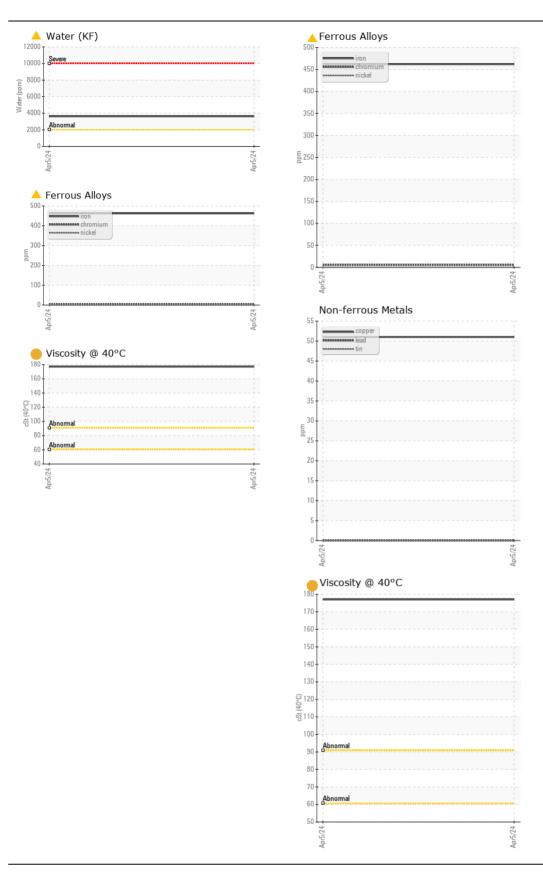
WEAR CONTAMINATION **FLUID CONDITION** **ABNORMAL ABNORMAL ATTENTION**

Machine Id

VOLVO EC160E 310125

Component
Swing Drive

VOLVO SUPER GEAR OIL 75W-80-GO102 ((
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
We advise that you check all areas where dirt can enter the system. We advise that you check for the source of water entry. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. (Customer Sample Comment: Suspected water contamination)	Sample Number		Client Info		ML0001447		
	Sample Date		Client Info		05 Apr 2024		
	Machine Age	hrs	Client Info		2260		
	Oil Age	hrs	Client Info		1000		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		N/A		
	Sample Status				ABNORMAL		
WEAR	Iron	ppm	ASTM D5185m	>400	462		
Gear wear is indicated.	Chromium	ppm	ASTM D5185m	>10	5		
	Nickel	ppm	ASTM D5185m	>10	<1		
	Titanium	ppm	ASTM D5185m		<1		
	Silver	ppm	ASTM D5185m		0		
	Aluminum	ppm	ASTM D5185m	>25	8		
	Lead	ppm	ASTM D5185m	>50	0		
	Copper	ppm	ASTM D5185m	>200	51		
	Tin	ppm	ASTM D5185m	>10	0		
	Vanadium	ppm	ASTM D5185m		<1		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION Appearance is hazy. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. There is a moderate concentration of water present in the oil.	Silicon	ppm	ASTM D5185m	>50	36		
	Potassium	ppm	ASTM D5185m	>20	0		
	Water	%	ASTM D6304	>0.2	△ 0.362		
	ppm Water	ppm	ASTM D6304	>2000	△ 3620		
	Silt	scalar	*Visual	NONE	NONE		
	Debris	scalar	*Visual	NONE	NONE		
	Sand/Dirt	scalar	*Visual	NONE	NONE		
	Appearance	scalar	*Visual	NORML	HAZY		
	Odor	scalar	*Visual	NORML	NORML		
	Emulsified Water	scalar	*Visual	>0.2	<u> </u>		
FLUID CONDITION	Sodium	ppm	ASTM D5185m		<1		
The oil viscosity is higher than normal.	Boron	ppm	ASTM D5185m		<1		
	Barium	ppm	ASTM D5185m		4		
	Molybdenum	ppm	ASTM D5185m		0		
	Manganese	ppm	ASTM D5185m		11		
	Magnesium	ppm	ASTM D5185m		0		
	Calcium	ppm	ASTM D5185m		13		
	Phosphorus	ppm	ASTM D5185m		482		
	Zinc	ppm	ASTM D5185m		82		
	Sulfur	ppm	ASTM D5185m		22736		
	Visc @ 40°C	cSt	ASTM D445		177		





Certificate L2367

Laboratory Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : ML0001447 Lab Number : 06150696

Unique Number : 10980774

Test Package : CONST (Additional Tests: KF)

Received **Tested** Diagnosed

: 16 Apr 2024

: 18 Apr 2024 : 18 Apr 2024 - Sean Felton

1345 MOUNTAIN ROAD GLEN ALLEN, VA US 23060

Contact: Alex Anderson aanderson@mcclung-logan.com

MCCLUNG-LOGAN EQUIPMENT CO - RICHMOND

To discuss this sample report, contact Customer Service at 1-800-237-1369. * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

F: (804)266-1611

T: