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REPORT

Intertek ETL SEMKO

3933 US ROUTE 11 CORTLAND, NEW YORK 13045

Order No. 3091281 Date: March 6, 2006

REPORT NO. 3091281CRT-001

AIRFLOW VERSUS STATIC PRESSURE ON A LEAD-LINED PREPARATION ENCLOSURE

RENDERED TO:

BIODEX MEDICAL SYSTEMS, INC.
BROOKHAVEN R & D PLAZA
20 RAMSEY ROAD
SHIRLEY, NY 11967

INTRODUCTION

This report gives the results of Airflow versus Static Pressure on a Lead-Lined Preparation Enclosure. The unit was selected and supplied by the client and received at the laboratories on January 31, 2006. The sample appeared to be in new, unused condition.

AUTHORIZATION

Purchase Order No. 667385 and a signed Intertek Quotation No. 18969799.

TEST METHOD

The test method employed for the testing of the enclosure was ANSI/AMCA 210-99, ANSI/ASHRAE 51-1999, American National Standard "Laboratory Methods of Testing Fans for Rating". An orifice metering station was employed for measuring the air volume.

The metering station, through appropriate ductwork, was connected to the inlet of a variable air volume blower system. To calculate the air volumes, the static pressure difference across a sharp edged orifice was measured employing piezometer rings and a "Dwyer" Inclined Manometer Model No. 424. The static pressure in the discharge duct from the unit was measured using a "Dwyer" Inclined Manometer Model No. 215. The air velocity at the two openings of the enclosure was measured using an Omega digital vane anemometer.

TEST METHOD (Cont'd)

The dry-bulb temperature was measured with a Miller and Weber Thermometer Model No. T3521-612, Range 60-120°F while the wet-bulb temperature was read in the same area using a Miller and Weber Thermometer Model No. T3521-631, Range 30-90°F. The barometric pressure was read on a Bruel & Kjaer Barometer Model No. UZ00001.

DESCRIPTION OF TEST SPECIMEN

The Lead-Lined Preparation Enclosure measured 36 inches wide by 24 inches deep by 30½ inches high with a 6 inch diameter exhaust chimney. An exhaust damper assembly was positioned to remove air from the bottom of the unit. The enclosure weighed over 700 pounds.

RESULTS OF TESTS

	Measurement Results – Vented from the Bottom						
Air Volume, CFM	120	140	160	180	200	220	240
Negative Static Pressure, "H_2O	0.041	0.055	0.073	0.092	0.111	0.136	0.161
Inlet Air Velocity, FPM		120		160		190	

Checked by:

CONCLUSION

The test method employed for this test has no pass-fail criteria; therefore, the evaluation of the test results is left to the discretion of the client.

AT TIME OF TEST

Temperature: 68°F
Humidity: 35%
Barometer: 28.65 in. Hg

Date of Test: February 14, 2006

Report Approved by:

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Report Reviewed By:

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Attachments: None