

WEAR NORMAL CONTAMINATION NORMAL FLUID CONDITION NORMAL

Machine Id CATERPILLAR 2022300

Component Diesel Engine

DIESEL ENGINE OIL SAE 15W40 (--- GAL)

RECOMMENDATION

The oil 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.

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Metal levels are typical for a components first oil change.

CONTAMINATION

Light fuel dilution occurring. No other contaminants were detected in the oil.

FLUID CONDITION

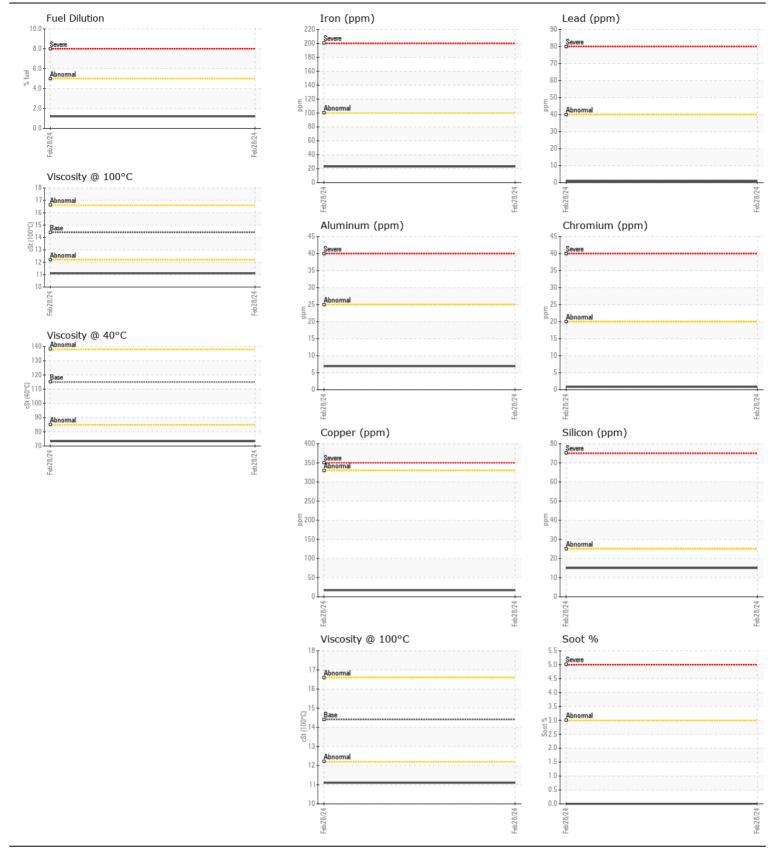
The condition of the oil is acceptable for the time in service.

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Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PC0084916		
Sample Date		Client Info		28 Feb 2024		
Machine Age	hrs	Client Info		280		
Oil Age	hrs	Client Info		280		
Filter Age	hrs	Client Info		280		
Oil Changed		Client Info		Changed		
Filter Changed		Client Info		N/A		
Sample Status				NORMAL		
Iron	ppm	ASTM D5185(m)	>100	23		
Chromium	ppm	ASTM D5185(m)	>20	<1		
Nickel	ppm	ASTM D5185(m)	>2	<1		
Titanium	ppm	ASTM D5185(m)	>2	0		
Silver	ppm	ASTM D5185(m)	>2	0		
Aluminum	ppm	ASTM D5185(m)	>25	7		
Lead	ppm	ASTM D5185(m)	>40	<1		
Copper	ppm	ASTM D5185(m)	>330	17		
Tin	ppm	ASTM D5185(m)	>15	<1		
Vanadium	ppm	ASTM D5185(m)		0		
0'''			05	4 5		
Silicon	ppm	ASTM D5185(m)	>25	15		
Potassium	ppm	ASTM D5185(m)	>20	2		
Fuel	%	ASTM D7593*	>5	1.2		
Water		WC Method	>0.2	NEG		
Glycol		WC Method	-	NEG		
Soot %	%	ASTM D7844*	>3	0		
Nitration	Abs/cm	ASTM D7624*	>20	6.8		
Sulfation	Abs/.1mm	ASTM D7415*	>30	21.1		
Emulsified Water	scalar	Visual*	>0.2	NEG		
Sodium	ppm	ASTM D5185(m)	>158	3		
Boron	ppm	ASTM D5185(m)	250	34		
Barium	ppm	ASTM D5185(m)	10	2		
Molybdenum	ppm	ASTM D5185(m)	100	36		
Manganese	ppm	ASTM D5185(m)		3		
Magnesium	ppm	ASTM D5185(m)	450	465		
Calcium	ppm	ASTM D5185(m)	3000	1577		
Phosphorus	ppm	ASTM D5185(m)	1150	929		
Zinc	ppm	ASTM D5185(m)	1350	1047		
Sulfur	ppm	ASTM D5185(m)	4250	2757		
Oxidation	Abs/.1mm	ASTM D7414*	>25	18.5		
Visc @ 40°C	cSt	ASTM D7279(m)	115	73.3		
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	11.1		
Viscosity Index (VII)	Coole		100	1 4 4		

Viscosity Index (VI) Scale ASTM D2270* 126

Contact/Location: Doug Francis - LAVCLI

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LAVIS CONTRACTING Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 CALA Sample No. Received :04 Mar 2024 37462A HURON ROAD : PC0084916 Lab Number : 02619510 CLINTON, ON Tested : 05 Mar 2024 ISO 17025:2017 Accredited : 05 Mar 2024 - Wes Davis CA NOM 1L0 Unique Number : 5736620 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.