

#### Machine Id HAMM 202-408 Component Diesel Engine Fluid DIESEL ENGINE OIL SAE 15W40 (--- GAL)

# RECOMMENDATION

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

### **WEAR**

All component wear rates are normal.

### CONTAMINATION

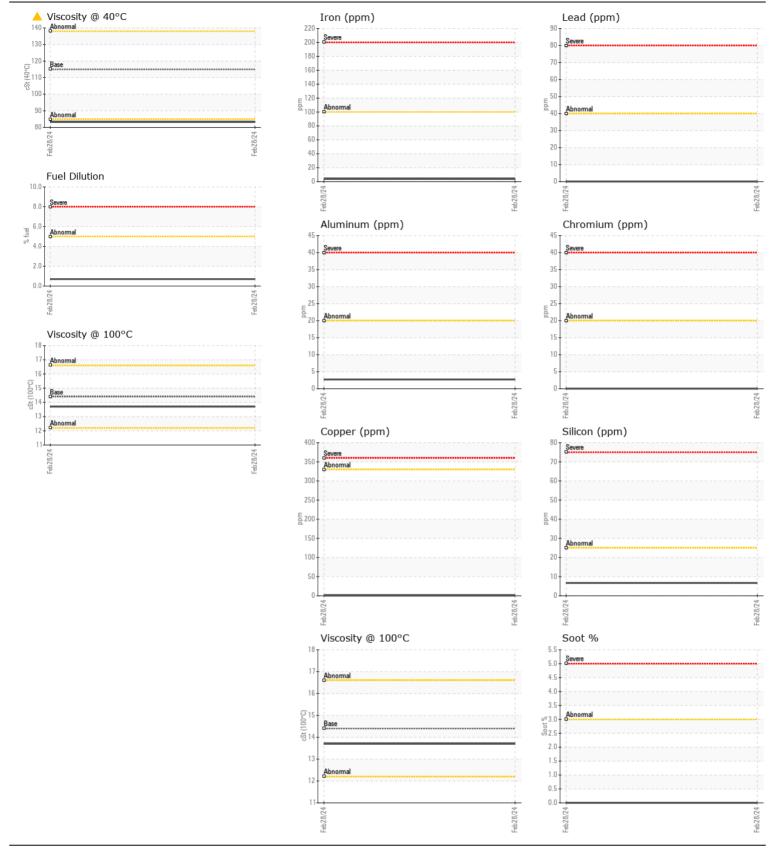
Fuel content negligible. There is no indication of any contamination in the oil.

## FLUID CONDITION

Viscosity of sample indicates oil is within SAE 5W40 range, advise investigate. The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PC0088999		
Sample Date		Client Info		28 Feb 2024		
Machine Age	hrs	Client Info		4852		
Oil Age	hrs	Client Info		0		
Filter Age	hrs	Client Info		0		
Oil Changed		Client Info		Not Changd		
Filter Changed		Client Info		Not Changd		
Sample Status				ABNORMAL		
			400			
Iron	ppm	ASTM D5185(m)	>100	4		
Chromium	ppm	ASTM D5185(m)	>20	0		
Nickel	ppm	ASTM D5185(m)	>4	<1		
Titanium	ppm	ASTM D5185(m)		0		
Silver	ppm	ASTM D5185(m)	>3	0		
Aluminum	ppm	ASTM D5185(m)	>20	3		
Lead	ppm	ASTM D5185(m)	>40	0		
Copper	ppm	ASTM D5185(m)	>330	<1		
Tin	ppm	ASTM D5185(m)	>15	0		
Vanadium	ppm	ASTM D5185(m)		0		
Silicon	ppm	ASTM D5185(m)	>25	7		
Potassium	ppm	ASTM D5185(m)	>20	<1		
Fuel	%	ASTM D7593*	>5	0.7		
Water		WC Method	>0.2	NEG		
Glycol		WC Method		NEG		
Soot %	%	ASTM D7844*	>3	0		
Nitration	Abs/cm	ASTM D7624*	>20	5.9		
Sulfation	Abs/.1mm	ASTM D7415*	>30	15.8		
Emulsified Water	scalar	Visual*	>0.2	NEG		
Sodium	ppm	ASTM D5185(m)	>158	2		
Boron	ppm	ASTM D5185(m)	250	10		
Barium	ppm	ASTM D5185(m)	10	0		
Molybdenum	ppm	ASTM D5185(m)	100	7		
Manganese	ppm	ASTM D5185(m)		0		
Magnesium	ppm	ASTM D5185(m)	450	97		
Calcium	ppm	ASTM D5185(m)	3000	2129		
Phosphorus	ppm	ASTM D5185(m)	1150	939		
Zinc	ppm	ASTM D5185(m)	1350	1044		
Sulfur	ppm	ASTM D5185(m)	4250	3206		
Oxidation	Abs/.1mm	ASTM D7414*	>25	13.1		
Visc @ 40°C	cSt	ASTM D7279(m)	115	<mark>▲</mark> 83.2		
Visc @ 100°C Viscosity Index (VI)	cSt	ASTM D7279(m) ASTM D2270*	14.4	13.7		

Contact/Location: Doug Francis - LAVCLI



LAVIS CONTRACTING Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 CALA Sample No. :04 Mar 2024 37462A HURON ROAD : PC0088999 Received E Lab Number : 02619512 : 05 Mar 2024 Tested CLINTON, ON ISO 17025:2017 Accredited : 06 Mar 2024 - Kevin Marson CA NOM 1L0 Unique Number : 5736622 Diagnosed Laboratory Test Package : MOB 1 (Additional Tests: FUELDILUTION, KV40, PercentFuel, VI) Contact: Doug Francis To discuss this sample report, contact Customer Service at 1-800-268-2131. dfrancis@lavis.ca T: (519)482-3694 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab. F: (519)482-7886 Validity of results and interpretation are based on the sample and information as supplied.