



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
55006
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (--- LTR)

RECOMMENDATION

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		WC0915492	WC0892099	WC0854793
Sample Date		Client Info		20 Mar 2024	02 Feb 2024	22 Dec 2023
Machine Age	mls	Client Info		870260	860156	850889
Oil Age	mls	Client Info		10104	9267	9735
Filter Age	mls	Client Info		10104	9267	9735
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>200	22	16	26
Chromium	ppm	ASTM D5185(m)	>20	1	<1	1
Nickel	ppm	ASTM D5185(m)	>2	0	0	<1
Titanium	ppm	ASTM D5185(m)	>2	0	0	0
Silver	ppm	ASTM D5185(m)	>2	0	0	0
Aluminum	ppm	ASTM D5185(m)	>30	1	1	2
Lead	ppm	ASTM D5185(m)	>30	1	2	2
Copper	ppm	ASTM D5185(m)	>30	<1	<1	<1
Tin	ppm	ASTM D5185(m)	>15	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

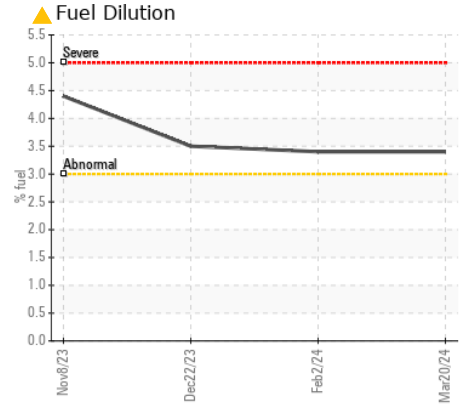
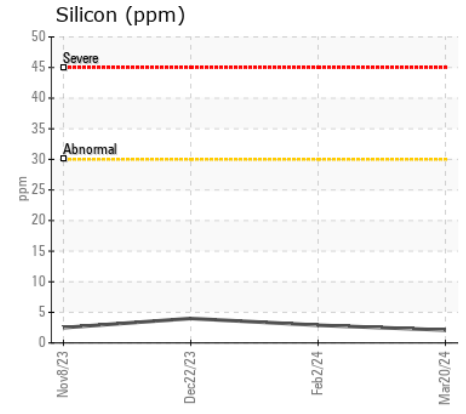
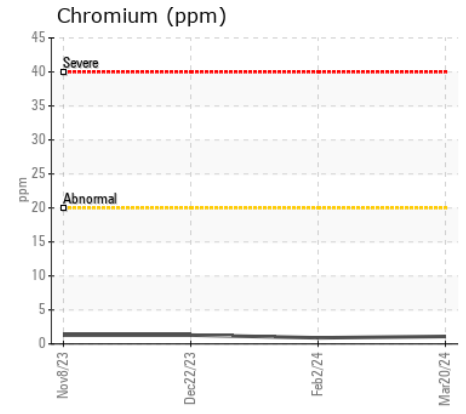
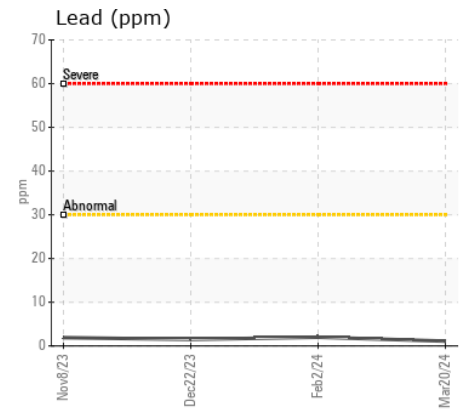
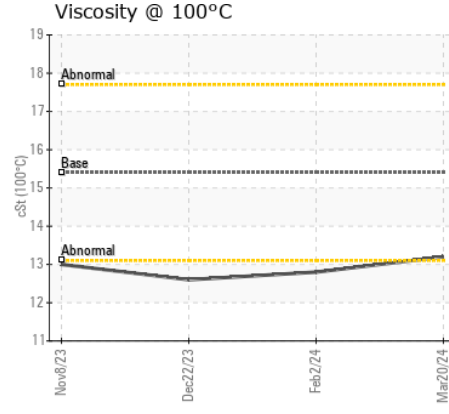
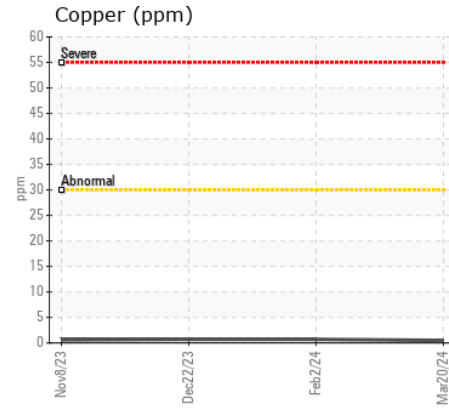
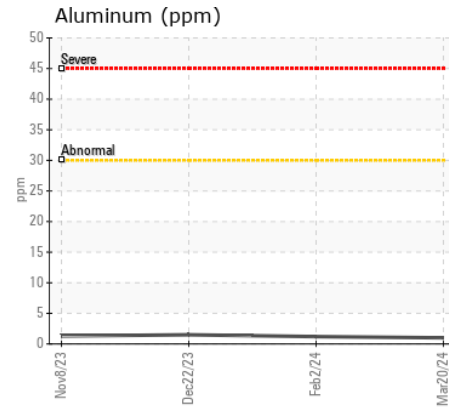
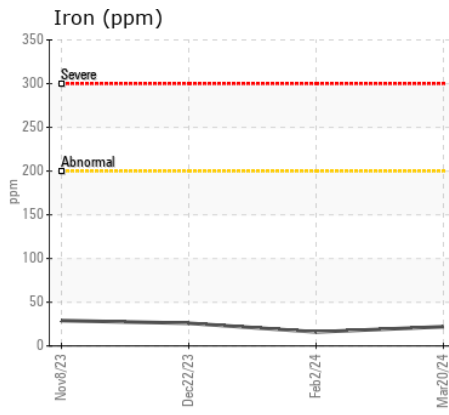
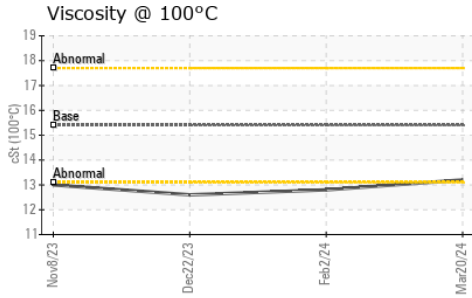
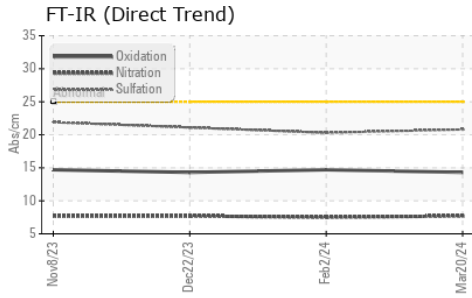
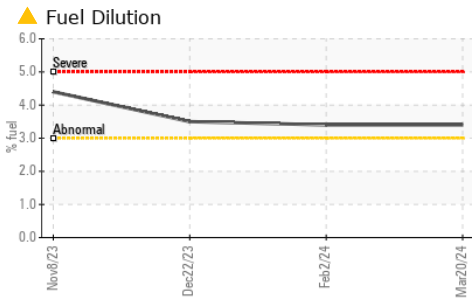
There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

Silicon	ppm	ASTM D5185(m)	>30	2	3	4
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	2
Fuel	%	ASTM D7593*	>3.0	▲ 3.4	▲ 3.4	▲ 3.5
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	1.3	0.7	1.4
Nitration	Abs/cm	ASTM D7624*	>20	7.7	7.5	7.7
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.8	20.3	21.1
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185(m)		6	1	2
Boron	ppm	ASTM D5185(m)	0	<1	1	4
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	60	59	60	57
Manganese	ppm	ASTM D5185(m)	0	0	0	0
Magnesium	ppm	ASTM D5185(m)	1010	984	976	919
Calcium	ppm	ASTM D5185(m)	1070	1048	1103	1070
Phosphorus	ppm	ASTM D5185(m)	1150	975	1030	961
Zinc	ppm	ASTM D5185(m)	1270	1174	1180	1124
Sulfur	ppm	ASTM D5185(m)	2060	2420	2673	2550
Oxidation	Abs/.1mm	ASTM D7414*	>25	14.3	14.7	14.3
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	13.2	▲ 12.8	▲ 12.6



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0915492 **Received** : 05 Apr 2024
Lab Number : 02626910 **Tested** : 08 Apr 2024
Unique Number : 5760042 **Diagnosed** : 08 Apr 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: PercentFuel)

MANITOU LIN TRANSPORT
 75 MUMFORD ROAD
 LIVELY, ON
 CA P3Y 1L1
 Contact: Todd Smith
 tosmith@manitoulintransport.com
 T: (705)562-3302
 F: x:

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.