**WEAR** CONTAMINATION **FLUID CONDITION** 

**NORMAL NORMAL ABNORMAL** 

Machine Id

371

Diesel Engine

<b>ECOMMENDATION</b>	Test	UOM	Method	Limit/Abn	Current	History1	History
Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. The fluid was specified as PETRO CANADA DURON SHP 10W30, however, a fluid match indicates that this fluid is SAE 40 Diesel Engine Oil. Please confirm the oil type and grade on your next sample.	Sample Number		Client Info		WC0879654		
	Sample Date		Client Info		15 Aug 2023		
	Machine Age	kms	Client Info		742342		
	Oil Age	kms	Client Info		12468		
	Filter Age	kms	Client Info		12468		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				ABNORMAL		
/EAR	Iron	ppm	ASTM D5185(m)	>165	31		
All component wear rates are normal.	Chromium	ppm	ASTM D5185(m)		1		
	Nickel	ppm	ASTM D5185(m)		<1		
	Titanium	ppm	ASTM D5185(m)		0		
	Silver	ppm	ASTM D5185(m)		0		
	Aluminum	ppm	ASTM D5185(m)		13		
	Lead	ppm	ASTM D5185(m)	>150	0		
	Copper	ppm	ASTM D5185(m)	>90	3		
	Tin	ppm	ASTM D5185(m)	>5	0		
	Vanadium	ppm	ASTM D5185(m)		0		
ONTAMINATION							
ONTAMINATION	Silicon	ppm	ASTM D5185(m)	>35	4		
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185(m)		10		
	Fuel		WC Method	>3.0	<1.0		
	Water	0/	WC Method	>0.2	NEG		
	Glycol Soot %	%	ASTM D7922* ASTM D7844*	. 7 5	0.0		
	Nitration	% Abs/cm	ASTM D7844*	>7.5	0.1 7.5		
	Sulfation	Abs/.1mm	ASTM D7024 ASTM D7415*	>30	20.5		
	Emulsified Water	scalar	Visual*	>0.2	NEG		
LUID CONDITION	Sodium	ppm	ASTM D5185(m)		2		
The BN result indicates that there is suitable alkalinity remaining in the oil. Viscosity of sample indicates oil is within SAE 40 range, advise investigate. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. The condition of the oil is suitable for further service.	Boron	ppm	ASTM D5185(m)	2	126		
	Barium	ppm	ASTM D5185(m)	0	0		
	Molybdenum	ppm	ASTM D5185(m)	50	13		
	Manganese	ppm	ASTM D5185(m)	0	0		
	Magnesium	ppm	ASTM D5185(m)	950	151		
	Calcium	ppm	ASTM D5185(m)	1050	1953		
	Phosphorus	ppm	ASTM D5185(m)	995	965		
	Zinc	ppm	ASTM D5185(m)	1180	1105		
	Sulfur	ppm	ASTM D5185(m)		3019		

Oxidation

Visc @ 100°C cSt

ASTM D7279(m) 12.00

Base Number (BN) mg KOH/g ASTM D2896\*

16.1

9.14

13.9





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No. Lab Number **Unique Number** 

: 02610111

: WC0879654

: 5711197

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Recieved Diagnosed

: 22 Jan 2024 : 23 Jan 2024

Diagnostician : Kevin Marson

Test Package : MOB 2 ( Additional Tests: Glycol ) 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.

Moncton - Transport Laberge 180 Edinburg Drive, Suite 1A

Moncton, NB CA E1E 2K7

Contact: Service Manager

T:

F: