



ASCENDUM

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
Ascendum Machinery/500 Hour CSA
Machine Id
VOLVO L70H 2168 (S/N 624364)
Component
Diesel Engine
Fluid
VOLVO VDS-4.5 Premium Motor Oil 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0001722	ASC0000152	VCP0005214
Sample Date		Client Info		22 Dec 2023	03 Jul 2023	18 Nov 2022
Machine Age	hrs	Client Info		1947	1506	559
Oil Age	hrs	Client Info		441	947	98
Filter Age	hrs	Client Info		441	0	98
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	21	34	10
Chromium	ppm	ASTM D5185m	>10	1	2	<1
Nickel	ppm	ASTM D5185m	>10	<1	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>10	6	11	4
Lead	ppm	ASTM D5185m	>20	<1	0	<1
Copper	ppm	ASTM D5185m	>15	2	2	<1
Tin	ppm	ASTM D5185m	>10	1	1	0
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

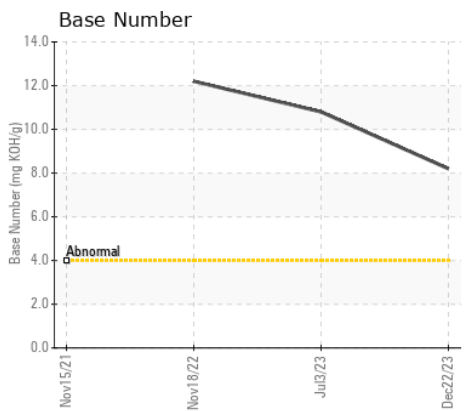
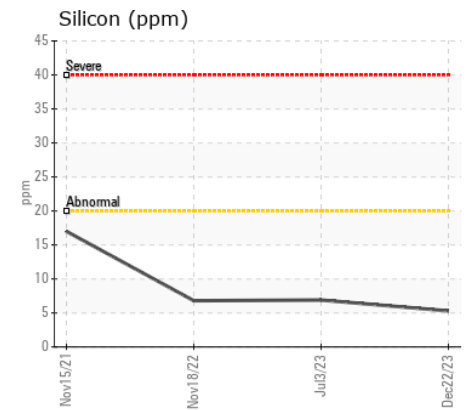
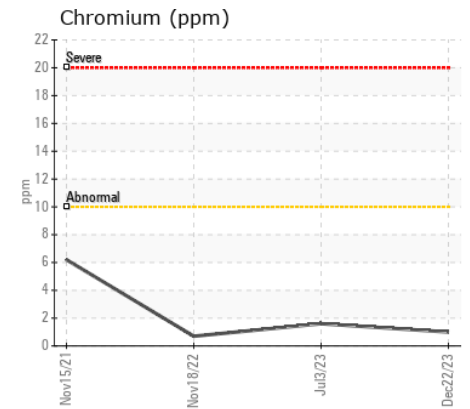
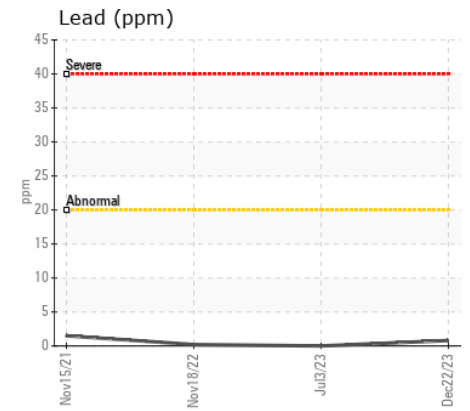
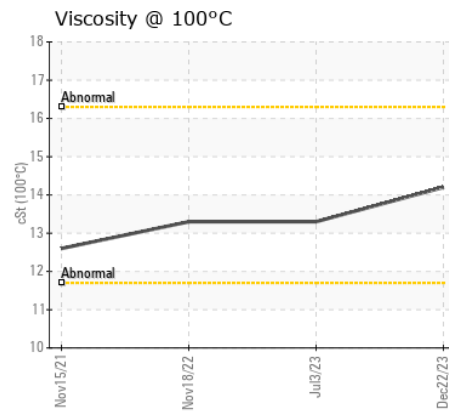
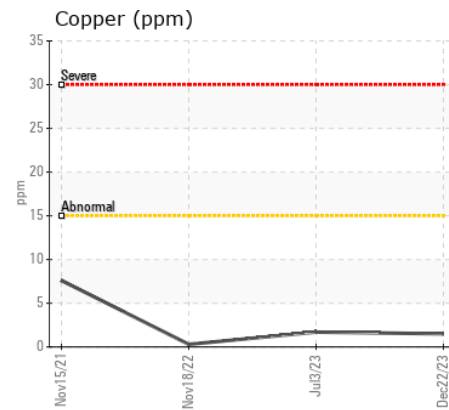
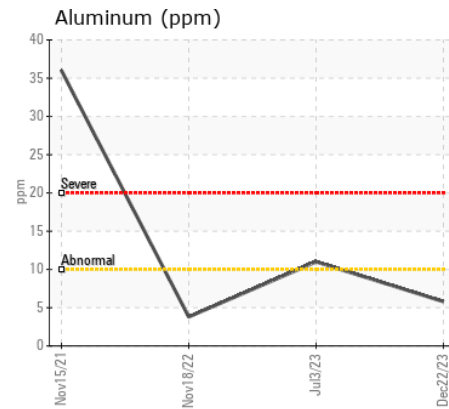
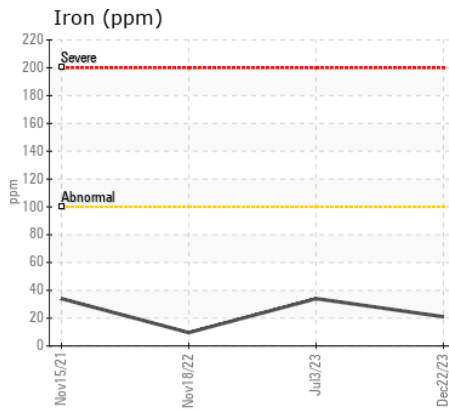
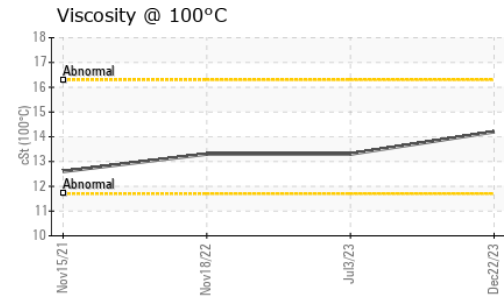
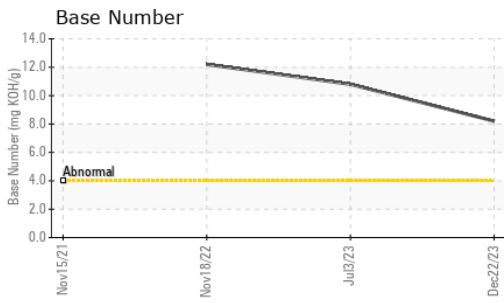
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	5	7	7
Potassium	ppm	ASTM D5185m	>20	6	0	0
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
Soot %	%	*ASTM D7844	>3	0.5	0.6	0.2
Nitration	Abs/cm	*ASTM D7624	>20	7.7	7.9	5.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.7	23.3	23.7
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	>0.1	NEG	NEG	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		0	2	<1
Boron	ppm	ASTM D5185m		110	49	62
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		21	42	39
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		164	525	501
Calcium	ppm	ASTM D5185m		2066	1780	1651
Phosphorus	ppm	ASTM D5185m		910	959	937
Zinc	ppm	ASTM D5185m		1196	1153	1070
Sulfur	ppm	ASTM D5185m		3775	3487	3406
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.6	20.5	20.4
Base Number (BN)	mg KOH/g	ASTM D2896		8.2	10.8	12.2
Visc @ 100°C	cSt	ASTM D445		14.2	13.3	13.3



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0001722 **Received** : 09 Jan 2024
Lab Number : 06055169 **Diagnosed** : 10 Jan 2024
Unique Number : 10821118 **Diagnostician** : Sean Felton
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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