## Power generation products

OIL ANALYSIS REPORT

WEAR NORMAL CONTAMINATION SEVERE FLUID CONDITION SEVERE

## [83181] 30 WELLINGTON ST W TORONTO, GENERATOR 5 QUADREAL 36J290

## Rear Diesel Engine

ESSO XD-3 EXTRA 15W40 (160 LTR)

RECOMMENDATION
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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.

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Metal levels are typical for a new component breaking in.

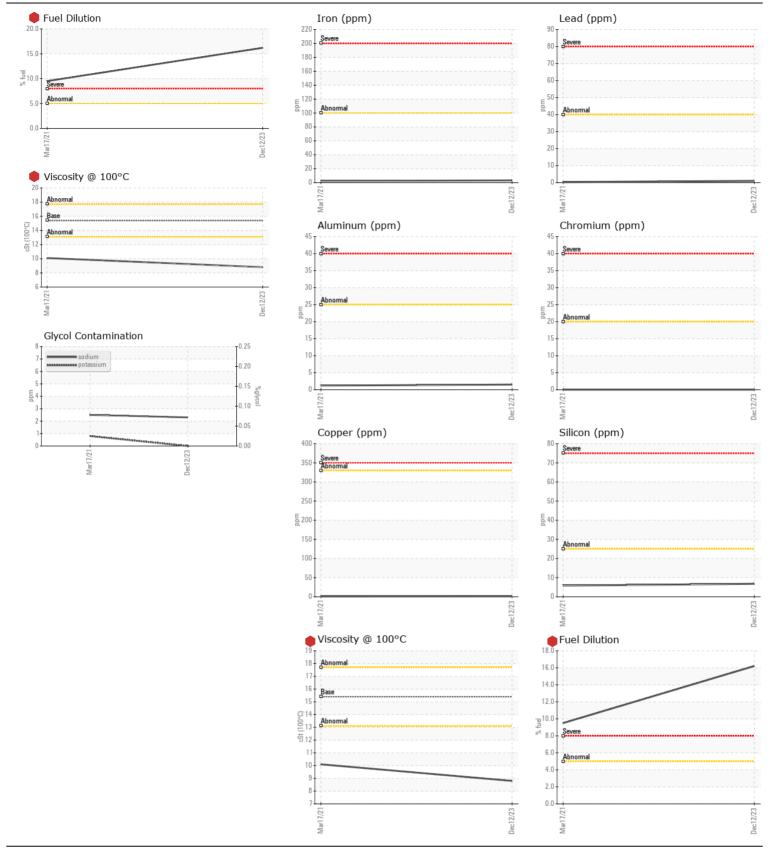
## **CONTAMINATION**

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

	FLU	ID C	OND	ITION
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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		PN0005526	PN0002218	
Sample Date		Client Info		12 Dec 2023	17 Mar 2021	
Machine Age	hrs	Client Info		655	609	
Oil Age	hrs	Client Info		0	0	
Filter Age	hrs	Client Info		0	0	
Oil Changed		Client Info		Changed	Not Changd	
Filter Changed		Client Info		Changed	Not Changd	
Sample Status				SEVERE	SEVERE	
Iron	ppm	ASTM D5185(m)	>100	3	2	
Chromium	ppm	ASTM D5185(m)	>20	0	0	
Nickel	ppm	ASTM D5185(m)	>2	<1	<1	
Titanium	ppm	ASTM D5185(m)	>2	0	0	
Silver	ppm	ASTM D5185(m)	>2	0	<1	
Aluminum	ppm	ASTM D5185(m)	>25	2	1	
Lead	ppm	ASTM D5185(m)	>40	1	<1	
Copper	ppm	ASTM D5185(m)	>330	2	1	
Tin	ppm	ASTM D5185(m)	>15	<1	<1	
Vanadium	ppm	ASTM D5185(m)		0	0	
White Metal	scalar	Visual*	NONE	VLITE		
Yellow Metal	scalar	Visual*	NONE	NONE		
Silicon	ppm	ASTM D5185(m)	>25	7	6	
Potassium	ppm	ASTM D5185(m)	>20	0	<1	
Fuel	%	ASTM D7593*	>5	<b>16.2</b>	9.5	
Water	70	WC Method	>0.2	NEG	NEG	
Glycol	%	ASTM D7922*	20.L	NEG	NEG	
Soot %	%	ASTM D7844*	>3	0	0	
Nitration	Abs/cm	ASTM D7624*	>20	6.5	5.4	
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.5	19.6	
Silt	scalar	Visual*	NONE	NONE		
Debris	scalar	Visual*	NONE	NONE		
Sand/Dirt	scalar	Visual*	NONE	NONE		
Appearance	scalar	Visual*	NORML	NORML		
Odor	scalar	Visual*	NORML	NORML		
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	
Sodium			. 100	•	0	
Sodium	ppm	ASTM D5185(m) ASTM D5185(m)	>192	2	2 40	
Deren	mm					
Boron	ppm	× 7		36		
Barium	ppm	ASTM D5185(m)		0	0	
Barium Molybdenum	ppm ppm	ASTM D5185(m) ASTM D5185(m)		0 37	0 36	
Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)		0 37 0	0 36 <1	
Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0700	0 37 0 419	0 36 <1 462	 
Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	3780	0 37 0 419 1411	0 36 <1 462 1386	  
Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	1370	0 37 0 419 1411 715	0 36 <1 462 1386 714	   
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	1370 1500	0 37 0 419 1411 715 788	0 36 <1 462 1386 714 861	   
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	1370 1500 3800	0 37 0 419 1411 715 788 2123	0 36 <1 462 1386 714 861 2211	
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	1370 1500	0 37 0 419 1411 715 788	0 36 <1 462 1386 714 861	   



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 POWER STATION INC. CALA Sample No. Recieved : 12 Jan 2024 1050 JAYSON COURT : PN0005526 Lab Number : 02608511 MISSISSAUGA, ON Diagnosed : 15 Jan 2024 ISO 17025:2017 : 5709597 Diagnostician : Kevin Marson Accredited CA L4W 2V5 Unique Number Laboratory Test Package : MOB 1 (Additional Tests: Glycol, PercentFuel, Visual) Contact: Brett Kinkley To discuss this sample report, contact Customer Service at 1-800-268-2131. Bkinkley@pwrstn.com Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab. T: F: (905)565-8544 Validity of results and interpretation are based on the sample and information as supplied.

Contact/Location: Brett Kinkley - POWMIS Page 2 of 2