



ASCENDUM

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
Blythe & Zachary JV CSA - I85 SC
Machine Id
VOLVO L60H 3104780 (S/N L60HV621728)
Component
Diesel Engine
Fluid
VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0003134	ASC0003394	VCP425572
Sample Date		Client Info		15 Jul 2024	26 Jan 2024	24 May 2023
Machine Age	hrs	Client Info		6007	5496	5006
Oil Age	hrs	Client Info		4507	4504	0
Filter Age	hrs	Client Info		0	4504	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	16	17	11
Chromium	ppm	ASTM D5185m	>10	<1	<1	1
Nickel	ppm	ASTM D5185m	>10	0	0	<1
Titanium	ppm	ASTM D5185m		0	<1	1
Silver	ppm	ASTM D5185m	>2	0	0	<1
Aluminum	ppm	ASTM D5185m	>10	8	10	7
Lead	ppm	ASTM D5185m	>20	0	<1	1
Copper	ppm	ASTM D5185m	>15	<1	1	1
Tin	ppm	ASTM D5185m	>10	0	1	<1
Vanadium	ppm	ASTM D5185m		0	0	<1
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.

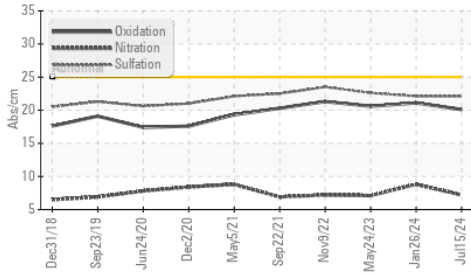
Silicon	ppm	ASTM D5185m	>20	8	8	6
Potassium	ppm	ASTM D5185m	>20	1	<1	0
Fuel		WC Method	>6.0	<1.0	<1.0	<1.0
Water		WC Method	>0.1	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.3	0.5	0.3
Nitration	Abs/cm	*ASTM D7624	>20	7.2	8.8	7.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.1	22.1	22.6
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

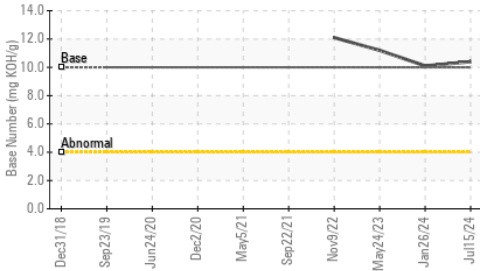
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		4	3	4
Boron	ppm	ASTM D5185m	2.5	51	32	46
Barium	ppm	ASTM D5185m	0.0	0	0	0
Molybdenum	ppm	ASTM D5185m	0.7	50	40	40
Manganese	ppm	ASTM D5185m	0.0	0	<1	<1
Magnesium	ppm	ASTM D5185m	256	614	498	502
Calcium	ppm	ASTM D5185m	2057	1947	1631	1661
Phosphorus	ppm	ASTM D5185m	935	1005	978	902
Zinc	ppm	ASTM D5185m	1223	1303	1143	1073
Sulfur	ppm	ASTM D5185m	4079	3178	2883	2930
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.1	21.1	20.6
Base Number (BN)	mg KOH/g	ASTM D2896	10	10.4	10.1	11.2
Visc @ 100°C	cSt	ASTM D445	15.0	13.0	13.5	13.3

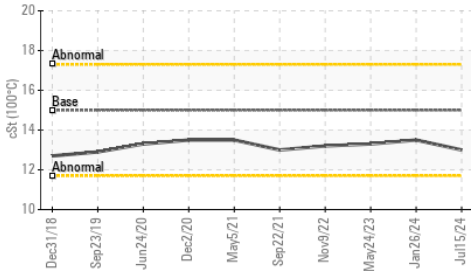
FT-IR (Direct Trend)



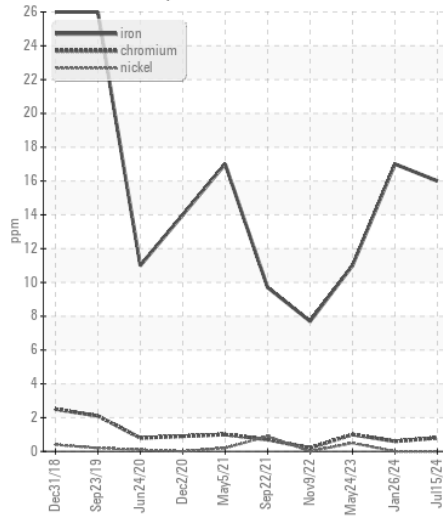
Base Number



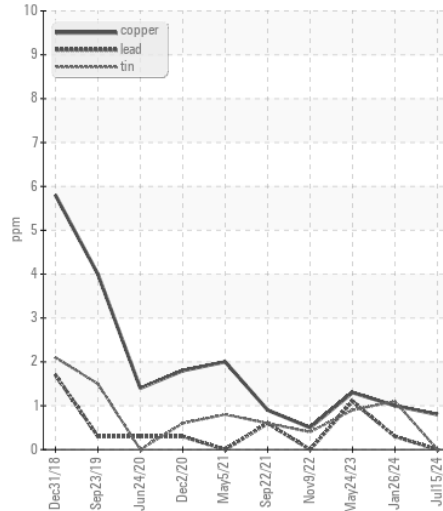
Viscosity @ 100°C



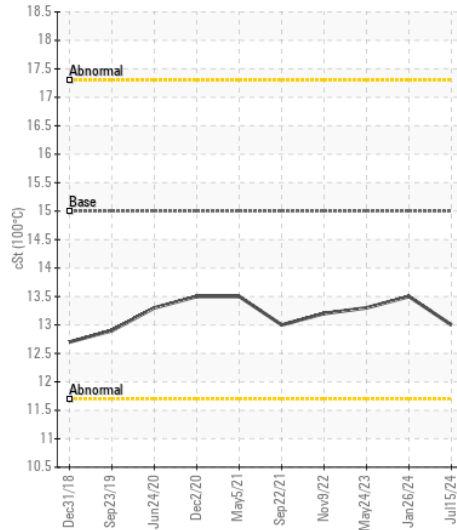
Ferrous Alloys



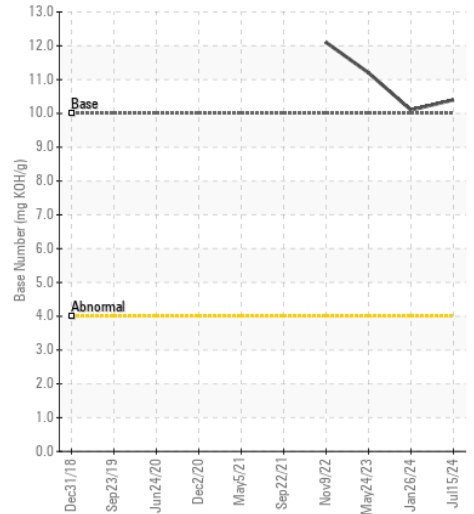
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0003134
Lab Number : 06237575
Unique Number : 11126409
Test Package : CONST (Additional Tests: TBN)

Received : 16 Jul 2024
Tested : 17 Jul 2024
Diagnosed : 17 Jul 2024 - Wes Davis

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)

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