MOB I LUBE 360 OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	SEVERE

Machine Id
0147
Component
Diesel Engine
Fluid
PETRO CANADA DURON HP 15W40 (24 LTR)

RECOMMENDATION

We advise that you check the fuel injection system. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

WEAR

All component wear rates are normal.

CONTAMINATION

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

FLUID CONDITION

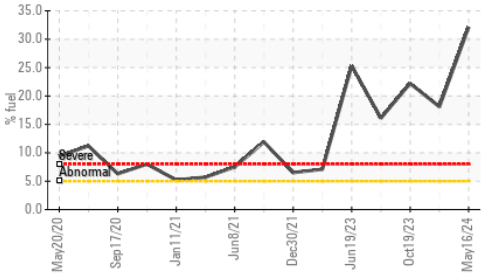
Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		**PC0078398**	PC0082833	PC0062037
Sample Date		Client Info		**16 May 2024**	04 Jan 2024	19 Oct 2023
Machine Age	kms	Client Info		**1153440**	1133005	118055
Oil Age	kms	Client Info		**12331**	14869	11377
Filter Age	kms	Client Info		**12331**	14869	11377
Oil Changed		Client Info		**Changed**	Changed	Changed
Filter Changed		Client Info		**Changed**	Changed	Changed
Sample Status				**SEVERE**	SEVERE	SEVERE
Iron	ppm	ASTM D5185(m)	>100	**48**	71	36
Chromium	ppm	ASTM D5185(m)	>20	**<1**	2	2
Nickel	ppm	ASTM D5185(m)	>4	**0**	<1	<1
Titanium	ppm	ASTM D5185(m)		**0**	0	0
Silver	ppm	ASTM D5185(m)	>3	**0**	0	<1
Aluminum	ppm	ASTM D5185(m)	>20	**<1**	2	3
Lead	ppm	ASTM D5185(m)	>40	**<1**	6	4
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
Silicon	ppm	ASTM D5185(m)	>25	**4**	4	5
Potassium	ppm	ASTM D5185(m)	>20	**<1**	1	1
Fuel	%	ASTM D7593*	>5	▲ **32.1**	▲ 18.1	▲ 22.2
Water		WC Method	>0.2	**NEG**	NEG	NEG
Glycol		WC Method		**NEG**	NEG	NEG
Soot %	%	ASTM D7844*	>3	**0.2**	0.3	0.2
Nitration	Abs/cm	ASTM D7624*	>20	**7.8**	8.3	8.9
Sulfation	Abs/.1mm	ASTM D7415*	>30	**17.9**	19.1	18.5
Emulsified Water	scalar	Visual*	>0.2	**NEG**	NEG	NEG
Sodium	ppm	ASTM D5185(m)		**6**	6	8
Boron	ppm	ASTM D5185(m)	0	**2**	3	10
Barium	ppm	ASTM D5185(m)	0	**0**	0	<1
Molybdenum	ppm	ASTM D5185(m)	60	**43**	44	34
Manganese	ppm	ASTM D5185(m)	0	**<1**	0	0
Magnesium	ppm	ASTM D5185(m)	1010	**692**	700	531
Calcium	ppm	ASTM D5185(m)	1070	**805**	808	807
Phosphorus	ppm	ASTM D5185(m)	1150	**703**	706	604
Zinc	ppm	ASTM D5185(m)	1270	**851**	858	759
Sulfur	ppm	ASTM D5185(m)	2060	**1577**	1724	1462
Oxidation	Abs/.1mm	ASTM D7414*	>25	**15.2**	16.5	15.0
Visc @ 40°C	cSt	ASTM D7279(m)	118.2	▲ **31.8**	▲ 40.0	▲ 33.7
Visc @ 100°C	cSt	ASTM D7279(m)	15.6	▲ **6.5**	▲ 7.4	▲ 6.4
Viscosity Index (VI)	Scale	ASTM D2270*	139	**163**	152	144

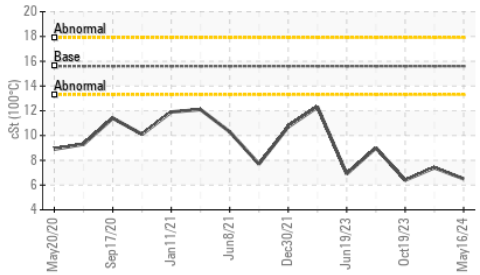
Report Id: STJNEW [WCAMIS] 02639820 (Generated: 06/06/2024 19:37:30) Rev: 1

Submitted By: Dan Finlay

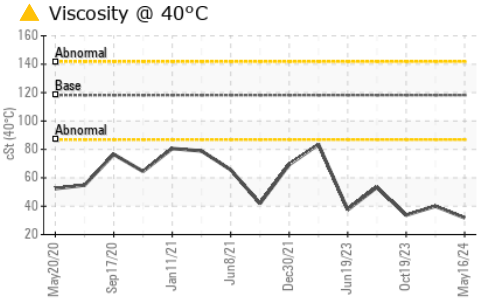
Fuel Dilution



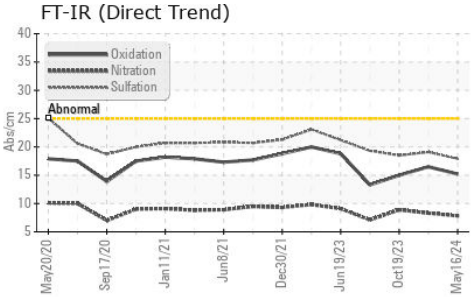
Viscosity @ 100°C



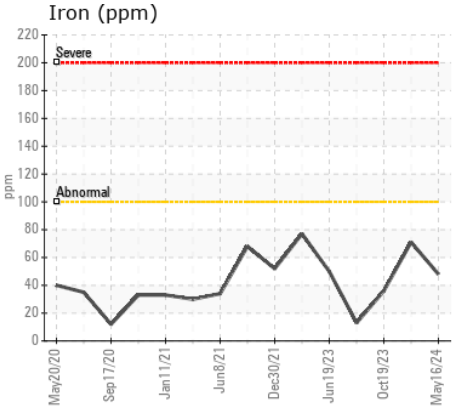
Viscosity @ 40°C



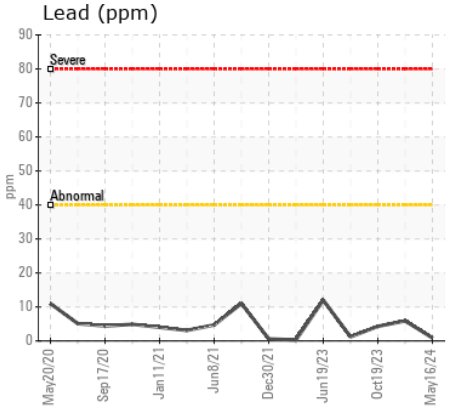
FT-IR (Direct Trend)



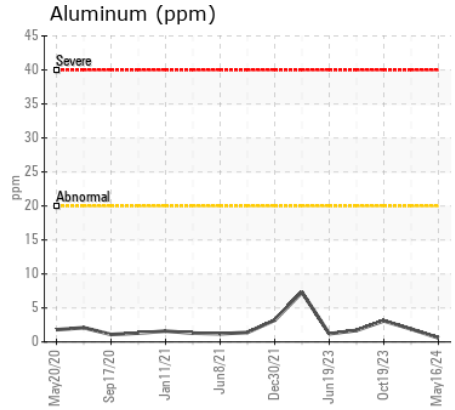
Iron (ppm)



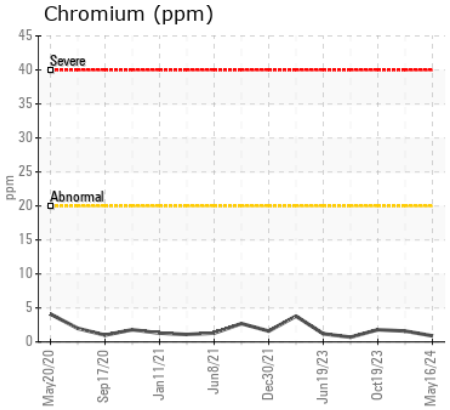
Lead (ppm)



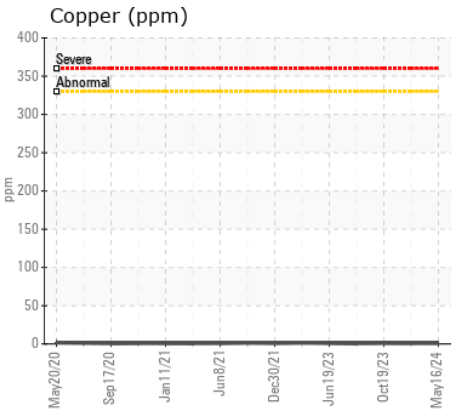
Aluminum (ppm)



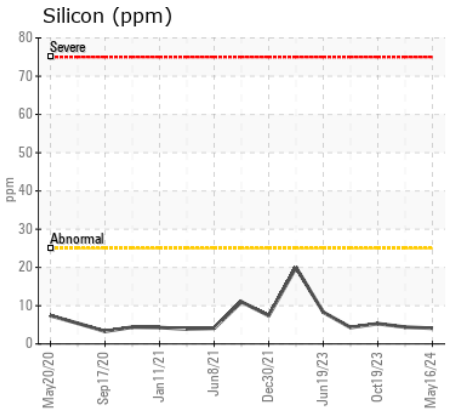
Chromium (ppm)



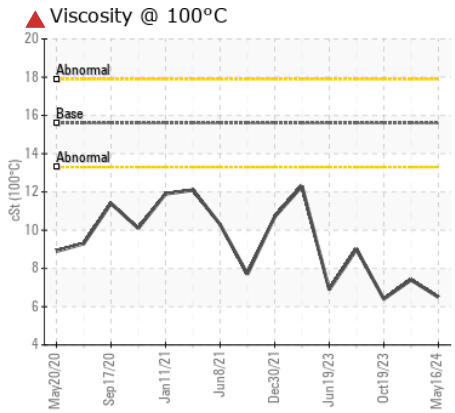
Copper (ppm)



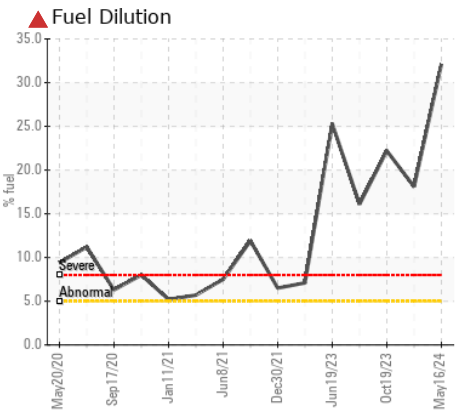
Silicon (ppm)



Viscosity @ 100°C



Fuel Dilution



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0078398 **Received** : 05 Jun 2024
Lab Number : 02639820 **Tested** : 06 Jun 2024
Unique Number : 5788982 **Diagnosed** : 06 Jun 2024 - Kevin Marson
Test Package : MOB 1 (Additional Tests: KV40, PercentFuel, VI)

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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