WEAR CONTAMINATION FLUID CONDITION

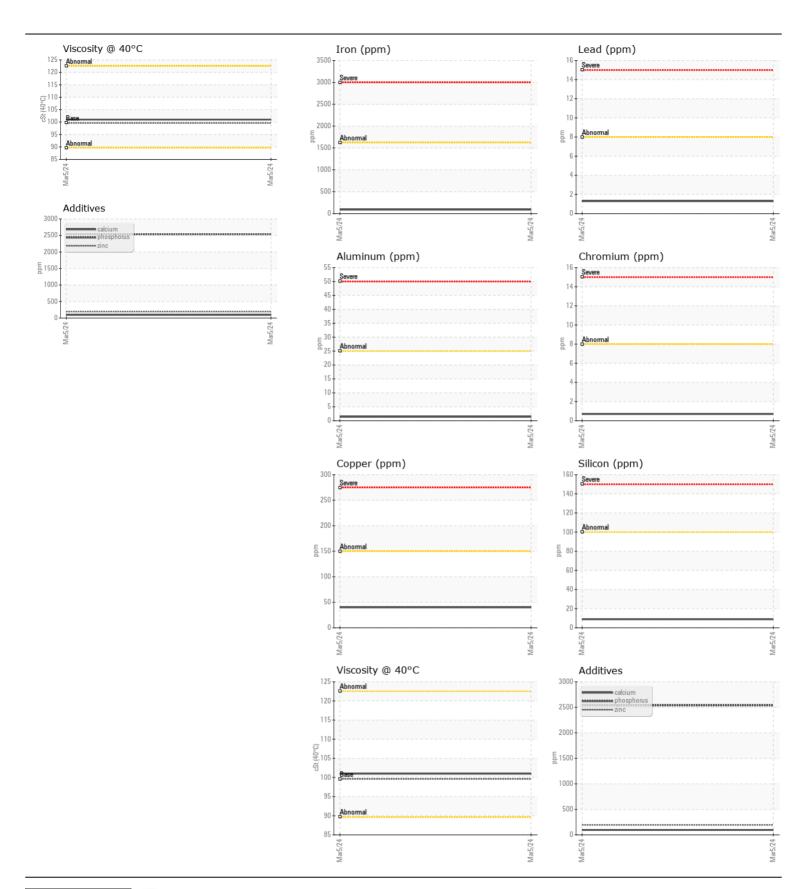
NORMAL NORMAL NORMAL



LIEBHERR L586 059953-1334

Component Front Right Wheel Hub

Test	PETRO CANADA TRAXON SY	NTHETIC 75	W90	(GAL	<u>)</u>			
Confirm the source of the lubricant being utilized for top-up/fill. Sample Number Client Info 50 Mar 2024	RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample pat the next service interval to monitor. Sample pat to Nachine Age hrs Clent Info 7962 Machine Age hrs Clent Info 0 0 Filter Changed Clent Info Changed 0 Filter Changed Clent Info NA 0 Filter Changed Clent Info NA NA 0 Filter Changed Clent Info NA 0 Filter Changed Clent Info NA NA 0 0 Filter Changed Changed Clent Info NA NA 0 0 Filter Changed Changed Clent Info NA NA 0 0 Filter Changed Changed Clent Info NA NA 0 0 Filter Changed Changed Changed Clent Info NA NA 0 0 Filter Changed Cha	Confirm the source of the lubricant being utilized for top-up/fill.	Sample Number		Client Info			,	,
Note		Sample Date		Client Info		05 Mar 2024		
Filter Age		Machine Age	hrs	Client Info		7962		
Filter Age		Oil Age	hrs	Client Info		0		
Filter Changed No Client Into No Amale No Changed No Changed		Filter Age	hrs	Client Info		0		
No. No.		Oil Changed		Client Info		Changed		
Iron		Filter Changed		Client Info		N/A		
Chromium ppm ASTM D5165/m >8 <1 Nickel ppm ASTM D5165/m >4 0 Titanium ppm ASTM D5165/m >4 0 Titanium ppm ASTM D5165/m >6 0 Aluminum ppm ASTM D5165/m >6 0 Aluminum ppm ASTM D5165/m >6 1 Aluminum ppm ASTM D5165/m >8 1 Aluminum ppm ASTM D5165/m >8 1 Copper ppm ASTM D5165/m >10 0 Tin ppm ASTM D5165/m >10 2 Vanadium ppm ASTM D5165/m >10 2 Vanadium ppm ASTM D5165/m >10 0 Value Vellow Metal scalar Visual* NONE NONE Vellow Metal Scalar Visual* NONE NONE There is no indication of any contamination in the oil. Silt scalar Visual* NONE NONE Silt scalar Visual* NONE NONE Silt scalar Visual* NONE NONE Sand/Dirt scalar Visual* NONE NONE Sand/Dirt scalar Visual* NONE NONE Sand/Dirt scalar Visual* NONE NONE Appearance scalar Visual* NONE NONE Sand/Dirt scalar Visual* NONE NONE Additive levels indicate the addition of a different brand, or type of oil, The condition of the oil is acceptable for the time in service. Boron ppm ASTM D5165/m 1 0 Magnaese ppm ASTM D5165/m 1 3 Magnaese ppm ASTM D5165/m 1 3 Phosphorus ppm ASTM D5165/m 1 3 Phosphorus ppm ASTM D5165/m 1 1 5 5 Phosphorus ppm ASTM D5165/m 1 1		Sample Status				NORMAL		
Nickel ppm ASTIL/DSISSIM 0 Titanium ppm ASTIL/DSISSIM 0 Silver ppm ASTIL/DSISSIM 0 Silver ppm ASTIL/DSISSIM 255 1 ASTIL/DSISSIM 250 2 ASTIL/DSISSIM 250 1	WEAR	Iron	ppm	ASTM D5185(m)	>1625	91		
Nickel ppm	All component wear rates are normal.	Chromium	ppm	ASTM D5185(m)	>8	<1		
Silver ppm ASTM DS185/m 25 1		Nickel	ppm	ASTM D5185(m)	>4	0		
Aluminum ppm ASTM DSISS(m) >25 1		Titanium	ppm	ASTM D5185(m)		0		
Lead		Silver	ppm	ASTM D5185(m)		0		
Copper		Aluminum	ppm	ASTM D5185(m)	>25	1		
Tin		Lead	ppm	ASTM D5185(m)	>8	1		
Vanadium		Copper	ppm	ASTM D5185(m)	>150	40		
White Metal Scalar Visual* NONE VITE Yellow Metal Scalar Visual* NONE NONE NONE NONE NONE NONE NONE NONE NONE NONE NONE NONE NONE NONE NONE NONE NONE NONE N		Tin	ppm	ASTM D5185(m)	>10	2		
Yellow Metal Scalar Visual* NONE N		Vanadium	ppm	ASTM D5185(m)		0		
Silicon ppm ASTM D5(85(m) > 100 9		White Metal	scalar	Visual*	NONE	VLITE		
Potassium ppm ASTM D5185(m) >20 1		Yellow Metal	scalar	Visual*	NONE	NONE		
Potassium ppm ASTM D5185(m) >20 1	CONTAMINATION	Silicon	ppm	ASTM D5185(m)	>100	9		
Water WC Method >0.2 NEG Silt scalar Visual* NONE NONE Debris scalar Visual* NONE NONE Debris scalar Visual* NONE NONE Appearance scalar Visual* NORM NORM NORM NORM NORM Debris scalar Visual* NONE NONE Appearance scalar Visual* NORM Debris scalar Visual* NORM		Potassium	ppm	ASTM D5185(m)	>20	1		
Debris Scalar Visual* NONE NORML NORML		Water		WC Method	>0.2	NEG		
Sand/Dirt scalar Visual* NONE NONE NONE Appearance scalar Visual* NORML NORM		Silt	scalar	Visual*	NONE	NONE		
Appearance Scalar Visual* NORML NORM		Debris	scalar	Visual*	NONE	NONE		
Odor scalar Visual* NORML NORML Emulsified Water scalar Visual* >0.2 NEG NEG -		Sand/Dirt	scalar	Visual*	NONE	NONE		
Emulsified Water scalar Visual* >0.2 NEG		Appearance	scalar	Visual*	NORML	NORML		
Sodium ppm ASTM D5185(m) 2		Odor	scalar	Visual*	NORML	NORML		
Additive levels indicate the addition of a different brand, or type of oil. The condition of the oil is acceptable for the time in service. Barium ppm ASTM D5185(m) 1 0 Molybdenum ppm ASTM D5185(m) 1 0 Manganese ppm ASTM D5185(m) 1 3 Magnesium ppm ASTM D5185(m) 1 3 Calcium ppm ASTM D5185(m) 7 96 Phosphorus ppm ASTM D5185(m) 1145 2538 Zinc ppm ASTM D5185(m) 3 195 Sulfur ppm ASTM D5185(m) 17909 21020		Emulsified Water	scalar	Visual*	>0.2	NEG		
The condition of the oil is acceptable for the time in service. Barium ppm ASTM D5185(m) 1 0 Molybdenum ppm ASTM D5185(m) 1 1 Magnesium ppm ASTM D5185(m) 1 3 Calcium ppm ASTM D5185(m) 7 96 Phosphorus ppm ASTM D5185(m) 1145 2538 Zinc ppm ASTM D5185(m) 3 195 Sulfur ppm ASTM D5185(m) 17909 21020	FLUID CONDITION	Sodium	ppm	ASTM D5185(m)		2		
Barium ppm ASTM D5185(m) 1 0 Molybdenum ppm ASTM D5185(m) 0 Manganese ppm ASTM D5185(m) 1 3 Magnesium ppm ASTM D5185(m) 7 96 Phosphorus ppm ASTM D5185(m) 1145 2538 Zinc ppm ASTM D5185(m) 3 195 Sulfur ppm ASTM D5185(m) 17909 21020	Additive levels indicate the addition of a different brand, or type of oil	Boron	ppm	ASTM D5185(m)	328	35		
Manganese ppm ASTM D5185(m) 1 Magnesium ppm ASTM D5185(m) 1 3 Calcium ppm ASTM D5185(m) 7 96 Phosphorus ppm ASTM D5185(m) 1145 2538 Zinc ppm ASTM D5185(m) 3 195 Sulfur ppm ASTM D5185(m) 17909 21020		Barium	ppm	ASTM D5185(m)	1	0		
Magnesium ppm ASTM D5185(m) 1 3 Calcium ppm ASTM D5185(m) 7 96 Phosphorus ppm ASTM D5185(m) 1145 2538 Zinc ppm ASTM D5185(m) 3 195 Sulfur ppm ASTM D5185(m) 17909 21020		Molybdenum	ppm	ASTM D5185(m)		0		
Calcium ppm ASTM D5185(m) 7 96 Phosphorus ppm ASTM D5185(m) 1145 2538 Zinc ppm ASTM D5185(m) 3 195 Sulfur ppm ASTM D5185(m) 17909 21020		Manganese	ppm	ASTM D5185(m)		1		
Phosphorus ppm ASTM D5185(m) 1145 2538 Zinc ppm ASTM D5185(m) 3 195 Sulfur ppm ASTM D5185(m) 17909 21020		Magnesium	ppm	ASTM D5185(m)	1	3		
Zinc ppm ASTM D5185(m) 3 195 Sulfur ppm ASTM D5185(m) 17909 21020		Calcium	ppm	ASTM D5185(m)	7	96		
Sulfur ppm ASTM D5185(m) 17909 21020		Phosphorus	ppm	ASTM D5185(m)	1145	2538		
			ppm	ASTM D5185(m)	3	195		
Visc @ 40°C cSt ASTM D7279(m) 99.6 101								
		Visc @ 40°C	cSt	ASTM D7279(m)	99.6	101		





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 : LH0270304 Lab Number : 02620666 Unique Number : 5737776

Received **Tested** Diagnosed

: 07 Mar 2024 : 07 Mar 2024

: 08 Mar 2024 - Kevin Marson

THOMAS CAVANAGH CONSTRUCTION LTD RR # 2, 9094 CAVANAGH ROAD ASHTON, ON CA K0A 1B0

Contact: Keith

Test Package : MOB 1 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.