



WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
SIGNET RESOLUTE

Component
Port Main Engine

Fluid
CHEVRON DELO 710 LE (240 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		MW0052026	MW0052010	MW0051966
Sample Date		Client Info		12 Jan 2024	17 Oct 2023	17 Jul 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

Cylinder, crank, or cam shaft wear is indicated.

Iron	ppm	ASTM D5185m	>75	▲ 76	72	65
Chromium	ppm	ASTM D5185m	>8	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	<1	<1	0
Titanium	ppm	ASTM D5185m	>3	<1	<1	0
Silver	ppm	ASTM D5185m	>2	4	5	4
Aluminum	ppm	ASTM D5185m	>15	1	3	2
Lead	ppm	ASTM D5185m	>18	7	7	5
Copper	ppm	ASTM D5185m	>80	17	21	16
Tin	ppm	ASTM D5185m	>14	2	2	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.

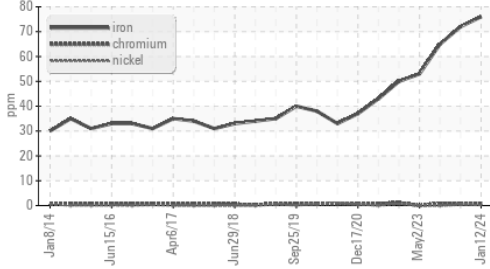
Silicon	ppm	ASTM D5185m	>20	5	4	4
Potassium	ppm	ASTM D5185m	>20	1	3	<1
Fuel		WC Method	>4.0	<1.0	<1.0	<1.0
Water		WC Method	>0.1	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.7	0.7	0.7
Nitration	Abs/cm	*ASTM D7624	>20	7.6	7.6	7.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	15.9	16.1	15.9
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

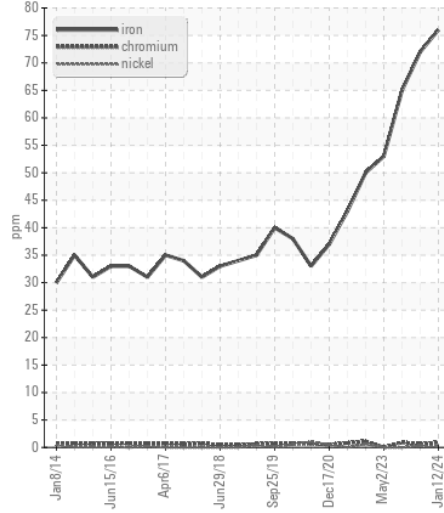
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>75	21	21	18
Boron	ppm	ASTM D5185m		25	14	15
Barium	ppm	ASTM D5185m		0	<1	0
Molybdenum	ppm	ASTM D5185m		59	65	55
Manganese	ppm	ASTM D5185m		1	<1	1
Magnesium	ppm	ASTM D5185m		21	12	21
Calcium	ppm	ASTM D5185m		3028	3288	2941
Phosphorus	ppm	ASTM D5185m		60	34	61
Zinc	ppm	ASTM D5185m	10	33	12	27
Sulfur	ppm	ASTM D5185m		2838	3299	3091
Oxidation	Abs/.1mm	*ASTM D7414	>25	7.8	7.8	7.8
Base Number (BN)	mg KOH/g	ASTM D2896	9.2	7.1	7.2	7.4
Visc @ 100°C	cSt	ASTM D445	15.5	13.8	14.1	14.0

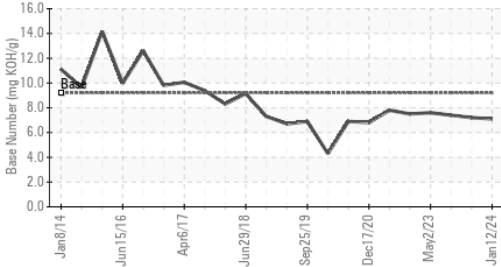
▲ Ferrous Alloys



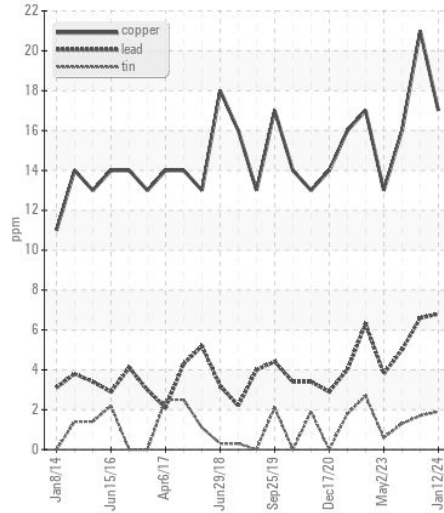
▲ Ferrous Alloys



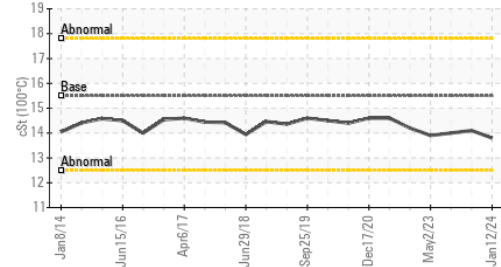
Base Number



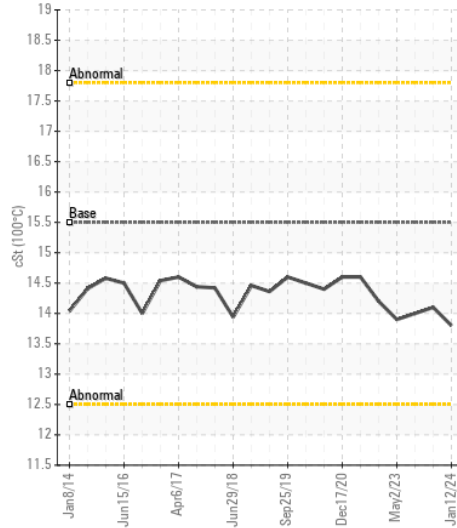
Non-ferrous Metals



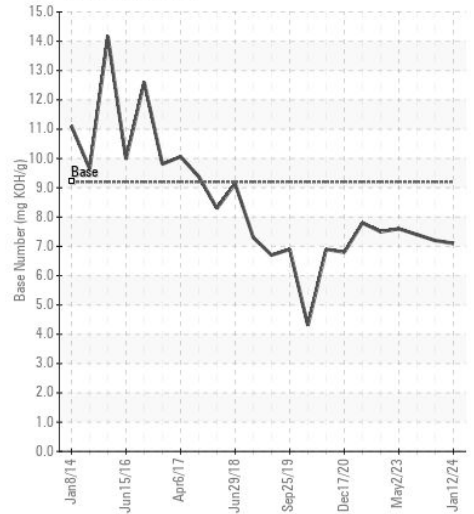
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : MW0052026 **Received** : 19 Jan 2024
Lab Number : 06065321 **Diagnosed** : 22 Jan 2024
Unique Number : 10836703 **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)

MARITIME COMPANY
 3802 PORT RIVER RD
 PASCAGOULA, MS
 US 39567

Contact: TERRY SCUDDER
 terry.scudder@signetmaritime.com

T:
 F: (228)769-0629