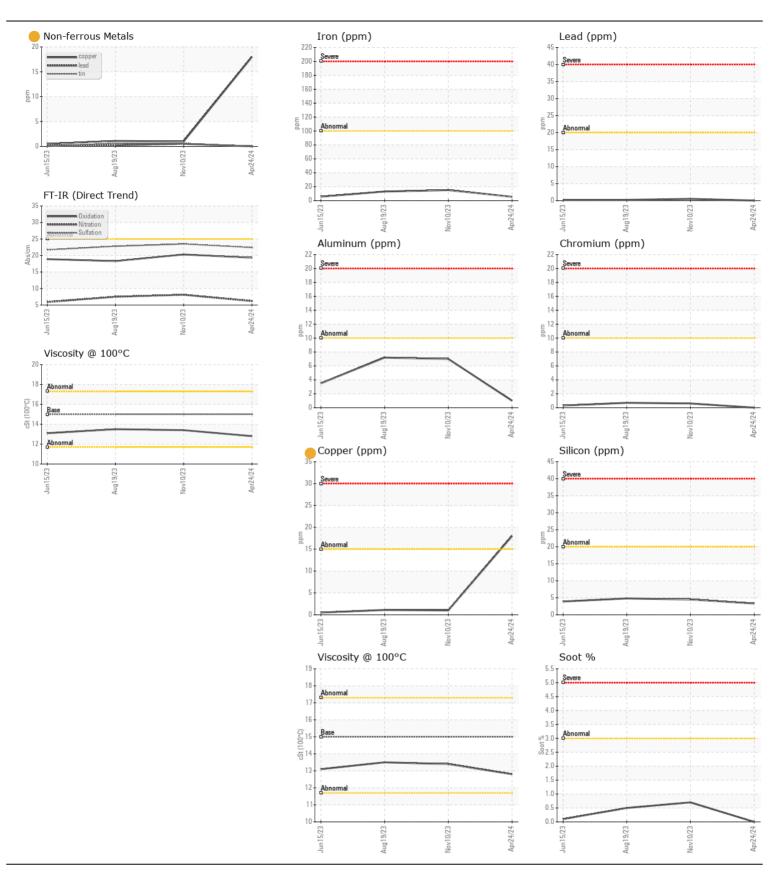
WEAR CONTAMINATION **FLUID CONDITION** **ATTENTION NORMAL NORMAL**

A&A AGGREGATES [401789] VOLVO L110H 632079



Diesel Engine

RECOMMENDATION	Tost	UOM	Method	Limit/Abn	Current	Lliotom:4	Llictor: O
Resample at the next service interval to monitor.	Test	UOIVI		LIMIT/ADN	VCP391655	History1	History2
	Sample Number Sample Date		Client Info		24 Apr 2024	VCP392983 10 Nov 2023	VCP39451 19 Aug 202
	Machine Age	hrs	Client Info		5015	4509	4003
	Oil Age	hrs	Client Info		0	506	500
	Filter Age	hrs	Client Info		0	0	0
	Oil Changed	1110	Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		N/A	Changed	Changed
	Sample Status				ATTENTION	NORMAL	NORMA
Copper ppm levels are noted. In the absence of other significant wear metals, suspect copper due to sources other than wear (i.e. cooling core). All other component wear rates are normal.	Iron	ppm	ASTM D5185(m)	>100	5	15	13
	Chromium	ppm	ASTM D5185(m)	>10	0	<1	<1
	Nickel	ppm	ASTM D5185(m)	>10	<1	<1	<1
	Titanium	ppm	ASTM D5185(m)		0	0	<1
	Silver	ppm	ASTM D5185(m)		0	<1	0
	Aluminum	ppm	ASTM D5185(m)		1	7	7
	Lead	ppm	ASTM D5185(m)		0	<1	<1
	Copper	ppm	ASTM D5185(m)		<u> </u>	1	1
	Tin	ppm	, ,	>10	0	<1	<1
	Vanadium	ppm	ASTM D5185(m)		0	0	0
CONTAMINATION	Silicon	ppm	ASTM D5185(m)	>20	3	4	5
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185(m)	>20	<1	0	<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	0.7	0.5
	Nitration	Abs/cm	ASTM D7624*	>20	6.2	8.1	7.5
	Sulfation	Abs/.1mm	ASTM D7415*	>30	22.4	23.5	22.8
	Emulsified Water	scalar	Visual*	>0.1	NEG	NEG	NEG
FLUID CONDITION	Sodium	ppm	ASTM D5185(m)		2	2	2
The condition of the oil is acceptable for the time in service.	Boron	ppm	ASTM D5185(m)	2.5	47	23	21
	Barium	ppm	ASTM D5185(m)	0.0	0	<1	0
	Molybdenum	ppm	ASTM D5185(m)	0.7	39	46	45
	Manganese	ppm	ASTM D5185(m)	0.0	<1	0	<1
	Magnesium	ppm	ASTM D5185(m)	256	483	597	616
	Calcium	ppm	ASTM D5185(m)	2057	1690	1657	1583
	Phosphorus	ppm	ASTM D5185(m)	935	904	944	1001
	Zinc	ppm	ASTM D5185(m)	1223	1051	1133	1119
	Sulfur	ppm	ASTM D5185(m)	4079	2442	2442	2457
	Oxidation	Abs/.1mm	ASTM D7414*	>25	19.3	20.3	18.3
	Visc @ 100°C	cSt	ASTM D7279(m)	15.0	12.8	13.4	13.5





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

: VCP391655 Lab Number : 02631468

Unique Number : 5772621 Test Package : MOB 1

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Received : 26 Apr 2024 **Tested** : 26 Apr 2024

Diagnosed : 26 Apr 2024 - Kevin Marson

55 ISNOR DRIVE, BURNSIDE INDUSTRIALPARK

DARTMOUTH, NS CA B3B 1N6 Contact: Lindsay Downs ldowns@strongco.com T: (902)468-5010

STRONGCO EQUIPMENT INC.

To discuss this sample report, contact Customer Service at 1-800-268-2131. Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Validity of results and interpretation are based on the sample and information as supplied.

F: (902)468-2468