MOB II LUBE 360 OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	ABNORMAL

Machine Id
9132
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

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

Metal levels are typical for a new component breaking in.

CONTAMINATION

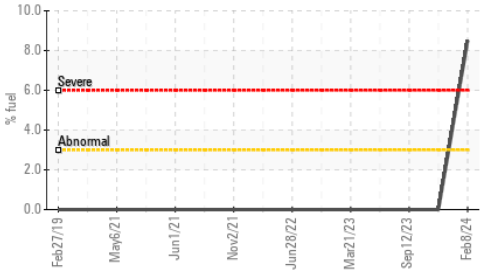
There is a high amount of fuel present in the oil. Water treatment chemicals present, indicating slow coolant leak. Tests confirm the presence of fuel in the oil. Test for glycol is negative.

FLUID CONDITION

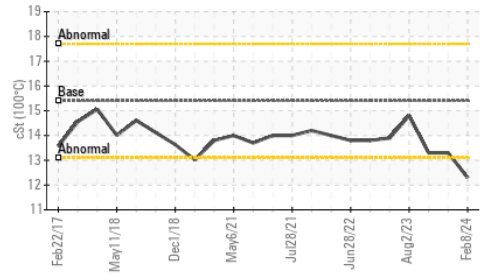
The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants. The condition of the oil is acceptable for the time in service (see recommendation).

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		**GFL0112406**	GFL0099591	GFL0091613
Sample Date		Client Info		**08 Feb 2024**	04 Dec 2023	12 Sep 2023
Machine Age	kms	Client Info		**12515**	489174	11454
Oil Age	kms	Client Info		**0**	0	300
Filter Age	kms	Client Info		**0**	0	300
Oil Changed		Client Info		**Changed**	Changed	Changed
Filter Changed		Client Info		**Changed**	Changed	Changed
Sample Status				**SEVERE**	NORMAL	NORMAL
Iron	ppm	ASTM D5185(m)	>75	**65**	57	30
Chromium	ppm	ASTM D5185(m)	>5	**2**	2	1
Nickel	ppm	ASTM D5185(m)	>4	**1**	1	<1
Titanium	ppm	ASTM D5185(m)	>2	**0**	0	0
Silver	ppm	ASTM D5185(m)	>2	**0**	<1	0
Aluminum	ppm	ASTM D5185(m)	>15	**13**	9	6
Lead	ppm	ASTM D5185(m)	>25	**<1**	<1	<1
Copper	ppm	ASTM D5185(m)	>100	**1**	2	1
Tin	ppm	ASTM D5185(m)	>4	**<1**	0	0
Vanadium	ppm	ASTM D5185(m)		**0**	0	0
Silicon	ppm	ASTM D5185(m)	>25	**7**	8	12
Potassium	ppm	ASTM D5185(m)	>20	**8**	3	3
Fuel	%	ASTM D7593*	>3.0	⬢ **8.5**	<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**	2.1	0.9
Nitration	Abs/cm	ASTM D7624*	>20	**14.5**	13.9	8.4
Sulfation	Abs/.1mm	ASTM D7415*	>30	**22.5**	26.6	21.1
Emulsified Water	scalar	Visual*	>0.2	**NEG**	NEG	NEG
Sodium	ppm	ASTM D5185(m)		▲ **1201**	111	5
Boron	ppm	ASTM D5185(m)	0	**2**	2	2
Barium	ppm	ASTM D5185(m)	0	**0**	<1	0
Molybdenum	ppm	ASTM D5185(m)	60	**104**	59	55
Manganese	ppm	ASTM D5185(m)	0	**0**	0	<1
Magnesium	ppm	ASTM D5185(m)	1010	**776**	869	884
Calcium	ppm	ASTM D5185(m)	1070	**922**	966	1034
Phosphorus	ppm	ASTM D5185(m)	1150	**812**	882	1003
Zinc	ppm	ASTM D5185(m)	1270	**997**	1090	1106
Sulfur	ppm	ASTM D5185(m)	2060	**2394**	2231	2366
Oxidation	Abs/.1mm	ASTM D7414*	>25	**19.9**	25.3	17.3
Base Number (BN)	mg KOH/g	ASTM D2896*	9.8	**10.23**	7.64	8.54
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	▲ **12.3**	13.3	13.3

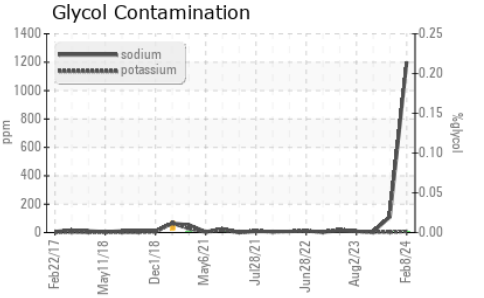
Fuel Dilution



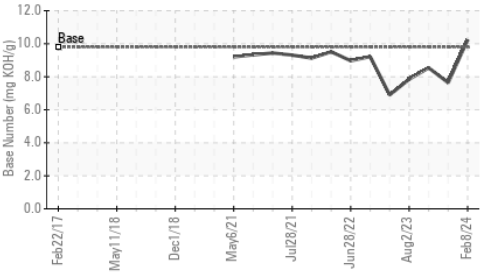
Viscosity @ 100°C



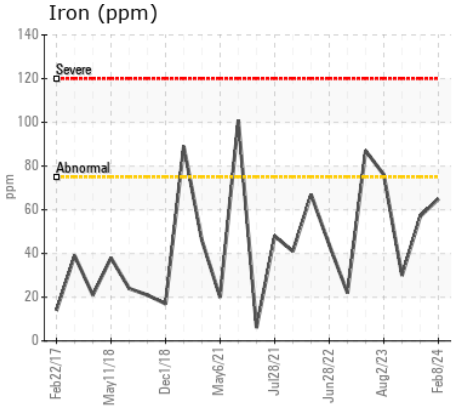
Glycol Contamination



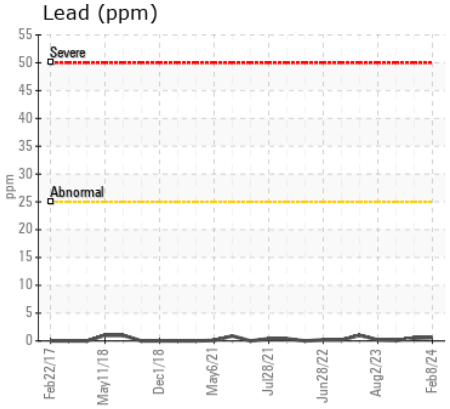
Base Number



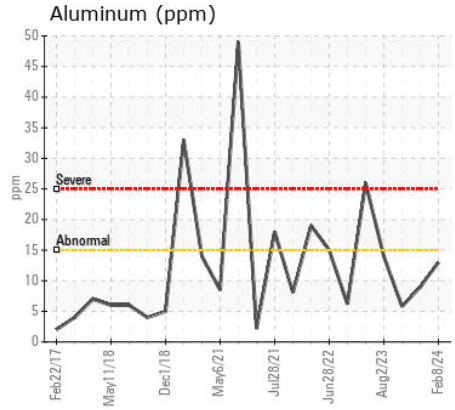
Iron (ppm)



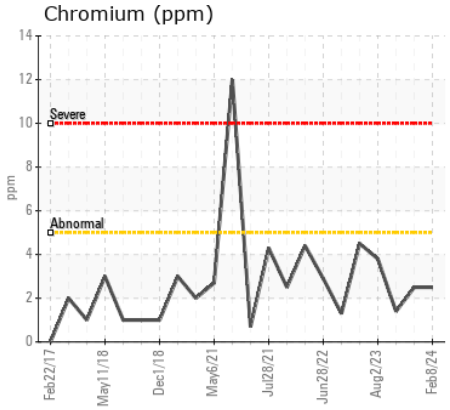
Lead (ppm)



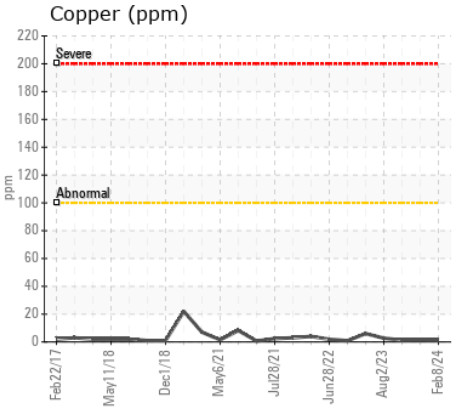
Aluminum (ppm)



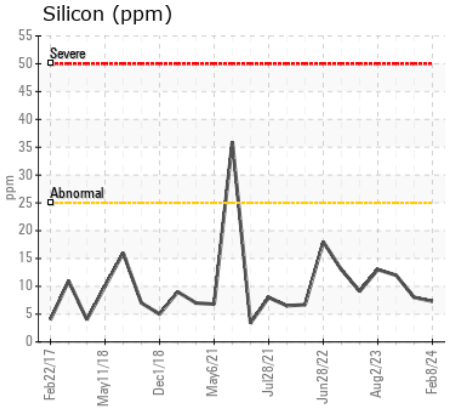
Chromium (ppm)



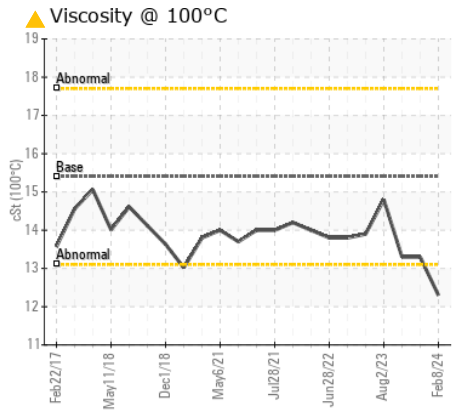
Copper (ppm)



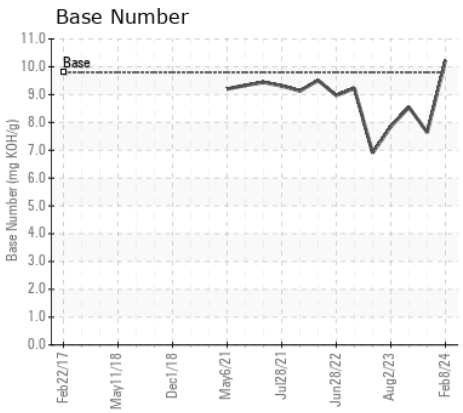
Silicon (ppm)



Viscosity @ 100°C



Base Number



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0112406
Lab Number : 02616968
Unique Number : 5734078
Test Package : MOB 2 (Additional Tests: FuelDilution, Glycol, PercentFuel)

Received : 21 Feb 2024
Tested : 22 Feb 2024
Diagnosed : 22 Feb 2024 - Wes Davis

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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