



ASCENDUM

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
Ascendum Machinery/500 Hour CSA
Machine Id
VOLVO L70H 2169 (S/N 624365)
Component
Diesel Engine
Fluid
VOLVO VDS-4.5 Premium Motor Oil 15W40 (6 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0001636	VCP0004252	---
Sample Date		Client Info		10 Jan 2024	29 Aug 2022	---
Machine Age	hrs	Client Info		512	512	---
Oil Age	hrs	Client Info		512	512	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	ABNORMAL	---

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>100	6	40	---
Chromium	ppm	ASTM D5185m	>10	1	5	---
Nickel	ppm	ASTM D5185m	>10	2	<1	---
Titanium	ppm	ASTM D5185m		0	<1	---
Silver	ppm	ASTM D5185m	>2	<1	<1	---
Aluminum	ppm	ASTM D5185m	>10	7	▲ 39	---
Lead	ppm	ASTM D5185m	>20	<1	2	---
Copper	ppm	ASTM D5185m	>15	3	10	---
Tin	ppm	ASTM D5185m	>10	<1	3	---
Vanadium	ppm	ASTM D5185m		<1	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

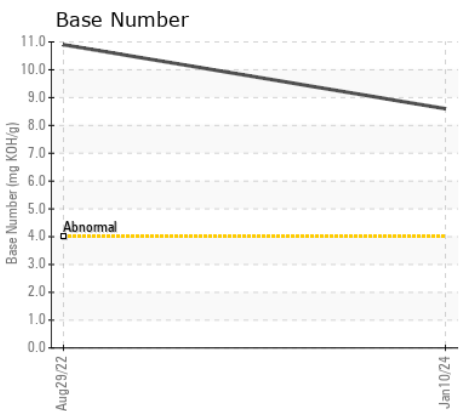
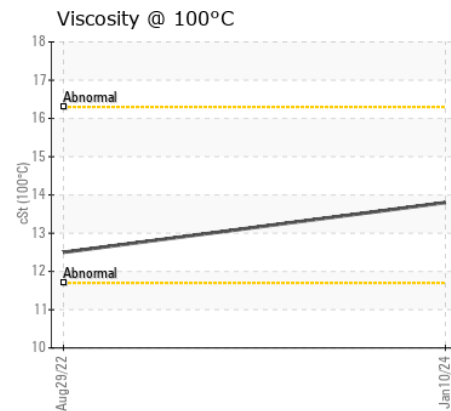
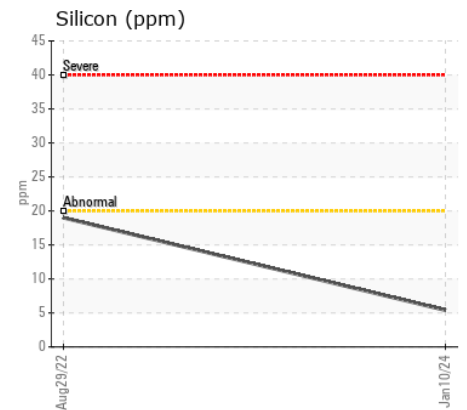
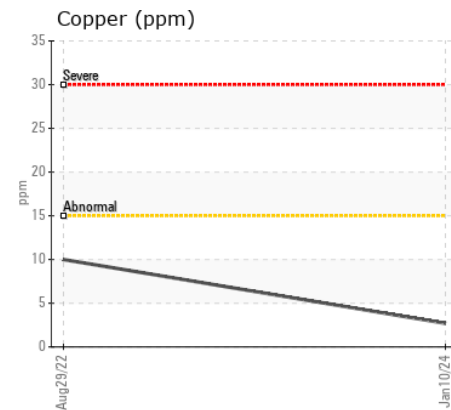
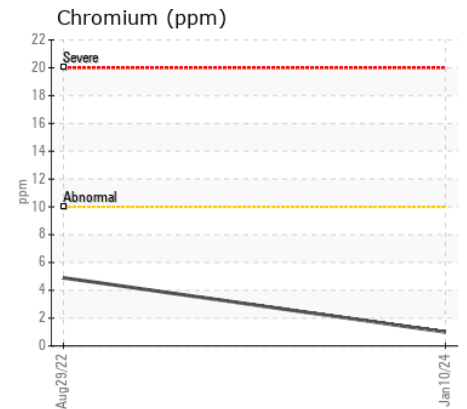
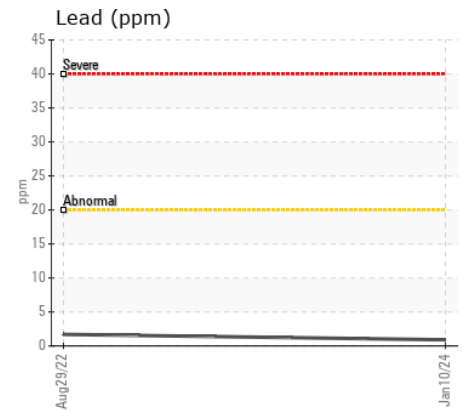
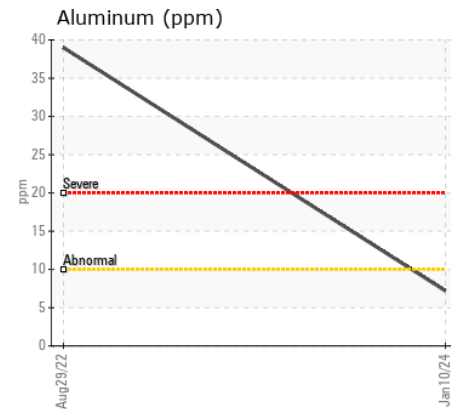
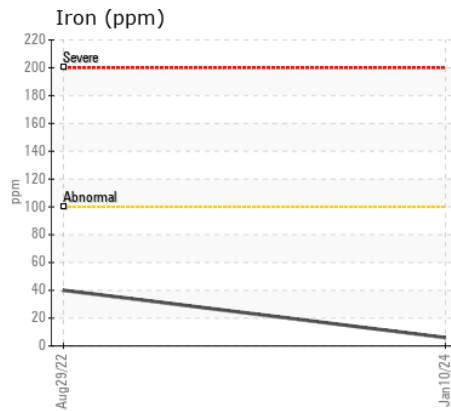
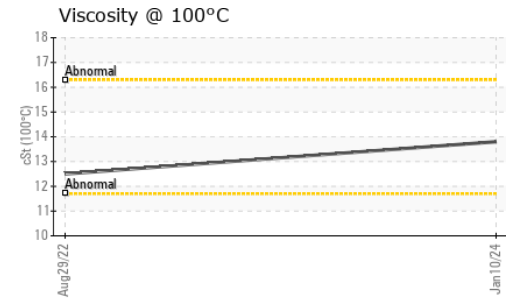
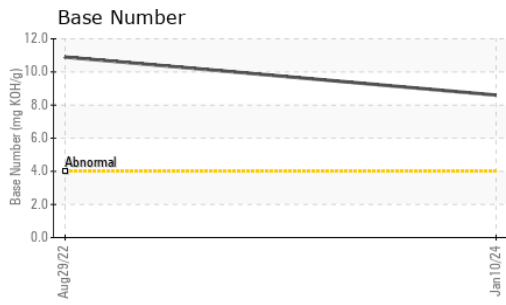
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	5	19	---
Potassium	ppm	ASTM D5185m	>20	<1	0	---
Fuel		WC Method	>6.0	<1.0	<1.0	---
Water		WC Method	>0.1	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.2	0.3	---
Nitration	Abs/cm	*ASTM D7624	>20	7.6	7.7	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.1	22.8	---
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

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

Sodium	ppm	ASTM D5185m		1	2	---
Boron	ppm	ASTM D5185m		21	63	---
Barium	ppm	ASTM D5185m		0	2	---
Molybdenum	ppm	ASTM D5185m		45	41	---
Manganese	ppm	ASTM D5185m		<1	5	---
Magnesium	ppm	ASTM D5185m		601	553	---
Calcium	ppm	ASTM D5185m		1389	1450	---
Phosphorus	ppm	ASTM D5185m		990	884	---
Zinc	ppm	ASTM D5185m		1235	1054	---
Sulfur	ppm	ASTM D5185m		3130	3177	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.0	19.6	---
Base Number (BN)	mg KOH/g	ASTM D2896		8.6	10.9	---
Visc @ 100°C	cSt	ASTM D445		13.8	12.5	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0001636 **Received** : 12 Jan 2024
Lab Number : 06059105 **Diagnosed** : 12 Jan 2024
Unique Number : 10830487 **Diagnostician** : Wes Davis
Test Package : MOBCE (Additional Tests: TBN)

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)

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