JOHN EMERY GEOTECHNICAL ENGINEERING LIMITED
CONSULTING ENGINEERS
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November 22, 1996
JEGEL: 96261

Norjohn Limited
Emulsion Division
P.O. Box 100 .
Thorold, Ontario L2V 3Y8

Attention: Mr. Bob Mennie
Sales Manager

Dear Sirs:

Laboratory Test Results
Pavement Sealer Trials

As requested, John Emery Geotechnical Engineering Limited Consulting Engineers (JEGEL), obtained cores of the asphalt concrete from the pavement sealer trial sections in the Walker Industries parking lot in Thorold, Ontario. A series of seven products were applied to the surface of the existing asphalt concrete pavement at two application rates (0.27 and 0.38 l/m^2). Three cores were taken from each of the trial sections with an additional 12 cores taken from the untreated pavement between the trial sections. The cores were returned to the JEGEL laboratory and maintained at a constant temperature until testing. The top 15 mm of the cores from the 0.38 l/m^2 trial sections along with three of the cores from the untreated was removed by sawcutting. The asphalt cement was recovered from the core sections using the Abson recovery method and the residual asphalt cement was tested as follows:

Asphalt Cement Content (ASTM D2172)
Penetration (ASTM D5)
Ductility (ASTM D113)
Absolute Viscosity (ASTM D2171)
Softening Point (ASTM D36)

The results of the laboratory testing are given in the attached table. We have retained the cores from the 0.27 l/m^2 trial sections and await further instructions for any additional testing. Please do not hesitate to contact us should you have any questions or if we can be of further assistance.

Yours very truly,
JOHN EMERY GEOTECHNICAL ENGINEERING LIMITED

David K. Hein, P.Eng.
Principal Pavements Engineer

PAVEMENT SEALER TRIALS
LABORATORY TEST RESULTS

Sample Number	Asphalt Cement Content (%)	Penetration (dmm)	Ductility (cm)	Absolute Viscosity (Pa.s)	Softening Point (°C)
Untreated	5.92	25	35	20287	60.6
1B	6.41	38	150+	7926	54.2
2B	6.43	32	150+	6605	57.5
3B	6.47	23	15	17367	59.6
6B	6.11	19	5	79295	69.8
7B	6.16	28	57	14208	60.0
8B	6.14	22	11	27453	61.6