

WEAR NORMAL CONTAMINATION NORMAL FLUID CONDITION NORMAL

OPG1 MANAGEMENT [151288]

33205587

Component Diesel Engine

VALVOLINE 15W40 (--- GAL)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		CU0022260		
	Sample Date		Client Info		10 Dec 2023		
	Machine Age	hrs	Client Info		8		
	Oil Age	hrs	Client Info		1		
	Filter Age	hrs	Client Info		1		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				NORMAL		
WEAR	Iron			. 65	4		
Metal levels are typical for a new component breaking in.	Chromium	ppm	ASTM D5185(m)		1		
	Nickel	ppm	ASTM D5185(m)		0		
	Titanium	ppm	ASTM D5185(m)		<1 17		
	Silver	ppm	ASTM D5185(m) ASTM D5185(m)		17 0		
	Aluminum	ppm	ASTM D5185(m)		1		
	Lead	ppm	ASTM D5185(m) ASTM D5185(m)		۰ <1		
	Copper	ppm ppm	ASTM D5185(m)		<1		
	Tin	ppm	ASTM D5185(m)		0		
	Vanadium	ppm	ASTM D5185(m)	~_	0		
	Valladidiii						
CONTAMINATION There is no indication of any contamination in the oil.	Silicon	ppm	ASTM D5185(m)	>25	3		
	Potassium	ppm	ASTM D5185(m)	>20	<1		
	Fuel		WC Method	>3.0	<1.0		
	Water		WC Method	>0.2	NEG		
	Glycol		WC Method		NEG		
	Soot %	%	ASTM D7844*	>6	0		
	Nitration	Abs/cm	ASTM D7624*	>20	4.6		
	Sulfation	Abs/.1mm	ASTM D7415*	>30	17.4		
	Emulsified Water	scalar	Visual*	>0.2	NEG		
FLUID CONDITION	Sodium	ppm	ASTM D5185(m)		2		
The condition of the oil is acceptable for the time in service.	Boron	ppm	ASTM D5185(m)	39	28		
	Barium	ppm	ASTM D5185(m)	1	0		
	Molybdenum	ppm	ASTM D5185(m)		47		
	Manganese	ppm	ASTM D5185(m)		0		
	Magnesium	ppm	ASTM D5185(m)		833		
	Calcium	ppm	ASTM D5185(m)		1185		
	Phosphorus	ppm	ASTM D5185(m)		1026		

Zinc

Sulfur

Oxidation

Visc @ 100°C cSt

Contact/Location: Elisia Johnson - CUMMISGEN

1150

2913

11.9

14.2

ASTM D5185(m) 1069

ASTM D5185(m) 2624

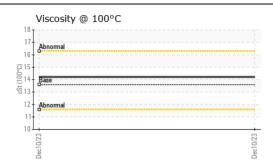
ASTM D7414* >25

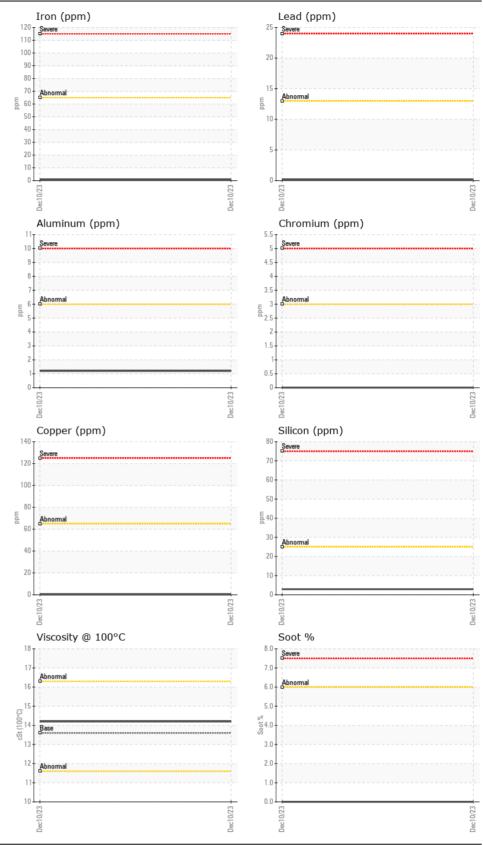
ASTM D7279(m) 13.6

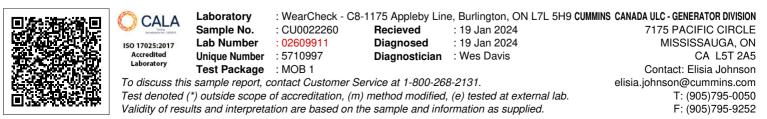
ppm

ppm

Abs/.1mm







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