WEAR
CONTAMINATION
FLUID CONDITION

NORMAL ABNORMAL ATTENTION

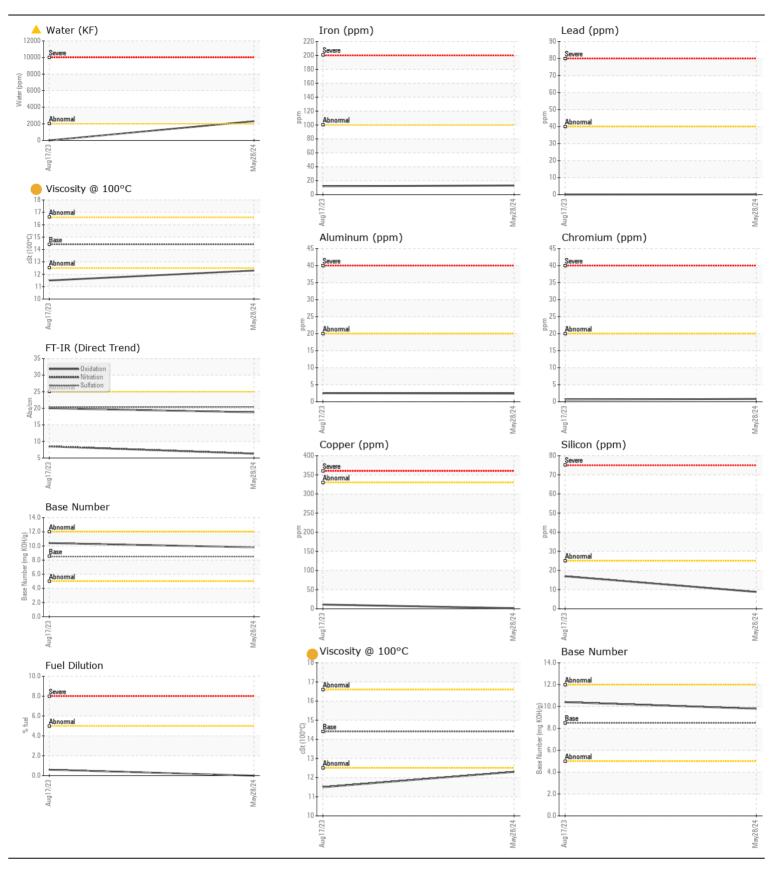
[SWA568842]

**AVANT 860 115761** 

Diesel Engine

DIESEL ENGINE OIL SAE 15W40 (--- GAL)

DIESEL ENGINE OIL SAE 15W40 ( GAL)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		VCP449524	VCP412126	
Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.	Sample Date		Client Info		28 May 2024	17 Aug 2023	
	Machine Age	hrs	Client Info		431	70	
	Oil Age	hrs	Client Info		0	70	
	Filter Age	hrs	Client Info		0	0	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		Changed	Changed	
	Sample Status				ABNORMAL	ATTENTION	
WEAR	Iron	ppm	ASTM D5185m	>100	13	12	
	Chromium	ppm	ASTM D5185m	>20	<1	<1	
All component wear rates are normal.	Nickel	ppm	ASTM D5185m	>4	<1	0	
	Titanium	ppm	ASTM D5185m		<1	<1	
	Silver	ppm	ASTM D5185m	>3	0	0	
	Aluminum	ppm	ASTM D5185m	>20	2	2	
	Lead	ppm	ASTM D5185m		- <1	0	
	Copper	ppm	ASTM D5185m		2	11	
	Tin	ppm	ASTM D5185m		- <1	<1	
	Vanadium	ppm	ASTM D5185m		<1	<1	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
	Silicon	nnm	ASTM D5185m	. 25	9	17	
CONTAMINATION	Potassium	ppm	ASTM D5185m		2	<1	
There is a light concentration of water present in the oil.	Fuel	ppm %	ASTM D3163111		<1.0	0.6	
	Water	%	ASTM D6304		< 1.0 ▲ 0.231	0.6	
	ppm Water		ASTM D6304		▲ 2310		
	Glycol	ppm %	*ASTM D2982	>2000	NEG	NEG	
	Soot %	%	*ASTM D2902	~3	0.1	0.1	
	Nitration	Abs/cm	*ASTM D7624		6.3	8.5	
	Sulfation	Abs/.1mm	*ASTM D7024		20.4	20.3	
	Silt	scalar	*Visual	NONE	NONE	NONE	
	Debris	scalar	*Visual	NONE	NONE	NONE	
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
	Appearance	scalar	*Visual	NORML	NORML	NORML	
	Odor	scalar	*Visual	NORML	NORML	NORML	
	Emulsified Water	scalar	*Visual	>0.2	▲ 0.2%	NEG	
TI LUD CONDITION	O a diama		AOTM DEADE	450	4		
FLUID CONDITION	Sodium	ppm	ASTM D5185m		4 67	5	
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.	Boron	ppm	ASTM D5185m		67	128	
	Barium	ppm	ASTM D5185m		0	4	
	Molybdenum	ppm	ASTM D5185m	100	46	44	
	Manganese	ppm	ASTM D5185m	150	<1	6	
	Magnesium	ppm	ASTM D5185m		483	825	
	Calcium	ppm	ASTM D5185m		1652	1396	
	Phosphorus	ppm	ASTM D5185m		986	719	
	Zinc	ppm	ASTM D5185m		1126	845	
	Sulfur	ppm Abo/1mm	ASTM D5185m		3361	3407	
	Oxidation	Abs/.1mm	*ASTM D7414		18.8	20.0	
	Base Number (BN)		ASTM D2896		9.8	10.4	
	Visc @ 100°C	cSt	ASTM D445	14.4	12.3	11.5	





Certificate L2367

Report Id: VOLVO0090 [WUSCAR] 06197406 (Generated: 06/07/2024 20:47:37) Rev: 2

Laboratory Sample No. Lab Number Unique Number: 11059529

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : VCP449524 : 06197406

Received **Tested** Diagnosed

: 03 Jun 2024 : 07 Jun 2024

: 07 Jun 2024 - Jonathan Hester Test Package: MOB 1 (Additional Tests: FuelDilution, Glycol, KF, TBN)

**ALTA EQUIPMENT COMPANY** 5151 DR MARTIN LUTHER KING BLVD FORT MYERS, FL

US 33905 Contact: TODD LARK tlark@altaequipfl.com

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: (239)481-3302

Contact/Location: TODD LARK - VOLVO0090