



ASCENDUM

OIL ANALYSIS REPORT



Area
Ascendum Machinery/500 Hour CSA
Machine Id
VOLVO EC160EL 1836 (S/N 310219)
Component
Hydraulic System
Fluid
{not provided} (--- GAL)

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0007359	VCP0007210	VCP0000831
Sample Date		Client Info		20 Feb 2024	01 Feb 2023	14 Mar 2022
Machine Age	hrs	Client Info		4444	4001	3385
Oil Age	hrs	Client Info		443	4001	3385
Filter Age	hrs	Client Info		0	0	3385
Oil Changed		Client Info		Not Changed	Changed	Not Changed
Filter Changed		Client Info		Not Changed	Changed	Not Changed
Sample Status				NORMAL	ABNORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>25	0	10	8
Chromium	ppm	ASTM D5185m	>10	<1	<1	<1
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>20	0	2	2
Lead	ppm	ASTM D5185m	>20	0	0	<1
Copper	ppm	ASTM D5185m	>150	7	19	21
Tin	ppm	ASTM D5185m	>10	0	<1	<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

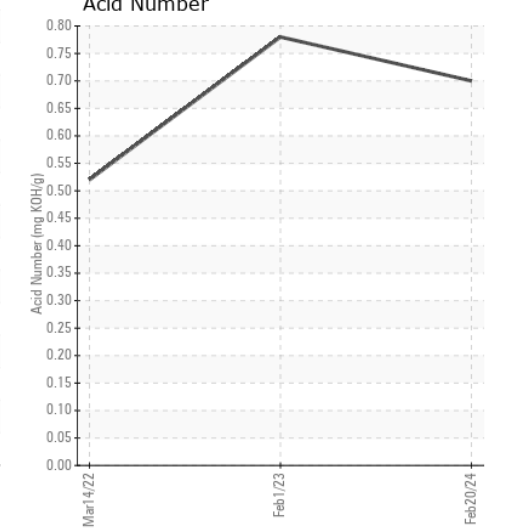
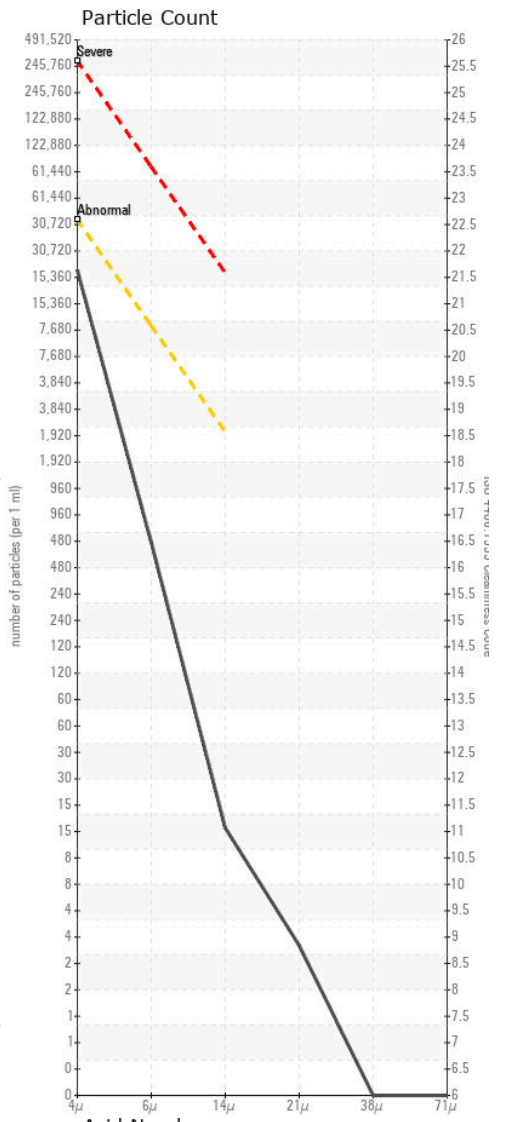
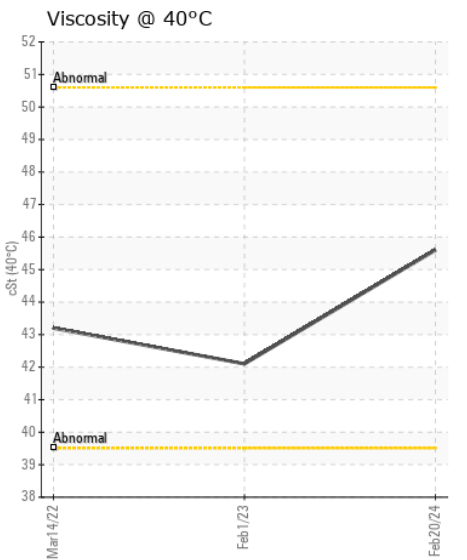
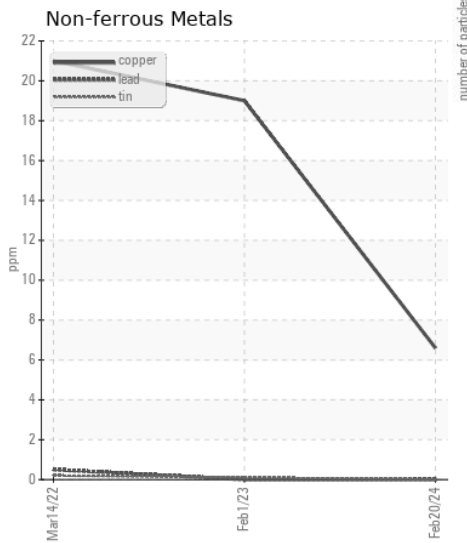
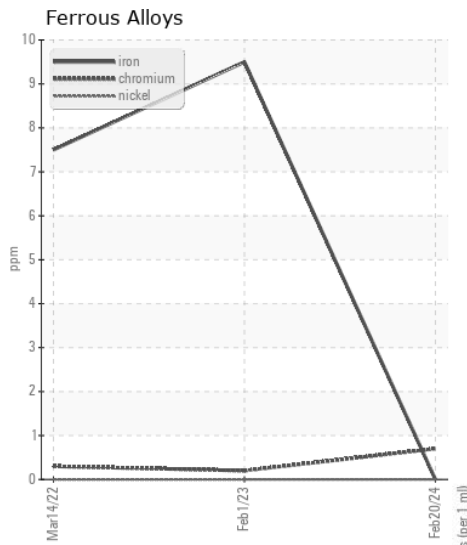
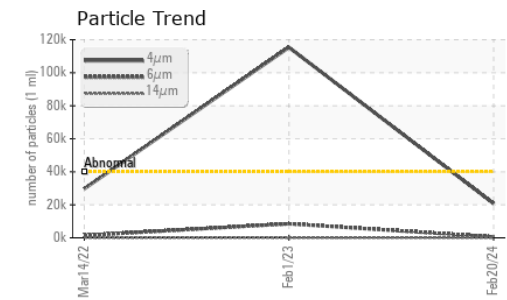
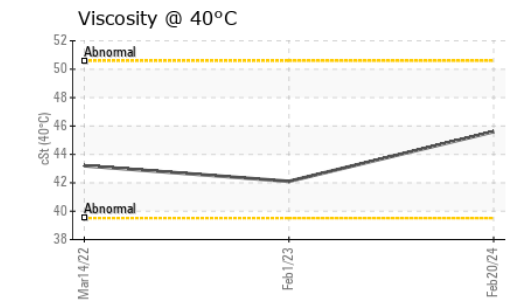
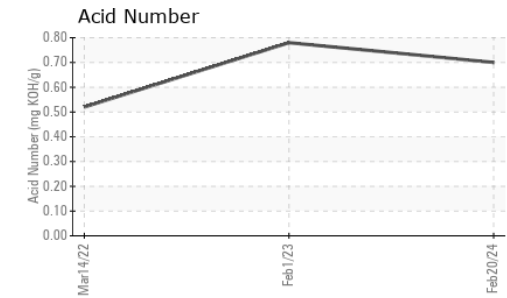
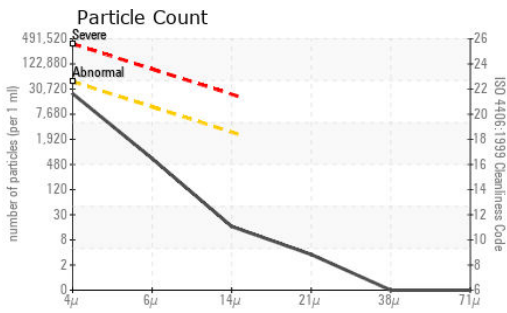
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>50	2	5	4
Potassium	ppm	ASTM D5185m	>20	0	0	2
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>40000	20773	▲ 115362	29727
Particles >6µm		ASTM D7647	>10000	587	8495	1466
Particles >14µm		ASTM D7647	>2500	14	27	20
Particles >21µm		ASTM D7647	>640	3	4	5
Particles >38µm		ASTM D7647	>160	0	1	1
Particles >71µm		ASTM D7647	>40	0	0	0
Oil Cleanliness		ISO 4406 (c)	>22/20/18	22/16/11	▲ 24/20/12	22/18/11
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 AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		0	2	0
Boron	ppm	ASTM D5185m		0	1	2
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		0	2	2
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		10	143	124
Calcium	ppm	ASTM D5185m		644	748	232
Phosphorus	ppm	ASTM D5185m		418	579	470
Zinc	ppm	ASTM D5185m		552	623	524
Sulfur	ppm	ASTM D5185m		1316	2102	1199
Acid Number (AN)	mg KOH/g	ASTM D8045		0.70	0.78	0.52
Visc @ 40°C	cSt	ASTM D445		45.6	42.1	43.2



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0007359
Lab Number : 06101540
Unique Number : 10899770
Test Package : CONST

Received : 27 Feb 2024
Tested : 28 Feb 2024
Diagnosed : 28 Feb 2024 - Wes Davis

TRIANGLE GRADING AND PAVING INC
 1521 Huffman Mill Rd
 BURLINGTON, NC
 US 27216
 Contact: ADAM CORBETT
 wacorbett@trianglegradingpaving.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: (336)584-0145