

Machine Id

VOLVO L60H 623353

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. Resample at the next service interval to monitor.	Sample Number		Client Info		VKC0001329		
	Sample Date		Client Info		17 Jun 2024		
	Machine Age	hrs	Client Info		1072		
	Oil Age	hrs	Client Info		500		
	Filter Age	hrs	Client Info		500		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				ABNORMAL		
WEAR The aluminum level is abnormal. All other component wear rates are normal.	Iron	ppm	ASTM D5185m	>100	31		
	Chromium	ppm	ASTM D5185m		2		
	Nickel	ppm	ASTM D5185m		0		
	Titanium	ppm	ASTM D5185m		2		
	Silver	ppm	ASTM D5185m	>2	0		
	Aluminum	ppm	ASTM D5185m		▲ 11		
	Lead	ppm	ASTM D5185m		<1		
	Copper	ppm	ASTM D5185m		7		
	Tin	ppm	ASTM D5185m	>10	2		
	Vanadium	ppm	ASTM D5185m		<1		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m		17		
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m		2		
	Fuel		WC Method	>6.0	<1.0		
	Water		WC Method	>0.1	NEG		
	Glycol		WC Method	-	NEG		
	Soot %	%	*ASTM D7844		0.5		
	Nitration	Abs/cm	*ASTM D7624		8.4		
	Sulfation	Abs/.1mm	*ASTM D7415		21.5		
	Silt	scalar	*Visual	NONE	NONE		
	Debris Sand/Dirt	scalar	*Visual *Visual	NONE NONE	NONE NONE		
		scalar	*Visual	NORML	NORML		
	Appearance Odor	scalar scalar	*Visual	NORML	NORML		
	Emulsified Water		*Visual	>0.1	NEG		
		Scalai	visuai	20.1			
FLUID CONDITION	Sodium	ppm	ASTM D5185m		4		
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Boron	ppm	ASTM D5185m	2.5	43		
	Barium	ppm	ASTM D5185m	0.0	3		
	Molybdenum	ppm	ASTM D5185m	0.7	30		
	Manganese	ppm	ASTM D5185m	0.0	4		
	Magnesium	ppm	ASTM D5185m	256	482		
	Calcium	ppm	ASTM D5185m	2057	1864		
	Phosphorus	ppm	ASTM D5185m	935	987		
	Zinc	ppm	ASTM D5185m		1198		
	Sulfur	ppm	ASTM D5185m	4079	3940		
	Oxidation	Abs/.1mm	*ASTM D7414	>25	19.0		

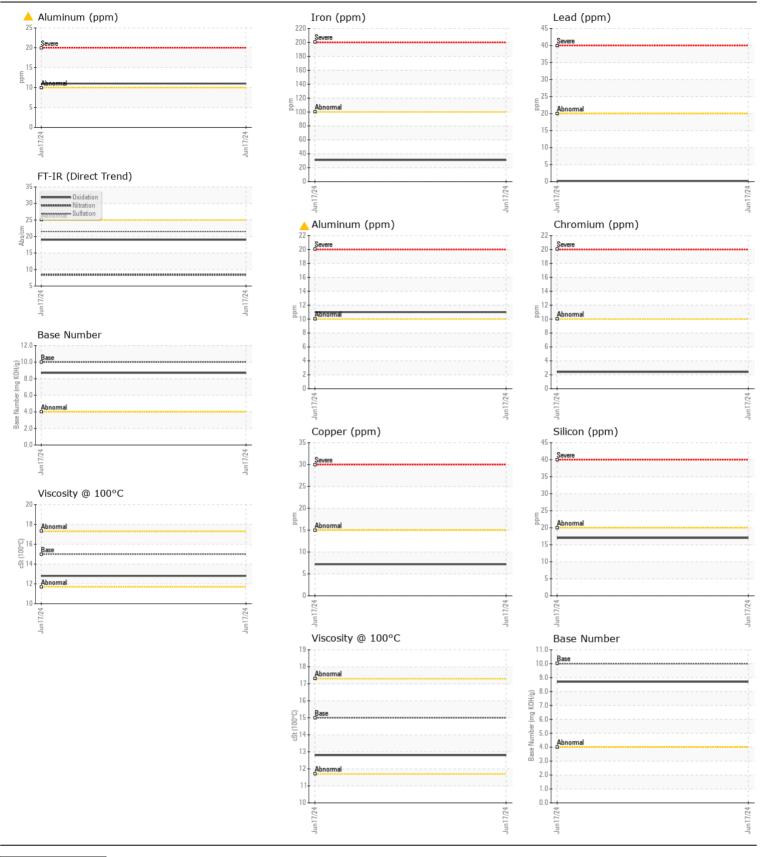
Base Number (BN) mg KOH/g ASTM D2896 10

ASTM D445 15.0

Visc @ 100°C cSt

8.7

12.8



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 **GW VAN KEPPEL CO** Sample No. : VKC0001329 Received 1801 NORTH 9TH ST : 24 Jun 2024 Ċ Lab Number : 06219077 Tested KANSAS CITY, KS : 25 Jun 2024 Unique Number : 11097274 Diagnosed : 26 Jun 2024 - Jonathan Hester US 66110 Test Package : MOBCE (Additional Tests: TBN) Contact: PAT SAUSE Certificate L2367 26 To discuss this sample report, contact Customer Service at 1-800-237-1369. psause@vankeppel.com * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. Т: Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (913)281-4815

Contact/Location: PAT SAUSE - GWVKAN Page 2 of 2