



Oil analysis lab



702-TEST

Analysis Report

ROLLSROYCE UUC505 (k)
THRUSTER 9 SEAL (1000268170 SEAL)

System: GEAR BOX
Sump Capacity (k): ?
Lubricant (k): SHELL OMALA S2 GX ISO 150
Labocodenbr: 115522-HK.9
Samplenumbr: 25.06.24 F003
Labelnummer:
Date sample drawn (k): 25.06.2024
Sampling: by client

Customer (k): LEWEK CONSTELLATION(SA)
Address (k):
Your customer (k): THR.9 SEAL
Your ref. (k): 31552574/CF24031



Oil



Pollution



Wear



Diagnostic

We received 2 bottles. One bottle has a lot of black particles on the bottom (PQ=91), the other one has no particles (PQ=1). The PQ-value has increased, indicating the presence of magnetic iron particles. Wear elements within tolerance.

Attention

Results:	Method*	Unit	Current sample						25.06.24 F003
Analysis date			25/06/2024	31/05/2024	26/09/2023	16/06/2023	14/12/2022	20/09/2022	
Date of receipt			25/06/2024	31/05/2024	26/09/2023	16/06/2023	14/12/2022	20/09/2022	
Sample date (k)			?	19/05/2024	21/07/2023	7/03/2023	1/12/2022	3/09/2022	
H/Km Oil (k)			?	?	? H	? H	? H	? H	
H/Km total (k)			?	?	48903 H	45726 H	44037 H	41929 H	
Top up (k)			?	?	?	?	?	?	

Oil Condition:

Viscosity at 40°C	ASTM D7279	cSt	153.0	145.0	149.0	147.0	147.0	150.0
Viscosity at 100°C	ASTM D7279	cSt	15.1	14.7	14.8	14.6	14.5	14.7
Viscosity-index	ASTM D2270		99	101	99	98	97	97
Fuel dilution	ASTM D7593	%						
AN	ASTM D8045	mg KOH/g						
BN	ASTM D2896B	mg KOH/g						
Oxidation	ASTM E2412 (A)	Abs/0.1mm	3.3	4.3	2.8	2.9	3.2	3.4
Nitration	ASTM E2412	Abs/0.1mm	3.3	3.4	3.0	3.1	3.4	3.5
PMCC	ASTM D93	°C						
COC	ASTM D92B	°C						
Color	ASTM D1500							

Additives:

Ba: Barium	ASTM D5185	ppm	< 1	< 1	1	< 1	< 1	< 1
Ca: Calcium	ASTM D5185 (A)	ppm	9	7	< 5	< 5	11	8
Mg: Magnesium	ASTM D5185 (A)	ppm	< 5	< 5	< 5	< 5	< 5	< 5
P: Phosphorus	ASTM D5185 (A)	ppm	267	245	244	245	272	204
S: Sulfur	ASTM D5185	%	0.94	1.05	0.87	0.95	1.44	1.23
Zn: Zink	ASTM D5185 (A)	ppm	< 5	9	7	< 5	8	9

Pollution:

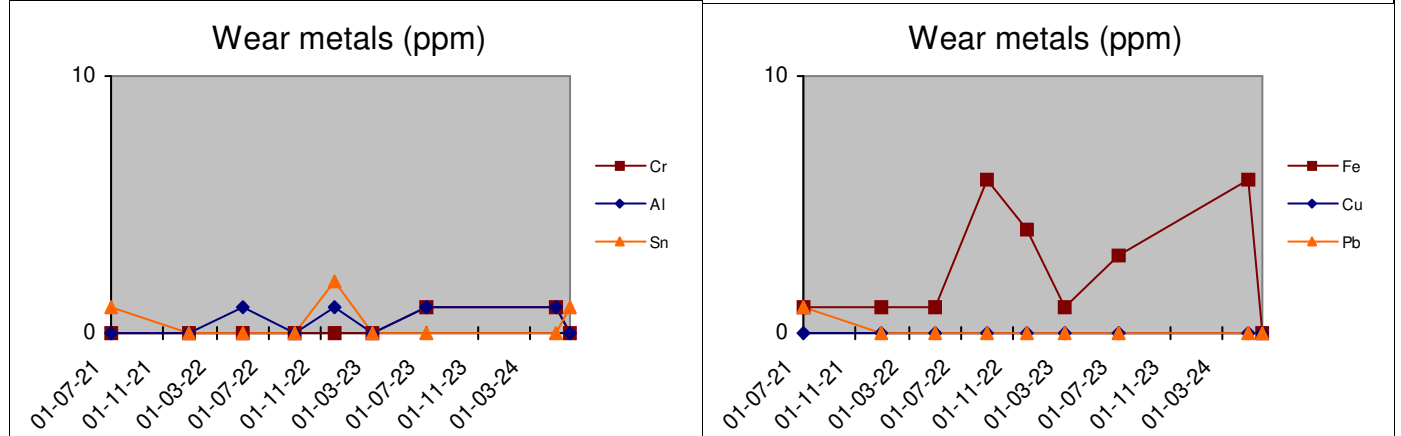
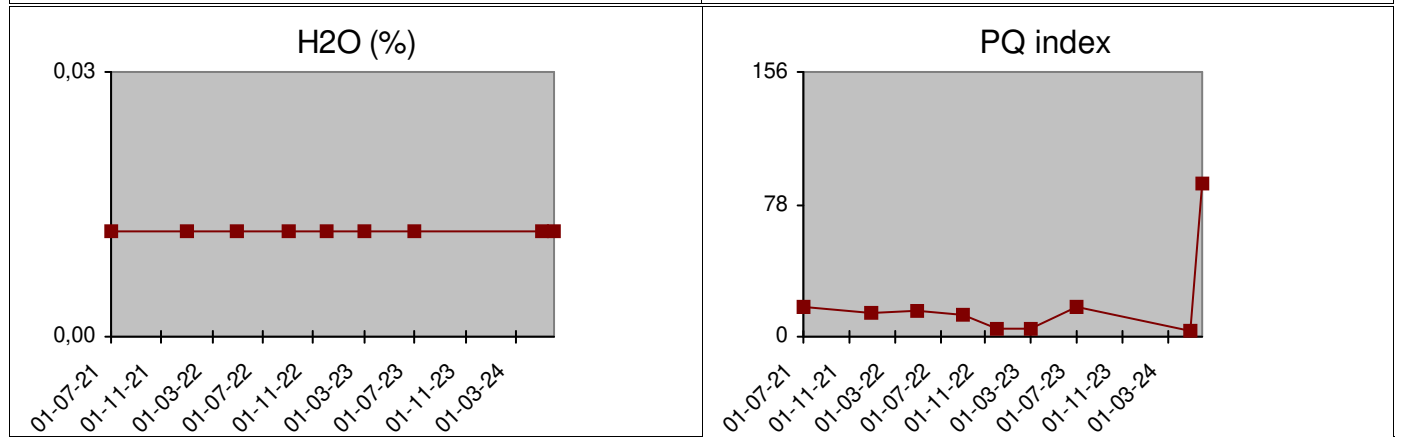
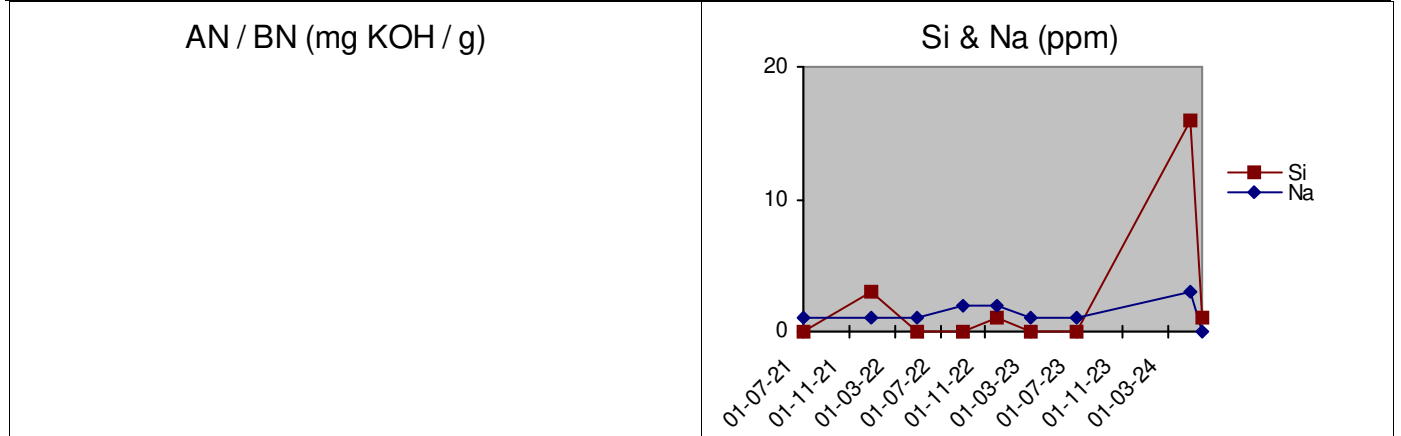
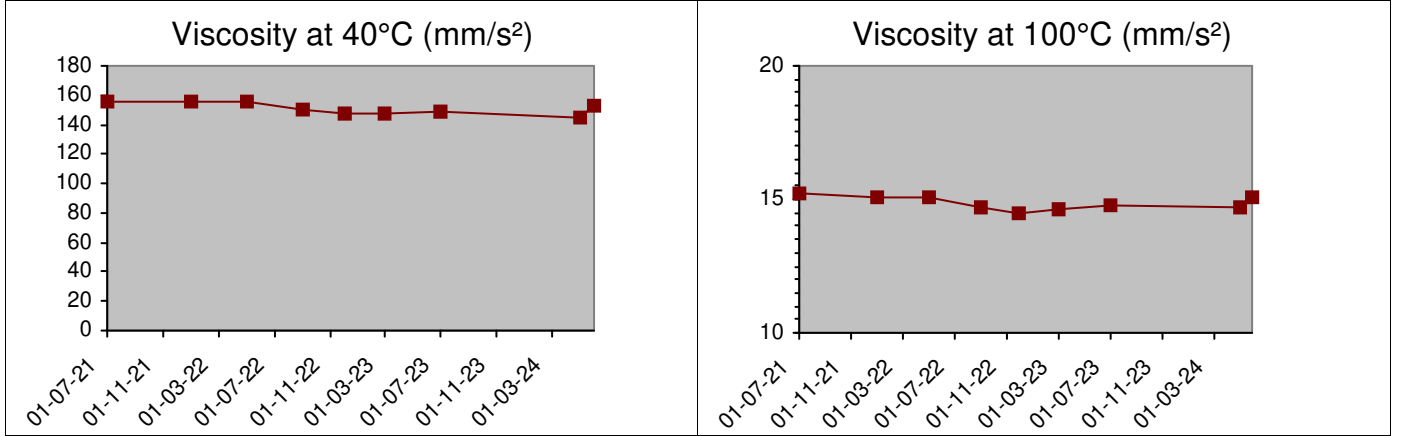
Si: Silicon	ASTM D5185 (A)	ppm	< 10	16	< 10	< 10	< 10	< 10
B: Boron	ASTM D5185	ppm	< 1	26	1	2	9	8
Na: Sodium	ASTM D5185 (A)	ppm	< 5	< 5	< 5	< 5	< 5	< 5
Water	WI-0002	%	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
Water (KF)	ASTM D6304C	ppm						
Soot content	ASTM E2412 (A)	%						
Antifreeze	ASTM D2982A							
PC ISO grade	ASTM D7647 (A)							
PC Cleanliness class	ASTM D7647 (A)							
Insolubles	ASTM D4898	mg/l						

Wear metals:

Al: Aluminium	ASTM D5185 (A)	ppm	< 5	< 5	< 5	< 5	< 5	< 5
Cr: Chromium	ASTM D5185 (A)	ppm	< 5	< 5	< 5	< 5	< 5	< 5
Cu: Copper	ASTM D5185 (A)	ppm	< 5	< 5	< 5	< 5	< 5	< 5
Fe: Iron	ASTM D5185 (A)	ppm	< 5	6	< 5	< 5	< 5	6
Mo: Molybdenum	ASTM D5185 (A)	ppm	< 5	< 5	< 5	< 5	< 5	< 5
Pb: Lead	ASTM D5185 (A)	ppm	< 5	< 5	< 5	< 5	< 5	< 5
Sn: Tin	ASTM D5185	ppm	1	< 1	< 1	< 1	2	< 1
PQ index	WI-0021		91	3	18	5	5	13

These conclusions are based on the tested supplied samples and information where the representativeness and validity cannot be guaranteed. Opinions and interpretation are outside the scope of accreditation. The measurement uncertainty is available on request. Samples are destroyed 2 months after receipt. The report may only be reproduced complete. Distribution on the responsibility of the client. *Methods are modified according to specified method. (A)Accreditation. (U)Outsourced. (k) Received info from customer.

History 25.06.24 F003



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