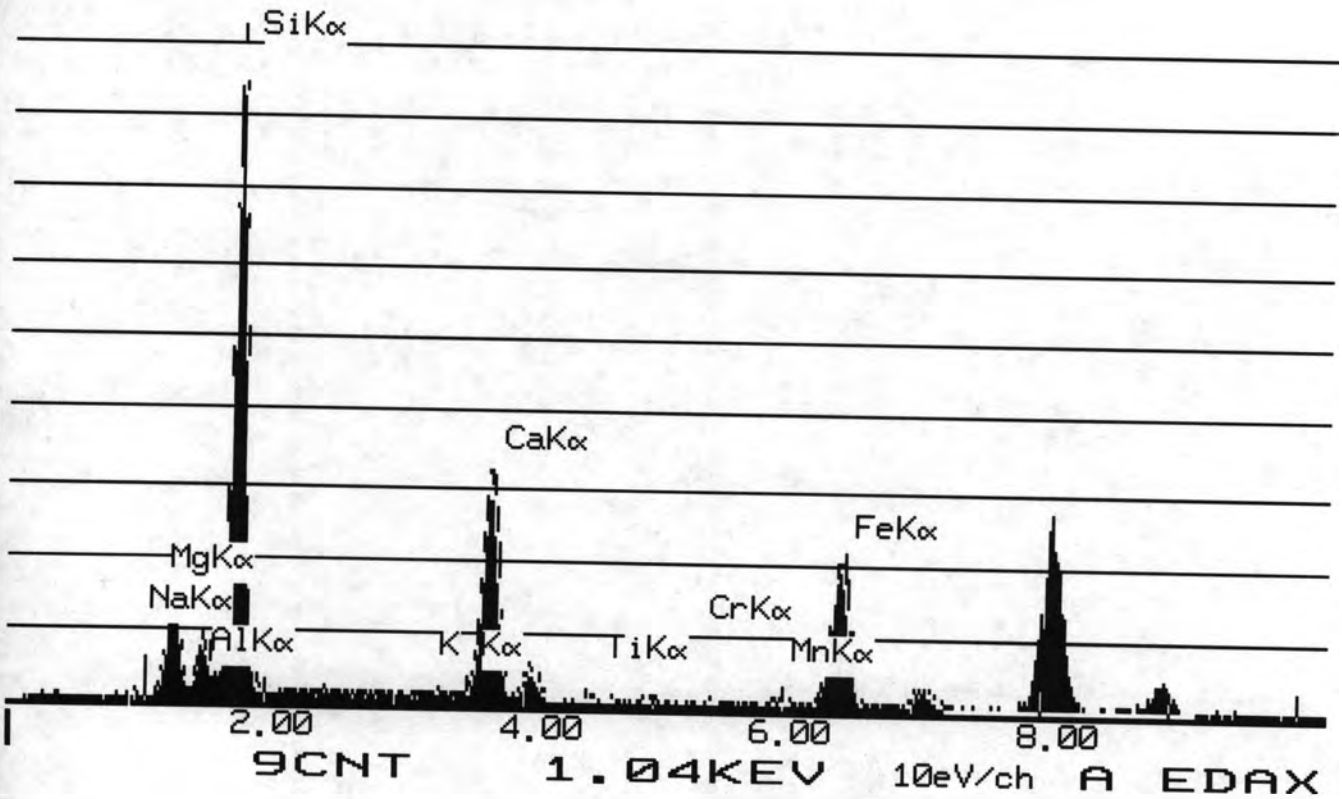
INTE-% :
LABEL = 041172-08 23/1 15155
09-OCT-72 19:01:11
45.022 LIVE SECONDS

ELEM	CPS	WT % ELEM	WT % OXIDE
MGK	25.365	8.071	13.382
ALK	9.773	1.868	3.529
SIK	143.263	25.637	54.847
CAK	58.171	9.925	13.887
TIK	1.022	0.246	0.410
MNK	0.600	0.148	0.191
FEK	42.446	9.620	13.755

TOTAL			100.000

USED PEIF: USER

08-OCT-04 19:02:01 SUPER QUANT
RATE= 569CPS TIME= 45LSEC
FS= 715/ 715 PRST= 200LSEC
A =041172-08 23/1 15155



	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	54.847	Si+4	7.7353	7.7353							
Al2O3	3.529	Al+3	0.5866	0.2647	**0.3219**						
TiO2	0.41	Ti+4	0.0435	0.0000	**0.0435**						
Cr2O3	0	Cr+3	0.0000			0.0000	0.0000				
Fe(total)O	13.755	Fe+3	0.0146			0.0146	0.0000				
MgO	13.382	Mg+2	2.8137			2.8137	**0.0000**				
MnO	0.191	Fe+2	1.6059			1.6059	**0.0000**				
CaO	13.887	Mn+2	0.0228			0.0228	**0.0000**				
Na2O	0	Ca+2	2.0982					2.0000	0.0982		
K2O	0	Na+	0.0000					0.0000	**0.0000**	0.0000	0.0000
		K+	0.0000							0.0000	0.0000
Total	**100.001**		**Excess**	T site	**0.3654**	C site	**0.0000**	B site	**0.0982444**	A site	**0**
			Total	**8**		**4.8224**		**2.0000**		**0.0000**	**0.0000**
			%Fill	**100**		**96.4473**		**100**			

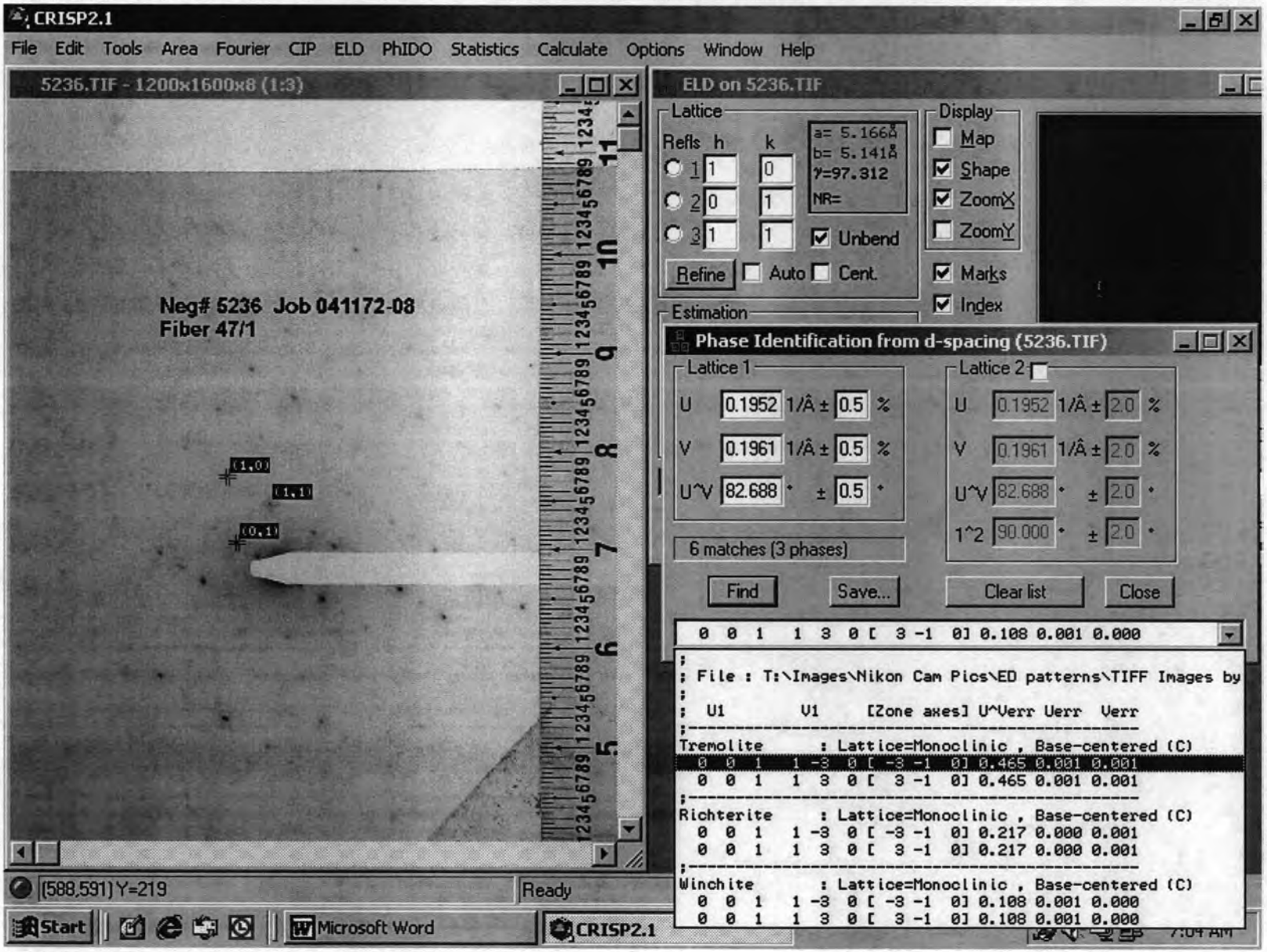
Prefix none
Name actinolite
Modifier none
Group Calcic Amphibole

Sample # **041172-08-15155**

Values		Satisfied Conditions
(Ca,Na)@B	2.00	(Ca,Na)@B >= 1 and Na@B < 0.5
Na@B	0.00	Ca@B >= 1.5 and (Na,K)@A < 0.5
Ca@B	2.00	(Mg/(Mg+Fe2))>= 0.5
(Na,K)@A	0.00	Si > 7.5
Mg/(Mg+Fe2)	0.64	(Mg/(Mg+Fe2))< 0.9
Si	7.74	

Mineral Analysis Program (Version 5.0)

TREMOLITE
[3 1 0]



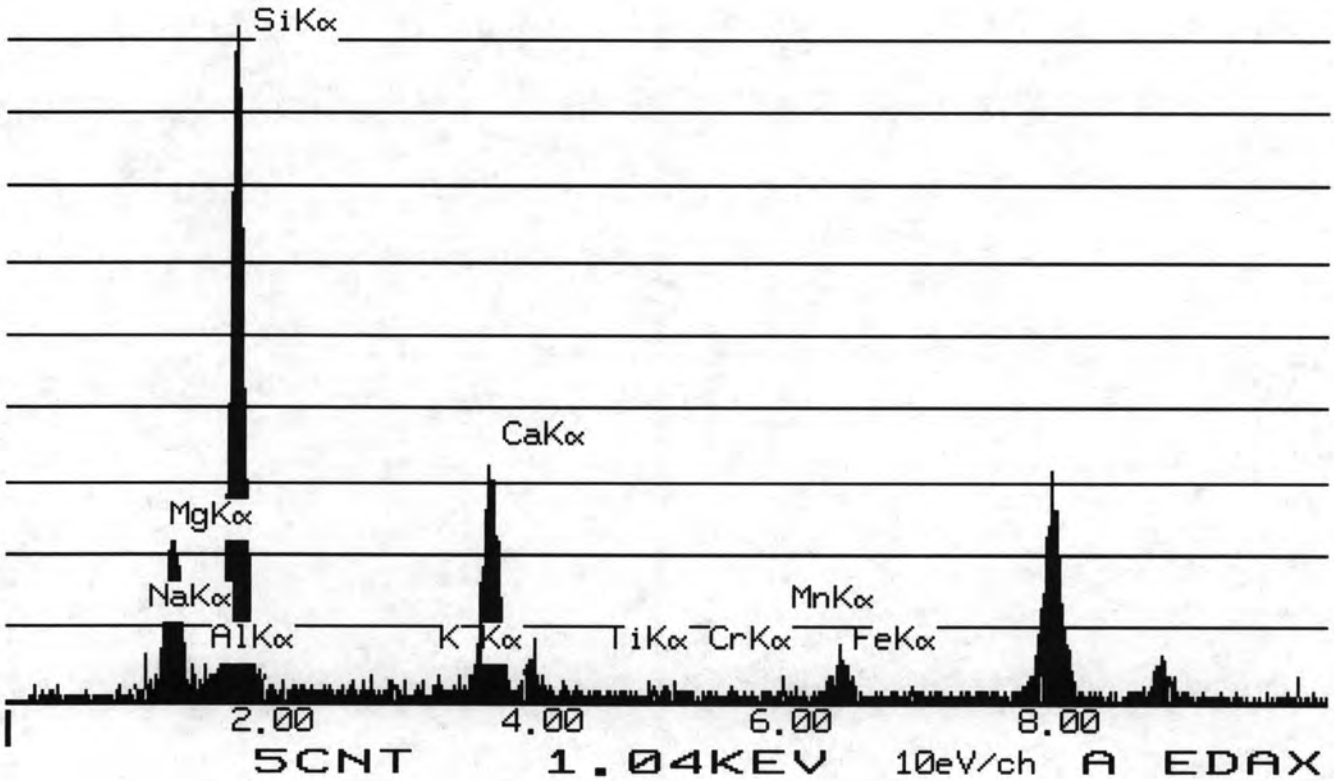
INTE-% :
LABEL =
09-OCT-72 22:22:20
52.106 LIVE SECONDS

ELEM	CPS	WT % ELEM	WT % OXIDE
NAK	0.806	1.237	1.668
MGK	18.002	13.043	21.627
ALK	1.324	0.576	1.089
SIK	65.673	26.763	57.255
K K	0.269	0.182	0.219
CAK	25.966	10.089	14.116
TIK	0.192	0.105	0.175
CRK	0.345	0.187	0.273
MNK	0.403	0.226	0.292
FEK	4.452	2.298	3.286

TOTAL			100.000

USED PEIF: USER

08-OCT-04 22:23:48 SUPER QUANT
RATE=10603CPS TIME= 52LSEC
FS= 380/ 380 PRST= 200LSEC
A =041172-08 47/1 15156



	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	57.255	Si+4	7.7853	7.7853							
Al2O3	1.089	Al+3	0.1745	0.1745	**0.0000**						
TiO2	0.175	Ti+4	0.0179	0.0179	**0.0000**						
Cr2O3	0.273	Cr+3	0.0293			0.0293	0.0000				
Fe(total)O	3.286	Fe+3	0.0034			0.0034	0.0000				
MgO	21.627	Mg+2	4.3841			4.3841	**0.0000**				
MnO	0.292	Fe+2	0.3699			0.3699	**0.0000**				
CaO	14.116	Mn+2	0.0336			0.0336	**0.0000**				
Na2O	1.668	Ca+2	2.0563					2.0000	0.0563		
K2O	0.219	Na+	0.4397					0.0000	**0.4397**	0.4397	0.0000
		K+	0.0380							0.0380	0.0000
Total	**100**		**Excess**	T site	**0.0000**	C site	**0.0000**	B site	**0.4960469**	A site	**0**
			Total	**7.9777**		**4.8203**		**2.0000**		**0.4777**	**0.0000**
			%Fill	**99.721**		**96.4068**		**100**			

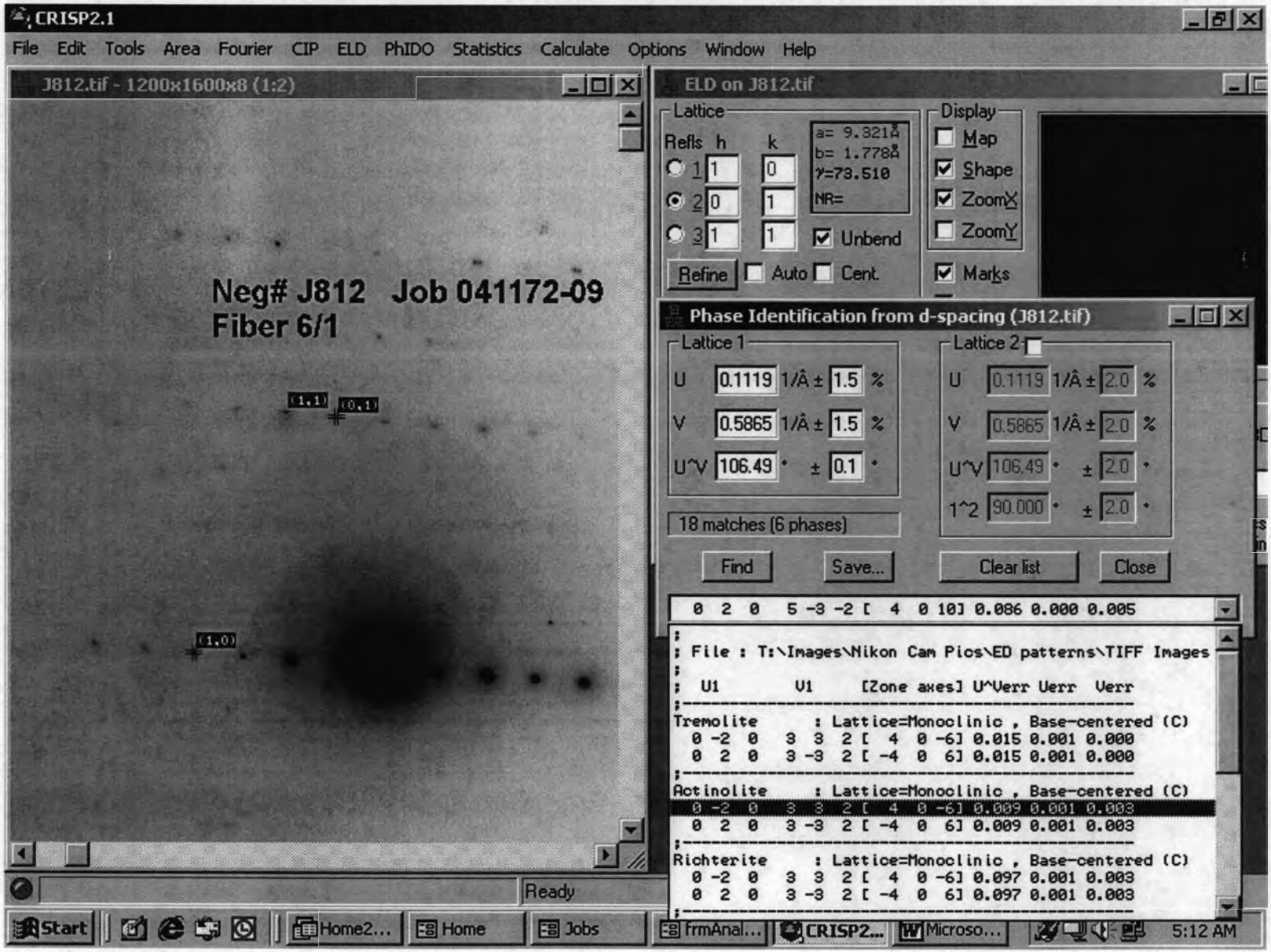
Prefix none
Name tremolite
Modifier none
Group Calcic Amphibole

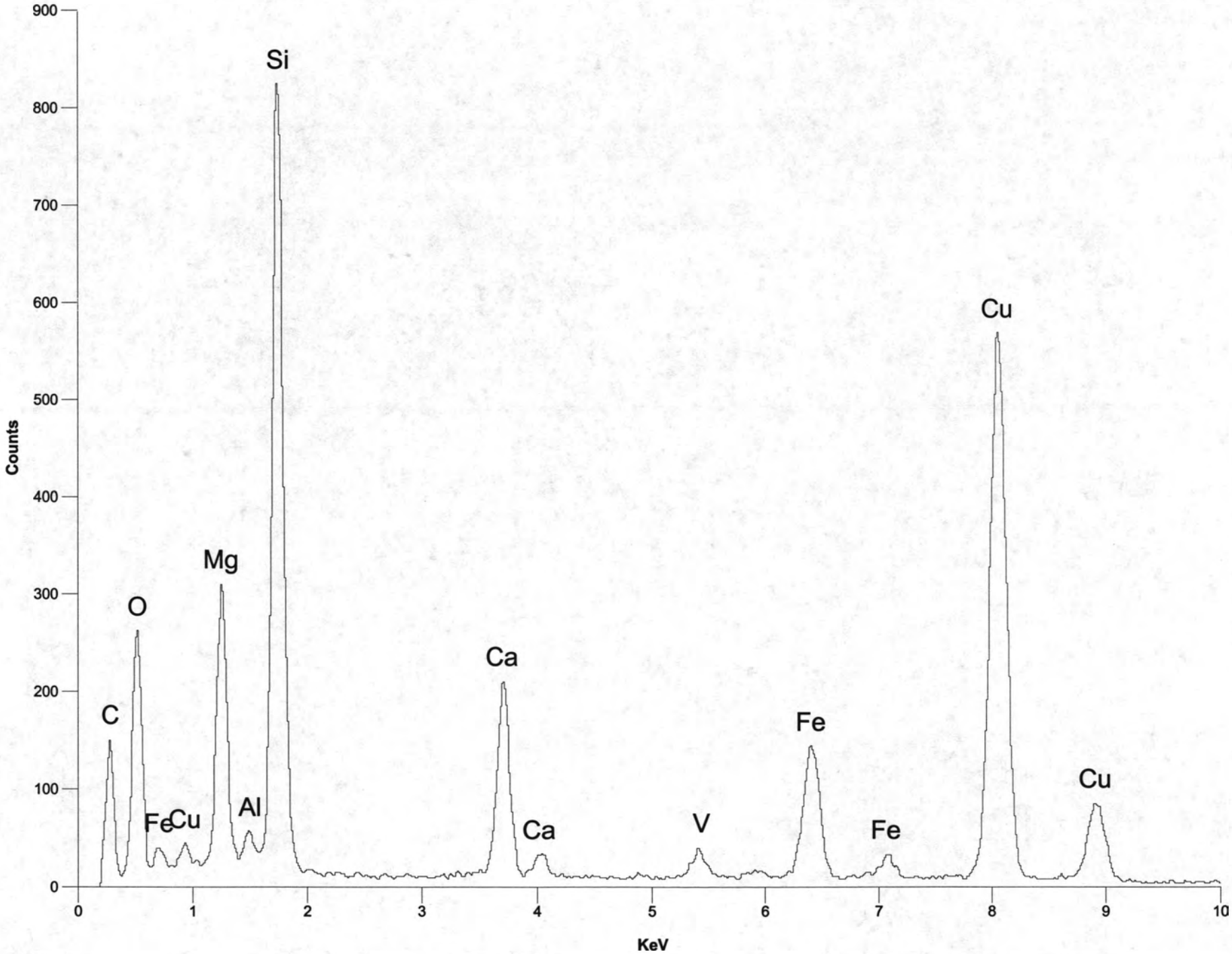
Sample # **041172-08-15156**

Values		Satisfied Conditions
(Ca,Na)@B	2.00	(Ca,Na)@B >= 1 and Na@B < 0.5
Na@B	0.00	Ca@B >= 1.5 and (Na,K)@A < 0.5
Ca@B	2.00	(Mg/(Mg+Fe2))>= 0.5
(Na,K)@A	0.48	Si > 7.5
Mg/(Mg+Fe2)	0.92	(Mg/(Mg+Fe2))>= 0.9
Si	7.79	

Mineral Analysis Program (Version 5.0)

ACTINOLITE
[2 0 -3]





Title: 041172-09 6/1 SP559 Time: 12:00 Date: Jan 1, 1997

	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	55.9	Si+4	7.7210	7.7210							
Al2O3	2.47	Al+3	0.4021	0.2790	**0.1231**						
TiO2	0	Ti+4	0.0000	0.0000	**0.0000**						
Cr2O3	0	Cr+3	0.0000			0.0000	0.0000				
Fe(total)O	13.56	Fe+3	0.6906			0.6906	0.0000				
MgO	16.59	Mg+2	3.4161			3.4161	**0.0000**				
MnO	0	Fe+2	0.7987			0.7702	**0.0285**				
CaO	11.46	Mn+2	0.0000			0.0000	**0.0000**				
Na2O	0.01	Ca+2	1.6958					1.6958	0.0000		
K2O	0.08	Na+	0.0027					0.0027	**0.0000**	0.0000	0.0000
		K+	0.0141							0.0141	0.0000
Total	**100.07**		**Excess**	T site	**0.1231**	C site	**0.0285**	B site	**0**	A site	**0**
			Total	**8**		**5.0000**		**1.6985**		**0.0141**	**0.0000**
			%Fill	**100**		**100**		**84.9229**			

Prefix none
Name actinolite
Modifier none
Group Calcic Amphibole

Sample # **041172-09-6-1**

Values		Satisfied Conditions
(Ca,Na)@B	1.70	(Ca,Na)@B >= 1 and Na@B < 0.5
Na@B	0.00	Ca@B >= 1.5 and (Na,K)@A < 0.5
Ca@B	1.70	(Mg/(Mg+Fe2))>= 0.5
(Na,K)@A	0.01	Si > 7.5
Mg/(Mg+Fe2)	0.81	(Mg/(Mg+Fe2))< 0.9
Si	7.72	

Mineral Analysis Program (Version 5.0)

EDENITE
[3 2 1]

CRISP2.1

File Edit Tools Area Fourier CIP ELD PhIDO Statistics Calculate Options Window Help

J813.TIF - 1200x1600x8 (1:3)

Neg# J813 Job 041172-09
Fiber 7/1

ELD on J813.TIF

Lattice

Refls	h	k
1	1	0
2	0	1
3	1	1

a= 4.885Å
b= 2.010Å
γ=91.371
NR=

Unbend

Refine Auto Cent.

Display: Map, Shape, ZoomX, ZoomY, Marks, Index

Phase Identification from d-spacing (J813.TIF)

Lattice 1

U	0.2048	1/Å ±	0.5 %
V	0.4978	1/Å ±	0.5 %
U^V	88.629 °	±	1.5 °

Lattice 2

U	0.2048	1/Å ±	2.0 %
V	0.4978	1/Å ±	2.0 %
U^V	88.629 °	±	2.0 °
1^2	90.000 °	±	2.0 °

6 matches (3 phases)

Find Save... Clear list Close

```
  1  1 -1   3  5  1 [ -6  4 -2] 1.424 0.001 0.000
;
; File : T:\Images\Nikon Cam Pics\ED patterns\TIFF Images by
;
;  U1        V1      [Zone axes] U^Verr Verr  Verr
;-----------------------------------------------------
Tremolite       : Lattice=Monoclinic , Base-centered (C)
  1 -1 -1   3 -5  1 [  6  4  2] 1.499 0.000 0.002
  1  1 -1   3  5  1 [ -6  4 -2] 1.499 0.000 0.002
;-----------------------------------------------------
Leakeite        : Lattice=Monoclinic , Base-centered (C)
  1 -1 -1   3 -5  1 [  6  4  2] 0.716 0.001 0.000
  1  1 -1   3  5  1 [ -6  4 -2] 0.716 0.001 0.000
;-----------------------------------------------------
Edenite         : Lattice=Monoclinic , Base-centered (C)
  1 -1 -1   3 -5  1 [  6  4  2] 1.424 0.001 0.000
  1  1 -1   3  5  1 [ -6  4 -2] 1.424 0.001 0.000
```

(1146,531) Y=235 Ready

Start 5236 Match.doc - Microso... CRISP2.1 7:14 AM

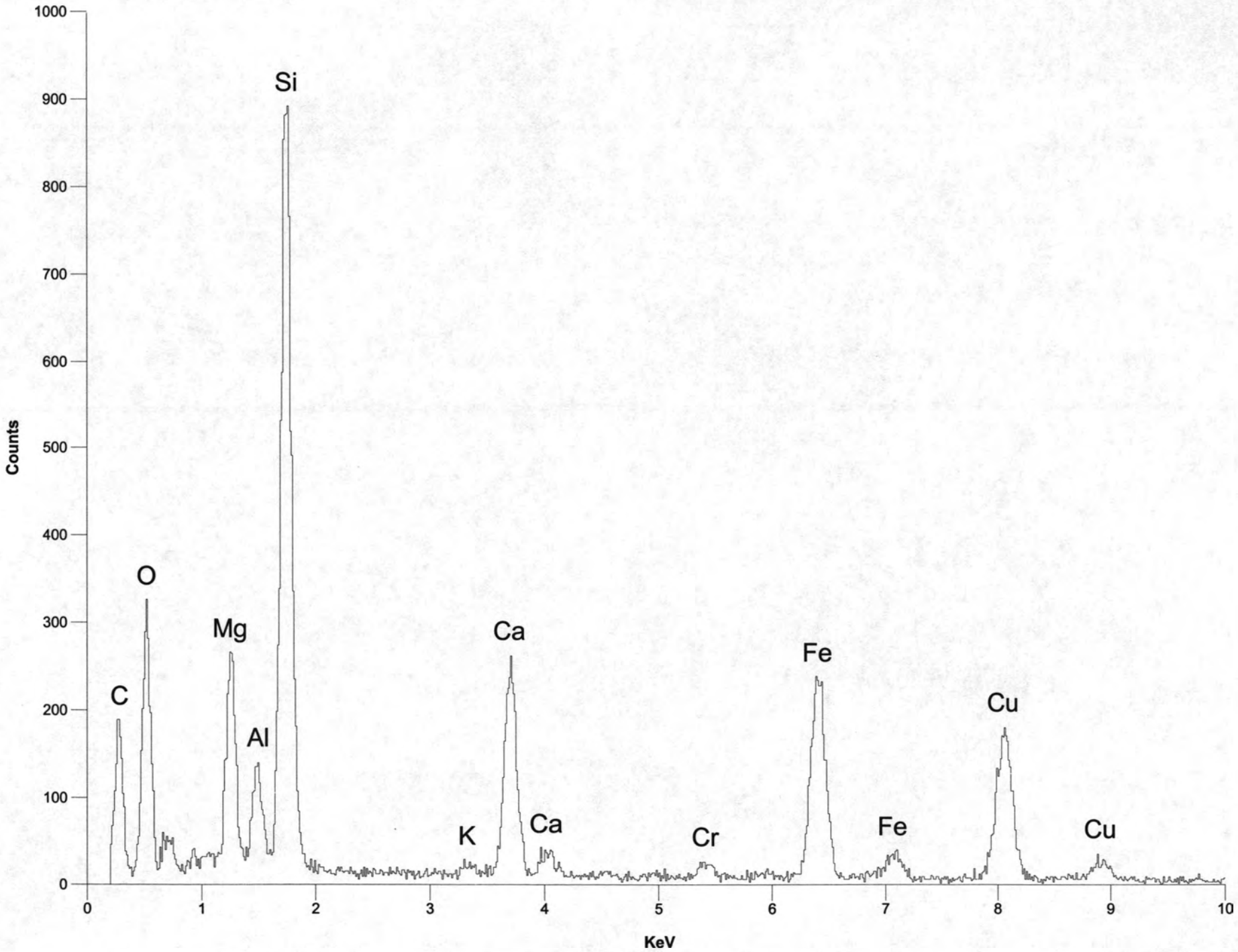
	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	47.27	Si+4	6.9010	6.9010							
Al2O3	9.4	Al+3	1.6173	1.0990	0.5183						
TiO2	0	Ti+4	0.0000	0.0000	0.0000						
Cr2O3	0	Cr+3	0.0000			0.0000	0.0000				
Fe(total)O	16.9	Fe+3	0.0186			0.0186	0.0000				
MgO	10.69	Mg+2	2.3266			2.3266	0.0000				
MnO	0	Fe+2	2.0425			2.0425	0.0000				
CaO	11.38	Mn+2	0.0000			0.0000	0.0000				
Na2O	3.91	Ca+2	1.7799					1.7799	0.0000		
K2O	0.45	Na+	1.1067					0.2201	0.8865	0.8865	0.0000
		K+	0.0838							0.0838	0.0000
Total	100		Excess	T site	0.5183	C site	0.0000	B site	0.8865379	A site	0
			Total	8		4.9060		2.0000		0.9703	0.0000
			%Fill	100		98.1191		100			

Prefix	Alumino
Name	edenite
Modifier	none
Group	Calcic Amphibole

Sample # 041172-09-7-1

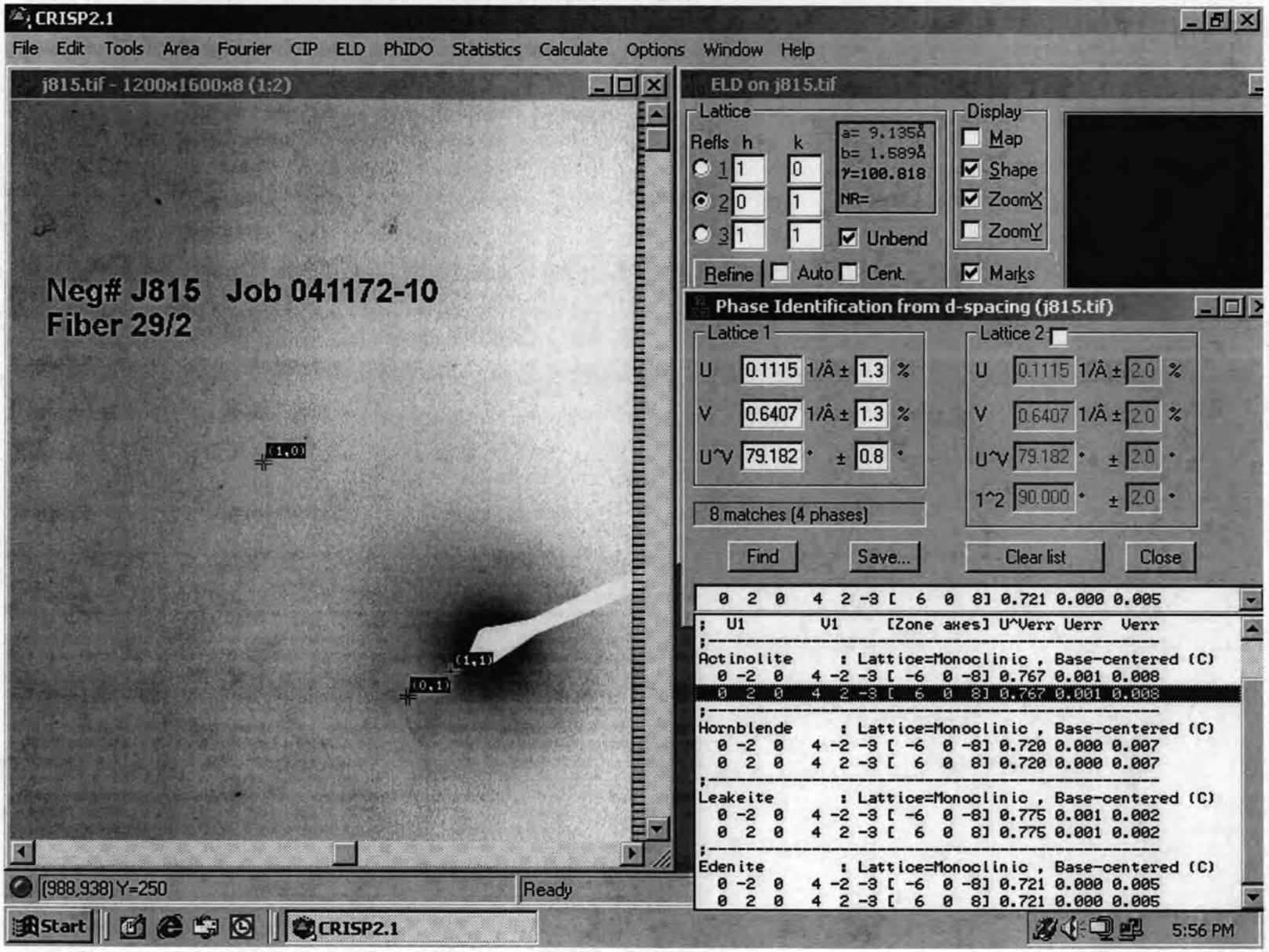
Values		Satisfied Conditions
(Ca,Na)@B	2.00	(Ca,Na)@B >= 1 and Na@B < 0.5
Na@B	0.22	Ca@B >= 1.5 and (Na,K)@A >= 0.5
Ca@B	1.78	(Mg/(Mg+Fe2))>= 0.5
(Na,K)@A	0.97	Si > 6.5
Mg/(Mg+Fe2)	0.53	
Si	6.90	

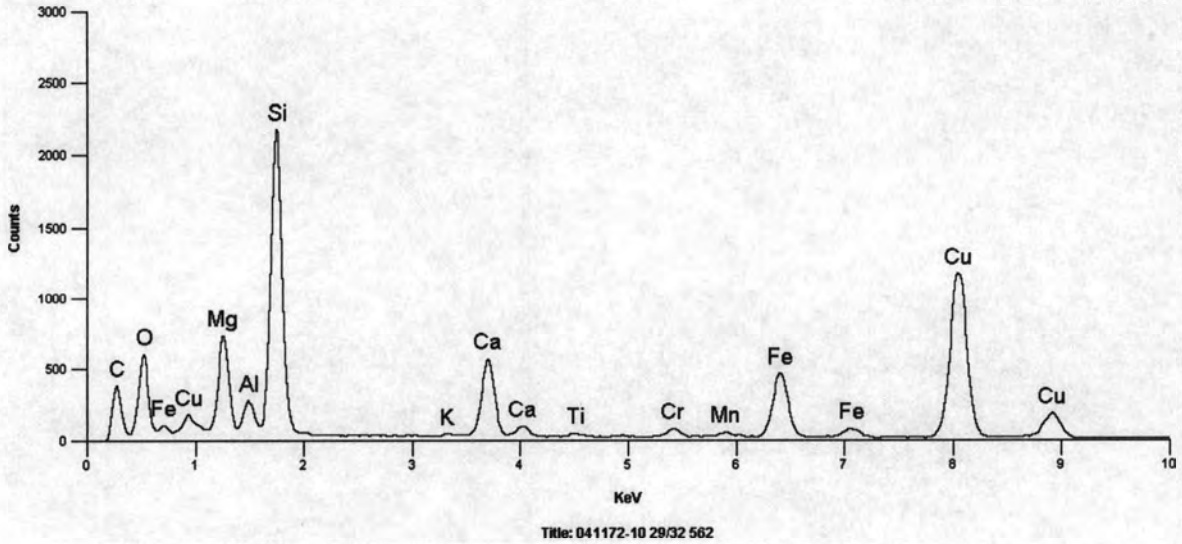
Mineral Analysis Program (Version 5.0)



Title: 041172- 7/1 SP560 Title: 041172-09 7/1 SP560

ACTINOLITE
[304]





Quantitative Analysis Results - Standardless Analysis :
Spectrum2 041172-10 29/32 562 Jan 1, 1997
EDS Parameters - 18KV, Takeoff Angle: 28.2°, Fit Index: 171.25
Correction: CLIFF LORIMER, Cycles: 1

Element	Atoms%	Compound	Weight%	Error(±)	Norm%
Mg	25.67	MgO	33.16	0.12	18.34
Al	2.88	Al2O3	4.71	0.04	2.60
Si	51.01	SiO2	98.21	0.20	54.32
K	0.27	K2O	0.41	0.02	0.23
Ca	9.53	CaO	17.13	0.08	9.47
Fe	10.63	Fe2O3	27.20	0.15	15.04
<Total>	100.00		180.81		100.00

	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	54.32	Si+4	7.5444	7.5444							
Al2O3	2.6	Al+3	0.4256	0.4256	**0.0000**						
TiO2	0	Ti+4	0.0000	0.0000	**0.0000**						
Cr2O3	0	Cr+3	0.0000			0.0000	0.0000				
Fe(total)O	15.04	Fe+3	0.7702			0.7702	0.0000				
MgO	18.34	Mg+2	3.7974			3.7974	**0.0000**				
MnO	0	Fe+2	0.8908			0.4324	**0.4584**				
CaO	9.47	Mn+2	0.0000			0.0000	**0.0000**				
Na2O	0	Ca+2	1.4091					1.4091	0.0000		
K2O	0.23	Na+	0.0000					0.0000	**0.0000**	0.0000	0.0000
		K+	0.0407							0.0407	0.0000
Total	**100**		**Excess**	T site	**0.0000**	C site	**0.4584**	B site	**0**	A site	**0**
			Total	**7.9699**		**5.0000**		**1.4091**		**0.0407**	**0.0000**
			%Fill	**99.624**		**100**		**70.4538**			

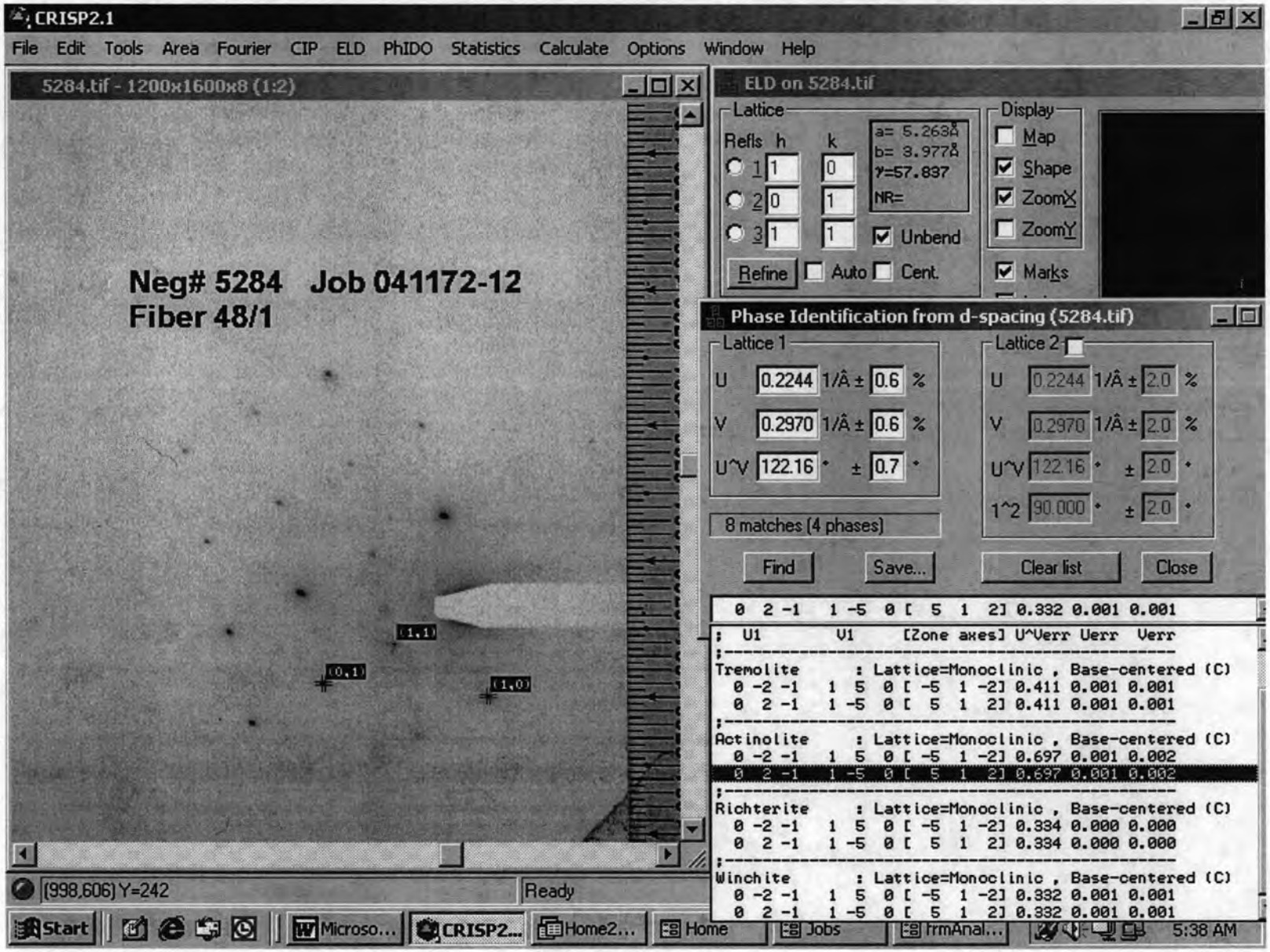
Prefix none
Name probable actinolite Ca values below optimal levels
Modifier Ferrian
Group Calcic Amphibole

Sample # 041172-10-29

Values		Satisfied Conditions
(Ca,Na)@B	1.41	(Ca,Na)@B >= 1 and Na@B < 0.5
Na@B	0.00	1 < Ca@B < 1.5 and (Na,K)@A < 0.5
Ca@B	1.41	(Mg/(Mg+Fe2))>= 0.5
(Na,K)@A	0.04	Si > 7.5
Mg/(Mg+Fe2)	0.81	(Mg/(Mg+Fe2))< 0.9
Si	7.54	

Mineral Analysis Program (Version 5.0)

ACTINOLITE
[5 1 2]



	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	51.62	Si+4	7.5301	7.5301							
Al2O3	0.85	Al+3	0.1461	0.1461	**0.0000**						
TiO2	0.612	Ti+4	0.0671	0.0671	**0.0000**						
Cr2O3	0.352	Cr+3	0.0406			0.0406	0.0000				
Fe(total)O	16.499	Fe+3	0.0181			0.0181	0.0000				
MgO	13.93	Mg+2	3.0294			3.0294	**0.0000**				
MnO	1.1	Fe+2	1.9924			1.9119	**0.0805**				
CaO	14.888	Mn+2	0.1359			0.0000	**0.1359**				
Na2O	0	Ca+2	2.3267					1.7836	0.5431		
K2O	0.149	Na+	0.0000					0.0000	**0.0000**	0.0000	0.0000
		K+	0.0277							0.0277	0.0000
Total	**100**		**Excess**	T site	**0.0000**	C site	**0.2164**	B site	**0.5431211**	A site	**0**
			Total	**7.7434**		**5.0000**		**1.7836**		**0.0277**	**0.0000**
			%Fill	**96.792**		**100**		**89.179**			

Prefix none
Name actinolite
Modifier none
Group Calcic Amphibole

Sample # **041172-12-15199**

Values		Satisfied Conditions
(Ca,Na)@B	1.78	(Ca,Na)@B >= 1 and Na@B < 0.5
Na@B	0.00	Ca@B >= 1.5 and (Na,K)@A < 0.5
Ca@B	1.78	(Mg/(Mg+Fe2))>= 0.5
(Na,K)@A	0.03	Si > 7.5
Mg/(Mg+Fe2)	0.60	(Mg/(Mg+Fe2))< 0.9
Si	7.53	

Mineral Analysis Program (Version 5.0)

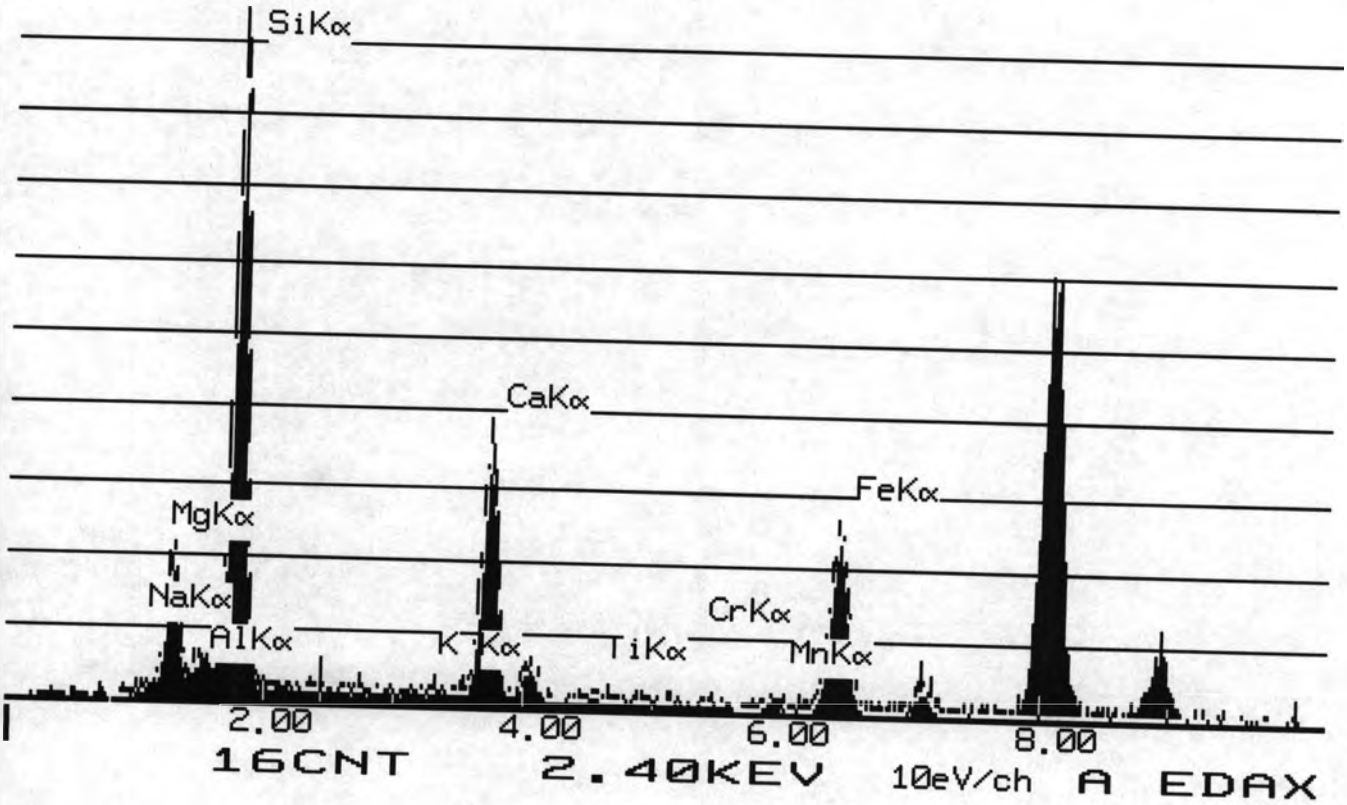
INTE-% :
LABEL = 041172-12 48/1 15199
23-NOV-72 02:25:51
56.111 LIVE SECONDS

ELEM	CPS	WT % ELEM	WT % OXIDE
MGK	10.194	8.401	13.930
ALK	0.909	0.450	0.850
SIK	52.057	24.129	51.620
K K	0.160	0.124	0.149
CAK	24.077	10.640	14.888
TIK	0.588	0.367	0.612
CRK	0.392	0.241	0.352
MNK	1.337	0.852	1.100
FEK	19.657	11.540	16.499

TOTAL			100.000

USED PEIF: USER

22-NOV-04 02:26:40 SUPER QUANT
RATE= 15CPS TIME= 56LSEC
FS= 330/ 330 PRST= 200LSEC
A =041172-12 48/1 15199



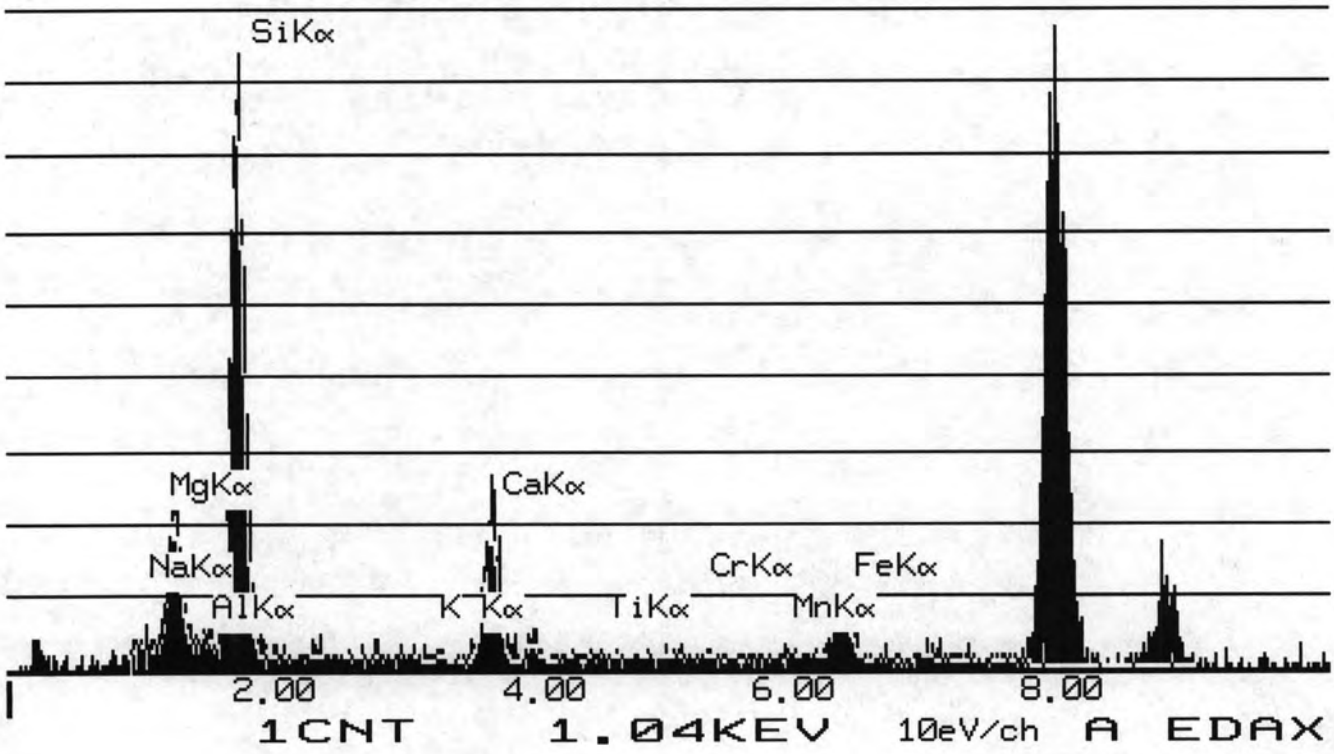
INTE-% :
LABEL = 041172-12 19/1 15159
10-OCT-72 09:16:46
100.046 LIVE SECONDS

ELEM	CPS	WT % ELEM	WT % OXIDE
MGK	3.478	11.588	19.215
ALK	0.240	0.480	0.907
SIK	15.333	28.730	61.463
K K	0.190	0.591	0.712
CAK	4.438	7.928	11.093
TIK	0.080	0.202	0.336
FEK	1.849	4.388	6.274

TOTAL			100.000

USED PEIF: USER

09-OCT-04 09:17:17 SUPER QUANT
RATE= 113CPS TIME= 100LSEC
FS= 198/ 198 PRST= 200LSEC
A =041172-12 19/1 15159



	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	61.463	Si+4	8.0000	8.0000							
Al2O3	0.907	Al+3	0.1649	0.0000	**0.1649**						
TiO2	0.336	Ti+4	0.0611	0.0000	**0.0611**						
Cr2O3	0	Cr+3	0.0000			0.0000	0.0000				
Fe(total)O	6.274	Fe+3	0.0200			0.0200	0.0000				
MgO	19.215	Mg+2	3.9005			3.9005	**0.0000**				
MnO	0	Fe+2	0.7277			0.7277	**0.0000**				
CaO	11.093	Mn+2	0.0000			0.0000	**0.0000**				
Na2O	0	Ca+2	1.6346					1.6346	0.0000		
K2O	0.712	Na+	0.0000					0.0000	**0.0000**	0.0000	0.0000
		K+	0.1450							0.1450	0.0000
Total	100		Excess	T site	**0.2260**	C site	**0.0000**	B site	**0**	A site	**0**
			Total	8		4.8742		1.6346		0.1450	0.0000
			%Fill	100		97.4831		81.7287			

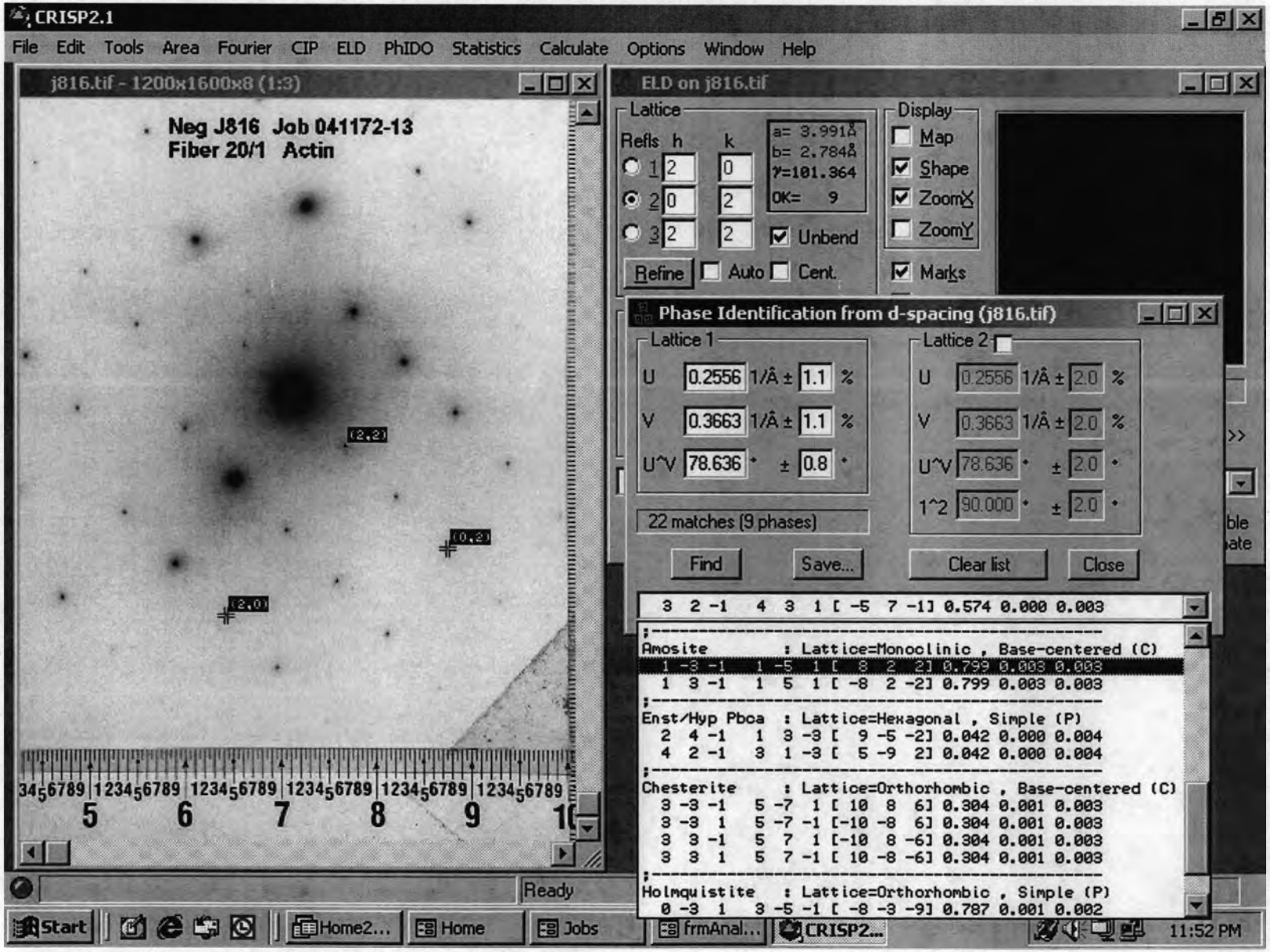
Prefix none
Name actinolite
Modifier none
Group Calcic Amphibole

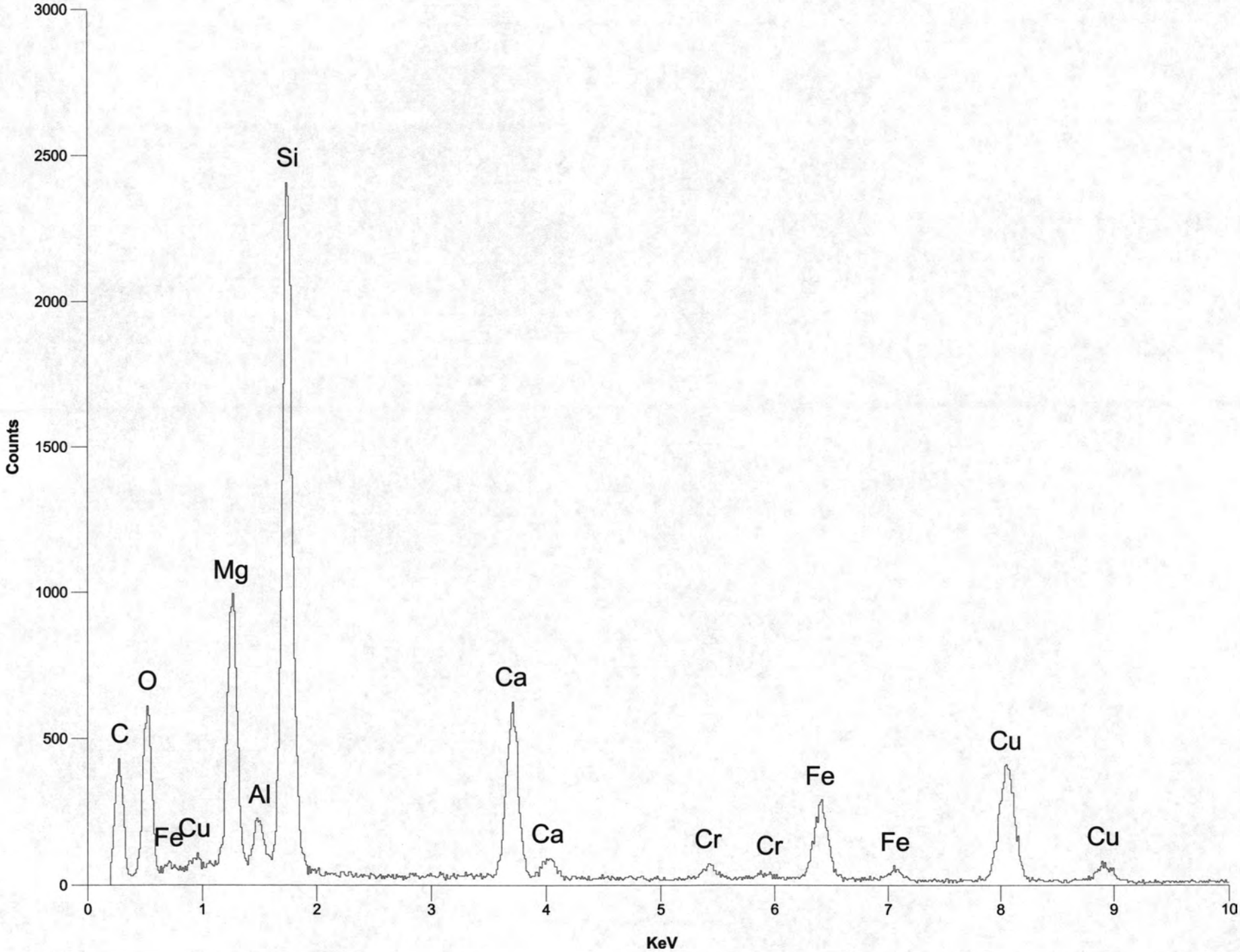
Sample # 041172-12-15159

Values		Satisfied Conditions
(Ca,Na)@B	1.63	(Ca,Na)@B >= 1 and Na@B < 0.5
Na@B	0.00	Ca@B >= 1.5 and (Na,K)@A < 0.5
Ca@B	1.63	(Mg/(Mg+Fe2))>= 0.5
(Na,K)@A	0.15	Si > 7.5
Mg/(Mg+Fe2)	0.84	(Mg/(Mg+Fe2))< 0.9
Si	8.00	

Mineral Analysis Program (Version 5.0)

ACTINOLITE
[4 1 1]





Title... 72-10 29/32 562 Title: 041172-~~40 29/32 562~~ 13-20 563

	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	56.36	Si+4	7.6332	7.6332							
Al2O3	5.1	Al+3	0.8140	0.3668	**0.4472**						
TiO2	0	Ti+4	0.0000	0.0000	**0.0000**						
Cr2O3	0	Cr+3	0.0000			0.0000	0.0000				
Fe(total)O	8.07	Fe+3	0.3619			0.3619	0.0000				
MgO	18.32	Mg+2	3.6990			3.6990	**0.0000**				
MnO	0	Fe+2	0.5118			0.4920	**0.0198**				
CaO	12.07	Mn+2	0.0000			0.0000	**0.0000**				
Na2O	0	Ca+2	1.7513					1.7513	0.0000		
K2O	0.09	Na+	0.0000					0.0000	**0.0000**	0.0000	0.0000
		K+	0.0155							0.0155	0.0000
Total	**100.01**		**Excess**	T site	**0.4472**	C site	**0.0198**	B site	**0**	A site	**0**
			Total	**8**		**5.0000**		**1.7513**		**0.0155**	**0.0000**
			%Fill	**100**		**100**		**87.5654**			

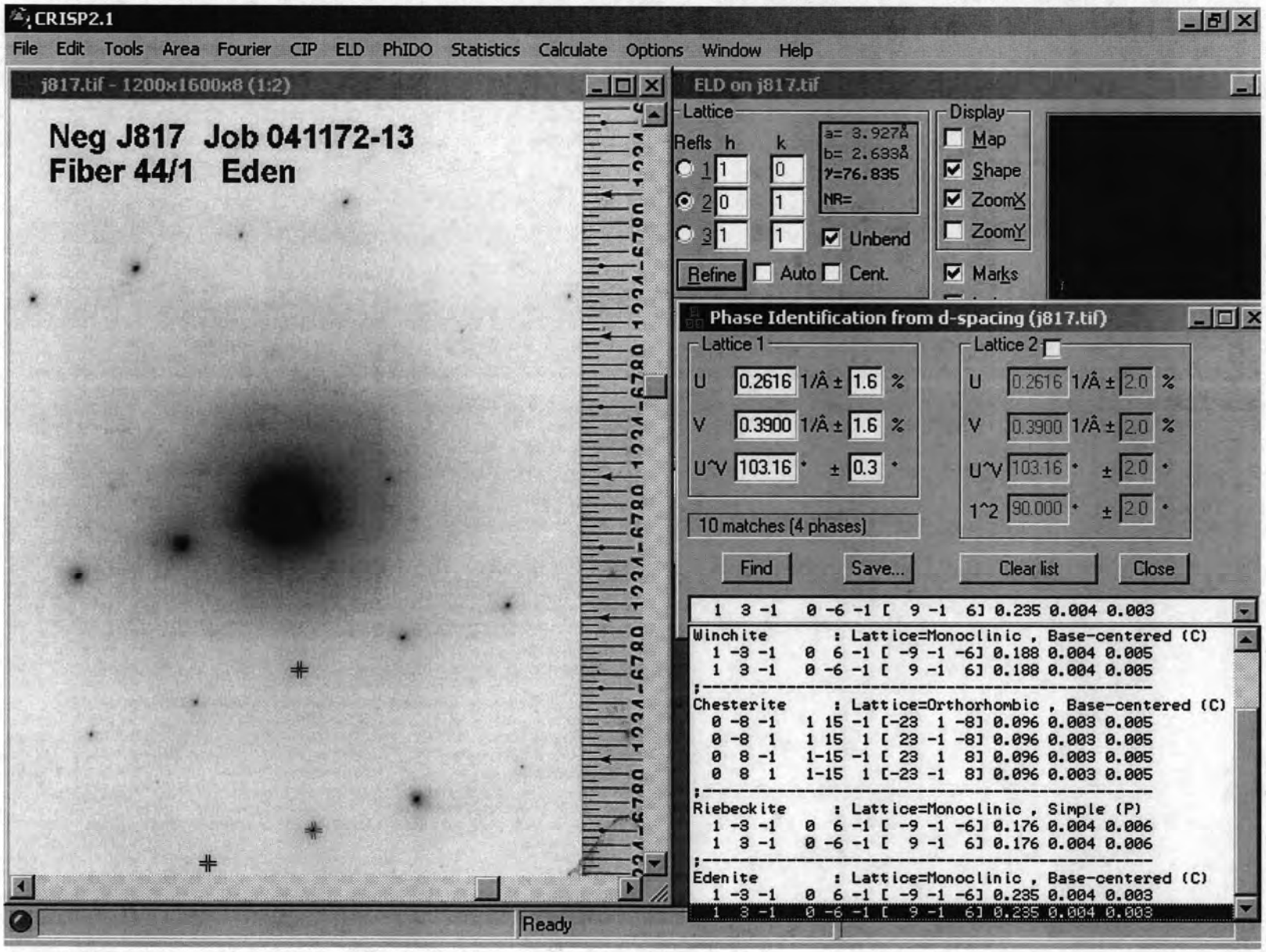
Prefix none
Name actinolite
Modifier none
Group Calcic Amphibole

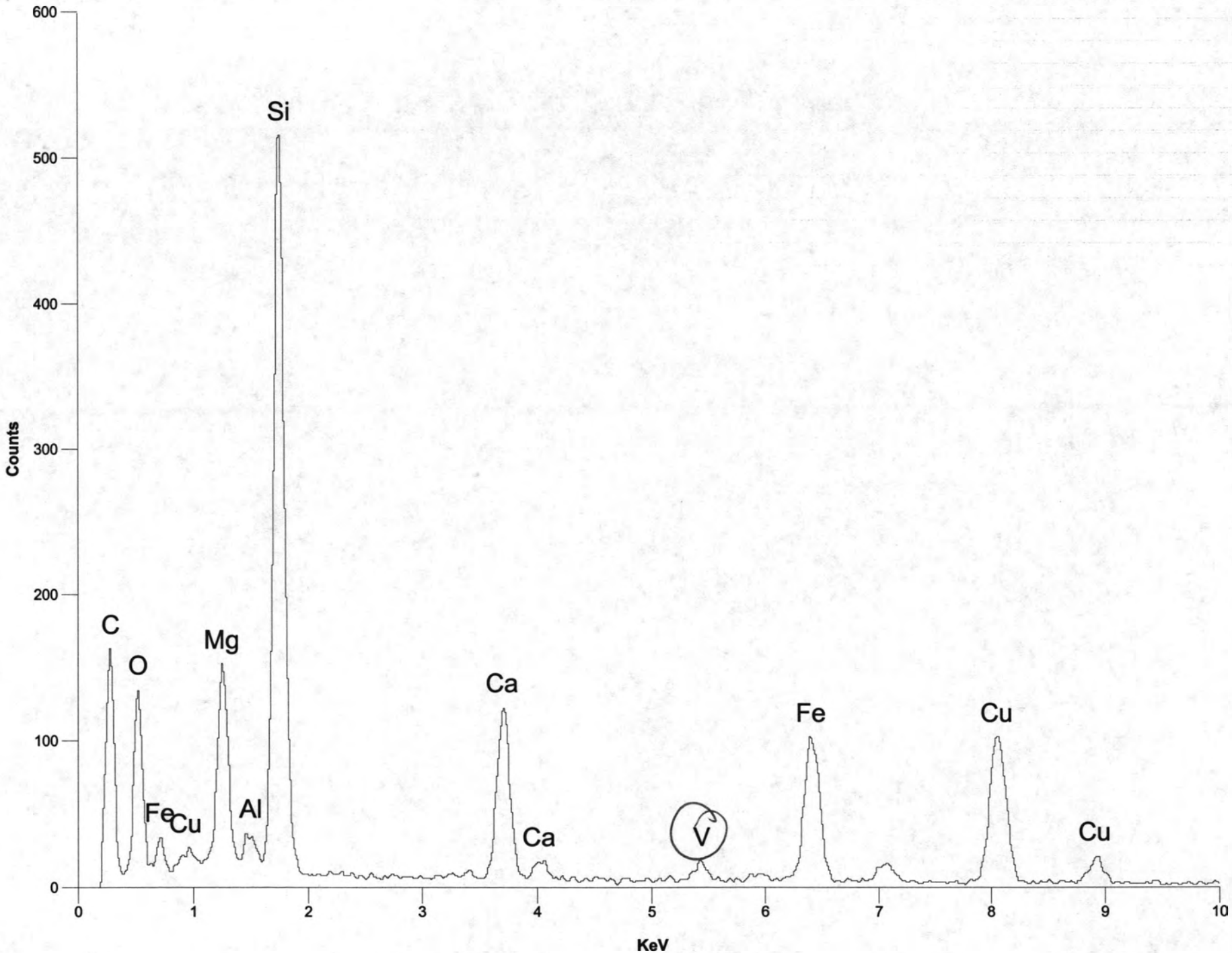
Sample # **041172-13-20-1**

Values		Satisfied Conditions
(Ca,Na)@B	1.75	(Ca,Na)@B >= 1 and Na@B < 0.5
Na@B	0.00	Ca@B >= 1.5 and (Na,K)@A < 0.5
Ca@B	1.75	(Mg/(Mg+Fe2))>= 0.5
(Na,K)@A	0.02	Si > 7.5
Mg/(Mg+Fe2)	0.88	(Mg/(Mg+Fe2))< 0.9
Si	7.63	

Mineral Analysis Program (Version 5.0)

EDENITE
[9 -1 6]


CRISP2.1
File Edit Tools Area Fourier CIP ELD PhIDO Statistics Calculate Options Window Help
j817.tif - 1200x1600x8 (1:2)
Neg J817 Job 041172-13
Fiber 44/1 Eden
ELD on j817.tif
Lattice
Refls h k
1 1 0
2 0 1
3 1 1
a= 3.927Å
b= 2.633Å
γ=76.835
NR=
Unbend
Refine
Auto
Cent.
Display
Map
Shape
ZoomX
ZoomY
Marks
Phase Identification from d-spacing (j817.tif)
Lattice 1
U 0.2616 1/Å ± 1.6 %
V 0.3900 1/Å ± 1.6 %
U^V 103.16 ° ± 0.3 °
Lattice 2
U 0.2616 1/Å ± 2.0 %
V 0.3900 1/Å ± 2.0 %
U^V 103.16 ° ± 2.0 °
1^2 90.000 ° ± 2.0 °
10 matches (4 phases)
Find
Save...
Clear list
Close
1 3 -1 0 -6 -1 [9 -1 6] 0.235 0.004 0.003
Winchite : Lattice=Monoclinic , Base-centered (C)
1 -3 -1 0 6 -1 [-9 -1 -6] 0.188 0.004 0.005
1 3 -1 0 -6 -1 [9 -1 6] 0.188 0.004 0.005
Chesterite : Lattice=Orthorhombic , Base-centered (C)
0 -8 -1 1 15 -1 [-23 1 -8] 0.096 0.003 0.005
0 -8 1 1 15 1 [23 -1 -8] 0.096 0.003 0.005
0 8 -1 1-15 -1 [23 1 8] 0.096 0.003 0.005
0 8 1 1-15 1 [-23 -1 8] 0.096 0.003 0.005
Riebeckite : Lattice=Monoclinic , Simple (P)
1 -3 -1 0 6 -1 [-9 -1 -6] 0.176 0.004 0.006
1 3 -1 0 -6 -1 [9 -1 6] 0.176 0.004 0.006
Edenite : Lattice=Monoclinic , Base-centered (C)
1 -3 -1 0 6 -1 [-9 -1 -6] 0.235 0.004 0.003
1 3 -1 0 -6 -1 [9 -1 6] 0.235 0.004 0.003
Ready



Title: 041172-13 44/1 564 Time: 12:00 Date: Jan 1, 1997

	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	52.62	Si+4	7.5231	7.5231							
Al2O3	5.16	Al+3	0.8694	0.4769	**0.3925**						
TiO2	0	Ti+4	0.0000	0.0000	**0.0000**						
Cr2O3	0	Cr+3	0.0000			0.0000	0.0000				
Fe(total)O	14.18	Fe+3	0.0153			0.0153	0.0000				
MgO	12.35	Mg+2	2.6323			2.6323	**0.0000**				
MnO	0	Fe+2	1.6783			1.6783	**0.0000**				
CaO	11.29	Mn+2	0.0000			0.0000	**0.0000**				
Na2O	3.92	Ca+2	1.7293					1.7293	0.0000		
K2O	0.48	Na+	1.0865					0.2707	**0.8158**	0.8158	0.0000
		K+	0.0875							0.0875	0.0000
Total	**100**		**Excess**	T site	**0.3925**	C site	**0.0000**	B site	**0.8157832**	A site	**0**
			Total	**8**		**4.7183**		**2.0000**		**0.9033**	**0.0000**
			%Fill	**100**		**94.3661**		**100**			

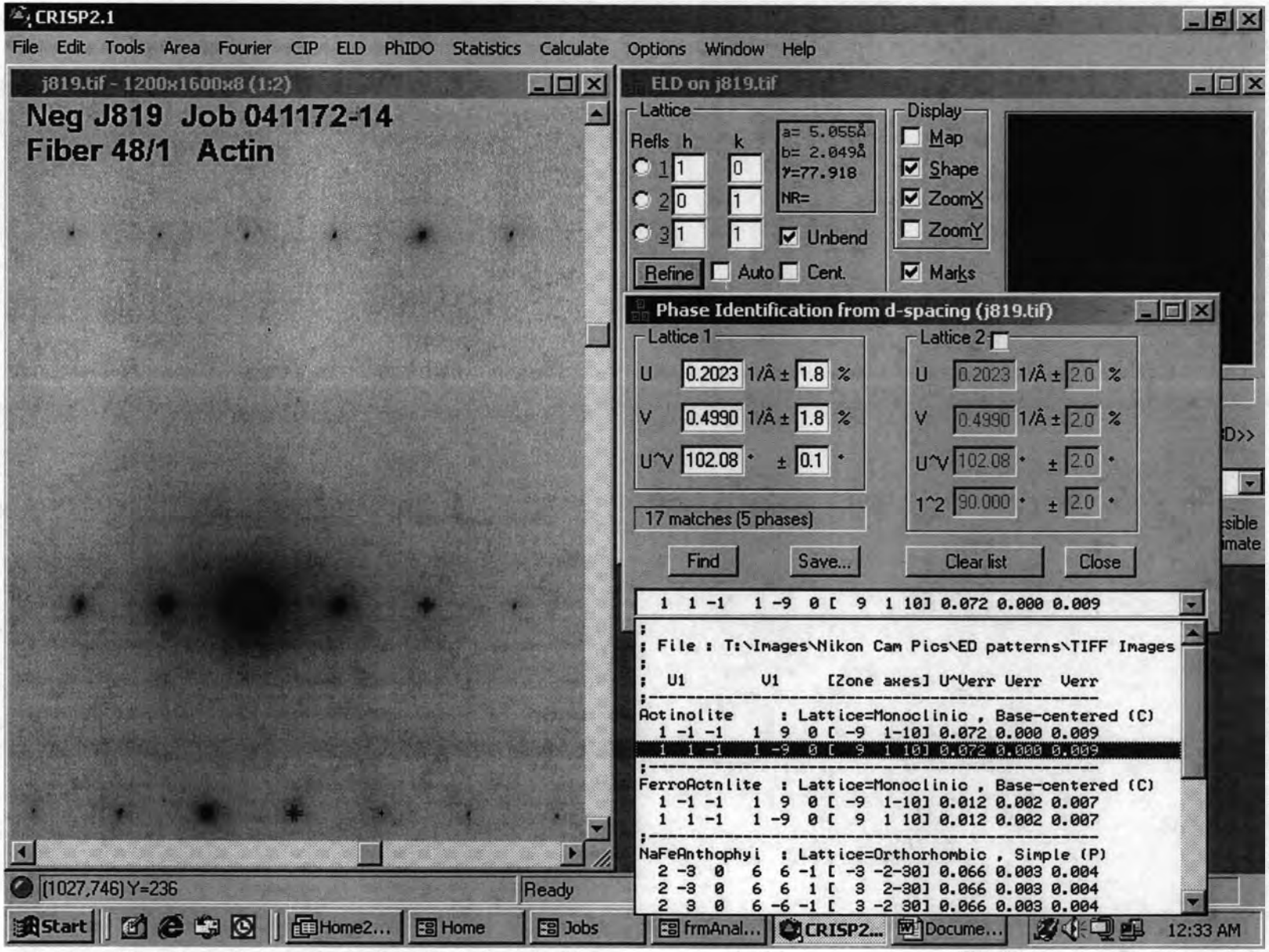
Prefix none
Name edenite
Modifier none
Group Calcic Amphibole

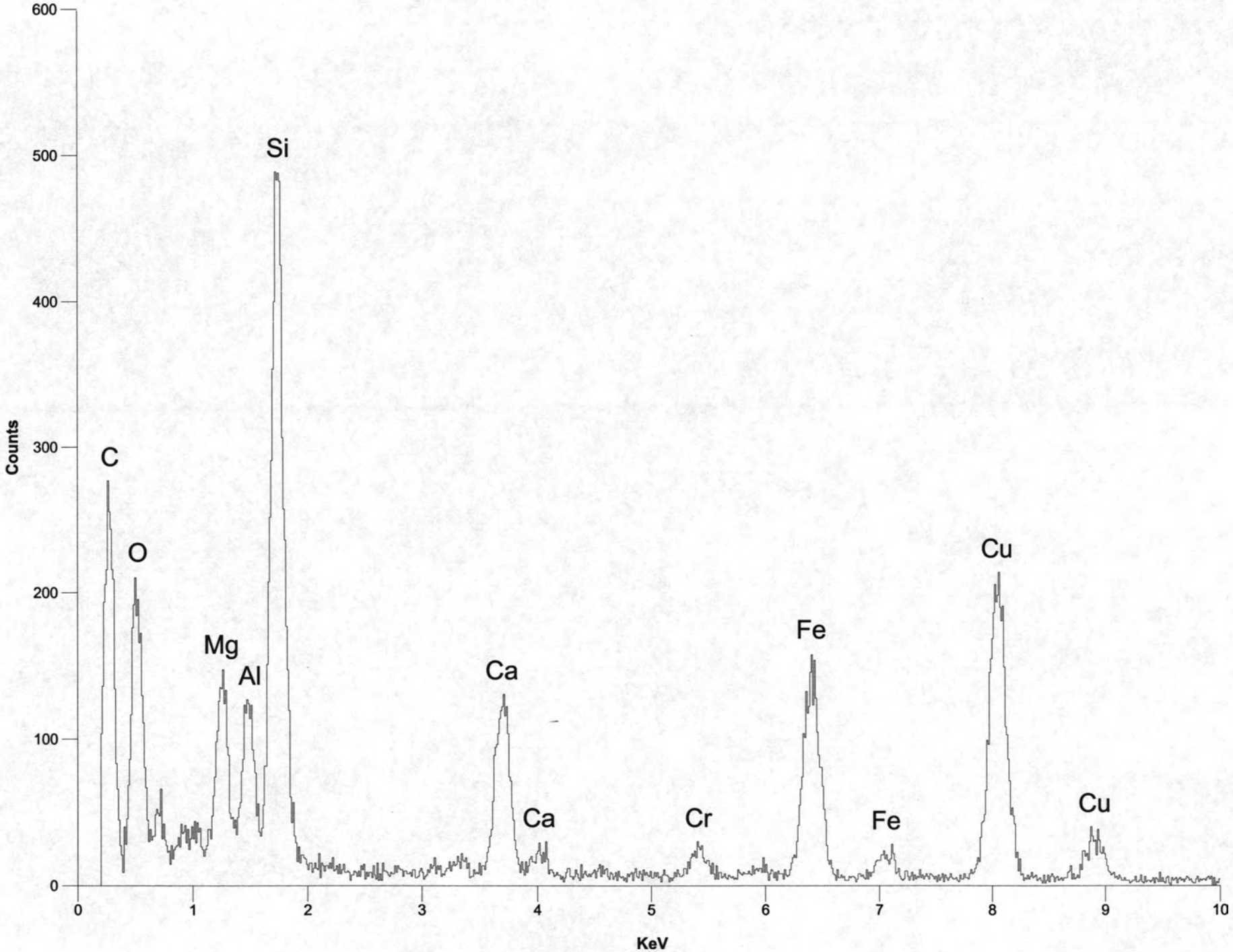
Sample # **041172-13-44-1**

Values		Satisfied Conditions
(Ca,Na)@B	2.00	(Ca,Na)@B >= 1 and Na@B < 0.5
Na@B	0.27	Ca@B >= 1.5 and (Na,K)@A >= 0.5
Ca@B	1.73	(Mg/(Mg+Fe2))>= 0.5
(Na,K)@A	0.90	Si > 6.5
Mg/(Mg+Fe2)	0.61	
Si	7.52	

Mineral Analysis Program (Version 5.0)

ACTINOLITE
[9 1 10]





Title: 041172-~~15 15/1~~ SP 566
14-48

	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	56.16	Si+4	7.6542	7.6542							
Al2O3	4.03	Al+3	0.6473	0.3458	**0.3016**						
TiO2	0	Ti+4	0.0000	0.0000	**0.0000**						
Cr2O3	0	Cr+3	0.0000			0.0000	0.0000				
Fe(total)O	10.45	Fe+3	0.5251			0.5251	0.0000				
MgO	18.14	Mg+2	3.6858			3.6858	**0.0000**				
MnO	0	Fe+2	0.6074			0.4875	**0.1199**				
CaO	11.22	Mn+2	0.0000			0.0000	**0.0000**				
Na2O	0.01	Ca+2	1.6383					1.6383	0.0000		
K2O	0	Na+	0.0026					0.0026	**0.0000**	0.0000	0.0000
		K+	0.0000							0.0000	0.0000
Total	**100.01**		**Excess**	T site	**0.3016**	C site	**0.1199**	B site	**0**	A site	**0**
			Total	**8**		**5.0000**		**1.6409**		**0.0000**	**0.0000**
			%Fill	**100**		**100**		**82.0465**			

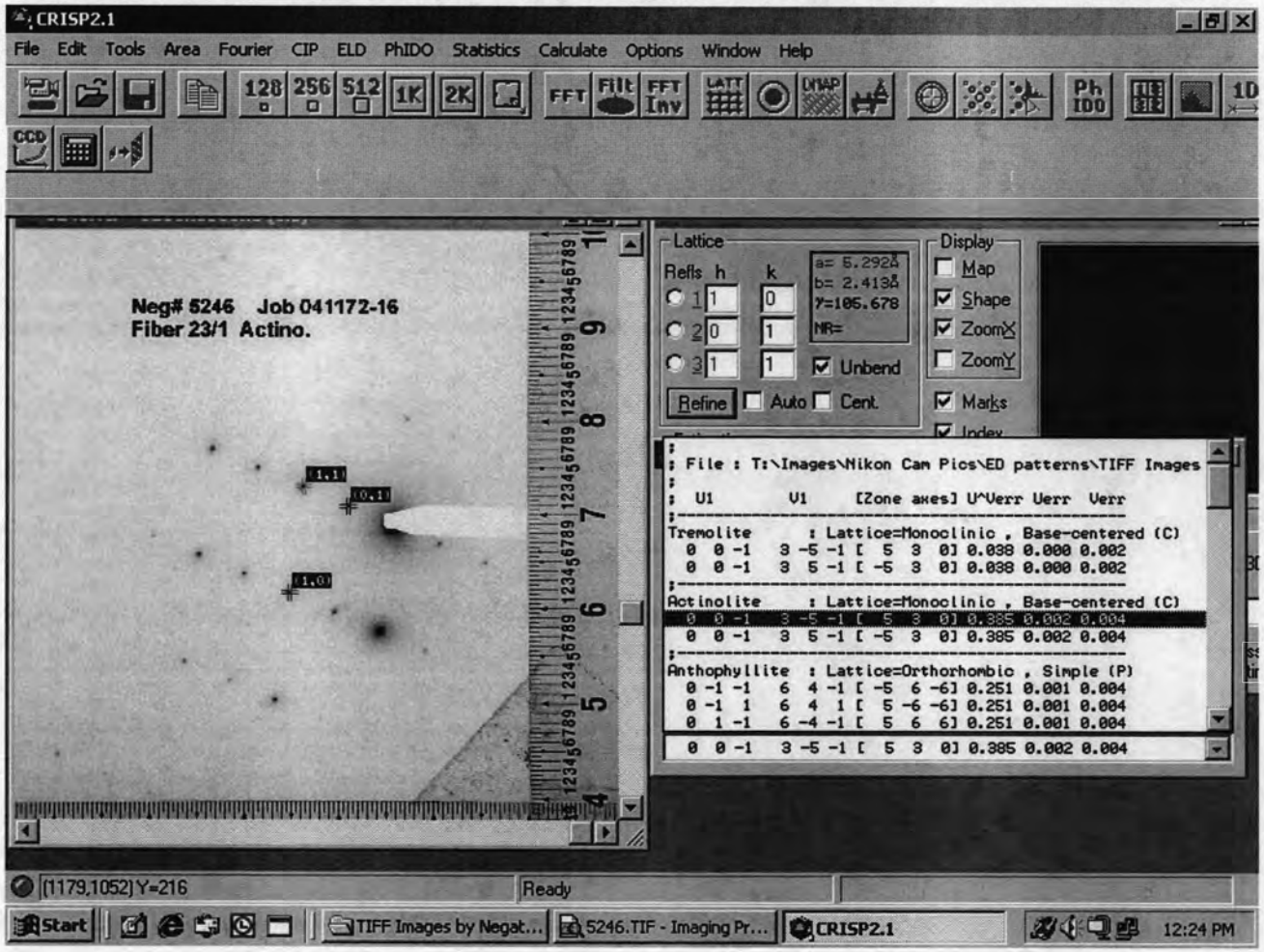
Prefix none
Name actinolite
Modifier none
Group Calcic Amphibole

Sample # **041172-14-48-1**

Values		Satisfied Conditions
(Ca,Na)@B	1.64	(Ca,Na)@B >= 1 and Na@B < 0.5
Na@B	0.00	Ca@B >= 1.5 and (Na,K)@A < 0.5
Ca@B	1.64	(Mg/(Mg+Fe2))>= 0.5
(Na,K)@A	0.00	Si > 7.5
Mg/(Mg+Fe2)	0.86	(Mg/(Mg+Fe2))< 0.9
Si	7.65	

Mineral Analysis Program (Version 5.0)

Actinolite
[5 3 0]

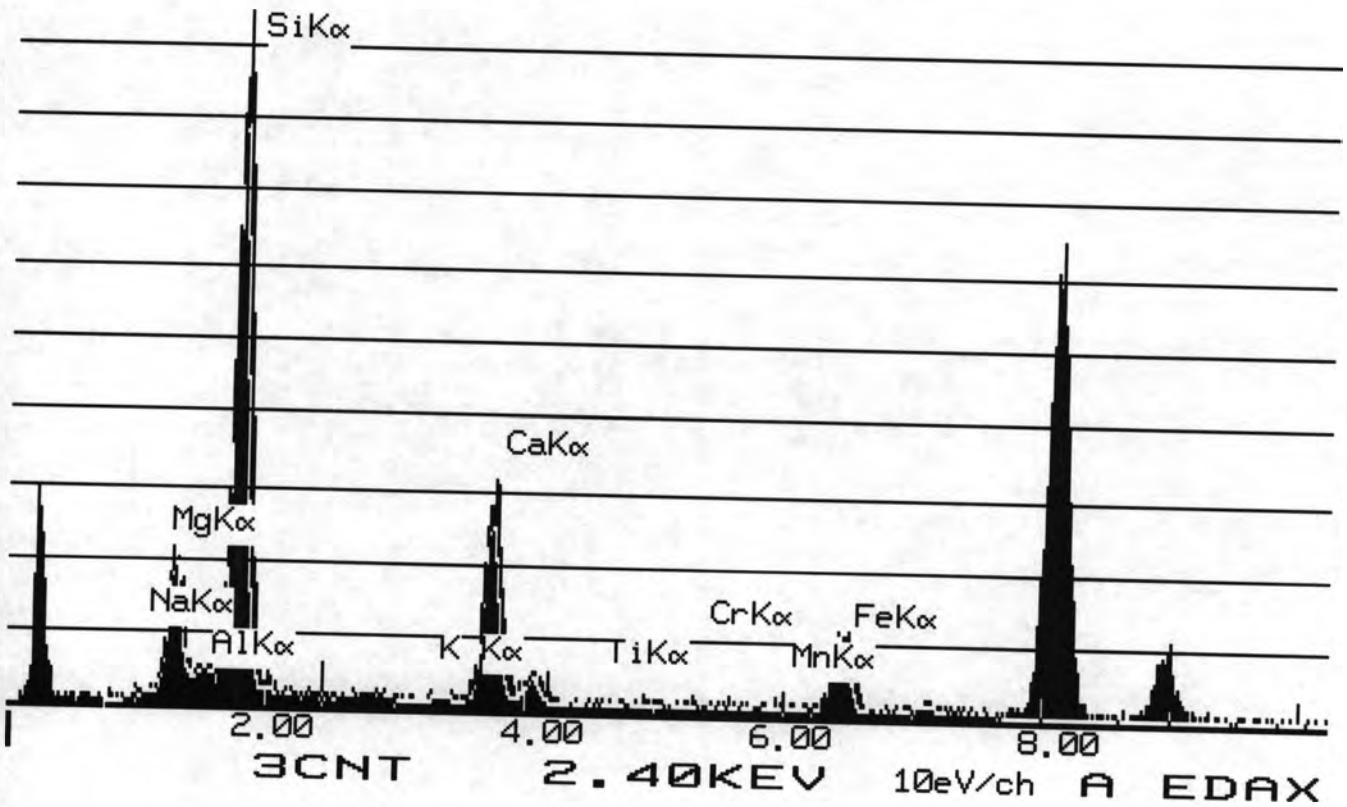


INTE-% :
LABEL = 041172-16 23/1 15163
23-NOV-72 01:54:55
90.657 LIVE SECONDS

ELEM	CPS	WT % ELEM	WT % OXIDE
MGK	8.328	10.907	18.086
ALK	0.408	0.321	0.607
SIK	36.677	27.017	57.798
K K	0.364	0.446	0.537
CAK	13.832	9.715	13.593
MNK	0.298	0.302	0.390
FEK	6.740	6.288	8.990
TOTAL			100.000

USED PEIF: USER

22-NOV-04 01:55:17 SUPER QUANT
RATE= 8CPS TIME= 90LSEC
FS= 394/ 394 PRST= 200LSEC
A =041172-16 23/1 15163



	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	57.798	Si+4	7.9884	7.9884							
Al2O3	0.607	Al+3	0.0989	0.0116	**0.0873**						
TiO2	0	Ti+4	0.0000	0.0000	**0.0000**						
Cr2O3	0	Cr+3	0.0000			0.0000	0.0000				
Fe(total)O	8.99	Fe+3	0.0093			0.0093	0.0000				
MgO	18.086	Mg+2	3.7266			3.7266	**0.0000**				
MnO	0.39	Fe+2	1.0286			1.0286	**0.0000**				
CaO	13.592	Mn+2	0.0457			0.0457	**0.0000**				
Na2O	0	Ca+2	2.0126					2.0000	0.0126		
K2O	0.537	Na+	0.0000					0.0000	**0.0000**	0.0000	0.0000
		K+	0.0947							0.0947	0.0000
Total	**100**		**Excess**	T site	**0.0873**	C site	**0.0000**	B site	**0.0125843**	A site	**0**
			Total	**8**		**4.8975**		**2.0000**		**0.0947**	**0.0000**
			%Fill	**100**		**97.9507**		**100**			

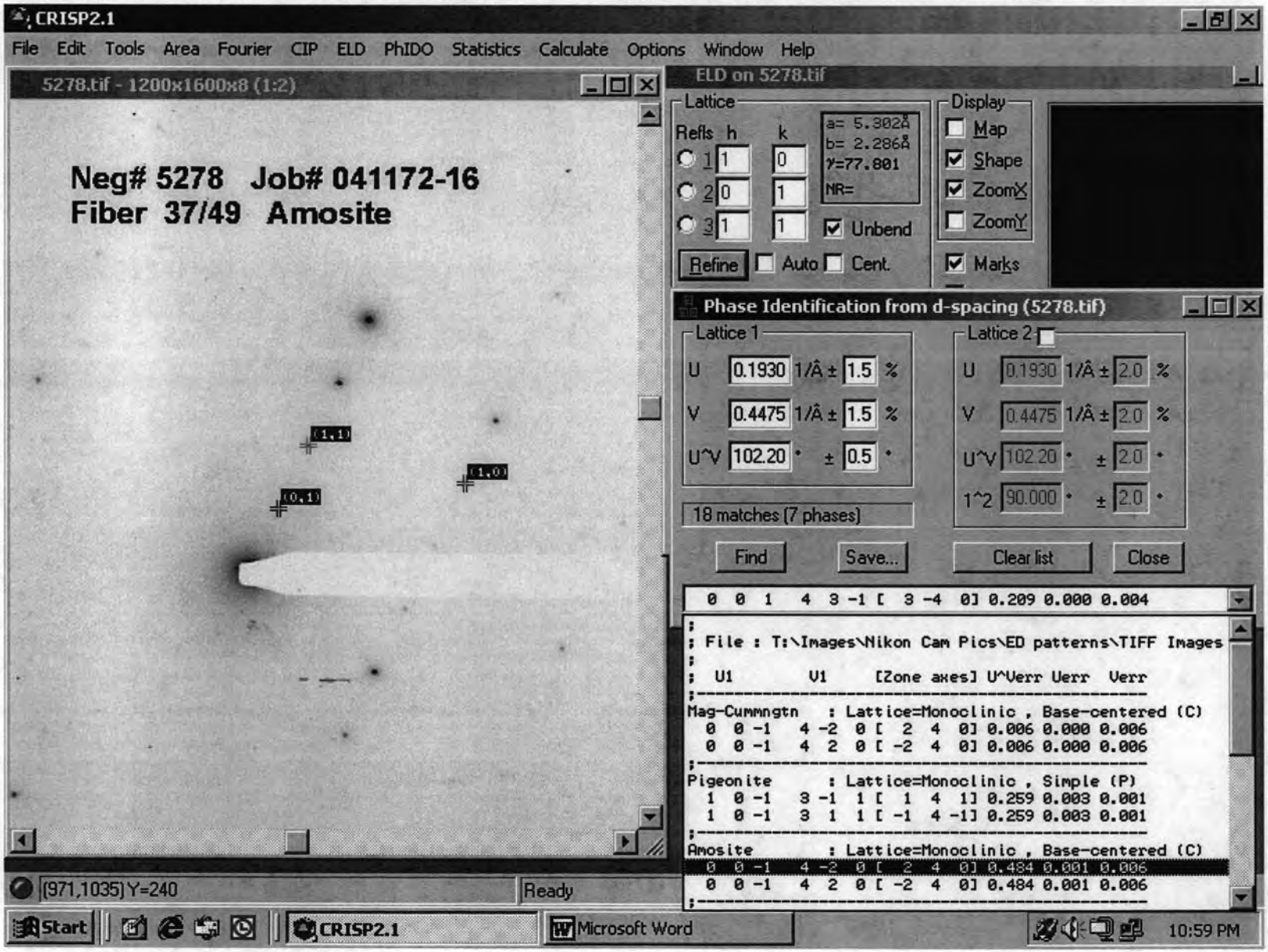
Prefix none
Name actinolite
Modifier none
Group Calcic Amphibole

Sample # **041172-16-15163**

Values		Satisfied Conditions
(Ca,Na)@B	2.00	(Ca,Na)@B >= 1 and Na@B < 0.5
Na@B	0.00	Ca@B >= 1.5 and (Na,K)@A < 0.5
Ca@B	2.00	(Mg/(Mg+Fe2))>= 0.5
(Na,K)@A	0.09	Si > 7.5
Mg/(Mg+Fe2)	0.78	(Mg/(Mg+Fe2))< 0.9
Si	7.99	

Mineral Analysis Program (Version 5.0)

AMOSITE
[1 2 0]


CRISP2.1
File Edit Tools Area Fourier CIP ELD PhIDO Statistics Calculate Options Window Help
5278.tif - 1200x1600x8 (1:2)
Neg# 5278 Job# 041172-16
Fiber 37/49 Amosite
(1,1)
(1,0)
(0,1)
ELD on 5278.tif
Lattice
Refls h k
1 1 0
2 0 1
3 1 1
a= 5.302Å
b= 2.286Å
γ=77.801
NR=
Unbend
Refine
Auto
Cent.
Display
Map
Shape
ZoomX
ZoomY
Marks
Phase Identification from d-spacing (5278.tif)
Lattice 1
U 0.1930 1/Å ± 1.5 %
V 0.4475 1/Å ± 1.5 %
U^V 102.20 ° ± 0.5 °
Lattice 2
U 0.1930 1/Å ± 2.0 %
V 0.4475 1/Å ± 2.0 %
U^V 102.20 ° ± 2.0 °
1^2 90.000 ° ± 2.0 °
18 matches (7 phases)
Find
Save...
Clear list
Close
0 0 1 4 3 -1 [3 -4 0] 0.209 0.000 0.004
; File : T:\Images\Nikon Cam Pics\ED patterns\TIFF Images
; U1 V1 [Zone axes] U^Verr Uerr Verr
Mag-Cummngtn : Lattice=Monoclinic , Base-centered (C)
0 0 -1 4 -2 0 [2 4 0] 0.006 0.000 0.006
0 0 -1 4 2 0 [-2 4 0] 0.006 0.000 0.006
Pigeonite : Lattice=Monoclinic , Simple (P)
1 0 -1 3 -1 1 [1 4 1] 0.259 0.003 0.001
1 0 -1 3 1 1 [-1 4 -1] 0.259 0.003 0.001
Amosite : Lattice=Monoclinic , Base-centered (C)
0 0 -1 4 -2 0 [2 4 0] 0.484 0.001 0.006
0 0 -1 4 2 0 [-2 4 0] 0.484 0.001 0.006
(971,1035) Y=240
Ready
Start
CRISP2.1
Microsoft Word
10:59 PM

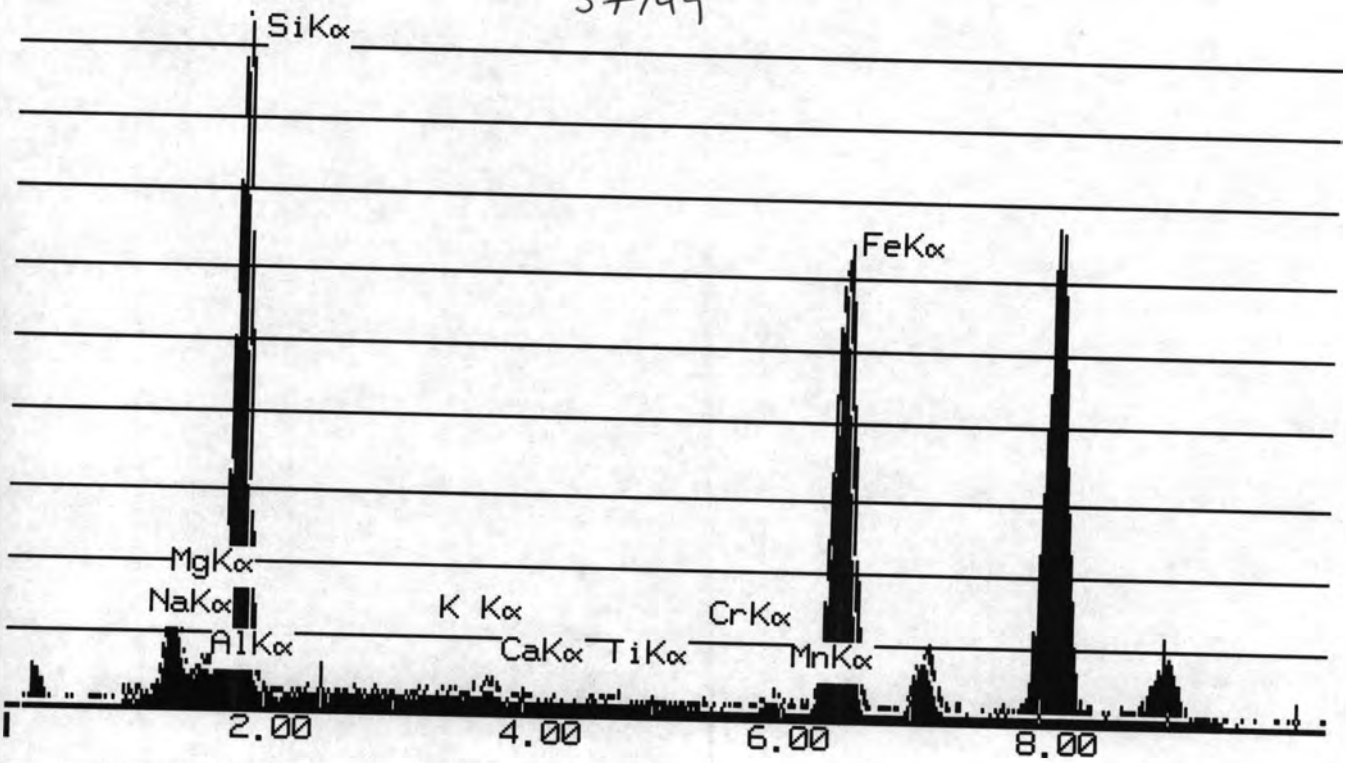
INTE-% :
LABEL = 041172-16 36/2 15164
23-NOV-72 01:50:44
75.710 LIVE SECONDS

ELEM	CPS	WT % ELEM	WT % OXIDE
MGK	12.337	6.780	11.241
ALK	1.426	0.471	0.890
SIK	74.112	22.906	49.005
K K	0.251	0.129	0.155
CAK	1.796	0.529	0.741
TIK	0.621	0.258	0.430
CRK	0.238	0.097	0.142
MNK	1.770	0.753	0.972
FEK	65.077	25.475	36.423

TOTAL			100.000

USED PEIF: USER

22-NOV-04 01:51:08 SUPER QUANT
RATE= 10CPS TIME= 75LSEC
FS= 608/ 608 PRST= 200LSEC
A =041172-16 ~~36/2~~ 15164
37/49



	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	49.005	Si+4	7.4838	7.4838							
Al2O3	0.89	Al+3	0.1602	0.1602	**0.0000**						
TiO2	0.43	Ti+4	0.0494	0.0494	**0.0000**						
Cr2O3	0.142	Cr+3	0.0171			0.0171	0.0000				
Fe(total)O	36.423	Fe+3	0.5023			0.5023	0.0000				
MgO	11.241	Mg+2	2.5592			2.5592	**0.0000**				
MnO	0.972	Fe+2	4.0930			1.9214	**2.1716**				
CaO	0.741	Mn+2	0.1257			0.0000	**0.1257**				
Na2O	0	Ca+2	0.1212					0.0000	0.1212		
K2O	0.155	Na+	0.0000					0.0000	**0.0000**	0.0000	0.0000
		K+	0.0302							0.0302	0.0000
Total	**99.999**		**Excess**	T site	**0.0000**	C site	**2.2974**	B site	**0.4185877**	A site	**0**
			Total	**7.6934**		**5.0000**		**0.0000**		**0.0302**	**0.0000**
			%Fill	**96.167**		**100**		**0**			

Prefix none

Name grunerite, ferro-anthophyllite, ferroholmquistite, clinoferroholmquistite

Modifier none

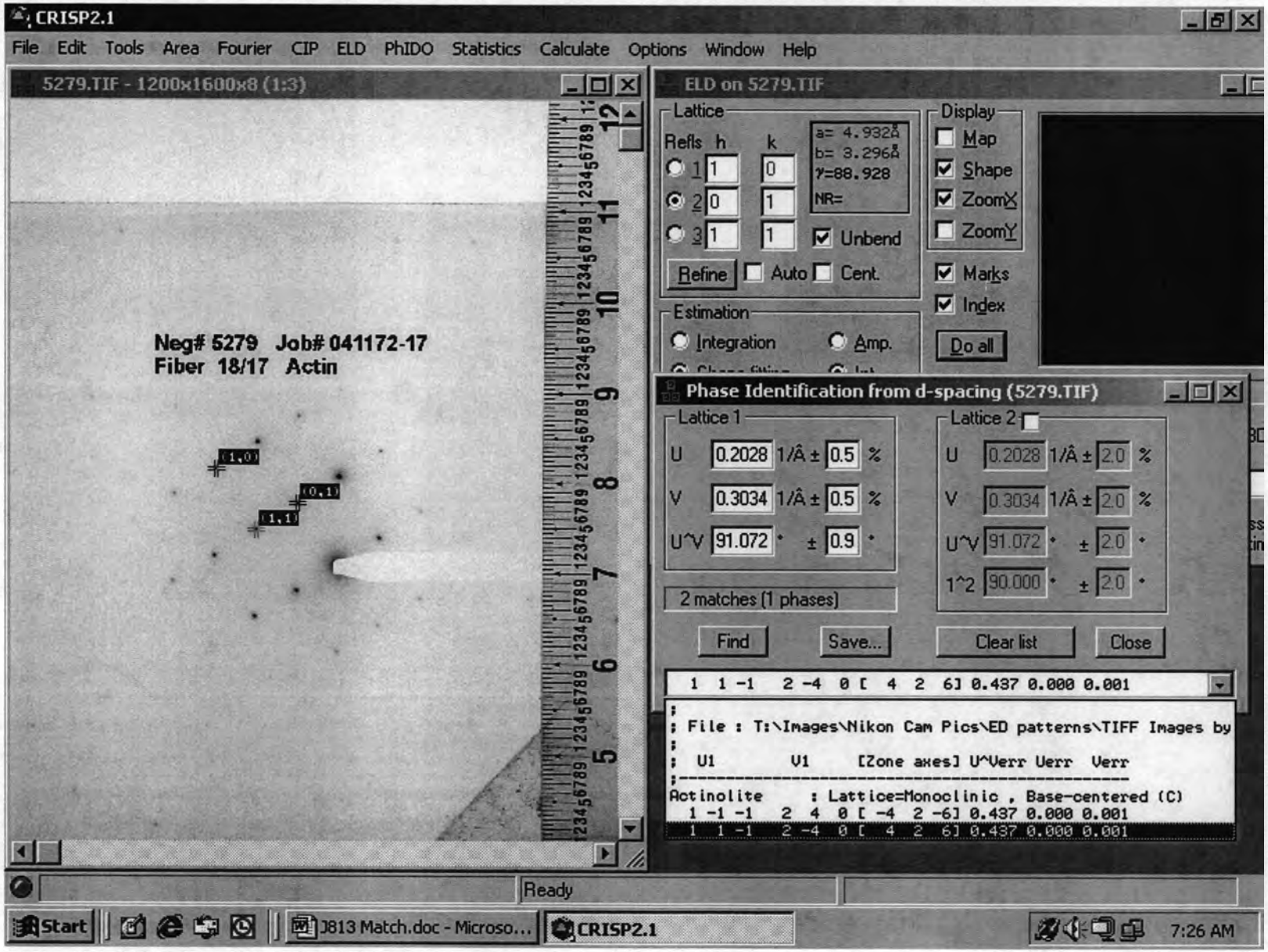
Group Mg-Fe-Mn Amphibole

Sample # **041172-16-15164**

Values		Satisfied Conditions
(Ca,Na)@B	0.00	(Ca,Na)@B < 1 and (Mg,Fe2,Mn)@B >= 0.95
(Mg,Fe2,Mn)@B	2.00	(Mg/(Mg+Fe2))< 0.5
Mg/(Mg+Fe2)	0.38	Si > 7
Si	7.48	

Mineral Analysis Program (Version 5.0)

ACTINOLITE
[2 1 3]



INTE-% :
LABEL = 041172-17 18/17 15197
14-OCT-72 19:39:59
94.528 LIVE SECONDS

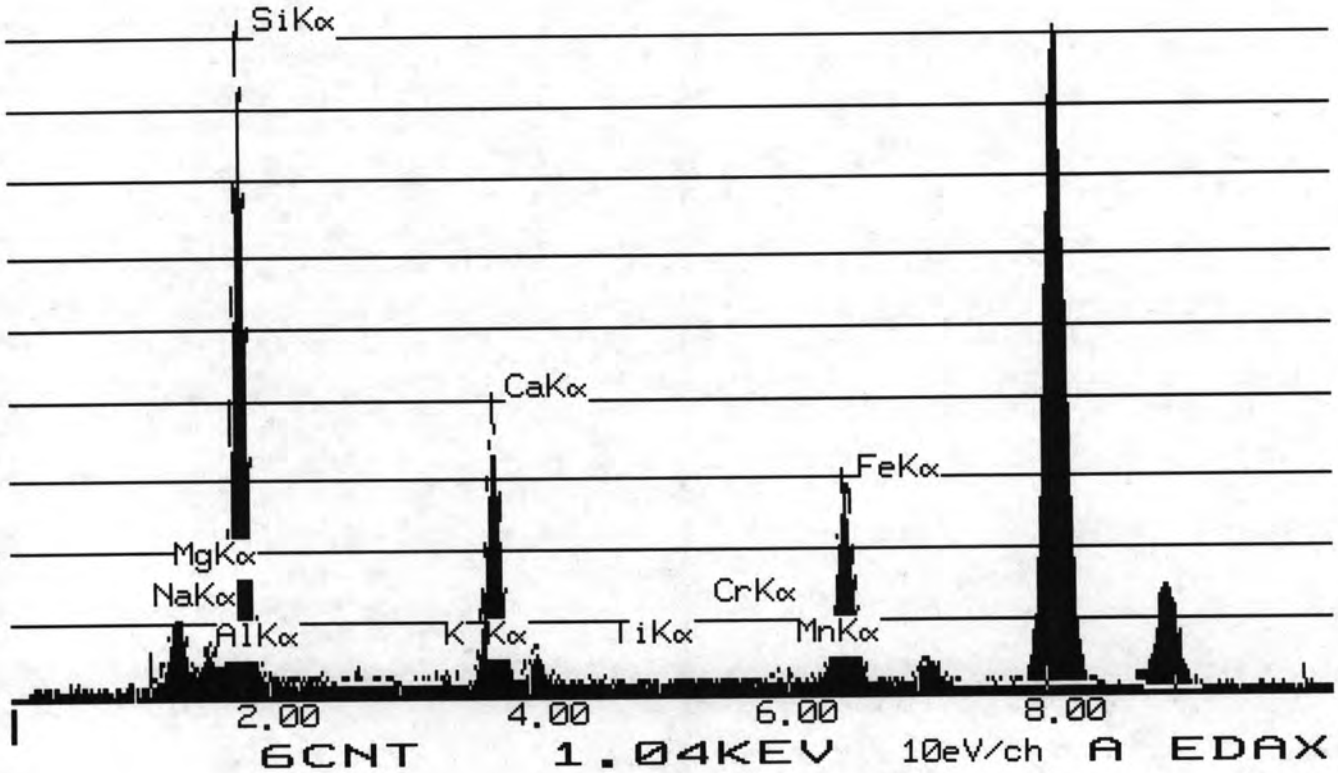
B6 - Auto

ELEM	CPS	WT % ELEM	WT % OXIDE
MGK	8.738	6.259	10.379
ALK	3.174	1.366	2.580
SIK	61.431	24.750	52.949
K K	0.508	0.340	0.410
CAK	28.880	11.093	15.522
MNK	0.518	0.287	0.371
FEK	24.384	12.443	17.790

TOTAL			100.000

USED PEIF: USER

13-OCT-04 19:40:36 SUPER QUANT
RATE= 1475CPS TIME= 95LSEC
FS= 610/ 610 PRST= 200LSEC
A =041172-17 18/17 15197



	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	52.949	Si+4	7.7046	7.7046							
Al2O3	2.58	Al+3	0.4424	0.2954	**0.1470**						
TiO2	0	Ti+4	0.0000	0.0000	**0.0000**						
Cr2O3	0	Cr+3	0.0000			0.0000	0.0000				
Fe(total)O	17.79	Fe+3	0.0195			0.0195	0.0000				
MgO	10.379	Mg+2	2.2515			2.2515	**0.0000**				
MnO	0.371	Fe+2	2.1429			2.1429	**0.0000**				
CaO	15.522	Mn+2	0.0457			0.0457	**0.0000**				
Na2O	0	Ca+2	2.4197					2.0000	0.4197		
K2O	0.41	Na+	0.0000					0.0000	**0.0000**	0.0000	0.0000
		K+	0.0761							0.0761	0.0000
Total	**100.001**		**Excess**	T site	**0.1470**	C site	**0.0000**	B site	**0.4197067**	A site	**0**
			Total	**8**		**4.6067**		**2.0000**		**0.0761**	**0.0000**
			%Fill	**100**		**92.1335**		**100**			

Prefix none
Name actinolite
Modifier none
Group Calcic Amphibole

Sample # **041172-17-15197**

Values		Satisfied Conditions
(Ca,Na)@B	2.00	(Ca,Na)@B >= 1 and Na@B < 0.5
Na@B	0.00	Ca@B >= 1.5 and (Na,K)@A < 0.5
Ca@B	2.00	(Mg/(Mg+Fe2))>= 0.5
(Na,K)@A	0.08	Si > 7.5
Mg/(Mg+Fe2)	0.51	(Mg/(Mg+Fe2))< 0.9
Si	7.70	

Mineral Analysis Program (Version 5.0)

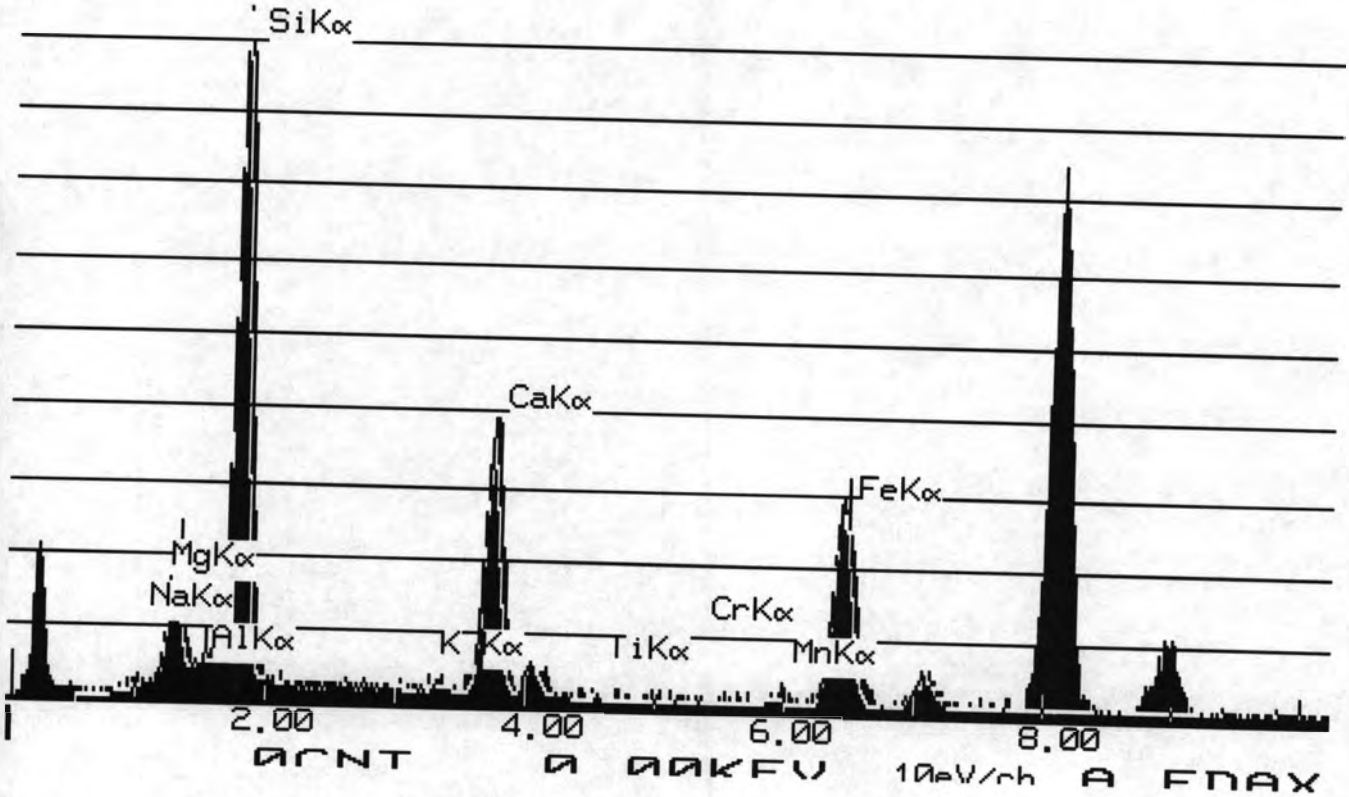
INTE-% :
LABEL = 041172-17 3/1 15165
23-NOV-72 21:31:23
92.763 LIVE SECONDS

ELEM	CPS	WT % ELEM	WT % OXIDE
MGK	9.206	7.814	12.956
ALK	0.787	0.401	0.758
SIK	51.055	24.371	52.138
K K	0.593	0.470	0.567
CAK	22.854	10.401	14.553
TIK	0.280	0.180	0.300
MNK	0.658	0.432	0.558
FEK	21.021	12.709	18.171

TOTAL			100.000

USED PEIF: USER

22-NOV-04 21:31:50 SUPER QUANT
RATE= 6CPS TIME= 92LSEC
FS= 511/ 511 PRST= 200LSEC
A =041172-17 3/1 15165



	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	52.138	Si+4	7.6354	7.6354							
Al2O3	0.758	Al+3	0.1308	0.1308	**0.0000**						
TiO2	0.3	Ti+4	0.0330	0.0330	**0.0000**						
Cr2O3	0	Cr+3	0.0000			0.0000	0.0000				
Fe(total)O	18.17	Fe+3	0.0200			0.0200	0.0000				
MgO	12.956	Mg+2	2.8286			2.8286	**0.0000**				
MnO	0.558	Fe+2	2.2028			2.1514	**0.0514**				
CaO	14.553	Mn+2	0.0692			0.0000	**0.0692**				
Na2O	0	Ca+2	2.2832					1.8794	0.4039		
K2O	0.567	Na+	0.0000					0.0000	**0.0000**	0.0000	0.0000
		K+	0.1059							0.1059	0.0000
Total	**100**		**Excess**	T site	**0.0000**	C site	**0.1206**	B site	**0.4038764**	A site	**0**
			Total	**7.7993**		**5.0000**		**1.8794**		**0.1059**	**0.0000**
			%Fill	**97.491**		**100**		**93.9685**			

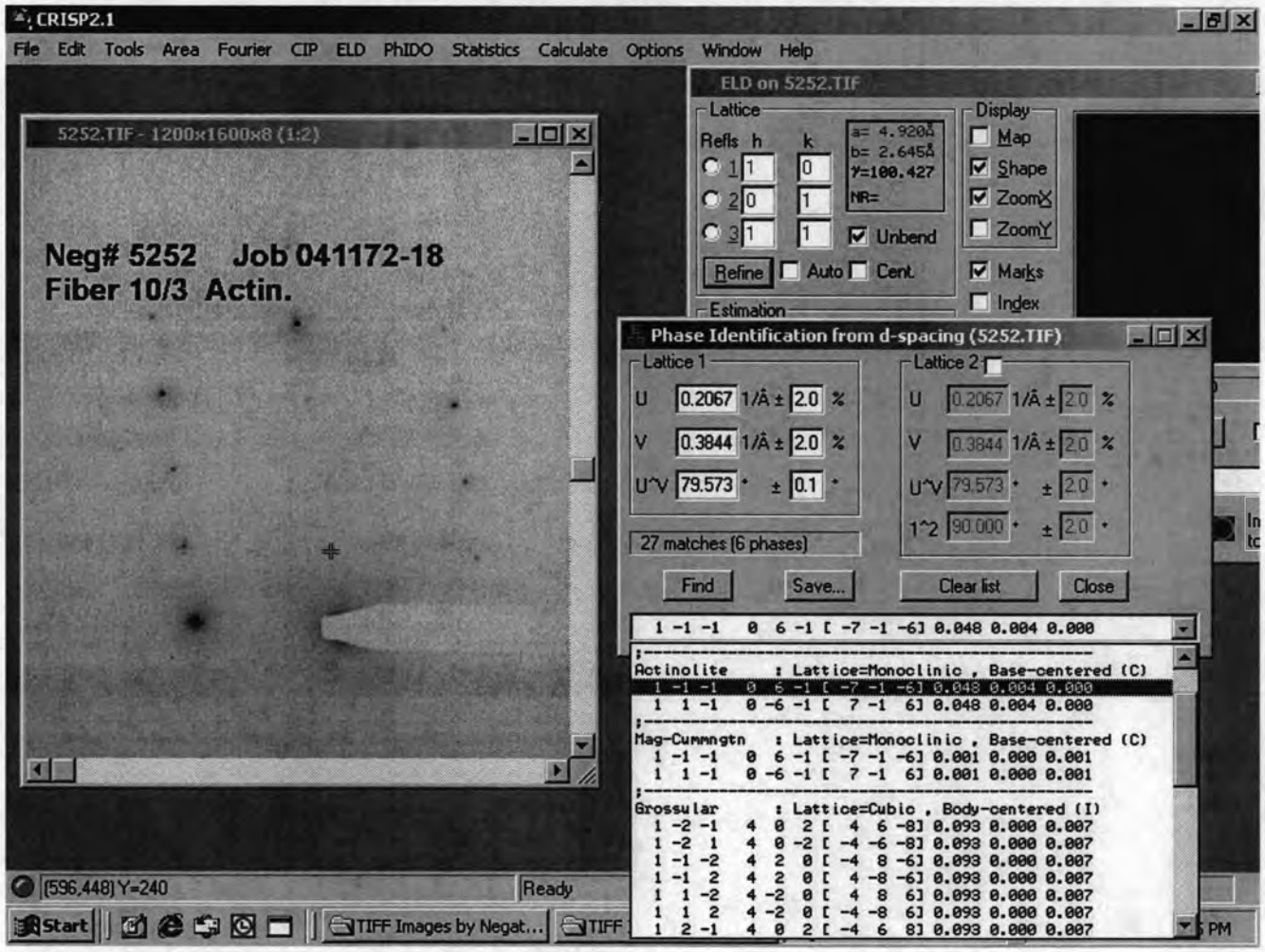
Prefix none
Name actinolite
Modifier none
Group Calcic Amphibole

Sample # **041172-17-15165**

Values		Satisfied Conditions
(Ca,Na)@B	1.88	(Ca,Na)@B >= 1 and Na@B < 0.5
Na@B	0.00	Ca@B >= 1.5 and (Na,K)@A < 0.5
Ca@B	1.88	(Mg/(Mg+Fe2))>= 0.5
(Na,K)@A	0.11	Si > 7.5
Mg/(Mg+Fe2)	0.56	(Mg/(Mg+Fe2))< 0.9
Si	7.64	

Mineral Analysis Program (Version 5.0)

Actinolite
[7 1 6]

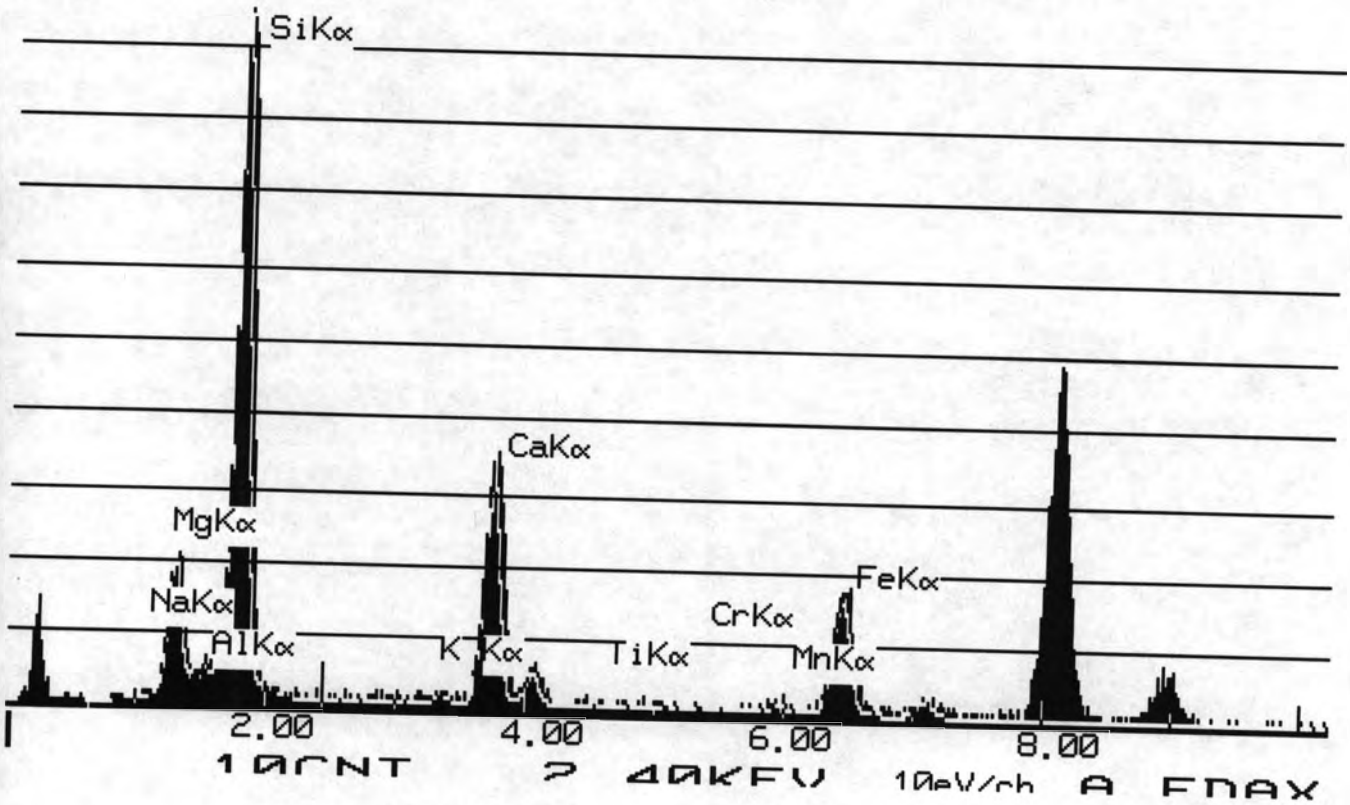


INTE-% :
LABEL = 041172-18 10/1 15171
23-NOV-72 01:47:05
101.958 LIVE SECONDS

ELEM	CPS	WT % ELEM	WT % OXIDE
MGK	12.211	9.400	15.587
ALK	0.294	0.136	0.257
SIK	61.045	26.431	56.545
K K	0.951	0.684	0.825
CAK	25.599	10.567	14.786
TIK	0.128	0.074	0.124
MNK	0.726	0.432	0.558
FEK	14.437	7.917	11.319
TOTAL			100.000

USED PEIF: USER

22-NOV-04 01:47:28 SUPER QUANT
RATE= 10CPS TIME= 101LSEC
FS= 664/ 664 PRST= 200LSEC
A =041172-18 10/1 15171



	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	56.545	Si+4	7.9639	7.9639							
Al2O3	0.257	Al+3	0.0427	0.0361	**0.0065**						
TiO2	0.124	Ti+4	0.0131	0.0000	**0.0131**						
Cr2O3	0	Cr+3	0.0000			0.0000	0.0000				
Fe(total)O	11.318	Fe+3	0.0120			0.0120	0.0000				
MgO	15.587	Mg+2	3.2728			3.2728	**0.0000**				
MnO	0.558	Fe+2	1.3196			1.3196	**0.0000**				
CaO	14.786	Mn+2	0.0666			0.0666	**0.0000**				
Na2O	0	Ca+2	2.2310					2.0000	0.2310		
K2O	0.825	Na+	0.0000					0.0000	**0.0000**	0.0000	0.0000
		K+	0.1482							0.1482	0.0000
Total	**100**		**Excess**	T site	**0.0196**	C site	**0.0000**	B site	**0.2310115**	A site	**0**
			Total	**8**		**4.6906**		**2.0000**		**0.1482**	**0.0000**
			%Fill	**100**		**93.8113**		**100**			

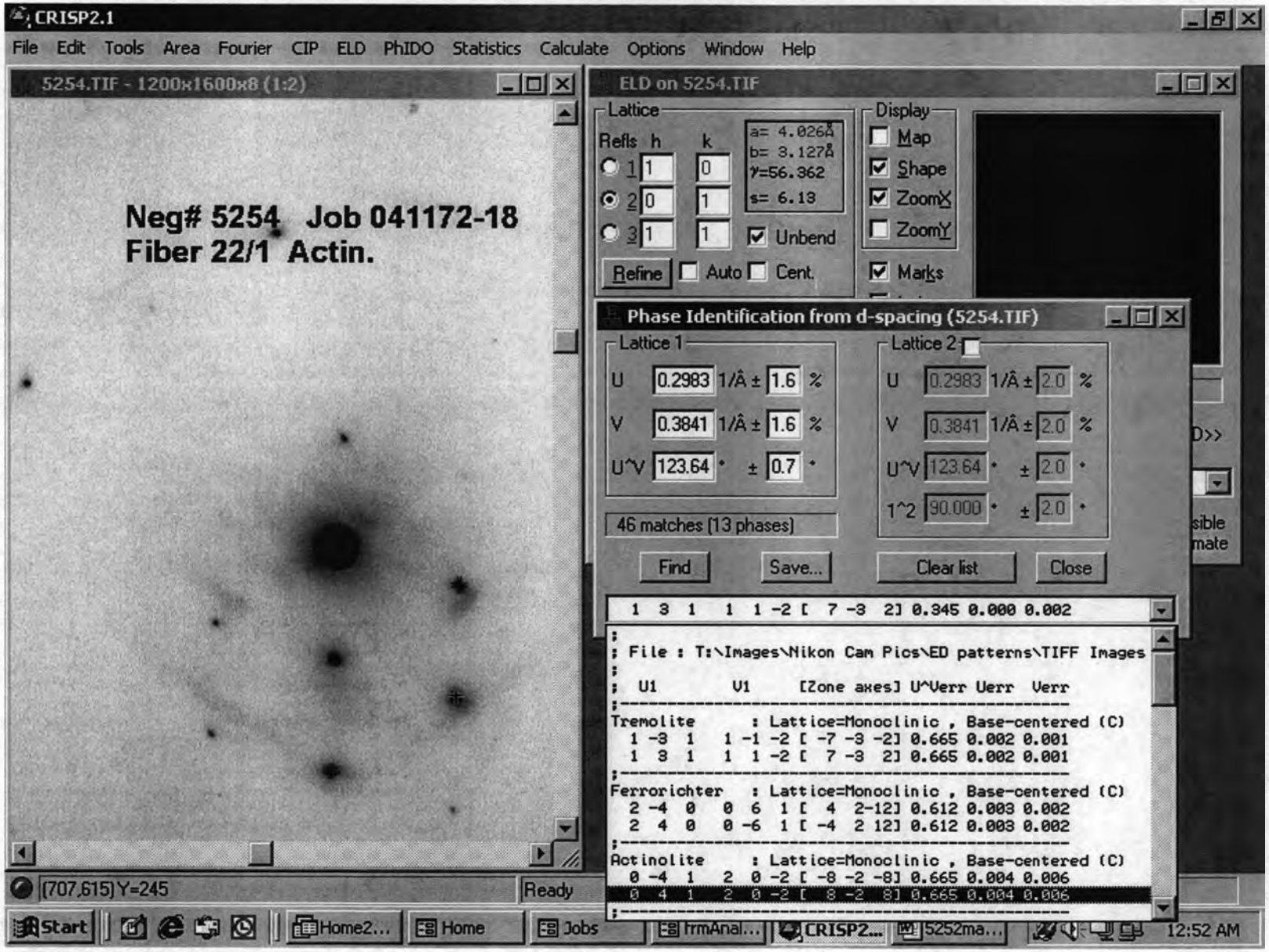
Prefix none
Name actinolite
Modifier none
Group **Calcic Amphibole**

Sample # **041172-18-15171**

Values		**Satisfied Conditions**
(Ca,Na)@B	**2.00**	**(Ca,Na)@B >= 1 and Na@B < 0.5**
Na@B	**0.00**	**Ca@B >= 1.5 and (Na,K)@A < 0.5**
Ca@B	**2.00**	**(Mg/(Mg+Fe2))>= 0.5**
(Na,K)@A	**0.15**	**Si > 7.5**
Mg/(Mg+Fe2)	**0.71**	**(Mg/(Mg+Fe2))< 0.9**
Si	**7.96**	

Mineral Analysis Program (Version 5.0)

ACTINOLITE
[4 -1 4]

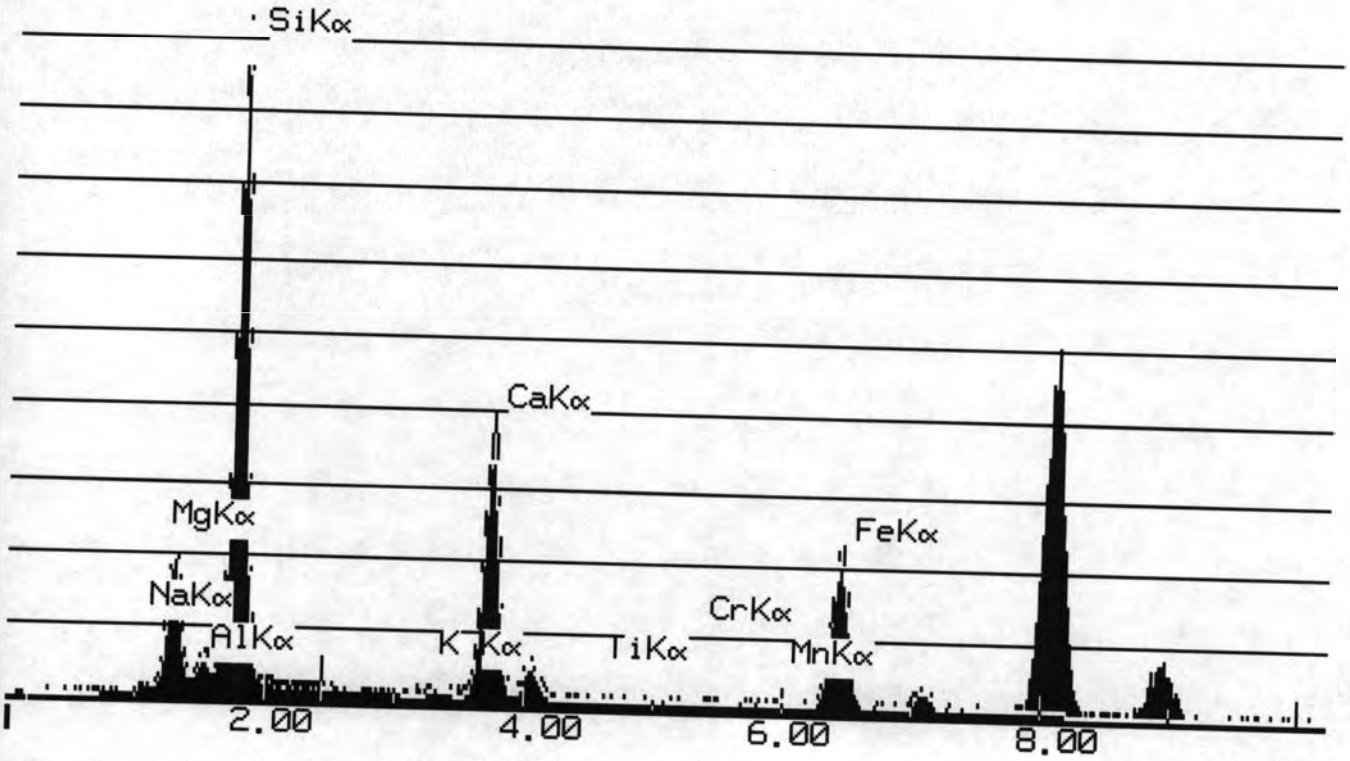


INTE-% :
LABEL = 041172-18 22/1 15173
23-NOV-72 01:42:16
192.663 LIVE SECONDS

ELEM	CPS	WT % ELEM	WT % OXIDE
MGK	12.826	9.429	15.635
ALK	2.159	0.954	1.802
SIK	59.394	24.559	52.540
K K	0.483	0.332	0.400
CAK	27.852	10.980	15.363
TIK	0.213	0.118	0.197
CRK	0.348	0.191	0.279
MNK	0.311	0.177	0.229
FEK	18.104	9.481	13.556
TOTAL			100.000

USED PEIF: USER

22-NOV-04 01:42:49 SUPER QUANT
RATE= 7CPS TIME= 193LSEC
FS= 1254/ 1254 PRST= 200LSEC
A =041172-18 22/1 15173



	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	52.54	Si+4	7.5299	7.5299							
Al2O3	1.802	Al+3	0.3044	0.3044	0.0000						
TiO2	0.197	Ti+4	0.0212	0.0212	0.0000						
Cr2O3	0.279	Cr+3	0.0316			0.0316	0.0000				
Fe(total)O	13.555	Fe+3	0.0146			0.0146	0.0000				
MgO	15.635	Mg+2	3.3406			3.3406	0.0000				
MnO	0.229	Fe+2	1.6082			1.6082	0.0000				
CaO	15.363	Mn+2	0.0278			0.0050	0.0228				
Na2O	0	Ca+2	2.3588					1.9772	0.3816		
K2O	0.4	Na+	0.0000					0.0000	0.0000	0.0000	0.0000
		K+	0.0731							0.0731	0.0000
Total	100		Excess	T site	0.0000	C site	0.0228	B site	0.3815908	A site	0
			Total	7.8555		5.0000		1.9772		0.0731	0.0000
			%Fill	98.193		100		98.8615			

Prefix	none
Name	actinolite
Modifier	none
Group	Calcic Amphibole

Sample # 041172-18-15173

Values		Satisfied Conditions
(Ca,Na)@B	1.98	(Ca,Na)@B >= 1 and Na@B < 0.5
Na@B	0.00	Ca@B >= 1.5 and (Na,K)@A < 0.5
Ca@B	1.98	(Mg/(Mg+Fe2))>= 0.5
(Na,K)@A	0.07	Si > 7.5
Mg/(Mg+Fe2)	0.68	(Mg/(Mg+Fe2))< 0.9
Si	7.53	

Mineral Analysis Program (Version 5.0)

ACTINOLITE
[100]

CRISP2.1

File Edit Tools Area Fourier CIP ELD PhIDO Statistics Calculate Options Window Help

5256.tif - 1200x1600x8 (1:2)

Neg# 5256 Job# 041172-19
Fiber 6/1 Actin

ELD on 5256.tif

Lattice

Refls	h	k
1	1	0
2	0	1
3	1	1

a=10.363Å
b= 5.077Å
γ=60.334
NR=

Unbend

Refine Auto Cent.

Display: Map, Shape, ZoomX, ZoomY, Marks

Phase Identification from d-spacing (5256.tif)

Lattice 1					Lattice 2				
U	0.1110	1/Å ±	1.6	%	U	0.1110	1/Å ±	2.0	%
V	0.2267	1/Å ±	1.6	%	V	0.2267	1/Å ±	2.0	%
U^V	119.67	° ±	0.1	°	U^V	119.67	° ±	2.0	°
					1^2	90.000	° ±	2.0	°

22 matches (6 phases)

Find Save... Clear list Close

```
  0  2  0   0 -2  1 [ -2  0  0] 0.041 0.000 0.002
;
; File : T:\Images\Nikon Cam Pics\ED patterns\TIFF Images
;
;  U1        V1     [Zone axes] U^Verr Uerr  Verr
;-----------------------------------------------
Actinolite     : Lattice=Monoclinic , Base-centered (C)
  0 -2  0   0  2 -1 [ -2  0  0] 0.002 0.001 0.004
  0 -2  0   0  2  1 [  2  0  0] 0.002 0.001 0.004
  0  2  0   0 -2 -1 [  2  0  0] 0.002 0.001 0.004
  0  2  0   0 -2  1 [ -2  0  0] 0.002 0.001 0.004
;-----------------------------------------------
Richterite     : Lattice=Monoclinic , Base-centered (C)
  0 -2  0   0  2 -1 [ -2  0  0] 0.095 0.000 0.002
  0 -2  0   0  2  1 [  2  0  0] 0.095 0.000 0.002
  0  2  0   0 -2 -1 [  2  0  0] 0.095 0.000 0.002
  0  2  0   0 -2  1 [ -2  0  0] 0.095 0.000 0.002
;-----------------------------------------------
```

(820,745) Y=236 Ready

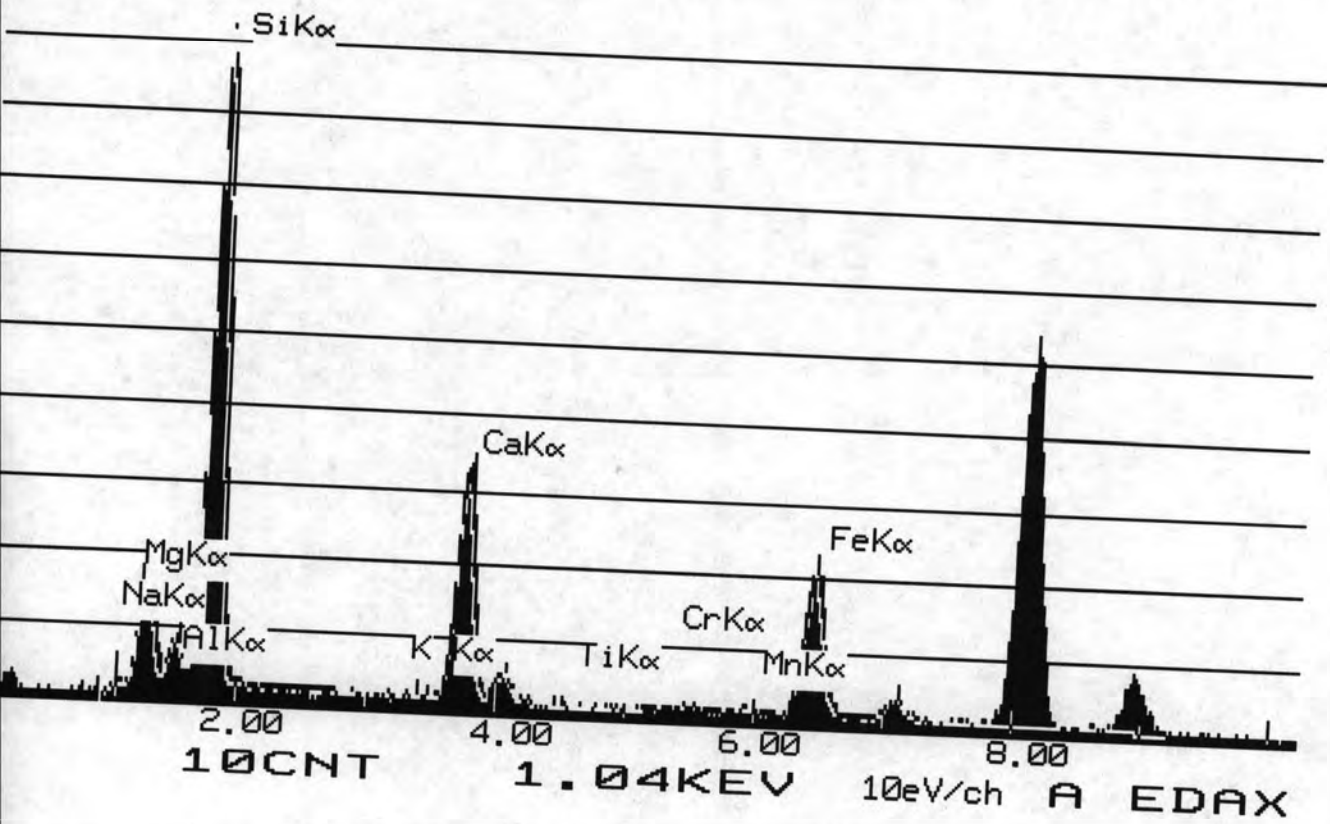
Start Home... Home Jobs frmA... CRIS... 5254 ... 1:16 AM

INTE-% :
LABEL = 041172-19 6/1 15175
11-OCT-72 18:05:04
45.048 LIVE SECONDS

ELEM	CPS	WT % ELEM	WT % OXIDE
MGK	30.812	9.427	15.630
ALK	10.012	1.840	3.476
SIK	147.532	25.386	54.309
CAK	59.381	9.742	13.631
MNK	0.355	0.084	0.109
FEK	41.223	8.984	12.845
TOTAL			100.000

USED PEIF: USER

10-OCT-04 18:06:06 SUPER QUANT
RATE= 521CPS TIME= 45LSEC
FS= 725/ 725 PRST= 200LSEC
A =041172-19 6/1 15175



	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	54.309	Si+4	7.6345	7.6345							
Al2O3	3.476	Al+3	0.5759	0.3655	**0.2104**						
TiO2	0	Ti+4	0.0000	0.0000	**0.0000**						
Cr2O3	0	Cr+3	0.0000			0.0000	0.0000				
Fe(total)O	12.845	Fe+3	0.0408			0.0408	0.0000				
MgO	15.63	Mg+2	3.2756			3.2756	**0.0000**				
MnO	0.109	Fe+2	1.4646			1.4646	**0.0000**				
CaO	13.631	Mn+2	0.0130			0.0087	**0.0043**				
Na2O	0	Ca+2	2.0529					1.9957	0.0572		
K2O	0	Na+	0.0000					0.0000	**0.0000**	0.0000	0.0000
		K+	0.0000							0.0000	0.0000
Total	**100**		**Excess**	T site	**0.2104**	C site	**0.0043**	B site	**0.0571804**	A site	**0**
			Total	**8**		**5.0000**		**1.9957**		**0.0000**	**0.0000**
			%Fill	**100**		**100**		**99.7839**			

Prefix none
Name actinolite
Modifier none
Group **Calcic Amphibole**

Sample # **041172-19-15175**

Values		Satisfied Conditions
(Ca,Na)@B	2.00	(Ca,Na)@B >= 1 and Na@B < 0.5
Na@B	0.00	Ca@B >= 1.5 and (Na,K)@A < 0.5
Ca@B	2.00	(Mg/(Mg+Fe2))>= 0.5
(Na,K)@A	0.00	Si > 7.5
Mg/(Mg+Fe2)	0.69	(Mg/(Mg+Fe2))< 0.9
Si	7.63	

Mineral Analysis Program (Version 5.0)

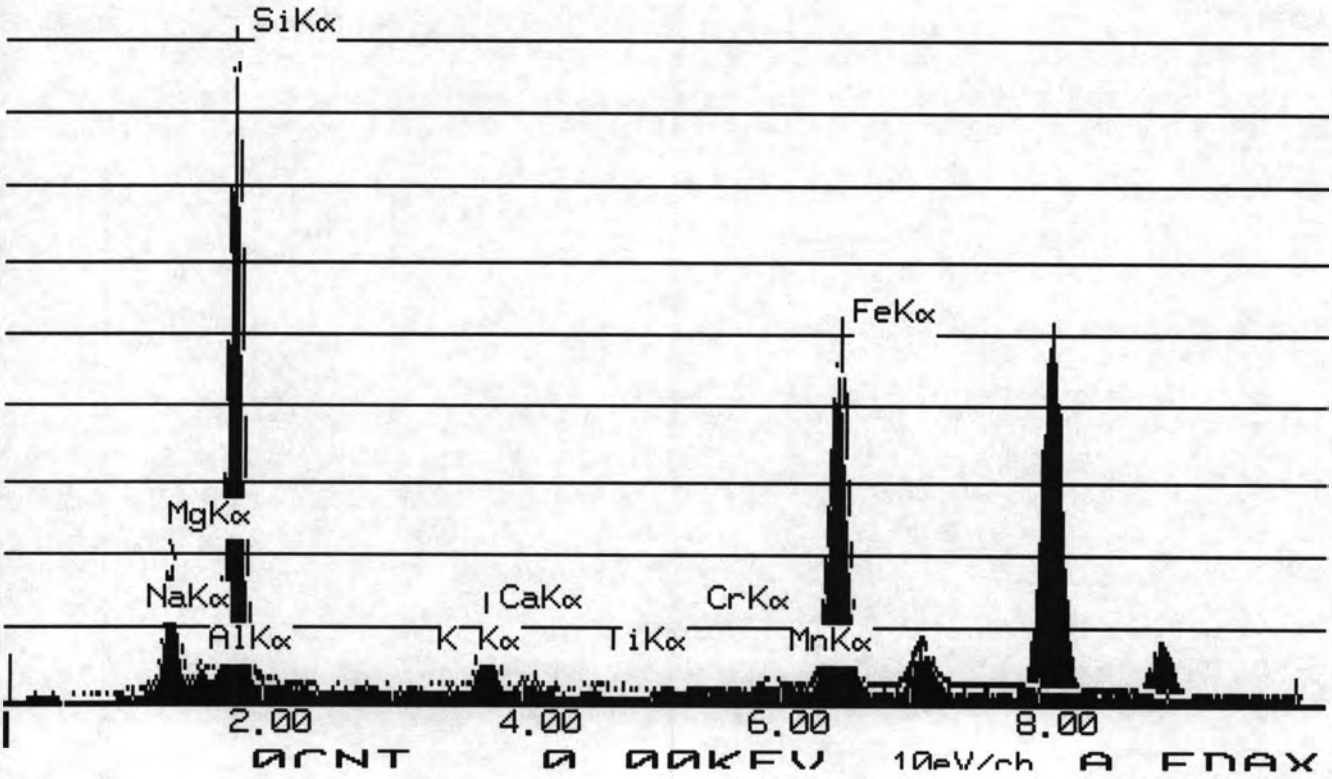
INTE-% :
LABEL = 041172-19 10/1 15176
23-NOV-72 21:36:05
61.249 LIVE SECONDS

ELEM	CPS	WT % ELEM	WT % OXIDE
MGK	32.343	8.816	14.618
ALK	4.212	0.690	1.303
SIK	154.042	23.616	50.522
K K	0.539	0.137	0.165
CAK	20.082	2.935	4.107
TIK	1.567	0.323	0.539
MNK	1.796	0.379	0.489
FEK	101.780	19.763	28.256

TOTAL			100.000

USED PEIF: USER

22-NOV-04 21:36:28 SUPER QUANT
RATE= 0CPS TIME= 61LSEC
FS= 1028/ 1028 PRST= 200LSEC
A =041172-19 10/1 15176



	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	50.522	Si+4	7.5212	7.5212							
Al2O3	1.303	Al+3	0.2286	0.2286	**0.0000**						
TiO2	0.539	Ti+4	0.0604	0.0604	**0.0000**						
Cr2O3	0	Cr+3	0.0000			0.0000	0.0000				
Fe(total)O	28.256	Fe+3	0.0000			0.0000	0.0000				
MgO	14.618	Mg+2	3.2443			3.2443	**0.0000**				
MnO	0.489	Fe+2	3.5174			1.7557	**1.7617**				
CaO	4.107	Mn+2	0.0617			0.0000	**0.0617**				
Na2O	0	Ca+2	0.6550					0.1767	0.4783		
K2O	0.165	Na+	0.0000					0.0000	**0.0000**	0.0000	0.0000
		K+	0.0313							0.0313	0.0000
Total	**99.999**		**Excess**	T site	**0.0000**	C site	**1.8233**	B site	**0.4783415**	A site	**0**
			Total	**7.8101**		**5.0000**		**0.1767**		**0.0313**	**0.0000**
			%Fill	**97.627**		**100**		**8.83379**			

Prefix none

Name grunerite, ferro-anthophyllite, ferroholmquistite, clinoferroholmquistite

Modifier Calcian

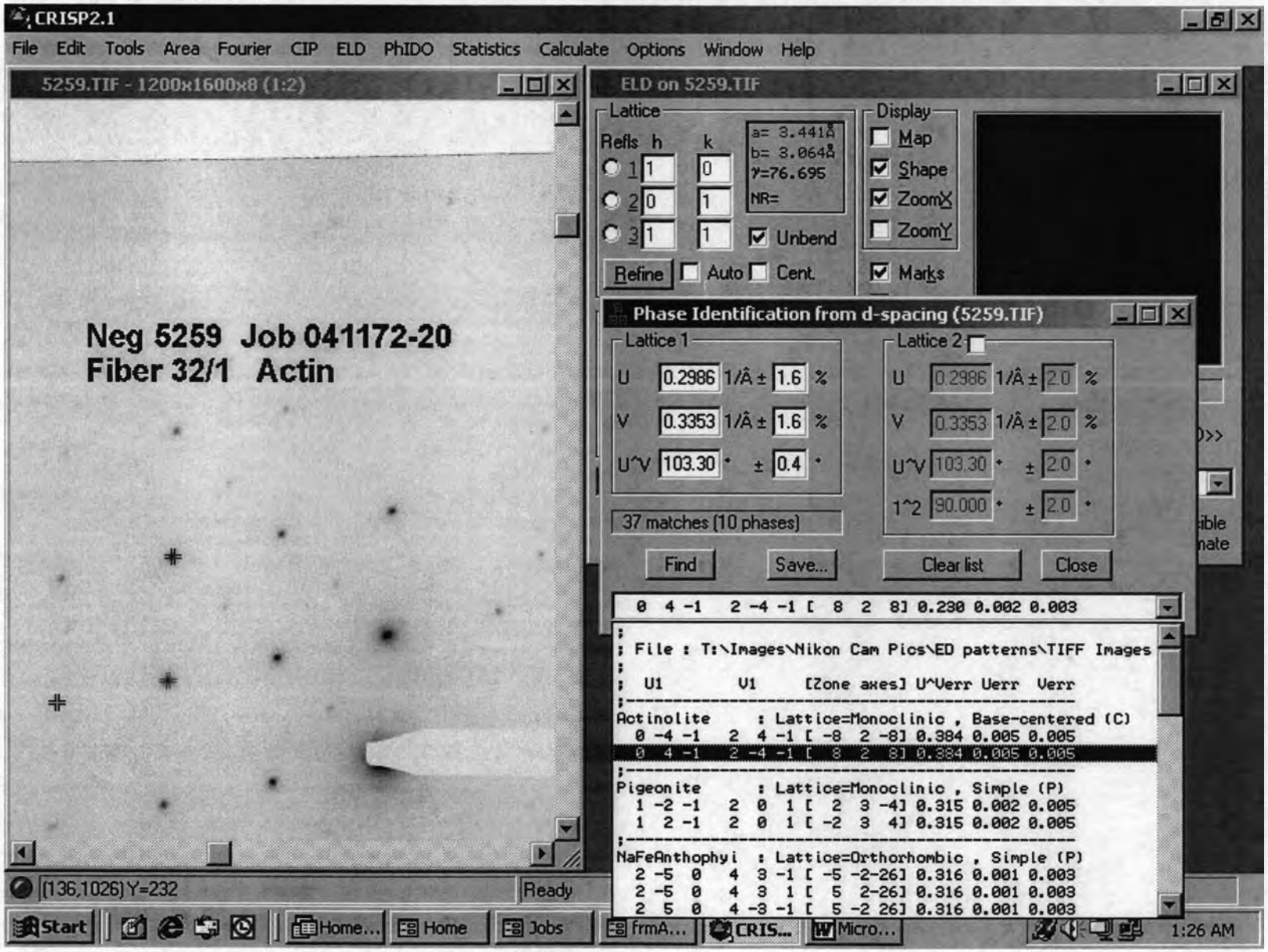
Group Mg-Fe-Mn Amphibole

Sample # 041172-19-15176

Values		Satisfied Conditions
(Ca,Na)@B	0.18	(Ca,Na)@B < 1 and (Mg,Fe2,Mn)@B >= 0.95
(Mg,Fe2,Mn)@B	1.82	(Mg/(Mg+Fe2))< 0.5
Mg/(Mg+Fe2)	0.48	Si > 7
Si	7.52	

Mineral Analysis Program (Version 5.0)

ACTINOLITE
[414]

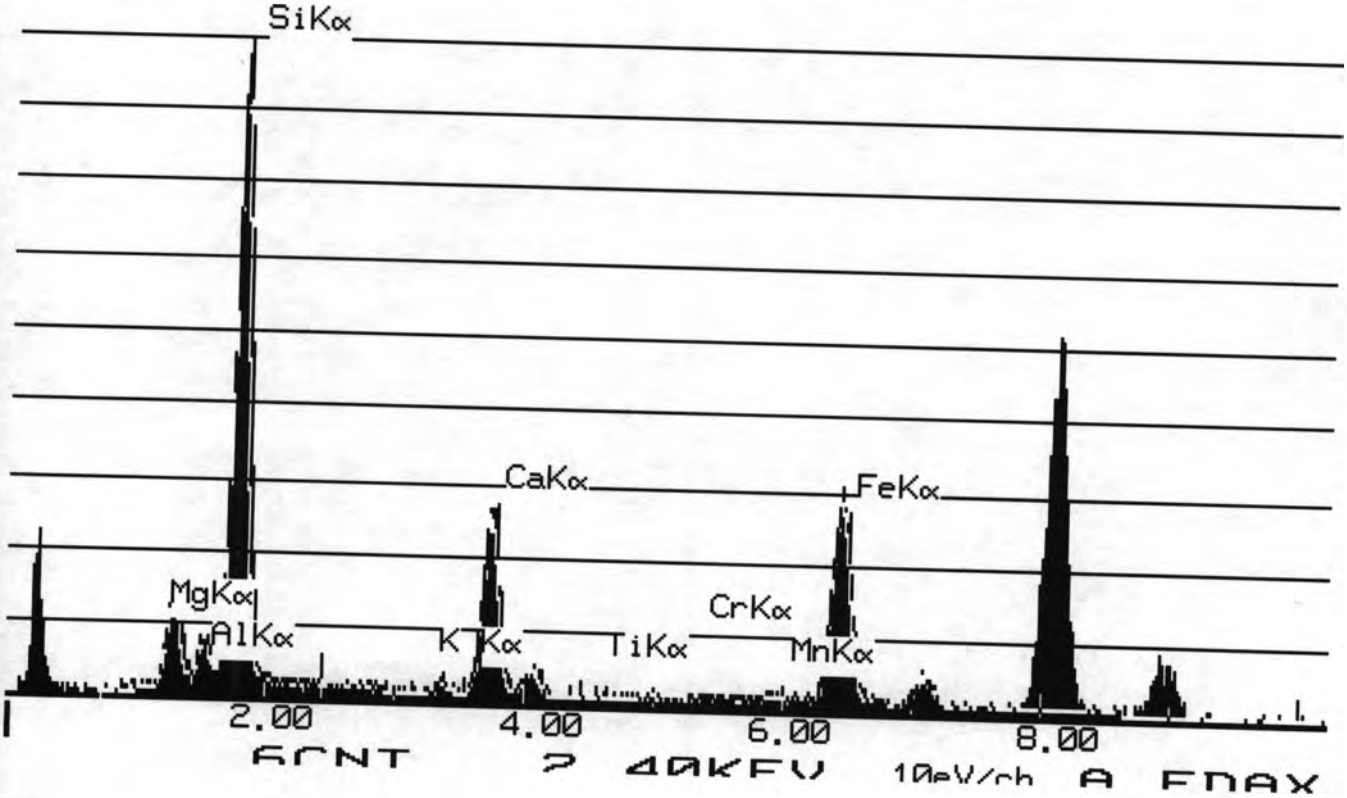


INTE-% :
LABEL = 041172-20 32/1 15177
23-NOV-72 01:58:48
125.885 LIVE SECONDS

ELEM	CPS	WT % ELEM	WT % OXIDE
NAK	0.143	0.437	0.589
MGK	4.687	6.767	11.220
ALK	1.891	1.640	3.098
SIK	30.822	25.028	53.543
K K	0.493	0.665	0.801
CAK	10.533	8.155	11.410
MNK	0.151	0.169	0.218
FEK	13.004	13.374	19.121
TOTAL			100.000

USED PEIF: USER

22-NOV-04 01:59:09 SUPER QUANT
RATE= 0CPS TIME= 125LSEC
FS= 446/ 446 PRST= 200LSEC
A =041172-20 32/1 15177



	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	53.543	Si+4	7.7429	7.7429							
Al2O3	3.098	Al+3	0.5280	0.2571	**0.2708**						
TiO2	0	Ti+4	0.0000	0.0000	**0.0000**						
Cr2O3	0	Cr+3	0.0000			0.0000	0.0000				
Fe(total)O	19.121	Fe+3	0.1040			0.1040	0.0000				
MgO	11.22	Mg+2	2.4189			2.4189	**0.0000**				
MnO	0.218	Fe+2	2.1965			2.1965	**0.0000**				
CaO	11.41	Mn+2	0.0267			0.0097	**0.0170**				
Na2O	0.589	Ca+2	1.7677					1.7677	0.0000		
K2O	0.801	Na+	0.1651					0.1651	**0.0000**	0.0000	0.0000
		K+	0.1478							0.1478	0.0000
Total	**100**		**Excess**	T site	**0.2708**	C site	**0.0170**	B site	**0**	A site	**0**
			Total	**8**		**5.0000**		**1.9328**		**0.1478**	**0.0000**
			%Fill	**100**		**100**		**96.6411**			

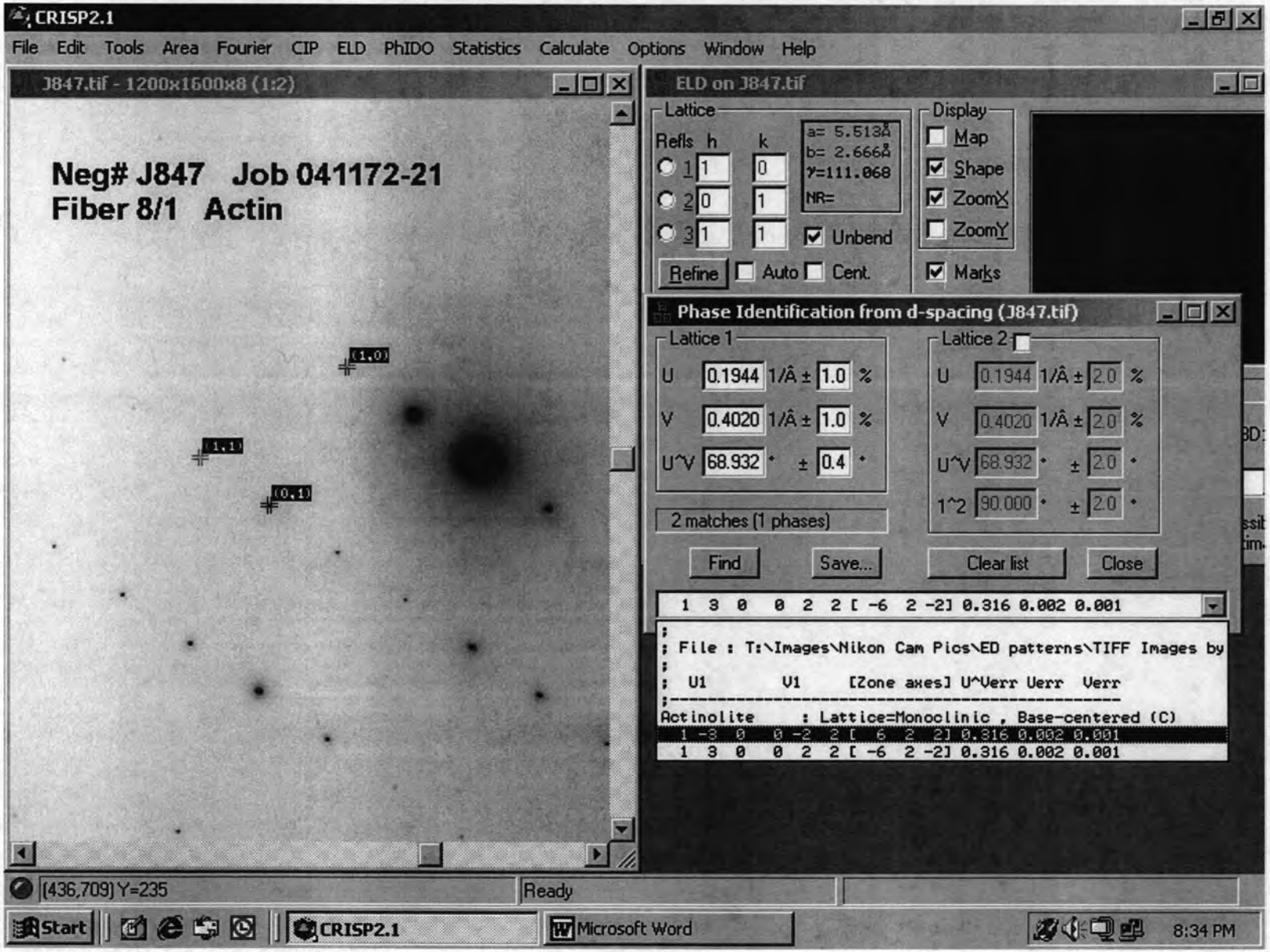
Prefix none
Name actinolite
Modifier none
Group Calcic Amphibole

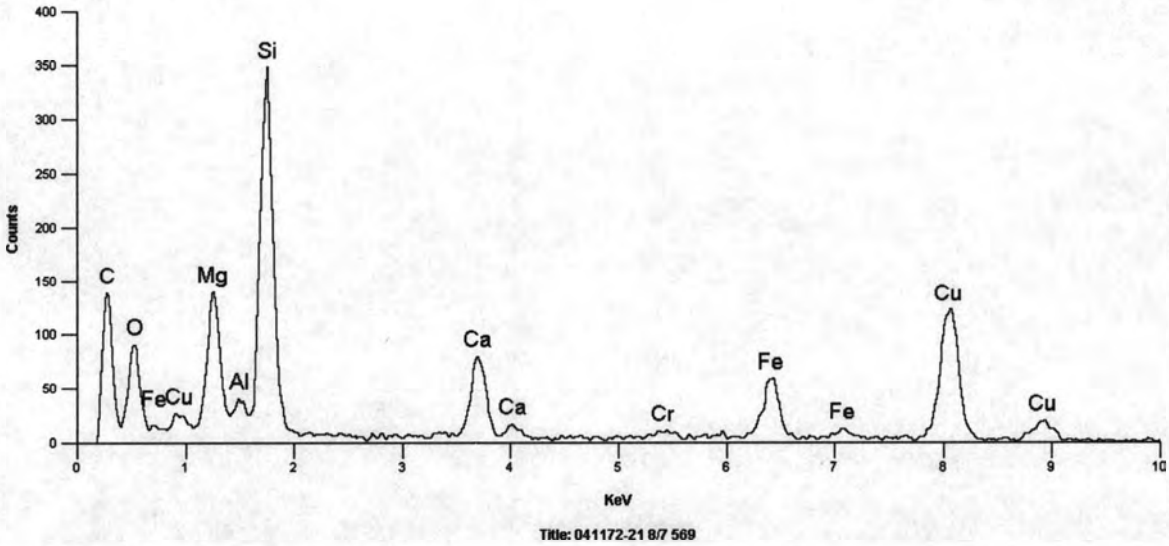
Sample # **041172-20-15177**

Values		Satisfied Conditions
(Ca,Na)@B	1.93	(Ca,Na)@B >= 1 and Na@B < 0.5
Na@B	0.17	Ca@B >= 1.5 and (Na,K)@A < 0.5
Ca@B	1.77	(Mg/(Mg+Fe2))>= 0.5
(Na,K)@A	0.15	Si > 7.5
Mg/(Mg+Fe2)	0.52	(Mg/(Mg+Fe2))< 0.9
Si	7.74	

Mineral Analysis Program (Version 5.0)

ACTINOLITE
[3 1 1]





Quantitative Analysis Results - Standardless Analysis :
Spectrum4 041172-21 8/7 569 Jan 1, 1997
EDS Parameters - 18KV, Takeoff Angle: 28.2°, Fit Index: 96.90
Correction: CLIFF LORIMER, Cycles: 1

Element	Atoms%	Compound	Weight%	Error(±)	Norm%
Mg	30.07	MgO	39.92	0.21	21.90
Al	1.54	Al2O3	2.58	0.06	1.42
Si	51.27	SiO2	101.46	0.31	55.66
K	0.52	K2O	0.80	0.03	0.44
Ca	7.88	CaO	14.55	0.11	7.98
Fe	8.73	Fe2O3	22.97	0.20	12.60
<Total>	100.00		182.28		100.00

	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	55.66	Si+4	7.6360	7.6360							
Al2O3	1.42	Al+3	0.2296	0.2296	**0.0000**						
TiO2	0	Ti+4	0.0000	0.0000	**0.0000**						
Cr2O3	0	Cr+3	0.0000			0.0000	0.0000				
Fe(total)O	12.6	Fe+3	0.6373			0.6373	0.0000				
MgO	21.9	Mg+2	4.4791			4.3627	**0.1164**				
MnO	0	Fe+2	0.7372			0.0000	**0.7372**				
CaO	7.98	Mn+2	0.0000			0.0000	**0.0000**				
Na2O	0	Ca+2	1.1729					1.1464	0.0265		
K2O	0.44	Na+	0.0000					0.0000	**0.0000**	0.0000	0.0000
		K+	0.0770							0.0770	0.0000
Total	**100**		**Excess**	T site	**0.0000**	C site	**0.8536**	B site	**0.0264738**	A site	**0**
			Total	**7.8656**		**5.0000**		**1.1464**		**0.0770**	**0.0000**
			%Fill	**98.32**		**100**		**57.3194**			

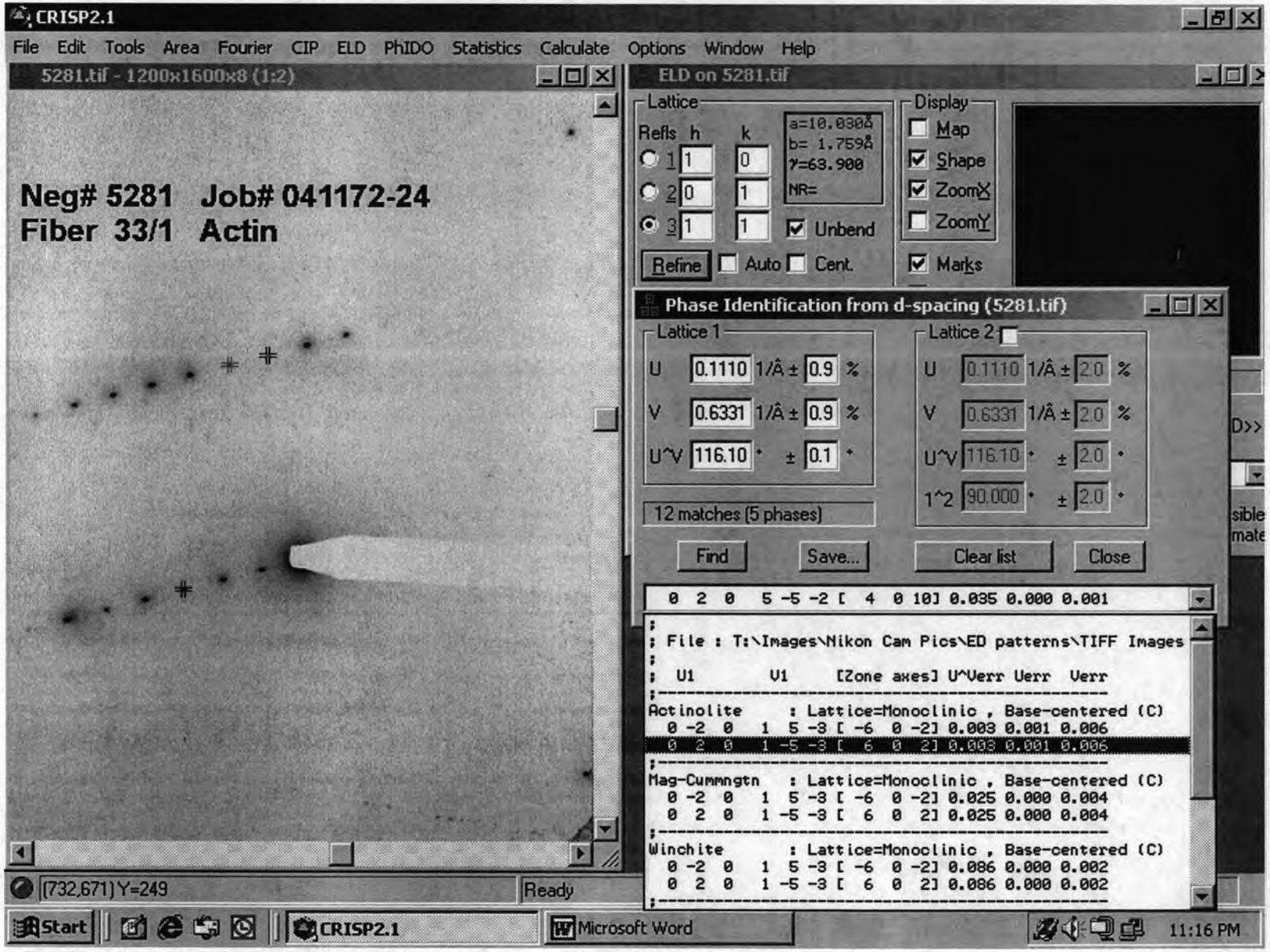
Prefix none
Name probable actinolite Ca values below optimal levels
Modifier none
Group Calcic Amphibole

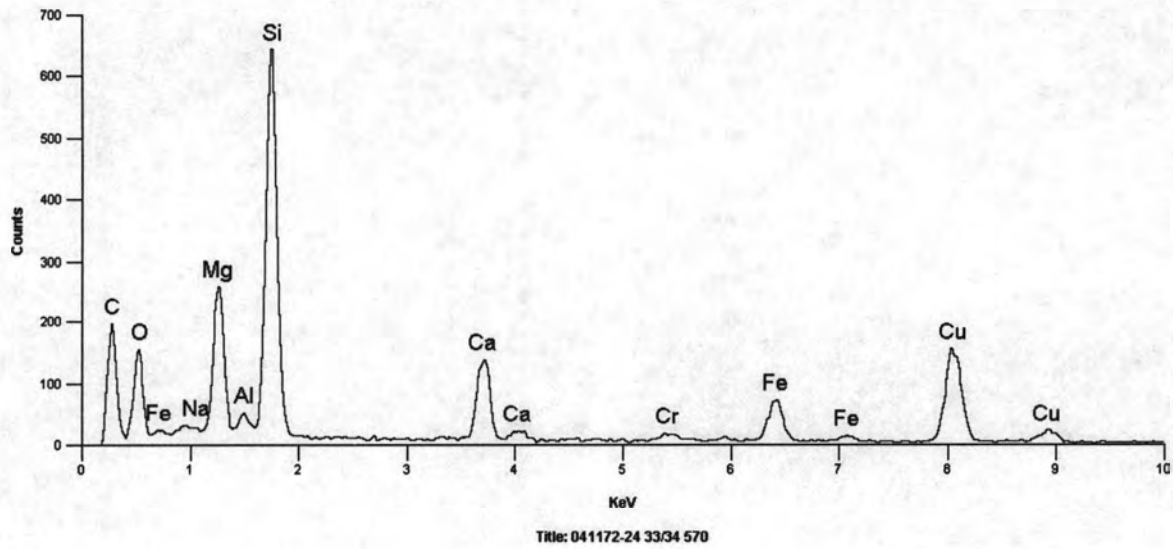
Sample # **041172-21-8**

Values		Satisfied Conditions
(Ca,Na)@B	1.15	(Ca,Na)@B >= 1 and Na@B < 0.5
Na@B	0.00	1 < Ca@B < 1.5 and (Na,K)@A < 0.5
Ca@B	1.15	(Mg/(Mg+Fe2))>= 0.5
(Na,K)@A	0.08	Si > 7.5
Mg/(Mg+Fe2)	0.86	(Mg/(Mg+Fe2))< 0.9
Si	7.64	

Mineral Analysis Program (Version 5.0)

ACTINOLITE
[3 0 1]





Quantitative Analysis Results - Standardless Analysis :
Spectrum7 041172-24 33/34 570 Jan 1, 1997
EDS Parameters - 18KV, Takeoff Angle: 28.2°, Fit Index: 173.23
Correction: CLIFF LORIMER, Cycles: 1

Element	Atoms%	Compound	Weight%	Error(±)	Norm%
Mg	32.38	MgO	44.32	0.17	24.05
Al	1.43	Al2O3	2.48	0.04	1.35
Si	51.77	SiO2	105.62	0.25	57.31
K	0.23	K2O	0.37	0.03	0.20
Ca	8.63	CaO	16.44	0.09	8.92
Fe	5.55	Fe2O3	15.05	0.14	8.17
<Total>	100.00		184.28		100.00

See following page for correct quants

	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	61.25	Si+4	8.0000	8.0000							
Al2O3	4.04	Al+3	0.6520	0.0000	**0.6520**						
TiO2	0	Ti+4	0.0000	0.0000	**0.0000**						
Cr2O3	0	Cr+3	0.0000			0.0000	0.0000				
Fe(total)O	6.42	Fe+3	0.0172			0.0172	0.0000				
MgO	17.09	Mg+2	3.4415			3.4415	**0.0000**				
MnO	0	Fe+2	0.7329			0.7329	**0.0000**				
CaO	10.98	Mn+2	0.0000			0.0000	**0.0000**				
Na2O	0	Ca+2	1.5999					1.5999	0.0000		
K2O	0.21	Na+	0.0000					0.0000	**0.0000**	0.0000	0.0000
		K+	0.0539							0.0539	0.0000
Total	**99.99**		**Excess**	T site	**0.6520**	C site	**0.0000**	B site	**0**	A site	**0**
			Total	**8**		**4.8436**		**1.5999**		**0.0539**	**0.0000**
			%Fill	**100**		**96.8711**		**79.9933**			

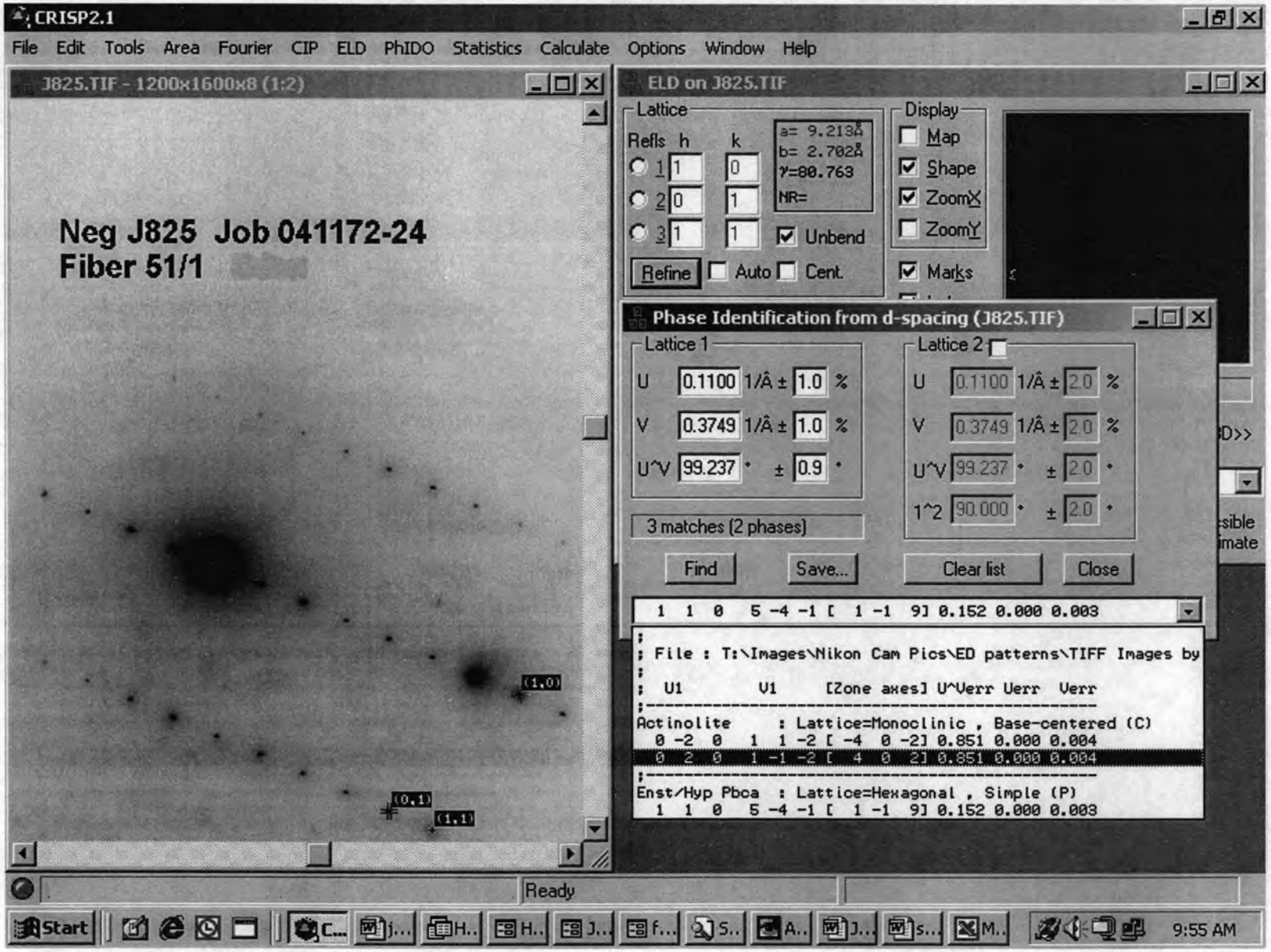
Prefix none
Name actinolite
Modifier none
Group Calcic Amphibole

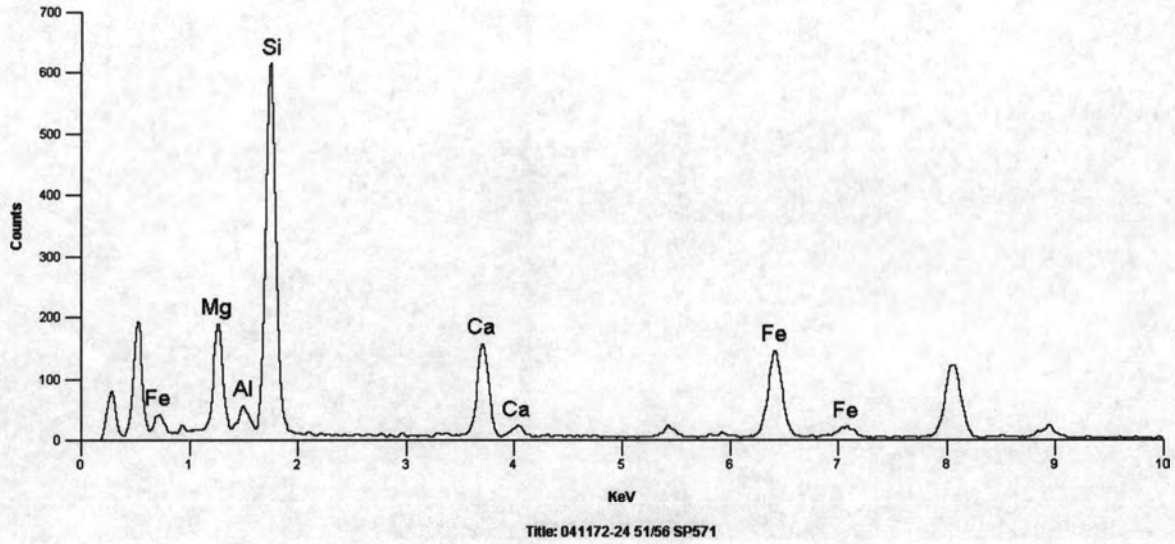
Sample # **041172-24-33**

Values		Satisfied Conditions
(Ca,Na)@B	1.60	(Ca,Na)@B >= 1 and Na@B < 0.5
Na@B	0.00	Ca@B >= 1.5 and (Na,K)@A < 0.5
Ca@B	1.60	(Mg/(Mg+Fe2))>= 0.5
(Na,K)@A	0.05	Si > 7.5
Mg/(Mg+Fe2)	0.82	(Mg/(Mg+Fe2))< 0.9
Si	8.00	

Mineral Analysis Program (Version 5.0)

ACTINOLITE
[2 0 1]





Quantitative Analysis Results - Standardless Analysis :
Spectrum1 041172-24 51/56 SP571 Jan 1, 1997
EDS Parameters - 18KV, Takeoff Angle: 28.2°, Fit Index: 622.26
Correction: CLIFF LORIMER, Cycles: 1

Element	Atoms%	Compound	Weight%	Error(±)	Norm%
Mg	9.08	MgO	16.59	0.80	16.59
Al	0.84	Al2O3	1.94	0.23	1.94
Si	20.11	SiO2	54.76	1.32	54.76
Ca	3.98	CaO	10.13	0.51	10.13
Fe	4.58	Fe2O3	16.58	1.07	16.58
<Total>	100.00		100.00		100.00

	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	54.76	Si+4	7.6436	7.6436							
Al2O3	1.94	Al+3	0.3191	0.3191	**0.0000**						
TiO2	0	Ti+4	0.0000	0.0000	**0.0000**						
Cr2O3	0	Cr+3	0.0000			0.0000	0.0000				
Fe(total)O	16.58	Fe+3	0.8533			0.8533	0.0000				
MgO	16.59	Mg+2	3.4523			3.4523	**0.0000**				
MnO	0	Fe+2	0.9869			0.6944	**0.2925**				
CaO	10.13	Mn+2	0.0000			0.0000	**0.0000**				
Na2O	0	Ca+2	1.5148					1.5148	0.0000		
K2O	0	Na+	0.0000					0.0000	**0.0000**	0.0000	0.0000
		K+	0.0000							0.0000	0.0000
Total	**100**		**Excess**	T site	**0.0000**	C site	**0.2925**	B site	**0**	A site	**0**
			Total	**7.9628**		**5.0000**		**1.5148**		**0.0000**	**0.0000**
			%Fill	**99.535**		**100**		**75.7422**			

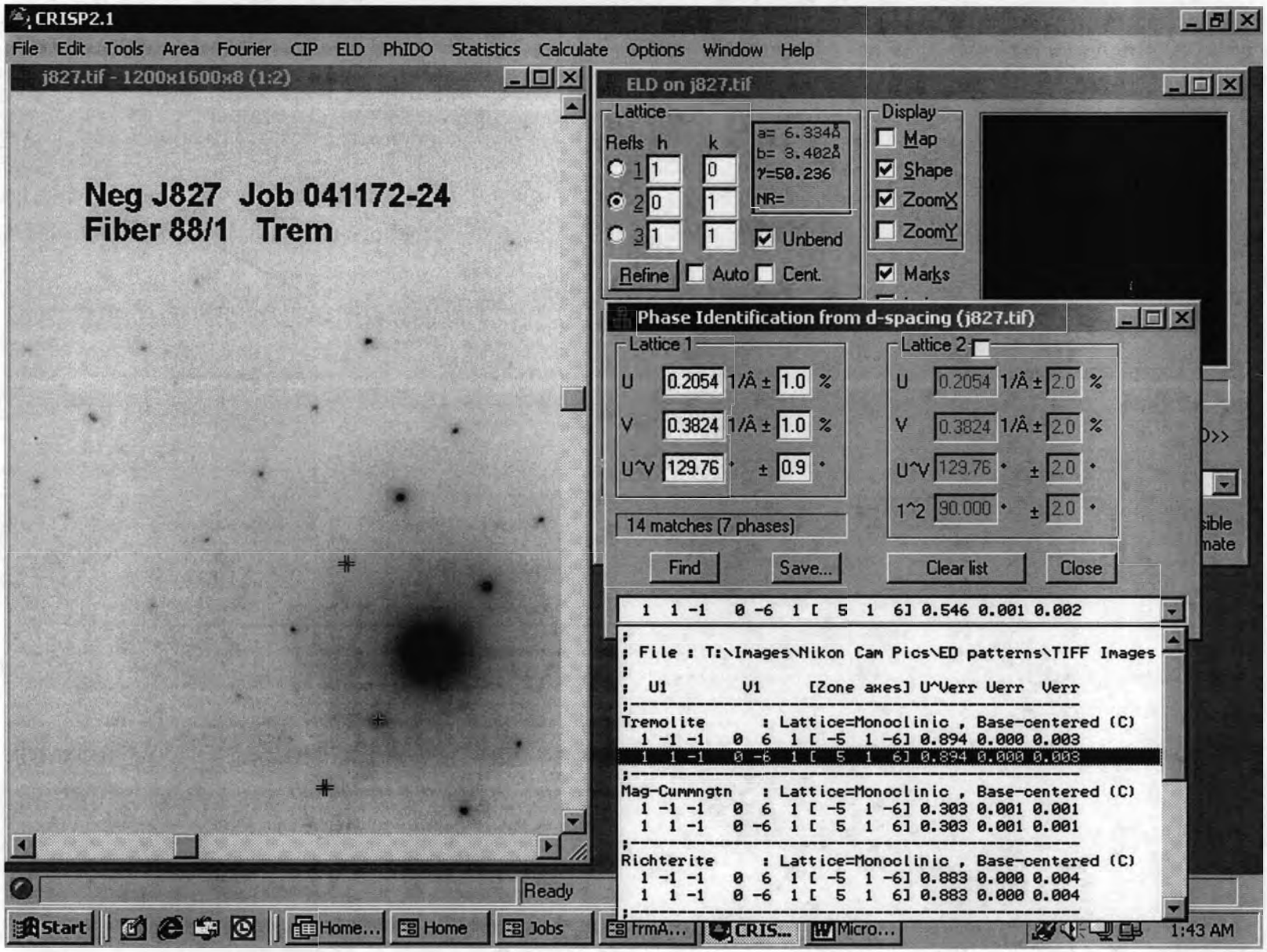
Prefix none
Name actinolite
Modifier Ferrian
Group **Calcic Amphibole**

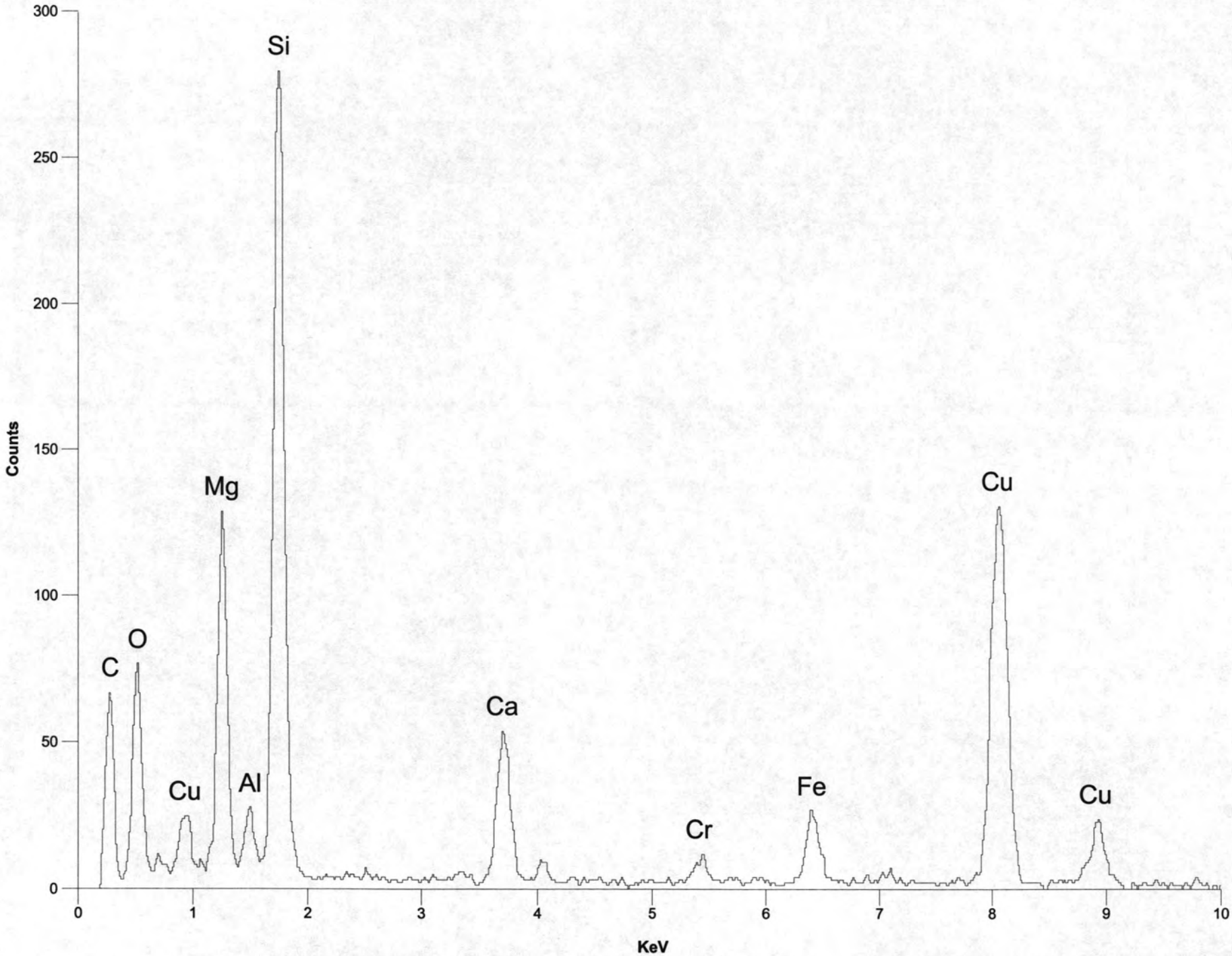
Sample # **041172-24-571**

Values		Satisfied Conditions
(Ca,Na)@B	1.51	(Ca,Na)@B >= 1 and Na@B < 0.5
Na@B	0.00	Ca@B >= 1.5 and (Na,K)@A < 0.5
Ca@B	1.51	(Mg/(Mg+Fe2))>= 0.5
(Na,K)@A	0.00	Si > 7.5
Mg/(Mg+Fe2)	0.78	(Mg/(Mg+Fe2))< 0.9
Si	7.64	

Mineral Analysis Program (Version 5.0)

TREMOLITE
[516]





Title: 041172-24 88/97 SP573

	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	54.98	Si+4	7.6053	7.6053							
Al2O3	3.53	Al+3	0.5755	0.3947	**0.1808**						
TiO2	0	Ti+4	0.0000	0.0000	**0.0000**						
Cr2O3	0	Cr+3	0.0000			0.0000	0.0000				
Fe(total)O	12.45	Fe+3	0.5443			0.5443	0.0000				
MgO	16.76	Mg+2	3.4563			3.4563	**0.0000**				
MnO	0	Fe+2	0.8352			0.8186	**0.0166**				
CaO	12.26	Mn+2	0.0000			0.0000	**0.0000**				
Na2O	0.01	Ca+2	1.8169					1.8169	0.0000		
K2O	0	Na+	0.0027					0.0027	**0.0000**	0.0000	0.0000
		K+	0.0000							0.0000	0.0000
Total	**99.99**		**Excess**	T site	**0.1808**	C site	**0.0166**	B site	**0**	A site	**0**
			Total	**8**		**5.0000**		**1.8196**		**0.0000**	**0.0000**
			%Fill	**100**		**100**		**90.9779**			

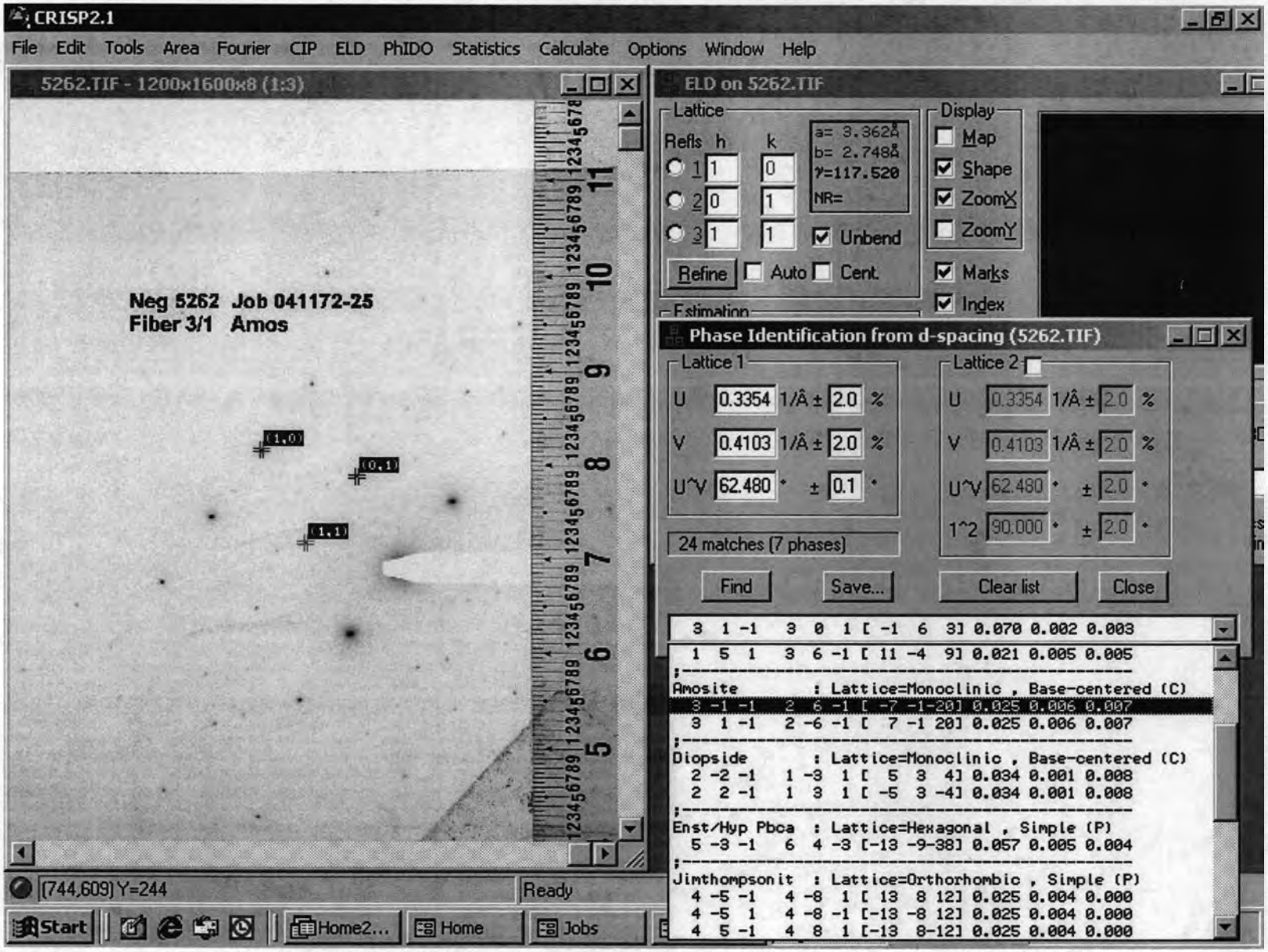
Prefix none
Name actinolite
Modifier none
Group Calcic Amphibole

Sample # 041172-24-89-98

Values		Satisfied Conditions
(Ca,Na)@B	1.82	(Ca,Na)@B >= 1 and Na@B < 0.5
Na@B	0.00	Ca@B >= 1.5 and (Na,K)@A < 0.5
Ca@B	1.82	(Mg/(Mg+Fe2))>= 0.5
(Na,K)@A	0.00	Si > 7.5
Mg/(Mg+Fe2)	0.81	(Mg/(Mg+Fe2))< 0.9
Si	7.61	

Mineral Analysis Program (Version 5.0)

AMOSITE
[7 1 20]



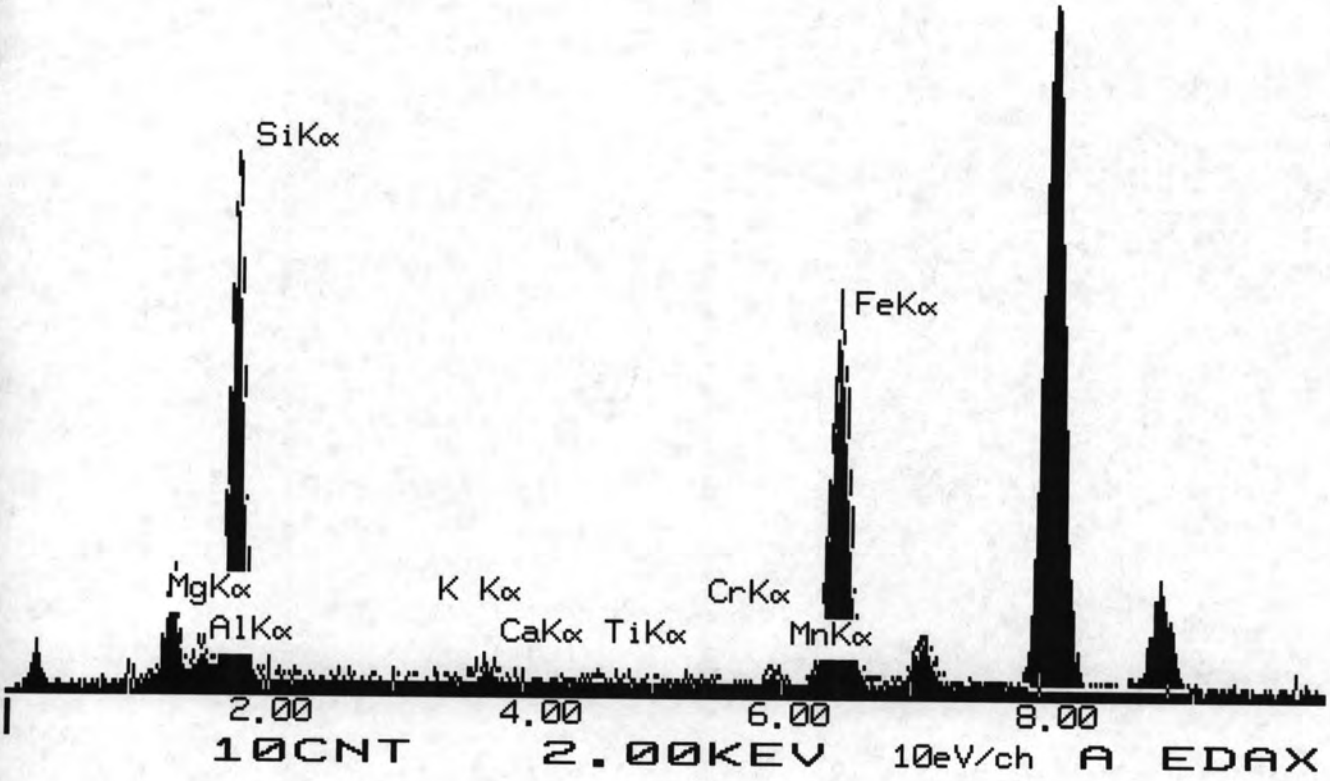
INTE-% :
LABEL = 041172-25 3/1 15181
15-OCT-72 07:59:27
107.302 LIVE SECONDS

ELEM	CPS	WT % ELEM	WT % OXIDE
MGK	5.154	7.086	11.749
ALK	1.575	1.301	2.458
SIK	28.499	22.038	47.147
K K	0.373	0.479	0.577
CAK	1.146	0.845	1.182
MNK	0.680	0.724	0.934
FEK	25.675	25.146	35.953

TOTAL			100.000

USED PEIF: USER

14-OCT-04 08:00:19 SUPER QUANT
RATE= 11CPS TIME= 107LSEC
FS= 409/ 409 PRST= 200LSEC
A =041172-25 3/1 15181



	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	47.147	Si+4	7.2186	7.2186							
Al2O3	2.458	Al+3	0.4435	0.4435	0.0000						
TiO2	0	Ti+4	0.0000	0.0000	0.0000						
Cr2O3	0	Cr+3	0.0000			0.0000	0.0000				
Fe(total)O	35.953	Fe+3	0.6213			0.6213	0.0000				
MgO	11.749	Mg+2	2.6818			2.6818	0.0000				
MnO	0.934	Fe+2	3.9125			1.6969	2.2156				
CaO	1.182	Mn+2	0.1211			0.0000	0.1211				
Na2O	0	Ca+2	0.1939					0.0000	0.1939		
K2O	0.577	Na+	0.0000					0.0000	0.0000	0.0000	0.0000
		K+	0.1127							0.1127	0.0000
Total	100		Excess	T site	0.0000	C site	2.3367	B site	0.5305806	A site	0
			Total	7.6621		5.0000		0.0000		0.1127	0.0000
			%Fill	95.776		100		0			

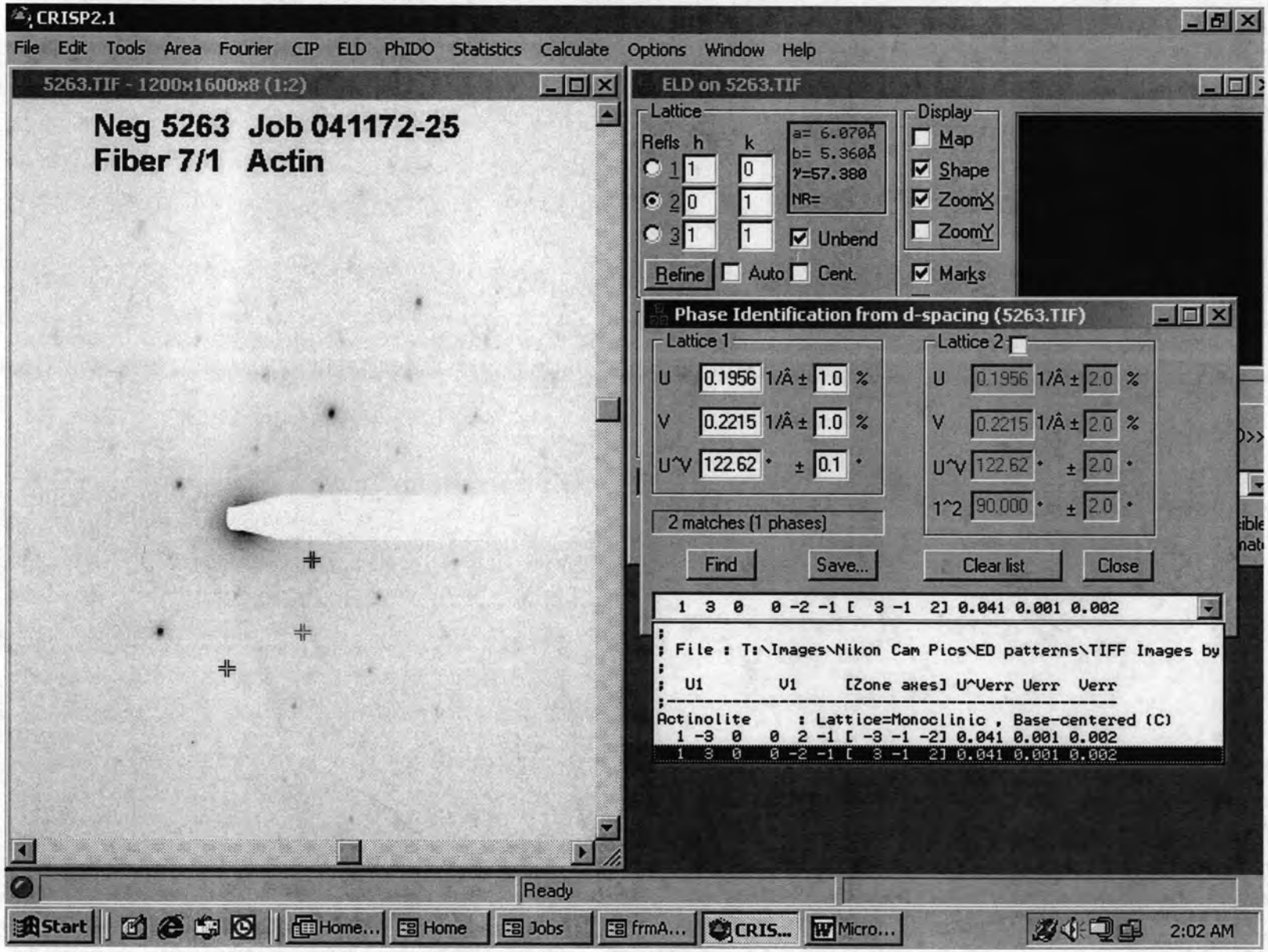
Prefix none
Name grunerite, ferro-anthophyllite, ferroholmquistite, clinoferroholmquistite
Modifier none
Group Mg-Fe-Mn Amphibole

Sample # 041172-25-3-1

Values		Satisfied Conditions
(Ca,Na)@B	0.00	(Ca,Na)@B < 1 and (Mg,Fe2,Mn)@B >= 0.95
(Mg,Fe2,Mn)@B	2.00	(Mg/(Mg+Fe2))< 0.5
Mg/(Mg+Fe2)	0.41	Si > 7
Si	7.22	

Mineral Analysis Program (Version 5.0)

ACTINOLITE
[3-12]



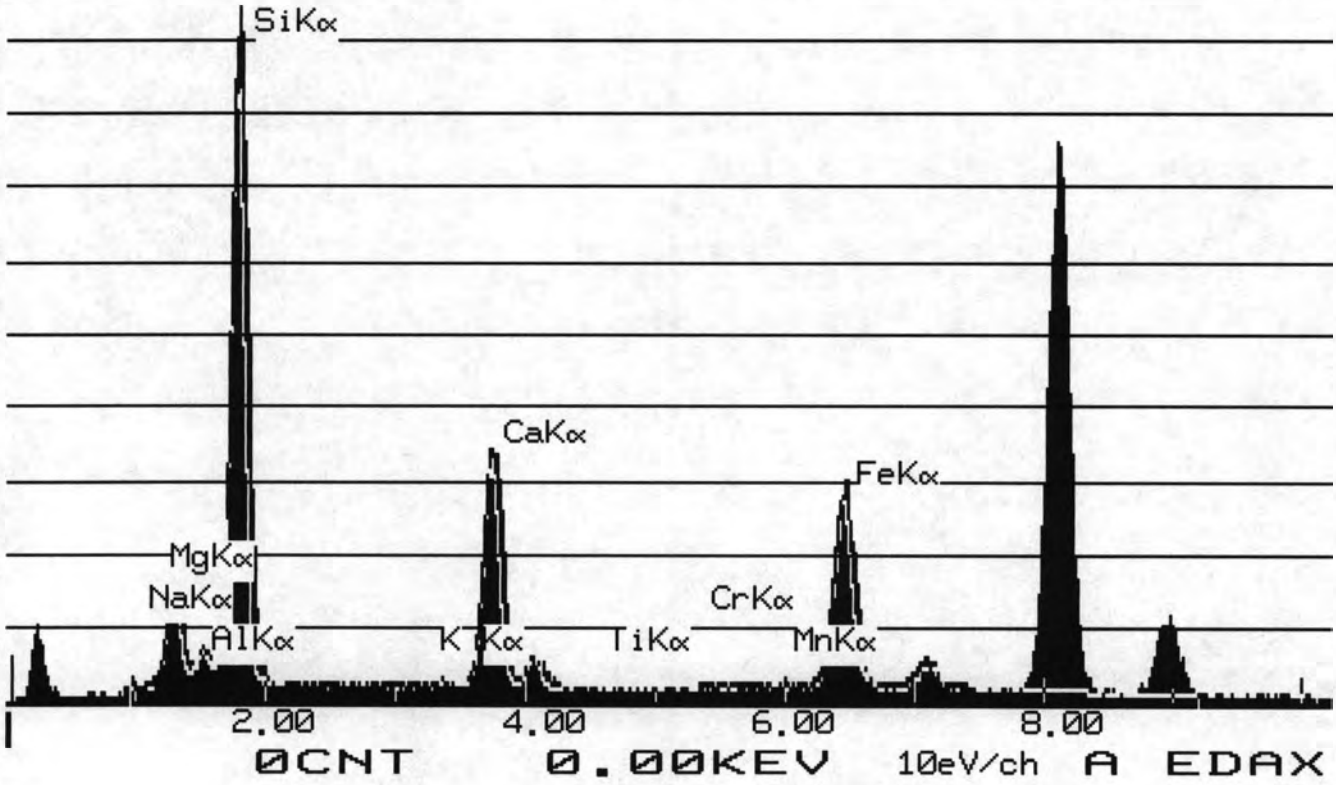
INTE-% :
LABEL = 041172-15 SP 15502
05-DEC-72 18:16:53
20.955 LIVE SECONDS

ELEM	CPS	WT % ELEM	WT % OXIDE
MGK	78.977	7.117	11.800
ALK	21.904	1.186	2.240
SIK	492.236	24.947	53.370
CAK	217.748	10.521	14.722
FEK	194.699	12.498	17.868

TOTAL			100.000

USED PEIF: USER

04-DEC-04 18:17:32 SUPER QUANT
RATE= 4528CPS TIME= 21LSEC
FS= 1147/ 1147 PRST= 200LSEC
A =041172-15 SP 15502



	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	53.37	Si+4	7.7174	7.7174							
Al2O3	2.24	Al+3	0.3817	0.2826	**0.0992**						
TiO2	0	Ti+4	0.0000	0.0000	**0.0000**						
Cr2O3	0	Cr+3	0.0000			0.0000	0.0000				
Fe(total)O	17.868	Fe+3	0.0194			0.0194	0.0000				
MgO	11.8	Mg+2	2.5438			2.5438	**0.0000**				
MnO	0	Fe+2	2.1389			2.1389	**0.0000**				
CaO	14.722	Mn+2	0.0000			0.0000	**0.0000**				
Na2O	0	Ca+2	2.2807					2.0000	0.2807		
K2O	0	Na+	0.0000					0.0000	**0.0000**	0.0000	0.0000
		K+	0.0000							0.0000	0.0000
Total	**100**		**Excess**	T site	**0.0992**	C site	**0.0000**	B site	**0.2806807**	A site	**0**
			Total	**8**		**4.8013**		**2.0000**		**0.0000**	**0.0000**
			%Fill	**100**		**96.026**		**100**			

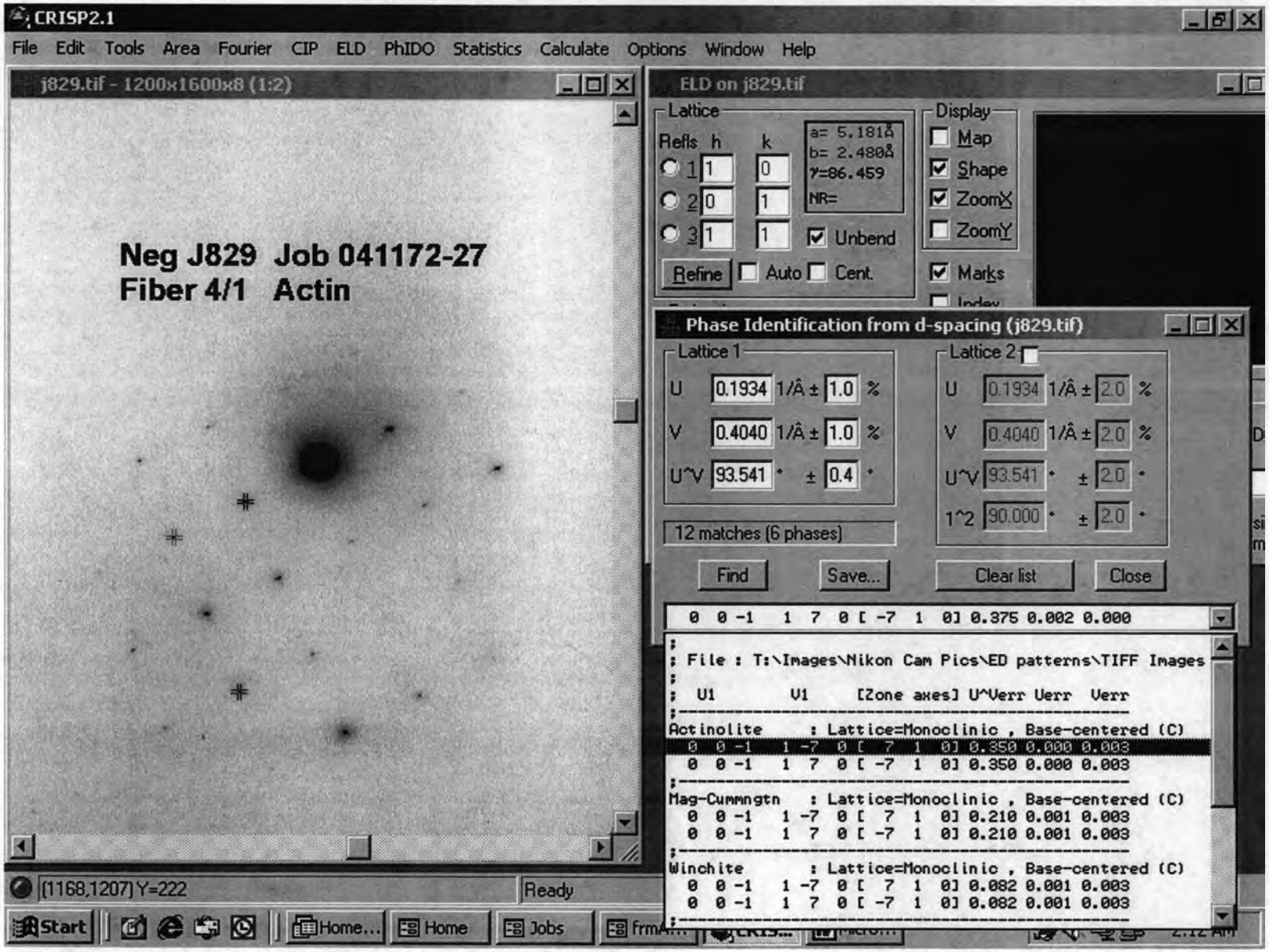
Prefix none
Name actinolite
Modifier none
Group Calcic Amphibole

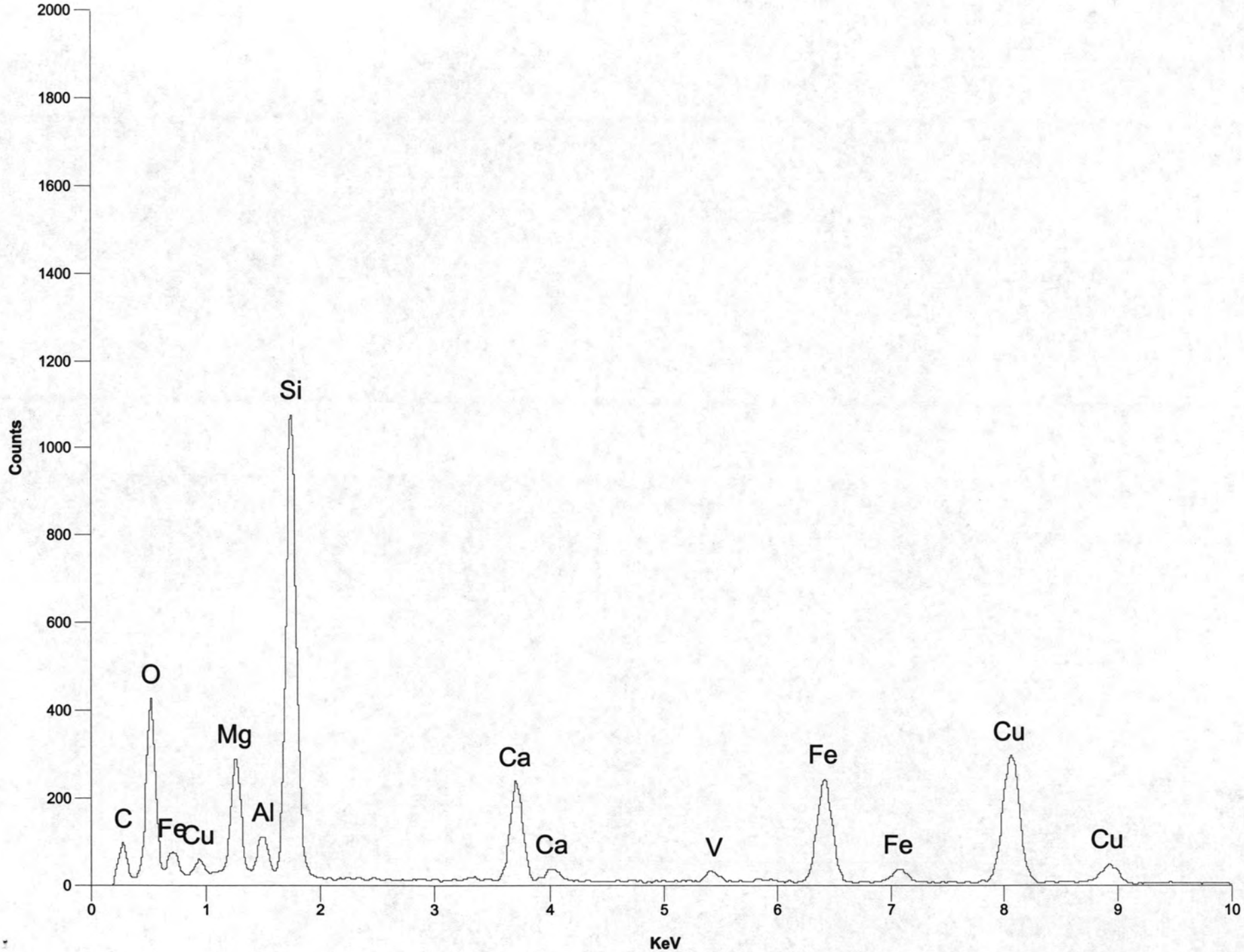
Sample # **041172-25-15502**

Values		Satisfied Conditions
(Ca,Na)@B	2.00	(Ca,Na)@B >= 1 and Na@B < 0.5
Na@B	0.00	Ca@B >= 1.5 and (Na,K)@A < 0.5
Ca@B	2.00	(Mg/(Mg+Fe2))>= 0.5
(Na,K)@A	0.00	Si > 7.5
Mg/(Mg+Fe2)	0.54	(Mg/(Mg+Fe2))< 0.9
Si	7.72	

Mineral Analysis Program (Version 5.0)

ACTINOLITE
[7 1 0]





Title: 041172-27 4/17 SP575 Time: 12:00 Date: Jan 1, 1997

	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	53.16	Si+4	7.5803	7.5803							
Al2O3	6.5	Al+3	1.0923	0.4197	**0.6726**						
TiO2	0	Ti+4	0.0000	0.0000	**0.0000**						
Cr2O3	0	Cr+3	0.0000			0.0000	0.0000				
Fe(total)O	16.3	Fe+3	0.0175			0.0175	0.0000				
MgO	10.66	Mg+2	2.2661			2.2661	**0.0000**				
MnO	0	Fe+2	1.9241			1.9241	**0.0000**				
CaO	10.03	Mn+2	0.0000			0.0000	**0.0000**				
Na2O	3.12	Ca+2	1.5322					1.5322	0.0000		
K2O	0.23	Na+	0.8625					0.4678	**0.3947**	0.3947	0.0000
		K+	0.0418							0.0418	0.0000
Total	**100**		**Excess**	T site	**0.6726**	C site	**0.0000**	B site	**0.3947498**	A site	**0**
			Total	**8**		**4.8804**		**2.0000**		**0.4366**	**0.0000**
			%Fill	**100**		**97.6073**		**100**			

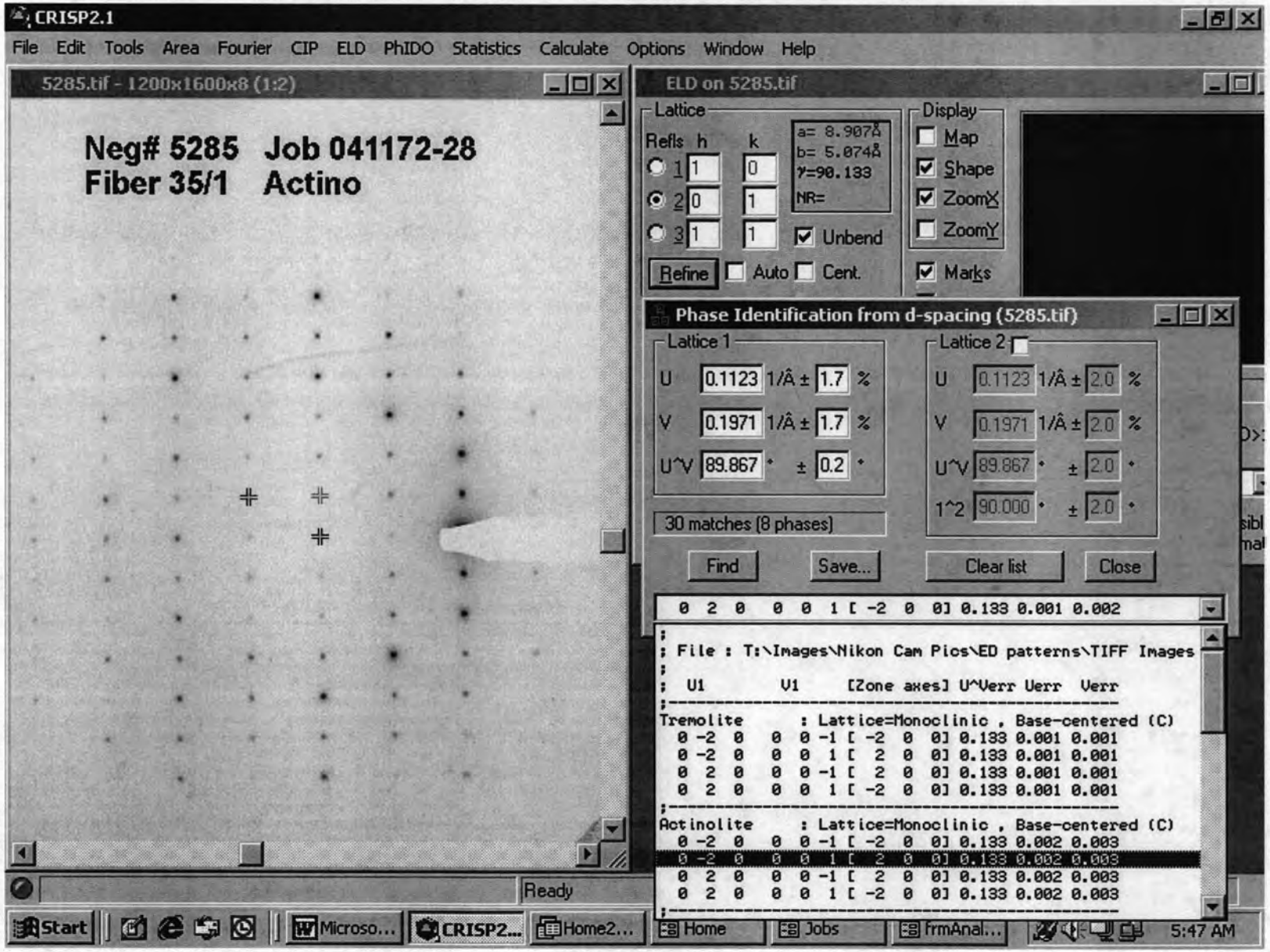
Prefix Alumino
Name actinolite
Modifier none
Group Calcic Amphibole

Sample # **041172-27-4-17**

Values		Satisfied Conditions
(Ca,Na)@B	2.00	(Ca,Na)@B >= 1 and Na@B < 0.5
Na@B	0.47	Ca@B >= 1.5 and (Na,K)@A < 0.5
Ca@B	1.53	(Mg/(Mg+Fe2))>= 0.5
(Na,K)@A	0.44	Si > 7.5
Mg/(Mg+Fe2)	0.54	(Mg/(Mg+Fe2))< 0.9
Si	7.58	

Mineral Analysis Program (Version 5.0)

ACTINOLITE
[1 0 0]



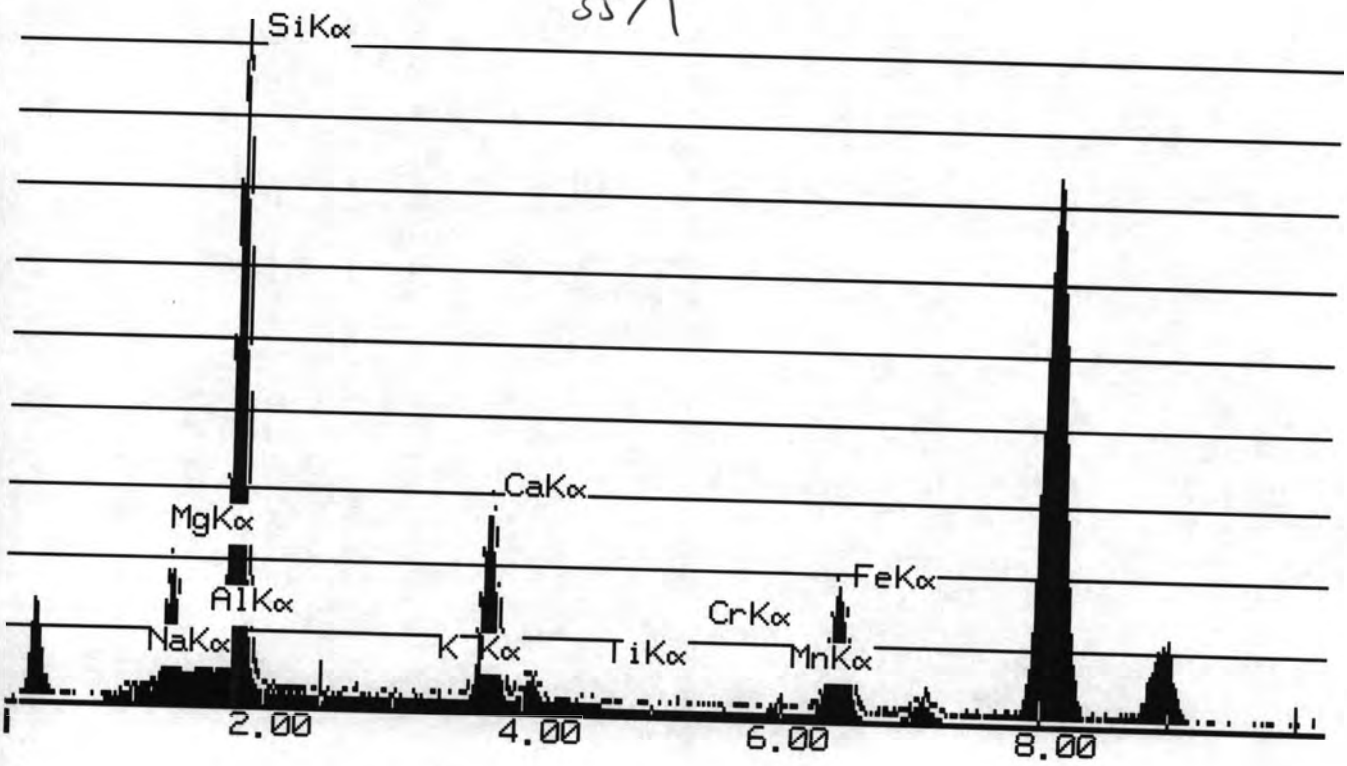
INTE-% :
LABEL = 041172-28 21/1 15185
23-NOV-72 02:06:27
131.165 LIVE SECONDS

ELEM	CPS	WT % ELEM	WT % OXIDE
MGK	12.404	8.975	14.881
ALK	4.475	1.945	3.675
SIK	62.509	25.437	54.419
K K	0.595	0.402	0.484
CAK	23.139	8.977	12.561
TIK	0.274	0.150	0.251
CRK	0.419	0.226	0.331
MNK	0.846	0.474	0.612
FEK	17.352	8.943	12.787

TOTAL			100.000

USED PEIF: USER

22-NOV-04 02:06:51 SUPER QUANT
RATE= 11CPS TIME= 131LSEC
FS= 885/ 885 PRST= 200LSEC
A =041172-28 ~~21/1~~ 15185
35/1



	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	54.419	Si+4	7.6558	7.6558							
Al2O3	3.675	Al+3	0.6093	0.3442	**0.2651**						
TiO2	0.251	Ti+4	0.0266	0.0000	**0.0266**						
Cr2O3	0.331	Cr+3	0.0368			0.0368	0.0000				
Fe(total)O	12.786	Fe+3	0.0812			0.0812	0.0000				
MgO	14.881	Mg+2	3.1210			3.1210	**0.0000**				
MnO	0.612	Fe+2	1.4139			1.4139	**0.0000**				
CaO	12.561	Mn+2	0.0729			0.0555	**0.0174**				
Na2O	0	Ca+2	1.8931					1.8931	0.0000		
K2O	0.484	Na+	0.0000					0.0000	**0.0000**	0.0000	0.0000
		K+	0.0869							0.0869	0.0000
Total	**100**		**Excess**	T site	**0.2916**	C site	**0.0174**	B site	**0**	A site	**0**
			Total	**8**		**5.0000**		**1.8931**		**0.0869**	**0.0000**
			%Fill	**100**		**100**		**94.6574**			

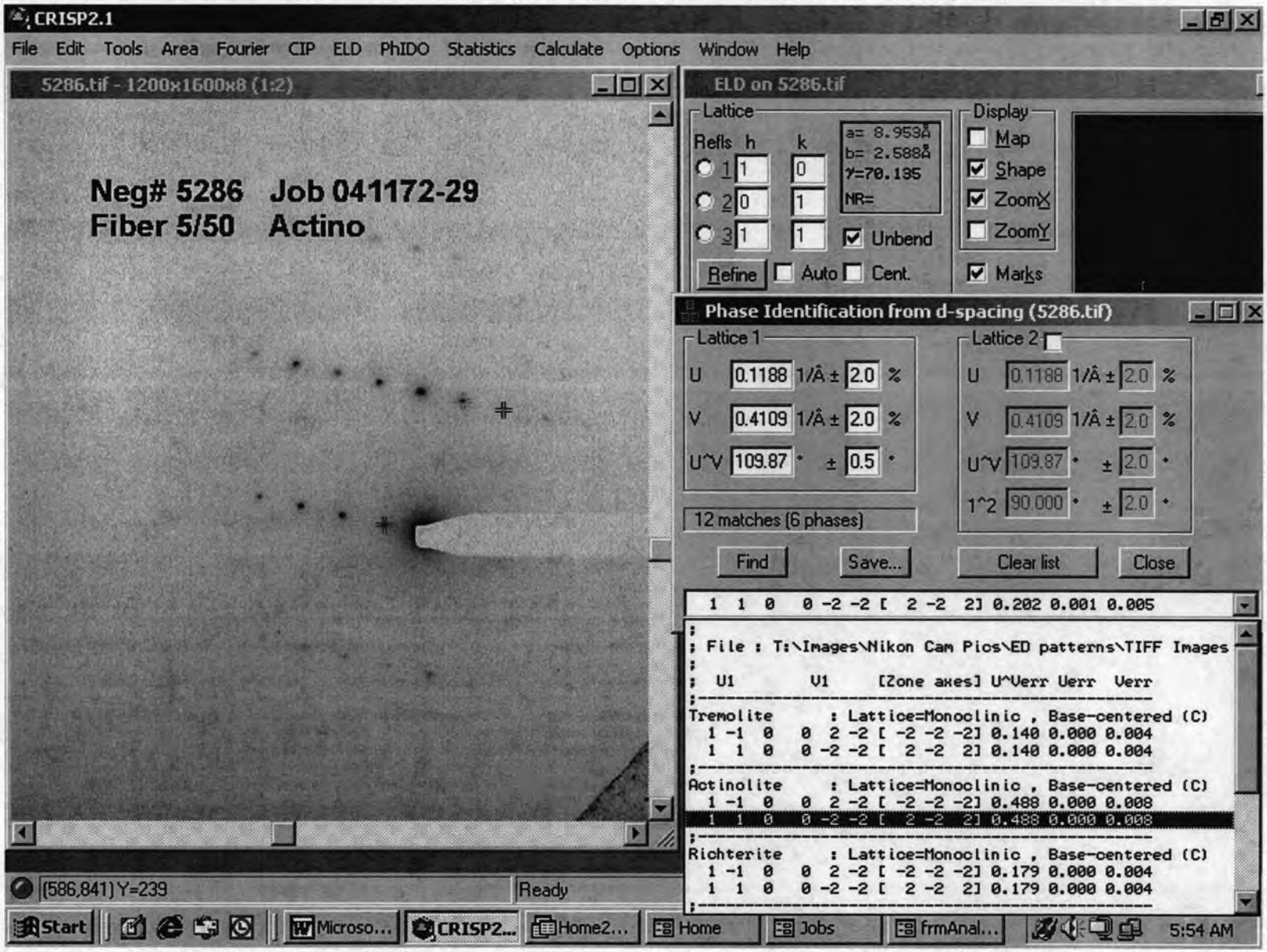
Prefix none
Name actinolite
Modifier none
Group Calcic Amphibole

Sample # **041172-28-15185**

Values		Satisfied Conditions
(Ca,Na)@B	1.89	(Ca,Na)@B >= 1 and Na@B < 0.5
Na@B	0.00	Ca@B >= 1.5 and (Na,K)@A < 0.5
Ca@B	1.89	(Mg/(Mg+Fe2))>= 0.5
(Na,K)@A	0.09	Si > 7.5
Mg/(Mg+Fe2)	0.69	(Mg/(Mg+Fe2))< 0.9
Si	7.66	

Mineral Analysis Program (Version 5.0)

ACTINOLITE
[1 -1 1]



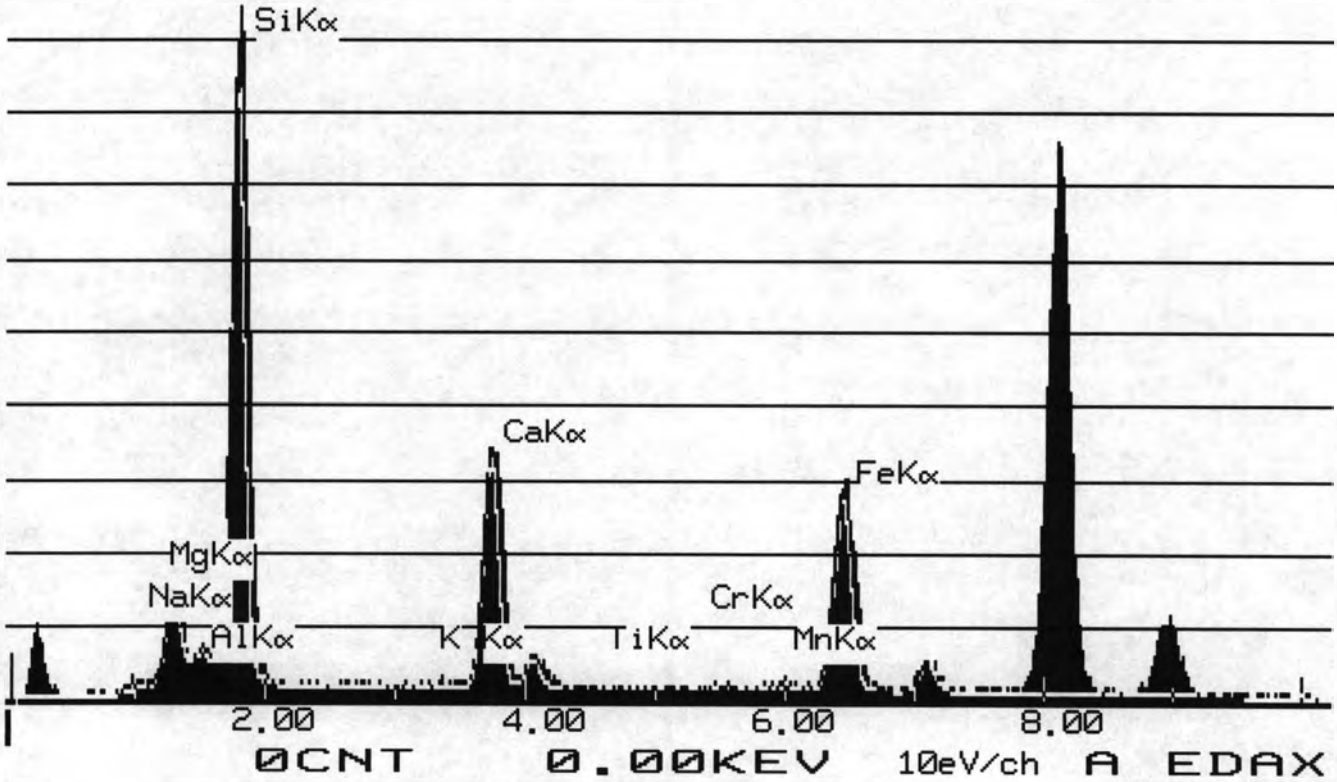
INTE-% :
LABEL = 041172-29 SP 15503
05-DEC-72 18:22:26
20.955 LIVE SECONDS

ELEM	CPS	WT % ELEM	WT % OXIDE
MGK	74.348	6.730	11.159
ALK	10.164	0.553	1.044
SIK	487.607	24.824	53.107
K K	1.957	0.166	0.199
CAK	220.373	10.696	14.966
MNK	5.106	0.358	0.462
FEK	206.773	13.333	19.062

TOTAL			100.000

USED PEIF: USER

04-DEC-04 18:23:04 SUPER QUANT
RATE= 10CPS TIME= 21LSEC
FS= 1147/ 1147 PRST= 200LSEC
A =041172-29 SP 15503



	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	53.107	Si+4	7.7680	7.7680							
Al2O3	1.044	Al+3	0.1800	0.1800	**0.0000**						
TiO2	0	Ti+4	0.0000	0.0000	**0.0000**						
Cr2O3	0	Cr+3	0.0000			0.0000	0.0000				
Fe(total)O	19.062	Fe+3	0.0210			0.0210	0.0000				
MgO	11.159	Mg+2	2.4334			2.4334	**0.0000**				
MnO	0.462	Fe+2	2.3082			2.3082	**0.0000**				
CaO	14.966	Mn+2	0.0572			0.0572	**0.0000**				
Na2O	0	Ca+2	2.3452					2.0000	0.3452		
K2O	0.199	Na+	0.0000					0.0000	**0.0000**	0.0000	0.0000
		K+	0.0371							0.0371	0.0000
Total	**99.999**		**Excess**	T site	**0.0000**	C site	**0.0000**	B site	**0.3452322**	A site	**0**
			Total	**7.948**		**4.8197**		**2.0000**		**0.0371**	**0.0000**
			%Fill	**99.35**		**96.3948**		**100**			

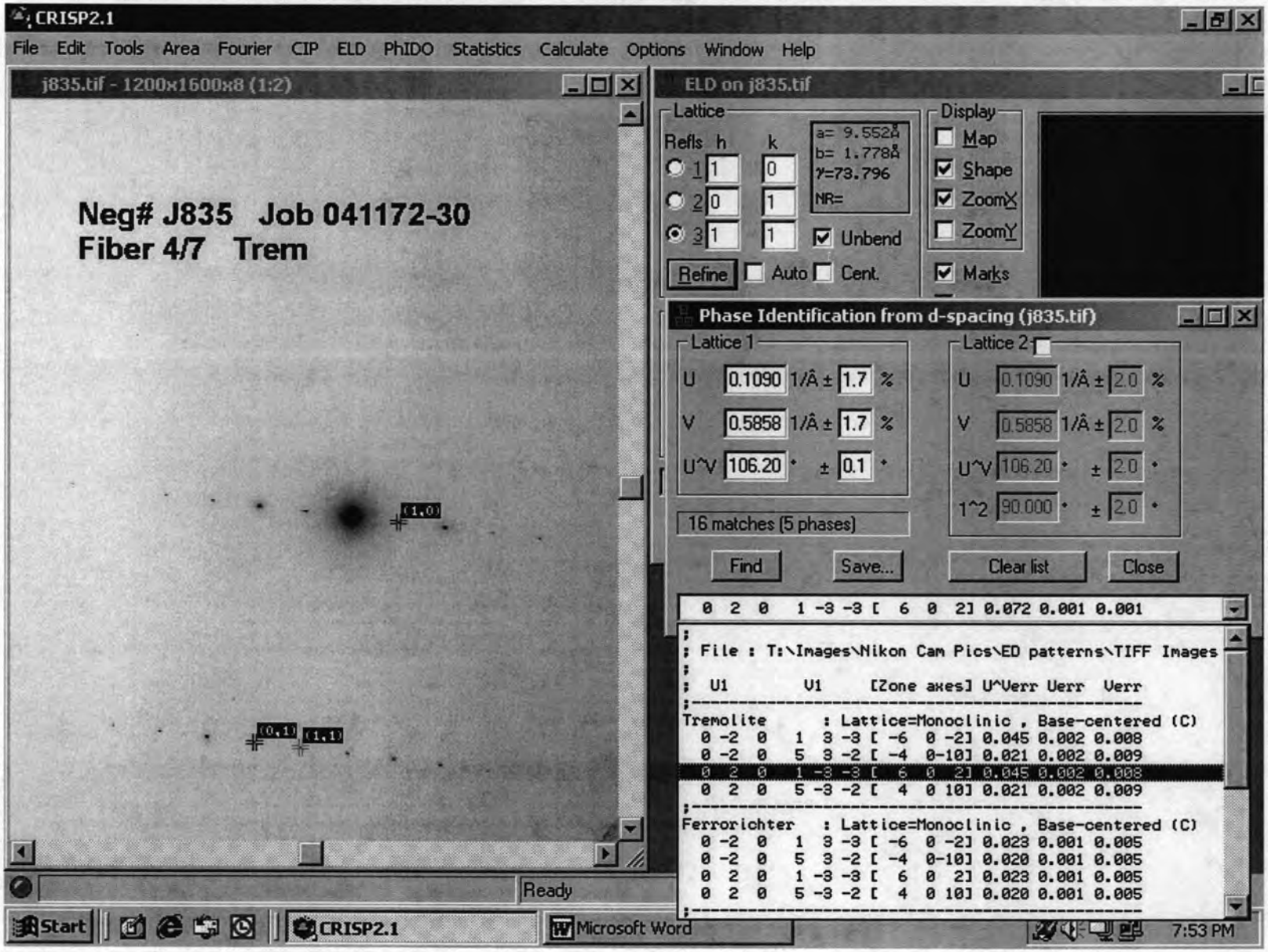
Prefix none
Name actinolite
Modifier none
Group Calcic Amphibole

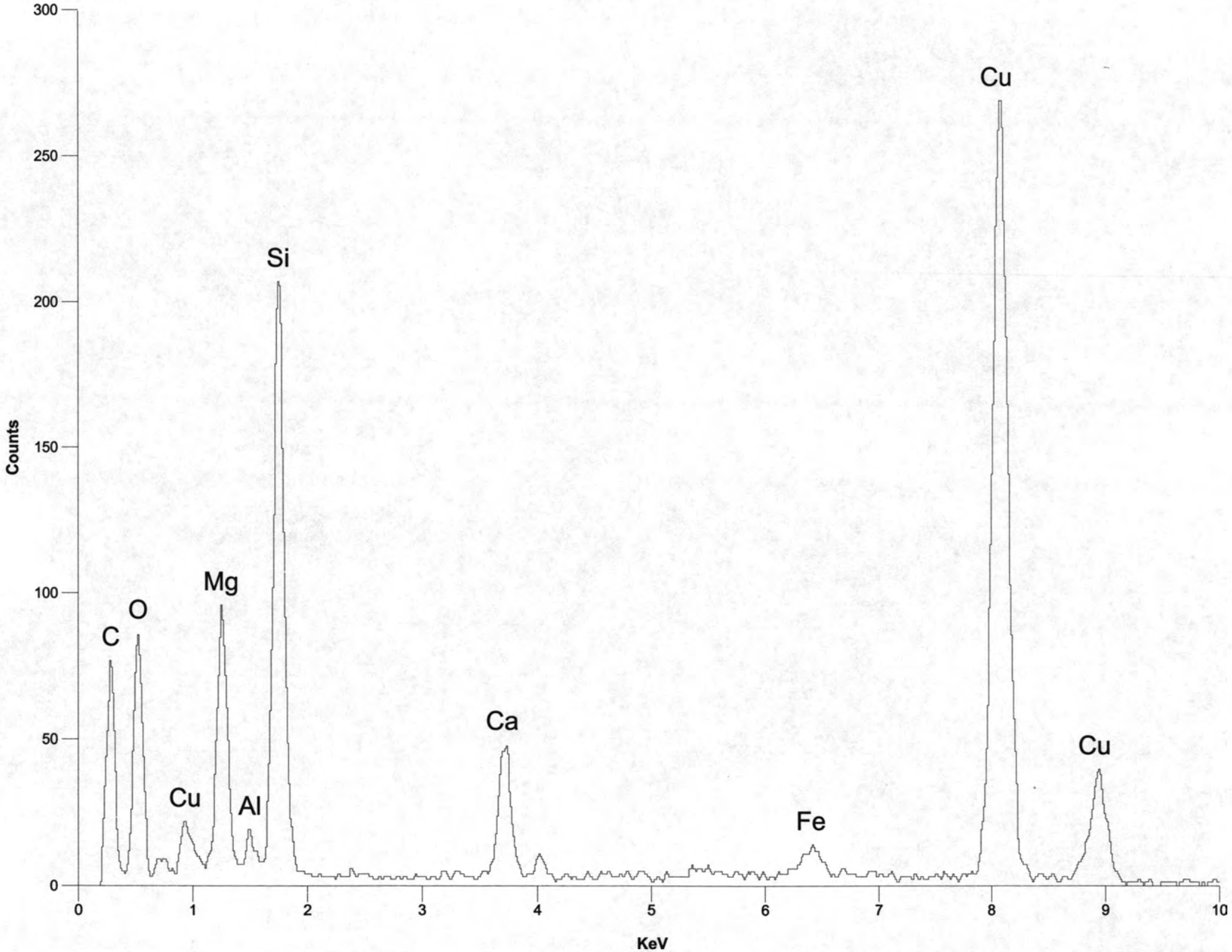
Sample # **041172-29-15503**

Values		Satisfied Conditions
(Ca,Na)@B	2.00	(Ca,Na)@B >= 1 and Na@B < 0.5
Na@B	0.00	Ca@B >= 1.5 and (Na,K)@A < 0.5
Ca@B	2.00	(Mg/(Mg+Fe2))>= 0.5
(Na,K)@A	0.04	Si > 7.5
Mg/(Mg+Fe2)	0.51	(Mg/(Mg+Fe2))< 0.9
Si	7.77	

Mineral Analysis Program (Version 5.0)

TREMOLITE
[3 0 1]





Title: 04 2-30 4/7 580

Title: 041172-30 4/7 580

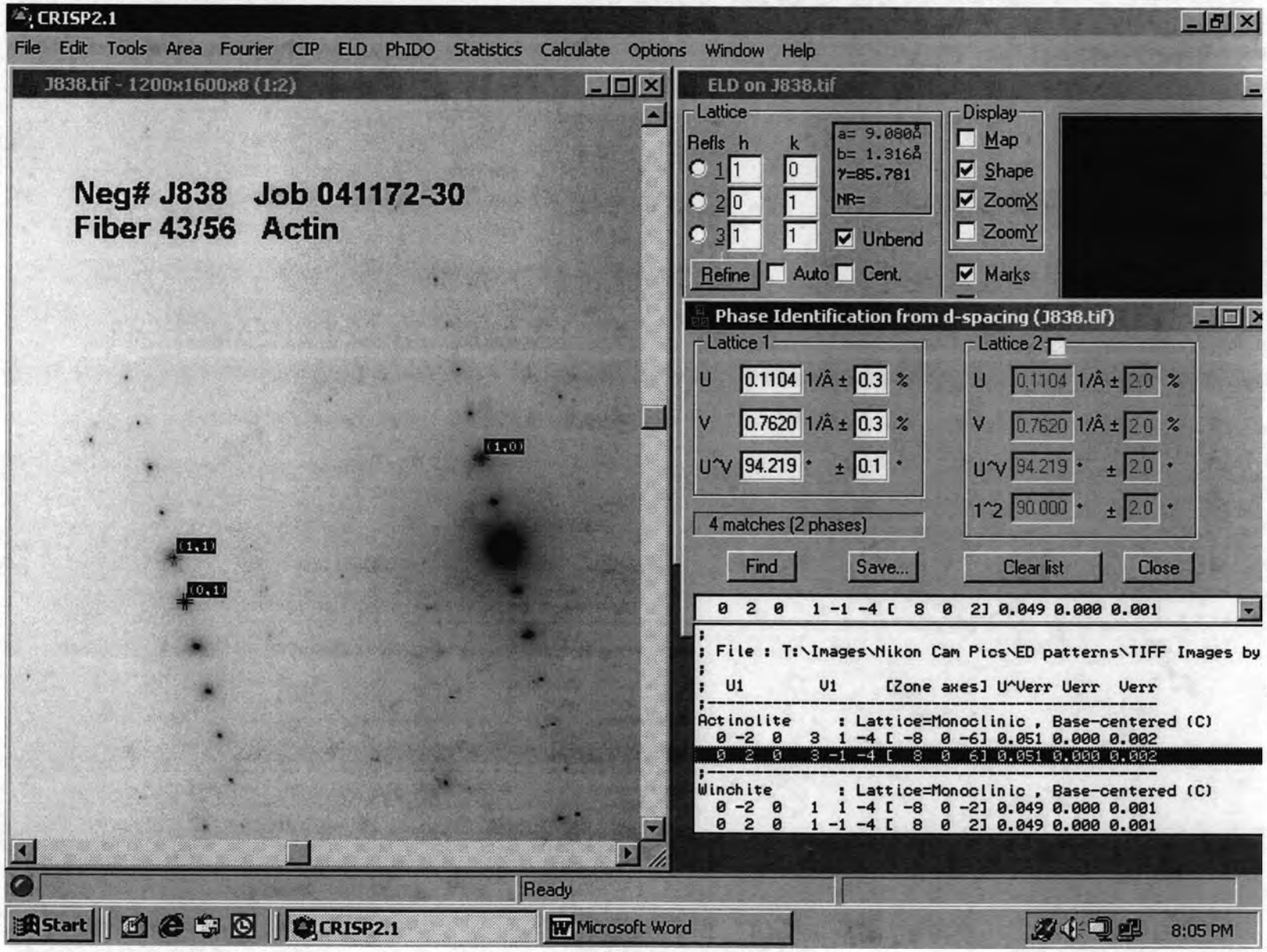
	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	58.02	Si+4	7.7396	7.7396							
Al2O3	3.16	Al+3	0.4968	0.2604	**0.2364**						
TiO2	0	Ti+4	0.0000	0.0000	**0.0000**						
Cr2O3	0	Cr+3	0.0000			0.0000	0.0000				
Fe(total)O	4.22	Fe+3	0.2076			0.2076	0.0000				
MgO	23.22	Mg+2	4.6177			4.5561	**0.0616**				
MnO	0	Fe+2	0.2401			0.0000	**0.2401**				
CaO	11.03	Mn+2	0.0000			0.0000	**0.0000**				
Na2O	0.03	Ca+2	1.5763					1.5763	0.0000		
K2O	0.31	Na+	0.0078					0.0078	**0.0000**	0.0000	0.0000
		K+	0.0527							0.0527	0.0000
Total	**99.99**		**Excess**	T site	**0.2364**	C site	**0.3017**	B site	**0**	A site	**0**
			Total	**8**		**5.0000**		**1.5841**		**0.0527**	**0.0000**
			%Fill	**100**		**100**		**79.2027**			

Prefix none
Name tremolite
Modifier none
Group Calcic Amphibole
Sample # ~~041086~~ 041172-30-4-7

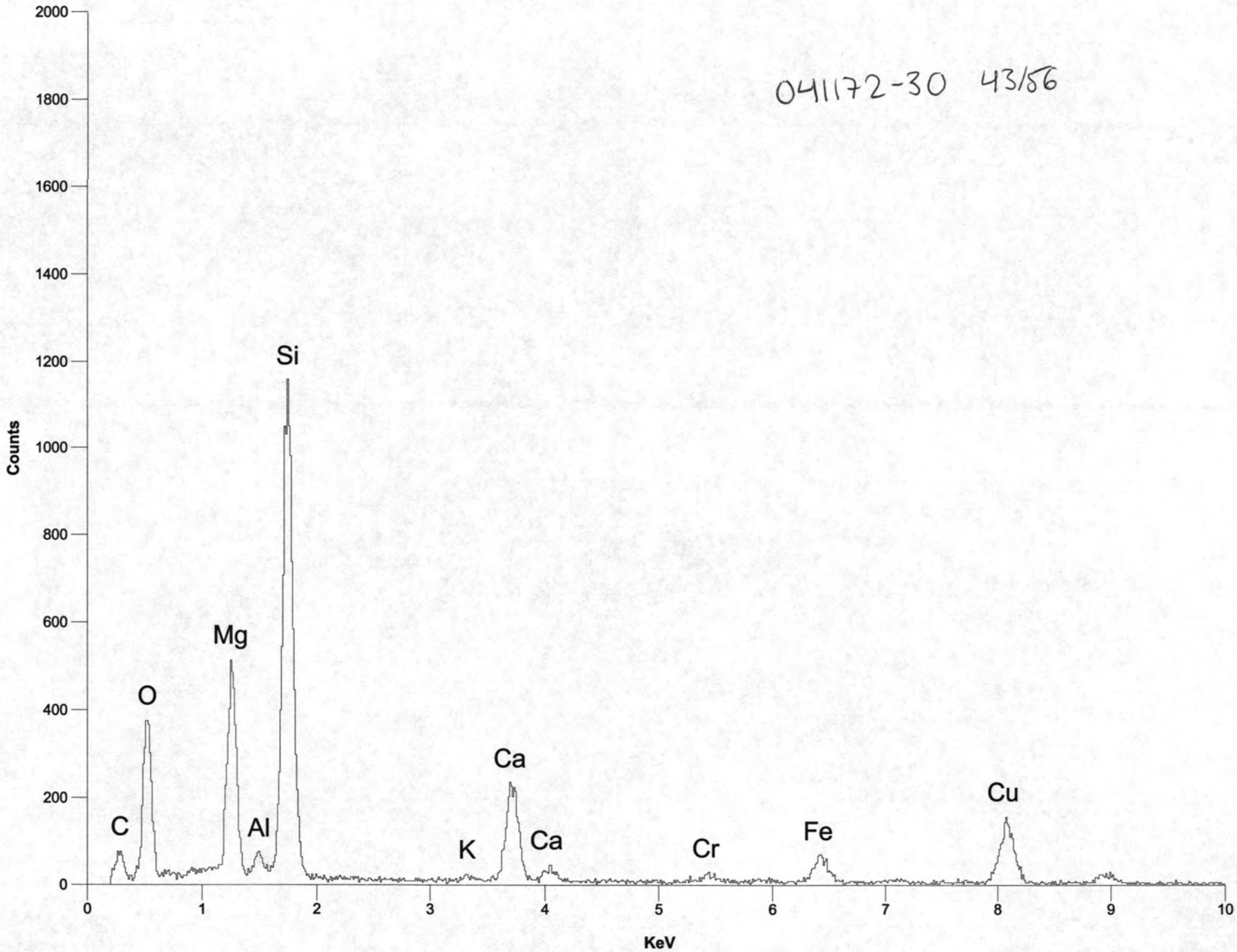
Values		Satisfied Conditions
(Ca,Na)@B	1.58	(Ca,Na)@B >= 1 and Na@B < 0.5
Na@B	0.01	Ca@B >= 1.5 and (Na,K)@A < 0.5
Ca@B	1.58	(Mg/(Mg+Fe2))>= 0.5
(Na,K)@A	0.05	Si > 7.5
Mg/(Mg+Fe2)	0.95	(Mg/(Mg+Fe2))>= 0.9
Si	7.74	

Mineral Analysis Program (Version 5.0)

ACTINOLITE
[403]



041172-30 43/56



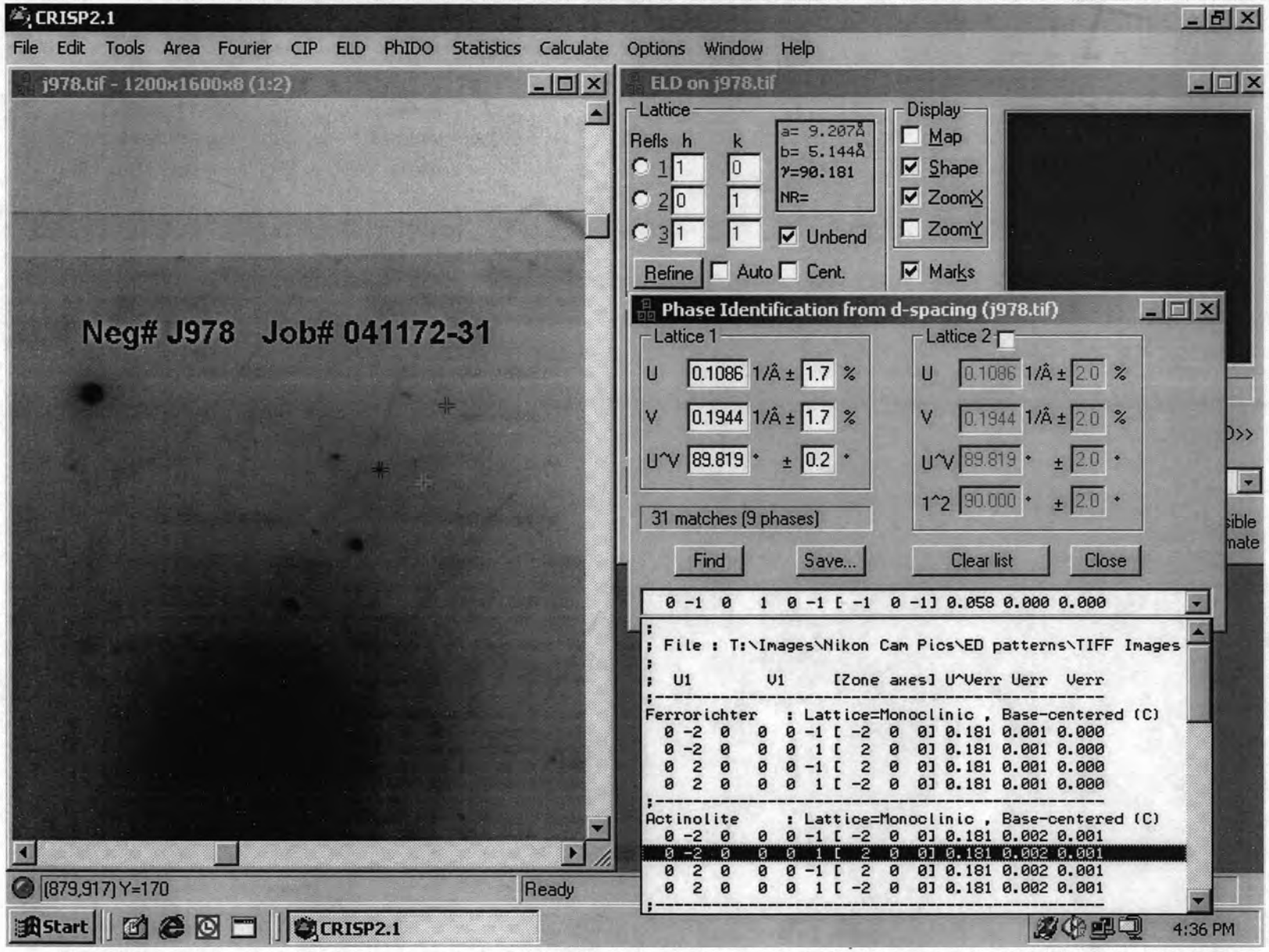
	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	59.68	Si+4	8.0000	8.0000							
Al2O3	2.6	Al+3	0.4118	0.0000	**0.4118**						
TiO2	0	Ti+4	0.0000	0.0000	**0.0000**						
Cr2O3	0	Cr+3	0.0000			0.0000	0.0000				
Fe(total)O	4.34	Fe+3	0.0048			0.0048	0.0000				
MgO	19.89	Mg+2	3.9807			3.9807	**0.0000**				
MnO	0	Fe+2	0.4831			0.4831	**0.0000**				
CaO	11.25	Mn+2	0.0000			0.0000	**0.0000**				
Na2O	2.01	Ca+2	1.6185					1.6185	0.0000		
K2O	0.24	Na+	0.5246					0.3815	**0.1431**	0.1431	0.0000
		K+	0.0418							0.0418	0.0000
Total	**100.01**		**Excess**	T site	**0.4118**	C site	**0.0000**	B site	**0.1431153**	A site	**0**
			Total	**8**		**4.8804**		**2.0000**		**0.1849**	**0.0000**
			%Fill	**100**		**97.6085**		**100**			

Prefix none
Name actinolite
Modifier none
Group Calcic Amphibole
Sample # 041172 ~~041086~~-30-43-56

Values		Satisfied Conditions
(Ca,Na)@B	2.00	(Ca,Na)@B >= 1 and Na@B < 0.5
Na@B	0.38	Ca@B >= 1.5 and (Na,K)@A < 0.5
Ca@B	1.62	(Mg/(Mg+Fe2))>= 0.5
(Na,K)@A	0.18	Si > 7.5
Mg/(Mg+Fe2)	0.89	(Mg/(Mg+Fe2))< 0.9
Si	8.00	

Mineral Analysis Program (Version 5.0)

ACTINOLITE
[1 0 0]



*
*X 'SQMTF

SQMTF: QUANTIFY
Standardless Analysis

Chi-sqd = 6.92

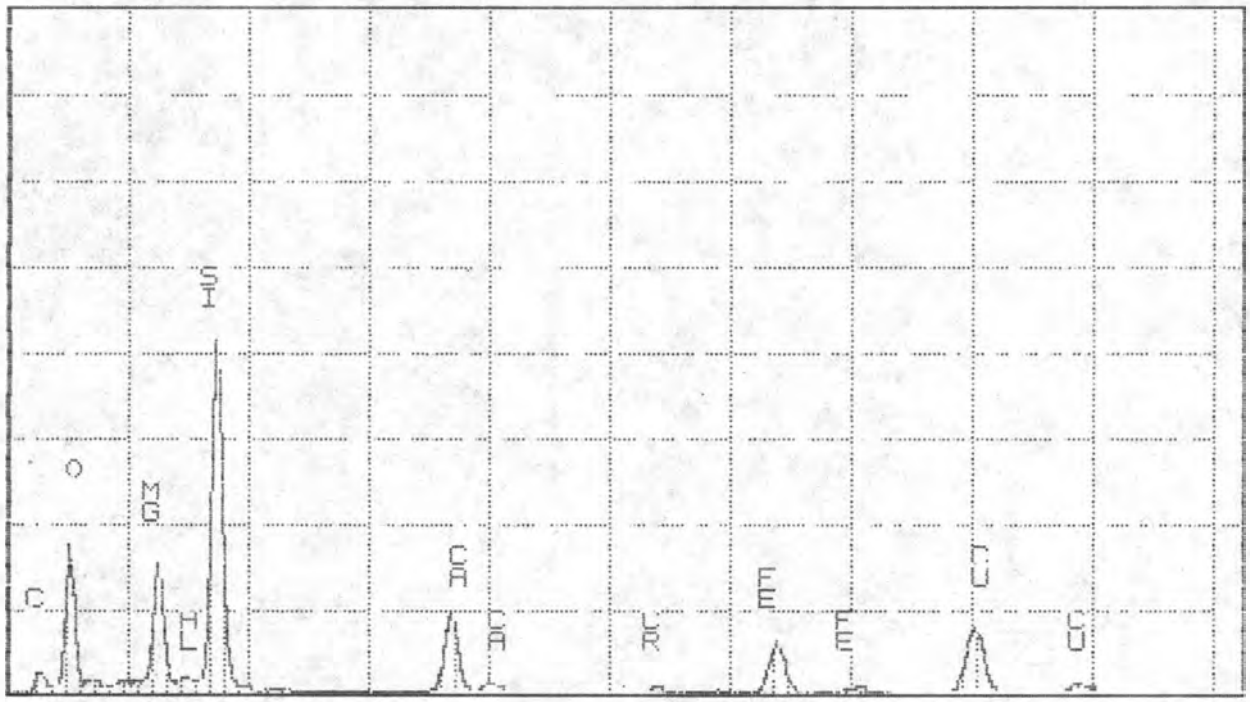
Element	Net Counts	
Si-K	23337 +/-	281
Mg-K	7768 +/-	286
Al-K	801 +/-	335
K -K	95 +/-	89
Ca-K	7029 +/-	166
Fe-K	5013 +/-	143
Na-K	365 +/-	149

PEAKS EDS:SIK EDS:MGK EDS:ALK EDS:K K EDS:CAK EDS:FEK EDS:

041172-31 SP711

EL-LINE	PEAK	K-FACTOR	CEL/CREF	ATOM%	EL WT%	WT%	FORMULA
SI-K	23337	1.000	1.000	21.50	27.78	59.53	SIO2
MG-K	7768	1.000	0.333	8.35	9.25	15.41	MGO
AL-K	801	0.750	0.026	0.57	0.72	1.35	AL2O3
K-K	95	1.060	0.004	0.07	0.12	0.15	K2O
CA-K	7029	0.949	0.286	4.31	7.95	11.13	CAO
FE-K	5013	1.399	0.301	3.23	8.36	11.94	FE2O3
NA-K	365	0.549	0.009	0.23	0.24	0.49	NA2O3
O			1.641	61.74	45.59		

TN-5500 University of Washington / JEOL WED 03-NOV-04 10:51
Cursor: 0.000keV = 0



0.000 VFS = 4096 10.240

20 041172-31 SP711

1,30
*
0,0

	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	59.53	Si+4	8.0000	8.0000							
Al2O3	1.35	Al+3	0.2362	0.0000	0.2362						
TiO2	0	Ti+4	0.0000	0.0000	0.0000						
Cr2O3	0	Cr+3	0.0000			0.0000	0.0000				
Fe(total)O	11.94	Fe+3	0.0232			0.0232	0.0000				
MgO	15.41	Mg+2	3.2083			3.2083	0.0000				
MnO	0	Fe+2	1.3860			1.3860	0.0000				
CaO	11.13	Mn+2	0.0000			0.0000	0.0000				
Na2O	0.49	Ca+2	1.6738					1.6738	0.0000		
K2O	0.15	Na+	0.1728					0.1728	0.0000	0.0000	0.0000
		K+	0.0448							0.0448	0.0000
Total	100		Excess	T site	0.2362	C site	0.0000	B site	0	A site	0
			Total	8		4.8537		1.8466		0.0448	0.0000
			%Fill	100		97.0744		92.3313			

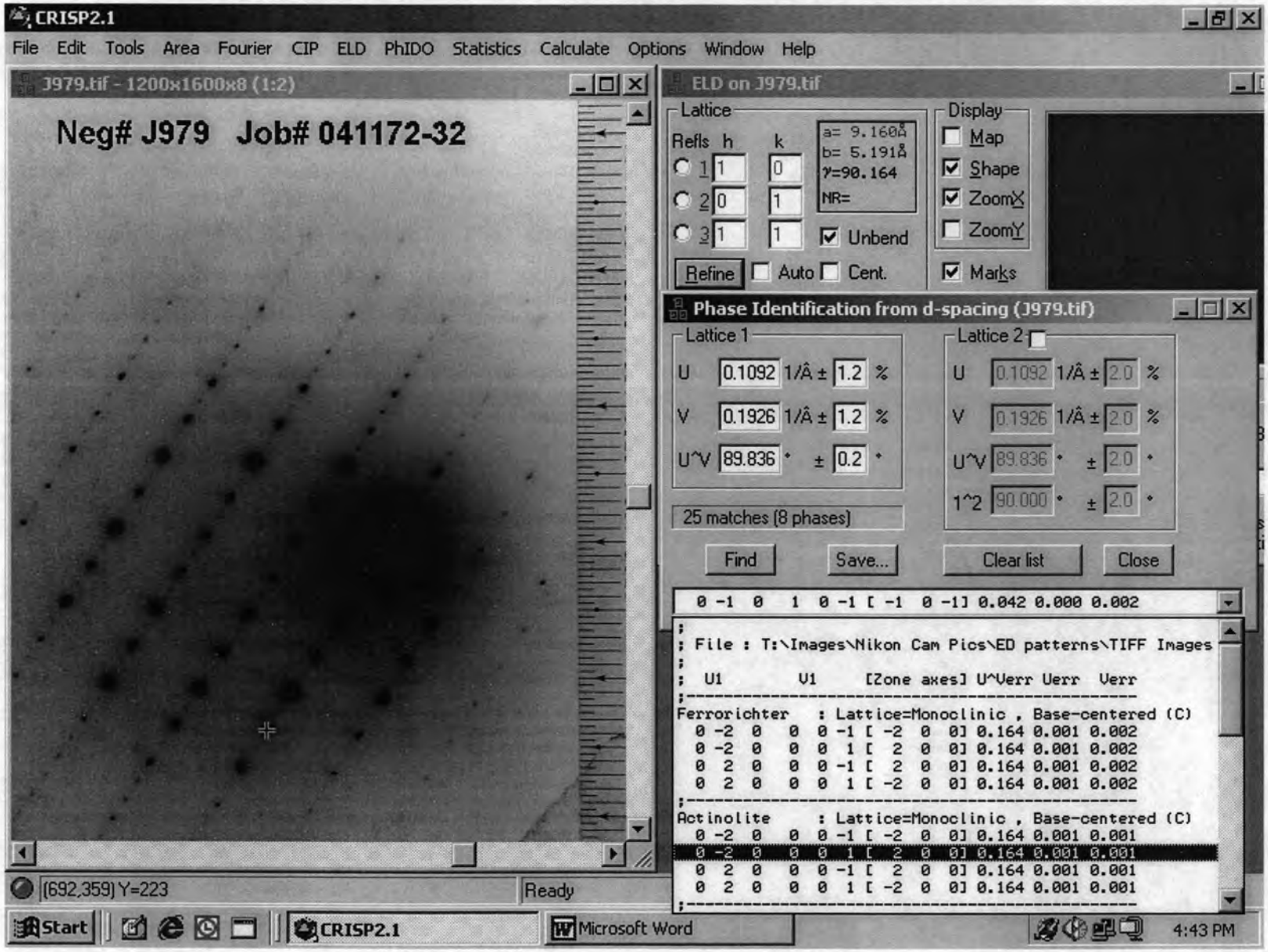
Prefix	none
Name	actinolite
Modifier	none
Group	Calcic Amphibole

Sample # 041172-31-711

Values		Satisfied Conditions
(Ca,Na)@B	1.85	(Ca,Na)@B >= 1 and Na@B < 0.5
Na@B	0.17	Ca@B >= 1.5 and (Na,K)@A < 0.5
Ca@B	1.67	(Mg/(Mg+Fe2))>= 0.5
(Na,K)@A	0.04	Si > 7.5
Mg/(Mg+Fe2)	0.70	(Mg/(Mg+Fe2))< 0.9
Si	8.00	

Mineral Analysis Program (Version 5.0)

ACTINOLITE
[1 0 0]



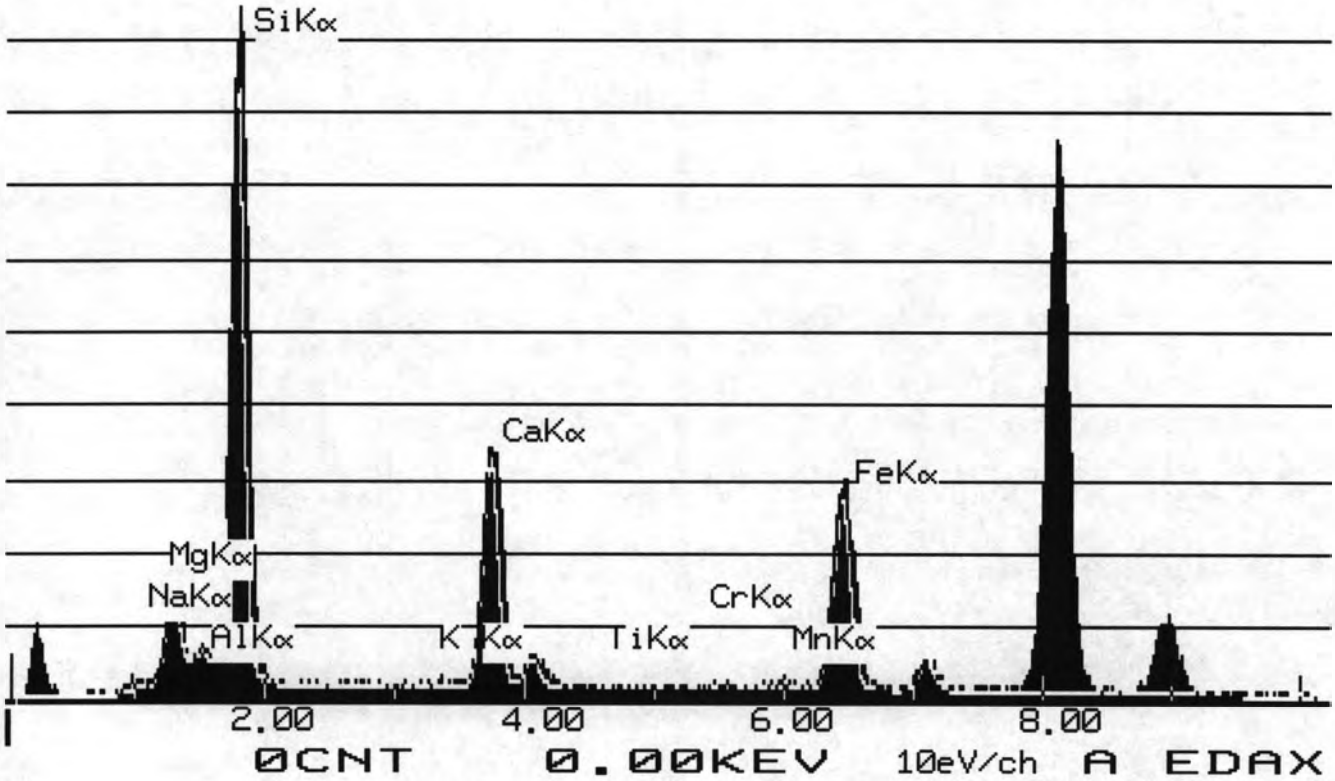
INTE-% :
LABEL = 041172-32 SP 15504
05-DEC-72 18:35:51
20.955 LIVE SECONDS

ELEM	CPS	WT % ELEM	WT % OXIDE
MGK	74.348	6.730	11.159
ALK	10.164	0.553	1.044
SIK	487.607	24.824	53.107
K K	1.957	0.166	0.199
CAK	220.373	10.696	14.966
MNK	5.106	0.358	0.462
FEK	206.773	13.333	19.062

TOTAL			100.000

USED PEIF: USER

04-DEC-04 18:36:30 SUPER QUANT
RATE= 66CPS TIME= 21LSEC
FS= 1147/ 1147 PRST= 200LSEC
A =041172-32 SP 15504



	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	53.107	Si+4	7.7680	7.7680							
Al2O3	1.044	Al+3	0.1800	0.1800	**0.0000**						
TiO2	0	Ti+4	0.0000	0.0000	**0.0000**						
Cr2O3	0	Cr+3	0.0000			0.0000	0.0000				
Fe(total)O	19.062	Fe+3	0.0210			0.0210	0.0000				
MgO	11.159	Mg+2	2.4334			2.4334	**0.0000**				
MnO	0.462	Fe+2	2.3082			2.3082	**0.0000**				
CaO	14.966	Mn+2	0.0572			0.0572	**0.0000**				
Na2O	0	Ca+2	2.3452					2.0000	0.3452		
K2O	0.199	Na+	0.0000					0.0000	**0.0000**	0.0000	0.0000
		K+	0.0371							0.0371	0.0000
Total	**99.999**		**Excess**	T site	**0.0000**	C site	**0.0000**	B site	**0.3452322**	A site	**0**
			Total	**7.948**		**4.8197**		**2.0000**		**0.0371**	**0.0000**
			%Fill	**99.35**		**96.3948**		**100**			

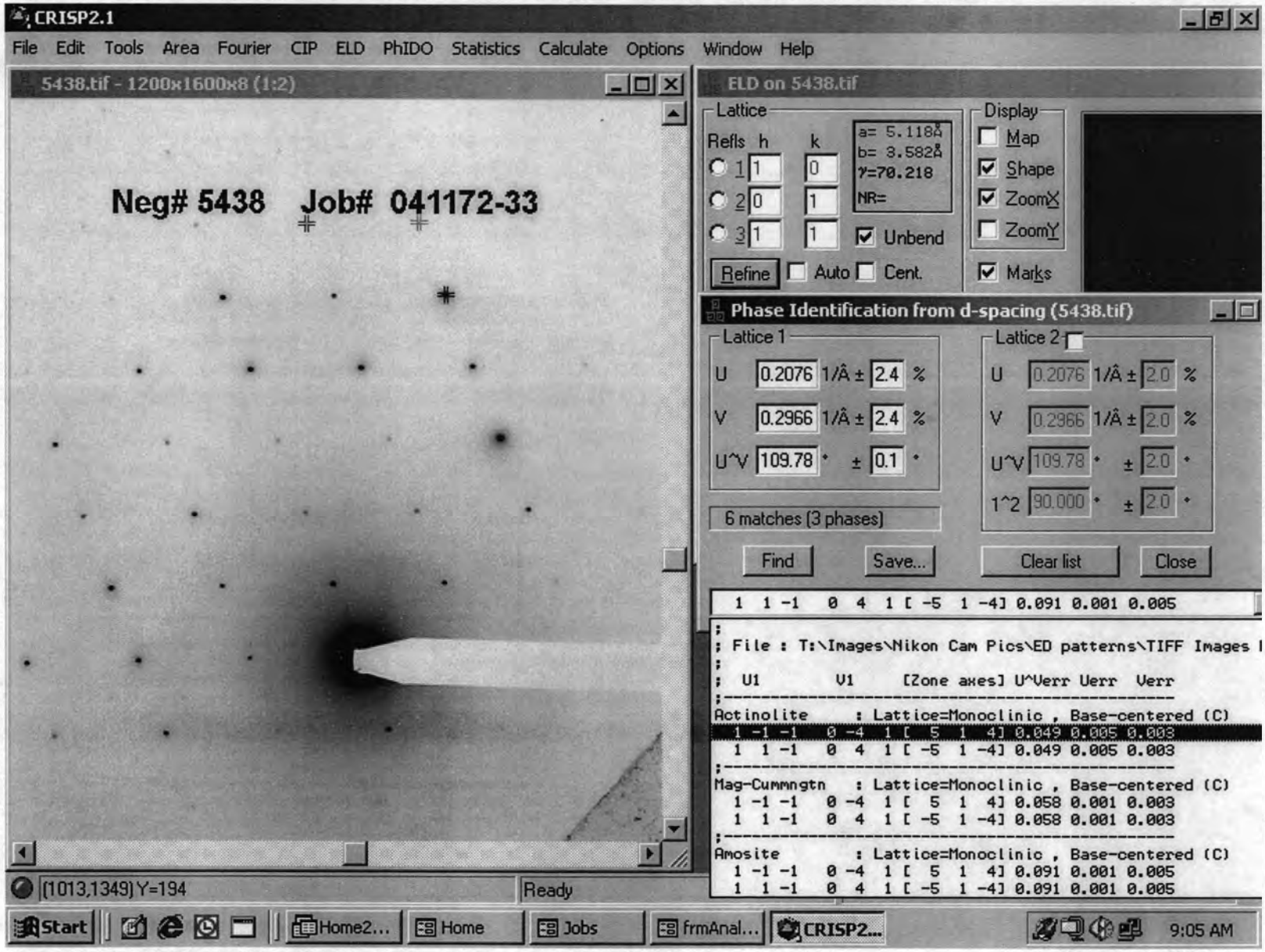
Prefix none
Name actinolite
Modifier none
Group Calcic Amphibole

Sample # **041172-32-15504**

Values		Satisfied Conditions
(Ca,Na)@B	2.00	(Ca,Na)@B >= 1 and Na@B < 0.5
Na@B	0.00	Ca@B >= 1.5 and (Na,K)@A < 0.5
Ca@B	2.00	(Mg/(Mg+Fe2))>= 0.5
(Na,K)@A	0.04	Si > 7.5
Mg/(Mg+Fe2)	0.51	(Mg/(Mg+Fe2))< 0.9
Si	7.77	

Mineral Analysis Program (Version 5.0)

ACTINOLITE
[514]



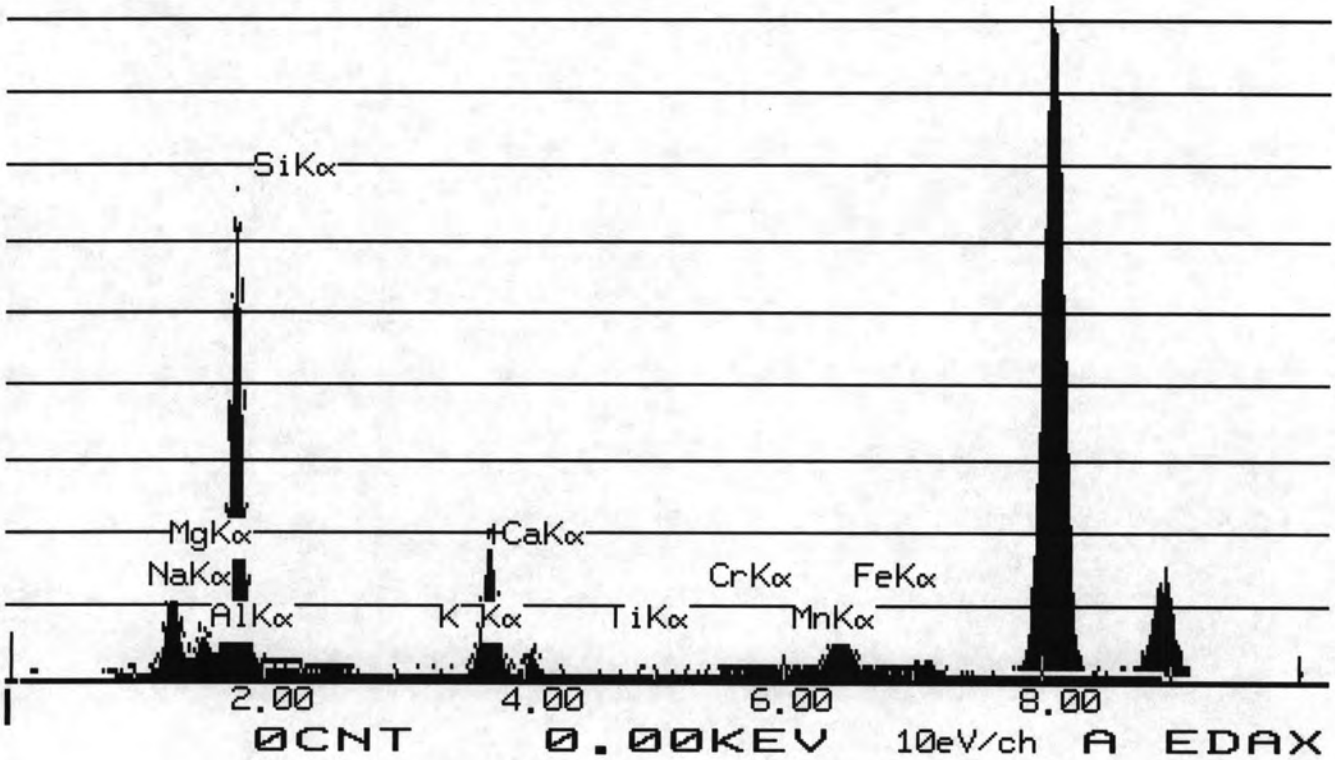
INTE-% :
LABEL = 041172-33 SP 15505
05-DEC-72 18:42:21
32.520 LIVE SECONDS

ELEM	CPS	WT % ELEM	WT % OXIDE
MGK	59.102	10.573	17.532
ALK	18.911	2.032	3.840
SIK	264.237	26.587	56.879
K K	2.245	0.375	0.452
CAK	94.557	9.071	12.692
FEK	47.232	6.019	8.606

TOTAL			100.000

USED PEIF: USER

04-DEC-04 18:43:00 SUPER QUANT
RATE= 45CPS TIME= 32LSEC
FS= 1294/ 1294 PRST= 200LSEC
A =041172-33 SP 15505



	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	56.879	Si+4	7.7956	7.7956							
Al2O3	3.84	Al+3	0.6202	0.2044	**0.4158**						
TiO2	0	Ti+4	0.0000	0.0000	**0.0000**						
Cr2O3	0	Cr+3	0.0000			0.0000	0.0000				
Fe(total)O	8.606	Fe+3	0.0178			0.0178	0.0000				
MgO	17.532	Mg+2	3.5822			3.5822	**0.0000**				
MnO	0	Fe+2	0.9666			0.9666	**0.0000**				
CaO	12.692	Mn+2	0.0000			0.0000	**0.0000**				
Na2O	0	Ca+2	1.8636					1.8636	0.0000		
K2O	0.452	Na+	0.0000					0.0000	**0.0000**	0.0000	0.0000
		K+	0.0790							0.0790	0.0000
Total	**100.001**		**Excess**	T site	**0.4158**	C site	**0.0000**	B site	**0**	A site	**0**
			Total	**8**		**4.9823**		**1.8636**		**0.0790**	**0.0000**
			%Fill	**100**		**99.6468**		**93.179**			

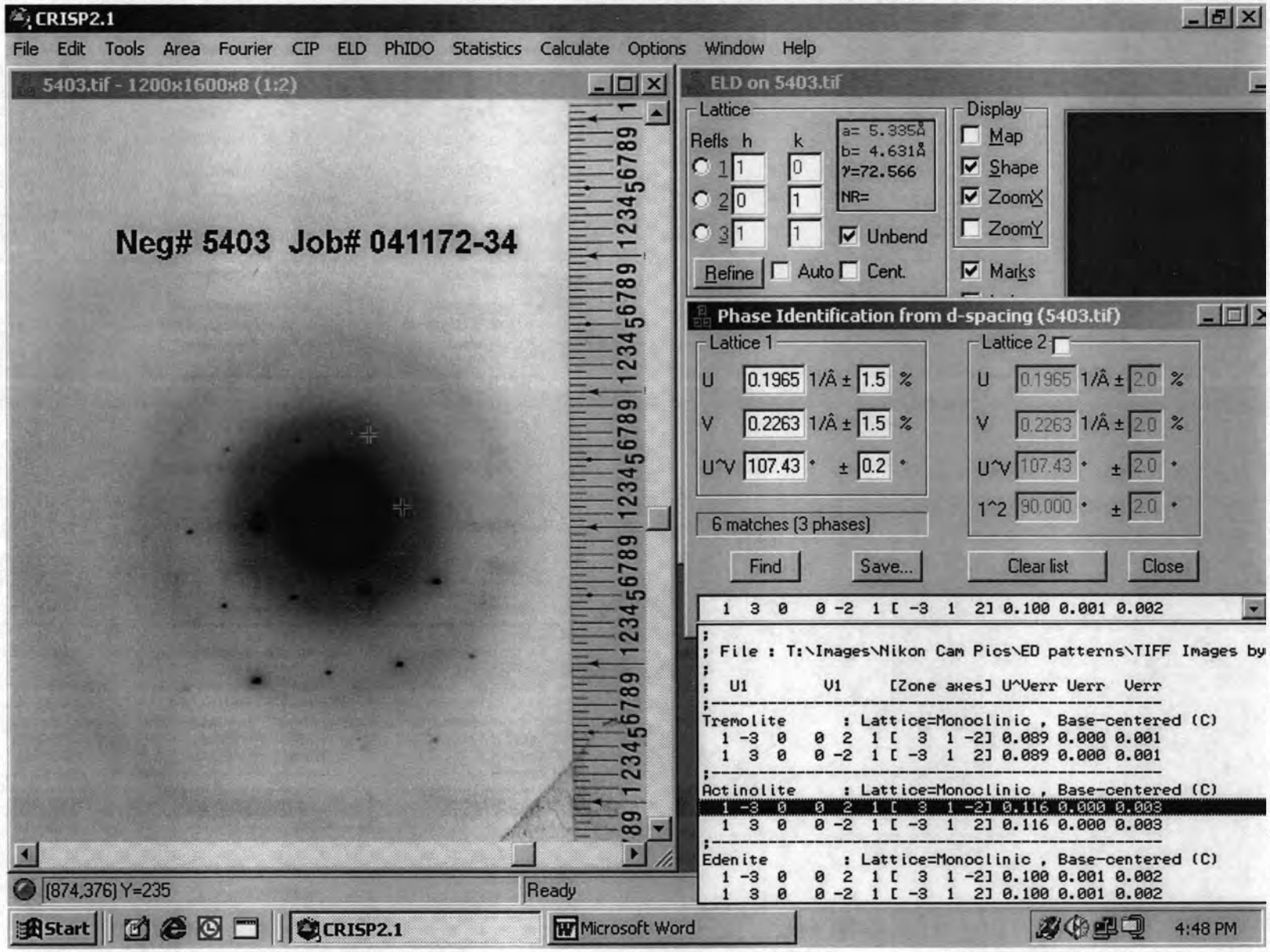
Prefix none
Name actinolite
Modifier none
Group Calcic Amphibole

Sample # **041172-33-15505**

Values		**Satisfied Conditions**
(Ca,Na)@B	**1.86**	**(Ca,Na)@B >= 1 and Na@B < 0.5**
Na@B	**0.00**	**Ca@B >= 1.5 and (Na,K)@A < 0.5**
Ca@B	**1.86**	**(Mg/(Mg+Fe2))>= 0.5**
(Na,K)@A	**0.08**	**Si > 7.5**
Mg/(Mg+Fe2)	**0.79**	**(Mg/(Mg+Fe2))< 0.9**
Si	**7.80**	

Mineral Analysis Program (Version 5.0)

ACTINOLITE
[3 1 -2]

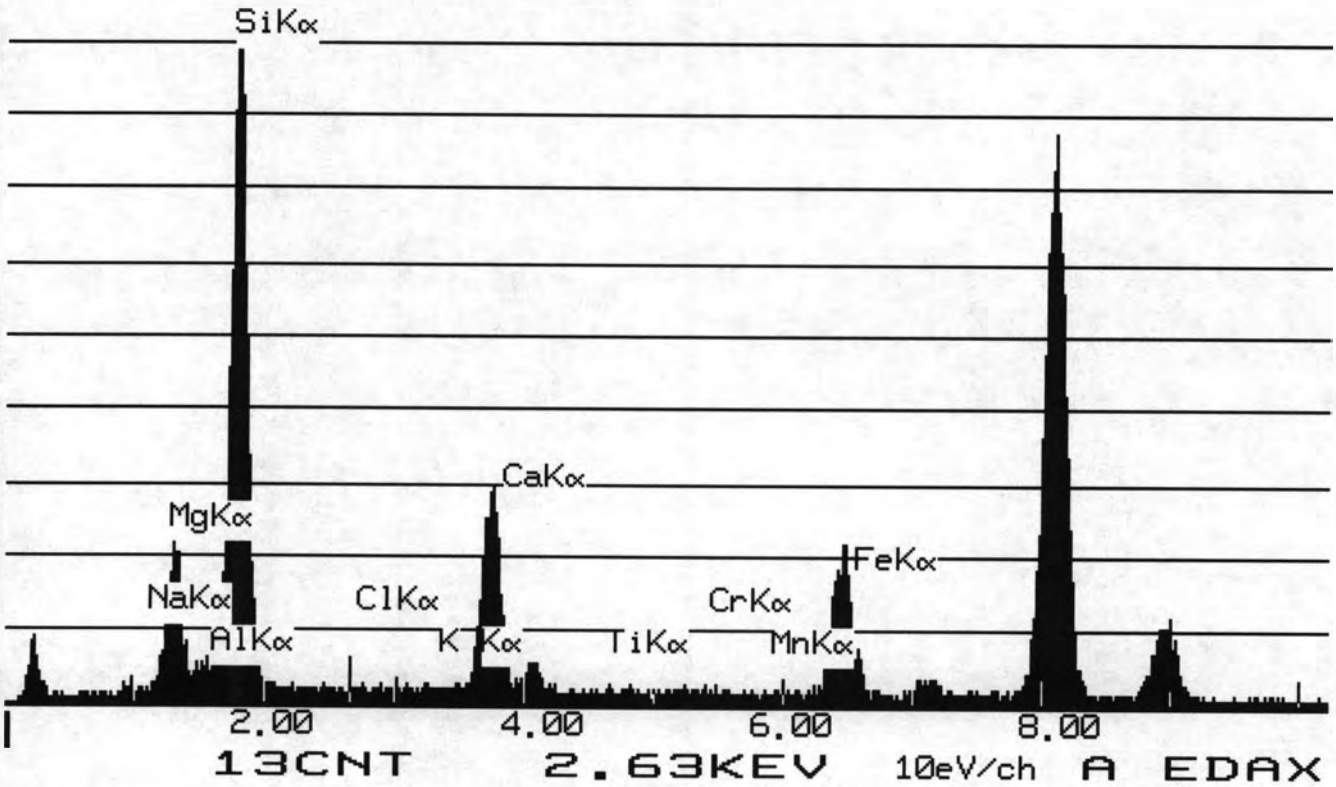


INTE-% :
LABEL =
04-NOV-72 10:51:48
46.426 LIVE SECONDS

ELEM	CPS	WT % ELEM	WT % OXIDE
MGK	32.482	8.783	14.563
ALK	4.480	0.728	1.375
SIK	175.226	26.649	57.011
CAK	66.105	9.585	13.411
TIK	0.388	0.079	0.132
FEK	49.046	9.447	13.507
TOTAL			100.000

USED PEIF: USER

03-NOV-04 10:52:58 SUPER QUANT
RATE= 139CPS TIME= 46LSEC
FS= 893/ 893 PRST= 200LSEC
A =041172-34 15299



	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	57.011	Si+4	7.9924	7.9924							
Al2O3	1.375	Al+3	0.2272	0.0076	**0.2195**						
TiO2	0.132	Ti+4	0.0139	0.0000	**0.0139**						
Cr2O3	0	Cr+3	0.0000			0.0000	0.0000				
Fe(total)O	13.507	Fe+3	0.0142			0.0142	0.0000				
MgO	14.563	Mg+2	3.0436			3.0436	**0.0000**				
MnO	0	Fe+2	1.5675			1.5675	**0.0000**				
CaO	13.411	Mn+2	0.0000			0.0000	**0.0000**				
Na2O	0	Ca+2	2.0142					2.0000	0.0142		
K2O	0	Na+	0.0000					0.0000	**0.0000**	0.0000	0.0000
		K+	0.0000							0.0000	0.0000
Total	**99.999**		**Excess**	T site	**0.2334**	C site	**0.0000**	B site	**0.0141836**	A site	**0**
			Total	**8**		**4.8588**		**2.0000**		**0.0000**	**0.0000**
			%Fill	**100**		**97.1767**		**100**			

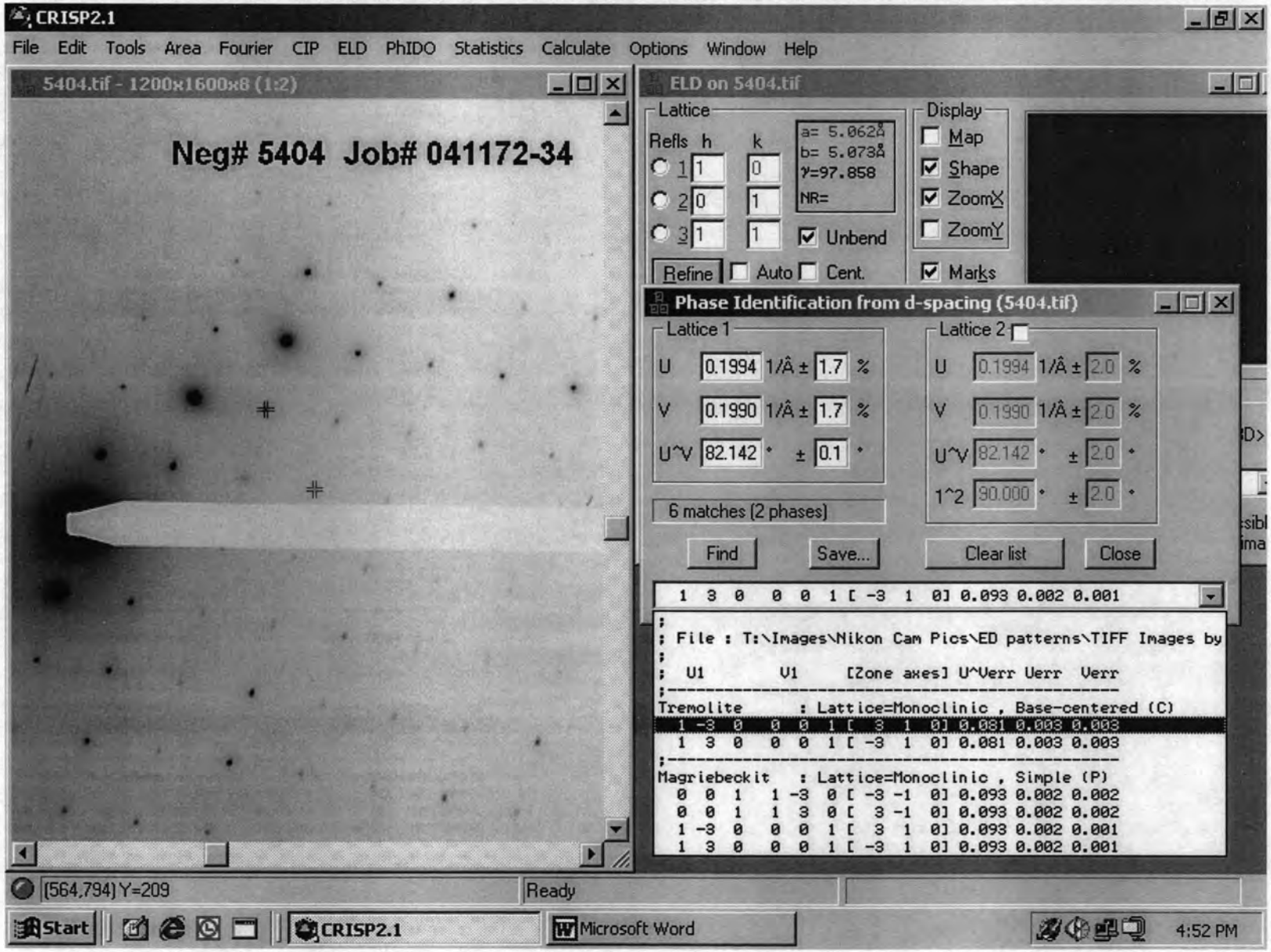
Prefix none
Name actinolite
Modifier none
Group **Calcic Amphibole**

Sample # **041172-34-15299**

Values		**Satisfied Conditions**
(Ca,Na)@B	**2.00**	**(Ca,Na)@B >= 1 and Na@B < 0.5**
Na@B	**0.00**	**Ca@B >= 1.5 and (Na,K)@A < 0.5**
Ca@B	**2.00**	**(Mg/(Mg+Fe2))>= 0.5**
(Na,K)@A	**0.00**	**Si > 7.5**
Mg/(Mg+Fe2)	**0.66**	**(Mg/(Mg+Fe2))< 0.9**
Si	**7.99**	

Mineral Analysis Program (Version 5.0)

TREMOLITE
[3 1 0]



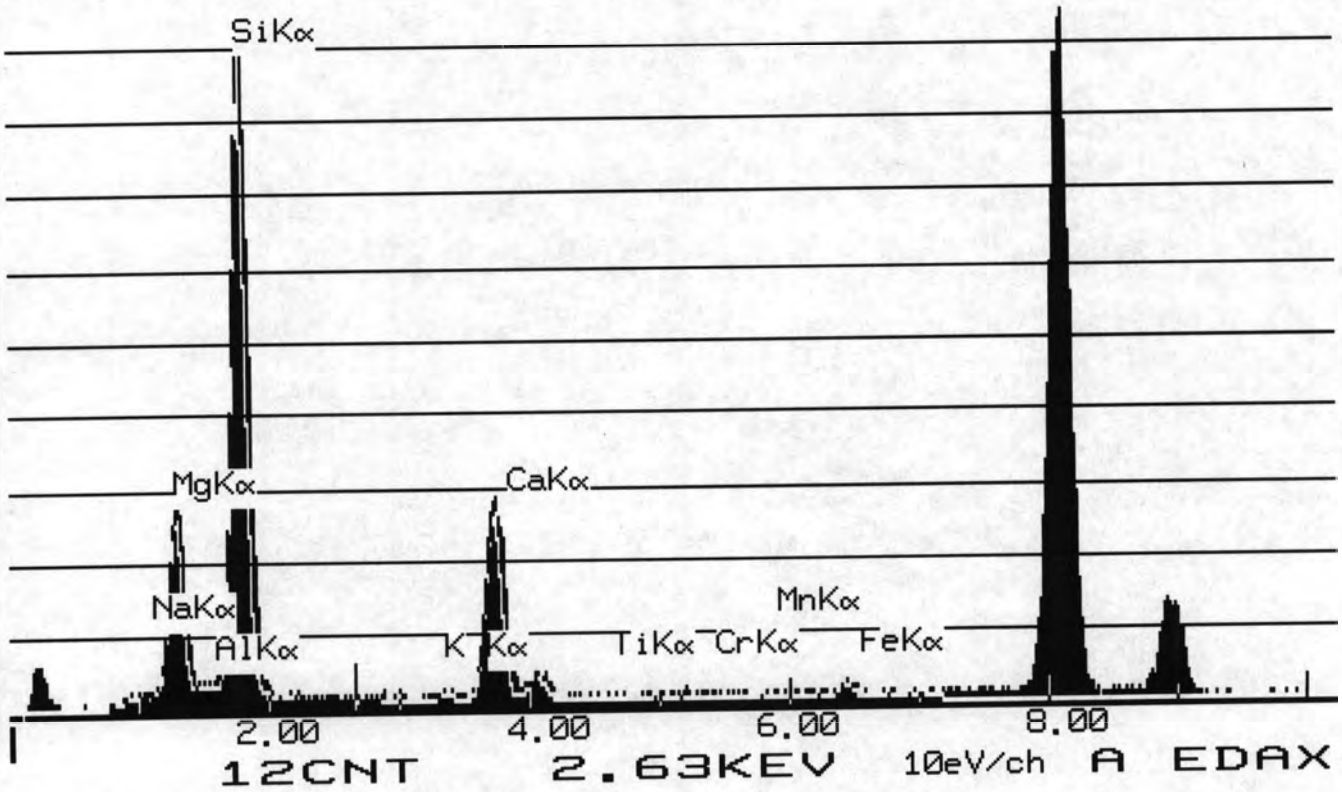
INTE-% :
LABEL = 041172-34 15300
04-NOV-72 19:57:27
30.460 LIVE SECONDS

ELEM	CPS	WT % ELEM	WT % OXIDE
MGK	82.830	13.505	22.393
ALK	2.626	0.257	0.486
SIK	308.504	28.290	60.522
K K	2.035	0.310	0.374
CAK	112.213	9.811	13.727
TIK	1.510	0.186	0.311
CRK	2.167	0.264	0.385
MNK	2.003	0.253	0.326
FEK	8.897	1.033	1.477

TOTAL			100.000

USED PEIF: USER

03-NOV-04 19:57:41 SUPER QUANT
RATE= 5601CPS TIME= 30LSEC
FS= 1033/ 1033 PRST= 200LSEC
A =041172-34 15300



	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	60.522	Si+4	8.0000	8.0000							
Al2O3	0.486	Al+3	0.0803	0.0000	**0.0803**						
TiO2	0.311	Ti+4	0.0363	0.0000	**0.0363**						
Cr2O3	0.385	Cr+3	0.0432			0.0432	0.0000				
Fe(total)O	1.477	Fe+3	0.0041			0.0041	0.0000				
MgO	22.393	Mg+2	4.4570			4.4570	**0.0000**				
MnO	0.326	Fe+2	0.1686			0.1686	**0.0000**				
CaO	13.727	Mn+2	0.0426			0.0426	**0.0000**				
Na2O	0	Ca+2	1.9662					1.9662	0.0000		
K2O	0.374	Na+	0.0000					0.0000	**0.0000**	0.0000	0.0000
		K+	0.0679							0.0679	0.0000
Total	**100.001**		**Excess**	T site	**0.1166**	C site	**0.0000**	B site	**0**	A site	**0**
			Total	**8**		**4.8321**		**1.9662**		**0.0679**	**0.0000**
			%Fill	**100**		**96.6411**		**98.3098**			

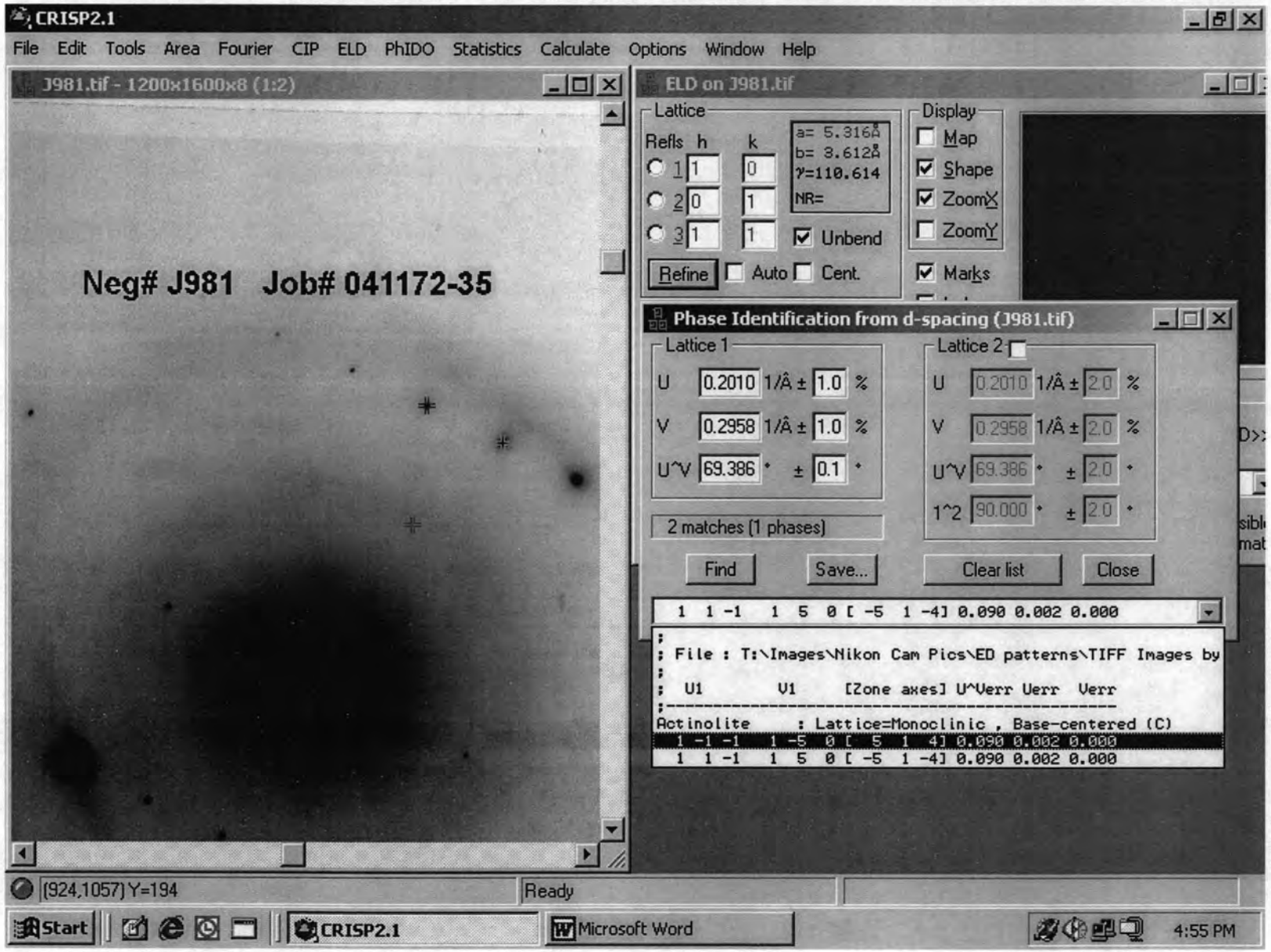
Prefix none
Name tremolite
Modifier none
Group Calcic Amphibole

Sample # **041172-34-15300**

Values		Satisfied Conditions
(Ca,Na)@B	1.97	(Ca,Na)@B >= 1 and Na@B < 0.5
Na@B	0.00	Ca@B >= 1.5 and (Na,K)@A < 0.5
Ca@B	1.97	(Mg/(Mg+Fe2))>= 0.5
(Na,K)@A	0.07	Si > 7.5
Mg/(Mg+Fe2)	0.96	(Mg/(Mg+Fe2))>= 0.9
Si	8.00	

Mineral Analysis Program (Version 5.0)

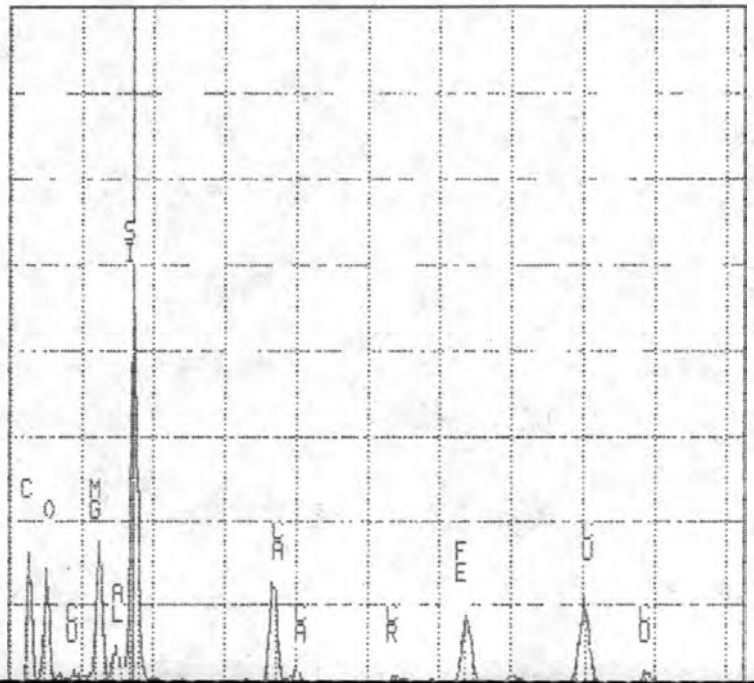
ACTINOLITE
[514]



```
*
 0,0
*
 *X 'SQMTF'

SQMTF: QUANTIFY
 Standardless Analysis

Refit _K K' _K K" _NAK' _NAK"
 Refit _ALK' _ALK" _NAK
Chi-sqd = 1.28

 Element          Net Counts
   Si-K          6616 +/-   117
   Mg-K          2043 +/-    90
   Al-K           477 +/-    58
   K -K            32 +/-    23
   Ca-K          2120 +/-    94
   Fe-K          1876 +/-    83
   Na-K             0 +/-     0


REF.S  EDS:SIK    EDS:MGK    EDS:ALK    EDS:K K    EDS:CAK    EDS:FEK
  EDS:NAK

041172-35 715

EL-LINE    PEAK  K-FACTOR   CEL/CREF  ATOM%  EL WT%    WT%  FORMULA
 SI-K      6616    1.000      1.000   20.88   26.60   56.99  SIO2
MG-K       2043    1.000      0.309    7.52    8.22   13.69  MGO
 AL-K       477    0.750      0.054    1.17    1.44    2.72  AL2O3
K-K          32    1.060      0.005    0.08    0.14    0.17  K2O
 CA-K      2120    0.949      0.304    4.45    8.10   11.34  CAO
FE-K       1876    1.399      0.397    4.15   10.56   15.09  FE2O3
 NA-K         0    0.549      0.000    0.00    0.00    0.00  NA2O3
O                           1.690   61.75   44.95
```

TN-5500 University of Washington / JEOL THU 04-NOV-04 09:52

Cursor: 1.730keV = 617



	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	56.99	Si+4	7.9675	7.9675							
Al2O3	2.72	Al+3	0.4481	0.0325	**0.4157**						
TiO2	0	Ti+4	0.0000	0.0000	**0.0000**						
Cr2O3	0	Cr+3	0.0000			0.0000	0.0000				
Fe(total)O	15.09	Fe+3	0.1587			0.1587	0.0000				
MgO	13.69	Mg+2	2.8533			2.8533	**0.0000**				
MnO	0	Fe+2	1.5877			1.5723	**0.0154**				
CaO	11.34	Mn+2	0.0000			0.0000	**0.0000**				
Na2O	0	Ca+2	1.6985					1.6985	0.0000		
K2O	0.17	Na+	0.0000					0.0000	**0.0000**	0.0000	0.0000
		K+	0.0303							0.0303	0.0000
Total	**100**		**Excess**	T site	**0.4157**	C site	**0.0154**	B site	**0**	A site	**0**
			Total	**8**		**5.0000**		**1.6985**		**0.0303**	**0.0000**
			%Fill	**100**		**100**		**84.9237**			

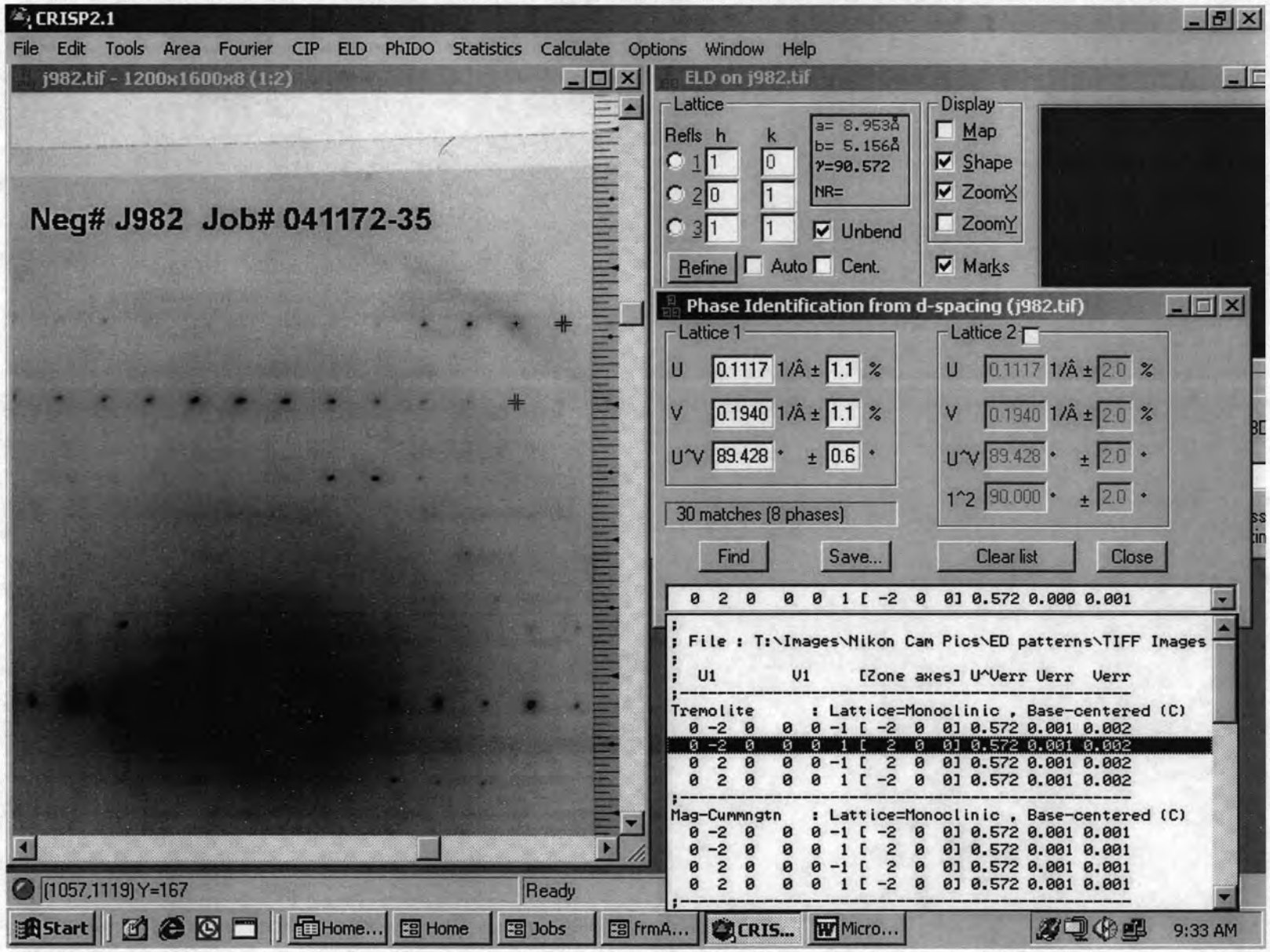
Prefix none
Name actinolite
Modifier none
Group Calcic Amphibole

Sample # 041172-35-715

Values		Satisfied Conditions
(Ca,Na)@B	1.70	(Ca,Na)@B >= 1 and Na@B < 0.5
Na@B	0.00	Ca@B >= 1.5 and (Na,K)@A < 0.5
Ca@B	1.70	(Mg/(Mg+Fe2))>= 0.5
(Na,K)@A	0.03	Si > 7.5
Mg/(Mg+Fe2)	0.64	(Mg/(Mg+Fe2))< 0.9
Si	7.97	

Mineral Analysis Program (Version 5.0)

TREMOLITE
[1 0 0]



SQMTF: QUANTIFY
Standardless Analysis
*X 'SQMTF'
SQMTF -3B/80
Refit _NAK' _NAK"
Refit _ALK' _ALK" _K K' _K K" _NAK
Chi-sqd = 1.04

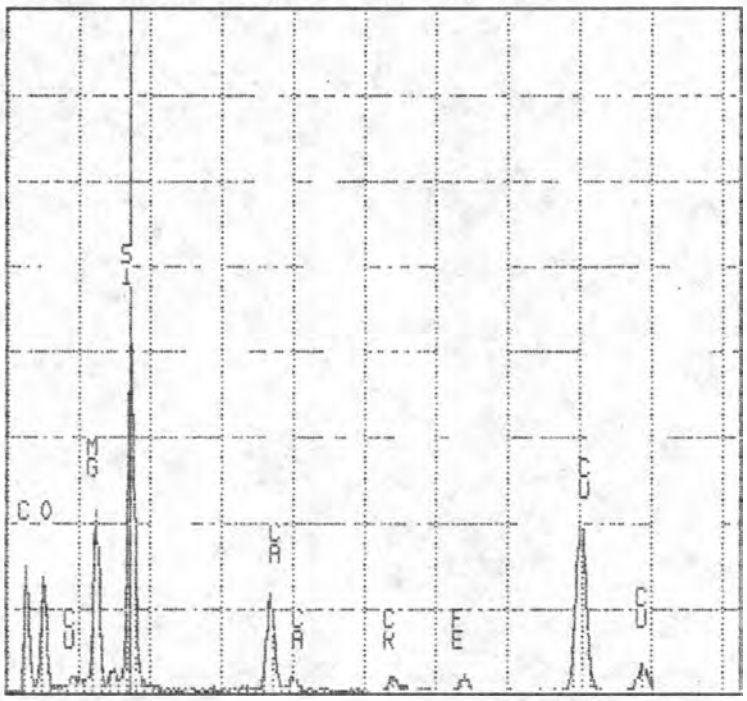
Element	Net Counts		
Si-K	6089	+/-	112
Mg-K	2580	+/-	93
Al-K	248	+/-	53
K -K	33	+/-	22
Ca-K	1949	+/-	91
Fe-K	325	+/-	55
Na-K	0	+/-	0

REF.S EDS:SIK EDS:MGK EDS:ALK EDS:K K EDS:CAK EDS:FEK
EDS:NAK

041172-35 716

EL-LINE	PEAK	K-FACTOR	CEL/CREF	ATOM%	EL WT%	WT%	FORMULA
SI-K	6089	1.000	1.000	21.77	29.01	62.17	SIO2
MG-K	2580	1.000	0.424	10.76	12.30	20.49	MGO
AL-K	248	0.750	0.031	0.69	0.89	1.68	AL2O3
K-K	33	1.060	0.006	0.09	0.17	0.20	K2O
CA-K	1949	0.949	0.304	4.63	8.82	12.35	CAO
FE-K	325	1.399	0.075	0.81	2.17	3.10	FE2O3
NA-K	0	0.549	0.000	0.00	0.00	0.00	NA2O3
O			1.608	61.24	46.64		

TN-5500 University of Washington / JEOL THU 04-NOV-04 01:05
Cursor: 1.780keV = 579



0.000 VFS = 1024 10.240

79 041172-35 716

	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	62.17	Si+4	8.0000	8.0000							
Al2O3	1.68	Al+3	0.2842	0.0000	**0.2842**						
TiO2	0	Ti+4	0.0000	0.0000	**0.0000**						
Cr2O3	0	Cr+3	0.0000			0.0000	0.0000				
Fe(total)O	3.1	Fe+3	0.0173			0.0173	0.0000				
MgO	20.49	Mg+2	4.0984			4.0984	**0.0000**				
MnO	0	Fe+2	0.3711			0.3711	**0.0000**				
CaO	12.35	Mn+2	0.0000			0.0000	**0.0000**				
Na2O	0	Ca+2	1.7912					1.7912	0.0000		
K2O	0.2	Na+	0.0000					0.0000	**0.0000**	0.0000	0.0000
		K+	0.0578							0.0578	0.0000
Total	**99.99**		**Excess**	T site	**0.2842**	C site	**0.0000**	B site	**0**	A site	**0**
			Total	**8**		**4.7710**		**1.7912**		**0.0578**	**0.0000**
			%Fill	**100**		**95.4208**		**89.5605**			

Prefix none
Name tremolite
Modifier none
Group Calcic Amphibole

Sample # 041172-35-716

Values		Satisfied Conditions
(Ca,Na)@B	1.79	(Ca,Na)@B >= 1 and Na@B < 0.5
Na@B	0.00	Ca@B >= 1.5 and (Na,K)@A < 0.5
Ca@B	1.79	(Mg/(Mg+Fe2))>= 0.5
(Na,K)@A	0.06	Si > 7.5
Mg/(Mg+Fe2)	0.92	(Mg/(Mg+Fe2))>= 0.9
Si	8.00	

Mineral Analysis Program (Version 5.0)

ACTINOLITE
[1 0 -5]

CRISP2.1

File Edit Tools Area Fourier CIP ELD PhIDO Statistics Calculate Options Window Help

J983.tif - 1200x1600x8 (1:2)

Neg# J983 Job# 041172-36

(1,0)
(0,1)
(1,1)

ELD on J983.tif

Lattice

Refls	h	k
1	1	0
2	0	1
3	1	1

a= 9.517Å
b= 1.630Å
γ=74.569
NR=

Unbend

Refine Auto Cent.

Display: Map, Shape, ZoomX, ZoomY, Marks

Phase Identification from d-spacing (J983.tif)

Lattice 1				
U	0.1090	1/Å ±	1.5	%
V	0.6363	1/Å ±	1.5	%
U^V	105.43	° ±	0.2	°

Lattice 2				
U	0.1090	1/Å ±	2.0	%
V	0.6363	1/Å ±	2.0	%
U^V	105.43	° ±	2.0	°
1^2	90.000	° ±	2.0	°

4 matches (2 phases)

Find Save... Clear list Close

```
  0  2  0   5 -3  1 [ -2  0 10] 0.142 0.002 0.007
;
; File : T:\Images\Nikon Cam Pics\ED patterns\TIFF Images by
;
;  U1        V1     [Zone axes] U^Verr Uerr  Verr
;-----------------------------------------------------
Actinolite     : Lattice=Monoclinic , Base-centered (C)
  0 -2  0   5  3  1 [  2  0-10] 0.116 0.001 0.009
  0  2  0   5 -3  1 [ -2  0 10] 0.116 0.001 0.009
;-----------------------------------------------------
Mag-Cummngtn   : Lattice=Monoclinic , Base-centered (C)
  0 -2  0   5  3  1 [  2  0-10] 0.142 0.002 0.007
  0  2  0   5 -3  1 [ -2  0 10] 0.142 0.002 0.007
```

(1029,1174) Y=207 Ready

Start CRISP2.1 Microsoft Word 5:07 PM

Fe-K	3178 +/-	79
Na-K	0 +/-	0

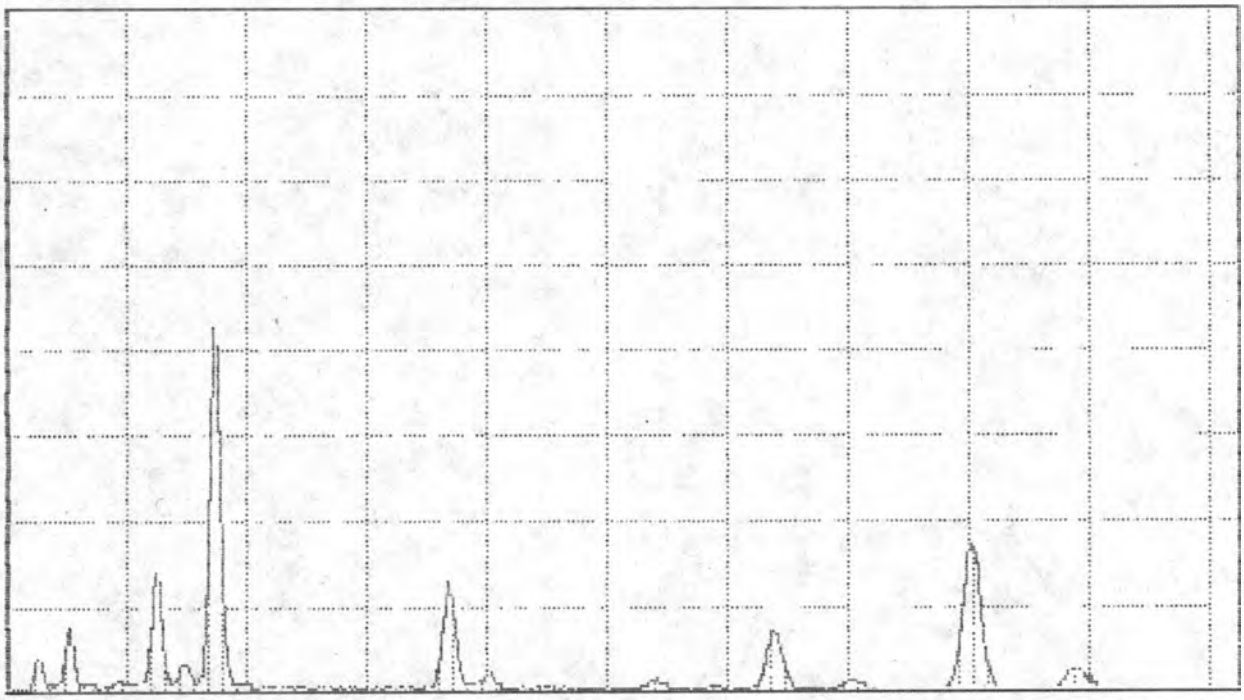
NAK REF.S EDS:STK EDS:MGK EDS:ALK EDS:K K

041172-36 SP717

EL-LINE	PEAK	K-FACTOR	CEL/CREF	ATOM%	EL WT%	WT%	FORMULA
SI-K	11717	1.000	1.000	20.88	26.49	56.77	SIO2
MG-K	3437	1.000	0.293	7.14	7.77	12.95	MGO
AL-K	761	0.750	0.049	1.05	1.29	2.44	AL2O3
K-K	37	1.060	0.003	0.05	0.09	0.11	K2O
CA-K	4439	0.949	0.360	5.26	9.54	13.35	CAO
FE-K	3178	1.399	0.380	3.96	10.06	14.37	FE2O3
NA-K	0	0.549	0.000	0.00	0.00	0.00	NA2O3
O			1.689	61.67	44.75		

TN-5500 University of Washington / JEOL THU 04-NOV-04 10:35

Cursor: 0.000keV = 0



0.000 VFs = 2048 10.240

25 041172-36 SP717

	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	56.77	Si+4	7.9811	7.9811							
Al2O3	2.44	Al+3	0.4043	0.0189	0.3853						
TiO2	0	Ti+4	0.0000	0.0000	0.0000						
Cr2O3	0	Cr+3	0.0000			0.0000	0.0000				
Fe(total)O	14.37	Fe+3	0.0152			0.0152	0.0000				
MgO	12.95	Mg+2	2.7142			2.7142	0.0000				
MnO	0	Fe+2	1.6724			1.6724	0.0000				
CaO	13.36	Mn+2	0.0000			0.0000	0.0000				
Na2O	0	Ca+2	2.0122					2.0000	0.0122		
K2O	0.11	Na+	0.0000					0.0000	0.0000	0.0000	0.0000
		K+	0.0197							0.0197	0.0000
Total	100		Excess	T site	0.3853	C site	0.0000	B site	0.0122016	A site	0
			Total	8		4.7871		2.0000		0.0197	0.0000
			%Fill	100		95.7423		100			

Prefix none
Name actinolite
Modifier none
Group Calcic Amphibole

Sample # 041172-36-717

Values		Satisfied Conditions
(Ca,Na)@B	2.00	(Ca,Na)@B >= 1 and Na@B < 0.5
Na@B	0.00	Ca@B >= 1.5 and (Na,K)@A < 0.5
Ca@B	2.00	(Mg/(Mg+Fe2))>= 0.5
(Na,K)@A	0.02	Si > 7.5
Mg/(Mg+Fe2)	0.62	(Mg/(Mg+Fe2))< 0.9
Si	7.98	

Mineral Analysis Program (Version 5.0)

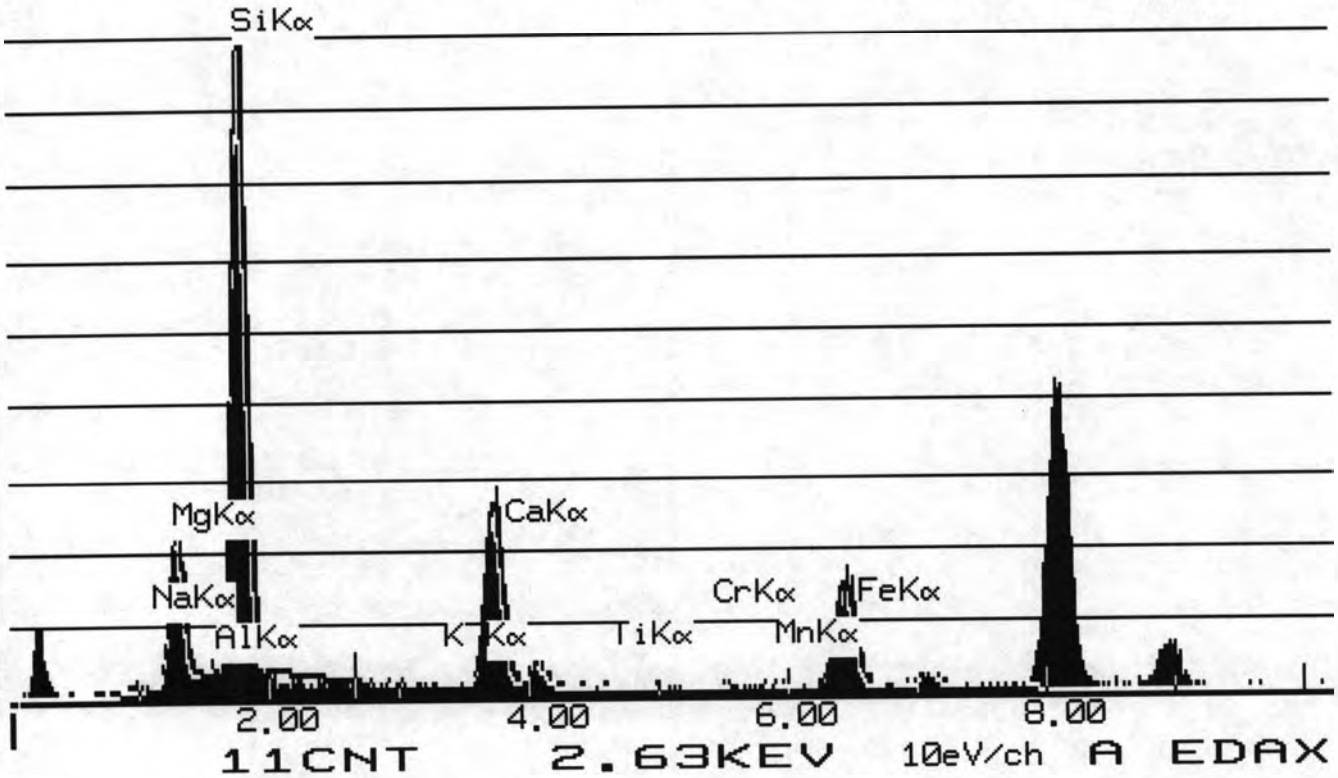
INTE-% :
LABEL = 041172-37 15302
04-NOV-72 23:39:29
29.152 LIVE SECONDS

ELEM	CPS	WT % ELEM	WT % OXIDE
NAK	0.858	0.251	0.339
MGK	79.172	10.952	18.159
ALK	4.048	0.336	0.636
SIK	343.480	26.722	57.169
K K	1.578	0.204	0.246
CAK	119.582	8.870	12.411
MNK	0.583	0.062	0.081
FEK	77.800	7.666	10.961

TOTAL			100.000

USED PEIF: USER

03-NOV-04 23:39:42 SUPER QUANT
RATE= 101CPS TIME= 29LSEC
FS= 1126/ 1126 PRST= 200LSEC
A =041172-37 15302



	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	57.169	Si+4	7.9134	7.9134							
Al2O3	0.636	Al+3	0.1038	0.0866	**0.0172**						
TiO2	0	Ti+4	0.0000	0.0000	**0.0000**						
Cr2O3	0	Cr+3	0.0000			0.0000	0.0000				
Fe(total)O	10.961	Fe+3	0.2169			0.2169	0.0000				
MgO	18.159	Mg+2	3.7473			3.7473	**0.0000**				
MnO	0.081	Fe+2	1.0276			1.0186	**0.0091**				
CaO	12.411	Mn+2	0.0095			0.0000	**0.0095**				
Na2O	0.339	Ca+2	1.8405					1.8405	0.0000		
K2O	0.246	Na+	0.0910					0.0910	**0.0000**	0.0000	0.0000
		K+	0.0434							0.0434	0.0000
Total	**100.002**		**Excess**	T site	**0.0172**	C site	**0.0186**	B site	**0**	A site	**0**
			Total	**8**		**5.0000**		**1.9315**		**0.0434**	**0.0000**
			%Fill	**100**		**100**		**96.573**			

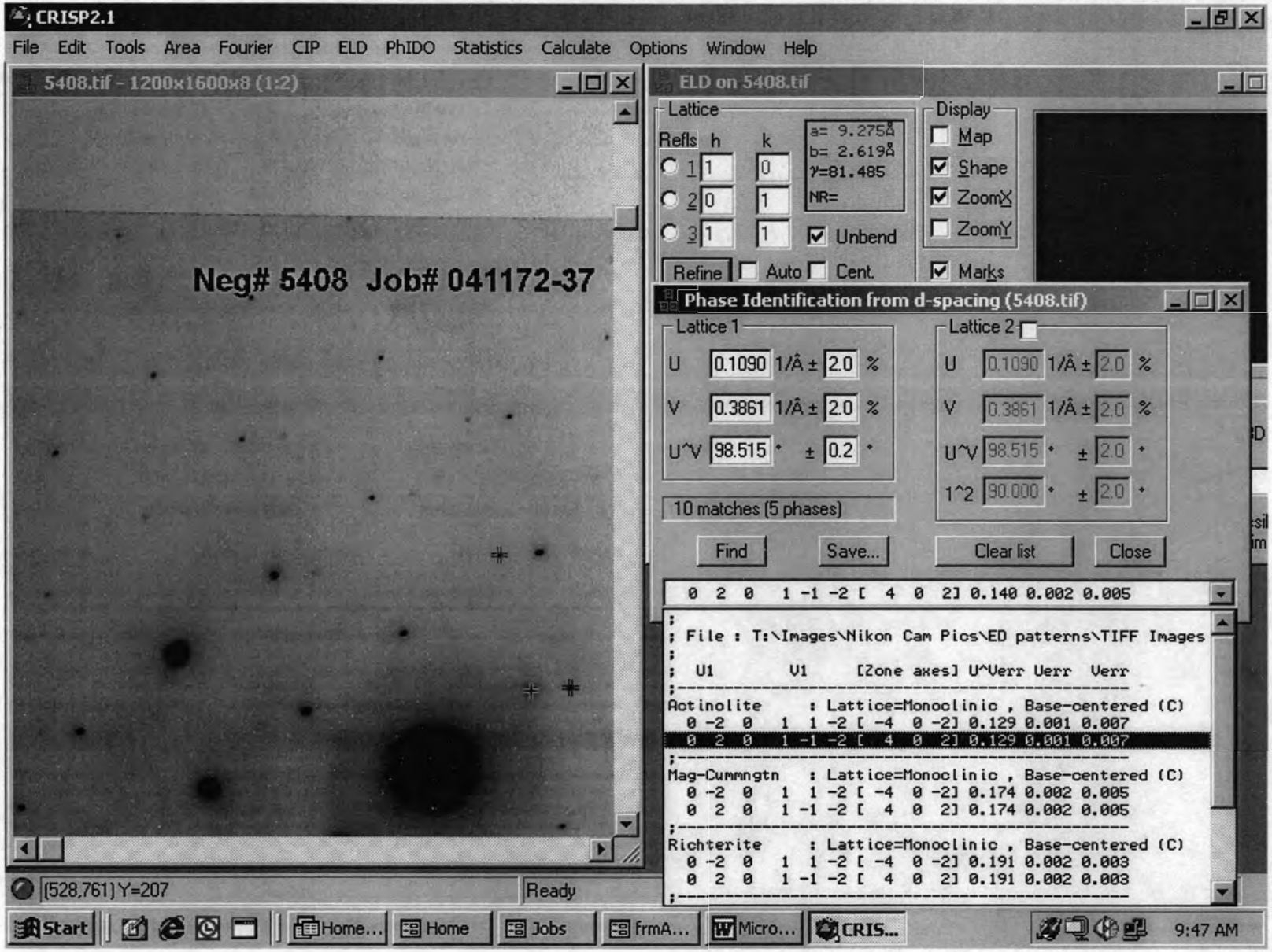
Prefix none
Name actinolite
Modifier none
Group Calcic Amphibole

Sample # **041172-37-15302**

Values		Satisfied Conditions
(Ca,Na)@B	1.93	(Ca,Na)@B >= 1 and Na@B < 0.5
Na@B	0.09	Ca@B >= 1.5 and (Na,K)@A < 0.5
Ca@B	1.84	(Mg/(Mg+Fe2))>= 0.5
(Na,K)@A	0.04	Si > 7.5
Mg/(Mg+Fe2)	0.78	(Mg/(Mg+Fe2))< 0.9
Si	7.91	

Mineral Analysis Program (Version 5.0)

ACTINOLITE
[2 0 1]



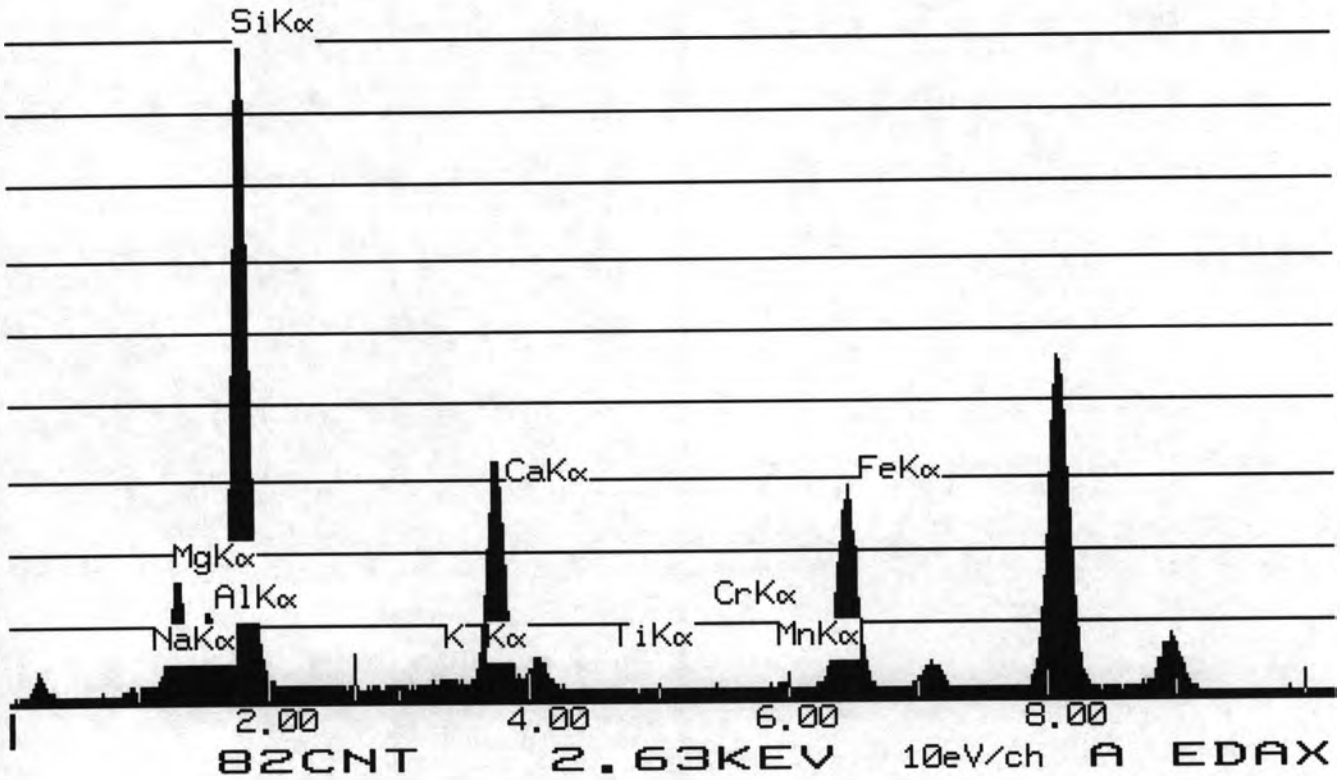
INTE-% :
LABEL = 041172-37 15302
05-NOV-72 08:20:38
136.350 LIVE SECONDS

ELEM	CPS	WT % ELEM	WT % OXIDE
MGK	53.209	6.909	11.456
ALK	33.077	2.580	4.875
SIK	338.789	24.742	52.931
K K	2.618	0.318	0.383
CAK	131.382	9.148	12.800
FEK	132.754	12.279	17.556

TOTAL			100.000

USED PEIF: USER

04-NOV-04 08:22:33 SUPER QUANT
RATE= 565CPS TIME= 136LSEC
FS= 5005/ 5005 PRST= 200LSEC
A =041172-37 15303



	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	52.931	Si+4	7.5971	7.5971							
Al2O3	4.875	Al+3	0.8246	0.4029	**0.4217**						
TiO2	0	Ti+4	0.0000	0.0000	**0.0000**						
Cr2O3	0	Cr+3	0.0000			0.0000	0.0000				
Fe(total)O	17.556	Fe+3	0.0190			0.0190	0.0000				
MgO	11.456	Mg+2	2.4513			2.4513	**0.0000**				
MnO	0	Fe+2	2.0859			2.0859	**0.0000**				
CaO	12.8	Mn+2	0.0000			0.0000	**0.0000**				
Na2O	0	Ca+2	1.9682					1.9682	0.0000		
K2O	0.383	Na+	0.0000					0.0000	**0.0000**	0.0000	0.0000
		K+	0.0701							0.0701	0.0000
Total	**100.001**		**Excess**	T site	**0.4217**	C site	**0.0000**	B site	**0**	A site	**0**
			Total	**8**		**4.9779**		**1.9682**		**0.0701**	**0.0000**
			%Fill	**100**		**99.5575**		**98.4099**			

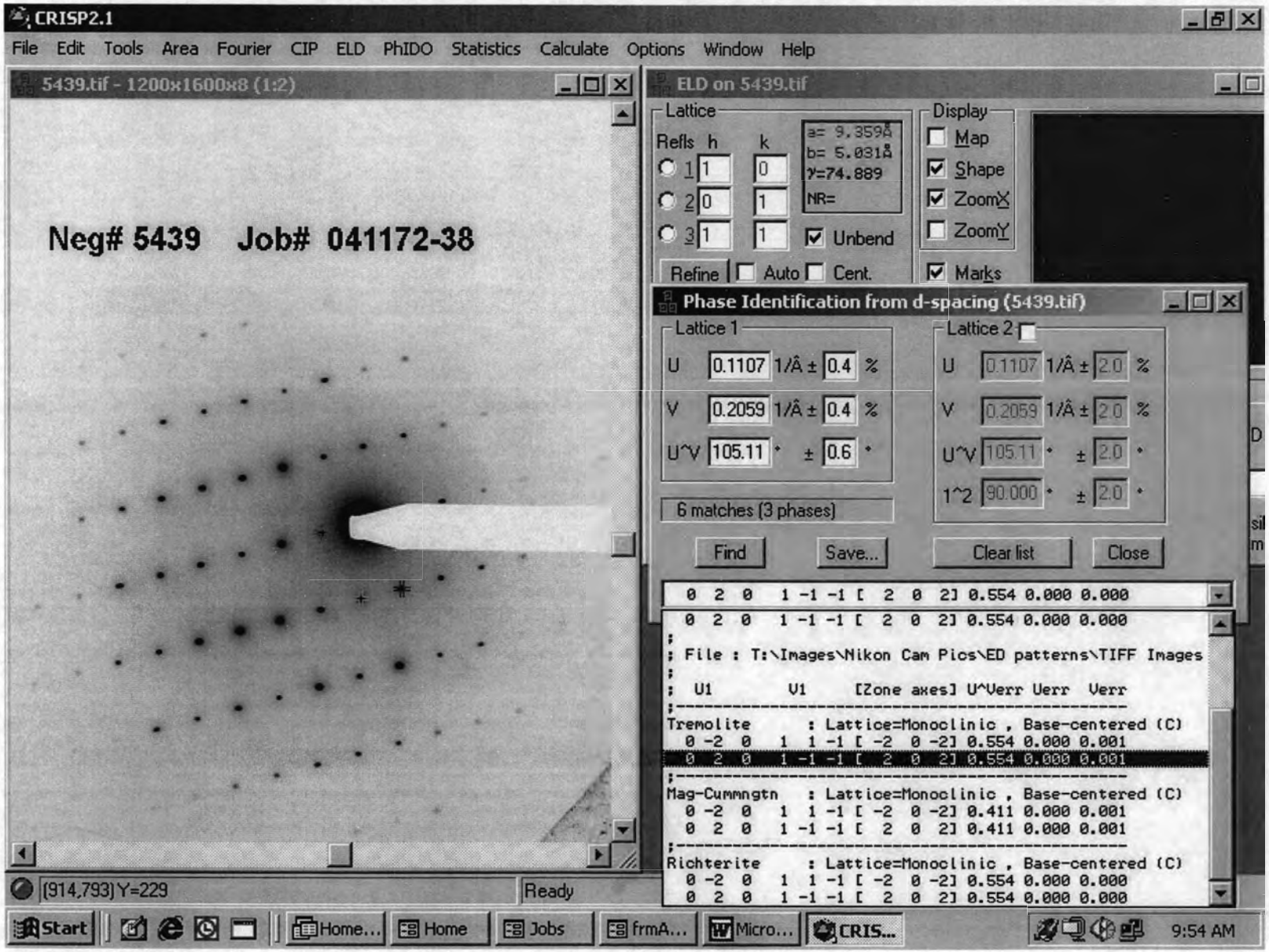
Prefix none
Name actinolite
Modifier none
Group Calcic Amphibole

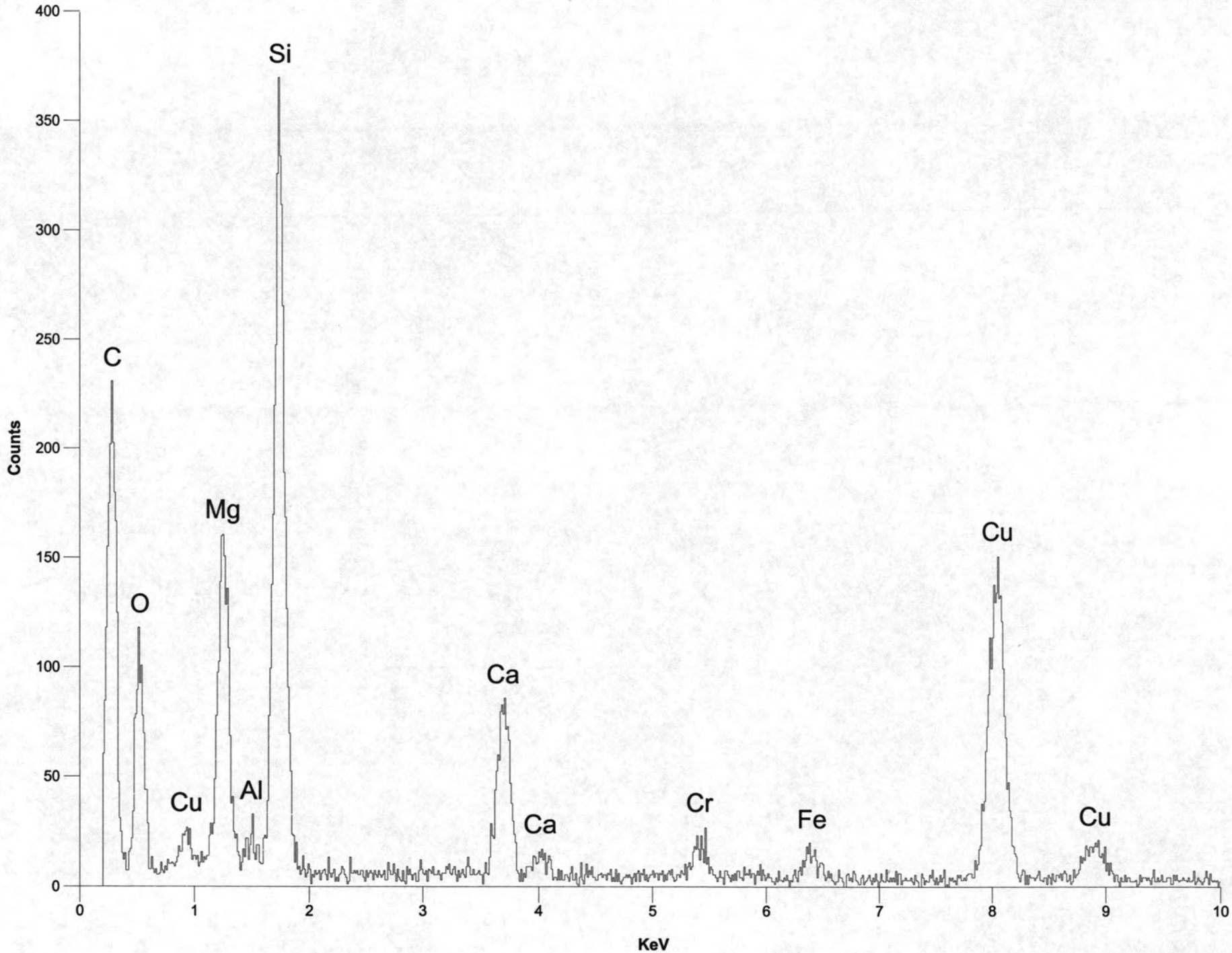
Sample # **041172-37-15303**

Values		Satisfied Conditions
(Ca,Na)@B	1.97	(Ca,Na)@B >= 1 and Na@B < 0.5
Na@B	0.00	Ca@B >= 1.5 and (Na,K)@A < 0.5
Ca@B	1.97	(Mg/(Mg+Fe2))>= 0.5
(Na,K)@A	0.07	Si > 7.5
Mg/(Mg+Fe2)	0.54	(Mg/(Mg+Fe2))< 0.9
Si	7.60	

Mineral Analysis Program (Version 5.0)

TREMOLITE
[1 0 1]





041172-38 SP 718 Title: 041172-38 SP 718

	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	61.42	Si+4	8.0000	8.0000							
Al2O3	1.22	Al+3	0.2088	0.0000	0.2088						
TiO2	0	Ti+4	0.0000	0.0000	0.0000						
Cr2O3	0	Cr+3	0.0000			0.0000	0.0000				
Fe(total)O	3.78	Fe+3	0.0149			0.0149	0.0000				
MgO	21.06	Mg+2	4.2239			4.2239	0.0000				
MnO	0	Fe+2	0.4413			0.4413	0.0000				
CaO	12.03	Mn+2	0.0000			0.0000	0.0000				
Na2O	0	Ca+2	1.7474					1.7474	0.0000		
K2O	0.48	Na+	0.0000					0.0000	0.0000	0.0000	0.0000
		K+	0.1003							0.1003	0.0000
Total	99.99		Excess	T site	0.2088	C site	0.0000	B site	0	A site	0
			Total	8		4.8889		1.7474		0.1003	0.0000
			%Fill	100		97.7777		87.372			

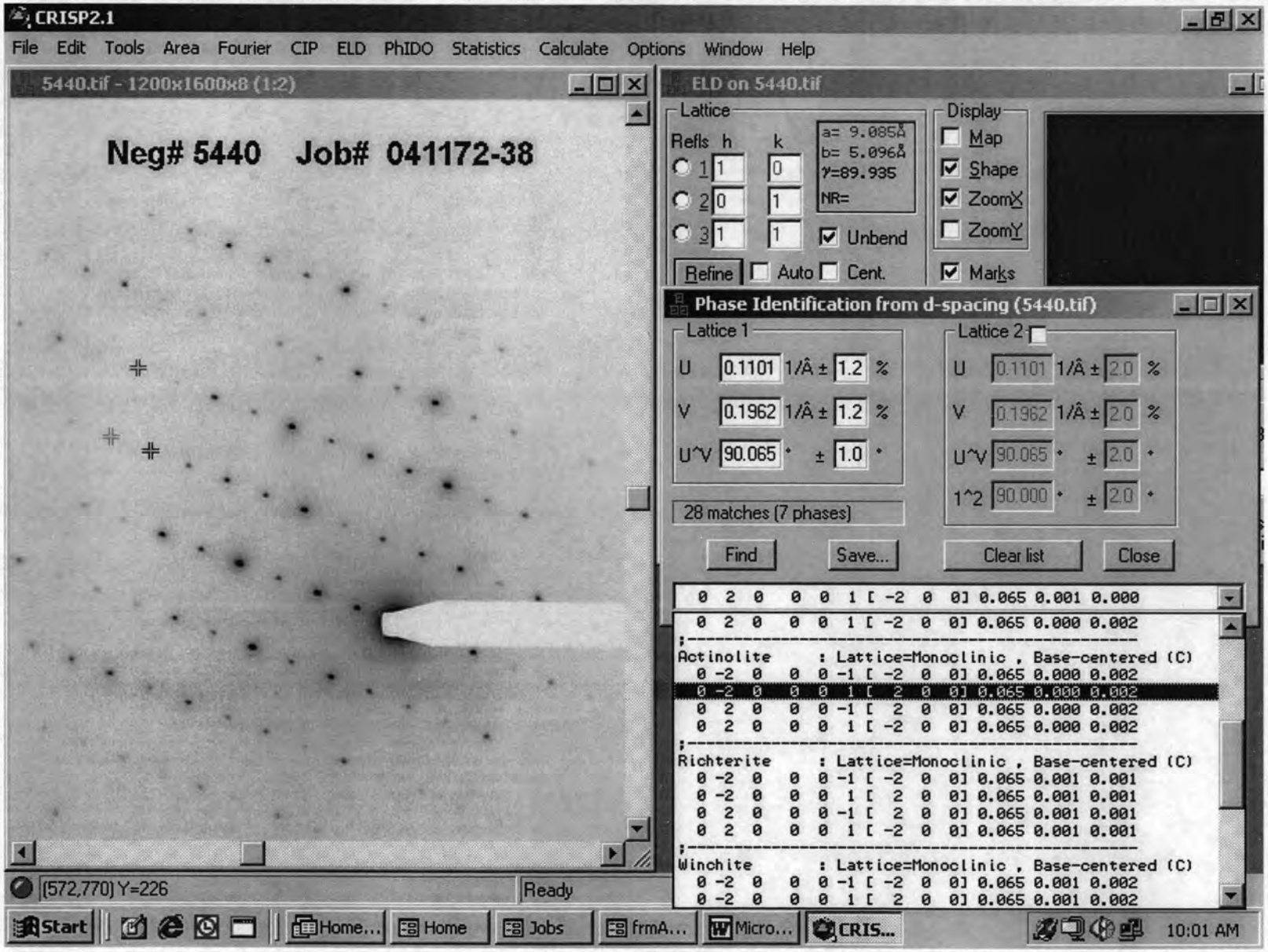
Prefix none
Name tremolite
Modifier none
Group Calcic Amphibole

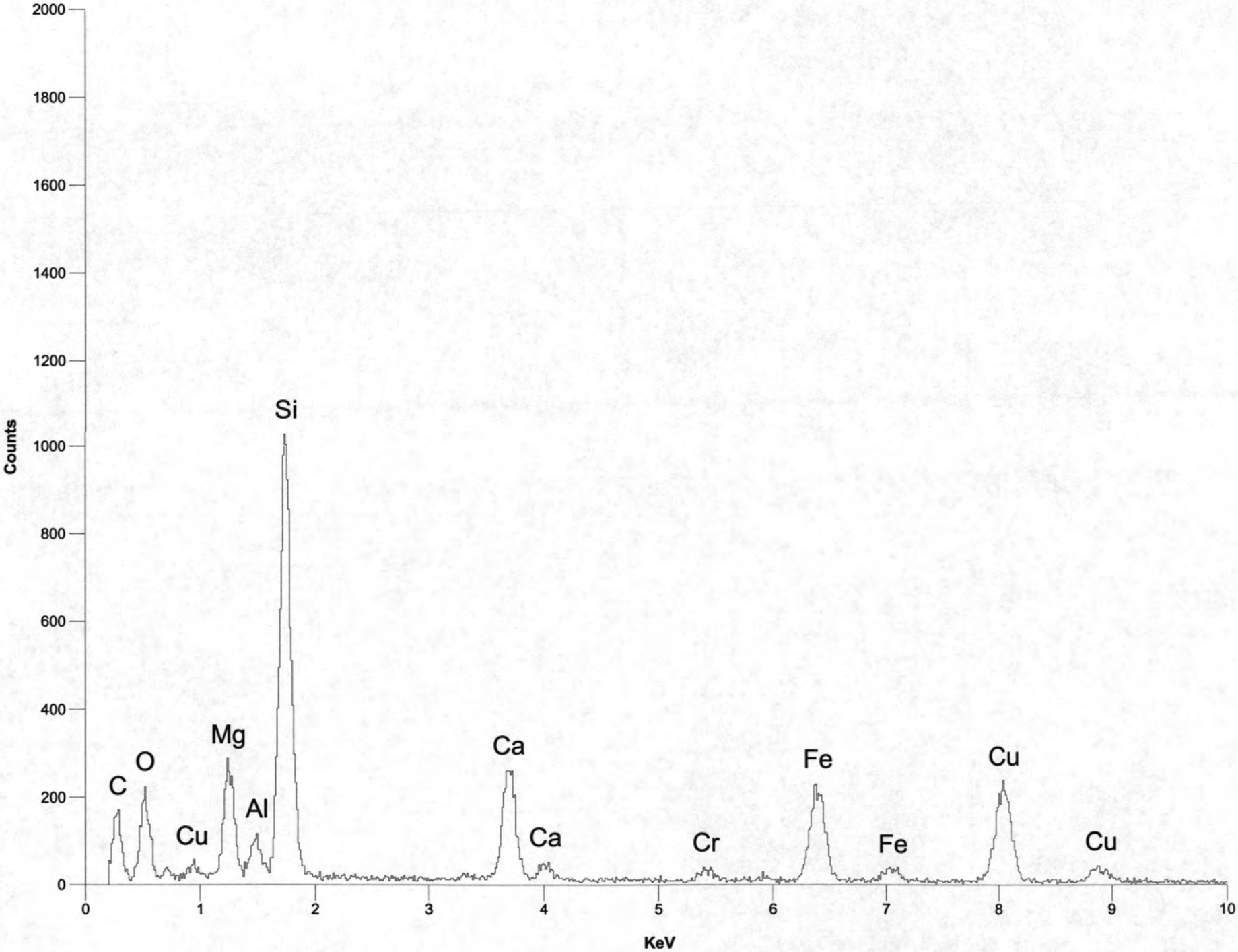
Sample # 041172-38-718

Values		Satisfied Conditions
(Ca,Na)@B	1.75	(Ca,Na)@B >= 1 and Na@B < 0.5
Na@B	0.00	Ca@B >= 1.5 and (Na,K)@A < 0.5
Ca@B	1.75	(Mg/(Mg+Fe2))>= 0.5
(Na,K)@A	0.10	Si > 7.5
Mg/(Mg+Fe2)	0.91	(Mg/(Mg+Fe2))>= 0.9
Si	8.00	

Mineral Analysis Program (Version 5.0)

ACTINOLITE
[1 0 0]





Title: EXEC(7-C) DATA LABEL 041172-38 719

	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	56.03	Si+4	7.9795	7.9795							
Al2O3	1.74	Al+3	0.2920	0.0205	**0.2715**						
TiO2	0	Ti+4	0.0000	0.0000	**0.0000**						
Cr2O3	0	Cr+3	0.0000			0.0000	0.0000				
Fe(total)O	18.28	Fe+3	0.1763			0.1763	0.0000				
MgO	12.2	Mg+2	2.5902			2.5902	**0.0000**				
MnO	0	Fe+2	1.9810			1.9620	**0.0190**				
CaO	11.34	Mn+2	0.0000			0.0000	**0.0000**				
Na2O	0	Ca+2	1.7302					1.7302	0.0000		
K2O	0.41	Na+	0.0000					0.0000	**0.0000**	0.0000	0.0000
		K+	0.0745							0.0745	0.0000
Total	**100**		**Excess**	T site	**0.2715**	C site	**0.0190**	B site	**0**	A site	**0**
			Total	**8**		**5.0000**		**1.7302**		**0.0745**	**0.0000**
			%Fill	**100**		**100**		**86.5083**			

Prefix none
Name actinolite
Modifier none
Group Calcic Amphibole

Sample # **041172-38-719**

Values		Satisfied Conditions
(Ca,Na)@B	1.73	(Ca,Na)@B >= 1 and Na@B < 0.5
Na@B	0.00	Ca@B >= 1.5 and (Na,K)@A < 0.5
Ca@B	1.73	(Mg/(Mg+Fe2))>= 0.5
(Na,K)@A	0.07	Si > 7.5
Mg/(Mg+Fe2)	0.57	(Mg/(Mg+Fe2))< 0.9
Si	7.98	

Mineral Analysis Program (Version 5.0)

SQMTF: QUANTIFY
Standardless Analysis

Refit _NAK' _NAK"
Refit _SIK" _MGK" _ALK' _ALK" _CAK" _NAK
Chi-sqd = 1.82

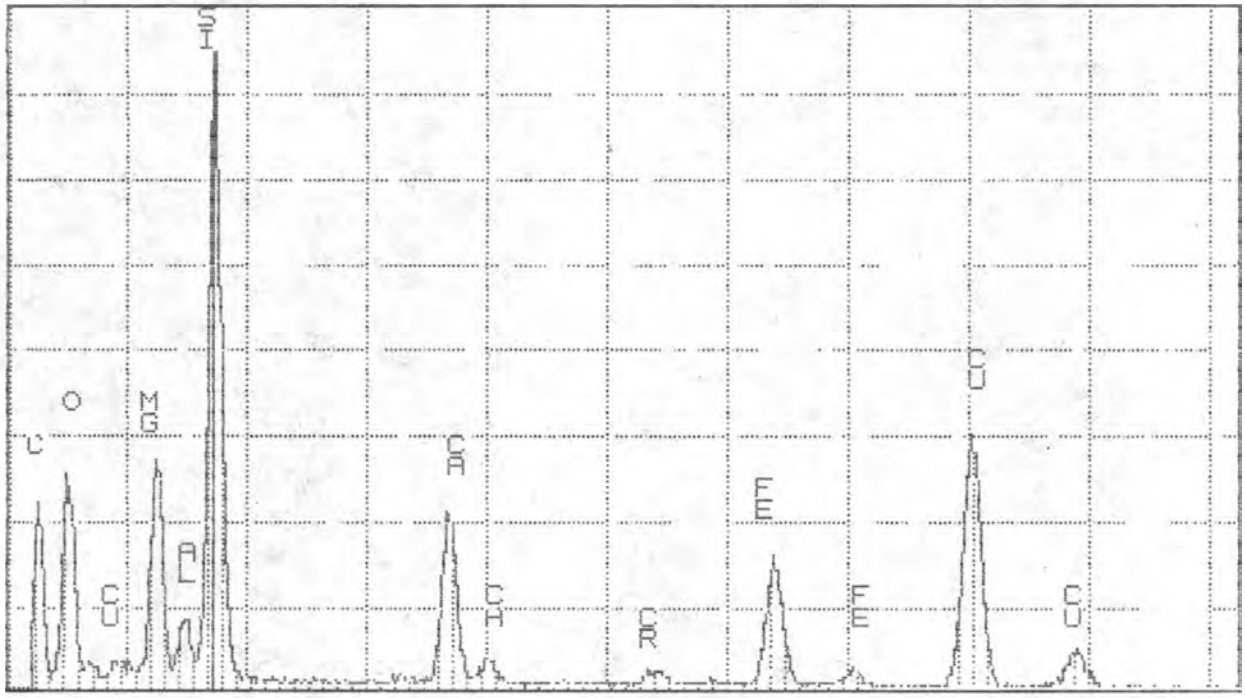
Element	Net Counts		
Si-K	12517	+/-	117
Mg-K	3944	+/-	68
Al-K	1018	+/-	63
K -K	160	+/-	73
Ca-K	4112	+/-	80
Fe-K	3542	+/-	119
Na-K	0	+/-	0

REFLS EDS:SIK EDS:MGK EDS:ALK EDS:K K EDS:CAK EDS:FEK
EDS:NAK

041172-39 720

EL-LINE	PEAK	K-FACTOR	CEL/CREF	ATOM%	EL WT%	WT%	FORMULA
SI-K	12517	1.000	1.000	20.66	26.30	56.35	SIO2
MG-K	3944	1.000	0.315	7.60	8.29	13.81	MGO
AL-K	1018	0.750	0.061	1.31	1.61	3.03	AL2O3
K-K	160	1.060	0.014	0.20	0.36	0.43	K2O
CA-K	4112	0.949	0.312	4.51	8.21	11.49	CAO
FE-K	3542	1.399	0.396	4.09	10.42	14.88	FE2O3
NA-K	0	0.549	0.000	0.00	0.00	0.00	NA2O3
O			1.705	61.63	44.83		

TN-5500 University of Washington / JEOL THU 04-NOV-04 20:24
Cursor: 1.730keV = 1016



0.000 VFS = 1024 10.240

71 041172-39 720

	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	56.35	Si+4	7.8997	7.8997							
Al2O3	3.03	Al+3	0.5006	0.1003	**0.4003**						
TiO2	0	Ti+4	0.0000	0.0000	**0.0000**						
Cr2O3	0	Cr+3	0.0000			0.0000	0.0000				
Fe(total)O	14.88	Fe+3	0.1413			0.1413	0.0000				
MgO	13.81	Mg+2	2.8863			2.8863	**0.0000**				
MnO	0	Fe+2	1.5873			1.5721	**0.0152**				
CaO	11.49	Mn+2	0.0000			0.0000	**0.0000**				
Na2O	0	Ca+2	1.7257					1.7257	0.0000		
K2O	0.43	Na+	0.0000					0.0000	**0.0000**	0.0000	0.0000
		K+	0.0769							0.0769	0.0000
Total	**99.99**		**Excess**	T site	**0.4003**	C site	**0.0152**	B site	**0**	A site	**0**
			Total	**8**		**5.0000**		**1.7257**		**0.0769**	**0.0000**
			%Fill	**100**		**100**		**86.2841**			

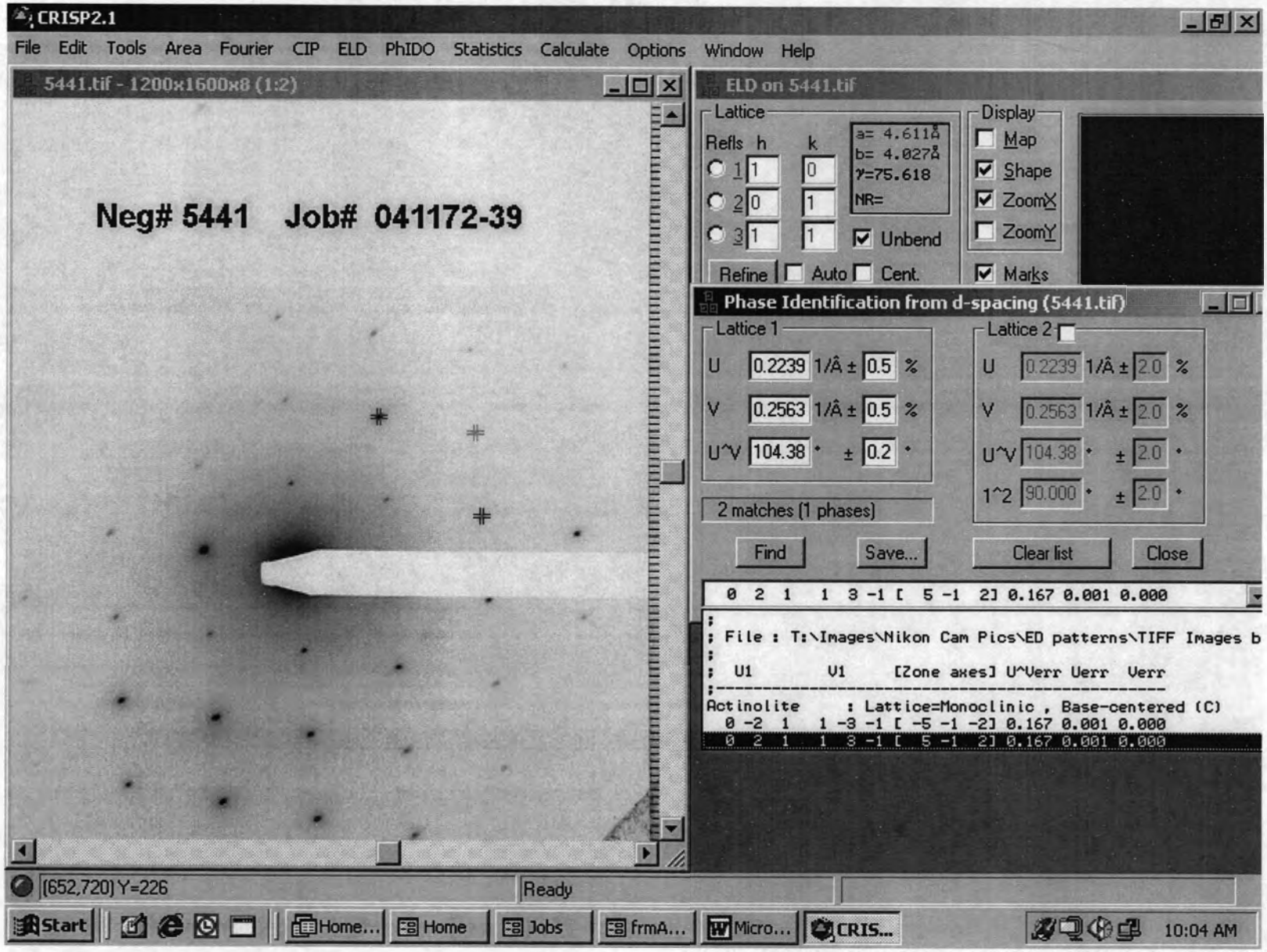
Prefix none
Name actinolite
Modifier none
Group Calcic Amphibole

Sample # **041172-39-720**

Values		Satisfied Conditions
(Ca,Na)@B	1.73	(Ca,Na)@B >= 1 and Na@B < 0.5
Na@B	0.00	Ca@B >= 1.5 and (Na,K)@A < 0.5
Ca@B	1.73	(Mg/(Mg+Fe2))>= 0.5
(Na,K)@A	0.08	Si > 7.5
Mg/(Mg+Fe2)	0.65	(Mg/(Mg+Fe2))< 0.9
Si	7.90	

Mineral Analysis Program (Version 5.0)

ACTINOLITE
[5-12]



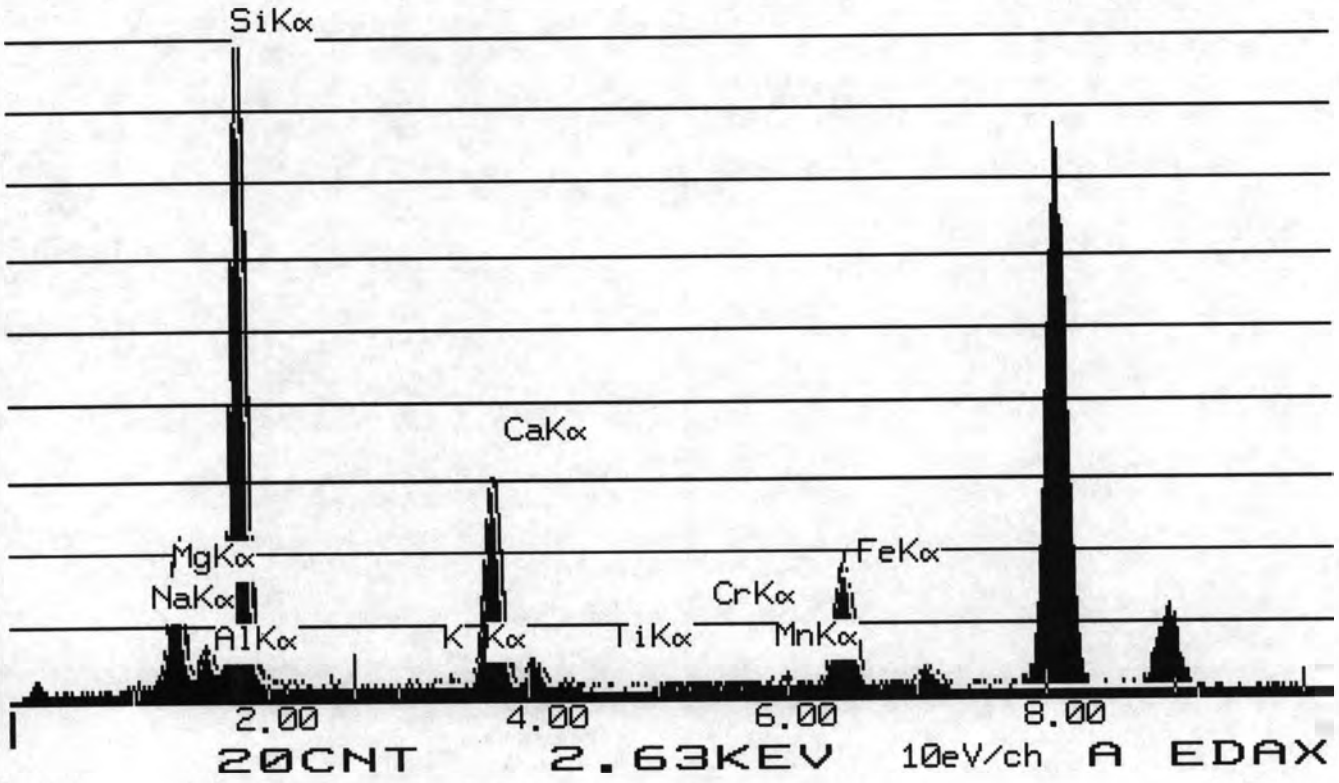
INTE-% :
LABEL = 041172-39 SP 15334
09-NOV-72 18:02:36
17.703 LIVE SECONDS

ELEM	CPS	WT % ELEM	WT % OXIDE
MGK	110.995	9.354	15.510
ALK	28.864	1.461	2.761
SIK	555.258	26.319	56.305
K K	1.751	0.138	0.166
CAK	204.875	9.259	12.955
MNK	1.638	0.107	0.138
FEK	141.724	8.508	12.165

TOTAL			100.000

USED PEIF: USER

08-NOV-04 18:02:57 SUPER QUANT
RATE= 9CPS TIME= 18LSEC
FS= 1076/ 1076 PRST= 200LSEC
A =041172-39 SP 15334



	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	56.305	Si+4	7.8522	7.8522							
Al2O3	2.761	Al+3	0.4538	0.1478	**0.3060**						
TiO2	0	Ti+4	0.0000	0.0000	**0.0000**						
Cr2O3	0	Cr+3	0.0000			0.0000	0.0000				
Fe(total)O	12.165	Fe+3	0.0128			0.0128	0.0000				
MgO	15.51	Mg+2	3.2247			3.2247	**0.0000**				
MnO	0.138	Fe+2	1.4044			1.4044	**0.0000**				
CaO	12.955	Mn+2	0.0163			0.0163	**0.0000**				
Na2O	0	Ca+2	1.9356					1.9356	0.0000		
K2O	0.166	Na+	0.0000					0.0000	**0.0000**	0.0000	0.0000
		K+	0.0295							0.0295	0.0000
Total	**100**		**Excess**	T site	**0.3060**	C site	**0.0000**	B site	**0**	A site	**0**
			Total	**8**		**4.9642**		**1.9356**		**0.0295**	**0.0000**
			%Fill	**100**		**99.2833**		**96.7779**			

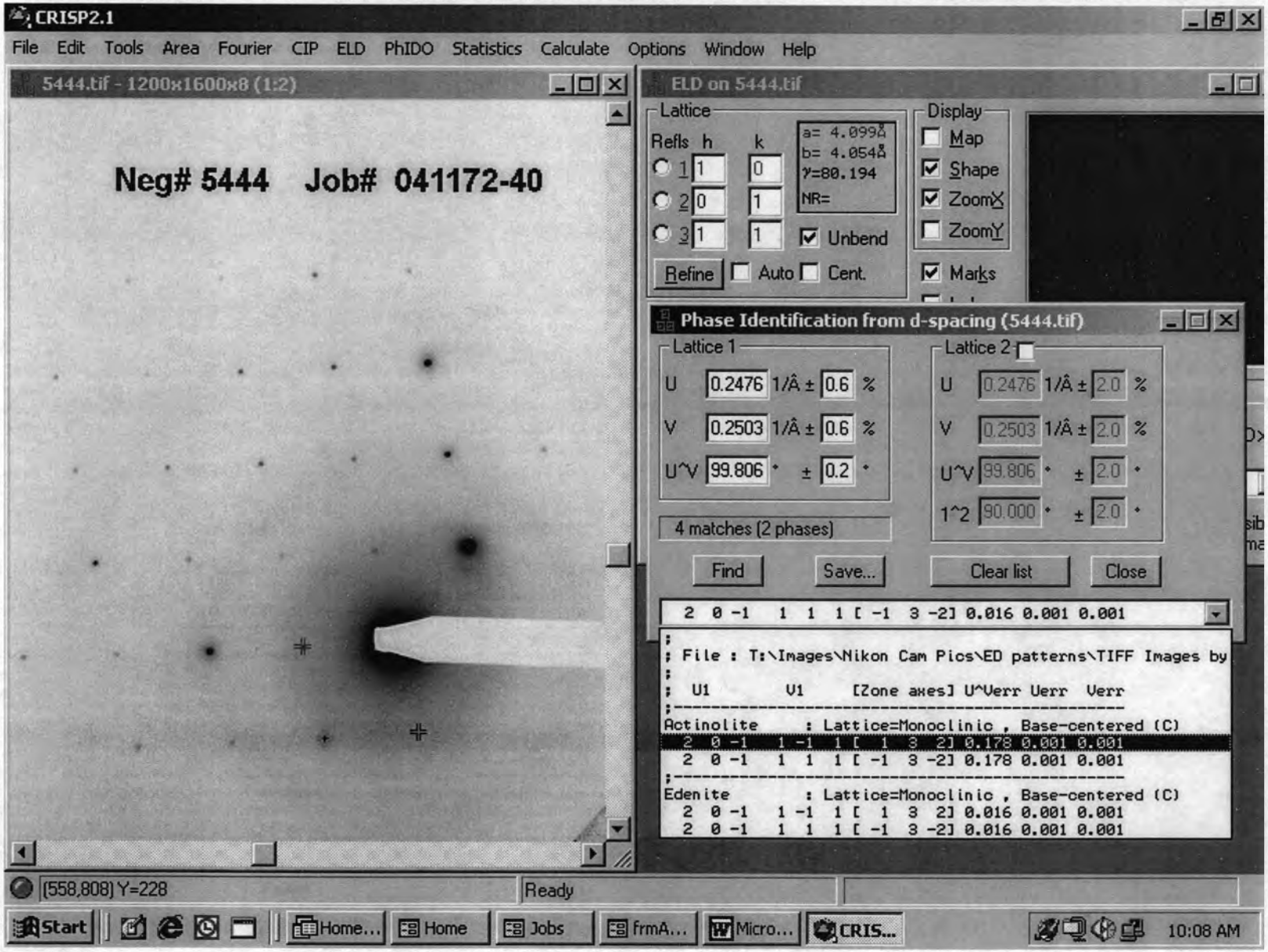
Prefix none
Name actinolite
Modifier none
Group Calcic Amphibole

Sample # **041172-39-15334**

Values		**Satisfied Conditions**
(Ca,Na)@B	**1.94**	**(Ca,Na)@B >= 1 and Na@B < 0.5**
Na@B	**0.00**	**Ca@B >= 1.5 and (Na,K)@A < 0.5**
Ca@B	**1.94**	**(Mg/(Mg+Fe2))>= 0.5**
(Na,K)@A	**0.03**	**Si > 7.5**
Mg/(Mg+Fe2)	**0.70**	**(Mg/(Mg+Fe2))< 0.9**
Si	**7.85**	

Mineral Analysis Program (Version 5.0)

ACTINOLITE
[1 3 2]

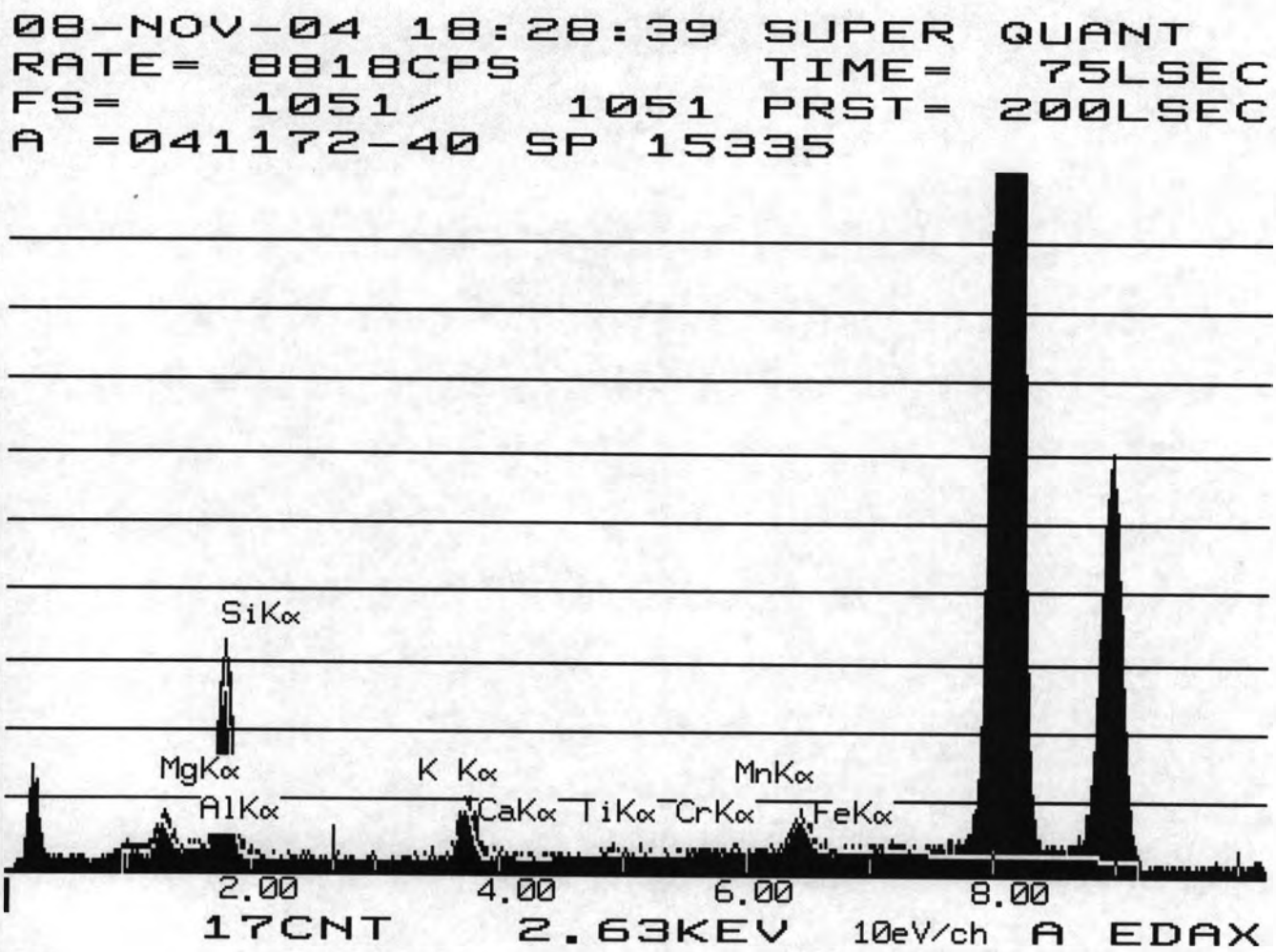


INTE-% :
LABEL = 041172-40 SP 15335
09-NOV-72 18:28:17
74.631 LIVE SECONDS

ELEM	CPS	WT % ELEM	WT % OXIDE
MGK	5.520	7.200	11.938
SIK	40.171	29.466	63.039
K K	0.348	0.425	0.512
CAK	13.118	9.174	12.836
FEK	8.790	8.166	11.676

TOTAL			100.000

USED PEIF: USER



	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	63.039	Si+4	8.0000	8.0000							
Al2O3	0	Al+3	0.0000	0.0000	**0.0000**						
TiO2	0	Ti+4	0.0000	0.0000	**0.0000**						
Cr2O3	0	Cr+3	0.0000			0.0000	0.0000				
Fe(total)O	11.676	Fe+3	0.0604			0.0604	0.0000				
MgO	11.938	Mg+2	2.6319			2.6319	**0.0000**				
MnO	0	Fe+2	1.4328			1.4328	**0.0000**				
CaO	12.836	Mn+2	0.0000			0.0000	**0.0000**				
Na2O	0	Ca+2	2.0233					2.0000	0.0233		
K2O	0.512	Na+	0.0000					0.0000	**0.0000**	0.0000	0.0000
		K+	0.1716							0.1716	0.0000
Total	**100.001**		**Excess**	T site	**0.0000**	C site	**0.0000**	B site	**0.0232526**	A site	**0**
			Total	**8**		**4.1252**		**2.0000**		**0.1716**	**0.0000**
			%Fill	**100**		**82.5034**		**100**			

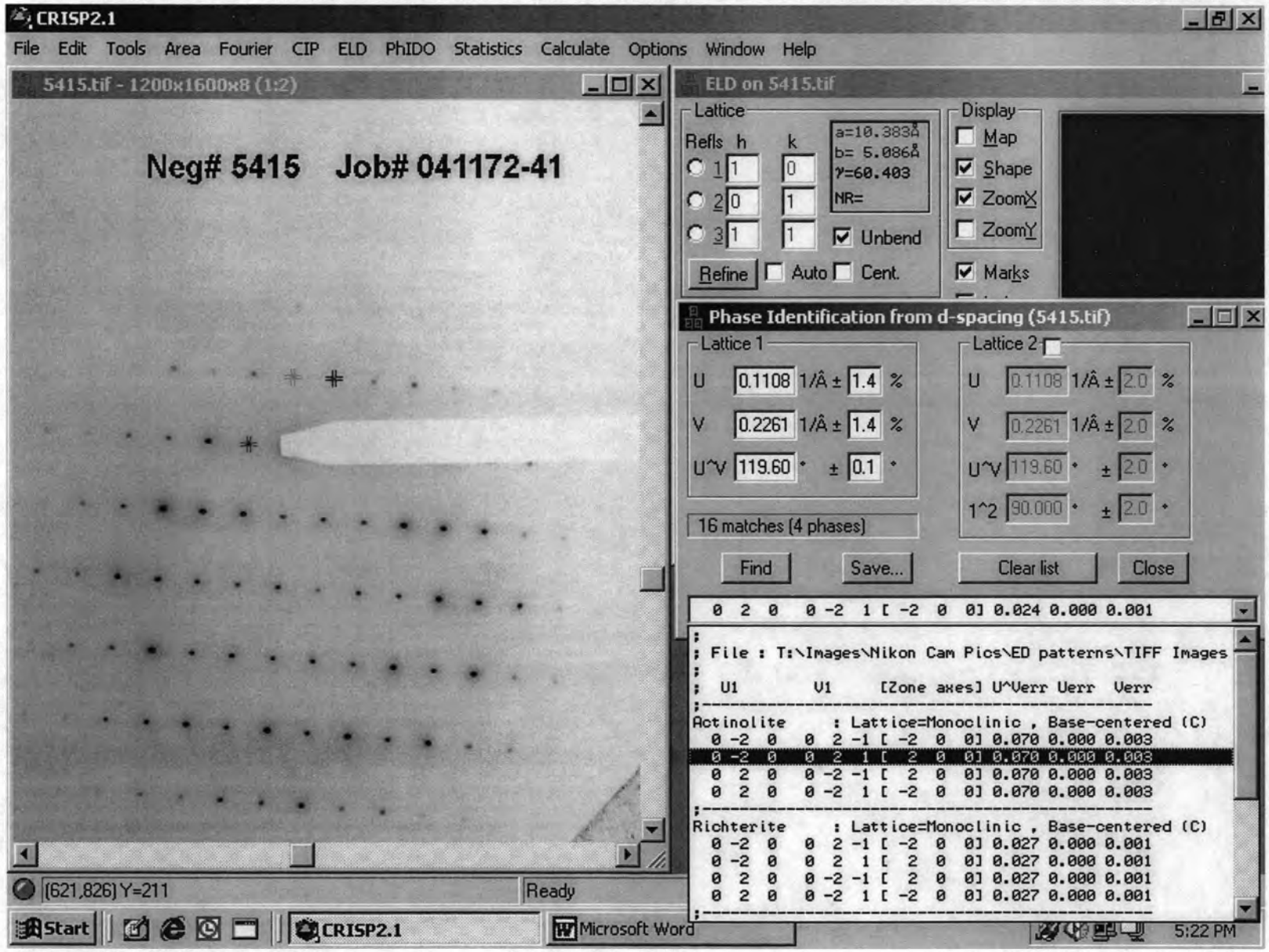
Prefix none
Name actinolite
Modifier none
Group Calcic Amphibole

Sample # **041172-40-15335**

Values		Satisfied Conditions
(Ca,Na)@B	2.00	(Ca,Na)@B >= 1 and Na@B < 0.5
Na@B	0.00	Ca@B >= 1.5 and (Na,K)@A < 0.5
Ca@B	2.00	(Mg/(Mg+Fe2))>= 0.5
(Na,K)@A	0.17	Si > 7.5
Mg/(Mg+Fe2)	0.65	(Mg/(Mg+Fe2))< 0.9
Si	8.00	

Mineral Analysis Program (Version 5.0)

ACTINOLITE
[100]



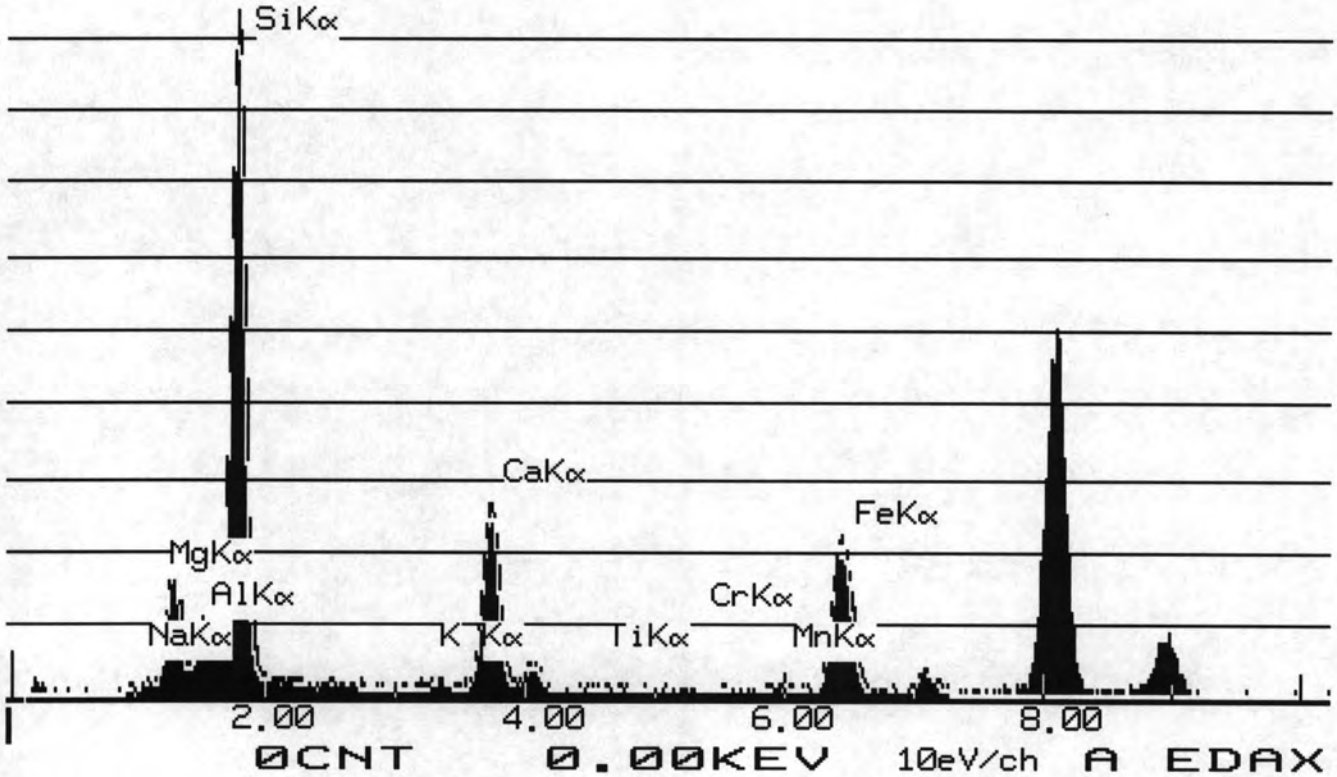
INTE-% :
LABEL = 041172-41 SP 15506
05-DEC-72 18:47:47
40.265 LIVE SECONDS

ELEM	CPS	WT % ELEM	WT % OXIDE
NAK	1.614	0.622	0.838
MGK	44.703	8.130	13.481
ALK	23.643	2.583	4.880
SIK	244.229	24.982	53.445
K K	4.371	0.743	0.895
CAK	82.304	8.026	11.231
TIK	1.018	0.140	0.234
CRK	0.422	0.057	0.084
MNK	2.806	0.395	0.510
FEK	77.759	10.074	14.403

TOTAL			100.000

USED PEIF: USER

04-DEC-04 18:48:26 SUPER QUANT
RATE= 11CPS TIME= 40LSEC
FS= 1039/ 1039 PRST= 200LSEC
A =041172-41 SP 15506



	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	53.445	Si+4	7.5702	7.5702							
Al2O3	4.88	Al+3	0.8146	0.4298	**0.3848**						
TiO2	0.234	Ti+4	0.0249	0.0000	**0.0249**						
Cr2O3	0.084	Cr+3	0.0094			0.0094	0.0000				
Fe(total)O	14.403	Fe+3	0.1535			0.1535	0.0000				
MgO	13.481	Mg+2	2.8467			2.8467	**0.0000**				
MnO	0.51	Fe+2	1.5353			1.5353	**0.0000**				
CaO	11.231	Mn+2	0.0612			0.0453	**0.0159**				
Na2O	0.838	Ca+2	1.7043					1.7043	0.0000		
K2O	0.895	Na+	0.2301					0.2301	**0.0000**	0.0000	0.0000
		K+	0.1617							0.1617	0.0000
Total	**100.001**		**Excess**	T site	**0.4097**	C site	**0.0159**	B site	**0**	A site	**0**
			Total	**8**		**5.0000**		**1.9344**		**0.1617**	**0.0000**
			%Fill	**100**		**100**		**96.72**			

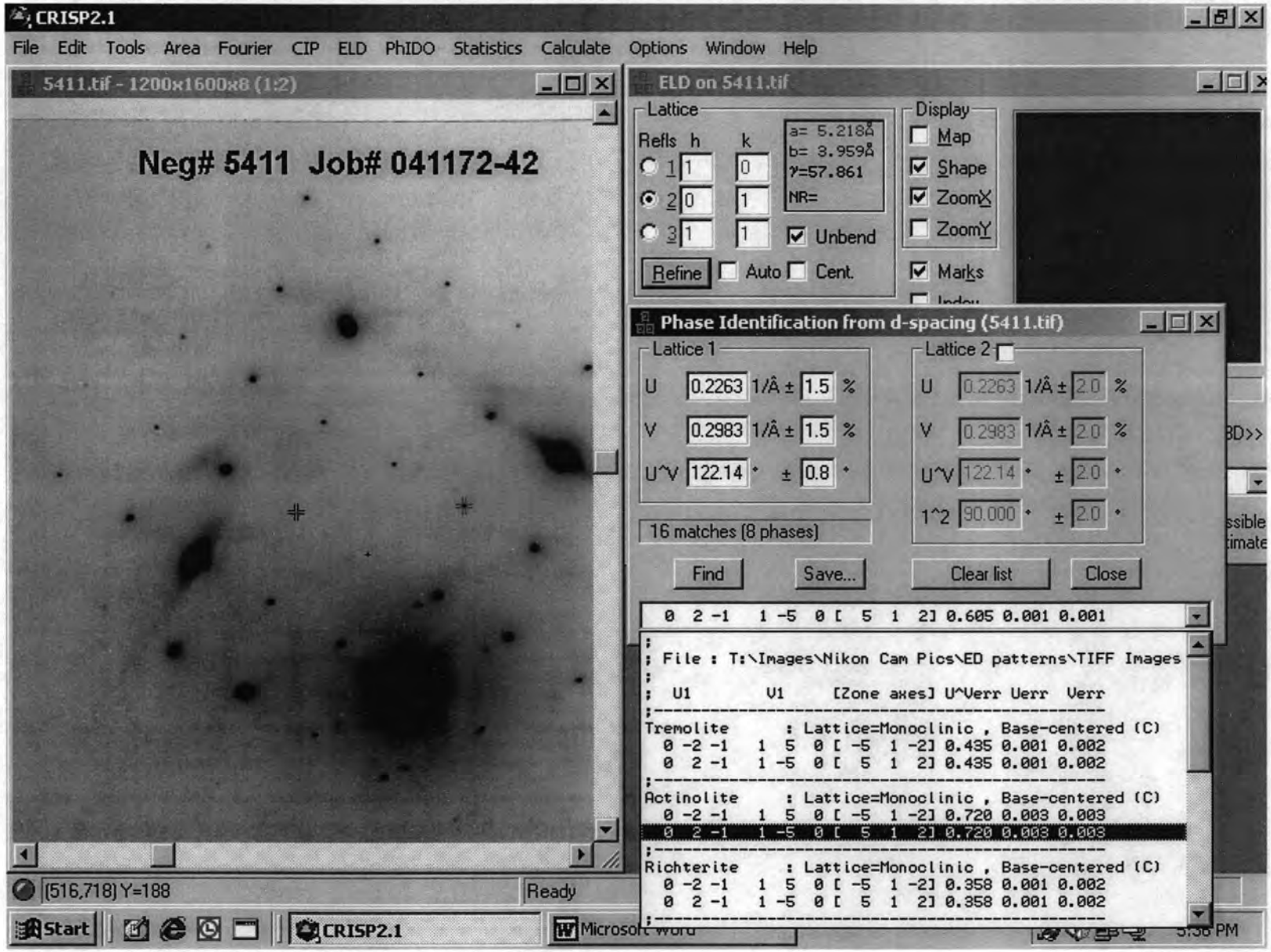
Prefix none
Name actinolite
Modifier none
Group Calcic Amphibole

Sample # **041172-41-15506**

Values		Satisfied Conditions
(Ca,Na)@B	1.93	(Ca,Na)@B >= 1 and Na@B < 0.5
Na@B	0.23	Ca@B >= 1.5 and (Na,K)@A < 0.5
Ca@B	1.70	(Mg/(Mg+Fe2))>= 0.5
(Na,K)@A	0.16	Si > 7.5
Mg/(Mg+Fe2)	0.65	(Mg/(Mg+Fe2))< 0.9
Si	7.57	

Mineral Analysis Program (Version 5.0)

ACTINOLITE
[5 1 2]



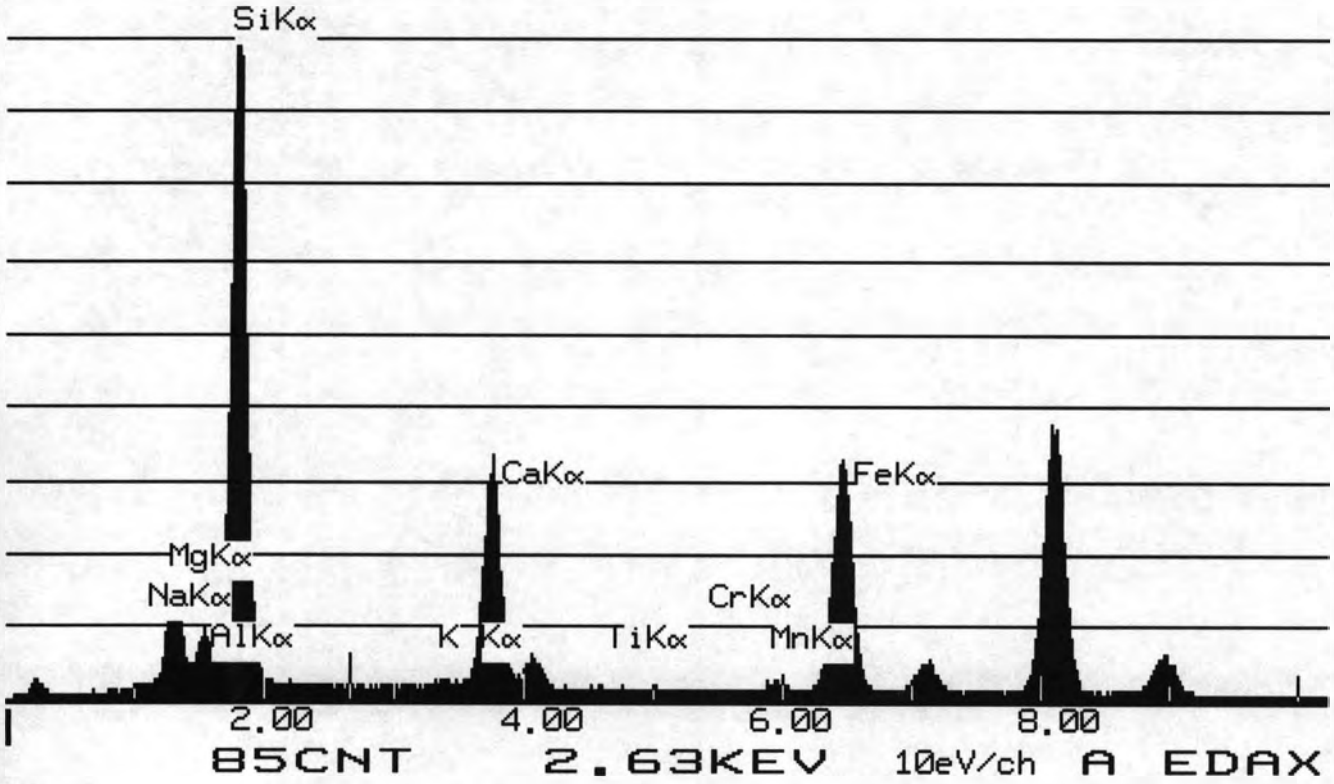
INTE-% :
LABEL = 041232-02 3/1 15305
06-NOV-72 08:08:27
78.135 LIVE SECONDS

ELEM	CPS	WT % ELEM	WT % OXIDE
NAK	1.600	0.224	0.301
MGK	102.886	6.786	11.253
ALK	50.387	1.996	3.772
SIK	662.555	24.579	52.584
CAK	243.462	8.611	12.049
FEK	298.328	14.017	20.041

TOTAL			100.000

USED PEIF: USER

05-NOV-04 08:09:55 SUPER QUANT
RATE= 3569CPS TIME= 78LSEC
FS= 5715/ 5715 PRST= 200LSEC
A =041172-42 15306



	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	52.584	Si+4	7.5823	7.5823							
Al2O3	3.772	Al+3	0.6410	0.4177	**0.2232**						
TiO2	0	Ti+4	0.0000	0.0000	**0.0000**						
Cr2O3	0	Cr+3	0.0000			0.0000	0.0000				
Fe(total)O	20.041	Fe+3	0.3479			0.3479	0.0000				
MgO	11.253	Mg+2	2.4190			2.4190	**0.0000**				
MnO	0	Fe+2	2.0298			2.0098	**0.0199**				
CaO	12.049	Mn+2	0.0000			0.0000	**0.0000**				
Na2O	0.301	Ca+2	1.8613					1.8613	0.0000		
K2O	0	Na+	0.0841					0.0841	**0.0000**	0.0000	0.0000
		K+	0.0000							0.0000	0.0000
Total	**100**		**Excess**	T site	**0.2232**	C site	**0.0199**	B site	**0**	A site	**0**
			Total	**8**		**5.0000**		**1.9454**		**0.0000**	**0.0000**
			%Fill	**100**		**100**		**97.2724**			

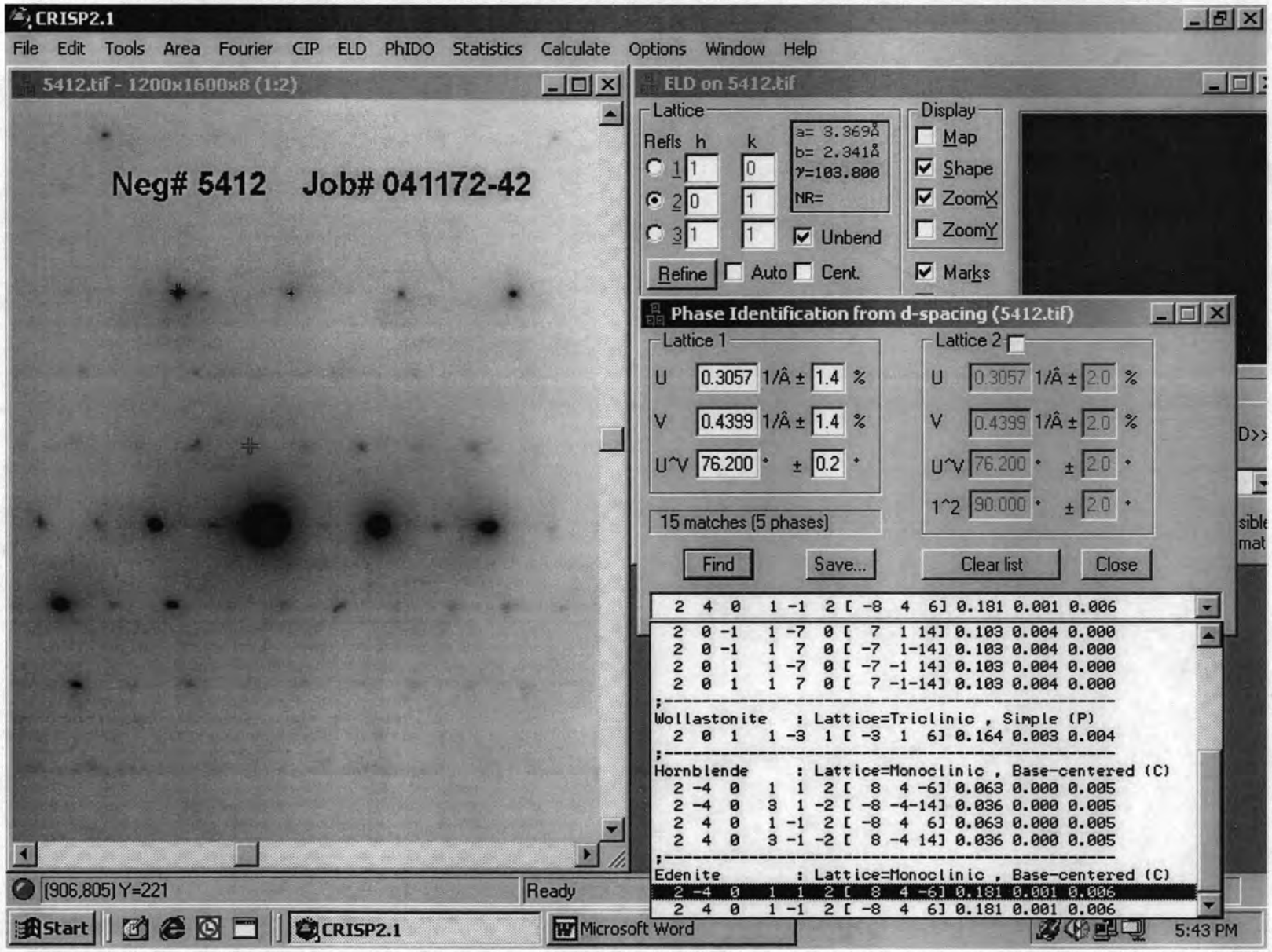
Prefix none
Name actinolite
Modifier none
Group Calcic Amphibole

Sample # **041172-42-15306**

Values		Satisfied Conditions
(Ca,Na)@B	1.95	(Ca,Na)@B >= 1 and Na@B < 0.5
Na@B	0.08	Ca@B >= 1.5 and (Na,K)@A < 0.5
Ca@B	1.86	(Mg/(Mg+Fe2))>= 0.5
(Na,K)@A	0.00	Si > 7.5
Mg/(Mg+Fe2)	0.54	(Mg/(Mg+Fe2))< 0.9
Si	7.58	

Mineral Analysis Program (Version 5.0)

EDENITE
[4 2 -3]


CRISP2.1
File Edit Tools Area Fourier CIP ELD PhIDO Statistics Calculate Options Window Help
5412.tif - 1200x1600x8 (1:2)
Neg# 5412 Job# 041172-42
ELD on 5412.tif
Lattice
Refls h k
1 1 0
2 0 1
3 1 1
a= 3.369Å
b= 2.341Å
γ=103.800
NR=
Unbend
Refine Auto Cent.
Display
Map
Shape
ZoomX
ZoomY
Marks
Phase Identification from d-spacing (5412.tif)
Lattice 1
U 0.3057 1/Å ± 1.4 %
V 0.4399 1/Å ± 1.4 %
U^V 76.200 ° ± 0.2 °
Lattice 2
U 0.3057 1/Å ± 2.0 %
V 0.4399 1/Å ± 2.0 %
U^V 76.200 ° ± 2.0 °
1^2 90.000 ° ± 2.0 °
15 matches (5 phases)
Find Save... Clear list Close
2 4 0 1 -1 2 [-8 4 6] 0.181 0.001 0.006
2 0 -1 1 -7 0 [7 1 14] 0.103 0.004 0.000
2 0 -1 1 7 0 [-7 1-14] 0.103 0.004 0.000
2 0 1 1 -7 0 [-7 -1 14] 0.103 0.004 0.000
2 0 1 1 7 0 [7 -1-14] 0.103 0.004 0.000
;----------
Wollastonite : Lattice=Triclinic , Simple (P)
2 0 1 1 -3 1 [-3 1 6] 0.164 0.003 0.004
;----------
Hornblende : Lattice=Monoclinic , Base-centered (C)
2 -4 0 1 1 2 [8 4 -6] 0.063 0.000 0.005
2 -4 0 3 1 -2 [-8 -4-14] 0.036 0.000 0.005
2 4 0 1 -1 2 [-8 4 6] 0.063 0.000 0.005
2 4 0 3 -1 -2 [8 -4 14] 0.036 0.000 0.005
;----------
Edenite : Lattice=Monoclinic , Base-centered (C)
2 -4 0 1 1 2 [8 4 -6] 0.181 0.001 0.006
2 4 0 1 -1 2 [-8 4 6] 0.181 0.001 0.006
(906,805) Y=221
Ready
Start
CRISP2.1
Microsoft Word
5:43 PM

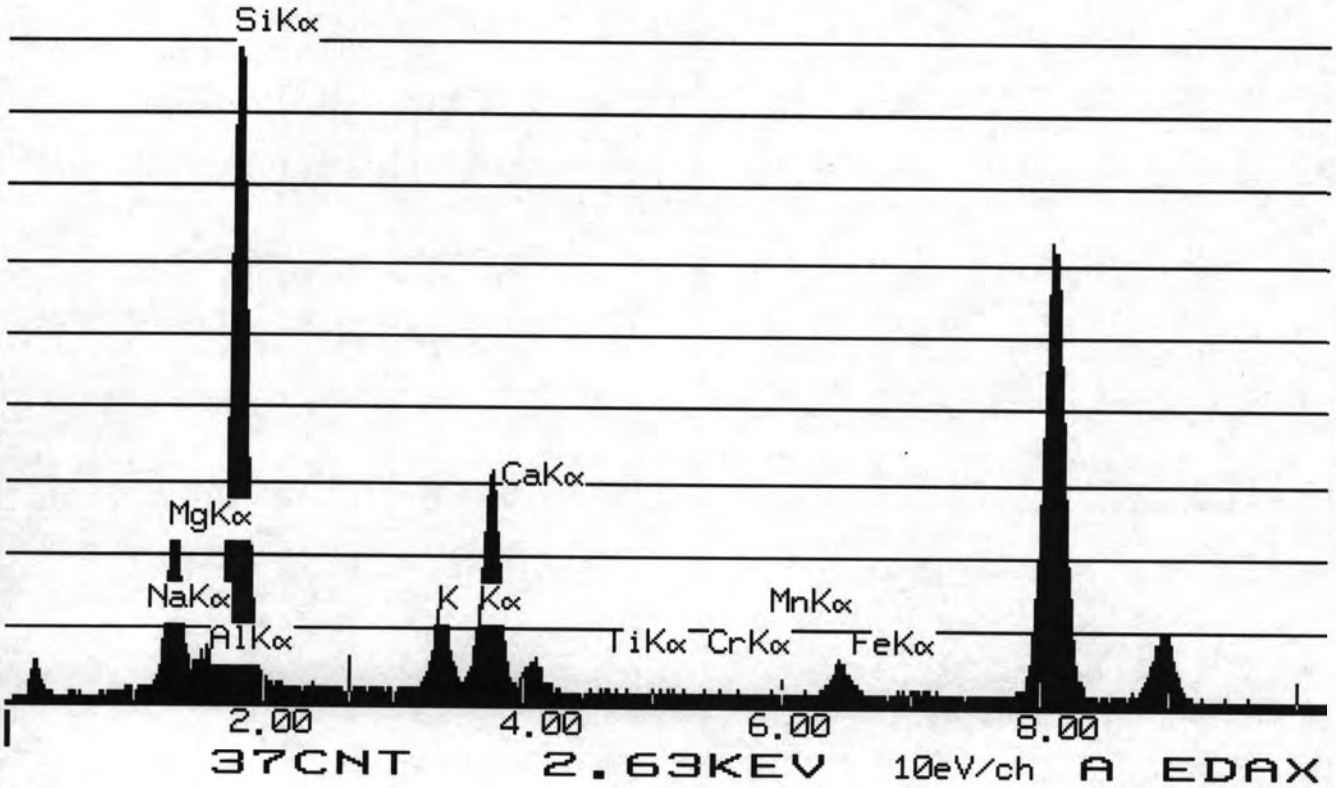
INTE-% :
LABEL = 041172-42 15307
06-NOV-72 09:30:24
200.000 LIVE SECONDS

ELEM	CPS	WT % ELEM	WT % OXIDE
MGK	26.095	11.551	19.154
ALK	5.230	1.391	2.628
SIK	106.150	26.428	56.539
K K	12.800	5.296	6.379
CAK	37.170	8.823	12.345
FEK	6.555	2.067	2.955

TOTAL			100.000

USED PEIF: USER

05-NOV-04 09:34:22 SUPER QUANT
RATE= 805CPS TIME= 200LSEC
FS= 2354/ 2354 PRST= 200LSEC
A =041172-42 15308



	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	56.539	Si+4	7.8312	7.8312							
Al2O3	2.628	Al+3	0.4290	0.1688	**0.2602**						
TiO2	0	Ti+4	0.0000	0.0000	**0.0000**						
Cr2O3	0	Cr+3	0.0000			0.0000	0.0000				
Fe(total)O	2.955	Fe+3	0.0031			0.0031	0.0000				
MgO	19.154	Mg+2	3.9552			3.9552	**0.0000**				
MnO	0	Fe+2	0.3388			0.3388	**0.0000**				
CaO	12.345	Mn+2	0.0000			0.0000	**0.0000**				
Na2O	0	Ca+2	1.8319					1.8319	0.0000		
K2O	6.379	Na+	0.0000					0.0000	**0.0000**	0.0000	0.0000
		K+	1.1271							1.0000	0.1271
Total	**100**		**Excess**	T site	**0.2602**	C site	**0.0000**	B site	**0**	A site	**0.127053**
			Total	**8**		**4.5573**		**1.8319**		**1.0000**	**0.1271**
			%Fill	**100**		**91.1464**		**91.5937**			

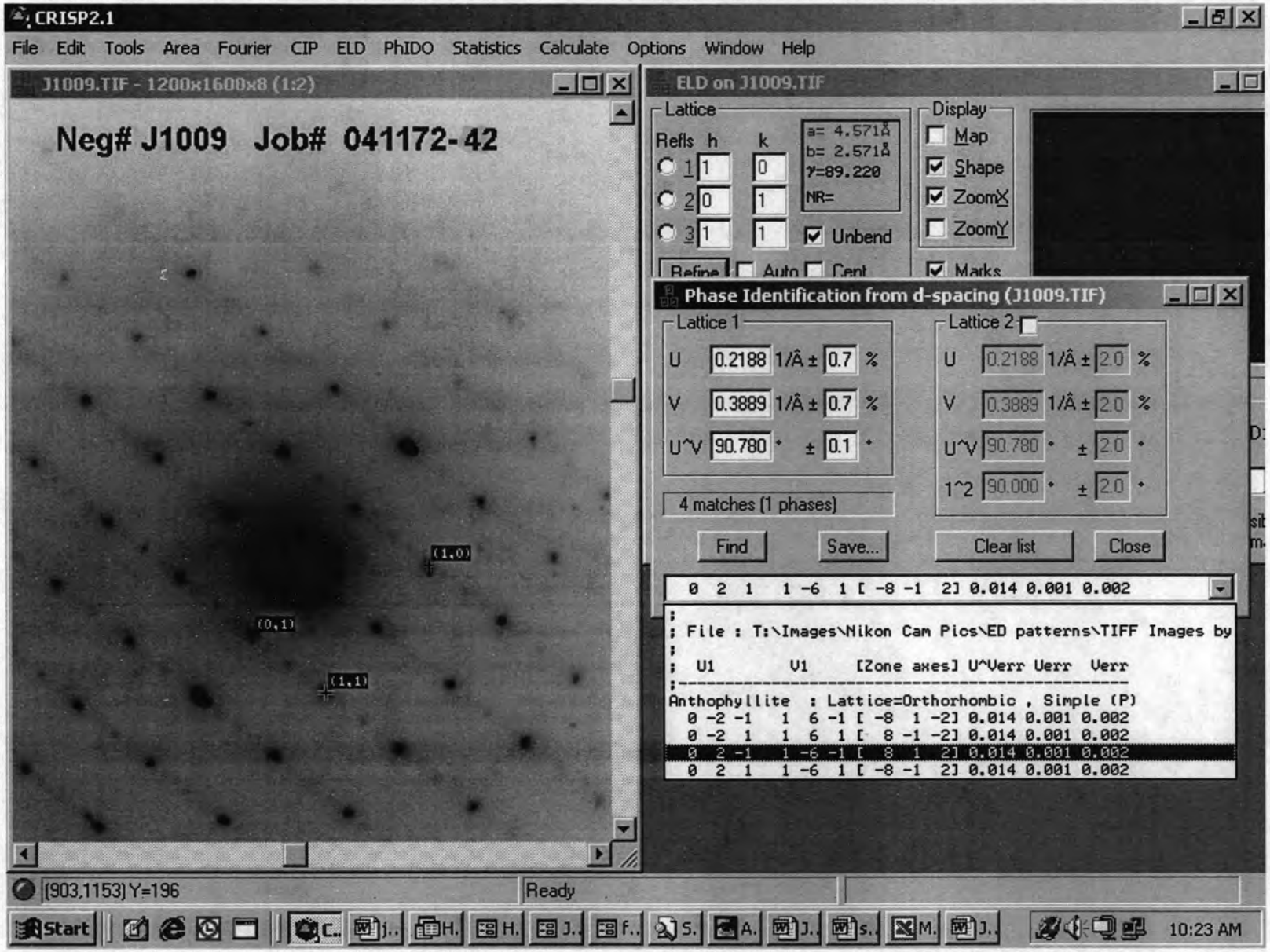
Prefix Potassic
Name edenite
Modifier none
Group Calcic Amphibole

Sample # **041172-42-15308**

Values		Satisfied Conditions
(Ca,Na)@B	1.83	(Ca,Na)@B >= 1 and Na@B < 0.5
Na@B	0.00	Ca@B >= 1.5 and (Na,K)@A >= 0.5
Ca@B	1.83	(Mg/(Mg+Fe2))>= 0.5
(Na,K)@A	1.00	Si > 6.5
Mg/(Mg+Fe2)	0.92	
Si	7.83	

Mineral Analysis Program (Version 5.0)

ANTHOPHYLLITE
[8 1 2]



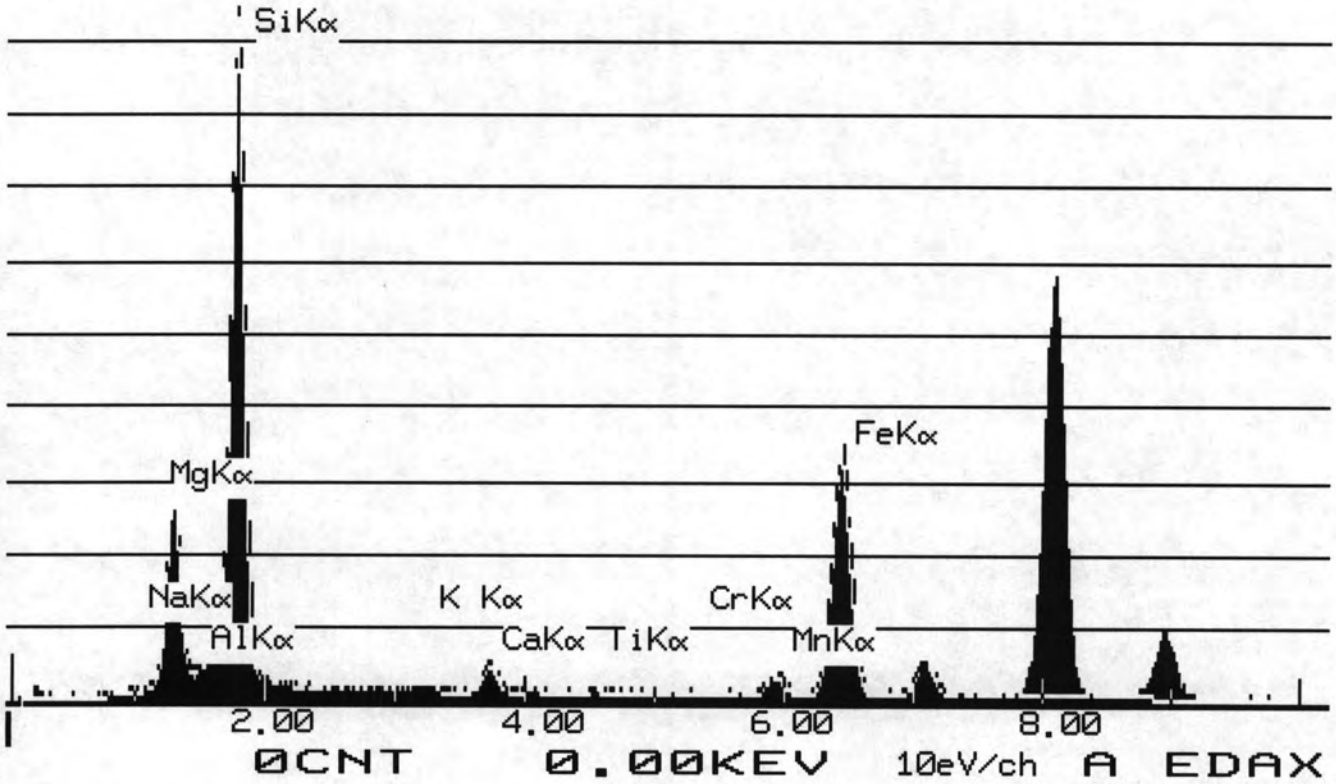
INTE-% :
LABEL = 041172-42 SP 15507
05-DEC-72 19:02:21
60.320 LIVE SECONDS

ELEM	CPS	WT % ELEM	WT % OXIDE
MGK	97.994	12.880	21.356
SIK	335.111	24.773	52.997
CAK	15.998	1.128	1.578
TIK	2.072	0.206	0.344
MNK	13.296	1.352	1.746
FEK	164.190	15.373	21.979

TOTAL			100.000

USED PEIF: USER

04-DEC-04 19:03:08 SUPER QUANT
RATE= 3424CPS TIME= 60LSEC
FS= 2190/ 2190 PRST= 200LSEC
A =041172-42 SP 15507



	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	52.997	Si+4	7.5866	7.5866							
Al2O3	0	Al+3	0.0000	0.0000	**0.0000**						
TiO2	0.344	Ti+4	0.0370	0.0370	**0.0000**						
Cr2O3	0	Cr+3	0.0000			0.0000	0.0000				
Fe(total)O	21.979	Fe+3	0.2841			0.2841	0.0000				
MgO	21.356	Mg+2	4.5577			4.5577	**0.0000**				
MnO	1.746	Fe+2	2.3152			0.1582	**2.1570**				
CaO	1.578	Mn+2	0.2117			0.0000	**0.2117**				
Na2O	0	Ca+2	0.2420					0.0000	0.2420		
K2O	0	Na+	0.0000					0.0000	**0.0000**	0.0000	0.0000
		K+	0.0000							0.0000	0.0000
Total	**100**		**Excess**	T site	**0.0000**	C site	**2.3686**	B site	**0.6106486**	A site	**0**
			Total	**7.6237**		**5.0000**		**0.0000**		**0.0000**	**0.0000**
			%Fill	**95.296**		**100**		**0**			

Prefix none

Name anthophyllite, holmquistite, cummingtonite, clinoholmquistite

Modifier none

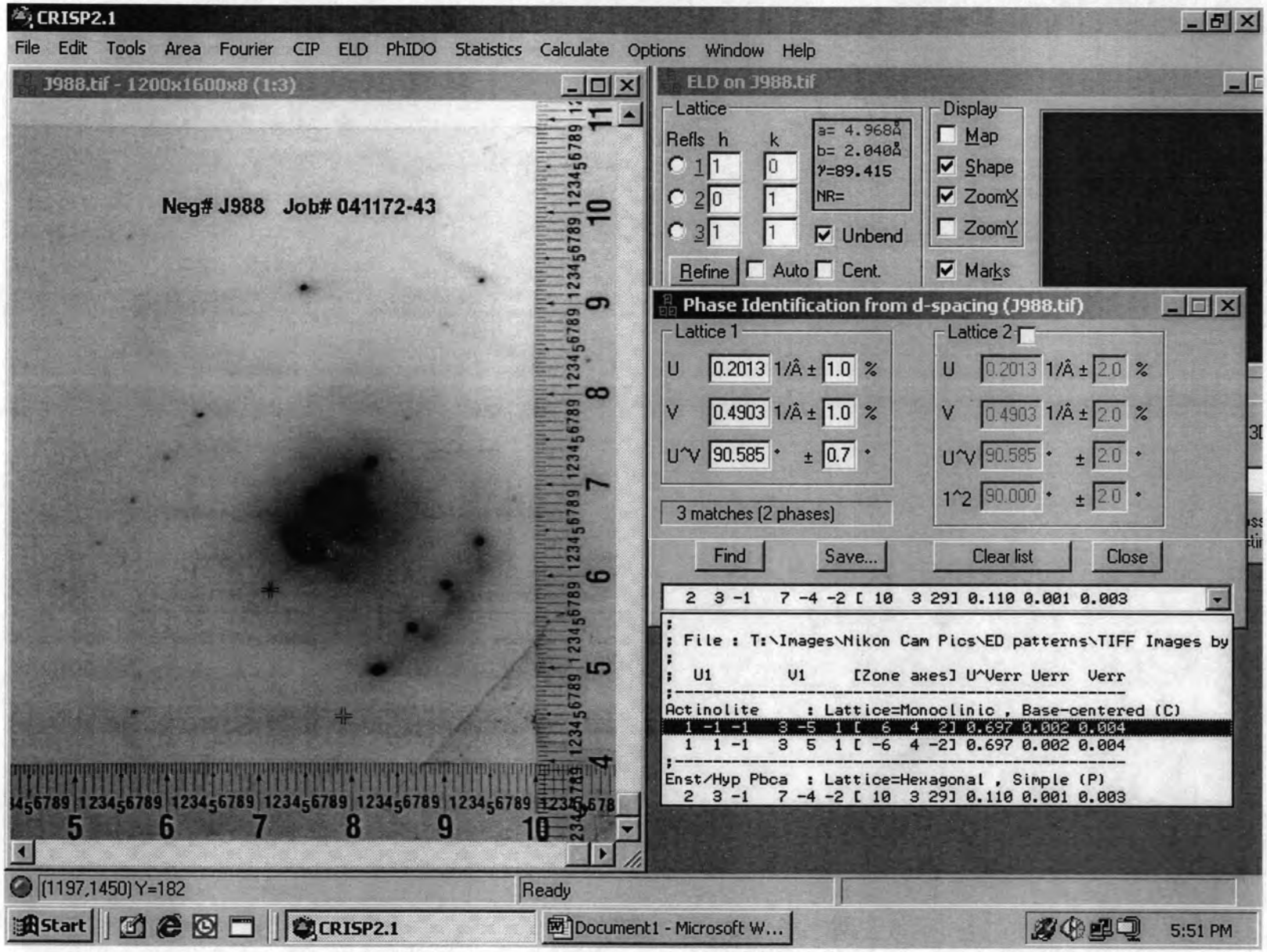
Group Mg-Fe-Mn Amphibole

Sample # 041172-42-15507

Values		Satisfied Conditions
(Ca,Na)@B	0.00	(Ca,Na)@B < 1 and (Mg,Fe2,Mn)@B >= 0.95
(Mg,Fe2,Mn)@B	2.00	(Mg/(Mg+Fe2))>= 0.5
Mg/(Mg+Fe2)	0.66	Si > 7
Si	7.59	

Mineral Analysis Program (Version 5.0)

ACTINOLITE
[3 2 1]



```
*X 11   7.060      534 FE KB
SQMTF 12   8.034     3406 CU KA
SQMTF -3B/80
   13   8.898      493 CU KB

SQMTF: QUANTIFY
Standardless Analysis

Refit _K K' _K K"
Refit _MGK" _ALK"
Chi-sqd = 3.15

Element          Net Counts
  Si-K        12873 +/-   194
 Mg-K         3639 +/-    87
  Al-K         1429 +/-    71
 K  -K           37 +/-    30
  Ca-K         4287 +/-   130
 Fe-K         4718 +/-   128
  Na-K          363 +/-    88
```

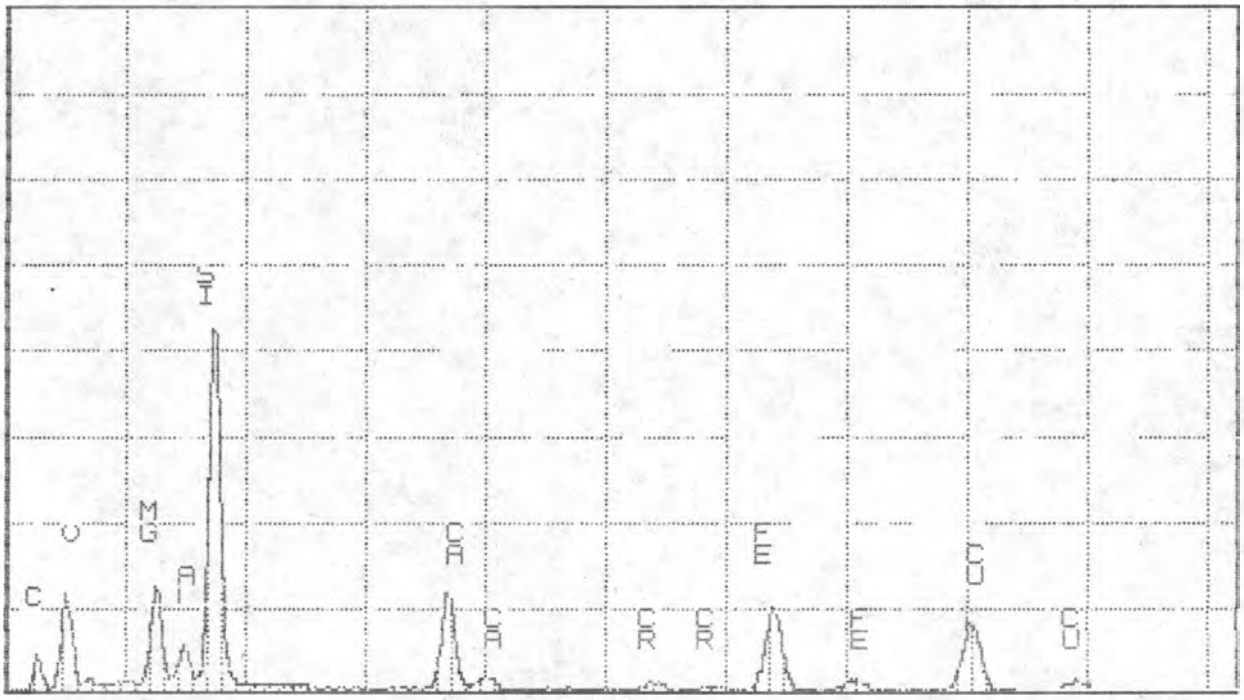
NAREF.S EDS:SIK EDS:MGK EDS:ALK EDS:K K EDS:CAK EDS:FEK EDS:

041172-43 SP725

EL-LINE	PEAK	K-FACTOR	CEL/CREF	ATOM%	EL WT%	WT%	FORMULA
SI-K	12873	1.000	1.000	19.96	25.11	53.80	SIO2
MG-K	3639	1.000	0.283	6.58	7.10	11.83	MGO
AL-K	1429	0.750	0.083	1.72	2.09	3.95	AL2O3
K-K	37	1.060	0.003	0.04	0.08	0.09	K2O
CA-K	4287	0.949	0.316	4.42	7.94	11.12	CAO
FE-K	4718	1.399	0.513	5.12	12.88	18.41	FE2O3
NA-K	363	0.549	0.016	0.38	0.39	0.80	NA2O3
O			1.769	61.77	44.41		

TN-5500 University of Washington / JEOL SAT 06-NOV-04 13:08

Cursor: 0.000KeV = 0



0 000 VFS = 2048 10 240

0 041172-43 SP725

	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	53.8	Si+4	7.6752	7.6752							
Al2O3	3.95	Al+3	0.6641	0.3248	**0.3393**						
TiO2	0	Ti+4	0.0000	0.0000	**0.0000**						
Cr2O3	0	Cr+3	0.0000			0.0000	0.0000				
Fe(total)O	18.41	Fe+3	0.3162			0.3162	0.0000				
MgO	11.83	Mg+2	2.5160			2.5160	**0.0000**				
MnO	0	Fe+2	1.8448			1.8285	**0.0163**				
CaO	11.12	Mn+2	0.0000			0.0000	**0.0000**				
Na2O	0.8	Ca+2	1.6995					1.6995	0.0000		
K2O	0.09	Na+	0.2213					0.2213	**0.0000**	0.0000	0.0000
		K+	0.0164							0.0164	0.0000
Total	**100**		**Excess**	T site	**0.3393**	C site	**0.0163**	B site	**0**	A site	**0**
			Total	**8**		**5.0000**		**1.9208**		**0.0164**	**0.0000**
			%Fill	**100**		**100**		**96.0405**			

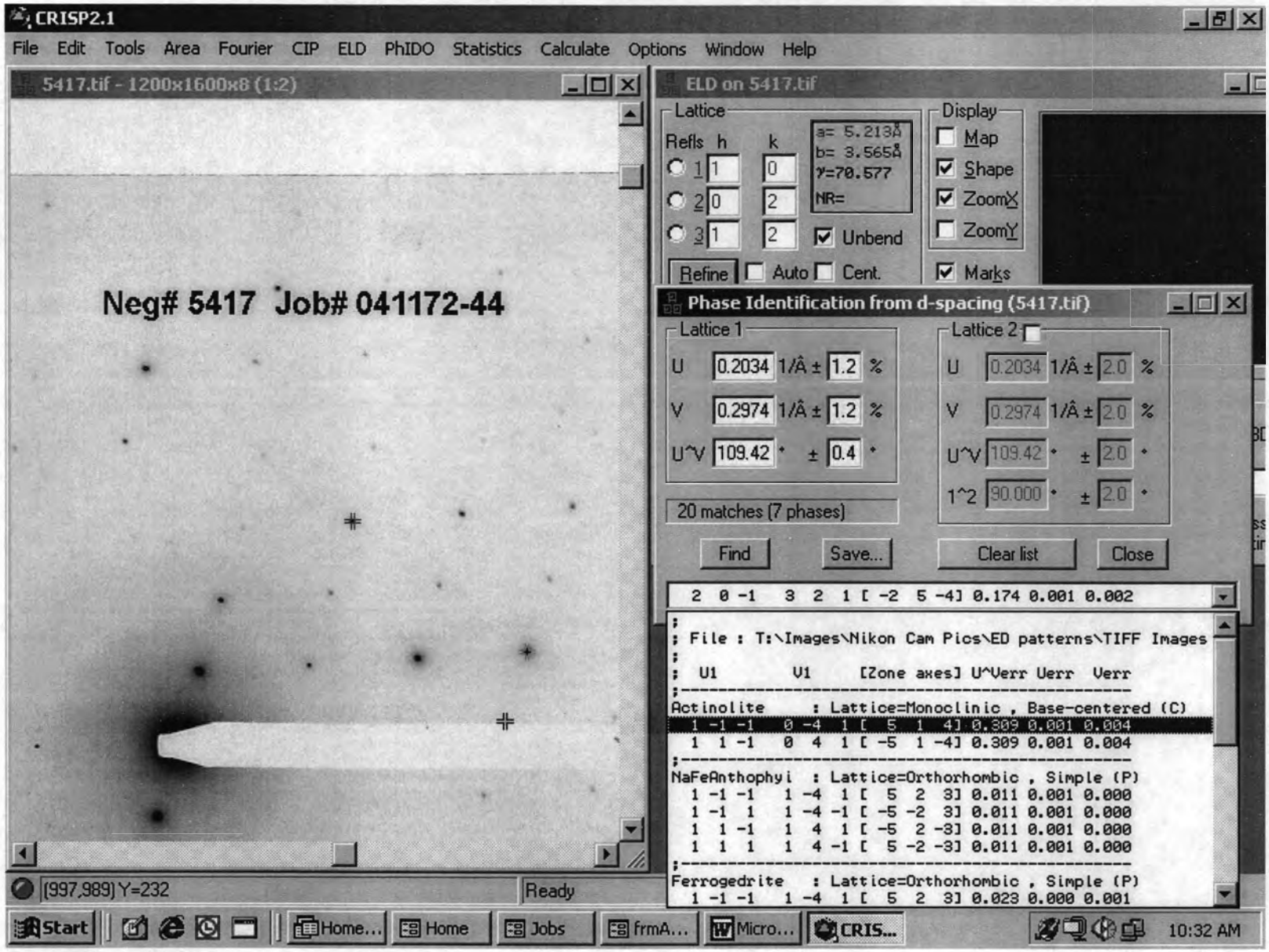
Prefix none
Name actinolite
Modifier none
Group Calcic Amphibole

Sample # **041172-43-725**

Values		Satisfied Conditions
(Ca,Na)@B	1.92	(Ca,Na)@B >= 1 and Na@B < 0.5
Na@B	0.22	Ca@B >= 1.5 and (Na,K)@A < 0.5
Ca@B	1.70	(Mg/(Mg+Fe2))>= 0.5
(Na,K)@A	0.02	Si > 7.5
Mg/(Mg+Fe2)	0.58	(Mg/(Mg+Fe2))< 0.9
Si	7.68	

Mineral Analysis Program (Version 5.0)

ACTINOLITE
[5 1 4]



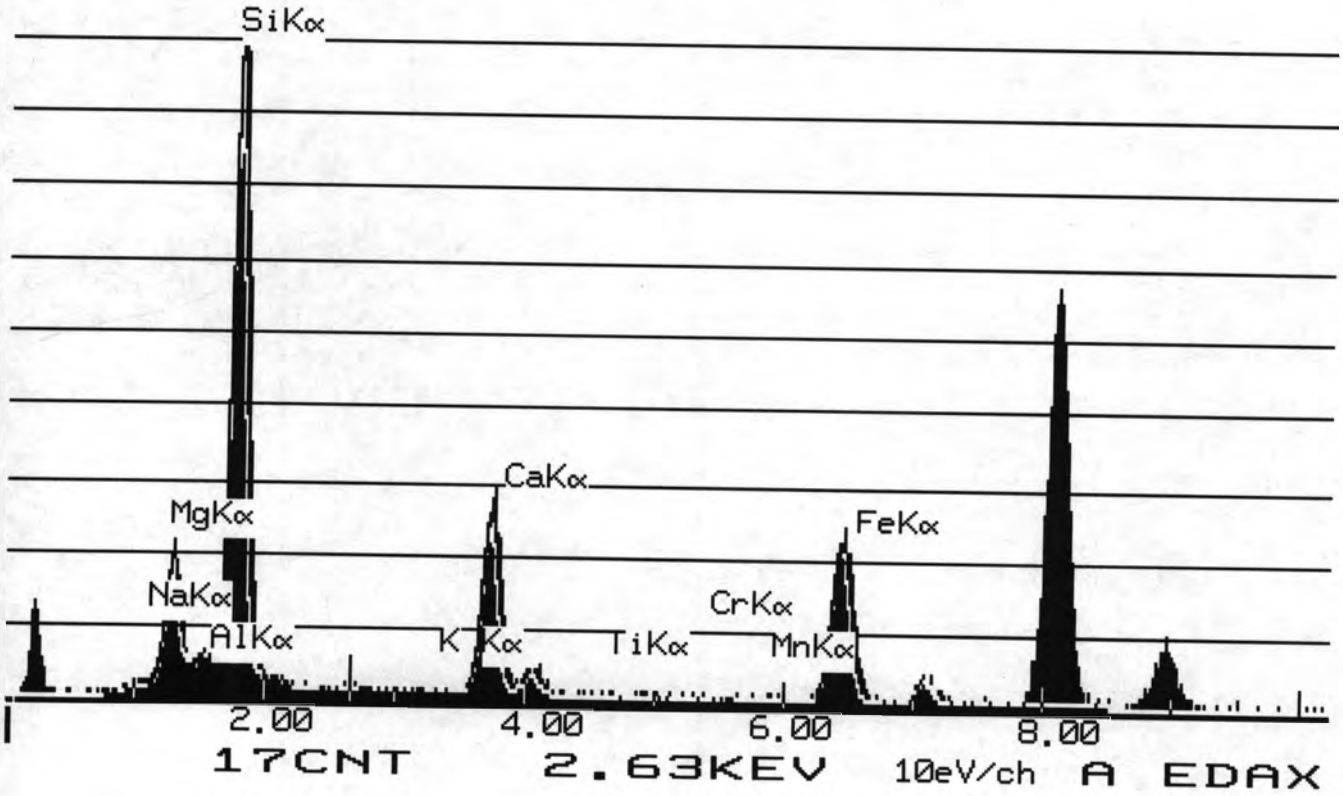
INTE-% :
LABEL = 041172-44 SP 15312
07-NOV-72 01:48:42
51.908 LIVE SECONDS

ELEM	CPS	WT % ELEM	WT % OXIDE
MGK	31.344	8.416	13.955
SIK	175.752	26.542	56.783
K K	0.347	0.087	0.105
CAK	58.796	8.466	11.845
TIK	0.328	0.067	0.111
MNK	1.117	0.232	0.300
FEK	61.801	11.821	16.901

TOTAL			100.000

USED PEIF: USER

06-NOV-04 01:48:59 SUPER QUANT
RATE= 1174CPS TIME= 52LSEC
FS= 1059/ 1059 PRST= 200LSEC
A =041172-44 SP 15312



	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	56.783	Si+4	8.0000	8.0000							
Al2O3	0	Al+3	0.0000	0.0000	**0.0000**						
TiO2	0.111	Ti+4	0.0167	0.0000	**0.0167**						
Cr2O3	0	Cr+3	0.0000			0.0000	0.0000				
Fe(total)O	16.901	Fe+3	0.2367			0.2367	0.0000				
MgO	13.955	Mg+2	2.9576			2.9576	**0.0000**				
MnO	0.3	Fe+2	1.7476			1.7476	**0.0000**				
CaO	11.845	Mn+2	0.0415			0.0414	**0.0001**				
Na2O	0	Ca+2	1.8051					1.8051	0.0000		
K2O	0.105	Na+	0.0000					0.0000	**0.0000**	0.0000	0.0000
		K+	0.0231							0.0231	0.0000
Total	**100**		**Excess**	T site	**0.0167**	C site	**0.0001**	B site	**0**	A site	**0**
			Total	**8**		**5.0000**		**1.8051**		**0.0231**	**0.0000**
			%Fill	**100**		**100**		**90.2529**			

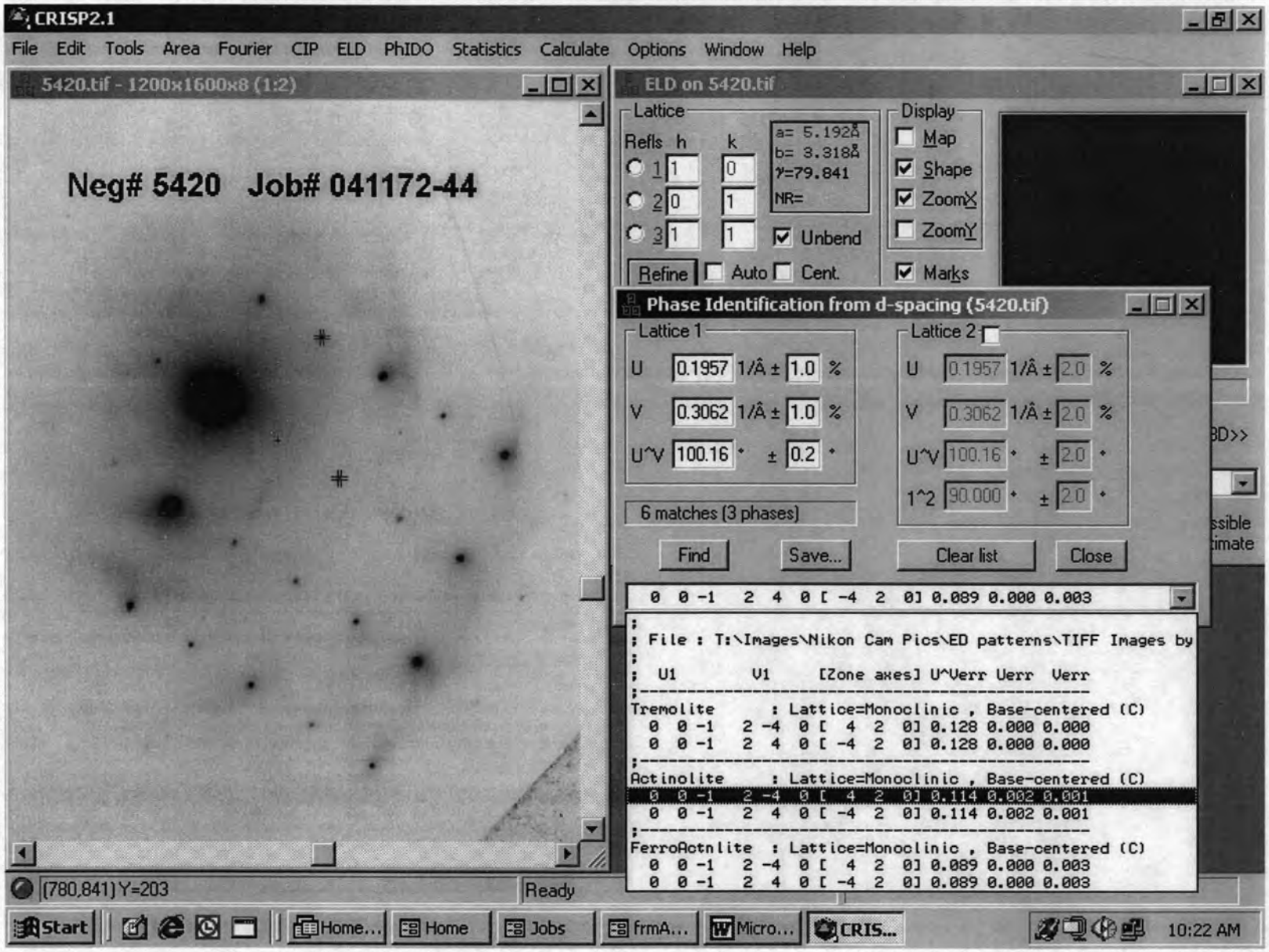
Prefix none
Name actinolite
Modifier none
Group Calcic Amphibole

Sample # **041172-44-15312**

Values		Satisfied Conditions
(Ca,Na)@B	1.81	(Ca,Na)@B >= 1 and Na@B < 0.5
Na@B	0.00	Ca@B >= 1.5 and (Na,K)@A < 0.5
Ca@B	1.81	(Mg/(Mg+Fe2))>= 0.5
(Na,K)@A	0.02	Si > 7.5
Mg/(Mg+Fe2)	0.63	(Mg/(Mg+Fe2))< 0.9
Si	8.00	

Mineral Analysis Program (Version 5.0)

ACTINOLITE
[2 1 0]



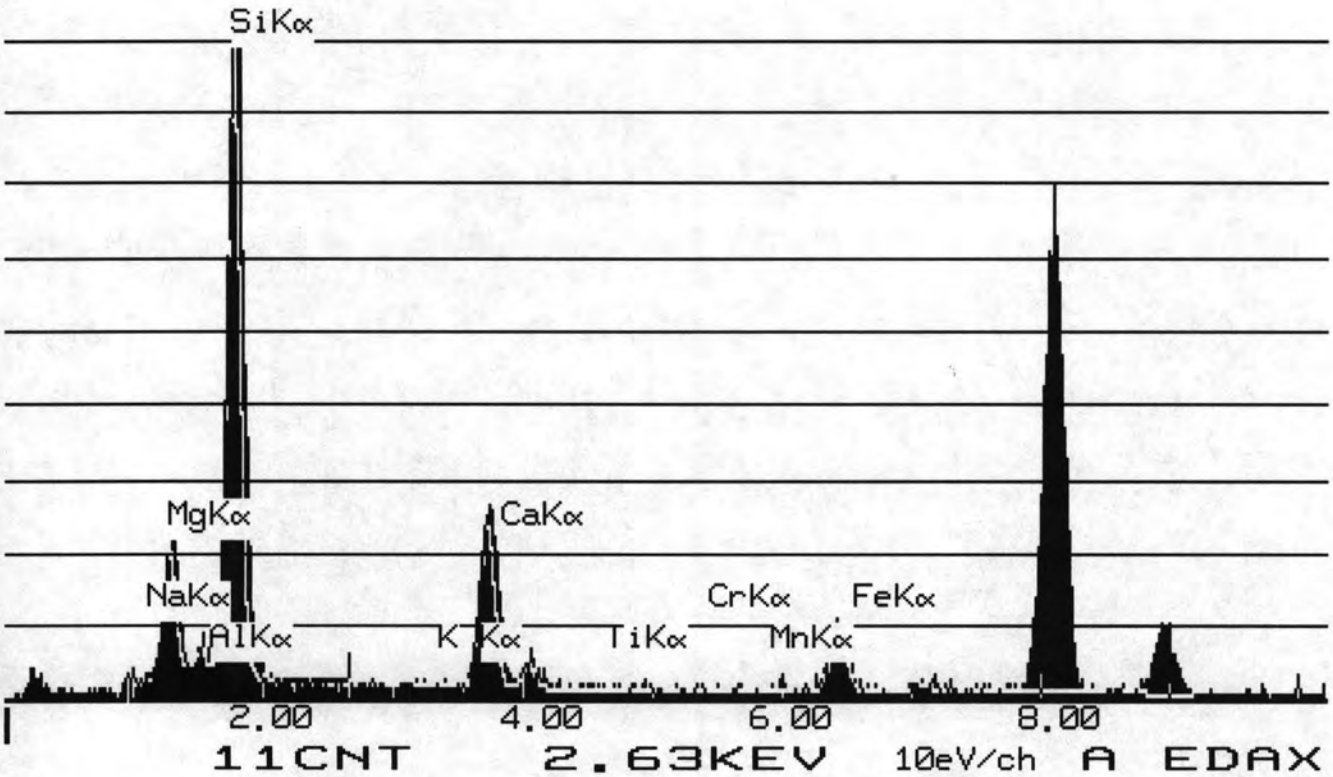
INTE-% :
LABEL = 041172-44 15315
07-NOV-72 22:53:36
30.236 LIVE SECONDS

ELEM	CPS	WT % ELEM	WT % OXIDE
MGK	32.246	10.135	16.805
ALK	6.548	1.236	2.336
SIK	163.116	28.835	61.688
CAK	49.973	8.423	11.785
TIK	0.496	0.118	0.197
FEK	22.457	5.028	7.189

TOTAL			100.000

USED PEIF: USER

06-NOV-04 22:53:58 SUPER QUANT
RATE= 2222CPS TIME= 30LSEC
FS= 541/ 541 PRST= 200LSEC
A =041172-44 15315



	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	61.688	Si+4	8.0000	8.0000							
Al2O3	2.336	Al+3	0.3959	0.0000	**0.3959**						
TiO2	0.197	Ti+4	0.0540	0.0000	**0.0540**						
Cr2O3	0	Cr+3	0.0000			0.0000	0.0000				
Fe(total)O	7.189	Fe+3	0.0243			0.0243	0.0000				
MgO	16.805	Mg+2	3.4273			3.4273	**0.0000**				
MnO	0	Fe+2	0.8360			0.8360	**0.0000**				
CaO	11.785	Mn+2	0.0000			0.0000	**0.0000**				
Na2O	0	Ca+2	1.7417					1.7417	0.0000		
K2O	0	Na+	0.0000					0.0000	**0.0000**	0.0000	0.0000
		K+	0.0000							0.0000	0.0000
Total	100		Excess	T site	0.4499	C site	0.0000	B site	0	A site	0
			Total	8		4.7376		1.7417		0.0000	0.0000
			%Fill	100		94.7528		87.0869			

Prefix	none
Name	actinolite
Modifier	none
Group	Calcic Amphibole

Sample # 041172-44-15315

Values		Satisfied Conditions
(Ca,Na)@B	1.74	(Ca,Na)@B >= 1 and Na@B < 0.5
Na@B	0.00	Ca@B >= 1.5 and (Na,K)@A < 0.5
Ca@B	1.74	(Mg/(Mg+Fe2))>= 0.5
(Na,K)@A	0.00	Si > 7.5
Mg/(Mg+Fe2)	0.80	(Mg/(Mg+Fe2))< 0.9
Si	8.00	

Mineral Analysis Program (Version 5.0)

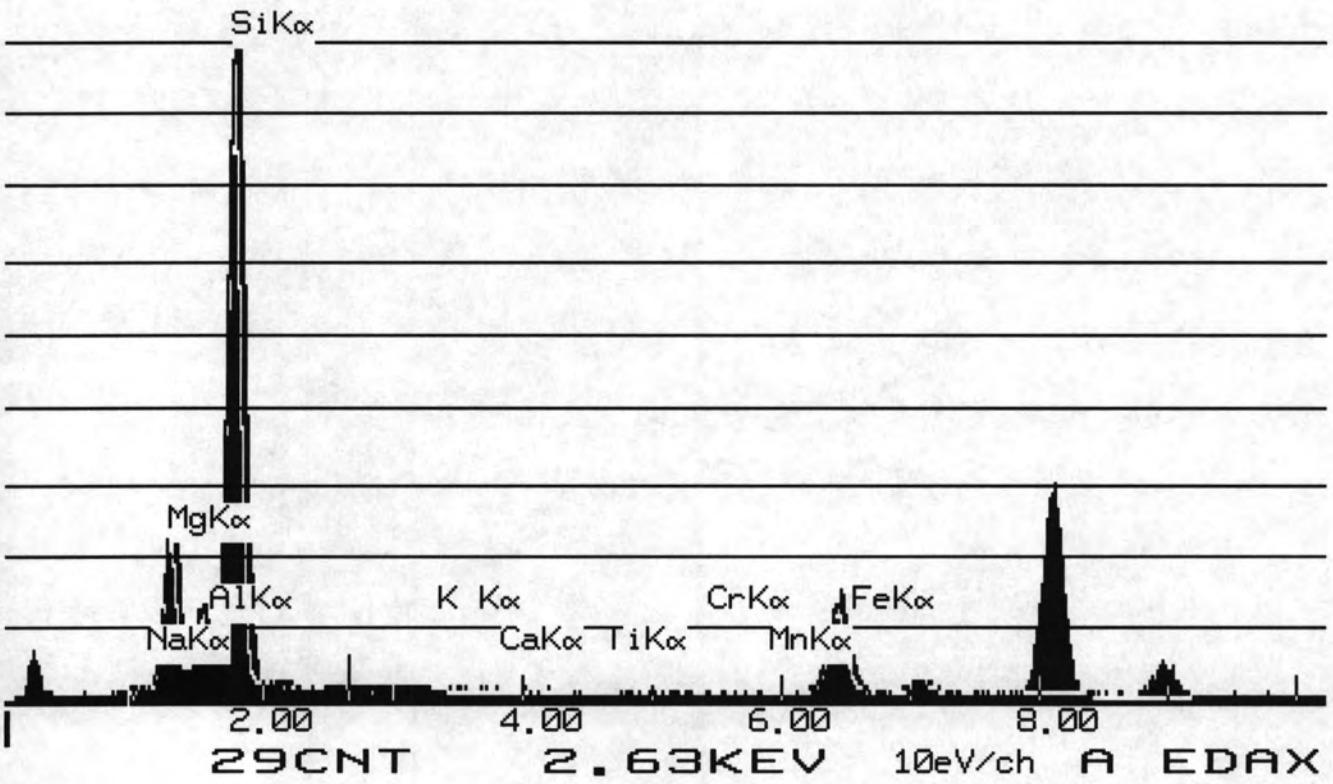
INTE-% :
LABEL = 041172-44 15316
08-NOV-72 01:53:38
59.416 LIVE SECONDS

ELEM	CPS	WT % ELEM	WT % OXIDE
MGK	68.753	12.895	21.382
ALK	32.399	3.650	6.897
SIK	273.866	28.890	61.805
K K	1.144	0.201	0.242
CAK	0.623	0.063	0.088
TIK	0.337	0.048	0.080
FEK	49.768	6.649	9.507

TOTAL			100.000

USED PEIF: USER

07-NOV-04 01:54:01 SUPER QUANT
RATE= 254CPS TIME= 59LSEC
FS= 1838/ 1838 PRST= 200LSEC
A =041172-44 15316



	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	61.805	Si+4	8.0000	8.0000							
Al2O3	6.897	Al+3	1.0698	0.0000	**1.0698**						
TiO2	0.08	Ti+4	0.0175	0.0000	**0.0175**						
Cr2O3	0	Cr+3	0.0000			0.0000	0.0000				
Fe(total)O	9.507	Fe+3	0.0000			0.0000	0.0000				
MgO	21.382	Mg+2	4.1849			3.9127	**0.2721**				
MnO	0	Fe+2	1.0496			0.0000	**1.0496**				
CaO	0.088	Mn+2	0.0000			0.0000	**0.0000**				
Na2O	0	Ca+2	0.0261					0.0261	0.0000		
K2O	0.242	Na+	0.0000					0.0000	**0.0000**	0.0000	0.0000
		K+	0.0485							0.0485	0.0000
Total	**100.001**		**Excess**	T site	**1.0873**	C site	**1.3217**	B site	**0**	A site	**0**
			Total	**8**		**5.0000**		**0.0261**		**0.0485**	**0.0000**
			%Fill	**100**		**100**		**1.30262**			

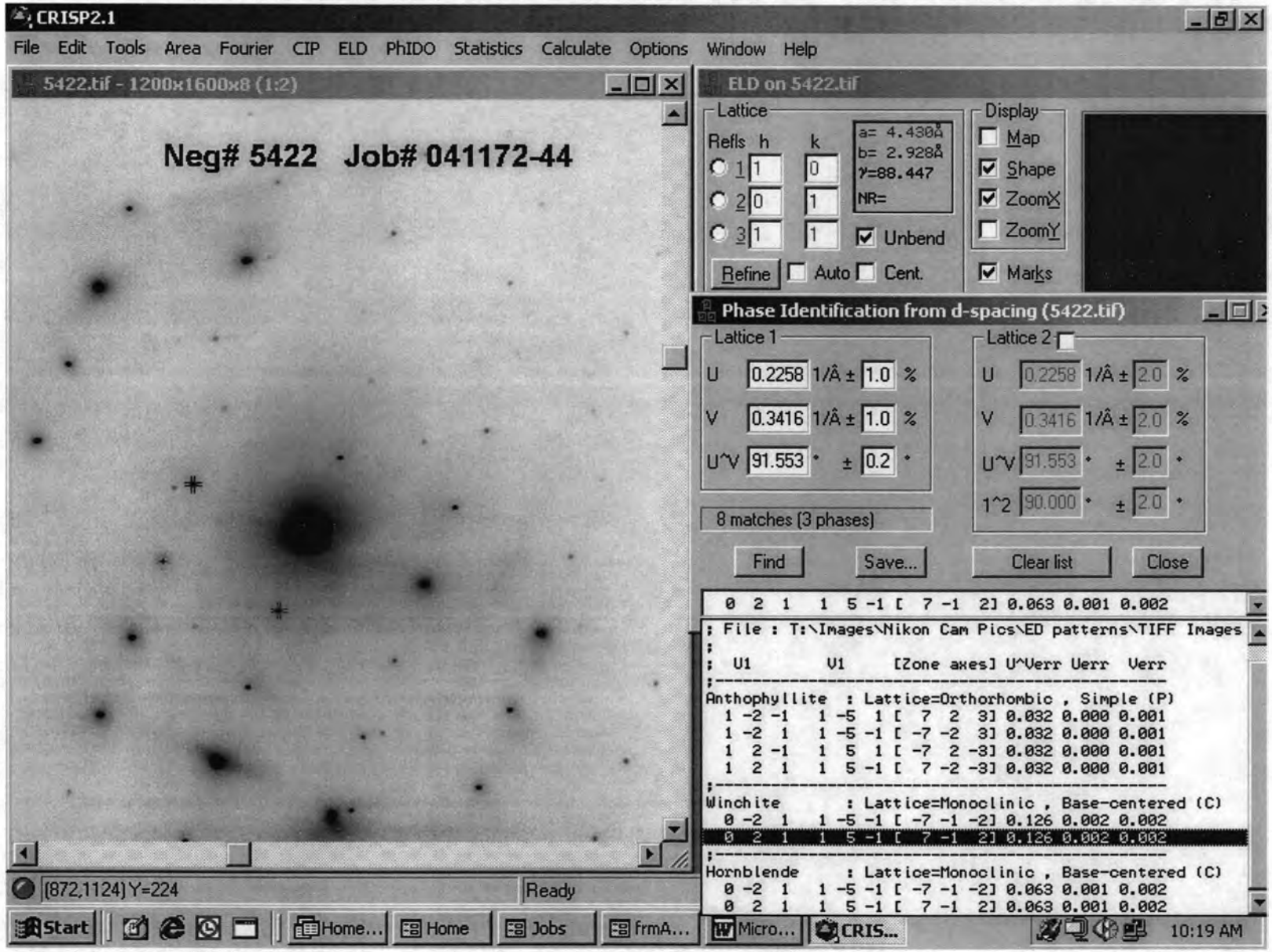
Prefix none
Name anthophyllite, holmquistite, cummingtonite, clinoholmquistite
Modifier none
Group Mg-Fe-Mn Amphibole

Sample # 041172-44-15316

Values		Satisfied Conditions
(Ca,Na)@B	0.03	(Ca,Na)@B < 1 and (Mg,Fe2,Mn)@B >= 0.95
(Mg,Fe2,Mn)@B	1.32	(Mg/(Mg+Fe2))>= 0.5
Mg/(Mg+Fe2)	0.80	Si > 7
Si	8.00	

Mineral Analysis Program (Version 5.0)

WINCHITE
[7 -1 2]



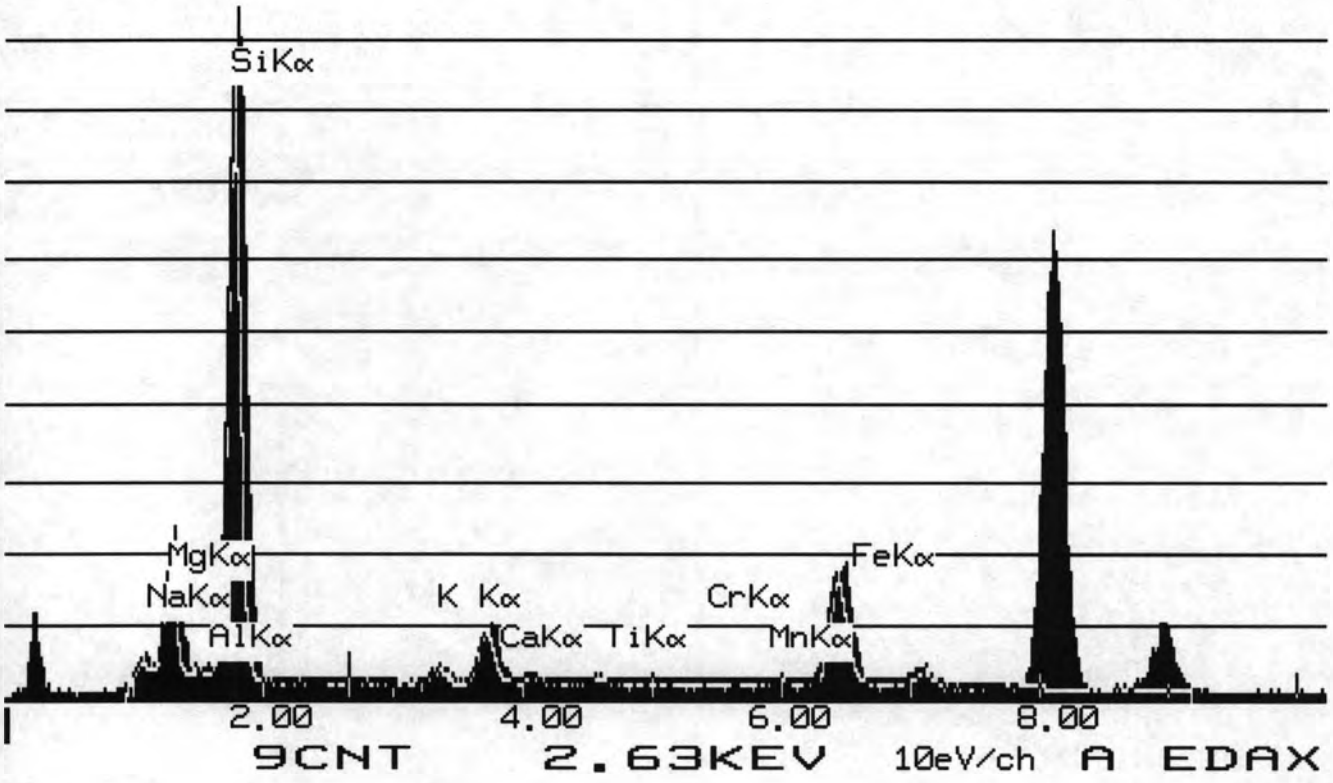
INTE-% :
LABEL = 041172-44 15317
08-NOV-72 02:16:08
32.287 LIVE SECONDS

ELEM	CPS	WT % ELEM	WT % OXIDE
NAK	10.902	4.227	5.698
MGK	53.211	9.739	16.149
ALK	4.801	0.528	0.997
SIK	268.408	27.630	59.111
K K	7.929	1.356	1.634
CAK	27.597	2.709	3.790
FEK	67.706	8.828	12.621

TOTAL			100.000

USED PEIF: USER

07-NOV-04 02:16:31 SUPER QUANT
RATE= 361CPS TIME= 32LSEC
FS= 1021/ 1021 PRST= 200LSEC
A =041172-44 15317



	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	59.111	Si+4	8.0000	8.0000							
Al2O3	0.997	Al+3	0.1744	0.0000	**0.1744**						
TiO2	0	Ti+4	0.0000	0.0000	**0.0000**						
Cr2O3	0	Cr+3	0.0000			0.0000	0.0000				
Fe(total)O	12.621	Fe+3	0.5839			0.5839	0.0000				
MgO	16.149	Mg+2	3.3499			3.3499	**0.0000**				
MnO	0	Fe+2	0.8322			0.8322	**0.0000**				
CaO	3.79	Mn+2	0.0000			0.0000	**0.0000**				
Na2O	5.698	Ca+2	0.5822					0.5822	0.0000		
K2O	1.637	Na+	1.5533					1.4178	**0.1355**	0.1355	0.0000
		K+	0.3013							0.3013	0.0000
Total	**100.003**		**Excess**	T site	**0.1744**	C site	**0.0000**	B site	**0.1355353**	A site	**0**
			Total	**8**		**4.9404**		**2.0000**		**0.4368**	**0.0000**
			%Fill	**100**		**98.8075**		**100**			

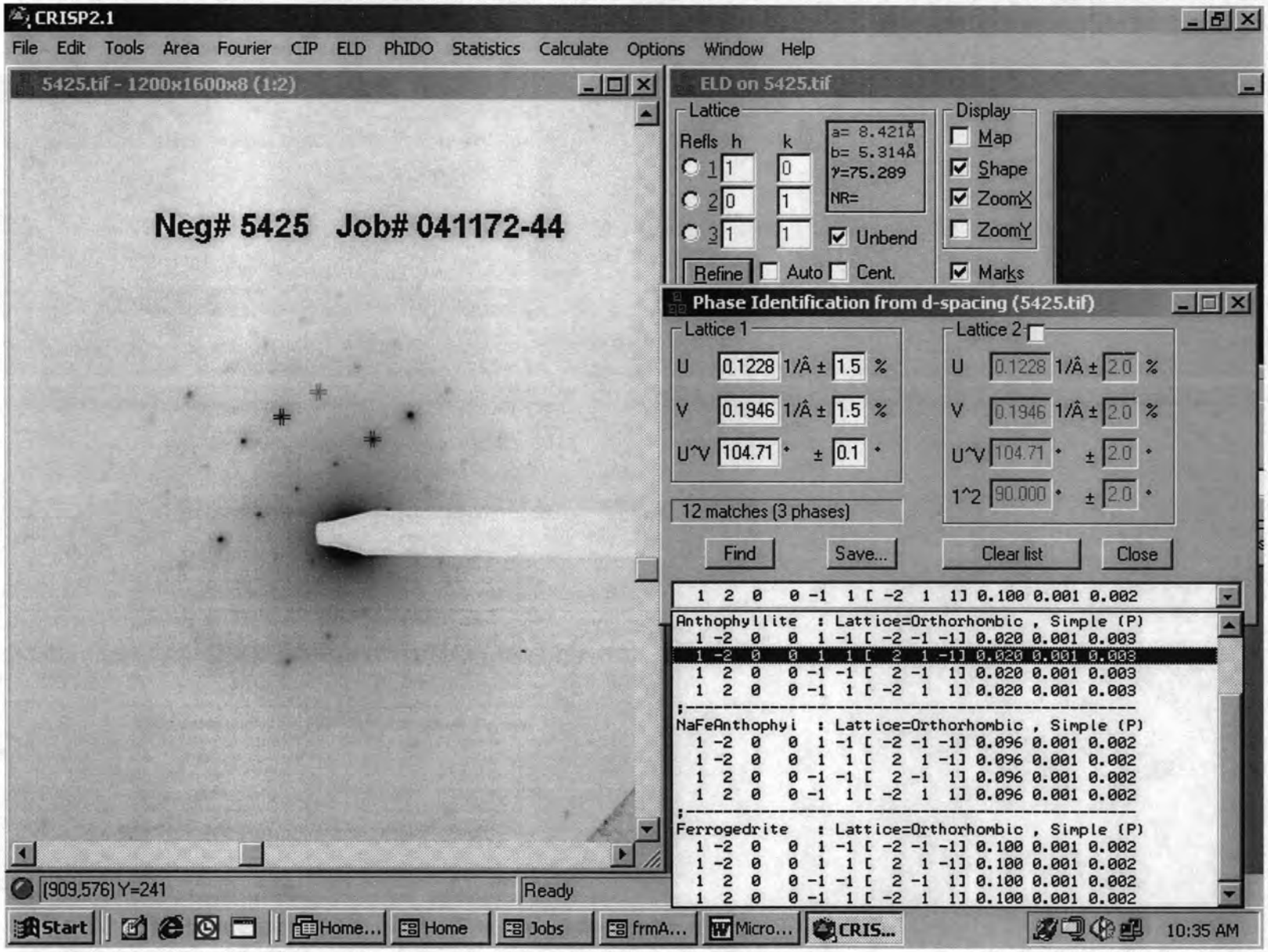
Prefix none
Name winchite
Modifier Potassian
Group **Sodic-Calcic Amphibole**

Sample # **041172-44-15317**

Values		**Satisfied Conditions**
(Ca,Na)@B	**2.00**	**(Ca,Na)@B >= 1 and 0.5 <= Na@B < 1.5**
Na@B	**1.42**	**(Na,K)@A < 0.5**
Na,K)@A	**0.44**	**(Mg/(Mg+Fe2))>= 0.5**
Mg/(Mg+Fe2)	**0.80**	**Si > 7.5**
Si	**8.00**	

Mineral Analysis Program (Version 5.0)

ANTHOPHYLLITE
[2 1 -1]



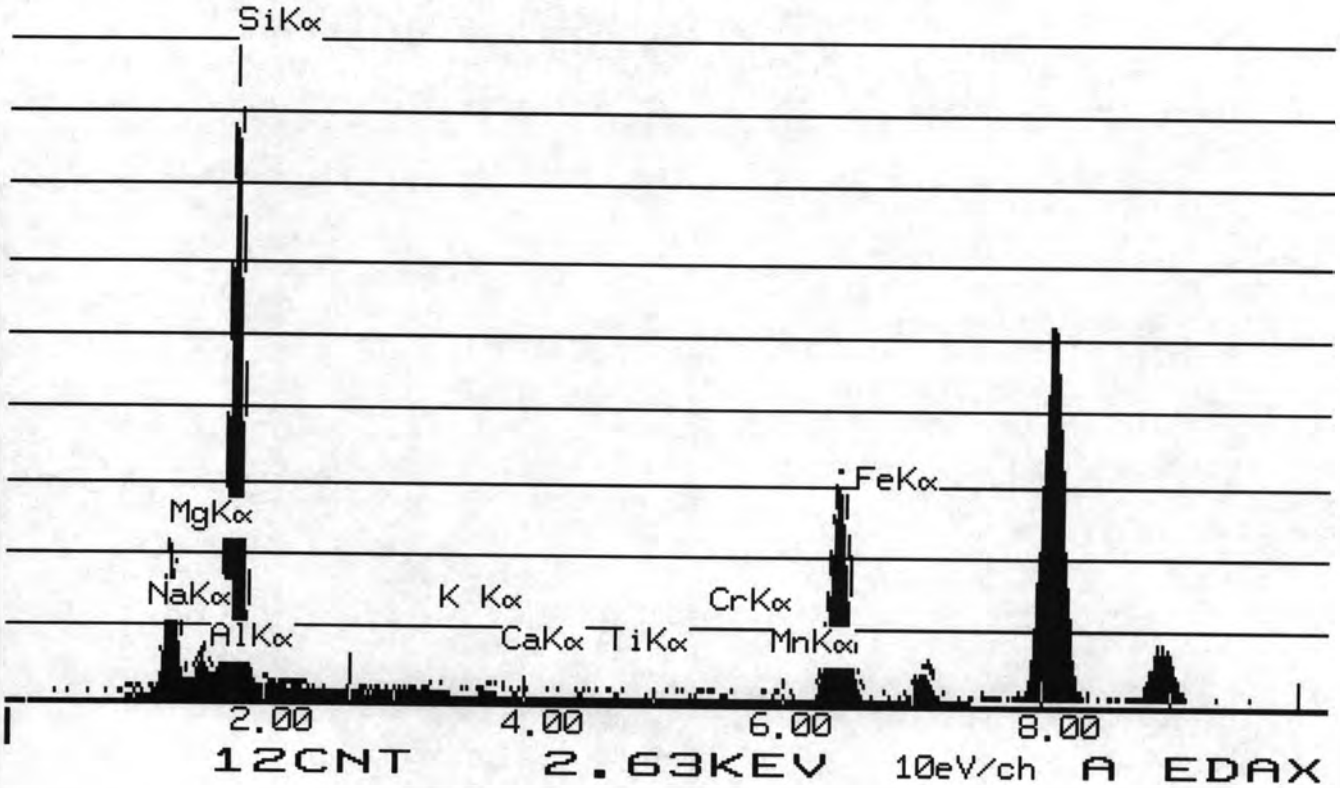
INTE-% :
LABEL = 041172-44 SP 15320
08-NOV-72 17:48:02
58.334 LIVE SECONDS

ELEM	CPS	WT % ELEM	WT % OXIDE
NAK	0.411	0.251	0.338
MGK	38.057	10.952	18.159
ALK	7.834	1.354	2.559
SIK	159.496	25.815	55.226
K K	0.754	0.203	0.244
CAK	1.457	0.225	0.315
TIK	0.617	0.134	0.224
CRK	0.651	0.140	0.204
MNK	0.874	0.195	0.251
FEK	76.696	15.722	22.479

TOTAL			100.000

USED PEIF: USER

07-NOV-04 17:48:31 SUPER QUANT
RATE= 1057CPS TIME= 58LSEC
FS= 1023/ 1023 PRST= 200LSEC
A =041172-44 SP 15320



	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	55.226	Si+4	7.8187	7.8187							
Al2O3	2.559	Al+3	0.4270	0.1813	**0.2457**						
TiO2	0.224	Ti+4	0.0239	0.0000	**0.0239**						
Cr2O3	0.204	Cr+3	0.0228			0.0228	0.0000				
Fe(total)O	22.479	Fe+3	0.0000			0.0000	0.0000				
MgO	18.159	Mg+2	3.8327			3.8327	**0.0000**				
MnO	0.251	Fe+2	2.6612			0.8749	**1.7863**				
CaO	0.315	Mn+2	0.0301			0.0000	**0.0301**				
Na2O	0.338	Ca+2	0.0478					0.0478	0.0000		
K2O	0.244	Na+	0.0928					0.0928	**0.0000**	0.0000	0.0000
		K+	0.0441							0.0441	0.0000
Total	**99.999**		**Excess**	T site	**0.2695**	C site	**1.8163**	B site	**0**	A site	**0**
			Total	**8**		**5.0000**		**0.1405**		**0.0441**	**0.0000**
			%Fill	**100**		**100**		**7.02747**			

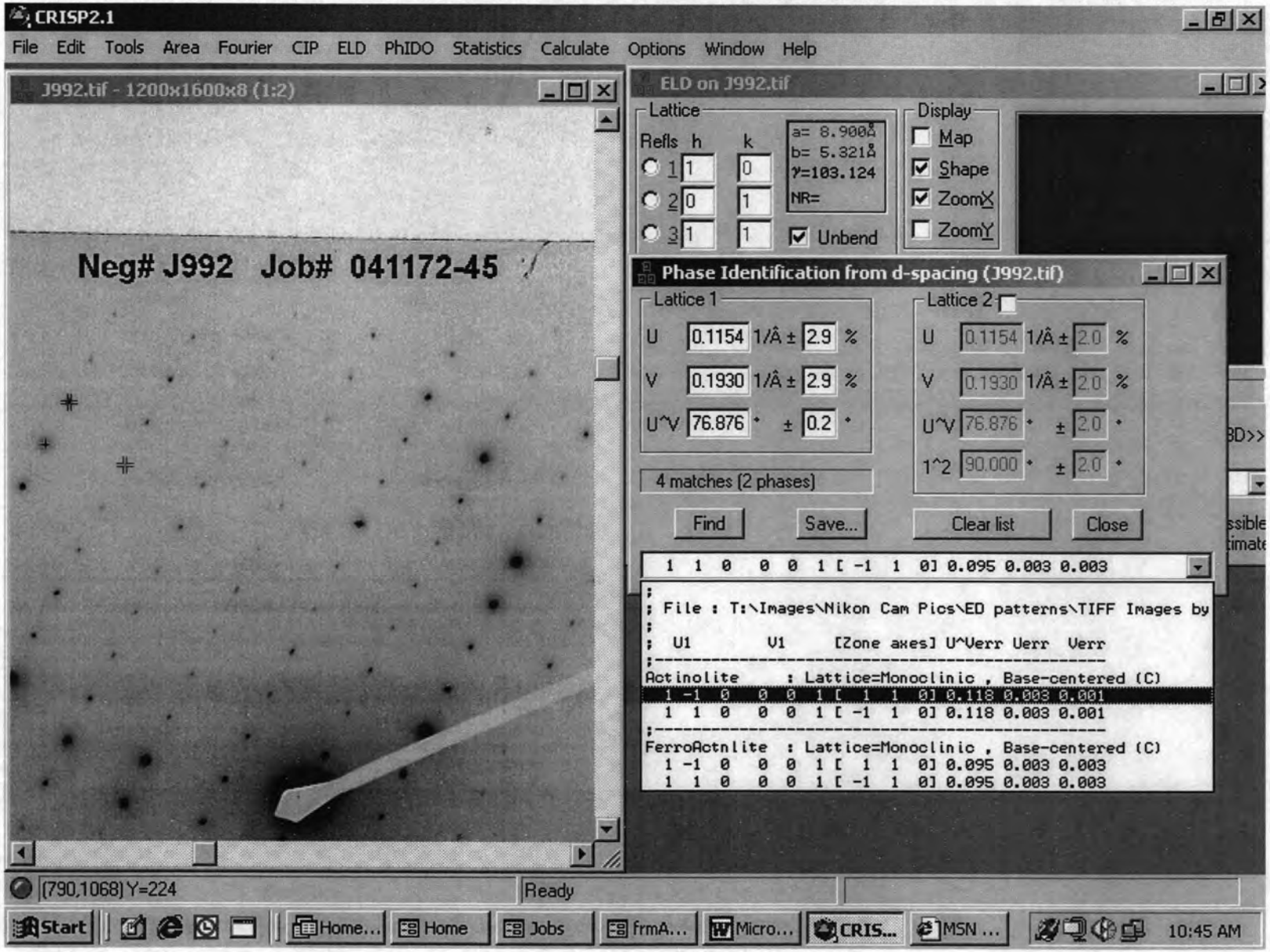
Prefix none
Name anthophyllite, holmquistite, cummingtonite, clinoholmquistite
Modifier none
Group Mg-Fe-Mn Amphibole

Sample # **041172-44-15320**

Values		Satisfied Conditions
(Ca,Na)@B	0.14	(Ca,Na)@B < 1 and (Mg,Fe2,Mn)@B >= 0.95
(Mg,Fe2,Mn)@B	1.82	(Mg/(Mg+Fe2))>= 0.5
Mg/(Mg+Fe2)	0.59	Si > 7
Si	7.82	

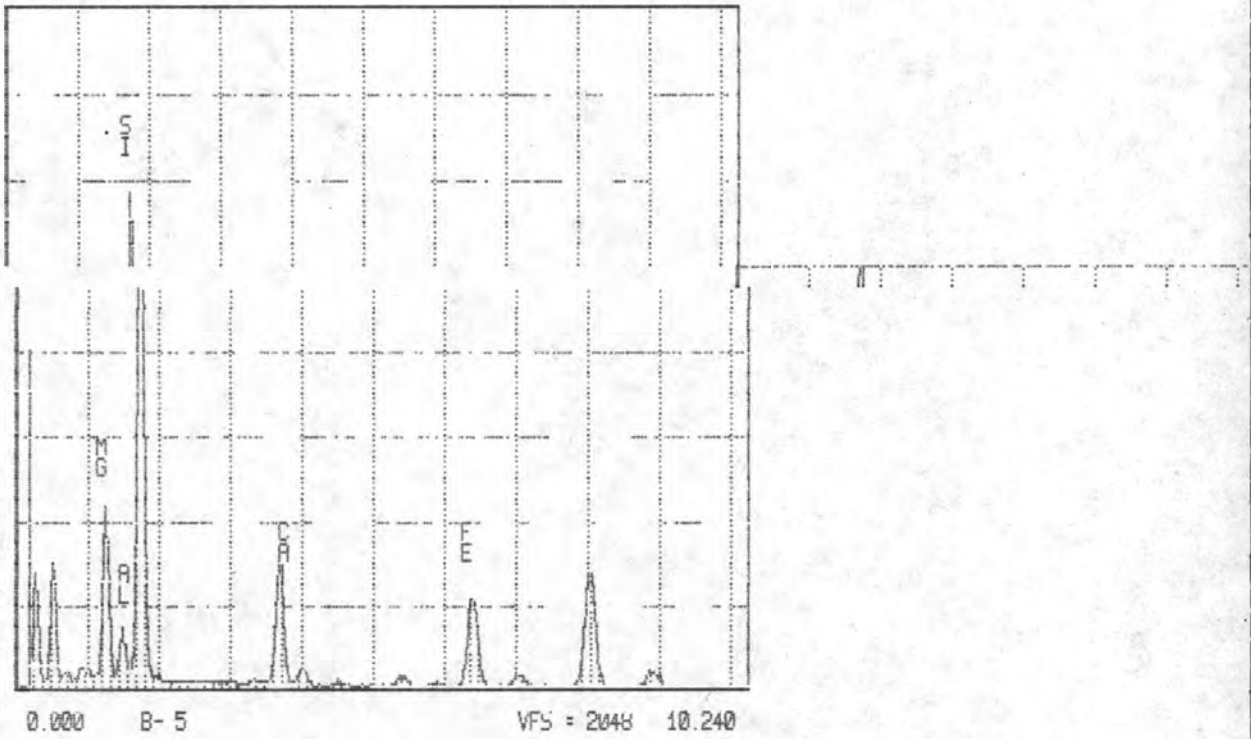
Mineral Analysis Program (Version 5.0)

ACTINOLITE
[1 1 0]



TN-5500 University of Washington / JEOL SUN 07-NOV-04 10:43

Cursor: 0.000KeV = 0



0.000 B- 5 VFS = 2048 10.240

99 1024chans 11%DT RT= 0sec 0.010KeV

TN FLEXTRAN [13-B]

SQMTF: QUANTIFY
*X 'SWM\M\WQMTF'
Standardless Analysis
SQMTF -3B/80

Chi-sqd = 3.79

Element	Net Counts	
Si-K	16899 +/-	247
Mg-K	5107 +/-	248
Al-K	1728 +/-	303
K -K	202 +/-	81
Ca-K	5149 +/-	147
Fe-K	5085 +/-	137
Na-K	196 +/-	129

REF.S EDS:SIK EDS:MGK EDS:ALK EDS:K K EDS:CAK EDS:FEK
EDS:NAK

041172-45 SP 727

EL-LINE	PEAK	K-FACTOR	CEL/CREF	ATOM%	EL WT%	WT%	FORMULA
SI-K	16899	1.000	1.000	20.54	26.13	55.99	SIO2
MG-K	5107	1.000	0.302	7.24	7.90	13.16	MGO
AL-K	1728	0.750	0.077	1.63	2.00	3.79	AL2O3
K-K	202	1.060	0.013	0.19	0.33	0.40	K2O
CA-K	5149	0.949	0.289	4.16	7.56	10.59	CAO
FE-K	5085	1.399	0.421	4.33	11.01	15.73	FE2O3
NA-K	196	0.549	0.006	0.16	0.17	0.34	NA2O3
O			1.718	61.75	44.90		

1,30
*
0,0
*

	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	55.99	Si+4	7.8400	7.8400							
Al2O3	3.79	Al+3	0.6254	0.1600	**0.4654**						
TiO2	0	Ti+4	0.0000	0.0000	**0.0000**						
Cr2O3	0	Cr+3	0.0000			0.0000	0.0000				
Fe(total)O	15.73	Fe+3	0.3149			0.3149	0.0000				
MgO	13.16	Mg+2	2.7472			2.7472	**0.0000**				
MnO	0	Fe+2	1.4918			1.4725	**0.0193**				
CaO	10.59	Mn+2	0.0000			0.0000	**0.0000**				
Na2O	0.34	Ca+2	1.5886					1.5886	0.0000		
K2O	0.4	Na+	0.0923					0.0923	**0.0000**	0.0000	0.0000
		K+	0.0714							0.0714	0.0000
Total	**100**		**Excess**	T site	**0.4654**	C site	**0.0193**	B site	**0**	A site	**0**
			Total	**8**		**5.0000**		**1.6809**		**0.0714**	**0.0000**
			%Fill	**100**		**100**		**84.0465**			

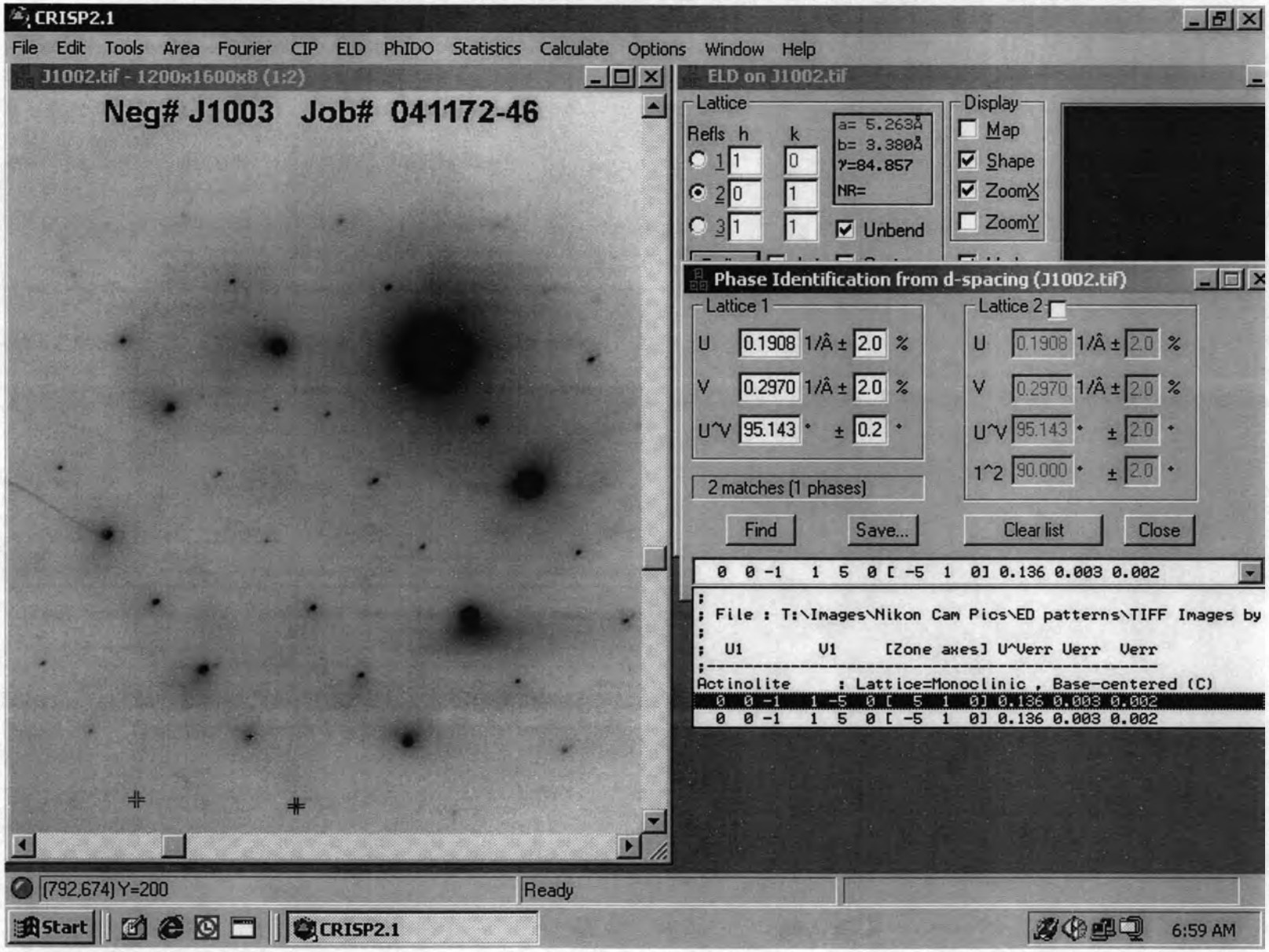
Prefix none
Name actinolite
Modifier none
Group Calcic Amphibole

Sample # **041172-45-727**

Values		Satisfied Conditions
(Ca,Na)@B	1.68	(Ca,Na)@B >= 1 and Na@B < 0.5
Na@B	0.09	Ca@B >= 1.5 and (Na,K)@A < 0.5
Ca@B	1.59	(Mg/(Mg+Fe2))>= 0.5
(Na,K)@A	0.07	Si > 7.5
Mg/(Mg+Fe2)	0.65	(Mg/(Mg+Fe2))< 0.9
Si	7.84	

Mineral Analysis Program (Version 5.0)

ACTINOLITE
[5 1 0]



TN FLEXTRAN L13-BJ

S. 728

*X 'SQMTF'
SQMTF -3R/80

SQMTF: QUANTIFY
Standardless Analysis

Refit _K K' _K K"
Refit _ALK"
Refit _NAK'
Chi-sqrd = 2.84

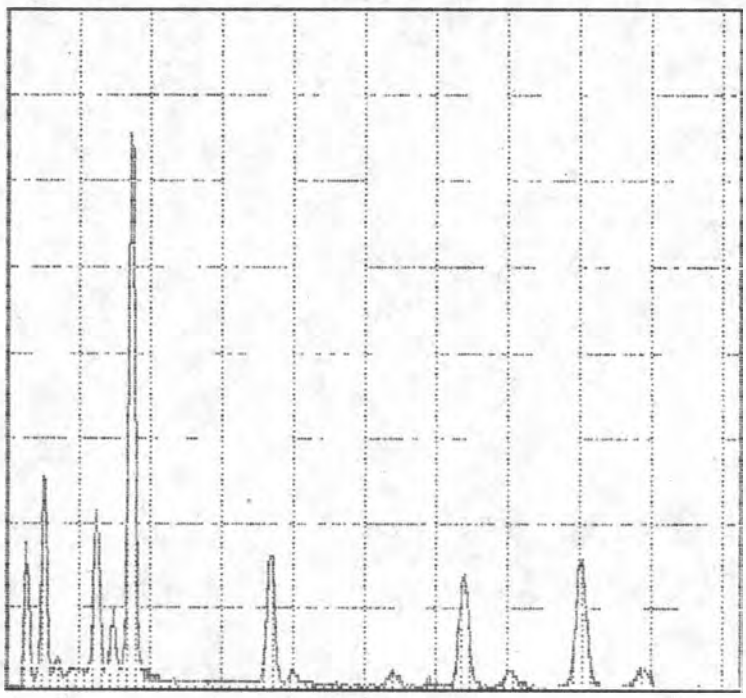
Element	Net Counts
Si-K	9069 +/- 162
Mg-K	2615 +/- 160
Al-K	1020 +/- 75
K -K	71 +/- 27
Ca-K	2969 +/- 107
Fe-K	3124 +/- 106
Na-K	173 +/- 77

REF.S EDS:SIK EDS:MGK EDS:ALK EDS:K K EDS:CAK EDS:FEK
EDS:NAK

EXFC(7-C) DATA LABEL

EL-LINE	PEAK	K-FACTOR	CFI /CREF	ATOM%	EI WT%	WT%	FORMULA
SI-K	9069	1.000	1.000	20.12	25.39	54.40	SIO2
MG-K	2615	1.000	0.288	6.77	7.32	12.20	MGO
AL-K	1020	0.750	0.084	1.76	2.14	4.05	AL2O3
K-K	71	1.060	0.008	0.12	0.21	0.24	K2O
CA-K	2969	0.949	0.311	4.38	7.90	11.05	CAO
FE-K	3124	1.399	0.482	4.85	12.24	17.49	FE2O3
NA-K	173	0.549	0.011	0.26	0.27	0.55	NA2O3
O			1.754	61.75	44.53		

TN-550M University of Washington / JEOL SUN 07-NOV-04 15:09
Cursor: 0.000keV = 0



0.000 VFS = 1024 10.240

	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	54.4	Si+4	7.7174	7.7174							
Al2O3	4.05	Al+3	0.6771	0.2826	**0.3945**						
TiO2	0	Ti+4	0.0000	0.0000	**0.0000**						
Cr2O3	0	Cr+3	0.0000			0.0000	0.0000				
Fe(total)O	17.49	Fe+3	0.2987			0.2987	0.0000				
MgO	12.2	Mg+2	2.5802			2.5802	**0.0000**				
MnO	0	Fe+2	1.7428			1.7266	**0.0162**				
CaO	11.05	Mn+2	0.0000			0.0000	**0.0000**				
Na2O	0.55	Ca+2	1.6794					1.6794	0.0000		
K2O	0.26	Na+	0.1513					0.1513	**0.0000**	0.0000	0.0000
		K+	0.0470							0.0470	0.0000
Total	**100**		**Excess**	T site	**0.3945**	C site	**0.0162**	B site	**0**	A site	**0**
			Total	**8**		**5.0000**		**1.8307**		**0.0470**	**0.0000**
			%Fill	**100**		**100**		**91.5333**			

Prefix none
Name actinolite
Modifier none
Group Calcic Amphibole

Sample # **041172-46-728**

Values		Satisfied Conditions
(Ca,Na)@B	1.83	(Ca,Na)@B >= 1 and Na@B < 0.5
Na@B	0.15	Ca@B >= 1.5 and (Na,K)@A < 0.5
Ca@B	1.68	(Mg/(Mg+Fe2))>= 0.5
(Na,K)@A	0.05	Si > 7.5
Mg/(Mg+Fe2)	0.60	(Mg/(Mg+Fe2))< 0.9
Si	7.72	

Mineral Analysis Program (Version 5.0)

SQMTF: QUANTIFY
Standardless Analysis

Refit _K K' _K K" _NAK' _NAK"
Refit _ALK' _ALK" _FEK" _NAK
Chi-sqd = 2.36

Element	Net Counts		
Si-K	7850	+/-	131
Mg-K	2328	+/-	97
Al-K	558	+/-	62
K -K	59	+/-	25
Ca-K	2662	+/-	103
Fe-K	2855	+/-	73
Na-K	0	+/-	0

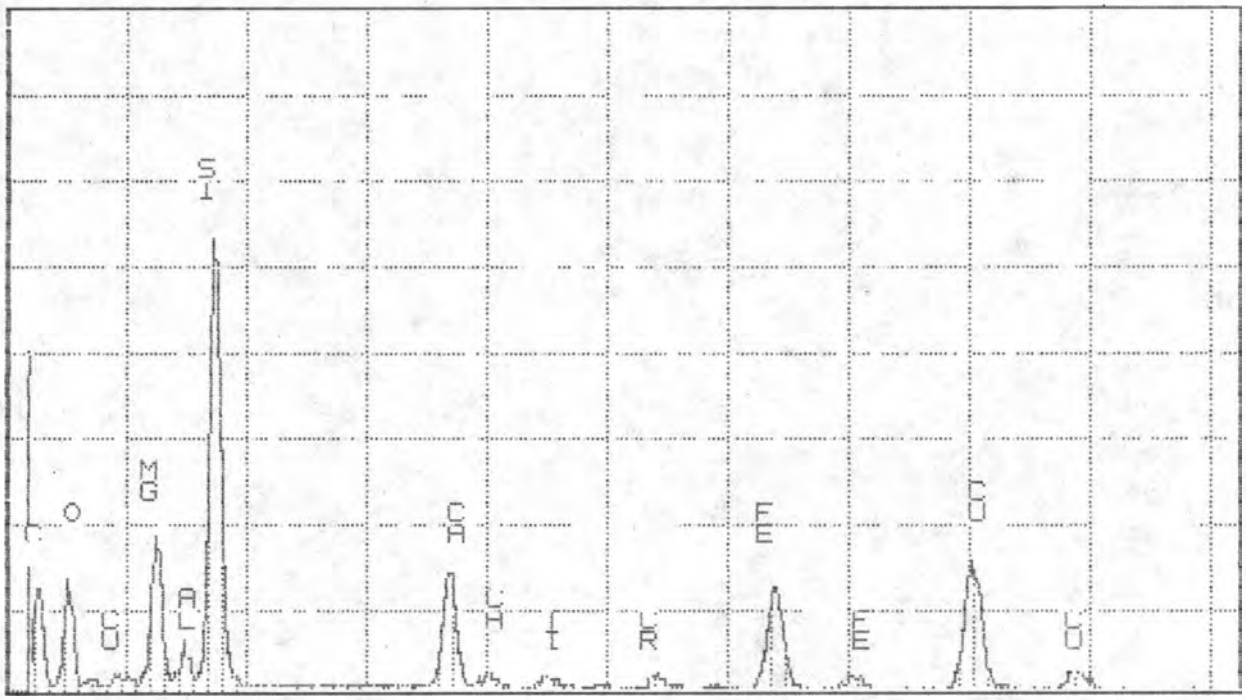
NAKS EDS:SIK EDS:MGK EDS:ALK EDS:K K EDS:CAK EDS:FEK EDS:

041172-47 729

EL-LINE	PEAK	K-FACTOR	CEL/CREF	ATOM%	EL WT%	WT%	FORMULA
SI-K	7850	1.000	1.000	20.30	25.47	54.57	SIO2
MG-K	2328	1.000	0.297	7.02	7.56	12.59	MGO
AL-K	558	0.750	0.053	1.12	1.36	2.57	AL2O3
K-K	59	1.060	0.008	0.12	0.21	0.25	K2O
CA-K	2662	0.949	0.322	4.58	8.20	11.49	CAO
FE-K	2855	1.399	0.509	5.17	12.97	18.53	FE2O3
NA-K	0	0.549	0.000	0.00	0.00	0.00	NA2O3
O			1.737	61.69	44.24		

1,30
*

TN-5500 University of Washington / JEOL SUN 07-NOV-04 20:57
Cursor: 0.000keV = 0



0.000 B- 5 VFS = 1024 10.240

	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	54.57	Si+4	7.7638	7.7638							
Al2O3	2.57	Al+3	0.4309	0.2362	**0.1947**						
TiO2	0	Ti+4	0.0000	0.0000	**0.0000**						
Cr2O3	0	Cr+3	0.0000			0.0000	0.0000				
Fe(total)O	18.53	Fe+3	0.4563			0.4563	0.0000				
MgO	12.59	Mg+2	2.6704			2.6704	**0.0000**				
MnO	0	Fe+2	1.6974			1.6787	**0.0187**				
CaO	11.49	Mn+2	0.0000			0.0000	**0.0000**				
Na2O	0	Ca+2	1.7513					1.7513	0.0000		
K2O	0.25	Na+	0.0000					0.0000	**0.0000**	0.0000	0.0000
		K+	0.0454							0.0454	0.0000
Total	**100**		**Excess**	T site	**0.1947**	C site	**0.0187**	B site	**0**	A site	**0**
			Total	**8**		**5.0000**		**1.7513**		**0.0454**	**0.0000**
			%Fill	**100**		**100**		**87.5649**			

Prefix none
Name actinolite
Modifier none
Group Calcic Amphibole

Sample # **000000-00-00-00**

Values		Satisfied Conditions
(Ca,Na)@B	1.75	(Ca,Na)@B >= 1 and Na@B < 0.5
Na@B	0.00	Ca@B >= 1.5 and (Na,K)@A < 0.5
Ca@B	1.75	(Mg/(Mg+Fe2))>= 0.5
(Na,K)@A	0.05	Si > 7.5
Mg/(Mg+Fe2)	0.61	(Mg/(Mg+Fe2))< 0.9
Si	7.76	

Mineral Analysis Program (Version 5.0)

ACTINOLITE
[1 1 0]

CRISP2.1

File Edit Tools Area Fourier CIP ELD PhIDO Statistics Calculate Options Window Help

5445.tif - 1200x1600x8 (1:2)

Neg# 5445 Job# 041172-47

ELD on 5445.tif

Lattice

Refls	h	k
1	1	0
2	0	1
3	1	1

a= 8.671Å
b= 5.292Å
γ=103.224
NR=

Unbend

Refine Auto Cent.

Display: Map, Shape, ZoomX, ZoomY, Marks

Phase Identification from d-spacing (5445.tif)

Lattice 1: U 0.1185 1/Å ± 0.3 %; V 0.1941 1/Å ± 0.3 %; U^V 76.776 ° ± 0.1 °

Lattice 2: U 0.1185 1/Å ± 2.0 %; V 0.1941 1/Å ± 2.0 %; U^V 76.776 ° ± 2.0 °; 1^2 90.000 ° ± 2.0 °

2 matches (1 phases)

Find Save... Clear list Close

```
  1  1  0   0  0  1 [ -1  1  0] 0.019 0.000 0.000
;
; File : T:\Images\Nikon Cam Pics\ED patterns\TIFF Images by
;
;  U1        V1      [Zone axes] U^Verr Uerr  Verr
;-----------------------------------------------------
Actinolite      : Lattice=Monoclinic , Base-centered (C)
  1 -1  0   0  0  1 [  1  1  0] 0.019 0.000 0.000
  1  1  0   0  0  1 [ -1  1  0] 0.019 0.000 0.000
```

Ready

Start | Ho... | Home | Jobs | frm... | Micr... | CRI... | MS... | Ado... | 10:50 AM

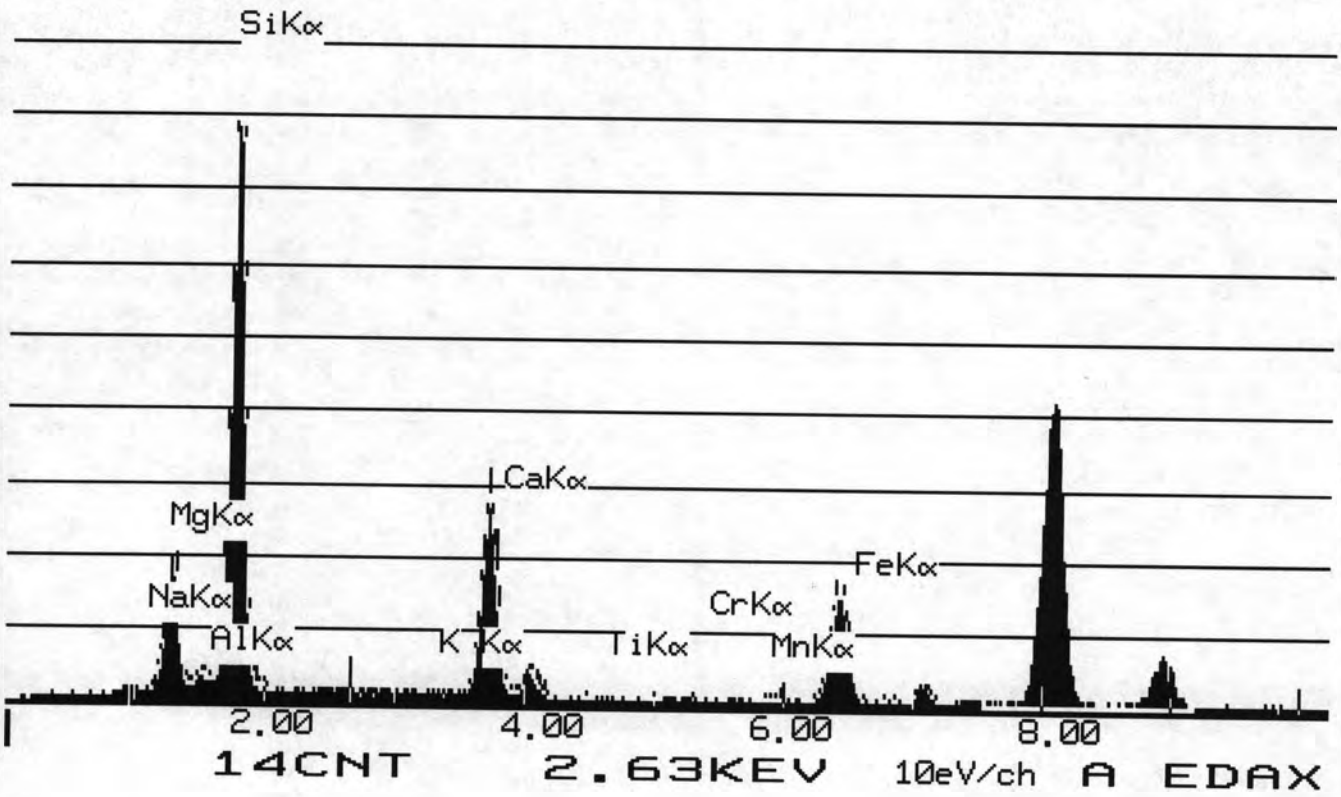
INTE-% :
LABEL = 041172-47 SP 15336
09-NOV-72 18:53:39
28.895 LIVE SECONDS

ELEM	CPS	WT % ELEM	WT % OXIDE
MGK	73.853	10.465	17.352
ALK	5.918	0.504	0.952
SIK	335.763	26.759	57.247
CAK	116.593	8.859	12.396
TIK	0.485	0.052	0.087
CRK	0.623	0.066	0.096
MNK	2.353	0.258	0.333
FEK	79.944	8.069	11.537

TOTAL			100.000

USED PEIF: USER

08-NOV-04 18:54:01 SUPER QUANT
RATE= 14CPS TIME= 29LSEC
FS= 1057/ 1057 PRST= 200LSEC
A =041172-47 SP 15336



	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	57.247	Si+4	7.9203	7.9203							
Al2O3	0.952	Al+3	0.1552	0.0797	**0.0755**						
TiO2	0.087	Ti+4	0.0091	0.0000	**0.0091**						
Cr2O3	0.096	Cr+3	0.0105			0.0105	0.0000				
Fe(total)O	11.537	Fe+3	0.2642			0.2642	0.0000				
MgO	17.352	Mg+2	3.5790			3.5790	**0.0000**				
MnO	0.333	Fe+2	1.0411			1.0411	**0.0000**				
CaO	12.396	Mn+2	0.0390			0.0207	**0.0184**				
Na2O	0	Ca+2	1.8373					1.8373	0.0000		
K2O	0	Na+	0.0000					0.0000	**0.0000**	0.0000	0.0000
		K+	0.0000							0.0000	0.0000
Total	**100**		**Excess**	T site	**0.0845**	C site	**0.0184**	B site	**0**	A site	**0**
			Total	**8**		**5.0000**		**1.8373**		**0.0000**	**0.0000**
			%Fill	**100**		**100**		**91.8672**			

Prefix none
Name actinolite
Modifier none
Group Calcic Amphibole

Sample # **041172-47-15336**

Values		Satisfied Conditions
(Ca,Na)@B	1.84	(Ca,Na)@B >= 1 and Na@B < 0.5
Na@B	0.00	Ca@B >= 1.5 and (Na,K)@A < 0.5
Ca@B	1.84	(Mg/(Mg+Fe2))>= 0.5
(Na,K)@A	0.00	Si > 7.5
Mg/(Mg+Fe2)	0.77	(Mg/(Mg+Fe2))< 0.9
Si	7.92	

Mineral Analysis Program (Version 5.0)

ACTINOLITE
[5 -1 2]

CRISP2.1

File Edit Tools Area Fourier CIP ELD PhIDO Statistics Calculate Options Window Help

5424.tif - 1200x1600x8 (1:2)

Neg# 5424 Job# 041172-47

ELD on 5424.tif

Lattice

Refls	h	k
1	1	0
2	0	1
3	1	1

a= 4.595Å
b= 4.021Å
γ=75.889
NR=

Unbend

Refine Auto Cent.

Display: Map, Shape, ZoomX, ZoomY, Marks

Phase Identification from d-spacing (5424.tif)

Lattice 1					Lattice 2				
U	0.2244	1/Å ±	0.6	%	U	0.2244	1/Å ±	2.0	%
V	0.2564	1/Å ±	0.6	%	V	0.2564	1/Å ±	2.0	%
U^V	104.11	° ±	0.2	°	U^V	104.11	° ±	2.0	°
					1^2	90.000	° ±	2.0	°

4 matches (2 phases)

Find Save... Clear list Close

```
  0  2  1   1  3 -1 [  5 -1  2] 0.003 0.000 0.001
;
; File : T:\Images\Nikon Cam Pics\ED patterns\TIFF Images by
;
;  U1        V1     [Zone axes] U^Verr Uerr  Verr
;-----------------------------------------------------
Actinolite      : Lattice=Monoclinic , Base-centered (C)
  0 -2  1   1 -3 -1 [ -5 -1 -2] 0.103 0.001 0.000
  0  2  1   1  3 -1 [  5 -1  2] 0.103 0.001 0.000
;-----------------------------------------------------
Edenite         : Lattice=Monoclinic , Base-centered (C)
  0 -2  1   1 -3 -1 [ -5 -1 -2] 0.003 0.000 0.001
  0  2  1   1  3 -1 [  5 -1  2] 0.003 0.000 0.001
```

Ready

Start Ho... Home Jobs frm... Micr... CRI... MS... Ado... 10:52 AM

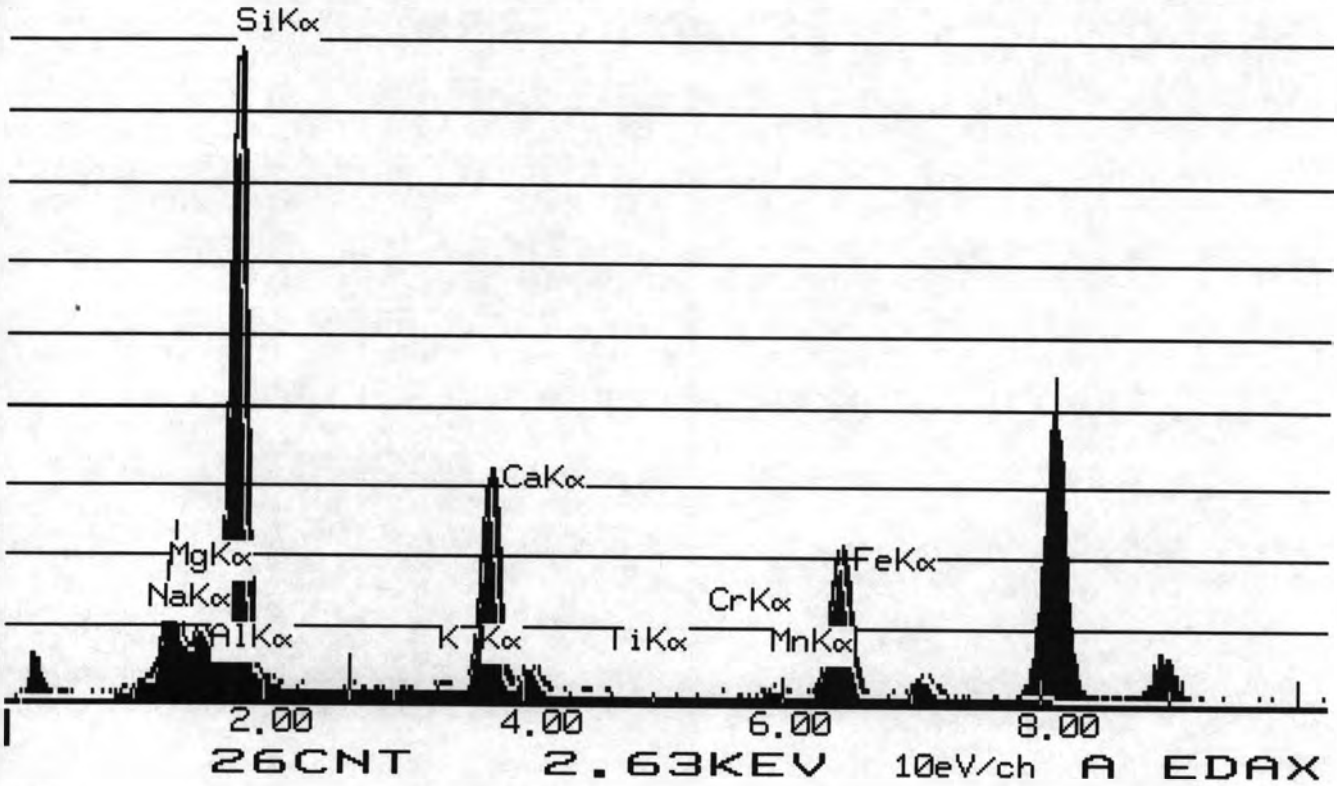
INTE-% :
LABEL = 041172-47 15319
10-NOV-72 00:07:35
32.168 LIVE SECONDS

ELEM	CPS	WT % ELEM	WT % OXIDE
MGK	75.200	8.285	13.738
ALK	17.378	1.150	2.173
SIK	408.640	25.322	54.174
K K	3.295	0.339	0.409
CAK	164.824	9.738	13.625
TIK	1.554	0.130	0.216
CRK	0.870	0.072	0.105
MNK	7.057	0.602	0.777
FEK	131.747	10.340	14.784

TOTAL			100.000

USED PEIF: USER

09-NOV-04 00:07:59 SUPER QUANT
RATE= 0CPS TIME= 32LSEC
FS= 1526/ 1526 PRST= 200LSEC
A =041172-47 15319



	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	54.174	Si+4	7.7372	7.7372							
Al2O3	2.173	Al+3	0.3657	0.2628	**0.1029**						
TiO2	0.216	Ti+4	0.0232	0.0000	**0.0232**						
Cr2O3	0.105	Cr+3	0.0119			0.0119	0.0000				
Fe(total)O	14.784	Fe+3	0.0159			0.0159	0.0000				
MgO	13.738	Mg+2	2.9251			2.9251	**0.0000**				
MnO	0.777	Fe+2	1.7479			1.7479	**0.0000**				
CaO	13.625	Mn+2	0.0940			0.0940	**0.0000**				
Na2O	0	Ca+2	2.0847					2.0000	0.0847		
K2O	0.409	Na+	0.0000					0.0000	**0.0000**	0.0000	0.0000
		K+	0.0745							0.0745	0.0000
Total	**100.001**		**Excess**	T site	**0.1261**	C site	**0.0000**	B site	**0.0847327**	A site	**0**
			Total	**8**		**4.9209**		**2.0000**		**0.0745**	**0.0000**
			%Fill	**100**		**98.4176**		**100**			

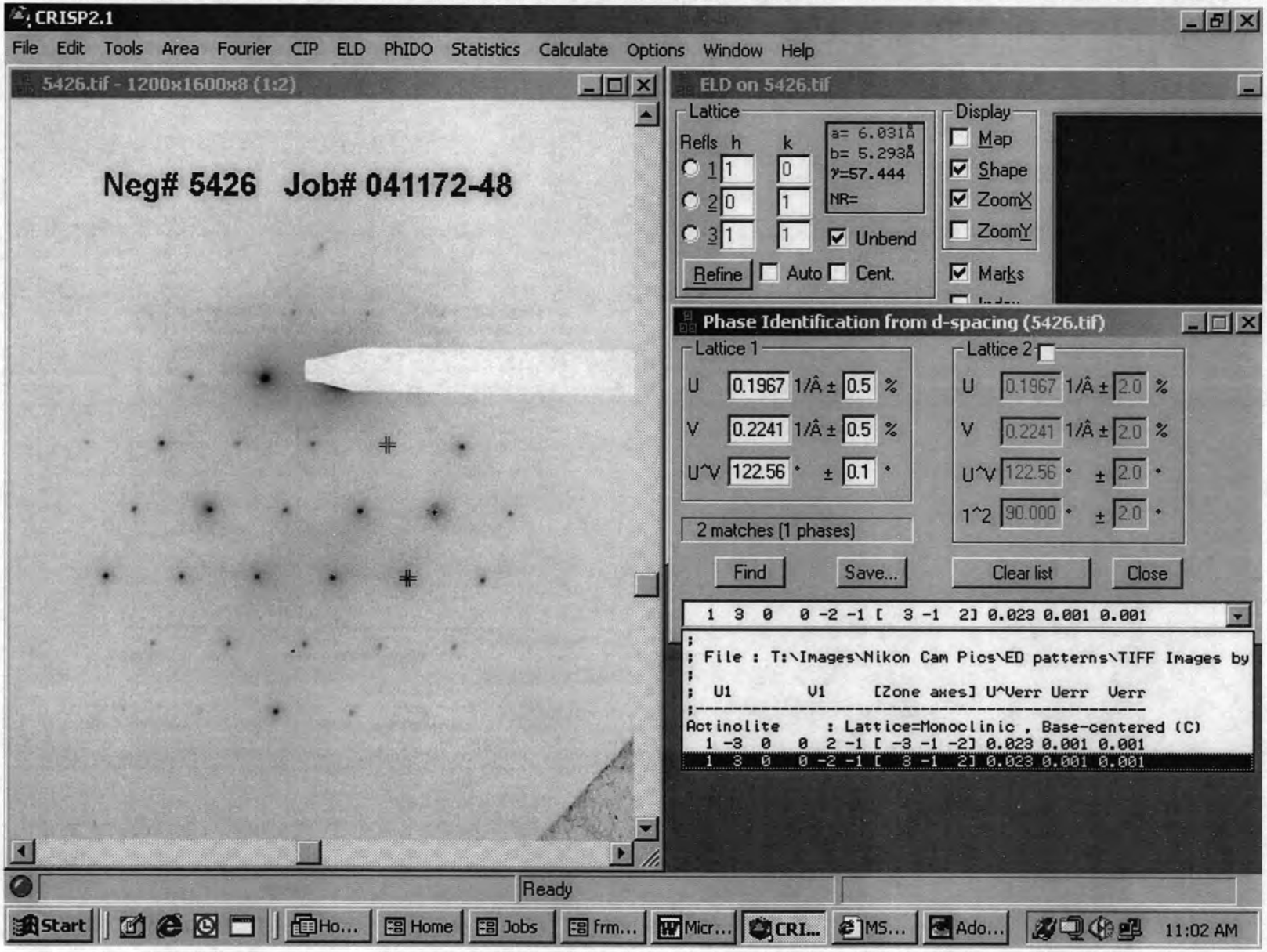
Prefix none
Name actinolite
Modifier none
Group Calcic Amphibole

Sample # **041172-47-15319**

Values		Satisfied Conditions
(Ca,Na)@B	2.00	(Ca,Na)@B >= 1 and Na@B < 0.5
Na@B	0.00	Ca@B >= 1.5 and (Na,K)@A < 0.5
Ca@B	2.00	(Mg/(Mg+Fe2))>= 0.5
(Na,K)@A	0.07	Si > 7.5
Mg/(Mg+Fe2)	0.63	(Mg/(Mg+Fe2))< 0.9
Si	7.74	

Mineral Analysis Program (Version 5.0)

ACTINOLITE
[3 -1 2]



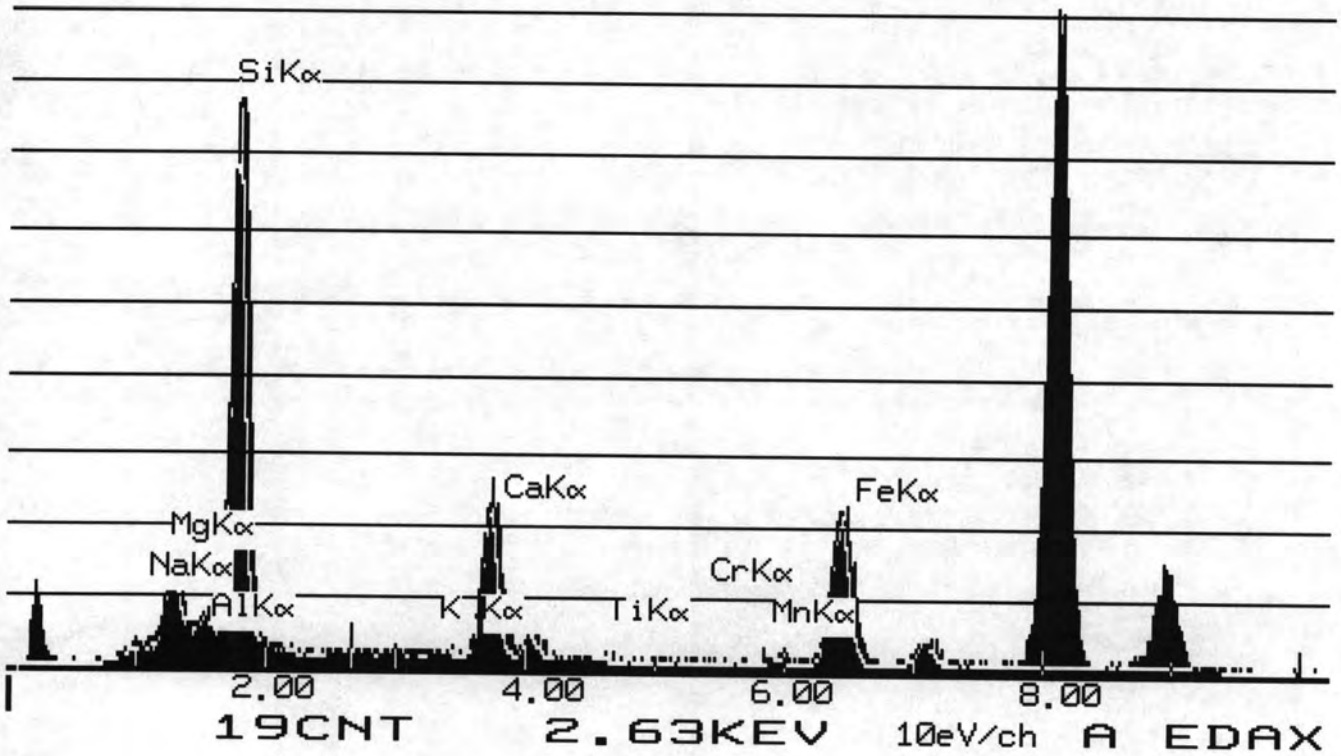
INTE-% :
LABEL = 041172-48 SP 15321
08-NOV-72 19:15:04
67.688 LIVE SECONDS

ELEM	CPS	WT % ELEM	WT % OXIDE
MGK	15.630	6.549	10.858
ALK	0.473	0.119	0.225
SIK	113.668	26.785	57.302
CAK	37.998	8.537	11.944
MNK	1.300	0.421	0.544
FEK	44.823	13.377	19.126

TOTAL			100.000

USED PEIF: USER

07-NOV-04 19:15:24 SUPER QUANT
RATE= 9576CPS TIME= 67LSEC
FS= 1023/ 1023 PRST= 200LSEC
A =041172-48 SP 15321



	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	57.302	Si+4	8.0000	8.0000							
Al2O3	0.225	Al+3	0.0588	0.0000	**0.0588**						
TiO2	0	Ti+4	0.0000	0.0000	**0.0000**						
Cr2O3	0	Cr+3	0.0000			0.0000	0.0000				
Fe(total)O	19.126	Fe+3	0.0339			0.0339	0.0000				
MgO	10.858	Mg+2	2.3724			2.3724	**0.0000**				
MnO	0.544	Fe+2	2.2985			2.2985	**0.0000**				
CaO	11.944	Mn+2	0.0959			0.0959	**0.0000**				
Na2O	0	Ca+2	1.8716					1.8716	0.0000		
K2O	0	Na+	0.0000					0.0000	**0.0000**	0.0000	0.0000
		K+	0.0000							0.0000	0.0000
Total	**99.999**		**Excess**	T site	**0.0588**	C site	**0.0000**	B site	**0**	A site	**0**
			Total	**8**		**4.8595**		**1.8716**		**0.0000**	**0.0000**
			%Fill	**100**		**97.1898**		**93.578**			

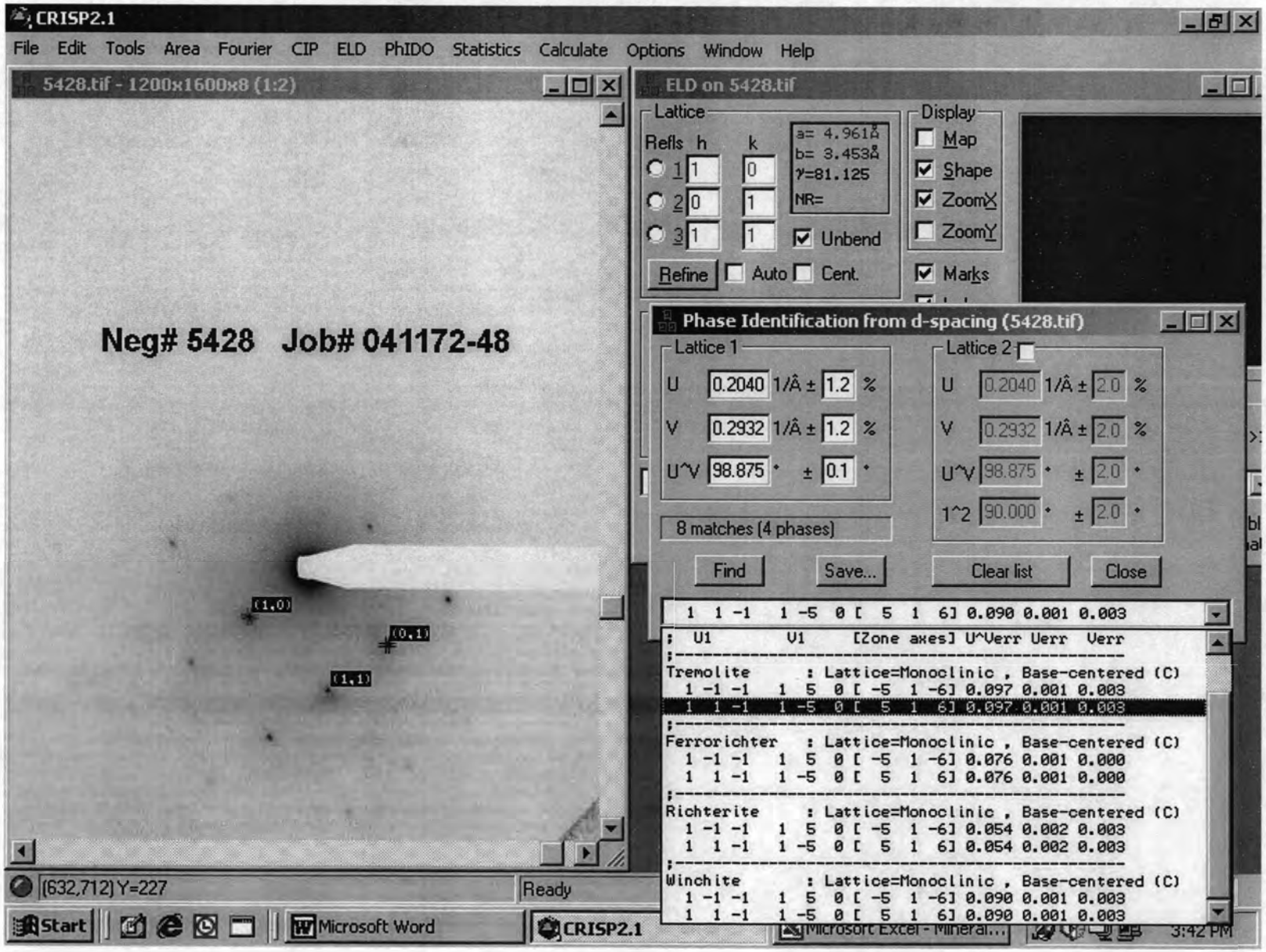
Prefix none
Name actinolite
Modifier none
Group Calcic Amphibole

Sample # **041172-48-15321**

Values		Satisfied Conditions
(Ca,Na)@B	1.87	(Ca,Na)@B >= 1 and Na@B < 0.5
Na@B	0.00	Ca@B >= 1.5 and (Na,K)@A < 0.5
Ca@B	1.87	(Mg/(Mg+Fe2))>= 0.5
(Na,K)@A	0.00	Si > 7.5
Mg/(Mg+Fe2)	0.51	(Mg/(Mg+Fe2))< 0.9
Si	8.00	

Mineral Analysis Program (Version 5.0)

TREMOLITE
[516]



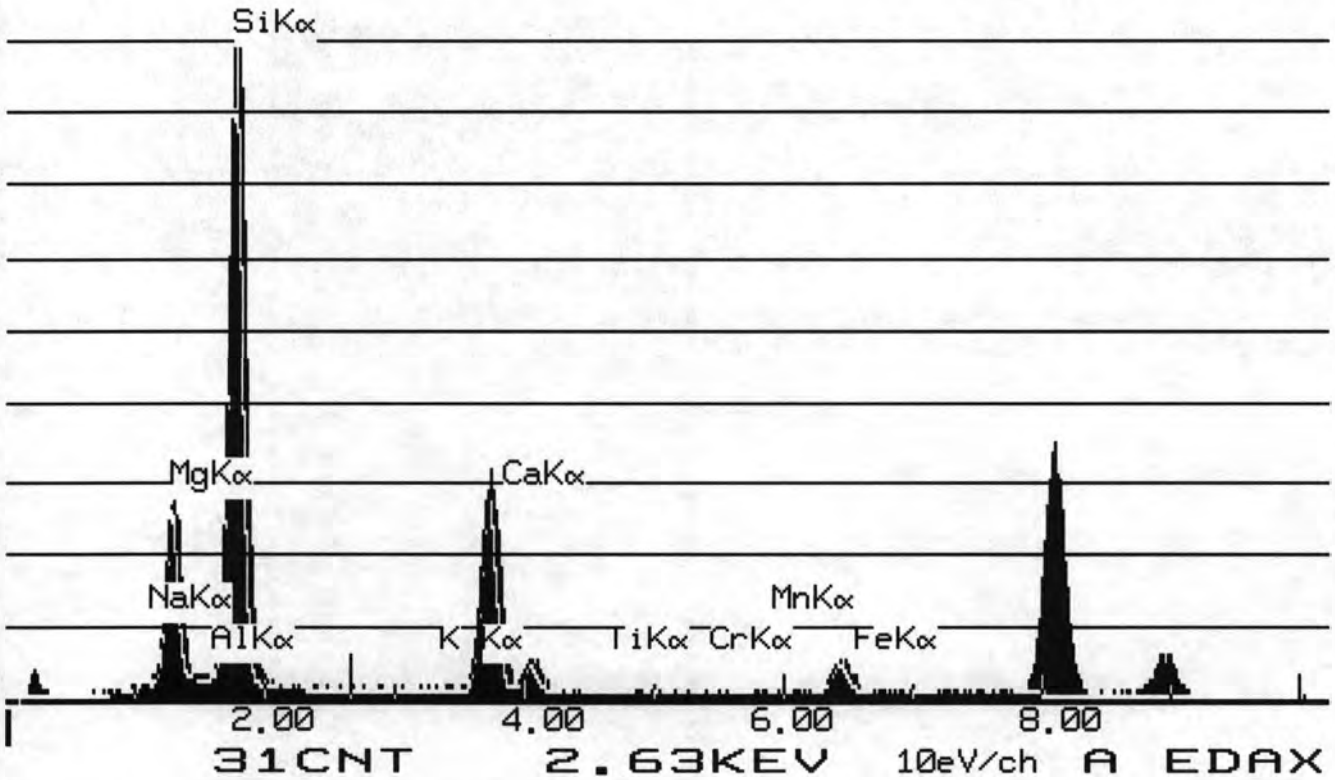
INTE-% :
LABEL = 041172-49 SP 15323
09-NOV-72 00:49:35
60.352 LIVE SECONDS

ELEM	CPS	WT % ELEM	WT % OXIDE
MGK	90.006	13.196	21.880
SIK	345.193	28.464	60.895
K K	1.110	0.152	0.183
CAK	123.311	9.694	13.564
TIK	1.259	0.140	0.233
MNK	0.580	0.066	0.085
FEK	21.159	2.210	3.159

TOTAL			100.000

USED PEIF: USER

08-NOV-04 00:49:55 SUPER QUANT
RATE=*****CPS TIME= 60LSEC
FS= 2259/ 2259 PRST= 200LSEC
A =041172-49 SP 15323



	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	60.895	Si+4	8.0000	8.0000							
Al2O3	0	Al+3	0.0000	0.0000	**0.0000**						
TiO2	0.233	Ti+4	0.0381	0.0000	**0.0381**						
Cr2O3	0	Cr+3	0.0000			0.0000	0.0000				
Fe(total)O	3.159	Fe+3	0.0105			0.0105	0.0000				
MgO	21.88	Mg+2	4.3877			4.3877	**0.0000**				
MnO	0.085	Fe+2	0.3658			0.3658	**0.0000**				
CaO	13.564	Mn+2	0.0262			0.0262	**0.0000**				
Na2O	0	Ca+2	1.9626					1.9626	0.0000		
K2O	0.183	Na+	0.0000					0.0000	**0.0000**	0.0000	0.0000
		K+	0.0437							0.0437	0.0000
Total	**99.999**		**Excess**	T site	**0.0381**	C site	**0.0000**	B site	**0**	A site	**0**
			Total	**8**		**4.8282**		**1.9626**		**0.0437**	**0.0000**
			%Fill	**100**		**96.5649**		**98.131**			

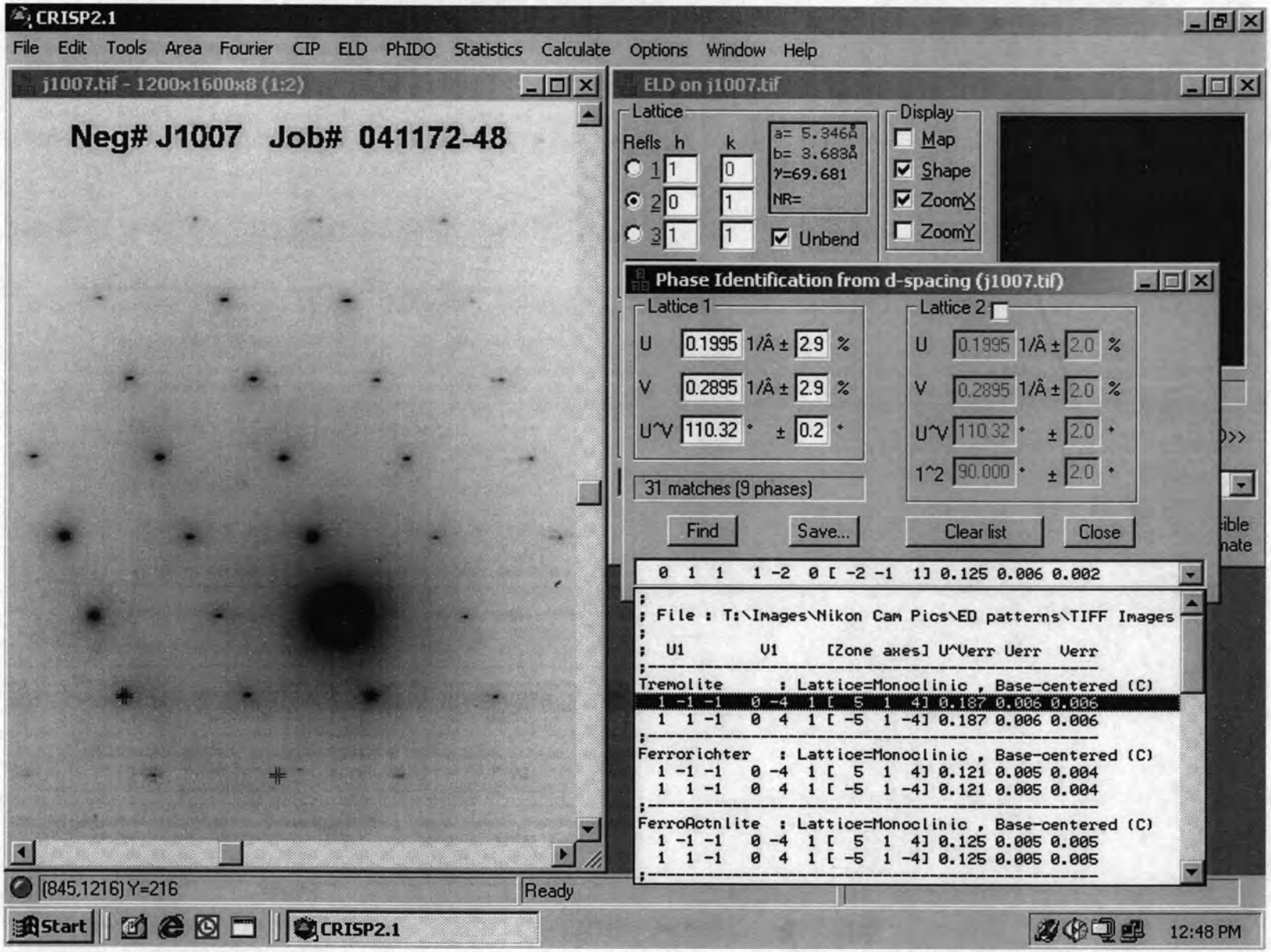
Prefix none
Name tremolite
Modifier none
Group Calcic Amphibole

Sample # **041172-48-15323**

Values		Satisfied Conditions
(Ca,Na)@B	1.96	(Ca,Na)@B >= 1 and Na@B < 0.5
Na@B	0.00	Ca@B >= 1.5 and (Na,K)@A < 0.5
Ca@B	1.96	(Mg/(Mg+Fe2))>= 0.5
(Na,K)@A	0.04	Si > 7.5
Mg/(Mg+Fe2)	0.92	(Mg/(Mg+Fe2))>= 0.9
Si	8.00	

Mineral Analysis Program (Version 5.0)

TREMOLITE
[514]



SQMTF: QUANTIFY
Standardless Analysis

Refit _NAK' _NAK"
Refit _ALK' _ALK" _K K' _K K" _FEK" _NAK
Chi-sqd = 4.39

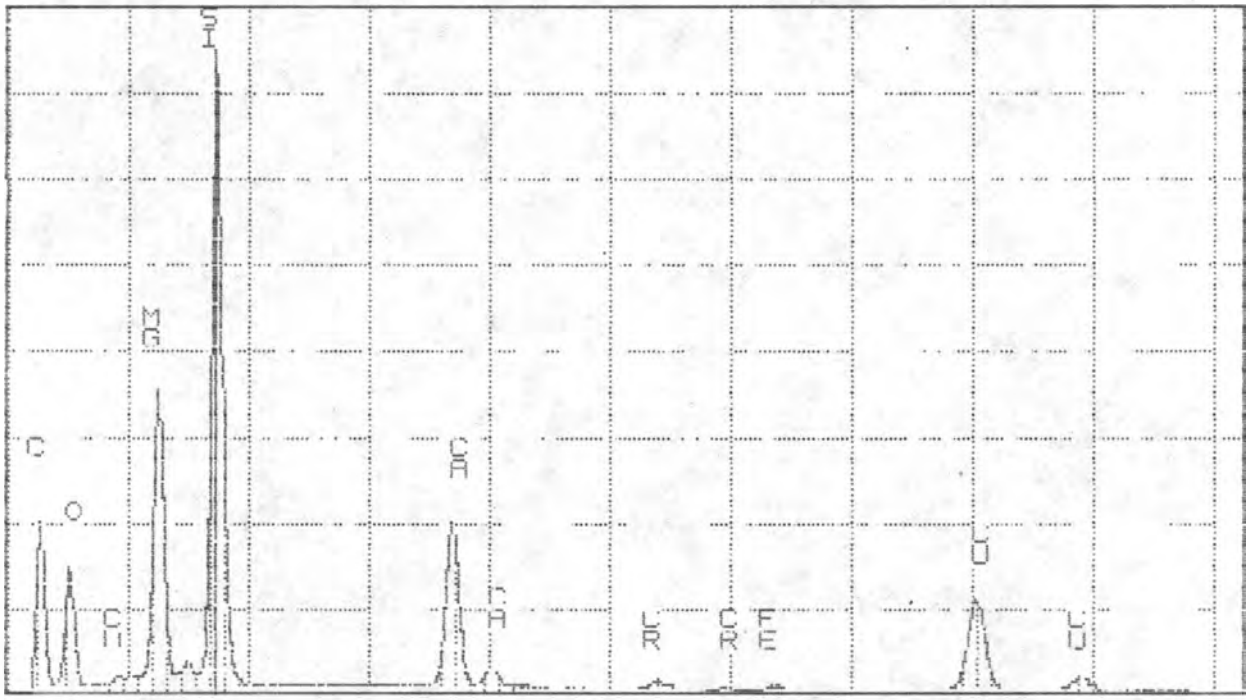
Element	Net Counts		
Si-K	83146	+/-	419
Mg-K	35723	+/-	343
Al-K	1504	+/-	188
K -K	294	+/-	77
Ca-K	28877	+/-	331
Fe-K	938	+/-	79
Na-K	0	+/-	0

REF.S EDS:SIK EDS:MGK EDS:ALK EDS:K K EDS:CAK EDS:FEK
EDS:NAK

041172-48 738

EL-LINE	PEAK	K-FACTOR	CEL/CREF	ATOM%	EL WT%	WT%	FORMULA
SI-K	83146	1.000	1.000	22.11	29.64	63.52	SIO2
MG-K	35723	1.000	0.430	11.08	12.74	21.23	MGO
AL-K	1504	0.750	0.014	0.31	0.40	0.76	AL2O3
K-K	294	1.060	0.004	0.06	0.11	0.13	K2O
CA-K	28877	0.949	0.330	5.11	9.78	13.69	CAO
FE-K	938	1.399	0.016	0.17	0.47	0.67	FE2O3
NA-K	0	0.549	0.000	0.00	0.00	0.00	NA2O3
O			1.581	61.16	46.86		

TN-5500 University of Washington / JEOL THU 04-NOV-04 21:56
Cursor: 1 730keV = 7688



0.000 VFS = 8192 10 240
349 041172-48 738

	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	63.52	Si+4	8.0000	8.0000							
Al2O3	0.76	Al+3	0.1501	0.0000	**0.1501**						
TiO2	0	Ti+4	0.0000	0.0000	**0.0000**						
Cr2O3	0	Cr+3	0.0000			0.0000	0.0000				
Fe(total)O	0.67	Fe+3	0.0215			0.0215	0.0000				
MgO	21.23	Mg+2	4.2340			4.2340	**0.0000**				
MnO	0	Fe+2	0.1190			0.1190	**0.0000**				
CaO	13.69	Mn+2	0.0000			0.0000	**0.0000**				
Na2O	0	Ca+2	1.9831					1.9831	0.0000		
K2O	0.13	Na+	0.0000					0.0000	**0.0000**	0.0000	0.0000
		K+	0.0570							0.0570	0.0000
Total	**100**		**Excess**	T site	**0.1501**	C site	**0.0000**	B site	**0**	A site	**0**
			Total	**8**		**4.5246**		**1.9831**		**0.0570**	**0.0000**
			%Fill	**100**		**90.4914**		**99.1531**			

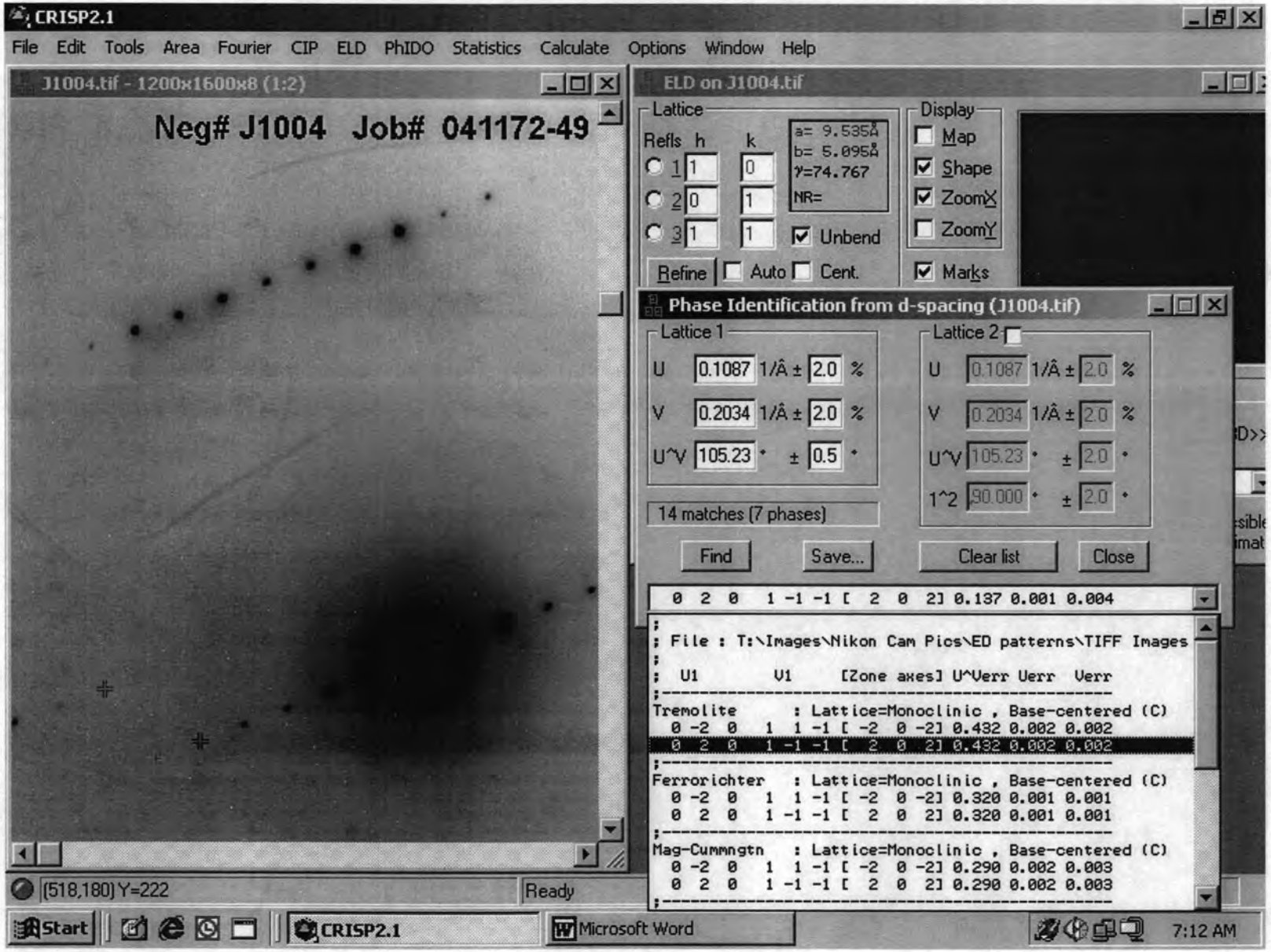
Prefix none
Name tremolite
Modifier none
Group Calcic Amphibole

Sample # **041172-48-738**

Values		Satisfied Conditions
(Ca,Na)@B	1.98	(Ca,Na)@B >= 1 and Na@B < 0.5
Na@B	0.00	Ca@B >= 1.5 and (Na,K)@A < 0.5
Ca@B	1.98	(Mg/(Mg+Fe2))>= 0.5
(Na,K)@A	0.06	Si > 7.5
Mg/(Mg+Fe2)	0.97	(Mg/(Mg+Fe2))>= 0.9
Si	8.00	

Mineral Analysis Program (Version 5.0)

TREMOLITE
[1 0 1]

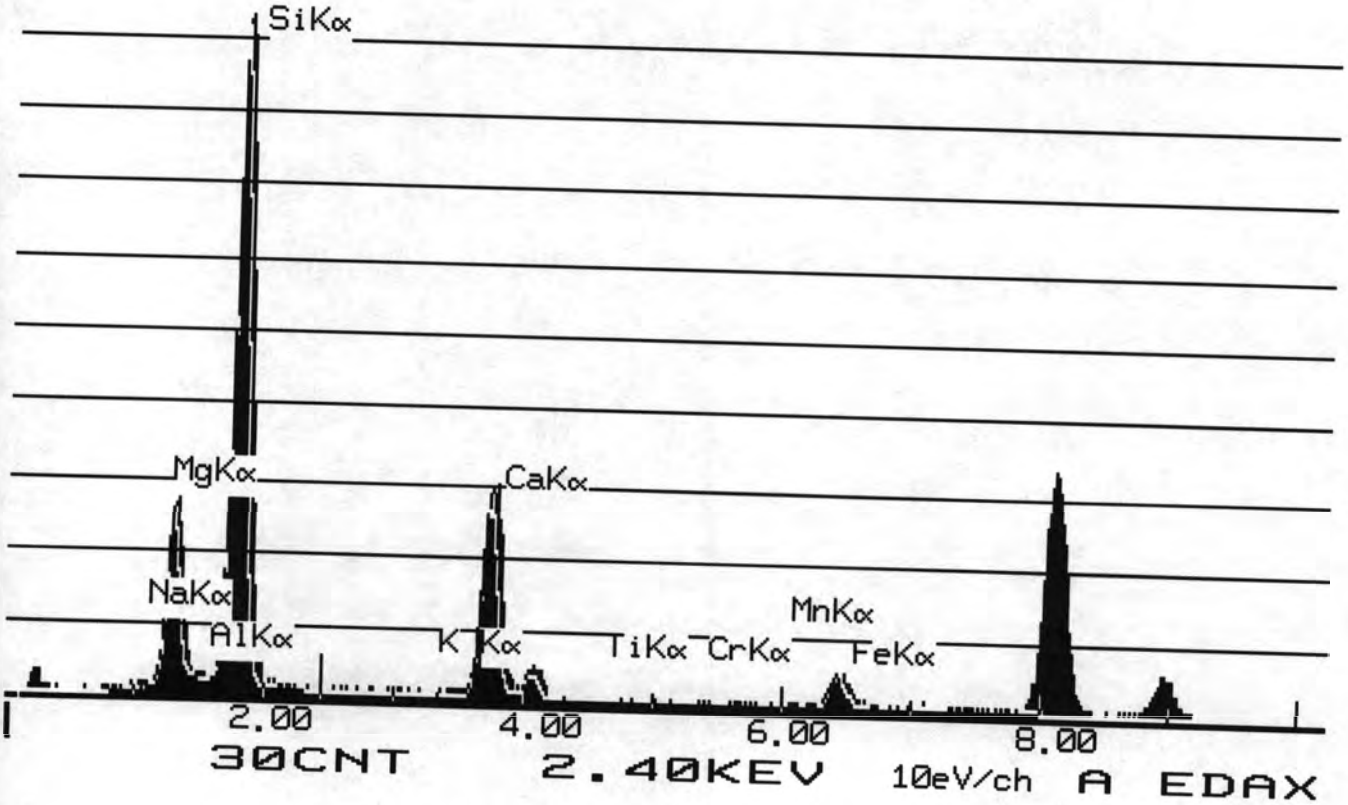


INTE-% :
LABEL = 041172-49 SP 15323
23-NOV-72 02:30:16
60.352 LIVE SECONDS

ELEM	CPS	WT % ELEM	WT % OXIDE
MGK	90.006	13.217	21.915
SIK	345.193	28.510	60.993
K K	0.978	0.134	0.162
CAK	123.311	9.710	13.586
TIK	1.259	0.140	0.233
MNK	0.580	0.066	0.085
FEK	20.231	2.116	3.026
TOTAL			100.000

USED PEIF: USER

22-NOV-04 02:30:39 SUPER QUANT
RATE= 13CPS TIME= 60LSEC
FS= 2259/ 2259 PRST= 200LSEC
A =041172-49 SP 15323



	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	60.993	Si+4	8.0000	8.0000							
Al2O3	0	Al+3	0.0000	0.0000	**0.0000**						
TiO2	0.233	Ti+4	0.0388	0.0000	**0.0388**						
Cr2O3	0	Cr+3	0.0000			0.0000	0.0000				
Fe(total)O	3.026	Fe+3	0.0107			0.0107	0.0000				
MgO	21.915	Mg+2	4.3922			4.3922	**0.0000**				
MnO	0.085	Fe+2	0.3515			0.3515	**0.0000**				
CaO	13.586	Mn+2	0.0269			0.0269	**0.0000**				
Na2O	0	Ca+2	1.9651					1.9651	0.0000		
K2O	0.162	Na+	0.0000					0.0000	**0.0000**	0.0000	0.0000
		K+	0.0406							0.0406	0.0000
Total	**100**		**Excess**	T site	**0.0388**	C site	**0.0000**	B site	**0**	A site	**0**
			Total	**8**		**4.8201**		**1.9651**		**0.0406**	**0.0000**
			%Fill	**100**		**96.4024**		**98.2527**			

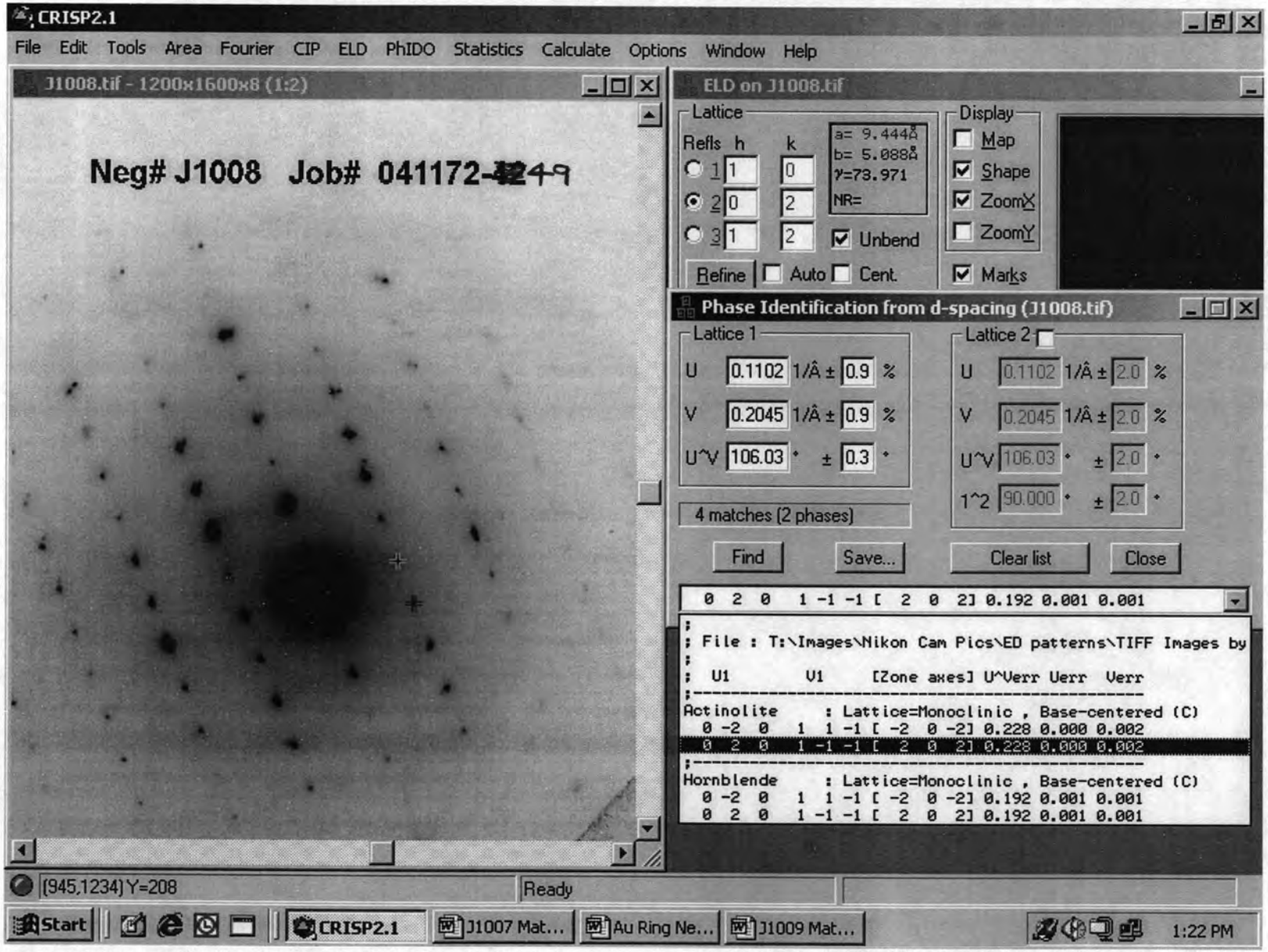
Prefix none
Name tremolite
Modifier none
Group Calcic Amphibole

Sample # **041172-49-15323**

Values		Satisfied Conditions
(Ca,Na)@B	1.97	(Ca,Na)@B >= 1 and Na@B < 0.5
Na@B	0.00	Ca@B >= 1.5 and (Na,K)@A < 0.5
Ca@B	1.97	(Mg/(Mg+Fe2))>= 0.5
(Na,K)@A	0.04	Si > 7.5
Mg/(Mg+Fe2)	0.93	(Mg/(Mg+Fe2))>= 0.9
Si	8.00	

Mineral Analysis Program (Version 5.0)

ACTINOLITE
[1 0 1]



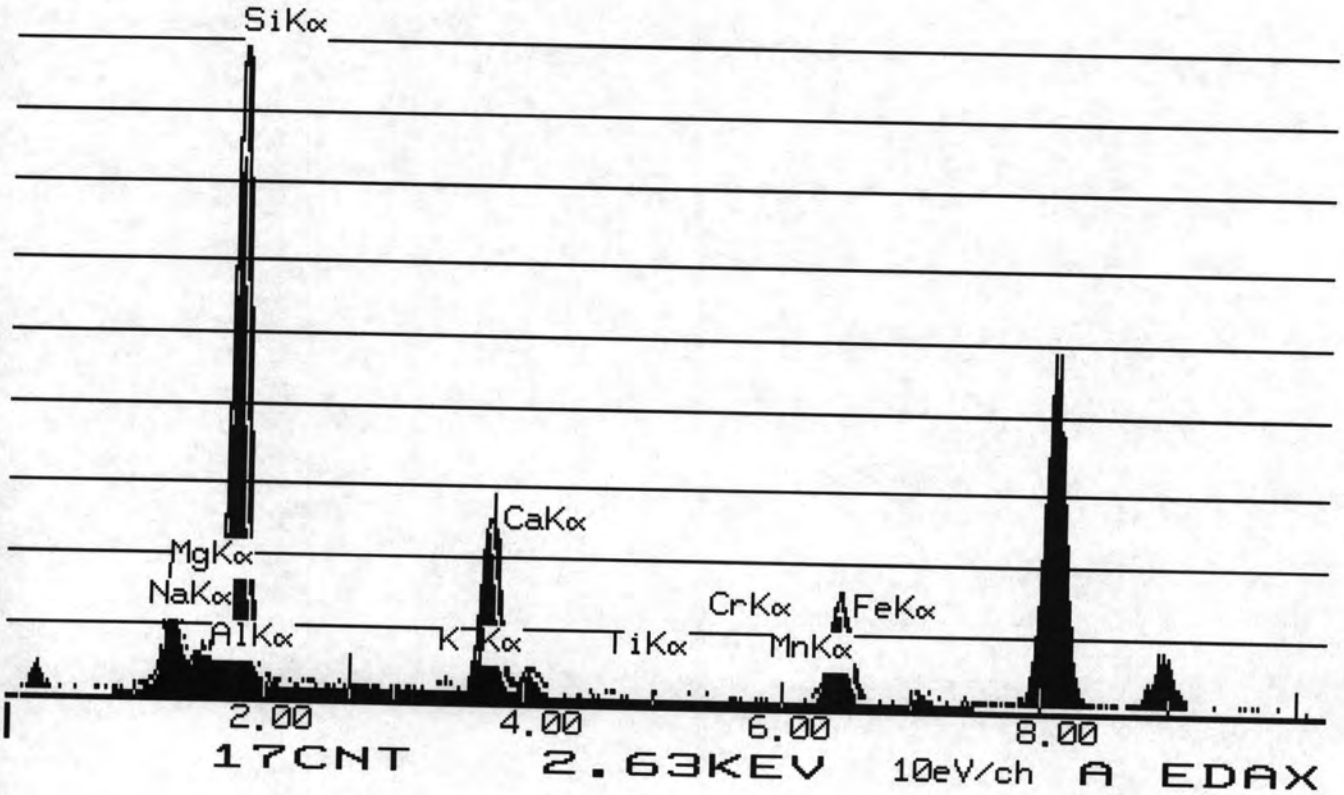
INTE-% :
LABEL = 041172-49 SP 15325
09-NOV-72 02:13:37
43.835 LIVE SECONDS

ELEM	CPS	WT % ELEM	WT % OXIDE
MGK	39.991	9.485	15.727
SIK	211.269	28.181	60.290
K K	0.411	0.091	0.110
CAK	69.237	8.805	12.320
MNK	0.388	0.071	0.092
FEK	47.451	8.017	11.462

TOTAL			100.000

USED PEIF: USER

08-NOV-04 02:13:59 SUPER QUANT
RATE= 90CPS TIME= 44LSEC
FS= 1087/ 1087 PRST= 200LSEC
A =041172-49 SP 15325



	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	60.29	Si+4	8.0000	8.0000							
Al2O3	0	Al+3	0.0000	0.0000	**0.0000**						
TiO2	0	Ti+4	0.0000	0.0000	**0.0000**						
Cr2O3	0	Cr+3	0.0000			0.0000	0.0000				
Fe(total)O	11.462	Fe+3	0.0309			0.0309	0.0000				
MgO	15.727	Mg+2	3.3048			3.3048	**0.0000**				
MnO	0.092	Fe+2	1.3492			1.3492	**0.0000**				
CaO	12.32	Mn+2	0.0536			0.0536	**0.0000**				
Na2O	0	Ca+2	1.8721					1.8721	0.0000		
K2O	0.11	Na+	0.0000					0.0000	**0.0000**	0.0000	0.0000
		K+	0.0516							0.0516	0.0000
Total	**100.001**		**Excess**	T site	**0.0000**	C site	**0.0000**	B site	**0**	A site	**0**
			Total	**8**		**4.7386**		**1.8721**		**0.0516**	**0.0000**
			%Fill	**100**		**94.7713**		**93.6074**			

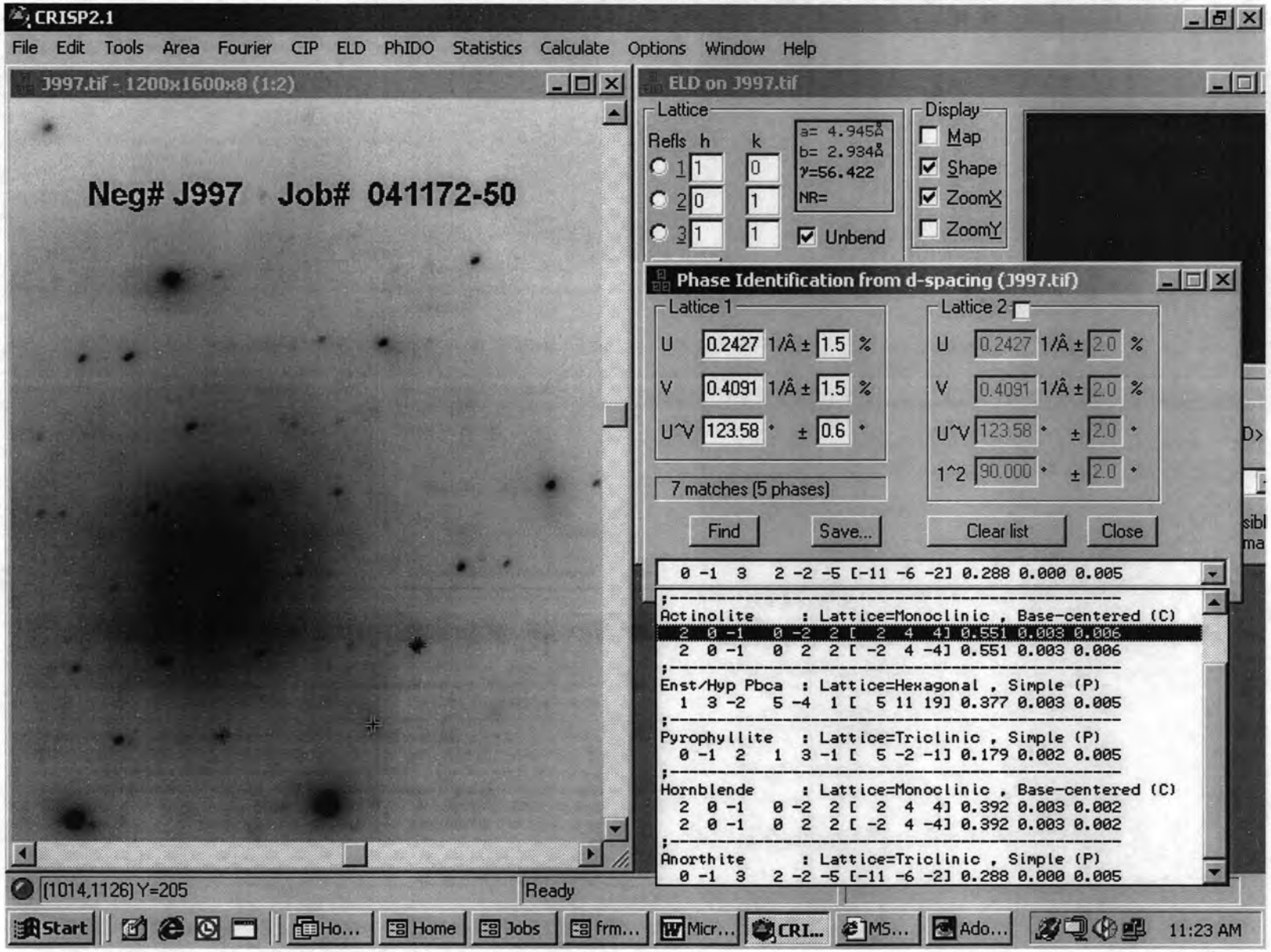
Prefix none
Name actinolite
Modifier none
Group Calcic Amphibole

Sample # **041172-49-15325**

Values		Satisfied Conditions
(Ca,Na)@B	1.87	(Ca,Na)@B >= 1 and Na@B < 0.5
Na@B	0.00	Ca@B >= 1.5 and (Na,K)@A < 0.5
Ca@B	1.87	(Mg/(Mg+Fe2))>= 0.5
(Na,K)@A	0.05	Si > 7.5
Mg/(Mg+Fe2)	0.71	(Mg/(Mg+Fe2))< 0.9
Si	8.00	

Mineral Analysis Program (Version 5.0)

ACTINOLITE
[1 2 2]



Standardless Analysis

Chi-sqd = 4.97

Element	Net Counts	
Si-K	24031 +/-	294
Mg-K	7601 +/-	287
Al-K	1977 +/-	357
K -K	106 +/-	93
Ca-K	7505 +/-	173
Fe-K	6903 +/-	158
Na-K	501 +/-	142

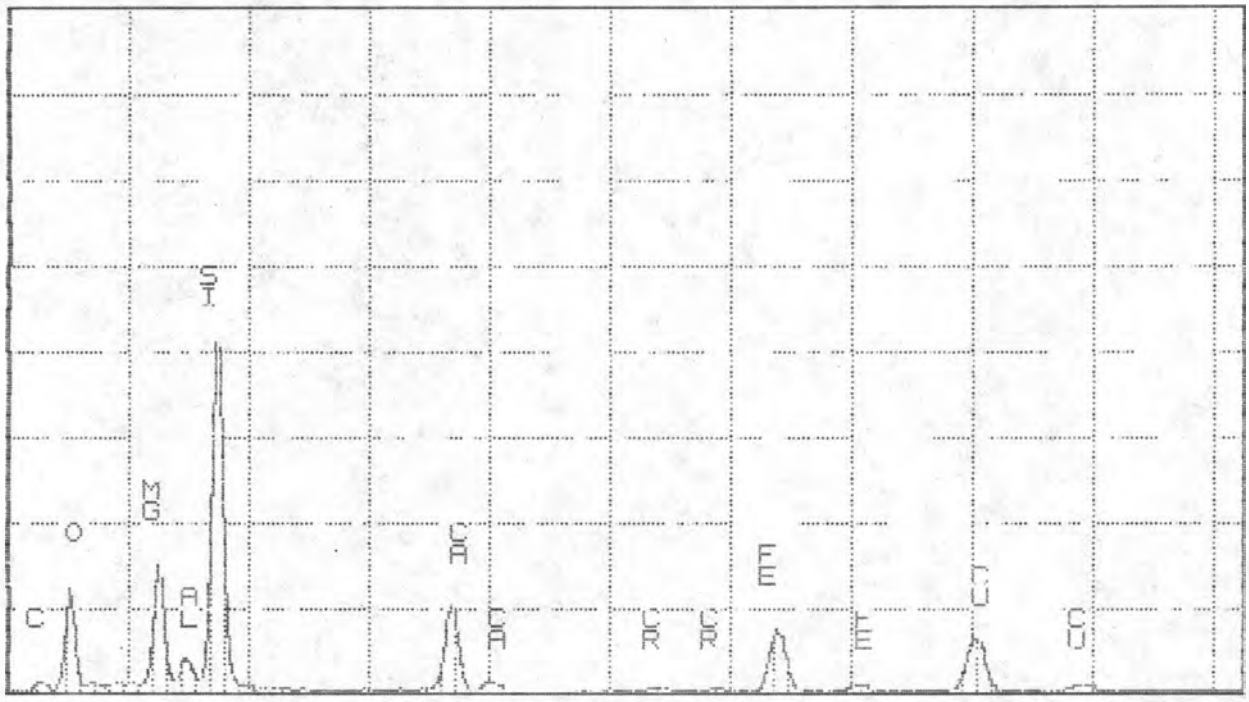
REF.S EDS:SiK EDS:MGK EDS:ALK EDS:K K EDS:CAK EDS:FEK
EDS:NAK

041172-50

EL-LINE	PEAK	K-FACTOR	CEL/CREF	ATOM%	EL WT%	WT%	FORMULA
SI-K	24031	1.000	1.000	20.59	26.28	56.31	SIO2
MG-K	7601	1.000	0.316	7.60	8.31	13.85	MGO
AL-K	1977	0.750	0.062	1.32	1.62	3.06	AL2O3
K-K	106	1.060	0.005	0.07	0.12	0.15	K2O
CA-K	7505	0.949	0.297	4.28	7.80	10.92	CAO
FE-K	6903	1.399	0.402	4.14	10.57	15.10	FE2O3
NA-K	501	0.549	0.011	0.29	0.30	0.62	NA2O3
O			1.713	61.72	45.00		

1,30
*

TN-5500 University of Washington / JEOL MON 08-NOV-04 14:05
Cursor: 0.00KeV = 0



0.000 VFS = 4096 10.240

0 041172-50 SP/KP

	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	56.31	Si+4	7.8819	7.8819							
Al2O3	3.06	Al+3	0.5048	0.1181	**0.3866**						
TiO2	0	Ti+4	0.0000	0.0000	**0.0000**						
Cr2O3	0	Cr+3	0.0000			0.0000	0.0000				
Fe(total)O	15.1	Fe+3	0.2227			0.2227	0.0000				
MgO	13.85	Mg+2	2.8901			2.8901	**0.0000**				
MnO	0	Fe+2	1.5199			1.5006	**0.0194**				
CaO	10.92	Mn+2	0.0000			0.0000	**0.0000**				
Na2O	0.62	Ca+2	1.6375					1.6375	0.0000		
K2O	0.15	Na+	0.1682					0.1682	**0.0000**	0.0000	0.0000
		K+	0.0268							0.0268	0.0000
Total	**100.01**		**Excess**	T site	**0.3866**	C site	**0.0194**	B site	**0**	A site	**0**
			Total	**8**		**5.0000**		**1.8058**		**0.0268**	**0.0000**
			%Fill	**100**		**100**		**90.2887**			

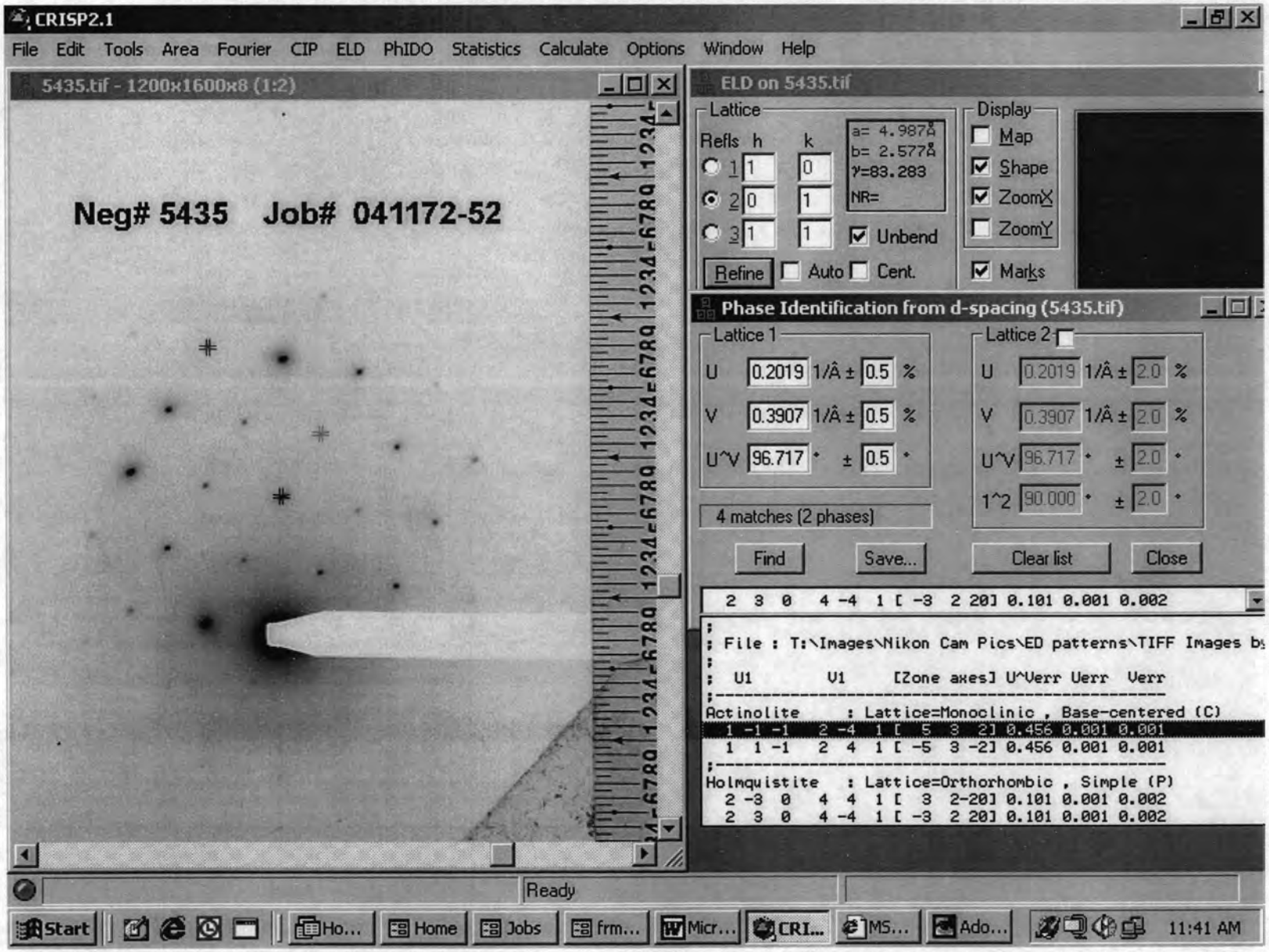
Prefix none
Name actinolite
Modifier none
Group Calcic Amphibole

Sample # **041172-50-732**

Values		Satisfied Conditions
(Ca,Na)@B	1.81	(Ca,Na)@B >= 1 and Na@B < 0.5
Na@B	0.17	Ca@B >= 1.5 and (Na,K)@A < 0.5
Ca@B	1.64	(Mg/(Mg+Fe2))>= 0.5
(Na,K)@A	0.03	Si > 7.5
Mg/(Mg+Fe2)	0.66	(Mg/(Mg+Fe2))< 0.9
Si	7.88	

Mineral Analysis Program (Version 5.0)

ACTINOLITE
[5 3 2]



INTE-% :
LABEL = 041172-52 15330
09-NOV-72 10:05:58
37.254 LIVE SECONDS

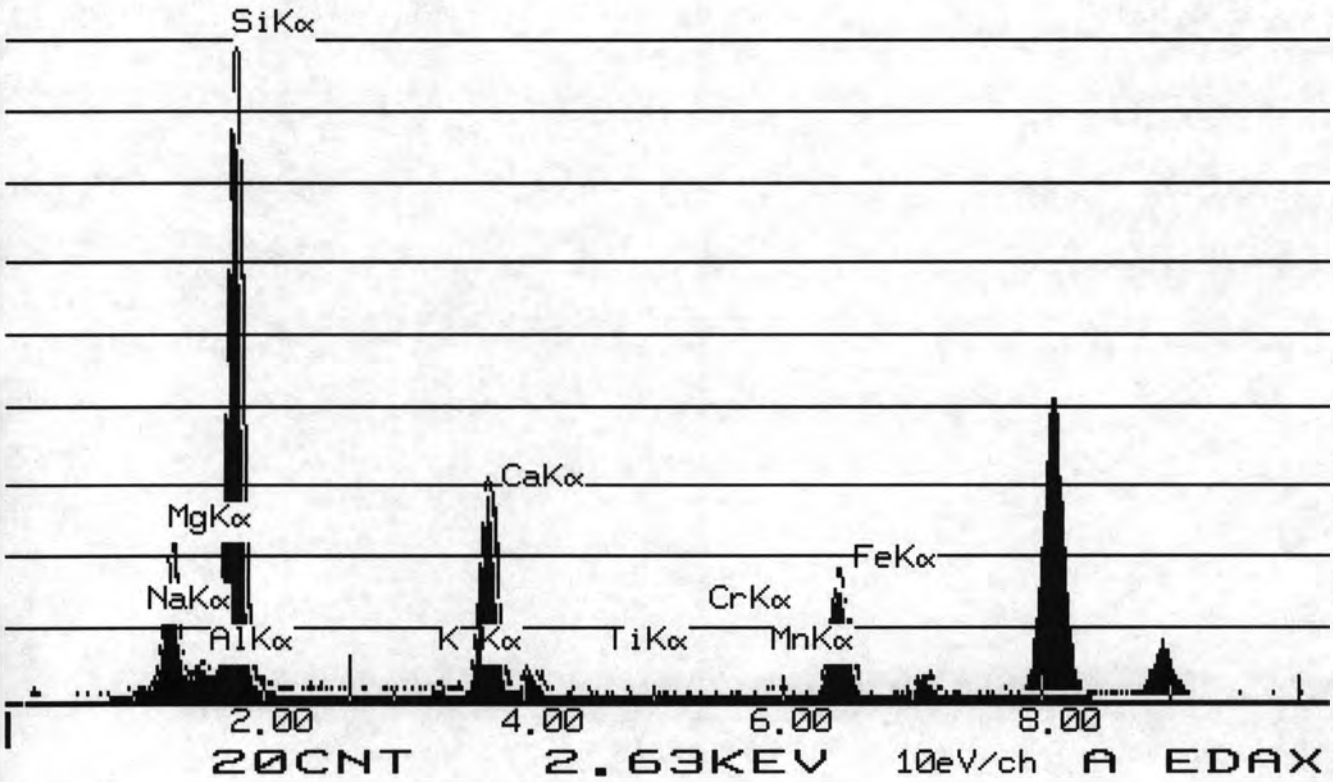
ELEM	CPS	WT % ELEM	WT % OXIDE
MGK	66.355	9.818	16.280
ALK	5.852	0.520	0.983
SIK	317.738	26.442	56.569
K K	2.523	0.349	0.420
CAK	122.671	9.733	13.619
TIK	0.671	0.075	0.125
MNK	2.255	0.258	0.333
FEK	77.441	8.163	11.670

TOTAL			100.000

USED PEIF: USER

Bb Out
Achondrite

08-NOV-04 10:06:35 SUPER QUANT
RATE= 162CPS TIME= 37LSEC
FS= 1320/ 1320 PRST= 200LSEC
A =041172-52 15330



	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	56.569	Si+4	7.9206	7.9206							
Al2O3	0.983	Al+3	0.1622	0.0794	**0.0828**						
TiO2	0.125	Ti+4	0.0132	0.0000	**0.0132**						
Cr2O3	0	Cr+3	0.0000			0.0000	0.0000				
Fe(total)O	11.67	Fe+3	0.0123			0.0123	0.0000				
MgO	16.28	Mg+2	3.3983			3.3983	**0.0000**				
MnO	0.333	Fe+2	1.3527			1.3527	**0.0000**				
CaO	13.619	Mn+2	0.0395			0.0395	**0.0000**				
Na2O	0	Ca+2	2.0429					2.0000	0.0429		
K2O	0.42	Na+	0.0000					0.0000	**0.0000**	0.0000	0.0000
		K+	0.0750							0.0750	0.0000
Total	**99.999**		**Excess**	T site	**0.0959**	C site	**0.0000**	B site	**0.0428886**	A site	**0**
			Total	**8**		**4.8986**		**2.0000**		**0.0750**	**0.0000**
			%Fill	**100**		**97.9726**		**100**			

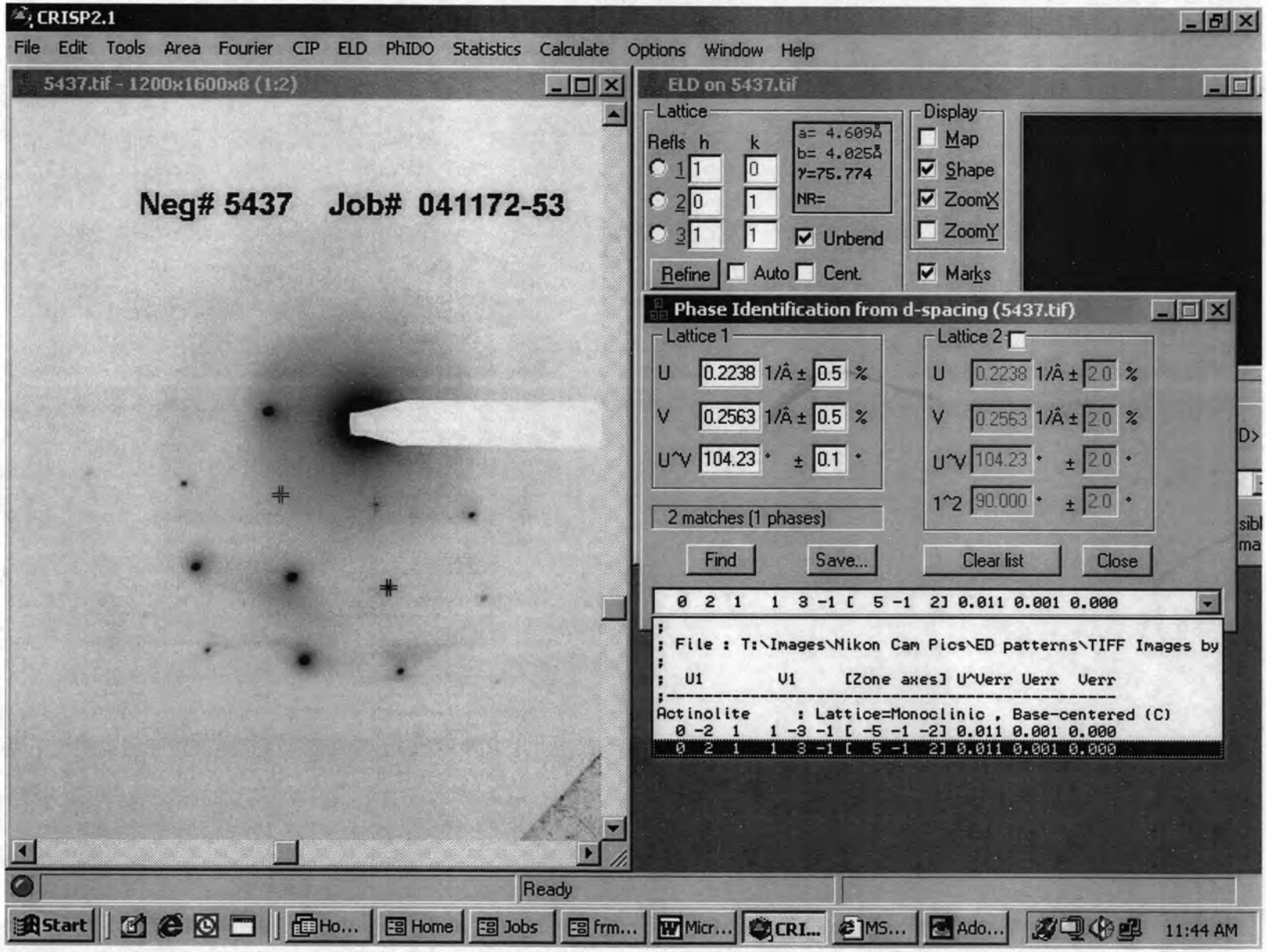
Prefix none
Name actinolite
Modifier none
Group Calcic Amphibole

Sample # **041172-52-15330**

Values		Satisfied Conditions
(Ca,Na)@B	2.00	(Ca,Na)@B >= 1 and Na@B < 0.5
Na@B	0.00	Ca@B >= 1.5 and (Na,K)@A < 0.5
Ca@B	2.00	(Mg/(Mg+Fe2))>= 0.5
(Na,K)@A	0.08	Si > 7.5
Mg/(Mg+Fe2)	0.72	(Mg/(Mg+Fe2))< 0.9
Si	7.92	

Mineral Analysis Program (Version 5.0)

ACTINOLITE
[5-12]



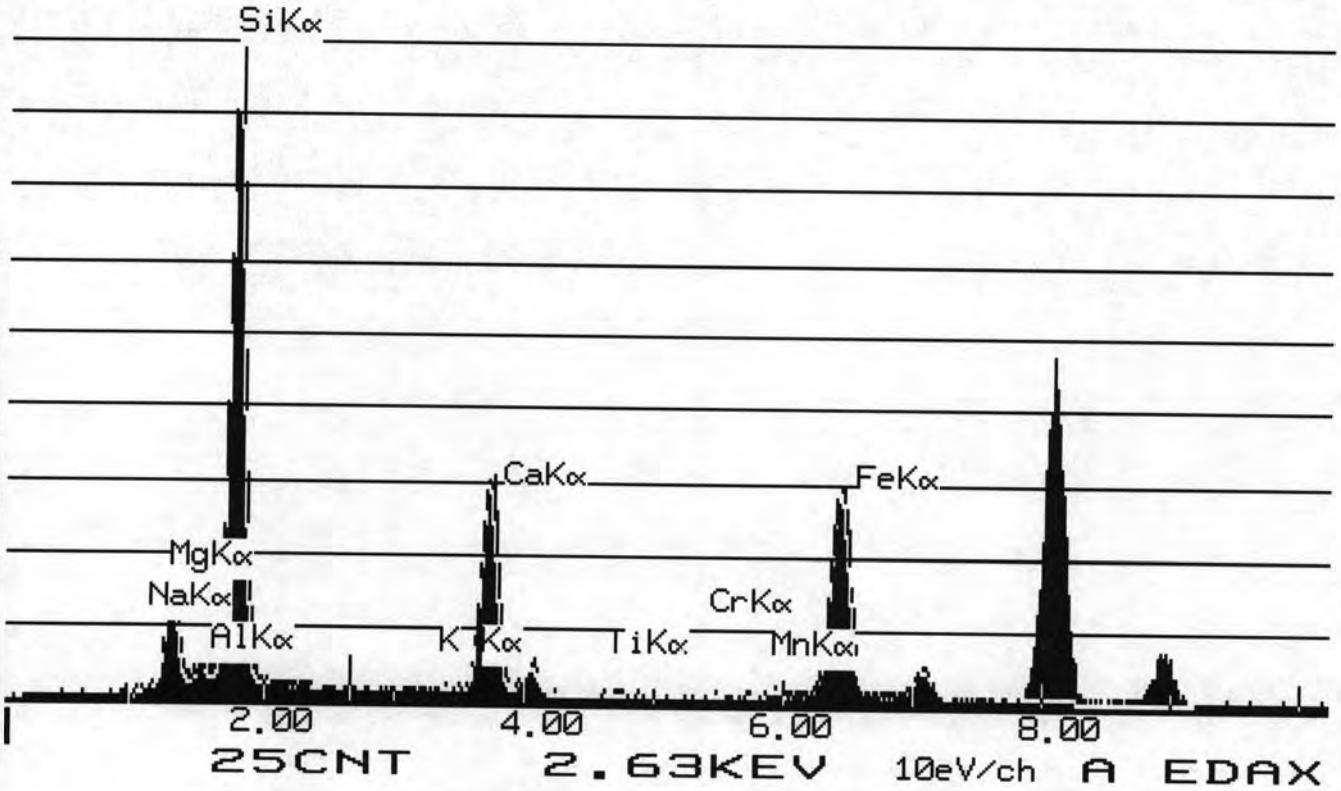
INTE-% :
LABEL = 041172-53 15333
09-NOV-72 11:22:13
35.040 LIVE SECONDS

ELEM	CPS	WT % ELEM	WT % OXIDE
NAK	0.656	0.180	0.243
MGK	54.909	7.125	11.814
ALK	9.504	0.741	1.400
SIK	349.432	25.501	54.555
CAK	126.571	8.806	12.322
MNK	0.599	0.060	0.078
FEK	148.232	13.701	19.589
TOTAL			100.000

USED PEIF: USER

BE Manual
Actinolite

08-NOV-04 11:22:38 SUPER QUANT
RATE= 43CPS TIME= 35LSEC
FS= 1312/ 1312 PRST= 200LSEC
A =041172-53 15333



	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	54.555	Si+4	7.8735	7.8735							
Al2O3	1.4	Al+3	0.2381	0.1265	**0.1116**						
TiO2	0	Ti+4	0.0000	0.0000	**0.0000**						
Cr2O3	0	Cr+3	0.0000			0.0000	0.0000				
Fe(total)O	19.589	Fe+3	0.1064			0.1064	0.0000				
MgO	11.814	Mg+2	2.5419			2.5419	**0.0000**				
MnO	0.078	Fe+2	2.2458			2.2402	**0.0056**				
CaO	12.322	Mn+2	0.0095			0.0000	**0.0095**				
Na2O	0.243	Ca+2	1.9052					1.9052	0.0000		
K2O	0	Na+	0.0680					0.0680	**0.0000**	0.0000	0.0000
		K+	0.0000							0.0000	0.0000
Total	**100.001**		**Excess**	T site	**0.1116**	C site	**0.0151**	B site	**0**	A site	**0**
			Total	**8**		**5.0000**		**1.9732**		**0.0000**	**0.0000**
			%Fill	**100**		**100**		**98.6581**			

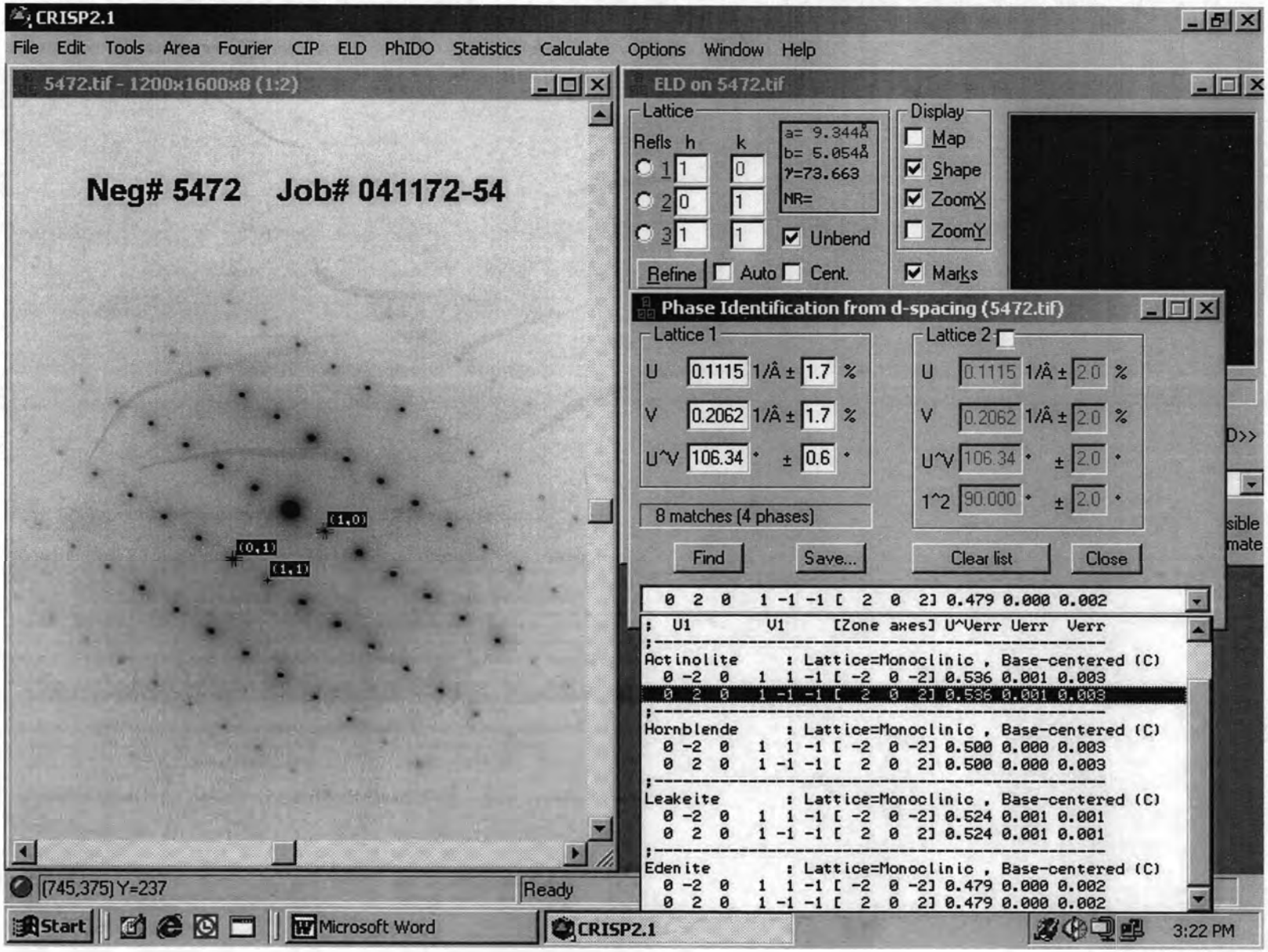
Prefix none
Name actinolite
Modifier none
Group Calcic Amphibole

Sample # **041172-53-15333**

Values		Satisfied Conditions
(Ca,Na)@B	1.97	(Ca,Na)@B >= 1 and Na@B < 0.5
Na@B	0.07	Ca@B >= 1.5 and (Na,K)@A < 0.5
Ca@B	1.91	(Mg/(Mg+Fe2))>= 0.5
(Na,K)@A	0.00	Si > 7.5
Mg/(Mg+Fe2)	0.53	(Mg/(Mg+Fe2))< 0.9
Si	7.87	

Mineral Analysis Program (Version 5.0)

ACTINOLITE
[1 0 1]



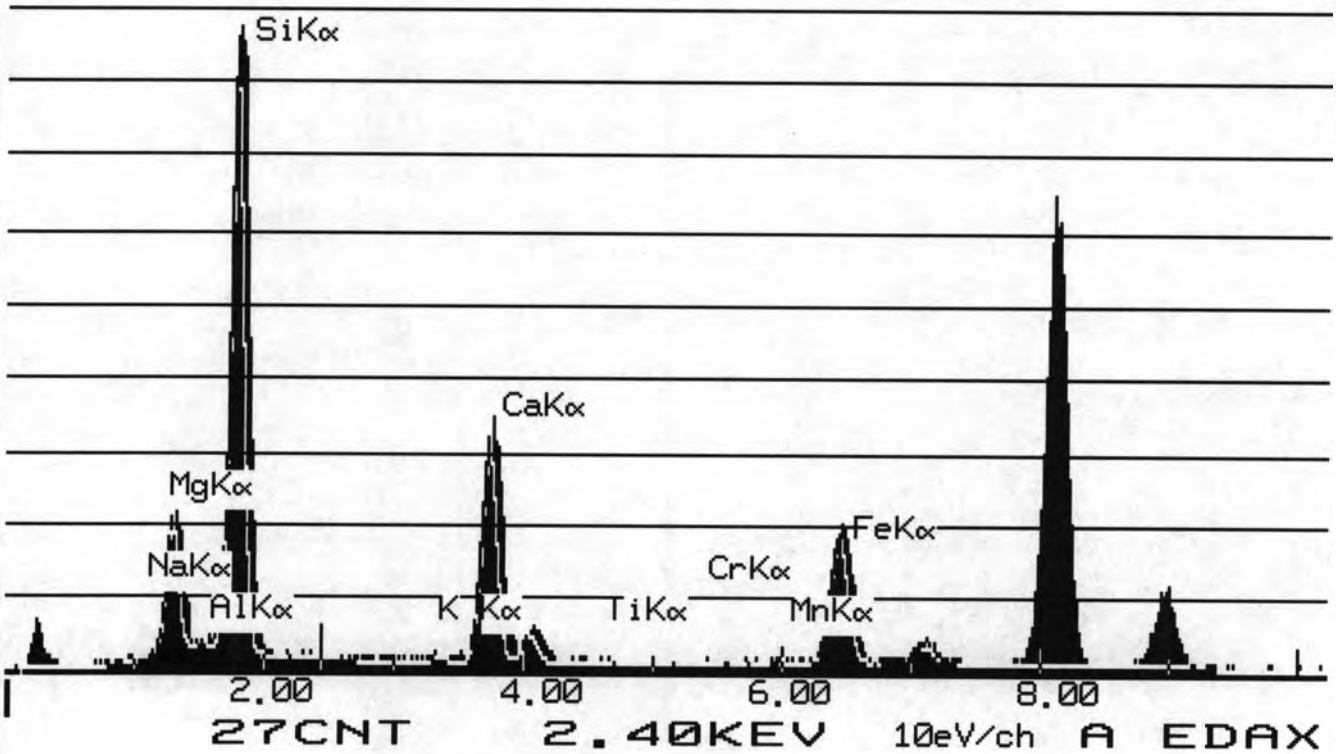
INTE-% :
LABEL = 041172-54 15350
23-NOV-72 02:47:56
36.174 LIVE SECONDS

ELEM	CPS	WT % ELEM	WT % OXIDE
MGK	91.557	10.166	16.856
ALK	2.847	0.190	0.359
SIK	409.768	25.588	54.742
K K	3.151	0.327	0.394
CAK	176.369	10.500	14.692
TIK	1.382	0.116	0.194
MNK	1.355	0.116	0.150
FEK	111.544	8.822	12.613

TOTAL			100.000

USED PEIF: USER

22-NOV-04 02:48:20 SUPER QUANT
RATE= 0CPS TIME= 36LSEC
FS= 1739/ 1739 PRST= 200LSEC
A =041172-54 15350



	Wt Percent		ions	T site	Leftover	C site	Leftover	B site	Leftover	A site	Leftover
SiO2	54.742	Si+4	7.7604	7.7604							
Al2O3	0.359	Al+3	0.0600	0.0600	**0.0000**						
TiO2	0.194	Ti+4	0.0207	0.0207	**0.0000**						
Cr2O3	0	Cr+3	0.0000			0.0000	0.0000				
Fe(total)O	12.613	Fe+3	0.0135			0.0135	0.0000				
MgO	16.856	Mg+2	3.5624			3.5624	**0.0000**				
MnO	0.15	Fe+2	1.4802			1.4241	**0.0561**				
CaO	14.692	Mn+2	0.0180			0.0000	**0.0180**				
Na2O	0	Ca+2	2.2314					1.9259	0.3054		
K2O	0.394	Na+	0.0000					0.0000	**0.0000**	0.0000	0.0000
		K+	0.0712							0.0712	0.0000
Total	**100**		**Excess**	T site	**0.0000**	C site	**0.0741**	B site	**0.3054406**	A site	**0**
			Total	**7.8411**		**5.0000**		**1.9259**		**0.0712**	**0.0000**
			%Fill	**98.014**		**100**		**96.2956**			

Prefix none
Name actinolite
Modifier none
Group **Calcic Amphibole**

Sample # **041172-54-15350**

Values		**Satisfied Conditions**
(Ca,Na)@B	**1.93**	**(Ca,Na)@B >= 1 and Na@B < 0.5**
Na@B	**0.00**	**Ca@B >= 1.5 and (Na,K)@A < 0.5**
Ca@B	**1.93**	**(Mg/(Mg+Fe2))>= 0.5**
(Na,K)@A	**0.07**	**Si > 7.5**
Mg/(Mg+Fe2)	**0.71**	**(Mg/(Mg+Fe2))< 0.9**
Si	**7.76**	

Mineral Analysis Program (Version 5.0)

Lab/Cor, Inc.

A Professional Service Corporation in the Northwest

December 18, 2004

Lisa M. Johnson
Ecology & Environment, Inc.
San Francisco, CA

Dear Lisa,

Enclosed is the additional requested QC Data from Lab/Cor, Inc. Below is a checklist of all that is included.

- NVLAP On-Site Assesment Approval
- Our latest NYDOH Proficiency Test Report for Air, Bulk and Water samples
- The latest Interlab results – our raw data for this series of analyses was submitted to Batta Labs for result compilation.
- 1st Packet – Jeol 1200EX QC Data – (October – December)
- 2nd Packet – Philips 410LS QC Data – October
- 3rd Packet – Philips 410LS QC Data – November
- 4th Packet – Philips 410LS QC Data – December

If any further data is necessary, please do not hesitate to call us.

Sincerely,

Kate March
Lab/Cor, Inc.
Seattle WA, 98117

(206)781-0155
kmarch@labcor.net

Johnson, Lisa

From: Johnson, Lisa
Sent: Wednesday, December 15, 2004 4:12 PM
To: 'mail@labcor.net'
Cc: Edwards, Howard
Subject: A few items needed for the El Dorado Hills Data Packages

Hello John,

I am coordinating validation services for Howard Edwards with a third party data service. There are a few more items needed to complete your data packages submitted to E&E on Dec. 7, 2004. Below is the list of items:

-Any TEM equipment maintenance and/or calibration logs, forms or other information for the contract period

-Results and raw data of any recent analysis of in-house standard reference materials or inter-laboratory performance verification

-Most recent copy of your NVLAP and proficiency test results

If you have any questions, please contact me at the number below.

Thank You,

Lisa M. Johnson
START Member
Ecology and Environment, Inc.
(415) 981-2811
(415) 981-0801 fax
ljohnson@ene.com

UNITED STATES DEPARTMENT OF COMMERCE
National Institute of Standards and Technology
Gaithersburg, Maryland 20899-

May 10, 2004

Mr. John Harris
Lab/Cor, Inc.
7619 Sixth Avenue, NW
Seattle, WA 98117

NVLAP Lab Code: 101920-0

Dear Mr. Harris:

On November 7, 2003, your laboratory was visited by an assessor representing the National Voluntary Laboratory Accreditation Program (NVLAP). The purpose of the visit was to assess your laboratory's compliance with NVLAP criteria for accreditation in the Airborne Asbestos Fiber Analysis (TEM) program.

I am pleased to inform you that the On-Site Assessment Review, which was completed on May 7, 2004, has found that your laboratory meets the on-site assessment requirements. No further action is required on your part, at this time, with regard to the on-site assessment phase of the evaluation of your laboratory.

If you have any questions, please call Thomas R. Davis at (301) 975-6499, or Hazel M. Richmond at (301) 975-3024.

Sincerely,

Warren R. Merkel, NVLAP Chief
Laboratory Accreditation Program

NIST

WADSWORTH CENTER
NEW YORK STATE DEPARTMENT OF HEALTH
ENVIRONMENTAL LABORATORY APPROVAL PROGRAM

Proficiency Test Report

Lab Id: 11747
EPA Lab Code: Not on File

LABCOR INC
7619 SIXTH AVENUE NW
SEATTLE, WA-98117-4037
(206) 781-0155
Director: MR. JOHN HARRIS

Shipment Date : 07-Sep-2004
Closing Date : 22-Oct-2004
Score Date : 09-Nov-2004

This report may contain data that are not covered by the NVLAP accreditation.
** Indicates NVLAP accredited analyte evaluated using the USEPA's National Standards for Water Proficiency Testing Studies Criteria Document.
NVLAP Lab Code 200387-0. ELAP is an A2LA accredited Proficiency Testing Provider. Certificate Number 1785.01

Shipment: 276 Asbestos in Air, Water, and NonFriable Samples by Electron Microscopy

Analyte Name	Units	Sample ID	Method	Result	Mean/ Target *	Warning Limits	Acceptance Limits	Score
Sample: Air and Emissions Asbestos in Air by TEM								
Asbestos in Air by TEM EPA Code: N/A	Struct/	1728	40 CFR APX A No. III	41.4	88.4		D.L. - 196 *28 passed out of 29 reported results.*	Satisfactory
Dominant Asbestos Type EPA Code: N/A		1728	40 CFR APX A No. III	Act	Act		*16 passed out of 29 reported results.*	Satisfactory
Dominant Asbestos Type EPA Code: N/A		1987	40 CFR APX A No. III	Amosite	Amosite		*27 passed out of 29 reported results.*	Satisfactory
Asbestos in Air by TEM EPA Code: N/A	Struct/	1987	40 CFR APX A No. III	10741	8040		660 - 15400 *29 passed out of 29 reported results.*	Satisfactory
Sample: Solid and Hazardous Waste Asbestos in Non-Friable Material								
Percent Asbestos in Residue EPA Code: N/A	%	1785	ITEM 198.4 OF MANUAL	60	47.7		D.L. - 98.7 *29 passed out of 29 reported results.*	Satisfactory
Percent Residue EPA Code: N/A	%	1785	ITEM 198.4 OF MANUAL	54.51	63.3		28.8 - 97.8 *28 passed out of 29 reported results.*	Satisfactory
Percent Residue EPA Code: N/A	%	5706	ITEM 198.4 OF MANUAL	17.71	18.0		13.2 - 22.8 *28 passed out of 29 reported results.*	Satisfactory
Percent Asbestos in Residue EPA Code: N/A	%	5706	ITEM 198.4 OF MANUAL	55	38.7		D.L. - 93.9 *29 passed out of 29 reported results.*	Satisfactory
Sample: Potable Water Asbestos in Water by TEM								
Asbestos in Water by TEM ** EPA Code: 0253	MF/L	4233	EPA 100.2	8.179	3.00 *		D.L. - 19.8 *22 passed out of 23 reported results.*	Satisfactory

BATTA

Date Report Prepared: November 21, 2004
Prepared By: R. Shumate

NISTIR 5351 - Analyst Summary

	Verifying Analyst rgs *	Analyst #1 bl	Analyst #2 drw	Analyst #3 mq	Analyst #4 km	Analyst #5 mp **	Analyst #5 yz **
Cumulative TP/TNS (should be >0.85)		0.980	0.980	1.000	0.980	0.918	0.926
Cumulative FP/TNS (should be <0.05)		0.020	0.000	0.041	0.000	0.000	0.000
Cumulative FN/TNS (should be <0.10)		0.020	0.020	0.000	0.020	0.082	0.074

** Since RGS was verifying analyst, values will not be calculated.*

*** MP and YZ each analyzed only 2 of the four grid openings.*

Summary of Grid Openings Analyzed

Grid Opening H-2: Seven structures were verified. This opening yielded good duplication. There were no FN recorded. Only two occurrences (causing FP) were in question. Nearly one-third of the way through the opening, a matrix with a fibril of Chrysotile attached was found. The fibril protruding from the matix was <5:1 aspect and was about 4μm in length. One analyst (MQ) counted it as a matrix structure. The second occurence was similar to the first. A martix having a Chrysotile "fibril" protuding was found halfway through the opening. In this case, the fibril was protruding less than 3μm from the matrix. The aspect ratio of the protrusion was less than 3:1. One analyst (MQ) counted this as a matrix structure.

Grid Opening E-2: Fifteen structures were verified. This opening also yielded good duplication. No FP were recorded. Only one occurrence (causing FN) was in question. Near the start of the opening, a bundle (avg L: 3.5μm, W: 1.2μm) consisting of Chrysotile fibers was found. At the onset of the round, I (RGS) had originally listed the occurence as a non-structure, feeling that the overall aspect of approximately 3:1 would disqualify it. Upon closer examination, I agree that the fibers within the matrix are discernable and the aspect ratios of the individual fibers within the bundle qualify it as a bundle structure. Only one other analyst (MP) did not list the occurence as a structure. Although I listed it as a FNA (feeling that MP saw the structure as I first did), it is uncertain whether his omission should be listed as a FNA or FNB. MP also did not list TPM9, and was listed as FNB.

Grid Opening D-9: Twenty-one structures were verified. This opening also yielded good duplication. A few structures were in question, yielding FN. Near the start of the opening, along the left grid bar, a Chrysotile fiber (approximately 1.5μm long, 0.1μm wide) was found. Only one analyst (BL) did not list the occurence as a structure. Structure TPM9 is a bundle of Chrysotile (approximately 4.5μm long and 0.6μm wide). This occurence was listed as ambiguous by DRW and was not listed by KM. Structures TPM12 and TPM20 were not listed by YZ. Both of these occurences are thin, single fibrils (about 1.0μm long and 0.07μm wide) of Chrysotile and it is assumed that the analyst simply missed the fiber.

Grid Opening E-20: Six structures were verified. This opening also yielded perfect duplication. All analysts listed six Chrysotile structures on their countsheet.

Overall Notes

As can be seen above, all analysts participating had "TP/FN/FP values" within the acceptable limits listed by NVLAP and in the NISTIR-5351. In addition to these values, I statistically tracked the reproducibility of fiber-sizing. I also wanted to track the accurate classification of structures (fiber, bundle, cluster and matrix) but not all analysts indicated structure class on the countsheets.

Problems noted during the verification process: Lack of fiber classification (see note above), fiber sizing not consistently precise (significant figures), lack of sketch detail causing the verification process to be more time-consuming. It helps to include any objects close in proximity to the structure and to include the grid bar in the sketch when it is nearby. The most significant problem noted was the counter-clockwise deviation of two grid openings by two analysts. Please be sure to follow grid orientation instructions to help cut-down the time taken in the verification process. It was also noted that two of the participating analysts only analyzed two grid openings apiece. To offer the best statistical value to the round, please have all TEM analysts read all the grid openings submitted for that round. Thanks to everyone for their timely submission of results. If anyone has any questions regarding these results, please feel free to contact me by phone or e-mail.

BATTA

Sample Type:	01-1-3
Sample Archive Location:	E-5
Grid Opening ID:	H-2

Verified Asbestos Analysis

Analytical Values	Verifying Analyst**	Analysis 1	Analysis 2	Analysis 3	Analysis 4	Analysis 5	Analysis 6	Analysis 7	Analysis 8	Analysis 9	Analysis 10	Analysis 11	Analysis 12	Analysis 13	Analysis 14	Analysis 15	Analysis 16	Analysis 17	Analysis 18	Analysis 19	Analysis 20
Date of Analysis	07/28/04	07/28/04	08/19/04	08/20/04	08/25/04	09/20/04															
TEM Operator	rgs	bl	drw	mq	km	mp															
Structures Reported (SR)	7	7	7	9	7	7															
True Positives (TP)	7	7	7	7	7	7															
TPM	7	7	7	7	7	7															
TPU	0	0	0	0	0	0															
*TPV (TP found by verifying analyst, but NOT found by any analyst)	0																				
*Total Number of Structures (TNS) (all analysts)	7																				
*Total Number of Structures (TNS) (one analyst)	7	7	7	7	7	7															
False Positives (FP)				2																	
False Negatives (FN)		0	0	0	0	0															
FNA																					
FNB																					
Not Located (NL)																					
Ambiguous (AMB)																					
TP/TNS		1.000	1.000	1.000	1.000	1.000															
FP/TNS		0.000	0.000	0.286	0.000	0.000															
FN/TNS		0.000	0.000	0.000	0.000	0.000															
[(TP/TNS) + (FN/TNS)] (must equal 1.00)		1.000	1.000	1.000	1.000	1.000															

*Value for these items will be the same for all analysts.

**Verifying analyst should not be one of the TEM Operators.

Refer to NISTIR 5351 for guidance.

BATTA

Statistical Review of Structure Assignment From Verified Asbestos Analysis

Only structures verified as "TPM" are recorded.

	Structure Length							Str Width							Structure Type							Stats for Structure Length					Stats for Structure Width					Str Type / Classification ID	
	H-2							H-2							f=1, b=2, m=3, c=4																		
Str #	rgs	bl	drw	mq	km	mp		rgs	bl	drw	mq	km	mp		rgs	bl	drw	mq	km	mp		Average	Std Dev	CV or %RSD	LCL	UCL	Average	Std Dev	CV or %RSD	LCL	UCL	Type Pass or Fail	Correct Ruling on Structure (If close to 0.5µm) Pass or Fail
1	7.50	7.55	7.50	8.00	6.50	7.00		0.250	0.250	0.500	0.500	0.400	0.400		2	2						7.3	0.52	7.08	6.320	8.363	0.38	0.11	29.36	0.1622	0.6045	Pass	Pass
2	4.00	4.00	4.00	3.00	3.80	4.20		0.250	0.200	0.350	0.250	0.250	0.380		1	1						3.8	0.43	11.15	2.994	4.673	0.28	0.07	24.74	0.1439	0.4161	Pass	Pass
3	2.70	2.75	2.50	2.50	2.50	2.50		0.050	0.050	0.100	0.050	0.050	0.030		1	1						2.6	0.12	4.55	2.345	2.805	0.06	0.02	42.64	0.0089	0.1011	Pass	Pass
4	1.50	1.75	1.30	2.00	1.50	1.60		0.080	0.090	0.100	0.100	0.100	0.100		1	1						1.6	0.24	15.03	1.133	2.083	0.10	0.01	8.81	0.0786	0.1114	Pass	Pass
5	1.80	1.90	1.50	2.00	1.50	1.70		0.060	0.060	0.100	0.100	0.100	0.050		2	2						1.7	0.21	11.92	1.327	2.139	0.08	0.02	30.66	0.0311	0.1255	Pass	Pass
6	3.20	3.25	2.75	2.50	3.00	3.00		0.070	0.080	0.100	0.100	0.080	0.100		1	1						3.0	0.28	9.59	2.394	3.506	0.09	0.01	15.05	0.0622	0.1145	Pass	Pass
7	2.80	2.90	3.00	2.50	3.20	2.60		0.060	0.050	0.050	0.050	0.050	0.050		2	1						2.8	0.26	9.11	2.326	3.341	0.05	0.00	7.90	0.0436	0.0597	Fail	Pass
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BATTA

Sample Type:	01-1-3
Sample Archive Location:	E-5
Grid Opening ID:	E-2

Verified Asbestos Analysis

Analytical Values	Verifying Analyst**	Analysis 1	Analysis 2	Analysis 3	Analysis 4	Analysis 5	Analysis 6	Analysis 7	Analysis 8	Analysis 9	Analysis 10	Analysis 11	Analysis 12	Analysis 13	Analysis 14	Analysis 15	Analysis 16	Analysis 17	Analysis 18	Analysis 19	Analysis 20
Date of Analysis	07/28/04	07/28/04	08/19/04	08/26/04	08/25/04	09/20/04															
TEM Operator	rgs	bl	drw	mq	km	mp															
Structures Reported (SR)	15	15	15	15	15	15															
True Positives (TP)	15	15	15	15	15	15															
*TPM	15	15	15	15	15	13															
TPU	0	0	0	0	0	2															
*TPV (TP found by verifying analyst, but NOT found by any analyst)	0																				
*Total Number of Structures (TNS) (all analysts)	15																				
*Total Number of Structures (TNS) (one analyst)	15	15	15	15	15	15															
False Positives (FP)																					
False Negatives (FN)		0	0	0	0	2															
FNA						1															
FNB						1															
Not Located (NL)																					
Ambiguous (AMB)																					
TP/TNS		1.000	1.000	1.000	1.000	0.867															
FP/TNS		0.000	0.000	0.000	0.000	0.000															
FN/TNS		0.000	0.000	0.000	0.000	0.133															
[(TP/TNS) + (FN/TNS)] (must equal 1.00)		1.000	1.000	1.000	1.000	1.000															

*Value for these items will be the same for all analysts.

**Verifying analyst should not be one of the TEM Operators.

Refer to NISTIR 5351 for guidance.

BATTA

Statistical Review of Structure Assignment From Verified Asbestos Analysis

Only structures verified as "TPM" are recorded.

	Structure Length							Str Width							Structure Type							Stats for Structure Length					Stats for Structure Width					Str Type / Classification ID	
	E-2							E-2							f=1, b=2, m=3, c=4																		
Str #	rgs	bl	drw	mq	km	mp		rgs	bl	drw	mq	km	mp		rgs	bl	drw	mq	km	mp		Average	Std Dev	CV or %RSD	LCL	UCL	Average	Std Dev	CV or %RSD	LCL	UCL	Type Pass or Fail	Correct Ruling on Structure (if close to 0.5µm) Pass or Fail
1	5.50	5.50	5.00	5.00	5.00	5.20		0.250	0.250	0.400	0.500	0.400	0.600		2	2						5.2	0.24	4.71	4.719	5.681	0.40	0.14	34.46	0.1291	0.6709	Pass	Pass
2	1.70	2.00	1.50	2.00	1.50	1.80		0.080	0.050	0.100	0.100	0.100	0.100		1	1						1.8	0.23	12.90	1.306	2.194	0.09	0.02	23.11	0.0482	0.1284	Pass	Pass
3	3.20	3.60	4.00	3.00	3.50	3.20		0.080	0.100	0.100	0.100	0.100	0.150		1	1						3.4	0.36	10.54	2.709	4.124	0.11	0.02	22.34	0.0589	0.1511	Pass	Pass
4	5.50	5.60	5.00	5.00	4.80	5.20		0.100	0.100	0.200	0.200	0.120	0.180		1	1						5.2	0.31	6.03	4.569	5.797	0.15	0.05	32.39	0.0545	0.2455	Pass	Pass
5	2.90	3.10	2.75	2.50	2.70	2.60		0.250	0.300	0.350	0.400	0.350	0.300		2	2						2.8	0.22	7.81	2.335	3.182	0.33	0.05	16.14	0.2220	0.4280	Pass	Pass
6	1.10	1.10	1.00	1.00	1.20	1.10		0.070	0.050	0.100	0.100	0.080	0.040		1	1						1.1	0.08	6.95	0.935	1.231	0.07	0.03	34.14	0.0241	0.1225	Pass	Pass
7	5.70	6.00	5.00	6.00	5.20	5.70		0.100	0.110	0.150	0.200	0.120	0.200		2	1						5.6	0.41	7.41	4.785	6.415	0.15	0.04	30.39	0.0591	0.2343	Fail	Pass
8	7.50	7.65	6.00	7.00	7.50	7.00		0.250	0.250	0.400	0.400	0.350	0.400		2	2						7.1	0.61	8.56	5.912	8.304	0.34	0.07	21.54	0.1970	0.4863	Pass	Pass
9	3.70	3.75	4.00	3.00	3.60			0.300	0.350	0.500	0.400	0.350			2	2						3.6	0.37	10.29	2.880	4.340	0.38	0.08	19.95	0.2310	0.5290	Pass	Pass
10	3.50	3.75	3.00	3.00	3.40	3.50		0.200	0.180	0.300	0.250	0.250	0.300		2	2						3.4	0.30	8.95	2.767	3.949	0.25	0.05	20.13	0.1491	0.3443	Pass	Pass
11	5.90	6.10	5.50	6.00	5.30	6.00		0.350	0.380	0.750	0.500	0.450	0.600		2	2						5.8	0.32	5.56	5.166	6.434	0.51	0.15	29.60	0.2112	0.7988	Pass	Pass
12	1.80	2.00	1.50	2.00	1.50	1.80		0.050	0.090	0.010	0.050	0.080	0.030		1	1						1.8	0.23	12.74	1.324	2.209	0.05	0.03	57.96	-0.0072	0.1105	Pass	Pass
13	2.30	2.25	2.50	3.00	1.80	2.00		0.080	0.080	0.100	0.100	0.100	0.100		1	1						2.3	0.42	18.09	1.488	3.129	0.09	0.01	11.07	0.0730	0.1136	Pass	Pass
14	5.20	5.25	5.00	4.50	4.60	5.10		0.100	0.100	0.150	0.200	0.110	0.150		1	1						4.9	0.32	6.41	4.319	5.564	0.14	0.04	29.16	0.0576	0.2124	Pass	Pass
15	3.60	3.50	4.00	3.00	3.50			1.200	1.000	1.500	1.000	1.200										3.5	0.36	10.12	2.820	4.220	1.18	0.20	17.37	0.7773	1.5827		Pass
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BATTA

Sample Type: 01-1-3
Sample Archive Location: N-5
Grid Opening ID: D-9

Verified Asbestos Analysis

Analytical Values	Verifying Analyst**	Analysis 1	Analysis 2	Analysis 3	Analysis 4	Analysis 5	Analysis 6	Analysis 7	Analysis 8	Analysis 9	Analysis 10	Analysis 11	Analysis 12	Analysis 13	Analysis 14	Analysis 15	Analysis 16	Analysis 17	Analysis 18	Analysis 19	Analysis 20
Date of Analysis	07/28/04	07/28/04	08/25/04	08/30/04	08/11/04	09/20/04															
TEM Operator	rgs	bl	drw	mq	km	yz															
Structures Reported (SR)	21	22	21	21	21	21															
True Positives (TP)	21	21	21	21	21	21															
*TPM	21	20	20	21	20	19															
TPU	0	1	1	0	1	2															
*TPV (TP found by verifying analyst, but NOT found by any analyst)	0																				
*Total Number of Structures (TNS) (all analysts)	21																				
*Total Number of Structures (TNS) (one analyst)	21	21	21	21	21	21															
False Positives (FP)		1																			
False Negatives (FN)		1	1	0	1	2															
FNA			1																		
FNB		1			1	2															
Not Located (NL)																					
Ambiguous (AMB)																					
TP/TNS		0.952	0.952	1.000	0.952	0.905															
FP/TNS		0.048	0.000	0.000	0.000	0.000															
FN/TNS		0.048	0.048	0.000	0.048	0.095															
[(TP/TNS) + (FN/TNS)] (must equal 1.00)		1.000	1.000	1.000	1.000	1.000															

*Value for these items will be the same for all analysts.

**Verifying analyst should not be one of the TEM Operators.

Refer to NISTIR 5351 for guidance.

BATTA

Statistical Review of Structure Assignment From Verified Asbestos Analysis

Only structures verified as "TPM" are recorded.

	Structure Length							Str Width							Structure Type							Stats for Structure Length					Stats for Structure Width					Str Type / Classification ID	
	D-9							D-9							f=1, b=2, m=3, c=4																		
Str #	rgs	bl	drw	mq	km	yz		rgs	bl	drw	mq	km	yz		rgs	bl	drw	mq	km	yz		Average	Std Dev	CV or %RSD	LCL	UCL	Average	Std Dev	CV or %RSD	LCL	UCL	Type Pass or Fail	Correct Ruling on Structure (if close to 0.5µm) Pass or Fail
1	1.50		1.00	1.50	1.50	1.20		0.060		0.100	0.100	0.100	0.060		1							1.3	0.23	17.18	0.888	1.792	0.08	0.02	26.08	0.0409	0.1271	Pass	
2	0.70	0.75	0.75	0.75	0.80	0.70		0.070	0.070	0.100	0.100	0.100	0.060		1	1						0.7	0.04	5.07	0.668	0.816	0.08	0.02	22.34	0.0467	0.1199	Pass	Pass
3	1.50	1.50	1.20	1.50	1.50	1.20		0.060	0.050	0.100	0.100	0.080	0.100		1	1						1.4	0.15	11.07	1.096	1.704	0.08	0.02	27.29	0.0379	0.1255	Pass	Pass
4	3.10	3.05	2.75	2.50	3.00	3.10		0.120	0.100	0.150	0.100	0.100	0.120		1	1						2.9	0.24	8.30	2.441	3.393	0.12	0.02	17.17	0.0762	0.1538	Pass	Pass
5	10.20	10.10	10.00	8.00	8.00	8.60		0.300	0.280	0.400	0.350	0.400	0.270		2	2						9.2	1.07	11.64	7.057	11.243	0.33	0.06	17.56	0.2183	0.4484	Pass	Pass
6	2.40	2.40	2.00	2.00	2.00	2.10		0.080	0.050	0.100	0.100	0.100	0.100		1	1						2.2	0.20	9.19	1.762	2.538	0.09	0.02	23.11	0.0482	0.1284	Pass	Pass
7	8.70	8.60	7.50	9.00	8.00	7.80		0.150	0.150	0.250	0.200	0.150	0.180		2	2						8.3	0.59	7.08	7.116	9.417	0.18	0.04	22.22	0.1014	0.2586	Pass	Pass
8	1.30	1.50	1.20	1.50	1.30	1.20		0.060	0.080	0.100	0.100	0.080	0.120		1	1						1.3	0.14	10.25	1.065	1.602	0.09	0.02	23.31	0.0488	0.1312	Pass	Pass
9	4.70	4.80		4.50		4.10		0.500	0.500		1.000		0.450		2	2						4.5	0.31	6.84	3.917	5.133	0.61	0.26	42.35	0.1028	1.1222	Pass	Pass
10	5.20	5.20	4.80	4.50	4.50	4.20		0.250	0.250	0.350	0.400	0.350	0.250		2	2						4.7	0.41	8.62	3.931	5.536	0.31	0.07	21.55	0.1777	0.4389	Pass	Pass
11	2.40	2.50	2.50	2.50	2.00	2.20		0.060	0.080	0.100	0.050	0.100	0.060		1	1						2.4	0.21	8.82	1.943	2.757	0.08	0.02	28.91	0.0324	0.1176	Pass	Pass
12	1.20	1.20	1.20	1.50	1.20			0.070	0.080	0.100	0.050	0.100			1	1						1.3	0.13	10.65	0.996	1.524	0.08	0.02	26.52	0.0383	0.1217	Pass	Pass
13	5.50	5.50	5.00	5.00	5.00	5.00		0.060	0.070	0.100	0.100	0.100	0.070		1	1						5.2	0.26	5.00	4.659	5.674	0.08	0.02	22.34	0.0467	0.1199	Pass	Pass
14	1.10	1.15	1.20	1.50	1.00	1.20		0.060	0.060	0.100	0.050	0.100	0.060		1	1						1.2	0.17	14.15	0.860	1.523	0.07	0.02	31.10	0.0279	0.1155	Pass	Pass
15	5.00	5.20	5.00	4.50	4.30	4.50		1.500	1.420	1.200	1.500	1.500	0.800		2	2						4.8	0.36	7.62	4.039	5.461	1.32	0.28	21.21	0.7698	1.8702	Pass	Pass
16	4.80	3.00	4.00	4.00	4.00	4.10		0.300	0.250	0.400	0.250	0.400	0.210		2	2						4.0	0.57	14.41	2.855	5.112	0.30	0.08	26.96	0.1418	0.4615	Pass	Pass
17	7.50	7.85	6.00	7.50	6.50	6.30		0.250	0.250	0.300	0.350	0.350	0.250		2	2						6.9	0.77	11.05	5.434	8.449	0.29	0.05	16.85	0.1951	0.3883	Pass	Pass
18	1.20	1.30	1.20	1.00	1.20	1.20		0.060	0.050	0.100	0.200	0.100	0.070		1	1						1.2	0.10	8.31	0.990	1.377	0.10	0.05	56.53	-0.0107	0.2041	Pass	Pass
19	7.80	8.05	7.50	8.00	7.00	6.80		0.700	0.700	1.200	1.500	1.000	0.720		2	2						7.5	0.53	6.98	6.493	8.557	0.97	0.33	33.97	0.3224	1.6176	Pass	Pass
20	1.00	1.25	1.00	1.00	1.00			0.050	0.050	0.100	0.050	0.100			1	1						1.1	0.11	10.65	0.830	1.270	0.07	0.03	39.12	0.0162	0.1238	Pass	Pass
21	3.50	3.50	2.75	3.50	3.00	3.70		0.200	0.200	0.300	0.250	0.220	0.180		2	2						3.3	0.37	11.00	2.606	4.044	0.23	0.04	19.42	0.1391	0.3109	Pass	Pass
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BATTA

Sample Type: 01-1-3
Sample Archive Location: N-5
Grid Opening ID: E-20

Verified Asbestos Analysis

Analytical Values	Verifying Analyst**	Analysis 1	Analysis 2	Analysis 3	Analysis 4	Analysis 5	Analysis 6	Analysis 7	Analysis 8	Analysis 9	Analysis 10	Analysis 11	Analysis 12	Analysis 13	Analysis 14	Analysis 15	Analysis 16	Analysis 17	Analysis 18	Analysis 19	Analysis 20
Date of Analysis	07/28/04	07/28/04	08/25/04	08/30/04	08/11/04	09/20/04															
TEM Operator	rgs	bl	drw	mq	km	yz															
Structures Reported (SR)	6	6	6	6	6	6															
True Positives (TP)	6	6	6	6	6	6															
*TPM	6	6	6	6	6	6															
TPU	0	0	0	0	0	0															
*TPV (TP found by verifying analyst, but NOT found by any analyst)	0																				
*Total Number of Structures (TNS) (all analysts)	6																				
*Total Number of Structures (TNS) (one analyst)	6	6	6	6	6	6															
False Positives (FP)																					
False Negatives (FN)		0	0	0	0	0															
FNA																					
FNB																					
Not Located (NL)																					
Ambiguous (AMB)																					
TP/TNS		1.000	1.000	1.000	1.000	1.000															
FP/TNS		0.000	0.000	0.000	0.000	0.000															
FN/TNS		0.000	0.000	0.000	0.000	0.000															
[(TP/TNS) + (FN/TNS)] (must equal 1.00)		1.000	1.000	1.000	1.000	1.000															

*Value for these items will be the same for all analysts.

**Verifying analyst should not be one of the TEM Operators.

Refer to NISTIR 5351 for guidance.

BATTA

Statistical Review of Structure Assignment From Verified Asbestos Analysis

Only structures verified as "TPM" are recorded.

	Structure Length							Str Width							Structure Type							Stats for Structure Length					Stats for Structure Width					Str Type / Classification ID	
	E-20							E-20							f=1, b=2, m=3, c=4																		
Str #	rgs	bl	drw	mq	km	yz		rgs	bl	drw	mq	km	yz		rgs	bl	drw	mq	km	yz		Average	Std Dev	CV or %RSD	LCL	UCL	Average	Std Dev	CV or %RSD	LCL	UCL	Type Pass or Fail	Correct Ruling on Structure (if close to 0.5µm) Pass or Fail
1	3.10	3.10	2.75	2.50	2.50	2.90		0.080	0.080	0.100	0.100	0.100	0.100		1	1						2.8	0.27	9.71	2.272	3.344	0.09	0.01	11.07	0.0730	0.1136	Pass	Pass
2	5.30	5.40	5.00	5.00	4.70	5.00		0.150	0.150	0.300	0.200	0.200	0.180		2	2						5.1	0.25	4.94	4.575	5.559	0.20	0.06	28.16	0.0878	0.3055	Pass	Pass
3	2.10	2.10	2.00	2.00	2.00	1.60		0.050	0.070	0.100	0.050	0.080	0.070		1	1						2.0	0.19	9.47	1.601	2.333	0.07	0.02	27.11	0.0327	0.1073	Pass	Pass
4	5.20	5.30	5.00	5.00	4.90	4.70		0.120	0.150	0.250	0.150	0.150	0.130		2	2						5.0	0.21	4.26	4.597	5.437	0.16	0.05	29.47	0.0667	0.2500	Pass	Pass
5	4.70	4.70	4.50	4.00	4.00	3.70		0.100	0.090	0.200	0.100	0.110	0.120		1	1						4.3	0.42	9.91	3.436	5.097	0.12	0.04	33.75	0.0404	0.1996	Pass	Pass
6	1.10	1.05	1.00	1.00	1.00	1.00		0.050	0.050	0.100	0.050	0.100	0.060		1	1						1.0	0.04	4.08	0.943	1.107	0.07	0.02	36.34	0.0195	0.1171	Pass	Pass
7																																	
8																																	
9																																	
10																																	
11																																	
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Screen and Camera Magnification Calibration

Date of Measurement: 11/1/2004 **Analyst:** JH

Setting: **20,000**

Camera

Date	Negative #	D_1	D_2	D	# Spaces	Magnification
11/1/2004	973					

	SM1	SM2	SM3	SM4	SM5	Screen/Camera Ratio
Screen	22.3	22.2	22.3	22.3	22.1	#VALUE!

Date	# Spaces	Magnification
11/1/2004	22.24	15540

Setting: **15,000**

Camera

Date	Negative #	D_1	D_2	D	# Spaces	Magnification
11/1/2004	ND *					

		SM2	SM3	SM4	SM5	Screen/Camera Ratio
Screen	29.2	29.2	29.1	29.3	29.1	#VALUE!

Date	# Spaces	Magnification
11/1/2004	29.18	11844

Setting: **10,000**

Camera

Date	Negative #	D_1	D_2	D	# Spaces	Magnification
11/1/2004	974					

	SM1	SM2	SM3	SM4	SM5	Screen/Camera Ratio
Screen	43.7	43.7	43.7	43.6	43.8	#VALUE!

Date		# Spaces		Magnification
11/1/2004		43.7		7908

Setting: **5,000**

Camera

Date	Negative #	D_1	D_2	D	# Spaces	Magnification
11/1/2004	975					

Setting: **1,000**

Camera

Date	Negative #	D_1	D_2	D	# Spaces	Magnification
11/1/2004	ND					

D1 = The smaller measurement of the Supper Device in mm.

D2 = The larger measurement of the Supper Device in mm.

D = D2 - D1

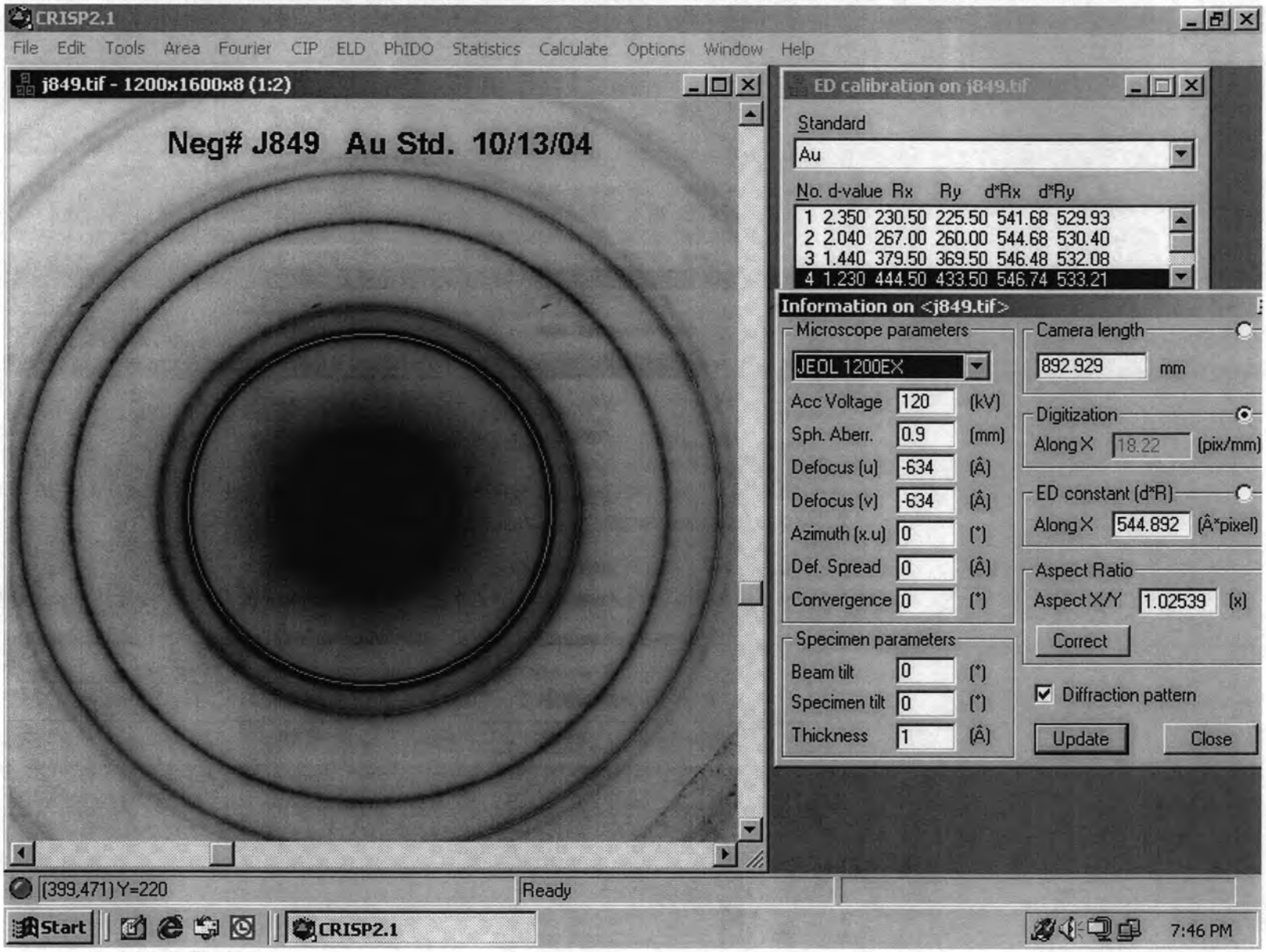
Spaces = The number of spaces spanned by the measurement or reported on calibration sheet. For the 18,000x screen mag., take the avg. of the five measurements recorded on the monthly calibration log. For the 10,000x screen mag., only one measurement is recorded on the monthly calibration log.

Camera Magnification = (D/# spaces) * 2160

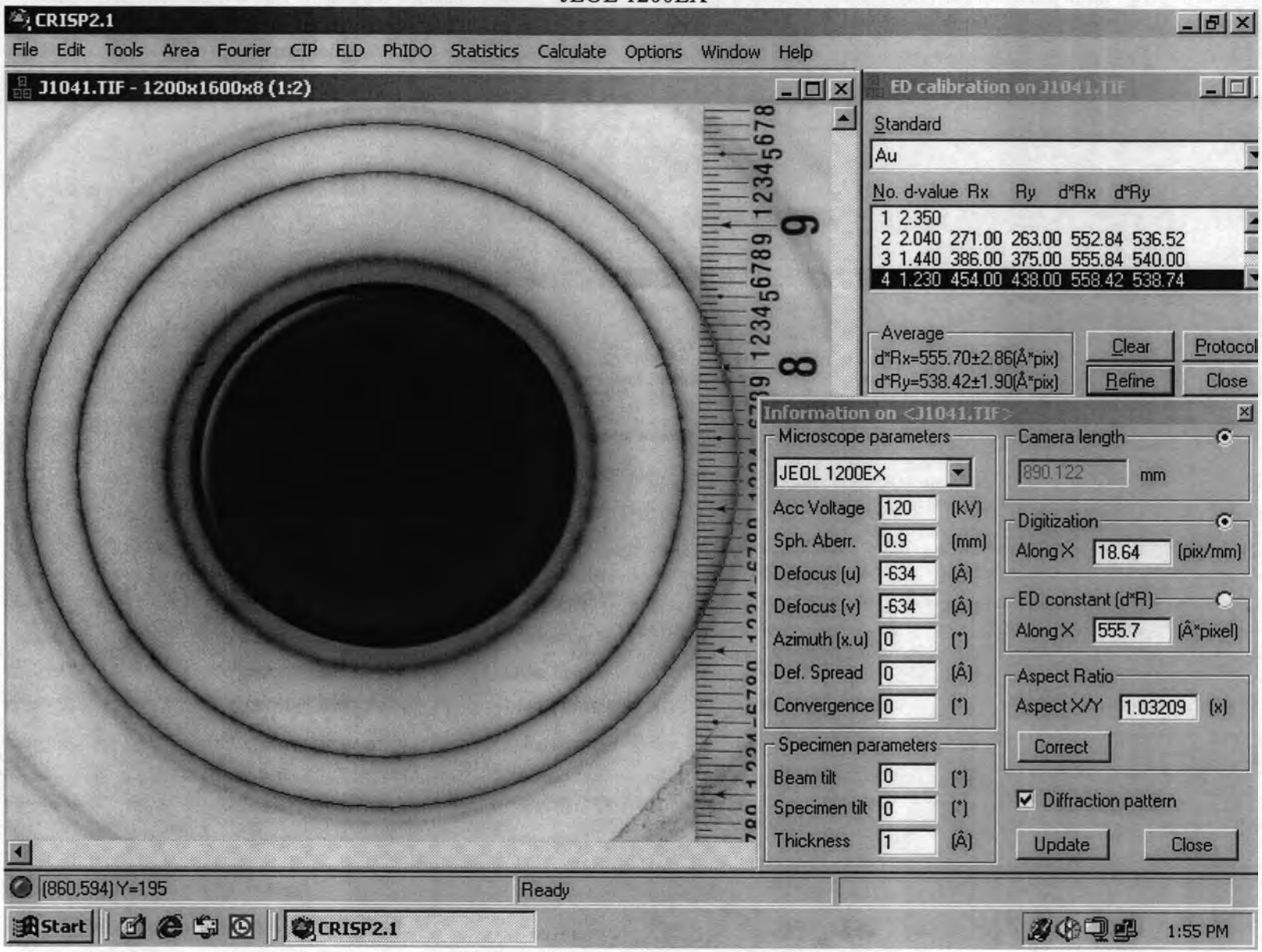
Screen Magnification = (155/# spaces) * 2160

* ND - Not Done

Au Std.
Jeol
10/13/04



Au Std. 11/18/04
JEOL 1200EX



Screen and Camera Magnification Calibration

Date of Measurement: 12/16/2004 **Analyst:** JH

Setting: **20,000**

Camera

Date	Negative #	D_1	D_2	D	# Spaces	Magnification
12/16/2004	1178					

	SM1	SM2	SM3	SM4	SM5	Screen/Camera Ratio
Screen	22.2	22.1	22.3	22.3	22.1	#VALUE!

Date	# Spaces	Magnification
12/16/2004	22.2	15568

Setting: **10,000**

Camera

Date	Negative #	D_1	D_2	D	# Spaces	Magnification
12/16/2004	1179					

	SM1	SM2	SM3	SM4	SM5	Screen/Camera Ratio
Screen	43.6	43.9	43.6	43.8	43.7	#VALUE!

Date	# Spaces	Magnification
12/16/2004	43.72	7905

Setting: **5,000**

Camera

Date	Negative #	D_1	D_2	D	# Spaces	Magnification
12/16/2004	1180					

D1 = The smaller measurement of the Supper Device in mm.

D2 = The larger measurement of the Supper Device in mm.

D = D2 - D1

Spaces = The number of spaces spanned by the measurement or reported on calibration sheet. For the 18,000x screen mag., take the avg. of the five measurements recorded on the monthly calibration log. For the 10,000x screen mag., only one measurement is recorded on the monthly calibration log.

Camera Magnification = (D/# spaces) * 2160

Screen Magnification = (155/# spaces) * 2160

* ND - Not Done

k-factor Calibration

KFACTOR SUMMARY

Date:	12/16/2004			
Analyst:	JH			
Microscope:	JEOL 1200EX			
Spectra Number	**Mg**	**Si**	**Ca**	**Fe**
1	1.08	1.00	1.35	2.02
2	1.07	1.00	1.32	2.01
3	1.08	1.00	1.32	1.82
4	1.08	1.00	1.36	2.04
5	1.08	1.00	1.37	2.01
Average	1.08	1.00	1.34	1.98
Standard Deviation	0.00	0.00	0.02	0.09
2s	0.01	0.00	0.04	0.18
STDEV Pass/Fail	Pass	Pass	Pass	Pass
Sensitivity (Mg:Fe)	0.54			
Pass/Fail	**PASS**			

Sensitivity (Mg:Fe) values greater than 1.5 are failed. Instrument must be taken out of operation, serviced and k-factor calibrations redone before instrument may be place back into service.

Relative kfactor values	**Rounded value**	**Limits**	**Pass/Fail**
Na			
Mg			
Al			
Ca			
Fe			

SRM 2063a Raw data

Spectra Number		Mg	Si	Ca	Fe
1	Background	0	0	0	0
	Net Area Counts	24742	84619	29201	18246
	Counts - Background	24742	84619	29201	18246
	Isi/Ia	3.42005497	1	2.897811719	4.63767401
	Ca/Csi	0.31452249	1	0.466456196	0.43646409
	k-factor	1.08	1.00	1.35	2.02
2	Background	0	0	0	0
	Net Area Counts	24546	83655	29487	18124
	Counts - Background	24546	83655	29487	18124
	Isi/Ia	3.40809093	1	2.837012921	4.61570294
	Ca/Csi	0.31452249	1	0.466456196	0.43646409
	k-factor	1.07	1.00	1.32	2.01
3	Background	0	0	0	0
	Net Area Counts	29488	101272	35702	24262
	Counts - Background	29488	101272	35702	24262
	Isi/Ia	3.43434617	1	2.836591788	4.17409941
	Ca/Csi	0.31452249	1	0.466456196	0.43646409
	k-factor	1.08	1.00	1.32	1.82
4	Background	0	0	0	0
	Net Area Counts	25022	85746	29481	18338
	Counts - Background	25022	85746	29481	18338
	Isi/Ia	3.42682439	1	2.90851735	4.67586433
	Ca/Csi	0.31452249	1	0.466456196	0.43646409
	k-factor	1.08	1.00	1.36	2.04
5	Background	0	0	0	0
	Net Area Counts	24843	85039	29000	18461
	Counts - Background	24843	85039	29000	18461
	Isi/Ia	3.4230568	1	2.93237931	4.60641352
	Ca/Csi	0.31452249	1	0.466456196	0.43646409
	k-factor	1.08	1.00	1.37	2.01

Albite Standard Calibration

SRM 99a (Version#1)

Date:	12-16-04		
Analyst:	JH		
Spectra Number	**Na**	**Al**	**Si**
1	3.88	2.72	1.00
2	1.07	0.53	1.00
Average	2.48	1.63	1.00
Standard Deviation	1.99	1.55	0.00
Na Limits	**2.48**	**PASS**	
Al Limits	**1.63**	**PASS**	

SRM 99a Raw Data

Spectra Number		Na	Al	Si
1	Background	0	0	0
	Gross Area	858	4609	28138
	Net Area Counts	858	4609	28138
	Cx/Csi	0.11838624	0.4457672	1
	Isi/Ix	32.7948718	6.10501193	1
	k-factor	3.88	2.72	1.00
2	Background	0	0	0
	Gross Counts	192	1460	1737
	Net Counts	192	1460	1737
	Cx/Csi	0.11838624	0.4457672	1
	Isi/Ix	9.046875	1.18972603	1
	k-factor	1.07	0.53	1.00

Albite Standard Calibration

SRM 99a

Date: 12/16/2004
Analyst: jh

Spectra Number	Na	Al	Si
1	0.90	1.43	1.00
2	1.91	1.76	1.00
3	1.41	1.62	1.00
4	0.94	1.82	1.00
5	0.89	1.33	1.00
Average	1.21	1.59	1.00
Standard Deviation	0.45	0.21	0.00
2s	0.90	0.42	0.00
Na Limits	**1.21**	**PASS**	
Al Limits	**1.59**	**PASS**	

SRM 99a Raw Data

Spectra Number		Na	Al	Si
1	**Background**			
	Area Counts	9419	22320	71365
	Net Counts	9419	22320	71365
	Cx/Csi	0.118386243	0.4457672	1
	Isi/Ix	7.576706657	3.1973566	1
	k-factor	0.90	1.43	1.00
2	**Background**			
	Area Counts	3370	13800	54377
	Net Counts	3370	13800	54377
	Cx/Csi	0.118386243	0.4457672	1
	Isi/Ix	16.13560831	3.9403623	1
	k-factor	1.91	1.76	1.00

3	**Background**			
	Area Counts	4692	15360	55914
	Net Counts	4692	15360	55914
	Cx/Csi	0.118386243	0.4457672	1
	Isi/Ix	11.9168798	3.6402344	1
	k-factor	1.41	1.62	1.00
4	**Background**			
	Area Counts	8496	16427	67125
	Net Counts	8496	16427	67125
	Cx/Csi	0.118386243	0.4457672	1
	Isi/Ix	7.900776836	4.0862604	1
	k-factor	0.94	1.82	1.00
5	**Background**			
	Area Counts	8414	21097	63127
	Net Counts	8414	21097	63127
	Cx/Csi	0.118386243	0.4457672	1
	Isi/Ix	7.50261469	2.9922264	1
	k-factor	0.89	1.33	1.00

BEAM DOSE CALIBRATION

(Version#1)

Date:	12/16/2004				
Analyst:	JH				
Microscope:	JEOL 1200EX				
Fiber Length used in analysis (um):					
Time (sec)	**Visual**	**Neg #**	**Recordable Diffraction**	**EDS**	**Photo**
0	Y		ND*		
30	Y		ND*		
60	Y	1181	Y		
90	Y	1182	Y		
120	Y	1183	Y		
150	Y	1184	Y	865	1185
PASS/FAIL	**PASS**		**PASS**		

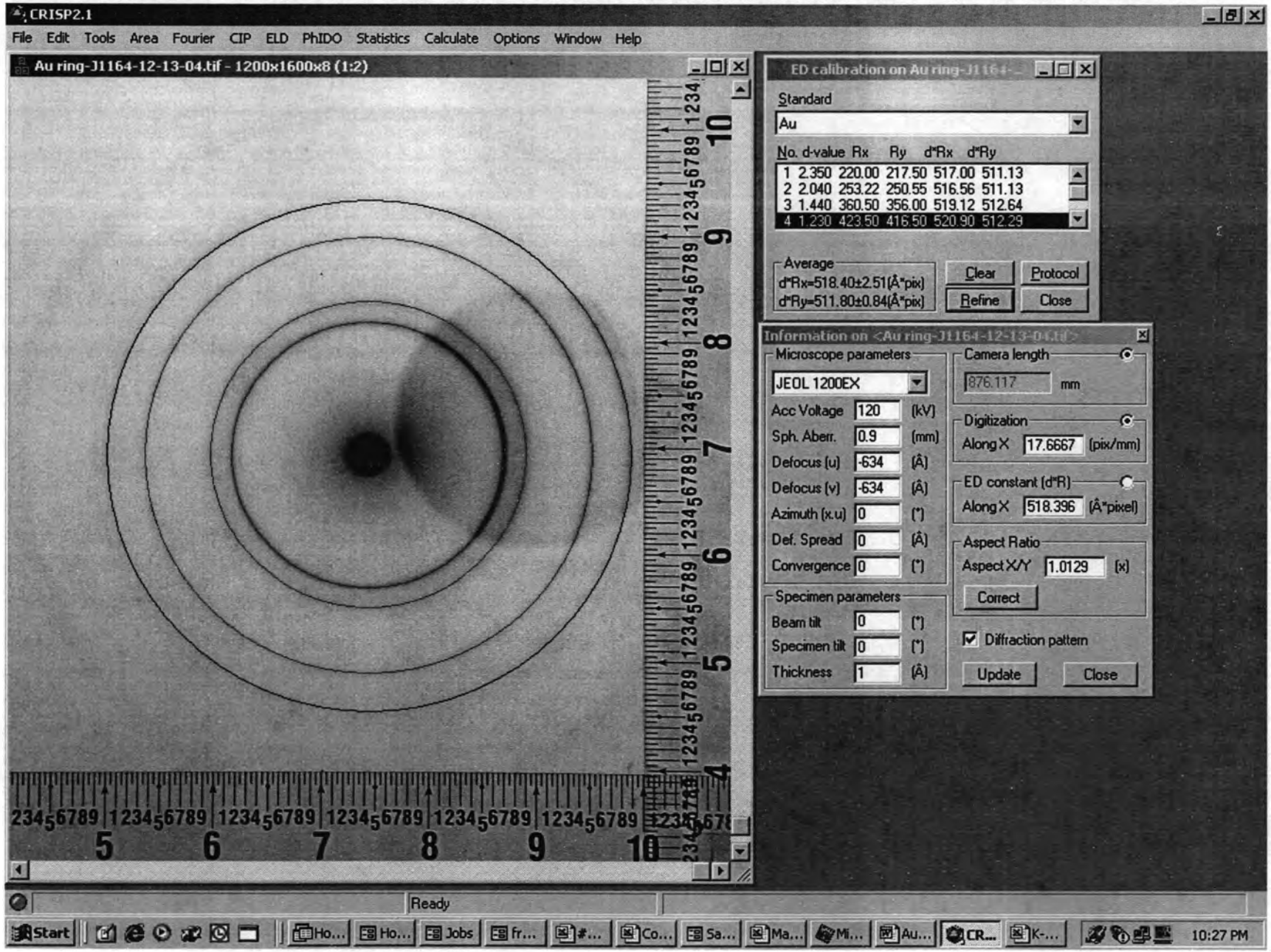
*ND - Not Done

Visual - Mark "Y" if diffraction pattern is seen on screen, mark "N" if pattern is not seen on screen

Recordable Diffraction - Mark "Y" if diffraction pattern is seen on negative, mark "N" if pattern is not seen on negative

Chrysotile Fiber Specs.: Single fibril, >= 1.0 micron in length

Au Std. 12/13/04
JEOL 1200EX
Neg J1164



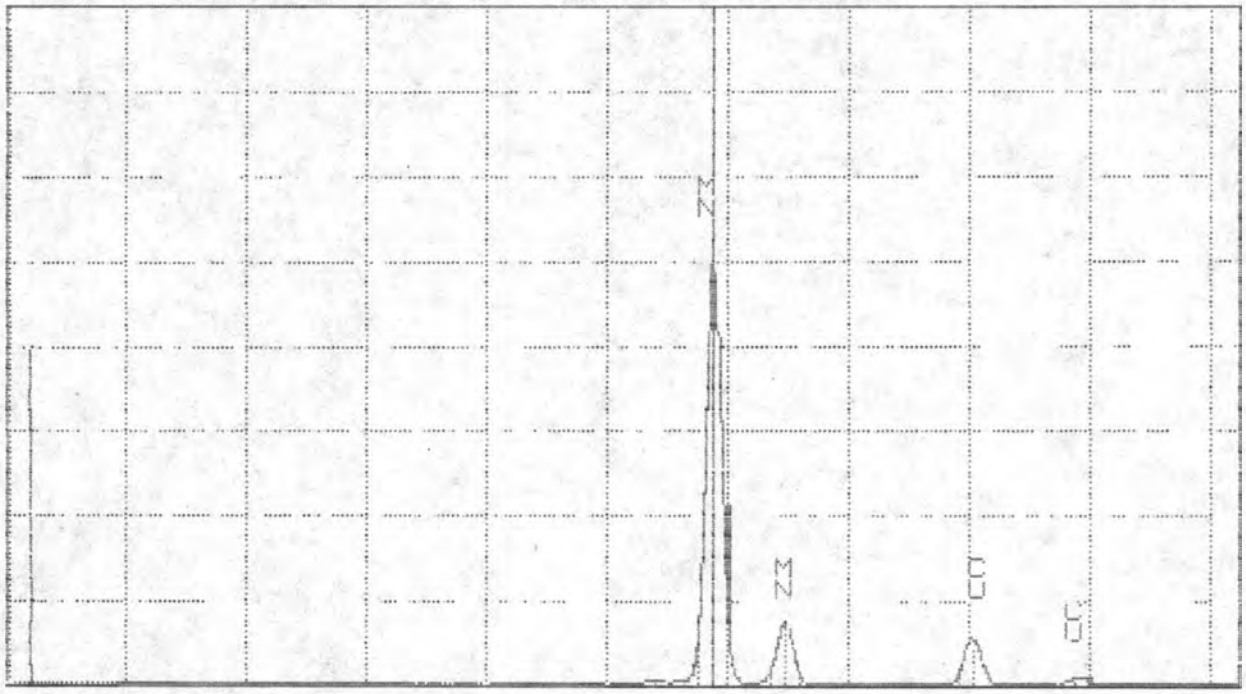
1,30
*

MN RESOL 12-16-04 SP 166SECS

CENTR.	AREA	FWHM
285	216	25 N
601	338	151
929	639	117
4142	671	135
5406	918	120
5888	168451	141
6478	24146	150
7412	321	147
8028	14145	159
8890	2924	179

RESOLUTION = 141

TN-5400 University of Washington / JEOL FRI 17-DEC-04 00:01
Cursor: 5.890keV = 10/25



0.000 B- 5 VFS = 16384 1V 240
166 MN RESOL 12-16-04 SP8K4

*
SQMTF: QUANTIFY
*Standardless Analysis
*X 'SQMTF'

Chi-sqd = 8.95

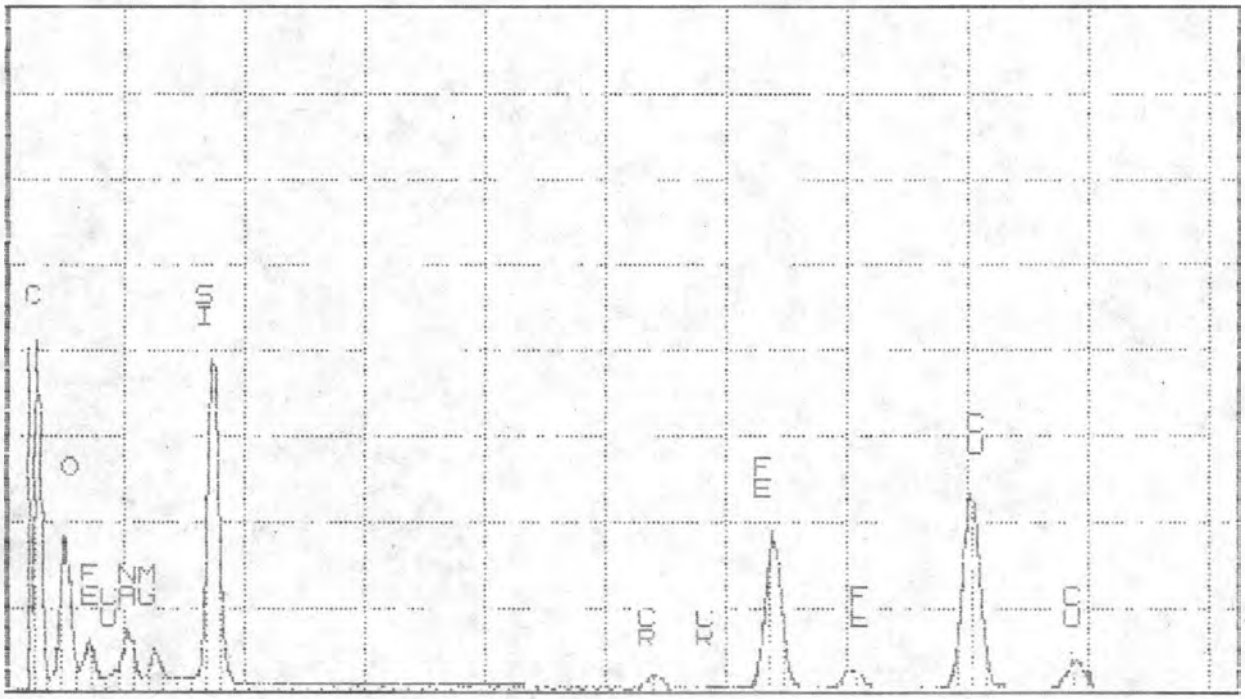
Element	Net Counts		
Si-K	23333	+/-	284
Mg-K	2630	+/-	256
Al-K	1275	+/-	308
Ca-K	179	+/-	106
Fe-K	16594	+/-	241
Na-K	4302	+/-	188
K -K	270	+/-	101

REF.S	EDS:SIK	EDS:MGK	EDS:AL K	EDS:CAK	EDS:FEK	EDS:NAK	EDS:

CROC STD 12-16-04 SP863

EL-LINE	PEAK	K-FACTOR	CEL/CREF	ATOM%	EL WT%	WT%	FORMULA
SI-K	23333	1.000	1.000	20.22	24.61	52.74	SIO2
MG-K	2630	1.000	0.113	2.66	2.77	4.62	MGO
AL-K	1275	0.750	0.041	0.86	1.01	1.91	AL2O3
CA-K	179	0.949	0.007	0.10	0.18	0.25	CAO
FE-K	16594	1.399	0.996	10.07	24.51	35.01	FE2O3
NA-K	4302	0.549	0.101	2.50	2.50	5.10	NA2O3
K-K	270	1.059	0.012	0.18	0.30	0.36	K2O
O			1.792	63.42	44.12		

TN-5500 University of Washington / JEOL THU 16-DEC-04 23:31
Cursor: 0.000keV = 0



0.0KV R- 5 VFS = 4046 10.240
162 CROC STD 12-16-04 SP863

✓ b. **for spot size measurement**, see:
- D. B. Williams, *Practical Analytical Electron Microscopy in Materials Science*, Philips Electronics Instruments, Inc., Mahwah, New Jersey, 1984, pp. 34-35 (for TEM or STEM mode);
- D. B. Williams, *Standardized Definitions of X-ray Analysis Performance Criteria in the AEM*, in A. D. Romig Jr. and W. F. Chambers, (ed.), *Microbeam Analysis 1986*, San Francisco Press, San Francisco, 1986, pp. 443-448 (for TEM mode); and
- J. I. Goldstein, et al., *Scanning Electron Microscopy and X-ray Microanalysis*, Plenum Press, New York, 1981, p. 48 (for STEM mode);

✓ c. **for k-factor measurement**, see:
- D. C. Joy, A. D. Romig, J. I. Goldstein, *Introduction to Analytical Electron Microscopy*, Plenum Press, New York, 1986; or
- D. B. Williams, *Practical Analytical Electron Microscopy in Materials Science*, Philips Electronics Instruments, Inc., Mahwah, New Jersey, 1984;

✓ d. **for quality assurance**, see J. K. Taylor, *Quality Assurance of Chemical Measurements*, Lewis Publishers, Chelsea, Michigan, 1987;

✓ e. **for statistical analysis**, see M. G. Natrella, *Experimental Statistics*, John Wiley & Sons, New York, 1966;

✓ f. **for control charts**, see *Manual on Presentation of Data and Control Chart Analysis*, ASTM, Philadelphia, 1991; and

✓ g. reference data on the crystallography and chemical composition of minerals that analytically interfere with the regulated asbestos minerals.

3 Personnel

✓ 3.1 Staff members are aware of both the extent and limitation of their area of responsibility.

✓ 3.2 The laboratory has a written description of its training program which includes training with standards and blind testing to determine competency and criteria for successful completion.

✓ 3.3 Analysts and technical supervisors participate in an appropriate form of continuing education, such as formal coursework, in-house education, and scientific or technical meetings, and have access to journals that describe advances in the field of electron microscopy and/or asbestos analysis.

✓ 3.4 The technical supervisor(s) shall be qualified to conduct AEM studies, apply AEM to crystalline materials and is knowledgeable in the field of asbestos analysis including procedures for sample handling, preparation, analysis, storage, disposal, and contamination monitoring.

3.5 AEM analysts are trained and are proficient in:

✓ a. AEM use, calibration, alignment, electron micrography (or functional equivalent);

should be from the low end (0.7 keV to 2 keV) and the other peak from the high end (7 keV to 10 keV) of this range. The calibration of the x-ray energy is checked prior to each analysis of samples and recalibrated if out of the specified range.

X 6.11 The relative sensitivity (k-factors) factors relative to Si for elements found in asbestos (Na, Mg, Al, Si, Ca, Fe) are determined so that:

a. the k-factors are determined to a precision (2 *s*) within 10% relative to the mean value obtained for Mg, Al, Si, Fe, and within 20% relative to the mean value obtained for Na;

b. the k-factor relative to Si for Na is between 1.0 and 4.0, for Mg and Fe is between 1.0 and 2.0, and for Al and Ca is between 1.0 and 1.75; and

✓ c. the k-factor for Mg relative to Fe on SRM 2063(a) or other standard traceable to NIST is 1.5 or less.

NOTE: *SRM 2063 or SRM 2063a can be used for the determination of k-factors for Mg, Si, Ca and Fe. The laboratory must obtain its own chemically characterized materials for determining the Na and Al k-factors. Examples include albite for Na k-factor determination and biotite or albite for Al k-factor determination. Na k-factors are sensitive to electron beam dose (current and time). It is suggested that small particles (≤ 0.1 μm in size) be used for Na k-factor determination to minimize the effect of Na migration.*

X 6.12 The portions of a grid in a specimen holder for which abnormal x-ray spectra are generated under routine asbestos analysis conditions are determined and these areas are avoided in asbestos analysis.

NOTE: *X-rays can be absorbed due to the relative position of the area of interest, the grid bars, specimen holder and x-ray detector and give an abnormal spectra (for an example of an abnormal spectra see S. Turner, E. B. Steel, S. S. Doorn, and S. B. Burris, "Proficiency Tests for the NIST Airborne Asbestos Program - 1991," NISTIR 5432). The laboratory should use a standard material (SRM 2063 is recommended) to map out the spectra obtained over the grid area and to thereby determine the regions that should be avoided in routine analysis.*

✓ 6.13 The low temperature asher is calibrated by determining a calibration curve for the weight vs. ashing time of collapsed mixed-cellulose-ester (mce) filters.

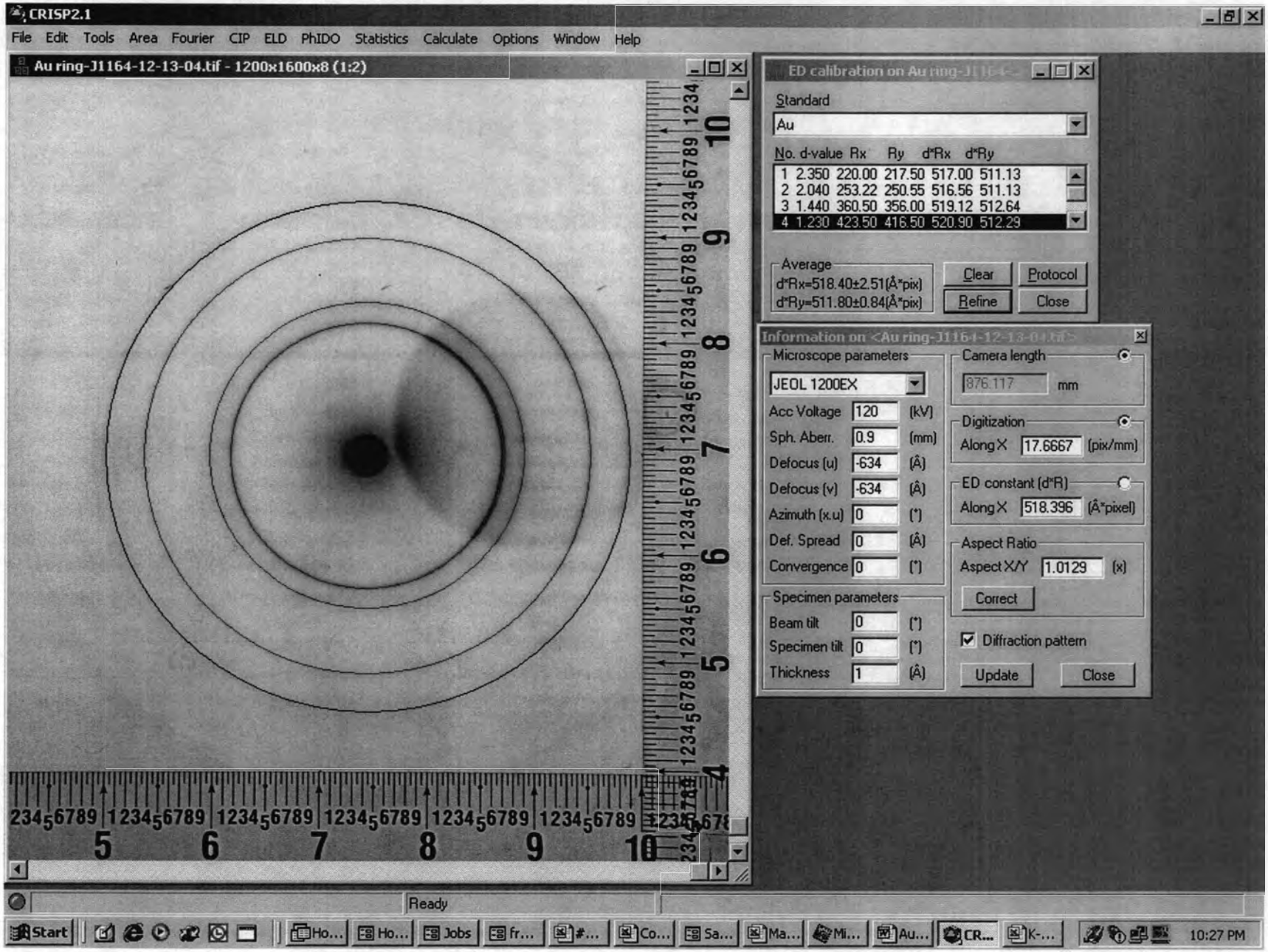
NOTE: *The AHERA method specifies that a mixed-cellulose-ester filter is to be ashed by 10%. However, if ashing by this amount generates a texture in the replica that affects structure counting, it is permissible to etch by less than this amount.*

✓ 6.14 The determination of the quality of sample preparations is calibrated or the laboratory has the following documentation available:

✓ a. images and samples showing good preparations and examples of the types of problems that occur in poor preparations (readily available to analysts); and

✓ b. a record of repeat evaluations of images and samples by the same and different analysts. (This data may be derived in part from sample preparation evaluations done in the course of verified analysis.)

Au Std. 12/13/04
JEOL 1200EX
Neg J1164



Screen and Camera Magnification Calibration

Version#1

Date of Measurement: 12/17/2004 **Analyst:** DW

Average:

Screen Magnification at 18,000:	17347
Screen Magnification at 10,000:	10024

Camera Magnification at 18,000:	18133
Camera Magnification at 10,000:	10527
Camera Magnification at 550:	562

Setting 18,000

Camera

Date	Negative #	D_1	D_2	D	# Spaces	Magnification
10/25/2004	5340	30.2	114.15	83.95	10	18133

H.ST
18100

Screen

Date	# Spaces	Magnification
10/25/2004	19.3	17347

Setting 10,000

Camera

Date	Negative #	D_1	D_2	D	# Spaces	Magnification
10/25/2004	5341	29.6	112.45	82.85	17	10527

H.ST
10511

Screen

Date	# Spaces	Magnification
10/25/2004	33.4	10024

Setting 550

Camera

Date	Negative #	D_1	D_2	D	# Spaces	Magnification
10/25/2004	5342	48.25	61.25	13	50	562

H.ST
570

D1 = The smaller measurement of the Supper Device in mm.

D2 = The larger measurement of the Supper Device in mm.

D = D2 - D1

Spaces = The number of spaces spanned by the measurement or reported on calibration sheet. For the 18,000x screen mag., take the avg. of the five measurements recorded on the monthly calibration log. For the 10,000x screen mag., only one measurement is recorded on the monthly calibration log.

Camera Magnification = (D/# spaces) * 2160

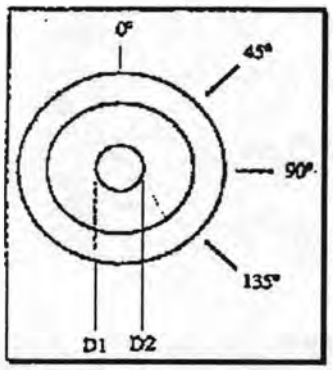
Screen Magnification = (155/# spaces) * 2160

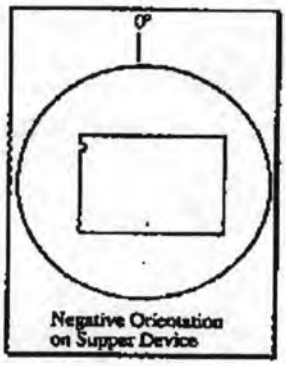
Camera Length and Camera Constant Calibration (Version#1)

Date of Measurement:	12/17/2004	**Average Camera Constant:**	26.951 **mmA**
Negative Number:	5343	(All 12 Measurements)	
Date Negative was Taken:	10/25/2004	**Average Camera Length:**	728.42 **mm**
Analyst:	DW	(All 12 Measurements)	

Ring #	**0 degrees**						**45 degrees**					
	D_1	D_2	D	R	CC	CL	D_1	D_2	D	R	CC	CL
1	55.60	78.45	22.85	11.43	26.91	727.19	64.50	87.35	22.85	11.43	26.91	727.19
2	53.70	80.25	26.55	13.28	27.07	731.56	62.60	89.00	26.40	13.20	26.91	727.43
3	48.25	85.70	37.45	18.73	27.00	729.77	57.20	94.40	37.20	18.60	26.82	724.90

Ring #	**90 degrees**						**135 degrees**					
	D_1	D_2	D	R	CC	CL	D_1	D_2	D	R	CC	CL
1	76.65	99.55	22.90	11.45	26.96	728.78	85.15	108.05	22.90	11.45	26.96	728.78
2	74.85	101.35	26.50	13.25	27.02	730.18	83.25	109.80	26.55	13.28	27.07	731.56
3	69.55	106.80	37.25	18.63	26.86	725.87	77.80	115.15	37.35	18.68	26.93	727.82





Measure the first three rings moving outward from the central spot of the diffraction pattern.

D_1 = The smaller measurement on the Supper device (mm).

D_2 = The larger measurement on the Supper device (mm).

$D = D_2 - D_1$

$R = D/2$

CC = Camera Constant

For Ring 1 [111], CC = R*2.355

For Ring 2 [200], CC = R*2.039

For Ring 3 [220], CC = R*1.442

CL = Camera Length = CC/0.037

k-factor Calibration

SRM 2063a (Revision# 4)

Date:	12/17/2004			
Analyst:	JH			
Spectra Number	**Mg**	**Si**	**Ca**	**Fe**
1	1.88	1.00	1.00	1.27
2	1.93	1.00	1.00	1.29
3	1.88	1.00	0.99	1.28
4	1.89	1.00	0.99	1.28
5	1.88	1.00	0.99	1.28
Average	1.89	1.00	0.99	1.28
Standard Deviation	0.02	0.00	0.01	0.01
2s	0.05	0.00	0.01	0.01
STDEV Pass/Fail	Pass	Pass	Pass	Pass
Sensitivity (Mg:Fe)	1.48			
Pass/Fail	**PASS**			
Relative Limits	**Mg**		**Ca**	**Fe**
	Pass		Fail	Pass

Sensitivity (Mg:Fe) values greater than 1.5 are failed. Instrument must be taken out of operation, serviced and k-factor calibrations redone before instrument may be place back into service.

SRM 2063a Raw data

Spectra Number		Mg	Si	Ca	Fe
1	Background				
	Net Area Counts	62.338	371.714	173.369	127.314
	Counts - Background	62.338	371.714	173.369	127.314
	Isi/Ia	5.96287978	1	2.144062664	2.91966319
	Ca/Csi	0.31452249	1	0.466456196	0.43646409
	k-factor	1.88	1.00	1.00	1.27
2	Background	0	0	0	0
	Net Area Counts	40.504	248.989	116.193	84.248
	Counts - Background	40.504	248.989	116.193	84.248
	Isi/Ia	6.14726941	1	2.142891568	2.95542921
	Ca/Csi	0.31452249	1	0.466456196	0.43646409
	k-factor	1.93	1.00	1.00	1.29
3	Background	0	0	0	0
	Net Area Counts	66.158	395.402	186.626	135.05
	Counts - Background	66.158	395.402	186.626	135.05
	Isi/Ia	5.9766317	1	2.118686571	2.92781933
	Ca/Csi	0.31452249	1	0.466456196	0.43646409
	k-factor	1.88	1.00	0.99	1.28
4	Background	0	0	0	0
	Net Area Counts	59.319	357.172	167.774	121.903
	Counts - Background	59.319	357.172	167.774	121.903
	Isi/Ia	6.02120737	1	2.12888767	2.92996891
	Ca/Csi	0.31452249	1	0.466456196	0.43646409
	k-factor	1.89	1.00	0.99	1.28
5	Background	0	0	0	0
	Net Area Counts	60.147	358.695	169.604	122.608
	Counts - Background	60.147	358.695	169.604	122.608
	Isi/Ia	5.96363908	1	2.114897054	2.92554319
	Ca/Csi	0.31452249	1	0.466456196	0.43646409
	k-factor	1.88	1.00	0.9865	1.28

Albite Standard Calibration

SRM 99a (Revision# 3)

Date:	12/17/2004		
Analyst:	TM		
Spectra Number	**Na**	**Al**	**Si**
1	2.04	1.53	1.00
2	2.05	1.45	1.00
3	2.14	1.37	1.00
4	2.45	1.46	1.00
5	2.18	1.49	1.00
Average	2.17	1.46	1.00
Standard Deviation	0.16	0.06	0.00
2s	0.33	0.11	0.00
STDEV Pass/Fail	Pass	Pass	Pass
Relative Limits	**Na**	**Al**	
	Pass	Pass	

SRM 99a Raw Data

Spectra Number		Na	Al	Si
1	Background	15	49	158
15598	Gross Counts	151	734	2503
	Net Counts	136	685	2345
	Cx/Csi	0.118386243	0.445767196	1
	Isi/Ix	17.24264706	3.423357664	1
	k-factor	2.04	1.53	1.00
2	Background	49	119	529
15599	Gross Counts	483	2433	8043
	Net Counts	434	2314	7514
	Cx/Csi	0.118386243	0.445767196	1
	Isi/Ix	17.31336406	3.247191011	1
	k-factor	2.05	1.45	1.00
3	Background	25	46	237
15600	Gross Counts	165	867	2763
	Net Counts	140	821	2526
	Cx/Csi	0.118386243	0.445767196	1
	Isi/Ix	18.04285714	3.076735688	1
	k-factor	2.14	1.37	1.00
4	Background	42	98	534
15601	Gross Counts	405	2382	8033
	Net Counts	363	2284	7499
	Cx/Csi	0.118386243	0.445767196	1
	Isi/Ix	20.6584022	3.283274956	1
	k-factor	2.45	1.46	1.00
5	Background	36	89	348
15602	Gross Counts	289	1488	5012
	Net Counts	253	1399	4664
	Cx/Csi	0.118386243	0.445767196	1
	Isi/Ix	18.43478261	3.333809864	1
	k-factor	2.18	1.49	1.00

Screen Magnification Calibration (Philips 410)

(Version#1)

Date of Measurement: 12/17/04

Analyst: DW

Average:

Screen Magnification at 18,000:	17347
Screen Magnification at 10,000:	10024

Setting 18,000

Screen

Date	# Spaces	Magnification
10/25/2004	19.3	17347

Large Circle Diameter

Date	Actual Diameter (um)	Theoretical Dia. (um)
10/25/2004	5.26	5.07

Small Circle Diameter

Date	Actual Diameter (um)	Theoretical Dia. (um)
10/25/2004	0.53	0.51

Rule

Date	Actual Length (um)	Theoretical Length (um)	Single Unit (um)	Ten Units (um)
10/25/2004	4.61	4.44	0.058	0.576

Setting 10,000

Screen

Date	# Spaces	Magnification
10/25/2004	33.4	10024

Large Circle Diameter

Date	Actual Diameter (um)	Theoretical Dia. (um)
10/25/2004	9.11	9.13

Small Circle Diameter

Date	Actual Diameter (um)	Theoretical Dia. (um)
10/25/2004	0.91	0.913

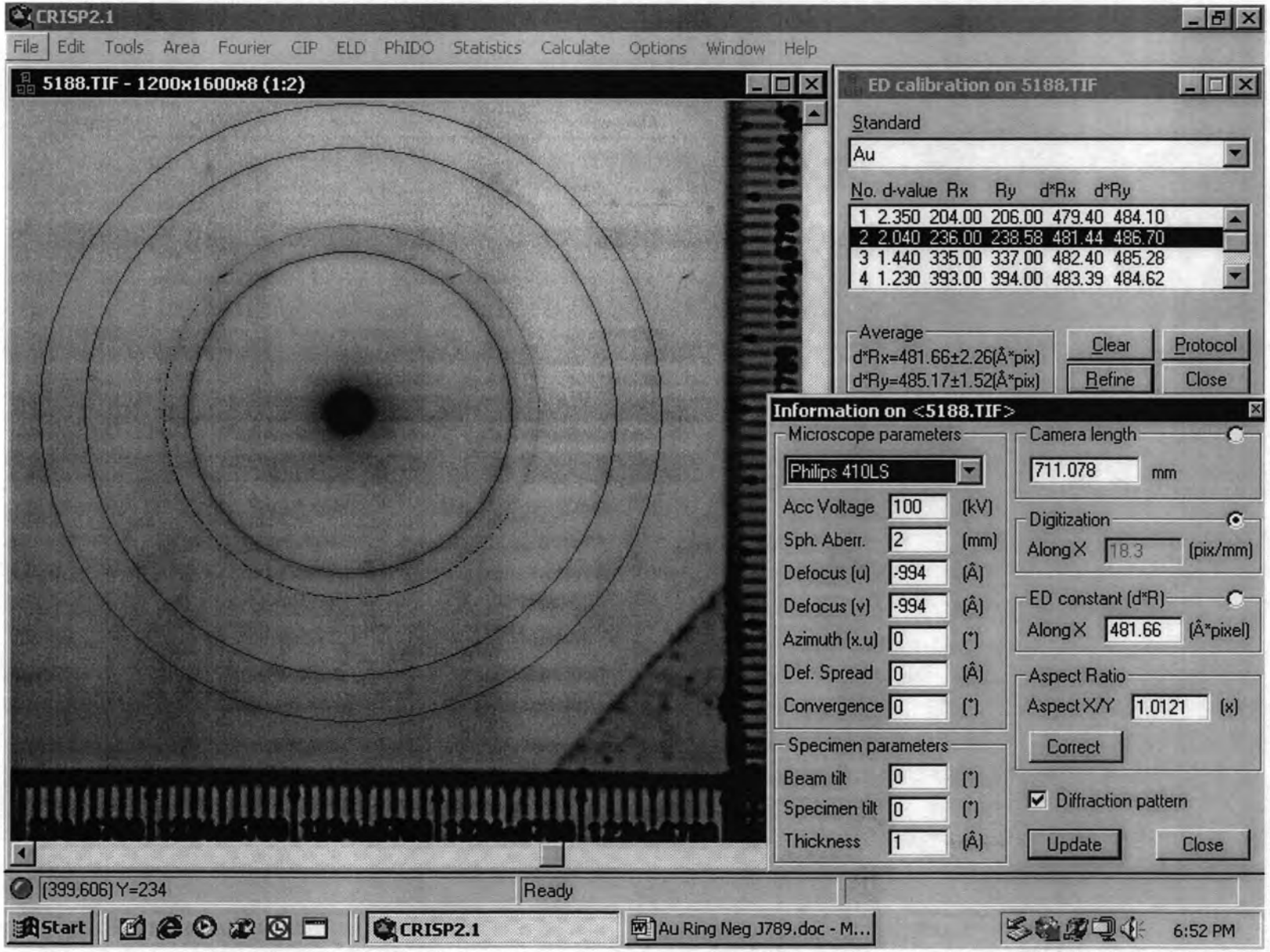
Rule

Date	Actual Length (um)	Theoretical Length (um)	Single Unit (um)	Ten Units (um)
10/25/2004	7.98	8.00	0.100	0.998

Spaces = The number of spaces spanned by the measurement or reported on calibration sheet. For the 18,000x screen mag., take the avg. of the five measurements recorded on the monthly calibration log. For the 10,000x screen mag., only one measurement is recorded on the monthly calibration log.

Screen Magnification = (155/# spaces) * 2160

Au Std 9/28/04
Philips 410
Neg 5188



Montl Claibration Log

Lab/Cor, Inc.

Date: OCT 04

Analyst											KM	KM	JH			
Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
18K Mag. Calib. SC1																
SC2																
SC3																
SC4																
SC5																
10K Mag. Calibration																
EDS																
EDS Na																
EDS Al											1.485					
Gain Inc.											-12					
New Gain											5					
Cu											8.044					
Zero Inc.											19					
New Zero											-794					
Resolution											167.8					
# of Iterations											4					
Alignment -- FCA											✓	✓	✓			
DA											✓					
Gold Rings Negative													✓			
Camera Constant																

Analyst			[illegible]	[illegible]					[illegible]		[illegible]			TM	TM	
Day	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
18K Mag. Calib. SC1									19.3							
SC2									19.3							
SC3									19.2							
SC4									19.3							
SC5									19.3							
10K Mag. Calibration									33.4							
EDS																
EDS Na				1.485					1.485		1.485			1.485	1.485	
EDS Al																
Gain Inc.				-5					-4		-31			5	8	
New Gain				193					122		149			118	96	
Cu				8.044					8.044		8.044			8.044	8.044	
Zero Inc.				25					23		38			-3	-14	
New Zero				-282					-497		-793			-419	-54	
Resolution				156.0					165.8		168			156.5	162.7	
# of Iterations				4					3					3	2	
Alignment -- FCA			[illegible]						[illegible]		[illegible]				KM	
DA			[illegible]	[illegible]					[illegible]		[illegible]				KM	
Gold Rings Negative									✓						✓	
Camera Constant																

Screen and Camera Magnification Calibration

Version#1

Date of Measurement: 12/17/2004 **Analyst:** KM

Average:

Screen Magnification at 18,000:	17187
Screen Magnification at 10,000:	9847

Camera Magnification at 18,000:	18036
Camera Magnification at 10,000:	10487
Camera Magnification at 550:	566

Setting 18,000

Camera

Date	Negative #	D_1	D_2	D	# Spaces	Magnification
11/9/2004	5629	24	107.5	83.5	10	18036

Hist 18100

Screen

Date	# Spaces	Magnification
11/1/2004	19.48	17187

Setting 10,000

Camera

Date	Negative #	D_1	D_2	D	# Spaces	Magnification
11/9/2004	5630	16.85	109.1	92.25	19	10487

Hist 10511

Screen

Date	# Spaces	Magnification
11/1/2004	34	9847

Setting 550

Camera

Date	Negative #	D_1	D_2	D	# Spaces	Magnification
11/9/2004	5631	52.45	65.55	13.1	50	566

Hist 570

D1 = The smaller measurement of the Supper Device in mm.

D2 = The larger measurement of the Supper Device in mm.

D = D2 - D1

Spaces = The number of spaces spanned by the measurement or reported on calibration sheet. For the 18,000x screen mag., take the avg. of the five measurements recorded on the monthly calibration log. For the 10,000x screen mag., only one measurement is recorded on the monthly calibration log.

Camera Magnification = (D/# spaces) * 2160

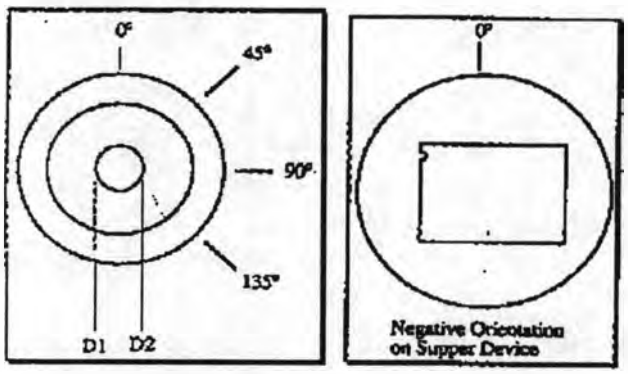
Screen Magnification = (155/# spaces) * 2160

Camera Length and Camera Constant Calibration (Version#1)

Date of Measurement:	12/17/2004	**Average Camera Constant:**	26.934 **mmA**
Negative Number:	5503	(All 12 Measurements)	
Date Negative was Taken:	11/16/2004	**Average Camera Length:**	727.95 **mm**
Analyst:	KM	(All 12 Measurements)	

Ring #	0 degrees						45 degrees					
	D_1	D_2	D	R	CC	CL	D_1	D_2	D	R	CC	CL
1	56.90	79.90	23.00	11.50	27.08	731.96	64.30	87.25	22.95	11.48	27.02	730.37
2	55.20	81.70	26.50	13.25	27.02	730.18	62.65	88.95	26.30	13.15	26.81	724.67
3	49.75	87.10	37.35	18.68	26.93	727.82	57.20	94.50	37.30	18.65	26.89	726.85

Ring #	90 degrees						135 degrees					
	D_1	D_2	D	R	CC	CL	D_1	D_2	D	R	CC	CL
1	75.30	98.20	22.90	11.45	26.96	728.78	83.15	106.00	22.85	11.43	26.91	727.19
2	73.45	99.80	26.35	13.18	26.86	726.05	81.35	107.80	26.45	13.23	26.97	728.80
3	68.05	105.30	37.25	18.63	26.86	725.87	75.75	113.05	37.30	18.65	26.89	726.85



Measure the first three rings moving outward from the central spot of the diffraction pattern.

D_1 = The smaller measurement on the Supper device (mm).

D_2 = The larger measurement on the Supper device (mm).

$D = D_2 - D_1$

R = D/2

CC = Camera Constant

For Ring 1 [111], CC = R*2.355

For Ring 2 [200], CC = R*2.039

For Ring 3 [220], CC = R*1.442

CL = Camera Length = CC/0.037

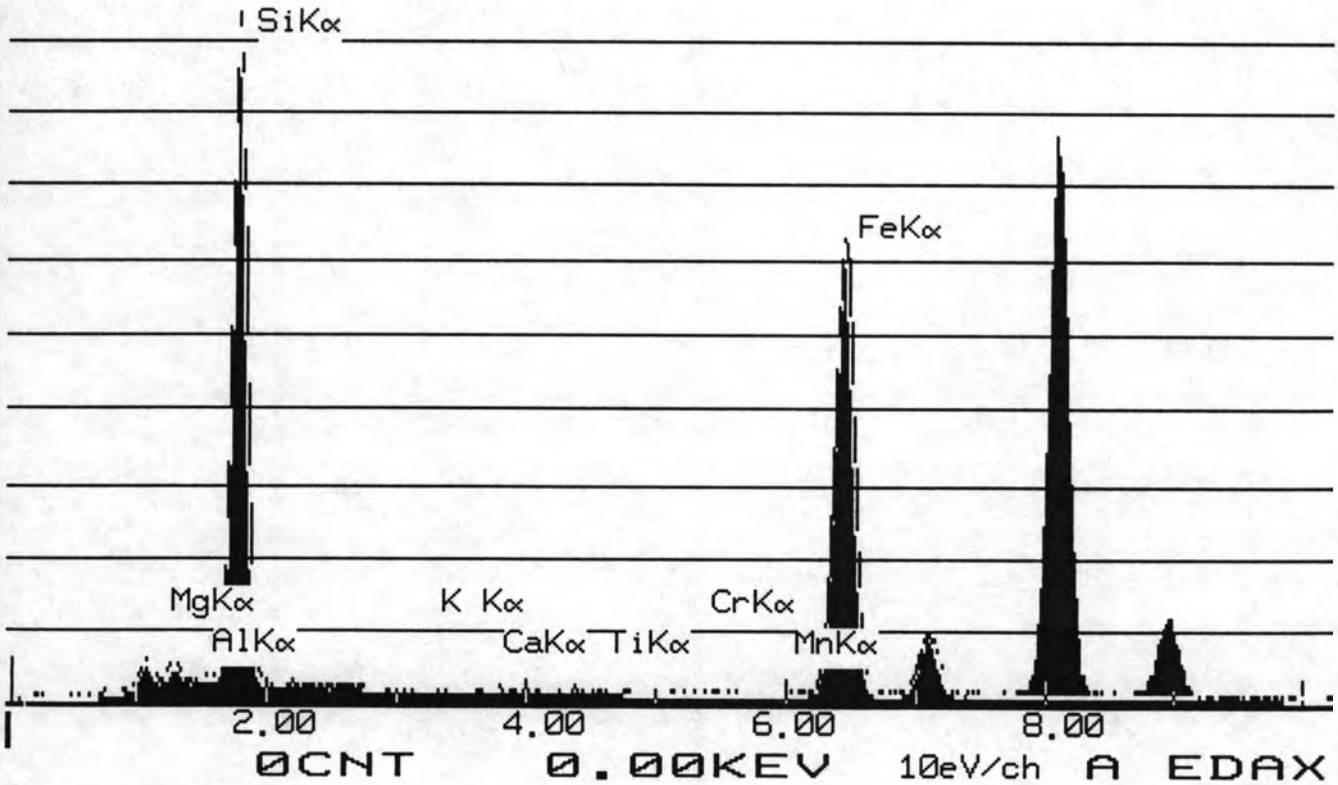
INTE-% :
I^BEL = CROC STD 11/1/04 15277
(JAN-73 19:53:55
91.138 LIVE SECONDS

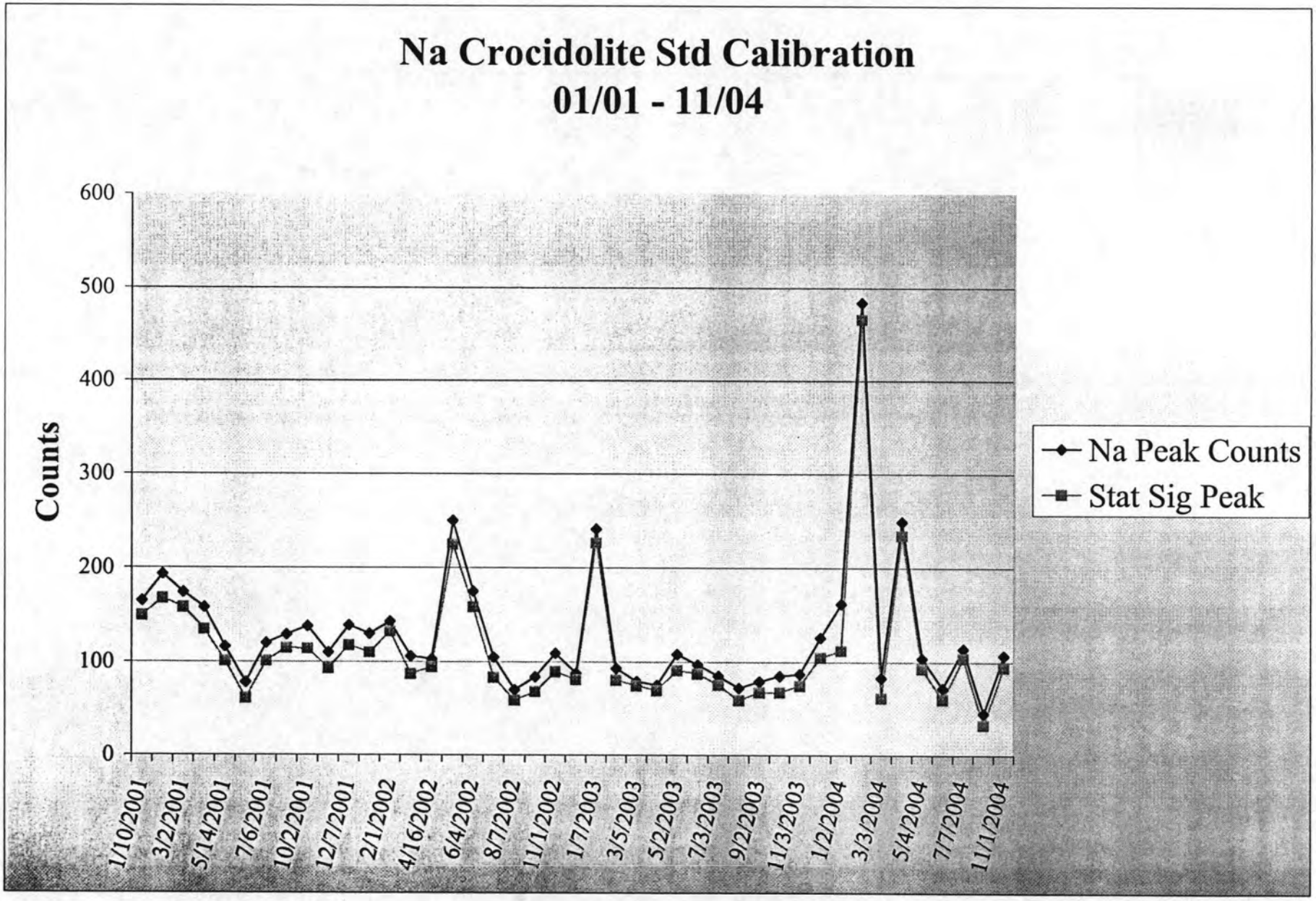
ELEM	CPS	WT % ELEM	WT % OXIDE
NAK	7.867	3.622	4.883
MGK	5.914	1.286	2.132
ALK	1.119	0.146	0.276
SIK	198.578	24.278	51.939
CRK	0.285	0.046	0.068
FEK	183.853	28.469	40.703

TOTAL			100.000

USED PEIF: USER

08-JAN-05 19:54:20 SUPER QUANT
RATE=21852CPS TIME= 91LSEC
FS= 1962/ 1962 PRST= 200LSEC
A =CROC STD 11/1/04 15277




Na Crocidolite Std Calibration
01/01 - 11/04
Counts
600
500
400
300
200
100
0
1/10/2001
3/2/2001
5/14/2001
7/6/2001
10/2/2001
12/7/2001
2/1/2002
4/16/2002
6/4/2002
8/7/2002
11/1/2002
1/7/2003
3/5/2003
5/2/2003
7/3/2003
9/2/2003
11/3/2003
1/2/2004
3/3/2004
5/4/2004
7/7/2004
11/1/2004
Na Peak Counts
Stat Sig Peak

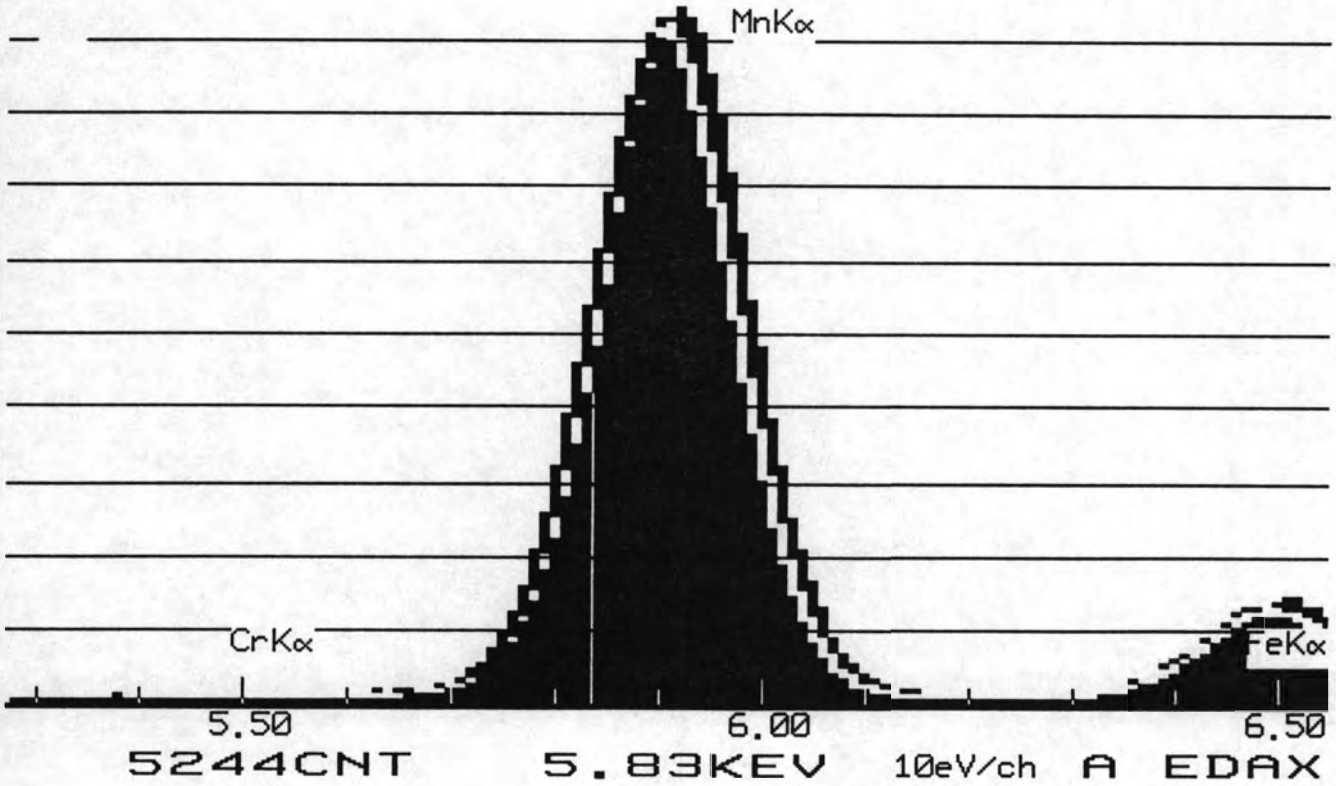
INTE-% :
LABEL = MN STD 11/1/04 15278
JAN-73 20:02:27
69.299 LIVE SECONDS

ELEM	CPS	WT % ELEM	WT % OXIDE
NAK	0.534	0.056	0.076
ALK	0.866	0.026	0.049
SIK	0.303	0.008	0.018
MNK	2018.071	77.335	99.858

TOTAL			100.000

USED PEIF: USER

08-JAN-05 20:02:52 SUPER QUANT
RATE=36068CPS TIME= 69LSEC
FS= 10892/ 10892 PRST= 200LSEC
A =MN STD 11/1/04 15278

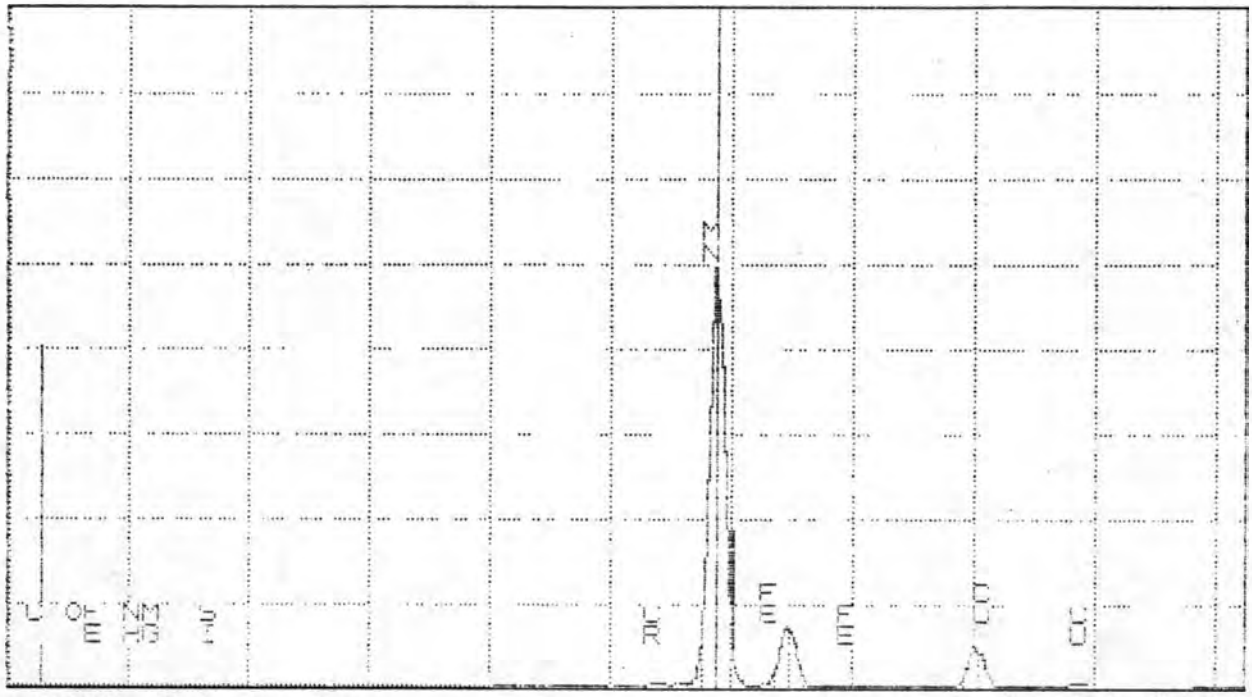


PHILIPS MnKa Peak Resolution Calibration

Date	Analyst	EDS	Mn Peak (cnts)	FWHM High (cnts)	FWHM Low (cnts)	FWHM (cnts)	# Channels	Resolution (eV)	Std Dev	Std Dev (2s)	Pass/Fail
2/5/02	DW		14255	7466	6369	6918	17	170			Pass
2/13/02	DW		10830	5441	4460	4951	17	170			Pass
2/26/02	DW		10070	5734	4772	5253	16	160			Pass
3/1/02	DW		10243	5177	4378	4778	15	150			Pass
3/20/02	DW		7684	3964	3290	3627	16	160			Pass
4/16/02	DW		10042	5693	4729	5211	16	160			Pass
5/2/02	DW	11466	10022	5310	4438	4874	17	170			Pass
6/4/02	DW	11531	10252	5421	4480	4951	16	160			Pass
7/1/02	DW	11800	10300	5749	4799	5274	16	160			Pass
8/7/02	DW	12318	10640	5905	4825	5365	17	170			Pass
10/1/02	DW	12634	15662	8414	7183	7799	17	170			Pass
11/1/02	DW	12667	20000	10797	9338	10068	17	170			Pass
12/2/02	DW	12778	10303	5421	4410	4916	16	160			Pass
1/7/03	DW	13007	10303	5569	4559	5064	14	140			Pass
2/7/03	KM	13089	10427	5960	4156	5058	17	170			Pass
3/5/2003	KM	13165	2348	1046	1279	1163	17	170			Pass
4/3/2003	KM	13226	10313	5676	4731	5204	16	160			Pass
5/5/2003	KM	13341	11454	5815	4977	5396	17	170			Pass
6/1/2003	KM	13437	9806	5385	4577	4981	17	170			Pass
7/3/2003	KM	13580	10335	5440	4620	5030	17	170			Pass
8/5/2003	KM	13713	10233	5686	4710	5198	17	170			Pass
9/2/2003	KM	13828	12311	6552	5661	6107	17	170			Pass
10/1/2003	KM	13981	10934	6341	5440	5891	17	170			Pass
11/3/2003	KM	14047	12783	7599	6376	6988	17	170	3.162	6.325	Pass
12/3/2003	KM	14131	10314	5258	4476	4867	17	170	3.162	6.325	Pass
1/2/2004	KM	14175	9901	5102	4166	4634	17	170	3.162	6.325	Pass
2/2/2004	KM	14240	10370	4747	5732	5240	17	170	0.000	0.000	Pass
3/3/2004	KM	14285	10232	5374	4428	4901	16	160	3.162	6.325	Pass
4/1/2004	KM	14371	9603	5532	4718	5125	17	170	3.162	6.325	Pass
5/4/2004	KM	14542	10344	4743	4017	4380	17	170	3.162	6.325	Pass
6/8/2004	KM	14819	10084	5420	4601	5011	17	170	3.162	6.325	Pass
7/7/2004	DW	14868	12292	5971	5843	5907	16	160	4.216	8.433	Pass
9/8/2004	KM	15032	6799	4180	3197	3689	16	160	4.830	9.661	Pass
11/1/2004	KM	15278	10251	6145	5244	5695	16	160	5.164	10.328	Pass

* Data is historical for the most recent 12 months

TN-5500 University of Washington / JEOL MON 01-NOV-04 17:25
Cursor: 5.440keV = 101:49



0.000 C- 6 VFS = 15384 10.240
82 1024chans 51%DT RT= 0sec 0.010keV

CRUC STD 11/1/04 SP7 R/S205

CENTR.	AREA	FWHM	
288	154	60345	N
590	365	144	
929	499	114	
4137	775	145	
5341	607	52	N
5823	140851	142	-- MN RESOLUTION
6473	23545	149	
8024	15741	162	
8881	2549	174	

JEOL Mn STD
11/1/04

MS FORTRAN [10-R]
SQMTF -38/80

SQMTF: QUANTIFY
Standardless Analysis

Refit _K K' _K K" _CAK' _CAK"
Refit _MGK' _ALK' _K K _FEK"
Chi-sqd = 4.99

JEOL CROCIDOLITE STD

11/1/04

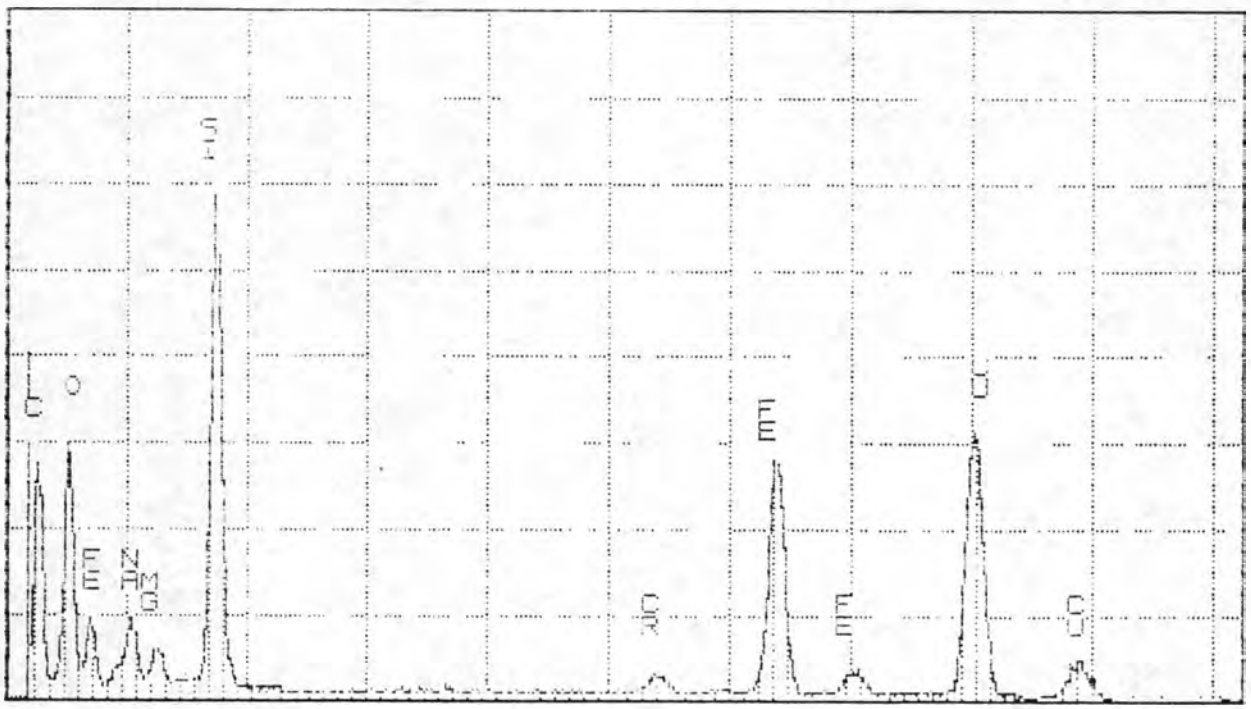
Element	Net Counts	
Si-K	8144 +/-	140
Mg-K	741 +/-	131
Al-K	360 +/-	164
K -K	0 +/-	0
Ca-K	122 +/-	30
Fe-K	6254 +/-	106
Na-K	1453 +/-	107

REF.S EDS:SIK EDS:MGK EDS:ALK EDS:K K EDS:CAK EDS:FEK
EDS:NAK

CROC STD 11/1/04 SP704

EL-LINE	PEAK	K-FACTOR	CEL/CREF	ATOM%	EL WT%	WT%	FORMULA
SI-K	8144	1.000	1.000	20.16	24.31	52.09	SIO2
MG-K	741	1.000	0.091	2.14	2.21	3.69	MGO
AL-K	360	0.750	0.033	0.69	0.81	1.52	AL2O3
K-K	0	1.060	0.000	0.00	0.00	0.00	K2O
CA-K	122	0.949	0.014	0.20	0.35	0.48	CAO
FE-K	6254	1.399	1.075	10.84	26.13	37.34	FE2O3
NA-K	1453	0.549	0.098	2.41	2.39	4.88	NA2O3
			1.802	43.54	43.40		

TN-5500 University of Washington / JEOL MON 01-NOV-04 17:16
Cursor: 0.000keV = 0



0.000 B- 5 VFS = 1024 10.24M
0 CROC STD 11/1/04 SP704

Lab/C , Inc.

A Professional Service Corporation in the Northwest

Report Number: 041373

Report Date: December 17, 2004

Client Information	
Project Name:	Test water bottles in Water Kit Supplies for asbestos
Project No.:	Not Available
P. O. No.:	Not Available
Sample Type:	Water

Tracking Information			
Login:	Nov 19, 2004	*By:*	JS
Prep:	Nov 19, 2004	*By:*	MH
Verified:	Nov 19, 2004	*By:*	MH
Reviewed:	Dec 17, 2004	*By:*	JH

Analysis Information	
Analysis Type:	EPA-Water
Reference No.:	100.2
Min. Aspect Ratio:	3:1
Min. Length:	10 µm
Min. Width:	Other µm

PRELIMINARY TABLE

Transmission Electron Microscopy – EPA-Water – Water Sample Analysis

Lab/Cor Sample No.	Client Sample No.	Description	Fiber Type	Concentration (MFL > 10 µm)**	95% Confidence Interval (MFL > 10 µm)	Struc. Count	Analytical Sens. (MFL > 10 µm)	Volume (ml)	Number of Grid Openings	Filter Area (mm²)	Area Analyzed (mm²)	Analyst	Analysis Date
041373-01	01	Water bottle certified as asbestos-free for Water Kit Supplies	AMPHIBOLE	<0.083	0 - 0.307	0	0.083	40.0	4	193	0.0580	MQ	12/17/04
			CHRYSOTILE	<0.083	0 - 0.307	0							
			TOTAL	<0.083	0 - 0.307	0							

**MFL > 10µm – Million Fibers per Liter Greater Than 10 µm in Length. Samples with values higher than seven(7) MFL are above the EPA maximum contaminant level (MCL) and must be reported to the appropriate state agency for an assessment of vulnerability.

Screen Magnification Calibration (Philips 410)

(Version#1)

Date of Measurement: 12/17/04

Analyst: DW

Average:

Screen Magnification at 18,000:	17187
Screen Magnification at 10,000:	9847

Setting 18,000

Screen

Date	# Spaces	Magnification
11/1/2004	19.48	17187

Large Circle Diameter

Date	Actual Diameter (um)	Theoretical Dia. (um)
11/1/2004	5.31	5.07

Small Circle Diameter

Date	Actual Diameter (um)	Theoretical Dia. (um)
11/1/2004	0.53	0.51

Rule

Date	Actual Length (um)	Theoretical Length (um)	Single Unit (um)	Ten Units (um)
11/1/2004	4.65	4.44	0.058	0.582

Setting 10,000

Screen

Date	# Spaces	Magnification
11/1/2004	34	9847

Large Circle Diameter

Date	Actual Diameter (um)	Theoretical Dia. (um)
11/1/2004	9.27	9.13

Small Circle Diameter

Date	Actual Diameter (um)	Theoretical Dia. (um)
11/1/2004	0.93	0.913

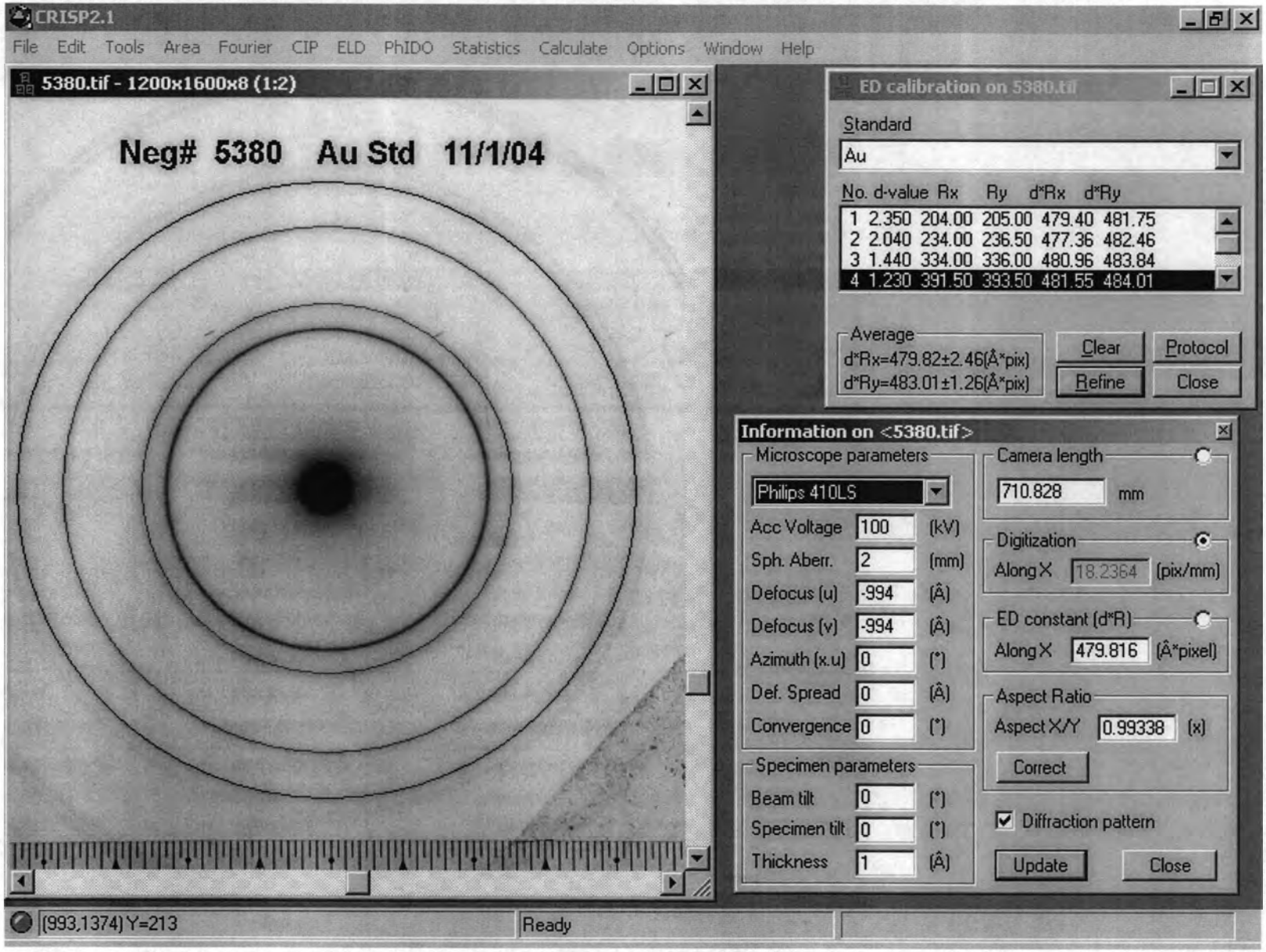
Rule

Date	Actual Length (um)	Theoretical Length (um)	Single Unit (um)	Ten Units (um)
11/1/2004	8.12	8.00	0.102	1.016

Spaces = The number of spaces spanned by the measurement or reported on calibration sheet. For the 18,000x screen mag., take the avg. of the five measurements recorded on the monthly calibration log. For the 10,000x screen mag., only one measurement is recorded on the monthly calibration log.

Screen Magnification = (155/# spaces) * 2160

Au Std 11/1/04
Phillips 410



Monthl Claibration Log

Lab/Cor, Inc.

Date: Nov. 04

Analyst	KM			MQ												KM
Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
18K Mag. Calib. SC1	14															
SC2	19.5															
SC3	19.5															
SC4	19.6															
SC5	19.4															
10K Mag. Calibration	34.0															
EDS				✓												
EDS Na	1.845	1.845		1.845												
EDS Al																
Gain Inc.	14	13		1												
New Gain	79	87		74												
Cu	8.044	8.044		8.044												
Zero Inc.	-18	-23		-4												
New Zero	-510	-580		-427												
Resolution	164.3	164.3														
# of Iterations	4	5		35												
Alignment -- FCA	✓			✓												✓
DA	✓	✓		✓												✓
Gold Rings Negative	KM															KM
Camera Constant																

Analyst								DW		DW		TM	DW	KM		
Day	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
18K Mag. Calib. SC1																
SC2																
SC3																
SC4																
SC5																
10K Mag. Calibration																
EDS				✓												
EDS Na																
EDS Al				1.485												
Gain Inc.				1												
New Gain				55												
Cu				8.044												
Zero Inc.				23												
New Zero				-473												
Resolution				161.6												
# of Iterations				3												
Alignment -- FCA				✓				✓		✓		✓	✓	✓		
DA				✓				✓		✓				✓		
Gold Rings Negative								DW		DW		TM	DW	KM		
Camera Constant																

Screen and Camera Magnification Calibration

Version#1

Date of Measurement: 12/17/2004 **Analyst:** DW

Average:

Screen Magnification at 18,000:	17392
Screen Magnification at 10,000:	9648

Camera Magnification at 18,000:	18014
Camera Magnification at 10,000:	10482
Camera Magnification at 550:	557

Setting 18,000

Camera

Date	Negative #	D_1	D_2	D	# Spaces	Magnification
12/15/2004	5718	26.6	110	83.4	10	18014

HIST 18096

Screen

Date	# Spaces	Magnification
12/15/2004	19.25	17392

Setting 10,000

Camera

Date	Negative #	D_1	D_2	D	# Spaces	Magnification
12/15/2004	5719	23	105.5	82.5	17	10482

HIST 10511

Screen

Date	# Spaces	Magnification
12/15/2004	34.7	9648

Setting 550

Camera

Date	Negative #	D_1	D_2	D	# Spaces	Magnification
12/15/2004	5720	51	63.9	12.9	50	557

HIST 568

D1 = The smaller measurement of the Supper Device in mm.

D2 = The larger measurement of the Supper Device in mm.

D = D2 - D1

Spaces = The number of spaces spanned by the measurement or reported on calibration sheet. For the 18,000x screen mag., take the avg. of the five measurements recorded on the monthly calibration log. For the 10,000x screen mag., only one measurement is recorded on the monthly calibration log.

Camera Magnification = (D/# spaces) * 2160

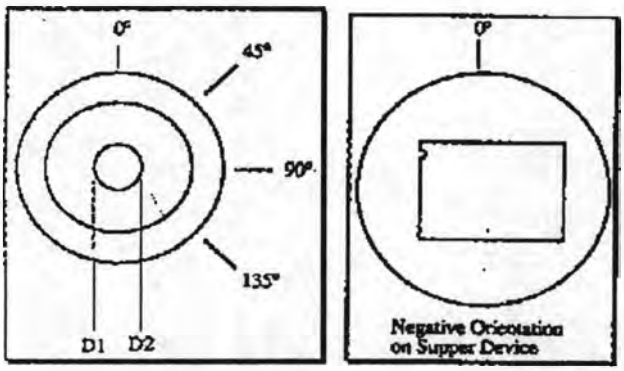
Screen Magnification = (155/# spaces) * 2160

Camera Length and Camera Constant Calibration (Version#1)

Date of Measurement:	12/17/2004	**Average Camera Constant:**	27.078 **mmA**
Negative Number:	5721	(All 12 Measurements)	
Date Negative was Taken:	12/15/2004	**Average Camera Length:**	731.83 **mm**
Analyst:	DW	(All 12 Measurements)	

Ring #	0 degrees						45 degrees					
	D_1	D_2	D	R	CC	CL	D_1	D_2	D	R	CC	CL
1	61.50	84.45	22.95	11.48	27.02	730.37	67.90	90.95	23.05	11.53	27.14	733.55
2	59.65	86.25	26.60	13.30	27.12	732.94	66.15	92.85	26.70	13.35	27.22	735.69
3	54.10	91.75	37.65	18.83	27.15	733.67	60.80	98.25	37.45	18.73	27.00	729.77

Ring #	90 degrees						135 degrees					
	D_1	D_2	D	R	CC	CL	D_1	D_2	D	R	CC	CL
1	75.80	98.80	23.00	11.50	27.08	731.96	80.25	103.25	23.00	11.50	27.08	731.96
2	73.90	100.50	26.60	13.30	27.12	732.94	78.45	105.00	26.55	13.28	27.07	731.56
3	68.60	106.00	37.40	18.70	26.97	728.79	73.00	110.40	37.40	18.70	26.97	728.79



Measure the first three rings moving outward from the central spot of the diffraction pattern.

D_1 = The smaller measurement on the Supper device (mm).

D_2 = The larger measurement on the Supper device (mm).

$D = D_2 - D_1$

$R = D/2$

CC = Camera Constant

For Ring 1 [111], CC = R*2.355

For Ring 2 [200], CC = R*2.039

For Ring 3 [220], CC = R*1.442

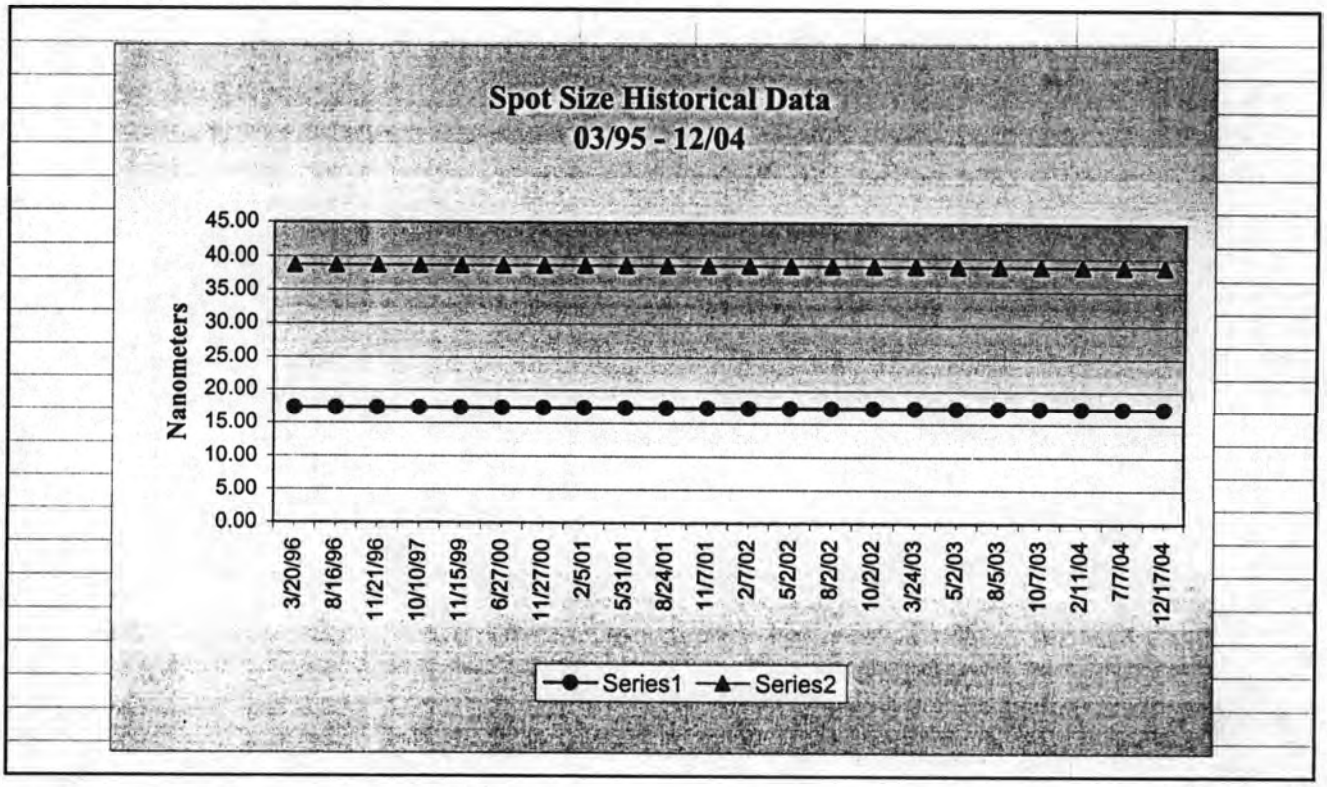
CL = Camera Length = CC/0.037

Spot Size Calibration

Spot Size Calculation

Run #	Spot Size (mm)	Avg.SpotSize mm	CamMag	SpotSize nm	Historical Avg
1	3.1	3.1	17392	176.3	155.1
2	3.1				
3	3				

Date	Spot size (nm)	UpperLimit (nm)	Analyst	Negative #	STD Spot Size	2S	25% Mean
9/8/95	117	250	JH		154.88	17.36	38.72
3/20/95	150	250	JH		154.88	17.36	38.72
9/8/95	117	250	JH		154.88	17.36	38.72
3/20/96	150.36	250	JH		154.88	17.36	38.72
8/16/96	122.3	250	JH		154.88	17.36	38.72
11/21/96	122.37	250	JH		154.88	17.36	38.72
10/10/97	122.58	250	JH		154.88	17.36	38.72
11/15/99	102.2	250	GG		154.88	17.36	38.72
6/27/00	124.1	250	DW		154.88	17.36	38.72
11/27/00	153.3	250	DW		154.88	17.36	38.72
2/5/01	166.1	250	DW		154.88	17.36	38.72
5/31/01	129	250	DW	1149	154.88	17.36	38.72
8/24/01	173.9	250	DW	1481	154.88	17.36	38.72
11/7/01	167.4	250	DW	1725	154.88	17.36	38.72
2/7/02	138	250	DW	1991	154.88	17.36	38.72
5/2/02	168.8	250	DW	2213	154.88	17.36	38.72
8/2/02	155.6	250	DW	2247	154.88	17.36	38.72
10/2/02	155.6	250	DW	2561	154.88	17.36	38.72
3/24/03	139.7	250	DW	3009	154.88	17.36	38.72
5/2/03	122.4	250	DW	3160	154.88	17.36	38.72
8/5/03	135.9	250	KM	3590	154.88	17.36	38.72
10/7/03	165.7	250	DW	3881	154.88	17.36	38.72
2/11/04	171.7	250	KM	4241	154.88	17.36	38.72
7/7/04	161.4	250	KM	4965	154.88	17.36	38.72
12/17/04	176.3	250	MQ	5723	154.88	17.36	38.72


Spot Size Historical Data
03/95 - 12/04
Nanometers
45.00
40.00
35.00
30.00
25.00
20.00
15.00
10.00
5.00
0.00
3/20/96
8/16/96
11/21/96
10/10/97
11/15/99
6/27/00
11/27/00
2/5/01
5/31/01
8/24/01
11/7/01
2/7/02
5/2/02
8/2/02
10/2/02
3/24/03
5/2/03
8/5/03
10/7/03
2/11/04
7/7/04
12/17/04
Series1
Series2

INTE-% :
ABEL = MN STD 15566 12/15/04
6-DEC-72 04:03:57
81.354 LIVE SECONDS

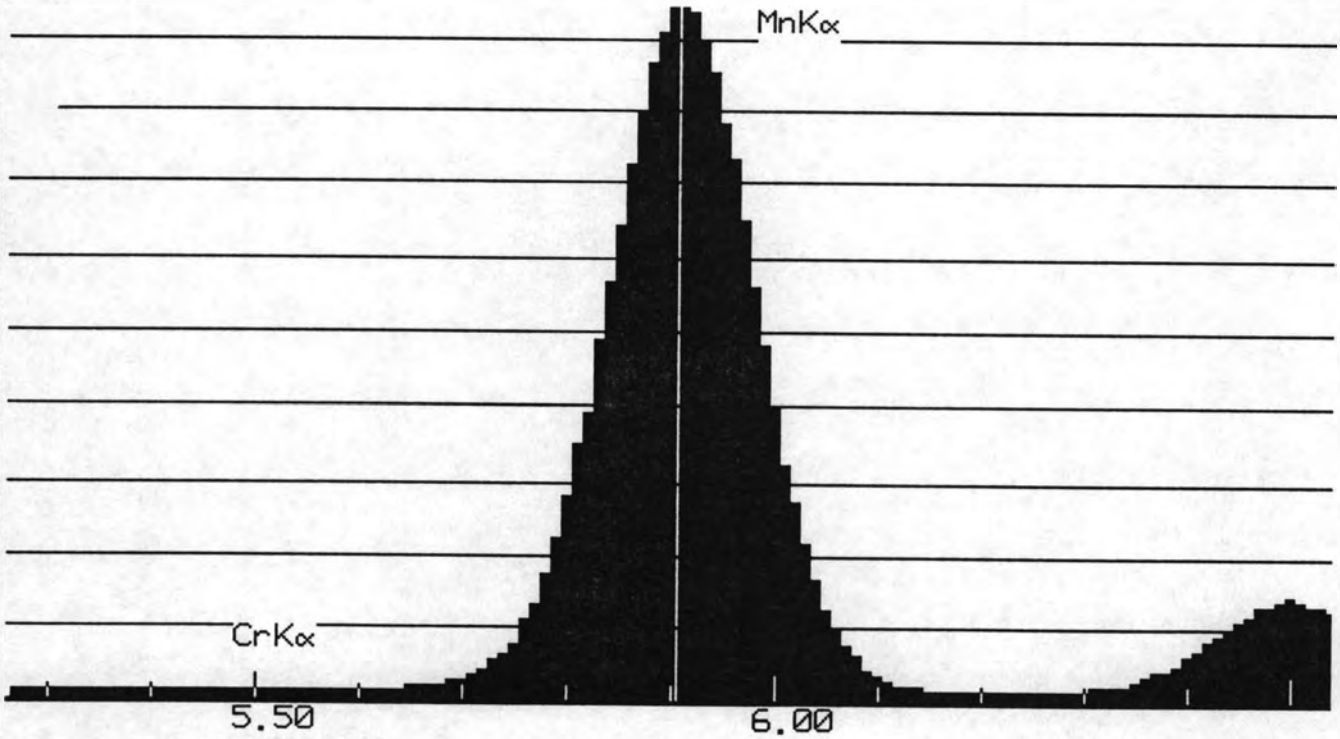
MN STD 12/15/04

17 channels @ 10 eV/channel

ELEM	CPS	WT % ELEM	WT % OXIDE
K K	0.393	0.022	0.026
MNK	1695.504	77.425	99.974
TOTAL			100.000

USED PEIF: USER

15-DEC-04 04:04:15 SUPER QUANT
RATE=24143CPS TIME= 81LSEC
FS= 10903/ 10903 PRST= 200LSEC
A =MN STD 15566 12/15/04



10227CNT 5.90KEV 10eV/ch A EDAX

PHILIPS MnKa Peak Resolution Calibration

Date	Analyst	EDS	Mn Peak (cnts)	FWHM High (cnts)	FWHM Low (cnts)	FWHM (cnts)	# Channels	Resolution (eV)	Std Dev	Std Dev (2s)	Pass/Fail
2/5/02	DW		14255	7466	6369	6918	17	170			Pass
2/13/02	DW		10830	5441	4460	4951	17	170			Pass
2/26/02	DW		10070	5734	4772	5253	16	160			Pass
3/1/02	DW		10243	5177	4378	4778	15	150			Pass
3/20/02	DW		7684	3964	3290	3627	16	160			Pass
4/16/02	DW		10042	5693	4729	5211	16	160			Pass
5/2/02	DW	11466	10022	5310	4438	4874	17	170			Pass
6/4/02	DW	11531	10252	5421	4480	4951	16	160			Pass
7/1/02	DW	11800	10300	5749	4799	5274	16	160			Pass
8/7/02	DW	12318	10640	5905	4825	5365	17	170			Pass
10/1/02	DW	12634	15662	8414	7183	7799	17	170			Pass
11/1/02	DW	12667	20000	10797	9338	10068	17	170			Pass
12/2/02	DW	12778	10303	5421	4410	4916	16	160			Pass
1/7/03	DW	13007	10303	5569	4559	5064	14	140			Pass
2/7/03	KM	13089	10427	5960	4156	5058	17	170			Pass
3/5/2003	KM	13165	2348	1046	1279	1163	17	170			Pass
4/3/2003	KM	13226	10313	5676	4731	5204	16	160			Pass
5/5/2003	KM	13341	11454	5815	4977	5396	17	170			Pass
6/1/2003	KM	13437	9806	5385	4577	4981	17	170			Pass
7/3/2003	KM	13580	10335	5440	4620	5030	17	170			Pass
8/5/2003	KM	13713	10233	5686	4710	5198	17	170			Pass
9/2/2003	KM	13828	12311	6552	5661	6107	17	170			Pass
10/1/2003	KM	13981	10934	6341	5440	5891	17	170			Pass
11/3/2003	KM	14047	12783	7599	6376	6988	17	170	3.162	6.325	Pass
12/3/2003	KM	14131	10314	5258	4476	4867	17	170	3.162	6.325	Pass
1/2/2004	KM	14175	9901	5102	4166	4634	17	170	3.162	6.325	Pass
2/2/2004	KM	14240	10370	4747	5732	5240	17	170	0.000	0.000	Pass
3/3/2004	KM	14285	10232	5374	4428	4901	16	160	3.162	6.325	Pass
4/1/2004	KM	14371	9603	5532	4718	5125	17	170	3.162	6.325	Pass
5/4/2004	KM	14542	10344	4743	4017	4380	17	170	3.162	6.325	Pass
6/8/2004	KM	14819	10084	5420	4601	5011	17	170	3.162	6.325	Pass
7/7/2004	DW	14868	12292	5971	5843	5907	16	160	4.216	8.433	Pass
9/8/2004	KM	15032	6799	4180	3197	3689	16	160	4.830	9.661	Pass
11/1/2004	KM	15278	10251	6145	5244	5695	16	160	4.924	9.847	Pass
12/15/2004	DW	15566	10227	5288	4330	4809	17	170	4.924	9.847	Pass

INTE-% :
LABEL = CROC STD 15568 12/15/04
1 DEC-72 05:10:28
64.025 LIVE SECONDS

ELEM	CPS	WT % ELEM	WT % OXIDE
NAK	7.291	2.885	3.888
MGK	9.512	1.777	2.946
ALK	2.421	0.272	0.513
SIK	230.814	24.248	51.875
CAK	3.983	0.399	0.558
MNK	0.734	0.106	0.137
FEK	210.697	28.035	40.082

TOTAL			100.000

USED PEIF: USER

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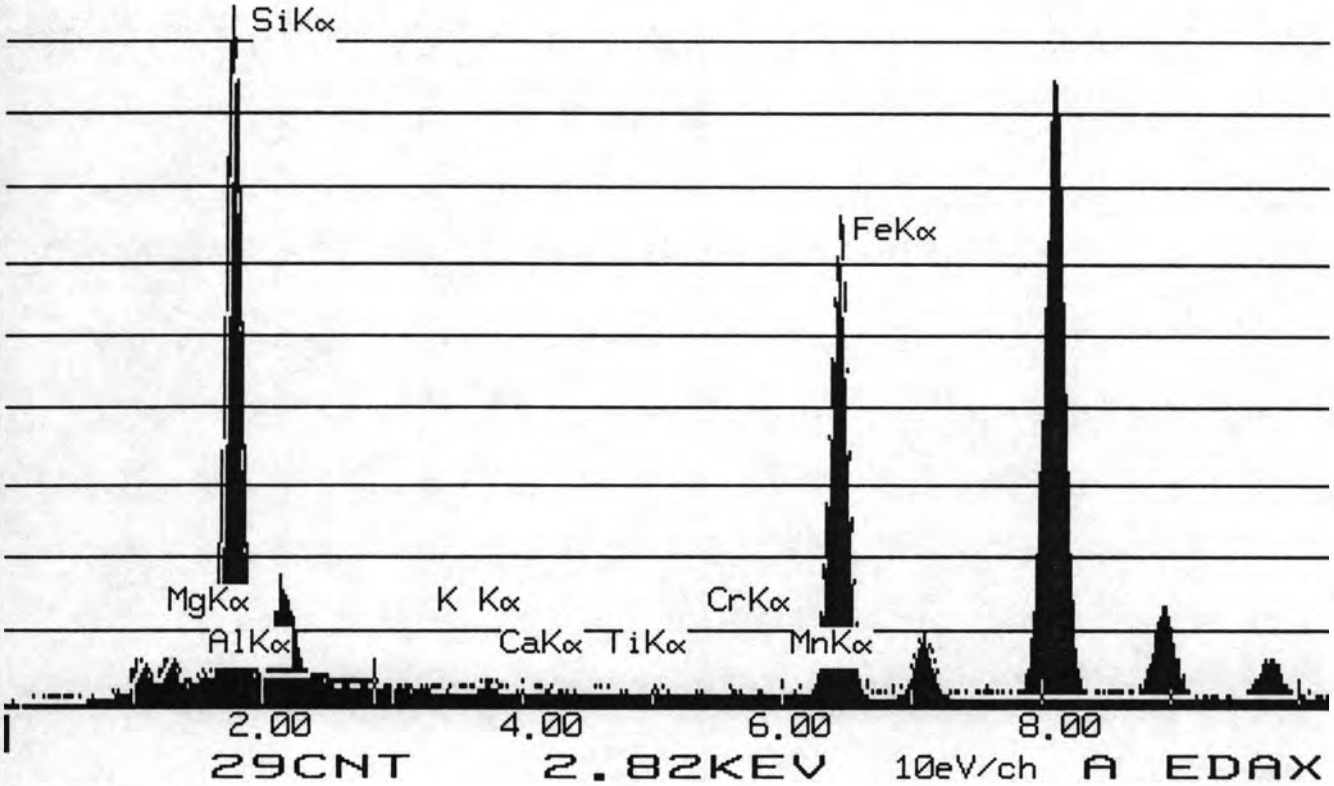
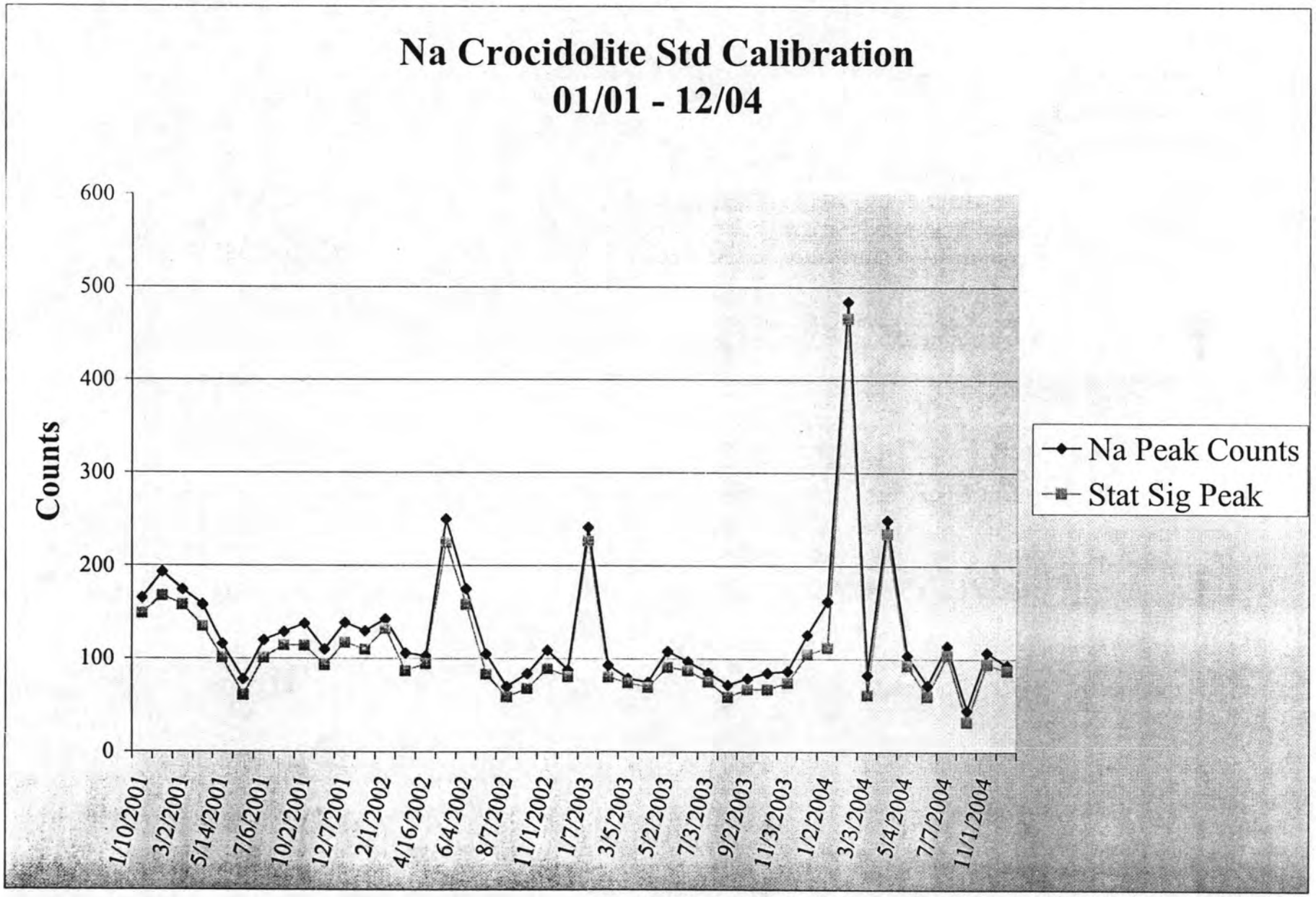
FS= 1546/ 1546 PRST= 200LSEC
A =CROC STD 15568 12/15/04




Na Crocidolite Std Calibration
01/01 - 12/04
Counts
600
500
400
300
200
100
0
1/10/2001
3/2/2001
5/14/2001
7/6/2001
10/2/2001
12/7/2001
2/1/2002
4/16/2002
6/4/2002
8/7/2002
11/1/2002
1/7/2003
3/5/2003
5/2/2003
7/3/2003
9/2/2003
11/3/2003
1/2/2004
3/3/2004
5/4/2004
7/7/2004
11/1/2004
Na Peak Counts
Stat Sig Peak

BEAM DOSE CALIBRATION

(Version#1)

Date:	12/15/04		
Analyst:	MQ		
Fiber Length used in analysis:			5 MICRONS
Time (sec)	**Visual**	**Neg #**	**Recordable Diffraction**	**EDS**
0	Y	ND*	ND*	
30	Y	ND*	ND*	
60	Y	5725	Y	
90	Y	5726	Y	
120	Y	5727	Y	15567
PASS/FAIL	**PASS**		**PASS**	

*ND - Not Done

Visual - Mark "Y" if diffraction pattern is seen on screen, mark "N" if pattern is not seen on screen

Recordable Diffraction - Mark "Y" if diffraction pattern is seen on negative, mark "N" if pattern is not seen on negative

Chrysotile Fiber Specs.: Single fibril, >= 1.0 micron in length

Screen Magnification Calibration (Philips 410)

(Version#1)

Date of Measurement: 12/17/04

Analyst: DW

Average:

Screen Magnification at 18,000:	17258
Screen Magnification at 10,000:	9789

Setting 18,000

Screen

Date	# Spaces	Magnification
8/3/2004	19.4	17258

Large Circle Diameter

Date	Actual Diameter (um)	Theoretical Dia. (um)
8/3/2004	5.29	5.07

Small Circle Diameter

Date	Actual Diameter (um)	Theoretical Dia. (um)
8/3/2004	0.53	0.51

Rule

Date	Actual Length (um)	Theoretical Length (um)	Single Unit (um)	Ten Units (um)
8/3/2004	4.64	4.44	0.058	0.579

Setting 10,000

Screen

Date	# Spaces	Magnification
8/3/2004	34.2	9789

Large Circle Diameter

Date	Actual Diameter (um)	Theoretical Dia. (um)
8/3/2004	9.33	9.13

Small Circle Diameter

Date	Actual Diameter (um)	Theoretical Dia. (um)
8/3/2004	0.93	0.913

Rule

Date	Actual Length (um)	Theoretical Length (um)	Single Unit (um)	Ten Units (um)
8/3/2004	8.17	8.00	0.102	1.022

Spaces = The number of spaces spanned by the measurement or reported on calibration sheet. For the 18,000x screen mag., take the avg. of the five measurements recorded on the monthly calibration log. For the 10,000x screen mag., only one measurement is recorded on the monthly calibration log.

Screen Magnification = (155/# spaces) * 2160

Screen Magnification Calibration (Philips 410)

(Version#1)

Date of Measurement: 12/15/04

Analyst: KM

Average:

Screen Magnification at 18,000:	17392
Screen Magnification at 10,000:	9648

Setting 18,000

Screen

Date	# Spaces	Magnification
1/12/1900	19.25	17392

Large Circle Diameter

Date	Actual Diameter (um)	Theoretical Dia. (um)
1/12/1900	5.25	5.07

Small Circle Diameter

Date	Actual Diameter (um)	Theoretical Dia. (um)
1/12/1900	0.52	0.51

Rule

Date	Actual Length (um)	Theoretical Length (um)	Single Unit (um)	Ten Units (um)
1/12/1900	4.60	4.44	0.057	0.575

Setting 10,000

Screen

Date	# Spaces	Magnification
2/2/2004	34.7	9648

Large Circle Diameter

Date	Actual Diameter (um)	Theoretical Dia. (um)
2/2/2004	9.46	9.13

Small Circle Diameter

Date	Actual Diameter (um)	Theoretical Dia. (um)
2/2/2004	0.95	0.913

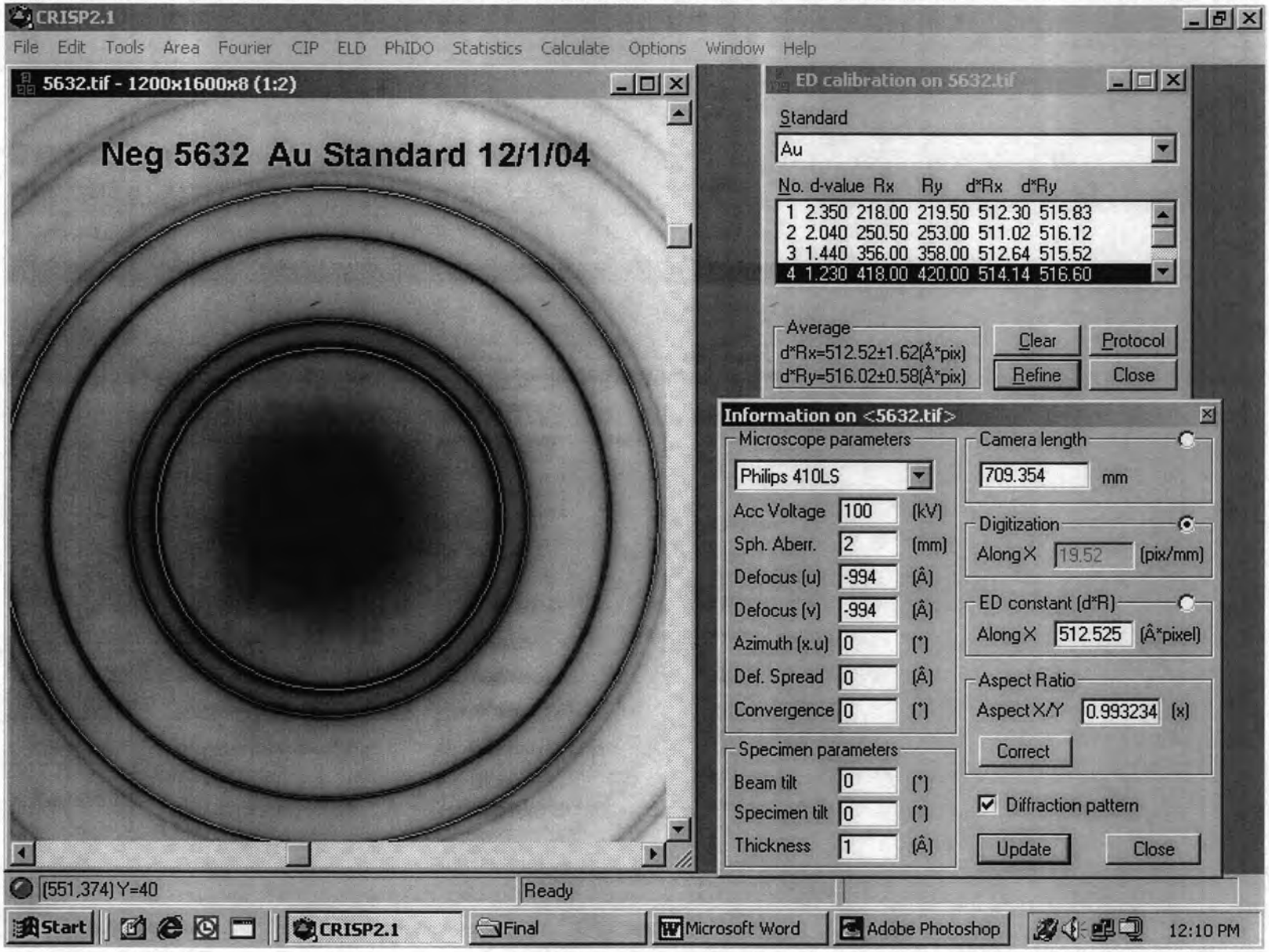
Rule

Date	Actual Length (um)	Theoretical Length (um)	Single Unit (um)	Ten Units (um)
2/2/2004	8.29	8.00	0.104	1.036

Spaces = The number of spaces spanned by the measurement or reported on calibration sheet. For the 18,000x screen mag., take the avg. of the five measurements recorded on the monthly calibration log. For the 10,000x screen mag., only one measurement is recorded on the monthly calibration log.

Screen Magnification = (155/# spaces) * 2160

Au Standard
Phillips 410LS
12/1/04



Montl Claibration Log

Lab/Cor, Inc.

Date: DEC 2004

Analyst	KM									TM					DW	
Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
18K Mag. Calib. SC1	19.3														19.2	
SC2	19.2														19.2	
SC3	19.1														19.2	
SC4	19.4														19.3	
SC5	19.3														19.3	
10K Mag. Calibration	33.4														33.7	
EDS																
EDS Na																
EDS Al	1.0485									1.485					1.485	
Gain Inc.	-5									1					1	
New Gain	52									59					447	
Cu	8.044									8.044					8.044	
Zero Inc.	27									2					-15	
New Zero	-626									-456					-1451	
Resolution	164.3									158.4					168.9	
# of Iterations	6									2					3	
Alignment -- FCA	✓									✓					DW	
DA										✓						
Gold Rings Negative	KM									KM					DW	
Camera Constant	–															

Analyst	KM															
Day	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
18K Mag. Calib. SC1																
SC2																
SC3																
SC4																
SC5																
10K Mag. Calibration																
EDS																
EDS Na																
EDS Al																
Gain Inc.																
New Gain																
Cu																
Zero Inc.																
New Zero																
Resolution																
# of Iterations																
Alignment -- FCA	✓															
DA	✓															
Gold Rings Negative																
Camera Constant																