MOB I LUBE 360 OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ABNORMAL

Machine Id
OE1247
Component
Diesel Engine
Fluid
PETRO CANADA DURON UHP 5W40 (7 LTR)

RECOMMENDATION

We advise that you check for faulty combustion and a possible overheat condition. The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

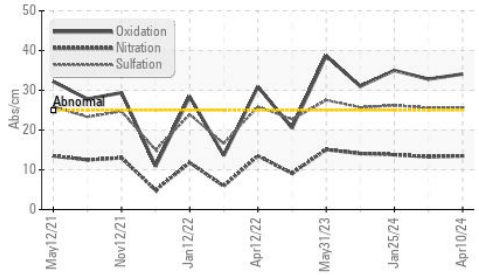
There is no indication of any contamination in the oil.

FLUID CONDITION

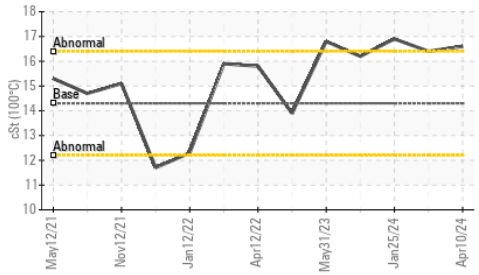
A small degree of oil oxidation was indicated. The oil is no longer serviceable.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PC0082023	PC0082216	PC0082667
Sample Date		Client Info		10 Apr 2024	01 Mar 2024	25 Jan 2024
Machine Age	hrs	Client Info		8836	7882	7017
Oil Age	hrs	Client Info		0	0	250
Filter Age	hrs	Client Info		0	0	250
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185(m)	>100	24	18	10
Chromium	ppm	ASTM D5185(m)	>20	1	1	<1
Nickel	ppm	ASTM D5185(m)	>4	0	<1	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	2	3	2
Lead	ppm	ASTM D5185(m)	>40	0	0	0
Copper	ppm	ASTM D5185(m)	>330	<1	<1	<1
Tin	ppm	ASTM D5185(m)	>15	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---
Silicon	ppm	ASTM D5185(m)	>25	4	4	5
Potassium	ppm	ASTM D5185(m)	>20	0	<1	<1
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0.1	0.2	0.1
Nitration	Abs/cm	ASTM D7624*	>20	13.5	13.3	13.8
Sulfation	Abs/.1mm	ASTM D7415*	>30	25.7	25.6	26.2
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
Sodium	ppm	ASTM D5185(m)		4	4	4
Boron	ppm	ASTM D5185(m)	65	38	42	43
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	65	56	57	59
Manganese	ppm	ASTM D5185(m)	0	0	0	0
Magnesium	ppm	ASTM D5185(m)	1160	1107	1141	1138
Calcium	ppm	ASTM D5185(m)	820	841	846	854
Phosphorus	ppm	ASTM D5185(m)	1160	928	995	999
Zinc	ppm	ASTM D5185(m)	1260	1182	1233	1225
Sulfur	ppm	ASTM D5185(m)	3000	2451	2794	2770
Oxidation	Abs/.1mm	ASTM D7414*	>25	▲ 34.1	▲ 32.8	▲ 35.0
Visc @ 40°C	cSt	ASTM D7279(m)	95.1	117	113	▲ 120
Visc @ 100°C	cSt	ASTM D7279(m)	14.3	16.6	16.4	▲ 16.9
Viscosity Index (VI)	Scale	ASTM D2270*	169	153	156	153

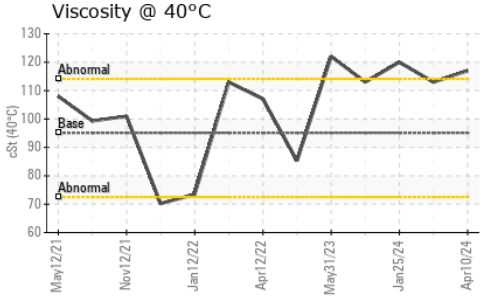
FT-IR (Direct Trend)



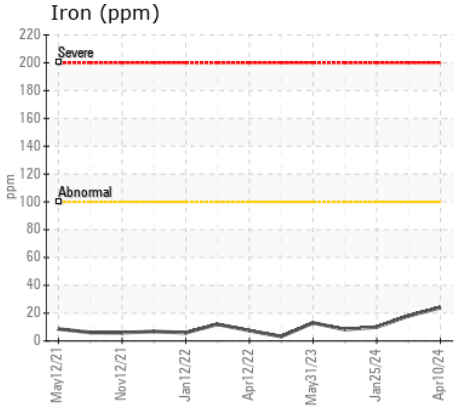
Viscosity @ 100°C



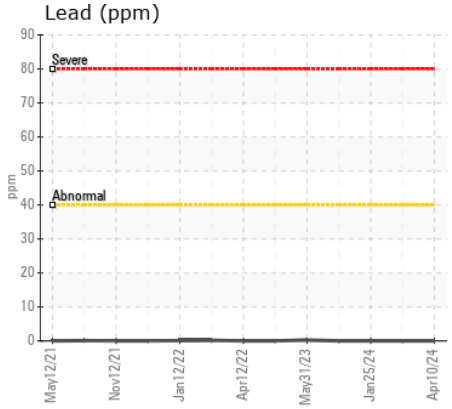
Viscosity @ 40°C



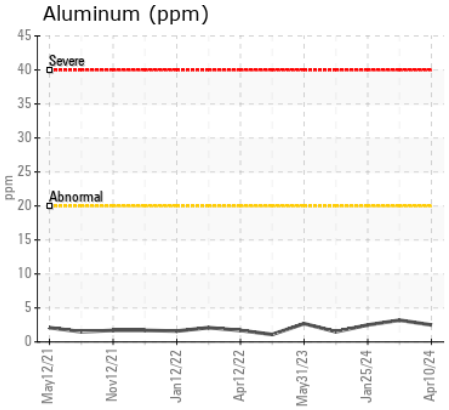
Iron (ppm)



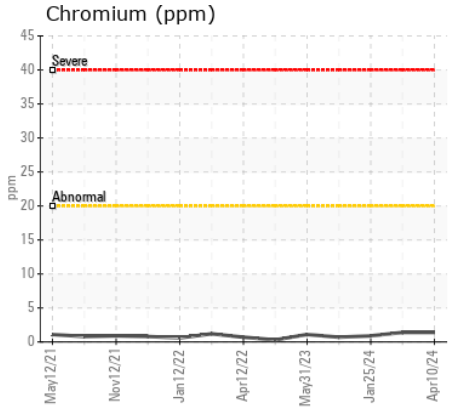
Lead (ppm)



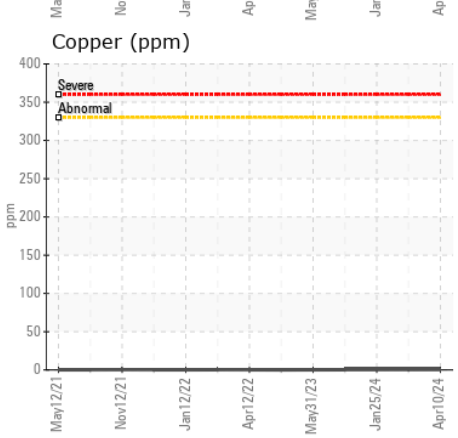
Aluminum (ppm)



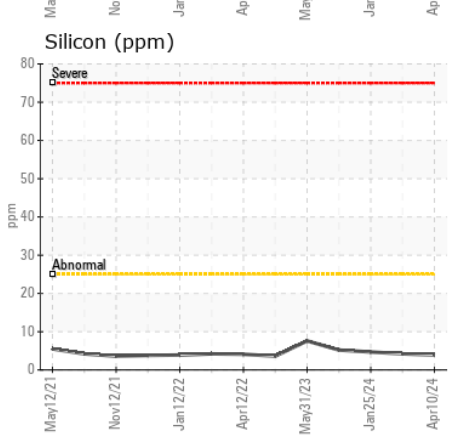
Chromium (ppm)



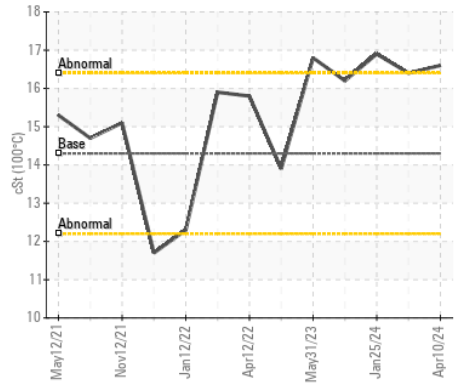
Copper (ppm)



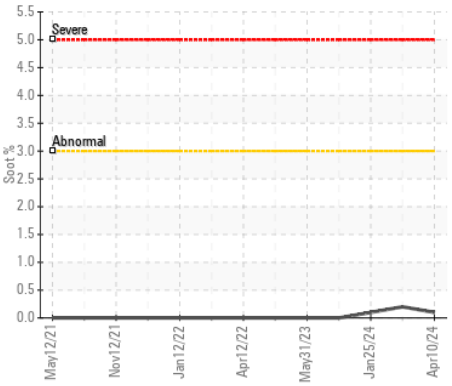
Silicon (ppm)



Viscosity @ 100°C



Soot %



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0082023
Lab Number : 02630913
Unique Number : 5772066
Test Package : MOB 1 (Additional Tests: KV40, VI, Visual)

Received : 23 Apr 2024
Tested : 23 Apr 2024
Diagnosed : 23 Apr 2024 - Kevin Marson

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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