


Warnock Hersey Professional Services Ltd.

125 East 4th Avenue Vancouver B.C. V5T 1G4 (604) 876-4111 Telex 04-54360

REPORT OF:	Permeability Tests	FILE NO.	XY300 480-0001-X1
AT:	Vancouver Laboratory	DATE	Aug. 9, 1982
PROJECT:	Xypex - Concentrate	REPORT NO.	1/82 - Final
REPORTED TO:	Xypex Chemical Corporation 12520 Vickers Way Richmond, B. C. V6V 1H9	ORDER NO.	

INTRODUCTION:

As requested, we have carried out tests to determine the permeability of concrete samples treated with two coats of Xypex concentrate as per manufacturers instructions. Tests were performed in accordance with CRD-C. 48-73 specifications. (Methods of test for water permeability of concrete).

SAMPLE PREPARATION:

From standard 3000 psi concrete, two test samples (6 ins. in diameter x 3 ins. high) were cast by compacting the concrete in standard test moulds. The concrete samples were allowed to cure for 28 days. The surfaces of the samples were then acid etched and cleaned to remove the smooth film of cement paste.

The samples were then treated with the first coat of Xypex concentrate as per manufacturers instructions and allowed to cure for about 18 hours, before applying the second coat. The samples were kept moist by spraying the samples 3 to 5 times during the day for the first two days after applying the Xypex coating.

The samples were then stored in an open area for 11 more days. After 11 days curing, the samples were placed in the pressure vessel and the sealant was poured in to seal the passage of water from all sides except the area of the sample under test.

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SAMPLE PREPARATION - Cont'd.

The sealant was allowed to cure for 7 days, after which the permeability test was started.

The pressure in the cell was increased by 10 psi each day, until the maximum pressure attainable with the equipment was achieved.

OBSERVATIONS:

1. At a pressure of 80 psi, one of the samples started to leak very slightly into the reservoir. At the conclusion of the test, it was noted that the seal around the pressure vessel had broken down, causing the water to leak into the reservoir.
2. The test was continued until the maximum pressure attainable was achieved. The maximum pressure achieved = 180 psi.
3. No leakage of, or permeance of water was noted on the second Xypex sample up to the pressure of 180 psi in the permeability cell.

CONCLUSIONS:

From the test observations, it can be concluded that the concrete samples treated with Xypex does not show any permeance or leakage in the permeability tests up to a pressure of 180 psi. In one sample, the leakage observed was due to the breakdown of sealant.

WARNOCK HERSEY PROFESSIONAL SERVICES LTD.



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Manager

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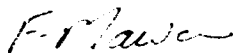
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