



OIL ANALYSIS REPORT

WEAR	ATTENTION
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
BUS 687
 Component
Diesel Engine
 Fluid
CHEVRON DELO 400 LE 15W40 (--- GAL)

RECOMMENDATION

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		DC0031950	DC0025256	DC0023299
Sample Date		Client Info		29 Mar 2024	02 Feb 2023	06 Sep 2022
Machine Age	mls	Client Info		345755	328619	311947
Oil Age	mls	Client Info		0	0	0
Filter Age	mls	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	53	27	14
Chromium	ppm	ASTM D5185m	>20	1	2	<1
Nickel	ppm	ASTM D5185m	>4	<1	<1	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>3	0	<1	0
Aluminum	ppm	ASTM D5185m	>20	7	5	10
Lead	ppm	ASTM D5185m	>40	1	3	<1
Copper	ppm	ASTM D5185m	>330	2	2	2
Tin	ppm	ASTM D5185m	>15	<1	1	0
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

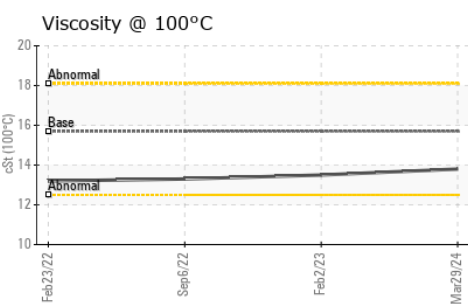
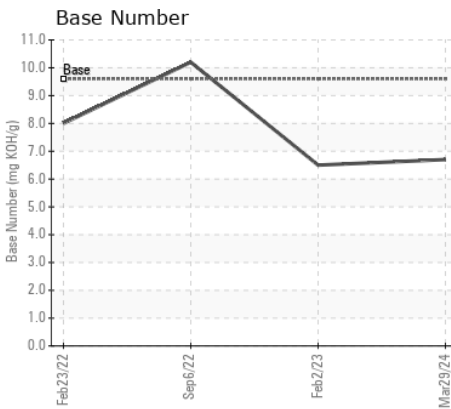
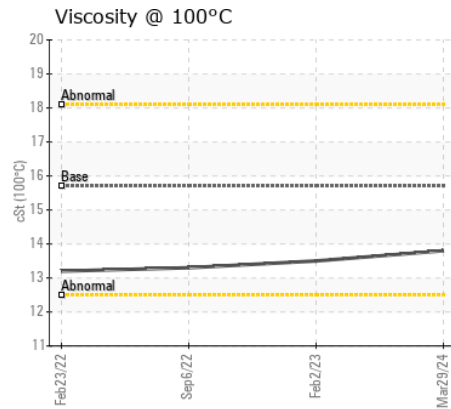
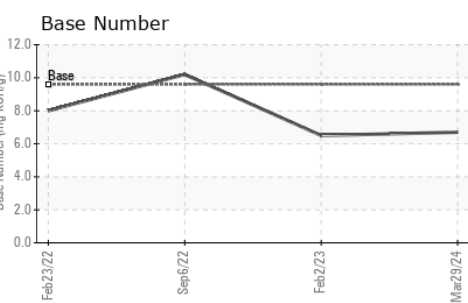
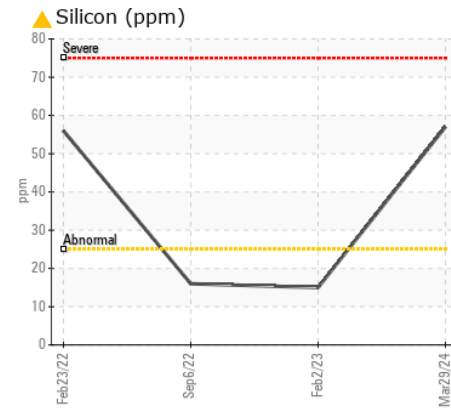
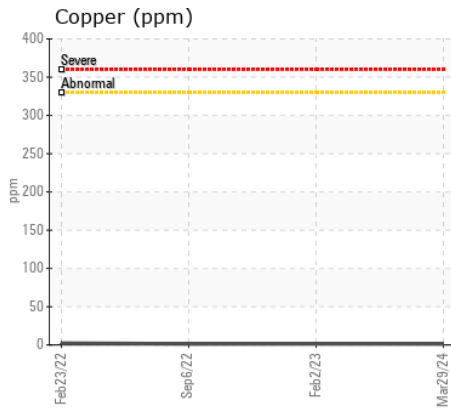
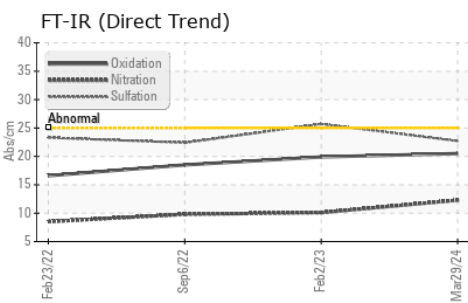
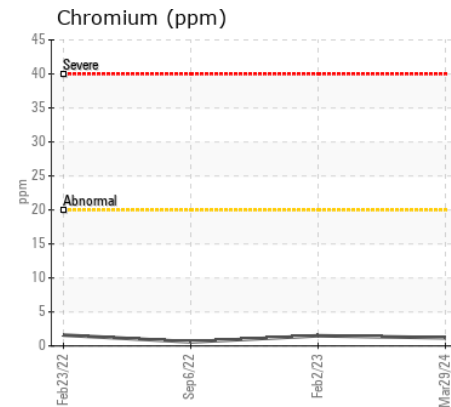
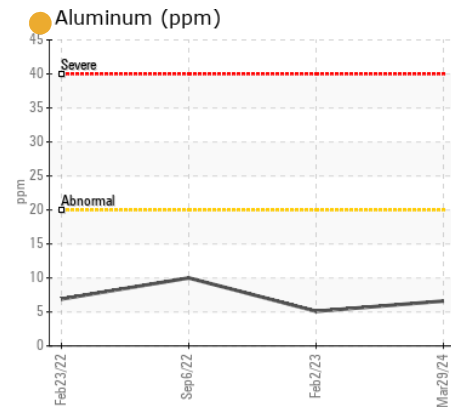
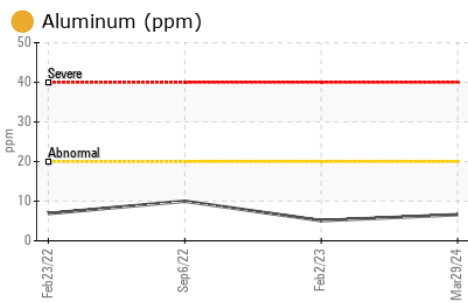
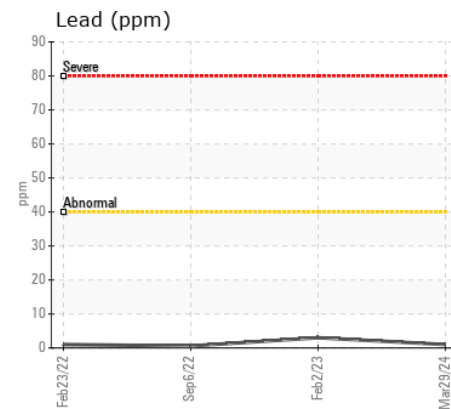
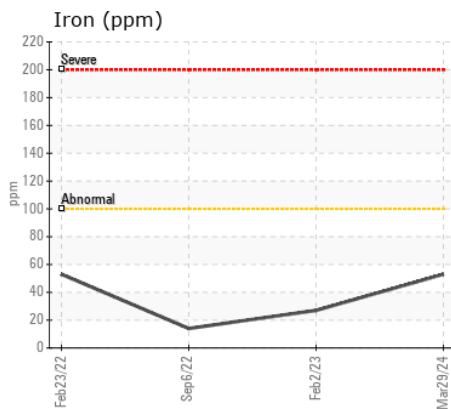
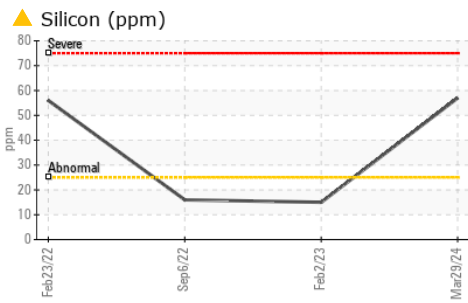
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Silicon	ppm	ASTM D5185m	>25	57	15	16
Potassium	ppm	ASTM D5185m	>20	9	0	0
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	0.5	0.8	0.3
Nitration	Abs/cm	*ASTM D7624	>20	12.3	10.1	9.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.7	25.7	22.4
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 acceptable for the time in service.

Sodium	ppm	ASTM D5185m		44	4	2
Boron	ppm	ASTM D5185m		58	190	49
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		57	91	54
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		752	473	716
Calcium	ppm	ASTM D5185m		1292	1476	1207
Phosphorus	ppm	ASTM D5185m	1200	752	974	746
Zinc	ppm	ASTM D5185m	1300	940	1201	845
Sulfur	ppm	ASTM D5185m	3200	2783	3400	2723
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.5	19.9	18.5
Base Number (BN)	mg KOH/g	ASTM D2896	9.6	6.7	6.5	10.2
Visc @ 100°C	cSt	ASTM D445	15.7	13.8	13.5	13.3



Certificate L2367

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

Sample No. : DC0031950

Lab Number : 06145632

Unique Number : 10970440

Test Package : MOB 1 (Additional Tests: TBN)

Received : 11 Apr 2024

Tested : 12 Apr 2024

Diagnosed : 14 Apr 2024 - Don Baldrige

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)

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