WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL

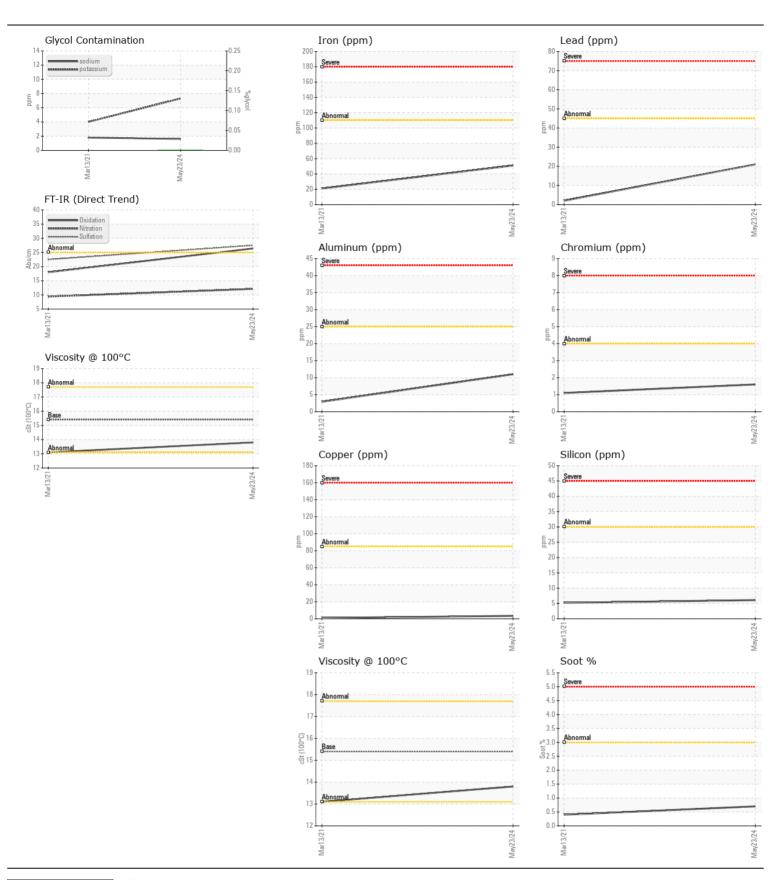
(HM8605)

924000

Diesel Engine

PETRO CANADA DURON SHP 15W40 (--- GAL)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		GFL0029321	GFL0020083	
	Sample Date		Client Info		23 May 2024	13 Mar 2021	
	Machine Age	hrs	Client Info		18133	13836	
	Oil Age	hrs	Client Info		900	529	
	Filter Age	hrs	Client Info		900	529	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		Changed	Changed	
	Sample Status				NORMAL	NORMAL	
VEAR	Iron	ppm	ASTM D5185(m)	>110	51	21	
All component wear rates are normal.	Chromium	ppm	ASTM D5185(m)	>4	2	1	
	Nickel	ppm	ASTM D5185(m)	>2	0	0	
	Titanium	ppm	ASTM D5185(m)		0	0	
	Silver	ppm	ASTM D5185(m)	>2	0	<1	
	Aluminum	ppm	ASTM D5185(m)	>25	11	3	
	Lead	ppm	ASTM D5185(m)	>45	21	2	
	Copper	ppm	ASTM D5185(m)	>85	3	1	
	Tin	ppm	ASTM D5185(m)	>4	1	<1	
	Vanadium	ppm	ASTM D5185(m)		0	0	
CONTAMINATION	Ciliana		ACTM DE10E()	00			
	Silicon	ppm	ASTM D5185(m)		6	5	
There is no indication of any contamination in the oil.	Potassium Fuel	ppm	ASTM D5185(m) WC Method		7	0.1	
	Water		WC Method		<1.0 NEG	NEG	
	Glycol	%	ASTM D7922*	>0.2	0.0	NEG	
	Soot %	%	ASTM D7822	~ 3	0.7	0.4	
	Nitration	Abs/cm	ASTM D7624*		12.1	9.4	
	Sulfation	Abs/.1mm	ASTM D7415*	>30	27.5	22.5	
	Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	
FLUID CONDITION	Sodium	ppm	ASTM D5185(m)		2	2	
The condition of the oil is acceptable for the time in service.	Boron	ppm	ASTM D5185(m)	0	5	16	
	Barium	ppm	ASTM D5185(m)		0	0	
	Molybdenum	ppm	ASTM D5185(m)		66	57	
	Manganese	ppm	ASTM D5185(m)		<1	<1	
	Magnesium	ppm	ASTM D5185(m)		1079	931	
	Calcium	ppm	ASTM D5185(m)		1269	1157	
	Phosphorus	ppm	ASTM D5185(m)		1134	1014	
	Zinc	ppm	ASTM D5185(m)		1264	1290	
	Sulfur	ppm	ASTM D5185(m)		2310	2615	
	Oxidation	Abs/.1mm	ASTM D7414*		26.4	18.0	
	Visc @ 100°C	cSt	ASTM D7279(m)		13.8	13.1	





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

Lab Number : 02638793

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 571 - Cranbrook Hauling TS LF : GFL0029321 Unique Number : 5787955

Received Tested Diagnosed Test Package : MOB 1 (Additional Tests: Glycol)

: 30 May 2024 : 31 May 2024

: 31 May 2024 - Kevin Marson

1425 Industrial Road 2 Cranbrook, BC CA V1C 5X5 Contact: Michael Miles mmiles@gflenv.com

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.

T: (250)417-3607 F: (250)417-3617 Validity of results and interpretation are based on the sample and information as supplied.