OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ABNORMAL

Machine Id
3993
Component
Diesel Engine
Fluid
CHEVRON SUPREME MOTOR OIL 10W40 (--- QTS)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

WEAR

Metal levels are typical for a new component breaking in.

CONTAMINATION

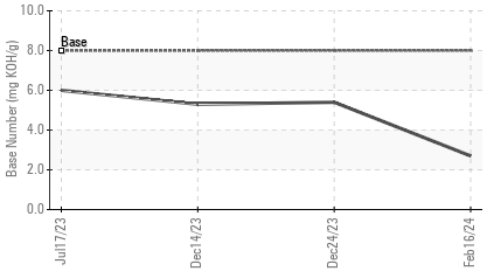
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

FLUID CONDITION

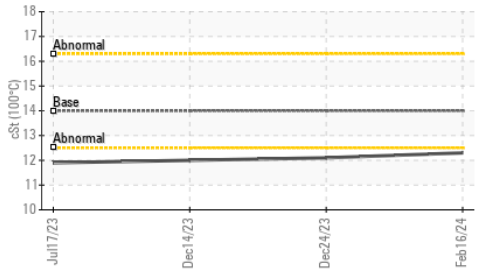
The BN level is low. Confirm oil type.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0906929	WC0863256	WC0863276
Sample Date		Client Info		16 Feb 2024	24 Dec 2023	14 Dec 2023
Machine Age	mls	Client Info		46477	38327	36226
Oil Age	mls	Client Info		0	16160	16160
Filter Age	mls	Client Info		46477	22167	20066
Oil Changed		Client Info		Changed	Not Changd	Not Changd
Filter Changed		Client Info		Changed	Not Changd	Not Changd
Sample Status				ABNORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>100	59	37	39
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	0	0	<1
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	<1
Aluminum	ppm	ASTM D5185m	>20	20	15	17
Lead	ppm	ASTM D5185m	>40	0	0	0
Copper	ppm	ASTM D5185m	>330	10	5	11
Tin	ppm	ASTM D5185m	>15	2	2	1
Vanadium	ppm	ASTM D5185m		0	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	10	7	9
Potassium	ppm	ASTM D5185m	>20	49	43	47
Fuel	%	ASTM D3524	>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	0.8	0.6	0.6
Nitration	Abs/cm	*ASTM D7624	>20	11.7	11.1	11.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	26.0	24.7	24.8
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
Sodium	ppm	ASTM D5185m		4	<1	5
Boron	ppm	ASTM D5185m		21	26	22
Barium	ppm	ASTM D5185m		0	0	<1
Molybdenum	ppm	ASTM D5185m		<1	0	0
Manganese	ppm	ASTM D5185m		1	<1	2
Magnesium	ppm	ASTM D5185m		758	808	827
Calcium	ppm	ASTM D5185m		1390	1403	1446
Phosphorus	ppm	ASTM D5185m	990	726	797	825
Zinc	ppm	ASTM D5185m	1100	796	907	944
Sulfur	ppm	ASTM D5185m		2777	3225	3140
Oxidation	Abs/.1mm	*ASTM D7414	>25	22.6	20.0	20.2
Base Number (BN)	mg KOH/g	ASTM D2896	8.0	▲ 2.7	5.4	5.3
Visc @ 100°C	cSt	ASTM D445	14.0	12.3	12.1	12.0

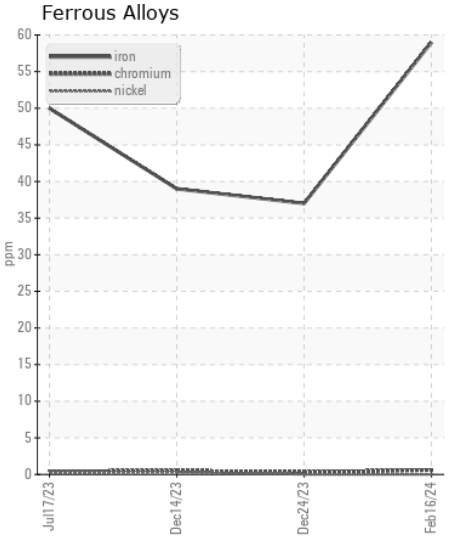
Base Number



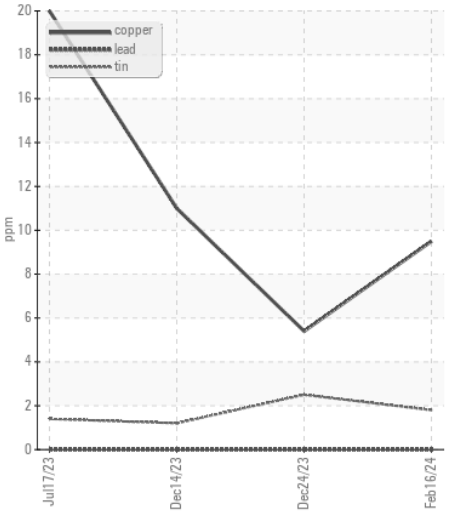
Viscosity @ 100°C



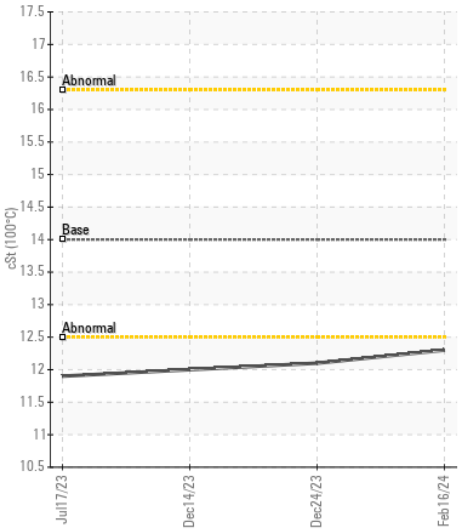
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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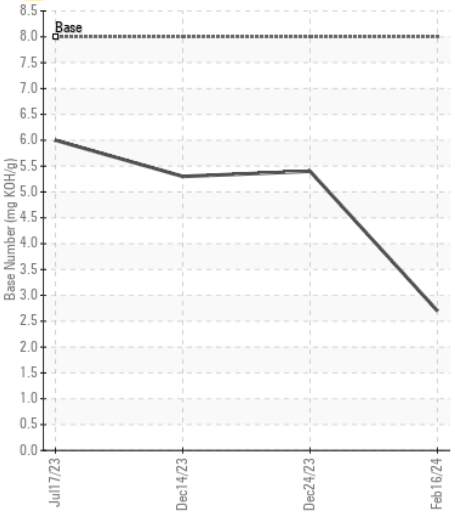

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0906929
Lab Number : 06099570
Unique Number : 10897800
Test Package : FLEET (Additional Tests: FuelDilution)

Received : 26 Feb 2024
Tested : 27 Feb 2024
Diagnosed : 27 Feb 2024 - Sean Felton

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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