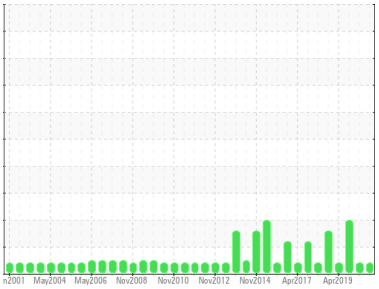
PROBLEM SUMMARY

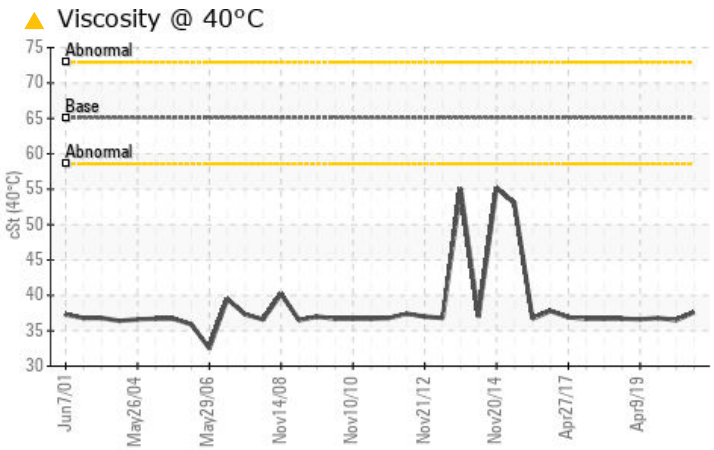
Sample Rating Trend

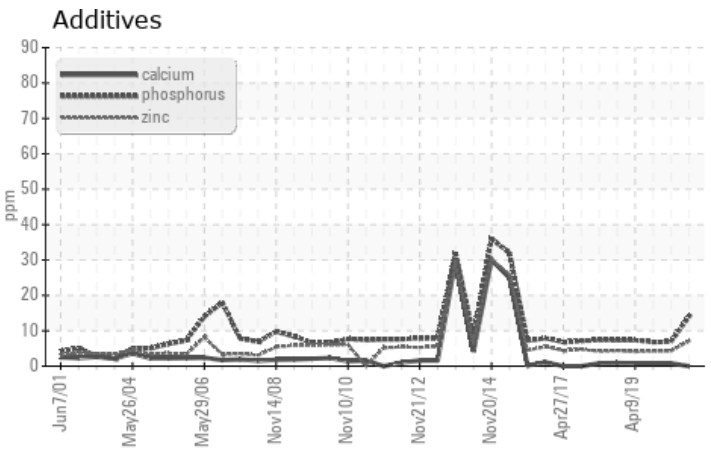


VISCOSITY

Area
[199042]
Machine Id
PBK G1 GOV
Component
Governor System
Fluid
MOBIL DTE OIL HVY MEDIUM (409 LTR)

COMPONENT CONDITION SUMMARY





RECOMMENDATION

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. The fluid was specified as MOBIL DTE OIL HVY MEDIUM, however, a fluid match indicates that this fluid is ISO 32 R&O Hydraulic Oil. Please confirm the oil type and grade on your next sample.

PROBLEMATIC TEST RESULTS

Sample Status				**ABNORMAL**	ABNORMAL	ABNORMAL
Visc @ 40°C	cSt	ASTM D7279(m)	65.1	▲ **37.6**	▲ 36.5	▲ 36.8

Customer Id: NEWSTJ
Sample No.: WC0455766
Lab Number: 02563213
Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data:
Kevin Marson +1 (289)291-4644 x4644
Kevin.Marson@wearcheck.com

To change component or sample information:
Gloria Gonzalez +1 (289)291-4643 x4643
gloria.gonzalez@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Alert	---	---	?	The fluid was specified as MOBIL DTE OIL HVY MEDIUM, however, a fluid match indicates that this fluid is ISO 32 R&O Hydraulic Oil. Please confirm the oil type and grade on your next sample.
Check Fluid Source	---	---	?	Confirm the source of the lubricant being utilized for top-up/fill.

HISTORICAL DIAGNOSIS

12 May 2020 Diag: Bill Quesnel

VISCOSITY

Resample at the next service interval to monitor.All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. Viscosity of sample indicates oil is within ISO 32 range, advise investigate. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

15 Nov 2019 Diag: Kevin Marson

VISCOSITY

We recommend you service the filters on this component. We recommend an early resample to monitor this condition.All component wear rates are normal. Particles >4µm are abnormally high. Particles >6µm are abnormally high. Particles >14µm are notably high. Particles >21µm are notably high. Viscosity of sample indicates oil is within ISO 32 range, advise investigate. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

09 Apr 2019 Diag: Kevin Marson

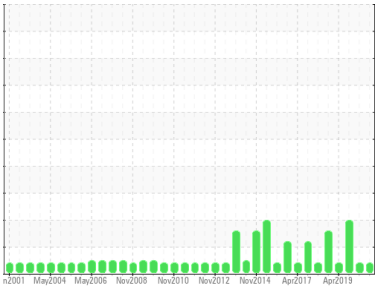
VISCOSITY

Resample at the next service interval to monitor.All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. Viscosity of sample indicates oil is within ISO 32 range, advise investigate. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY

Area
[199042]
Machine Id
PBK G1 GOV
Component
Governor System
Fluid
MOBIL DTE OIL HVY MEDIUM (409 LTR)

DIAGNOSIS

Recommendation

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. The fluid was specified as MOBIL DTE OIL HVY MEDIUM, however, a fluid match indicates that this fluid is ISO 32 R&O Hydraulic Oil. Please confirm the oil type and grade on your next sample.

Wear

All component wear rates are normal.

Contamination

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

Fluid Condition

Viscosity of sample indicates oil is within ISO 32 range, advise investigate. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0455766**	WC0327958	WC0316956
Sample Date		Client Info		**24 May 2023**	12 May 2020	15 Nov 2019
Machine Age	hrs	Client Info		**0**	0	0
Oil Age	hrs	Client Info		**0**	0	0
Oil Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**ABNORMAL**	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>50	**2**	1	2
Chromium	ppm	ASTM D5185(m)	>10	**0**	0	0
Nickel	ppm	ASTM D5185(m)	>10	**0**	0	0
Titanium	ppm	ASTM D5185(m)		**0**	0	0
Silver	ppm	ASTM D5185(m)		**0**	0	0
Aluminum	ppm	ASTM D5185(m)	>3	**0**	0	0
Lead	ppm	ASTM D5185(m)	>75	**<1**	<1	<1
Copper	ppm	ASTM D5185(m)	>15	**<1**	<1	<1
Tin	ppm	ASTM D5185(m)	>55	**<1**	0	0
Antimony	ppm	ASTM D5185(m)	>5	**<1**	<1	<1
Vanadium	ppm	ASTM D5185(m)		**0**	0	0
Beryllium	ppm	ASTM D5185(m)		**0**	0	0
Cadmium	ppm	ASTM D5185(m)		**0**	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		**<1**	<1	<1
Barium	ppm	ASTM D5185(m)		**0**	0	<1
Molybdenum	ppm	ASTM D5185(m)		**0**	0	0
Manganese	ppm	ASTM D5185(m)		**0**	0	0
Magnesium	ppm	ASTM D5185(m)		**1**	1	2
Calcium	ppm	ASTM D5185(m)		**0**	<1	<1
Phosphorus	ppm	ASTM D5185(m)		**14**	7	7
Zinc	ppm	ASTM D5185(m)		**7**	4	4
Sulfur	ppm	ASTM D5185(m)		**2028**	2070	1996
Lithium	ppm	ASTM D5185(m)		**<1**	<1	<1

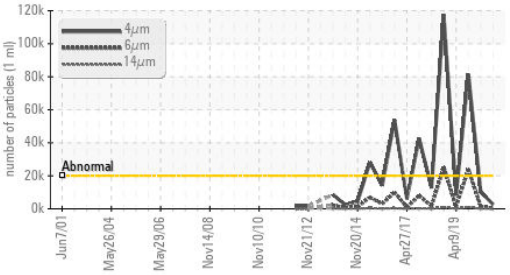
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>8	**<1**	0	0
Sodium	ppm	ASTM D5185(m)		**0**	0	0
Potassium	ppm	ASTM D5185(m)	>20	**<1**	0	0

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>20000	**2649**	10179	▲ 81399
Particles >6µm		ASTM D7647	>5000	**297**	1413	▲ 23961
Particles >14µm		ASTM D7647	>640	**6**	55	▲ 977
Particles >21µm		ASTM D7647	>160	**2**	15	▲ 240
Particles >38µm		ASTM D7647	>40	**0**	0	14
Particles >71µm		ASTM D7647	>10	**0**	0	2
Oil Cleanliness		ISO 4406 (c)	>21/19/16	**19/15/10**	21/18/13	▲ 24/22/17

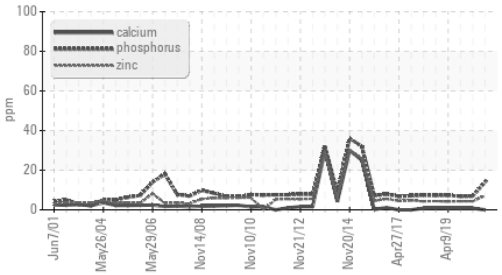
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*		**0.04**	0.02	0.030

OIL ANALYSIS REPORT

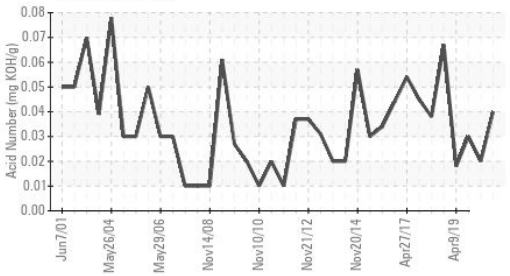
Particle Trend



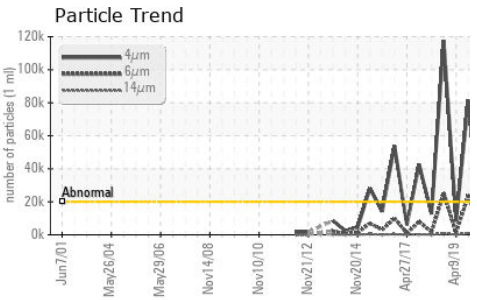
Additives



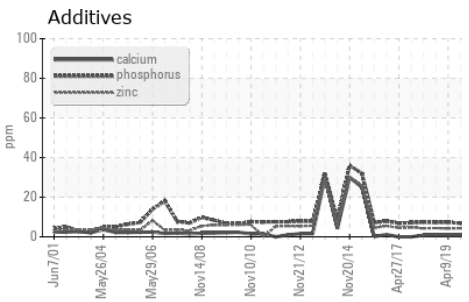
Acid Number



Particle Trend



Additives



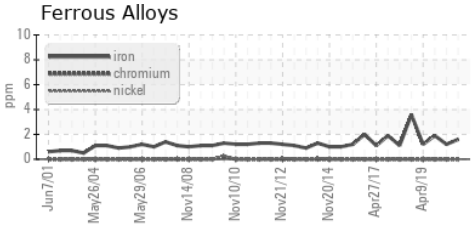
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	**NONE**	NONE	NONE
Precipitate	scalar	Visual*	NONE	**NONE**	NONE	NONE
Silt	scalar	Visual*	NONE	**NONE**	NONE	NONE
Debris	scalar	Visual*	NONE	**NONE**	NONE	VLITE
Sand/Dirt	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
Free Water	scalar	Visual*		**NEG**	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	65.1	▲ **37.6**	▲ 36.5	▲ 36.8

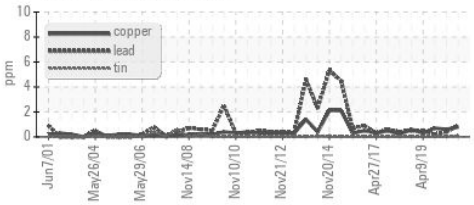
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

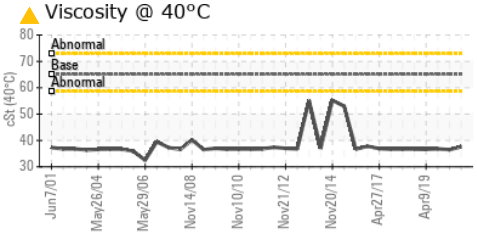
Ferrous Alloys



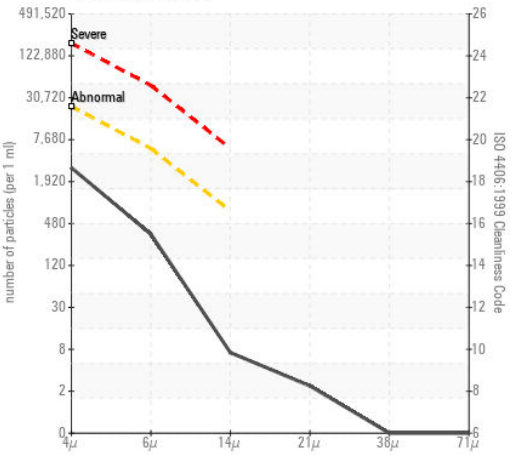
Non-ferrous Metals



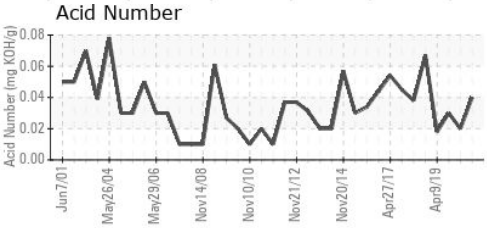
▲ Viscosity @ 40°C



Particle Count



Acid Number



CALA
ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0455766 **Received** : 09 Jun 2023
Lab Number : 02563213 **Diagnosed** : 12 Jun 2023
Unique Number : 5592254 **Diagnostician** : Kevin Marson
Test Package : IND 2 (Additional Tests: TAN Man)

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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