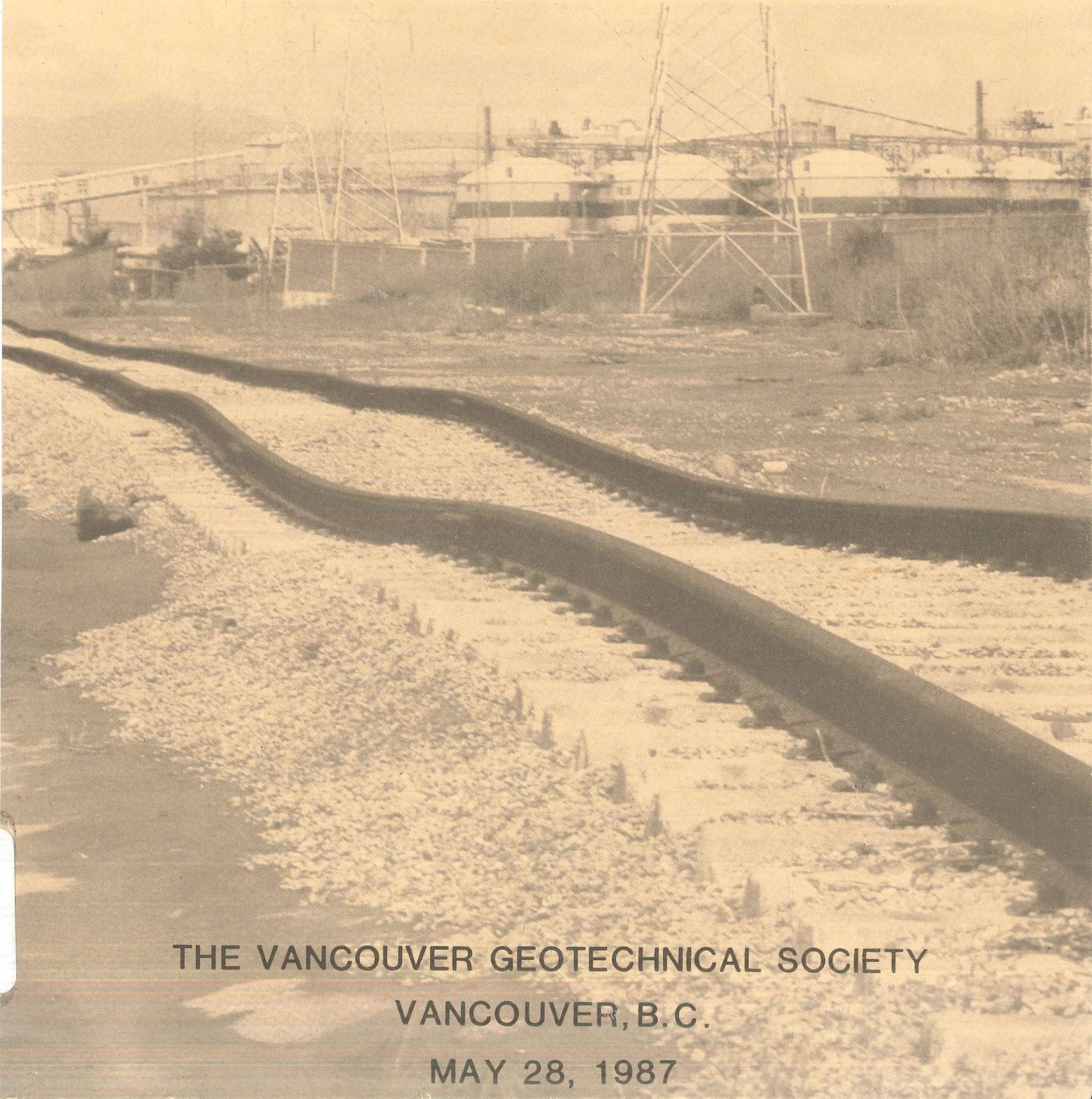


# EARTHQUAKE GEOTECHNIQUE

Klohn Crippen Berger Ltd.



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THE VANCOUVER GEOTECHNICAL SOCIETY

VANCOUVER, B.C.

MAY 28, 1987

M. Olsen

The Canadian Geotechnical  
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# EARTHQUAKE GEOTECHNIQUE

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## PROGRAM

08:00 - 08:30 - REGISTRATION

08:30 - 11:45 - MORNING SESSION - TECHNICAL PAPERS

### OPENING REMARKS

Peter C. Lighthall, Organizing Committee Chairman  
Klohn Leonoff Ltd., Richmond, B.C.

### SEISMIC RISK IN WESTERN CANADA

Dieter H. Weichert and Garry C. Rogers  
Pacific Geoscience Centre, EMR - Canada

### GROUND MOTIONS, IMPLICATIONS FOR BUILDING CODES

Neville Donovan, Principal, Dames & Moore, San Francisco, California

10:00 - 10:15 - COFFEE BREAK

### CHARACTERISTIC RESPONSE OF SOIL TO EARTHQUAKE LOADING

Peter M. Byrne, Professor, Department of Civil Engineering, U.B.C.,  
Vancouver, B.C.

### SEISMIC RESPONSE ANALYSIS OF LEVEL SITES, EMBANKMENTS AND SOIL-STRUCTURE SYSTEMS

W.D. Liam Finn, M. Yogendrakumar and A. Nichols  
Department of Civil Engineering, U.B.C., Vancouver, B.C.

11:45 - 13:15 - LUNCHEON

13:15 - 15:30 - AFTERNOON SESSION - TECHNICAL PAPERS

*Chairman Al Stewart, Piteau*

### EARTHQUAKE DESIGN - A STRUCTURAL ENGINEERS VIEWPOINT

R.H. DeVall, Sr. Design Engineer, Read Jones Christoffersen Ltd.,  
Vancouver, B.C.

### SEISMIC RISK AND GROUND IMPROVEMENT

A. Wightman, K.I. Morrison and Alex SY  
Klohn Leonoff Ltd., Richmond, B.C.

### LIQUEFACTION EVALUATION OF A DAM FOUNDED ON SLIDE DEBRIS USING BECKER PENETRATION TESTS

J.D. Cattanach, Geotechnical Engineer, B.C. Hydro, Vancouver, B.C.

## POSTER PRESENTATIONS

1. A REVIEW OF THE PERFORMANCE OF MINE TAILINGS IMPOUNDMENTS UNDER EARTHQUAKE LOADING CONDITIONS  
Brian H. Conlin, Associate-In-Charge, Golder Associates, Vancouver, B.C.
2. SITE SEISMICITY AND PILE DESIGN FOR THE ALEX FRASER BRIDGE NORTH APPROACH PIERS  
Trevor P. Fitzell, Senior Engineer, Golder Associates, Vancouver, B.C.
3. REDUCING LIQUEFACTION POTENTIAL BY VIBRO-REPLACEMENT  
Don Fraser, Ministry of Transportation and Highways, Victoria, B.C.
4. THE ASSESSMENT OF LIQUEFACTION SUSCEPTIBILITY USING THE SEISMIC CONE PENETROMETER  
D. Gillespie, J. Howie and R.G. Campanella, Department of Civil Engineering, U.B.C., Vancouver, B.C.
5. NEW WESTMINSTER WATERFRONT DEVELOPMENT ON LOOSE SEDIMENTS  
G. Macleod, E. Naesgaard and J. O'Brien, Macleod Geotechnical Ltd., West Vancouver, B.C.
6. VANCOUVER SKYTRAIN - SURREY EXTENSION SEISMIC ANALYSIS  
R.R. Parsons and P.E. Salt, N.D. Lea & Associates, Vancouver, B.C.

**TECHNICAL  
PAPERS**