WEAR CONTAMINATION **FLUID CONDITION**

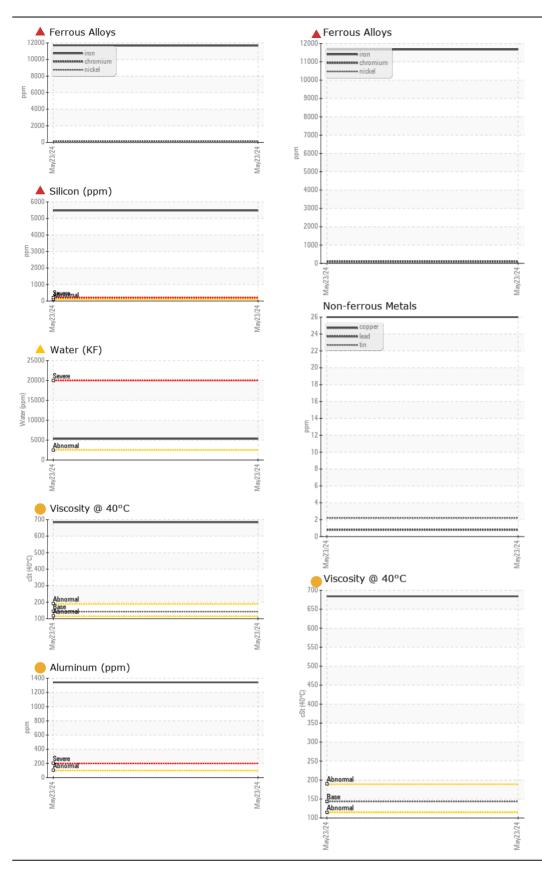
SEVERE SEVERE ATTENTION

Machine Id

VOLVO EC350E 310403

Left Travel

Fluid							
GEAR OIL SAE 80W90 (GAL)							
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. We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.	Sample Number		Client Info		ML0001961		
	Sample Date		Client Info		23 May 2024		
	Machine Age	hrs	Client Info		9621		
	Oil Age	hrs	Client Info		0		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		Not Changd		
	Filter Changed		Client Info		Not Changd		
	Sample Status				SEVERE		
WEAR	Iron	ppm	ASTM D5185m	>1200	11671		
Gear wear is indicated.	Chromium	ppm	ASTM D5185m		▲ 101		
	Nickel	ppm	ASTM D5185m		<u> </u>		
	Titanium	ppm	ASTM D5185m		151		
	Silver	ppm	ASTM D5185m		0		
	Aluminum	ppm	ASTM D5185m	>100	1342		
	Lead	ppm	ASTM D5185m	>50	<1		
	Copper	ppm	ASTM D5185m	>50	26		
	Tin	ppm	ASTM D5185m	>5	2		
	Vanadium	ppm	ASTM D5185m		4		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION Elemental levels of silicon (Si) and aluminum (Al) indicate aluminasilicate (coarse dirt) ingress. There is a moderate concentration of water present in the oil.	Silicon	ppm	ASTM D5185m	>100	▲ 5480		
	Potassium	ppm	ASTM D5185m	>20	393		
	Water	%	ASTM D6304	>0.25	△ 0.533		
	ppm Water	ppm	ASTM D6304	>2500	<u>▲</u> 5330		
	Silt	scalar	*Visual	NONE	NONE		
	Debris	scalar	*Visual	NONE	NONE		
	Sand/Dirt	scalar	*Visual	NONE	NONE		
	Appearance	scalar	*Visual	NORML	NORML		
	Odor	scalar	*Visual	NORML	NORML		
	Emulsified Water	scalar	*Visual	>0.25	0.2%		
FLUID CONDITION	Sodium	ppm	ASTM D5185m	>170	178		
The oil viscosity is higher than normal. The oil is no longer serviceable due to the presence of contaminants.	Boron	ppm	ASTM D5185m	400	106		
	Barium	ppm	ASTM D5185m	200	9		
	Molybdenum	ppm	ASTM D5185m	12	15		
	Manganese	ppm	ASTM D5185m		▲ 78		
	Magnesium	ppm	ASTM D5185m	12	183		
	Calcium	ppm	ASTM D5185m		253		
	Phosphorus	ppm	ASTM D5185m		715		
	Zinc	ppm	ASTM D5185m		32		
	Sulfur	ppm	ASTM D5185m		74003		
Papart Id. WIII CLIA RMI ISCARI 06104442 /Canavatad. 05/01/0004 10:14:20\ Day: 1	Visc @ 40°C	cSt	ASTM D445	143	684		





Certificate L2367

Laboratory Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : ML0001961 Lab Number : 06194443

Unique Number: 11056566 Test Package : CONST (Additional Tests: KF)

Received : 29 May 2024 **Tested** : 31 May 2024 Diagnosed

: 31 May 2024 - Sean Felton

PO BOX 600 CHANTILLY, VA US 20153 Contact: SERVICE MANAGER

WILLIAM HAZEL

jimmy_elswick@wahazel.com T: (703)378-8300

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: