# Alpha Maintenance Systems Oil gnakris lab

# Analysis Report

### UNITED RENTAL DW11920 SVL (FUEL TANK)

ATLAS COPCO RENTAL EUROPE

Luc Despeghel

B- 2850 BOOM

System: DIESEL

Sump Capacity: ?

Fuel type DIESEL Address: INDUSTRIEWEG 1F

Labocodenbr: 109897-qbf9 Samplenumber: 11.12.23 T014

Labelnumber: 429000800490

Date sample drawn: 10.11.2023 Your customer: FUEL TANK

Sampling: by client Your ref.: F/FUEL TANK

#### Diagnostic

Appearance: bright red. There is no visual precipitation. We notice a high sulphur content. For the insolubles (based on EN12662), 60 g of sample was used. For a precise result, we would like to receive 300 ml of sample. Microscopic examination of the patch shows the presence of some black particles. No bacteria or fungi present in the fuel.

Customer:

Action

Results:		Current sample			11.12.23 T014
Analysis date		11/12/2023			
Sample date		10/11/2023			
Fuel condition:			EN 59	90 Min	Max
Density	kg/m³			820.0	845.0
Visual		red			
S: Sulfur content	ppm	19.71			10.0
Viscosity at 40°C	cSt	3.3		2.0	4.5
Water content	ppm	20			200
Pollution/additives:			EN 59	90 Min	Max
Al: Aluminium content	ppm	< 1			10.0
Ba: Barium content	ppm	< 1			10.0
Ca: Calcium content	ppm	< 1			10.0
Cu: Kopper content	ppm	< 1			10.0
Fe: Iron content	ppm	< 1			10.0
Mg: Magnesium content	ppm	< 1			10.0
Mn: Mangan content	ppm	< 1			2.0
Na: Sodium content	ppm	< 1			10.0
Pb: Lead content	ppm	< 1			10.0
V: Vanadium content	ppm	< 1			10.0
Zn: Zink content	ppm	< 1			10.0
Bacteria		0			
Insolubles	mg/kg	23			24-50: Follow-up
					>50: Alert
Quality:			EN 59	90 Min	Max
Distillate at 250°C	V%				< 65
Distillate at 350°C	V%			85.0	
95% (V/V) distilled at	°C				360.0
Flashpoint	°C			> 55.0	
Cetane index				46.0	
Cetane number				51.0	
PAK (Aromaten)	m%				8.0
FAME (biodiesel)	V%				7.0
CFPP	°C			A-class	max +5°C
				Class B	max 0°C
				Class C	max -5°C
				Class D	max -10°C
				Class E	max -15°C
				Class F	max -20°C

These conclusions are based on the 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.



## Microscopical analysis

## **UNITED RENTAL DW11920 SVL** (FUEL TANK)

				11.12.23 1014
System:	DIESEL	Labocodenbr:	109897-qbf9	
Sump Capacity:	?	Labelnumber:	429000800490	
Lubricant:	DIESEL	Samplenumber:	10.11.23	
Your ref.:	F/FUEL TANK	Analysis date:	11.12.23	

The sample was diluted with an organic pre-filtered solvent and filtered on a 0.7 µm fiberglass filter. After filtration, the filtrate was dried and analyzed under microscope.

Particle type:	None	Few	Moderate	Many
White metal:	✓			
Black particles:		<b>✓</b>		
Rust particles:	<b>✓</b>			
Silicon:	<b>✓</b>			
Fibers:	<b>✓</b>			
Weldings:	<b>✓</b>			
Plastics:	<b>✓</b>			
Copper:	<b>✓</b>			
Polymers:	<b>✓</b>			
Final judgement:				
✓ Normal	Moderate			High
_500µm	Diagnos	stic:		

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