WEAR CONTAMINATION **FLUID CONDITION**

NORMAL NORMAL NORMAL

Machine Id

1265 GRANDVIEW Component Diesel Engine

PETRO CANADA XR 4 SAE 15W40 (LTR)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. Please specify the component make and model with your next sample.	Sample Number		Client Info		WC0824633		
	Sample Date		Client Info		06 Jun 2023		
	Machine Age	hrs	Client Info		784		
	Oil Age	hrs	Client Info		0		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		N/A		
	Filter Changed		Client Info		N/A		
	Sample Status				NORMAL		
WEAR	Iron	ppm	ASTM D5185(m)	>100	15		
Metal levels are typical for a new component breaking in.	Chromium	ppm	ASTM D5185(m)		<1		
	Nickel	ppm	ASTM D5185(m)	>4	0		
	Titanium	ppm	ASTM D5185(m)		0		
	Silver	ppm	ASTM D5185(m)	>3	0		
	Aluminum	ppm	ASTM D5185(m)	>20	<1		
	Lead	ppm	ASTM D5185(m)	>40	4		
	Copper	ppm	ASTM D5185(m)	>330	2		
	Tin	ppm	ASTM D5185(m)	>15	2		
	Vanadium	ppm	ASTM D5185(m)		0		
CONTAMINATION	Silicon	nnm	ASTM D5185(m)	>25	4		
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185(m)	>20	<1		
	Fuel	ррпп	WC Method		<1.0		
	Water		WC Method		NEG		
	Glycol		WC Method	70.2	NEG		
	Soot %	%	ASTM D7844*	>3	0.2		
	Nitration	Abs/cm	ASTM D7624*	>20	5.7		
	Sulfation	Abs/.1mm	ASTM D7415*	>30	15.0		
	Emulsified Water	scalar	Visual*	>0.2	NEG		
FLUID CONDITION	Sodium	nnm	ASTM D5185(m)		ــــــــــــــــــــــــــــــــــــــ		
	Boron	ppm	ASTM D5185(III) ASTM D5185(m)	1	<1 3		
Additive levels indicate the addition of a different brand, or type of oil. The condition of the oil is acceptable for the time in service.	Barium	ppm	ASTM D5185(III) ASTM D5185(m)		0		
	Molybdenum	ppm	ASTM D5185(m)		2		
	Manganese	ppm	ASTM D5185(m)	1	<1		
	Magnesium	ppm	ASTM D5185(m)	10	1443		
	Calcium	ppm	ASTM D5185(m)	3032	124		
	Phosphorus	ppm	ASTM D5185(m)		1158		
	Zinc	ppm	ASTM D5185(m)	1332	1297		
			(/	-			
	Sulfur	ppm	ASTM D5185(m)	3985	9914		
		ppm Abs/.1mm	ASTM D5185(m) ASTM D7414*		9914 5.9		





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

: WC0824633 Lab Number : 02578025

Unique Number : 5631085 Test Package : MOB 1

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Received : 24 Aug 2023 **Tested** : 24 Aug 2023

Diagnosed : 25 Aug 2023 - Kevin Marson

NORTHERN GENERATOR CO. LTD. 80 ASHBRIDGE CIRCLE,, UNIT #1 & 2

WOODBRIDGE, ON CA L4L 3R5 Contact: Selome Afework

selome@northerngenerator.com T: (905)264-9744 F: (905)264-9714

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.