## POWER GENERATION PRODUCTS

OIL ANALYSIS REPORT

## [83184] 30 WELLINGTON ST. W TORONTO, UNIT 7 QUADREAL 36J292

## Rear Diesel Engine

ESSO XD-3 EXTRA 15W40 (150 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.

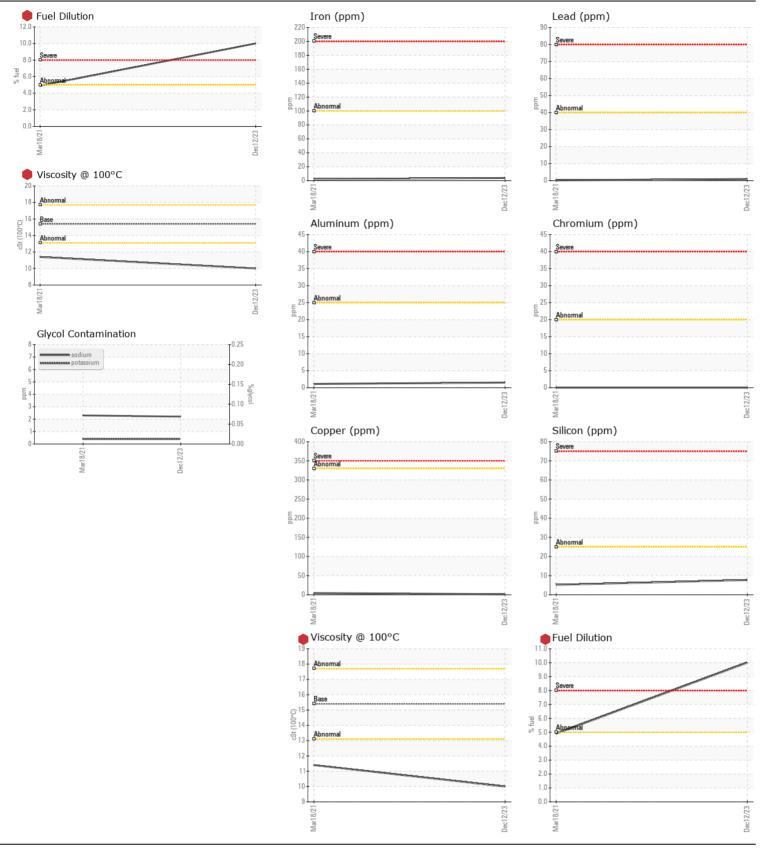
## **CONTAMINATION**

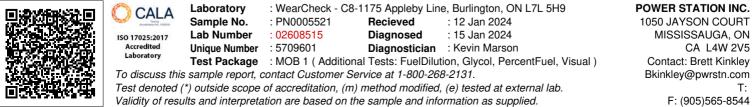
There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

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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.

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Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PN0005521	PN0002209	
Sample Date		Client Info		12 Dec 2023	18 Mar 2021	
Machine Age	hrs	Client Info		617	522	
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	Changed	
Sample Status				SEVERE	ABNORMAL	
Iron	ppm	ASTM D5185(m)	>100	4	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	1	4	
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	8	5	
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	
Fuel	%	ASTM D7593*	>5	10	<b>4</b> .9	
Water		WC Method	>0.2	NEG	NEG	
Glycol	%	ASTM D7922*		NEG	NEG	
Soot %	%	ASTM D7844*	>3	0	0	
Nitration	Abs/cm	ASTM D7624*	>20	5.9	5.2	
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.8	20.7	
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	nom	ASTM D5185(m)	>192	0	2	
Sodium	ppm	ASTM D5185(m) ASTM D5185(m)	>192	2	2 49	
Boron	ppm			40		
Barium	ppm	ASTM D5185(m)		0	0	
Molybdenum	ppm	ASTM D5185(m)		35	35	
Manganese	ppm	ASTM D5185(m)		0	<1	
Magnesium	ppm	ASTM D5185(m)	0700	425	496	
Calcium	ppm	ASTM D5185(m)	3780	1512	1422	
Phosphorus	ppm	ASTM D5185(m)	1370	732	▲ 697	
Zinc	ppm	ASTM D5185(m)	1500	806	844	
Sulfur	ppm	ASTM D5185(m)	3800	2131	2097	
Oxidation	Abs/.1mm	ASTM D7414*	>25	18.3	18.2	
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	10.0	🔺 11.4	





Contact/Location: Brett Kinkley - POWMIS

Page 2 of 2