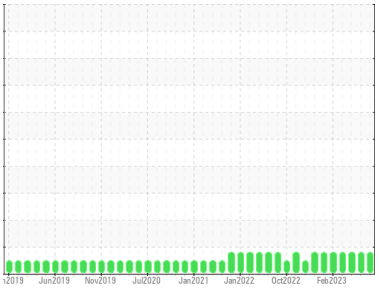
OIL ANALYSIS REPORT

Sample Rating Trend



WEAR

Area
TODD BROWN
Machine Id
[TODD BROWN] 001 587214-1
Component
Port Main Engine
Fluid
CHEVRON DELO 400 LE 15W40 (52 GAL)

DIAGNOSIS

▲ Recommendation

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

▲ Wear

The lead level is abnormal. All other component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

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.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**MW0042516**	MW0042985	MW0042982
Sample Date		Client Info		**01 Nov 2023**	01 May 2023	31 Mar 2023
Machine Age	hrs	Client Info		**47333**	44253	43691
Oil Age	hrs	Client Info		**1428**	2513	1953
Oil Changed		Client Info		**Not Changd**	N/A	Not Changd
Sample Status				**ABNORMAL**	ABNORMAL	ABNORMAL

CONTAMINATION		method	limit/base	current	history1	history2
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

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>75	**8**	11	10
Chromium	ppm	ASTM D5185m	>8	**0**	<1	<1
Nickel	ppm	ASTM D5185m	>2	**0**	0	0
Titanium	ppm	ASTM D5185m	>3	**<1**	<1	<1
Silver	ppm	ASTM D5185m	>2	**0**	0	0
Aluminum	ppm	ASTM D5185m	>15	**3**	2	2
Lead	ppm	ASTM D5185m	>18	▲ **22**	▲ 33	▲ 27
Copper	ppm	ASTM D5185m	>80	**9**	11	8
Tin	ppm	ASTM D5185m	>14	**<1**	<1	<1
Vanadium	ppm	ASTM D5185m		**0**	0	0
Cadmium	ppm	ASTM D5185m		**0**	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**262**	228	233
Barium	ppm	ASTM D5185m		**0**	0	0
Molybdenum	ppm	ASTM D5185m		**117**	114	110
Manganese	ppm	ASTM D5185m		**<1**	<1	<1
Magnesium	ppm	ASTM D5185m		**614**	656	631
Calcium	ppm	ASTM D5185m		**1596**	1670	1624
Phosphorus	ppm	ASTM D5185m	1200	**779**	693	680
Zinc	ppm	ASTM D5185m	1300	**892**	871	864
Sulfur	ppm	ASTM D5185m	3200	**2673**	3097	3012

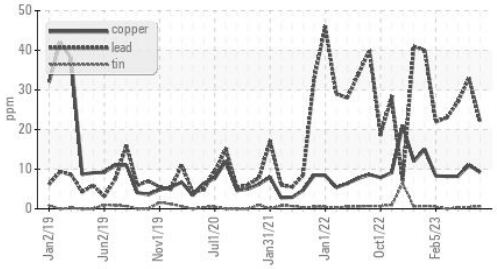
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	**7**	7	7
Sodium	ppm	ASTM D5185m	>75	**<1**	1	<1
Potassium	ppm	ASTM D5185m	>20	**<1**	<1	<1

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844		**0.4**	0.5	0.5
Nitration	Abs/cm	*ASTM D7624	>20	**7.8**	8.9	8.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	**23.6**	25.3	25.1

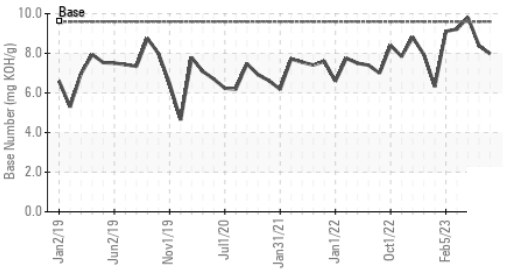
FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	**16.9**	19.1	18.8
Base Number (BN)	mg KOH/g	ASTM D2896	9.6	**7.98**	8.39	9.81

OIL ANALYSIS REPORT

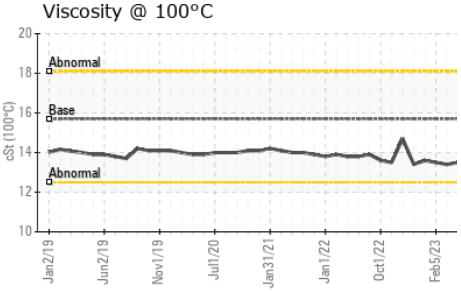
Non-ferrous Metals



Base Number



Viscosity @ 100°C

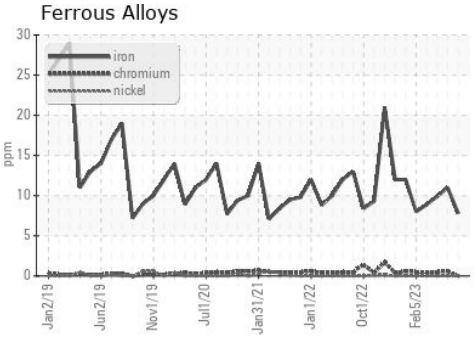


VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt	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
Free Water	scalar	*Visual		**NEG**	NEG	NEG

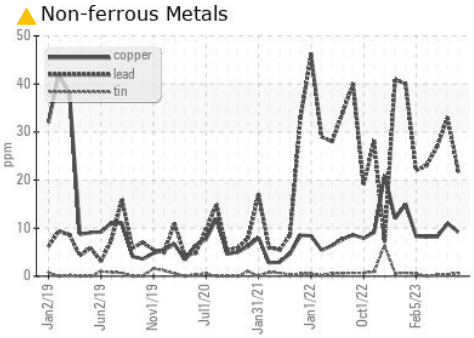
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.7	**13.5**	13.6	13.5

GRAPHS

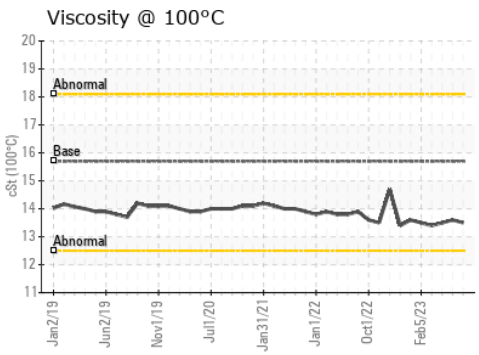
Ferrous Alloys



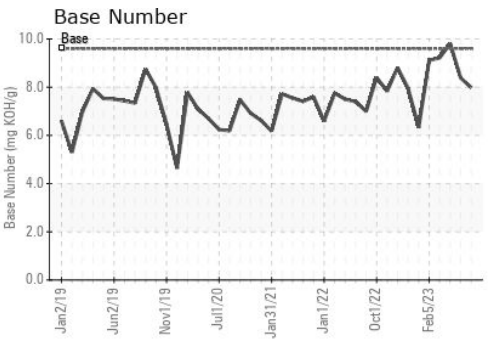
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : MW0042516 **Recieved** : 12 Jan 2024
Lab Number : 06060420 **Diagnosed** : 16 Jan 2024
Unique Number : 10831802 **Diagnostician** : Don Baldridge
Test Package : MAR 2

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)

INGRAM BARGE
900 S 3RD ST
PADUCAH, KY
US 42003
Contact: MVJPA
mvjpa@ingrambarge.com
T:
F: (615)695-3697