



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ABNORMAL



Machine Id
LIEBHERR A934 061746-1418

Component
Splitter Box

Fluid
PETRO CANADA TRAXON SYNTHETIC 75W90 (3 LTR)

RECOMMENDATION

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0282761	LH0251441	LHMC120614
Sample Date		Client Info		03 Apr 2024	09 Jan 2023	05 Dec 2017
Machine Age	hrs	Client Info		13336	13240	10469
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Not Changd	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	ABNORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>880	106	97	46
Chromium	ppm	ASTM D5185(m)	>10	1	1	<1
Nickel	ppm	ASTM D5185(m)	>5	<1	<1	0
Titanium	ppm	ASTM D5185(m)	>5	<1	<1	<1
Silver	ppm	ASTM D5185(m)	>5	0	0	0
Aluminum	ppm	ASTM D5185(m)	>15	2	2	1
Lead	ppm	ASTM D5185(m)	>25	1	3	8
Copper	ppm	ASTM D5185(m)	>60	4	3	2
Tin	ppm	ASTM D5185(m)	>5	0	0	<1
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

There is no indication of any contamination in the oil.

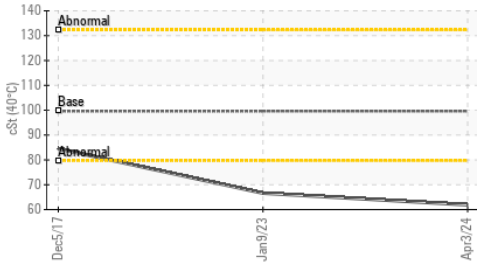
Silicon	ppm	ASTM D5185(m)	>55	5	6	5
Potassium	ppm	ASTM D5185(m)	>20	5	5	10
Water		WC Method	>0.1	NEG	NEG	NEG
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	VLITE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	VLITE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG	NEG

FLUID CONDITION

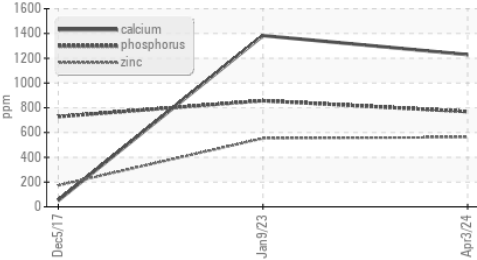
Viscosity of sample indicates oil is within SAE 20 range, advise investigate. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)	>25	2	1	4
Boron	ppm	ASTM D5185(m)	328	31	27	19
Barium	ppm	ASTM D5185(m)	1	<1	0	2
Molybdenum	ppm	ASTM D5185(m)		<1	1	0
Manganese	ppm	ASTM D5185(m)		0	1	<1
Magnesium	ppm	ASTM D5185(m)	1	20	20	1
Calcium	ppm	ASTM D5185(m)	7	1229	1383	52
Phosphorus	ppm	ASTM D5185(m)	1145	769	857	728
Zinc	ppm	ASTM D5185(m)	3	562	553	172
Sulfur	ppm	ASTM D5185(m)	17909	6057	6422	18904
Visc @ 40°C	cSt	ASTM D7279(m)	99.6	▲ 61.9	▲ 66.6	84.5

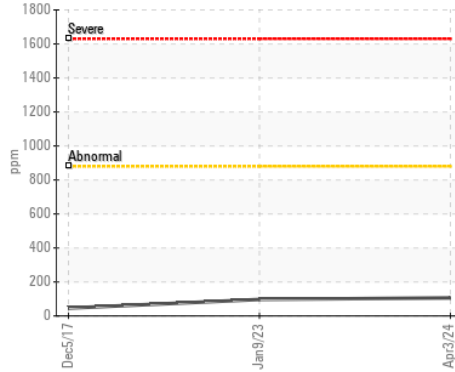
▲ Viscosity @ 40°C



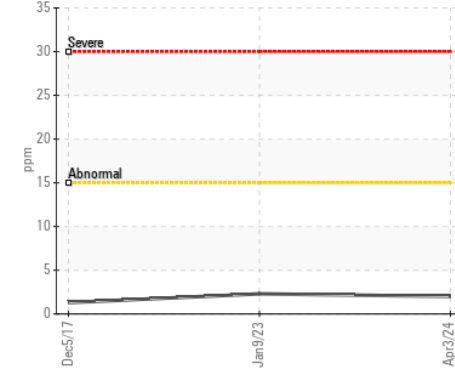
Additives



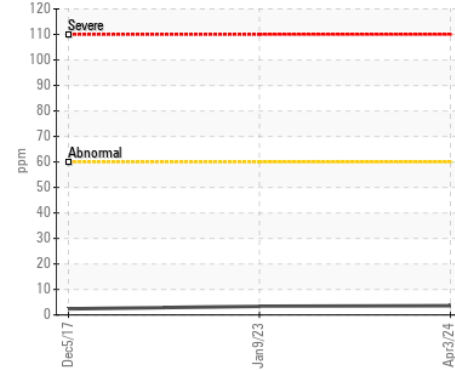
Iron (ppm)



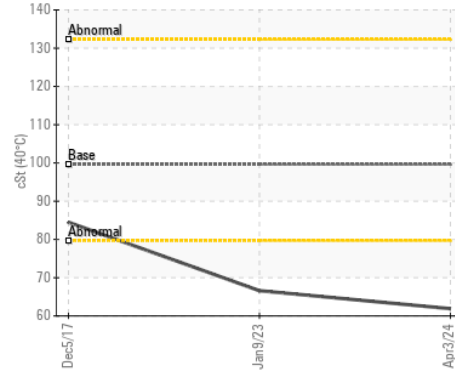
Aluminum (ppm)



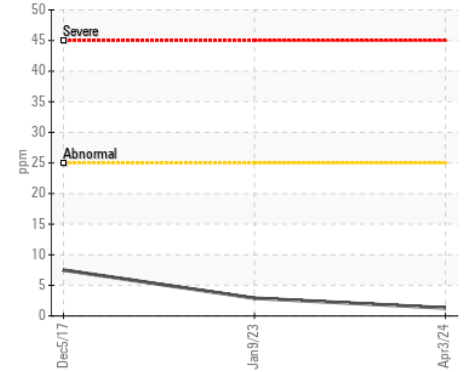
Copper (ppm)



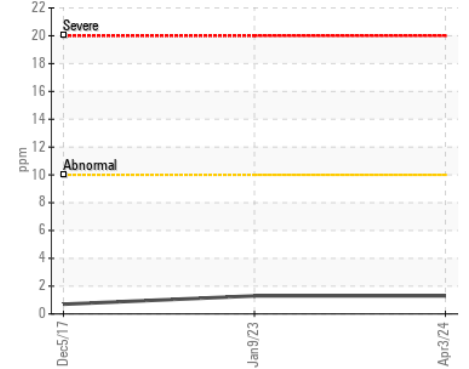
▲ Viscosity @ 40°C



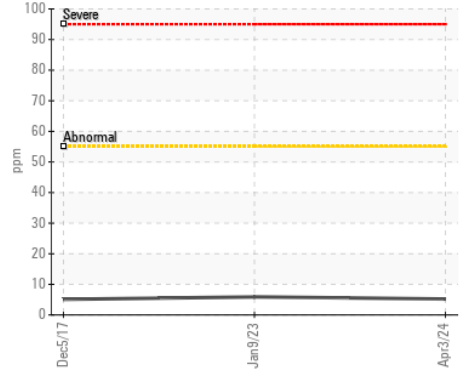
Lead (ppm)



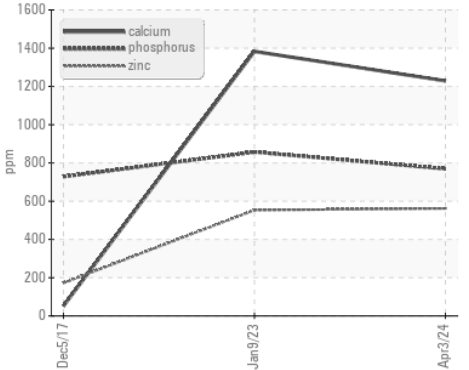
Chromium (ppm)



Silicon (ppm)



Additives



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9

Sample No. : LH0282761

Lab Number : 02627056

Unique Number : 5760188

Test Package : MOB 1

Received : 05 Apr 2024

Tested : 05 Apr 2024

Diagnosed : 08 Apr 2024 - Kevin Marson

MAKSTEEL SERVICE CENTRE

7615 TORBRAM ROAD

MISSISSAUGA, ON

CA L4T 4A8

Contact: Steve Dodge

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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.