



WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**500 GLEN RIDGE AVE. ST.CATHARINES, CUB BROCK UNIVERSITY FSE03181**

Component  
**Rear Diesel Engine**

Fluid  
**ESSO XD-3 EXTRA 15W40 (60 LTR)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>PN0006261</b>	PN0003658	PN0002572
Sample Date		Client Info		<b>05 Jun 2024</b>	06 Jun 2022	10 Jun 2021
Machine Age	hrs	Client Info		<b>181</b>	149	140
Oil Age	hrs	Client Info		<b>0</b>	0	10
Filter Age	hrs	Client Info		<b>0</b>	0	10
Oil Changed		Client Info		<b>Changed</b>	N/A	Changed
Filter Changed		Client Info		<b>Changed</b>	N/A	Not Changd
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>100	<b>&lt;1</b>	1	1
Chromium	ppm	ASTM D5185(m)	>6	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m)	>4	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>30	<b>&lt;1</b>	2	2
Lead	ppm	ASTM D5185(m)	>10	<b>0</b>	0	0
Copper	ppm	ASTM D5185(m)	>150	<b>&lt;1</b>	1	<1
Tin	ppm	ASTM D5185(m)	>4	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	<1
White Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---

**CONTAMINATION**

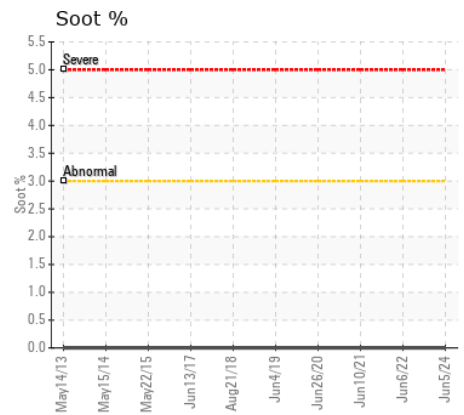
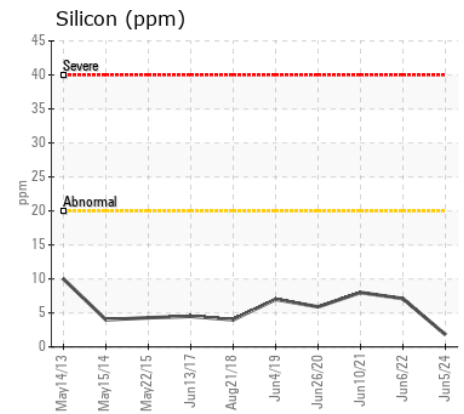
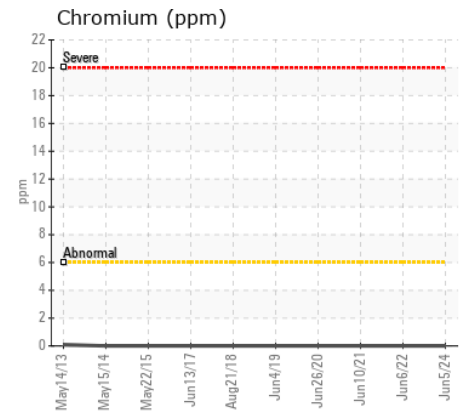
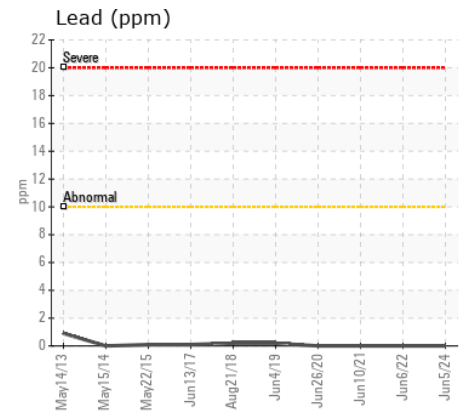
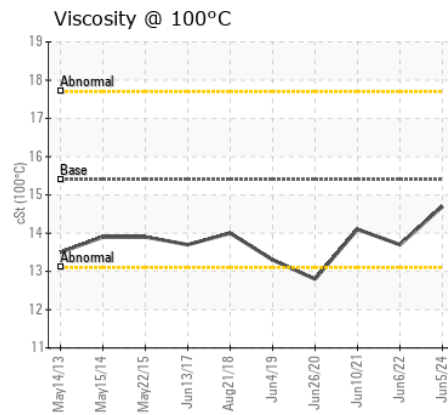
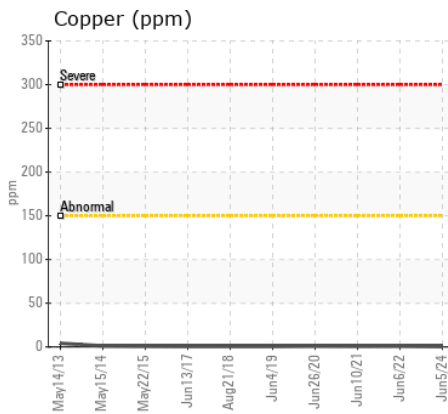
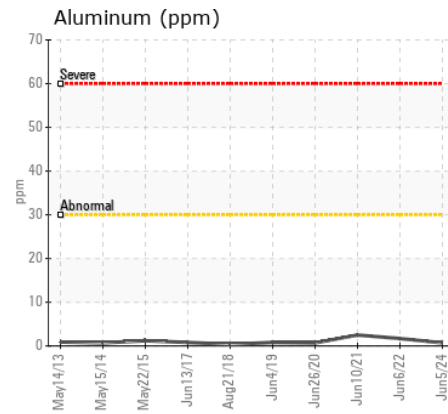
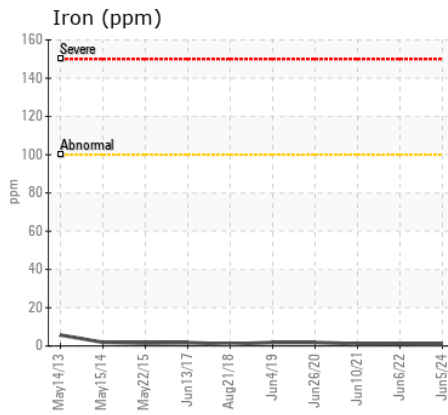
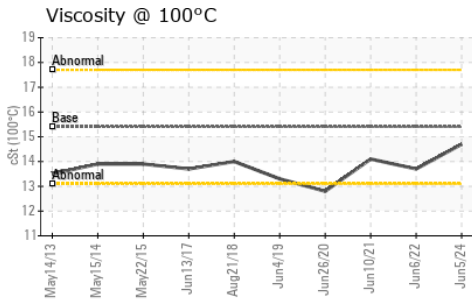
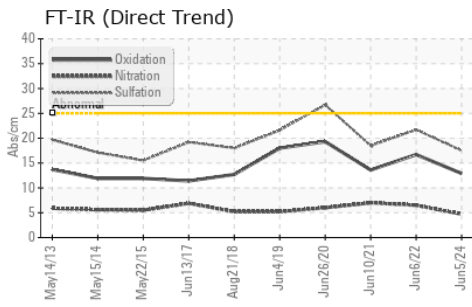
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>20	<b>2</b>	7	8
Potassium	ppm	ASTM D5185(m)	>20	<b>0</b>	<1	<1
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	ASTM D7844*	>3	<b>0</b>	0	0
Nitration	Abs/cm	ASTM D7624*	>20	<b>4.7</b>	6.5	7.0
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>17.5</b>	21.7	18.5
Silt	scalar	Visual*	NONE	<b>NONE</b>	---	---
Debris	scalar	Visual*	NONE	<b>NONE</b>	---	---
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	---	---
Appearance	scalar	Visual*	NORML	<b>NORML</b>	---	---
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	---
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	NEG

**FLUID CONDITION**

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)	>192	<b>1</b>	2	3
Boron	ppm	ASTM D5185(m)		<b>9</b>	70	73
Barium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)		<b>51</b>	63	79
Manganese	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)		<b>840</b>	241	80
Calcium	ppm	ASTM D5185(m)	3780	<b>1138</b>	1867	1983
Phosphorus	ppm	ASTM D5185(m)	1370	<b>963</b>	897	986
Zinc	ppm	ASTM D5185(m)	1500	<b>1125</b>	1032	1136
Sulfur	ppm	ASTM D5185(m)	3800	<b>2563</b>	2702	3202
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>12.9</b>	16.7	13.6
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	<b>14.7</b>	13.7	14.1



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PN0006261 **Received** : 11 Jun 2024  
**Lab Number** : 02641029 **Tested** : 11 Jun 2024  
**Unique Number** : 5798568 **Diagnosed** : 11 Jun 2024 - Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: Visual )

**POWER STATION INC.**  
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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.