

Machine Id VOLVO L70H 624677

Diesel Engine

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

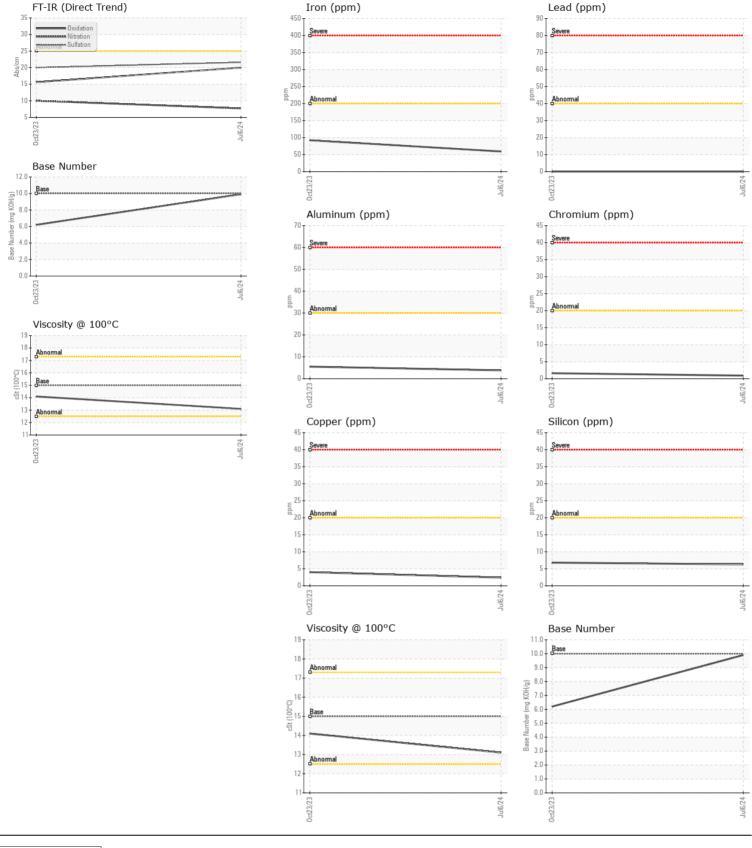
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		VCP451397	VCP419958	
Resample at the next service interval to monitor.	Sample Date		Client Info		06 Jul 2024	23 Oct 2023	
	Machine Age	hrs	Client Info		3028	1880	
	Oil Age	hrs	Client Info		0	0	
	Filter Age	hrs	Client Info		0	0	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		Changed	Changed	
	Sample Status				NORMAL	NORMAL	
WEAR	Iron	ppm	ASTM D5185m	>200	59	92	
All component wear rates are normal.	Chromium	ppm	ASTM D5185m	>20	<1	2	
	Nickel	ppm	ASTM D5185m	>5	<1	0	
	Titanium	ppm	ASTM D5185m		0	0	
	Silver	ppm	ASTM D5185m	>2	0	0	
	Aluminum	ppm	ASTM D5185m	>30	4	6	
	Lead	ppm	ASTM D5185m		0	0	
	Copper	ppm	ASTM D5185m	>20	2	4	
	Tin	ppm	ASTM D5185m	>20	<1	<1	
	Vanadium	ppm	ASTM D5185m		0	0	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
CONTAMINATION	Silicon	ppm	ASTM D5185m	>20	6	7	
	Potassium	ppm	ASTM D5185m		2	0	
There is no indication of any contamination in the oil.	Fuel	le le	WC Method		<1.0	<1.0	
	Water		WC Method		NEG	NEG	
	Glycol		WC Method		NEG	NEG	
	Soot %	%	*ASTM D7844	>3	0.2	0.3	
	Nitration	Abs/cm	*ASTM D7624	>20	7.7	10.0	
	Sulfation	Abs/.1mm	*ASTM D7415	>30	21.6	20.0	
	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	NEG	NEG	
FLUID CONDITION The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Sodium	ppm	ASTM D5185m		3	3	
	Boron	ppm	ASTM D5185m	2.5	27	16	
	Barium	ppm	ASTM D5185m	0.0	0	0	
	Molybdenum	ppm	ASTM D5185m	0.7	44	86	
	Manganese	ppm	ASTM D5185m	0.0	<1	2	
	Magnesium	ppm	ASTM D5185m	256	498	131	
	Calcium	ppm	ASTM D5185m	2057	1726	2146	
	Phosphorus	ppm	ASTM D5185m	935	985	930	
	Zinc	ppm	ASTM D5185m	1223	1154	1237	
	Sulfur	ppm	ASTM D5185m	4079	3529	3531	
	Oxidation	Abs/.1mm	*ASTM D7414	>25	20.0	15.6	
	Base Number (BN)	mg KOH/g	ASTM D2896	10	9.9	6.2	
	Vian @ 100°C	~C+		15.0	40.4	474	

Visc @ 100°C cSt

ASTM D445 15.0

14.1

13.1



ALTA EQUIPMENT COMPANY Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No. : VCP451397 Received 5151 DR MARTIN LUTHER KING BLVD : 10 Jul 2024 Lab Number : 06231908 Tested : 10 Jul 2024 FORT MYERS, FL Unique Number : 11115401 Diagnosed : 10 Jul 2024 - Wes Davis US 33905 Test Package : MOB 1 (Additional Tests: TBN) Contact: TODD LARK Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. tlark@altaequipfl.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: (239)481-3302

Contact/Location: TODD LARK - VOLVO0090 Page 2 of 2