

Machine Id **320057** Component **Diesel Engine** Fluid **CHEVRON DELO 400 XLE 10W30 (--- QTS)**

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor. Please specify the component make and model with your next sample.	Sample Number		Client Info		RY0123434	RY0123214	RY0123243
	Sample Date		Client Info		09 Feb 2024	19 Apr 2023	20 Oct 2022
	Machine Age	mls	Client Info		18000	0	0
	Oil Age	mls	Client Info		0	32000	38000
	Filter Age	mls	Client Info		0	0	0
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Changed
	Sample Status				NORMAL	NORMAL	ATTENTION
WEAR	Iron	ppm	ASTM D5185m	<100	45	60	81
Metal levels are typical for a new component breaking in.	Chromium	ppm	ASTM D5185m		3	2	3
	Nickel	ppm	ASTM D5185m		ہ <1	0	0
	Titanium	ppm	ASTM D5185m	~7	<1	0	0
	Silver	ppm	ASTM D5185m	-3	<1	0	0
	Aluminum	ppm	ASTM D5185m		18	19	26
	Lead	ppm	ASTM D5185m		-10 <1	0	0
	Copper	ppm	ASTM D5185m		4	4	8
	Tin	ppm	ASTM D5185m		1	<1	<1
	Vanadium	ppm	ASTM D5185m	210	<1	0	<1
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
		Jouran	VISUUI	NONE		NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m		13	13	16
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m	>20	14	20	33
	Fuel		WC Method		<1.0	<1.0	2 .0
	Water		WC Method	>0.2	NEG	NEG	NEG
	Glycol		WC Method		NEG	NEG	NEG
	Soot %	%	*ASTM D7844	>3	0.7	1.3	1.3
	Nitration	Abs/cm	*ASTM D7624	>20	12.4	13.8	15.1
	Sulfation	Abs/.1mm	*ASTM D7415	>30	24.2	29.3	29.4
	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	Sodium	ppm	ASTM D5185m		4	2	3
	Boron	ppm	ASTM D5185m		23	28	13
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185m		0	0	0
	Molybdenum	ppm	ASTM D5185m		41	85	82
	Manganese	ppm	ASTM D5185m		1	1	2
	Magnesium	ppm	ASTM D5185m		833	482	669
	Calcium	ppm	ASTM D5185m	2900	1680	1449	1621
	Phosphorus	ppm	ASTM D5185m	1100	1022	878	698
	Zinc	ppm	ASTM D5185m	1200	1127	1186	918
	Sulfur	ppm	ASTM D5185m		4342	2787	2995
	Oxidation	Abs/.1mm	*ASTM D7414		18.5	24.7	24.8
		1/011/		10.0		= 0	= 0

Base Number (BN) mg KOH/g ASTM D2896 10.3

ASTM D445 11.9

Visc @ 100°C cSt

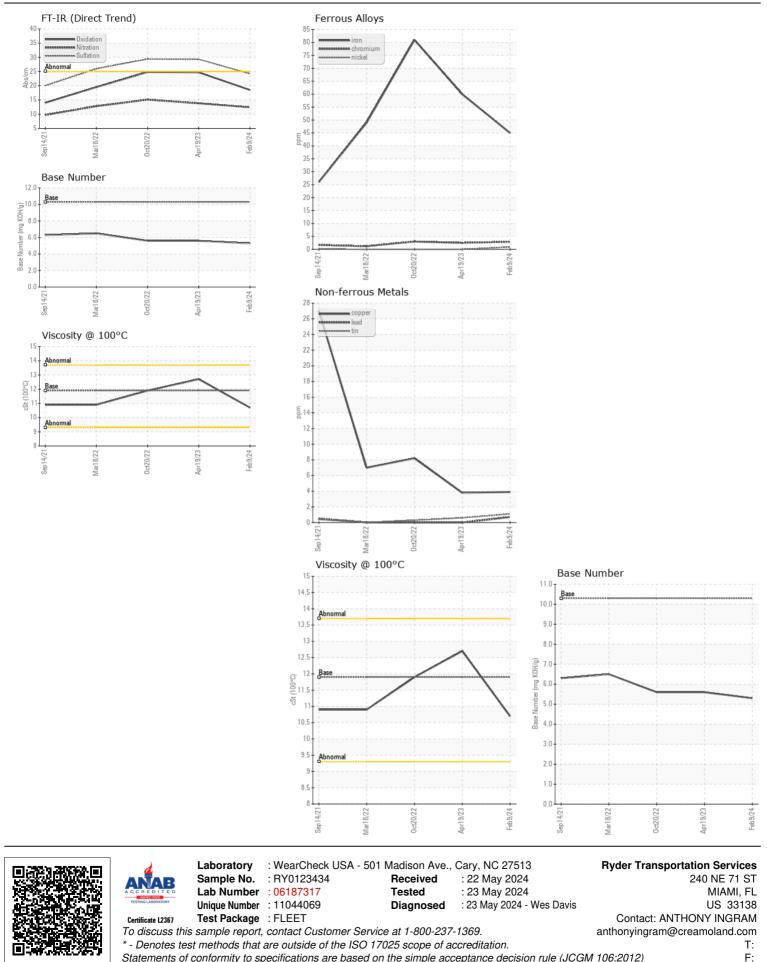
5.6 5.6

11.9

12.7

5.3

10.7



Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)