



OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ABNORMAL

Machine Id
139-337
Component
Diesel Engine
Fluid
CHEVRON DELO 400 SAE 10W30 (--- GAL)

RECOMMENDATION

We recommend that you drain the oil from the component if this has not already been done. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		RPL0014037	RPL0010757	RPL0005172
Sample Date		Client Info		11 Dec 2023	01 Sep 2023	05 Jan 2023
Machine Age	hrs	Client Info		10607	9640	217885
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	Changed
Filter Changed		Client Info		N/A	N/A	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

The iron level is abnormal. All other component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	▲ 104	37	37
Chromium	ppm	ASTM D5185m	>20	4	2	1
Nickel	ppm	ASTM D5185m	>4	0	<1	<1
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	<1
Aluminum	ppm	ASTM D5185m	>20	5	3	4
Lead	ppm	ASTM D5185m	>40	6	3	4
Copper	ppm	ASTM D5185m	>330	3	1	1
Tin	ppm	ASTM D5185m	>15	0	<1	1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

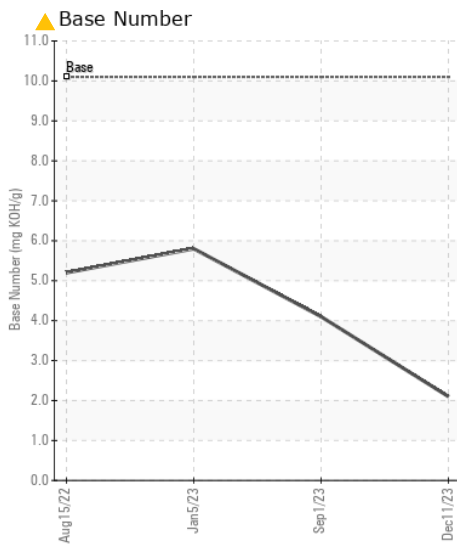
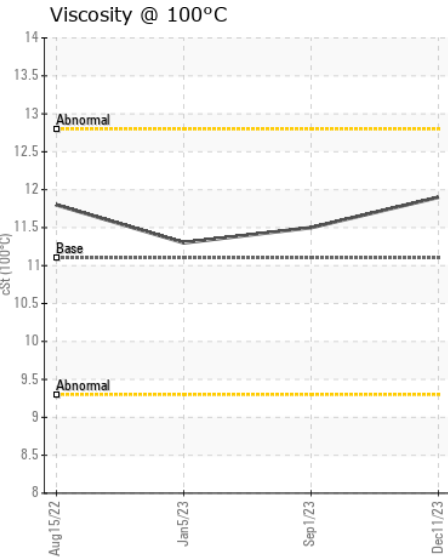
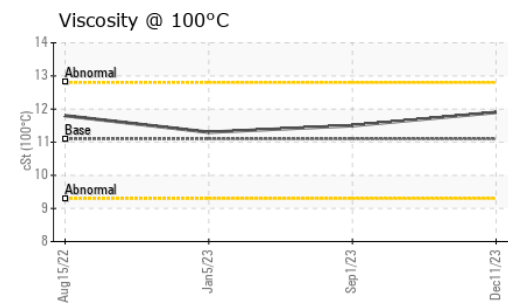
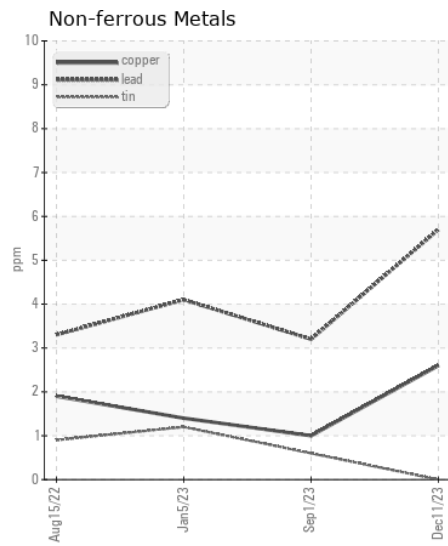
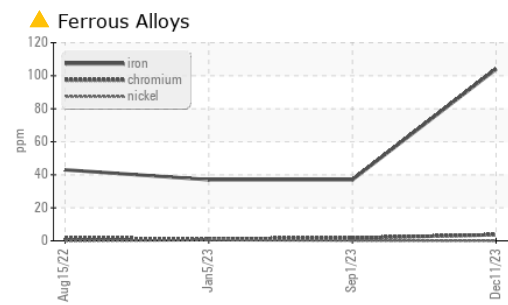
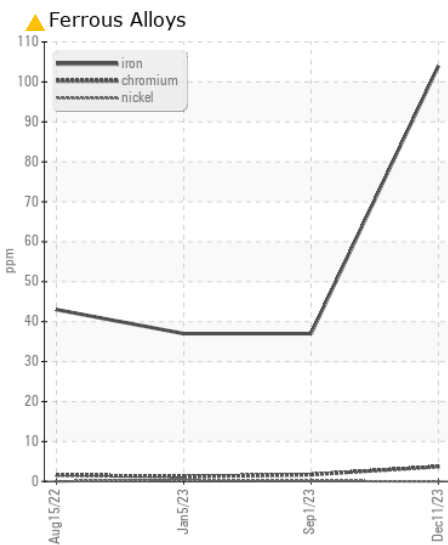
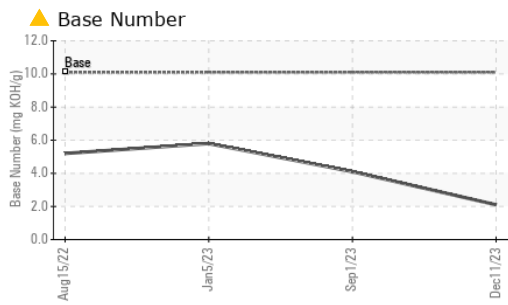
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	9	6	6
Potassium	ppm	ASTM D5185m	>20	8	7	8
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	0.8	0.5	0.6
Nitration	Abs/cm	*ASTM D7624	>20	14.8	12.1	11.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	34.2	26.8	24.3
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 low BN value indicates relatively little reserve alkalinity remaining in this oil. The oil is no longer serviceable.

Sodium	ppm	ASTM D5185m		6	4	4
Boron	ppm	ASTM D5185m		21	22	22
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		19	18	12
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		641	509	694
Calcium	ppm	ASTM D5185m		1689	1425	1470
Phosphorus	ppm	ASTM D5185m	1260	876	654	710
Zinc	ppm	ASTM D5185m	1400	1031	815	876
Sulfur	ppm	ASTM D5185m		3466	2556	3229
Oxidation	Abs/.1mm	*ASTM D7414	>25	38.1	26.3	18.3
Base Number (BN)	mg KOH/g	ASTM D2896	10.1	▲ 2.1	4.1	5.8
Visc @ 100°C	cSt	ASTM D445	11.1	11.9	11.5	11.3



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RPL0014037 **Received** : 10 Jan 2024
Lab Number : 06056121 **Diagnosed** : 11 Jan 2024
Unique Number : 10822070 **Diagnostician** : Angela Borella
Test Package : FLEET

RTL PACLEASE - 7001 - Houston
 6300 N. Loop East
 Houston, TX
 US 77026
 Contact: RODNEY BRIGGS
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Certificate L2367
 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)