MAR I

WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
UNKNOWN SHIP NAME
Machine Id
MARQUIS 2009 MARQUIS 50 SC
Component
Port Main Engine
Fluid
{not provided} (--- LTR)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

WEAR

All component wear rates are normal.

CONTAMINATION

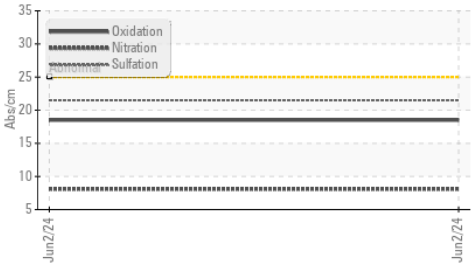
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

FLUID CONDITION

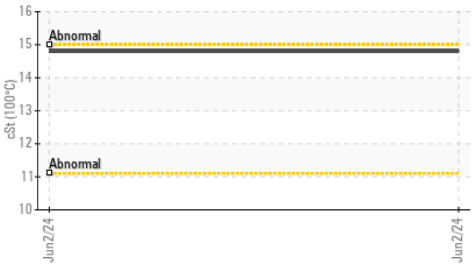
The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0951266	---	---
Sample Date		Client Info		02 Jun 2024	---	---
Machine Age	hrs	Client Info		750	---	---
Oil Age	hrs	Client Info		20	---	---
Filter Age	hrs	Client Info		20	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				NORMAL	---	---
Iron	ppm	ASTM D5185(m)	>75	16	---	---
Chromium	ppm	ASTM D5185(m)	>8	<1	---	---
Nickel	ppm	ASTM D5185(m)	>2	<1	---	---
Titanium	ppm	ASTM D5185(m)	>3	0	---	---
Silver	ppm	ASTM D5185(m)	>2	0	---	---
Aluminum	ppm	ASTM D5185(m)	>15	3	---	---
Lead	ppm	ASTM D5185(m)	>18	<1	---	---
Copper	ppm	ASTM D5185(m)	>80	4	---	---
Tin	ppm	ASTM D5185(m)	>14	<1	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---
Silicon	ppm	ASTM D5185(m)	>20	3	---	---
Potassium	ppm	ASTM D5185(m)	>20	9	---	---
Fuel		WC Method	>4.0	<1.0	---	---
Water		WC Method	>0.1	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	ASTM D7844*		0	---	---
Nitration	Abs/cm	ASTM D7624*	>20	8.1	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	21.5	---	---
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	---	---
Emulsified Water	scalar	Visual*	>0.1	NEG	---	---
Sodium	ppm	ASTM D5185(m)	>75	3	---	---
Boron	ppm	ASTM D5185(m)		151	---	---
Barium	ppm	ASTM D5185(m)		0	---	---
Molybdenum	ppm	ASTM D5185(m)		3	---	---
Manganese	ppm	ASTM D5185(m)		0	---	---
Magnesium	ppm	ASTM D5185(m)		54	---	---
Calcium	ppm	ASTM D5185(m)		2122	---	---
Phosphorus	ppm	ASTM D5185(m)		953	---	---
Zinc	ppm	ASTM D5185(m)		1109	---	---
Sulfur	ppm	ASTM D5185(m)		2936	---	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	18.5	---	---
Visc @ 100°C	cSt	ASTM D7279(m)		14.8	---	---

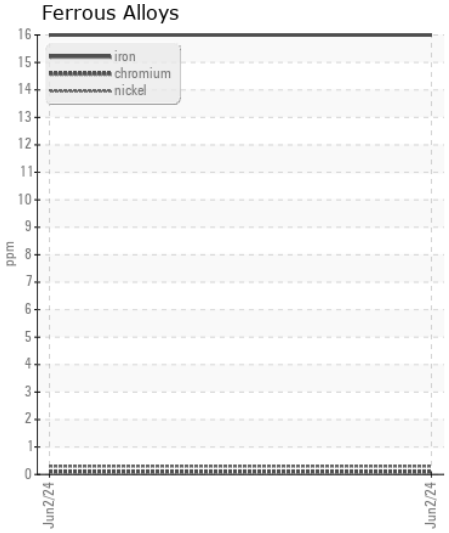
FT-IR (Direct Trend)



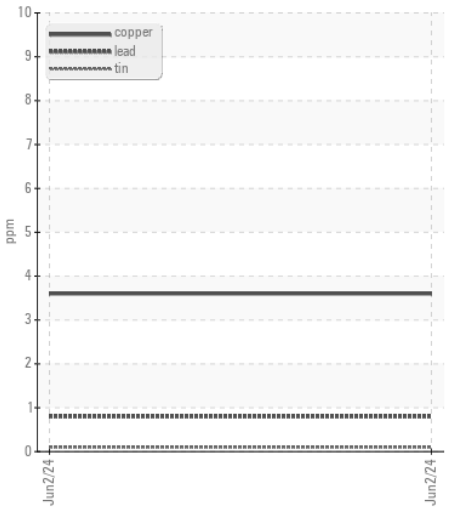
Viscosity @ 100°C



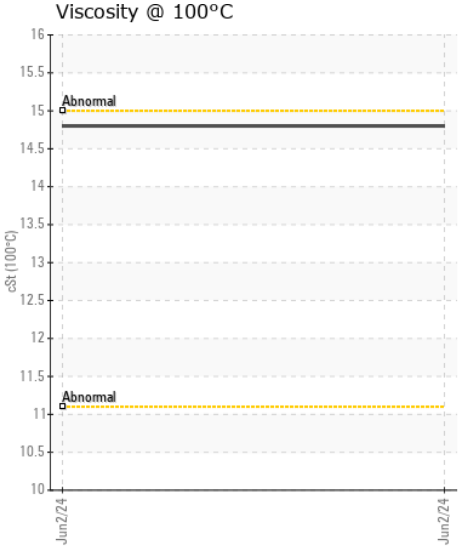
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



ISO 17025:2017 Accredited Laboratory

Laboratory	: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9		
Sample No.	: WC0951266	**Received**	: 04 Jun 2024
Lab Number	: 02639541	**Tested**	: 05 Jun 2024
Unique Number	: 5788703	**Diagnosed**	: 05 Jun 2024 - Wes Davis
Test Package	: MAR 1		

To discuss this sample report, contact Customer Service at 1-800-268-2131.
Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
Validity of results and interpretation are based on the sample and information as supplied.

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