



[SPM717839 MCIRON] Wachine Id VOLVO A45GGS 352632

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		VCP444194	VCP304651	VCP433413
	Sample Date		Client Info		03 Jun 2024	08 Mar 2024	12 Oct 2023
	Machine Age	hrs	Client Info		3995	3423	2965
	Oil Age	hrs	Client Info		0	0	0
	Filter Age	hrs	Client Info		0	0	0
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Changed
	Sample Status				NORMAL	ABNORMAL	ABNORMAL
WEAR All component wear rates are normal.	Iron	ppm	ASTM D5185m	>100	17	18	16
	Chromium	ppm	ASTM D5185m	>20	<1	0	<1
	Nickel	ppm	ASTM D5185m	>2	3	4	4
	Titanium	ppm	ASTM D5185m		<1	0	<1
	Silver	ppm	ASTM D5185m	>2	0	0	0
	Aluminum	ppm	ASTM D5185m	>25	5	2	2
	Lead	ppm	ASTM D5185m	>40	<1	<1	<1
	Copper	ppm	ASTM D5185m	>330	3	3	2
	Tin	ppm	ASTM D5185m	>15	<1	0	<1
	Vanadium	ppm	ASTM D5185m		0	0	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	6	3	4
There is no indication of any contention in the cil	Potassium	ppm	ASTM D5185m	>20	2	0	4
There is no indication of any contamination in the oil.	Fuel		WC Method	>6.0	<1.0	<1.0	<1.0
	Water		WC Method	>0.2	NEG	NEG	NEG
	Glycol		WC Method		NEG	NEG	NEG
	Soot %	%	*ASTM D7844	>3	0.5	0.6	0.7
	Nitration	Abs/cm	*ASTM D7624	>20	8.6	8.7	8.2
	Sulfation	Abs/.1mm	*ASTM D7415	>30	19.8	19.5	19.9
	Silt	scalar	*Visual	NONE	NONE	NONE	NONE
	Debris	scalar	*Visual	NONE	NONE	NONE	NONE
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
	Odor	scalar	*Visual	NORML	NORML	NORML	NORML
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
FLUID CONDITION	Sodium	ppm	ASTM D5185m	>158	28	9 7	1 25
	Boron	ppm	ASTM D5185m	250	2	0	0
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		0	0	0
	Molybdenum	ppm	ASTM D5185m	100	75	59	60
	Manganese	ppm	ASTM D5185m		<1	0	<1
	Magnesium	ppm	ASTM D5185m	450	1234	1003	926
	Calcium	ppm	ASTM D5185m		1334	1091	1032
	Phosphorus	ppm	ASTM D5185m		1262	1080	964
	Zinc	ppm	ASTM D5185m		1597	1297	1200
	Sulfur	ppm	ASTM D5185m		3715	3669	3424
	Oxidation	Abs/.1mm	*ASTM D7414		15.0	14.4	14.1
	Base Number (BN)				8.8	7.8	8.7
		-					

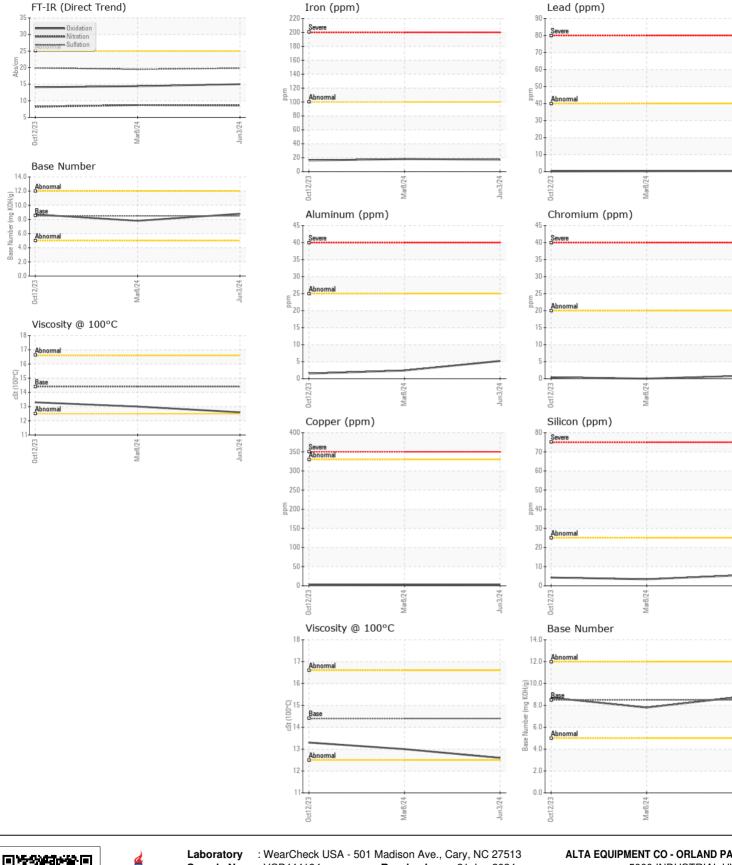
Visc @ 100°C cSt

ASTM D445 14.4

13.0

13.3

12.6



ALTA EQUIPMENT CO - ORLAND PARK Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No. : VCP444194 Received 5000 INDUSTRIAL HWY : 21 Jun 2024 Lab Number : 06216535 Tested GARY, IN : 24 Jun 2024 Unique Number : 11089399 Diagnosed : 24 Jun 2024 - Wes Davis US 46406 Test Package : MOB 1 (Additional Tests: TBN) Contact: MARK DEROSA Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. mark.derosa@altg.com * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (248)356-5200 F: Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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