



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
SIGNET RELIANCE - FIFI

Component
Center Diesel Engine

Fluid
CHEVRON DELO 400 MULTIGRADE 15W40 (49 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		MW0052110	MW0034674	MW0051917
Sample Date		Client Info		11 Apr 2024	24 Jan 2024	23 Nov 2023
Machine Age	hrs	Client Info		145	144	143
Oil Age	hrs	Client Info		145	144	143
Filter Age	hrs	Client Info		145	144	143
Oil Changed		Client Info		Not Changd	N/A	Not Changd
Filter Changed		Client Info		Not Changd	N/A	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	6	4	4
Chromium	ppm	ASTM D5185m	>20	1	0	<1
Nickel	ppm	ASTM D5185m	>4	1	0	0
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>20	2	2	2
Lead	ppm	ASTM D5185m	>40	9	9	9
Copper	ppm	ASTM D5185m	>330	43	37	38
Tin	ppm	ASTM D5185m	>15	2	1	2
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

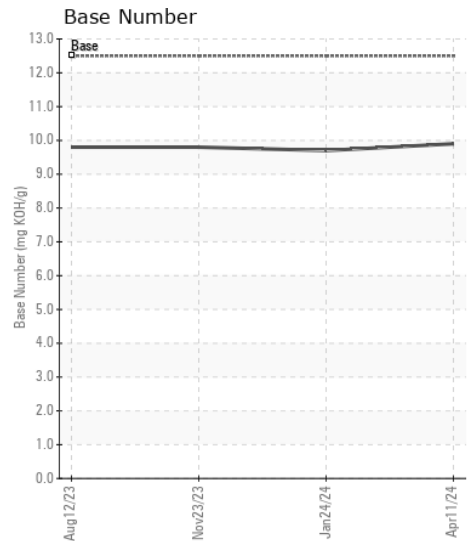
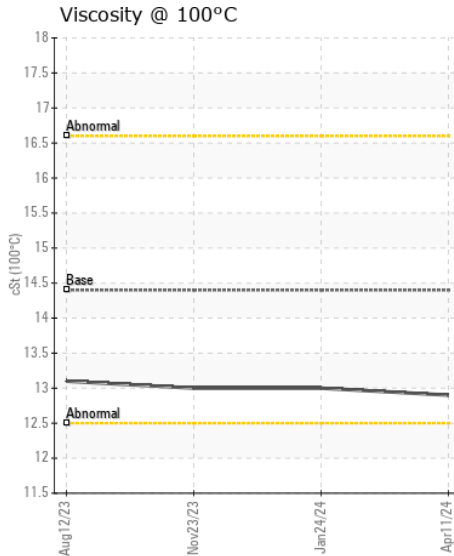
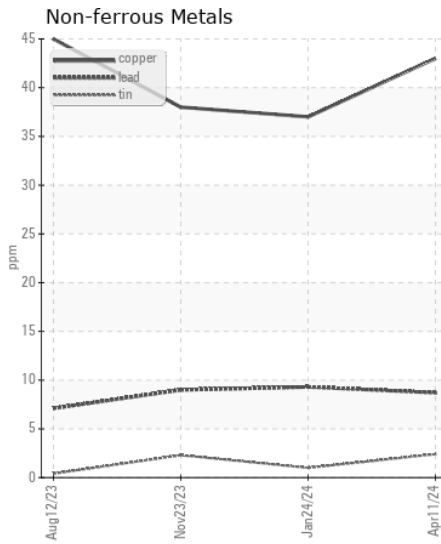
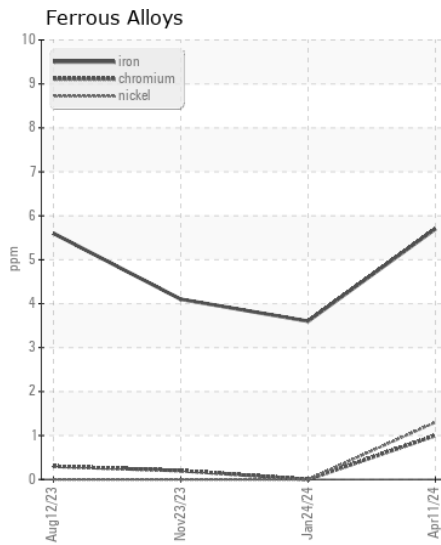
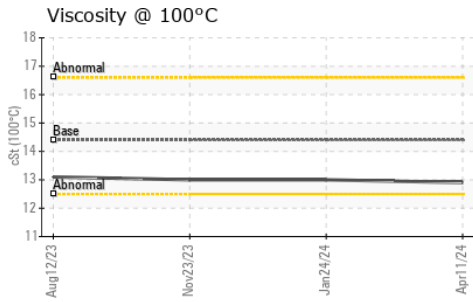
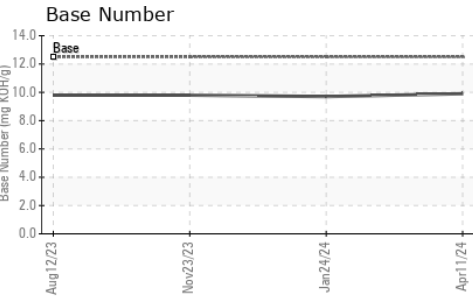
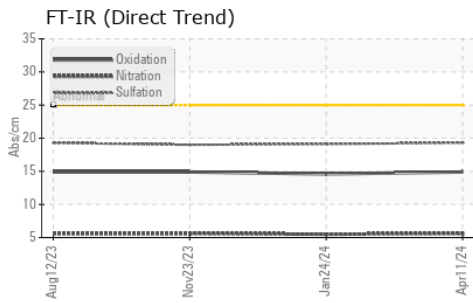
There is no indication of any contamination in the component.

Silicon	ppm	ASTM D5185m	>25	6	5	4
Potassium	ppm	ASTM D5185m	>20	5	3	3
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.1	0	0
Nitration	Abs/cm	*ASTM D7624	>20	5.6	5.5	5.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.3	19.1	19.0
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	>0.2	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		4	4	3
Boron	ppm	ASTM D5185m	151	208	184	180
Barium	ppm	ASTM D5185m	0.4	0	0	0
Molybdenum	ppm	ASTM D5185m	250	39	40	41
Manganese	ppm	ASTM D5185m		2	<1	<1
Magnesium	ppm	ASTM D5185m	0	219	260	265
Calcium	ppm	ASTM D5185m	2046	2250	2299	2348
Phosphorus	ppm	ASTM D5185m	1043	1154	1219	1254
Zinc	ppm	ASTM D5185m	943	1242	1393	1370
Sulfur	ppm	ASTM D5185m	5012	4812	4666	4781
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.9	14.6	14.9
Base Number (BN)	mg KOH/g	ASTM D2896	12.5	9.9	9.7	9.8
Visc @ 100°C	cSt	ASTM D445	14.4	12.9	13.0	13.0



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : MW0052110

Lab Number : 06152768

Unique Number : 10982846

Test Package : MAR 2

Received : 18 Apr 2024

Tested : 18 Apr 2024

Diagnosed : 22 Apr 2024 - Don Baldrige

MARITIME COMPANY

3802 PORT RIVER RD

PASCAGOULA, MS

US 39567

Contact: TERRY SCUDDER

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T:

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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