Test report Ref: 5-23311-2016-1070943-0 1/3



CUSTOMER

W.F. VOSKERO Aggeliki Kritikou

SAMPLE DATA

Ref: VEST00649-0007-S50.1 Descrip.: Gearbox - Gearbox

Tmk: Model: V-52 Serial N.: 18513

Sample Ref.: 17/06/2016-1070943 Oil label:

Date sampled: 09/03/2016 Oil type: CASTROL OPTIGEAR SYNTHETIC X 320 S/Ref.: Lab. date: 10/06/2016

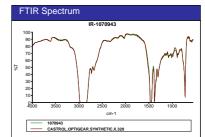
Machine serv.: Capac.(I): Oil serv.: Adds (I):

LAST SAMPLE CONCLUSIONS

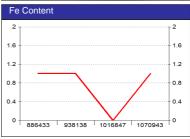
The oil is fit for further use. There are no symptoms of contamination or abnormal wear.

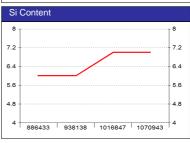


	RESULTS					
Date sampled:	09/03/2016	01/07/2015	05/12/2014	16/05/2014		
Sample Ref.:	1070943	1016847	938138	886433		
Machine serv.:	1070343	1010047	930130	000433		
Oil serv.:						
Report date:	20/06/2016	23/11/2015	29/01/2015	02/07/2014		
Status						
Oxidation (A/cm)	<1	<1	<1	< 1		
Appearance (Adim)	Dark transp.	Dark transp.	Dark transp.	Dark transp.		
Water content (mg/kg)	582	436	<u>254</u>	155		
TAN (mgr KOH/gr)				1.39		
TAN (mgr KOH/gr)	1.22	1.15	1.23			
Visc. Index (Adim)	153	153	151	152		
Viscosity 100°C (cst)		34.83	34.61	34.08		
Viscosity 100°C (cst)	34.57					
Viscosity 40°C (cst)		321.4	324.1	315.22		
Viscosity 40°C (cst)	317.6					
Particles count						
ISO 4406/99 (Adim)	18/16/12	15/14/11	15/13/10	15/12/9		
Part > 4 microns (100ml)	140162	29834	23684	18135		
Part > 6 microns (100ml)	61508	11218	6462	3157		
Part > 14 microns (100ml)	3611	1883	734	309		
Additives						
B Content (ppm)	<30		0	0		
Ba Content (ppm)	0	0	0	0		
Ca Content (ppm)	1665	1519	1419	1395		
Mg Content (ppm)	6	5	4	8		
P Content (ppm)	309	283	277	268		
Zn Content (ppm)	3	0	1	1		
Contamination and wear metals						
Al Content (ppm)	0	3	0	0		
Cr Content (ppm)	0	0	0	0		
Cu Content (ppm)	1	0	0	0		
Fe Content (ppm)	1	0	1	1		
K Content (ppm)	1	0	1	1		
Mo Content (ppm)	895	807	726	731		
Na Content (ppm)	0	0	2	1		
Ni Content (ppm)	0	0	0	0		
Pb Content (ppm)	0	0	0	0		
Status: Normal <u>Caution</u> <u>Alarm</u>	/	/	^	/		









Performed by: Manuel Bilbao



Tests done from 09/06/2016 to 20/06/2016

lests done from 09/06/2016 to 20/06/2016

NOTE: The obtained results only correspond to the tested samples. This report can not be reproduced neither partially not totally without the express writen permission of the laboratory that emits it. Sample will be destroyed 15 DAYS after the emission of this report. The uncertainties of the tests are calculated and available to customers

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Test report Ref: 5-23311-2016-1070943-0



CUSTOMER

W.F. VOSKERO Aggeliki Kritikou

SAMPLE DATA

Ref: VEST00649-0007-S50.1 Descrip.: Gearbox - Gearbox

Tmk: Model: V-52 Serial N.: 18513

Sample Ref.: 17/06/2016-1070943 Oil label: Date sampled: 09/03/2016 Oil type: CASTROL OPTIGEAR SYNTHETIC X 320 S/Ref.: Lab. date: 10/06/2016

Machine serv.: Oil serv.: Capac.(I): Adds (I):

LAST SAMPLE CONCLUSIONS

The oil is fit for further use. There are no symptoms of contamination or abnormal wear.



		RES	ULTS		
ate sampled:	09/03/2016	01/07/2015	05/12/2014	16/05/2014	
ample Ref.: achine serv.: I serv.:	1070943	1016847	938138	886433	
eport date: ontamination and wear metals	20/06/2016	23/11/2015	29/01/2015	02/07/2014	
Content (ppm)	7	7	6	6	
Content (ppm)	2	3	2	1	
rticles					
Q Index (Adim)	1	3	6	1	
					Performed by: Manuel Bilbac
					17/06/2016
					1,00/2010
					11/1/4
					4181

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Test report Ref: 5-23311-2016-1070943-0 3/3



CUSTOMER

W.F. VOSKERO Aggeliki Kritikou

	Test methods				
Status					
Oxidation (A/cm)	(ASTM D7414-09) Differential Trending				
Appearance (Adim)	(PE-TA.096)				
Water content (mg/kg)	(PE-TA.084)				
TAN (mgr KOH/gr)	(PE-TA.043_5.1 colorimétrico)				
TAN (mgr KOH/gr)	(PE-TA.043_5.3 termométrico)				
Visc. Index (Adim)	(ASTM D2270-10)				
Viscosity 100°C (cst)	(PE-TA.054)				
Viscosity 100°C (cst)	(ASTM D7279-14a)				
Viscosity 40°C (cst)	(PE-TA.054)				
Viscosity 40°C (cst)	(PE-1A.004) (ASTM D7279-14a)				
Particles count	(· · · · · · · · · · · · · · · · · · ·				
ISO 4406/99 (Adim)	(ASTM D7647-10)				
Additives	(10.11.2.1.1.1.1)				
B Content (ppm)	(PE-TA.007)				
Ba Content (ppm)	(PE-TA.007)				
Ca Content (ppm)	(PE-TA.007)				
Mg Content (ppm)	(PE-TA:007)				
P Content (ppm)	(PE-TA.007) (PE-TA.007)				
Zn Content (ppm)	(PE-TA.007) (PE-TA.007)				
Contamination and wear metals	(FE-1A.007)				
	(PE-TA.007)				
Al Content (ppm)					
Cr Content (ppm)	(PE-TA-007)				
Cu Content (ppm)	(PE-TA.007)				
Fe Content (ppm)	(PE-TA.007)				
K Content (ppm)	(PE-TA.007)				
Mo Content (ppm)	(PE-TA.007)				
Na Content (ppm)	(PE-TA.007)				
Ni Content (ppm)	(PE-TA.007)				
Pb Content (ppm)	(PE-TA.007)				
Si Content (ppm)	(PE-TA.007)				
Sn Content (ppm)	(PE-TA.007)				
Particles					
PQ Index (Adim)	(PE-TA.024)				