



ASCENDUM

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
Ascendum Machinery/500 Hour CSA
Machine Id
VOLVO A40G 2305 (S/N 353314)
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 30 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0009802	ASC0007457	VCP0005781
Sample Date		Client Info		12 Jun 2024	08 Feb 2024	25 May 2023
Machine Age	hrs	Client Info		1936	1472	503
Oil Age	hrs	Client Info		464	500	503
Filter Age	hrs	Client Info		0	500	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	6	9	15
Chromium	ppm	ASTM D5185m	>20	<1	0	0
Nickel	ppm	ASTM D5185m	>2	1	2	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>25	2	1	5
Lead	ppm	ASTM D5185m	>40	<1	0	<1
Copper	ppm	ASTM D5185m	>330	5	20	67
Tin	ppm	ASTM D5185m	>15	1	<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

There is no indication of any contamination in the oil.

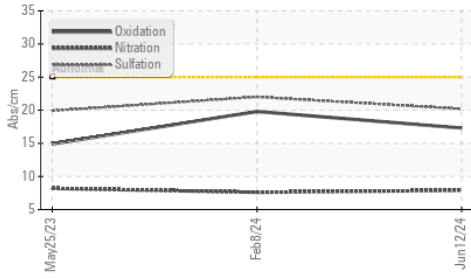
Silicon	ppm	ASTM D5185m	>25	6	8	25
Potassium	ppm	ASTM D5185m	>20	2	0	2
Fuel		WC Method	>6.0	<1.0	<1.0	0.5
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.1	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	7.9	7.6	8.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.2	22.0	19.9
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	>0.2	NEG	NEG	NEG

FLUID CONDITION

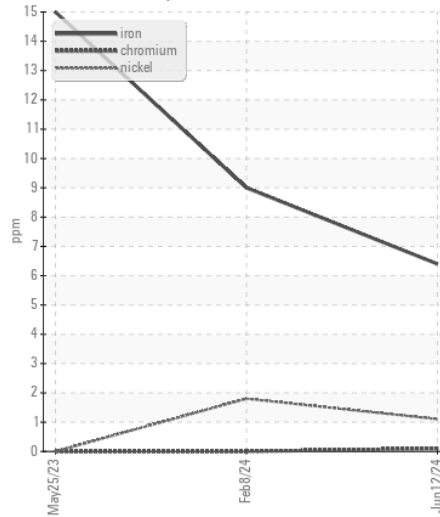
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m	>75	0	2	2
Boron	ppm	ASTM D5185m	250	61	46	89
Barium	ppm	ASTM D5185m	10	0	0	0
Molybdenum	ppm	ASTM D5185m	100	49	40	66
Manganese	ppm	ASTM D5185m		0	<1	2
Magnesium	ppm	ASTM D5185m	450	370	498	288
Calcium	ppm	ASTM D5185m	3000	1760	1754	1867
Phosphorus	ppm	ASTM D5185m	1150	865	972	1017
Zinc	ppm	ASTM D5185m	1350	1145	1107	1227
Sulfur	ppm	ASTM D5185m	4250	3396	3039	4247
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.3	19.8	14.9
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	8.6	9.4	7.8
Visc @ 100°C	cSt	ASTM D445	10.9	12.8	12.8	10.8

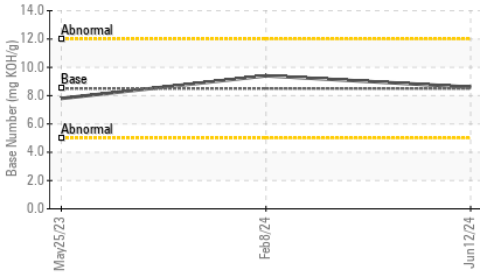
FT-IR (Direct Trend)



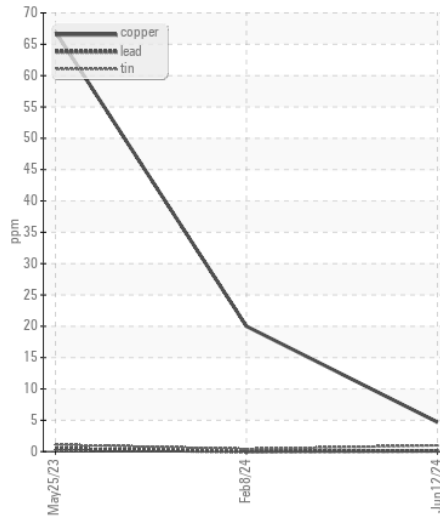
Ferrous Alloys



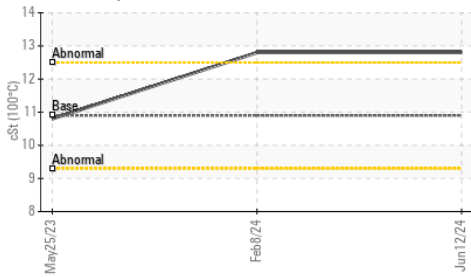
Base Number



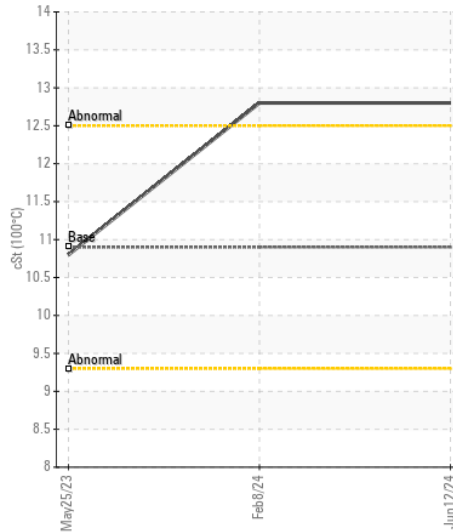
Non-ferrous Metals



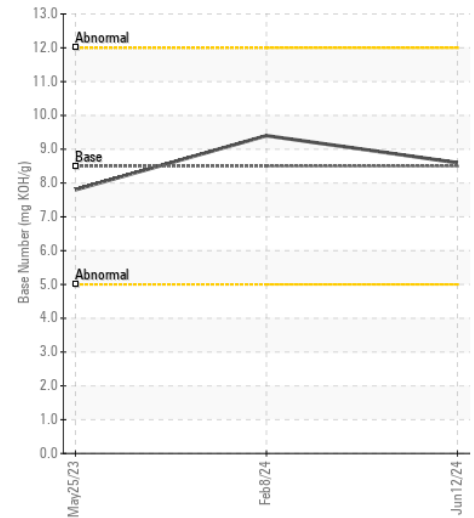
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0009802 **Received** : 14 Jun 2024
Lab Number : 06209890 **Tested** : 17 Jun 2024
Unique Number : 11082754 **Diagnosed** : 17 Jun 2024 - Angela Borella
Test Package : CONST (Additional Tests: TBN)

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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)