

Machine Id VOLVO L60H 621956 **Diesel Engine** {not provided} (--- GAL)

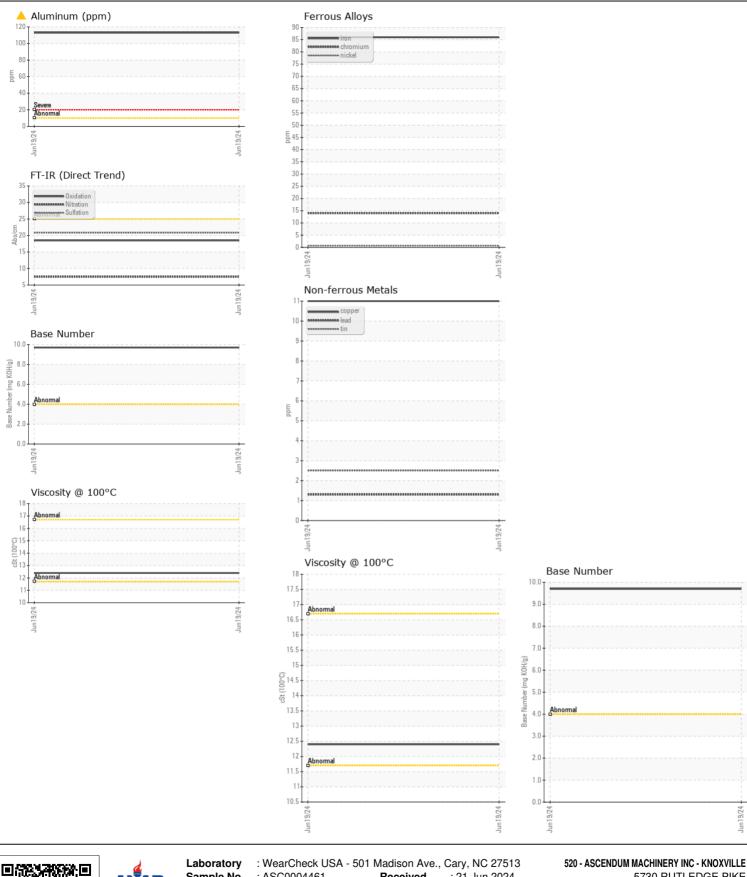
CONTAMINATION

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.	Sample Number		Client Info		ASC0004461		
	Sample Date		Client Info		19 Jun 2024		
	Machine Age	hrs	Client Info		448		
	Oil Age	hrs	Client Info		0		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				ABNORMAL		
WEAR	Iron			. 100	00		
VEAR Blower/turbocharger and/or piston wear is indicated. All other metal levels are typical for a new component breaking in.	Iron	ppm	ASTM D5185m		86		
	Chromium Nickel	ppm	ASTM D5185m		14		
	Titanium	ppm	ASTM D5185m ASTM D5185m	>10	<1		
	Silver	ppm		. 0	<1 0		
		ppm	ASTM D5185m		-		
	Aluminum	ppm	ASTM D5185m		▲ 113 1		
	Lead Copper	ppm	ASTM D5185m ASTM D5185m		1 11		
	Tin	ppm	ASTM D5185m		2		
		ppm		>10	2		
	Vanadium White Metal	ppm	ASTM D5185m *Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
		scalar	visual	NONE			
CONTAMINATION	Silicon	ppm	ASTM D5185m	>20	29		
	Potassium	ppm	ASTM D5185m		5		
There is no indication of any contamination in the oil.	Fuel		WC Method	>6.0	<1.0		
	Water		WC Method	>0.1	NEG		
	Glycol		WC Method		NEG		
	Soot %	%	*ASTM D7844	>3	0.2		
	Nitration	Abs/cm	*ASTM D7624	>20	7.5		
	Sulfation	Abs/.1mm	*ASTM D7415	>30	20.8		
	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	>0.1	NEG		
FLUID CONDITION							
	Sodium	ppm	ASTM D5185m		2		
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.	Boron	ppm	ASTM D5185m		63		
	Barium	ppm	ASTM D5185m		<1		
	Molybdenum	ppm	ASTM D5185m		46		
	Manganese	ppm	ASTM D5185m		7		
	Magnesium	ppm	ASTM D5185m		564		
	Calcium	ppm	ASTM D5185m		1618		
	Phosphorus	ppm	ASTM D5185m		866		
	Zinc	ppm	ASTM D5185m		1052		
	Sulfur	ppm	ASTM D5185m		3175		
	Oxidation	Abs/.1mm	*ASTM D7414	>25	18.5		
	Base Number (BN)	mg KOH/g	ASTM D2896		9.7		

Visc @ 100°C cSt

ASTM D445

12.4



Sample No. : ASC0004461 Received : 21 Jun 2024 5730 RUTLEDGE PIKE Lab Number : 06216572 Tested : 24 Jun 2024 KNOXVILLE, TN Unique Number : 11089436 Diagnosed : 24 Jun 2024 - Sean Felton US 37924 Test Package : CONST (Additional Tests: TBN) Contact: Riley Shipe Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. riley.shipe@ascendummachinery.com * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (865)525-0251