MAR II

WEAR CHECK Inland Marine Oil Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
ROBERT W TAYLOR
Machine Id
[ROBERT W TAYLOR] 001 568680-1
Component
Port Main Engine
Fluid
SHELL ROTELLA T 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

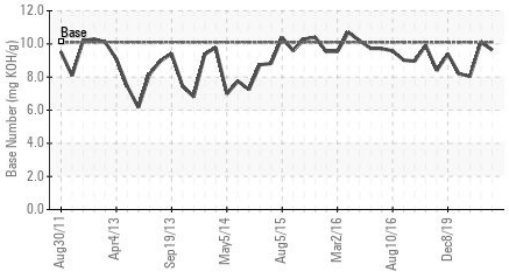
There is no indication of any contamination in the oil.

FLUID CONDITION

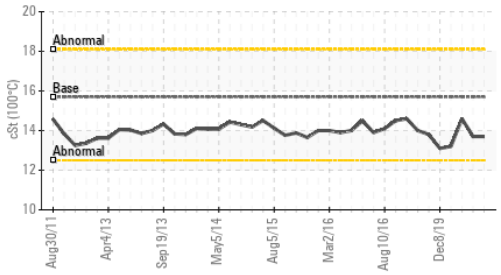
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		MW0062956	MW0046409	MW0046406
Sample Date		Client Info		01 Dec 2023	07 Oct 2023	19 Nov 2022
Machine Age	hrs	Client Info		1831	9820	41484
Oil Age	hrs	Client Info		345	452	369
Filter Age	hrs	Client Info		345	452	369
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>75	5	10	7
Chromium	ppm	ASTM D5185m	>8	0	<1	<1
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m	>3	0	2	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>15	<1	2	0
Lead	ppm	ASTM D5185m	>18	<1	2	<1
Copper	ppm	ASTM D5185m	>80	2	2	2
Tin	ppm	ASTM D5185m	>14	<1	2	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>20	13	9	4
Potassium	ppm	ASTM D5185m	>20	6	8	7
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	0.1	0.3
Nitration	Abs/cm	*ASTM D7624	>20	7.0	7.6	10.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.0	20.5	21.7
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
Sodium	ppm	ASTM D5185m	>75	3	3	7
Boron	ppm	ASTM D5185m	316	176	153	156
Barium	ppm	ASTM D5185m	0.0	0	0	0
Molybdenum	ppm	ASTM D5185m	1.2	10	12	8
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m	24	65	129	47
Calcium	ppm	ASTM D5185m	2292	2038	2110	2309
Phosphorus	ppm	ASTM D5185m	1064	970	963	996
Zinc	ppm	ASTM D5185m	1160	1116	1340	1216
Sulfur	ppm	ASTM D5185m	4996	3575	3994	4186
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.8	17.4	20.3
Base Number (BN)	mg KOH/g	ASTM D2896	10.1	9.63	10.12	8.04
Visc @ 100°C	cSt	ASTM D445	15.7	13.7	13.7	14.6

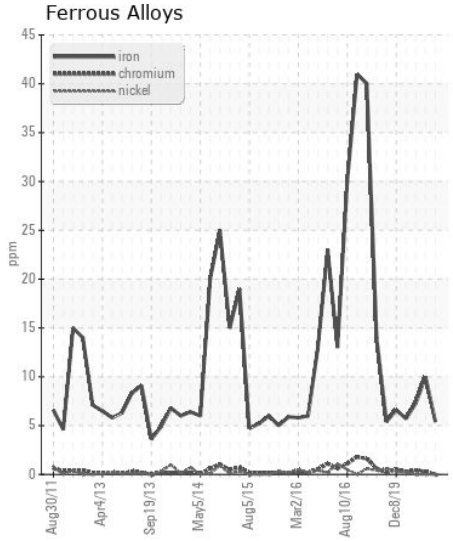
Base Number



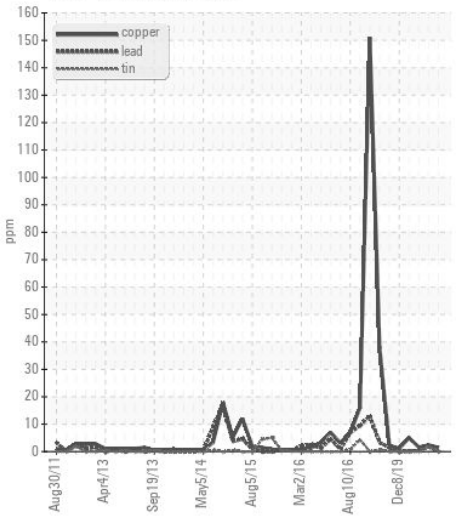
Viscosity @ 100°C



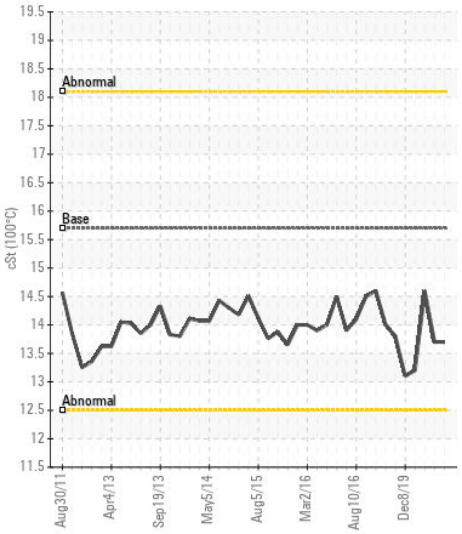
Ferrous Alloys



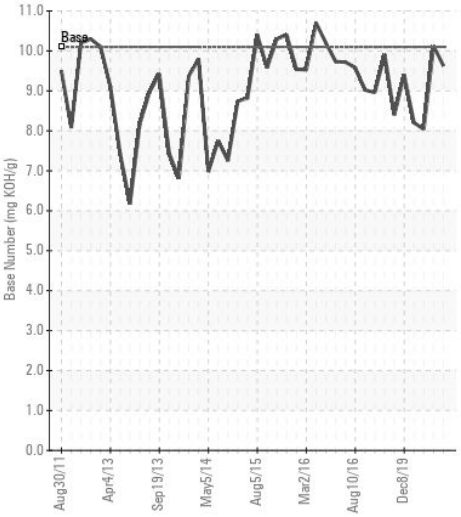
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory	: WearCheck USA - 501 Madison Ave., Cary, NC 27513		
Sample No.	: MW0062956	**Recieved**	: 08 Jan 2024
Lab Number	: 06054159	**Diagnosed**	: 09 Jan 2024
Unique Number	: 10820108	**Diagnostician**	: Sean Felton
Test Package	: MAR 2		

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)

INGRAM BARGE
900 S 3RD ST
PADUCAH, KY
US 42003
Contact: KEN ELLISON
ken.ellison@ingrambarge.com
T: (270)415-4467
F: (615)695-3697