

Area

SEAGATE TERMINALS VOLVO L120H 633352 **Diesel Engine**

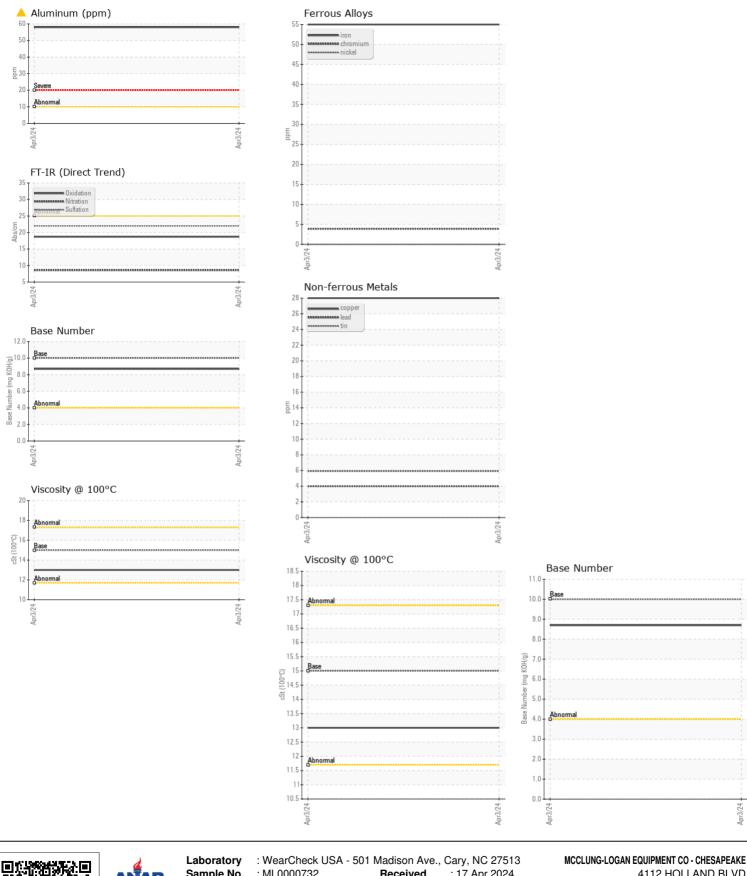
VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3 (--- GAL)

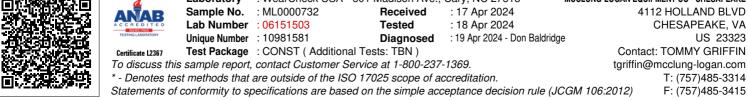
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.	Sample Number		Client Info		ML0000732		
	Sample Date		Client Info		03 Apr 2024		
	Machine Age	hrs	Client Info		817		
	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	ppm	ASTM D5185m		55		
The aluminum level is abnormal. All other metal levels are typical for a new component breaking in.	Chromium	ppm	ASTM D5185m		4		
	Nickel	ppm	ASTM D5185m	>10	0		
	Titanium	ppm	ASTM D5185m		<1		
	Silver	ppm	ASTM D5185m		1		
	Aluminum	ppm	ASTM D5185m		6 58		
	Lead	ppm	ASTM D5185m	>20	4		
	Copper	ppm	ASTM D5185m		28		
	Tin	ppm	ASTM D5185m	>10	6		
	Vanadium	ppm	ASTM D5185m		0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m	>20	16		
SONTAMINATION	Potassium	ppm	ASTM D5185m		9		
There is no indication of any contamination in the oil.	Fuel	ррпп	WC Method		<1.0		
	Water		WC Method		NEG		
	Glycol		WC Method	20.1	NEG		
	Soot %	%	*ASTM D7844	>3	0.6		
	Nitration	Abs/cm	*ASTM D7624	>20	8.6		
	Sulfation	Abs/.1mm	*ASTM D7415		22.0		
	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		4		
	Boron	ppm	ASTM D5185m	2.5	24		
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.	Barium	ppm	ASTM D5185m	0.0	20		
	Molybdenum	ppm	ASTM D5185m	0.7	47		
	Manganese	ppm	ASTM D5185m	0.0	2		
	Magnesium	ppm	ASTM D5185m	256	702		
	Calcium	ppm	ASTM D5185m	2057	1399		
	Phosphorus	ppm	ASTM D5185m	935	950		
	Zinc	ppm	ASTM D5185m	1223	1111		
	Sulfur	ppm	ASTM D5185m	4079	3369		
	Oxidation	Abs/.1mm	*ASTM D7414	>25	18.7		
	Base Number (BN)	mg KOH/g	ASTM D2896	10	8.7		
	Viac @ 100%C	oC+		15.0	10.0		

Visc @ 100°C cSt

ASTM D445 15.0

13.0





Contact/Location: TOMMY GRIFFIN - VOLVO0264 Page 2 of 2