



QA: QA

Paul R. Dixon, Manager
Performance Assessment Project Natural Systems
Bechtel SAIC Company, LLC (BSC)
1180 Town Center Drive
Las Vegas, NV 89144

**ISSUANCE OF DEFICIENCY REPORT (DR) LLNL(B)-02-D-105 RESULTING FROM THE
BECHTEL SAIC COMPANY, LLC (BSC) QUALITY ASSURANCE (QA) SURVEILLANCE
BSCQA-02-S-17 OF BSC**

Enclosed is the subject DR generated as a result of BSC QA Surveillance BSCQA-02-S-17 to verify implementation of the Control of Measuring & Test Equipment (M&TE) at Lawrence Livermore National Laboratory (LLNL). The condition adverse to quality relates to M&TE used in laboratory experiments on the Origin of Hydrogen Fluoride Gas in the Drift Scale Test not being properly controlled.

Please provide the original copy of the response within 10 working days from the date of this correspondence to Judith E. Gebhart, Bechtel SAIC Company, LLC, 1180 Town Center Drive, Las Vegas, Nevada 89144, with a copy of the response to Deborah G. Opielowski, Navarro Quality Services, P. O. Box 364629, YMSCO, Mail Stop 455, North Las Vegas, Nevada 89036.

If you have any questions, please contact either Charles C. Warren at (925) 423-6863 or Judith E. Gebhart (702) 295-4788.

A handwritten signature in cursive script that reads 'D.T. Krishna'.

Donald T. Krishna, Manager
Quality Assurance

4/17/02
Date Signed

REP:bw-0416022236

Enclosure:
DR LLNL(B)-02-D-105

NMSS07
WM-11

April 17, 2002

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cc w/encl:

R. W. Andrews, BSC, Las Vegas, NV
L. H. Barrett, DOE/HQ (RW-2) FORS
G. K. Beall, BSC, Las Vegas, NV
L. W. Bradshaw, Nye County, Pahrump, NV
Margaret Chu, DOE/HQ (RW-1) FORS
J. R. Dyer, DOE/YMSCO, Las Vegas, NV
W. J. Glasser, NQS, Las Vegas, NV
C. E. Hampton, DOE/YMSCO, Las Vegas, NV
D. G. Horton, DOE/YMSCO, Las Vegas, NV
D. T. Krishna, BSC, Las Vegas, NV
Robert Latta, NRC, Las Vegas, NV
S. W. Lynch, State of Nevada, Carson City, NV
S. P. Mellington, DOE/YMSCO, Las Vegas, NV
Ram Murthy, DOE/OQA, Las Vegas, NV
D. G. Opielowski, NQS, Las Vegas, NV
R. E. Powe, BSC, Las Vegas, NV
J. M. Replogle, DOE/YMSCO, Las Vegas, NV
N. K. Stablein, NRC, Rockville, MD
Engelbrecht von Tiesenhausen, Clark County, Las Vegas, NV
T. J. Wall, BSC, Las Vegas, NV
B. L. Wilson, BSC, Las Vegas, NV

cc w/encl:

V. J. Barish, LLNL, Livermore, CA
P. R. Dixon, BSC, Las Vegas, NV
J. E. Gebhart, BSC, Las Vegas, NV
M. H. Kohler, LLNL, Livermore, CA
R. L. Jones, BSC, Las Vegas, NV
M. T. Peters, BSC, Las Vegas, NV
C. I. Steefle, LLNL, Livermore, CA
C. C. Warren, BSC, LLNL, Livermore, CA
N. H. Williams, BSC, Las Vegas, NV

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**OFFICE OF CIVILIAN
RADIOACTIVE WASTE MANAGEMENT
U.S. DEPARTMENT OF ENERGY
WASHINGTON, D.C.**

8. DEFICIENCY REPORT
 CORRECTIVE ACTION
REPORT
NO. LLNL(B)-02-D-105
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DEFICIENCY REPORT/CORRECTIVE ACTION REPORT

1. Controlling Document: (Document ID and Revision or Date)

AP-12.1Q, Revision 0, ICN 2

2. Related Report No.:

QA Surveillance BSCQA-02-S-17

3. Responsible Organization:

LLNL

4. Discussed With: Robert Andrews, Paul Dixon,
Martha Kohler, Wunan Lin, Vic Barish, Carl Steefel

5. Requirement:

1. 5.3.1 Responsible Manager or PI:

a) Ensure that M&TE is calibrated, adjusted, and maintained, as appropriate, at established intervals, or prior to use, against reference calibration standards having traceability to nationally recognized standards.

2. 5.1.2 Affected Organization M&TE Custodian:

Maintain and be responsible for an up-to-date list of M&TE that includes specific information listed in this paragraph.

(Continued on page 2)

6. Description of Condition:

Laboratory experiments on the origin of HF gas in the DST (HF experiments) did not control M&TE in accordance with AP-12.1Q.

1. The following M&TE used in laboratory experiments on the origin of HF gas in the DST (HF Experiments) was not calibrated at established intervals or prior to use against reference calibration standards having traceability to nationally recognized standards:

a. Sartorius Balance, Serial # 3410024 - Calibrated using a standard that was not current in calibration and therefore, could not be verified as traceable to NIST.

b. Beckman pH Probe, Serial # 204928 - Calibrated using a NIST traceable buffer solution that expired in 1998.

c. Thermocouple Readout, Serial # unknown - Was not calibrated against a nationally recognized standard.

Has work been stopped? Yes No

7. Initiator:

C. C. Warren
Printed Name

C. C. Warren
Signature

4/9/02
Date

9. Does a stop work condition exist?

Yes No N/A

If Yes, Check One: A B C D

10. Recommended Actions:

The extent of condition evaluation should focus on Scientific Investigation personnel that are new to the project within the past 12 months.

11. QA Review:

C. C. Warren
Printed Name

C. C. Warren
Signature

4/9/02
Date

12. Response Due Date:

10 Working Days after Issuance

13. QAM Issuance Approval:

Printed Name Donald T. Krishna

Signature

D. T. Krishna

Date

4/17/02

14. Corrective Actions Verified/Closure

QAR Printed Name

Signature

Date

15. QAM Closure Approval:

Printed Name

Signature

Date

**OFFICE OF CIVILIAN
RADIOACTIVE WASTE MANAGEMENT
U.S. DEPARTMENT OF ENERGY
WASHINGTON, D.C.**

DR/CAR/QO
 SWO

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CONDITION ADVERSE TO QUALITY CONTINUATION PAGE

Block 5 continued

3. 5.7.1 Responsible Individual:

a) Consider M&TE out of tolerance or out of calibration if any of these conditions exist, as applicable:

4) M&TE that has not been calibrated has been used to collect data or gauge performance.

c) Document Out-of-calibration conditions of M&TE by using Attachment 6, Measuring and Test Equipment Out of Calibration Report (M&TE OCR), in accordance with instructions provided.

5.7.2 Responsible Manager or PI:

Ensure that an individual knowledgeable in the functional use of the M&TE and its relation to data collected evaluates the impact to data.

Block 6 continued:

2. Information on the following M&TE used in HF Experiments was not provided to the M&TE Custodian and therefore, was not maintained on the LLNL list of M&TE:

a. Sartorius Balance, Serial # 3410024

b. Beckman pH Probe, Serial # 204928

c. Pressure Indicator and Transducer, Serial #'s unknown and 895359

d. Thermocouples, ID #'s 008748 and 008776

e. Thermocouple Readout, Serial # unknown

3. Out-of-Calibration conditions for the M&TE listed in item 1 were not documented on a M&TE OCR so that impact to data taken with the M&TE could be evaluated.