



Machine Id
50 UPJOHN RD NORTH YORK 33 DIVISION CITY OF TORONTO RG6125HO35627

Component
Rear Diesel Engine

Fluid
ESSO XD-3 EXTRA 15W40 (60 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.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PN0006084	PN0004779	PN0003543
Sample Date		Client Info		10 May 2024	18 May 2023	12 May 2022
Machine Age	hrs	Client Info		360	345	329
Oil Age	hrs	Client Info		16	15	0
Filter Age	hrs	Client Info		16	15	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Not Changd
Sample Status				SEVERE	SEVERE	SEVERE

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>51	<1	1	1
Chromium	ppm	ASTM D5185(m)	>11	0	0	0
Nickel	ppm	ASTM D5185(m)	>5	0	0	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>31	<1	<1	2
Lead	ppm	ASTM D5185(m)	>26	0	<1	<1
Copper	ppm	ASTM D5185(m)	>26	<1	<1	<1
Tin	ppm	ASTM D5185(m)	>4	0	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---

CONTAMINATION

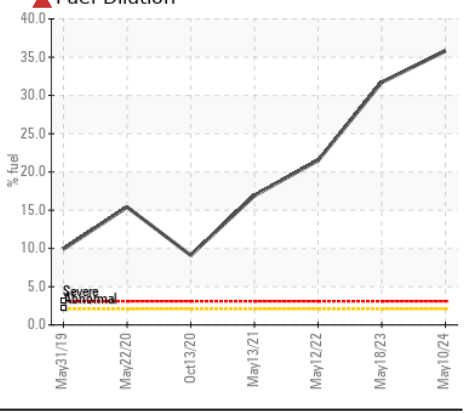
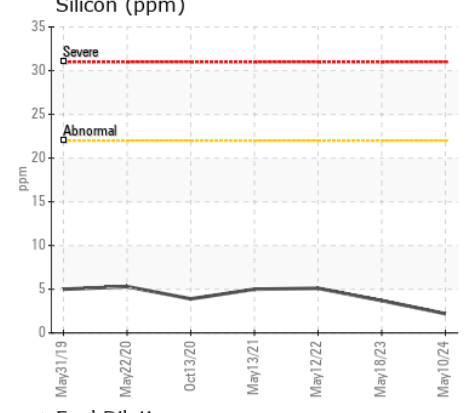
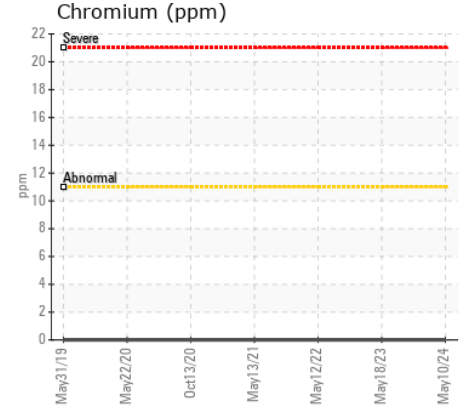
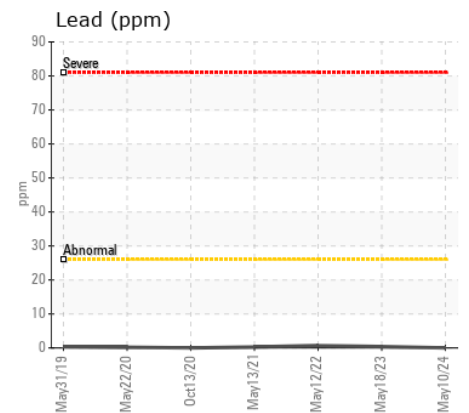
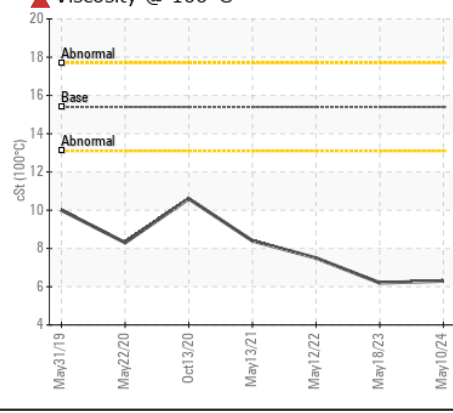
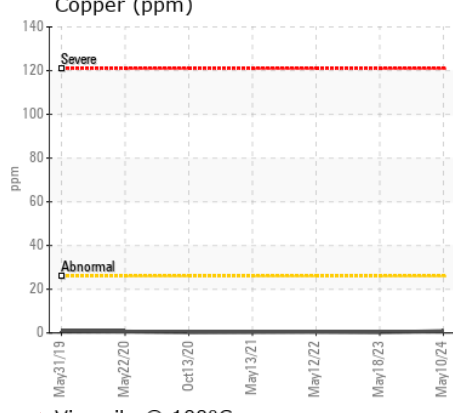
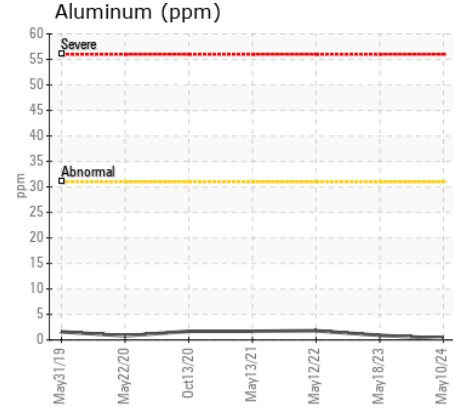
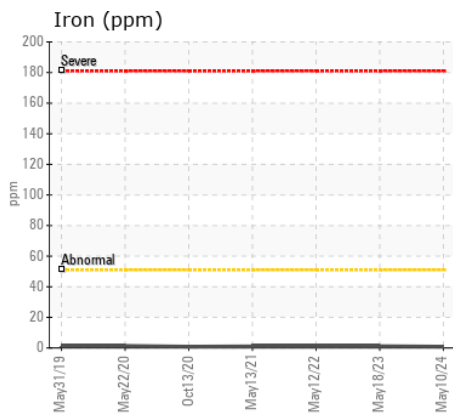
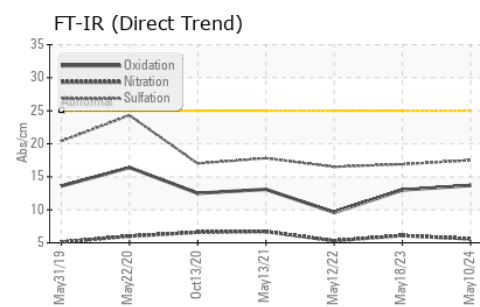
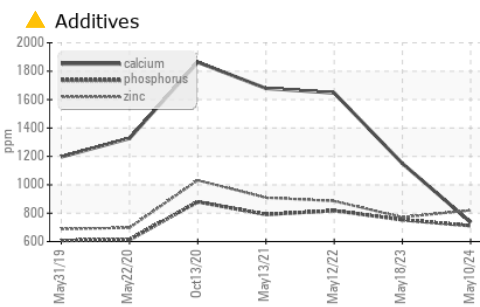
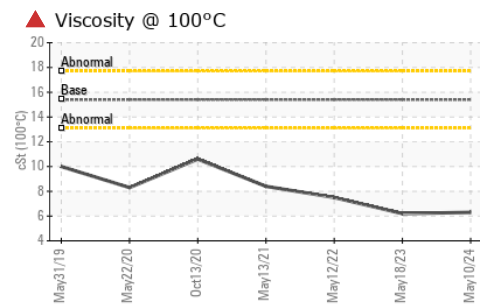
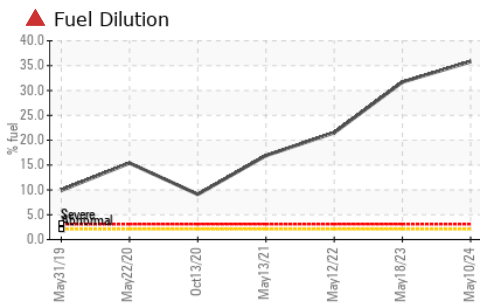
There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

Silicon	ppm	ASTM D5185(m)	>22	2	4	5
Potassium	ppm	ASTM D5185(m)	>20	0	0	<1
Fuel	%	ASTM D7593*	>2.1	▲ 35.8	▲ 31.7	▲ 21.5
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	5.6	6.1	5.3
Sulfation	Abs/.1mm	ASTM D7415*	>30	17.5	16.9	16.5
Silt	scalar	Visual*	NONE	VLITE	---	---
Debris	scalar	Visual*	NONE	VLITE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.21	NEG	NEG	NEG

FLUID CONDITION

Visc @ 100°C is severe. Sulfur ppm levels are abnormally low. Zinc ppm levels are abnormally low. Calcium ppm levels are abnormally low. The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185(m)	>192	<1	1	2
Boron	ppm	ASTM D5185(m)		3	28	57
Barium	ppm	ASTM D5185(m)		0	0	0
Molybdenum	ppm	ASTM D5185(m)		41	48	65
Manganese	ppm	ASTM D5185(m)		0	0	0
Magnesium	ppm	ASTM D5185(m)		646	356	13
Calcium	ppm	ASTM D5185(m)	3780	▲ 736	1150	1647
Phosphorus	ppm	ASTM D5185(m)	1370	711	753	818
Zinc	ppm	ASTM D5185(m)	1500	▲ 820	▲ 771	885
Sulfur	ppm	ASTM D5185(m)	3800	▲ 1853	▲ 2007	2526
Oxidation	Abs/.1mm	ASTM D7414*	>25	13.7	13.0	9.6
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	▲ 6.3	▲ 6.2	▲ 7.5



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PN0006084 **Received** : 21 May 2024
Lab Number : 02636541 **Tested** : 22 May 2024
Unique Number : 5785703 **Diagnosed** : 22 May 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: PercentFuel, Visual)

POWER STATION INC.
 1050 JAYSON COURT
 MISSISSAUGA, ON
 CA L4W 2V5
 Contact: Brett Kinkley
 Bkinkley@pwrstn.com
 T:
 F: (905)565-8544

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.