



[SPM661173 HERC] VOLVO ECR145EL 311879 Component

Diesel Engine

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

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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		VCP454235		
	Sample Date		Client Info		15 Apr 2024		
	Machine Age	hrs	Client Info		2911		
Service interval to monitor.	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 The aluminum level is abnormal. All other component wear rates are normal.	Iron	ppm	ASTM D5185m		31		
	Chromium	ppm	ASTM D5185m	>10	3		
	Nickel	ppm	ASTM D5185m	>10	2		
	Titanium	ppm	ASTM D5185m		<1		
	Silver	ppm	ASTM D5185m		<1		
	Aluminum	ppm	ASTM D5185m		🔺 18		
	Lead	ppm	ASTM D5185m		1		
	Copper	ppm	ASTM D5185m	>15	8		
	Tin	ppm	ASTM D5185m	>10	2		
	Vanadium	ppm	ASTM D5185m		<1		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
	0'''				•		
CONTAMINATION	Silicon	ppm	ASTM D5185m		8		
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m		2		
	Fuel		WC Method		<1.0 NEG		
	Water		WC Method WC Method	>0.1			
	Glycol Soot %	%	*ASTM D7844	. 0	NEG 0.2		
	Nitration	Abs/cm	*ASTM D7644	>3 >20	7.5		
	Sulfation	Abs/.1mm	*ASTM D7024		20.8		
	Silt	scalar	*Visual	NONE	20.8 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		
		Scalai	visual	20.1			
FLUID CONDITION	Sodium	ppm	ASTM D5185m		2		
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.	Boron	ppm	ASTM D5185m	2.5	323		
	Barium	ppm	ASTM D5185m	0.0	<1		
	Molybdenum	ppm	ASTM D5185m	0.7	84		
	Manganese	ppm	ASTM D5185m		2		
	Magnesium	ppm	ASTM D5185m	256	335		
	Calcium	ppm	ASTM D5185m	2057	1503		
	Phosphorus	ppm	ASTM D5185m	935	1109		
	Zinc	ppm	ASTM D5185m		1205		
	Sulfur	ppm	ASTM D5185m	4079	3778		
	Oxidation		*ASTM D7414		15.1		
		KOLU		10			

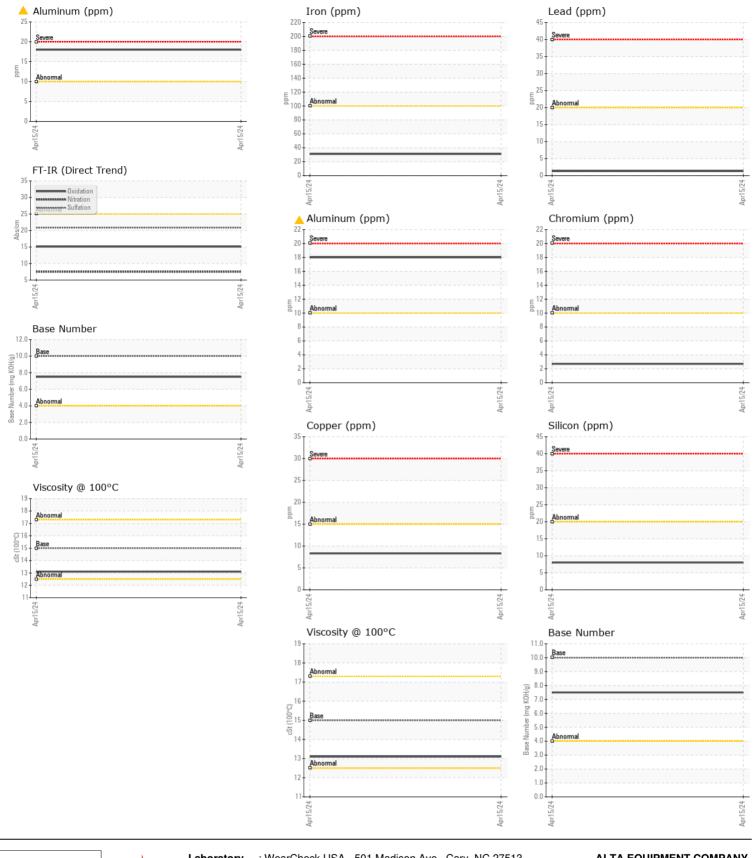
Base Number (BN) mg KOH/g ASTM D2896 10

ASTM D445 15.0

Visc @ 100°C cSt

7.5

13.1



ALTA EQUIPMENT COMPANY Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No. : VCP454235 Received 5210 REESE ROAD : 18 Apr 2024 É Lab Number : 06152717 Tested DAVIE, FL : 18 Apr 2024 Unique Number : 10982795 Diagnosed : 22 Apr 2024 - Don Baldridge US 33314 Test Package : MOB 1 (Additional Tests: TBN) Contact: N. FACEY Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. nfacey@altaequipfl.com * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (954)581-4744 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (954)583-0318

Contact/Location: N. FACEY - VOLVO0095 Page 2 of 2