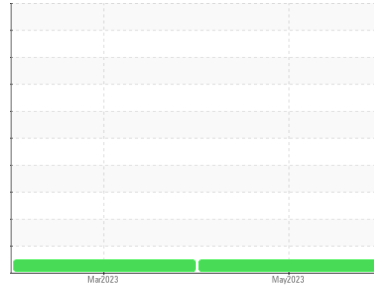




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
51D2

Component
Gearbox
Fluid

LUBRICATION ENG DUOLEC 1606 ISO 320 (--- LTR)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.
NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

Viscosity of sample indicates oil is within ISO 220 range, advise investigate. 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		WC0815264	WC0578418	---
Sample Date	Client Info		17 May 2023	20 Mar 2023	---
Machine Age	hrs	Client Info	0	0	---
Oil Age	hrs	Client Info	0	0	---
Oil Changed	Client Info		Not Changed	Not Changed	---
Sample Status			NORMAL	NORMAL	---

WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*		0	0	---
Iron	ppm	ASTM D5185(m) >200	4	3	---
Chromium	ppm	ASTM D5185(m) >15	0	0	---
Nickel	ppm	ASTM D5185(m) >15	0	<1	---
Titanium	ppm	ASTM D5185(m)	0	0	---
Silver	ppm	ASTM D5185(m)	0	0	---
Aluminum	ppm	ASTM D5185(m) >25	<1	0	---
Lead	ppm	ASTM D5185(m) >100	0	0	---
Copper	ppm	ASTM D5185(m) >200	0	0	---
Tin	ppm	ASTM D5185(m) >25	0	0	---
Antimony	ppm	ASTM D5185(m) >5	0	<1	---
Vanadium	ppm	ASTM D5185(m)	0	0	---
Beryllium	ppm	ASTM D5185(m)	0	0	---
Cadmium	ppm	ASTM D5185(m)	0	0	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	27	25	---
Barium	ppm	ASTM D5185(m)	0	0	---
Molybdenum	ppm	ASTM D5185(m)	0	0	---
Manganese	ppm	ASTM D5185(m)	0	0	---
Magnesium	ppm	ASTM D5185(m)	0	0	---
Calcium	ppm	ASTM D5185(m)	0	0	---
Phosphorus	ppm	ASTM D5185(m)	539	539	---
Zinc	ppm	ASTM D5185(m)	<1	<1	---
Sulfur	ppm	ASTM D5185(m)	6067	6168	---
Lithium	ppm	ASTM D5185(m)	<1	<1	---

CONTAMINANTS

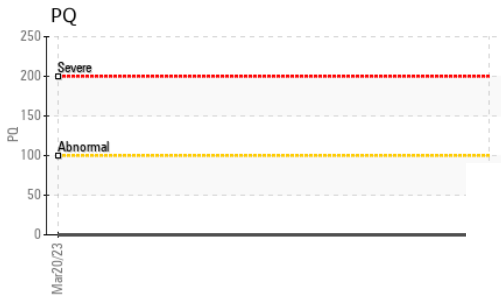
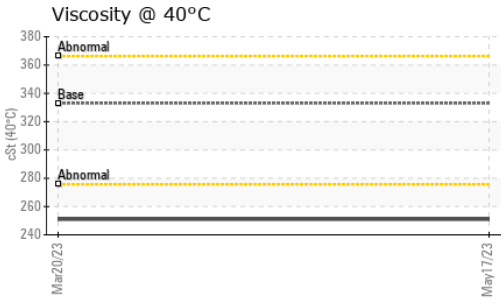
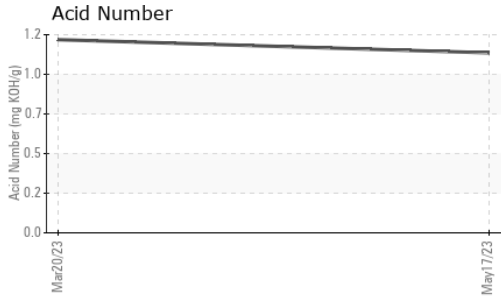
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >50	<1	1	---
Sodium	ppm	ASTM D5185(m)	0	<1	---
Potassium	ppm	ASTM D5185(m) >20	0	<1	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	1.09	1.17	---



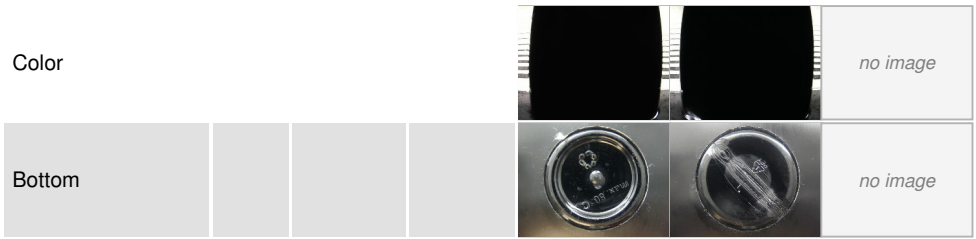
OIL ANALYSIS REPORT



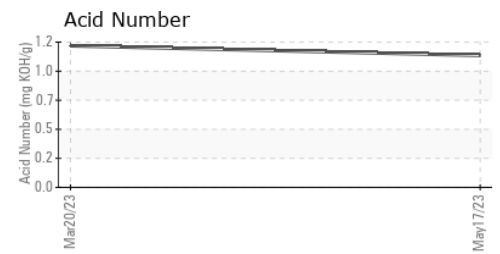
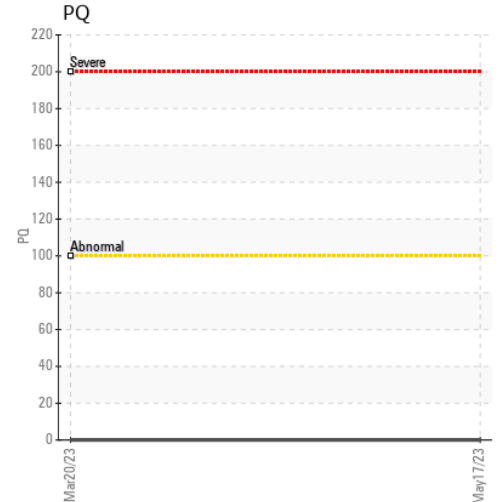
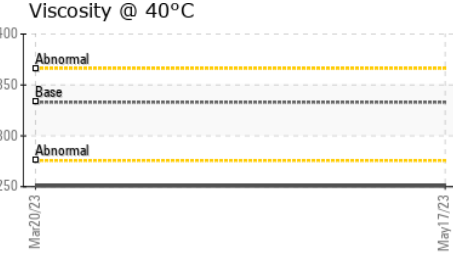
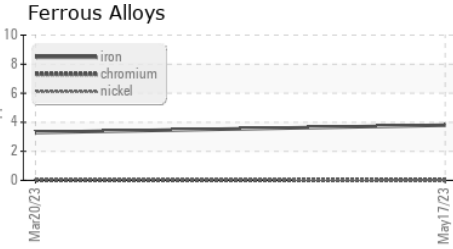
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	---
Yellow Metal	scalar	Visual*	NONE	NONE	---
Precipitate	scalar	Visual*	NONE	NONE	---
Silt	scalar	Visual*	NONE	NONE	---
Debris	scalar	Visual*	NONE	NONE	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---
Appearance	scalar	Visual*	NORML	NORML	---
Odor	scalar	Visual*	NORML	NORML	---
Emulsified Water	scalar	Visual*	>0.2	NEG	---
Free Water	scalar	Visual*		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	333	251	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0815264 **Received** : 19 May 2023
Lab Number : 02558723 **Diagnosed** : 24 May 2023
Unique Number : 5579763 **Diagnostician** : Kevin Marson
Test Package : IND 2 (Additional Tests: TAN Man)

HIRAM WALKER & SONS LTD.
 2072 RIVERSIDE DRIVE EAST, BOX 2518
 WINDSOR, ON
 CA N8Y 4S5
 Contact: Matt Morand
 matt.morand@pernod-ricard.com
 T: (519)561-5359
 F: (519)971-5719

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.