

January 13, 2004

Celeste M. Powers, CAE
Independent Lubricant Manufacturers Association
651 S. Washington Street
Alexandria, VA 22314

Re: ILMA Comments on Second Draft ILSAC GF-4 Standard

Dear Ms. Powers:

The ILSAC/Oil Committee would like to thank you for your December 4, 2003, comments on the second Draft ILSAC GF-4 Standard. We will endeavor to address the comments in this letter.

Base Oil Supply

We asked Kline to provide a response to your questions concerning their report. The response is attached.

Increased Oil Consumption Due to Lighter Viscosity Grades

Viscosity grade recommendations for individual vehicles are outside of the scope of the ILSAC GF-4 Standard and beyond the control of the ILSAC/Oil Committee. These are strictly the responsibility of the individual engine manufacturers.

Approval Period

API, not the ILSAC/Oil Committee, determines the implementation timing for GF-4. Based on API's current plans, the first allowable use of the "Starburst" based on meeting GF-4 requirements is July 31, 2004; however, manufacturers will be able to continue to market products with the "Starburst" based on ILSAC GF-3 approvals through April 2005. This implementation timing is consistent with past practice and has been known throughout the industry for some time now. The additive suppliers are well down the road in developing GF-4 approved products. Their practice of developing market general products in all major base oils means that all oil marketers should have reasonable access to ILSAC GF-4 formulations in time for the first allowable use date.

We trust that we have addressed your concerns to your satisfaction and look forward to a successful transition from ILSAC GF-3 to GF-4 with the help of your member companies.

Respectfully Submitted,



Robert M. Olree
Chairman – ILSAC/Oil Committee



January 2, 2004

Mr. James Williams
Products Issues Manager
American Petroleum Institute
1220 L Street, N.W.
Washington, D.C. 20005

Dear Mr. Williams:

This letter is with reference to the presentation made by Kline & Company on October 22, 2003 to the ILSAC committee regarding the future availability of API Group II baseoils given draft GF-4 specifications. We have respectfully studied the ILMA letter dated December 4, 2003 that outlines the concerns regarding the future availability of Group II and which questions some of our assumptions.

We would like to state at the outset that we highly value our relationship with ILMA and the ILMA membership. In addition, we are very respectful of their opinions. However, we are confident of our analysis and totally stand behind our research, forecasts, and resulting conclusions.

Please find attached our responses to the issues raised in the ILMA letter:

Response to ILMA questions

Q: Basestock viscosity grades below 100 and above 300 should have been dropped from the supply, as these are not used for lubricants

A: The analysis covers all lubricants, not just automotive lubricants. To fully understand basestock supply and demand, we need to look at all lubricant product categories, including industrial lubricants and process oils (which are referred to below in the white oil comment). Of course, ILMA members realize this because some make monograde engine oils, which are blended with 300, 500, even 600 SUS basestock. ILMA members make a range of industrial grades, which also require grades over 300 SUS.

IF WE WERE TO TAKE THE SUGGESTION and drop 70/90 grades from the analysis -- despite the fact that they are used in process oil applications and can be used to make non-DEXRON ATF's -- this change in assumption would reduce the supply of **Group II basestocks** but would still be in comfortable excess of demand.

Q: Kline's assumption of 90% capacity utilization is wrong as actual utilization rates are close to 85%

A: Kline's assumption of 90% capacity utilization is an industry wide average and is valid based on NPRA and EIA data. This includes the average across both solvent and hydroprocessing plants.

- Total US basestock capacity (pg 15 of presentation) is 2,554 Million gallons or about 167 KBD
- Supply with 90% utilization is 150 KBD
- Actual supply as per EIA data is 151 KBD for 2002 (refer to: <http://www.eia.doe.gov/emeu/aer/txt/ptb0511.html>)

In fact, we would like to add that the existing Group II/III facilities in North America are newer facilities. With Group II being in great demand, we can state unequivocally that these plants operate with utilization factors of at least 95%, and operating factors of 97-98% is not uncommon. These operating factors can be verified by referring to the annual Solomon Surveys. Solvent extraction, solvent dewaxing plants – the common technology used to make Group I – are more maintenance intensive and tend to have lower utilization rates when compared to nameplate capacities. The 85% utilization cited by ILMA would be more appropriate when describing solvent extraction, solvent dewaxing plants.

Moreover, capacity creep has increased the output of these plants significantly. We estimate that all the hydroprocessing base oil plants built in the last 10 years in North America are operating at 7-14% above the nameplate capacities cited in the NPRA annual base oil report.

In addition, if North American plants -- which make Group III as well as Group II -- chose to not make Group III to take advantage of the inexpensive Group III's coming in from offshore, their Group II capacity will increase even more, as there is a yield penalty for most plants when they make Group II instead of Group III.

Q: Pg 19 of the presentation: "Yesterday" scenario does not mention Dexron H which requires Group II and "Tomorrow" scenario does not mention 10WXX

A: In our deblend model, we have approximately 140 million gallons of finished ATF, which in the "Yesterday" scenario requires nearly 80 million gallons of Group II/III. In the "Tomorrow" scenario, approximately 120 million gallons of API Group II/III will be required to make ATF.

In the deblend model, we estimate about 480 million gallons of 10WXX PCMO demand and we expect 58% of this is Group II/II+ in the "Tomorrow" scenario. Please note Group II/II+ represents about 73% of the total basestock used in the 10WXX formulation in the "Tomorrow" scenario; the difference between the 58% in the total formulation and the 73% of the basestock is the additive package.

Hence our "Tomorrow" scenario does include 400 million gallons of Group II/II+/III demand for use in 10Wxx and ATF.

Q: Kline has not included about 150 million gallons of white oil demand, which can be serviced by Group II

A: We agree that such white oil producers as Penreco and Petro-Canada use Group II baseoils as feedstock for white oils. However, in our estimates, ILMA has overestimated the demand for paraffinic white oils by as much as 50%. Nevertheless, what is important to note here is the fact that these formulators use 70N and 600 as the dominant Group II grades to produce the white oils.

Now, as we all are aware, 70N and 600 grades will impact the total Group II supply but will not take anything away from the supply available to ILSAC automotive applications, as these grades are not used to formulate PCMO meeting the ILSAC requirements.

Additional Comments

An important additional consideration is the cost for a formulator to acquire Group I vs. Group II, and specifically the present differential in the cost of acquisition. If this gap widens in the future, it will provide incentives to formulators to dedicate extra tankage to basestock storage and store multiple basestock as well as to buy more robust additive packages. A growing differential in the formulator's cost to acquire Group II over Group I will provide incentives to the blenders that cost parity or small cost differentials did not.

In addition, players who are active in the marketplace are also well aware of the presence and availability of "distressed Group I's" leading to an increase in the Group I vs. Group II cost differential. We expect this differential to exist in the future as well, as Group I suppliers make the necessary competitive moves to retain the industrial lubricants business. Industrial lubricants (particularly most hydraulic fluids, railroad engine oils, paraffinic process oils, and others) will therefore continue to be blended with Group I.

In addition, we have not considered imports of Group III in our analysis, in order to be conservative. In fact, there is Group III being imported from Asia and additional capacity is coming on stream in the near future that is, in our professional opinion, primarily earmarked for North American markets. We understand this Group III is available for acquisition by ILMA members.

Finally, and as an extreme case scenario exercise: We know that the finished lubricants market is estimated at 2.9 billion gal. In this scenario, around 44% of this demand will continue to be met by Group I baseoils for such product categories as metalworking fluids, railroad engine oils, marine engine oils, most process oils excluding white oils, other general industrial oils, most hydraulic fluids, most hydraulic and transmission fluids used in the commercial automotive segment, and some greases.

We know there is a differential in the cost to acquire Group I and II existing today. We know there is Group I capacity as well as the fact that these plants are fully depreciated and cost competitive. There is a very strong incentive for those Group I suppliers to make it attractive for formulators not to use Group II's in its formulations. To put it differently, this case assumes that all PCMO, HDMO, ATF, gear oils, turbine oils, compressor and refrigerant fluids, white oils, and others use Group II and above grade baseoils. When you marry this with current capacity of Group II/II+ baseoils in North America you will come away with the same conclusion that there will be enough Group II supply to meet demand, post GF-4.

In conclusion, we think that the biggest fallacy in ILMA's assumption is that the integrated oil companies who produce Group II's will use Group II's in all of its captive product applications. Because of the growing differential in the cost to acquire Group I and Group II, astute producers of Group II will and are only using Group II captively in such applications that absolutely require the usage of Group II. (Recognize that as they buy Group I instead of using Group II, they will get better returns by selling Group II in the merchant marketplace).

Again, we would like to state that we highly value our relationship with ILMA and the ILMA membership. In addition, we are very respectful of their opinions. However, we reiterate the fact that we are confident of our analysis and totally stand behind our research, forecasts, and resulting conclusions.

We would be pleased to discuss these or any other issues relating to our presentation in greater detail or to provide clarifications, as deemed necessary. We thank you for the opportunity to serve the API, ILSAC and the industry and wish you the best for the holiday season and New Year.

Sincerely,

William R. Downey
Vice President, Petroleum & Energy Practice

Cc: Geeta S. Agashe
Milind Phadke
James Weatherall