

# **OIL ANALYSIS REPORT**

Area [6658] 44

Component

**Diesel Engine** 

CHEVRON DELO 400 SAE 10W30 (--- GAL)

# Sample Rating Trend



# Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

# Contamination

There is no indication of any contamination in the

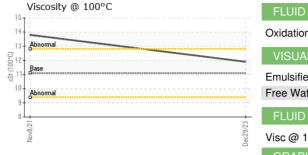
# **Fluid Condition**

The condition of the oil is acceptable for the time in service.

)			Nov2021	Dec2023		
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0846148	WC0576472	
Sample Date		Client Info		29 Dec 2023	08 Nov 2021	
Machine Age	kms	Client Info		422599	265439	
Oil Age	kms	Client Info		0	0	
Oil Changed		Client Info		Not Changd	Not Changd	
Sample Status				NORMAL	NORMAL	
CONTAMINATIO	N	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	
Water		WC Method	>0.2	NEG	NEG	
Glycol		WC Method		NEG	NEG	
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>100	12	27	
Chromium	ppm	ASTM D5185(m)	>20	0	<1	
Nickel	ppm	ASTM D5185(m)	>4	0	0	
Titanium	ppm	ASTM D5185(m)		0	<1	
Silver	ppm	ASTM D5185(m)	>3	0	<1	
Aluminum	ppm	ASTM D5185(m)	>20	3	6	
Lead	ppm	ASTM D5185(m)	>40	0	0	
Copper	ppm	ASTM D5185(m)	>330	<1	1	
Tin	ppm	ASTM D5185(m)	>15	0	0	
Antimony	ppm	ASTM D5185(m)		0	<1	
Vanadium	ppm	ASTM D5185(m)		0	<1	
Beryllium	ppm	ASTM D5185(m)		0	0	
Cadmium	ppm	ASTM D5185(m)		0	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		40	52	
Barium	ppm	ASTM D5185(m)		0	0	
Molybdenum	ppm	ASTM D5185(m)		62	82	
Manganese	ppm	ASTM D5185(m)		0	<1	
Magnesium	ppm	ASTM D5185(m)		977	795	
Calcium	ppm	ASTM D5185(m)		1145	1454	
Phosphorus	ppm	ASTM D5185(m)	1260	1030	793	
Zinc	ppm	ASTM D5185(m)	1400	1221	898	
Sulfur	ppm	ASTM D5185(m)		2965	2308	
Lithium	ppm	ASTM D5185(m)		<1	<1	
CONTAMINANT	S	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	5	8	
Sodium	ppm	ASTM D5185(m)		2	9	
Potassium	ppm	ASTM D5185(m)	>20	3	11	
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	0.2	0.3	
Nitration	Abs/cm	ASTM D7624*	>20	10.0	11.4	
Sulfation	Abs/.1mm	ASTM D7415*	>30	22.1	27.0	



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FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	19.7	25.1	
VISUAL		method	limit/base	current	history1	history2
Emulsified Water Free Water	scalar scalar	Visual* Visual*	>0.2	NEG NEG	NEG NEG	
FLUID PROPER	ΓIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	11.1	11.9	13.8	
GRAPHS						

1.00 @ 1.00 0	• • • • • • • • • • • • • • • • • • • •		
GRAPHS			
Iron (ppm)		Lead (ppm)	
Severe		80 - Severe	
		60 -	
Abnormal		Abnormal	
		20	
		0	
Mov8/21-	Dec29/23	Nov8/211	
	Dec		
Aluminum (ppm)		Chromium (ppm)	
Severe		40 - Severe	
		_ 30	
Abnormal		Abnormal 20+	
		10	
		0	
Nov8/21	Dec29/23	Nov8/21	
Copper (ppm)	Ö	Silicon (ppm)	
Severe		80 T Severe	***************************************
Abnormal		70 + 60 + 60 + 60 + 60 + 60 + 60 + 60 +	
		50	
		30 - Abnormal	
1		10 + \	
- 12	- 53	0 12	
Nov8/21	Dec29/23	Nov8/21	
Viscosity @ 100°C		Soot %	
		6.0 5.0 Severe	
Abnomal		4.0	
Base		abnormal	
		2.0	
Abnormal		1.0	
<u> </u>		0.0	



CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No. Lab Number Unique Number : 5707819 Test Package : MOB 1

: WC0846148 : 02606733

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Recieved

: 05 Jan 2024 : 05 Jan 2024

Diagnosed Diagnostician : Wes Davis

To discuss this sample report, contact Customer Service at 1-800-268-2131. Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Validity of results and interpretation are based on the sample and information as supplied.

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