

9/43

CENTER FOR NUCLEAR WASTE REGULATORY ANALYSES

NONCONFORMANCE REPORT

Project No. 20-1402-571

NCR No. 98-10

PART 1: DESCRIPTION OF NONCONFORMANCE

Orion Expandable Ion Analyzer model number 720A serial number 005885 was out of tolerance on 500,1000 and 1500 mV ranges.

Initiated by: Darrell S. Dunn

Date: 6/19/98

PART 2: PROPOSED DISPOSITION AND CORRECTIVE ACTION

Disposition: Accept test results that used this instruments as-is

Basis of Disposition: Error for all ranges was 1mV or less. This translates to a pH error of less than 0.02 pH units. This error is not significant for pH measurements.

Action to Correct Nonconformance: Instrument was calibrated to manufacturers specifications.

Target date for completion: 7/2/98

Proposed by: D. S. Dunn
Darrell S. Dunn

Date: 6/19/98

PART 3: APPROVAL

Element Manager: N. S. ...

Date: 6/19/98

Director of QA: D. S. Dunn

Date: 6/29/98

Comments/Instructions:

Technical Staff advises against "loosening" the specified manufacturer's tolerances on this instrument. See

PART 4: CLOSE OUT

Comments: None

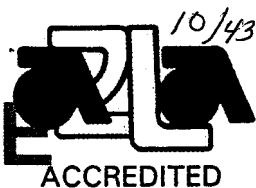
Distribution:

D. Dunn
Element Managers
B. S. ... / H. Garcia
Original To NCR Folder

Verified by: D. S. Dunn Date: 7/2/98



Southwest Research Institute
6220 Culebra Road
San Antonio, TX 78238



OUT OF TOLERANCE

Certificate of Calibration

20 May 1998

OUT OF TOLERANCE

Issued to: DARRELL DUNN DIV20 B57
 Manufacturer/Model: ORION 720A
 Description: PH METER
 Serial Number: 005885
 Asset Number: 001869

OUT OF TOLERANCE

Environmental Conditions

Temperature: 76 Deg. F Humidity: 42 % RH

Calibration Information

OUT OF TOLERANCE

Calibration was in accordance with requirements of MIL-STD-45662A and ANSI-MCS-7540-1-1994. Measurements are traceable to the National Institute of Standards and Technology (NIST). This report may not be reproduced except in full without written approval of the originator. Inspection and test data are on file and available for inspection.

The uncertainty of the calibration was sufficient to determine that the instrument met the manufacturer's specifications.

OUT OF TOLERANCE

Calibration Date: 20 May 98 Calibration Procedure: CLCP-PH-001

Interval: 12 , months Received: Out of Tolerance

Next Calibration Due: 20 May 99

OUT OF TOLERANCE

Remarks:

Out of Tolerance Data

OUT OF TOLERANCE

The unit was found to be in an out of tolerance condition as indicated below. An evaluation should be made by the user to determine any adverse impact that may have occurred.

Absolute Millivots

Channel 1

Applied:	Reading:	Limits:	As left:
0.0mV	.3mV	-.2 +.2	0.0mV
50.0mV	499.4mV	499.7 - 500.3mV	500.0mV
1000.0mV	999.1mV	999.5 - 1000.5mV	1000.0mV
1500.0mV	1499.0mV	1499.2 - 1500.8mV	1500.1mV

OUT OF TOLERANCE

Channel 2

500.0mV	499.5mV	499.1 - 500.3mV	500.0mV
1000.0mV	999.2mV	999.5 - 1000.5mV	1000.0mV
1500.0mV	1499.0mV	1499.2 - 1500.8	1500.1mV

OUT OF TOLERANCE