



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
88DAVENPORT
 Component
Diesel Engine
 Fluid
DIESEL ENGINE OIL SAE 10W30 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0910635	WC0443208	WC0370221
Sample Date		Client Info		04 Apr 2024	19 Feb 2020	26 Aug 2019
Machine Age	hrs	Client Info		112	70	67
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	Not Changd	Changed
Filter Changed		Client Info		N/A	Not Changd	Changed
Sample Status				NORMAL	NORMAL	ABNORMAL

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>100	2	14	1
Chromium	ppm	ASTM D5185(m)	>20	0	6	<1
Nickel	ppm	ASTM D5185(m)	>4	0	<1	0
Titanium	ppm	ASTM D5185(m)		0	<1	<1
Silver	ppm	ASTM D5185(m)	>3	0	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	<1	9	2
Lead	ppm	ASTM D5185(m)	>40	0	0	<1
Copper	ppm	ASTM D5185(m)	>330	2	2	4
Tin	ppm	ASTM D5185(m)	>15	<1	4	<1
Vanadium	ppm	ASTM D5185(m)		0	<1	<1
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE

CONTAMINATION

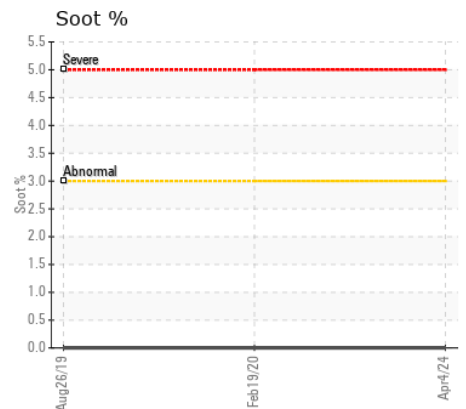
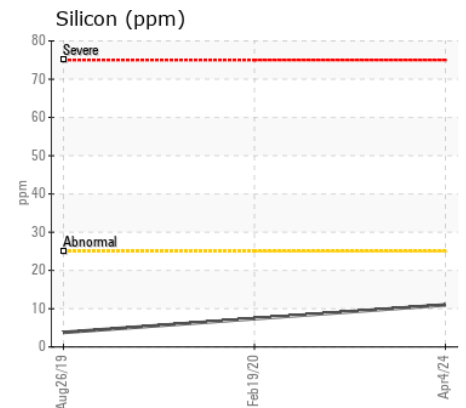
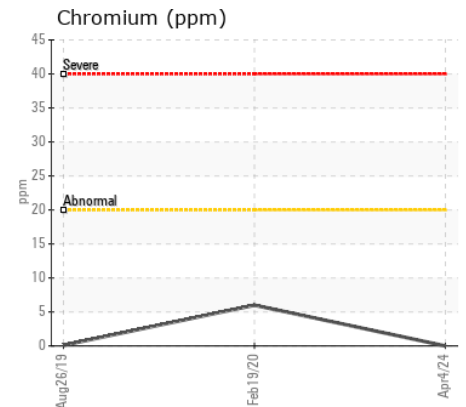
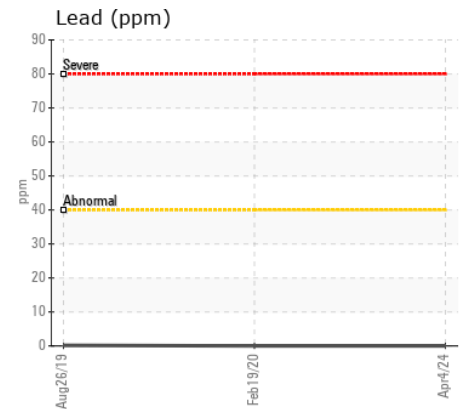
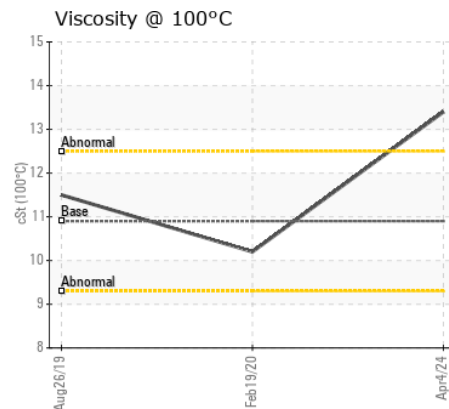
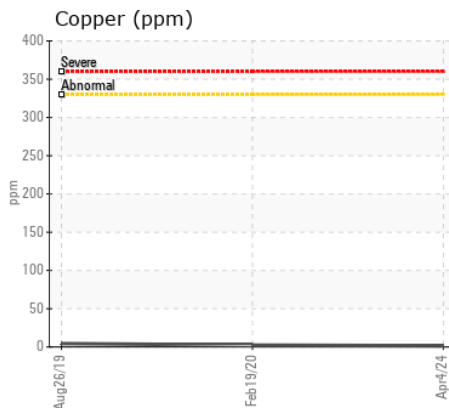
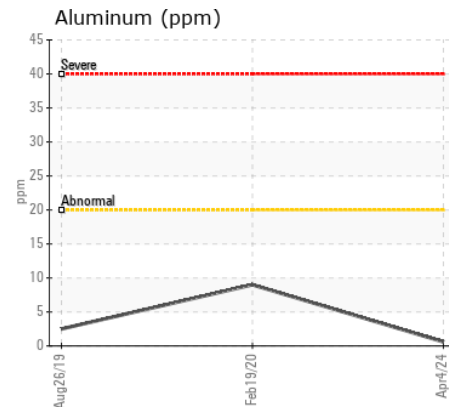
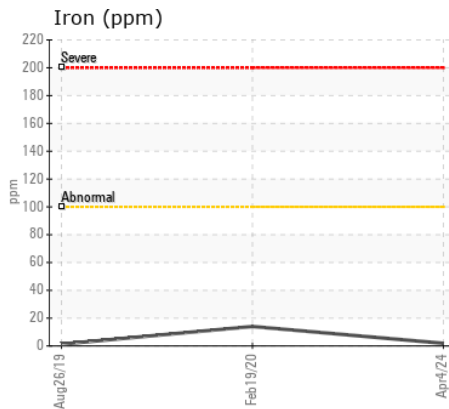
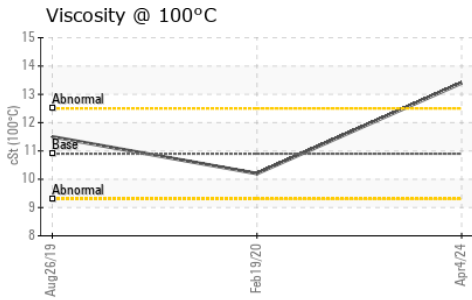
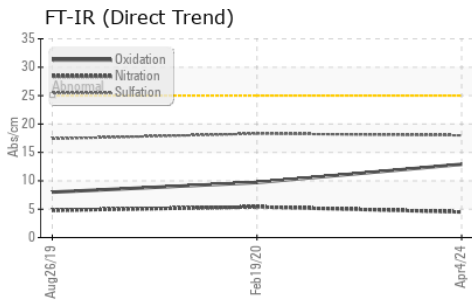
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	11	7	4
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	0
Fuel		WC Method	>5	<1.0	0.8	0.2
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	4.5	5.4	4.8
Sulfation	Abs/.1mm	ASTM D7415*	>30	18.0	18.3	17.4
Silt	scalar	Visual*	NONE	NONE	VLITE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE	VLITE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

Viscosity of sample indicates oil is within SAE 40 range, advise investigate. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		1	<1	4
Boron	ppm	ASTM D5185(m)	250	2	17	171
Barium	ppm	ASTM D5185(m)	10	0	<1	0
Molybdenum	ppm	ASTM D5185(m)	100	61	51	77
Manganese	ppm	ASTM D5185(m)		0	<1	<1
Magnesium	ppm	ASTM D5185(m)	450	990	713	75
Calcium	ppm	ASTM D5185(m)	3000	1073	1416	2345
Phosphorus	ppm	ASTM D5185(m)	1150	1005	663	658
Zinc	ppm	ASTM D5185(m)	1350	1186	764	778
Sulfur	ppm	ASTM D5185(m)	4250	2723	2566	2296
Oxidation	Abs/.1mm	ASTM D7414*	>25	12.9	9.7	8.0
Visc @ 100°C	cSt	ASTM D7279(m)	10.9	13.4	10.2	▲ 11.5



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0910635
Lab Number : 02633017
Unique Number : 5774170
Test Package : MOB 1 (Additional Tests: Visual)

Received : 03 May 2024
Tested : 03 May 2024
Diagnosed : 03 May 2024 - Kevin Marson

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