

## 20 ADELAIDE ST E TORONTO CSREFI CSREFI

Component Diesel Engine

## ESSO XD-3 EXTRA 15W40 (40 LTR)

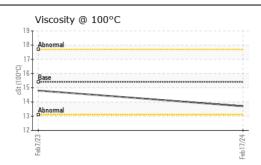
ESSO XD-3 EXTRA 15W40 (40 LTR)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		PN0005766	PN0004600	
	Sample Date		Client Info		17 Feb 2024	07 Feb 2023	
	Machine Age	hrs	Client Info		744	299	
	Oil Age	hrs	Client Info		46	0	
	Filter Age	hrs	Client Info		46	0	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		Changed	Changed	
	Sample Status				NORMAL	NORMAL	
WEAR	Iron	ppm	ASTM D5185(m)	>90	2	2	
Metal levels are typical for a new component breaking in.	Chromium	ppm	ASTM D5185(m)	>20	0	0	
	Nickel	ppm	ASTM D5185(m)	>2	<1	0	
	Titanium	ppm	ASTM D5185(m)	>2	0	0	
	Silver	ppm	ASTM D5185(m)	>2	0	0	
	Aluminum	ppm	ASTM D5185(m)	>20	2	<1	
	Lead	ppm	ASTM D5185(m)	>40	<1	<1	
	Copper	ppm	ASTM D5185(m)	>330	1	<1	
	Tin	ppm	ASTM D5185(m)	>15	0	<1	
	Vanadium	ppm	ASTM D5185(m)		0	0	
CONTAMINATION	Silicon	ppm	ASTM D5185(m)	>25	3	2	
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185(m)	>20	<1	<1	
	Fuel		WC Method	>3.0	<1.0	<1.0	
	Water		WC Method	>0.2	NEG	NEG	
	Glycol		WC Method		NEG	NEG	
	Soot %	%	ASTM D7844*	>6	0	0	
	Nitration	Abs/cm	ASTM D7624*	>20	6.0	4.8	
	Sulfation	Abs/.1mm	ASTM D7415*	>30	17.3	19.6	
	Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	
FLUID CONDITION	Sodium	ppm	ASTM D5185(m)	>192	<1	1	
The condition of the oil is acceptable for the time in service.	Boron	ppm	ASTM D5185(m)		43	3	
	Barium	ppm	ASTM D5185(m)		0	0	
	Molybdenum	ppm	ASTM D5185(m)		34	59	
	Manganese	ppm	ASTM D5185(m)		0	<1	
	Magnesium	ppm	ASTM D5185(m)		497	982	
	Calcium	ppm	ASTM D5185(m)		1593	1082	
	Phosphorus	ppm	ASTM D5185(m)		1009	1127	
	Zinc	ppm	ASTM D5185(m)		1114	1210	
	Sulfur	ppm	ASTM D5185(m)		3155	2776	
	Oxidation	Abs/.1mm	ASTM D7414*	>25	12.9	13.6	

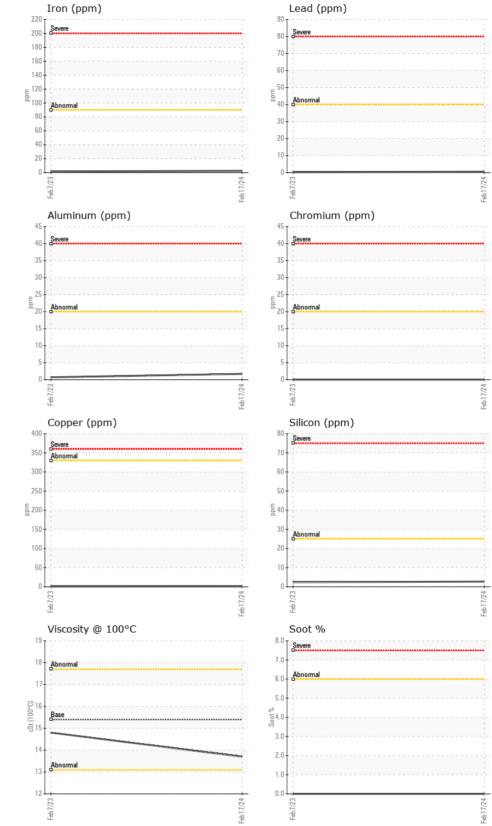
Visc @ 100°C cSt ASTM D7279(m) 15.4

Contact/Location: Brett Kinkley - POWMIS

13.7

14.8







CALA Sample No. Received : 29 Feb 2024 : PN0005766 Lab Number : 02618925 Tested : 29 Feb 2024 ISO 17025:2017 Accredited Unique Number : 5736035 : 29 Feb 2024 - Wes Davis Diagnosed Laboratory Test Package : MOB 1 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.

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9

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

Laboratory

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