



POWER SYSTEMS
SYSTÈMES DE PUISSANCE

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	MARGINAL
FLUID CONDITION	NORMAL

Area
HALIFAX REGIONAL - DARTMOUTH SEWER TREAT [6100287061]

Machine Id
MTU DIESEL 5362003436

Component
Diesel Engine

Fluid
PETRO CANADA DURON SHP 15W40 (102 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		WA0020841	WA0019001	WA0015349
Sample Date		Client Info		10 Jun 2024	07 Nov 2022	05 Mar 2020
Machine Age	hrs	Client Info		642	605	474
Oil Age	hrs	Client Info		0	100	0
Filter Age	hrs	Client Info		0	100	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				MARGINAL	ABNORMAL	MARGINAL

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>100	3	5	4
Chromium	ppm	ASTM D5185(m)	>20	0	0	<1
Nickel	ppm	ASTM D5185(m)	>4	0	<1	<1
Titanium	ppm	ASTM D5185(m)		0	<1	<1
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	<1	<1	1
Lead	ppm	ASTM D5185(m)	>40	0	1	<1
Copper	ppm	ASTM D5185(m)	>330	1	2	3
Tin	ppm	ASTM D5185(m)	>15	0	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	VLITE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---

CONTAMINATION

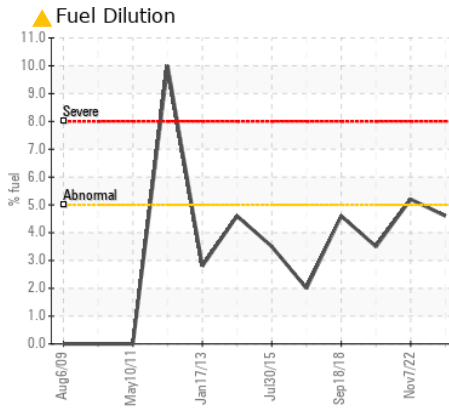
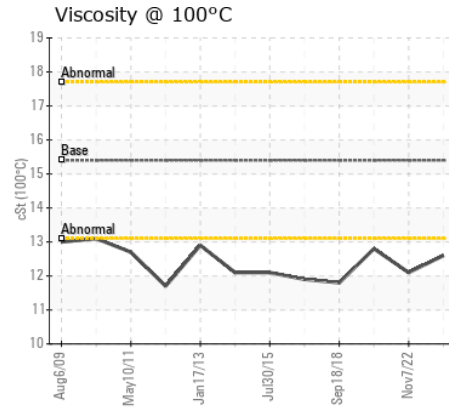
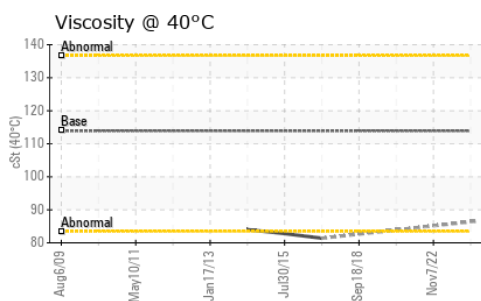
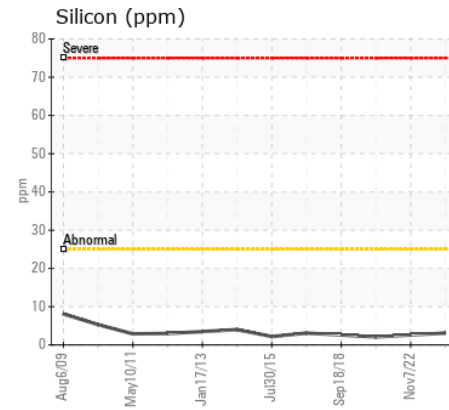
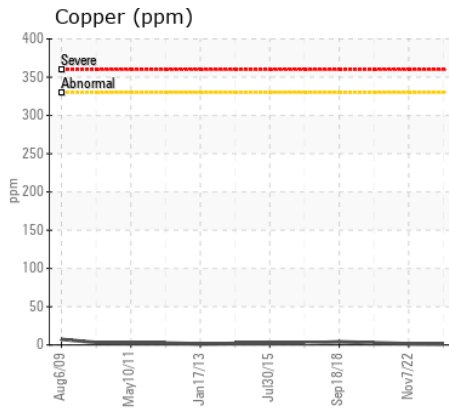
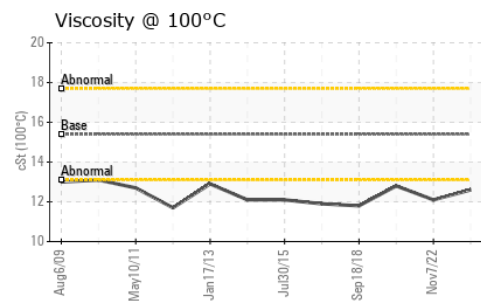
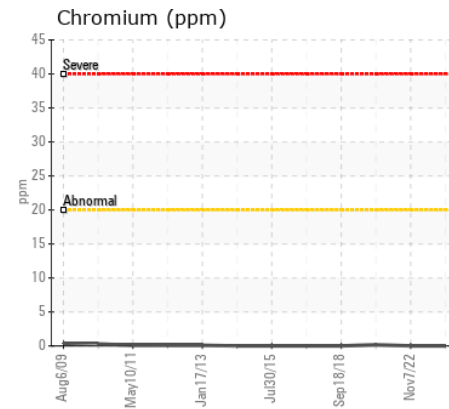
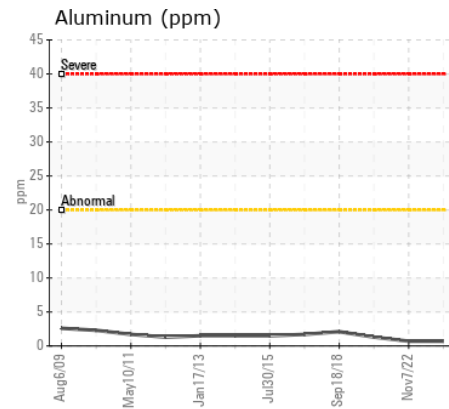
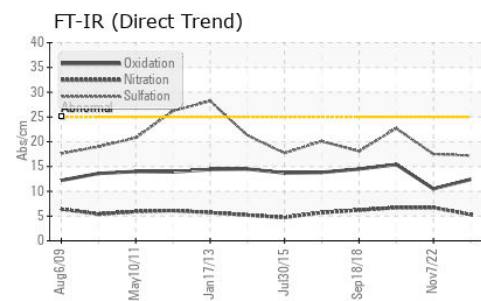
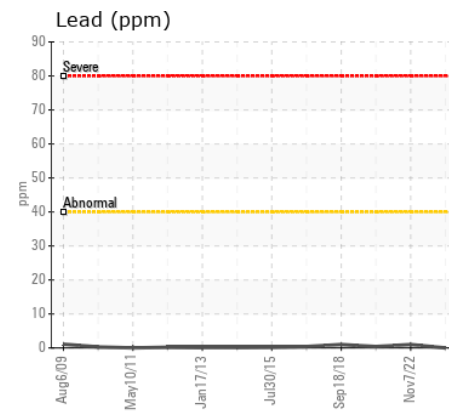
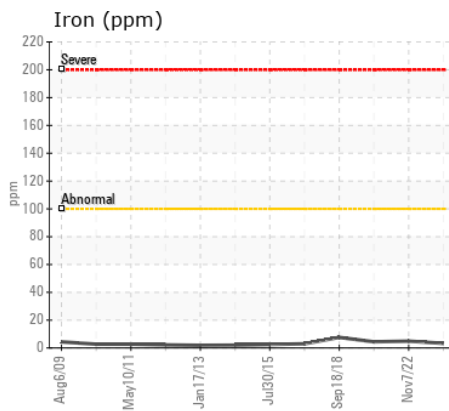
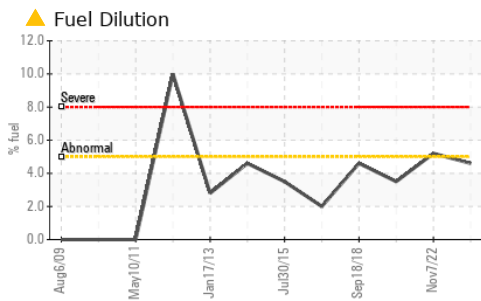
Light fuel dilution occurring. No other contaminants were detected in the oil.

Silicon	ppm	ASTM D5185(m)	>25	3	3	2
Potassium	ppm	ASTM D5185(m)	>20	<1	2	3
Fuel	%	ASTM D7593*	>5	▲ 4.6	▲ 5.2	▲ 3.5
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	5.3	6.7	6.7
Sulfation	Abs/.1mm	ASTM D7415*	>30	17.2	17.5	22.7
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	---
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)		1	2	2
Boron	ppm	ASTM D5185(m)	0	5	28	109
Barium	ppm	ASTM D5185(m)	0	0	0	<1
Molybdenum	ppm	ASTM D5185(m)	60	49	<1	<1
Manganese	ppm	ASTM D5185(m)	0	0	<1	<1
Magnesium	ppm	ASTM D5185(m)	1010	803	18	16
Calcium	ppm	ASTM D5185(m)	1070	1188	2295	2290
Phosphorus	ppm	ASTM D5185(m)	1150	956	977	1052
Zinc	ppm	ASTM D5185(m)	1270	1124	1037	1156
Sulfur	ppm	ASTM D5185(m)	2060	2623	3111	3379
Oxidation	Abs/.1mm	ASTM D7414*	>25	12.4	10.5	15.4
Visc @ 40°C	cSt	ASTM D7279(m)	113.9	86.4	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	12.6	▲ 12.1	12.8
Viscosity Index (VI)	Scale	ASTM D2270*	142	143	---	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WA0020841 **Received** : 17 Jun 2024
Lab Number : 02642268 **Tested** : 18 Jun 2024
Unique Number : 5799807 **Diagnosed** : 18 Jun 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: 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.