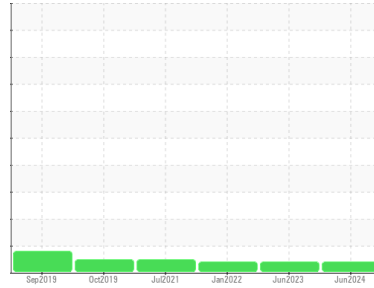


OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY



Area

[W/O 10980]

Machine Id

VOLVO A25G 742134

Component

Diesel Engine

Fluid

DIESEL ENGINE OIL SAE 15W40 (10 GAL)



DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		ML0002096	VCP418134	VCP331702
Sample Date	Client Info		17 Jun 2024	27 Jun 2023	12 Jan 2022
Machine Age	hrs	Client Info	3986	3382	2629
Oil Age	hrs	Client Info	604	423	0
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			ATTENTION	ATTENTION	ATTENTION

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.2	NEG	NEG	NEG
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	11	5	6
Chromium	ppm	ASTM D5185m >20	<1	<1	<1
Nickel	ppm	ASTM D5185m >2	0	0	0
Titanium	ppm	ASTM D5185m	<1	0	0
Silver	ppm	ASTM D5185m >2	0	0	0
Aluminum	ppm	ASTM D5185m >25	3	1	<1
Lead	ppm	ASTM D5185m >40	0	0	<1
Copper	ppm	ASTM D5185m >330	<1	<1	2
Tin	ppm	ASTM D5185m >15	<1	0	<1
Antimony	ppm	ASTM D5185m	---	---	<1
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 250	314	62	53
Barium	ppm	ASTM D5185m 10	0	0	0
Molybdenum	ppm	ASTM D5185m 100	108	43	40
Manganese	ppm	ASTM D5185m	0	<1	<1
Magnesium	ppm	ASTM D5185m 450	509	581	533
Calcium	ppm	ASTM D5185m 3000	1446	1725	1786
Phosphorus	ppm	ASTM D5185m 1150	921	1005	1014
Zinc	ppm	ASTM D5185m 1350	1124	1209	1214
Sulfur	ppm	ASTM D5185m 4250	2953	3689	3087

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	6	4	6
Sodium	ppm	ASTM D5185m >158	0	2	2
Potassium	ppm	ASTM D5185m >20	2	2	0
Fuel	%	ASTM D3524 >6.0	<1.0	<1.0	1.1

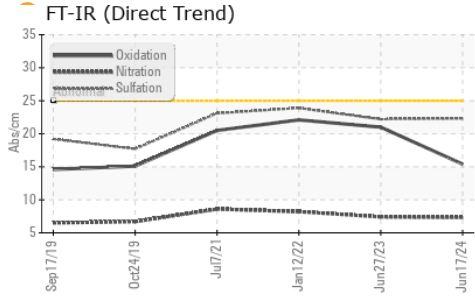
INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	0.4	0.2	0.2
Nitration	Abs/cm	*ASTM D7624 >20	7.3	7.4	8.2
Sulfation	Abs/.1mm	*ASTM D7415 >30	22.3	22.2	23.9

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	15.4	21.0	22.1
Base Number (BN)	mg KOH/g	ASTM D2896 8.5	7.2	9.9	11.1

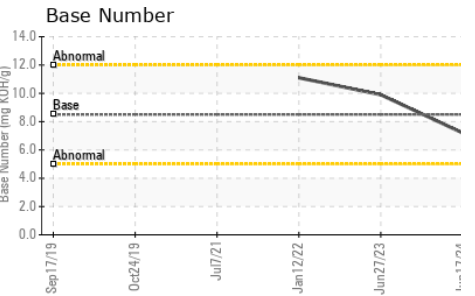
OIL ANALYSIS REPORT



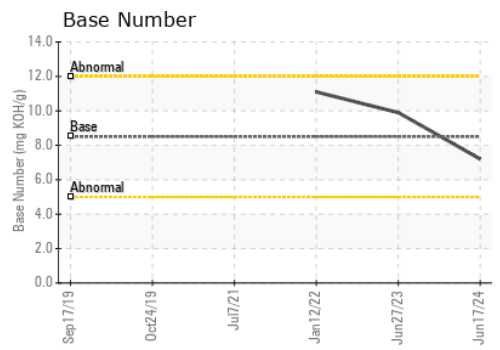
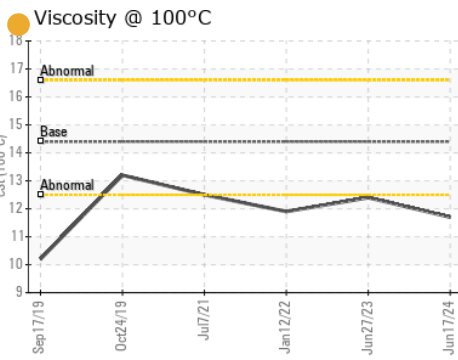
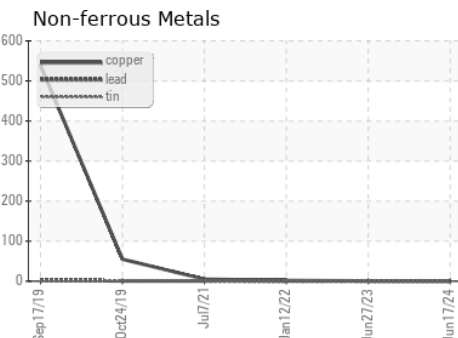
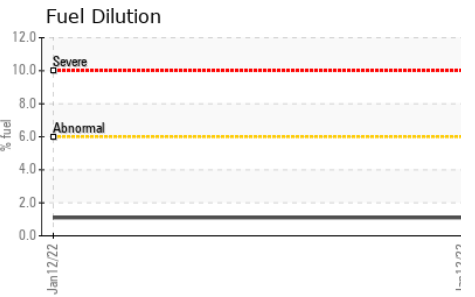
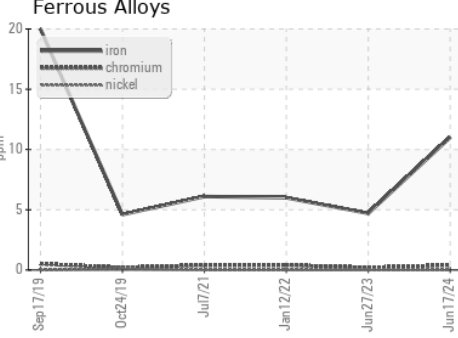
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG



FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	14.4	11.7	12.4	11.9



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ML0002096
Lab Number : 06216428
Unique Number : 11089292
Test Package : CONST (Additional Tests: FuelDilution, PercentFuel, TBN)
Received : 20 Jun 2024
Tested : 23 Jun 2024
Diagnosed : 23 Jun 2024 - Don Baldrige

McCLUNG-LOGAN EQUIPMENT CO - RICHMOND
 1345 MOUNTAIN ROAD
 GLEN ALLEN, VA
 US 23060
 Contact: KYLE RATLIFF
 KRATLIFFE@McCLUNG-LOGAN.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)