FLEET WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	MARGINAL

Machine Id
CUMMINS PORT
Component
Auxiliary Engine
Fluid
CHEVRON DELO 400 MULTIGRADE 15W40 (--- GAL)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

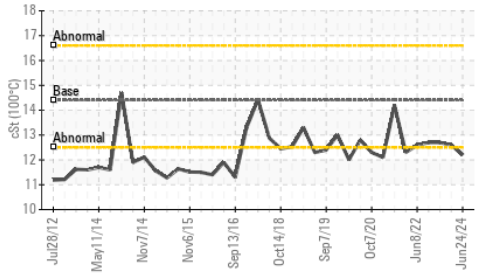
Fuel content negligible. There is no indication of any contamination in the oil.

FLUID CONDITION

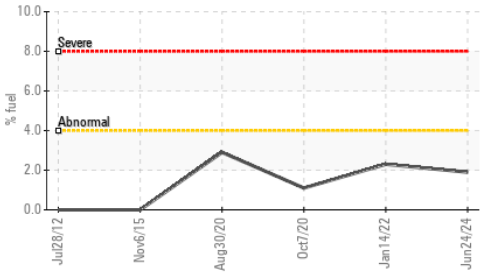
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		KL0011437	KL0008726	KL0007012
Sample Date		Client Info		24 Jun 2024	13 Aug 2023	17 Jun 2023
Machine Age	hrs	Client Info		14967	13923	13315
Oil Age	hrs	Client Info		595	501	308
Filter Age	hrs	Client Info		595	501	308
Oil Changed		Client Info		Not Changd	Changed	Not Changd
Filter Changed		Client Info		Not Changd	Changed	Not Changd
Sample Status				MARGINAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>100	2	9	2
Chromium	ppm	ASTM D5185m	>20	0	0	0
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m	>2	0	<1	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>20	<1	2	0
Lead	ppm	ASTM D5185m	>40	0	<1	0
Copper	ppm	ASTM D5185m	>330	0	1	<1
Tin	ppm	ASTM D5185m	>15	0	0	0
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	3	4	3
Potassium	ppm	ASTM D5185m	>20	<1	2	0
Fuel	%	ASTM D3524	>4.0	1.9	<1.0	<1.0
Water		WC Method	>0.1	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844		0.1	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	8.0	7.6	7.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.4	17.7	18.7
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
Sodium	ppm	ASTM D5185m		<1	2	<1
Boron	ppm	ASTM D5185m	151	89	106	99
Barium	ppm	ASTM D5185m	0.4	0	0	0
Molybdenum	ppm	ASTM D5185m	250	0	3	4
Manganese	ppm	ASTM D5185m		<1	<1	0
Magnesium	ppm	ASTM D5185m	0	713	731	643
Calcium	ppm	ASTM D5185m	2046	1371	1423	1254
Phosphorus	ppm	ASTM D5185m	1043	698	692	605
Zinc	ppm	ASTM D5185m	943	788	803	710
Sulfur	ppm	ASTM D5185m	5012	3693	3548	3654
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.6	12.9	14.2
Base Number (BN)	mg KOH/g	ASTM D2896	12.5	8.0	7.8	8.2
Visc @ 100°C	cSt	ASTM D445	14.4	▲ 12.2	12.6	12.7

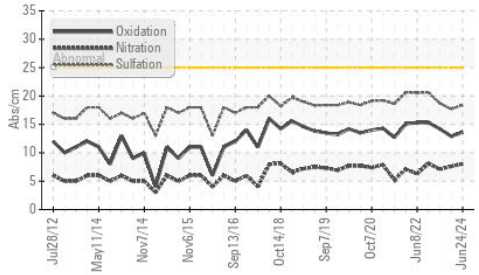
Viscosity @ 100°C



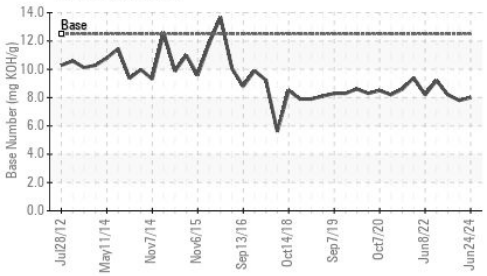
Fuel Dilution



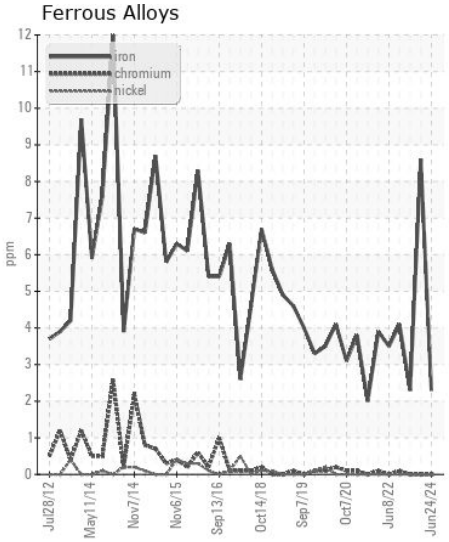
FT-IR (Direct Trend)



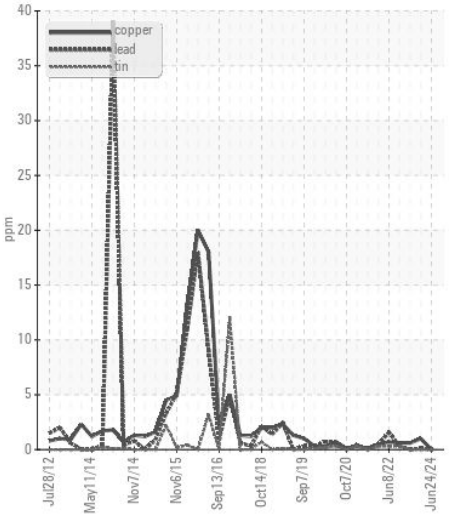
Base Number



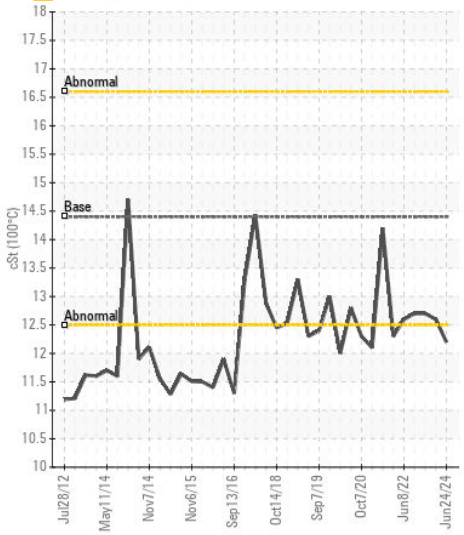
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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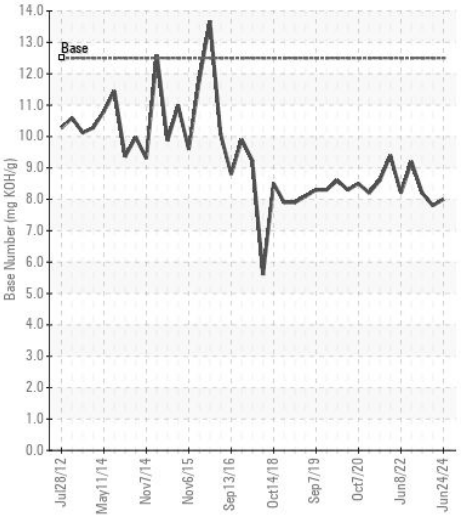

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KL0011437
Lab Number : 06225551
Unique Number : 11103748
Test Package : FLEET (Additional Tests: FuelDilution, PercentFuel)

Received : 01 Jul 2024
Tested : 08 Jul 2024
Diagnosed : 08 Jul 2024 - Jonathan Hester

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)

VANGUARD FISHERIES LLC
PO BOX 275
KODIAK, AK
US 99615
Contact: FRANKE BROWN
frankelbrown@yahoo.com
T: (907)942-9359
F: (907)481-1697