



VOLVO EC480 315121

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	Sample Number		Client Info		VCP440173	VCP422915	
	Sample Date		Client Info		17 Jun 2024	30 Jun 2023	
at the next service interval to monitor.	Machine Age	hrs	Client Info		1782	593	
	Oil Age	hrs	Client Info		0	500	
	Filter Age	hrs	Client Info		0	0	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		Changed	Changed	
	Sample Status				ABNORMAL	ABNORMAL	
			400	_			
WEAR The copper level has decreased, but is still abnormal. All other component wear rates are normal.	Iron	ppm	ASTM D5185m		7	5	
	Chromium	ppm	ASTM D5185m		0	0	
	Nickel	ppm	ASTM D5185m	>10	0	0	
	Titanium	ppm	ASTM D5185m	0	0	0	
	Silver	ppm	ASTM D5185m		0	0	
	Aluminum	ppm	ASTM D5185m		1	6	
	Lead	ppm	ASTM D5185m		0	5	
	Copper	ppm	ASTM D5185m		▲ 28	4 98	
	Tin	ppm	ASTM D5185m	>10	<1	1	
	Vanadium	ppm	ASTM D5185m		<1	0	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
CONTAMINATION	Silicon	ppm	ASTM D5185m	>20	9	29	
	Potassium	ppm	ASTM D5185m		0	4	
There is no indication of any contamination in the oil.	Fuel	%	ASTM D3524	>6.0	<1.0	0.6	
	Water		WC Method		NEG	NEG	
	Glycol		WC Method		NEG	NEG	
	Soot %	%	*ASTM D7844	>3	0.1	0.1	
	Nitration	Abs/cm	*ASTM D7624	>20	9.9	10.1	
	Sulfation	Abs/.1mm	*ASTM D7415		22.6	20.8	
	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	>0.1	NEG	NEG	
FLUID CONDITION	Sodium	ppm	ASTM D5185m		1	3	
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.	Boron	ppm	ASTM D5185m		10	41	
	Barium	ppm	ASTM D5185m		0	13	
	Molybdenum	ppm	ASTM D5185m		55	96	
	Manganese	ppm		0.0	<1	2	
	Magnesium	ppm	ASTM D5185m		523	272	
	Calcium	ppm		2057	1780	2384	
	Phosphorus	ppm	ASTM D5185m		939	1229	
	Zinc	ppm	ASTM D5185m		1191	1429	
	Sulfur	ppm	ASTM D5185m		3223	4822	
	Oxidation	Abs/.1mm	*ASTM D7414	>25	20.0	17.0	
	D NI I (DIN		LOTH DOGO	10		0.4	

6.4

11.0

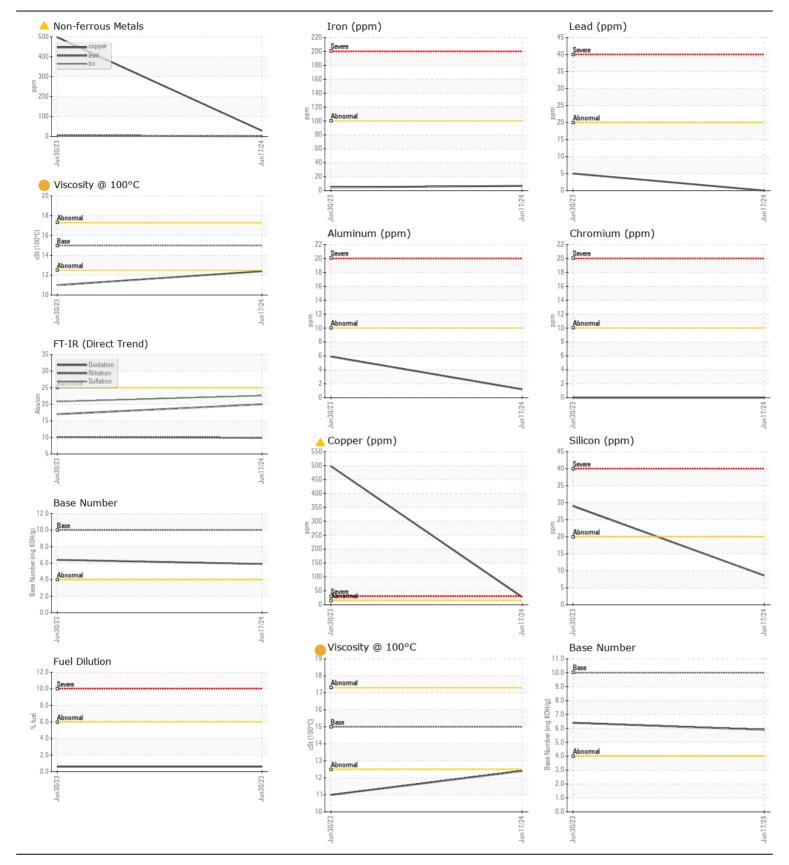
5.9

12.4

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

ASTM D445 15.0

Visc @ 100°C cSt



ALTA EQUIPMENT/FLAGLER CONSTRUCTION EQUIPMENT LLC Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No. : VCP440173 Received 8418 PALM RIVER ROAD : 24 Jun 2024 团 Lab Number : 06217756 Tested TAMPA, FL : 25 Jun 2024 : 25 Jun 2024 - Don Baldridge US 33619 Unique Number : 11090620 Diagnosed Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel, TBN) Contact: KENNY HANEY Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. khaney@flaglerce.com * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (813)630-0077 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (813)630-2233

Contact/Location: KENNY HANEY - VOLVO0093