He then started to do an oil temperature study and quickly found that where the Filtroil unit was installed the oil temperature was running at 110 degrees versus machines without the Filtroil unit were running at 140 degrees Fahrenheit. They had budgeted $ 25,000 for extra chilling capacity but quickly found by installing the Filtroil units that they would be able to eliminate this $25,000 expenditure because they could bring the oil temperature down and consequently would not require as much capacity on the chiller system as they were previously using.

We had another energy related case at Pamco Corporation in Fitchburg, MA. Here we took a 500 ton injection molding machine that was running at approximately 88% and with the addition of a BU-100 Filtroil unit within one month's time we increased the machine's capacity to 120%. (Enclosed are the fantastic test results.)

We have a distributor in New York (Iak Knowles) who has been working closely with New York State Electric & Gas Company. Obviously, electric companies have a tremendous amount of mobile hydraulic equipment. Oak Knowles worked on cleaning up oil that came from a 50-ton hydraulic crane.

Electric companies are not allowed to run hydraulic oil in their machinery that has conductively (KVA) lower than 28. When it gets to 22, they have to take the equipment off the road. This particular crane had a KVA of 11. There were three 55-gallon drums of Dextron ATF red transmission oil at $5.00 per gallon, or $750.00, that were to be hauled away by a licensed disposal company. After two of these drums had the M600R Filtroil filter cart with six water eaters filtering the oil for 2 hours each, the KVA was 28. At the same time, New York Electric & Gas tried a Hilco filter on other 55-gallon drum. This filter was unable to bring the KVA up to minimum specifications. Attached are two Carl Fisher water test reports showing that the oil had 4,125 parts per million of water before being filtered with the Water Eaters. Another test was taken after the oil was filtered, and showed that the water was reduced to 215 parts per million. This transmission hydraulic oil is now suitable for use. Obviously his customer bought the cart and plans to purchase 11 more.

P.S.- We have enclosed the Polytop oil test results for your perusal.

1. 1983 – Van Dorn – 300 Ton – 35 oz. – Toggle

   The filter that came with the Van Dorn (purchased new by us in 1983) gave us much trouble. Once replaced with the Filtroil Filter, the problems disappeared. We felt this represented a $1500 yearly press timesaving, not counting labor and parts, if we continued on trying to maintain the original Van Dorn filter.

2. 1976 – Engel – 275 Ton – 22 oz. Toggle
   A. We were losing 40 to 80 running hours per year due to repetitive hydraulic problems - $840 to $1680.
   B. Labor on repairs - $210 to $420.
   C. Parts - $150 to $200.
   D. Oil change savings - $400.
   E. Energy – 20-cent savings per hour - $900.

   Total Yearly Outlay - $2350 to $3200

3. 1964 – HPM – 200 Ton – 14 oz. – Hydraulic Ram
   A. Loss press time - $1776 to $2775.
   B. Labor on repairs - $400 to 4600.
   C. Parts - $300 to $500
   D. Oil change savings - $400
   E. Energy – 30 cents per hour - $1350.

   Total Yearly Outlay - $4226 to $5625

4. 1962 – Beloit – 300 Ton – 25 oz. – Hydraulic ram
   A. Loss press time - $4368 to $7736.
   B. Labor on repairs - $800 to $1000.
   C. Parts - $600 to $ 900.
   D. Oil change savings – 4400.
   E. Energy - $1.00 per hour - $4500.

   Total Yearly Outlay - $10,668 to $14,530.

POLYTOP ®
CORPORATION

Summary of Oil Analysis tests Performed by Analysis, Inc. for Filtroil New England

Test #1

Physical Properties Tests								
Sample Drawn	**KF PPM**	**VCS 40 C**	**TAN**	**P/C SAE 5-10**	**Micron 10-25**	**Range 25-50**	**PER 50-100**	**100ML 100+**
10/25/83	488	49.0	1.06	1195870	498310	1280	100	20
12/22/83	185	4703	1.68	1253980	347350	1250	180	10
1/26/84	127	55.0	1.40	888678	39830	1000	70	10
2/22/84	32	49.6	0.84	496310	12400	1640	170	0

Test #2

Physical Properties Tests								
Sample Drawn	**KF PPM**	**VCS 40 C**	**TAN**	**P/C SAE 5-10**	**Micron 10-25**	**Range 25-50**	**PER 50-100**	**100ML 100+**
1/20/84	320	58.5	1.18	N/R	N/R	N/R	N/R	N/R
9/17/84	50	63.5	0.22	509850	139750	4020	270	20

Test #3

Physical Properties Tests								
Sample Drawn	**KF PPM**	**VCS 40 C**	**TAN**	**P/C SAE 5-10**	**Micron 10-25**	**Range 25-50**	**PER 50-100**	**100ML 100+**
11/20/84	145	54.2	0.17	2177340	232710	1360	210	20
12/14/84	130	53.9	0.33	777690	6678	528	250	40