TOTAL ANAC **EXPERT**

The in-depth diagnostics system for driveline components

TOTAL ANAC Expert is an in-depth, personalised diagnosis system for engines, gearboxes and other driveline components.

TOTAL ANAC Expert is recommended for:
• Detailed follow–up of component wear and lubricant behaviour.
• Spot analysis and diagnosis in special cases (breakdowns, claims, expertise, …)
• Analysis of new lubricants.

MEASURED CHARACTERISTICS

Mechanical wear:
Wear elements : Iron, Lead, Copper, Tin, Chromium, Aluminium, Nickel (ppm)

Contamination of the lubricant:
Silicon (ppm), Soot* (%) , Water (%), Cooling Liquid*(presence) , Fuel* (%)

Characteristics of the lubricant:
Viscosity (mm2/s) at 40°C and 100°C , Viscosity Index
Base Number TBN* (mg KOH/g) or Acid Number TAN** (mg KOH/g)
Sulphated Ash and Oxidation*

Optional:
Additive elements Ca, Zn, P, Mg, Mo, Ba, V, Na, B, K, Ag

* engines - ** other components

DIAGNOSIS AND COMMENTS

The diagnosis and comments are established by an TOTAL ANAC expert, specialised in engine and lubricant technology, aided by the TOTAL ANAC database with reference data of all current part types, calculated on over 4 million performed analyses.

Also the database of feedback on successful corrective actions by the users is at the disposal of the specialist of the TOTAL ANAC EXPERT analysis.

The specialist of the TOTAL ANAC EXPERT analysis takes into account the specific knowledge on the usage conditions and possible remarks by the user.

Personalised answers on questions by the users.

DIAGNOSIS REPORT

The diagnosis report is available within 48 hours after reception of the oil sample in the lab and can be dispatched either by post or e-mail, and can be consulted on the Internet. In urgent cases, the report will be faxed, as soon as the diagnosis is ready.

Satisfying diagnostic — Slight deviations — Anomaly observed — Dangerous situation

ANAC, a service of the TOTAL group

ANAC references : FFVD --16 ---1
Your references :
Vehicle: P2110012
Component: Diesel engine

red

Make and type:
Vehicle: XXXX

TOTAL SPECIMEN / ZZ

Component: XXXX

Diagnosis date: 14 march 2014
Oil : Total Rubia Tir 7400 15W40

		EXPERT	EXPERT	EXPERT	EXPERT	EXPERT
Sample date		15-MAR-10	14-FEB-11	21-MAR-12	18-OCT-13	05-FEB-14
Sample Number		60023452	60033891	60087880	60105688	60133230
Working time		7051 H	8042 H	9012 H	10027 H	11089 H
Mileage oil		1000 H	1000 H	1000 H	1000 H	1000 H

Wear						
Iron	ppm	30	18	4	4	6
Lead	ppm	7	3	1	2	15
Copper	ppm	9	2	5	5	190
Tin	ppm	4	< 1	< 1	< 1	< 1
Chromium	ppm	1	< 1	< 1	< 1	< 1
Aluminium	ppm	4	5	2	2	1
Nickel	ppm	< 1	< 1	< 1	< 1	< 1

Contamination						
Si-Foreign	ppm	6	6	4	2	2
Soot	%	0.4	0.4	0.2	0.0	0.0
Water	%	OK	OK	<0.07	OK	OK
Cooling liq.		OK	OK	OK	OK	***
Fuel	%	OK	OK	OK	OK	3.4

Oil						
B.N.	mgKOH/g	8.3	8.5	11.2	10.7	11.3
Visc. 40°C	mm2/s	95.7	91.9	107.4	103.7	103.3
Visc. 100°C	mm2/s	13.2	12.8	14.3	13.8	14.0
Visc. Index		137	136	136	134	137
Sulph. Ash	%	1.0	1.0	1.2	1.3	1.2
IR oxi meas	A/cm	19.5	18.7	22.5	18.7	20.4
IR oxi net	A/cm	2.5	1.5	3.5	0.0	0.0

Interpretation of the diagnosis
- *** Attention : The measured values of certain elements strongly suggest that there is cooling liquid contamination in the oil.
- This pollution increases the wear.
- Metal content too high.
- Control the tightness of the coolant circuit
- Make a control sample after intervention

Colour code : green , orange, red

Administrative data on customer, machine, part, oil sample

Wear elements and evaluation (colour)

Contamination elements and evaluation (colour)

Characteristics of the lubricant and evaluation (colour)

Comments:
- User memo
- Diagnosis comments by the TOTAL ANAC expert
- Remarks

The history of the 5 most recent diagnosis is displayed on the report.

A website that helps to manage the park monitoring: www.anac-diagnosis.com

A personal and secured access for:

- Consultation of new results and history
- Graphical display of analysis results
- Queries
- Downloads of Excel and Pdf files
- Statistics

- On-line recording of new sample data
- Mobile version for smartphones & tablets

Available in 7 languages

TOTAL ANAC MAKES THE DIFFERENCE

- Database on more than 4 million performed analyses, over 400.000 parts in follow up
- Database on feedback of successful interventions after TOTAL ANAC diagnosis
- Specific and personalised comments
- User friendly website for management of diagnosis data
- Reports available by post, e-mail, fax or Internet
- More than 35 years of experience
- Reports available in 19 languages