



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
AMR-Manchester
Machine Id
625478 VOLVO L90H 625478
Component
Diesel Engine
Fluid
CHEVRON 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		DJJ0019227	DJJ0012260	DJJ0012267
Sample Date		Client Info		03 Jan 2024	02 Aug 2023	12 Jun 2023
Machine Age	hrs	Client Info		8522	4477	7481
Oil Age	hrs	Client Info		8522	0	250
Filter Age	hrs	Client Info		0	0	250
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>200	3	3	4
Chromium	ppm	ASTM D5185m	>20	<1	0	<1
Nickel	ppm	ASTM D5185m	>5	<1	<1	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>30	4	4	3
Lead	ppm	ASTM D5185m	>40	0	0	0
Copper	ppm	ASTM D5185m	>20	<1	<1	0
Tin	ppm	ASTM D5185m	>20	<1	0	<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

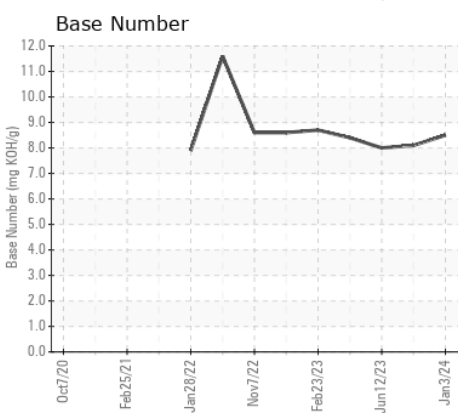
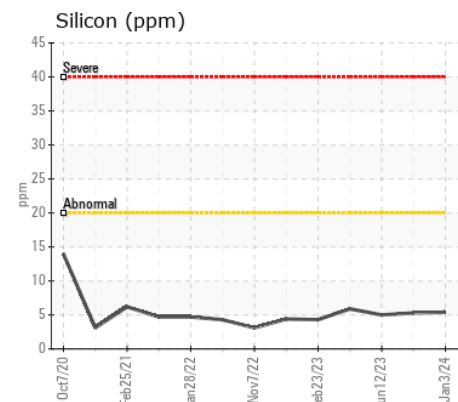
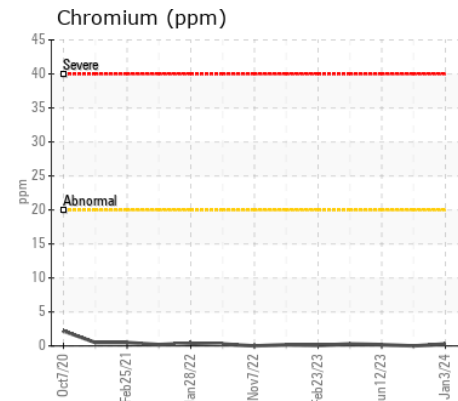
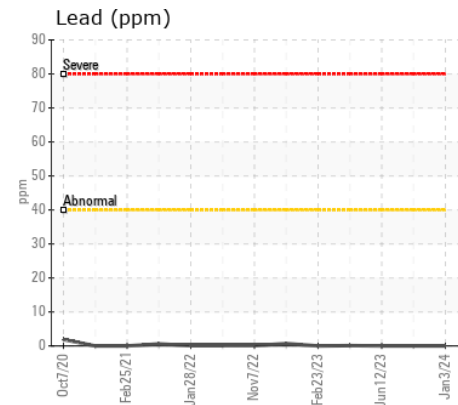
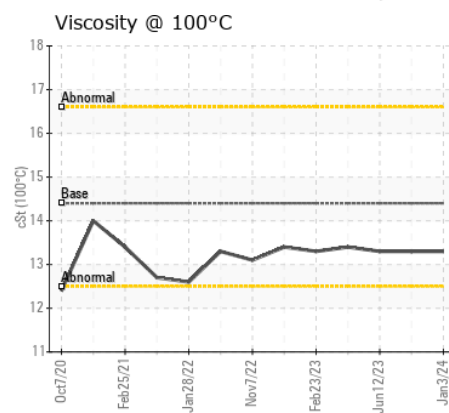
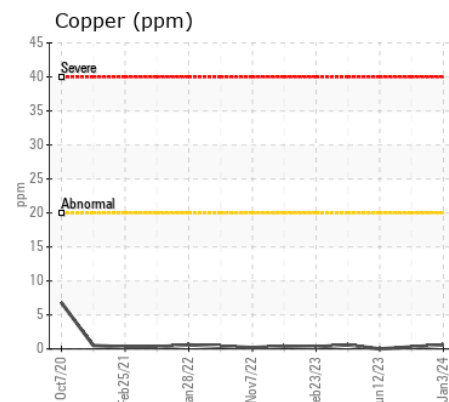
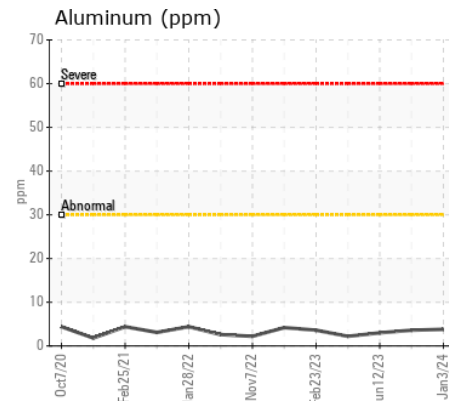
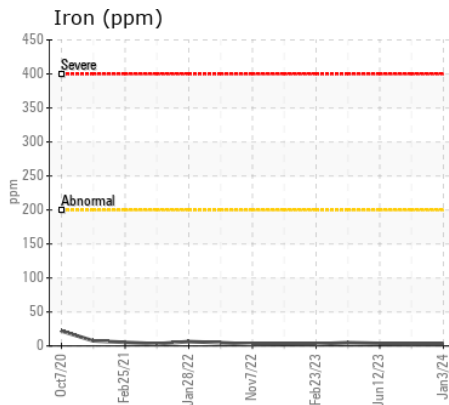
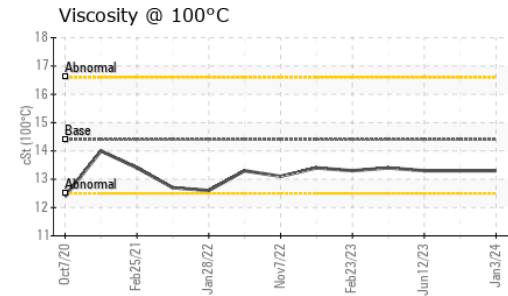
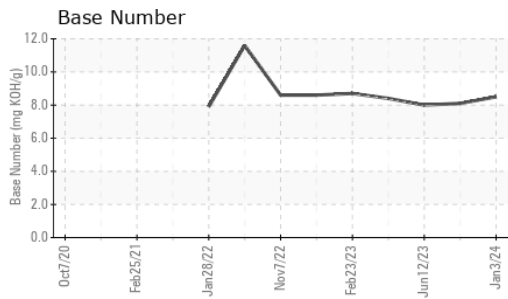
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	5	5	5
Potassium	ppm	ASTM D5185m	>20	2	1	0
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	0.2	0.2	0.3
Nitration	Abs/cm	*ASTM D7624	>20	6.0	5.7	6.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.1	20.5	21.9
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 suitable for further service.

Sodium	ppm	ASTM D5185m	>50	0	<1	<1
Boron	ppm	ASTM D5185m		360	393	354
Barium	ppm	ASTM D5185m		0	2	0
Molybdenum	ppm	ASTM D5185m		112	113	116
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		570	527	603
Calcium	ppm	ASTM D5185m		1351	1372	1506
Phosphorus	ppm	ASTM D5185m		750	749	791
Zinc	ppm	ASTM D5185m		853	880	965
Sulfur	ppm	ASTM D5185m		2724	2486	3205
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.5	14.5	16.6
Base Number (BN)	mg KOH/g	ASTM D2896		8.5	8.1	8.0
Visc @ 100°C	cSt	ASTM D445	14.4	13.3	13.3	13.3



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DJJ0019227 **Recieved** : 11 Jan 2024
Lab Number : 06058636 **Diagnosed** : 12 Jan 2024
Unique Number : 10830018 **Diagnostician** : Wes Davis
Test Package : MOBCE (Additional Tests: TBN)

ADVANTAGE METALS RECYCLING - MANCHESTER
 3005 MANCHESTER TRAFFICWAY
 KANSAS CITY, MO
 US 64129
 Contact: STEVE BROWN
 steve.brown@advantagerecycling.com
 T: (816)922-5100
 F: (816)861-7670

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)