



ASCENDUM

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
Ascendum Machinery
Machine Id
VOLVO EC220E EX-4 (S/N 310878)
Component
Swing Drive
Fluid
VOLVO PREMIUM GEAR OIL 85W-140 GL-5 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0007337	ASC0000962	ASC0000108
Sample Date		Client Info		22 Apr 2024	13 Dec 2023	06 Jun 2023
Machine Age	hrs	Client Info		5981	5519	5011
Oil Age	hrs	Client Info		5473	508	964
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Not Changd	Changed
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>1200	78	71	55
Chromium	ppm	ASTM D5185m	>10	<1	<1	<1
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	<1	1	0
Lead	ppm	ASTM D5185m	>50	0	0	0
Copper	ppm	ASTM D5185m	>50	<1	3	1
Tin	ppm	ASTM D5185m	>10	<1	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

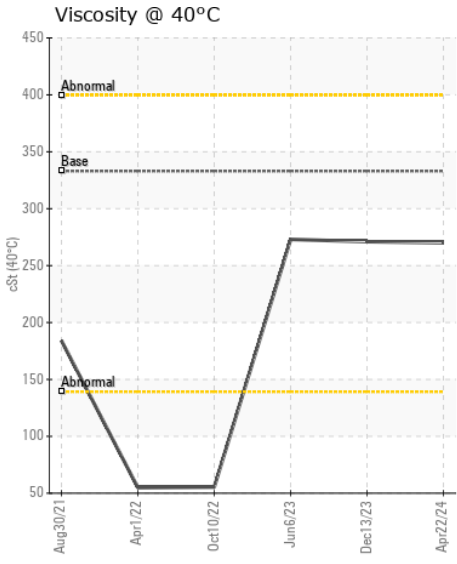
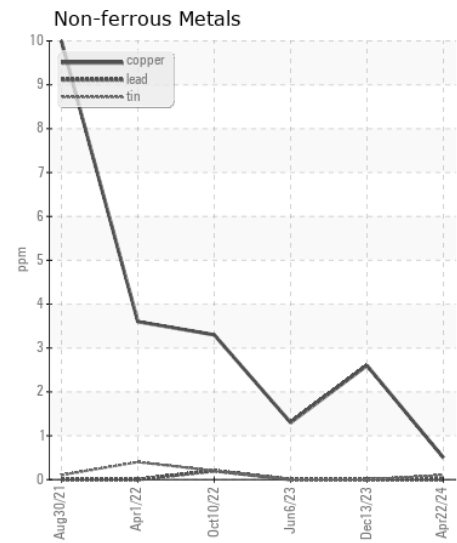
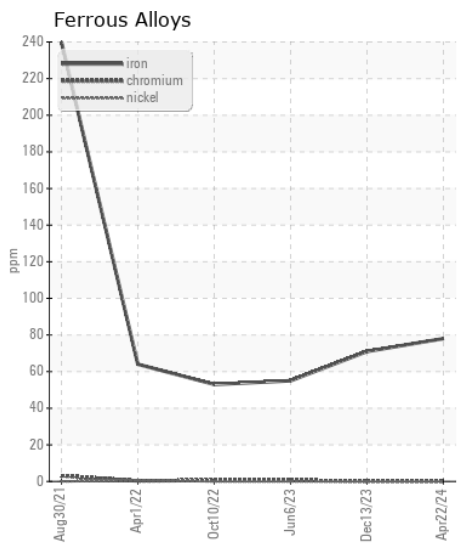
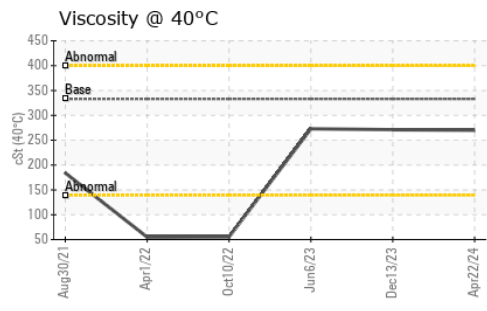
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>100	6	4	2
Potassium	ppm	ASTM D5185m	>20	0	<1	0
Water		WC Method	>0.25	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	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	>0.25	NEG	NEG	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		2	0	<1
Boron	ppm	ASTM D5185m	111	186	212	222
Barium	ppm	ASTM D5185m	0.0	0	0	0
Molybdenum	ppm	ASTM D5185m	0.9	0	0	0
Manganese	ppm	ASTM D5185m	0.0	<1	0	<1
Magnesium	ppm	ASTM D5185m	39	<1	<1	1
Calcium	ppm	ASTM D5185m	93	26	19	33
Phosphorus	ppm	ASTM D5185m	920	1138	1077	1091
Zinc	ppm	ASTM D5185m	104	8	0	12
Sulfur	ppm	ASTM D5185m	20179	34033	32343	34209
Visc @ 40°C	cSt	ASTM D445	333	270	271	273



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0007337
Lab Number : 06160770
Unique Number : 10996193
Test Package : CONST
Received : 25 Apr 2024
Tested : 26 Apr 2024
Diagnosed : 29 Apr 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)