

WEAR	
CONTAMINATION	
FLUID CONDITION	NORMAL

[43948499]

1426M

Diesel Engine

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

RECOMMENDATION

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0737697		
Sample Date		Client Info		28 Mar 2024		
Machine Age	kms	Client Info		144480		
Oil Age	kms	Client Info		21381		
Filter Age	kms	Client Info		21381		
Oil Changed		Client Info		Changed		
Filter Changed		Client Info		Changed		
Sample Status				NORMAL		
Iron	ppm	ASTM D5185(m)	>130	34		
Chromium	ppm	ASTM D5185(m)	>10	<1		
Nickel	ppm	ASTM D5185(m)	>4	0		
Titanium	ppm	ASTM D5185(m)	>2	0		
Silver	ppm	ASTM D5185(m)	>2	0		
Aluminum	ppm	ASTM D5185(m)	>20	20		
Lead	ppm	ASTM D5185(m)	>20	0		
Copper	ppm	ASTM D5185(m)	>125	3		
Tin	ppm	ASTM D5185(m)	>4	0		
Vanadium	ppm	ASTM D5185(m)		0		
White Metal	scalar	Visual*	NONE	NONE		
Yellow Metal	scalar	Visual*	NONE	NONE		
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Silicon	ppm	ASTM D5185(m)	>25	4		
Potassium	ppm	ASTM D5185(m)	>20	22		
Fuel		WC Method	>3.0	<1.0		
Water		WC Method	>0.2	NEG		
Glycol		WC Method		NEG		
Soot %	%	ASTM D7844*	>6	0.1		
Nitration	Abs/cm	ASTM D7624*	>20	10.5		
Sulfation	Abs/.1mm	ASTM D7415*	>30	24.7		
Silt	scalar	Visual*	NONE	NONE		
Debris	scalar	Visual*	NONE	NONE		
Sand/Dirt	scalar	Visual*	NONE	NONE		
Appearance	scalar	Visual*	NORML	NORML		
Odor	scalar	Visual*	NORML	NORML		
Emulsified Water	scalar	Visual*	>0.2	NEG		
Sodium	ppm	ASTM D5185(m)		2		
Boron	ppm	ASTM D5185(m)		104		
Barium	ppm	ASTM D5185(m)		0		
Molybdenum	ppm	ASTM D5185(m)		21		
Manganese	ppm	ASTM D5185(m)		<1		
Magnesium	ppm	ASTM D5185(m)		163		
Calcium	ppm	ASTM D5185(m)		2092		
Phosphorus	ppm	ASTM D5185(m)	1260	803		
Zinc	ppm	ASTM D5185(m)	1400	969		
Sulfur	ppm	ASTM D5185(m)		2707		
Oxidation	Abs/.1mm	ASTM D7414*	>25	20.4		
Visc @ 100°C	cSt	ASTM D7279(m)	11.1	12.8		
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FLUID CONDITION

Additive levels indicate the addition of a different brand, or type of oil. The condition of the oil is acceptable for the time in service.



