



ASCENDUM

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ATTENTION
FLUID CONDITION	NORMAL



Area
Ascendum Machinery
Machine Id
VOLVO ECR145E EX-9 (S/N 315052)
Component
Hydraulic System
Fluid
VOLVO SUPER HYDRAULIC OIL 46 (--- GAL)

RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0000827	VCP0005233	---
Sample Date		Client Info		18 Sep 2023	10 Nov 2022	---
Machine Age	hrs	Client Info		3003	2043	---
Oil Age	hrs	Client Info		960	2043	---
Filter Age	hrs	Client Info		0	2043	---
Oil Changed		Client Info		Not Changed	Changed	---
Filter Changed		Client Info		Not Changed	Changed	---
Sample Status				ATTENTION	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>25	3	2	---
Chromium	ppm	ASTM D5185m	>10	0	0	---
Nickel	ppm	ASTM D5185m	>10	0	0	---
Titanium	ppm	ASTM D5185m		<1	0	---
Silver	ppm	ASTM D5185m		0	0	---
Aluminum	ppm	ASTM D5185m	>20	5	1	---
Lead	ppm	ASTM D5185m	>20	0	1	---
Copper	ppm	ASTM D5185m	>150	18	27	---
Tin	ppm	ASTM D5185m	>10	0	0	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

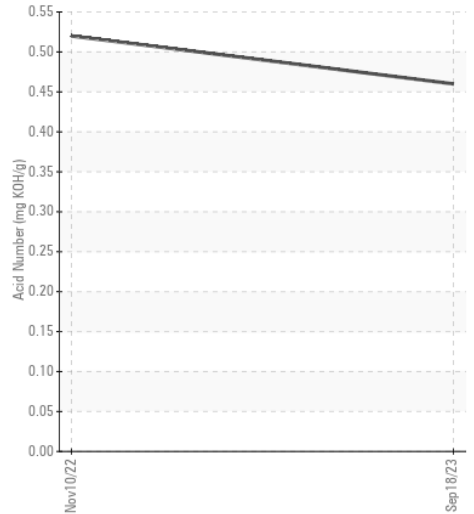
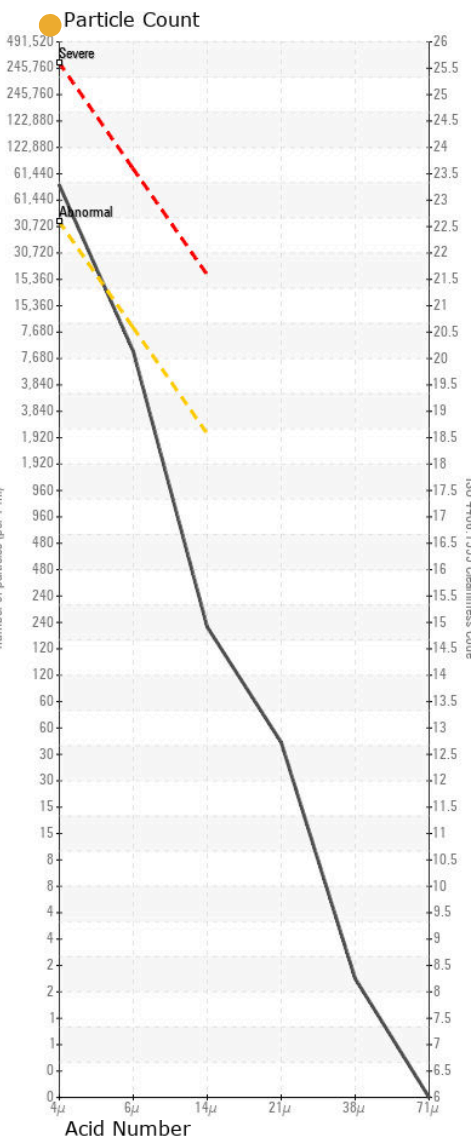
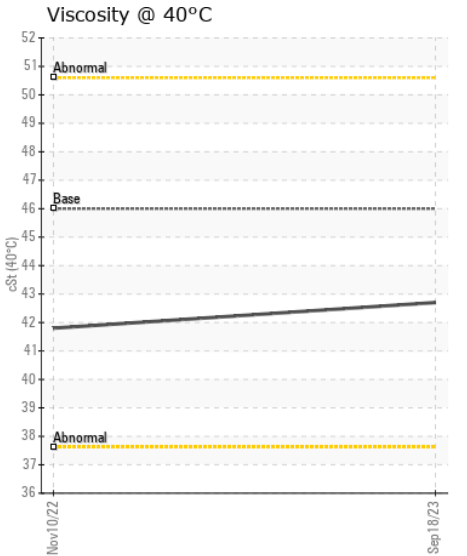
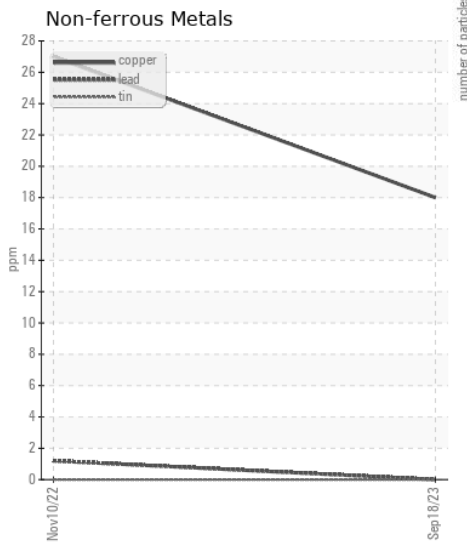
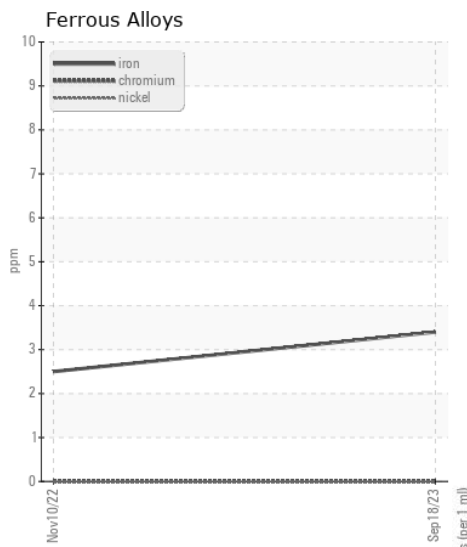
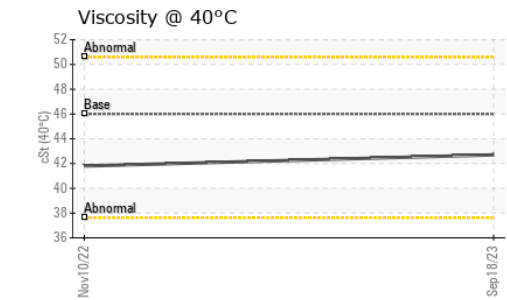
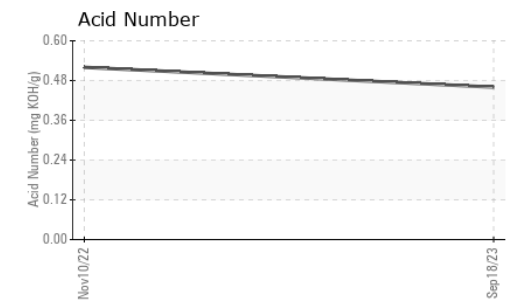
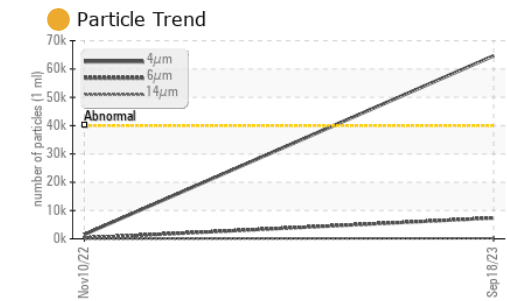
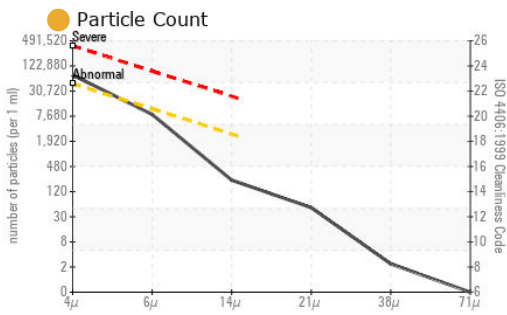
There is a light amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>50	6	6	---
Potassium	ppm	ASTM D5185m	>20	0	0	---
Water		WC Method	>0.1	NEG	NEG	---
Particles >4µm		ASTM D7647	>40000	64675	1529	---
Particles >6µm		ASTM D7647	>10000	7351	294	---
Particles >14µm		ASTM D7647	>2500	199	20	---
Particles >21µm		ASTM D7647	>640	44	4	---
Particles >38µm		ASTM D7647	>160	2	1	---
Particles >71µm		ASTM D7647	>40	0	0	---
Oil Cleanliness		ISO 4406 (c)	>22/20/18	23/20/15	18/15/11	---
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		2	<1	---
Boron	ppm	ASTM D5185m	14	0	0	---
Barium	ppm	ASTM D5185m	0.0	0	0	---
Molybdenum	ppm	ASTM D5185m	0.0	0	0	---
Manganese	ppm	ASTM D5185m	0.0	0	0	---
Magnesium	ppm	ASTM D5185m	2.6	4	1	---
Calcium	ppm	ASTM D5185m	49	206	77	---
Phosphorus	ppm	ASTM D5185m	354	408	385	---
Zinc	ppm	ASTM D5185m	419	485	509	---
Sulfur	ppm	ASTM D5185m	3719	1755	1339	---
Acid Number (AN)	mg KOH/g	ASTM D8045		0.46	0.52	---
Visc @ 40°C	cSt	ASTM D445	46	42.7	41.8	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0000827
Lab Number : 05955225
Unique Number : 10656438
Test Package : MOBCE

Received : 19 Sep 2023
Tested : 20 Sep 2023
Diagnosed : 20 Sep 2023 - Wes Davis

CAROLINA EXCAVATING
 1036 BRANCHVIEW DR, SUITE 106
 CONCORD, NC
 US 28025
 Contact: KEVIN LADGERWOOD
 kevin@carlinaexcavation.com

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)

T:
F: