



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
CAMILLE B BARRETT
Machine Id
[CAMILLE B BARRETT] 002 538801-2
Component
Center Main Engine
Fluid
CHEVRON DELO 710 LS (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		MW0061368	MW0038621	MW0054394
Sample Date		Client Info		01 Feb 2024	01 Nov 2023	16 Oct 2023
Machine Age	hrs	Client Info		30181	28047	0
Oil Age	hrs	Client Info		30181	28047	0
Filter Age	hrs	Client Info		36	151	0
Oil Changed		Client Info		Not Changd	Not Changd	N/A
Filter Changed		Client Info		Not Changd	Not Changd	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>75	7	12	14
Chromium	ppm	ASTM D5185m	>8	1	1	1
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m	>3	0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>15	2	2	2
Lead	ppm	ASTM D5185m	>18	5	5	8
Copper	ppm	ASTM D5185m	>80	16	18	13
Tin	ppm	ASTM D5185m	>14	3	3	4
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

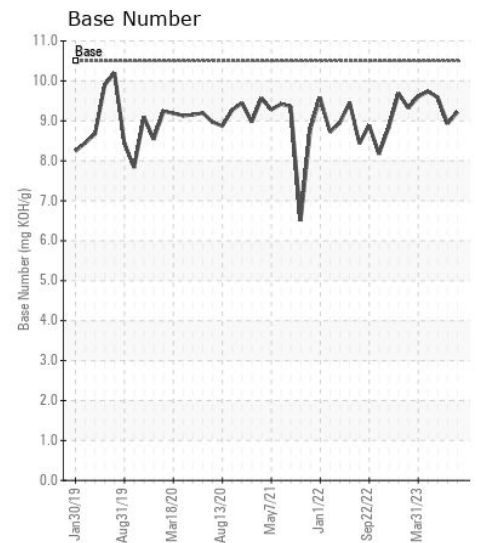
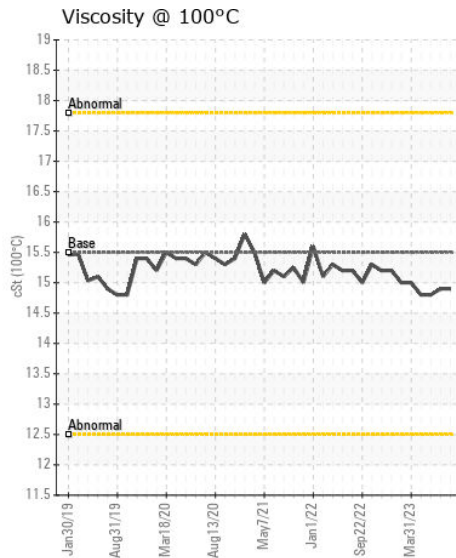
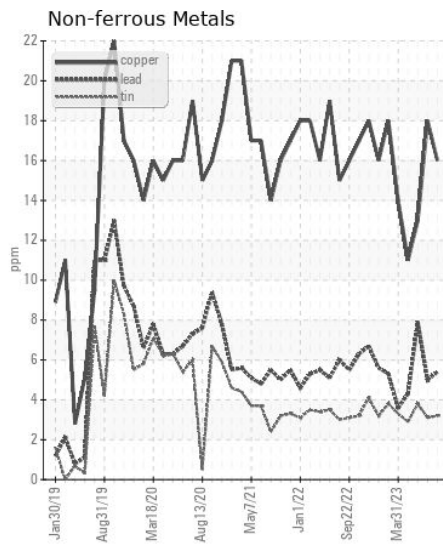
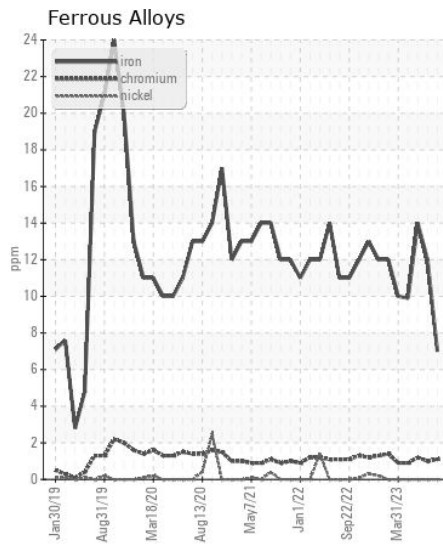
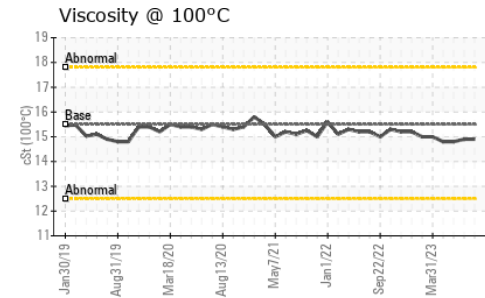
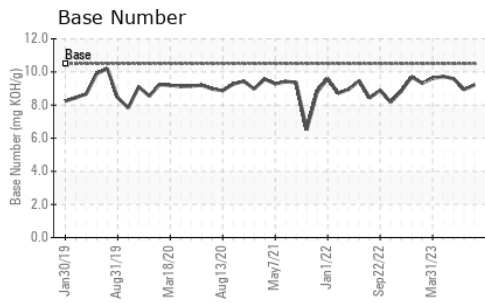
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	4	6	8
Potassium	ppm	ASTM D5185m	>20	0	3	4
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		0.5	0.6	0.6
Nitration	Abs/cm	*ASTM D7624	>20	9.3	9.0	8.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	17.5	17.1	16.8
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	>0.1	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	>75	10	33	42
Boron	ppm	ASTM D5185m		28	36	38
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		43	47	47
Manganese	ppm	ASTM D5185m		1	<1	<1
Magnesium	ppm	ASTM D5185m		17	13	2
Calcium	ppm	ASTM D5185m		3299	3408	3700
Phosphorus	ppm	ASTM D5185m		9	4	0
Zinc	ppm	ASTM D5185m		9	0	0
Sulfur	ppm	ASTM D5185m		2109	2336	2780
Oxidation	Abs/.1mm	*ASTM D7414	>25	9.4	8.5	8.1
Base Number (BN)	mg KOH/g	ASTM D2896	10.5	9.22	8.93	9.59
Visc @ 100°C	cSt	ASTM D445	15.5	14.9	14.9	14.8



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : MW0061368

Lab Number : 06101154

Unique Number : 10899384

Test Package : MAR 2

Received : 26 Feb 2024

Tested : 28 Feb 2024

Diagnosed : 28 Feb 2024 - Wes Davis

INGRAM BARGE

900 S 3RD ST

PADUCAH, KY

US 42003

Contact: GLENN ELLIS

glen.ellis@ingrambarga.com

T: (270)415-4467

F: (615)695-3697

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)