

WEAR NORMAL CONTAMINATION NORMAL FLUID CONDITION NORMAL

Machine Id HAMM 202-2105 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. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) DIESEL ENGINE OIL SAE 15W40. Please confirm.

WEAR

Metal levels are typical for a new component breaking in.

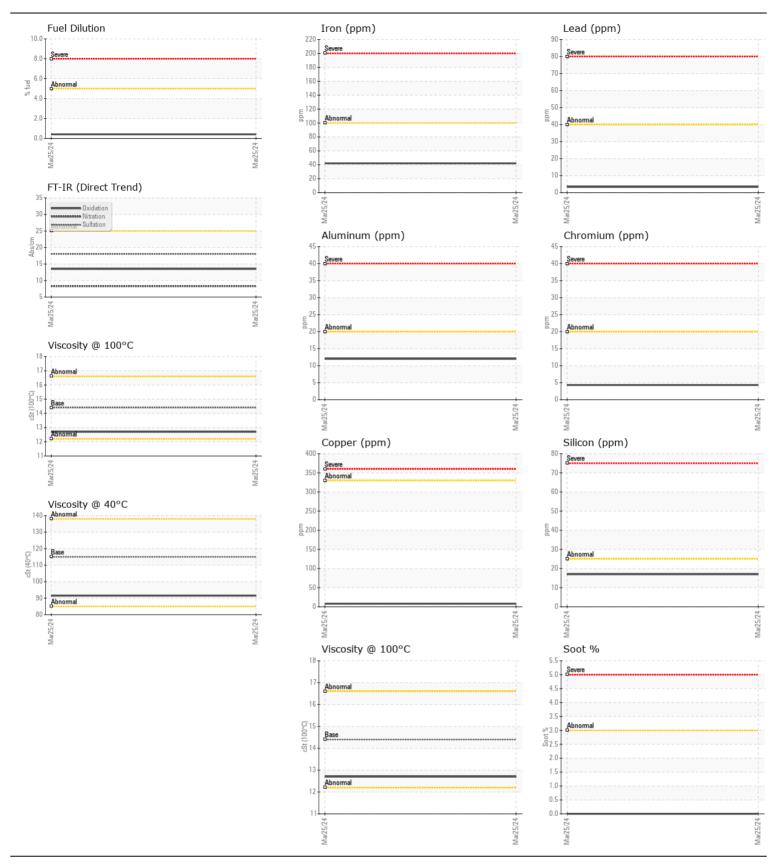
CONTAMINATION

FLUID CONDITION

Fuel content negligible. 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		PC0088941		
Sample Date		Client Info		25 Mar 2024		
Machine Age	hrs	Client Info		470		
Oil Age	hrs	Client Info		0		
Filter Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Filter Changed		Client Info		N/A		
Sample Status				NORMAL		
Iron	ppm	ASTM D5185(m)	>100	42		
Chromium	ppm	ASTM D5185(m)	>20	4		
Nickel	ppm	ASTM D5185(m)	>4	0		
Titanium	ppm	ASTM D5185(m)		<1		
Silver	ppm	ASTM D5185(m)	>3	0		
Aluminum	ppm	ASTM D5185(m)	>20	12		
Lead	ppm	ASTM D5185(m)	>40	3		
Copper	ppm	ASTM D5185(m)	>330	8		
Tin	ppm	ASTM D5185(m)	>15	0		
Vanadium	ppm	ASTM D5185(m)		0		
White Metal	scalar	Visual*	NONE	VLITE		
Yellow Metal	scalar	Visual*	NONE	NONE		
Ciliana			05	47		
Silicon	ppm	ASTM D5185(m)	>25	17		
Potassium	ppm	ASTM D5185(m)	>20	35		
Fuel	%	ASTM D7593*	>5	0.4		
Water		WC Method	>0.2	NEG		
Glycol	0/	WC Method	0	NEG		
Soot %	%	ASTM D7844*	>3	0		
Nitration	Abs/cm	ASTM D7624* ASTM D7415*	>20	8.3		
Sulfation Silt	Abs/.1mm		>30	18.0		
	scalar	Visual*	NONE	VLITE		
Debris Sand/Dirt	scalar	Visual*	NONE	NONE		
	scalar	Visual*	NONE NORML	NONE NORML		
Appearance	scalar	Visual*	NORML	NORML		
Odor	scalar	Visual*	>0.2	NEG		
Emulsified Water	scalar	Visual*	>0.2	NEG		
Sodium	ppm	ASTM D5185(m)	>158	4		
Boron	ppm	ASTM D5185(m)	250	58		
Barium	ppm	ASTM D5185(m)	10	<1		
Molybdenum	ppm	ASTM D5185(m)		76		
Manganese	ppm	ASTM D5185(m)		2		
Magnesium	ppm	ASTM D5185(m)	450	_ 190		
Calcium	ppm	ASTM D5185(m)	3000	2017		
Phosphorus	ppm	ASTM D5185(m)	1150	991		
Zinc	ppm	ASTM D5185(m)	1350	1165		
Sulfur	ppm	ASTM D5185(m)	4250	3794		
Oxidation	Abs/.1mm	ASTM D7414*	>25	13.5		
Visc @ 40°C	cSt	ASTM D7279(m)	115	91.5		
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	12.7		
Viscosity Index (VI)		ASTM D2270*	126	135		
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The condition of the oil is acceptable for the time in service.



LAVIS CONTRACTING Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 CALA Sample No. Received 37462A HURON ROAD : PC0088941 : 19 Apr 2024 Lab Number : 02630159 Tested : 22 Apr 2024 CLINTON, ON ISO 17025:2017 : 22 Apr 2024 - Wes Davis Accredited CA NOM 1L0 Unique Number : 5763291 Diagnosed Laboratory Test Package : MOB 1 (Additional Tests: FUELDILUTION, KV40, PercentFuel, VI, Visual) 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.

Contact/Location: Doug Francis - LAVCLI Page 2 of 2