



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	MARGINAL

Machine Id
12249 REEFER
Component
Diesel Engine
Fluid
CHEVRON DELO 400 MULTIGRADE 15W40 (--- GAL)

RECOMMENDATION

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0913858	---	---
Sample Date		Client Info		03 Apr 2024	---	---
Machine Age	hrs	Client Info		1224	---	---
Oil Age	hrs	Client Info		1224	---	---
Filter Age	hrs	Client Info		1224	---	---
Oil Changed		Client Info		N/A	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				MARGINAL	---	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	14	---	---
Chromium	ppm	ASTM D5185m	>20	<1	---	---
Nickel	ppm	ASTM D5185m	>4	0	---	---
Titanium	ppm	ASTM D5185m		0	---	---
Silver	ppm	ASTM D5185m	>3	<1	---	---
Aluminum	ppm	ASTM D5185m	>20	2	---	---
Lead	ppm	ASTM D5185m	>40	0	---	---
Copper	ppm	ASTM D5185m	>330	1	---	---
Tin	ppm	ASTM D5185m	>15	0	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

Fuel content negligible. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	4	---	---
Potassium	ppm	ASTM D5185m	>20	0	---	---
Fuel	%	ASTM D3524	>5	1.1	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844	>3	1.1	---	---
Nitration	Abs/cm	*ASTM D7624	>20	8.7	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.6	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---	---

FLUID CONDITION

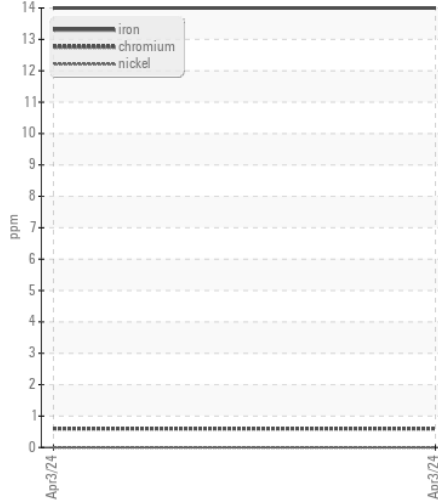
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil.

Sodium	ppm	ASTM D5185m		0	---	---
Boron	ppm	ASTM D5185m	151	7	---	---
Barium	ppm	ASTM D5185m	0.4	0	---	---
Molybdenum	ppm	ASTM D5185m	250	68	---	---
Manganese	ppm	ASTM D5185m		<1	---	---
Magnesium	ppm	ASTM D5185m	0	1008	---	---
Calcium	ppm	ASTM D5185m	2046	1290	---	---
Phosphorus	ppm	ASTM D5185m	1043	1112	---	---
Zinc	ppm	ASTM D5185m	943	1398	---	---
Sulfur	ppm	ASTM D5185m	5012	3916	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.3	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	12.5	9.1	---	---
Visc @ 100°C	cSt	ASTM D445	14.4	▲ 12.2	---	---

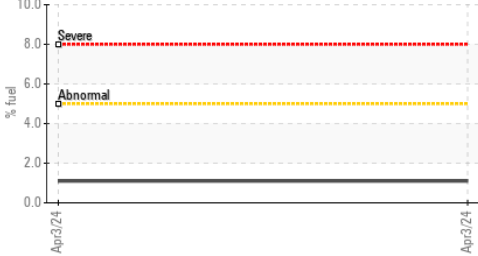
▲ Viscosity @ 100°C



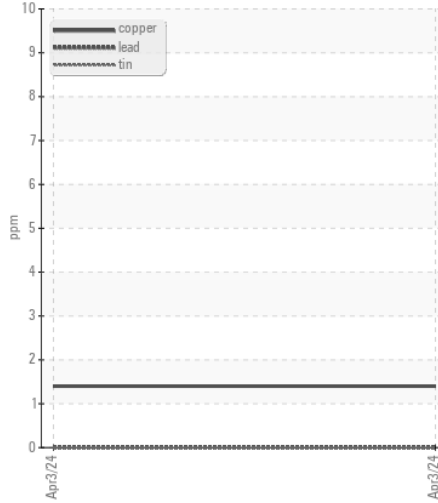
Ferrous Alloys



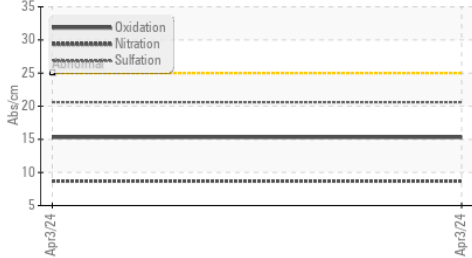
Fuel Dilution



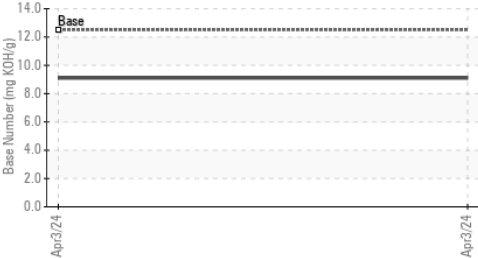
Non-ferrous Metals



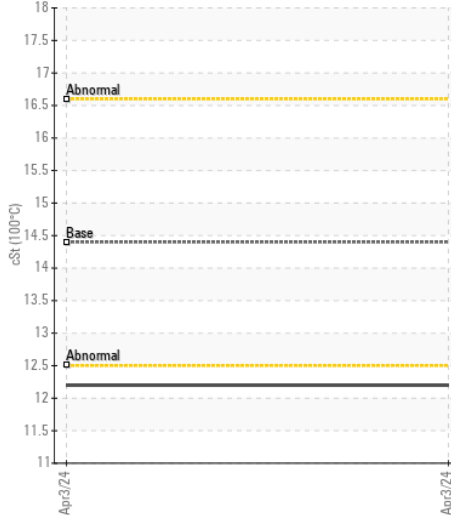
FT-IR (Direct Trend)



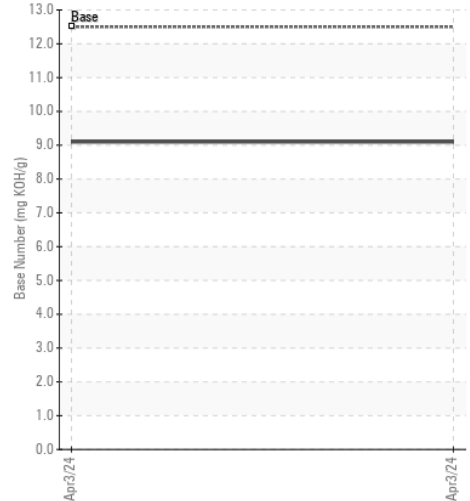
Base Number



▲ Viscosity @ 100°C



Base Number



Certificate L2367

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

Sample No. : WC0913858

Lab Number : 06193348

Unique Number : 11050100

Test Package : FLEET (Additional Tests: FuelDilution, PercentFuel)

Received : 28 May 2024

Tested : 31 May 2024

Diagnosed : 31 May 2024 - Jonathan Hester

SALEM NATIONALEASE CORPORATION

198 PARK PLAZA DRIVE

WINSTON SALEM, NC

US 27105

Contact: Audrey Hopkins

Audrey.Hopkins@salemcorp.com

T: (336)767-9642

F: x:

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)