



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
[W/O 10835]
Machine Id
VOLVO L90H 625233
Component
Diesel Engine
Fluid
CHEVRON 15W40 (5 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ML0002173	VCP429617	VCP402371
Sample Date		Client Info		22 May 2024	17 Jan 2024	13 Apr 2023
Machine Age	hrs	Client Info		4547	3932	3533
Oil Age	hrs	Client Info		615	0	0
Filter Age	hrs	Client Info		615	0	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	>200	6	10	14
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>5	0	0	0
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>30	9	13	12
Lead	ppm	ASTM D5185m	>40	0	0	0
Copper	ppm	ASTM D5185m	>20	<1	1	1
Tin	ppm	ASTM D5185m	>20	<1	0	<1
Vanadium	ppm	ASTM D5185m		0	<1	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.

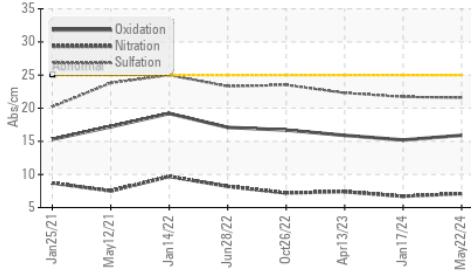
Silicon	ppm	ASTM D5185m	>20	9	8	9
Potassium	ppm	ASTM D5185m	>20	0	0	2
Fuel		WC Method	>6.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.3	0.3	0.4
Nitration	Abs/cm	*ASTM D7624	>20	7.1	6.7	7.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.6	21.7	22.3
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	>0.2	NEG	NEG	NEG

FLUID CONDITION

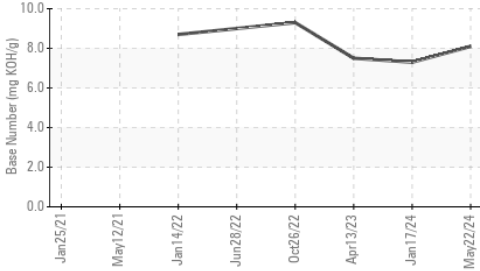
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>50	1	2	1
Boron	ppm	ASTM D5185m		318	367	350
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		107	90	98
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		607	438	451
Calcium	ppm	ASTM D5185m		1487	1423	1416
Phosphorus	ppm	ASTM D5185m		885	1068	956
Zinc	ppm	ASTM D5185m		1018	1303	1184
Sulfur	ppm	ASTM D5185m		3213	3395	3067
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.9	15.2	15.9
Base Number (BN)	mg KOH/g	ASTM D2896		8.1	7.3	7.5
Visc @ 100°C	cSt	ASTM D445	14.4	13.1	13.3	13.6

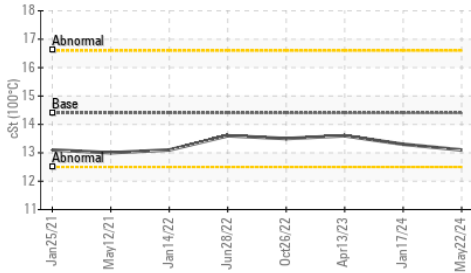
FT-IR (Direct Trend)



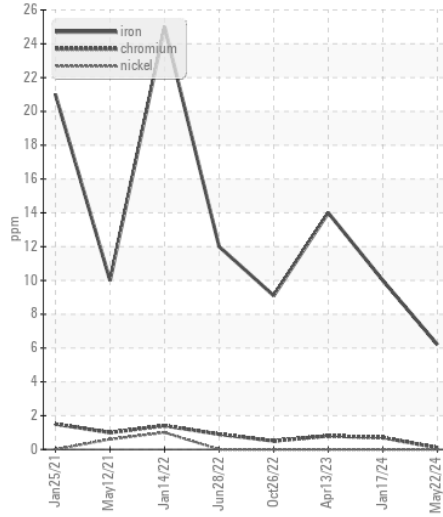
Base Number



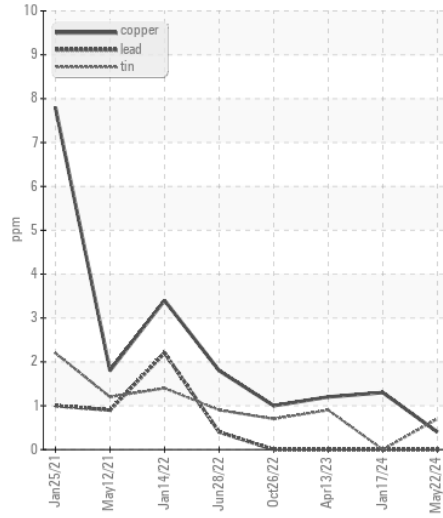
Viscosity @ 100°C



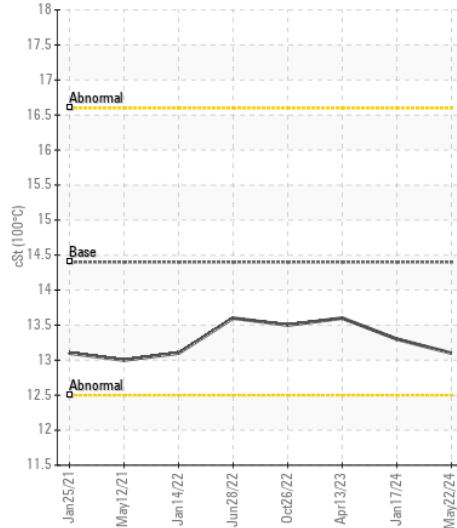
Ferrous Alloys



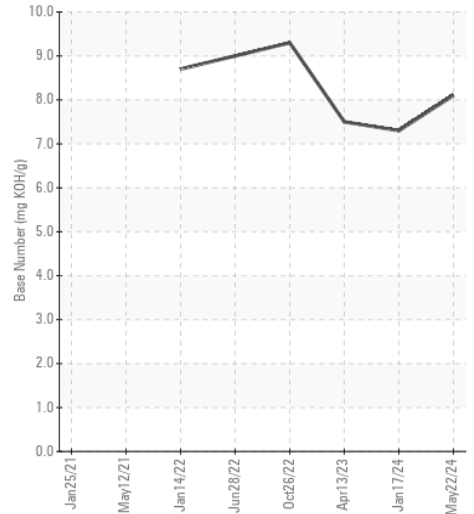
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ML0002173
Lab Number : 06196249
Unique Number : 11058372
Test Package : CONST (Additional Tests: TBN)

Received : 31 May 2024
Tested : 03 Jun 2024
Diagnosed : 03 Jun 2024 - Don Baldrige

RECYCLE 1
 4700 LAWRENCE ST
 HYATTSVILLE, MD
 US 20781

Contact: MIKE DESJARDINS
 mdesjarkins@wbwaste.com

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)

T:
F: