

[SPM687839 US STEEL]

VOLVO A60H 340125

Component Diesel Engine

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

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		VCP436320	VCP366807	
	Sample Date		Client Info		12 Apr 2024	27 Aug 2022	
	Machine Age	hrs	Client Info		8696	6235	
	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	>100	16	12	
	Chromium	ppm	ASTM D5185m	>20	<1	<1	
All component wear rates are normal.	Nickel	ppm	ASTM D5185m	>2	0	<1	
	Titanium	ppm	ASTM D5185m		0	0	
	Silver	ppm	ASTM D5185m	>2	0	0	
	Aluminum	ppm	ASTM D5185m		2	2	
	Lead	ppm	ASTM D5185m		- <1	<1	
	Copper	ppm	ASTM D5185m		<1	17	
	Tin	ppm	ASTM D5185m		1	<1	
	Vanadium	ppm	ASTM D5185m	10	<1	0	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
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CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	4	6	
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m	>20	0	1	
	Fuel		WC Method	>6.0	<1.0	<1.0	
	Water		WC Method	>0.2	NEG	NEG	
	Glycol		WC Method		NEG	NEG	
	Soot %	%	*ASTM D7844	>3	0.4	0.3	
	Nitration	Abs/cm	*ASTM D7624	>20	8.1	7.9	
	Sulfation	Abs/.1mm	*ASTM D7415	>30	22.0	22.7	
	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	Sodium	ppm	ASTM D5185m	>158	2	4	
	Boron	ppm	ASTM D5185m	250	333	30	
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185m	10	0	0	
	Molybdenum	ppm	ASTM D5185m	100	79	49	
	Manganese	ppm	ASTM D5185m		<1	<1	
	Magnesium	ppm	ASTM D5185m	450	412	650	
	Calcium	ppm	ASTM D5185m		1537	1314	
	Phosphorus	ppm	ASTM D5185m		1038	971	
	Zinc	ppm	ASTM D5185m		1204	1176	
	Sulfur	ppm	ASTM D5185m		3768	2964	
	Oxidation	Abs/.1mm	*ASTM D7414		16.1	18.7	

Base Number (BN) mg KOH/g ASTM D2896 8.5

ASTM D445 14.4

Visc @ 100°C cSt

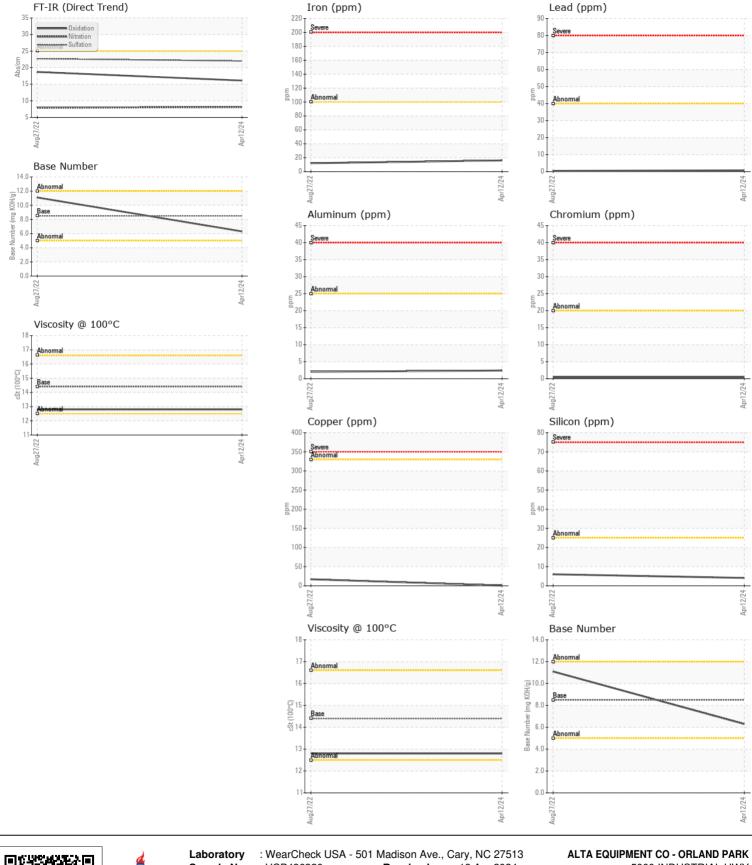
11.1

12.8

6.3

12.8

WEAR NORMAL CONTAMINATION NORMAL FLUID CONDITION NORMAL



Sample No. : VCP436320 Received 5000 INDUSTRIAL HWY : 19 Apr 2024 Lab Number : 06153899 Tested GARY, IN : 22 Apr 2024 Unique Number : 10989322 Diagnosed : 22 Apr 2024 - Wes Davis US 46406 Test Package : MOB 1 (Additional Tests: TBN) Contact: DAVE ENG Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. DAVE.ENG@ALTG.COM * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (312)350-2560 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: