



ASCENDUM

OIL ANALYSIS REPORT

WEAR	SEVERE
CONTAMINATION	SEVERE
FLUID CONDITION	NORMAL

Area
Blythe & Zachary JV CSA - I85 SC
Machine Id
VOLVO EC220E 3004954 (S/N 220E310634)
Component
Front Right Final Drive
Fluid
VOLVO PREMIUM GEAR OIL 85W-140 GL-5 (--- GAL)

RECOMMENDATION

We advise that you check all areas where dirt can enter the system. We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0003270	ASC0003365	VCP412387
Sample Date		Client Info		15 Jul 2024	05 Apr 2024	03 Aug 2023
Machine Age	hrs	Client Info		7496	7017	5771
Oil Age	hrs	Client Info		479	7017	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changed	Changed	Changed
Filter Changed		Client Info		N/A	Changed	Not Changed
Sample Status				SEVERE	SEVERE	NORMAL

WEAR

Gear wear is indicated.

Iron	ppm	ASTM D5185m	>500	▲ 2568	▲ 1269	174
Chromium	ppm	ASTM D5185m	>10	▲ 18	▲ 12	1
Nickel	ppm	ASTM D5185m	>10	3	2	<1
Titanium	ppm	ASTM D5185m		26	18	<1
Silver	ppm	ASTM D5185m		0	0	<1
Aluminum	ppm	ASTM D5185m	>25	● 471	● 408	11
Lead	ppm	ASTM D5185m	>25	<1	<1	0
Copper	ppm	ASTM D5185m	>50	5	3	<1
Tin	ppm	ASTM D5185m	>10	0	0	0
Vanadium	ppm	ASTM D5185m		1	1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

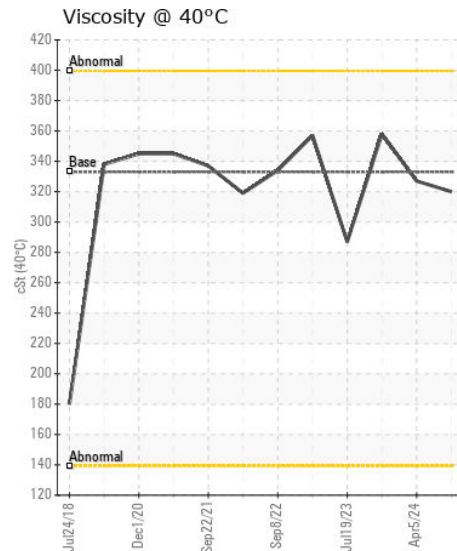
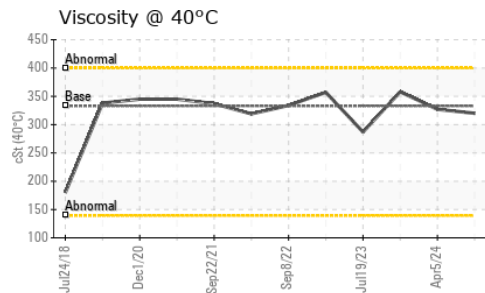
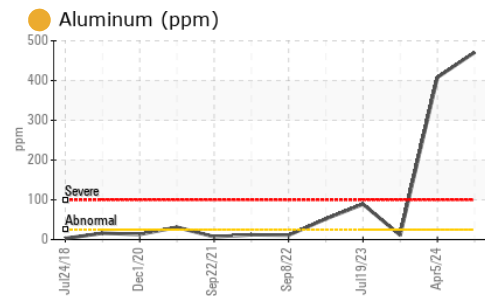
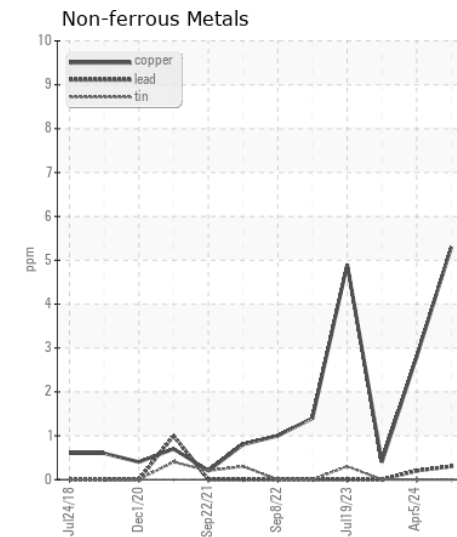
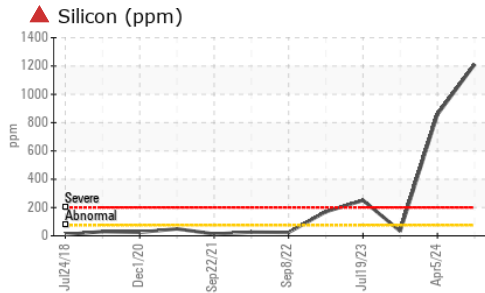
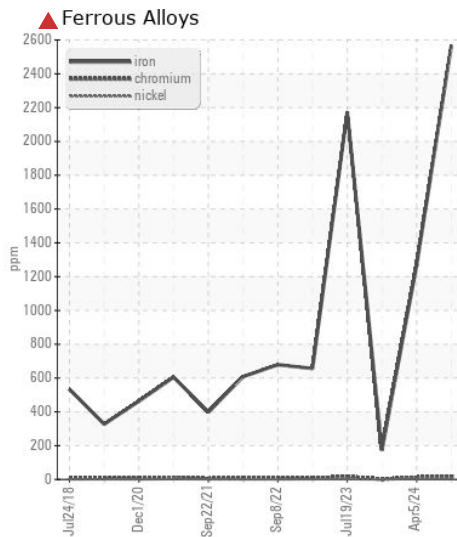
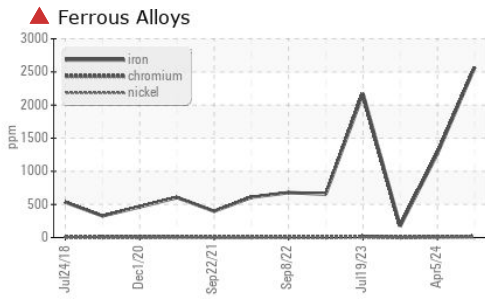
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Silicon	ppm	ASTM D5185m	>75	▲ 1212	▲ 857	33
Potassium	ppm	ASTM D5185m	>20	42	31	3
Water		WC Method	>0.2	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	MODER	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	>0.2	NEG	NEG	NEG

FLUID CONDITION

The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185m		8	6	0
Boron	ppm	ASTM D5185m	111	202	192	230
Barium	ppm	ASTM D5185m	0.0	0	0	0
Molybdenum	ppm	ASTM D5185m	0.9	2	1	<1
Manganese	ppm	ASTM D5185m	0.0	13	7	<1
Magnesium	ppm	ASTM D5185m	39	59	46	1
Calcium	ppm	ASTM D5185m	93	100	154	4
Phosphorus	ppm	ASTM D5185m	920	978	1085	1039
Zinc	ppm	ASTM D5185m	104	15	44	2
Sulfur	ppm	ASTM D5185m	20179	29543	32587	31039
Visc @ 40°C	cSt	ASTM D445	333	320	327	358



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0003270
Lab Number : 06238231
Unique Number : 11127065
Test Package : CONST

BLYTHE CONSTRUCTION INC
 2911 N GRAHAM STREET
 CHARLOTTE, NC
 US 28231
 Contact: Service Manager

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: (704)373-2960
F: (704)373-2960