



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
JEFF KINDL

Component
Port Genset

Fluid
CHEVRON DELO 400 MULTIGRADE 15W40 (5 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		MW06185800	MW0019800	MW0019818
Sample Date		Client Info		22 Apr 2024	27 Dec 2021	17 Sep 2021
Machine Age	hrs	Client Info		0	24262	23279
Oil Age	hrs	Client Info		0	296	247
Filter Age	hrs	Client Info		0	296	247
Oil Changed		Client Info		N/A	Changed	Not Changd
Filter Changed		Client Info		N/A	Changed	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	3	4	3
Chromium	ppm	ASTM D5185m	>4	0	0	<1
Nickel	ppm	ASTM D5185m	>2	0	0	<1
Titanium	ppm	ASTM D5185m		10	8	12
Silver	ppm	ASTM D5185m	>5	0	0	0
Aluminum	ppm	ASTM D5185m	>12	1	2	2
Lead	ppm	ASTM D5185m	>17	0	<1	0
Copper	ppm	ASTM D5185m	>70	2	<1	<1
Tin	ppm	ASTM D5185m	>15	<1	0	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.

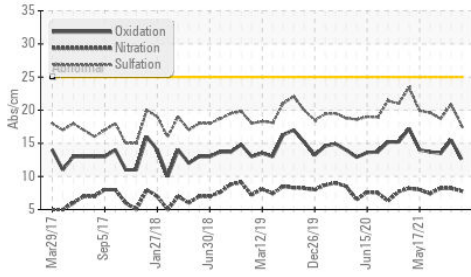
Silicon	ppm	ASTM D5185m	>25	4	4	5
Potassium	ppm	ASTM D5185m	>20	3	2	9
Fuel		WC Method	>4.0	<1.0	<1.0	<1.0
Water		WC Method	>0.1	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844		0.2	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	7.8	8.2	8.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	17.7	20.9	18.7
Silt	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

FLUID CONDITION

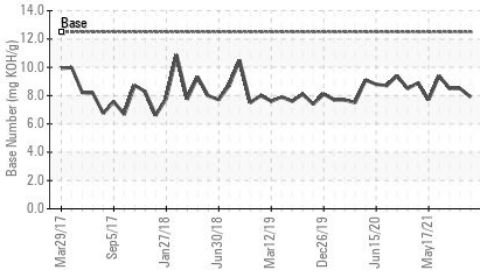
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		3	2	3
Boron	ppm	ASTM D5185m	151	96	200	90
Barium	ppm	ASTM D5185m	0.4	0	0	0
Molybdenum	ppm	ASTM D5185m	250	21	62	26
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	0	777	646	689
Calcium	ppm	ASTM D5185m	2046	1440	1573	1707
Phosphorus	ppm	ASTM D5185m	1043	739	739	718
Zinc	ppm	ASTM D5185m	943	829	826	837
Sulfur	ppm	ASTM D5185m	5012	3617	2130	4389
Oxidation	Abs/.1mm	*ASTM D7414	>25	12.6	15.5	13.5
Base Number (BN)	mg KOH/g	ASTM D2896	12.5	7.9	8.5	8.5
Visc @ 100°C	cSt	ASTM D445	14.4	13.7	13.2	13.8

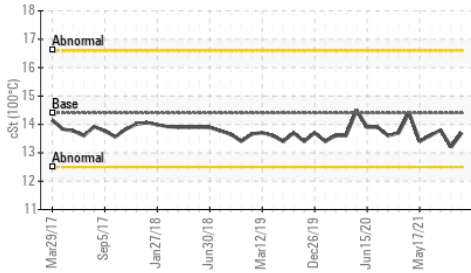
FT-IR (Direct Trend)



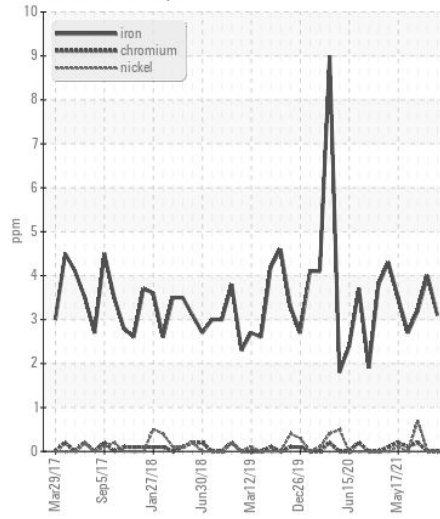
Base Number



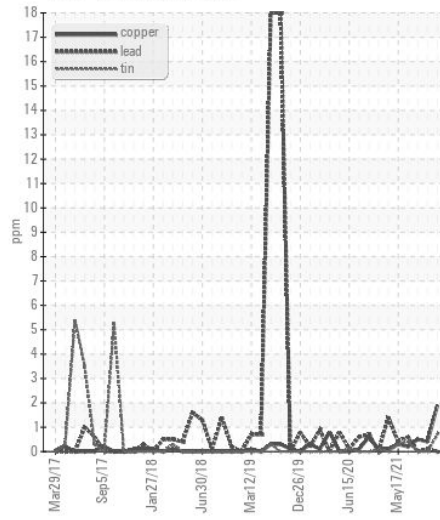
Viscosity @ 100°C



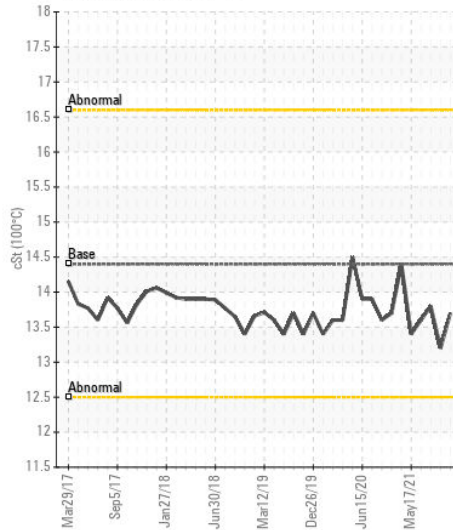
Ferrous Alloys



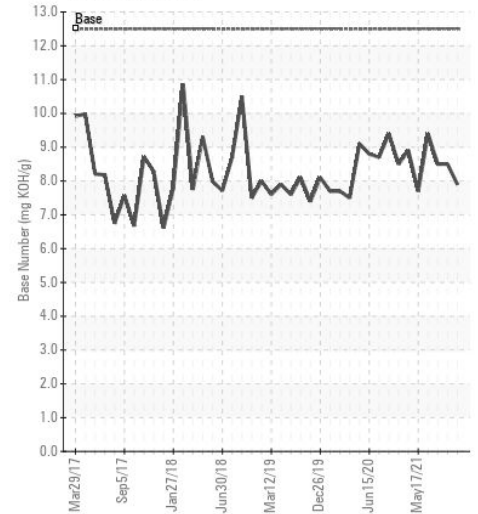
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : MW06185800
Lab Number : 06185800
Unique Number : 11042552
Test Package : MAR 2

Received : 21 May 2024
Tested : 22 May 2024
Diagnosed : 22 May 2024 - Wes Davis

AMERICAN COMMERCIAL LINES
 PO BOX 610, 1701 E. MARKET STREET
 JEFFERSONVILLE, IN
 US 47130
 Contact: RONALD SCHNEIDER
 ronald.schneider@bargaeacbl.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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