



WEAR	NORMAL
CONTAMINATION	MARGINAL
FLUID CONDITION	NORMAL

Machine Id
INTERNATIONAL 114
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 10W30 (16 LTR)

RECOMMENDATION

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. No other corrective action is recommended at this time.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PC0083925	PC0071660	PC0065604
Sample Date		Client Info		05 Feb 2024	09 Jun 2023	23 Nov 2022
Machine Age	kms	Client Info		279494	258442	235974
Oil Age	kms	Client Info		21052	22468	21133
Filter Age	kms	Client Info		21052	22468	21133
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				MARGINAL	ABNORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>130	69	62	32
Chromium	ppm	ASTM D5185(m)	>10	2	2	1
Nickel	ppm	ASTM D5185(m)	>4	<1	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	0	<1	0
Silver	ppm	ASTM D5185(m)	>2	0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	13	18	8
Lead	ppm	ASTM D5185(m)	>20	0	0	<1
Copper	ppm	ASTM D5185(m)	>125	2	2	1
Tin	ppm	ASTM D5185(m)	>4	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---

CONTAMINATION

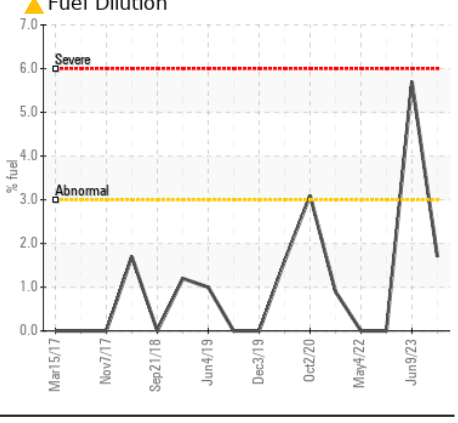
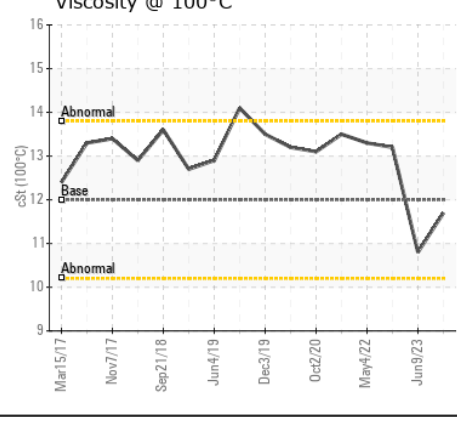
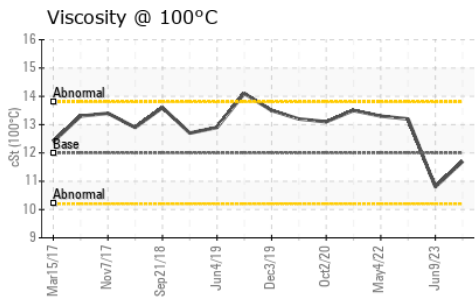
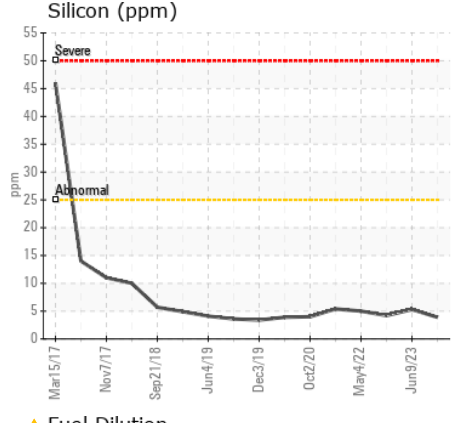
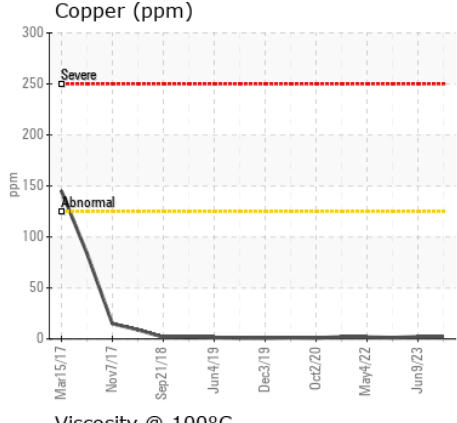
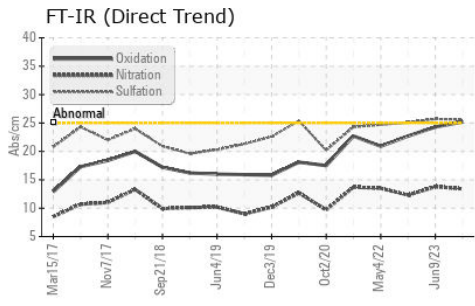
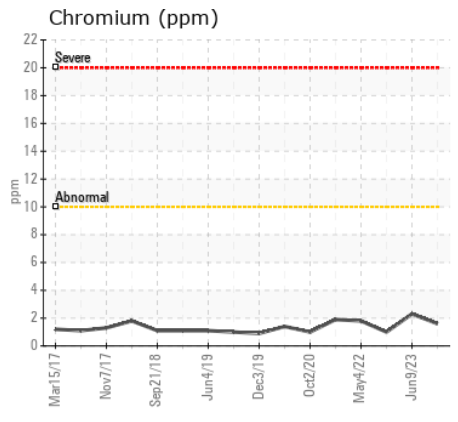
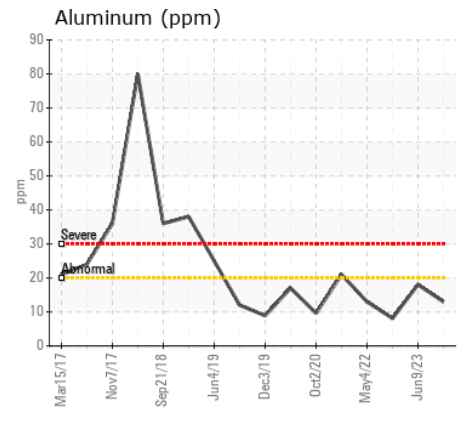
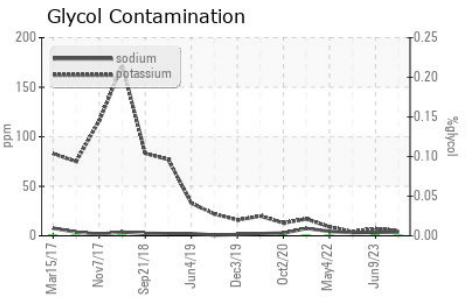
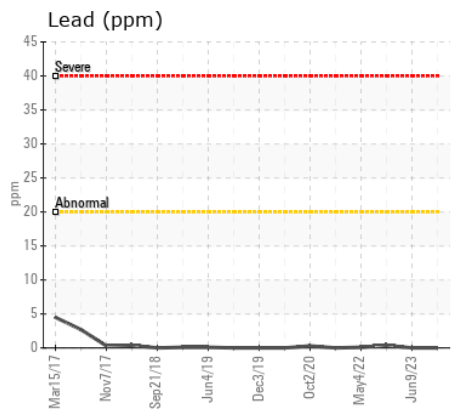
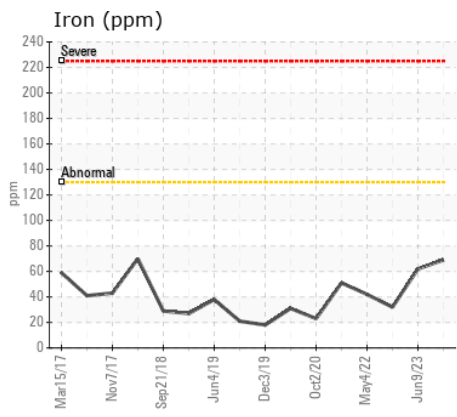
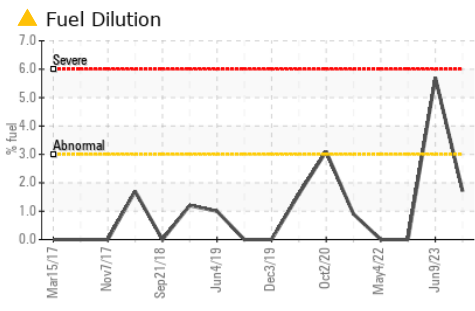
Light fuel dilution occurring. No other contaminants were detected in the oil.

Silicon	ppm	ASTM D5185(m)	>25	4	5	4
Potassium	ppm	ASTM D5185(m)	>20	5	7	4
Fuel	%	ASTM D7593*	>3.0	▲ 1.7	▲ 5.7	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	ASTM D7922*		0.0	0.0	NEG
Soot %	%	ASTM D7844*	>6	0.8	1.3	0.8
Nitration	Abs/cm	ASTM D7624*	>20	13.4	13.8	12.3
Sulfation	Abs/.1mm	ASTM D7415*	>30	25.6	25.7	25.1
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		4	4	3
Boron	ppm	ASTM D5185(m)	2	1	2	1
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	50	58	56	58
Manganese	ppm	ASTM D5185(m)	0	0	<1	<1
Magnesium	ppm	ASTM D5185(m)	950	917	881	886
Calcium	ppm	ASTM D5185(m)	1050	1028	1037	1084
Phosphorus	ppm	ASTM D5185(m)	995	881	943	975
Zinc	ppm	ASTM D5185(m)	1180	1136	1137	1169
Sulfur	ppm	ASTM D5185(m)	2600	2407	2406	2472
Oxidation	Abs/.1mm	ASTM D7414*	>25	25.2	24.3	22.7
Visc @ 40°C	cSt	ASTM D7279(m)	80.1	78.8	70.6	95.4
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	11.7	10.8	13.2
Viscosity Index (VI)	Scale	ASTM D2270*	144	141	142	137



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0083925
Lab Number : 02626847
Unique Number : 5759979
Test Package : MOB 1 (Additional Tests: Glycol, KV40, PercentFuel, VI, Visual)

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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.