



Area
ERNA E HONEYCUTT
Machine Id
[ERNA E HONEYCUTT] 008 641346-8
Component
Starboard Genset
Fluid
CHEVRON DELO 400 LE 15W40 (--- GAL)

RECOMMENDATION

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		MW0035234	MW0035235	MW0063227
Sample Date		Client Info		01 Jun 2024	02 May 2024	31 Mar 2024
Machine Age	hrs	Client Info		5909	5614	5169
Oil Age	hrs	Client Info		366	374	381
Filter Age	hrs	Client Info		0	374	0
Oil Changed		Client Info		N/A	Changed	N/A
Filter Changed		Client Info		N/A	Changed	N/A
Sample Status				ATTENTION	ATTENTION	ATTENTION

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	8	9	4
Chromium	ppm	ASTM D5185m	>4	0	<1	0
Nickel	ppm	ASTM D5185m	>2	0	0	<1
Titanium	ppm	ASTM D5185m		<1	2	<1
Silver	ppm	ASTM D5185m	>5	0	<1	0
Aluminum	ppm	ASTM D5185m	>12	2	3	4
Lead	ppm	ASTM D5185m	>17	0	<1	<1
Copper	ppm	ASTM D5185m	>70	<1	1	0
Tin	ppm	ASTM D5185m	>15	0	<1	<1
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

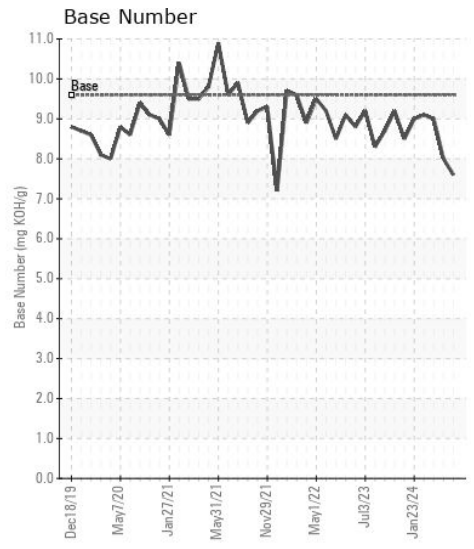
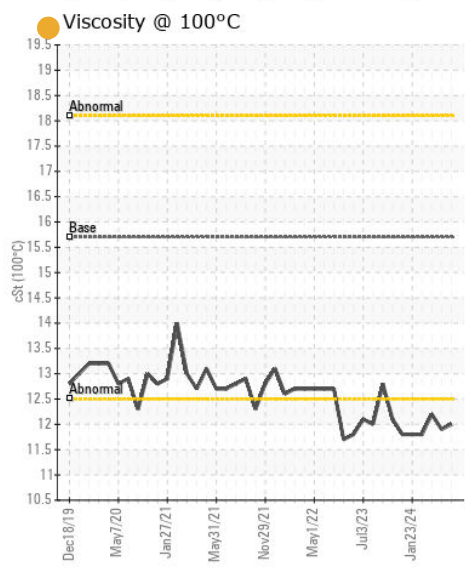
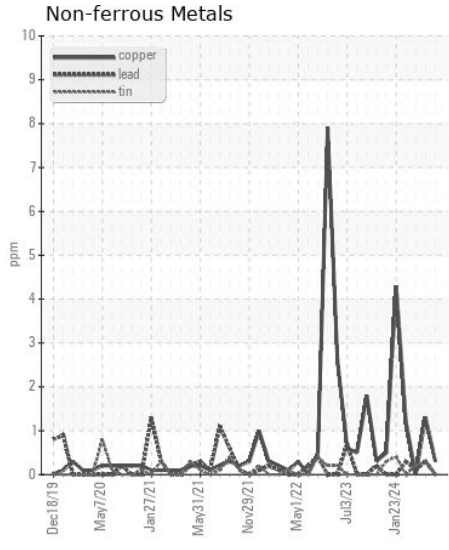
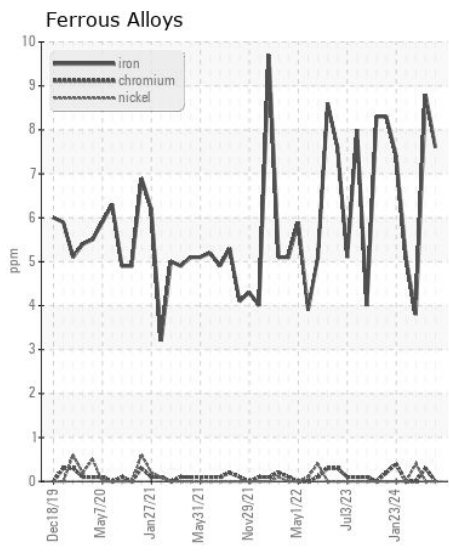
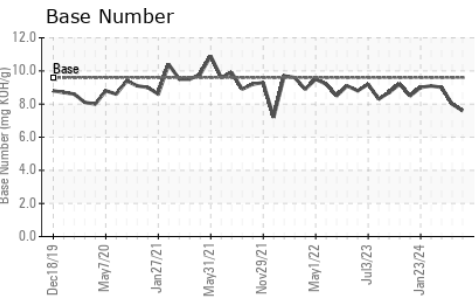
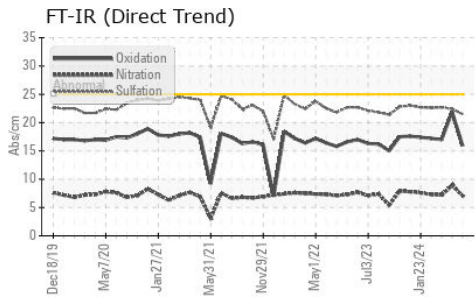
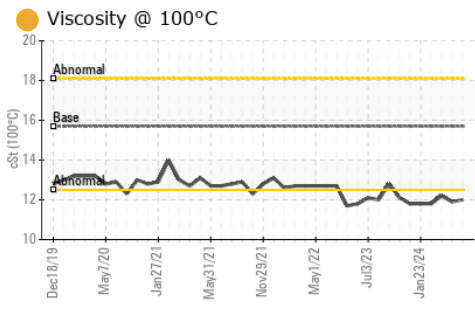
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	4	6	5
Potassium	ppm	ASTM D5185m	>20	<1	2	1
Fuel		WC Method	>4.0	<1.0	<1.0	<1.0
Water		WC Method	>0.1	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844		0.1	0.4	0.1
Nitration	Abs/cm	*ASTM D7624	>20	7.1	8.9	7.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.5	22.4	22.7
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	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

FLUID CONDITION

The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m		<1	<1	1
Boron	ppm	ASTM D5185m		343	388	339
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		94	93	121
Manganese	ppm	ASTM D5185m		2	2	1
Magnesium	ppm	ASTM D5185m		493	468	680
Calcium	ppm	ASTM D5185m		1580	1422	1579
Phosphorus	ppm	ASTM D5185m	1200	1008	1022	729
Zinc	ppm	ASTM D5185m	1300	1268	1101	885
Sulfur	ppm	ASTM D5185m	3200	3908	3442	3079
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.9	21.9	17.0
Base Number (BN)	mg KOH/g	ASTM D2896	9.6	7.6	8.0	9.0
Visc @ 100°C	cSt	ASTM D445	15.7	12.0	11.9	12.2



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : MW0035234
Lab Number : 06219121
Unique Number : 11097318
Test Package : MAR 2
Received : 24 Jun 2024
Tested : 25 Jun 2024
Diagnosed : 26 Jun 2024 - Jonathan Hester

INGRAM BARGE
 900 S 3RD ST
 PADUCAH, KY
 US 42003
 Contact: ANTHONY VAN CURA
 anthony.vancura@ingrambarga.com
 T: (270)415-4467
 F: (615)695-3697

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)