



McCLUNG-LOGAN
EQUIPMENT COMPANY, INC.

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
VOLVO ECR235E 315576
Component
Diesel Engine
Fluid
MOBIL 15W40 (5 GAL)

RECOMMENDATION

Resample at the next service interval to monitor. (Customer Sample Comment: 500 hour service)

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ML0886281	VCP416128	VCP416220
Sample Date		Client Info		09 Feb 2024	22 Sep 2023	26 May 2023
Machine Age	hrs	Client Info		1461	993	540
Oil Age	hrs	Client Info		500	993	500
Filter Age	hrs	Client Info		500	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	10	14	29
Chromium	ppm	ASTM D5185m	>10	<1	<1	2
Nickel	ppm	ASTM D5185m	>10	<1	2	9
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m	>2	<1	0	<1
Aluminum	ppm	ASTM D5185m	>10	6	<1	7
Lead	ppm	ASTM D5185m	>20	0	<1	2
Copper	ppm	ASTM D5185m	>15	<1	4	8
Tin	ppm	ASTM D5185m	>10	<1	1	2
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

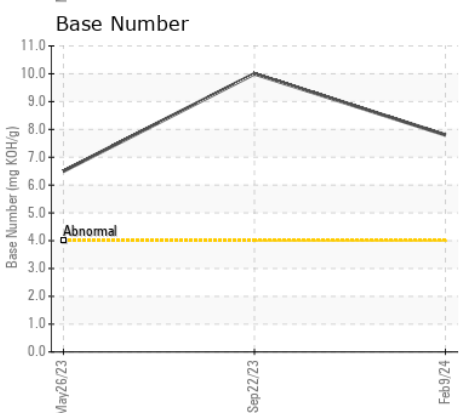
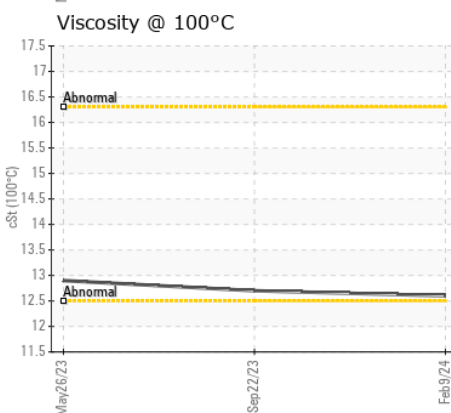
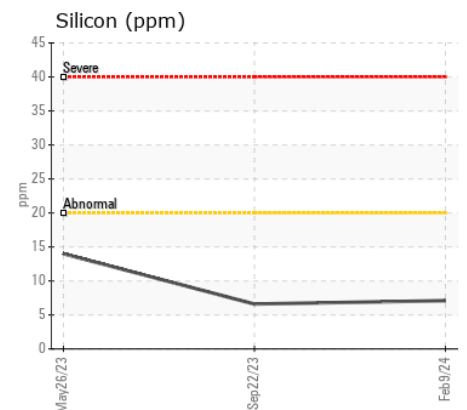
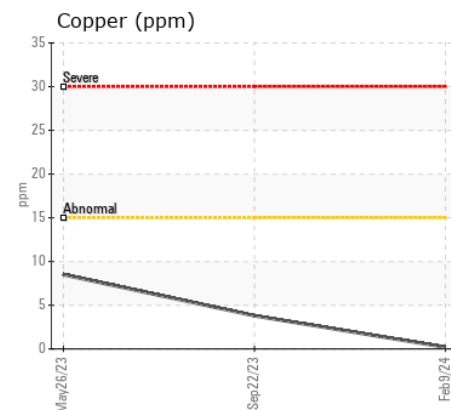
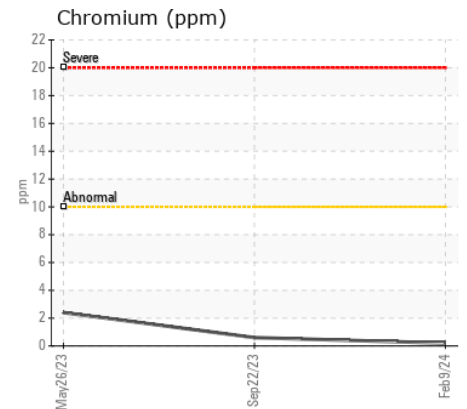
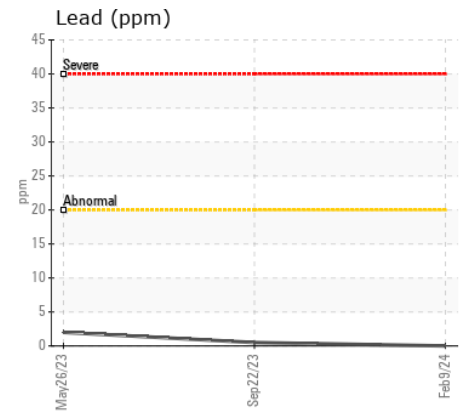
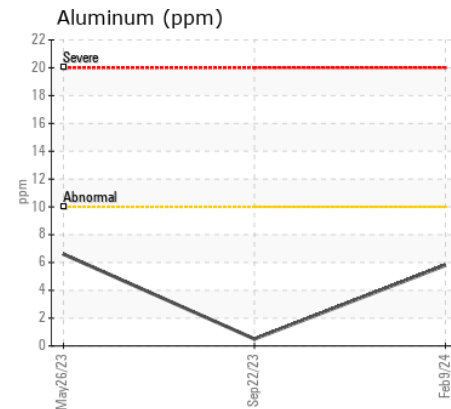
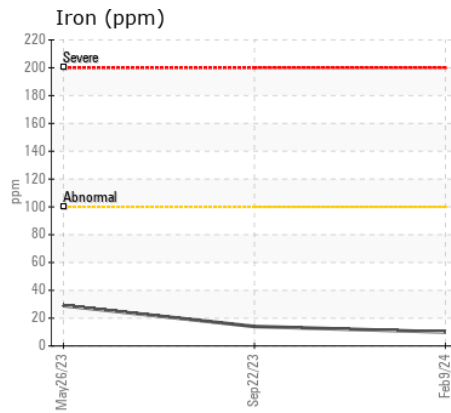
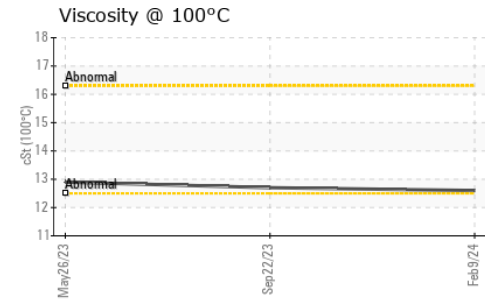
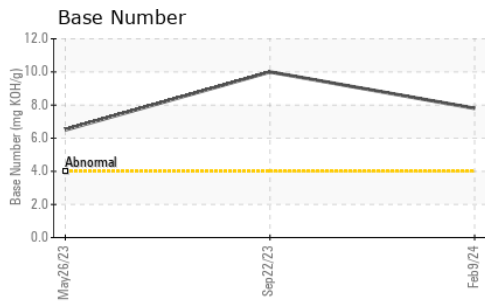
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	7	7	14
Potassium	ppm	ASTM D5185m	>20	0	0	3
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	0.1	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	7.4	6.7	6.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.6	22.1	18.5
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	>118	1	3	3
Boron	ppm	ASTM D5185m		242	23	5
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		112	38	14
Manganese	ppm	ASTM D5185m		<1	1	4
Magnesium	ppm	ASTM D5185m		623	507	188
Calcium	ppm	ASTM D5185m		1467	1780	2301
Phosphorus	ppm	ASTM D5185m		750	928	983
Zinc	ppm	ASTM D5185m		888	1142	1160
Sulfur	ppm	ASTM D5185m		2448	2963	4438
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.7	20.3	11.5
Base Number (BN)	mg KOH/g	ASTM D2896		7.8	10.0	6.5
Visc @ 100°C	cSt	ASTM D445		12.6	12.7	12.9



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : ML0886281

Lab Number : 06087943

Unique Number : 10875388

Test Package : MOBCE (Additional Tests: TBN)

Received : 13 Feb 2024

Tested : 14 Feb 2024

Diagnosed : 15 Feb 2024 - Don Baldrige

MCCLOG-LOGAN EQUIPMENT CO - MANASSAS

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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)