MOB I LUBE 360 OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	SEVERE

Machine Id
1207
Component
Rear Diesel Engine
Fluid
PETRO CANADA DURON HP 15W40 (24 LTR)

RECOMMENDATION

We advise that you check the fuel injection system. Check for low coolant level. 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

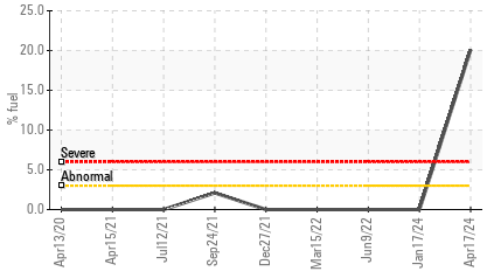
There is a high amount of fuel present in the oil. Water treatment chemicals present, indicating slow coolant leak. Test for glycol is negative. Tests confirm the presence of fuel in the oil.

FLUID CONDITION

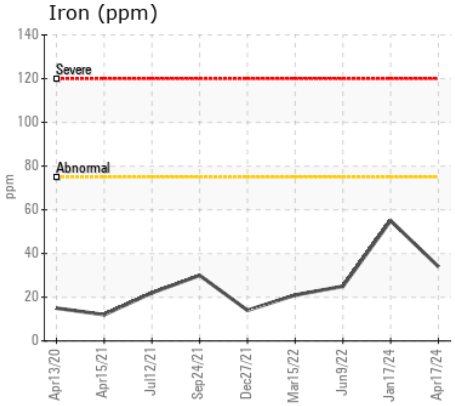
Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants. The condition of the oil is acceptable for the time in service (see recommendation).

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		**PC0082761**	PC0081669	PC417065
Sample Date		Client Info		**17 Apr 2024**	17 Jan 2024	09 Jun 2022
Machine Age	kms	Client Info		**639773**	624591	589975
Oil Age	kms	Client Info		**14979**	12360	16019
Filter Age	kms	Client Info		**14979**	12360	16019
Oil Changed		Client Info		**Changed**	Changed	Changed
Filter Changed		Client Info		**Changed**	Changed	Changed
Sample Status				**SEVERE**	SEVERE	NORMAL
Iron	ppm	ASTM D5185(m)	>75	**34**	55	25
Chromium	ppm	ASTM D5185(m)	>5	**1**	2	1
Nickel	ppm	ASTM D5185(m)	>4	**0**	2	0
Titanium	ppm	ASTM D5185(m)	>2	**0**	0	<1
Silver	ppm	ASTM D5185(m)	>2	**0**	0	0
Aluminum	ppm	ASTM D5185(m)	>15	**2**	5	2
Lead	ppm	ASTM D5185(m)	>25	**0**	4	1
Copper	ppm	ASTM D5185(m)	>100	**3**	11	6
Tin	ppm	ASTM D5185(m)	>4	**0**	<1	<1
Vanadium	ppm	ASTM D5185(m)		**0**	0	0
Silicon	ppm	ASTM D5185(m)	>25	**13**	▲ 78	8
Potassium	ppm	ASTM D5185(m)	>20	**2**	20	0
Fuel	%	ASTM D7593*	>3.0	▲ **20.1**	<1.0	<1.0
Water		WC Method	>0.2	**NEG**	NEG	NEG
Glycol	%	ASTM D7922*		**0.0**	0.0	NEG
Soot %	%	ASTM D7844*	>6	**1.4**	2.1	1.1
Nitration	Abs/cm	ASTM D7624*	>20	**13.2**	19.9	10.8
Sulfation	Abs/.1mm	ASTM D7415*	>30	**24.3**	▲ 34.2	23.2
Emulsified Water	scalar	Visual*	>0.2	**NEG**	NEG	NEG
Sodium	ppm	ASTM D5185(m)		● **518**	● 3143	10
Boron	ppm	ASTM D5185(m)	0	**8**	46	1
Barium	ppm	ASTM D5185(m)	0	**0**	0	0
Molybdenum	ppm	ASTM D5185(m)	60	**65**	165	64
Manganese	ppm	ASTM D5185(m)	0	**<1**	1	<1
Magnesium	ppm	ASTM D5185(m)	1010	**786**	277	1072
Calcium	ppm	ASTM D5185(m)	1070	**925**	1792	1179
Phosphorus	ppm	ASTM D5185(m)	1150	**747**	843	1112
Zinc	ppm	ASTM D5185(m)	1270	**942**	1090	1331
Sulfur	ppm	ASTM D5185(m)	2060	**2024**	3047	2649
Oxidation	Abs/.1mm	ASTM D7414*	>25	**21.0**	22.4	17.9
Visc @ 40°C	cSt	ASTM D7279(m)	118.2	▲ **49.1**	107	103
Visc @ 100°C	cSt	ASTM D7279(m)	15.6	▲ **8.6**	14.9	13.8
Viscosity Index (VI)	Scale	ASTM D2270*	139	**153**	144	134

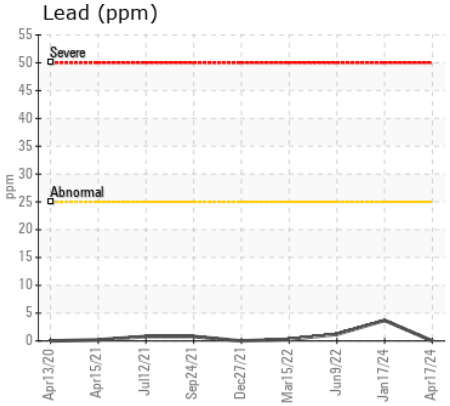
Fuel Dilution



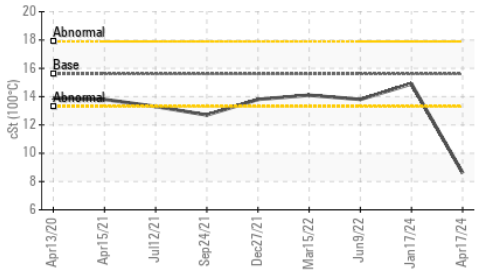
Iron (ppm)



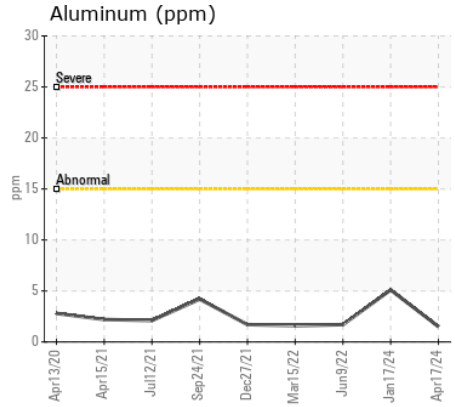
Lead (ppm)



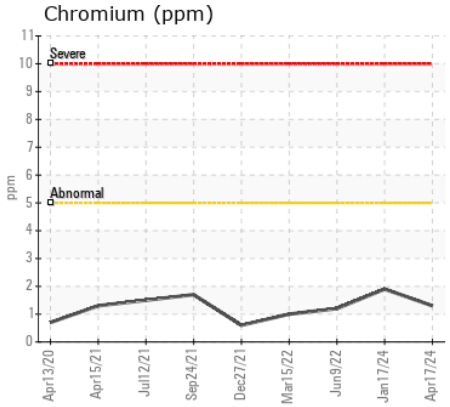
Viscosity @ 100°C



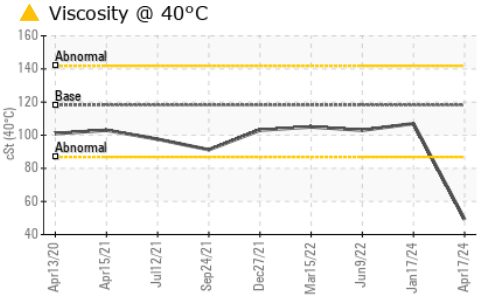
Aluminum (ppm)



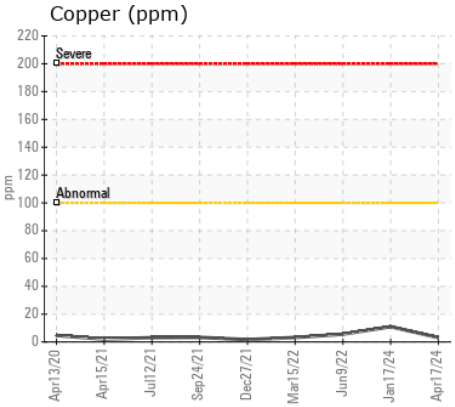
Chromium (ppm)



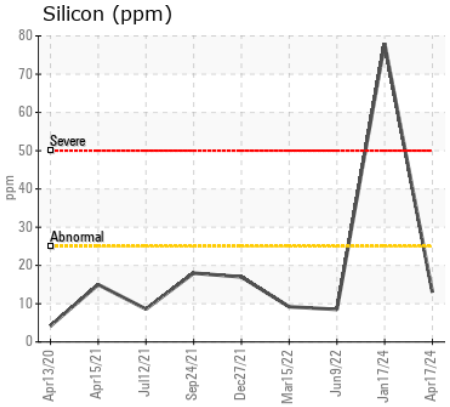
Viscosity @ 40°C



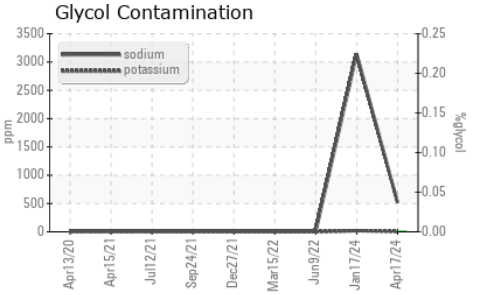
Copper (ppm)



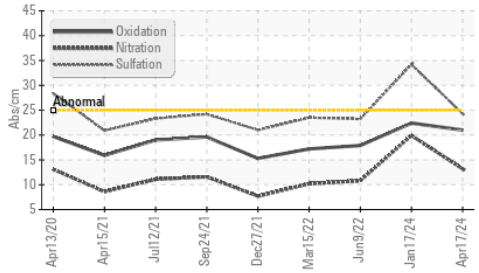
Silicon (ppm)



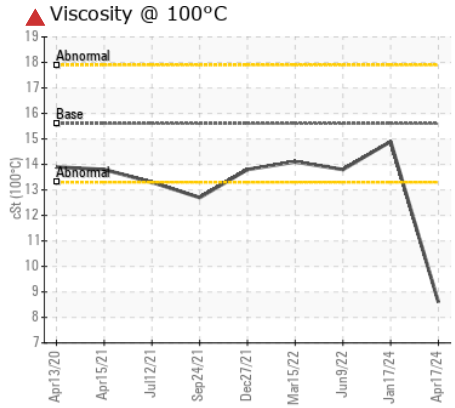
Glycol Contamination



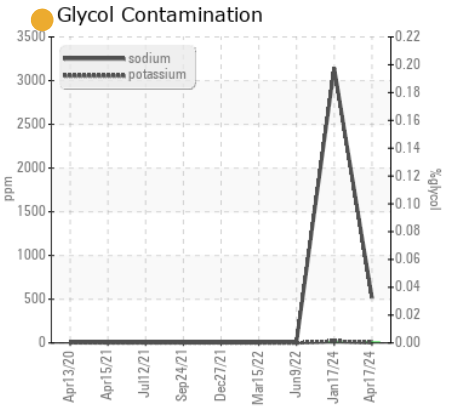
FT-IR (Direct Trend)



Viscosity @ 100°C



Glycol Contamination



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0082761 **Received** : 03 May 2024
Lab Number : 02633051 **Tested** : 06 May 2024
Unique Number : 5774204 **Diagnosed** : 06 May 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: FuelDilution, Glycol, 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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