

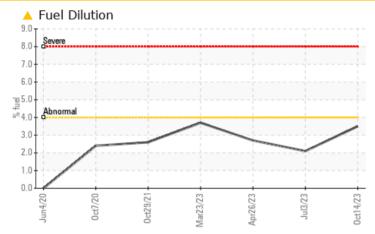
PROBLEM SUMMARY

Area ERNA E HONEYCUTT Machine Id [ERNA E HONEYCUTT] 008 641346-8 Component

Starboard Genset

CHEVRON DELO 400 LE 15W40 (--- GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS										
Sample Status				MARGINAL	NORMAL	ATTENTION				
Fuel	%	ASTM D3524	>4.0	A 3.5	<1.0	<1.0				

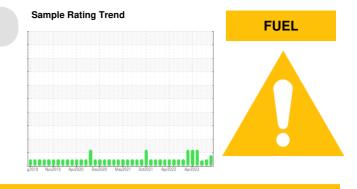
Customer Id: INGPAD Sample No.: MW0043036 Lab Number: 06006260 Test Package: MAR 2



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

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

01 Oct 2023 Diag: Wes Davis



Resample at the next service interval to monitor.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.

09 Sep 2023 Diag: Sean Felton



Resa any alka

Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

03 Jul 2023 Diag: Jonathan Hester

to the 2020 Blug.



Resample at the next service interval to monitor.All component wear rates are normal. Light fuel dilution occurring. No other contaminants were detected in the oil. The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.



view report



OIL ANALYSIS REPORT

Area ERNA E HONEYCUTT Machine Id [ERNA E HONEYCUTT] 008 641346-8

Starboard Genset

CHEVRON DELO 400 LE 15W40 (--- GAL)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

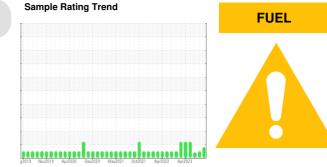
All component wear rates are normal.

Contamination

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

Fluid Condition

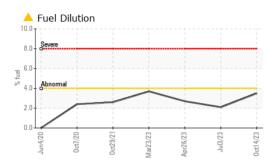
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

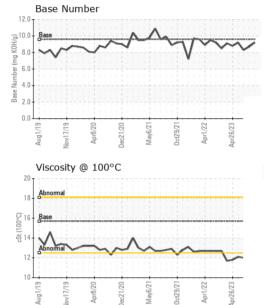


SAMPLE INFORMATION method limit/base current history1 history2 MW0043036 MW0052550 MW0052555 Sample Number **Client Info** Sample Date Client Info 14 Oct 2023 01 Oct 2023 09 Sep 2023 3229 Machine Age hrs Client Info 2910 2832 Oil Age hrs Client Info 347 78 371 Oil Changed **Client Info** N/A Not Changd N/A Sample Status MARGINAL NORMAL ATTENTION CONTAMINATION method limit/base current history1 history2 NEG Glycol WC Method NEG NEG WEAR METALS limit/base method current history1 history2 Iron ASTM D5185m >50 8 4 8 ppm Chromium ASTM D5185m >4 0 ppm <1 <1 0 0 Nickel ASTM D5185m >2 0 ppm Titanium ASTM D5185m ppm <1 <1 <1 0 Silver ASTM D5185m >5 n 0 ppm Aluminum ppm ASTM D5185m >12 2 4 2 ASTM D5185m >17 0 0 Lead <1 ppm 2 Copper ppm ASTM D5185m >70 <1 <1 Tin ASTM D5185m >15 0 0 0 ppm 0 0 0 Vanadium ppm ASTM D5185m 0 Cadmium 0 ppm ASTM D5185m 0 **ADDITIVES** method limit/base current history1 history2 302 366 Boron ASTM D5185m 280 ppm Barium ppm ASTM D5185m 0 0 <1 Molvbdenum ASTM D5185m 118 129 140 ppm 1 0 1 Manganese ppm ASTM D5185m Magnesium ASTM D5185m 601 644 648 ppm 1472 Calcium ASTM D5185m 1506 ppm 1454 Phosphorus ASTM D5185m 1200 655 670 719 ppm Zinc ppm ASTM D5185m 1300 812 845 913 Sulfur ASTM D5185m 3200 2335 2686 3214 ppm **CONTAMINANTS** limit/base method current history1 history2 Silicon ppm ASTM D5185m >25 7 6 8 Sodium ASTM D5185m 0 0 ppm <1 Potassium ASTM D5185m >20 1 2 2 ppm % ASTM D3524 Fuel >4.0 3.5 <1.0 <1.0 **INFRA-RED** method limit/base current history1 history2 Soot % % *ASTM D7844 0.2 0.1 0.1 Abs/cm *ASTM D7624 >20 5.4 Nitration 7.9 7.4 Sulfation Abs/.1mm *ASTM D7415 >30 22.8 21.4 21.8 **FLUID DEGRADATION** method limit/base current history1 history2 >25 Oxidation Abs/.1mm *ASTM D7414 17.5 15.0 16.2 Base Number (BN) mg KOH/g ASTM D2896 9.6 9.2 8.7 8.3



OIL ANALYSIS REPORT





VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	LIGHT	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT	NONE
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	>0.1	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT		mathad	limit/base	ourroat	biotoput	biotom/0
	IE0	method	innit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.7	12.1	12.8	1 2.0
GRAPHS						

Ferrous Alloys

Non-ferrous Metals

head

20

19 18

17

12

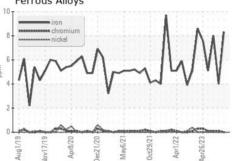
10

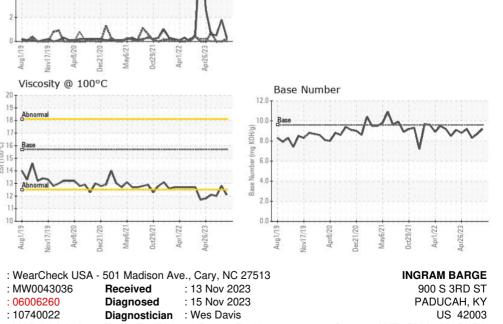
Laboratory

Sample No.

Lab Number

cSt (100°C)





Unique Number Test Package : MAR 2 (Additional Tests: FuelDilution, PercentFuel) Contact: ANTHONY VAN CURA Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. anthony.vancura@ingrambarge.com * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (270)415-4467 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (615)695-3697