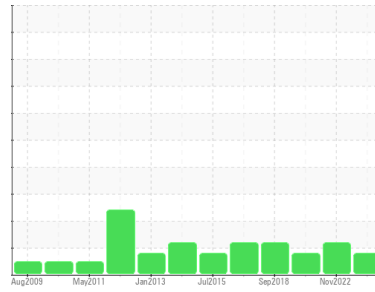


OIL ANALYSIS REPORT

Sample Rating Trend



FUEL



Area
HALIFAX REGIONAL - DARTMOUTH SEWER TREAT [6100287061]
Machine Id
MTU DIESEL 5362003436
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (102 LTR)

DIAGNOSIS

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.

Wear

Metal levels are typical for a new component breaking in.

Contamination

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

Fluid Condition

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

SAMPLE INFORMATION		method	limit/base	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
Oil Changed	Client Info			Changed	Changed	Changed
Sample Status				MARGINAL	ABNORMAL	MARGINAL

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method	>0.2		NEG	NEG	NEG
Glycol	WC Method			NEG	NEG	NEG

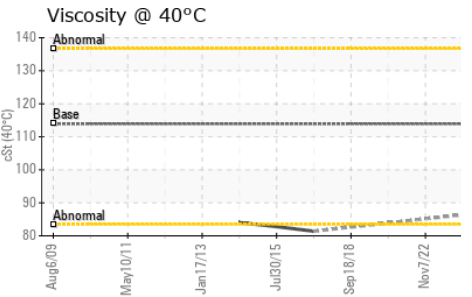
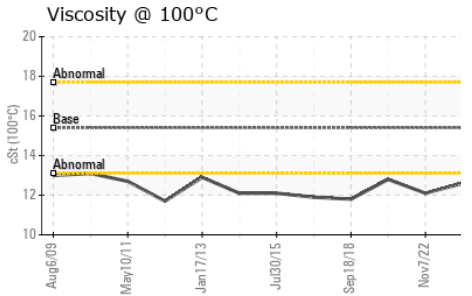
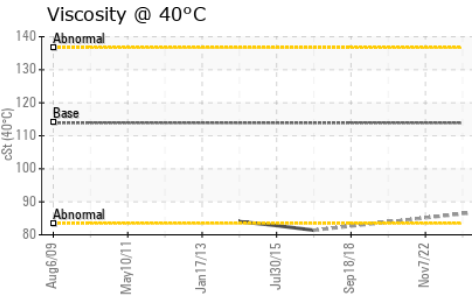
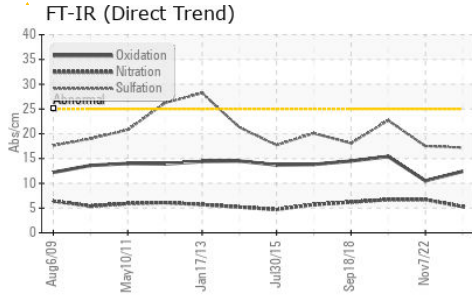
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>100	3	5	4
Chromium	ppm	ASTM D5185(m)	>20	0	0	<1
Nickel	ppm	ASTM D5185(m)	>4	0	<1	<1
Titanium	ppm	ASTM D5185(m)		0	<1	<1
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	<1	<1	1
Lead	ppm	ASTM D5185(m)	>40	0	1	<1
Copper	ppm	ASTM D5185(m)	>330	1	2	3
Tin	ppm	ASTM D5185(m)	>15	0	<1	<1
Antimony	ppm	ASTM D5185(m)		<1	0	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium	ppm	ASTM D5185(m)		0	0	0

ADDITIVES		method	limit/base	current	history1	history2
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
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	3	3	2
Sodium	ppm	ASTM D5185(m)		1	2	2
Potassium	ppm	ASTM D5185(m)	>20	<1	2	3
Fuel	%	ASTM D7593*	>5	▲ 4.6	▲ 5.2	▲ 3.5

INFRA-RED		method	limit/base	current	history1	history2
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

OIL ANALYSIS REPORT

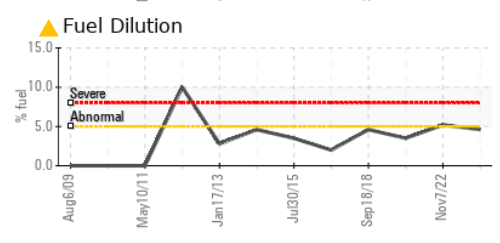
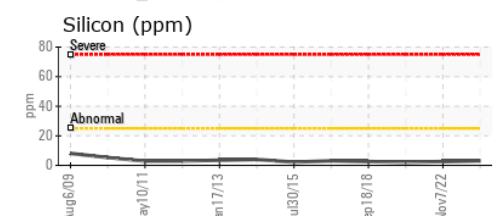
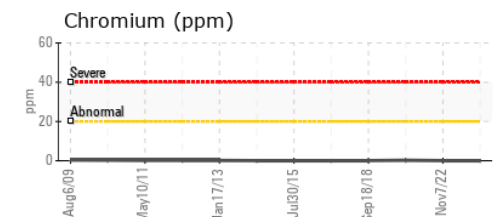
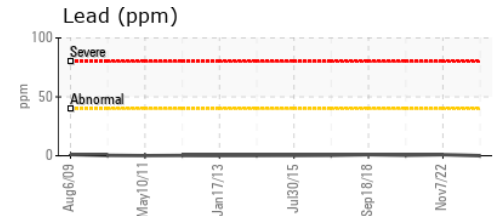
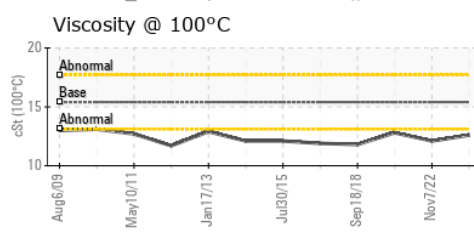
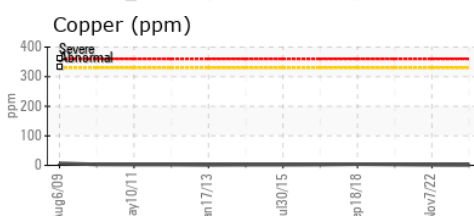
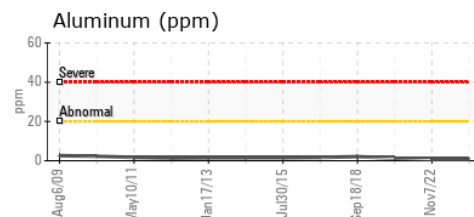
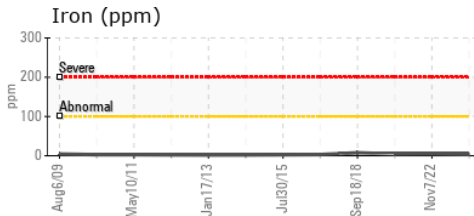


FLUID DEGRADATION	method	limit/base	current	history1	history2	
Oxidation	Abs./1mm	ASTM D7414*	>25	12.4	10.5	15.4

VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	VLITE	---
Yellow Metal	scalar	Visual*	NONE	NONE	---
Precipitate	scalar	Visual*	NONE	NONE	---
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	---
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG
Free Water	scalar	Visual*	NEG	NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	113.9	86.4	---
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	12.6	▲ 12.1
Viscosity Index (VI)	Scale	ASTM D2270*	142	143	---

GRAPHS



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)

Wajax Power Systems
 70 Raddall Avenue
 Dartmouth, NS
 CA B3B 1T7
 Contact: Danelle Hoffman
 dhoffman@wajax.com
 T: (902)468-6200
 F: (902)468-3325

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.