



VOLVO

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
[10190 PCS SALES]
Machine Id
VOLVO L120H 14091
Component
Diesel Engine
Fluid
CHEVRON 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.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VCP435514	VCP384775	VCP361106
Sample Date		Client Info		10 Jan 2024	27 Dec 2022	22 Jul 2022
Machine Age	hrs	Client Info		6317	5490	5380
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				ABNORMAL	NORMAL	ABNORMAL

WEAR

The aluminum level is abnormal. All other component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	17	8	30
Chromium	ppm	ASTM D5185m	>10	<1	<1	1
Nickel	ppm	ASTM D5185m	>10	0	<1	1
Titanium	ppm	ASTM D5185m		2	1	4
Silver	ppm	ASTM D5185m	>2	0	0	<1
Aluminum	ppm	ASTM D5185m	>10	▲ 16	9	▲ 22
Lead	ppm	ASTM D5185m	>20	<1	2	15
Copper	ppm	ASTM D5185m	>15	2	<1	3
Tin	ppm	ASTM D5185m	>10	1	<1	3
Vanadium	ppm	ASTM D5185m		0	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

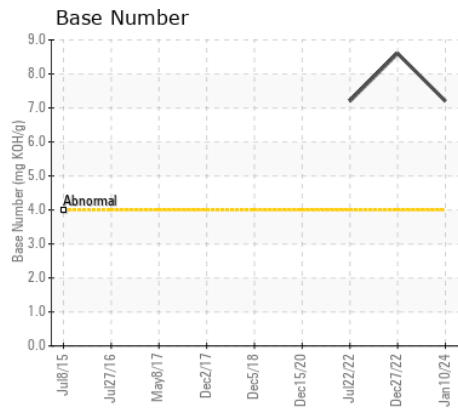
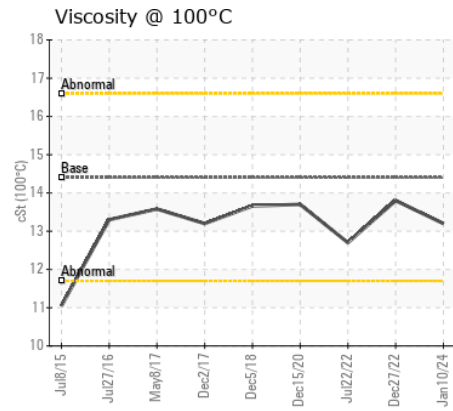
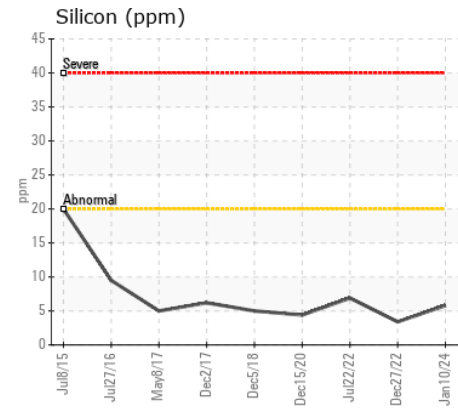
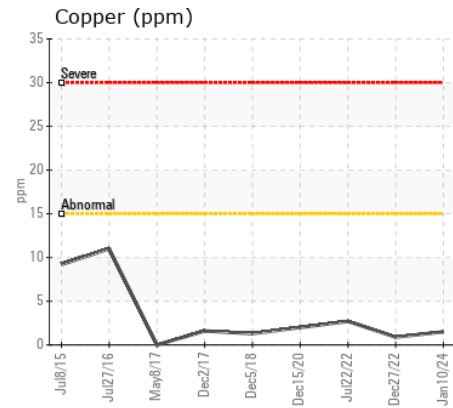
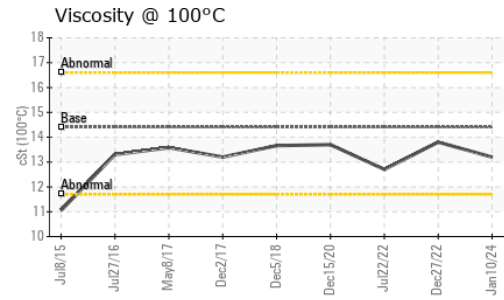
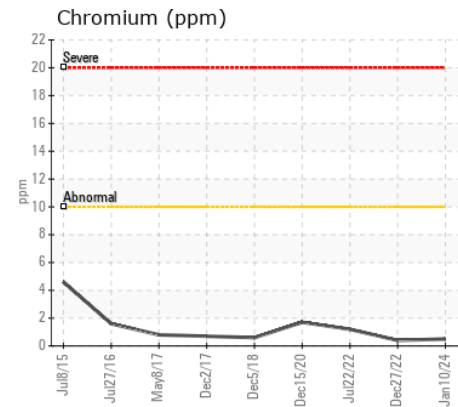
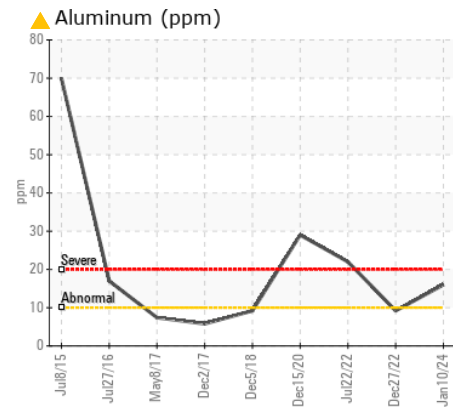
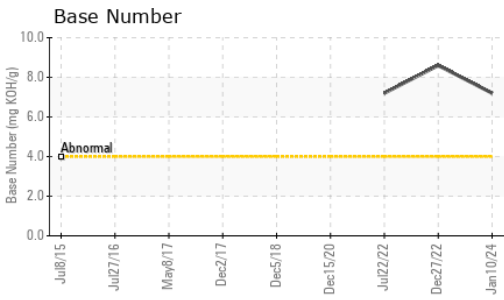
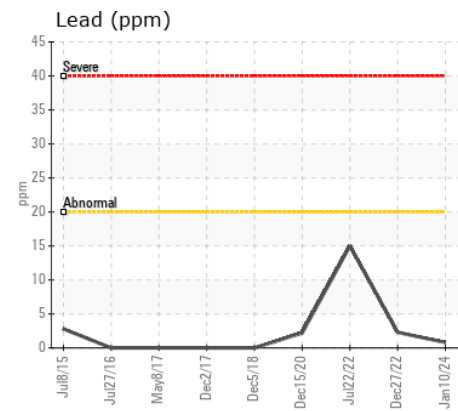
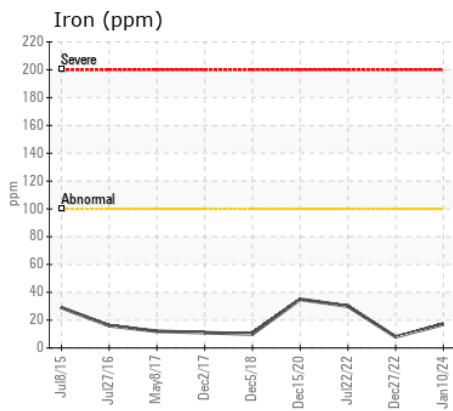
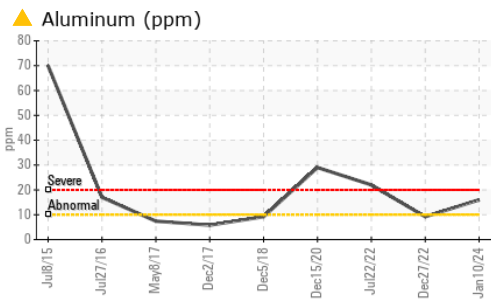
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	6	3	7
Potassium	ppm	ASTM D5185m	>20	2	3	1
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	0.2	0.6
Nitration	Abs/cm	*ASTM D7624	>20	8.5	6.7	11.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.4	23.1	25.6
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 acceptable for the time in service.

Sodium	ppm	ASTM D5185m	>50	2	1	2
Boron	ppm	ASTM D5185m		212	353	158
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		80	107	112
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		487	487	660
Calcium	ppm	ASTM D5185m		1423	1431	1554
Phosphorus	ppm	ASTM D5185m		1052	856	606
Zinc	ppm	ASTM D5185m		1246	1010	773
Sulfur	ppm	ASTM D5185m		3213	3550	3240
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.8	16.4	20.4
Base Number (BN)	mg KOH/g	ASTM D2896		7.2	8.6	7.2
Visc @ 100°C	cSt	ASTM D445	14.4	13.2	13.8	12.7



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VCP435514 **Received** : 17 Jan 2024
Lab Number : 06063277 **Diagnosed** : 19 Jan 2024
Unique Number : 10834659 **Diagnostician** : Don Baldrige
Test Package : MOB 1 (Additional Tests: TBN)

MCCLEUNG-LOGAN EQUIPMENT CO - BALTIMORE
 4601 WASHINGTON BOULEVARD
 BALTIMORE, MD
 US 21227
 Contact: MARK CIULLA
 mciulla@mcclung-logan.com
 T: (410)242-6500
 F: (410)242-7835

Certificate L2367
 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)