

WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL NORMAL

Area

[DEHN DEMO]

VOLVO ECR355F 314896

Diesel Engine

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

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor. Please specify the component make and model with your next sample.	Sample Number		Client Info		VKC0001321		
	Sample Date		Client Info		11 Jun 2024		
	Machine Age	hrs	Client Info		270		
	Oil Age	hrs	Client Info		270		
	Filter Age	hrs	Client Info		270		
	Oil Changed		Client Info		Not Changd		
	Filter Changed		Client Info		Not Changd		
	Sample Status				NORMAL		
WEAR	Iron	ppm	ASTM D5185m	>100	9		
WEAT	Chromium	ppm	ASTM D5185m		<1		
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		6		
	Titanium	ppm	ASTM D5185m		0		
	Silver	ppm	ASTM D5185m	>2	<1		
	Aluminum	ppm	ASTM D5185m		17		
	Lead	ppm	ASTM D5185m		1		
	Copper	ppm	ASTM D5185m		11		
	Tin	ppm	ASTM D5185m	>15	1		
	Vanadium	ppm	ASTM D5185m		0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m		12		
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m		4		
	Fuel		WC Method	>6.0	<1.0		
	Water		WC Method	>0.2	NEG		
	Glycol		WC Method		NEG		
	Soot %	%	*ASTM D7844		0.1		
	Nitration	Abs/cm	*ASTM D7624	>20	6.0		
	Sulfation	Abs/.1mm	*ASTM D7415		16.4		
	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	>0.2	NEG		
FLUID CONDITION	Sodium	ppm	ASTM D5185m		3		
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Boron		ASTM D5185m	2.5	21		
	Barium	ppm	ASTM D5185m		8		
	Molybdenum	ppm	ASTM D5185m		7		
	Manganese	ppm	ASTM D5185m		2		
	Magnesium	ppm	ASTM D5185m	256	232		
	Calcium	ppm	ASTM D5185m		2015		
	Phosphorus	ppm	ASTM D5185m	935	977		
	Zinc	ppm	ASTM D5185m	1223	1078		
	Sulfur	ppm	ASTM D5185m	4079	4867		
	Oxidation	Abs/.1mm	*ASTM D7414	>25	10.1		
	Base Number (BN)	mg KOH/g	ASTM D2896	10	7.4		
	Visc @ 100°C	cSt	ASTM D445	15.0	12.8		





Laboratory Sample No.

Lab Number : 06212863 Unique Number : 11085727

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : VKC0001321 Received **Tested**

Diagnosed Test Package: MOBCE (Additional Tests: TBN)

: 19 Jun 2024

: 17 Jun 2024

: 19 Jun 2024 - Angela Borella

KANSAS CITY, KS US 66110 Contact: PAT SAUSE psause@vankeppel.com

GW VAN KEPPEL CO

1801 NORTH 9TH ST

To discuss this sample report, contact Customer Service at 1-800-237-1369. * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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