MOB II WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	SEVERE

Area
[142229]
Machine Id
DORMAN PETER ST PS
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 15W40 (--- GAL)

RECOMMENDATION

We advise that you check the fuel injection system. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

WEAR

Metal levels are typical for a new component breaking in.

CONTAMINATION

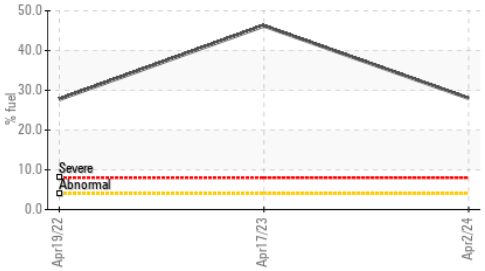
There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

FLUID CONDITION

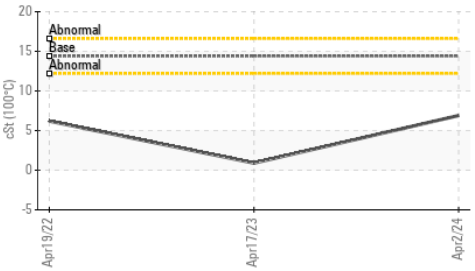
The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		**WC0919651**	WC0791191	WC0668179
Sample Date		Client Info		**02 Apr 2024**	17 Apr 2023	19 Apr 2022
Machine Age	hrs	Client Info		**138**	110	86
Oil Age	hrs	Client Info		**0**	0	0
Filter Age	hrs	Client Info		**0**	0	0
Oil Changed		Client Info		**Not Changd**	Not Changd	Not Changd
Filter Changed		Client Info		**Not Changd**	Not Changd	Not Changd
Sample Status				**SEVERE**	SEVERE	SEVERE
Iron	ppm	ASTM D5185(m)	>80	**2**	3	4
Chromium	ppm	ASTM D5185(m)	>6	**0**	0	0
Nickel	ppm	ASTM D5185(m)	>2	**0**	0	0
Titanium	ppm	ASTM D5185(m)	>2	**0**	0	0
Silver	ppm	ASTM D5185(m)	>2	**0**	0	0
Aluminum	ppm	ASTM D5185(m)	>20	**<1**	1	1
Lead	ppm	ASTM D5185(m)	>95	**0**	1	<1
Copper	ppm	ASTM D5185(m)	>85	**4**	16	8
Tin	ppm	ASTM D5185(m)	>9	**0**	0	0
Vanadium	ppm	ASTM D5185(m)		**0**	0	0
Silicon	ppm	ASTM D5185(m)	>25	**1**	3	4
Potassium	ppm	ASTM D5185(m)	>20	**<1**	<1	1
Fuel	%	ASTM D7593*	>4.0	▲ **28**	▲ 46.2	▲ 27.7
Water		WC Method	>0.1	**NEG**	NEG	NEG
Glycol		WC Method		**NEG**	NEG	NEG
Soot %	%	ASTM D7844*		**0**	0	0
Nitration	Abs/cm	ASTM D7624*	>20	**5.8**	7.4	7.7
Sulfation	Abs/.1mm	ASTM D7415*	>30	**14.1**	14.1	17.0
Emulsified Water	scalar	Visual*	>0.1	**NEG**	NEG	NEG
Sodium	ppm	ASTM D5185(m)	>158	**<1**	2	2
Boron	ppm	ASTM D5185(m)	250	**4**	31	43
Barium	ppm	ASTM D5185(m)	10	**0**	0	<1
Molybdenum	ppm	ASTM D5185(m)	100	**2**	39	52
Manganese	ppm	ASTM D5185(m)		**0**	0	0
Magnesium	ppm	ASTM D5185(m)	450	**9**	8	10
Calcium	ppm	ASTM D5185(m)	3000	**1608**	1097	1430
Phosphorus	ppm	ASTM D5185(m)	1150	**614**	▲ 520	683
Zinc	ppm	ASTM D5185(m)	1350	**684**	▲ 525	744
Sulfur	ppm	ASTM D5185(m)	4250	**2135**	1644	2171
Oxidation	Abs/.1mm	ASTM D7414*	>25	**7.8**	9.1	10.5
Base Number (BN)	mg KOH/g	ASTM D2896*	8.5	**6.55**	4.00	5.80
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	▲ **6.9**	▲ 0.9	▲ 6.2

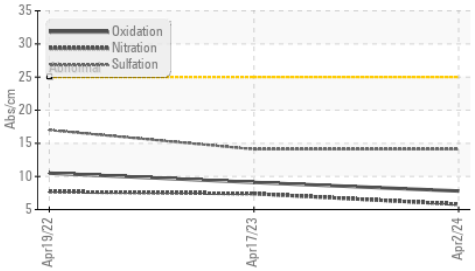
Fuel Dilution



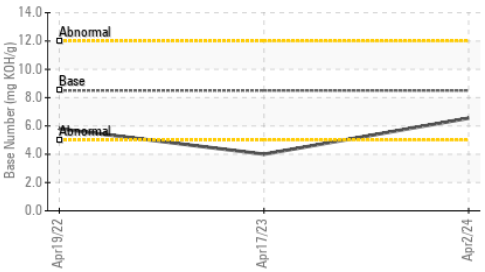
Viscosity @ 100°C



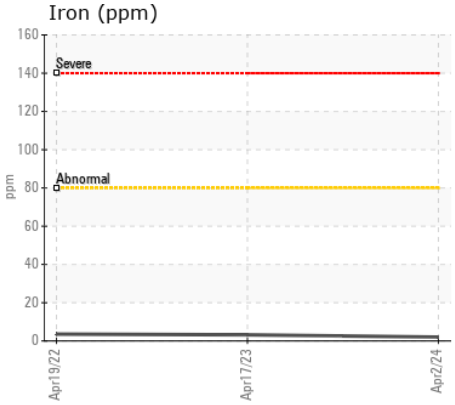
FT-IR (Direct Trend)



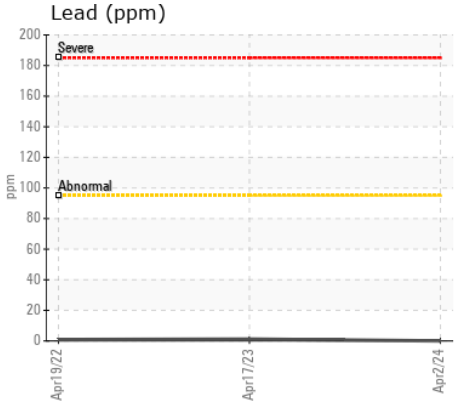
Base Number



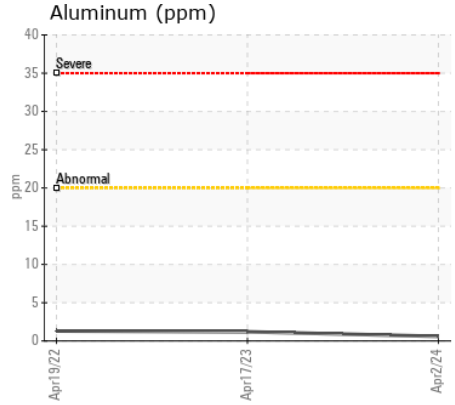
Iron (ppm)



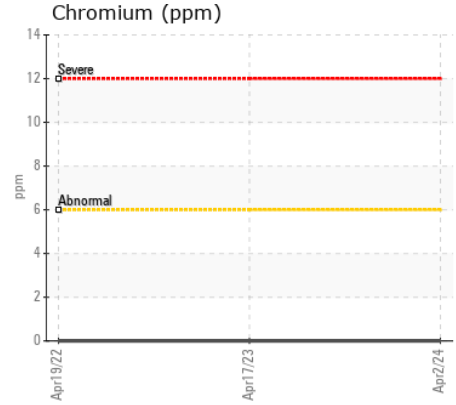
Lead (ppm)



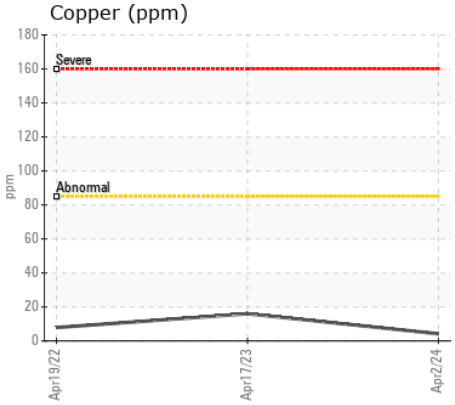
Aluminum (ppm)



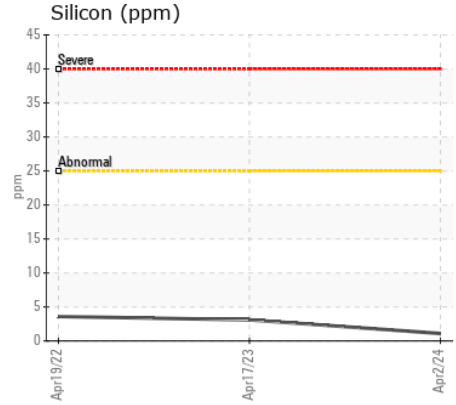
Chromium (ppm)



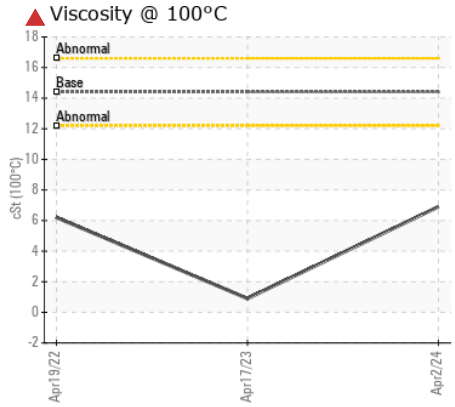
Copper (ppm)



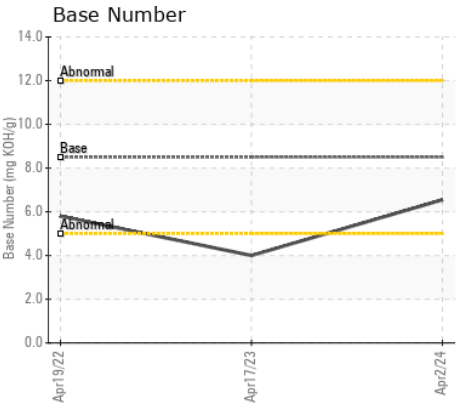
Silicon (ppm)



Viscosity @ 100°C



Base Number



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0919651 **Received** : 15 Apr 2024
Lab Number : 02628681 **Tested** : 16 Apr 2024
Unique Number : 5761813 **Diagnosed** : 16 Apr 2024 - Wes Davis
Test Package : MOB 2 (Additional Tests: PercentFuel)

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.

GENREP LTD
476 HWY 77, R.R. # 3
LEAMINGTON, ON
CA N8H 3V6
Contact: Debbie Johnston
djohnston@genrep.com
T: (519)325-0202
F: (519)322-0026