



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
139-460
 Component
Diesel Engine
 Fluid
CHEVRON DELO 400 MULTIGRADE 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		RPL0016752	RPL0016658	RPL0016595
Sample Date		Client Info		12 Apr 2024	01 Mar 2024	19 Dec 2023
Machine Age	mls	Client Info		137587	128684	124407
Oil Age	mls	Client Info		133310	4277	114314
Filter Age	mls	Client Info		0	0	114314
Oil Changed		Client Info		N/A	N/A	Changed
Filter Changed		Client Info		N/A	N/A	Changed
Sample Status				NORMAL	NORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	3	9	54
Chromium	ppm	ASTM D5185m	>20	<1	<1	2
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m		2	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	4	5	12
Lead	ppm	ASTM D5185m	>40	0	1	15
Copper	ppm	ASTM D5185m	>330	0	<1	3
Tin	ppm	ASTM D5185m	>15	<1	<1	3
Vanadium	ppm	ASTM D5185m		0	<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.

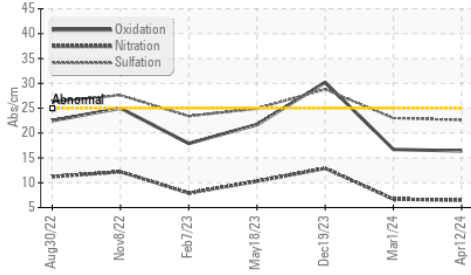
Silicon	ppm	ASTM D5185m	>25	6	6	15
Potassium	ppm	ASTM D5185m	>20	6	5	▲ 50
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.1	0.1	0.7
Nitration	Abs/cm	*ASTM D7624	>20	6.5	6.7	12.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.6	23.0	28.8
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	>0.2	NEG	NEG	NEG

FLUID CONDITION

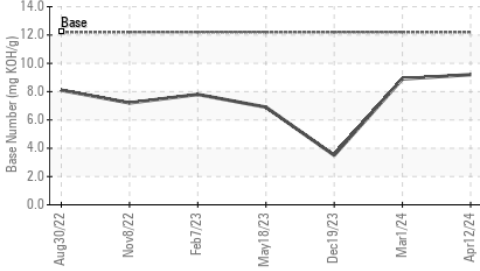
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		0	<1	2
Boron	ppm	ASTM D5185m		335	353	38
Barium	ppm	ASTM D5185m		0	0	<1
Molybdenum	ppm	ASTM D5185m		108	129	190
Manganese	ppm	ASTM D5185m		0	<1	2
Magnesium	ppm	ASTM D5185m		676	704	633
Calcium	ppm	ASTM D5185m		1467	1630	1560
Phosphorus	ppm	ASTM D5185m	1360	694	733	635
Zinc	ppm	ASTM D5185m	1480	780	831	789
Sulfur	ppm	ASTM D5185m		2730	2632	2238
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.4	16.7	30.2
Base Number (BN)	mg KOH/g	ASTM D2896	12.2	9.2	8.9	3.5
Visc @ 100°C	cSt	ASTM D445	15.1	13.5	13.4	13.7

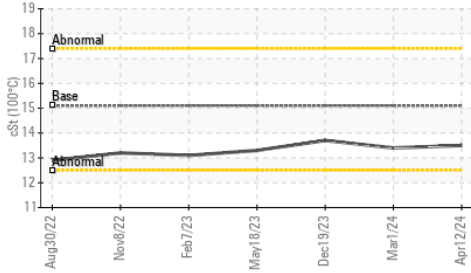
FT-IR (Direct Trend)



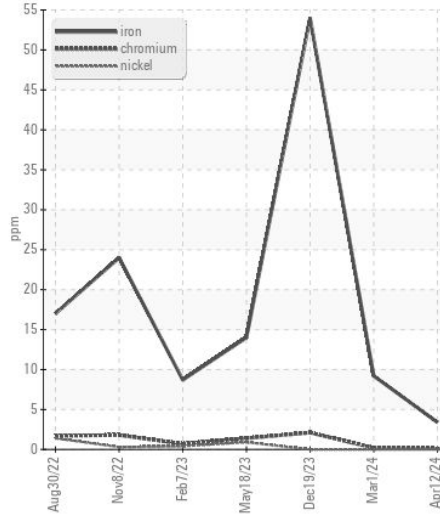
Base Number



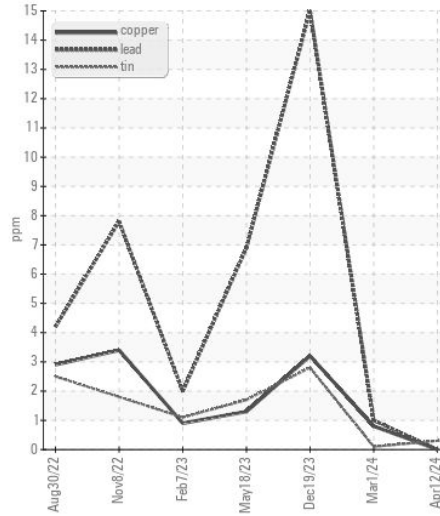
Viscosity @ 100°C



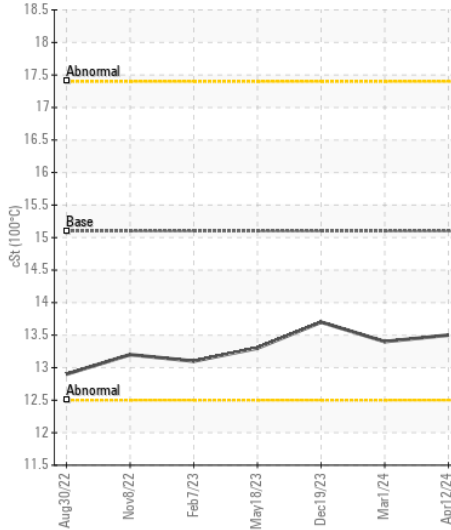
Ferrous Alloys



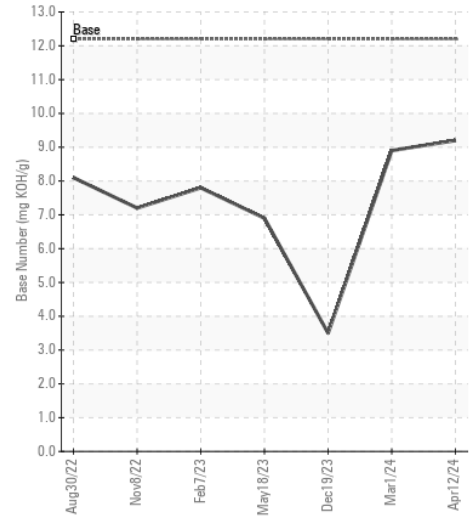
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RPL0016752
Lab Number : 06151445
Unique Number : 10981523
Test Package : FLEET
Received : 17 Apr 2024
Tested : 18 Apr 2024
Diagnosed : 18 Apr 2024 - Wes Davis

RTL PACLEASE - 7005 - Arlington
 1900 E Division
 Arlington, TX
 US 76011
 Contact: Richard Ronquillo
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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)