

Current

WC0910596

History1

History2

WC0795009 WC0647856

Limit/Abn

Test

Sample Number

UOM

Method

**Client Info** 

## Machine Id **333 MARKET DRIVE GEN #5** Component **Diesel Engine** Fluid **DIESEL ENGINE OIL SAE 40 (--- GAL)**

## RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor. Please specify the component make and model with your next sample. Please specify the brand, type, and viscosity of the oil on your next sample.

WEAR		

All component wear rates are normal.

## CONTAMINATION

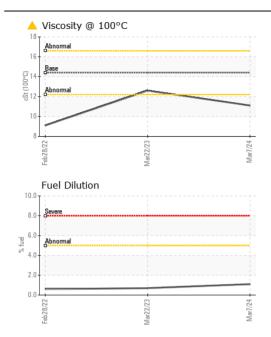
Light fuel dilution occurring. No other contaminants were detected in the oil.

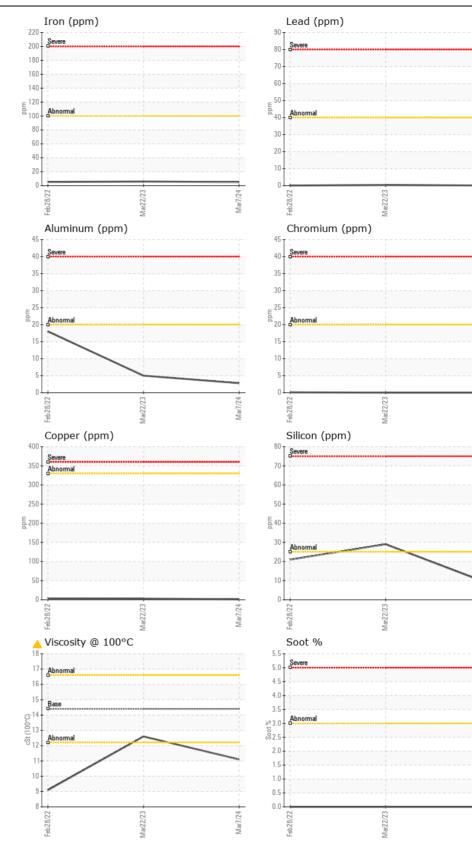
	Sample Date		Client Info		07 Mar 2024	22 Mar 2023	28 Feb 2022
	Machine Age	hrs	Client Info		0	0	55
	Oil Age	hrs	Client Info		0	0	0
	Filter Age	hrs	Client Info		0	0	0
	Oil Changed		Client Info		N/A	N/A	Changed
	Filter Changed		Client Info		N/A	N/A	Changed
	Sample Status				ABNORMAL	NORMAL	NORMAL
	Iron		ASTM D5185(m)	>100	5	6	5
	Chromium	ppm	ASTM D5185(m)	>20	0	0	<1
	Nickel	ppm ppm	ASTM D5185(m)	>4	0	0	<1
	Titanium	ppm	ASTM D5185(m)	24	0	<1	0
	Silver	ppm	ASTM D5185(m)	>3	0	0	0
	Aluminum	ppm	ASTM D5185(m)	>20	3	5	18
	Lead	ppm	ASTM D5185(m)	>40	0	<1	0
	Copper	ppm	ASTM D5185(m)	>330	1	3	2
	Tin	ppm	ASTM D5185(m)	>15	0	<1	<1
	Vanadium	ppm	ASTM D5185(m)	210	0	0	0
	vanadiam	- PPIII					0
	Silicon	ppm	ASTM D5185(m)	>25	10	29	21
	Potassium	ppm	ASTM D5185(m)	>20	0	0	<1
	Fuel	%	ASTM D7593*	>5	1.1	0.7	0.6
	Water		WC Method	>0.2	NEG	NEG	NEG
	Glycol		WC Method		NEG	NEG	NEG
	Soot %	%	ASTM D7844*	>3	0	0	0
	Nitration	Abs/cm	ASTM D7624*	>20	5.5	4.9	4.6
	Sulfation	Abs/.1mm	ASTM D7415*	>30	15.6	21.1	16.3
	Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
	Sodium	ppm	ASTM D5185(m)	>216	<1	3	3
	Boron	ppm	ASTM D5185(m)	250	154	307	134
	Barium	ppm	ASTM D5185(m)	10	0	<1	2
	Molybdenum	ppm	ASTM D5185(m)	100	46	74	40
	Manganese	ppm	ASTM D5185(m)		0	<1	<1
	Magnesium	ppm	ASTM D5185(m)	450	686	469	481
	Calcium	ppm	ASTM D5185(m)	3000	866	1431	1324
	Phosphorus	ppm	ASTM D5185(m)	1150	635	1014	739
	Zinc	ppm	ASTM D5185(m)	1350	725	1103	809
	Sulfur	ppm	ASTM D5185(m)	4250	2073	2749	2640
	Oxidation	Abs/.1mm	ASTM D7414*	>25	9.1	13.2	7.9
	Visc @ 100°C	cSt	ASTM D7279(m)	14.4	<b>11.1</b>	12.6	9.1
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## FLUID CONDITION

Viscosity of sample indicates oil is within SAE 30 range, advise investigate. The condition of the oil is acceptable for the time in service.

Contact/Location: Selome Afework - NORWOO





NORTHERN GENERATOR CO. LTD. Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 CALA Sample No. 80 ASHBRIDGE CIRCLE,, UNIT #1 & 2 : WC0910596 Received : 01 Apr 2024 Lab Number : 02625620 WOODBRIDGE, ON Tested : 03 Apr 2024 ISO 17025:2017 Accredited Laboratory CA L4L 3R5 Unique Number : 5750739 Diagnosed : 03 Apr 2024 - Kevin Marson Test Package : MOB 1 (Additional Tests: FUELDILUTION, PercentFuel) Contact: Selome Afework selome@northerngenerator.com To discuss this sample report, contact Customer Service at 1-800-268-2131. T: (905)264-9744 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab. F: (905)264-9714 Validity of results and interpretation are based on the sample and information as supplied.

Mar7/24