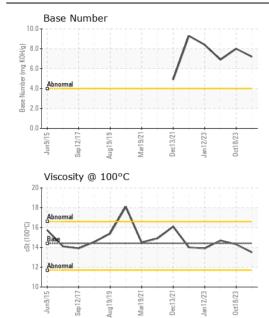
WEAR CONTAMINATION FLUID CONDITION

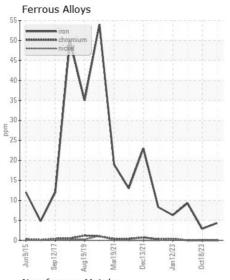
NORMAL NORMAL NORMAL

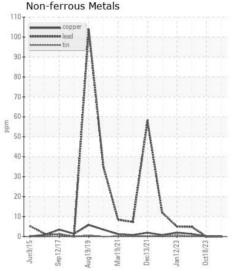
Area [W/O 10496] **VOLVO L90F 71862**

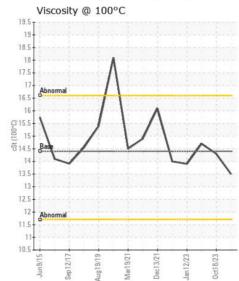
Component Diesel Engine

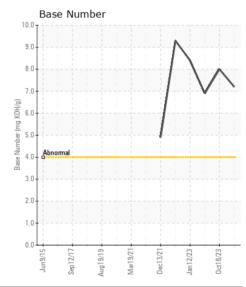
CHEVRON 15W40 (5 GAL)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		ML0000008	VCP426372	
Resample at the next service interval to monitor.	Sample Date		Client Info		18 Mar 2024	18 Oct 2023	27 Jun 2023
	Machine Age	hrs	Client Info		18161	17714	17016
	Oil Age	hrs	Client Info		447	0	0
	Filter Age	hrs	Client Info		447	0	0
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Changed
	Sample Status				NORMAL	NORMAL	NORMAL
WEAR	Iron	ppm	ASTM D5185m	>100	4	3	9
WEAIT	Chromium	ppm	ASTM D5185m		0	0	0
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		0	0	<1
	Titanium	ppm	ASTM D5185m	710	2	2	2
	Silver	ppm	ASTM D5185m	>2	0	0	0
	Aluminum	ppm	ASTM D5185m		2	1	2
	Lead	ppm	ASTM D5185m		0	0	5
	Copper	ppm	ASTM D5185m		<1	0	1
	Tin	ppm	ASTM D5185m		0	0	<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	Silicon		ASTM D5185m	. 00	Δ	E	6
CONTAMINATION	Potassium	ppm	ASTM D5185m		4 <1	5 0	6
There is no indication of any contamination in the oil.	Fuel	ppm	WC Method		<1.0	<1.0	<1.0
	Water		WC Method		NEG	NEG	NEG
	Glycol		WC Method	>0.1	NEG	NEG	NEG
	Soot %	%	*ASTM D7844	~3	0.1	0.2	0.3
	Nitration	Abs/cm	*ASTM D7624	>20	6.8	8.4	11.1
	Sulfation	Abs/.1mm	*ASTM D7024		21.6	23.1	26.6
	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		*Visual	>0.1	NEG	NEG	NEG
ELUID CONDITION	0 "		AOTA DELOE				
FLUID CONDITION	Sodium	ppm	ASTM D5185m	>50	1	3	0
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Boron	ppm	ASTM D5185m		351	126	230
	Barium	ppm	ASTM D5185m		0	0	0
	Monganasa	ppm	ASTM D5185m		90	79	108
	Manganese Magnesium	ppm	ASTM D5185m ASTM D5185m		0 463	<1 697	<1 492
	Calcium	ppm	ASTM D5185m		1428	1289	1526
	Phosphorus	ppm	ASTM D5185m		1080	1018	964
	Zinc		ASTM D5185m		1278	1339	1191
	Sulfur	ppm	ASTM D5185m		3962	3335	3395
	Oxidation	ppm Abs/.1mm	*ASTM D7414	-25	16.0	19.6	24.1
	Base Number (BN)			720	7.2	8.0	6.9
	Visc @ 100°C	cSt	ASTM D2090	14.4	13.5	14.3	14.7
	VISC @ 100 C	COL	A3 1 W D443	14.4	13.5	14.3	14./













Certificate L2367

Laboratory Sample No. Lab Number : 06122951

: ML0000008

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

Tested Unique Number : 10937102 Diagnosed Test Package : CONST (Additional Tests: TBN)

: 20 Mar 2024 : 21 Mar 2024 - Don Baldridge

: 19 Mar 2024

MCCLUNG-LOGAN EQUIPMENT CO - BALTIMORE 4601 WASHINGTON BOULEVARD $\mathsf{BALTIMORE},\,\mathsf{MD}$

US 21227 Contact: MARK CIULLA

> T: (410)242-6500 F: (410)242-7835

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)

mciulla@mcclung-logan.com