



VOLVO

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

[HER RENTALS]

Machine Id

VOLVO L110H 632557

Component

Diesel Engine

Fluid

DIESEL ENGINE OIL SAE 15W40 (--- GAL)



RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VCP439678	VCP432040	VCP428845
Sample Date		Client Info		09 Jul 2024	28 Dec 2023	06 Dec 2023
Machine Age	hrs	Client Info		2420	1206	1101
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	N/A	N/A
Filter Changed		Client Info		Changed	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	30	1	11
Chromium	ppm	ASTM D5185m	>10	2	0	<1
Nickel	ppm	ASTM D5185m	>10	<1	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>2	<1	0	0
Aluminum	ppm	ASTM D5185m	>10	10	2	11
Lead	ppm	ASTM D5185m	>20	<1	<1	<1
Copper	ppm	ASTM D5185m	>15	10	1	6
Tin	ppm	ASTM D5185m	>10	3	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

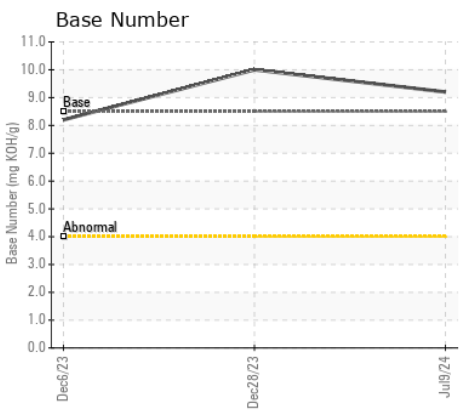
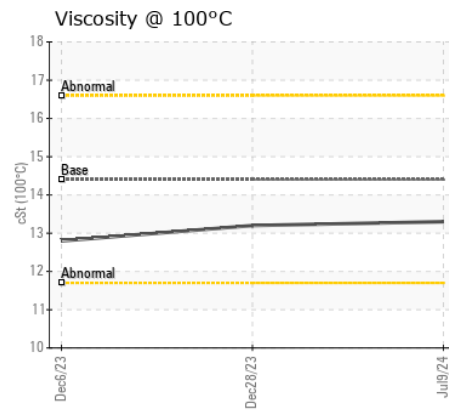
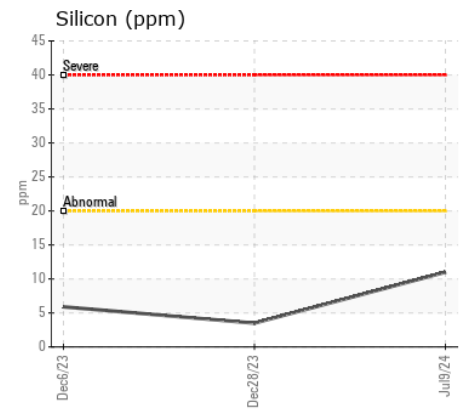
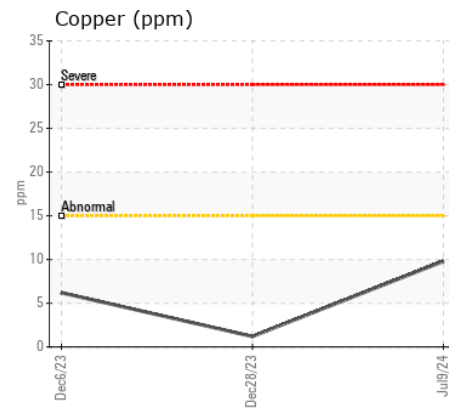
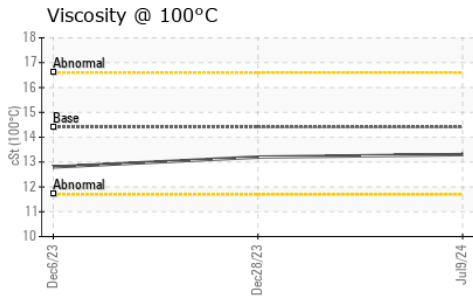
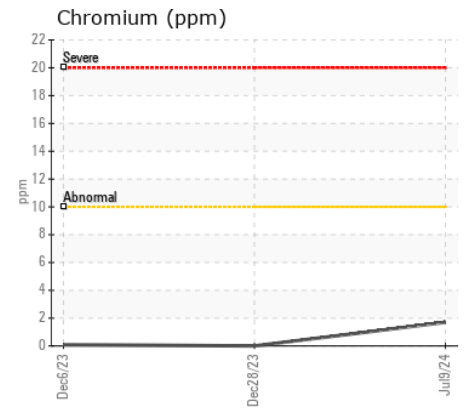
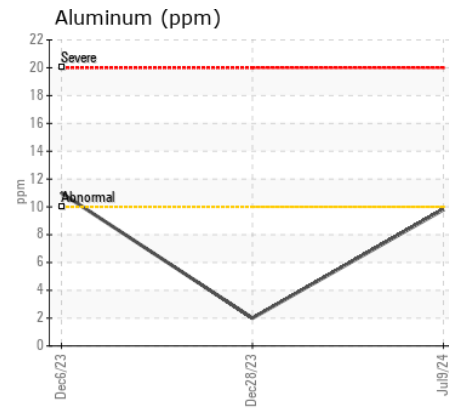
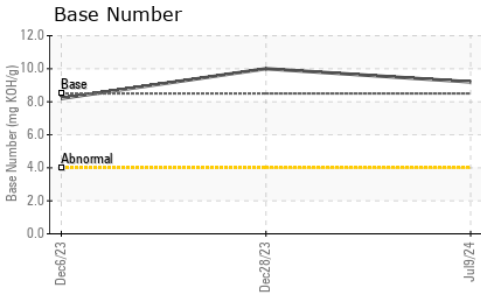
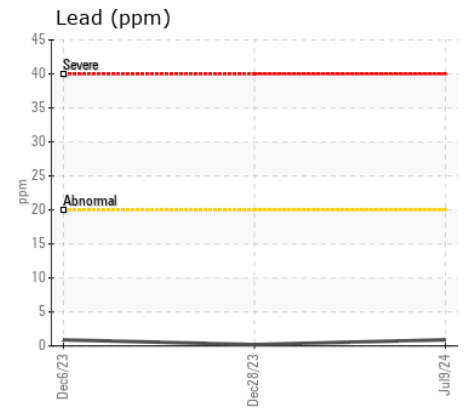
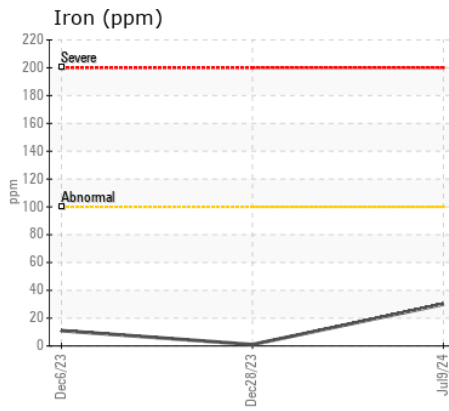
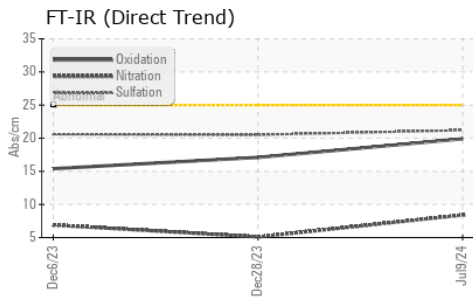
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	11	4	6
Potassium	ppm	ASTM D5185m	>20	2	<1	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	0.3	0.1	0.2
Nitration	Abs/cm	*ASTM D7624	>20	8.4	5.1	6.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.2	20.5	20.6
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 suitable for further service.

Sodium	ppm	ASTM D5185m	>158	2	1	1
Boron	ppm	ASTM D5185m	250	21	86	281
Barium	ppm	ASTM D5185m	10	0	0	<1
Molybdenum	ppm	ASTM D5185m	100	44	43	72
Manganese	ppm	ASTM D5185m		<1	0	0
Magnesium	ppm	ASTM D5185m	450	557	513	448
Calcium	ppm	ASTM D5185m	3000	1740	1500	1349
Phosphorus	ppm	ASTM D5185m	1150	1011	879	924
Zinc	ppm	ASTM D5185m	1350	1263	1140	1222
Sulfur	ppm	ASTM D5185m	4250	3738	3070	3112
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.9	17.1	15.4
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	9.2	10.0	8.2
Visc @ 100°C	cSt	ASTM D445	14.4	13.3	13.2	12.8



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VCP439678 **Received** : 12 Jul 2024
Lab Number : 06234415 **Tested** : 12 Jul 2024
Unique Number : 11123249 **Diagnosed** : 14 Jul 2024 - Don Baldrige
Test Package : MOB 1 (Additional Tests: TBN)

ALTA EQUIPMENT/FLAGLER CONSTRUCTION EQUIPMENT LLC
 8418 PALM RIVER ROAD
 TAMPA, FL
 US 33619
 Contact: KENNY HANEY
 khaney@flaglerce.com
 T: (813)630-0077
 F: (813)630-2233

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)