



McCLUNG-LOGAN
EQUIPMENT COMPANY, INC.

OIL ANALYSIS REPORT

WEAR

NORMAL

CONTAMINATION

ABNORMAL

FLUID CONDITION

ABNORMAL



Area

[W02008185]

Machine Id

VOLVO A30F 82248

Component

Diesel Engine

Fluid

VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3 (11 GAL)

RECOMMENDATION

We advise that you check the fuel injection system. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. (Customer Sample Comment: W02008185)

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ML0001598	VCP218868	---
Sample Date		Client Info		12 Apr 2024	01 Feb 2018	---
Machine Age	hrs	Client Info		14578	6580	---
Oil Age	hrs	Client Info		500	0	---
Filter Age	hrs	Client Info		500	0	---
Oil Changed		Client Info		Changed	Not Changed	---
Filter Changed		Client Info		Changed	N/A	---
Sample Status				ABNORMAL	MARGINAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>200	6	2	---
Chromium	ppm	ASTM D5185m	>20	<1	0	---
Nickel	ppm	ASTM D5185m	>10	<1	<1	---
Titanium	ppm	ASTM D5185m		<1	0	---
Silver	ppm	ASTM D5185m	>2	0	0	---
Aluminum	ppm	ASTM D5185m	>30	2	1	---
Lead	ppm	ASTM D5185m	>40	<1	<1	---
Copper	ppm	ASTM D5185m	>20	2	<1	---
Tin	ppm	ASTM D5185m	>20	1	<1	---
Vanadium	ppm	ASTM D5185m		<1	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

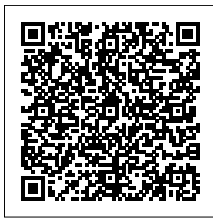
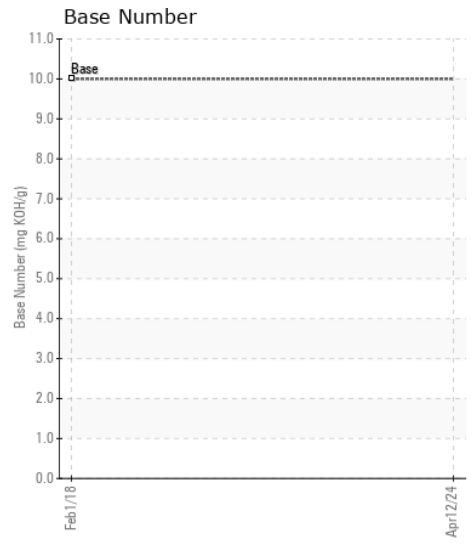
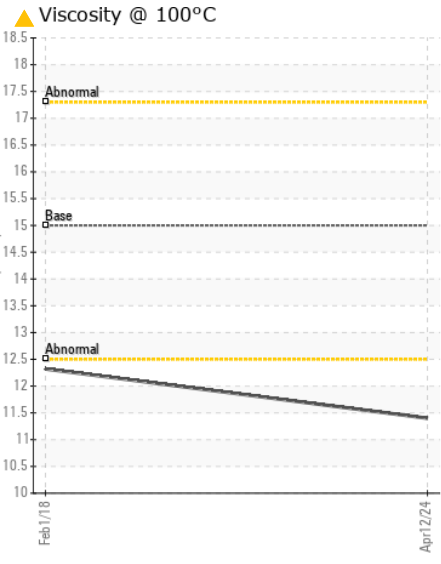
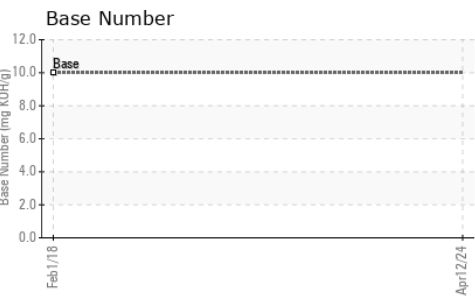
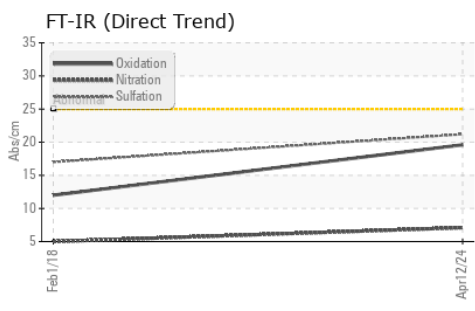
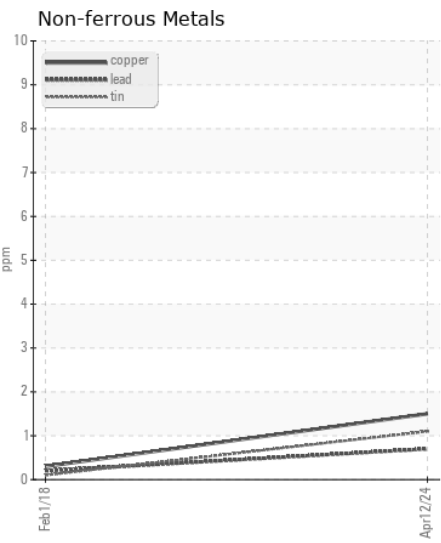
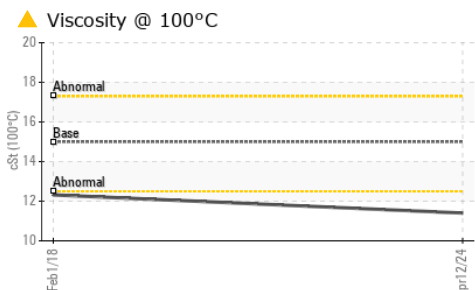
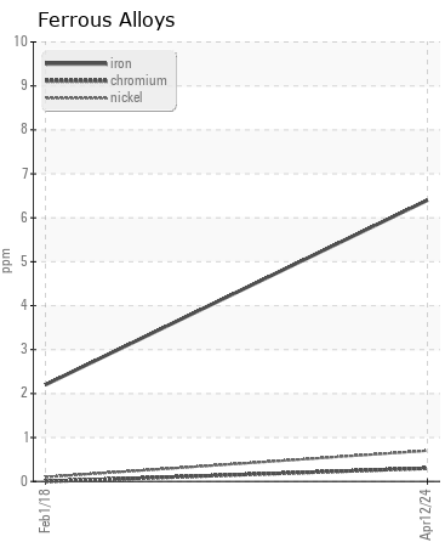
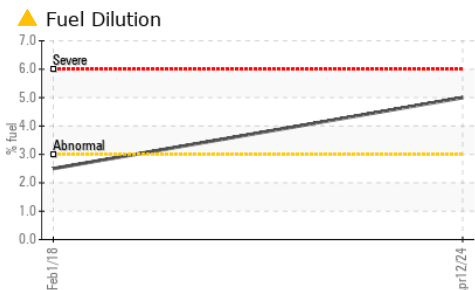
There is a moderate amount of fuel present in the oil.

Silicon	ppm	ASTM D5185m	>20	7	4	---
Potassium	ppm	ASTM D5185m	>20	2	2	---
Fuel	%	ASTM D3524	>3.0	▲ 5.0	▲ 2.5	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.1	0	---
Nitration	Abs/cm	*ASTM D7624	>20	7.1	5.	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.2	17.	---
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	---

FLUID CONDITION

Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil.

Sodium	ppm	ASTM D5185m		1	2	---
Boron	ppm	ASTM D5185m	2.5	61	3	---
Barium	ppm	ASTM D5185m	0.0	<1	0	---
Molybdenum	ppm	ASTM D5185m	0.7	43	56	---
Manganese	ppm	ASTM D5185m	0.0	<1	<1	---
Magnesium	ppm	ASTM D5185m	256	490	854	---
Calcium	ppm	ASTM D5185m	2057	1651	985	---
Phosphorus	ppm	ASTM D5185m	935	788	1009	---
Zinc	ppm	ASTM D5185m	1223	893	998	---
Sulfur	ppm	ASTM D5185m	4079	2846	3476	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.6	12.	---
Base Number (BN)	mg KOH/g	ASTM D2896	10	9.6	---	---
Visc @ 100°C	cSt	ASTM D445	15.0	▲ 11.4	12.32	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ML0001598 **Received** : 16 Apr 2024
Lab Number : 06149831 **Tested** : 22 Apr 2024
Unique Number : 10979909 **Diagnosed** : 22 Apr 2024 - Jonathan Hester
Test Package : CONST (Additional Tests: FuelDilution, PercentFuel, TBN)

MCCLUNG-LOGAN EQUIPMENT CO - MANASSAS
 8450 QUARRY ROAD
 MANASSAS, VA
 US 20110
 Contact: MIKE MAYHUGH
 MMAYHUGH@MCCLUNG-LOGAN.COM
 T: (703)393-7344
 F: (703)393-7844

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)