



QA: QA

William Fullam, Product Manager  
Mikron Instrument Company, Inc.  
16 Thornton Road  
Oakland, NJ 07436

**BECHTEL SAIC COMPANY, LLC (BSC) QUALITY ASSURANCE (QA) SUPPLIER  
AUDIT REPORT BSC-SA-02-024 OF MIKRON INSTRUMENT COMPANY, INC.**


Enclosed is the Supplier Audit Report BSC-SA-02-024 of Mikron Instrument Company, Inc. that was performed on May 9-10, 2002, in Oakland, New Jersey. The audit evaluated the implementation and effectiveness of the Quality Program in meeting the requirements of the BSC procurement documents.

The audit revealed effective implementation of the Mikron Instrument Company, Inc. Quality Program with the exception of three conditions adverse to quality in the areas of Control of Purchased Items and Services, Control of Measuring and Test Equipment, and Software. The conditions adverse to quality are documented in Deficiency Reports BSC(V)-02-D-115, -116 and -117.

As a result of the audit, Mikron Instrument Company, Inc. was found to be effectively implementing its quality program and will remain on the Office of Civilian Radioactive Waste Management Qualified Suppliers List. Mikron Instrument Company, Inc. will be placed on an annual audit schedule for analytical services. Additional audits or surveillances prior to the next scheduled audit may be performed upon closure of the DRs.

This audit is considered complete and closed as of the date of this letter.

If you have any questions, please contact either Richard L. Maudlin at (702) 295-2961 or Daniel A. Klimas at (702) 295-2665.

  
Donald T. Krishna, Manager  
Quality Assurance

6/4/02  
Date Signed

RLM:bw-0603022858

Enclosure:  
Supplier Audit Report BSC-SA-02-024

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June 4, 2002

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cc w/encl:

G. K. Beall, BSC, Las Vegas, NV  
L. W. Bradshaw, Nye County, Pahrump, NV  
David Chavez, Nye County, Tonopah, NV  
Margaret Chu, DOE/HQ (RW-1) FORS  
J. R. Dyer, DOE/YMSCO, Las Vegas, NV  
Leonard Fiorenzi, Eureka County, Eureka, NV  
Arlo Funk, Mineral County, Hawthorne, NV  
Birdie Hamilton-Ray, DOE/YMSCO, Las Vegas, NV  
Alan Kalt, Churchill County, Fallon, NV  
D. A. Klimas, BSC, Las Vegas, NV  
D. T. Krisha, BSC, Las Vegas, NV  
Josie Larson, White Pine County, Ely, NV  
Robert Latta, NRC, Las Vegas, NV  
R. R. Loux, State of Nevada, Carson City, NV  
S. W. Lynch, State of Nevada, Carson City, NV  
George McCorkell, Esmeralda County, Goldfield, NV  
Mifflin and Associates, Las Vegas, NV  
Ram Murthy, DOE/OQA, Las Vegas, NV  
Irene Navis, Clark County, Las Vegas, NV  
Andrew Remus, County of Inyo, Independence, CA  
N. K. Stablein, NRC, Rockville, MD  
Lola Stark, Lincoln County, Caliente, NV  
D. D. vonderLinden, BSC, Las Vegas, NV  
N. H. Williams, BSC, Las Vegas, NV  
B. L. Wilson, BSC, Las Vegas, NV  
Mickey Yarbrow, Lander County, Battle Mountain, NV

cc w/encl:

R. W. Andrews, BSC, Las Vegas, NV  
T. W. Doering, BSC, Las Vegas, NV  
R. L. Hand, BSC, Las Vegas, NV  
Norman Kramer, BSC, Las Vegas, NV  
R. L. Maudlin, BSC, Las Vegas, NV  
M. T. Peters, BSC/LANL, Las Vegas, NV  
Roxanna VanDillen, BSC, Las Vegas, NV

**BECHTEL SAIC COMPANY, LLC (BSC)  
QUALITY ASSURANCE (QA)  
SUPPLIER AUDIT REPORT**

QA:QA

1. **SUPPLIER AUDIT NUMBER:** BSC-SA-02-024
2. **DATES PERFORMED:** May 9-10, 2002
3. **SUPPLIER NAME:** Mikron Instrument Company, Inc.
4. **SUPPLIER LOCATION:** Oakland, New Jersey
5. **SERVICES/ITEMS PROVIDED:** Thermal emissivity analysis of metallic and granular materials.
6. **AUDIT SCOPE:** An evaluation of the implementation and effectiveness of the Mikron Instrument Company, Inc. Quality Assurance Program to meet BSC procurement documents and included the areas found deficient as a result of the previous BSC Supplier Audit BSC-SA-01-009.
7. **QA PROGRAM ELEMENTS EVALUATED:** Organization, Quality Assurance Program, Procurement Document Control, Implementing Documents, Document Control, Control of Purchased Items and Services, Control of Measuring and Test Equipment, Corrective Action, Quality Assurance Records, Audits, Software, and Sample Control.
8. **SUPPLIER QUALITY PROGRAM DOCUMENT AND REVISION AUDITED:**  
Mikron Instrument Company, Inc. Quality Assurance Manual, Revision K, 06/28/1999
9. **BSC APPLICABLE PROCUREMENT DOCUMENTS:**  
BSC Purchase Orders 24540-160-PO-00178 and 24540-160-PO-01644
10. **AUDIT TEAM MEMBERS:**  
**LEAD:** Richard L. Maudlin, BSC QA  
**MEMBERS:** Richard L. Hand, BSC QA
11. **OBSERVERS:** None
12. **PERSONNEL CONTACTED DURING AUDIT:**  
Keikhosrw Irani, Director, Mikron Instrument Company, Inc.  
Michael MacBurney, Director of Engineering, Mikron Instrument Company, Inc.  
Constancio Almedia, Director of QA, Mikron Instrument Company, Inc.

13. **OVERALL EFFECTIVENESS OF THE SUPPLIERS QA PROGRAM IMPLEMENTATION:**

SATISFACTORY   X   UNSATISFACTORY \_\_\_\_\_

IF CONSIDERED UNSATISFACTORY –DESCRIBE QA ELEMENT AND CAUSE: N/A

14. **FOLLOW-UP REQUIRED:**

\_\_\_\_\_ NO FOLLOW-UP AUDIT OR SURVEILLANCE REQUIRED

\_\_\_\_\_ SURVEILLANCE

\_\_\_\_\_ FOLLOW-UP AUDIT

  X   DETERMINATION BASED ON IMPACT WHEN CAR/DR CLOSED

15. **SUPPLIER STATUS:**

**AUDIT SCHEDULE**

\_\_\_\_\_ REMAIN ON QSL WITH TRIENNIAL AUDIT SCHEDULE

  X   REMAIN ON QSL WITH ANNUAL AUDIT SCHEDULE

Audits or surveillances prior to the next scheduled audit may be performed based on QA program changes, scope of work changes, and/or supplier performance as deemed necessary.

**RESTRICTIONS**

\_\_\_\_\_ NONE

  X   YES

IF YES – RESTRICTION IS: The existing restriction, which states: “Mikron Instrument Company, Inc. shall be prohibited from making any Quality Procurements without prior approval from the purchaser for any items/services subject to this Statement of Work”, will remain in effect.

16. **AUDIT DETAILS:**

Details of the audit, along with the objective evidence reviewed are contained within the audit checklist, which is available from the BSC Records Processing Center.

17. **AUDIT FINDINGS:**

TOTAL CONDITIONS ADVERSE TO QUALITY:   Three

**CONDITIONS ADVERSE TO QUALITY BRIEF DESCRIPTION:**


Document Type and Number	Description
<p>Deficiency Report BSC(V)-02-D-115</p>	<p>BSC Purchase Orders 24540-160-PO-00178 and -01644, Scope of Work, Section IV, Subsection 3.0 states, in part: "Mikron shall be prohibited from making any quality procurements without prior approval from the purchaser for any items/services subject to this statement of work."</p> <p>Contrary to the above, no objective evidence could be provided to reflect the approval of the purchaser (Bechtel SAIC Company, LLC) for the use of Sensing Devices, Inc. for the calibration of Mikron thermocouple PS032. This thermocouple was used for the calibration of Mikron M67S IR Sensor, Serial Number 41741, and Mikron Anritsu-Aritherm HL600 (R120) Type K t/c indicator, Serial Number C60002.</p>
<p>Deficiency Report BSC(V)-02-D-116</p>	<p>The Mikron Quality Assurance Manual, Section 11.0, Subsection 4.11.1 states, in part: "Mikron Instrument Company, Inc. has established and maintains documented procedure to control, calibrate, and maintain inspection, measuring, and test equipment...." Subsection 4.11.2 states, in part: "The established documented procedures: (3) Define the process employed for the calibration, of inspection, measuring, and test equipment including details of...frequency of checks.... (5) Maintain calibration records for inspection, measuring, and test equipment.... (6) Assess and document the validity of previous inspection, measuring, and test equipment is found out of calibration."</p> <p>A. No Mikron procedures could be provided which describe the requirements for documenting Mikron internal calibrations. Documentation supporting the Mikron internal calibration of the MS67S IR Sensor, Serial Number 41741, Mikron Black Body Source, Serial Number SS290, and Anritsu-Anritherm HL600, Serial Number C60002, failed to include such information as who performed the calibration, the procedure and revision used to perform the calibration, the clear unique identification of the item under calibration, as found/as left condition, etc. The Mikron M&amp;TE described above was used to support work performed under BSC Purchase Orders 24540-160-PO-00178 and -01644.</p> <p>B. No calibration procedure could be provided for the calibration of the Anritsu-Anritherm HL600 (R120) Type K t/c indicator.</p> <p>C. Fluke Multimeter, Model 8842A, Serial Number 4007160, was found to be Out of Tolerance, upon receipt on May 14, 2001 by the Fluke Corporation. There was no documentation to support the identification of the Out of Tolerance condition and an assessment of the validity of previous inspection and test results using the Fluke Multimeter in support of YMP analysis.</p>

Document Type and Number	Description
<p>Deficiency Report BSC(V)-02-D-117</p>	<p>D. The Mikron Instrument Status Report failed to include Mikron inspection, measuring, and test equipment M67S IR Sensor, Serial Number 41741 and the Anritsu-Anritherm HL600 (R120) Type K t/c indicator, Serial Number C60002 and associated calibration frequencies.</p> <p>BSC Purchase Orders 24540-160-PO-00178 and -01644, Scope of Work, Section IV, Subsection titled "Software" states, in part: "...Software changes, such as changes which impact function and/or resultant output, shall be tested to verify that the software continues to produce correct results. Where testing of changes is not required, justification shall be documented."</p> <p>Contrary to the above, Mikron revised the software named TRW_test_data.xls twice, renaming the software each time, (Bechtel_test_data_corr.xls and Bechtel_test_data_corrjan02.xls), however, no documentation could be provided to reflect the testing of the changed/revised software or documentation to support the justification that testing of the changes was not required.</p>

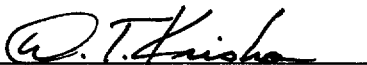
TOTAL RECOMMENDATIONS FOR IMPROVEMENT: None

RECOMMENDATIONS FOR IMPROVEMENT BRIEF DESCRIPTION: N/A

This audit is considered closed.

Prepared by:   
 Richard L. Maudlin  
 Audit Team Leader  
 BSC Quality Assurance

Date: 05-23-02

Approved by:   
 Donald T. Krisha, Manager  
 BSC Quality Assurance

Date: 6/4/02