



McCLUNG-LOGAN
EQUIPMENT COMPANY, INC.

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL



Machine Id
VOLVO ECR145 311293
Component
Swing Drive
Fluid
GEAR OIL SAE 85W140 (--- GAL)

RECOMMENDATION

The oil change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ML0000448	---	---
Sample Date		Client Info		08 Apr 2024	---	---
Machine Age	hrs	Client Info		2913	---	---
Oil Age	hrs	Client Info		1000	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				ABNORMAL	---	---

WEAR

The copper level is abnormal. All other component wear rates are normal.

Iron	ppm	ASTM D5185m	>1200	949	---	---
Chromium	ppm	ASTM D5185m	>10	9	---	---
Nickel	ppm	ASTM D5185m	>10	0	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m		0	---	---
Aluminum	ppm	ASTM D5185m	>25	4	---	---
Lead	ppm	ASTM D5185m	>50	0	---	---
Copper	ppm	ASTM D5185m	>50	▲ 53	---	---
Tin	ppm	ASTM D5185m	>10	0	---	---
Vanadium	ppm	ASTM D5185m		<1	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

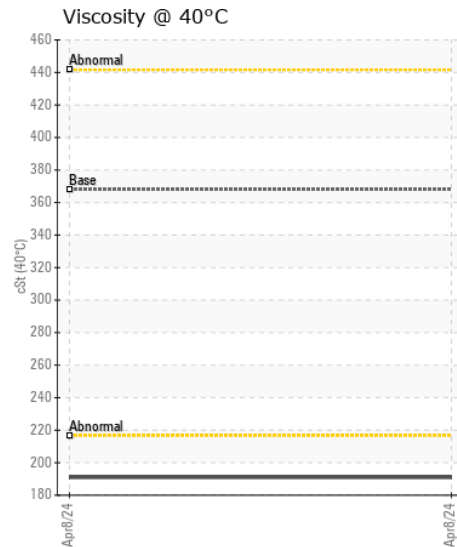
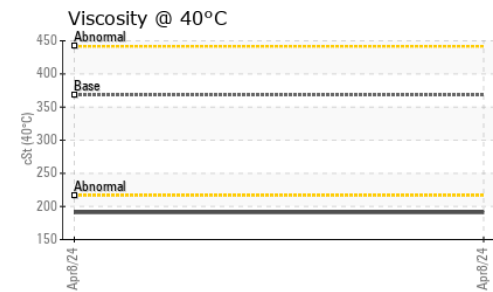
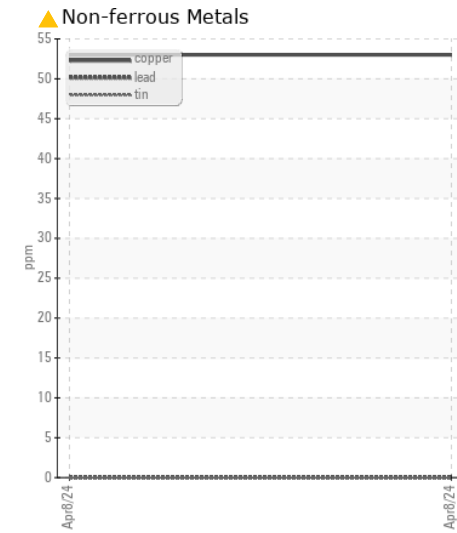
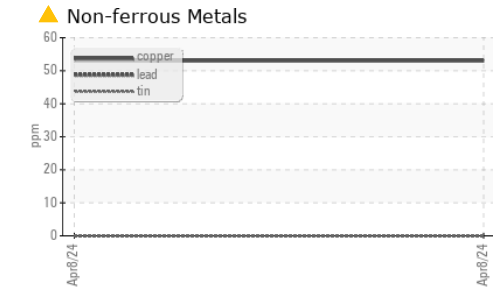
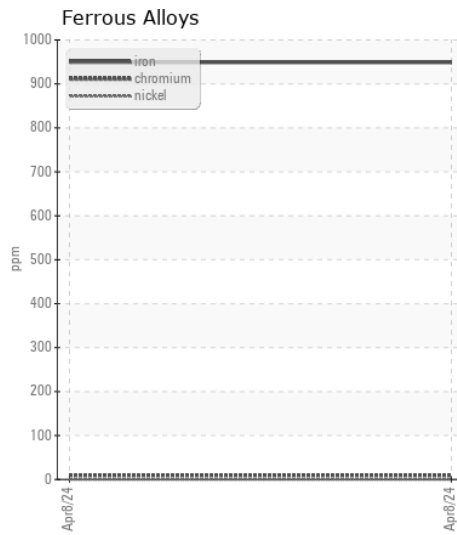
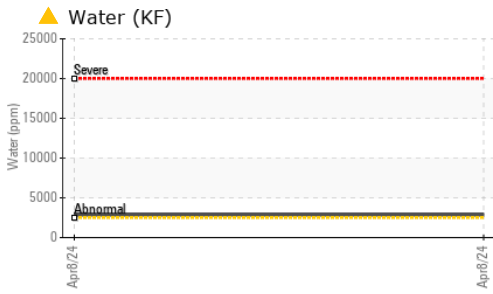
There is a light concentration of water present in the oil.

Silicon	ppm	ASTM D5185m	>100	18	---	---
Potassium	ppm	ASTM D5185m	>20	0	---	---
Water	%	ASTM D6304	>0.25	▲ 0.285	---	---
ppm Water	ppm	ASTM D6304	>2500	▲ 2850	---	---
Silt	scalar	*Visual	NONE	MODER	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	HAZY	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.25	0.2%	---	---

FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		<1	---	---
Boron	ppm	ASTM D5185m	400	<1	---	---
Barium	ppm	ASTM D5185m	200	5	---	---
Molybdenum	ppm	ASTM D5185m	12	<1	---	---
Manganese	ppm	ASTM D5185m		10	---	---
Magnesium	ppm	ASTM D5185m	12	<1	---	---
Calcium	ppm	ASTM D5185m	150	16	---	---
Phosphorus	ppm	ASTM D5185m	1650	468	---	---
Zinc	ppm	ASTM D5185m	125	62	---	---
Sulfur	ppm	ASTM D5185m	22500	17884	---	---
Visc @ 40°C	cSt	ASTM D445	368	191	---	---



Certificate L2367

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

Sample No. : ML0000448

Lab Number : 06150697

Unique Number : 10980775

Test Package : CONST (Additional Tests: KF)

Received : 16 Apr 2024

Tested : 18 Apr 2024

Diagnosed : 18 Apr 2024 - Sean Felton

MCCLUNG-LOGAN EQUIPMENT CO - WINCHESTER

160 KENTMERE COURT

WINCHESTER, VA

US 22603

Contact: JENNIFER MATIAS

jmatias@mcclung-logan.com

T: (540)722-3700

F: (540)722-4441

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)