



ASCENDUM

OIL ANALYSIS REPORT

WEAR
CONTAMINATION
FLUID CONDITION

ABNORMAL

SEVERE

NORMAL



Area

Blythe Construction CSA - Charlotte

Machine Id

VOLVO EC250E 3004996 (S/N 250E310486)

Component

Left Travel

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 recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0000958	ASC0000320	VCP0006516
Sample Date		Client Info		08 Dec 2023	05 Jun 2023	20 Apr 2023
Machine Age		Client Info		6432	5993	5866
Oil Age		Client Info		439	127	366
Filter Age		Client Info		0	0	0
Oil Changed		Client Info		Not Changed	Changed	Changed
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				SEVERE	ABNORMAL	SEVERE

WEAR

Gear wear is indicated.

Iron	ppm	ASTM D5185m	>1200	▲ 1313	620	▲ 2166
Chromium	ppm	ASTM D5185m	>20	9	5	16
Nickel	ppm	ASTM D5185m	>5	<1	<1	2
Titanium	ppm	ASTM D5185m		18	11	▲ 48
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>100	● 155	● 94	● 298
Lead	ppm	ASTM D5185m	>50	0	0	0
Copper	ppm	ASTM D5185m	>50	<1	<1	<1
Tin	ppm	ASTM D5185m	>5	0	0	0
Vanadium	ppm	ASTM D5185m		0	<1	<1
White Metal	scalar	*Visual	NONE	NONE	MODER	MODER
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

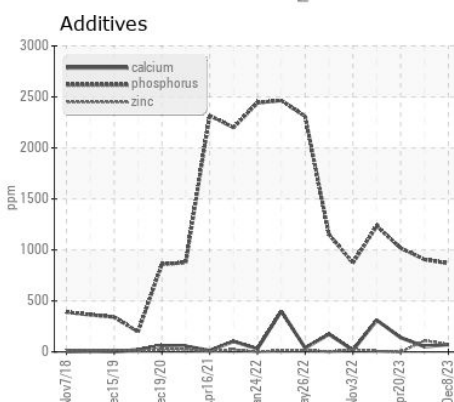
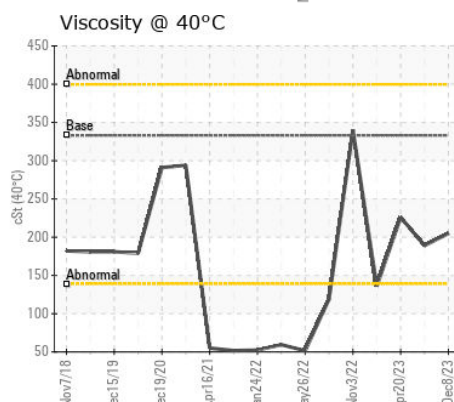
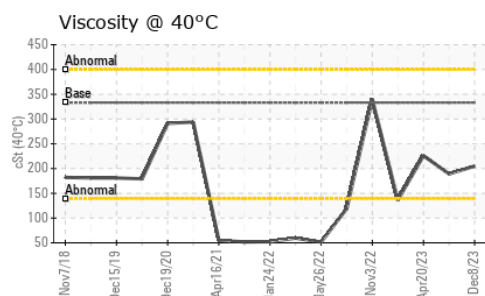
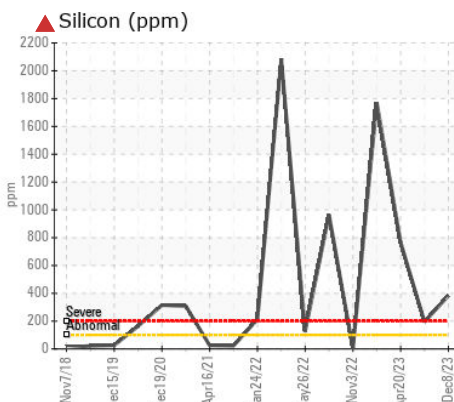
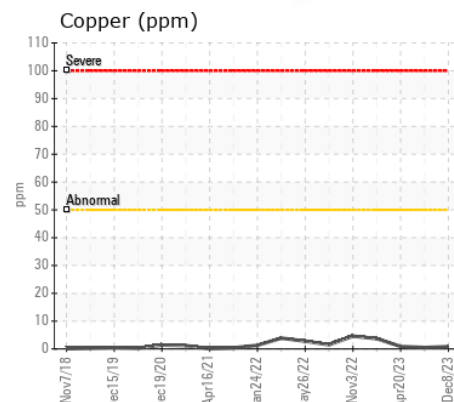
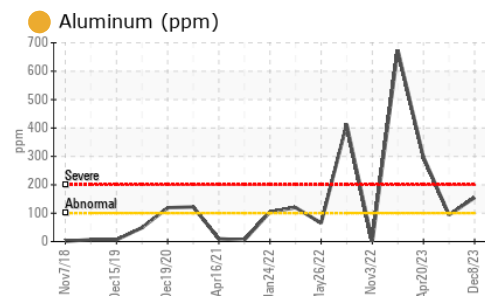
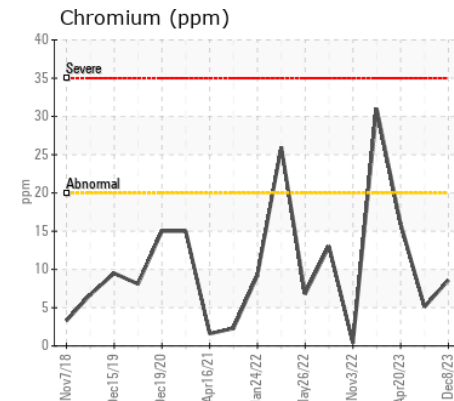
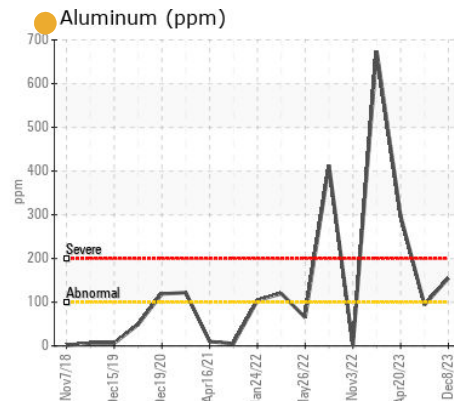
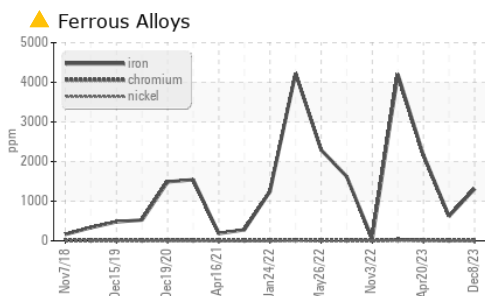
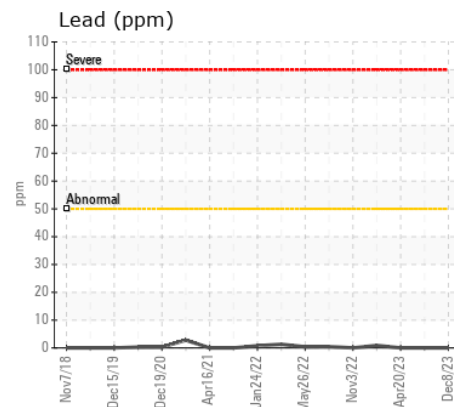
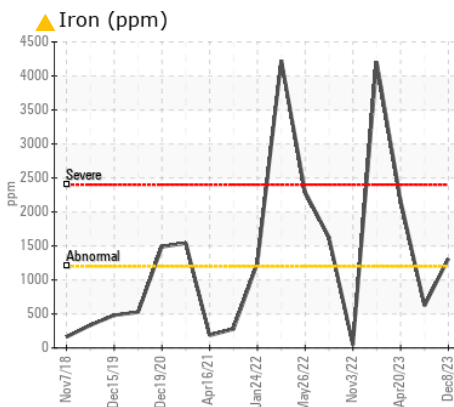
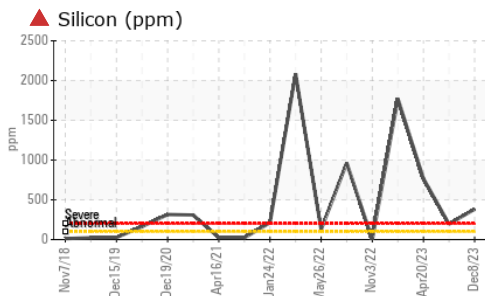
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Silicon	ppm	ASTM D5185m	>100	▲ 383	▲ 195	▲ 766
Potassium	ppm	ASTM D5185m	>20	10	7	25
Water		WC Method	>0.25	NEG	NEG	NEG
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	>0.25	NEG	NEG	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		28	15	69
Boron	ppm	ASTM D5185m	111	148	138	179
Barium	ppm	ASTM D5185m	0.0	0	0	0
Molybdenum	ppm	ASTM D5185m	0.9	<1	<1	2
Manganese	ppm	ASTM D5185m	0.0	11	5	17
Magnesium	ppm	ASTM D5185m	39	33	20	71
Calcium	ppm	ASTM D5185m	93	73	52	141
Phosphorus	ppm	ASTM D5185m	920	869	906	1019
Zinc	ppm	ASTM D5185m	104	75	111	0
Sulfur	ppm	ASTM D5185m	20179	26056	28147	25056
Visc @ 40°C	cSt	ASTM D445	333	205	189	226



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0000958
Lab Number : 06038254
Unique Number : 10793483
Test Package : MOBCE
Received : 18 Dec 2023
Tested : 19 Dec 2023
Diagnosed : 20 Dec 2023 - Jonathan Hester

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)