



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
ANN ELISE
Component
Port Main Engine
Fluid
CHEVRON DELO 400 LE 15W40 (150 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		MW0071593	MW0061812	MW0061815
Sample Date		Client Info		25 Jun 2024	16 May 2024	25 Jan 2024
Machine Age	hrs	Client Info		41664	0	4597
Oil Age	hrs	Client Info		454	1335	467
Filter Age	hrs	Client Info		354	750	467
Oil Changed		Client Info		N/A	Not Changed	Changed
Filter Changed		Client Info		N/A	Changed	Changed
Sample Status				NORMAL	NORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>75	7	14	10
Chromium	ppm	ASTM D5185m	>8	<1	<1	0
Nickel	ppm	ASTM D5185m	>2	<1	<1	<1
Titanium	ppm	ASTM D5185m	>3	7	8	7
Silver	ppm	ASTM D5185m	>2	<1	<1	0
Aluminum	ppm	ASTM D5185m	>15	3	3	4
Lead	ppm	ASTM D5185m	>18	1	4	2
Copper	ppm	ASTM D5185m	>80	27	68	▲ 93
Tin	ppm	ASTM D5185m	>14	0	1	<1
Vanadium	ppm	ASTM D5185m		<1	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

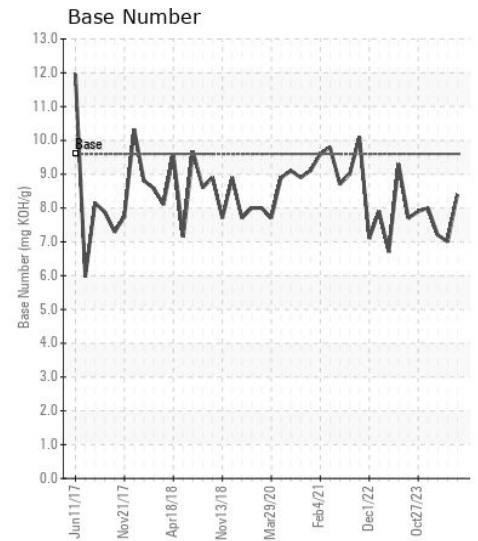
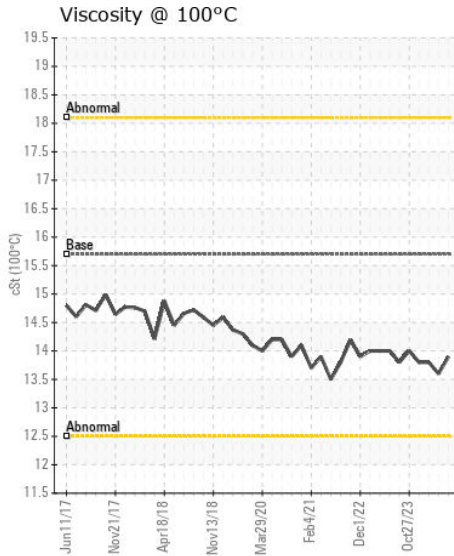
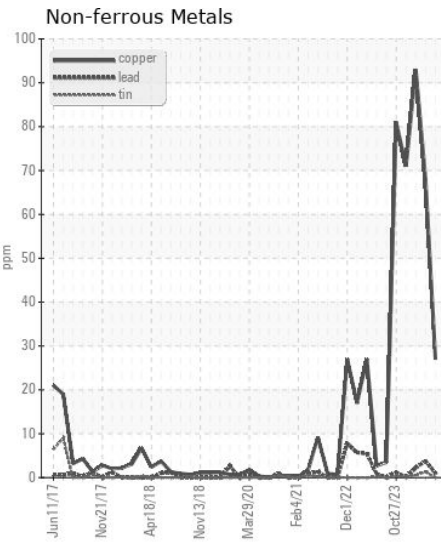
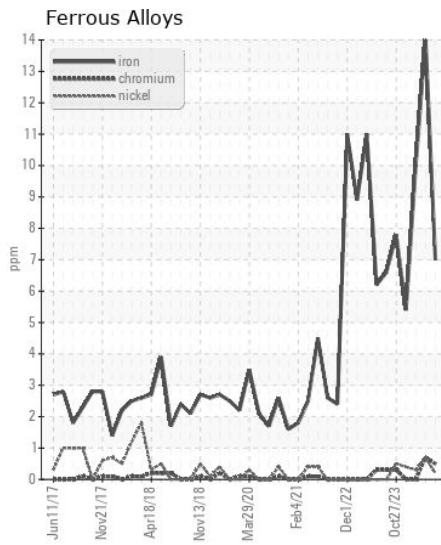
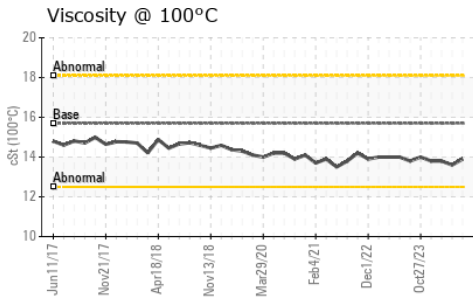
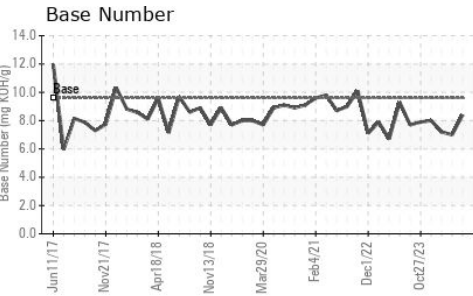
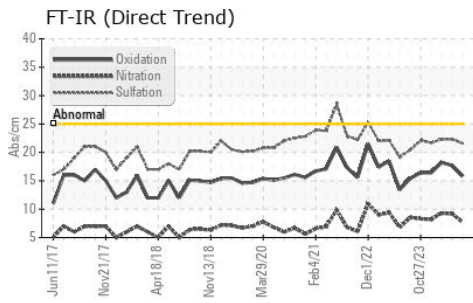
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	6	6	5
Potassium	ppm	ASTM D5185m	>20	2	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		0.1	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	7.7	9.2	9.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.6	22.3	22.3
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	2	2	3
Boron	ppm	ASTM D5185m		223	196	175
Barium	ppm	ASTM D5185m		<1	0	0
Molybdenum	ppm	ASTM D5185m		86	86	76
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		694	716	682
Calcium	ppm	ASTM D5185m		1594	1672	1536
Phosphorus	ppm	ASTM D5185m	1200	785	711	720
Zinc	ppm	ASTM D5185m	1300	874	907	845
Sulfur	ppm	ASTM D5185m	3200	2820	2983	2659
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.8	17.7	18.2
Base Number (BN)	mg KOH/g	ASTM D2896	9.6	8.4	7.0	7.2
Visc @ 100°C	cSt	ASTM D445	15.7	13.9	13.6	13.8



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : MW0071593
Lab Number : 06224201
Unique Number : 11102398
Test Package : MAR 2

Received : 28 Jun 2024
Tested : 01 Jul 2024
Diagnosed : 01 Jul 2024 - Wes Davis

MAGNOLIA MARINE TRANSPORT
 697 HAINING ROAD
 VICKSBURG, MS
 US 39183
 Contact: MMT MAINTENANCE PLANNERS
 mmtmaintenanceplanners@ergon.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)

T: x:
 F: (601)638-8028