



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
LIEBHERR L556 053602-1484
Component
Hydraulic System
Fluid
PETRO CANADA 10W30 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0277578	LH0215736	LH0274747
Sample Date		Client Info		11 Jan 2024	13 Oct 2023	29 Aug 2023
Machine Age	hrs	Client Info		7741	7226	6756
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Not Changd	Not Changd
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>20	9	8	8
Chromium	ppm	ASTM D5185(m)	>10	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>10	0	0	0
Titanium	ppm	ASTM D5185(m)		0	0	<1
Silver	ppm	ASTM D5185(m)		0	<1	0
Aluminum	ppm	ASTM D5185(m)	>10	5	4	3
Lead	ppm	ASTM D5185(m)	>10	3	3	3
Copper	ppm	ASTM D5185(m)	>75	3	2	2
Tin	ppm	ASTM D5185(m)	>10	<1	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE

CONTAMINATION

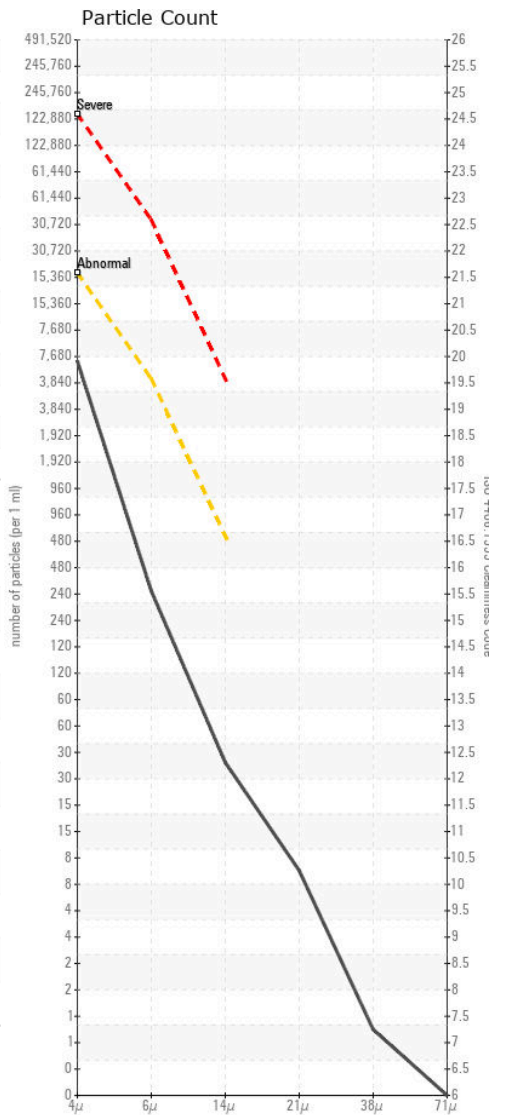
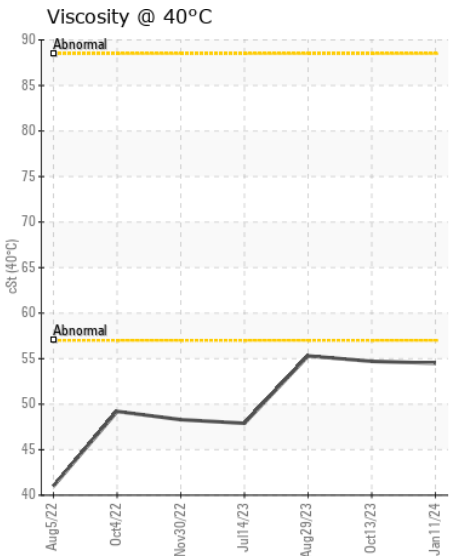
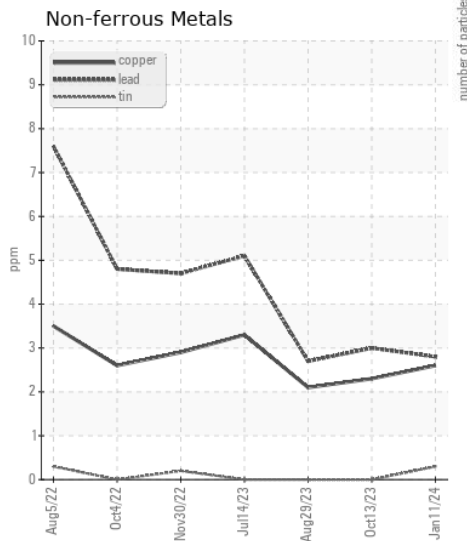
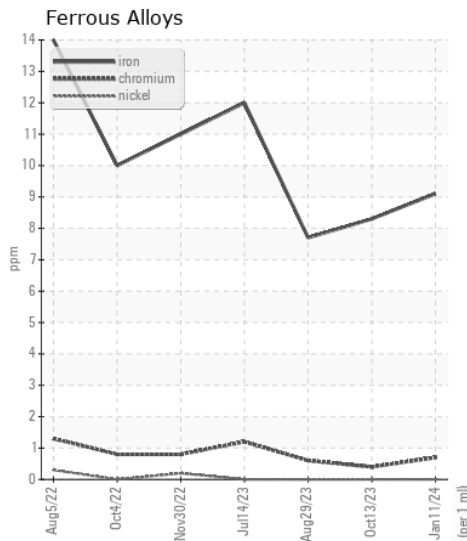
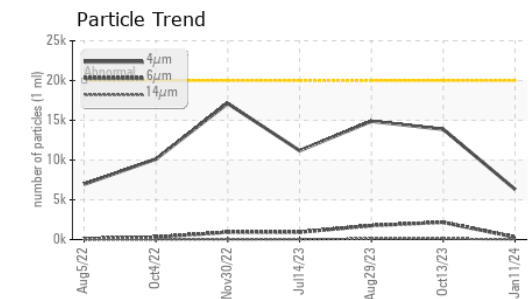
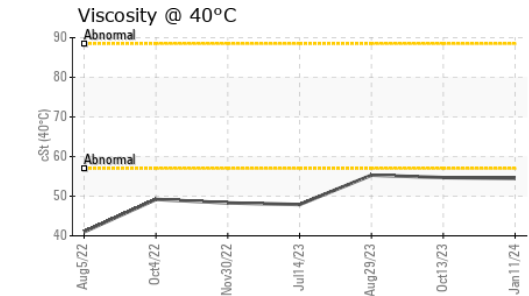
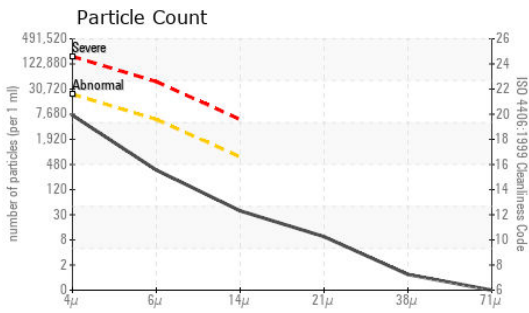
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185(m)	>20	10	9	8
Potassium	ppm	ASTM D5185(m)	>20	2	16	2
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>20000	6312	13873	14881
Particles >6µm		ASTM D7647	>5000	311	2170	1759
Particles >14µm		ASTM D7647	>640	33	97	92
Particles >21µm		ASTM D7647	>160	8	16	16
Particles >38µm		ASTM D7647	>40	1	1	0
Particles >71µm		ASTM D7647	>10	0	0	0
Oil Cleanliness		ISO 4406 (c)	>21/19/16	20/15/12	21/18/14	21/18/14
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	VLITE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)		1	1	1
Boron	ppm	ASTM D5185(m)		<1	1	1
Barium	ppm	ASTM D5185(m)		0	<1	<1
Molybdenum	ppm	ASTM D5185(m)		44	44	43
Manganese	ppm	ASTM D5185(m)		0	0	<1
Magnesium	ppm	ASTM D5185(m)		720	716	726
Calcium	ppm	ASTM D5185(m)		1010	994	994
Phosphorus	ppm	ASTM D5185(m)		968	965	1020
Zinc	ppm	ASTM D5185(m)		1087	1102	1118
Sulfur	ppm	ASTM D5185(m)		2933	2748	2786
Visc @ 40°C	cSt	ASTM D7279(m)		54.5	54.7	▲ 55.3



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **THOMAS CAVANAGH CONSTRUCTION LTD**
Sample No. : LH0277578 **Received** : 17 Jan 2024 **RR # 2, 9094 CAVANAGH ROAD**
Lab Number : 02609411 **Diagnosed** : 18 Jan 2024 **ASHTON, ON**
Unique Number : 5710497 **Diagnostician** : Wes Davis **CA K0A 1B0**
Test Package : MOB 1 (Additional Tests: PrtCount) **Contact: Keith**

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.

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