ASCENDUM

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
[HANSON]
Machine Id
VOLVO L220H 3137
Component
Diesel Engine
Fluid
VOLVO ULTRA DIESEL ENGINE OIL SAE 10W30 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

Metal levels are typical for a new component breaking in.

CONTAMINATION

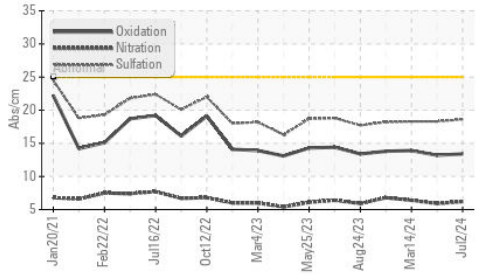
There is no indication of any contamination in the oil.

FLUID CONDITION

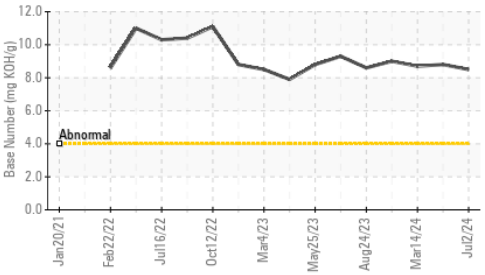
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0009444	ASC0010093	VCP421578
Sample Date		Client Info		02 Jul 2024	29 Apr 2024	14 Mar 2024
Machine Age	hrs	Client Info		500	9414	9077
Oil Age	hrs	Client Info		500	400	0
Filter Age	hrs	Client Info		0	400	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>100	7	3	5
Chromium	ppm	ASTM D5185m	>10	0	0	0
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>10	2	1	0
Lead	ppm	ASTM D5185m	>20	0	1	0
Copper	ppm	ASTM D5185m	>15	2	1	2
Tin	ppm	ASTM D5185m	>10	<1	<1	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>20	4	3	2
Potassium	ppm	ASTM D5185m	>20	3	2	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	0.5	0.4	0.4
Nitration	Abs/cm	*ASTM D7624	>20	6.2	5.9	6.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.6	18.3	18.3
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	1	0
Boron	ppm	ASTM D5185m		5	5	2
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		65	58	58
Manganese	ppm	ASTM D5185m		0	<1	0
Magnesium	ppm	ASTM D5185m		913	928	1015
Calcium	ppm	ASTM D5185m		1050	1047	1104
Phosphorus	ppm	ASTM D5185m		1063	1036	1059
Zinc	ppm	ASTM D5185m		1258	1253	1245
Sulfur	ppm	ASTM D5185m		3705	3703	3696
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.4	13.2	13.9
Base Number (BN)	mg KOH/g	ASTM D2896		8.5	8.8	8.7
Visc @ 100°C	cSt	ASTM D445		13.6	13.5	13.9

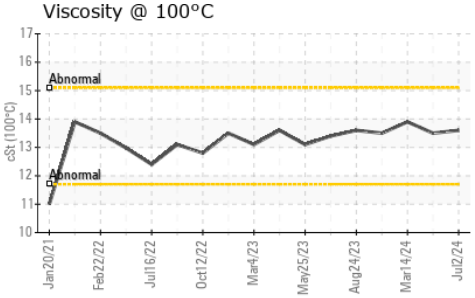
FT-IR (Direct Trend)



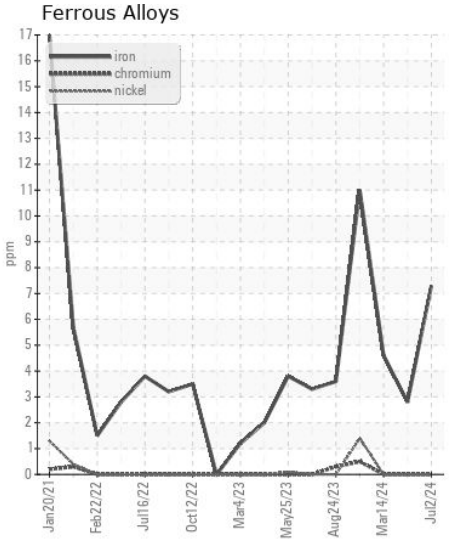
Base Number



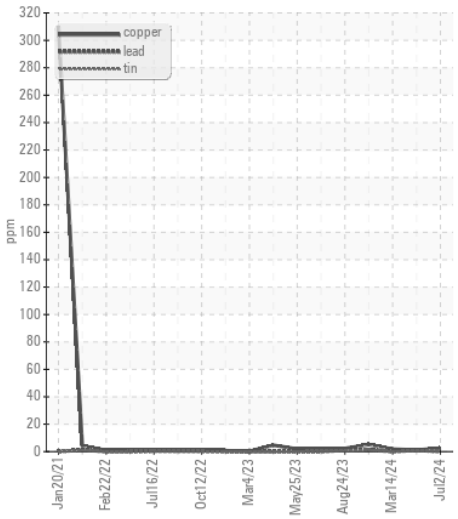
Viscosity @ 100°C



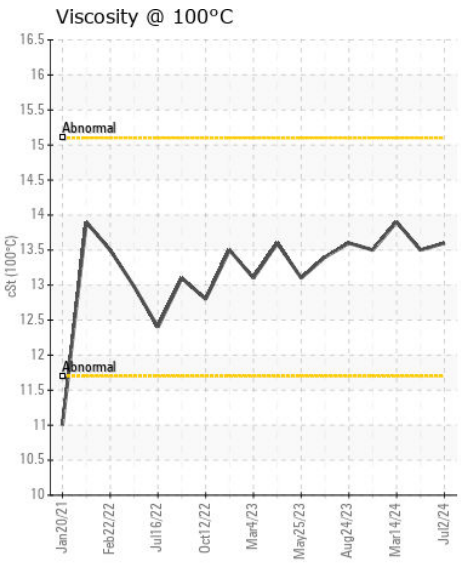
Ferrous Alloys



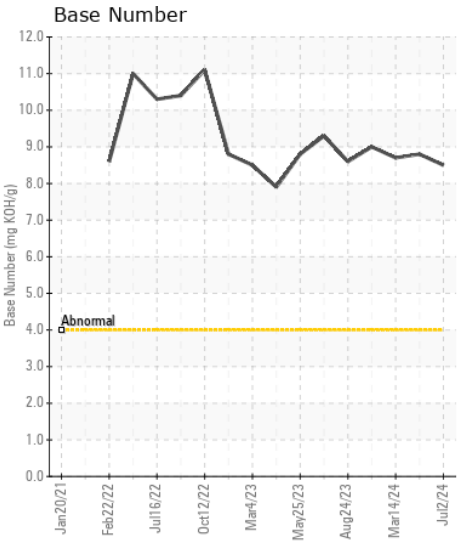
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0009444
Lab Number : 06231922
Unique Number : 11115415
Test Package : CONST (Additional Tests: TBN)

Received : 10 Jul 2024
Tested : 10 Jul 2024
Diagnosed : 10 Jul 2024 - Wes Davis

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)

113 - ASCENDUM MACHINERY INC - GARNER
3561 JONES SAUSAGE ROAD
GARNER, NC
US 27529
Contact: TRENT BROADWELL
trent.broadwell@ascendummachinery.com
T: (919)661-8817
F: (919)661-9038