WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL

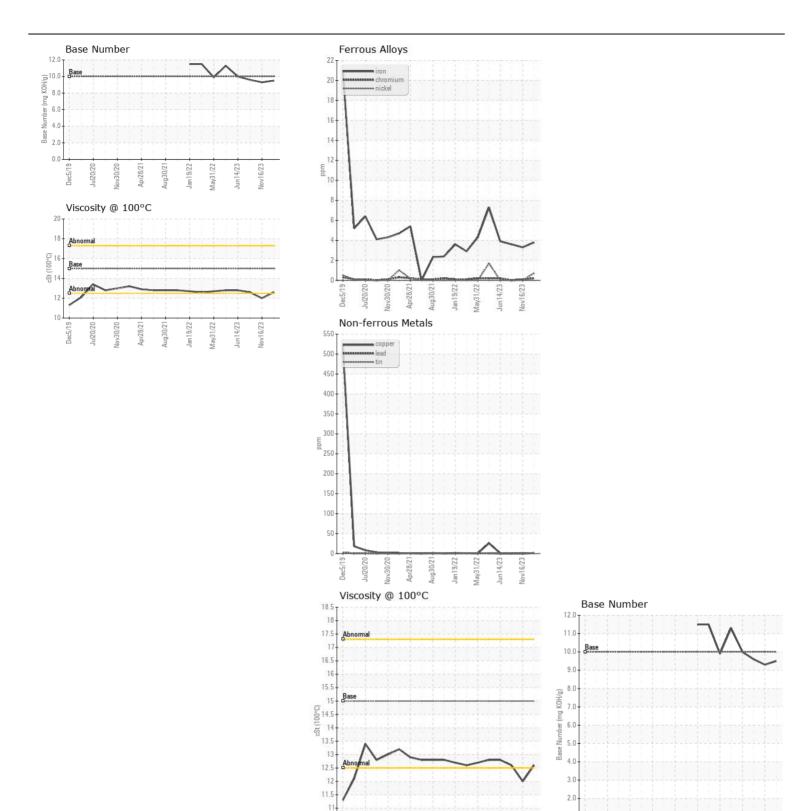


VOLVO L180H 5271

Component Diesel Engine

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

VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3 (GAL)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		ASC0003396	ASC0003118	,
Resample at the next service interval to monitor.	Sample Date		Client Info		07 Feb 2024	16 Nov 2023	11 Sep 2023
	Machine Age	hrs	Client Info		10510	10510	10018
	Oil Age	hrs	Client Info		11007	10018	0
	Filter Age	hrs	Client Info		11007	10018	0
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Changed
	Sample Status				NORMAL	NORMAL	NORMAL
WEAR	Iron	ppm	ASTM D5185m	>200	4	3	4
W=7111	Chromium	ppm	ASTM D5185m	>20	<1	<1	0
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		<1	0	0
	Titanium	ppm	ASTM D5185m		<1	0	0
	Silver	ppm	ASTM D5185m	>2	0	0	0
	Aluminum	ppm	ASTM D5185m		2	1	<1
	Lead	ppm	ASTM D5185m		- <1	0	0
	Copper	ppm	ASTM D5185m		1	<1	<1
	Tin	ppm		>20	<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	~2∩	4	4	5
CONTAININATION	Potassium	ppm	ASTM D5185m		2	2	0
There is no indication of any contamination in the oil.	Fuel	ррпп	WC Method		<1.0	1.2	<1.0
	Water		WC Method		NEG	NEG	NEG
	Glycol		WC Method	<i>></i> 0.2	NEG	NEG	NEG
	Soot %	%	*ASTM D7844	\ 3	0.1	0.1	0.2
	Nitration	Abs/cm	*ASTM D7624	>20	6.6	6.3	6.7
	Sulfation	Abs/.1mm	*ASTM D7415		21.9	21.4	21.1
	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		0	0	2
TEGID CONDITION	Boron	ppm	ASTM D5185m	2.5	48	39	41
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		13	2	0
	Molybdenum	ppm	ASTM D5185m		38	36	43
	Manganese	ppm	ASTM D5185m		<1	0	<1
	Magnesium	ppm	ASTM D5185m		456	432	537
	Calcium	ppm	ASTM D5185m		1506	1484	1850
	Phosphorus	ppm	ASTM D5185m		946	774	958
	Zinc	ppm	ASTM D5185m		1023	977	1177
	Sulfur	ppm	ASTM D5185m		3243	2849	3580
	Oxidation	Abs/.1mm	*ASTM D7414		19.8	19.4	18.7
	Base Number (BN)				9.5	9.3	9.6
	Visc @ 100°C	cSt	ASTM D445		12.6	12.0	12.6







Laboratory Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Lab Number : 06085695

Unique Number : 10873140 Test Package : CONST (Additional Tests: TBN)

: ASC0003396

10.5 10

Received **Tested** Diagnosed

: 12 Feb 2024 : 12 Feb 2024 - Wes Davis

: 12 Feb 2024

PARTON LUMBER CO 251 PARTON RD RUTHERFORDTON, NC US 28139

Contact: SERVICE MANAGER

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)

T:

F:

Nov16/23