

[71396] Machine Id SUMMERSIDE (S/N L190699866) Component Diesel Engine

VALVOLINE 15W40 (--- GAL)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. No other corrective action is recommended at this time.	Sample Number		Client Info		CU0021695	CU0019888	
	Sample Date		Client Info		11 Jun 2024	02 Mar 2023	
	Machine Age	hrs	Client Info		98	74	
	Oil Age	hrs	Client Info		0	0	
	Filter Age	hrs	Client Info		0	0	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		Changed	Changed	
	Sample Status				MARGINAL	NORMAL	
WEAR	Iron	ppm	ASTM D5185(m)	>100	3	7	
Metal levels are typical for a new component breaking in.	Chromium	ppm	ASTM D5185(m)	>20	0	0	
	Nickel	ppm	ASTM D5185(m)	>4	0	<1	
	Titanium	ppm	ASTM D5185(m)		0	<1	
	Silver	ppm	ASTM D5185(m)	>3	0	0	
	Aluminum	ppm	ASTM D5185(m)	>20	<1	2	
	Lead	ppm	ASTM D5185(m)	>40	0	2	
	Copper	ppm	ASTM D5185(m)	>330	4	109	
	Tin	ppm	ASTM D5185(m)	>15	0	<1	
	Vanadium	ppm	ASTM D5185(m)		0	0	
	White Metal	scalar	Visual*	NONE	NONE		
	Yellow Metal	scalar	Visual*	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185(m)	>25	4	6	
There is a trace of moisture present in the oil. Test for glycol is negative.	Potassium	ppm	ASTM D5185(m)	>20	<1	1	
	Fuel		WC Method	>5	<1.0	<1.0	
	Water	%	ASTM D6304*	>0.2	🔺 0.160		
	ppm Water	ppm	ASTM D6304*	>2000	🔺 1609		
	Glycol	%	ASTM D7922*		0.0	NEG	
	Soot %	%	ASTM D7844*	>3	0	0	
	Nitration	Abs/cm	ASTM D7624*	>20	8.0	5.7	
	Sulfation	Abs/.1mm	ASTM D7415*	>30	19.8	19.0	
	Silt	scalar	Visual*	NONE	NONE		
	Debris	scalar	Visual*	NONE	NONE		
	Sand/Dirt	scalar	Visual*	NONE	NONE		
	Appearance	scalar	Visual*	NORML	WGOIL		
	Odor	scalar	Visual*	NORML	NORML	NORML	
	Emulsified Water	scalar	Visual*	>0.2	▲ 1%	NEG	
FLUID CONDITION	Sodium	ppm	ASTM D5185(m)		4	4	
The condition of the oil is acceptable for the time in service.	Boron	ppm	ASTM D5185(m)	39	41	42	
	Barium	ppm	ASTM D5185(m)		<1	<1	
	Molybdenum	ppm	ASTM D5185(m)	49	44	49	
	Manganese	ppm	ASTM D5185(m)		<1	<1	
	Magnesium	ppm	ASTM D5185(m)		759	840	
	Calcium	ppm	ASTM D5185(m)		1136	1132	
	Phosphorus	ppm	ASTM D5185(m)		680	855	
	Zinc	ppm	ASTM D5185(m)	1069	819	914	
	0.14						

Sulfur

Oxidation

ppm ASTM D5185(m) 2624

Abs/.1mm ASTM D7414* >25

Visc @ 100°C cSt ASTM D7279(m) 13.6

2187

12.2

13.5

1902

19.3

13.8



