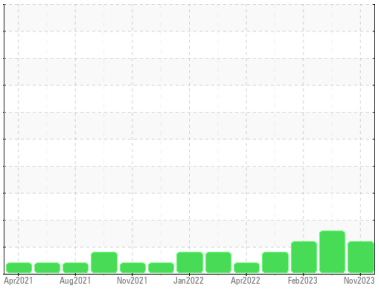
OIL DIAGNOSTICS

PROBLEM SUMMARY

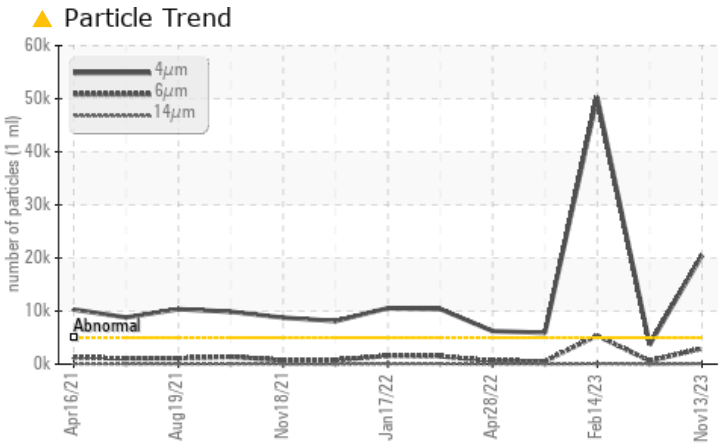
Sample Rating Trend



ISO

Area
Sawmill/Trimmer
Machine Id
[Sawmill^Trimmer] Comact LOG LOADER HPU
Component
Hydraulic System
Fluid
PETRO CANADA HYDREX AW 68 (105 GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

We recommend you service the filters on this component. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				**ABNORMAL**	ABNORMAL	ABNORMAL
Particles >4µm		ASTM D7647	>5000	▲ **20496**	3674	▲ 50280
Particles >6µm		ASTM D7647	>1300	▲ **2965**	615	▲ 5379
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ **22/19/14**	19/16/11	▲ 23/20/14

Customer Id: WESRIE
Sample No.: PCA0111706
Lab Number: 06009647
Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data:
Wes Davis +1 905-569-8600 x223
wesd@wearcheck.ca

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Filter	---	---	?	We recommend you service the filters on this component.
Resample	---	---	?	We recommend an early resample to monitor this condition.

HISTORICAL DIAGNOSIS

11 May 2023 Diag: Don Baldridge

DIRT

No corrective action is recommended at this time. Resample at the next service interval to monitor.All component wear rates are normal. Elemental level of silicon (Si) above normal. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

14 Feb 2023 Diag: Don Baldridge

ISO

We recommend you service the filters on this component. Resample at the next service interval to monitor.All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

01 Jun 2022 Diag: Don Baldridge

ISO

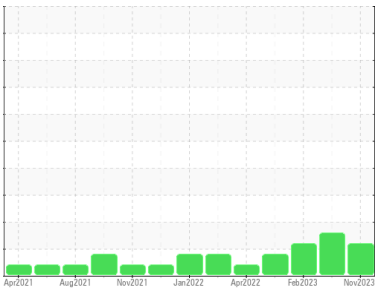
No corrective action is recommended at this time. Resample at the next service interval to monitor.All component wear rates are normal. There is a moderate amount of silt (particulates < 6 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

OIL DIAGNOSTICS

OIL ANALYSIS REPORT

Sample Rating Trend



ISO

Area
Sawmill/Trimmer
Machine Id
[Sawmill^Trimmer] Comact LOG LOADER HPU
Component
Hydraulic System
Fluid
PETRO CANADA HYDREX AW 68 (105 GAL)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. The water content is negligible.

Fluid Condition

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**PCA0111706**	PCA0079395	PCA0079450
Sample Date		Client Info		**13 Nov 2023**	11 May 2023	14 Feb 2023
Machine Age	mths	Client Info		**0**	3	3
Oil Age	mths	Client Info		**0**	0	0
Oil Changed		Client Info		**Not Changd**	Not Changd	Not Changd
Sample Status				**ABNORMAL**	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	**2**	<1	2
Chromium	ppm	ASTM D5185m	>20	**0**	0	0
Nickel	ppm	ASTM D5185m	>20	**0**	0	0
Titanium	ppm	ASTM D5185m		**0**	0	0
Silver	ppm	ASTM D5185m		**0**	0	0
Aluminum	ppm	ASTM D5185m	>20	**<1**	1	0
Lead	ppm	ASTM D5185m	>20	**0**	0	0
Copper	ppm	ASTM D5185m	>20	**2**	4	4
Tin	ppm	ASTM D5185m	>20	**0**	0	0
Vanadium	ppm	ASTM D5185m		**0**	0	0
Cadmium	ppm	ASTM D5185m		**0**	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	**0**	0	0
Barium	ppm	ASTM D5185m	0	**7**	0	0
Molybdenum	ppm	ASTM D5185m	0	**0**	0	<1
Manganese	ppm	ASTM D5185m	0	**0**	0	0
Magnesium	ppm	ASTM D5185m	0	**5**	<1	0
Calcium	ppm	ASTM D5185m	50	**43**	47	35
Phosphorus	ppm	ASTM D5185m	330	**272**	233	192
Zinc	ppm	ASTM D5185m	430	**319**	245	198
Sulfur	ppm	ASTM D5185m	760	**793**	621	590

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	**5**	▲ 34	14
Sodium	ppm	ASTM D5185m		**0**	<1	1
Potassium	ppm	ASTM D5185m	>20	**<1**	0	0
Water	%	ASTM D6304	>0.05	**0.006**	0.006	0.008
ppm Water	ppm	ASTM D6304	>500	**63.5**	60.4	80.4

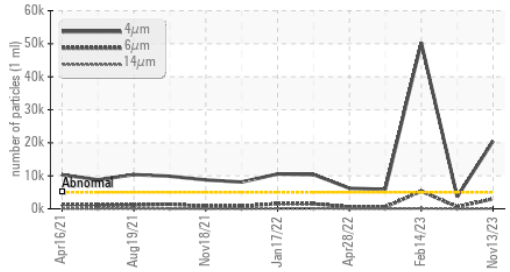
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	▲ **20496**	3674	▲ 50280
Particles >6µm		ASTM D7647	>1300	▲ **2965**	615	▲ 5379
Particles >14µm		ASTM D7647	>160	**88**	19	94
Particles >21µm		ASTM D7647	>40	**16**	3	16
Particles >38µm		ASTM D7647	>10	**0**	0	1
Particles >71µm		ASTM D7647	>3	**0**	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ **22/19/14**	19/16/11	▲ 23/20/14

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.60	**0.31**	0.30	0.31

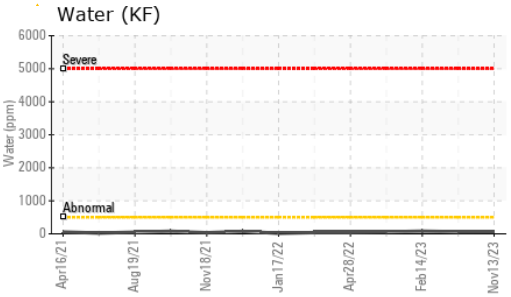
OIL ANALYSIS REPORT

OIL DIAGNOSTICS

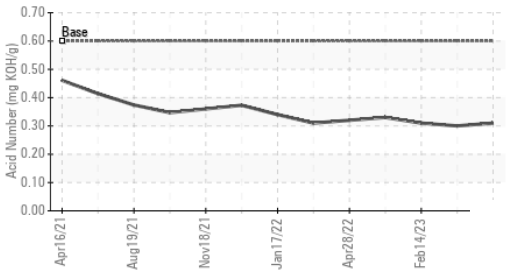
Particle Trend



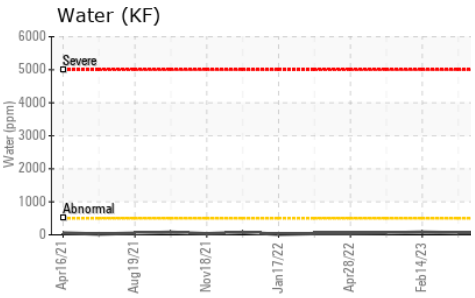
Water (KF)



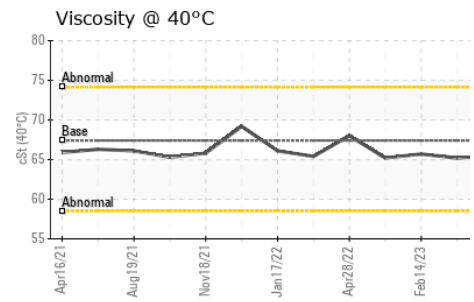
Acid Number



Water (KF)



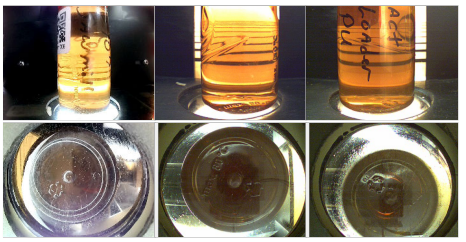
Viscosity @ 40°C



VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
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	>0.05	**NEG**	NEG	NEG
Free Water	scalar	*Visual		**NEG**	NEG	NEG

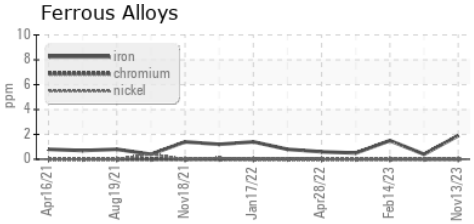
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	67.4	**65.5**	65.2	65.7

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

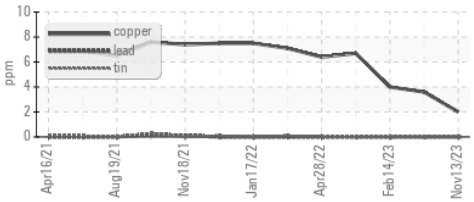


GRAPHS

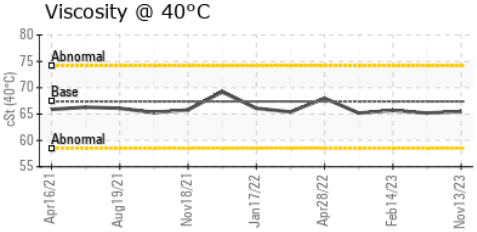
Ferrous Alloys



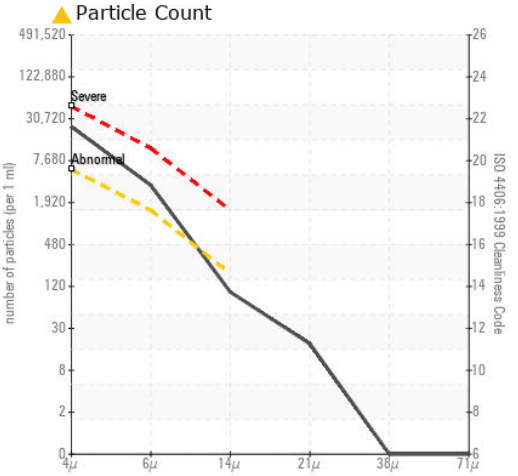
Non-ferrous Metals



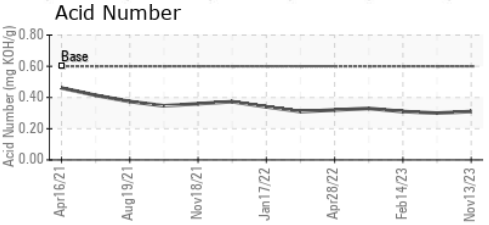
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0111706 **Received** : 16 Nov 2023
Lab Number : 06009647 **Diagnosed** : 17 Nov 2023
Unique Number : 10743409 **Diagnostician** : Wes Davis
Test Package : IND 2 (Additional Tests: KF)

To discuss this sample report, contact Customer Service at 1-800-237-1369.
** - Denotes test methods that are outside of the ISO 17025 scope of accreditation.*
Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

West Fraser Inc. - Armour Lumber Mill
361 Federeal Road, PO Box 57
Riegelwood, NC
US 28456
Contact: Jay Wilson
Jay.B.Wilson@westfraser.com
T: (910)627-3021
F: (910)655-9368

Report Id: WESRIE [WUSCAR] 06009647 (Generated: 11/17/2023 16:11:22) Rev: 1

Submitted By: JAMES KRINER