

Machine Id LIEBI Componen Front Petro

LIEBHERR LH30M 144578-1253

Front Left Wheel Hub

PETRO CANADA TRAXON SYNTHETIC 75W90 (--- GAL)

RECOMMENDATION

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

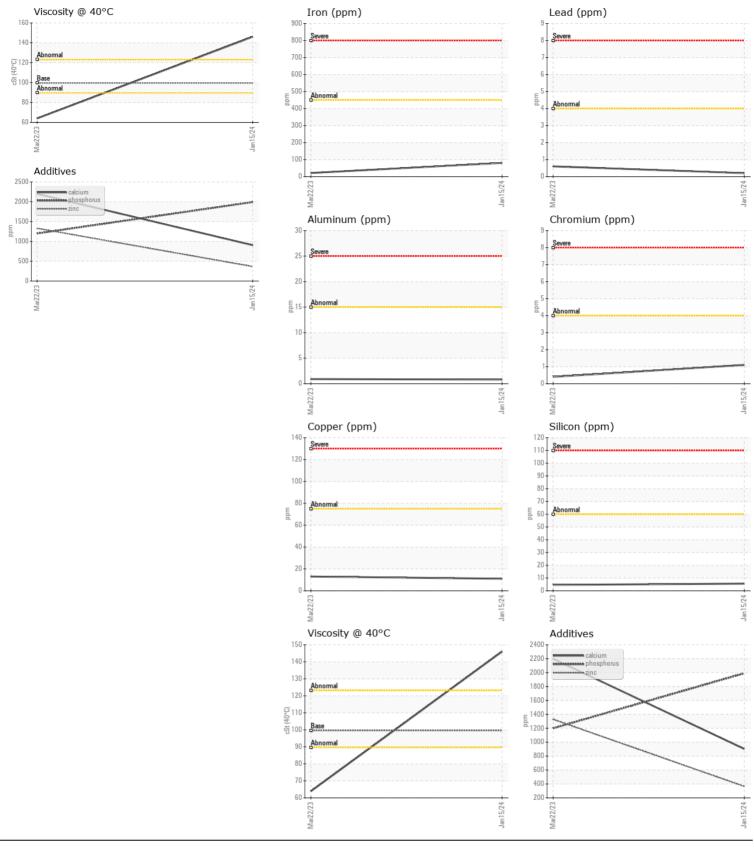
CONTAMINATION

There is no indication of any contamination in the oil.

FLUID CONDITION

Additive levels indicate the addition of a different brand, or type of oil. Viscosity of sample indicates oil is within SAE 50 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		LH0278620	LH0250055	
Sample Date		Client Info		15 Jan 2024	22 Mar 2023	
Machine Age	hrs	Client Info		1200	498	
Oil Age	hrs	Client Info		0	0	
Filter Age	hrs	Client Info		0	0	
Oil Changed		Client Info		Not Changd	N/A	
Filter Changed		Client Info		N/A	N/A	
Sample Status				NORMAL	NORMAL	
Iron	ppm	ASTM D5185(m)	>450	80	21	
Chromium	ppm	ASTM D5185(m)	>4	1	<1	
Nickel	ppm	ASTM D5185(m)	>2	- <1	0	
Titanium	ppm	ASTM D5185(m)	~_	0	<1	
Silver	ppm	ASTM D5185(m)		0	0	
Aluminum	ppm	ASTM D5185(m)	>15	ں <1	<1	
Lead		ASTM D5185(m)	>4	<1	<1	
Copper	ppm ppm	ASTM D5185(m)	>75	11	13	
Tin	ppm	ASTM D5185(m)	210	0	0	
Vanadium	ppm	ASTM D5185(m)		0	0	
White Metal	scalar	Visual*	NONE	VLITE	VLITE	
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	
Silicon	ppm	ASTM D5185(m)	>60	6	5	
		. ,				
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	
Potassium Water	ppm	ASTM D5185(m) WC Method	>20 >0.2	<1 NEG	<1 NEG	
	ppm scalar	· · /				
Water		WC Method	>0.2	NEG	NEG	
Water Silt	scalar	WC Method Visual*	>0.2 NONE	NEG NONE	NEG LIGHT	
Water Silt Debris	scalar scalar	WC Method Visual* Visual*	>0.2 NONE NONE	NEG NONE NONE	NEG LIGHT NONE	
Water Silt Debris Sand/Dirt	scalar scalar scalar	WC Method Visual* Visual* Visual*	>0.2 NONE NONE NONE	NEG NONE NONE NONE	NEG LIGHT NONE NONE	
Water Silt Debris Sand/Dirt Appearance	scalar scalar scalar scalar	WC Method Visual* Visual* Visual* Visual*	>0.2 NONE NONE NONE NORML	NEG NONE NONE NONE NORML	NEG LIGHT NONE NONE NORML	
Water Silt Debris Sand/Dirt Appearance Odor	scalar scalar scalar scalar scalar	WC Method Visual* Visual* Visual* Visual* Visual*	>0.2 NONE NONE NORML NORML	NEG NONE NONE NORE NORML	NEG LIGHT NONE NONE NORML NORML	
Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water	scalar scalar scalar scalar scalar scalar	WC Method Visual* Visual* Visual* Visual* Visual* Visual*	>0.2 NONE NONE NORML NORML	NEG NONE NONE NORML NORML NEG	NEG LIGHT NONE NORML NORML NEG	
Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium	scalar scalar scalar scalar scalar scalar ppm	WC Method Visual* Visual* Visual* Visual* Visual* Visual*	>0.2 NONE NONE NORML NORML >0.2	NEG NONE NONE NORML NORML NEG	NEG LIGHT NONE NORML NORML NEG 19	
Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron	scalar scalar scalar scalar scalar scalar ppm	WC Method Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m)	>0.2 NONE NONE NORML NORML >0.2	NEG NONE NONE NORML NORML NEG 11 13	NEG LIGHT NONE NORML NORML NEG 19	
Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium	scalar scalar scalar scalar scalar scalar ppm ppm	WC Method Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m)	>0.2 NONE NONE NORML NORML >0.2	NEG NONE NONE NORML NORML NEG 11 13 <1	NEG LIGHT NONE NORML NORML NEG 19 94	
Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum	scalar scalar scalar scalar scalar scalar ppm ppm ppm	WC Method Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>0.2 NONE NONE NORML NORML >0.2	NEG NONE NONE NORML NORML NEG 11 13 <1 0	NEG LIGHT NONE NORML NORML NEG 19 94 <1 0	
Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese	scalar scalar scalar scalar scalar scalar ppm ppm ppm ppm	WC Method Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>0.2 NONE NONE NORML NORML >0.2 328 1	NEG NONE NONE NORML NORML NEG 11 13 <1 0 1	NEG LIGHT NONE NORML NORML NEG 19 94 <1 0 <1	
Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium	scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm	WC Method Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	 >0.2 NONE NORML NORML >0.2 328 1 1 	NEG NONE NONE NORML NORML NEG 11 13 <1 0 1 1 4	NEG LIGHT NONE NORML NORML NEG 19 94 <1 0 <1 10	
Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Malybdenum Manganese Magnesium	scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm	WC Method Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	 >0.2 NONE NONE NORML >0.2 328 1 1 7 	NEG NONE NONE NORML NORML NEG 11 13 <1 0 1 1 4 904	NEG LIGHT NONE NORML NORML 19 94 <1 0 <1 0 <1 10 2199	
Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Malganese Magnesium Calcium Phosphorus	scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm	WC Method Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	 >0.2 NONE NONE NORML >0.2 328 1 1 7 1145 	NEG NONE NONE NORML NORML NEG 11 13 <1 0 1 4 904 1990	NEG LIGHT NONE NORML NORML NEG 19 94 <1 0 <1 0 <1 10 2199 1199	
WaterSiltDebrisDabrisAppearanceOdorEmulsified WaterBoronBariumMolybdenumMaganeseMagnesiumCalciumPhosphorusZinc	scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm	WC Method Visual* Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	 >0.2 NONE NORME NORML >0.2 328 1 1 7 1145 3 	NEG NONE NONE NORML NORML NEG 11 13 <1 0 1 4 904 1990 365	NEG LIGHT NONE NORML NORML NEG 19 4 (1 0 (1 10 2199 1199 1329	



Industrial Metals Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 CALA Sample No. Recieved : 16 Jan 2024 550 Messier St. : LH0278620 Lab Number : 02609067 : 17 Jan 2024 Winnipeg, MB Diagnosed ISO 17025:2017 Accredited Laboratory Unique Number : 5710153 Diagnostician : Kevin Marson Test Package : MOB 1 Contact: Service Manager To discuss this sample report, contact Customer Service at 1-800-268-2131. Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.

Validity of results and interpretation are based on the sample and information as supplied.

Submitted By: ? Page 2 of 2

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