



WEAR	NORMAL
CONTAMINATION	MARGINAL
FLUID CONDITION	ABNORMAL

Area
[85527]
 Machine Id
479 CLARENCE ST LONDON BELL CANADA UNIT 1
 Component
Right Diesel Engine
 Fluid
ESSO XD-3 EXTRA 15W40 (36 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PN0005970	PN0004477	PN0001967
Sample Date		Client Info		22 Apr 2024	15 Feb 2023	14 Dec 2020
Machine Age	hrs	Client Info		323	828	819
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Chngd	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>100	9	2	3
Chromium	ppm	ASTM D5185(m)	>20	<1	0	<1
Nickel	ppm	ASTM D5185(m)	>4	0	0	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	0	<1
Aluminum	ppm	ASTM D5185(m)	>20	2	<1	<1
Lead	ppm	ASTM D5185(m)	>40	2	<1	1
Copper	ppm	ASTM D5185(m)	>330	7	<1	2
Tin	ppm	ASTM D5185(m)	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---

CONTAMINATION

Light fuel dilution occurring.

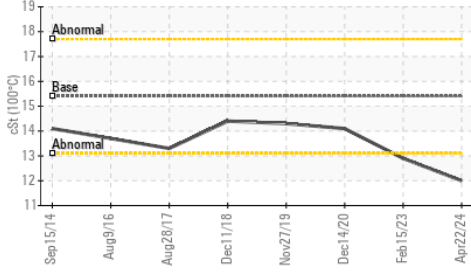
Silicon	ppm	ASTM D5185(m)	>25	<1	3	4
Potassium	ppm	ASTM D5185(m)	>20	<1	0	1
Fuel	%	ASTM D7593*	>5	▲ 4.3	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	0.0
Soot %	%	ASTM D7844*	>3	0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	6.8	4.3	3.3
Sulfation	Abs/.1mm	ASTM D7415*	>30	18.2	16.8	13.2
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	VLITE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	NORML	---
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

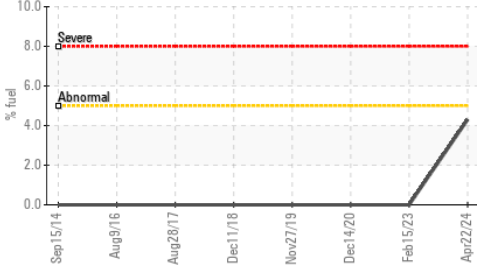
Fuel is present in the oil and is lowering the viscosity. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)	>192	4	7	48
Boron	ppm	ASTM D5185(m)		32	13	12
Barium	ppm	ASTM D5185(m)		<1	0	0
Molybdenum	ppm	ASTM D5185(m)		17	10	11
Manganese	ppm	ASTM D5185(m)		<1	<1	<1
Magnesium	ppm	ASTM D5185(m)		216	77	69
Calcium	ppm	ASTM D5185(m)	3780	1973	3519	2088
Phosphorus	ppm	ASTM D5185(m)	1370	951	777	817
Zinc	ppm	ASTM D5185(m)	1500	1088	764	967
Sulfur	ppm	ASTM D5185(m)	3800	3078	2506	2584
Oxidation	Abs/.1mm	ASTM D7414*	>25	14.9	6.3	5.6
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	▲ 12.0	12.9	14.1

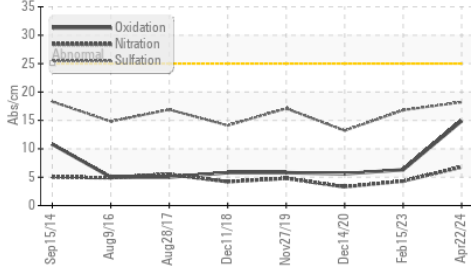
▲ Viscosity @ 100°C



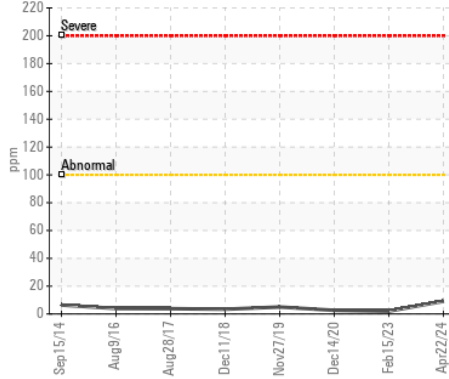
▲ Fuel Dilution



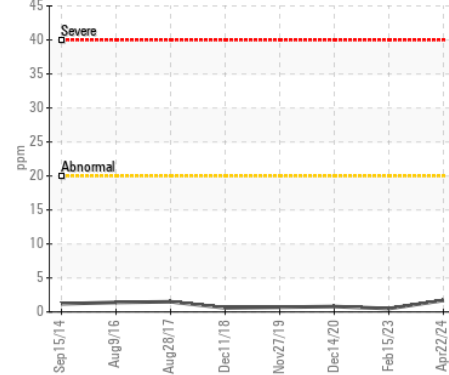
FT-IR (Direct Trend)



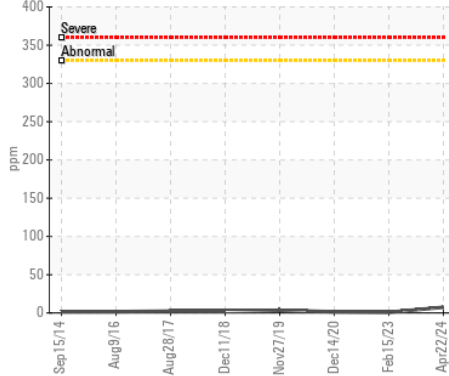
Iron (ppm)



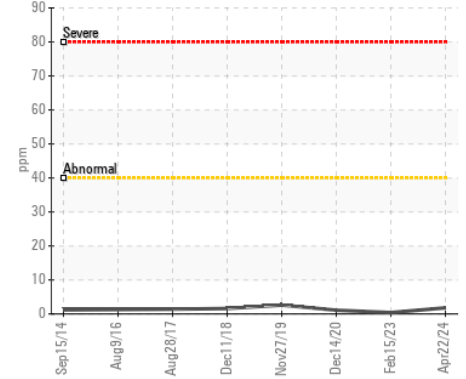
Aluminum (ppm)



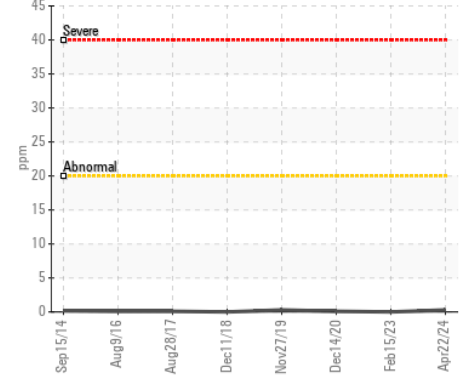
Copper (ppm)



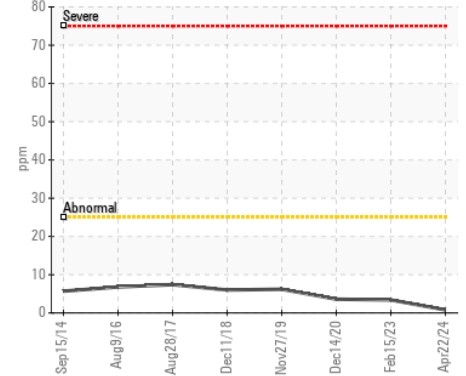
Lead (ppm)



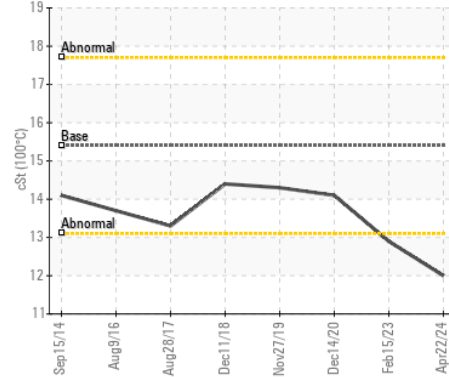
Chromium (ppm)



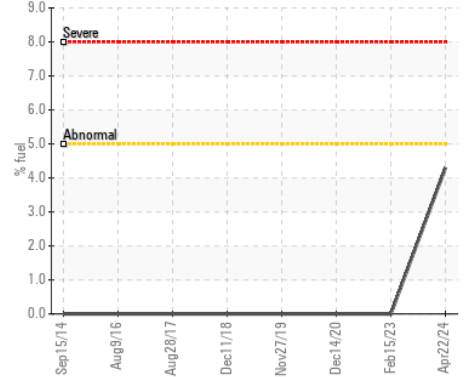
Silicon (ppm)



▲ Viscosity @ 100°C



▲ Fuel Dilution



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PN0005970
Lab Number : 02631482
Unique Number : 5772635
Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel, Visual)

Received : 26 Apr 2024
Tested : 29 Apr 2024
Diagnosed : 29 Apr 2024 - Wes Davis

POWER STATION INC.
 1050 JAYSON COURT
 MISSISSAUGA, ON
 CA L4W 2V5
 Contact: Brett Kinkley
 Bkinkley@pwrstn.com

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.

T:
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