MOB POWERStation POWER GENERATION PRODUCTS

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	SEVERE

Machine Id
555 UNIVERSITY AVE TORONTO ANNEX UNIT 1 CAT 66B341
Component
Front Diesel Engine
Fluid
ESSO XD-3 EXTRA 15W40 (250 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. Please contact your representative for information regarding the proper sampling kits for your service. NOTE: We recommend using MOB 3 test kits, this testkit includes Analytical Ferrography which provides a detailed morphological analysis of wear particles present in the fluid. this testkit includes BN to determine the suitability of the oil for continued use.

WEAR

Component wear rates appear to be normal (unconfirmed).

CONTAMINATION

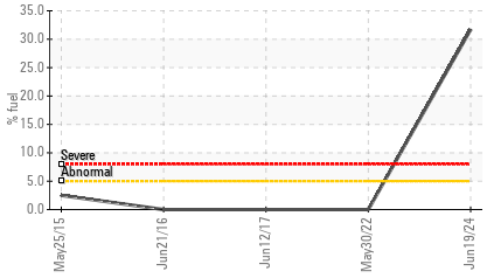
There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

FLUID CONDITION

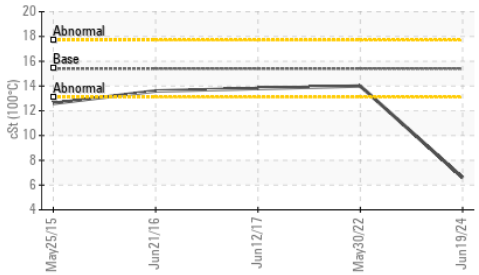
Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PN0006207	PN0003516	PN990785
Sample Date		Client Info		19 Jun 2024	30 May 2022	12 Jun 2017
Machine Age	hrs	Client Info		0	683	566
Oil Age	hrs	Client Info		0	33	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				SEVERE	NORMAL	NORMAL
Iron	ppm	ASTM D5185(m)	>100	1	1	1
Chromium	ppm	ASTM D5185(m)	>20	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	<1	0
Aluminum	ppm	ASTM D5185(m)	>25	<1	3	1
Lead	ppm	ASTM D5185(m)	>40	<1	<1	<1
Copper	ppm	ASTM D5185(m)	>330	<1	<1	<1
Tin	ppm	ASTM D5185(m)	>15	0	<1	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	---	VLITE
Yellow Metal	scalar	Visual*	NONE	NONE	---	NONE
Silicon	ppm	ASTM D5185(m)	>25	3	7	12
Potassium	ppm	ASTM D5185(m)	>20	<1	1	1
Fuel	%	ASTM D7593*	>5	▲ 31.7	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	5.3	7.8	6.6
Sulfation	Abs/.1mm	ASTM D7415*	>30	17.5	19.5	19.9
Silt	scalar	Visual*	NONE	NONE	---	NONE
Debris	scalar	Visual*	NONE	NONE	---	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	---	NONE
Appearance	scalar	Visual*	NORML	NORML	---	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185(m)	>192	1	2	2
Boron	ppm	ASTM D5185(m)		11	76	6
Barium	ppm	ASTM D5185(m)		0	0	<1
Molybdenum	ppm	ASTM D5185(m)		42	83	10
Manganese	ppm	ASTM D5185(m)		0	0	<1
Magnesium	ppm	ASTM D5185(m)		562	59	181
Calcium	ppm	ASTM D5185(m)	3780	845	2088	2058
Phosphorus	ppm	ASTM D5185(m)	1370	705	1067	946
Zinc	ppm	ASTM D5185(m)	1500	815	1155	1110
Sulfur	ppm	ASTM D5185(m)	3800	1919	3239	2979
Oxidation	Abs/.1mm	ASTM D7414*	>25	14.2	13.8	12.2
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	▲ 6.6	14.0	13.8

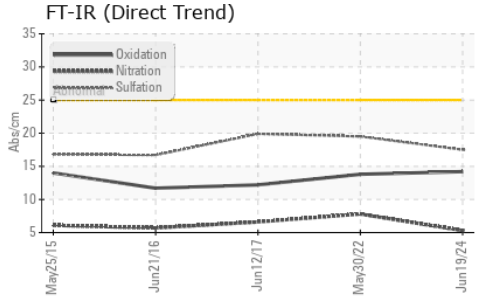
Fuel Dilution



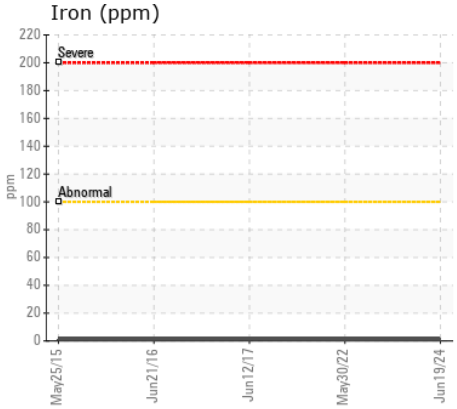
Viscosity @ 100°C



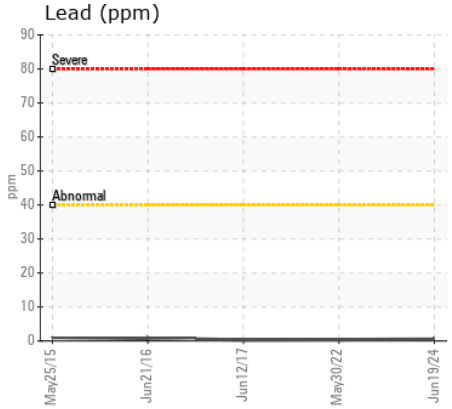
FT-IR (Direct Trend)



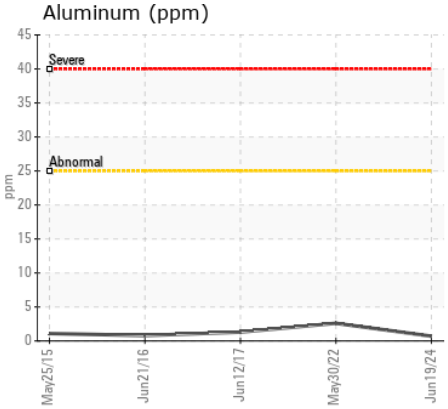
Iron (ppm)



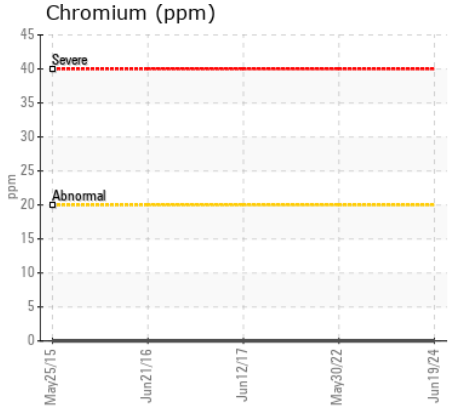
Lead (ppm)



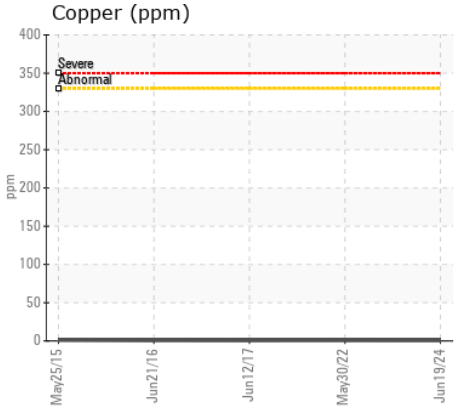
Aluminum (ppm)



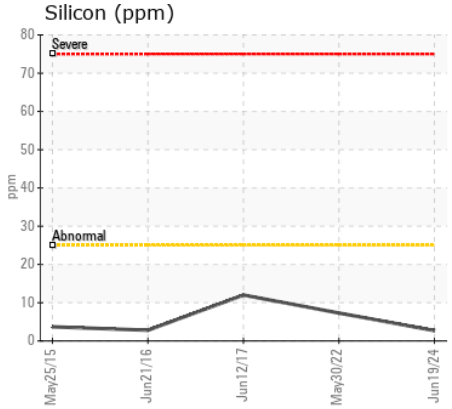
Chromium (ppm)



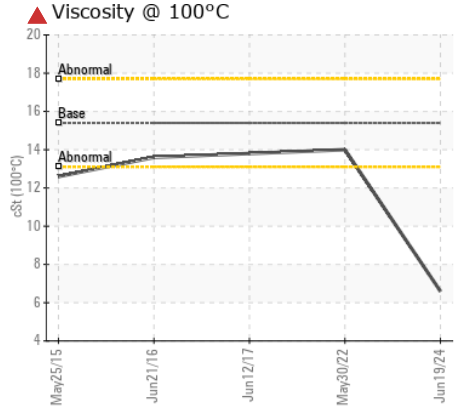
Copper (ppm)



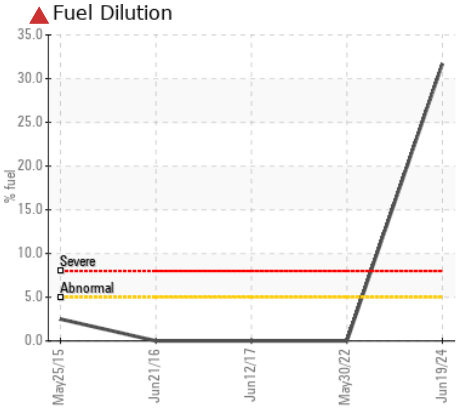
Silicon (ppm)



Viscosity @ 100°C



Fuel Dilution



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PN0006207 **Received** : 25 Jun 2024
Lab Number : 02643936 **Tested** : 26 Jun 2024
Unique Number : 5801475 **Diagnosed** : 26 Jun 2024 - Kevin Marson
Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel, Visual)

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.

POWER STATION INC.
1050 JAYSON COURT
MISSISSAUGA, ON
CA L4W 2V5
Contact: Ryan Udall
rudall@pwrstn.com
T: (905)565-1621
F: (905)629-1499