



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
[PREMIER HORTICULTURE]

Machine Id
VOLVO L110H 631056

Component
Diesel Engine

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

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ML0000481	VCP333939	VCP318801
Sample Date		Client Info		31 Jan 2024	15 Sep 2021	30 Jun 2021
Machine Age	hrs	Client Info		14024	9538	9070
Oil Age	hrs	Client Info		500	500	0
Filter Age	hrs	Client Info		500	0	0
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	4	4	7
Chromium	ppm	ASTM D5185m	>10	<1	<1	<1
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m	>2	0	<1	0
Aluminum	ppm	ASTM D5185m	>10	2	2	2
Lead	ppm	ASTM D5185m	>20	0	<1	<1
Copper	ppm	ASTM D5185m	>15	<1	<1	<1
Tin	ppm	ASTM D5185m	>10	<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

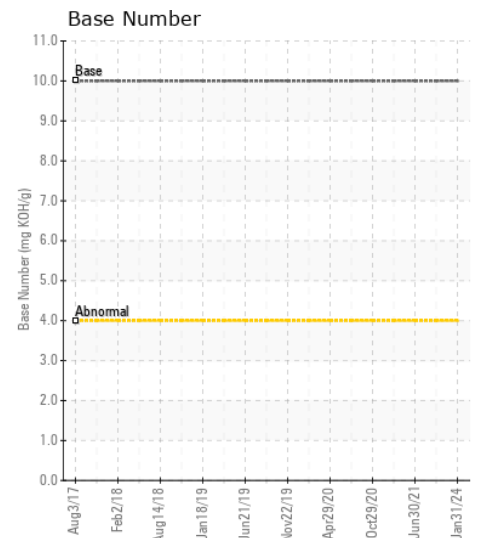
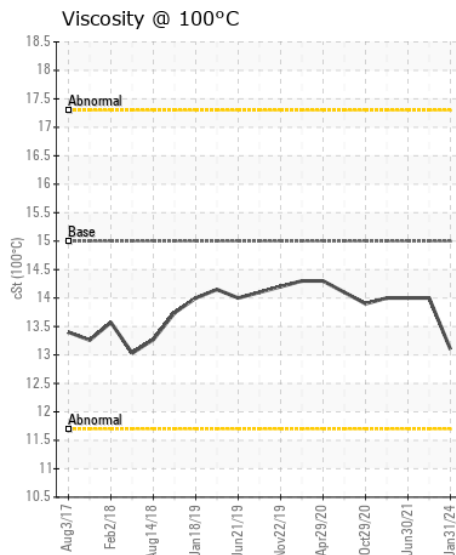
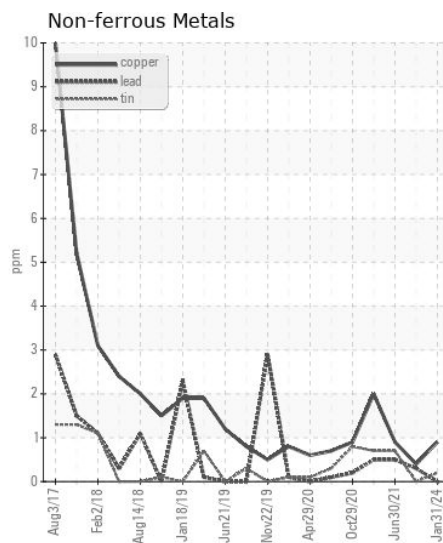
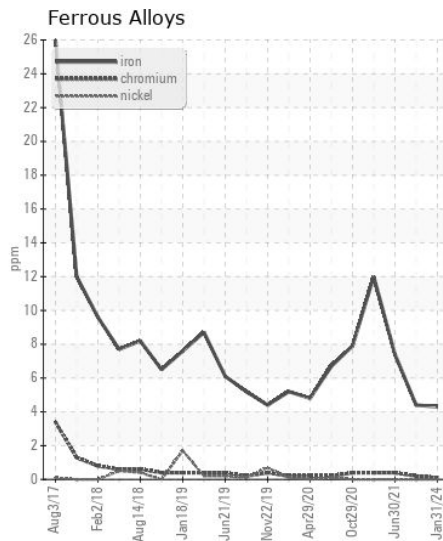
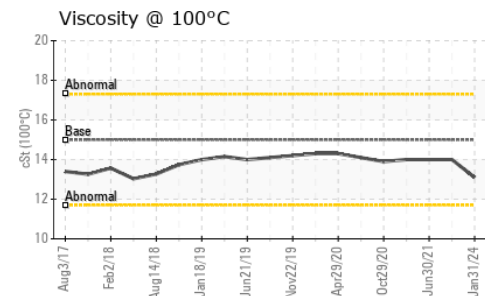
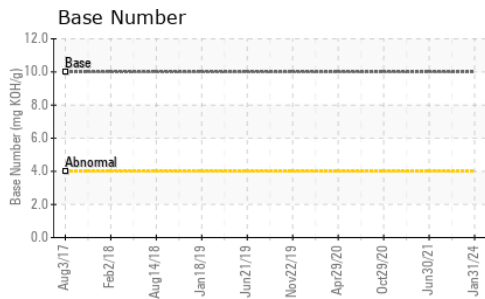
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	4	2	4
Potassium	ppm	ASTM D5185m	>20	0	0	<1
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	0.1	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	6.4	8.9	9.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.1	20.2	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	>0.1	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		1	<1	3
Boron	ppm	ASTM D5185m	2.5	52	16	30
Barium	ppm	ASTM D5185m	0.0	0	0	0
Molybdenum	ppm	ASTM D5185m	0.7	39	48	50
Manganese	ppm	ASTM D5185m	0.0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	256	505	740	748
Calcium	ppm	ASTM D5185m	2057	1590	1145	1206
Phosphorus	ppm	ASTM D5185m	935	967	702	732
Zinc	ppm	ASTM D5185m	1223	1121	860	866
Sulfur	ppm	ASTM D5185m	4079	2799	2097	2179
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.4	17.8	19
Base Number (BN)	mg KOH/g	ASTM D2896	10	10.3	---	---
Visc @ 100°C	cSt	ASTM D445	15.0	13.1	14.0	14.0



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : ML0000481

Lab Number : 06082930

Unique Number : 10870375

Test Package : CONST (Additional Tests: TBN)

Received : 07 Feb 2024

Tested : 08 Feb 2024

Diagnosed : 09 Feb 2024 - Don Baldrige

MCCLUNG-LOGAN EQUIPMENT CO - CHESAPEAKE

4112 HOLLAND BLVD

CHESAPEAKE, VA

US 23323

Contact: TOMMY GRIFFIN

griffin@mcclung-logan.com

T: (757)485-3314

F: (757)485-3415

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)