



VOLVO

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
[SW1028546 LKQ]
Machine Id
VOLVO L90H 624586
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VCP437526	VCP413319	VCP354180
Sample Date		Client Info		08 Jan 2024	30 Aug 2023	26 Apr 2023
Machine Age	hrs	Client Info		7972	7364	6788
Oil Age	hrs	Client Info		0	0	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				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	9	17	35
Chromium	ppm	ASTM D5185m	>10	<1	2	3
Nickel	ppm	ASTM D5185m	>10	0	0	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>10	2	3	6
Lead	ppm	ASTM D5185m	>20	0	0	0
Copper	ppm	ASTM D5185m	>15	<1	<1	2
Tin	ppm	ASTM D5185m	>10	<1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

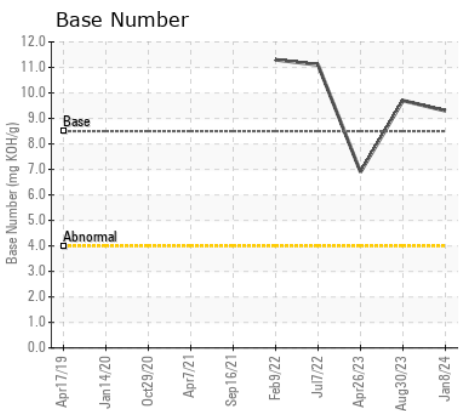
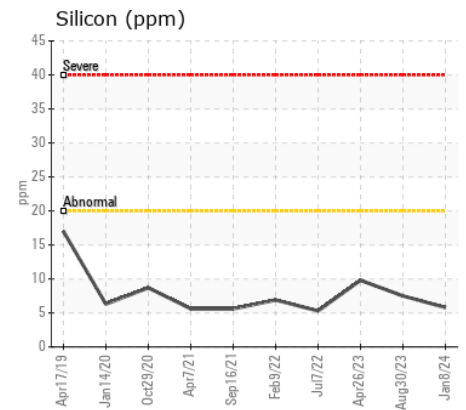
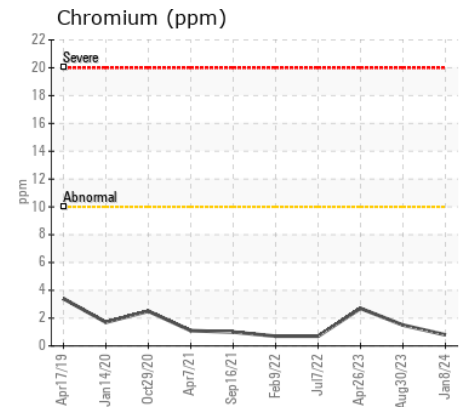
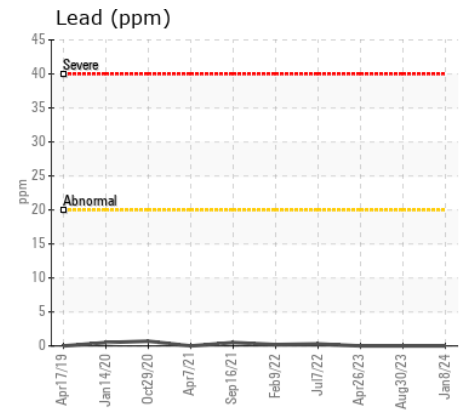
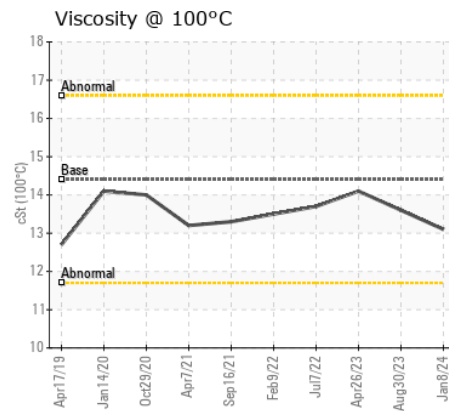
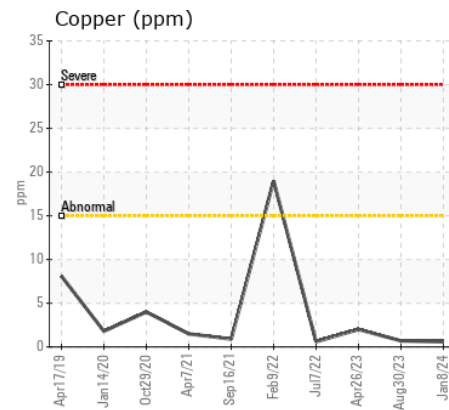
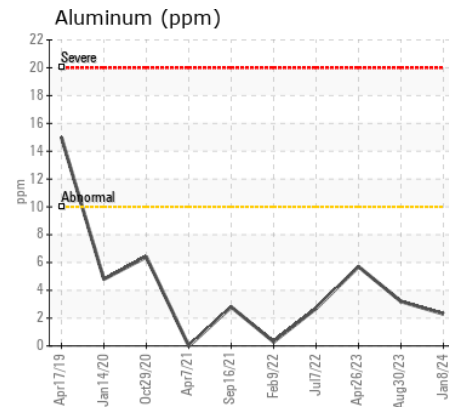
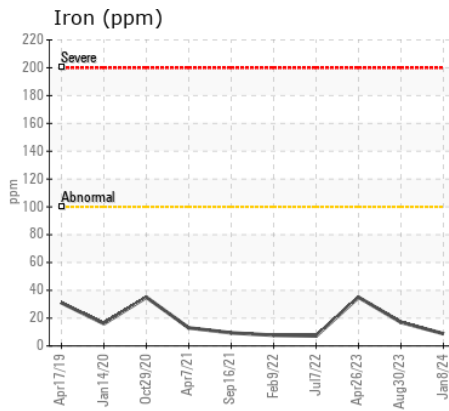
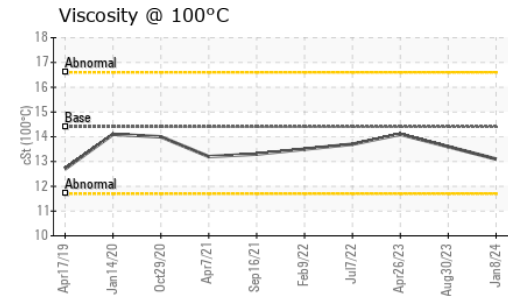
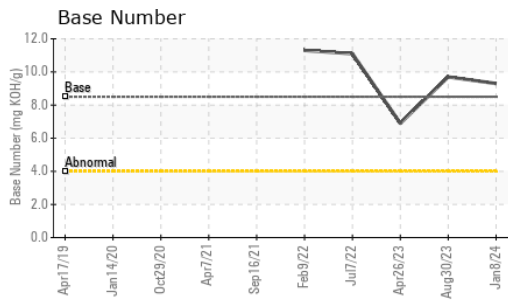
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	6	8	10
Potassium	ppm	ASTM D5185m	>20	1	<1	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	0.4	0.6	0.6
Nitration	Abs/cm	*ASTM D7624	>20	7.6	8.7	9.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.5	20.7	19.2
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

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	>158	2	2	1
Boron	ppm	ASTM D5185m	250	11	13	2
Barium	ppm	ASTM D5185m	10	<1	2	0
Molybdenum	ppm	ASTM D5185m	100	52	58	70
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	450	860	891	1127
Calcium	ppm	ASTM D5185m	3000	1181	1331	1404
Phosphorus	ppm	ASTM D5185m	1150	1072	1069	1137
Zinc	ppm	ASTM D5185m	1350	1251	1292	1492
Sulfur	ppm	ASTM D5185m	4250	3071	3492	3781
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.3	17.1	17.2
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	9.3	9.7	6.9
Visc @ 100°C	cSt	ASTM D445	14.4	13.1	13.6	14.1



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VCP437526 **Received** : 19 Jan 2024
Lab Number : 06065286 **Diagnosed** : 20 Jan 2024
Unique Number : 10836668 **Diagnostician** : Wes Davis
Test Package : MOB 1 (Additional Tests: TBN)

ARNOLD MACHINERY COMPANY
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 PHOENIX, AZ
 US 85040
 Contact: RANDY PRZEKURAT
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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)

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