



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
245
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 10W30 (45 GAL)

RECOMMENDATION

We advise that you check for the source of water entry. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0885203	WC0831682	WC0805590
Sample Date		Client Info		12 Dec 2023	22 Aug 2023	13 Mar 2023
Machine Age	kms	Client Info		935554	923063	937674
Oil Age	kms	Client Info		12491	39984	64486
Filter Age	kms	Client Info		12491	39984	64486
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>165	15	8	12
Chromium	ppm	ASTM D5185(m)	>5	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	<1	0	1
Titanium	ppm	ASTM D5185(m)	>2	0	0	<1
Silver	ppm	ASTM D5185(m)	>2	<1	<1	<1
Aluminum	ppm	ASTM D5185(m)	>20	3	<1	2
Lead	ppm	ASTM D5185(m)	>150	2	<1	2
Copper	ppm	ASTM D5185(m)	>90	2	<1	1
Tin	ppm	ASTM D5185(m)	>5	<1	<1	1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

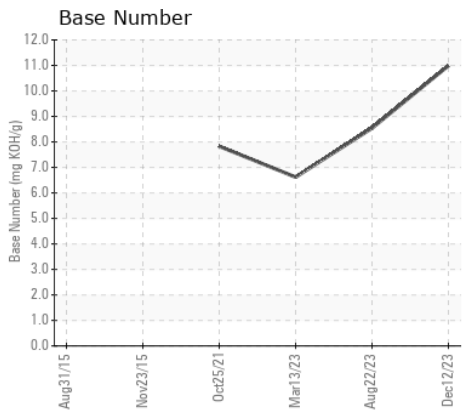
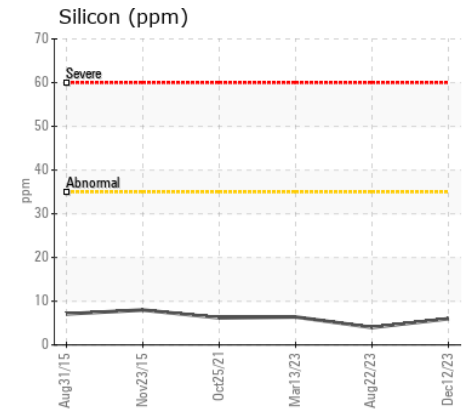
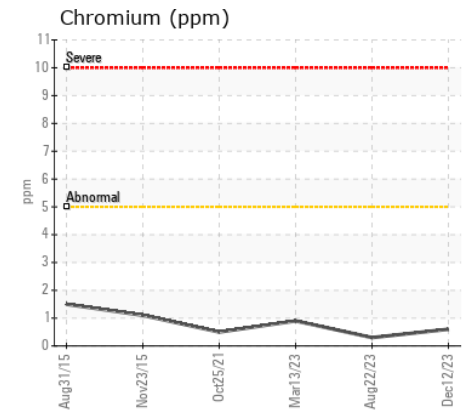
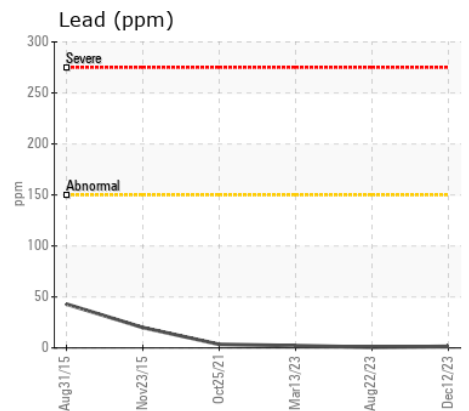
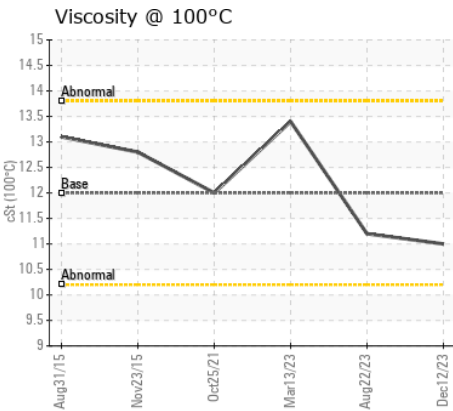
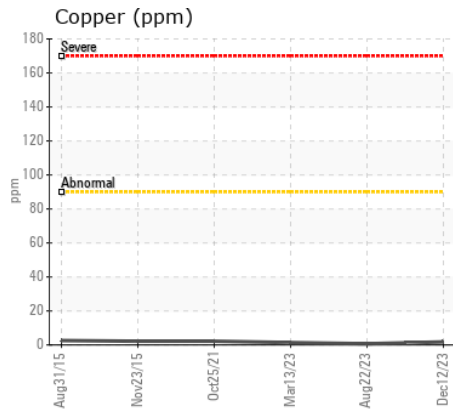
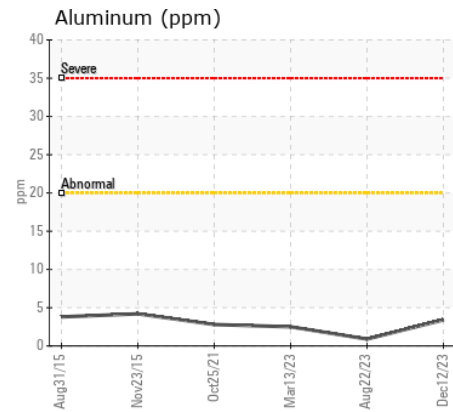
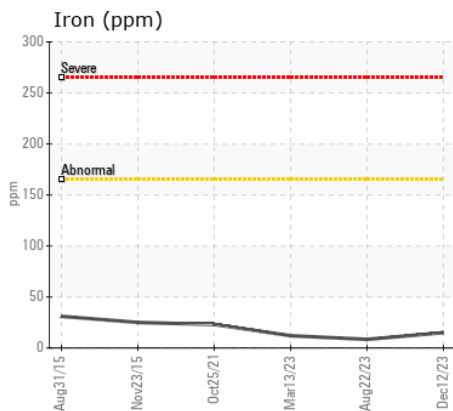
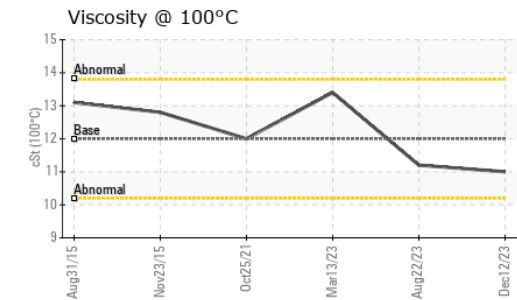
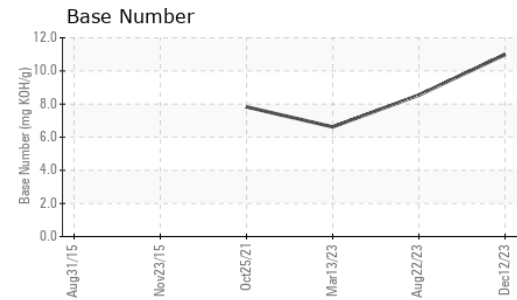
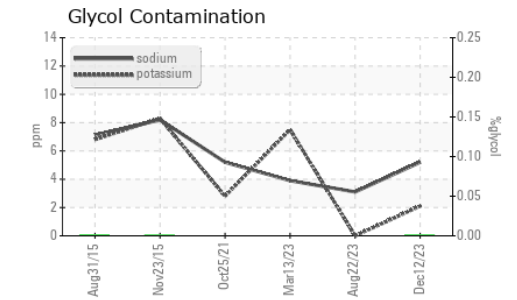
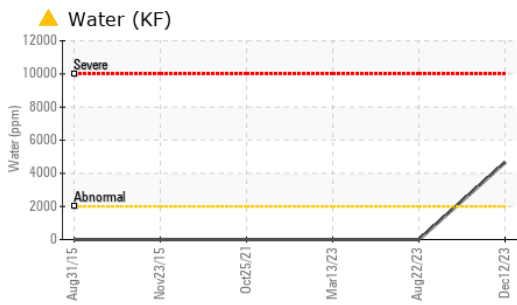
There is a moderate concentration of water present in the oil. Free water present. Test for glycol is negative.

Silicon	ppm	ASTM D5185(m)	>35	6	4	6
Potassium	ppm	ASTM D5185(m)	>20	2	0	8
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water	%	ASTM D6304*	>0.2	▲ 0.465	---	---
ppm Water	ppm	ASTM D6304*	>2000	▲ 4659	---	---
Glycol	%	ASTM D7922*		0.0	NEG	NEG
Soot %	%	ASTM D7844*	>7.5	0.2	0.2	0.1
Nitration	Abs/cm	ASTM D7624*	>20	8.7	7.5	8.7
Sulfation	Abs/.1mm	ASTM D7415*	>30	18.3	18.6	21.1
Emulsified Water	scalar	Visual*	>0.2	▲ .5%	NEG	NEG

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185(m)		5	3	4
Boron	ppm	ASTM D5185(m)	2	10	10	109
Barium	ppm	ASTM D5185(m)	0	0	<1	<1
Molybdenum	ppm	ASTM D5185(m)	50	53	61	15
Manganese	ppm	ASTM D5185(m)	0	0	0	<1
Magnesium	ppm	ASTM D5185(m)	950	889	932	190
Calcium	ppm	ASTM D5185(m)	1050	1128	1187	2094
Phosphorus	ppm	ASTM D5185(m)	995	987	1040	1056
Zinc	ppm	ASTM D5185(m)	1180	1164	1241	1182
Sulfur	ppm	ASTM D5185(m)	2600	2791	2697	2988
Oxidation	Abs/.1mm	ASTM D7414*	>25	15.5	14.1	16.6
Base Number (BN)	mg KOH/g	ASTM D2896*		10.99	8.54	6.62
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	11.0	11.2	13.4



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0885203 **Received** : 03 Jan 2024
Lab Number : 02606180 **Diagnosed** : 05 Jan 2024
Unique Number : 5707266 **Diagnostician** : Kevin Marson
Test Package : MOB 2 (Additional Tests: Glycol, KF)

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: