



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
WMR-Plymouth
Machine Id
6843 VOLVO L150H 6843
Component
Diesel Engine
Fluid
PHILLIPS 66 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		DJJ0009394	DJJ0009436	DJJ0008934
Sample Date		Client Info		16 Feb 2024	07 Dec 2023	05 Oct 2023
Machine Age	hrs	Client Info		10275	9749	9240
Oil Age	hrs	Client Info		500	500	445
Filter Age	hrs	Client Info		500	500	445
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	>200	2	<1	3
Chromium	ppm	ASTM D5185m	>20	0	0	0
Nickel	ppm	ASTM D5185m	>5	0	<1	<1
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>30	<1	2	0
Lead	ppm	ASTM D5185m	>40	0	0	<1
Copper	ppm	ASTM D5185m	>20	0	0	<1
Tin	ppm	ASTM D5185m	>20	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

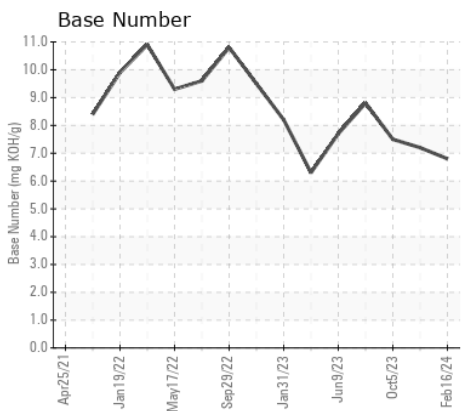
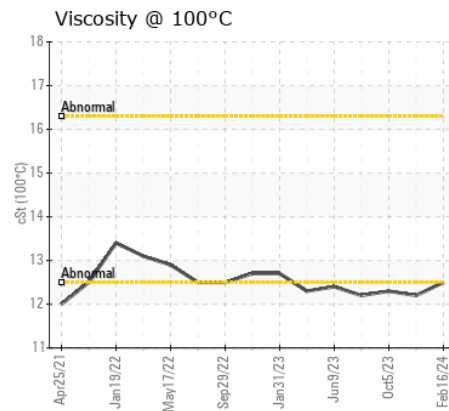
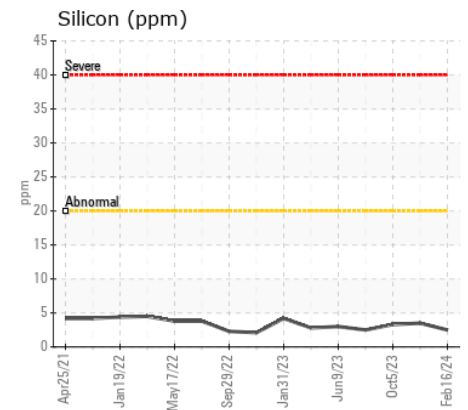
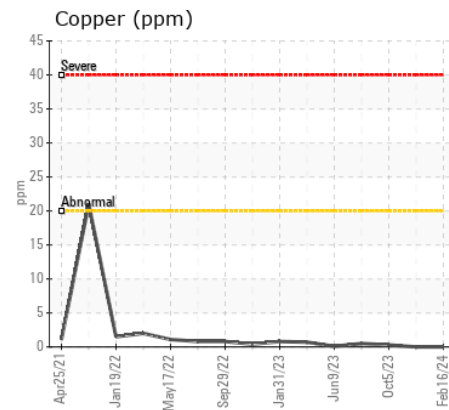
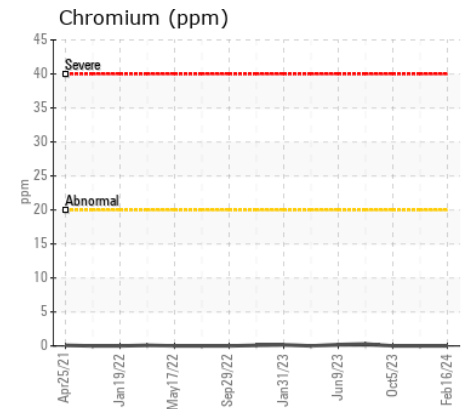
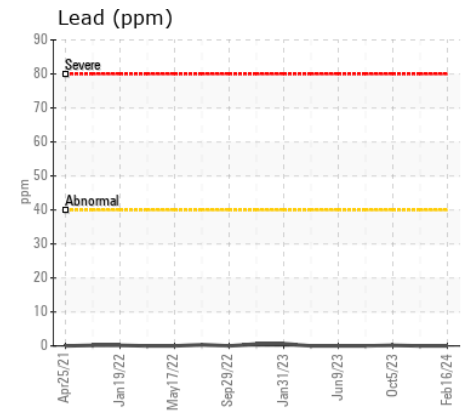
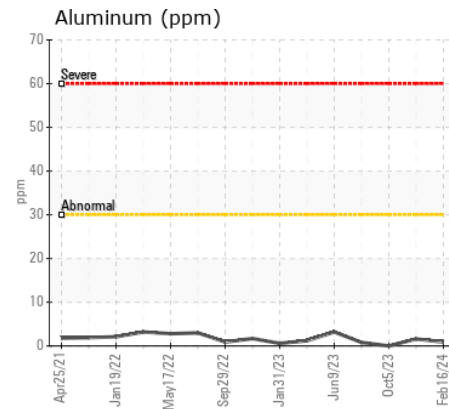
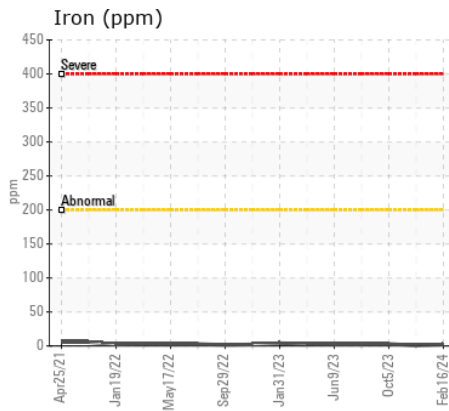
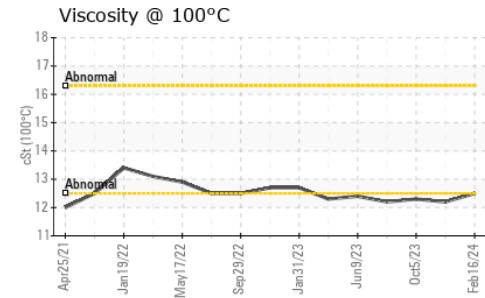
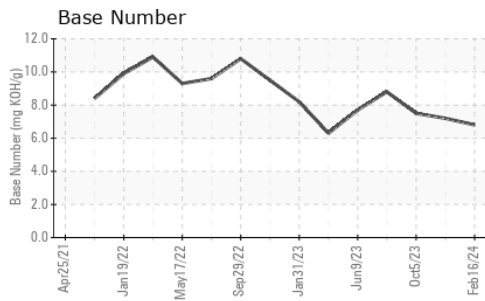
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	2	4	3
Potassium	ppm	ASTM D5185m	>20	<1	5	2
Fuel		WC Method	>6.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.1	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	7.9	7.6	7.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.0	17.8	18.0
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

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		3	2	<1
Boron	ppm	ASTM D5185m		90	116	93
Barium	ppm	ASTM D5185m		0	0	1
Molybdenum	ppm	ASTM D5185m		12	18	22
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		606	666	626
Calcium	ppm	ASTM D5185m		1267	1264	1212
Phosphorus	ppm	ASTM D5185m		640	723	674
Zinc	ppm	ASTM D5185m		655	805	804
Sulfur	ppm	ASTM D5185m		2611	2905	3048
Oxidation	Abs/.1mm	*ASTM D7414	>25	12.4	12.2	12.8
Base Number (BN)	mg KOH/g	ASTM D2896		6.8	7.2	7.5
Visc @ 100°C	cSt	ASTM D445		12.5	12.2	12.3



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DJJ0009394 **Received** : 23 Feb 2024
Lab Number : 06098250 **Tested** : 26 Feb 2024
Unique Number : 10896480 **Diagnosed** : 26 Feb 2024 - Don Baldrige
Test Package : MOBCE (Additional Tests: TBN)

WESTERN METALS RECYCLING - PLYMOUTH
 7400 WEST CEMETERY ROAD
 PLYMOUTH, UT
 US 84330
 Contact: JARDEE STEED
 jardee.steed@wmrecycling.com
 T: (435)458-3851
 F: (435)458-3601

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)