



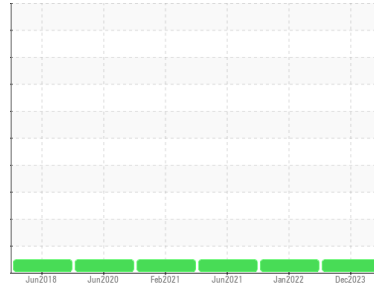
OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
5389 VOLVO L150H 5389
 Component
Diesel Engine
 Fluid
VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3 (--- GAL)



DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		DJJ0009443	DJJ0009118	DJJ05286742
Sample Date	Client Info		29 Dec 2023	13 Jan 2022	22 Jun 2021
Machine Age	hrs	Client Info	14865	9460	8665
Oil Age	hrs	Client Info	250	400	0
Oil Changed	Client Info		Changed	Changed	N/A
Sample Status			NORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>6.0	<1.0	<1.0	<1.0
Water	WC Method	>0.1	NEG	NEG	NEG
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	<1	6	7
Chromium	ppm	ASTM D5185m >10	<1	<1	<1
Nickel	ppm	ASTM D5185m >10	0	<1	0
Titanium	ppm	ASTM D5185m	0	<1	<1
Silver	ppm	ASTM D5185m >2	0	<1	0
Aluminum	ppm	ASTM D5185m >10	2	2	1
Lead	ppm	ASTM D5185m >20	0	<1	<1
Copper	ppm	ASTM D5185m >15	0	<1	<1
Tin	ppm	ASTM D5185m >10	0	<1	<1
Antimony	ppm	ASTM D5185m	---	0	0
Vanadium	ppm	ASTM D5185m	0	<1	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 2.5	24	127	48
Barium	ppm	ASTM D5185m 0.0	0	0	0
Molybdenum	ppm	ASTM D5185m 0.7	60	20	34
Manganese	ppm	ASTM D5185m 0.0	0	<1	<1
Magnesium	ppm	ASTM D5185m 256	816	673	539
Calcium	ppm	ASTM D5185m 2057	1112	1441	1673
Phosphorus	ppm	ASTM D5185m 935	982	958	964
Zinc	ppm	ASTM D5185m 1223	1138	1041	1131
Sulfur	ppm	ASTM D5185m 4079	3446	3172	2794

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	2	4	4
Sodium	ppm	ASTM D5185m	1	6	2
Potassium	ppm	ASTM D5185m >20	1	3	<1

INFRA-RED

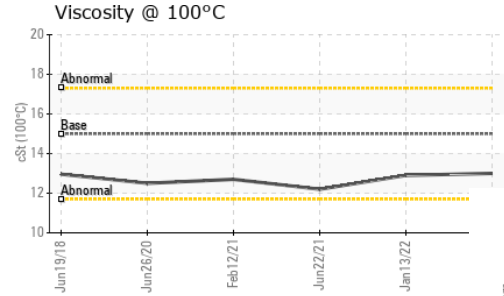
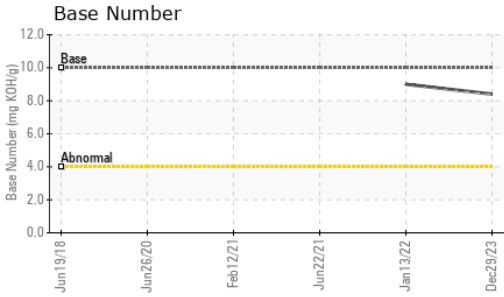
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	0.1	0.1	0.1
Nitration	Abs/cm	*ASTM D7624 >20	5.7	7.7	7.6
Sulfation	Abs/.1mm	*ASTM D7415 >30	17.2	20.0	22.6

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	12.7	13.2	19.6
Base Number (BN)	mg KOH/g	ASTM D2896 10	8.4	9.0	---



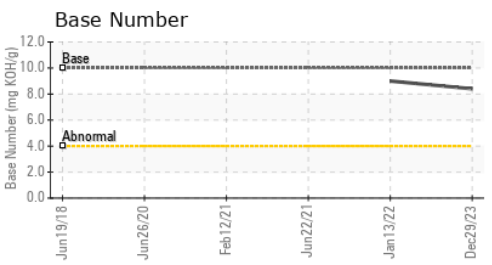
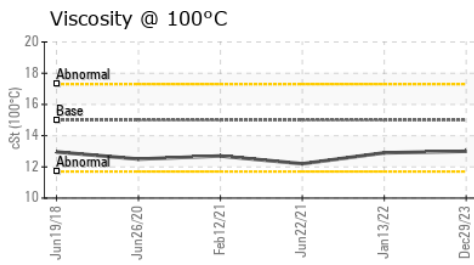
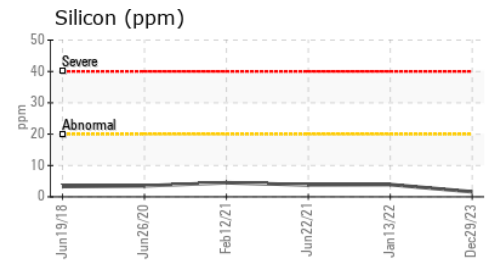
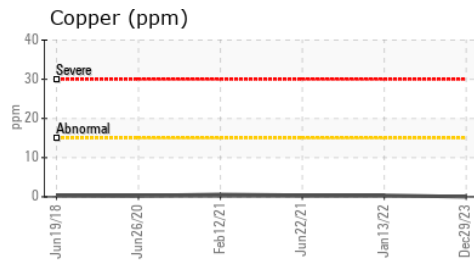
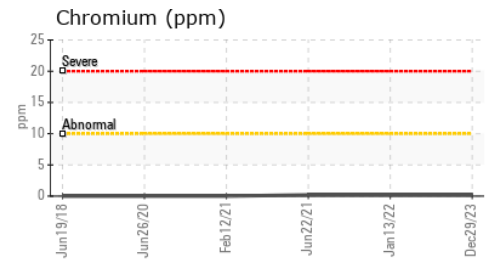
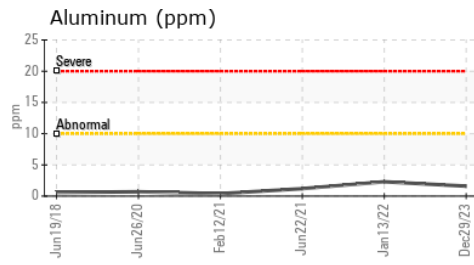
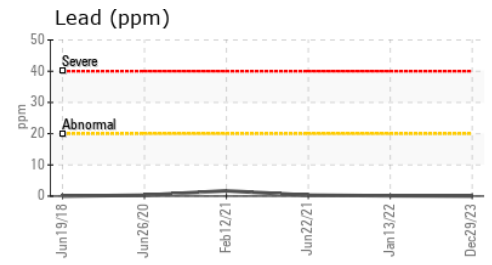
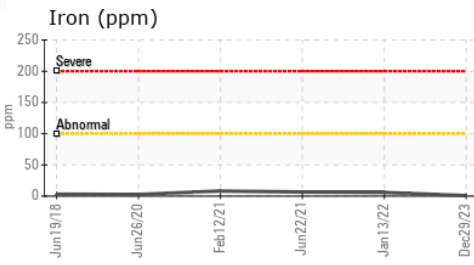
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
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
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	15.0	13.0	12.9	12.2

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DJJ0009443 **Recieved** : 09 Jan 2024
Lab Number : 06055744 **Diagnosed** : 10 Jan 2024
Unique Number : 10821693 **Diagnostician** : Sean Felton
Test Package : MOBCE (Additional Tests: TBN)

WESTERN METALS RECYCLING - SALT LAKE CITY
 4221 WEST 700 SOUTH
 SALT LAKE CITY, UT
 US 84104
 Contact: TIMOTHY SHEFFIELD
 timothy.sheffield@wmrecycling.com
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Certificate L2367
 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)