



OIL ANALYSIS REPORT

Sample Rating Trend

DIRT



Machine Id
MG2APU (S/N NF300270)
 Component
Genset
 Fluid
PEEP 5031 (37 LTR)



DIAGNOSIS

Recommendation

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. We recommend that you drain the oil from the component if this has not already been done. We advise that you flush the component thoroughly before re-filling with oil. We recommend you service the filters on this component. We recommend an early resample to monitor this condition. No other corrective action is recommended at this time. The fluid was specified as PEEP 5031, however, a fluid match indicates that this fluid is SAE 10W30 Diesel Engine Oil. Please confirm the oil type and grade on your next sample.

Wear

All component wear rates are normal. We have assumed that this component is not breaking in (age of component not reported).

Contamination

Fuel content negligible. High concentration of dirt present in the oil.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. Viscosity of sample indicates oil is within SAE 10W30 range, advise investigate. The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0327928	---	---
Sample Date	Client Info		26 Nov 2020	---	---
Machine Age	hrs	Client Info	0	---	---
Oil Age	hrs	Client Info	0	---	---
Oil Changed	Client Info		N/A	---	---
Sample Status			SEVERE	---	---

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.2	NEG	---	---
Glycol	WC Method		NEG	---	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >100	12	---	---
Chromium	ppm	ASTM D5185(m) >20	<1	---	---
Nickel	ppm	ASTM D5185(m) >2	<1	---	---
Titanium	ppm	ASTM D5185(m) >2	<1	---	---
Silver	ppm	ASTM D5185(m) >2	<1	---	---
Aluminum	ppm	ASTM D5185(m) >25	2	---	---
Lead	ppm	ASTM D5185(m) >40	5	---	---
Copper	ppm	ASTM D5185(m) >330	29	---	---
Tin	ppm	ASTM D5185(m) >15	3	---	---
Antimony	ppm	ASTM D5185(m)	0	---	---
Vanadium	ppm	ASTM D5185(m)	0	---	---
Beryllium	ppm	ASTM D5185(m)	0	---	---
Cadmium	ppm	ASTM D5185(m)	0	---	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	62	---	---
Barium	ppm	ASTM D5185(m)	8	---	---
Molybdenum	ppm	ASTM D5185(m)	38	---	---
Manganese	ppm	ASTM D5185(m)	4	---	---
Magnesium	ppm	ASTM D5185(m)	492	---	---
Calcium	ppm	ASTM D5185(m)	1584	---	---
Phosphorus	ppm	ASTM D5185(m)	913	---	---
Zinc	ppm	ASTM D5185(m)	1088	---	---
Sulfur	ppm	ASTM D5185(m)	2527	---	---
Lithium	ppm	ASTM D5185(m)	<1	---	---

CONTAMINANTS

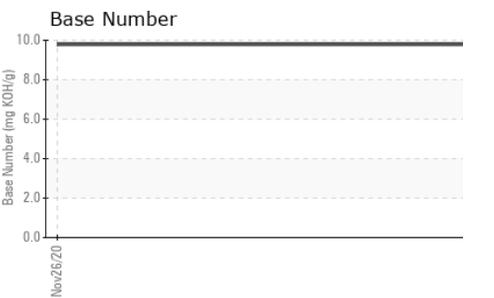
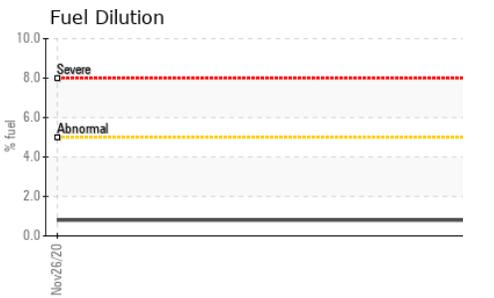
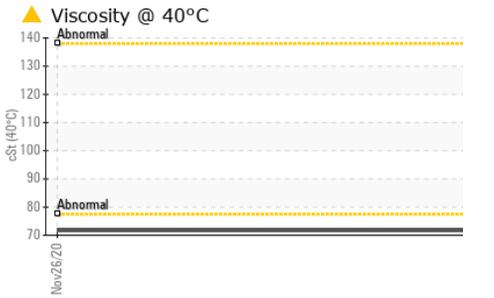
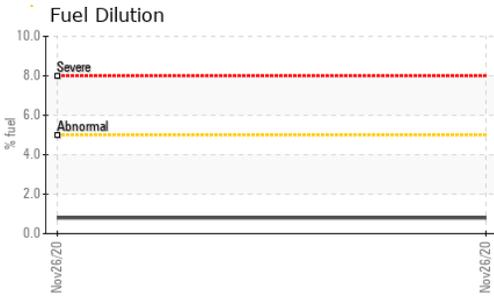
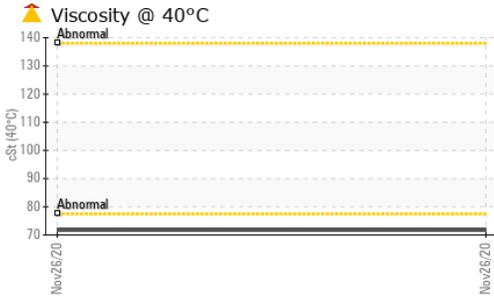
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >25	105	---	---
Sodium	ppm	ASTM D5185(m)	5	---	---
Potassium	ppm	ASTM D5185(m) >20	1	---	---
Fuel	%	ASTM D7593* >5	0.8	---	---

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >3	0	---	---
Nitration	Abs/cm	ASTM D7624* >20	5.3	---	---
Sulfation	Abs.1mm	ASTM D7415* >30	22.9	---	---



OIL ANALYSIS REPORT

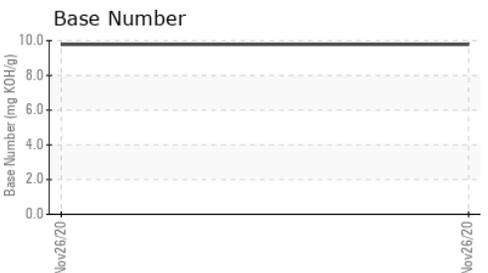
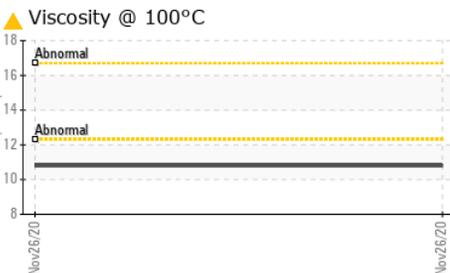
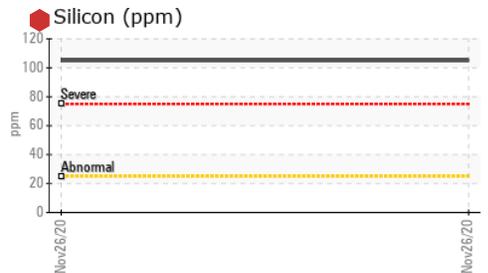
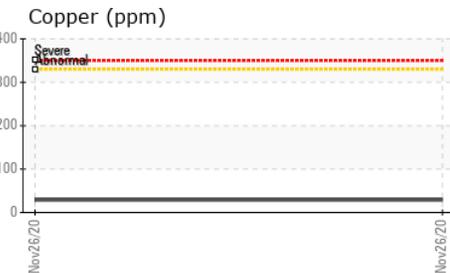
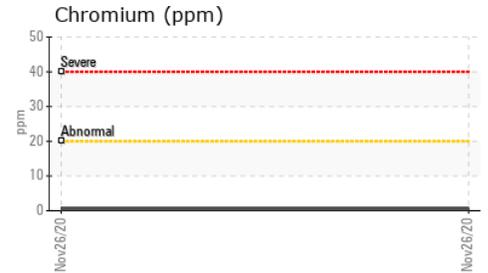
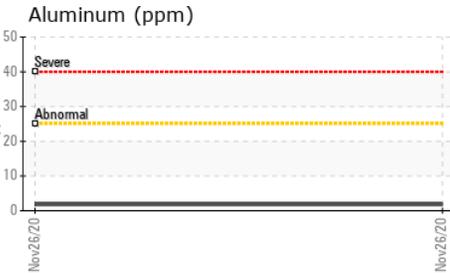
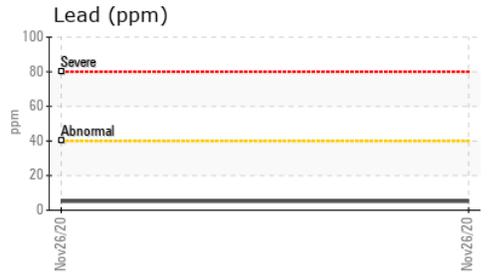
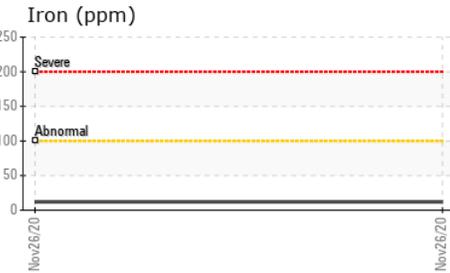


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	20.0	---	---
Base Number (BN)	mg KOH/g	ASTM D2896*		9.79	---	---

VISUAL		method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	NEG	---	---
Free Water	scalar	Visual*		NEG	---	---

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)		▲ 71.7	---	---
Visc @ 100°C	cSt	ASTM D7279(m)		▲ 10.8	---	---
Viscosity Index (VI)	Scale	ASTM D2270*		139	---	---

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0327928 **Received** : 19 Feb 2021
Lab Number : 02404865 **Diagnosed** : 23 Feb 2021
Unique Number : 5176337 **Diagnostician** : Kevin Marson
Test Package : MOB 2 (Additional Tests: FuelDilution, KV40, PercentFuel, VI)

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 Contact: Andre Adams
 aadams@newfoundlandpower.com

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.

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