



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
CHARLIE T
Component
Port Genset
Fluid
CHEVRON DELO 400 MULTIGRADE 15W40 (3 GAL)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		MW0071507	MW0059564	MW0059552
Sample Date		Client Info		28 May 2024	14 Mar 2024	19 Nov 2023
Machine Age	hrs	Client Info		17040	0	0
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	12	14	12
Chromium	ppm	ASTM D5185m	>4	<1	<1	0
Nickel	ppm	ASTM D5185m	>2	<1	<1	0
Titanium	ppm	ASTM D5185m		16	15	10
Silver	ppm	ASTM D5185m	>5	0	<1	0
Aluminum	ppm	ASTM D5185m	>12	2	4	2
Lead	ppm	ASTM D5185m	>17	7	2	3
Copper	ppm	ASTM D5185m	>70	<1	1	0
Tin	ppm	ASTM D5185m	>15	<1	<1	0
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

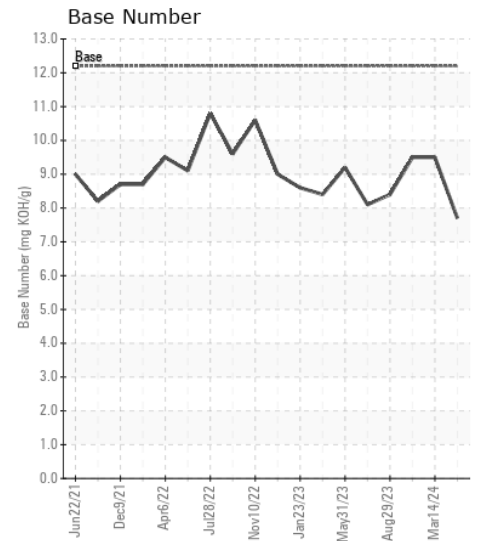
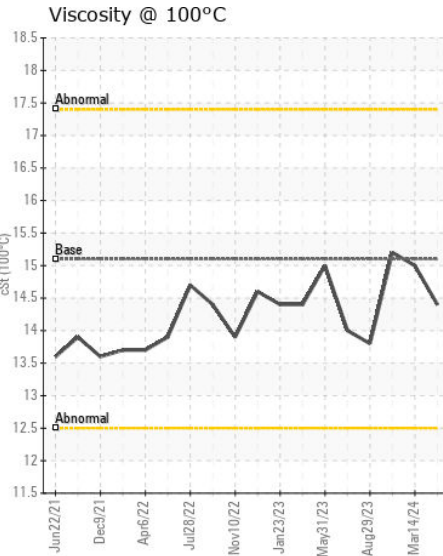
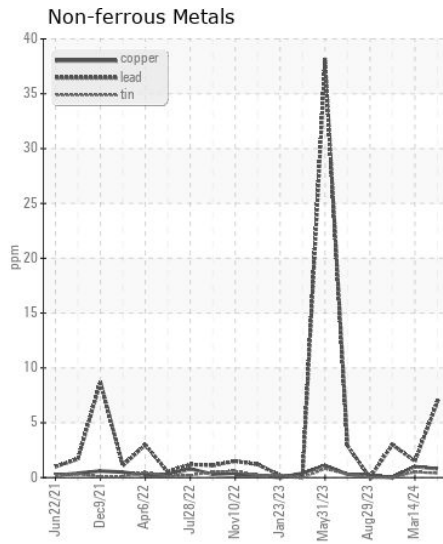
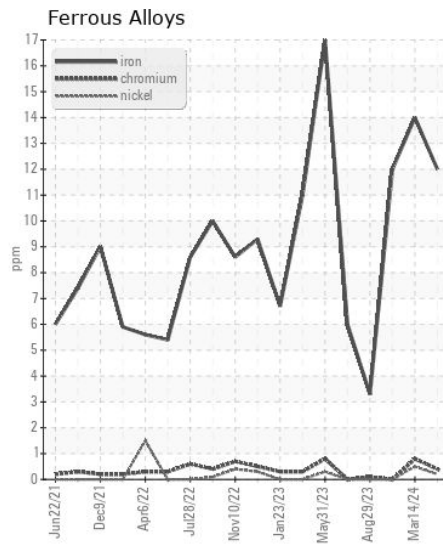
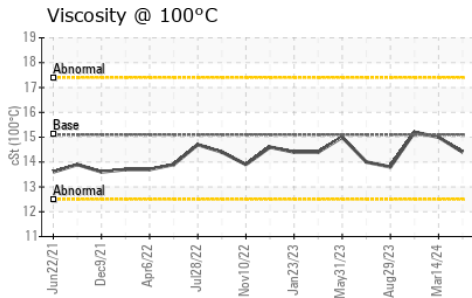
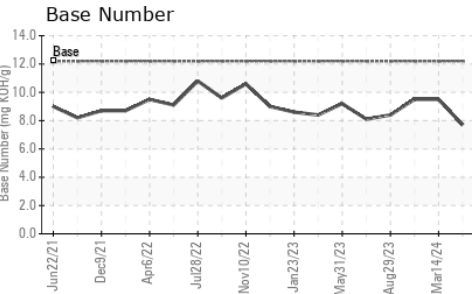
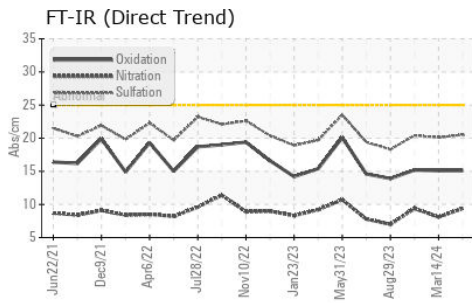
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	5	6	5
Potassium	ppm	ASTM D5185m	>20	4	4	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		0.7	0.3	0.2
Nitration	Abs/cm	*ASTM D7624	>20	9.4	8.1	9.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.5	20.1	20.4
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		2	3	2
Boron	ppm	ASTM D5185m		84	109	94
Barium	ppm	ASTM D5185m		<1	0	0
Molybdenum	ppm	ASTM D5185m		40	42	44
Manganese	ppm	ASTM D5185m		2	<1	0
Magnesium	ppm	ASTM D5185m		737	756	660
Calcium	ppm	ASTM D5185m		1817	1814	2815
Phosphorus	ppm	ASTM D5185m	1360	725	789	670
Zinc	ppm	ASTM D5185m	1480	830	905	815
Sulfur	ppm	ASTM D5185m		3329	3139	4163
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.1	15.1	15.2
Base Number (BN)	mg KOH/g	ASTM D2896	12.2	7.7	9.5	9.5
Visc @ 100°C	cSt	ASTM D445	15.1	14.4	15.0	15.2



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : MW0071507
Lab Number : 06196319
Unique Number : 11058442
Test Package : MAR 2

Received : 31 May 2024
Tested : 02 Jun 2024
Diagnosed : 02 Jun 2024 - Wes Davis

OSAGE MARINE
 750 E DAVIS ST
 ST LOUIS, MO
 US 63111

Contact: MIKE KESSLER
 mike.kessler@osagemarine.com

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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F: