



McCLUNG-LOGAN
EQUIPMENT COMPANY, INC.

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
VOLVO ECR235 314138
Component
Hydraulic System
Fluid
MOBIL HYDRAULIC OIL AW 46 (40 GAL)

RECOMMENDATION

Resample at the next service interval to monitor. (Customer Sample Comment: 4000 hour service)

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ML0886329	VCP319138	---
Sample Date		Client Info		09 Feb 2024	19 Oct 2021	---
Machine Age	hrs	Client Info		4085	2031	---
Oil Age	hrs	Client Info		2000	2031	---
Filter Age	hrs	Client Info		2000	0	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>25	19	4	---
Chromium	ppm	ASTM D5185m	>10	5	2	---
Nickel	ppm	ASTM D5185m	>10	0	<1	---
Titanium	ppm	ASTM D5185m		<1	<1	---
Silver	ppm	ASTM D5185m		0	0	---
Aluminum	ppm	ASTM D5185m	>20	<1	<1	---
Lead	ppm	ASTM D5185m	>20	0	<1	---
Copper	ppm	ASTM D5185m	>150	11	14	---
Tin	ppm	ASTM D5185m	>10	0	<1	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

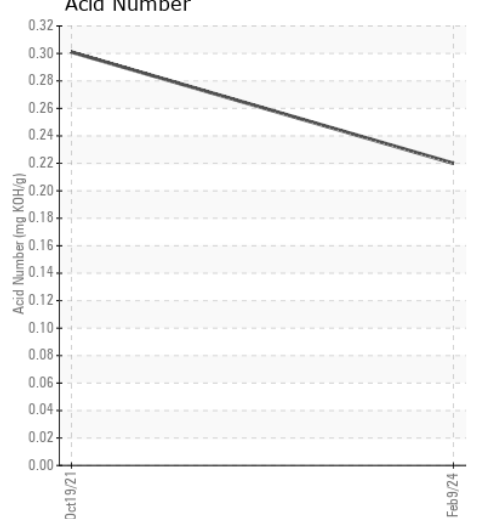
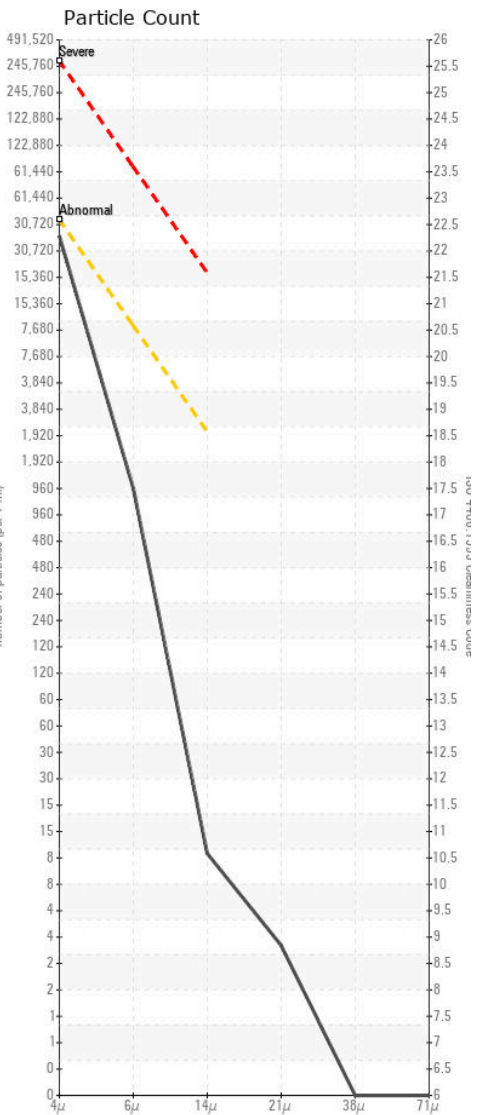
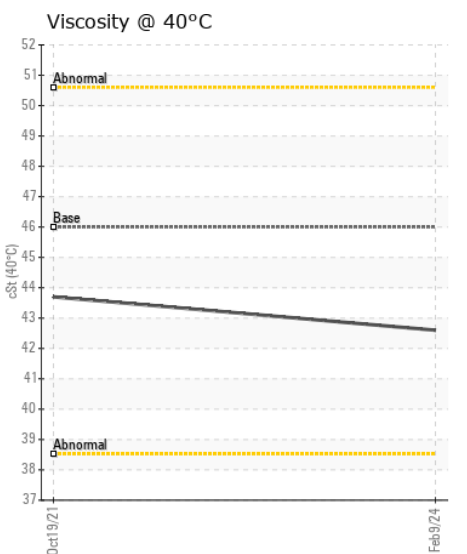
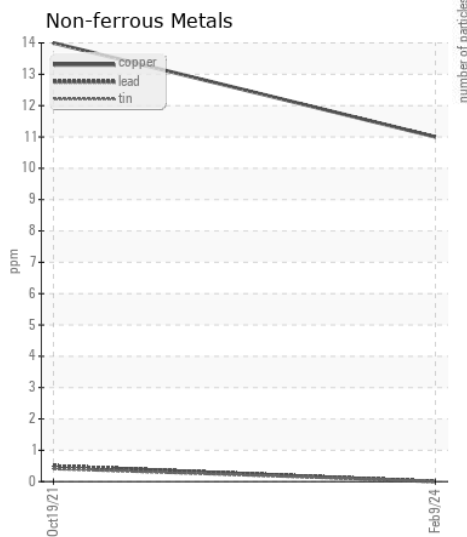
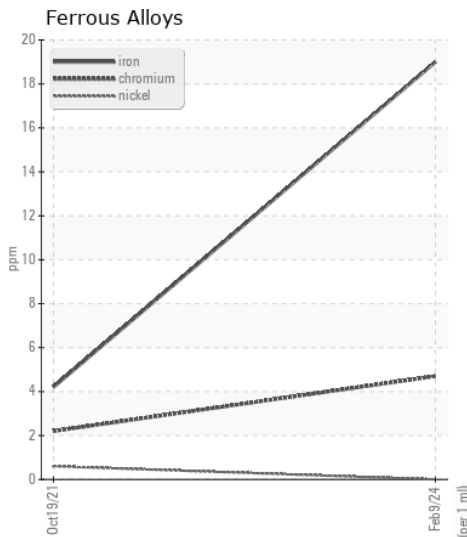
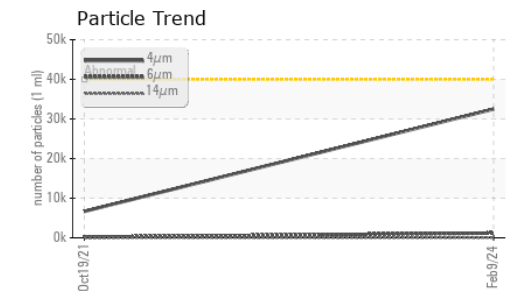
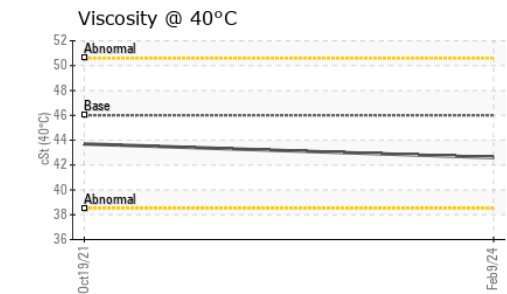
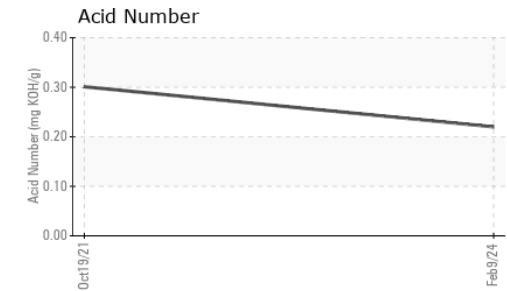
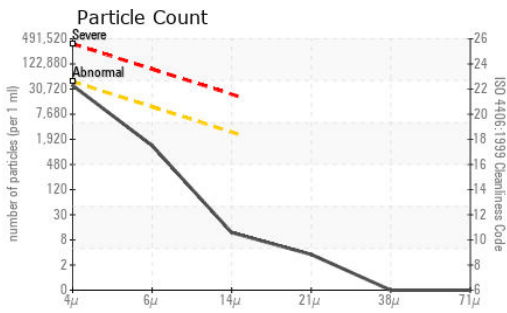
The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>50	6	2	---
Potassium	ppm	ASTM D5185m	>20	1	<1	---
Water		WC Method	>0.1	NEG	NEG	---
Particles >4µm		ASTM D7647	>40000	32494	6668	---
Particles >6µm		ASTM D7647	>10000	1192	175	---
Particles >14µm		ASTM D7647	>2500	10	8	---
Particles >21µm		ASTM D7647	>640	3	2	---
Particles >38µm		ASTM D7647	>160	0	0	---
Particles >71µm		ASTM D7647	>40	0	0	---
Oil Cleanliness		ISO 4406 (c)	>22/20/18	22/17/10	20/15/10	---
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 AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<1	1	---
Boron	ppm	ASTM D5185m		0	0	---
Barium	ppm	ASTM D5185m		0	<1	---
Molybdenum	ppm	ASTM D5185m		<1	<1	---
Manganese	ppm	ASTM D5185m		<1	0	---
Magnesium	ppm	ASTM D5185m		6	8	---
Calcium	ppm	ASTM D5185m		72	79	---
Phosphorus	ppm	ASTM D5185m		204	170	---
Zinc	ppm	ASTM D5185m		151	179	---
Sulfur	ppm	ASTM D5185m		4445	2392	---
Acid Number (AN)	mg KOH/g	ASTM D8045		0.22	0.301	---
Visc @ 40°C	cSt	ASTM D445	46	42.6	43.7	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ML0886329
Lab Number : 06088109
Unique Number : 10875554
Test Package : MOBCE

Received : 13 Feb 2024
Tested : 14 Feb 2024
Diagnosed : 15 Feb 2024 - Don Baldrige

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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)