MOB ASCENDUM

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

Area
Ascendum Machinery
Machine Id
VOLVO EC350E 310863
Component
Diesel Engine
Fluid
VOLVO VDS-4.5 Premium Motor Oil 15W40 (--- GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

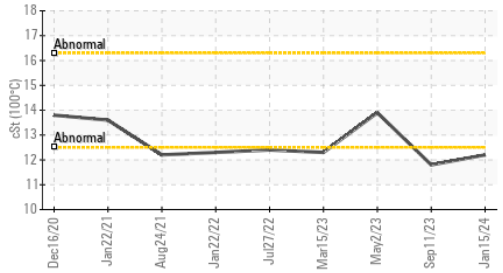
There is no indication of any contamination in the oil.

FLUID CONDITION

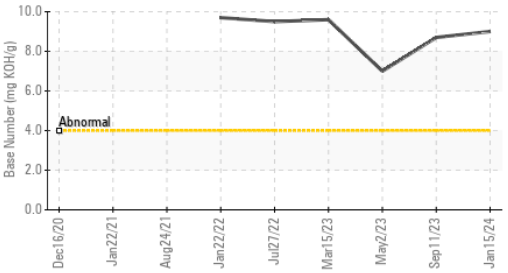
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0001734	ASC0001331	VCP398461
Sample Date		Client Info		15 Jan 2024	11 Sep 2023	02 May 2023
Machine Age	hrs	Client Info		4726	4195	3480
Oil Age	hrs	Client Info		531	663	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ATTENTION	ABNORMAL	NORMAL
Iron	ppm	ASTM D5185m	>100	7	5	29
Chromium	ppm	ASTM D5185m	>10	0	0	<1
Nickel	ppm	ASTM D5185m	>10	1	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>10	2	8	11
Lead	ppm	ASTM D5185m	>20	0	0	0
Copper	ppm	ASTM D5185m	>15	<1	<1	0
Tin	ppm	ASTM D5185m	>10	0	<1	0
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>20	7	6	7
Potassium	ppm	ASTM D5185m	>20	0	0	1
Fuel	%	ASTM D3524	>6.0	<1.0	1.9	<1.0
Water		WC Method	>0.1	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.1	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	7.7	8.0	4.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.3	21.3	18.8
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
Sodium	ppm	ASTM D5185m		2	3	0
Boron	ppm	ASTM D5185m		29	24	478
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		40	40	92
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		472	485	432
Calcium	ppm	ASTM D5185m		1681	1670	1490
Phosphorus	ppm	ASTM D5185m		917	889	1114
Zinc	ppm	ASTM D5185m		1083	1091	1419
Sulfur	ppm	ASTM D5185m		2821	3341	3905
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.1	19.9	13.8
Base Number (BN)	mg KOH/g	ASTM D2896		9.0	8.7	7.0
Visc @ 100°C	cSt	ASTM D445		▲ 12.2	▲ 11.8	13.9

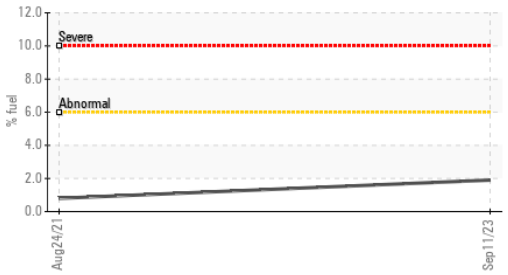
Viscosity @ 100°C



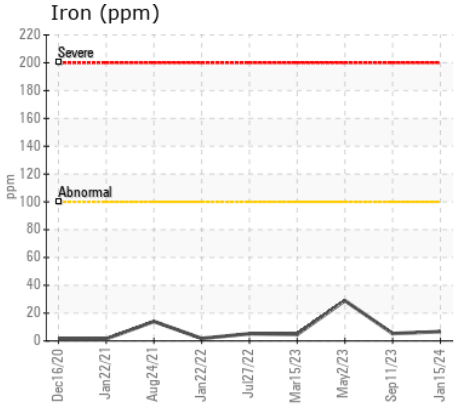
Base Number



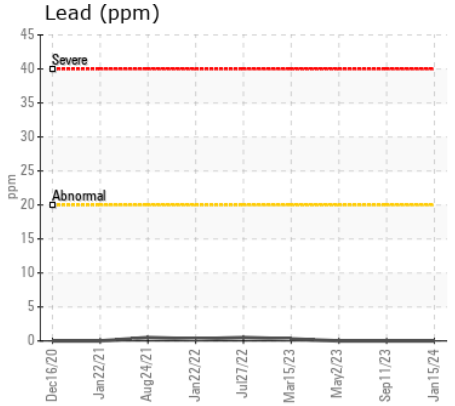
Fuel Dilution



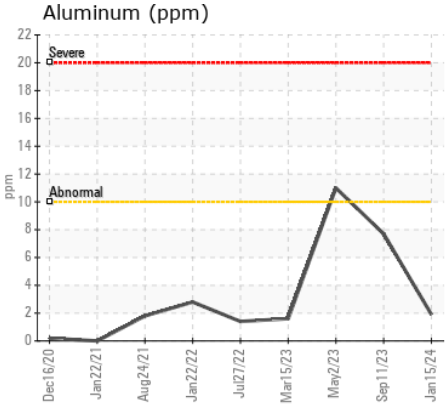
Iron (ppm)



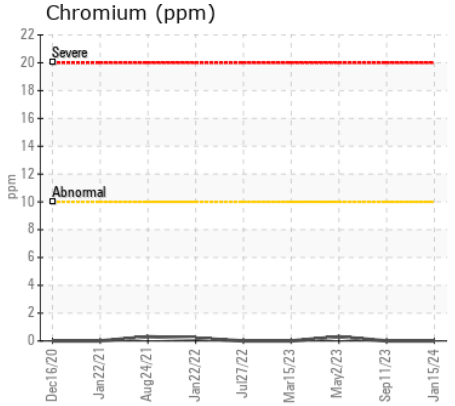
Lead (ppm)



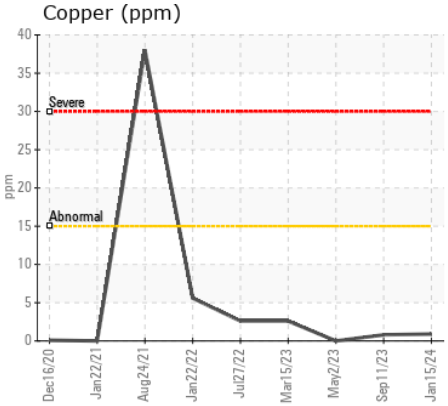
Aluminum (ppm)



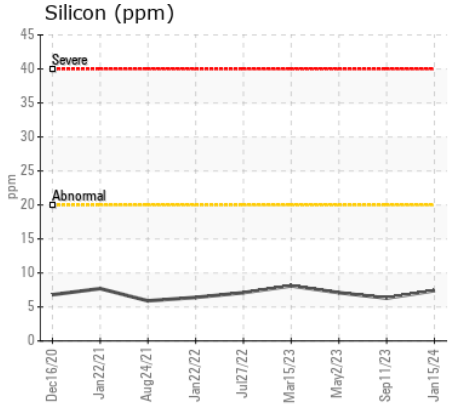
Chromium (ppm)



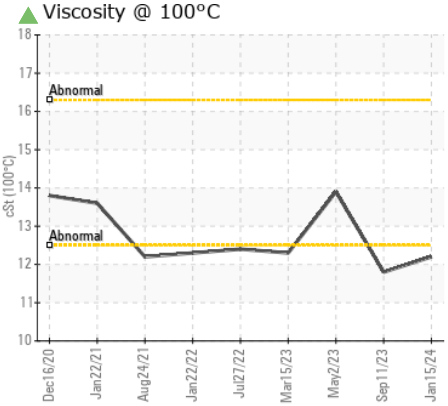
Copper (ppm)



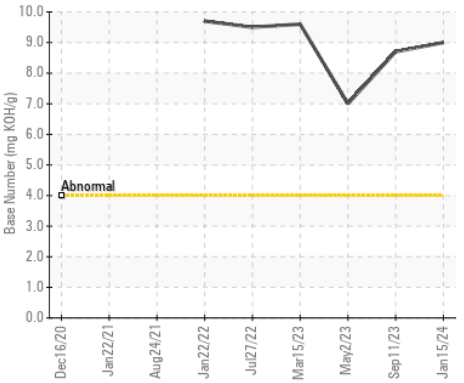
Silicon (ppm)



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory	: WearCheck USA - 501 Madison Ave., Cary, NC 27513		
Sample No.	: ASC0001734	**Recieved**	: 17 Jan 2024
Lab Number	: 06062333	**Diagnosed**	: 18 Jan 2024
Unique Number	: 10833715	**Diagnostician**	: Sean Felton
Test Package	: MOBCE (Additional Tests: FuelDilution, TBN)		

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)

CAROLINA PRECISION GRADING
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CHARLOTTE, NC
US 28227
Contact: Service Manager

T:
F:

Report Id: CARCHAVCP [WUSCAR] 06062333 (Generated: 01/19/2024 19:21:58) Rev: 1

Submitted By: KARRINGTON RENDLEMAN