

## WEAR NORMAL CONTAMINATION NORMAL FLUID CONDITION ABNORMAL



Machine Id MACK 1242322 Diesel Engine Fluid

SAE 15W40 (--- GAL)

## RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

## WEAR

Metal levels are typical for a components first oil change.

CONTAMINATION	
Evel content no aliaible. Elevated alua	

Fuel content negligible. Elevated aluminum (AI) 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 (component. There is no indication of any contamination in

 $\ensuremath{\mathsf{equipment/components}}$  . There is no indication of any contamination in the oil.

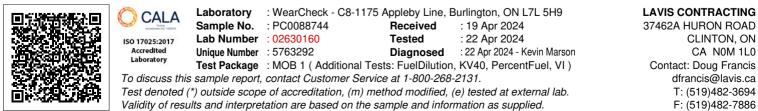
## FLUID CONDITION

Viscosity of sample indicates oil is within SAE 5W30 range, advise investigate. The condition of the oil is acceptable for the time in service.

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Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PC0088744		
Sample Date		Client Info		16 Apr 2024		
Machine Age	kms	Client Info		15000		
Oil Age	kms	Client Info		15000		
Filter Age	kms	Client Info		15000		
Oil Changed		Client Info		Changed		
Filter Changed		Client Info		Changed		
Sample Status				ABNORMAL		
Iron	ppm	ASTM D5185(m)	>120	41		
Chromium	ppm	ASTM D5185(m)	>20	1		
Nickel		ASTM D5185(m)	>5	10		
Titanium	ppm	ASTM D5185(m)	>2	<1		
Silver	ppm		>2	<1		
Aluminum	ppm	ASTM D5185(m) ASTM D5185(m)	>2	<1 12		
Lead	ppm			12 <1		
Copper	ppm	ASTM D5185(m) ASTM D5185(m)	>40 >330	<1 22		
Tin	ppm	ASTM D5185(m)	>330	22		
Vanadium	ppm	ASTM D5185(m)	>10	2		
vanaulum	ppm					
Silicon	ppm	ASTM D5185(m)	>25	86		
Potassium	ppm	ASTM D5185(m)	>20	31		
Fuel	%	ASTM D7593*	>3.0	0.5		
Water		WC Method	>0.2	NEG		
Glycol		WC Method		NEG		
Soot %	%	ASTM D7844*	>4	0.1		
Nitration	Abs/cm	ASTM D7624*	>20	10.4		
Sulfation	Abs/.1mm	ASTM D7415*	>30	24.4		
Emulsified Water	scalar	Visual*	>0.2	NEG		
Sodium	nom	ASTM D5185(m)	>57	3		
Boron	ppm	ASTM D5185(m)	>07	205		
Barium	ppm	ASTM D5185(m)		205 <1		
Molybdenum	ppm	ASTM D5185(m)		109		
Manganese	ppm ppm	ASTM D5185(m)		5		
Magnesium	ppm	ASTM D5185(m)		622		
Calcium	ppm	ASTM D5185(m)		1478		
Phosphorus	ppm	ASTM D5185(m)		680		
Zinc	ppm	ASTM D5185(m)		803		
Sulfur	ppm	ASTM D5185(m)		1933		
Oxidation	Abs/.1mm	ASTM D3103(III)	>25	22.2		
Visc @ 40°C	cSt	ASTM D7279(m)	115	▲ 59.0		
Visc @ 100°C	cSt	ASTM D7279(m)	14.5	▲ 9.7		
Viscosity Index (VI)	Scale	ASTM D2270*	128	148		
VISCOSILY ITLICEN (VI)	Juaie	NOTWI DZZTU	120	1-0		

Contact/Location: Doug Francis - LAVCLI





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