



VOLVO

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL



Area

[SPM742835 WASTE MGMT]

Machine Id

CATERPILLAR 336 DKS10115

Component

Hydraulic System

Fluid

VOLVO SUPER HYDRAULIC OIL 46 (--- GAL)

RECOMMENDATION

No corrective action is recommended at this time. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VCP446139	---	---
Sample Date		Client Info		08 Jul 2024	---	---
Machine Age	hrs	Client Info		5206	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Not Chngd	---	---
Filter Changed		Client Info		Not Chngd	---	---
Sample Status				ABNORMAL	---	---

WEAR

The chromium level is abnormal. The iron level is abnormal.

Iron	ppm	ASTM D5185m	>20	▲ 22	---	---
Chromium	ppm	ASTM D5185m	>10	▲ 31	---	---
Nickel	ppm	ASTM D5185m	>10	0	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m		<1	---	---
Aluminum	ppm	ASTM D5185m	>10	4	---	---
Lead	ppm	ASTM D5185m	>10	<1	---	---
Copper	ppm	ASTM D5185m	>75	8	---	---
Tin	ppm	ASTM D5185m	>10	<1	---	---
Vanadium	ppm	ASTM D5185m		<1	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

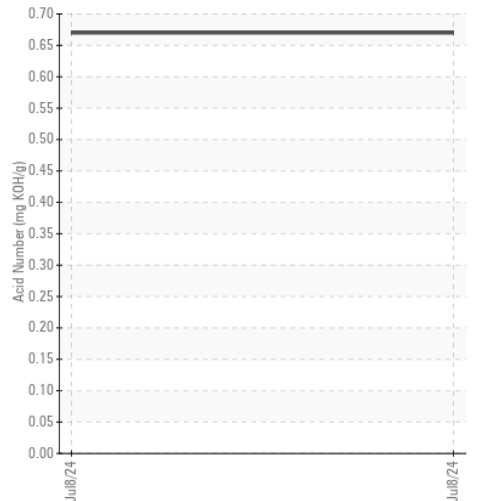
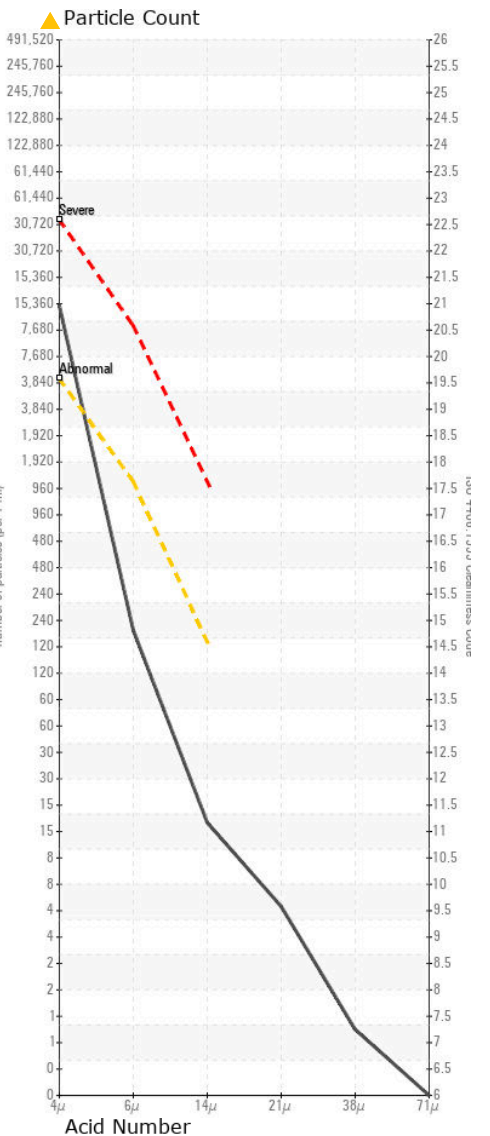
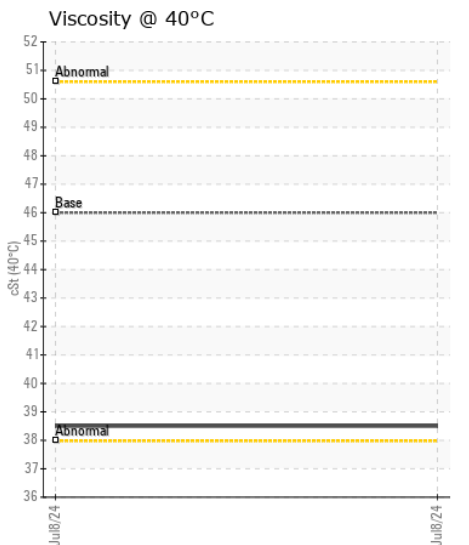
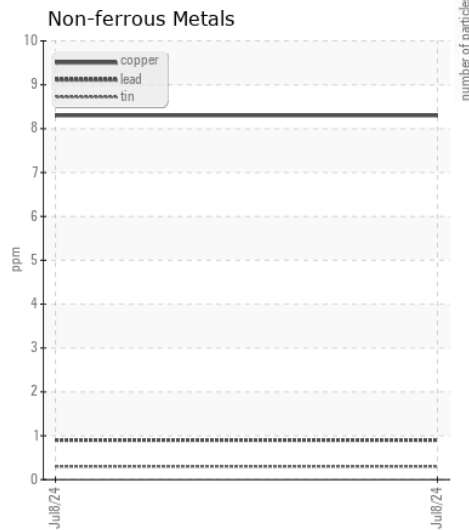
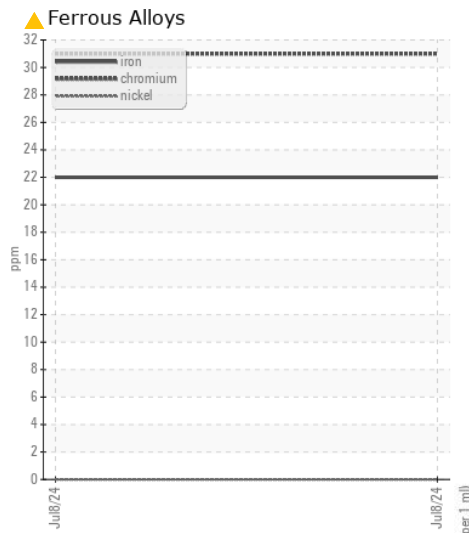
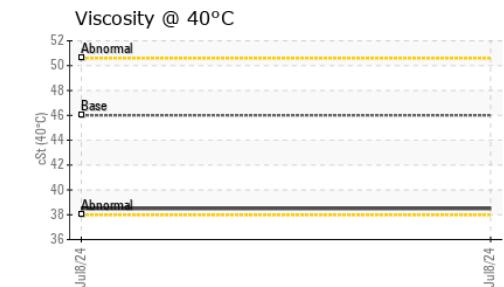
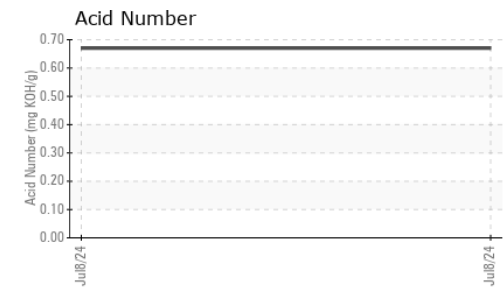
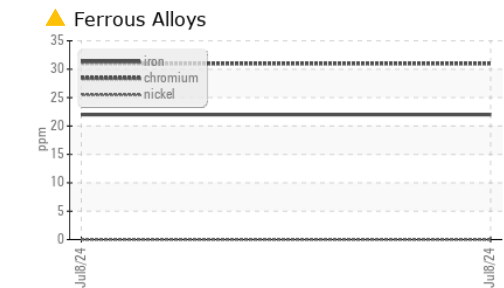
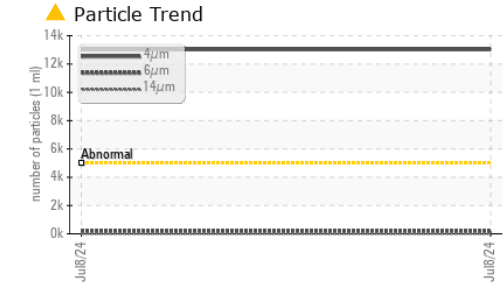
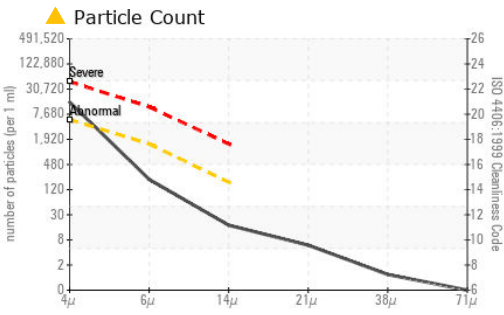
There is a high amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>20	3	---	---
Potassium	ppm	ASTM D5185m	>20	3	---	---
Water		WC Method	>0.1	NEG	---	---
Particles >4µm		ASTM D7647	>5000	▲ 13019	---	---
Particles >6µm		ASTM D7647	>1300	186	---	---
Particles >14µm		ASTM D7647	>160	15	---	---
Particles >21µm		ASTM D7647	>40	5	---	---
Particles >38µm		ASTM D7647	>10	1	---	---
Particles >71µm		ASTM D7647	>3	0	---	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ 21/15/11	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.1	NEG	---	---

FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		0	---	---
Boron	ppm	ASTM D5185m	14	0	---	---
Barium	ppm	ASTM D5185m	0.0	0	---	---
Molybdenum	ppm	ASTM D5185m	0.0	<1	---	---
Manganese	ppm	ASTM D5185m	0.0	0	---	---
Magnesium	ppm	ASTM D5185m	2.6	12	---	---
Calcium	ppm	ASTM D5185m	49	154	---	---
Phosphorus	ppm	ASTM D5185m	354	575	---	---
Zinc	ppm	ASTM D5185m	419	815	---	---
Sulfur	ppm	ASTM D5185m	3719	1528	---	---
Acid Number (AN)	mg KOH/g	ASTM D8045		0.67	---	---
Visc @ 40°C	cSt	ASTM D445	46	38.5	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : VCP446139
 Lab Number : 06240240
 Unique Number : 11129074
 Test Package : MOB 2

Received : 18 Jul 2024
 Tested : 19 Jul 2024
 Diagnosed : 20 Jul 2024 - Don Baldrige

ALTA EQUIPMENT CO - ORLAND PARK
 5000 INDUSTRIAL HWY
 GARY, IN
 US 46406
 Contact: DAVE ENG
 DAVE.ENG@ALTG.COM
 T: (312)350-2560
 F:

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)