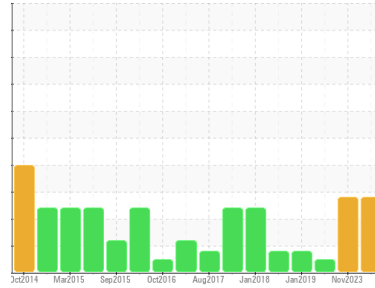




PROBLEM SUMMARY

Sample Rating Trend

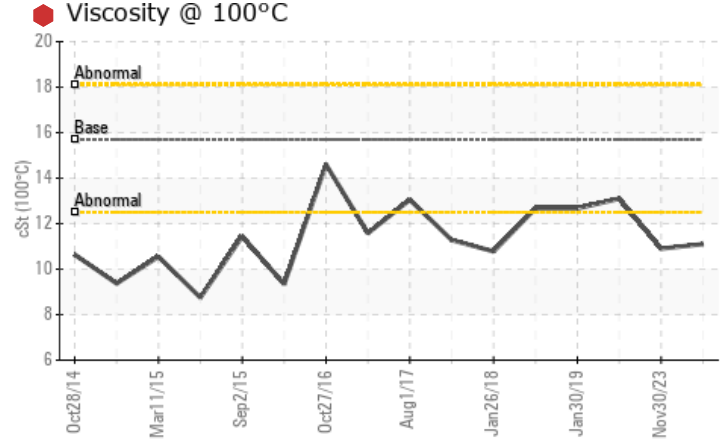
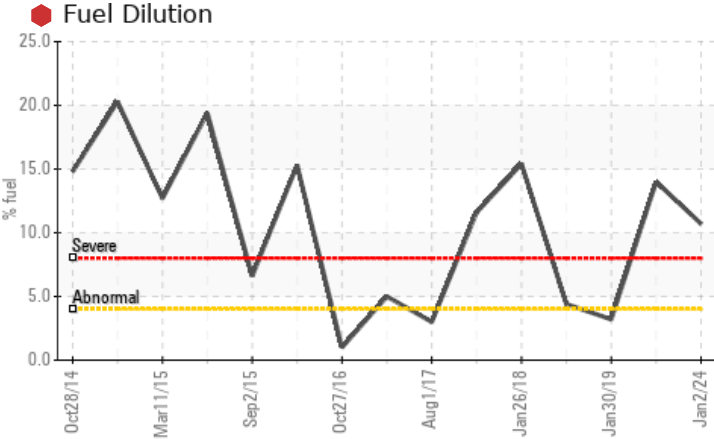


FUEL



Area
SANDY B
 Machine Id
[SANDY B] 007 562531-7
 Component
Port Genset
 Fluid
SHELL ROTELLA T 15W40 (--- GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

We advise that you check the fuel injection system. We recommend that you change the oil at the next available stoppage or outage. We recommend an early resample to monitor this condition. Please specify the component make and model with your next sample.

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	SEVERE	NORMAL
Fuel	%	ASTM D3524	>4.0	10.7	14.0	<1.0
Visc @ 100°C	cSt	ASTM D445	15.7	11.1	10.9	13.1

Customer Id: INGPAD
 Sample No.: MW0061661
 Lab Number: 06061639
 Test Package: MAR 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Wes Davis +1 905-569-8600 x223
wesd@wearcheck.ca

To change component or sample information:
 Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	We recommend that you change the oil at the next available stoppage or outage.
Resample	---	---	?	We recommend an early resample to monitor this condition.
Information Required	---	---	?	Please specify the component make and model with your next sample.
Check Fuel/injector System	---	---	?	We advise that you check the fuel injection system.

HISTORICAL DIAGNOSIS

30 Nov 2023 Diag: Wes Davis

FUEL



We advise that you check the fuel injection system. We recommend that you change the oil at the next available stoppage or outage. We recommend an early resample to monitor this condition. Please specify the component make and model with your next sample. All component wear rates are normal. There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

view report



01 Nov 2023 Diag: Wes Davis

NORMAL



Resample at the next service interval to monitor. Please specify the component make and model with your next sample. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

view report



30 Jan 2019 Diag: Jonathan Hester

FUEL



No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. Light fuel dilution occurring. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

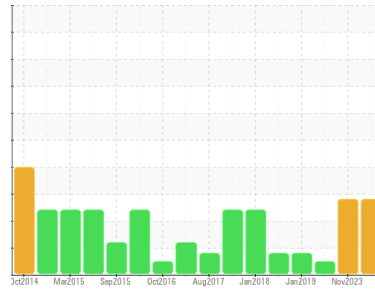
view report





OIL ANALYSIS REPORT

Sample Rating Trend



FUEL



Area
SANDY B
Machine Id
[SANDY B] 007 562531-7
Component
Port Genset
Fluid
SHELL ROTELLA T 15W40 (--- GAL)

DIAGNOSIS

Recommendation

We advise that you check the fuel injection system. We recommend that you change the oil at the next available stoppage or outage. We recommend an early resample to monitor this condition. Please specify the component make and model with your next sample.

Wear

All component wear rates are normal.

Contamination

There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	MW0061661	MW0061340	MW0061391
Sample Date	Client Info	02 Jan 2024	30 Nov 2023	01 Nov 2023
Machine Age	hrs	23268	22842	22492
Oil Age	hrs	285	424	69
Oil Changed	Client Info	Not Chngd	Not Chngd	Not Chngd
Sample Status		SEVERE	SEVERE	NORMAL

CONTAMINATION

method	limit/base	current	history1	history2
Water	WC Method >0.1	NEG	NEG	NEG
Glycol	WC Method	NEG	NEG	NEG

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >50	3	3	1
Chromium	ppm ASTM D5185m >4	0	<1	0
Nickel	ppm ASTM D5185m >2	0	<1	0
Titanium	ppm ASTM D5185m	0	<1	<1
Silver	ppm ASTM D5185m >5	0	0	0
Aluminum	ppm ASTM D5185m >12	<1	2	<1
Lead	ppm ASTM D5185m >17	0	<1	<1
Copper	ppm ASTM D5185m >70	<1	<1	0
Tin	ppm ASTM D5185m >15	0	<1	0
Antimony	ppm ASTM D5185m	---	---	---
Vanadium	ppm ASTM D5185m	<1	0	0
Cadmium	ppm ASTM D5185m	0	<1	0

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 316	148	150	196
Barium	ppm ASTM D5185m 0.0	0	12	0
Molybdenum	ppm ASTM D5185m 1.2	10	8	8
Manganese	ppm ASTM D5185m	0	<1	<1
Magnesium	ppm ASTM D5185m 24	70	24	11
Calcium	ppm ASTM D5185m 2292	1953	1869	2014
Phosphorus	ppm ASTM D5185m 1064	888	847	942
Zinc	ppm ASTM D5185m 1160	1069	987	1149
Sulfur	ppm ASTM D5185m 4996	3165	3381	3416

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	3	3	2
Sodium	ppm ASTM D5185m	1	0	1
Potassium	ppm ASTM D5185m >20	6	8	7
Fuel	% ASTM D3524 >4.0	10.7	14.0	<1.0

INFRA-RED

method	limit/base	current	history1	history2
Soot %	% *ASTM D7844	0.1	0.1	0.1
Nitration	Abs/cm *ASTM D7624 >20	8.1	8.9	6.2
Sulfation	Abs/.1mm *ASTM D7415 >30	19.8	19.5	19.8

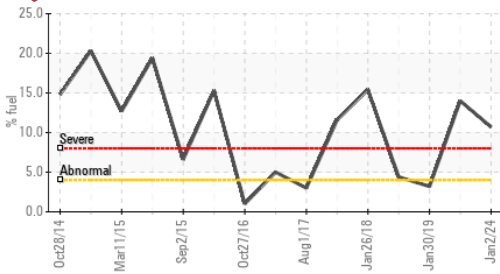
FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	17.0	18.0	15.9
Base Number (BN)	mg KOH/g ASTM D2896 10.1	7.3	6.2	8.3

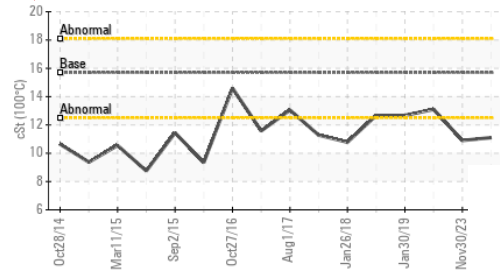


OIL ANALYSIS REPORT

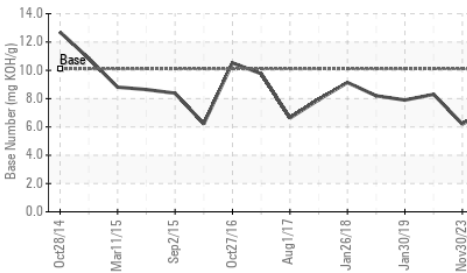
Fuel Dilution



Viscosity @ 100°C



Base Number

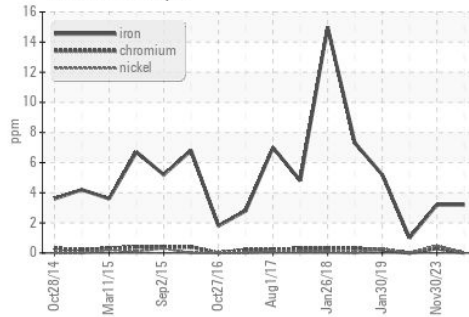


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

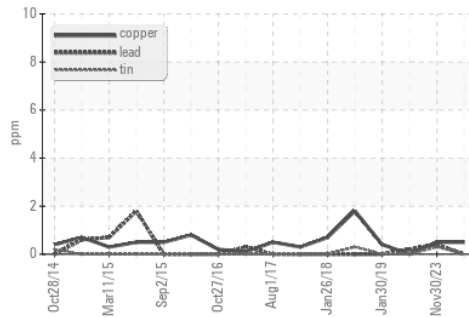
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.7	11.1	10.9

GRAPHS

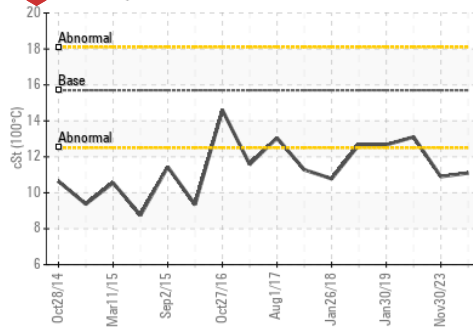
Ferrous Alloys



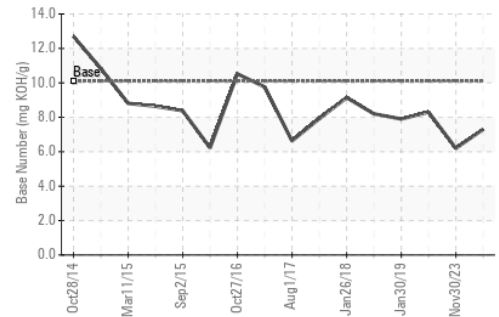
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : MW0061661 Recieved : 16 Jan 2024
 Lab Number : 06061639 Diagnosed : 18 Jan 2024
 Unique Number : 10833021 Diagnostician : Wes Davis
 Test Package : MAR 2 (Additional Tests: PercentFuel)

To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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