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ASTA Technologies – UBP C/o Centre SOCRAN

4031 ANGLEUR

Parc Scientifique du Sart-Tilman Avenue Pré-Aily

Zwijndrecht, 11 September 2000

Dear Mr Nenach,

Re: ASTA 3000 engine treatment

The different tests organized in our diagnosis centre were able to confirm that the ASTA 3000 Engine Treatment really has positive effects on the pollution and the general operation of engines.

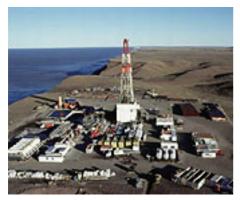
We also stated that the vehicles of our fleet, treated by ASTA 3000, have a lower maintenance cost than the other equivalent vehicles of our fleet, not treated by ASTA 3000, even though those vehicles are used in the same circumstances.

Yours sincerely,

Geert Popelier

Senior Account Manager

ANAC – TotalFinaElf Compatibility with gasolines and diesel



ANAC is a service of park management which belongs to TotalFinaElf group.

This service includes diagnoses for any type of vehicles (cars, trucks, etc.) and allows companies to reduce exploitation costs of their park by, in particular, optimizing the longevity of engines or fuel consumption.

ANAC has 30 years of expertise in the diagnosis

field, covers 26 countries and carries out 3 million diagnoses on hundreds of thousands of machine parts. Many car manufacturers use its services: Mercedes, Renault, Volvo, DAF, Iveco, MAN, etc.

At the request of Touring, ANAC controlled the compatibility of ASTA 3000 Engine Treatment with gasoline, diesel and engine oils. These results are all positive.



Elf analysis report

Product: ASTA 3000 Engine Treatment

ASTA LOWER ENGINE (oil):

Compatible and stable in engine oil.

Composition Light aromatic hydrocarbons with -NH and

-OH groups (probably dispersants and

antioxidants).

Presence of Ca-, Zn-, and Mg- additives (probably detergents and wear resistant

materials).

ASTA UPPER ENGINE (fuel):

Compatible and stable in petrol and diesel fuel.

Composition Light aromatic hydrocarbons with -NH, -OH

and C=O groups (probably dispersants and

antioxidants).





A. ENGALYTCHEFF

Ing. Ind. E.C.A.M. Rue des Moutons 21c 1180 BRUXELLES

December 8th 1996

To Mr S. NENACH

Dear Sir.

Re: ASTA 3000 Engine Treatment

As arranged, please find enclosed a translation into French of the laboratory report on your **ASTA 3000** products.

Apart from the conclusions of the report and in order to summarize the content of our various conversations, I would like to add the following comments:

It is undeniable that a clean engine operates better and longer than a dirty engine. Moreover it will consume less energy.

Not all fuels are blended in the same way, nor with the same concentrations, as can be seen from the so-called "white" or unbranded pumps, whose technical specifications are not defined.

Finally, I am well placed to observe that numerous maintenance professionals (garage mechanics, car centers, etc.) do not use the high performance lubricants needed by modern engines and environmental standards.

This is one reason why extra additives will be always beneficial and the improvement in cleanliness and engine performance will be higher when the vehicle is subjected to demanding use (city driving, high revving, heavy loads), when the fuel is of low or borderline quality or when the oil does not comply with the manufacturers' recommendations.

Obviously too much additive is not to be recommended either, as this could give rise to undesirable effects.



To come to the specific case of your ASTA 3000 Engine Treatment additive, it has the advantage of being ashless, that is to say it burns in the combustion chamber without leaving any deposits (no spontaneous ignition - knock free); its dispersant and anti-oxidizing qualities help to reduce the formation of the gum which causes engine fouling and leads to malfunctions.

I have also noted that your additive remained stable during the trial period carried out with Touring Secours vehicles. Moreover analysis of the oil showed no harmful influence on engine wear in the tested engines.

Assuming that an engine is dirty, experience shows that when a better quality lubricant and a brand-name petrol is used, the results of tests on the lubricant are much improved. This improvement is clearly proportional to the "degree of fouling" of the engine and the duration of the treatment.

In the hope that I have answered all your questions about the use of your additive, I remain

Yours Faithfully

A. ENGALYTCHEFF

Member of the French Association of Petroleum Technicians (A.F.T.P.)



To: Technical service Mr. Engalytcheff Date: 10/10/96 From: Laboratory PRODUCT PREPARATION **LUBRICATING OIL** X TEST Identification: **ASTA 3000** Product: Code: COMPOSITION (1) %m (2) %m (3) %m Components ASTA LOWER ENGINE (oil) 100 ASTA UPPER ENGINE (fuel) 100 100 100 0

CHARACTERISTICS

Property	Method	Unit	Specifications			Results		
			Min.	Max.	Type			
Appearance	Visual					Clear	Clear	
Color	ASTM D1500					Green	Blue	
Density 15°C	ASTM D4052	Kg/l				0.854	0.826	
Visc. 40°C	ELFA 019	mm²/s						
Visc. 100°C	ELFA 019	mm²/s						
VI/VIE	ASTM D2270							
Visco CCS°C	ELFA 029	mPa.s						
Pour point	ELFA 016	°C						
Flame point PMCC	ASTM D93	°C						
TBN	ELFA D18	mg KOH/g				1.5	<0.1	
TAN	ASTM D664	mg KOH/g				0.4	0.1	
Sulfates	ELFA 017	%m						
Cu Corrosion	ASTM D130							
Emulsion loss °C	ASTM D1401	min						
Aeration loss	ASTM D3427	min						
Foam test seq. 1	ASTM D892	ml						
Foam test seq. 2	ASTM D892	ml						
Foam test seq. 3	ASTM D892	ml						
Noack	CEC L-40T-87	%m						
IR Spectrum	ELFA 008					ANNEXE	ANNEXE	
Emission	ELFA 007							
Ca		ppm						
Be		ppm				450	<10	
Zn		ppm						
Pour point		ppm				200		
Mg		ppm				200	<10	
Be		ppm				100		
Si		ppm						
Na		ppm				<5	5	
Cu		ppm						
Stability in sport TX1 15W40 (2 %m)						Uniform		

