



RECOMMENDATION

Resample at the next service interval to monitor.

Machine Id LIEBHERR L566 071183-1758

Component Transmission (Manual)

PETRO CANADA DURATRAN (--- GAL)

**WEAR** 

All component wear rates are normal.

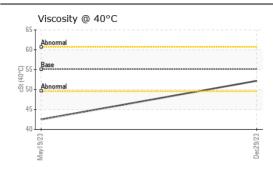
## CONTAMINATION

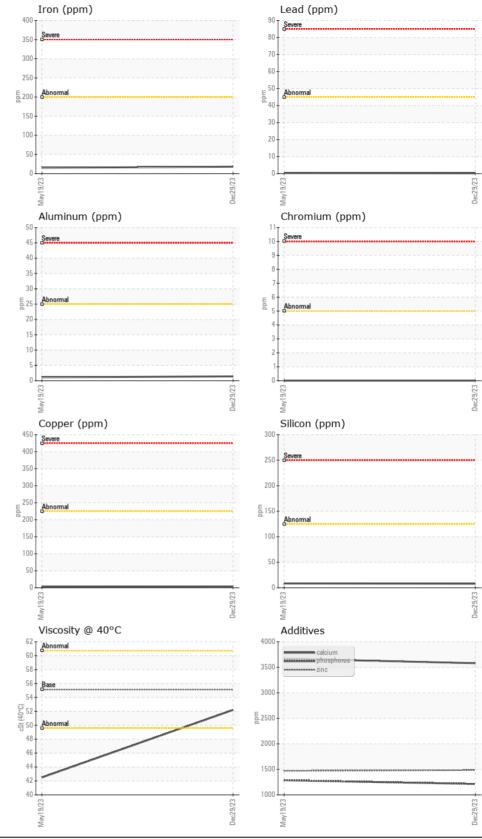
There is no indication of any contamination in the fluid.

FLUID		

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0251935	LH0260621	
Sample Date		Client Info		29 Dec 2023	19 May 2023	
Machine Age	hrs	Client Info		3102	1190	
Oil Age	hrs	Client Info		0	0	
Filter Age	hrs	Client Info		0	0	
Oil Changed		Client Info		Changed	Changed	
Filter Changed		Client Info		Changed	N/A	
Sample Status				NORMAL	NORMAL	
Iron	ppm	ASTM D5185(m)	>200	18	15	
Chromium	ppm	ASTM D5185(m)	>5	0	0	
Nickel	ppm	ASTM D5185(m)	>5	<1	<1	
Titanium	ppm	ASTM D5185(m)		0	<1	
Silver	ppm	ASTM D5185(m)	>7	0	<1	
Aluminum	ppm	ASTM D5185(m)	>25	1	1	
Lead	ppm	ASTM D5185(m)	>45	<1	<1	
Copper	ppm	ASTM D5185(m)	>225	2	4	
Tin	ppm	ASTM D5185(m)	>10	0	0	
Vanadium	ppm	ASTM D5185(m)		0	0	
White Metal	scalar	Visual*	NONE	NONE	NONE	
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	
Silicon	ppm	ASTM D5185(m)	>125	8	8	
Potassium	ppm	ASTM D5185(m)	>20	2	3	
					-	
Water		WC Method	>0.1	NEG	NEG	
Water Silt	scalar	WC Method Visual*	>0.1 NONE	NEG NONE	NEG NONE	
				-		
Silt	scalar	Visual*	NONE	NONE	NONE	
Silt Debris	scalar scalar	Visual* Visual*	NONE NONE	NONE	NONE NONE	
Silt Debris Sand/Dirt	scalar scalar scalar	Visual* Visual* Visual*	NONE NONE NONE	NONE NONE NONE	NONE NONE NONE	
Silt Debris Sand/Dirt Appearance	scalar scalar scalar scalar	Visual* Visual* Visual* Visual*	NONE NONE NORML	NONE NONE NORML	NONE NONE NORML	
Silt Debris Sand/Dirt Appearance Odor Emulsified Water	scalar scalar scalar scalar scalar scalar	Visual* Visual* Visual* Visual* Visual* Visual*	NONE NONE NORML NORML	NONE NONE NORML NORML NEG	NONE NONE NORML NORML NEG	
Silt Debris Sand/Dirt Appearance Odor	scalar scalar scalar scalar scalar scalar scalar	Visual* Visual* Visual* Visual* Visual*	NONE NONE NORML NORML >0.1	NONE NONE NORE NORML	NONE NONE NORML NORML NEG 18	    
Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron	scalar scalar scalar scalar scalar scalar ppm	Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m)	NONE NONE NORML NORML >0.1	NONE NONE NORML NORML NEG 6 101	NONE NONE NORML NORML NEG 18 98	    
Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium	scalar scalar scalar scalar scalar scalar ppm ppm	Visual* Visual* Visual* Visual* Visual* Visual*	NONE NONE NONE NORML >0.1 110	NONE NONE NORML NORML NEG 6 101 0	NONE NONE NORML NORML NEG 18	
Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron	scalar scalar scalar scalar scalar scalar ppm ppm ppm	Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m)	NONE NONE NORML NORML >0.1 110	NONE NONE NORML NORML NEG 6 101	NONE NONE NORML NORML NEG 18 98 0	
Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum	scalar scalar scalar scalar scalar scalar ppm ppm ppm ppm	Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	NONE NORML NORML >0.1 110 0.0 1	NONE NONE NORML NORML NEG 6 101 0 0 0	NONE NONE NORML NORML NEG 18 98 0 0	
Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese	scalar scalar scalar scalar scalar scalar ppm ppm ppm ppm	Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	NONE NONE NORML NORML >0.1 110 0.0	NONE NONE NORML NORML NEG 6 101 0 0	NONE NONE NORML NORML NEG 18 98 0 0 0 <1	
Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium	scalar scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm	Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	NONE NORML NORML >0.1 110 0.0 1 0.0 1 13 3610	NONE NONE NORML NORML NEG 6 101 0 0 0 0 10 3580	NONE NONE NORML NORML NEG 18 98 0 0 0 <1 8	
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 ppm	Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	NONE NONE NORML >0.1 110 0.0 1 13	NONE NONE NORML NORML NEG 6 101 0 0 0 0 10 3580 1213	NONE NONE NORML NORML NEG 18 98 0 0 0 <1 8 3669	
Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Barium Molybdenum Manganese Magnesium Calcium Phosphorus	scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm	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)	NONE NORME NORML >0.1 110 0.0 0.0 1 13 3610 1192 1455	NONE NONE NORML NORML NEG 6 101 0 0 0 0 10 3580 1213 1485	NONE NONE NORML NORML NEG 18 98 0 0 0 <1 8 3669 1286 1470	
Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium	scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm	Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	NONE NORML NORML >0.1 110 0.0 1 13 3610 1192	NONE NONE NORML NORML NEG 6 101 0 0 0 0 10 3580 1213	NONE NONE NORML NORML NEG 18 98 0 0 0 <1 8 3669 1286	





Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Abbycel Substrate Ltd. CALA Sample No. Recieved : 08 Jan 2024 3545 Ross Road : LH0251935 Lab Number : 02607175 Diagnosed Abbotsford, BC : 08 Jan 2024 ISO 17025:2017 Accredited Laboratory Unique Number : 5708261 Diagnostician : Wes Davis CA V4X 1M6 Test Package : MOBCE (Additional Tests: Visual) Contact: Service Manager To discuss this sample report, contact Customer Service at 1-800-268-2131. T: 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. F: