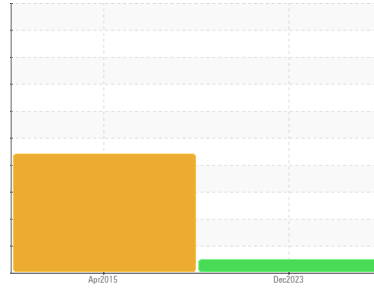




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
2227-2235 WINCH BRAKE COOLING OIL

Component
Winch
Fluid
MOBIL DTE EXCEL ISO 32 (100 mL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

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			WC0711969	WC	---
Sample Date	Client Info			12 Dec 2023	04 Apr 2015	---
Machine Age	hrs	Client Info		0	0	---
Oil Age	hrs	Client Info		0	0	---
Oil Changed	Client Info			N/A	N/A	---
Sample Status				NORMAL	ABNORMAL	---

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>0.2	NEG	NEG	---

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184*		0	28	---
Iron	ppm	ASTM D5185(m)	>30	<1	27	---
Chromium	ppm	ASTM D5185(m)	>2	0	<1	---
Nickel	ppm	ASTM D5185(m)	>2	<1	<1	---
Titanium	ppm	ASTM D5185(m)	>2	0	<1	---
Silver	ppm	ASTM D5185(m)	>2	<1	0	---
Aluminum	ppm	ASTM D5185(m)	>5	0	<1	---
Lead	ppm	ASTM D5185(m)	>70	<1	▲ 83	---
Copper	ppm	ASTM D5185(m)	>65	3	▲ 95	---
Tin	ppm	ASTM D5185(m)	>9	0	2	---
Antimony	ppm	ASTM D5185(m)	>5	0	0	---
Vanadium	ppm	ASTM D5185(m)		0	0	---
Beryllium	ppm	ASTM D5185(m)		0	0	---
Cadmium	ppm	ASTM D5185(m)		0	0	---

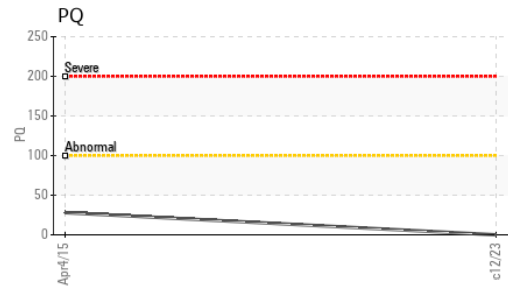
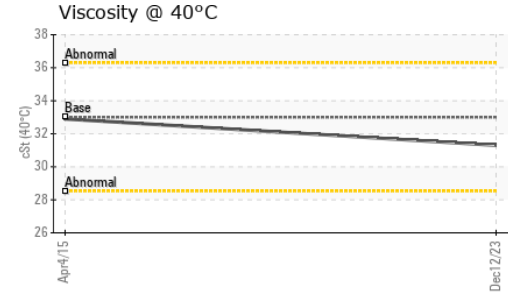
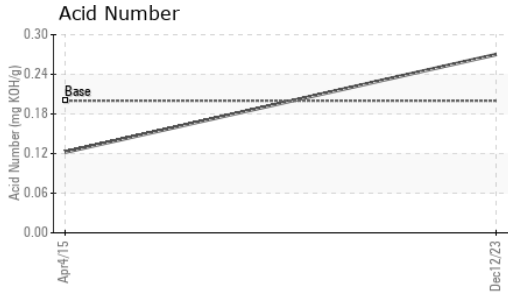
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		2	<1	---
Barium	ppm	ASTM D5185(m)		<1	8	---
Molybdenum	ppm	ASTM D5185(m)		0	<1	---
Manganese	ppm	ASTM D5185(m)		0	2	---
Magnesium	ppm	ASTM D5185(m)		14	<1	---
Calcium	ppm	ASTM D5185(m)		96	113	---
Phosphorus	ppm	ASTM D5185(m)		214	457	---
Zinc	ppm	ASTM D5185(m)		121	80	---
Sulfur	ppm	ASTM D5185(m)		1141	1462	---
Lithium	ppm	ASTM D5185(m)		<1	<1	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>30	<1	▲ 123	---
Sodium	ppm	ASTM D5185(m)		<1	2	---
Potassium	ppm	ASTM D5185(m)	>20	0	4	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	.2	0.27	0.122	---



OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	---
Yellow Metal	scalar	Visual*	NONE	▲ LIGHT	---
Precipitate	scalar	Visual*	NONE	NONE	---
Silt	scalar	Visual*	NONE	LIGHT	---
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)	33.0	31.3	32.9

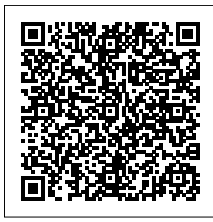
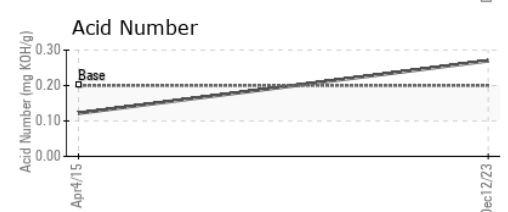
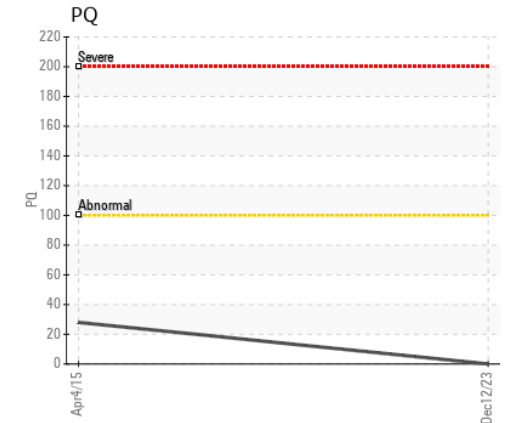
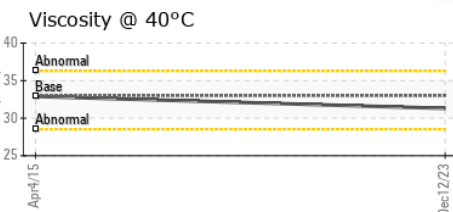
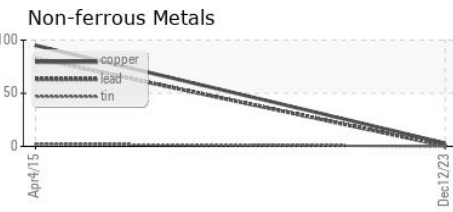
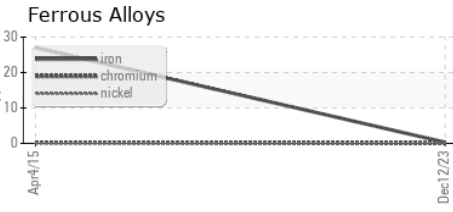
SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color

Bottom

PrtFilter

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Canadian Coast Guard - CCGS Constable Carriere
Sample No. : WC0711969 **Received** : 18 Dec 2023 867 Lakeshore Road
Lab Number : 02603806 **Diagnosed** : 18 Dec 2023 Burlington, ON
Unique Number : 5696891 **Diagnostician** : Wes Davis CA L7R 4A6
Test Package : MAR 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. F: x: