**WEAR** CONTAMINATION **FLUID CONDITION** 

**NORMAL NORMAL NORMAL** 



## Machine Id LIEBHERR L580 071613-1760

Transmission (Manual)

PETRO CANADA DURATRAN (	(30 LTR)						
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		LH0292406	LH0277094	
	Sample Date		Client Info		22 Jun 2024	14 Oct 2023	
	Machine Age	hrs	Client Info		2202	1054	
	Oil Age	hrs	Client Info		0	0	
	Filter Age	hrs	Client Info		0	0	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		N/A	N/A	
	Sample Status				NORMAL	ABNORMAL	
WEAR	Iron	ppm	ASTM D5185(m)	>200	16	18	
All component wear rates are normal.	Chromium	ppm	ASTM D5185(m)	>5	0	0	
	Nickel	ppm	ASTM D5185(m)		<1	<1	
	Titanium	ppm	ASTM D5185(m)		0	0	
	Silver	ppm	ASTM D5185(m)	>7	<1	<1	
	Aluminum	ppm	ASTM D5185(m)	>25	1	<1	
	Lead	ppm	ASTM D5185(m)	>45	0	<1	
	Copper	ppm	ASTM D5185(m)	>225	2	3	
	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	
CONTAMINATION	Silicon	nnm	ASTM D5185(m)	>125	9	8	
There is no indication of any contamination in the fluid.	Potassium	ppm	ASTM D5185(m)	>20	2	3	
	Water	ррпп	WC Method	>0.1	NEG	NEG	
	Silt	scalar	Visual*	NONE	NONE	NONE	
	Debris	scalar	Visual*	NONE	NONE	NONE	
	Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	
	Appearance	scalar	Visual*	NORML	NORML	NORML	
	Odor	scalar	Visual*	NORML	NORML	NORML	
	Emulsified Water	scalar	Visual*	>0.1	NEG	NEG	
FLUID CONDITION	Sodium	ppm	ASTM D5185(m)		9	18	
	Boron	ppm	ASTM D5185(m)	110	104	100	
The fluid viscosity is lower than typical, possibly indicating the addition of lighter grade fluid. The condition of the fluid is acceptable for the time in service.	Barium	ppm	ASTM D5185(m)		<1	<1	
	Molybdenum	ppm	ASTM D5185(m)		0	0	
	Manganese	ppm	ASTM D5185(m)		<1	0	
	Magnesium	ppm	ASTM D5185(m)	13	9	7	
	Calcium	ppm	ASTM D5185(m)	3610	3597	3565	
	Phosphorus	ppm	ASTM D5185(m)	1192	1191	1183	
	Zinc	ppm	ASTM D5185(m)	1455	1473	1440	
	Sulfur	ppm	ASTM D5185(m)	2641	3637	4700	
	Visc @ 40°C	cSt	ASTM D7279(m)	55.14	36.9	<b>▲</b> 43.2	
Papart Id: PIPMON [MCAMIC] 00644657 (Caparated: 07/00/0004 14:16:15) Pay: 1						0.1	aittad Dur 2





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

: LH0292406 Lab Number : 02644657 Unique Number : 5802196 Test Package : MOB 1

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Received **Tested** 

Diagnosed

: 02 Jul 2024

: 02 Jul 2024 - Kevin Marson

: 28 Jun 2024

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.

**BIRCH HILL CONSTRUCTION** 

11 MCELROY ST. MONCTON, NB CA E1C 9T2

Contact: Service Manager

T: F: