



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
LIEBHERR L556 069061-1826
Component
Hydraulic System
Fluid
PETRO CANADA HYDREX DT 46 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0257331	LH0257320	LH0257287
Sample Date		Client Info		04 Apr 2024	25 Jan 2024	12 May 2023
Machine Age	hrs	Client Info		4986	4000	1010
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		Changed	N/A	Changed
Sample Status				NORMAL	ATTENTION	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>20	6	11	8
Chromium	ppm	ASTM D5185(m)	>10	2	3	<1
Nickel	ppm	ASTM D5185(m)	>10	0	<1	0
Titanium	ppm	ASTM D5185(m)		<1	0	<1
Silver	ppm	ASTM D5185(m)		0	0	0
Aluminum	ppm	ASTM D5185(m)	>10	2	4	2
Lead	ppm	ASTM D5185(m)	>10	5	12	6
Copper	ppm	ASTM D5185(m)	>75	2	4	4
Tin	ppm	ASTM D5185(m)	>10	0	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

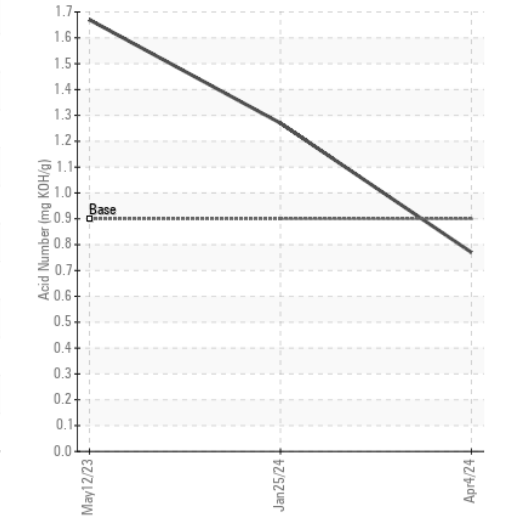
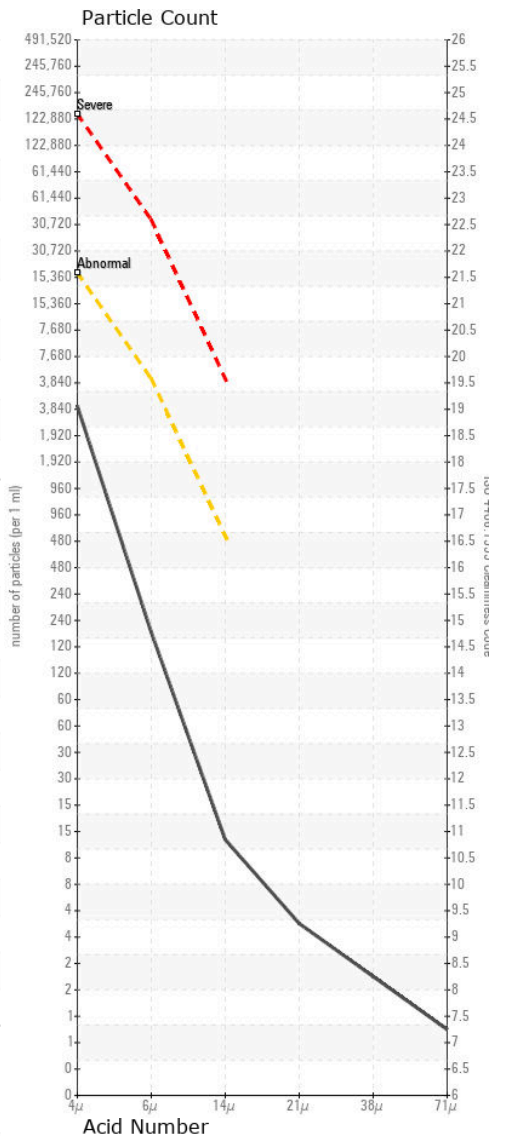
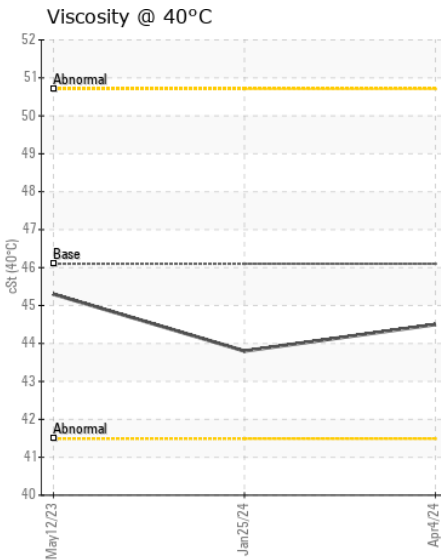
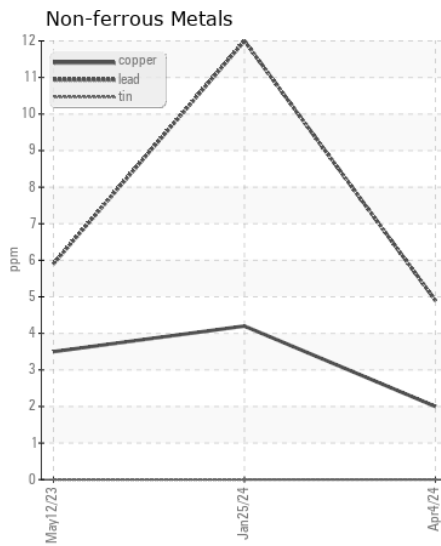
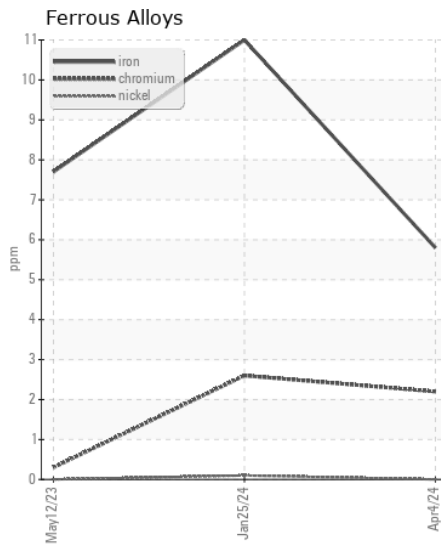
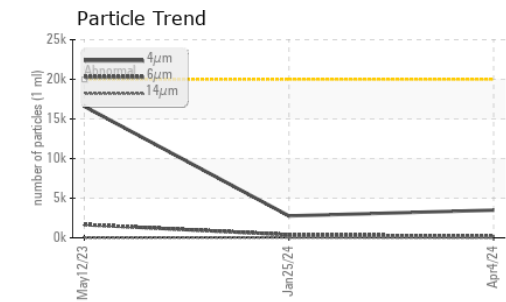
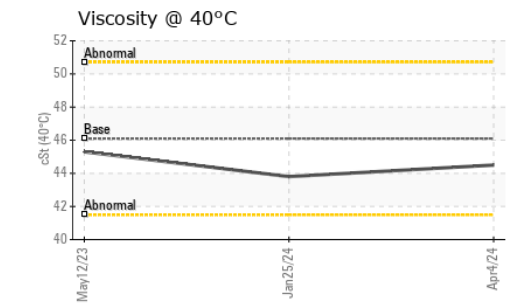
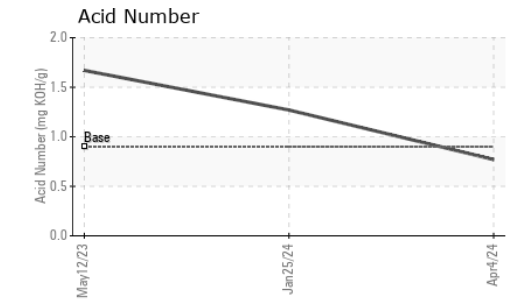
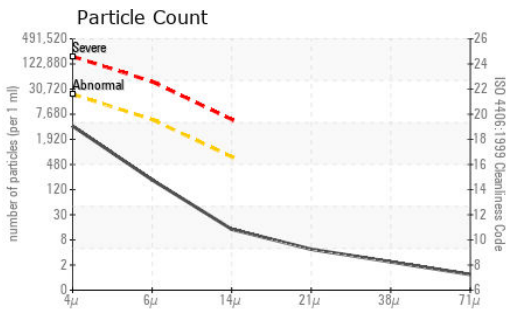
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185(m)	>20	3	8	5
Potassium	ppm	ASTM D5185(m)	>20	2	5	6
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>20000	3493	2766	16592
Particles >6µm		ASTM D7647	>5000	181	395	1667
Particles >14µm		ASTM D7647	>640	12	31	14
Particles >21µm		ASTM D7647	>160	4	8	2
Particles >38µm		ASTM D7647	>40	2	1	0
Particles >71µm		ASTM D7647	>10	1	0	0
Oil Cleanliness		ISO 4406 (c)	>21/19/16	19/15/11	19/16/12	21/18/11
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE	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 AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185(m)		<1	1	1
Boron	ppm	ASTM D5185(m)	0	<1	<1	<1
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	0	0	0	0
Manganese	ppm	ASTM D5185(m)	0	0	0	<1
Magnesium	ppm	ASTM D5185(m)	0	3	5	5
Calcium	ppm	ASTM D5185(m)	790	957	1256	1301
Phosphorus	ppm	ASTM D5185(m)	350	428	619	685
Zinc	ppm	ASTM D5185(m)	450	518	683	685
Sulfur	ppm	ASTM D5185(m)	980	1527	2857	2864
Acid Number (AN)	mg KOH/g	ASTM D974*	0.9	0.77	1.27	1.67
Visc @ 40°C	cSt	ASTM D7279(m)	46.1	44.5	43.8	45.3



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH0257331
Lab Number : 02628876
Unique Number : 5762008
Test Package : MOBCE

PRODUITS FORESTIERS D.G. LTEE
 313 RANG ST-JOSEPH
 STE-AURELIE, QC
 CA G0M 1M0
 Contact: Roger .

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.

T: (418)593-3547
 F: (418)593-3633