

[SWO-072394] Machine Id OLVO A45G 352639

Diesel Engine

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

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RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		VCP443924	VCP441454	VCP427458
	Sample Date		Client Info		29 May 2024	24 Jan 2024	23 Oct 2023
	Machine Age	hrs	Client Info		5870	5434	4956
	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	ATTENTION	NORMAL
WEAR All component wear rates are normal.	Iron	ppm	ASTM D5185m	>100	3	5	2
	Chromium	ppm	ASTM D5185m		0	0	0
	Nickel	ppm	ASTM D5185m		<1	<1	<1
	Titanium	ppm	ASTM D5185m		0	0	0
	Silver	ppm	ASTM D5185m	>2	<1	<1	0
	Aluminum	ppm	ASTM D5185m		2	2	1
	Lead	ppm	ASTM D5185m		0	1	<1
	Copper	ppm	ASTM D5185m		2	1	1
	Tin	ppm	ASTM D5185m		- <1	<1	<1
	Vanadium	ppm	ASTM D5185m	10	0	0	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m		4	4	3
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m		3	2	0
	Fuel		WC Method		<1.0	0.5	<1.0
	Water		WC Method	>0.2	NEG	NEG	NEG
	Glycol		WC Method		NEG	NEG	NEG
	Soot %	%	*ASTM D7844		0.1	0.2	0.1
	Nitration	Abs/cm	*ASTM D7624	>20	6.0	6.7	6.2
	Sulfation	Abs/.1mm	*ASTM D7415		21.1	20.0	18.3
	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		3	1	<1
	Boron	ppm	ASTM D5185m	2.5	74	71	20
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	<1	0	0
	Molybdenum	ppm	ASTM D5185m	0.7	40	41	49
	Manganese	ppm	ASTM D5185m	0.0	<1	<1	<1
	Magnesium	ppm	ASTM D5185m	256	500	533	774
	Calcium	ppm	ASTM D5185m	2057	1642	1688	1182
	Phosphorus	ppm	ASTM D5185m	935	982	1001	980
	Zinc	ppm	ASTM D5185m	1223	1125	1167	1181
	Sulfur	ppm	ASTM D5185m	4079	3496	3169	3112
	Oxidation	Abs/.1mm	*ASTM D7414	>25	19.0	18.3	14.9
	Base Number (BN)	mg KOH/g	ASTM D2896	10	10.2	10.9	8.6
	Vice @ 100°C	~C+		100	105	- 10.0	10.1

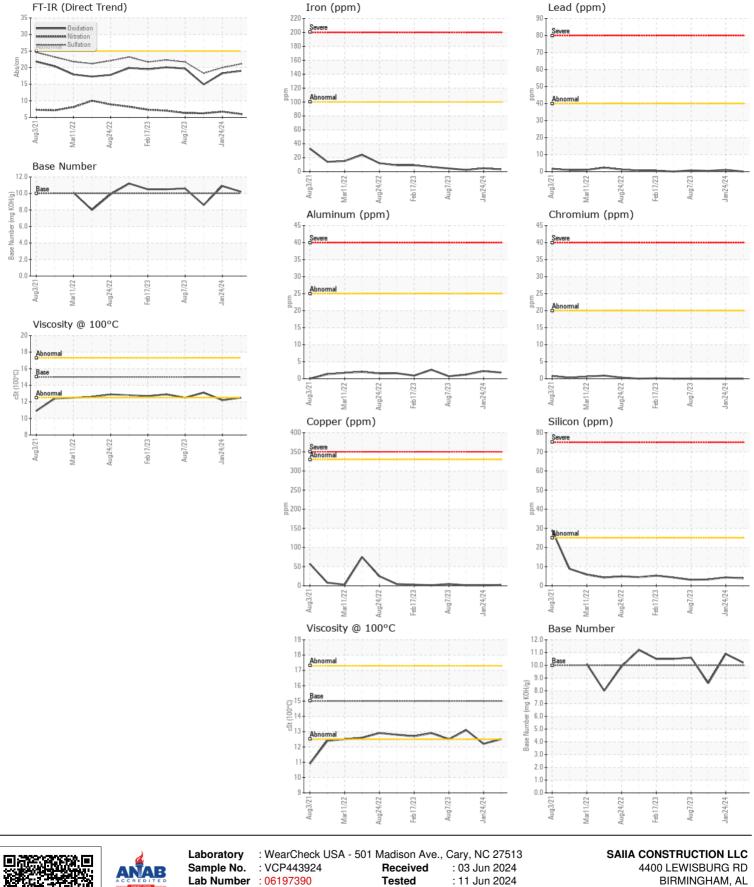
Visc @ 100°C cSt

ASTM D445 15.0

12.2

13.1

12.5



 Unique Number
 : 11059513
 Diagnosed
 : 11 Jun 2024 - Jonathan Hester
 US 35207

 Certificate L2367
 Test Package
 : MOB 1 (Additional Tests: TBN)
 Contact: STEPHANI BRITTON

 To discuss this sample report, contact Customer Service at 1-800-237-1369.
 sbritton@saiia.com;doug.bogart@wearcheck.com

 * - Denotes test methods that are outside of the ISO 17025 scope of accreditation.
 T: (205)943-2268

 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)
 F: (205)943-2269

Contact/Location: STEPHANI BRITTON - SAIBIR