



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

Machine Id
349650-152248
 Component
Diesel Engine
 Fluid
CHEVRON DELO 400 XLE 15W40 (--- QTS)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		RY0123437	RY0123224	RY0123239
Sample Date		Client Info		05 Feb 2024	10 Feb 2023	16 Aug 2022
Machine Age	mls	Client Info		29000	0	0
Oil Age	mls	Client Info		0	11000	6000
Filter Age	mls	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ATTENTION	ATTENTION	ATTENTION

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	81	28	15
Chromium	ppm	ASTM D5185m	>20	3	<1	1
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	<1
Aluminum	ppm	ASTM D5185m	>20	10	8	8
Lead	ppm	ASTM D5185m	>40	<1	<1	1
Copper	ppm	ASTM D5185m	>330	4	2	2
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

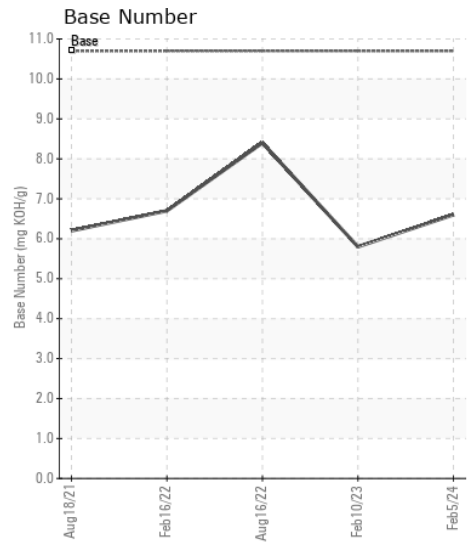
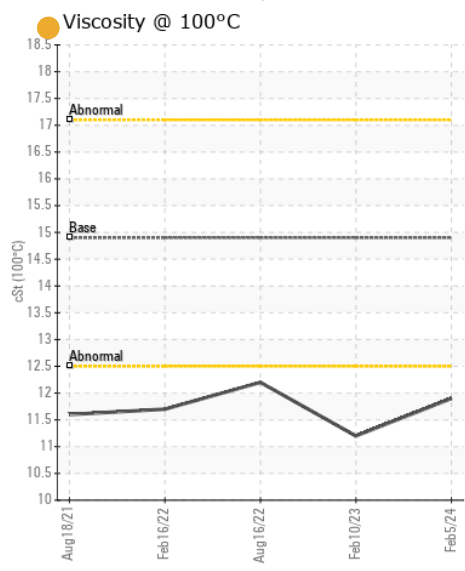
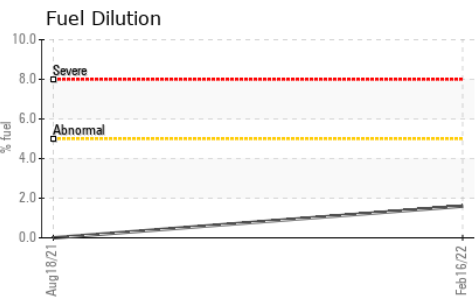
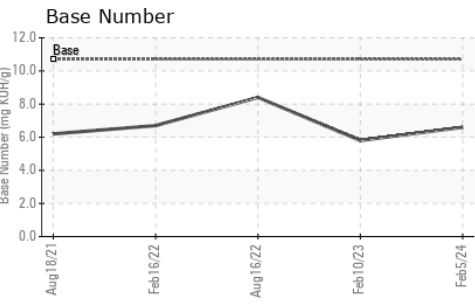
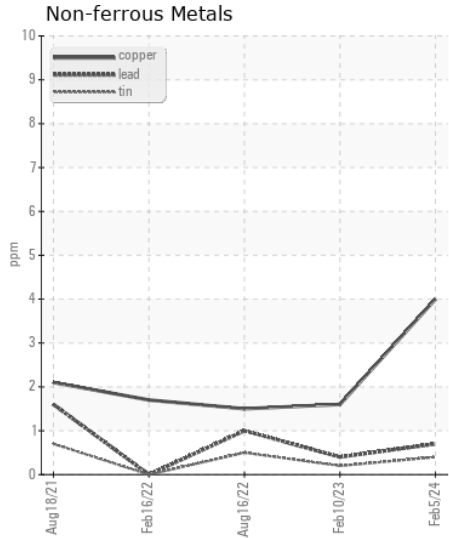
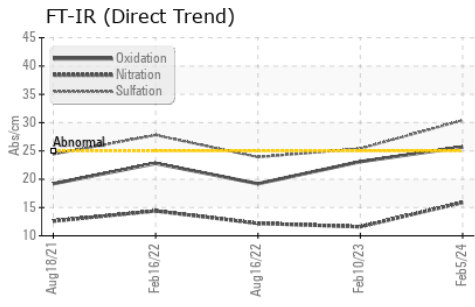
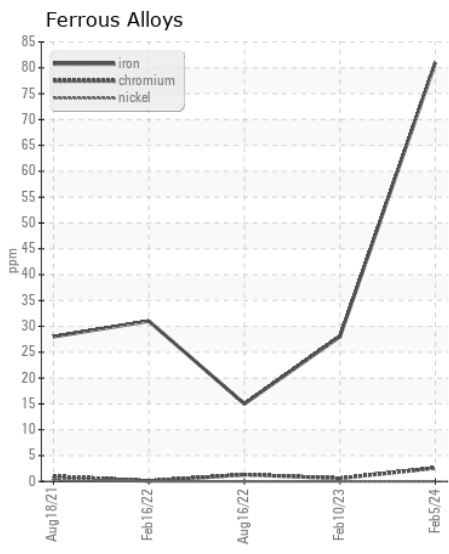
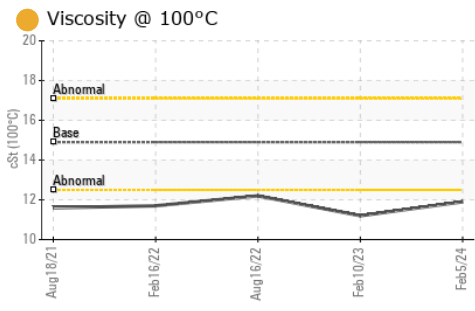
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	11	6	5
Potassium	ppm	ASTM D5185m	>20	10	8	4
Fuel	%	ASTM D3524	>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	2	0.8	0.6
Nitration	Abs/cm	*ASTM D7624	>20	15.9	11.6	12.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	30.4	25.4	23.9
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 oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m		5	4	5
Boron	ppm	ASTM D5185m		23	86	88
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		39	75	69
Manganese	ppm	ASTM D5185m		1	<1	1
Magnesium	ppm	ASTM D5185m		653	437	610
Calcium	ppm	ASTM D5185m		1369	1298	1398
Phosphorus	ppm	ASTM D5185m	760	786	763	669
Zinc	ppm	ASTM D5185m	830	934	1006	835
Sulfur	ppm	ASTM D5185m	2770	3202	2848	2897
Oxidation	Abs/.1mm	*ASTM D7414	>25	25.7	23.1	19.2
Base Number (BN)	mg KOH/g	ASTM D2896	10.7	6.6	5.8	8.4
Visc @ 100°C	cSt	ASTM D445	14.9	11.9	11.2	12.2



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RY0123437 **Received** : 22 May 2024
Lab Number : 06187314 **Tested** : 23 May 2024
Unique Number : 11044066 **Diagnosed** : 24 May 2024 - Sean Felton
Test Package : FLEET (Additional Tests: FuelDilution)

Ryder Transportation Services
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 MIAMI, FL
 US 33138
 Contact: ANTHONY INGRAM
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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)