MOB II LUBE 360 OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	ATTENTION

Area
ETS
Machine Id
[ETS] 68
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (24 QTS)

RECOMMENDATION

We advise that you check for the source of the coolant leak. 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

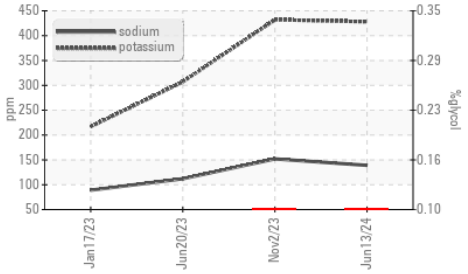
Test for glycol is positive. There is a high concentration of glycol present in the oil.

FLUID CONDITION

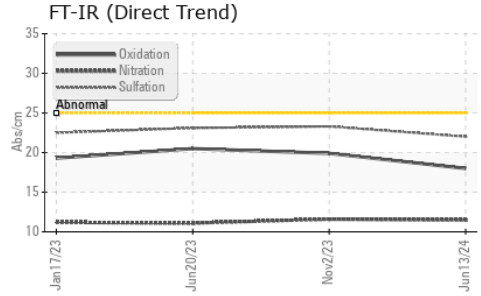
The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PCA0041878	WC0843782	WC0788561
Sample Date		Client Info		13 Jun 2024	02 Nov 2023	20 Jun 2023
Machine Age	mls	Client Info		232533	225046	217776
Oil Age	mls	Client Info		7487	7270	7224
Filter Age	mls	Client Info		7487	7270	7224
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				SEVERE	SEVERE	ABNORMAL
Iron	ppm	ASTM D5185m	>75	66	28	19
Chromium	ppm	ASTM D5185m	>5	2	2	1
Nickel	ppm	ASTM D5185m	>4	<1	<1	0
Titanium	ppm	ASTM D5185m	>2	<1	0	<1
Silver	ppm	ASTM D5185m	>2	<1	0	0
Aluminum	ppm	ASTM D5185m	>15	5	2	<1
Lead	ppm	ASTM D5185m	>25	<1	<1	0
Copper	ppm	ASTM D5185m	>100	1	1	<1
Tin	ppm	ASTM D5185m	>4	<1	0	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	9	11	7
Potassium	ppm	ASTM D5185m	>20	▲ 428	▲ 432	▲ 307
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	*ASTM D2982		▲ 0.10	▲ 0.10	NEG
Soot %	%	*ASTM D7844	>6	0.3	0.4	0.3
Nitration	Abs/cm	*ASTM D7624	>20	11.5	11.6	11.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.0	23.3	23.1
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185m		● 139	● 152	▲ 112
Boron	ppm	ASTM D5185m	0	9	0	6
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	60	93	93	84
Manganese	ppm	ASTM D5185m	0	<1	0	<1
Magnesium	ppm	ASTM D5185m	1010	1055	1038	1057
Calcium	ppm	ASTM D5185m	1070	1183	1153	1180
Phosphorus	ppm	ASTM D5185m	1150	1097	989	1069
Zinc	ppm	ASTM D5185m	1270	1436	1339	1368
Sulfur	ppm	ASTM D5185m	2060	3728	3244	3686
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.0	19.9	20.5
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	8.71	7.2	6.5
Visc @ 100°C	cSt	ASTM D445	15.4	13.5	14.2	13.8

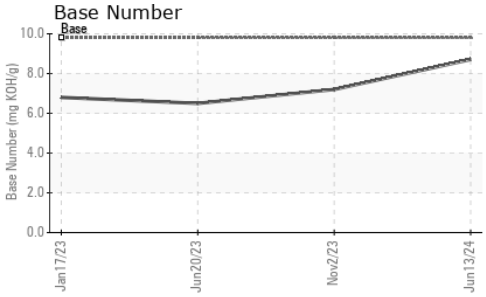
Glycol Contamination



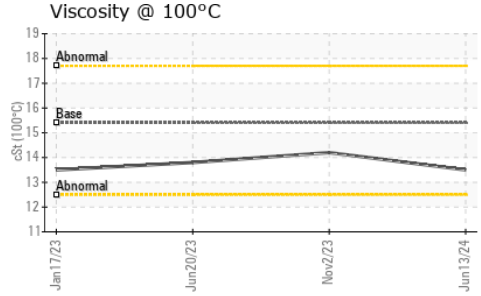
FT-IR (Direct Trend)



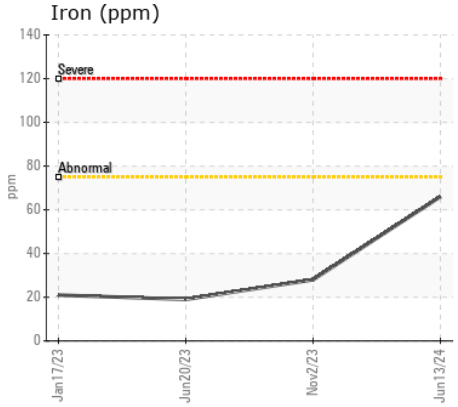
Base Number



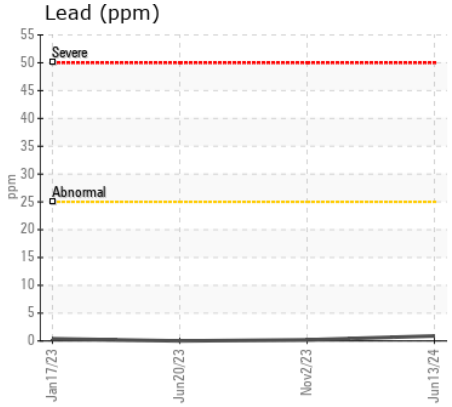
Viscosity @ 100°C



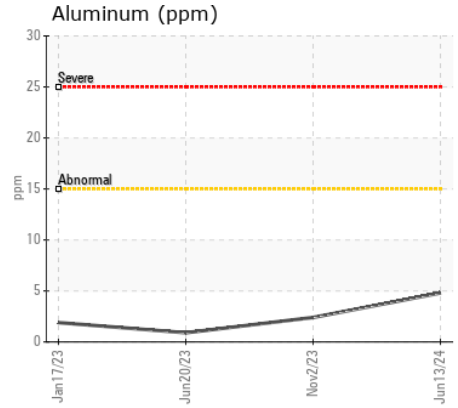
Iron (ppm)



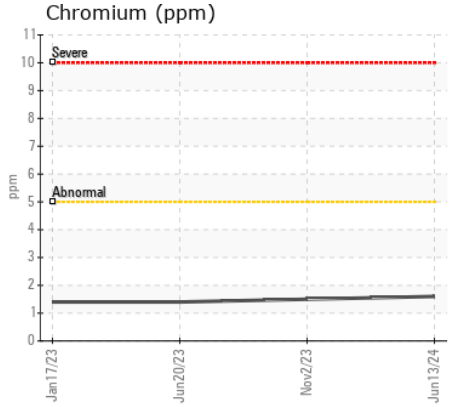
Lead (ppm)



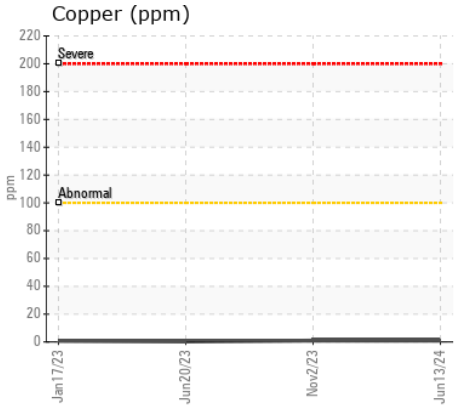
Aluminum (ppm)



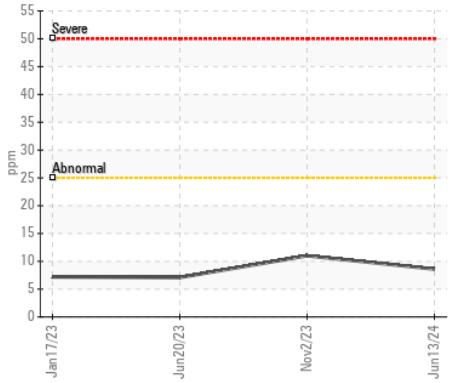
Chromium (ppm)



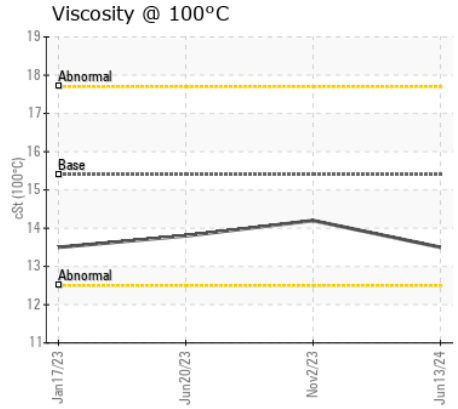
Copper (ppm)



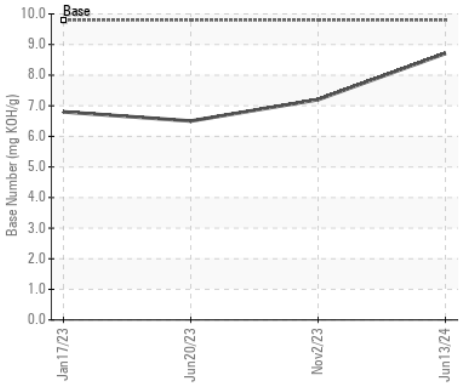
Silicon (ppm)



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0041878
Lab Number : 06224085
Unique Number : 11102282
Test Package : MOB 2

Received : 28 Jun 2024
Tested : 01 Jul 2024
Diagnosed : 01 Jul 2024 - Wes Davis

To discuss this sample report, contact Customer Service at 1-800-237-1369.
** - Denotes test methods that are outside of the ISO 17025 scope of accreditation.*
Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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