



OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
{UNASSIGNED}

Machine Id
377

Component
Diesel Engine

Fluid
PETRO CANADA DURON SHP 10W30 (41 LTR)

RECOMMENDATION

We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition. (Customer Sample Comment: Sample requested due to last one detecting aluminium)

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0903669	WC0879657	---
Sample Date		Client Info		14 Feb 2024	04 Jan 2024	---
Machine Age	kms	Client Info		766730	760311	---
Oil Age	kms	Client Info		6419	17971	---
Filter Age	kms	Client Info		6419	17971	---
Oil Changed		Client Info		N/A	Changed	---
Filter Changed		Client Info		Not Changed	Changed	---
Sample Status				ABNORMAL	SEVERE	---

WEAR

Aluminum ppm levels are abnormal. Piston wear is indicated.

Iron	ppm	ASTM D5185(m)	>100	52	97	---
Chromium	ppm	ASTM D5185(m)	>20	2	4	---
Nickel	ppm	ASTM D5185(m)	>4	<1	<1	---
Titanium	ppm	ASTM D5185(m)		0	0	---
Silver	ppm	ASTM D5185(m)	>3	0	0	---
Aluminum	ppm	ASTM D5185(m)	>20	▲ 26	▲ 47	---
Lead	ppm	ASTM D5185(m)	>40	<1	0	---
Copper	ppm	ASTM D5185(m)	>330	2	6	---
Tin	ppm	ASTM D5185(m)	>15	0	<1	---
Vanadium	ppm	ASTM D5185(m)		0	0	---

CONTAMINATION

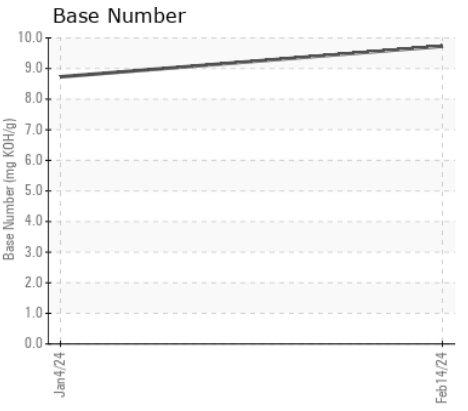
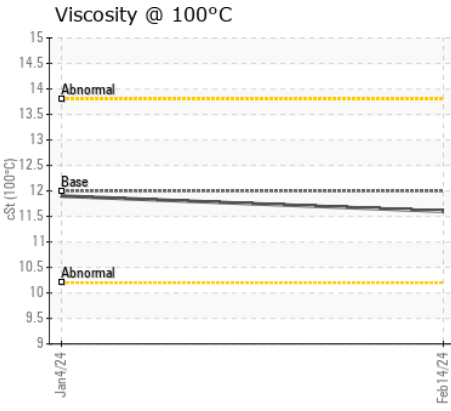
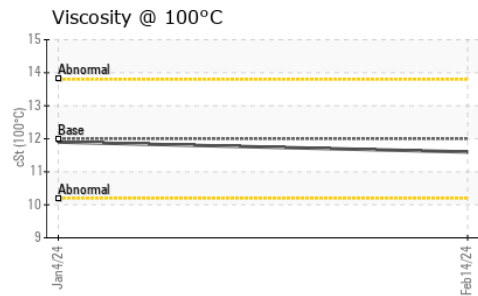
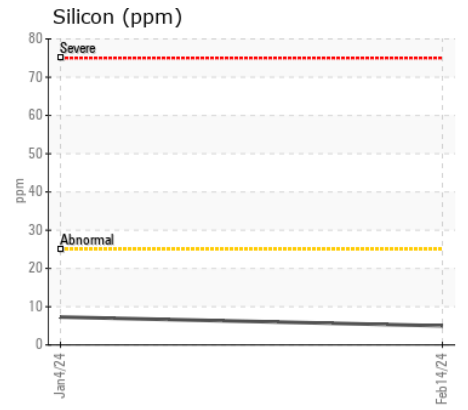
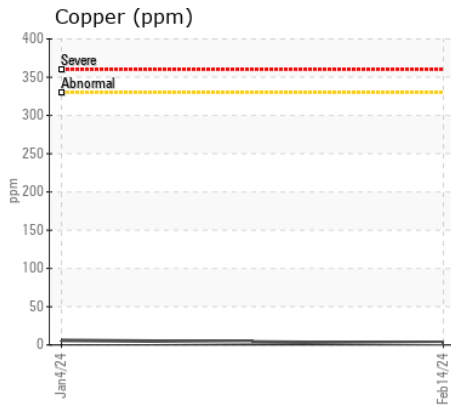
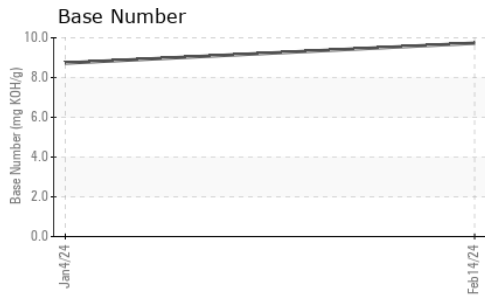
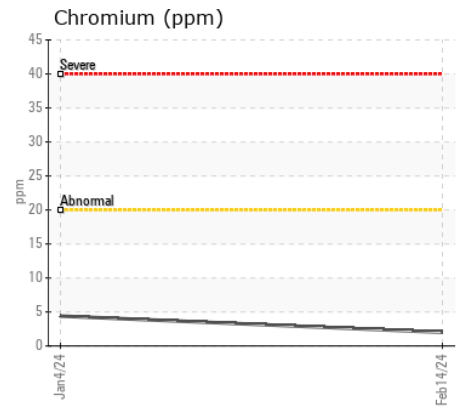
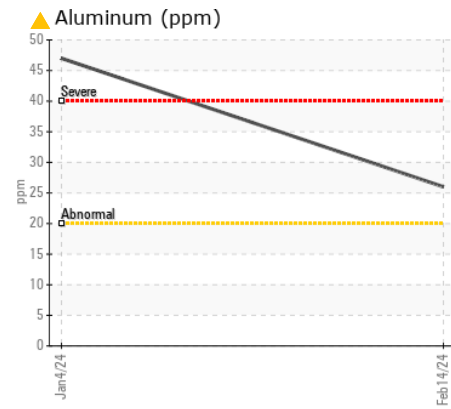
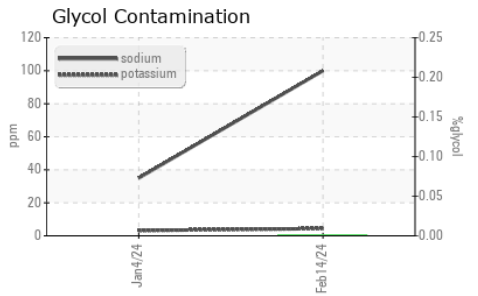
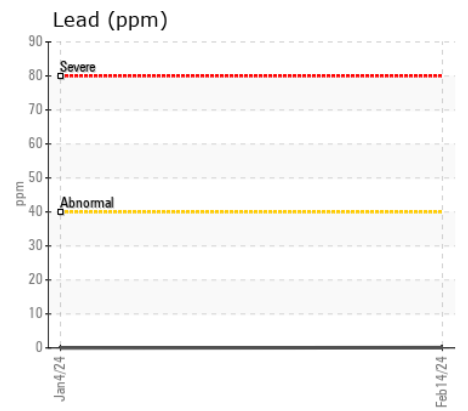
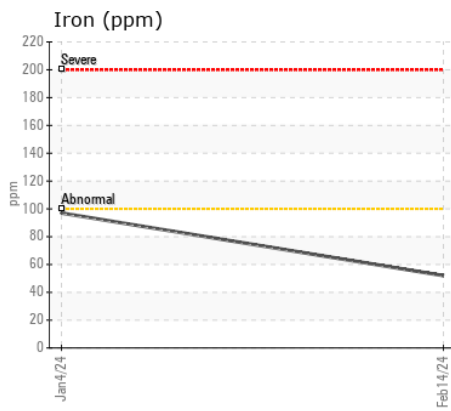
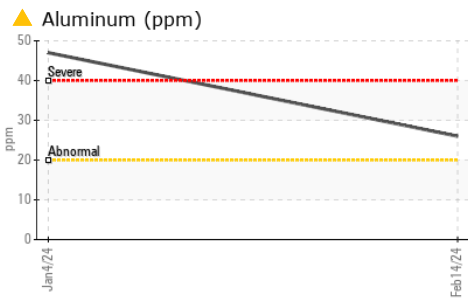
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	5	7	---
Potassium	ppm	ASTM D5185(m)	>20	4	3	---
Fuel		WC Method	>5	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol	%	ASTM D7922*		0.0	NEG	---
Soot %	%	ASTM D7844*	>3	0.1	0.6	---
Nitration	Abs/cm	ASTM D7624*	>20	7.7	11.2	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.1	22.6	---
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	---

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Sodium	ppm	ASTM D5185(m)		100	35	---
Boron	ppm	ASTM D5185(m)	2	5	6	---
Barium	ppm	ASTM D5185(m)	0	0	0	---
Molybdenum	ppm	ASTM D5185(m)	50	66	64	---
Manganese	ppm	ASTM D5185(m)	0	<1	<1	---
Magnesium	ppm	ASTM D5185(m)	950	965	994	---
Calcium	ppm	ASTM D5185(m)	1050	1075	1122	---
Phosphorus	ppm	ASTM D5185(m)	995	1039	1028	---
Zinc	ppm	ASTM D5185(m)	1180	1175	1219	---
Sulfur	ppm	ASTM D5185(m)	2600	2740	2631	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	15.8	19.7	---
Base Number (BN)	mg KOH/g	ASTM D2896*		9.73	8.73	---
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	11.6	11.9	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0903669 **Received** : 16 Feb 2024
Lab Number : 02616159 **Tested** : 20 Feb 2024
Unique Number : 5733269 **Diagnosed** : 20 Feb 2024 - Kevin Marson
Test Package : MOB 2 (Additional Tests: Glycol)

Moncton - Transport Laberge
 180 Edinburg Drive, Suite 1A
 Moncton, NB
 CA E1E 2K7
 Contact: Service Manager

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.

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F: