



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

ROBIN B INGRAM

Machine Id

[ROBIN B INGRAM] 001 617985-1

Component

Port Main Engine

Fluid

CHEVRON DELO 710 LS (250 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		MW06193064	MW06159855	MW06159857
Sample Date		Client Info		28 May 2024	24 Apr 2024	29 Feb 2024
Machine Age	hrs	Client Info		65778	64747	63956
Oil Age	hrs	Client Info		65778	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>75	11	7	7
Chromium	ppm	ASTM D5185m	>8	1	1	1
Nickel	ppm	ASTM D5185m	>2	<1	1	1
Titanium	ppm	ASTM D5185m	>3	<1	<1	<1
Silver	ppm	ASTM D5185m	>2	1	<1	<1
Aluminum	ppm	ASTM D5185m	>15	3	2	2
Lead	ppm	ASTM D5185m	>18	2	3	3
Copper	ppm	ASTM D5185m	>80	11	9	9
Tin	ppm	ASTM D5185m	>14	2	2	2
Vanadium	ppm	ASTM D5185m		<1	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

There is no indication of any contamination in the oil.

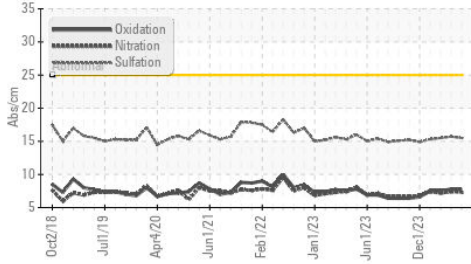
Silicon	ppm	ASTM D5185m	>20	5	5	5
Potassium	ppm	ASTM D5185m	>20	2	3	3
Fuel		WC Method	>4.0	<1.0	<1.0	<1.0
Water		WC Method	>0.1	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.5	0.6	0.6
Nitration	Abs/cm	*ASTM D7624	>20	7.3	7.4	7.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	15.5	15.7	15.5
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

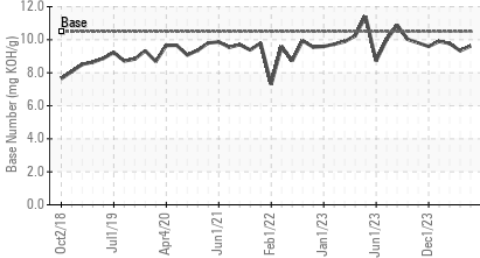
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>75	5	3	8
Boron	ppm	ASTM D5185m		53	43	44
Barium	ppm	ASTM D5185m		0	<1	<1
Molybdenum	ppm	ASTM D5185m		55	46	44
Manganese	ppm	ASTM D5185m		2	2	2
Magnesium	ppm	ASTM D5185m		14	37	15
Calcium	ppm	ASTM D5185m		4045	3332	3322
Phosphorus	ppm	ASTM D5185m		18	33	13
Zinc	ppm	ASTM D5185m		10	29	5
Sulfur	ppm	ASTM D5185m		2930	2657	2671
Oxidation	Abs/.1mm	*ASTM D7414	>25	7.7	7.8	7.5
Base Number (BN)	mg KOH/g	ASTM D2896	10.5	9.62	9.33	9.77
Visc @ 100°C	cSt	ASTM D445	15.5	14.96	14.7	14.7

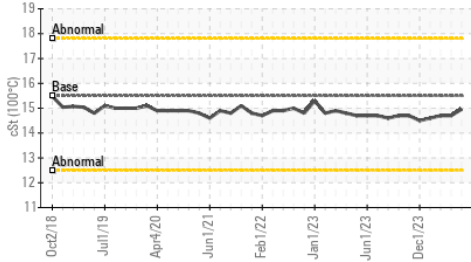
FT-IR (Direct Trend)



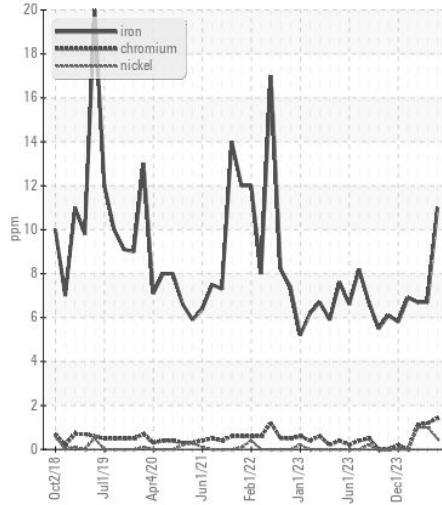
Base Number



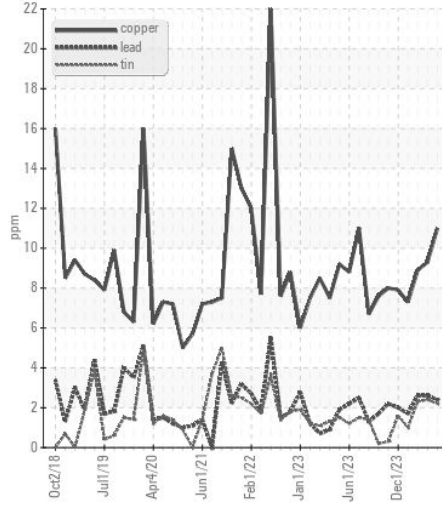
Viscosity @ 100°C



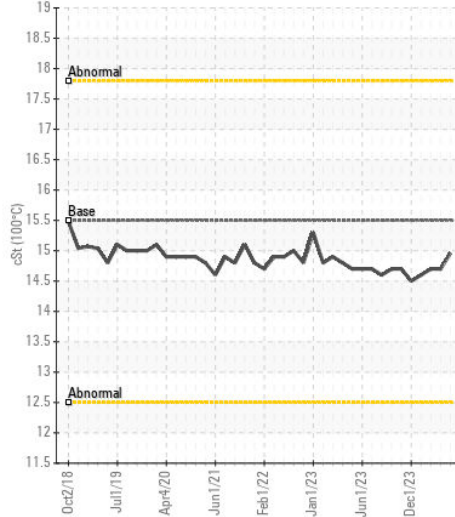
Ferrous Alloys



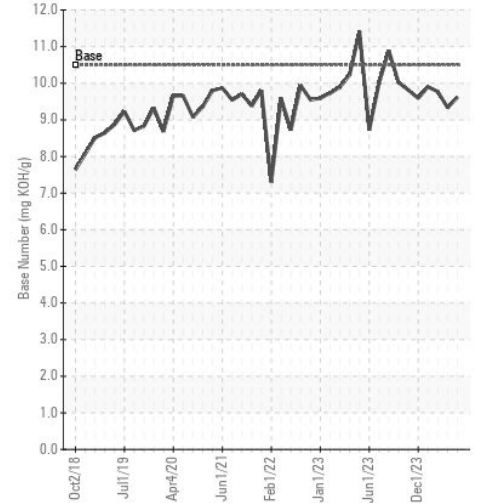
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : MW06193064
Lab Number : 06193064
Unique Number : 11049816
Test Package : MAR 2
Received : 28 May 2024
Tested : 31 May 2024
Diagnosed : 31 May 2024 - Sean Felton

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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)